TOWN OF CARMEL
PLANNING BOARD

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

PLANNING BOARD AGENDA
FEBRUARY 9, 2023– 6:00 P.M.

REVISION #1

		TAX MAP #	PUB. HEARING	MAP DATE	COMMENTS

TOWN BOARD REFERRAL - 6:00 PM – 7:00 PM

1.	Town of Carmel Comprehensive Master Plan and Zoning Code Draft			Discussion (No Public Comments)

SITE PLAN

2.	Kiwi Country Day School – 825 Union Valley Rd	77.17-1-31 & 32	1/30/23	Amended Site Plan
3.	Glenacom Lake Cell Tower – Walton Drive	87.5-1-90	1/26/23	Site Plan

MISCELLANEOUS

4.	MK Realty - Route 6 & Old Route 6, Carmel	55.6-1-44 & 45	Re-Approval of Final Site Plan Approval
5.	Carmel Centre Senior Housing (Pulte Homes) Lot 3 – Terrace Drive	55.14-1-11.1	Bond Return
6.	Minutes – 01/12/23		

TOWN BOARD REFERRAL – CONTINUATION OF DISCUSSION

7.	Town of Carmel Comprehensive Master Plan and Zoning Code Draft	Discussion (No Public Comments)

INSITE
ENGINEERING, SURVEYING &
LANDSCAPE ARCHITECTURE, P.C.

January 30, 2023

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

RE: Kiwi Country Day Camp
Town of Carmel
TM# 77.17-1-31 & 32

Dear Chairman Paeprer and Members of the Board:

Please find enclosed the following materials in support of an application for amended site plan approval for the above referenced project:

- Site Plan Set, last revised January 30, 2023.

With regard to comments received from Town of Carmel Director of Code Enforcement, Mike Carnazza, dated October 24, 2022, the required Use Variance was granted at the January meeting of the Zoning Board of Appeals, which is now indicated in the General Notes on drawing OP-1.

With the resolution of the use issue identified by Mr. Carnazza, the applicant would request that the board schedule the public hearing for their next available meeting. Please place the project on the February 9, 2022 Planning Board agenda for discussion with the Board.

Should you have any questions or comments regarding this information, please feel free to contact our office.

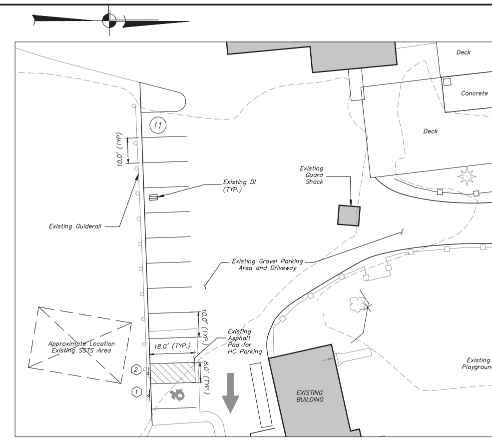
Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: _____
Jeffrey J. Contelmo, PE
Senior Principal Engineer

JJC/adt

Enclosures (All via email only)
cc: Willl Yahr
Mahopac Volunteer Fire Department



ENLARGED PLAN

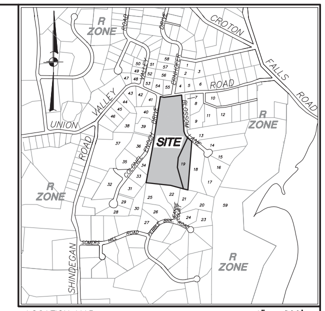
1" = 20'

500' ADJOINERS:

1. N/F CORRADI
2. N/F FIEDERLEIN
3. N/F SANTORO
4. N/F TRAYNOR
5. N/F SHEA
6. N/F GARY
7. N/F BELLOTTO
8. N/F MCGUIRE
9. N/F O'HANLON
10. N/F MULLIGAN
11. N/F GIAMMO
12. N/F DAVID
13. N/F IANNOLO
14. N/F ROGLER
15. N/F CHONG
16. N/F PARFIT & BARZUN
17. N/F SORRENTINO
18. N/F MCINERNEY
19. N/F BROWN
20. N/F YAMIN
21. N/F DEVIVO
22. N/F URBAN LIVING TRUST
23. N/F YAMIN
24. N/F EINHORN
25. N/F UNITED CEREBRAL PALSY ASSOC.
26. N/F FRANZE
27. N/F VLATTAS
28. N/F CHRISTOS
29. N/F HARKER
30. N/F COMMUNITY AREA
31. N/F BERGLUND & GUINEY
32. N/F SCHERER
33. N/F LAVIN
34. N/F WILLIAMS
35. N/F MCLAUGHLIN
36. N/F POULOS
37. N/F FRAKE
38. N/F COMMUNITY AREA
39. N/F MCGUCKIN
40. N/F MAHER
41. N/F STEIN
42. N/F FIGUEIREDO
43. N/F O'CONNOR
44. N/F ISOKANE
45. N/F LEFTWICH & HUNTER
46. N/F SPANO
47. N/F ARCHER
48. N/F ARCHER
49. N/F CATANIA
50. N/F CHMIELOSKI
51. N/F SPRANCE
52. N/F MELE
53. N/F PHILLIPS
54. N/F MURPHY
55. N/F BELLOTTO
56. N/F GUEREIN & KING
57. N/F JACOBELLIS & RYAN
58. N/F ARMISTEAD
59. N/F YAMIN

SIGN DATA TABLE

NO.	TEXT	M.U.T.C.D. NUMBER	SIZE OF SIGN (s.f.)	DESCRIPTION
1	RESERVED PARKING	NY R7-8*	12" x 18"	Green on White Blue Symbol
	VAN ACCESSIBLE	R7-8P	12" x 6"	Green on White
2	NO PARKING ANY TIME	R7-1	12" x 18"	Red on White



LOCATION MAP 1" = 800'

SITE DATA:

Tax Map No.: 77.17-1-32 & 77.13-1-41
Zone: R (Residential)
Lot Area: 14.7 AC ±
Use: Camp and Private School

OWNER/APPLICANT:

Camp Kiwi, Inc.
P.O. Box 518
Somers, NY 10589

GENERAL NOTES:

1. Property line shown hereon per final subdivision Plat prepared for Brad & Karla Brown and Camp Kiwi, Inc. by Kayler Surveying, P.C., last revised July 29, 1992.

   Topography as shown hereon are based upon aerial photography from 2003. The contour interval is 2.

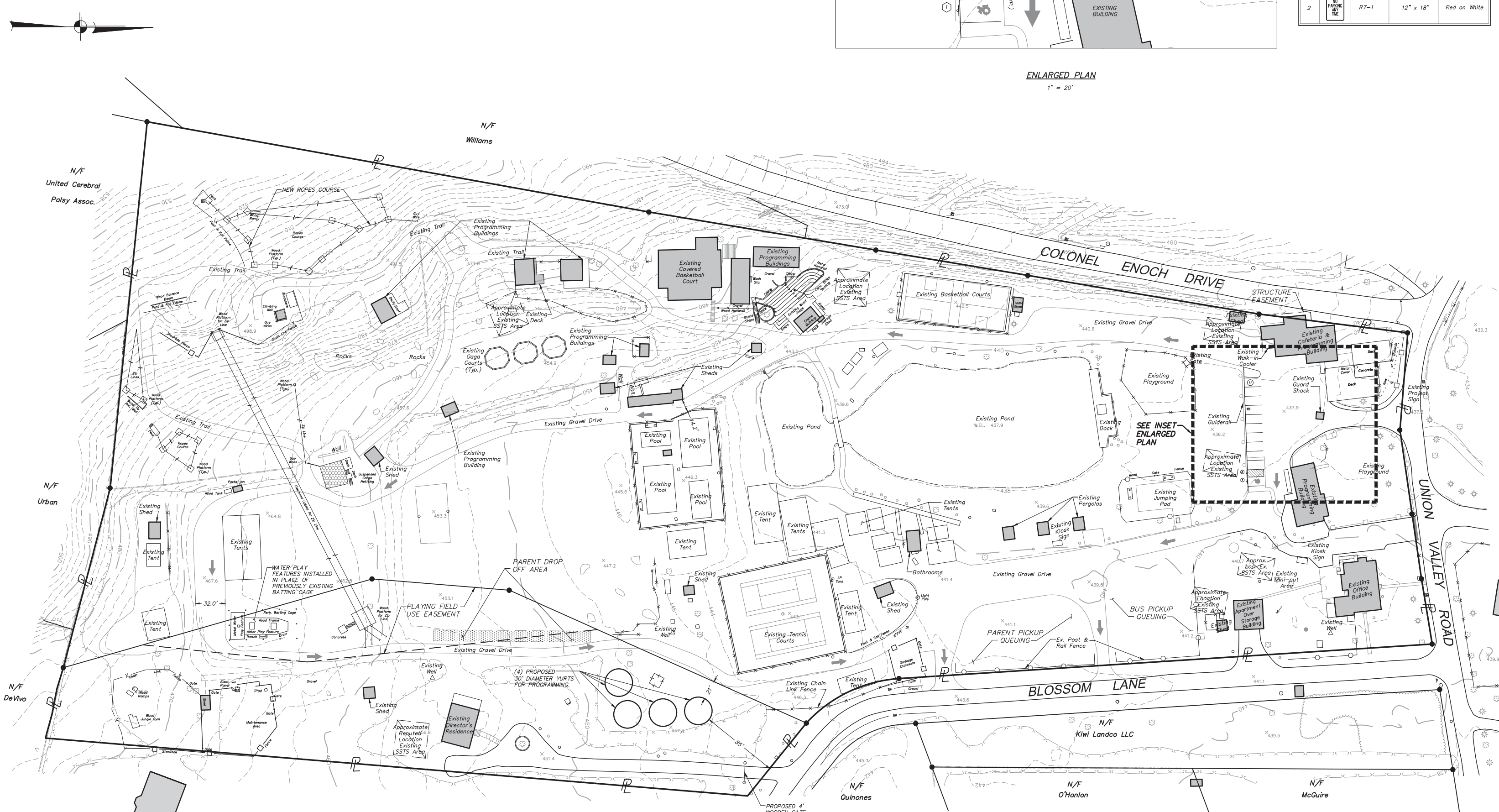
   Existing site features as shown hereon based on aerial photography from 2013 and with updated existing conditions per information obtained thorough field observation completed January 2015 by Insite Engineering, Surveying & Landscape Architecture, PC.
2. All improvements are existing unless otherwise noted.
3. The subject property is currently used as a private school, a summer day camp and an event facility. At no time is the subject property used for more than one of the above described uses.
4. The subject property has been granted numerous variances by the Town of Carmel ZBA in May 1992, April 1994 and October 1994. These variances apply to structures and uses located on Parcel 1 (Tax Map No. 77.17-1-32).
5. The location and sizes of existing temporary tents and gazebos provided by owner and based on field observations and are shown as approximate.
6. A Use Variance for Director's Residence on 31 Blossom Lane was granted at the January 26, 2023 meeting of the Zoning Board of Appeals.

R ZONE REQUIREMENTS:

	Required:	Existing: Lot 77.17-1-32	Existing: Lot 77.17-1-31
Min. Lot Area:	120,000 sf	640,129 sf±	122,123 sf±
Min. Lot Depth:	200'	1,395'±	790'±
Min. Lot Width:	200'	407'±	202'±
Min. Yards:*			
Front:	40'	27'± **	306'±
Side:	20'	< 25'	27'
Rear:	40'	< 40'	420'
Max. Building Height:	35'	< 35'	< 35'
Max. Bldg. Coverage:	15%	1.95% ±	1.5% ±

* The setbacks shown are for the Camp Office building, garage and shed located in the northeastern corner of the property. All other setbacks conform or have been granted the necessary variances by the Zoning Board of Appeals.

** Variance granted by Town of Carmel ZBA on May 26, 2005.



ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

GRAPHIC SCALE

0 25 50 100

(IN FEET)
1 inch = 50 ft.

NO.	DATE	REVISION	BY
3	1-30-23	REVISED FOR PLANNING BOARD COMMENTS	DSW
2	10-17-22	REVISED FOR PLANNING BOARD COMMENTS	DSW
1	9-19-22	REVISED FOR PLANNING BOARD COMMENTS	DSW

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(845) 225-9717 fax
www.insite-eng.com

PROJECT:

CAMP KIWI
CAMP & PRIVATE SCHOOL

UNION VALLEY ROAD, TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK

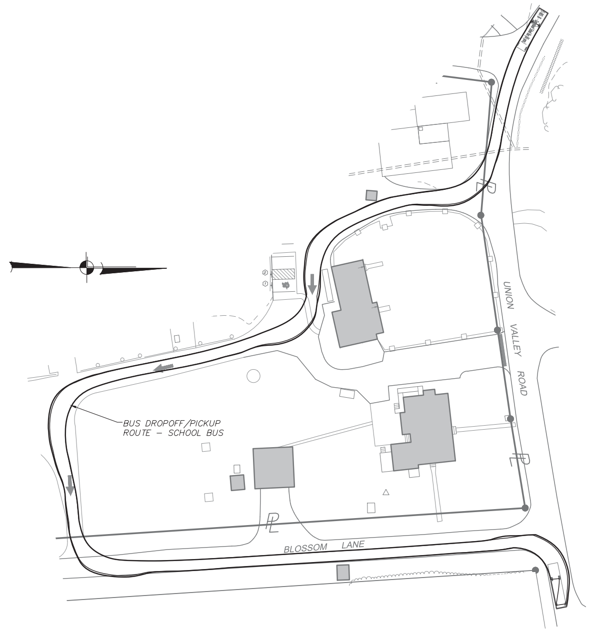
DRAWING:

AMENDED SITE PLAN – OVERALL PLAN

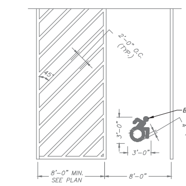
PROJECT NUMBER	21258.100	PROJECT MANAGER	J.J.C.
DATE	9-19-22	DRAWN BY	D.S.W.
SCALE	1" = 50'	CHECKED BY	A.D.T.

DRAWING NO. OP-1

SHEET 1 / 2

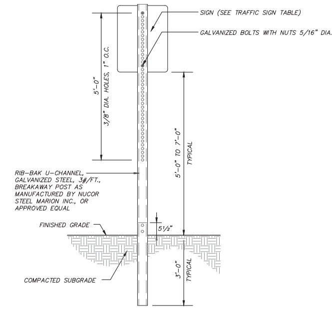


BUS DROPOFF/PICKUP ROUTE
SCALE 1"=40'



NOTE:
ALL HANDICAP STRIPING SHALL BE 4" WIDE BLUE PAINT.

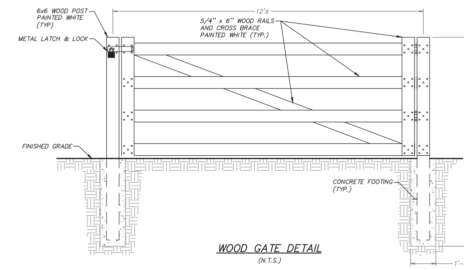
PAINTED NYS ACCESSIBLE PARKING DETAIL
(N.T.S.)



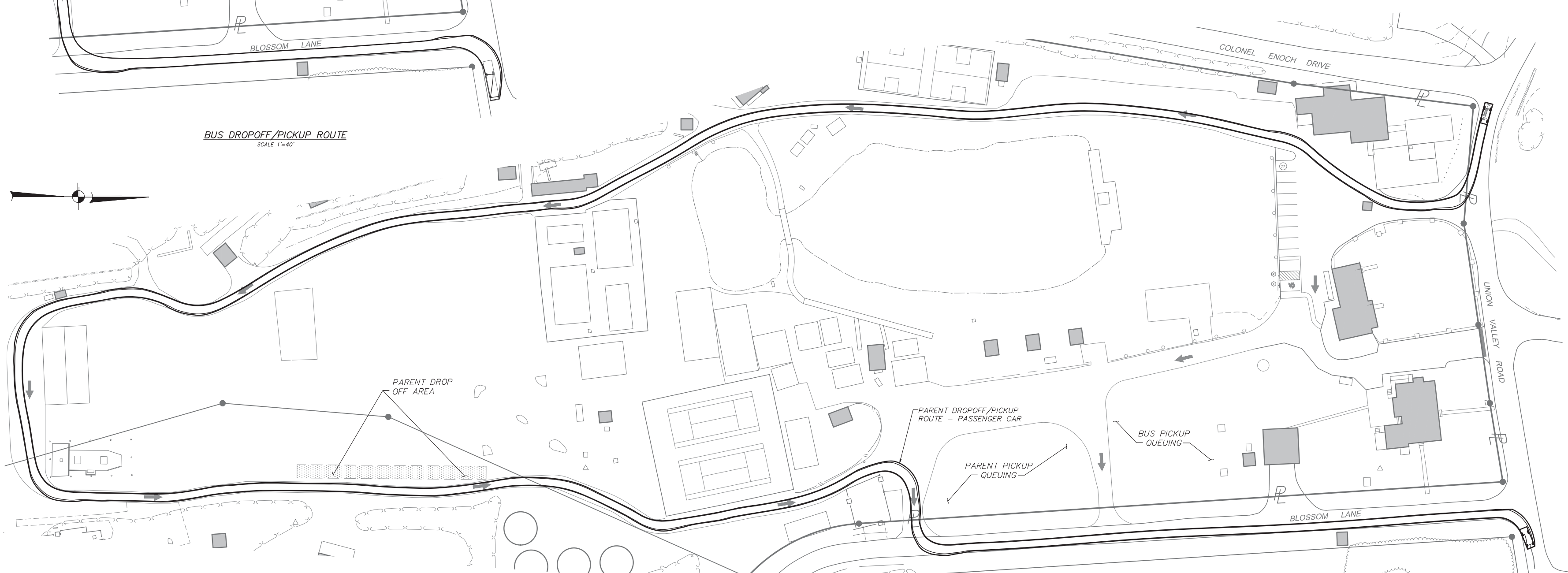
NOTE: FOR HANDICAP PARKING SIGNAGE, SIGNS SHALL BE INSTALLED AT A CLEAR HEIGHT OF BETWEEN 5'-0" AND 7'-0" ABOVE GRADE OF PARKING SPACE AND SUCH THAT SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.

TRAFFIC SIGN DETAIL
(N.T.S.)

YURT DETAIL
(N.T.S.)



WOOD GATE DETAIL
(N.T.S.)



PARENT DROPOFF/PICKUP ROUTE
SCALE 1"=40'

GRAPHIC SCALE
0 20 40 80
(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISION	BY
1	1-30-23	REVISED FOR PLANNING BOARD COMMENTS	DSW
1	9-19-22	REVISED FOR PLANNING BOARD COMMENTS	DSW

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Carmel, NY 10512
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PROJECT:
CAMP KIWI
CAMP & PRIVATE SCHOOL
UNION VALLEY ROAD, TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING:
AMENDED SITE PLAN – VEHICLE ROUTES & DETAILS

PROJECT NUMBER	21258.100	PROJECT MANAGER	J.J.C.
DATE	9-19-22	DRAWN BY	D.S.W.
SCALE	1" = 40'	CHECKED BY	A.D.T.

DRAWING NO. D-1
SHEET 2 / 2

LAW OFFICES OF
SNYDER & SNYDER, LLP
94 WHITE PLAINS ROAD
TARRYTOWN, NEW YORK 10591
(914) 333-0700
FAX (914) 333-0743

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REPLY TO:

TARRYTOWN OFFICE

January 30, 2023

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

Re: Application for site plan and special permit approval for
Glenacom (a/k/a Glencoma) Lake: Walton Drive, Carmel, New York

Honorable Chairman Paeprer
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").

In response to the comments received on January 12, 2023 from Director of Code Enforcement Michael G. Carnazza, Patrick Cleary of Cleary Consulting, and Town Engineer Richard J. Franzetti, we respectfully offer the following response and five (5) copies of the following documents:

1. Supplemental visual resource evaluation from Saratoga Associates with monopine renderings and color swatches ("Saratoga Report");

2. SWPPP, last revision dated November 2020;

3. Wetland Delineation Report prepared by Ecological Solutions, LLC with maps;

4. Letter from Dewberry Engineering ("Dewberry Letter");

5. Revised Site Plan ("Site Plan").

The following information is respectfully offered in response to each of the below staff comments:

Memorandum by Director of Code Enforcement Michael G. Carnazza

What is the width of the driveway? How many trips will be generated from this site.

The driveway is 12 feet wide and each wireless carrier is anticipated to have only one trip per month. See Dewberry Letter and Site Plan submitted herewith.

Will there be lighting at the site? Is all lighting oriented downward?

There will be no lighting on the tower. A small dark-sky complaint fixture oriented downward will be on a timer switch at the base equipment in the event personnel must access the site after dark.

Why are you proposing a mono-pole and not a mono-"pine"? I assume the mono-"pine" would blend in better.

A monopole has been proposed as it has the slimmest profile and visibility, particularly given the location adjacent to power line poles. Visual renderings of a monopine alternative have been provided. See Saratoga Report submitted herewith.

Provide a note on the Site Plan that reads:
"All obsolete or unused wireless telecommunications antennas (including tower supports) shall be removed within 60 days of cessation of operations at the site. The Town may remove such facilities upon reasonable notice and an opportunity to be heard and treat the cost as a tax lien on the property. The Planning Board may also require, at the time of approval, the posting of a bond sufficient to cover the costs of removing an abandoned wireless telecommunications facility."

This note has been added. See Dewberry Letter and Site Plan submitted herewith.

Provide a detail of the I.D. sign that will be installed with the owner/operators [sic] contact information (not to exceed 6 square feet).

The requested detail has been added to the Site Plan. See Dewberry Letter and Site Plan submitted herewith.

Memorandum by Patrick Cleary of Cleary Consulting

Site Plan Review Comments

Location
§156-62 I. establishes the following hierarchy of priorities for the siting of wireless communications facilities:

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 proposed facility falls into category 5, which represents a very low priority location. The burden falls on the applicant to clearly and plainly document (through the Facility Service Plan among other methods) why the facility cannot be located in a more preferable location.

The priority hierarchy embeds the presumption that the installation of a wireless telecommunications facility at a lower priority site carries with it greater potentially adverse impacts.

We disagree. The Code does not state any such presumption. As zoning codes are in derogation of the Common Law, they must be strictly construed. In *Matter of Allen v. Adami*, 39 N.Y.2d 275 (1976), the New York State Court of Appeals held that "[s]ince zoning regulations are in derogation of the common law, they must be strictly construed against the municipality which has enacted and seeks to enforce them." (*Thomson Ind. v. Incorporated Vil. of Port Washington North*, 27 N.Y.2d 537, 539 (1970); *Matter of 440 East 102nd St. Corp. v. Murdock*, 285 NY 298, 304 (1941).) Any ambiguity in the language used in such regulations must be resolved in favor of the property owner. (*Matter of Turiano v. Gilchrist*, 8 A.D.2d 953, 954 (2d Dept. 1959)).

The Code also establishes the provision that a higher priority location cannot be bypassed because it is inconvenient or more expensive. The Planning Board should bear these conditions in mind when reviewing the pending application.

We disagree. Again, the Code contains no such criteria. *See New York SMSA Ltd. P'ship v. Vill. of Floral Park Bd. of Trustees*, 812 F. Supp. 2d 143, 161 (E.D.N.Y. 2011) (where "the Code is silent as to what type of evidence is required . . . the absence of such data cannot in and of itself impeach the credibility of [the applicant's] experts"). "A special permit may be denied only if the record contains substantial evidence that the proposed use is 'substantially deficient' compared to the criteria governing the issuance of special permits. [I]n reviewing special permit applications, a zoning board of appeals or planning board is confined to the parameters of the standards and criteria set forth in the municipality's zoning law." Rice, *McKinney Practice Commentary*, N.Y. Town Law § 274-b (*citing Sullivan v. Town Board of the Town of Riverhead*, 102 A.D.2d 113, 476 N.Y.S.2d 578 (2d Dept. 1984); *Mason v. Zoning Board of Appeals of the Town of Clifton Park*, 72 A.D.2d 889, 422 N.Y.S.2d 166 (3d Dept. 1979)).

In any event, there is no evidence in the administrative record that any higher priority location was bypassed because it is inconvenient or more expensive for the Applicants.

Under the laws of the State of New York, Verizon Wireless is qualified as a public utility. *See Cellular One v. Rosenberg*, 82 N.Y.2d 364 (1993) (hereinafter referred to as "*Rosenberg*"); *see also Cellular One v. Meyer*, 607 N.Y.S.2d 81 (2d Dept. 1994); *see also Sprint Spectrum, L.P. v. Town of West Seneca*, (Index No. 1996/9106 Feb. 25, 1997, Sup. Ct. Erie County). In *Rosenberg*, *supra*, the Court of Appeals, New York's highest court, held that federally licensed wireless carriers (such as Verizon Wireless) provide an essential public service and are public utilities in the State of New York. The Court held that the test for a public utility such as Verizon Wireless only requires the utility to show that the application is necessary "to render safe and adequate service and that there are compelling reasons **economic or otherwise**," which make the project more feasible than alternatives. *Rosenberg* at 372 (emphasis supplied). The Court also made clear that a land use board may not exclude a utility from a community where the utility has shown a need for its facilities. *Id.*

Moreover, the Code expressly states: "Notwithstanding the above, the Planning Board may approve any site located within an area in the above list of priorities, provided that the Planning Board finds that the proposed site is in the best interests of the health, safety and welfare of the Town of Carmel and its inhabitants." See Section 156-62.I.3.

The applicant has submitted a report assessing the feasibility of alterative locations in the context of the priority list. The report concluded that no category 1 - 4 sites would meet their siting criteria. It then evaluated 6 alternative category 5 sites:

- **200 Union Valley Road**
- **55 Fenwood Road**
- **74 Teakettle Spout Road**
- **45 Margaret Road**
- **545 Union Valley Road**
- **78 Englewood Terrace**

Based upon limitations of local topography, existing site conditions and coverage objectives, these sites were found to be less suitable than the subject site. The applicant reached out to all 6 property owners to negotiate a possible lease, and all property owners refused the offer.

Regarding potential alternative locations for the Facility, please note that the Applicants have made good-faith efforts to review alternative locations for the Facility, and that the record clearly demonstrates there is no viable alternative location for the Facility other than the proposed Property. *See New York SMSA Ltd. Partnership v. Vil. of Floral Park Bd. of Trustees*, 812 F. Supp. 2d 143 (E.D.N.Y. 2011), ("[t]he record reveals a good-faith effort by Verizon to evaluate viable alternative sites, and there was no requirement or request for Verizon to submit additional materials regarding the Verizon Building. Accordingly, the Board's denial on this ground is not supported by substantial evidence.") In fact, the Applicants have reviewed numerous proposed alternative locations and have demonstrated to the Town why such alternative locations are not viable solutions. *See New Cingular Wireless PCS v. Town of Fenton*, 843 F. Supp. 2d 236, 254 (N.D.N.Y. 2012) (finding that plaintiff met its burden to establish that its proposed facility was the least intrusive means to remedy its gap in coverage because the plaintiff "analyzed, in great detail, every attempt by the [board] and town residents to identify a less intrusive, but still feasible, alternative", but no alternative locations existed); *See also, UP State Tower Co., LLC v. Town of Tonawanda*, New York, 118CV00952LJVMJR, 2020 WL 8083693, (W.D.N.Y. Nov. 18, 2020), report and recommendation adopted, 18-CV-952-LJV-MJR, 2021 WL 50906 (W.D.N.Y. Jan. 6, 2021). As there are no viable alternative properties that were identified by the Town or included in the record, failure to approve the Facility at the Property would effectively prohibit Verizon Wireless from providing its services in the Town. *See T-Mobile USA, Inc. v. City of Anacortes*, 572 F.3d 987 (9th Cir. 2009) ("we conclude that T–Mobile's application made a prima facie showing of effective prohibition, and that the City in denying the application failed to show that there were any potentially available and feasible alternatives to the Church site.").

Please also note that it is well established law that "in order to establish public necessity, 'the carrier must demonstrate not that the proposed facility was the 'least intrusive means,' but rather that the proposed facility was 'more feasible than other options.'' District courts in the 2nd Circuit have generally concluded that '[i]f the [wireless carrier] makes the required showing, which necessarily means the record is devoid of substantial evidence to support a denial, the [application] must [be granted].'" *UP State Tower*, at 11, citing *Vill. of Floral Park* (emphasis added). We respectfully submit that the Applicants have made such a demonstration and that the record is completely devoid of any available viable alternative to address the gap in service, other than the proposed Facility at the Property. Without the Facility, Verizon Wireless will be materially inhibited or limited from providing its personal wireless services in the Town.

We remind the Town that the Telecommunications Act requires that the Town not take any action, or enforce any Town Code section, that prohibits or effectively prohibits the provision of personal wireless services. 47 USC §§ 253(a) & 332(b)(i)(II). The FCC in the Third Report and Order clarified that the significant gap plus least intrusive means standard is no longer applicable and that a carrier need only to demonstrate that a municipality is materially inhibiting the provision of wireless services. *See In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Inv., Declaratory Ruling and Third Report and Order*, 33 FCC Rcd 9088 (2018), (hereinafter referred to as the "Third Report and Order"); *See also, City of Portland v. United States*, 969 F.3d 1020 (9th Cir. 2020), cert denied sub nom. *City of Portland, Oregon v. Fed. Communications Commn.*, 141 S. Ct. 2855 (2021) (upholding the Third Report and Order's material inhibition standard.) The FCC clarified that "an effective prohibition occurs where a state or local legal requirement materially inhibits a provider's ability to engage in any of a variety of activities related to its provision of a covered service. This test is met not only when filling a coverage gap but also when densifying a wireless network, introducing new services or otherwise improving service capabilities." Third Report and Order, at 9104-9105. Furthermore, "a state or local legal requirement could materially inhibit service in numerous ways—not only by rendering a service provider unable to provide an existing service in a new geographic area or by restricting the entry of a new provider in providing service in a particular area, but also by materially inhibiting the introduction of new services or the improvement of existing services. Thus, an effective prohibition includes materially inhibiting additional services or improving existing services." Third Report and Order, at 9105; *See also, New Cingular Wireless PCS, LLC v. Town of Colonie*, 20-CV-1388 (NAM/ATB), 2022 WL 1009436, (N.D.N.Y. Mar. 31, 2022) ("[t]he FCC has stated that the 'materially inhibit' standard is the appropriate standard for determining whether a State or local law operates as a prohibition or effective prohibition within the meaning of Sections 253 and 332.")

Facility Service Plan

A Facility Service Plan, as required by §156-62 G, has not been submitted. While material submitted by the applicant separately address [sic] two of the three requirements of the Facility Service Plan, the requirement to provide a two-to-five-year plan for the provision of additional facilities in and immediately adjacent to the town, was not addressed. This material is required.

The full Facility Service Plan was submitted on December 7, 2022. See Independent Radio Frequency Report prepared by PierCon Solutions, dated December 7, 2022, Exhibit AP, which is Verizon Wireless' two-to-five-year plan for the provision of additional facilities in and immediately adjacent to the town based on current projections.

Visual Resource Assessment

Saratoga Associates prepared a Visual Resource Assessment (December 5, 2022) that documents views of the antennas tower [sic] from 39 viewpoints. The Visual Resources Analysis utilized a balloon test (February 20, 2022) and an on-site crane elevated to the towner [sic] height of 140' or 890.8' amsl (February 20, 2020) to determine views from the 39 viewpoints.

The report concluded that the monopole tower antenna will be visible from 29 of the 39 viewpoints, and that most of those views would be limited to seasonal leaf-off periods. These views exist from surrounding residential areas, public roadways, and importantly, from Teakettle Park, and the Putnam County Trailway.

The potential view of the tower from important scenic resources, such as Teakettle Park and the County Trailways is a significant concern. The applicant is requested to supplement the Visual Resources Assessment with a more in-depth evaluation (including renderings of the tower superimposed onto the photography) to more fully document the potential visual impact of the facility from these two public viewpoints.

See Saratoga Report submitted herewith. The Saratoga Report also includes additional visual renderings of a monopine alternative.

Wetlands:

The applicant submitted a Wetland Delineation Report, prepared by Ecological Solutions, LLC (12/23/2019). The report concluded that USACOE and Town regulated wetlands are present on the site, but that the project would not encroach into these wetlands or wetland buffer areas. The report references a map depicting the wetland locations; however, the map was not attached to the report. The wetland map is required to be submitted,

See Wetland Delineation Report prepared by Ecological Solutions, LLC with maps submitted herewith.

6. **Equipment Compound:**
The following comments relate to the constriction of the equipment compound:

- **Approximately 40 trees will need to be removed to accommodate this earth work. Only three, 6' tall spruce trees are proposed to replace the trees removed. While screening is not a priority, the ecological benefit resulting from the loss of 40 trees, [sic] should be replaced and mitigated by additional plantings.**

  The Applicants are willing to replace the trees to be removed with an equal number of trees or make a reasonable contribution to an off-site tree mitigation fund, and respectfully request that the Planning Board provide direction.

- **Clarify the amount of cut and fill required. Will material need to be imported or exported?**

  See Dewberry Letter submitted herewith.

- **What is the surface of the new driveway?**

  See Dewberry Letter submitted herewith.

- **Is lighting proposed in the compound?**

  See Dewberry Letter submitted herewith.

- **Is a backup generator proposed? If so, provide details, particularly sound generation details.**

  Yes. Please see the from the Applicants' December 7, 2022 filing a letter from Dewberry Engineers detailing the make and type of proposed generator and the noise levels associated therewith.

- **What site security measures are proposed?**

  See Site Plan submitted herewith that details the proposed fencing.

Moreover, all equipment cabinets are to be locked and the Verizon Wireless equipment is remotely monitored 24-7 by Verizon Wireless.

7. **Stealth Treatment:**
   The monopole will support the Verizon antennas at the 140' elevation, and will also be able to accommodate 3 additional antenna arrays below the Verizon antennas.

   The monopole is proposed to be painted brown.

   Are there additional "stealth" treatments that would further mitigate the visual appearance of the tower and the antennas? The code references "faux trees' [sic] as one method of addressing this.

   See Saratoga Report submitted herewith which includes additional renderings of a stealth monopine (i.e. "faux tree").

Memorandum by Town Engineer Richard J. Franzetti P.E.

I. **General Comments**
   The following referrals would appear to be warranted:
   a. Mahopac Fire Department.

   A copy of his filing and the December 7, 2022 filing is being simultaneously referred to the Mahopac Fire District.

Comments

1. **The application should be referred to a technical expert in accordance with §156-62(E)(2) of the Town Code. The applicant will need to provide funding for escrow [sic] account.**

   It is our understanding that this comment has been withdrawn.

2. **The proposed tower exceeds the maximum height permitted under §156-62(O)(2), which is capped at 50 feet. In accordance with §156-62(O)(3), the applicant must provide justification for exceeding the maximum height cap. Even with relief from §156-62(O)(2), the maximum height permitted is 50% of the [sic] of 50 feet, which would be 75 feet. The applicant is proposing a tower of 140 feet with exceeds this length.**

   A variance application has been filed. In any event, the Code states: "Notwithstanding

anything stated herein, the Planning Board shall be permitted to increase the height of any tower beyond any limitations set forth herein in order to accommodate additional users. In reviewing a request for greater height, the Planning Board shall balance the effect of a greater height against the provision of one or more additional towers, collocating or other alternatives." See Section 156-62.O.4. The proposed height has been shown by the PierCon Solutions Report that it is the minimum height for Verizon Wireless' services. The Facility has been designed to support collocation in order to avoid the proliferation of towers. See Collocation Commitment letter filed on January 24, 2020 in accordance with Section 156-62.F.1.s.

3. **The application proposes a tower location at a priority 5 site as identified in §156-62(I)(1). In accordance with §156-62(I)(2), the applicant must provide an explanation of why a higher priority was not selected.**

   We understand that this comment has been withdrawn. See PierCon Solutions Independent Radio Frequency Report dated December 7, 2022 and the Klaus Wimmer Area Analysis of Feasibility Report dated January 21, 2020.

4. **Requirements of §156-62L. must be met.**

   We understand that this comment has been withdrawn. See PierCon Solutions Independent Radio Frequency Report dated December 7, 2022 and the Klaus Wimmer Area Analysis of Feasibility Report dated January 21, 2020. See also the Pinnacle Report dated December 11, 2019.

5. **Requirements as set forth on §156-62(O)(3) have not been provided.**

   See PierCon Solutions Independent Radio Frequency Report dated December 7, 2022 and the Klaus Wimmer Area Analysis of Feasibility Report dated January 21, 2020. A variance has been requested from the Zoning Board of Appeals. In addition, the Zoning Code states: "Notwithstanding anything stated herein, the Planning Board shall be permitted to increase the height of any tower beyond any limitations set forth herein in order to accommodate additional users. In reviewing a request for greater height, the Planning Board shall balance the effect of a greater height against the provision of one or more additional towers, collocating or other alternatives." See Section 156-62.O.4. The proposed height has been shown by the PierCon Solutions Report that it is the minimum height for Verizon Wireless's services. The Facility has been designed to support collocation in order to avoid the proliferation of towers. See Collocation Commitment letter filed on January 24, 2020 in accordance with Section 156-62.F.1.s.

6. **Requirements of §156-62 P (7) must be met. A landscape plan must be provided.**

Three evergreen landscaping trees have already been provided. See Site Plan. The trees' height need be twenty feet only if a faux tree (monopine) is proposed. If the Planning Board approves a monopine, the height of the proposed trees will be twenty feet as required by the Code. See Dewberry Letter and Site Plan submitted herewith.

7. **All planting should be verified by the Town of Carmel Wetlands Inspector and all plantings shall be installed per §142 of the Town of Carmel Town Code.**

   All plantings will comply with the Code and a note has been added to the Site Plan. See Dewberry Letter and Site Plan submitted herewith.

8. **The overall disturbance for the project is unclear. The FEIS indicates ~5,800 sq-ft, the October 2020 SWPPP indicates ~19,6150 [sic] sq-ft, the NOI has 21,780 sq ft and sheet Z-9 indicates an area of disturbance of 20,540 sq ft. These areas need to be clarified. In either case these areas are above the threshold criteria of disturbance for New York State Department of Environmental Conservation (NYSDEC) stormwater regulations. A Stormwater Pollution Prevention Plan (SWPPP) is required and has been provided. uired for the site. [sic]**

   See Dewberry Letter and Site Plan submitted herewith.

9. **The area of disturbance must include the utility trench up the entire length of driveway.**

   See Dewberry Letter and Site Plan submitted herewith.

10. **The Town should be notified when construction commenced [sic] and should be part of the pre-construction meeting**

    Agreed.

11. **In accordance with §128-37(E), the following conditions must be met and provided on the drawings:**
    a. Not exceed 6 % 15' from roadway;
    b. Not exceed 7% 30' from house(in this case structure);
    c. Must be paved if slope exceed exceeds 7%,
    The applicant should note the paving details are 8" base, 3" binder and 2" top.

    The above requirements are not applicable because a "home" is not proposed. Nevertheless, the Applicants have complied with such requirements for the unmanned

Facility. See Dewberry Letter and Site Plan, submitted herewith.

12. **Details must be provided that address drainage from the proposed driveway and site.**

See Dewberry Letter and Site Plan submitted herewith.

13. **Parking on the site must be addressed.**

See Dewberry Letter and Site Plan submitted herewith.

14. **A lighting spill plan must be provided.**

See Dewberry Letter and Site Plan submitted herewith.

15. **Graphic representation of all vehicle movements (i.e., cars and trucks) through the site should be provided to illustrate that sufficient space exists to maneuver all types of vehicles anticipated at the site.**

See Dewberry Letter and Site Plan submitted herewith.

16. **All turning radii for the site should be graphically provided.**

See Dewberry Letter and Site Plan submitted herewith.

17. **Should any public improvements be deemed necessary as part of the development of the tract, a Performance Bond and associated Engineering Fee must eventually be established for the work.**

No action required at this time.

18. **The applicant must consider having the monopole designed to resemble a tree.**

See Saratoga Report submitted herewith.

We thank you for your consideration and look forward to discussing this matter at the February 9, 2023 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 District (with December 7, 2022 filing)
Z:\SSDATA\WPDATA\SS3\RDG\Homelandtowers\Carmel\Glencoma Lake\2023 Filing\Final PB Letter.docx

SARATOGA
ASSOCIATES

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

January 25, 2023

Honorable Chairperson Craig Paeper and Members of the Planning Board
Town of Carmel
60 Mc Alpin Avenue
Mahopac, NY 10541

Re: Visual Resource Assessment
Proposed Wireless Telecommunications Facility
Walton Road (NY054) – Glenacom Lake
Mahopac, NY

Dear Honorable Chairperson Paeper and Planning Board Members:

Saratoga Associates is writing on behalf of Homeland Towers regarding a proposed telecommunications tower and associated equipment at the above referenced address. Saratoga Associates has been retained to address potential visual impacts associated with this project. Saratoga Associates has previously submitted as part of this application a Visual Resource Assessment (VRA) report (revised December 5, 2022).

For consideration by the Board, I offer the following information to in response to comments submitted in a letter by Town consultant Cleary Consulting dated January 12, 2023.

Comment 5 - Visual Resource Assessment

Saratoga Associates prepared a Visual resource Assessment (December 5, 2022) that documents views of the antennas tower from 39 viewpoints. The Visual Resource Analysis utilized a balloon test (February 20, 2022 and an on-site crane elevated to the tower height of 140' or 890.8' amsl (February 20, 2020) to determine views from the 39 viewpoints.

The report concluded that the monopole tower antenna will be visible from 29 of the 39 viewpoints, and that most of those views would be limited to seasonal leaf-off periods. These views exist from surrounding residential areas, public roadways, and importantly, from Teakettle Park, and the Putnam County Trailway.

The potential view of the tower from important scenic resources, such as Teakettle Park and the County Trailway is a significant concern. The applicant is requested to supplement the Visual Resource Assessment with a more detailed in-depth evaluation (including renderings of the tower

superimposed onto the photography) to document the potential visual impact of the facility more fully from these two public viewpoints."

Response – The Cleary Consulting letter references a balloon test on February 20, 2022. A balloon test was not conducted on that date. We believe this reference is made in error. A crane test was conducted on February 20, 2020, as correctly stated in the Cleary letter.

The VRA documents views from 39 vantage points within a 2-mile radius of the Facility. Of these, the proposed tower was determined to be visible above intervening vegetation from just 4. In these cases the tower will be viewed very low to the tree line at distances greater than ½ mile.

The tower was determined to be visible through of intervening vegetation during winter leaf-off season from 19 studied locations. In these cases visibility will be heavily filtered by dense deciduous stems and branches. These views will be fully screened during summer leaf-on season.

The tower was found to be fully screened by intervening vegetation year-round from the remaining 16 studied locations.

The VRA concludes, based on the degree of Facility visibility, it is clear that project visibility is not of a size or extent that it would constitute an unacceptable magnitude. Nor does the Facility affect a sufficient number of public viewers or geographic area where the Facility can reasonably be deemed to be visually important as defined by SEQRA.

The VRA provides annotated photographs from Teakettle Park and three locations along the Putnam County Trailway (refer to VRA Appendix B, Photo VP27, VP35, VP37 and VP38).

- Teakettle Lake Park - A photo simulation illustrating the degree of visibility of the proposed tower from Teakettle Lake Park during leaf-off season is also provided in the VRA (*refer to* Appendix C, Figure 9b).

  As viewed from Teakettle Lake Park the top of the proposed tower falls below the foreground tree line. Although the antenna array is indistinctly visible through dense deciduous branches, at a distance greater than 0.4 miles it is unlikely the facility will be discernible to a casual viewer. The facility will be completely screened during summer leaf-on season from Teakettle Lake Park.

- Putnam County Trailway - Supplemental photo simulations illustrating the degree of visibility of the proposed tower from three locations along the Putnam County Trailway are attached ss Exhibit A herein.

  The nearest point on the Putnam County Trailway is approximately 0.9 miles west of the Facility. The Putnam County Trailway generally parallels U.S. Route 6. Distant views from the trailway

are typically screened by trailside vegetation. Foreground views commonly include local residential and commercial structures as well as overhead utility infrastructure.

Isolated glimpses in the direction of the facility are possible through foreground deciduous vegetation in discrete locations along the trail during leaf-off season. Such views are generally brief and minor "keyhole" type views. At viewing distances greater than 0.9 miles it is unlikely the facility will be discernible to trail users. The facility will be completely screened during summer leaf-on season from most if not all vantage points along the Putnam County Trailway.

Comment 8 – Stealth Treatment

"Are there additional 'stealth' treatments that would further mitigate the visual appearance of the tower and the antennas? The code references 'faux trees' as one method of addressing this.

Response – Photo simulations illustrating a stealth monopine tower design are provided in Exhibit B herein.

Because the proposed tower is substantially screened from most vantage points by intervening vegetation the use of a stealth monopine tower design for visual mitigation is unnecessary. Importantly, from locations where the facility is seasonally visible through intervening deciduous vegetation use of faux tree branching will increase color contrast and the visible profile of the structure heightening its conspicuity. In the limited number of cases where the tower is visible above intervening vegetation the faux tree structure would appear noticeably taller than surrounding woodland increasing its visual presence as compared to a traditional slender profile monopole structure.

To minimize visual contrast I recommend the monopole design, painted either Pinecone Brown or Thunder Gray. See color swatches attached as Exhibit C.

Thank you for your attention to this matter.

Matthew W. Allen, RLA
Principal
SARATOGA ASSOCIATES
Landscape Architects, Architects, Engineers, and Planners, P.C.

Exhibit A
Supplemental Photo Simulations
Putnam County Trailway

Simulated Condition - 140 ft Monopole Tower

VP35 - Putnam County Trailway near Astor Drive

SARATOGA ASSOCIATES

Photograph Information				
Date:	February 20, 2020	Photo Location:	41° 21' 51.8220" N	
Time:	12:32 pm		73° 44' 33.4500" W	
Focal Length:	50 mm (eqivalent)	Distance:	6,470 Feet	
Camera:	Nikon D3100			

This photograph was taken using a 50mm wide angle lens. To appear at the correct scale this page is intended to be viewed approximately 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 10b
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Glenacom Lake (NY 054)
Walton Drive
Mahopac, NY 10541

Simulated Condition - 140 ft Monopole Tower

VP37 - Putnam County Trailway near Bloomer Road

SARATOGA ASSOCIATES

Photograph Information

Date:	February 20, 2020	Photo Location:	41° 21' 29.8881" N
Time:	12:51 pm		73° 44' 47.9566" W
Focal Length:	50 mm (eqivalent)	Distance:	5,540 Feet
Camera:	Nikon D3100		

This photograph was taken using a 50mm wide angle lens. To appear at the correct scale this page is intended to be viewed approximately 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 10b
Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Glenacom Lake (NY 054)
Walton Drive
Mahopac, NY 10541

Simulated Condition - 140 ft Monopole Tower

VP38 - Putnam County Trailway near Horton Drive

SARATOGA ASSOCIATES

Photograph Information

Date:	February 20, 2020	Photo Location:	41° 21' 14.0688" N
Time:	1:02 pm		73° 44' 48.6492" W
Focal Length:	50 mm (eqivalent)	Distance:	4,800 Feet
Camera:	Nikon D3100		

This photograph was taken using a 50mm wide angle lens. To appear at the correct scale this page is intended to be viewed approximately 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 10b

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Glenacom Lake (NY 054)
Walton Drive
Mahopac, NY 10541

Exhibit B
Supplemental Photo Simulations
Alternative Stealth Monopine Tower Design

Simulated Condition - 140 ft Monopole Tower - Brown Color Alternative

VP3 - Fassitt Drive near #61

SARATOGA ASSOCIATES

Photograph Information

Date:	February 20, 2020	Photo Location:	41° 20' 51.4968" N
Time:	1:20 pm		73° 44' 18.7908" W
Focal Length:	50 mm	Distance:	2,270 Feet
Camera:	Canon EOS 6D MarkII		

This photograph was taken using a 50mm wide angle lens. To appear at the correct scale this page is intended to be viewed approximately 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 2c

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Glenacom Lake (NY 054)
Walton Drive
Mahopac, NY 10541

Simulated Condition - 140 ft Stealth Monopine Tower Alternative

VP3 - Fassitt Drive near #61

SARATOGA ASSOCIATES

Photograph Information			
Date:	February 20, 2020	Photo Location:	41° 20' 51.4968" N
Time:	1:20 pm		73° 44' 18.7908" W
Focal Length:	50 mm	Distance:	2,270 Feet
Camera:	Canon EOS 6D MarkII		

This photograph was taken using a 50mm wide angle lens. To appear at the correct scale this page is intended to be viewed approximately 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 2d

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Glenacom Lake (NY 054)
Walton Drive
Mahopac, NY 10541

Simulated Condition - 140 ft Monopole Tower

VP12 - Walton Drive near #43

SARATOGA ASSOCIATES

Date:	February 20, 2020		
Time:	11:34 am	Photo Location:	41° 21' 00.1368" N
Focal Length:	50 mm		73° 43' 44.7060" W
Camera:	Canon EOS 6D MarkII	Distance:	510 Feet

This photograph was taken using a 50mm wide angle lens. To appear at the correct scale this page is intended to be viewed approximately 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 5c

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Glenacom Lake (NY 054)
Walton Drive
Mahopac, NY 10541

Simulated Condition - 140 ft Stealth Monopine Alternative

VP12 - Walton Drive near #43

SARATOGA ASSOCIATES

Date:	February 20, 2020		
Time:	11:34 am	Photo Location:	41° 21' 00.1368" N
Focal Length:	50 mm		73° 43' 44.7060" W
Camera:	Canon EOS 6D MarkII	Distance:	510 Feet

This photograph was taken using a 50mm wide angle lens. To appear at the correct scale this page is intended to be viewed approximately 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 5d

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Glenacom Lake (NY 054)
Walton Drive
Mahopac, NY 10541

Simulated Condition - 140 ft Monopole Tower - Brown Color Alternative

VP14 - Summit Circle Drive at cul-de-sac

SARATOGA ASSOCIATES

Photograph Information			
Date:	February 20, 2020	Photo Location:	41° 20' 55.4136" N
Time:	11:42 am		73° 43' 43.3488" W
Focal Length:	50 mm	Distance:	520 Feet
Camera:	Canon EOS 6D MarkII		

This photograph was taken using a 50mm wide angle lens. To appear at the correct scale this page is intended to be viewed approximately 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 7c

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Glenacom Lake (NY 054)
Walton Drive
Mahopac, NY 10541

Simulated Condition - 140 ft Stealth Monopine Alternative

VP14 - Summit Circle Drive at cul-de-sac

SARATOGA ASSOCIATES

Photograph Information			
Date:	February 20, 2020	Photo Location:	41° 20' 55.4136" N
Time:	11:42 am		73° 43' 43.3488" W
Focal Length:	50 mm	Distance:	520 Feet
Camera:	Canon EOS 6D MarkII		

This photograph was taken using a 50mm wide angle lens. To appear at the correct scale this page is intended to be viewed approximately 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 7d

Visual Resource Assessment

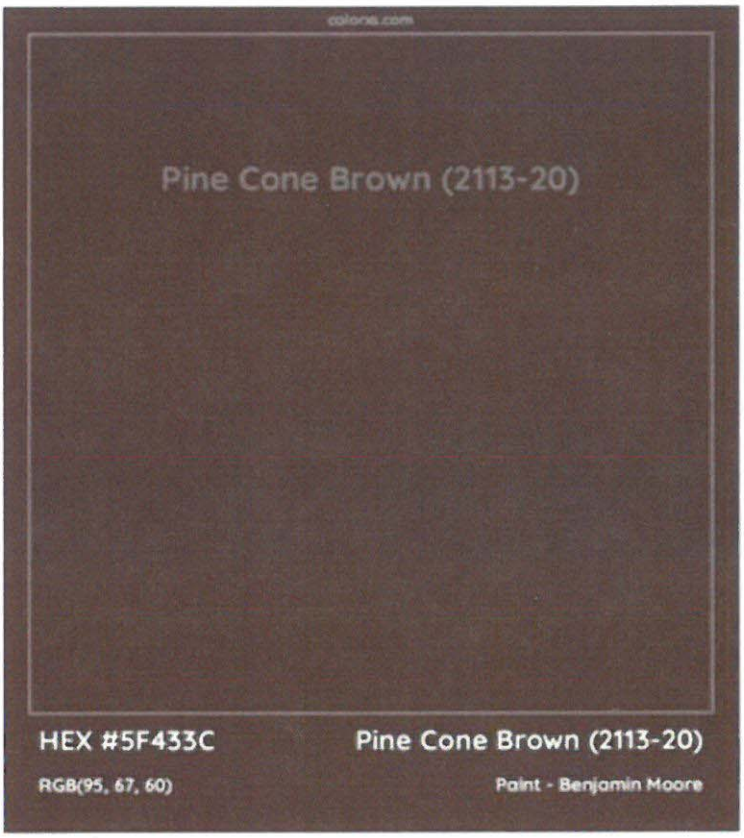
PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Glenacom Lake (NY 054)
Walton Drive
Mahopac, NY 10541

Exhibit C
Color Swatches

colorxs.com



Benjamin Moore Pine Cone Brown (2113-20) Paint color codes ...

SW7645 – Thunder Grey

Color Name: Thunder Gray
Color Number: SW 7645

Collection(s):
Violet

Color Information:
Color Family: Cool Neutral

Store Strip Location: null

RGB Value:
R: 88
G: 85
B: 78

Hex Value:
58554e

Dewberry

Stormwater Pollution Prevention Plan

Project Name: Glencoma Lake Cell Tower Compound

Walton Drive, Mahopac, NY 10541

Town of Carmel, Putnam County, New York

Block 1, Lot 90

October 2020
Revised November 2020

SUBMITTED BY:

Dewberry Engineers Inc.
600 Parsippany Road, Suite 301
Parsippany, NJ 07054-3715
973.739.9400

Robert J. Foley, P.E.
NY Lic. No. 088774

Stormwater Pollution Prevention Plan

Project Name: Glencoma Lake Cell Tower Compound
Block 1, Lot 90
Walton Drive, Mahopac, NY 10541
Town of Carmel, Putnam County, New York

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Stormwater Pollution Prevention Plan
Project Name: Glencoma Lake Cell Tower Compound
Block 1, Lot 90
Walton Drive, Mahopac, NY 10541
Town of Carmel, Putnam County, New York

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LIST OF APPENDICES

1.0 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the activities associated with construction of the Glencoma Lake Cell Tower Compound located in the Town of Carmel, Putnam County, NY. Since the project is located in the "East of Hudson" watershed and the disturbance is between five thousand (5,000) square feet and one acre of land, coverage under the SPDES General Permit (GP-0-20-001) is required and erosion and sediment controls are required.

To obtain coverage under the general permit for this project, the following are required:

- Project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when applicable.
- Where required, all necessary permits subject to the Uniform Procedures Act ("UPA") (see 6 NYCRR Part 621) have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4).
- The final SWPPP has been prepared, and

- A complete NOI will be submitted to the NYSDEC in accordance with the requirements of this permit immediately upon approval by the delegated MS4 permittee.

1.1 Relevant Standards and Guidelines

The erosion and sediment control measures have been designed to minimize soil loss, retain eroded soil, and prevent it from reaching water bodies or adjoining properties. These measures have been designed and evaluated in accordance with the following standards and guidelines:

- New York State Department of Environmental Conservation, SPDES General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-0-20-001, effective January 29, 2020, expiration date January 28, 2025;
- New York State Department of Environmental Conservation, Division of Water, New York State Standards and Specifications for Erosion and Sediment Control, November 2016;

1.2 Responsible Parties

There is a shared responsibility between the project owner and the owner's contractor to ensure that the intent and purpose of this Stormwater Pollution Prevention Plan (SWPPP) are implemented. While the size of the proposed disturbance does not trigger a weekly inspection requirement, it is recommended that a qualified SWPPP Inspector verify that the erosion and sediment controls remain functional during construction.

The responsible parties will ensure cooperation with the local enforcing authority. A copy of the updated, approved SWPPP will be kept at the project site throughout the duration of the construction.

The SWPPP Certification requires signatures from the Owner, Contractor, and SWPPP preparer. A copy of the contractors Department of Environmental Conservation (DEC) training shall also be provided.

1.3 Stormwater Management and Downstream Impacts

The Town of Carmel's chapter on Stormwater Management requires that sites meeting certain criteria to install post-construction stormwater management. Article X – Stormwater Control in the Town Code of Carmel, Section **156-81 – C** states:

> Land development activities, as defend in § 156-80 of this article, meeting Condition One, Two or Three below shall also include water quantity and water quality controls (postconstruction stormwater runoff controls) as set forth in Subsection D below as applicable:
>
> 1. Condition One: stormwater runoff from land development activities discharging a pollutant of concern to either an impaired water identified on the Department's 303(d) list of

impaired waters or a total maximum daily load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment.

2. Condition Two: stormwater runoff from land development activities disturbing five or more acres.
3. Condition Three: stormwater runoff from land development activity disturbing between one and five acres of land during the course of the project, exclusive of the construction of single-family residences and construction activities at agricultural properties

Additionally, Table 1 of Appendix B in GP-0-20-001 lists, "All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land" to only include Erosion and Sediment Controls in the SWPPP (and not post-construction stormwater management).

The proposed activities of this project do not meet the criteria requiring postconstruction stormwater controls; therefore, none are proposed.

The proposed development will mimic existing drainage characteristics and stormwater will overland flow to the west through wooded areas to the Plum Brook (class C) which is part of the Plum River-Croton River sub-watershed (HUC12 020301010302). The Plum River-Croton-River is part of the Lower Hudson Watershed (HUC8 – 02030101). By implementing the temporary and permanent erosion and sediment control measures outlined in this document the proposed development will have no adverse impacts to any of the downstream areas.

2.0 SITE AND PROJECT DESCRIPTION

2.1 Project Location

The project is located within Block 1, Lot 90 of Mahopac (a hamlet) in the town of Carmel in Putnam County, New York. It is bound by Walton Drive to the east, a private residence to the north, and undeveloped wooded land to the south and west. The project site and the immediate surrounding area is shown on the USGS/Site Location Map (Figure 1), Street Map (Figure 2) and Tax Map (Figure 3). Per tax map number 87.5, lot 90 is 66.68 acres.

2.2 Existing Land use and Topography

The existing site is undeveloped wooded land and is located at the southern end of Walton Drive which is a dead-end street.

The existing topography of the subject site is varied and in some areas relatively steep and graded slopes ranging from 15% to 50%. The site surface topography generally slopes down in a westerly direction, from Walton Drive towards the Plum Brook, approximately 1,450 LF to the west of the site.

The highest elevations are ±750 feet above sea level along the easterly side of the site, near Walton Drive. At the edge of this project's disturbance, the land elevation drops ±20 feet to

approximately ±730 feet above sea level. Based on available mapping, this slope continues until it reaches the Plum Brook.

2.3 Proposed Project Description

The proposed improvements include clearing and grading the site in order to install a 2,550 SF fenced equipment compound with a new 140' monopole and associated cellular equipment.

2.4 Site Soil Conditions

Based on information provided in the United States Department of Agriculture Natural Resources Soil Conservation Service, Web Soil Survey of Putnam County, New York, the project area consists of, "CID - Charlton loam, very stony, 15 to 25% slopes." Soils surrounding the site range include "CIF – Charlton loam, very stony, 35-45% slopes" and "CIE – Charlton loam, very stony, 25-35% slopes"

According to the Web Soil Survey the 'CID' soils in this area have a Hydrologic Soil Group 'B'. The USDA Soil Information & Maps (Figure 4) is included in the Appendix.

2.5 Floodplains

Per FEMA Flood Insurance Rate Map 36079C0226E, the site is not located within the 100-year floodplain. Refer to Figure 5 for additional information.

2.6 Wetlands

Delineated Wetlands (by others) are located south of the proposed cell tower and are depicted on the SWPPP drawings. No disturbance is proposed within 100' of the of delineated area. The NYS DEC Environmental Resource Mapper indicates that there are state-regulated wetlands located approximately 1,200 LF west of the site. Refer to Figure 6 for additional information.

2.7 Site map and Construction Drawings

A Site Location Map included as Figure 1.

Construction Drawing Set

A full-size Stormwater Pollution Prevention Plan drawing set is incorporated as Appendix G (see drawing list below of 3 sheets – 22"x34"). The drawings include information on existing conditions, phasing of construction and earthwork, erosion and sediment control, site improvements, grading, and SWPPP details.

3.0 CONSTRUCTION PHASING AND SEQUENCE OF OPERATIONS

3.1 Pre-Construction Activities

- Conduct pre-construction meeting.
- Identify contractor / subcontractor trained contractor responsible for implementation of the SWPPP and provide certification (see Appendix F for a copy of the certification).
- Identify on-site and downstream surface water bodies and install controls to protect them from sedimentation.
- Establish temporary stone construction entrance pad to capture mud and debris from the tires of construction vehicles.
- Install perimeter sediment controls such as silt fences, as shown on the project plans.
- Install temporary construction fencing as shown on the project plans or as directed by the site engineer.
- All earth disturbances during this phase should be limited to work necessary to install erosion and sedimentation controls.
- Owner's qualified inspector to inspect completed erosion and sediment control measures as required

3.2 During Construction Activities

- Stabilize soils with seed and mulch and plantings upon completion of work and at the end of each phase. The maximum time limit for any soil exposure shall be 7 days.
- Maintain soil erosion and sediment control measures throughout construction phase. Remove phased measures as appropriate at the end of phase.
- Completely stabilize with seed, mulch, plantings and other measures, or impervious cover.
- The applicant or developer or their representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices per NYS DEC requirements

Total Disturbance: 20,540 SF

3.3 Post Construction Activities

- Ensure that all surfaces are completely stabilized with seed and mulch or impervious cover. Do not leave any exposed soil.
- After site work is completed perform routine inspection and maintenance and insure proper vegetative cover is maintained at the site.
- Remove temporary erosion and sediment control measures.
- Submit Notice of Termination.

4.0 CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROL

The SWPPP and accompanying plans identify and detail the proposed temporary erosion and sediment control practices to be utilized during construction. These measures will be implemented during construction to minimize soil erosion and control sediment transport off-site.

Temporary erosion and sediment control measures that shall be applied during construction generally include:

- Minimizing soil erosion and sedimentation by stabilization of disturbed areas and by removing sediment from construction-site discharges.
- Establishment of permanent vegetation following the completion of construction activities in any portion of the site.
- Site preparation activities shall be planned to minimize the area and duration of soil disruption.
- The maximum time limit for any soil exposure shall be 7 days.

The contractor will comply with all conditions of the SPDES GP-0-20-001, including the conditions related to maintaining the SWPPP and evidence of compliance with the SWPPP at the job site and allowing regulatory personnel access to the job site and to records in order to determine compliance. If during construction a method is not working, the contractor must make adjustments to prevent sediment-laden runoff or other pollutants from leaving construction site or entering waterbodies.

4.1 Temporary and Permanent Erosion and Sediment Control Measures

The temporary and permanent erosion and sediment control measures recommended and described in the following section are to be installed and/or implemented prior to the initiation of construction and during construction as required and as directed. SEE APPENDIX F FOR MORE INFORMATION ON NYDEC EROSION AND SEDIMENT CONTROL STANDARDS.

Stabilized Construction Entrance

Prior to construction, a stabilized construction entrance will be installed at points of entry and egress from the site to reduce the tracking of sediment onto public roadways. Construction traffic must enter and exit the site at the stabilized construction entrance. When necessary, the placement of additional aggregate atop the filter fabric will be done to assure the minimum thickness is maintained. All sediments and soils spilled, dropped, or washed onto the adjacent streets must be removed immediately. Periodic inspection and needed maintenance shall be provided after each substantial rainfall event.

Landgrading

Permanent reshaping of the existing land surface by grading in accordance with and engineering topographic plan and specification to provide for erosion control and vegetative

establishment on disturbed reshaped areas. This will take place on the subject property in preparation for the new building and site improvements. In order to level the site a large volume of soil will be placed as fill.

Mulching/Wood Mulch/Jute Mat Mulch

Use wood mulch outside of the growing season. Areas undergoing clearing or grading and any areas disturbed by construction activities where work has temporarily or permanently ceased will be stabilized with wood mulch within seven days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the New York State Standards and Specifications for Erosion and Sediment Control. During growing season other suitable mulch material may be used. On slopes, Jute Mat or anchored stabilization in combination with wood mulch shall be used. See pages 4.40 and 4.41 of Appendix G for more information.

Permanent Construction Area Planting

Establishment of permanent grasses and or shrubs to provide a minimum of 80% perennial vegetative cover on areas disturbed by construction. See Section 4.5 for Permanent stabilization planting.

Temporary Construction Area Seeding

Areas undergoing clearing or grading and any areas disturbed by construction activities where work has temporarily or permanently ceased will be stabilized with temporary vegetative cover within seven days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the New York State Standards and Specifications for Erosion and Sediment Control.

Topsoiling

Spreading a specified quality and quantity of topsoil material on grade or constructed subsoil areas to provide acceptable plant cover growing condition thereby reducing erosion to reduce irrigation water needs and to reduce the need for nitrogen fertilizer application.

Trees and Shrubs

Establishing trees and shrubs to protect the soil and plant resources improve an area to increase attractiveness and usefulness of areas.

Silt Fence

A temporary barrier of geotextile fabric installed on contours across a slope used to intercept sediment laden runoff form small drainage areas of disturbed soil. Prior to the initiation of and during construction activities, a geotextile filter fabric (silt fence) will be established along the down slope perimeter of areas to be disturbed. To facilitate effectiveness of the silt fence, daily inspections and inspections immediately after significant storm events will be performed by site personnel. Maintenance of the fence will be performed as needed. In specified areas a reinforced silt fence will be utilized.

Flow Diffuser
A permanent non-erosive outlet for concentrated runoff constructed to diffuse flow uniformly through a stone matrix onto a stabilized area in the form of shallow, low velocity, sheet flow.

4.2 General Considerations and Measures

Steep Slope Stabilization
Proposed slopes are designed to not exceed a 2:1 slope ratio. At all times during and after earthmoving operations slopes will be maintained by a variety of measures including anchored stabilization blankets and jute matting.

Temporary Soil Stockpile
Materials, such as topsoil, will be temporarily stockpiled (if necessary) on-site during construction. Stockpiles will be located in an area away from storm drainage, water bodies and/or courses, and will be properly protected from erosion by a surrounding silt fence.

4.3 Housekeeping Measures – Construction Material and Pollution & Spill Prevention

Litter, Debris, Chemicals, Waste Material,
Litter, construction debris, chemicals, waste material shall be prevented from exposure to stormwater and from becoming a pollutant source. A daily walkthrough of the project site by the trained contractor shall be conducted to identify exposure of potential pollutants to stormwater. Debris and waste material shall be properly covered and managed until removal from the project site is accomplished. All waste materials shall be disposed of properly in accordance with all applicable regulations.

The following good housekeeping and material management practices will be followed on site during the construction project to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff.

- Materials will be brought on site in the minimum quantities required.
- Construction materials shall be stored in a stabilized area designated for contractor use.
- The contractor staging and storage area shall be located in an area that does not negatively impact stormwater quality and will be surrounded with silt fence.
- All materials stored on site will be stored in a neat, orderly manner in their appropriate containers, and if possible, under a roof or other enclosure.
- Products will be kept in their original containers with the original manufacturer's label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used up before disposal. Manufacturer's recommendations for proper use and disposal will be followed.
- The construction manager or his designee will inspect regularly to ensure proper use and disposal of materials on site.

- The contractor shall prohibit washing of tools, equipment, and machinery in or within 100 feet of any watercourse or wetland.

Inventory for Pollution Prevention Plan

The materials and substances listed below are expected to be on-site during construction.

- Petroleum for fueling vehicles will be stored in above ground storage tanks. Tanks will either be steel with an enclosure capable of holding 110% of the storage tank volume or of a Con-Store, concrete encased type typically employed by NYSDOT. Hydraulic oil and other oils will be stored in their original containers. Concrete and asphalt will be stored in the original delivery trucks.
- Fertilizer may be stored on site in its original container for a short period of time prior to seeding. Original containers will be safely piled on pallets or similar devices to protect from moisture.
- Paints and other similar materials will be stored in their original containers and all empty containers will be disposed of in accordance with label directions.
- Portable sanitary facilities, which contain chemical disinfectants (deodorants) will be located on-site, with the disinfectants held in the tank of the toilet.

Hazardous Products

These practices are used to reduce the risks associated with hazardous materials.

- Products will be kept in original containers unless they are not resealable.
- Original labels and material safety data sheets will be retained; they contain important product information.
- If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

Spill Prevention

The following product specific practices will be followed on site.

Petroleum Products:

- Construction personnel should be made aware that emergency telephone numbers are located in this SWPPP.
- The contractor shall immediately contact NYSDEC in the event of a spill and shall take all appropriate steps to contain the spill, including construction of a dike around the spill and placing absorbent material over this spill.
- The contractor shall instruct personnel that spillage of fuels, oils, and similar chemicals must be avoided and will have arranged with a qualified spill remediation company to serve the site.
- Fuels, oils, and chemicals will be stored in appropriate and tightly capped containers. Containers shall not be disposed of on the project site.
- Fuels, oils, chemicals, material, equipment, and sanitary facilities will be stored/located away from trees and at least 100 feet from streams, wells, wet areas, and other environmentally sensitive sites.

- Dispose of chemical containers and surplus chemicals off the project site in accordance with label directions.
- Use tight connections and hoses with appropriate nozzles in all operations involving fuels, lubricating materials or chemicals.
- Use funnels when pouring fuels, lubricating materials or chemicals.
- Refueling and cleaning of construction equipment will take place in parking areas to provide rapid response to emergency situations.
- All on-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Any vehicle leaking fuel or hydraulic fuel will be immediately scheduled for repairs and use will be discontinued until repairs are made.

Fertilizers:

- Fertilizer will be stored in its original containers on pallets with water resistant coverings.
- Proper delivery scheduling will minimize storage time.
- Any damaged containers will be repaired immediately upon discovery and any released fertilizer recovered to the fullest extent practicable.

Paints:

- All containers will be tightly sealed and stored when not required for use.
- Excess paint will not be discharged to the storm water system or wastewater system but will be properly disposed of according to manufacturers' instructions or State and local regulations.

Concrete Trucks:

- Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water only at designated locations on site.

Asphalt Trucks:

- Asphalt trucks shall not discharge surplus asphalt on the site.

Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup.

- The construction manager responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator. The names of responsible spill personnel will be posted in the material storage area and in the onsite construction office or trailer.
- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies. Any spill in excess or suspected to be in excess of two gallons will be reported to the NYSDEC Regional Spill Response Unit. Notification to the

NYSDEC (1-800-457-7362) must be completed within two hours of the discovery of the spill.

- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to absorbent pads, brooms, dust pans, mops, rags, gloves, goggles, activated clay, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with spilled substance.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size

4.4 Maintenance Requirements

The following maintenance procedures shall be performed by the contractor as noted:

- The applicant or developer or their representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices
- Litter, construction debris and chemicals shall be prevented from exposure to stormwater and from becoming a pollutant source.
- The maximum time limit for any soil exposure shall be 7 days.
- All measures will be maintained in good working order; if repairs are found to be necessary, they will be initiated within 24 hours of report.
- Remove built-up sediment from silt fences when it has reached 1/3 of the aboveground height of the silt fence.
- Inspect silt fences for depth of sediment, tears or sags in the fabric, and to see if the fabric is securely attached to the posts. Inspect posts to ensure that they are firmly set in the ground. Replace deteriorated silt fences as soon as the condition is discovered.
- Inspect temporary and permanent seeding weekly during its period of establishment for bare spots and areas of insufficient germination or growth. Take remedial action to establish a stabilized surface in these areas, once identified.
- Accumulations of sediment that escape to off-site areas must be removed at intervals to minimize off-site impacts. Sediment accumulations in public streets shall be removed as soon as possible and before any anticipated rain event. Vehicle tire mud cleaning devices shall be maintained to ensure their proper operation.
- Spare erosion and sediment control barrier material and mulch shall be stocked on-site at all times.

4.5 Permanent Stabilization (seeding)

Permanent Seeding shall be done in accordance with “Permanent Construction Area Planting” Section and Table 4.4 of the New York Department of Environmental Conservation Standards for Erosion and Sediment Control, (See Appendix F of this Volume)

- Upland seed mix shall be applied to all disturbed areas

- In areas to be seeded, the seed bed shall be prepared by discing to a depth of 4 inches.
- Seed shall be evenly spread either by hand or mechanical means at the specified rate.
- Immediately following seeding, seed shall be incorporated into the soil by tracking with a dozer.
- Permanent seeding shall occur in the spring or fall. The spring seeding window is from March 1 to May 15 and the fall seeding window is from august 15 to October 1.
- Permanent seeding application shall be applied at the rate of a minimum of 4.0 pounds total seed per 1000 square feet or approximately 175 pounds per acre. If hydroseeding will be the method of application, the seed rate should be increased by 25% hydro seed areas must still receive straw and tackifier.
- If construction is completed between May 16 and July 15 or between October 2 and February 1, temporary seeding shall be required. The temporary seeding shall then be followed by a permanent seeding in the subsequent spring/fall seeding window. temporary seeding shall be as directed by the engineer.
- A non-growing season stabilization cover shall be applied if construction is completed between July 16 and august 14 or February 2 and February 28. The cover shall consist of straw mulch applied at the rate of 4,000 lbs./acre. The mulch shall be bound in place with an approved binder.
- For permanent or temporary seeding, the seed mix shall be mulched at the rate of 4,000 lbs./acre of straw mulch. The mulch shall be bound in place with an approved binder.
- Approval of final grading by the Owner is required prior to permanent or temporary seeding.

4.6 Final Stabilization

Final Stabilization is defined as all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

5.0 Post-Construction Requirements

The owner or operator shall ensure that the provisions of the SWPPP are implemented from the commencement of construction activity until all areas of disturbance have achieved final stabilization and the Notice of Termination (“NOT”) has been submitted to the Department in accordance with Part V. of the permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of the permit.

Appendix A

FIGURE 1: USGS/SITE LOCATION MAP

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

USGS
science for a changing world

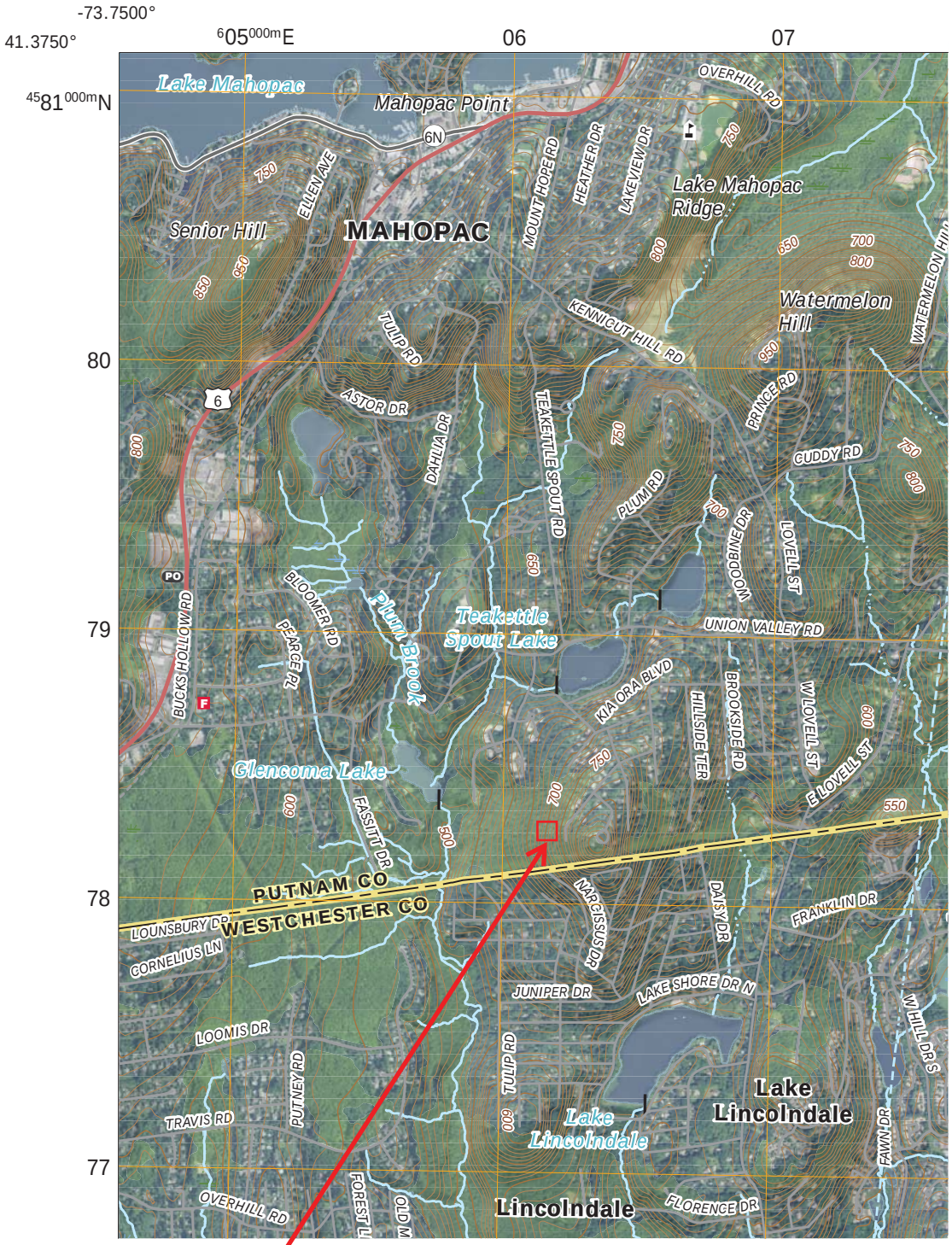
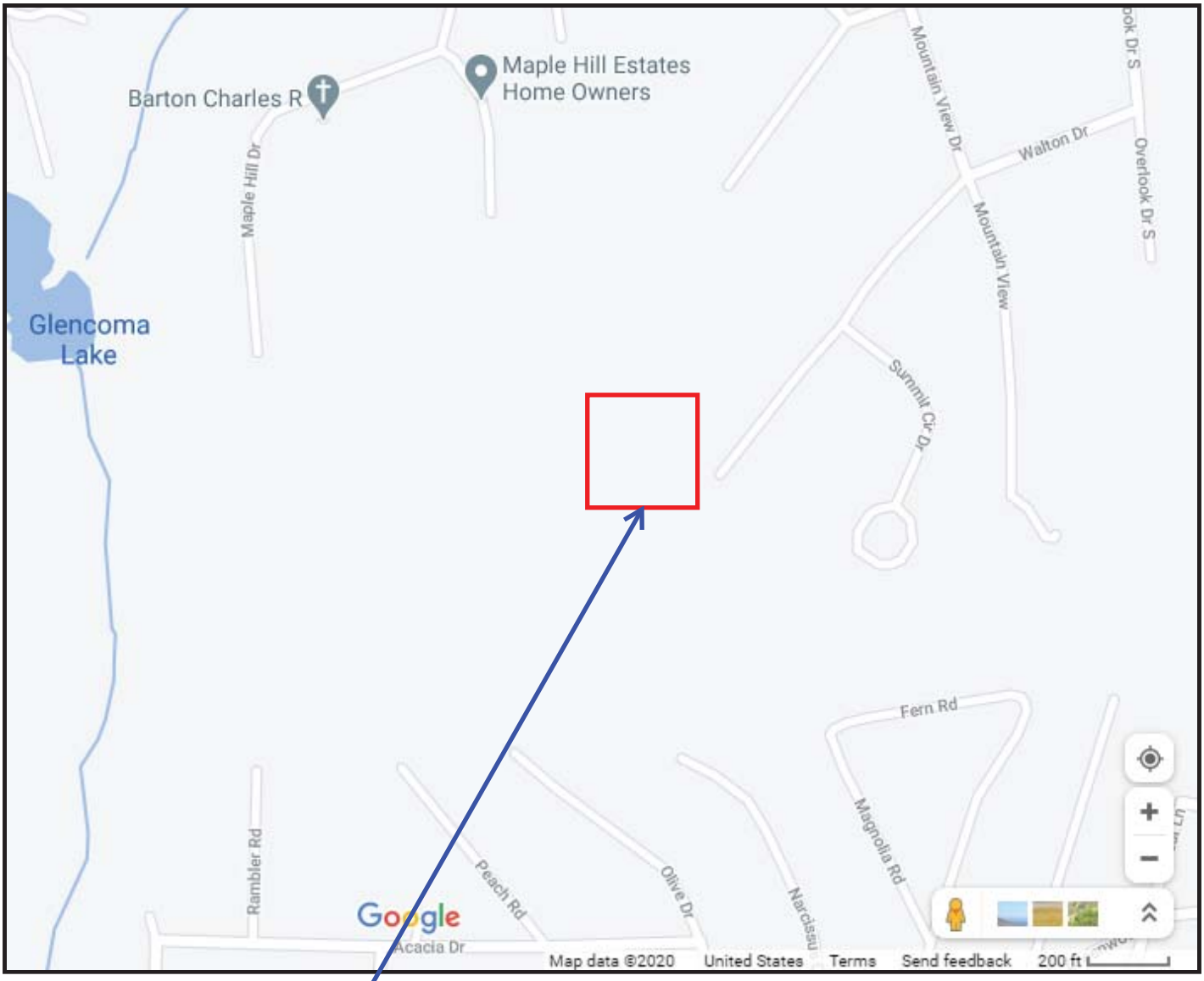


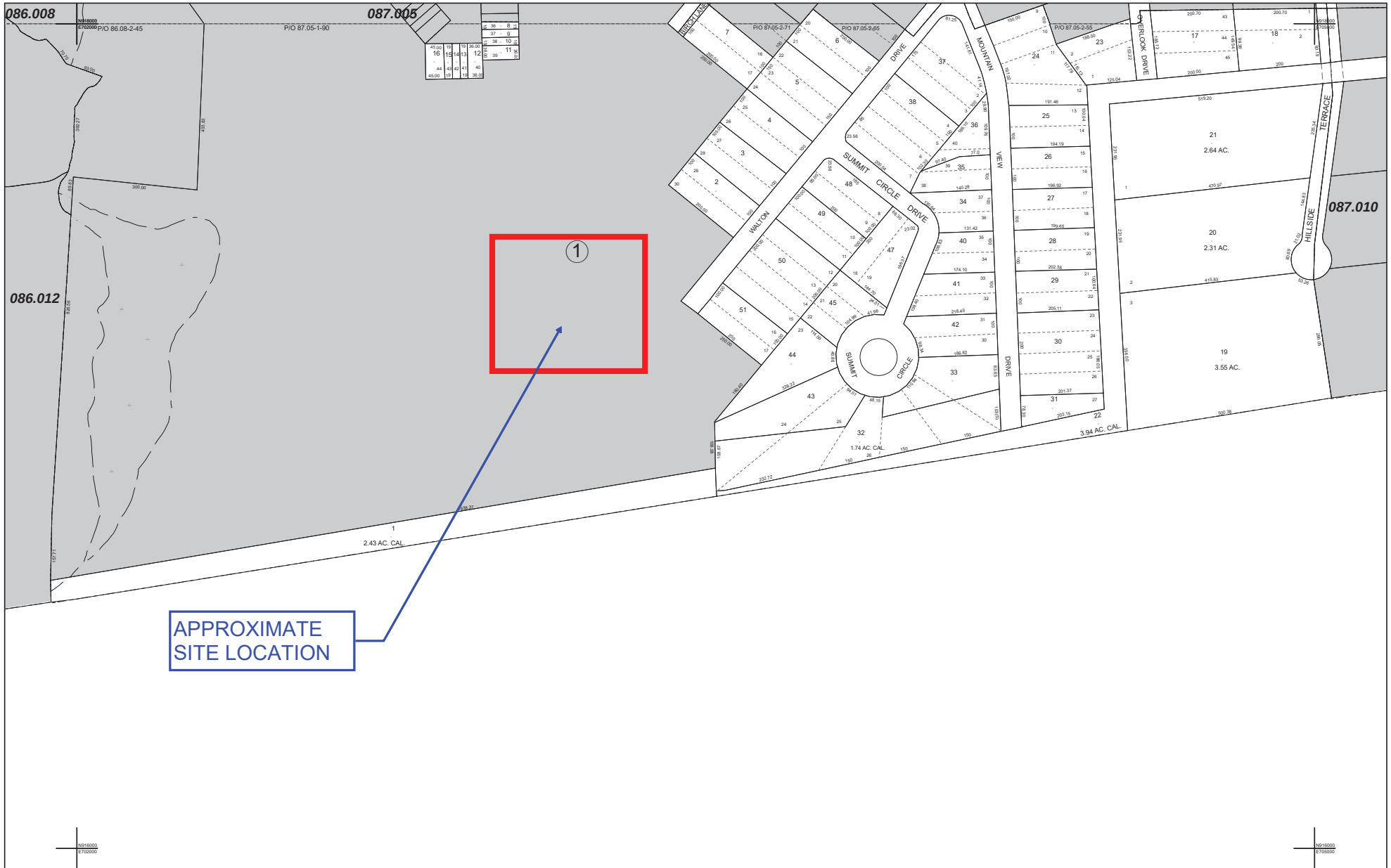
FIGURE 2: STREET MAP



APPROXIMATE
SITE LOCATION

STREET MAP

FIGURE 3: TAX MAP



SEWALL

FOR ASSESSMENT PURPOSES ONLY NOT TO BE USED FOR CONVEYANCES

CONVERTED TO ESRI GEODATABASE DIGITAL TAX MAP FORMAT BY WEILER MAPPING, A DIVISION OF JAMES W. SEWALL COMPANY JUNE 2004

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
10/12/2000	Bl.1-45+46=45		
10/12/2000	Bl.1-10+11=11		

Special Districts

MAHOPAC CENTRAL SCHOOL DISTRICT
MAHOPAC FD

LEGEND

STATE LINE
COUNTY LINE
TOWN LINE
VILLAGE LINE
BLOCK LIMIT
ORIGINAL LOT LINE
PROPERTY LINE
DISPUTED AREA
CONTINOUS OWNERSHIP
ROAD R.O.W.
STREAM WATER LINE
SPECIAL DISTRICT LINE
SCHOOL DISTRICT LINE
PART OF PARCEL BOUNDARY
WETLANDS LINE & SYMBOL
DEVELOPERS LOT NUMBER
DEED DIMENSION
SCALED DIMENSION
CALCULATED AREA
VISUAL CENTROID
PARCEL NUMBER

86.08	87.05	87.06
86.12		87.10

TOWN OF CARMEL

PUTNAM COUNTY, NEW YORK

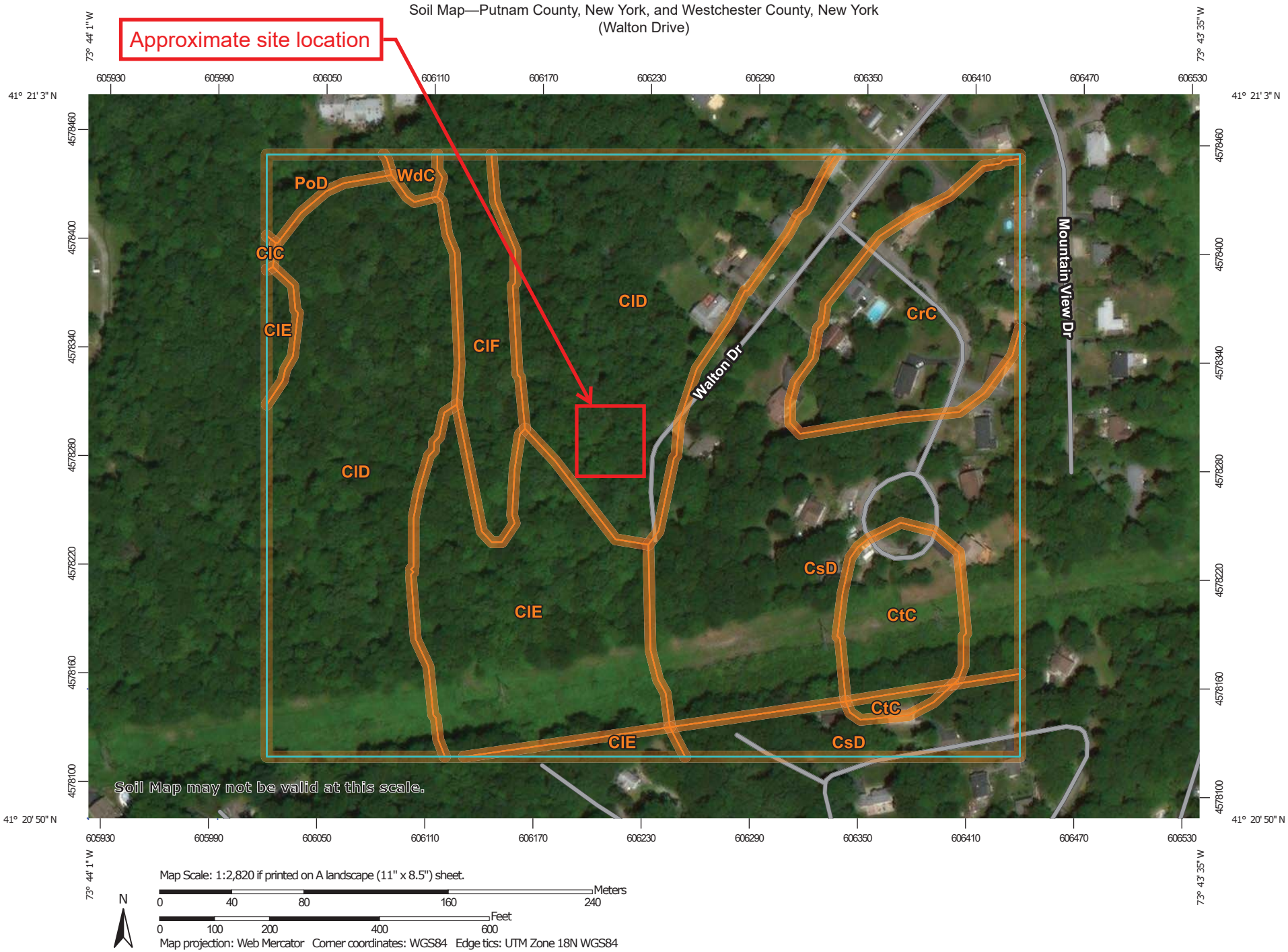
REVISED THROUGH
FEBRUARY 28, 2020

DATE AERIAL PHOTOGRAPHY .. 4-10-87 MAP:2-17-89
NY STATE PLANE COORD. = NAD83 IN FEET

87.9

FIGURE 4: SOILS MAP

Soil Map—Putnam County, New York, and Westchester County, New York
(Walton Drive)



Map Scale: 1:2,820 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP LEGEND

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:12,000 to 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Putnam County, New York
Survey Area Data: Version 17, Jun 11, 2020

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 16, Jun 11, 2020

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 5, 2016

MAP INFORMATION

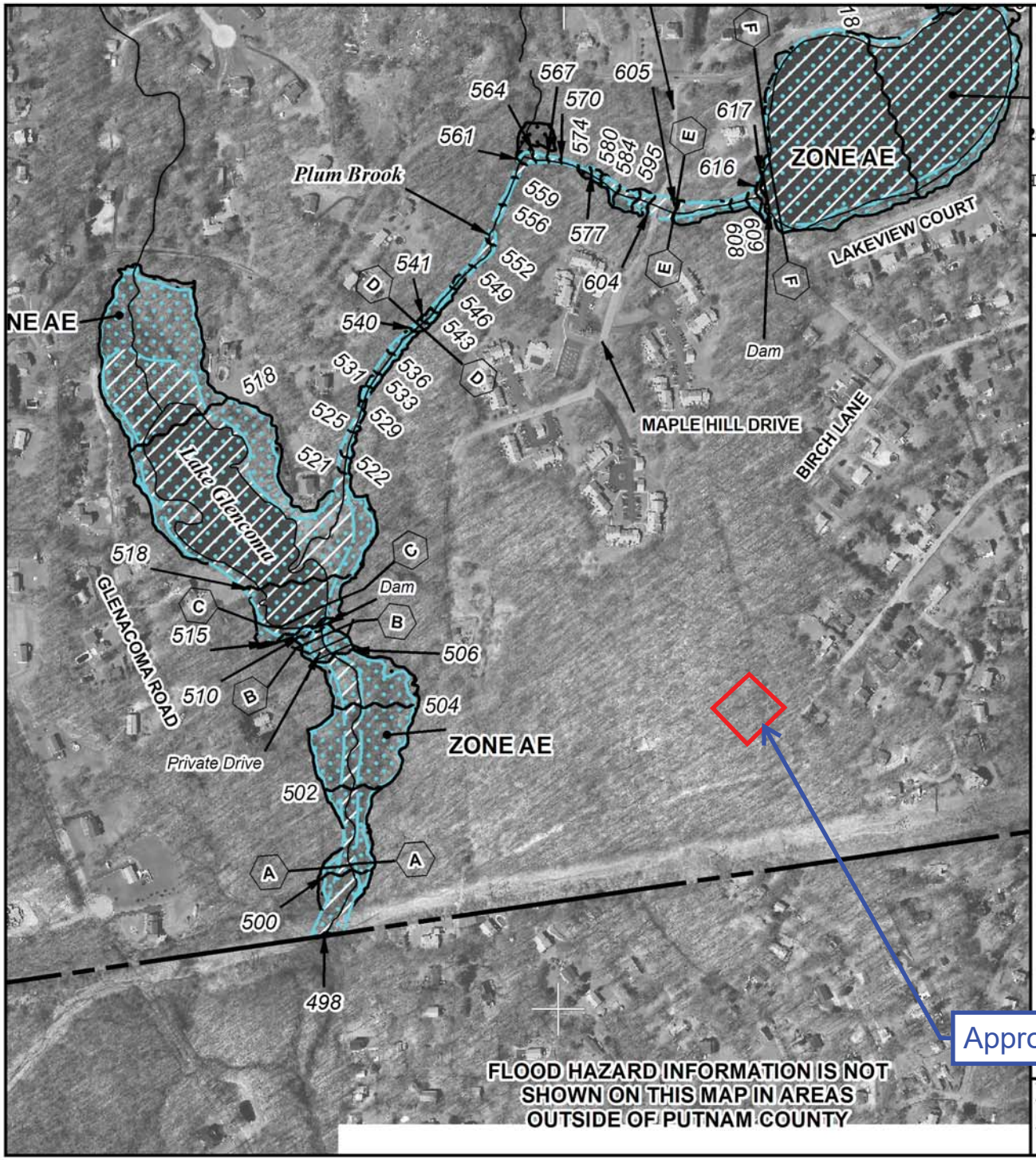
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ClC	Charlton fine sandy loam, 8 to 15 percent slopes, very stony	0.0	0.0%
ClD	Charlton loam, 15 to 25 percent slopes, very stony	12.7	36.9%
ClE	Charlton loam, 25 to 35 percent slopes, very stony	4.8	13.8%
ClF	Charlton loam, 35 to 45 percent slopes, very stony	1.6	4.6%
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	3.1	8.9%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	8.6	25.0%
CtC	Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes	1.4	4.1%
PoD	Paxton fine sandy loam, 15 to 25 percent slopes, very stony	0.4	1.2%
WdC	Woodbridge loam, 8 to 15 percent slopes	0.1	0.4%
Subtotals for Soil Survey Area		**32.8**	**95.0%**
Totals for Area of Interest		**34.5**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ClE	Charlton loam, 25 to 35 percent slopes, very stony	0.2	0.7%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	1.3	3.8%
CtC	Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes	0.1	0.4%
Subtotals for Soil Survey Area		**1.7**	**5.0%**
Totals for Area of Interest		**34.5**	**100.0%**

FIGURE 5: FEMA FLOODPLAIN MAP



MAP SCALE 1" = 500'

250 0 500 1000

FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0226E

FIRM

FLOOD INSURANCE RATE MAP

PUTNAM COUNTY,
NEW YORK
(ALL JURISDICTIONS)

PANEL 226 OF 256

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CARMEL, TOWN OF	360669	0226	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

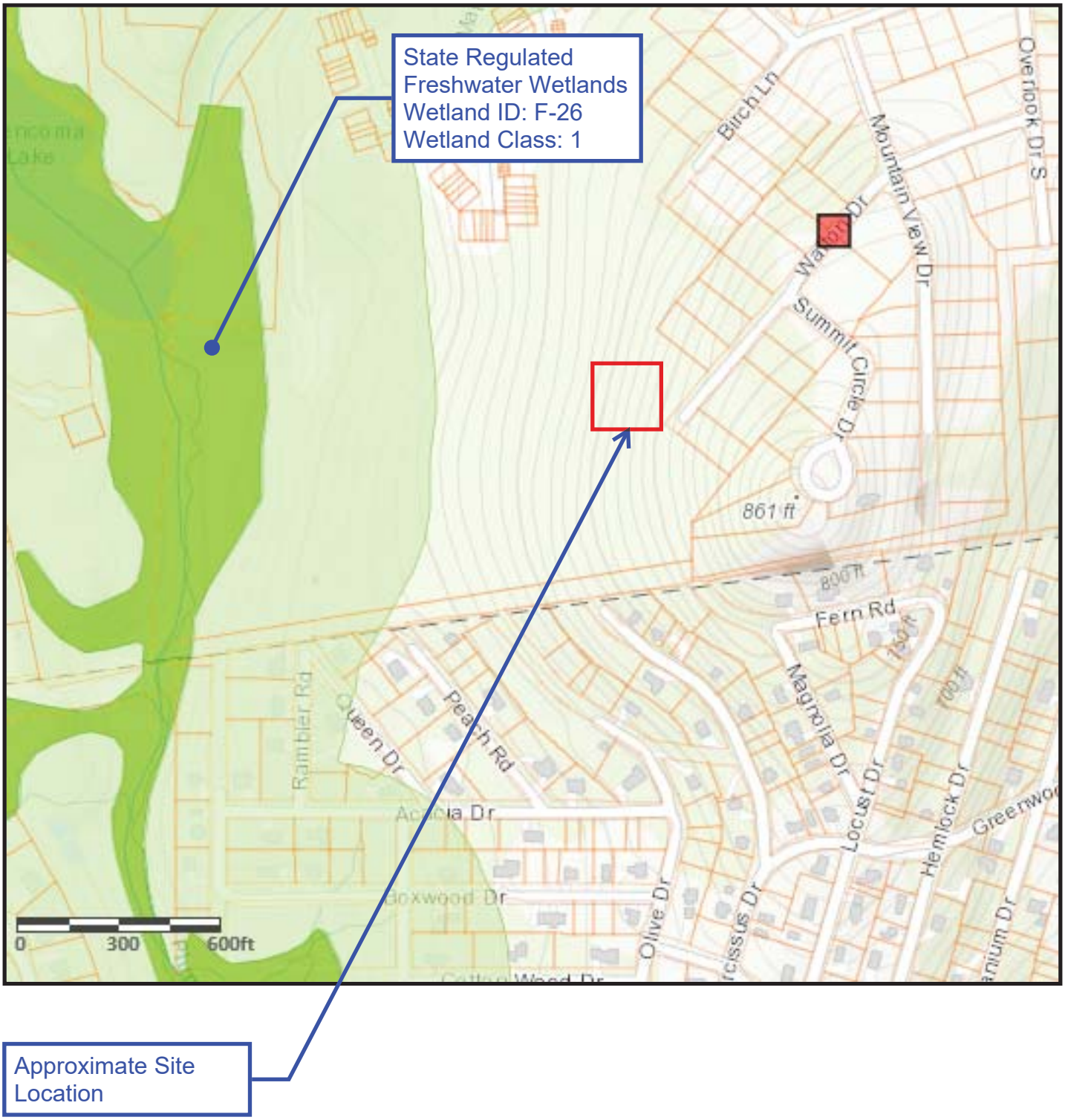
MAP NUMBER
36079C0226E

EFFECTIVE DATE
MARCH 4, 2013

Federal Emergency Management Agency

Approximate Site Location

FIGURE 6: NYS ERS MAP



ERM MAP

Source: https://gisservices.dec.ny.gov/gis/erm/

Appendix B

APPENDIX F
CONSTRUCTION SITE INSPECTION AND MAINTENANCE LOG BOOK

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES

SAMPLE CONSTRUCTION SITE LOG BOOK

Table of Contents

I. **PRE-CONSTRUCTION MEETING DOCUMENTS**

Project Name _____

Permit No. _____ **Date of Authorization** _____

Name of Operator _____

Prime Contractor _____

a. **Preamble to Site Assessment and Inspections**

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified inspector[1] conduct an assessment of the site prior to the commencement of construction[2] and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements. A preconstruction meeting should be held to review all of the SWPPP requirements with construction personnel.

When construction starts, site inspections shall be conducted by the qualified inspector at least every 7 calendar days. The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that the site has undergone final stabilization[3] using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 Refer to "Qualified Inspector" inspection requirements in the current SPDES General Permit for Stormwater Discharges from Construction Activity for complete list of inspection requirements.
2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.
3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Pre-construction Site Assessment Checklist
(NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

[ ] [ ] [ ] Has a Notice of Intent been filed with the NYS Department of Conservation?
[ ] [ ] [ ] Is the SWPPP on-site? Where?_____
[ ] [ ] [ ] Is the Plan current? What is the latest revision date?_____
[ ] [ ] [ ] Is a copy of the NOI (with brief description) onsite? Where?_____
[ ] [ ] [ ] Have all contractors involved with stormwater related activities signed a contractor's certification?

2. Resource Protection

Yes No NA

[ ] [ ] [ ] Are construction limits clearly flagged or fenced?
[ ] [ ] [ ] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
[ ] [ ] [ ] Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

[ ] [ ] [ ] Clean stormwater runoff has been diverted from areas to be disturbed.
[ ] [ ] [ ] Bodies of water located either on site or in the vicinity of the site have been identified and protected.
[ ] [ ] [ ] Appropriate practices to protect on-site or downstream surface water are installed.
[ ] [ ] [ ] Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Access

Yes No NA

[ ] [ ] [ ] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
[ ] [ ] [ ] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
[ ] [ ] [ ] Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Sediment Controls

Yes No NA

[ ] [ ] [ ] Silt fence material and installation comply with the standard drawing and specifications.
[ ] [ ] [ ] Silt fences are installed at appropriate spacing intervals
[ ] [ ] [ ] Sediment/detention basin was installed as first land disturbing activity.
[ ] [ ] [ ] Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

[ ] [ ] [ ] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
[ ] [ ] [ ] The plan is contained in the SWPPP on page _____
[ ] [ ] [ ] Appropriate materials to control spills are onsite. Where? _____

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and

6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

SITE PLAN/SKETCH

_____ _____

Inspector (print name) **Date of Inspection**

_____ _____

Qualified Inspector (print name) **Qualified Inspector Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Appendix C

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP- 0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2020

Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator

1-23-20

Authorized Signature

Date

Address: NYS DEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System ("NPDES")* permit or by a state permit program. New York administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of "*construction activity*", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a *point source* and therefore, pursuant to ECL section 17-0505 and 17-0701, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. The *owner or operator* cannot wait until there is an actual *discharge* from the *construction site* to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES

Table of Contents

Part 1. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;

2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State.*

3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

B. Effluent Limitations Applicable to Discharges from Construction Activities

*Discharge*s authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the *Stormwater Pollution Prevention Plan* (“SWPPP”) the reason(s) for the

deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:

   (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharge*s;

   (ii) Control stormwater *discharge*s, including both peak flowrates and total stormwater volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points;

   (iii) *Minimize* the amount of soil exposed during *construction activity*;

   (iv) *Minimize* the disturbance of *steep slopes*;

   (v) *Minimize* sediment *discharge*s from the site;

   (vi) Provide and maintain *natural buffer*s around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharge*s, unless *infeasible*;

   (vii) *Minimize* soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted;

   (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and

   (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged from the site.

b. **Soil Stabilization**. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments

listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

c. **Dewatering**. *Discharge*s from *dewatering* activities, including *discharge*s from *dewatering* of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures**. Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:

(i) *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;

(ii) *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use) ; and

(iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. **Prohibited *Discharges*.** The following *discharge*s are prohibited:

(i) Wastewater from washout of concrete;

(ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

(iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;

(iv) Soaps or solvents used in vehicle and equipment washing; and

(v) Toxic or hazardous substances from a spill or other release.

f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

C. Post-construction Stormwater Management Practice Requirements

1. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the *performance criteria* in the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices ("SMPs") are not designed in conformance with the *performance criteria* in the Design Manual, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

a. Sizing Criteria for New Development

(i) Runoff Reduction Volume ("RRv"): Reduce the total Water Quality Volume ("WQv") by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP.

For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume ("Cpv"): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
(2) The site discharges directly to tidal waters, or fifth order or larger streams.

(iv) *Overbank* Flood Control Criteria ("Qp"): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
(1) the site discharges directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

(v) Extreme Flood Control Criteria ("Qf"): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
(1) the site discharges directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

b. *Sizing Criteria* for *New Development* in Enhanced Phosphorus Removal Watershed

(i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be

calculated in accordance with the criteria in Section 10.3 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible.*

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
(2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.

(iv) *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

(v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

c. Sizing Criteria for Redevelopment Activity

(i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.

(1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or

(2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or

(3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or

(4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 – 4 above.

(ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(iii) *Overbank* Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site

d. Sizing Criteria for Combination of Redevelopment Activity and New Development

Construction projects that include both New Development and Redevelopment Activity shall provide post-construction stormwater management controls that meet the sizing criteria calculated as an aggregate of the Sizing Criteria in Part I.C.2.a. or b. of this permit for the New Development portion of the project and Part I.C.2.c of this permit for Redevelopment Activity portion of the project.

D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control *discharge*s necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any discharge to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;

2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharge*s authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharge*s authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharge*s will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

E. Eligibility Under This General Permit

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph F. of this Part.

2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharge*s; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.

3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated *discharge*s from *construction site* de-watering operations. All non-stormwater discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.

4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

F. Activities Which Are Ineligible for Coverage Under This General Permit

All of the following are **not** authorized by this permit:

1. *Discharge*s after *construction activities* have been completed and the site has undergone *final stabilization*;

2. *Discharge*s that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;

3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;

4. *Construction activities* or *discharges* from *construction activities* that may adversely affect an *endangered or threatened species* unless the *owner or*

operator has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.D.2 of this permit;

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;

6. *Construction activities* for residential, commercial and institutional projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

7. *Construction activities* for linear transportation projects and linear utility projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.D.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:

   a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.

      - 1-5 acres of disturbance - 20 feet
      - 5-20 acres of disturbance - 50 feet
      - 20+ acres of disturbance - 100 feet, or

   b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
      (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
      (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
      (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
      (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or

   c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

(i) No Affect
(ii) No Adverse Affect
(iii) Executed Memorandum of Agreement, or

d. Documentation that:

(i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.

9. *Discharge*s from *construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

Part II. PERMIT COVERAGE

A. How to Obtain Coverage

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.

2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have the SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the “MS4 SWPPP Acceptance” form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department.

3. The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.F. (Change of *Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4* . This exemption does not apply to *construction activities* subject to the New York City Administrative Code.

B. Notice of Intent (NOI) Submittal

1. Prior to December 21, 2020, an owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (http://www.dec.ny.gov/). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address:

   NOTICE OF INTENT
   NYS DEC, Bureau of Water Permits
   625 Broadway, 4th Floor
   Albany, New York 12233-3505

2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.

3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.

4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

C. Permit Authorization

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.

2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:

   a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (http://www.dec.ny.gov/) for more information,

   b. where required, all necessary Department permits subject to the *Uniform Procedures Act ("UPA")* (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits

must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

c. the final SWPPP has been prepared, and

d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.

3. An *owner or operator* that has satisfied the requirements of Part II.C.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

   a. For *construction activities* that are not subject to the requirements of a *regulated, traditional land use control MS4*:

      (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or

      (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has not been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;

      (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.

b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:

(i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed "*MS4* SWPPP Acceptance" form, or

(ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed "MS4 SWPPP Acceptance" form.

4. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.C. of this permit.

D. General Requirements For Owners or Operators With Permit Coverage

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination ("NOT") has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.

2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-20-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor's or subcontractor's certification statement (see Part III.A.6.), and all documentation necessary to demonstrate eligibility with this permit at the *construction site* until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.

3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land*

use control MS4, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.

c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.

d. The *owner or operator* shall install any additional site-specific practices needed to protect water quality.

e. The *owner or operator* shall include the requirements above in their SWPPP.

4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements or consistent with Part VII.K..

5. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.

6. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the

regulated, traditional land use control MS4 in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *regulated, traditional land use control MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *regulated, traditional land use control MS4* prior to commencing construction of the post-construction stormwater management practice.

E. Permit Coverage for Discharges Authorized Under GP-0-15-002

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-15-002), an *owner or operator* of *a construction activity* with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to *discharge* in accordance with GP- 0-20-001, unless otherwise notified by the Department.

   An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-20-001.

F. Change of Owner or Operator

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4,* the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.

2. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.B.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.

3. Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or*

operator was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.

2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.

3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.

4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP, including construction drawings:

    a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;

b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*;

c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* the Department or other regulatory authority; and

d. to document the final construction conditions.

5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4. of this permit.

6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor.* The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

   The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

   "I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with

the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharge*s from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

B. Required SWPPP Contents

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:

    a. Background information about the scope of the project, including the location, type and size of project

b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours ; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater *discharge*(s);

c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);

d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;

e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;

f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;

g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;

h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;

i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection

schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016;

j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;

k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the *construction site*; and

l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

   Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

   The post-construction stormwater management practice component of the SWPPP shall include the following:

   a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;

b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;

c. A Stormwater Modeling and Analysis Report that includes:
   (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;

   (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;

   (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;

   (iv) Summary table, with supporting calculations, which demonstrates that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;

   (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and

   (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;

d. Soil testing results and locations (test pits, borings);

e. Infiltration test results, when required; and

f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria,* Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

C. Required SWPPP Components by Project Type

Unless otherwise notified by the Department, *owners or operators* of *construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.

2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York or protect the public health and safety and/or the environment.

B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity* identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall

begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.

3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

C. Qualified Inspector Inspection Requirements

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- New York State Erosion and Sediment Control Certificate Program holder
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:

   a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located

in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and

d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:

a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.

b. For construction sites where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.

d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization,* and all temporary, structural erosion and sediment control measures have been removed*;* and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice" certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.B.1 of this permit.

e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization,* all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site*, and all points of *discharge* from the *construction site*.

4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

a. Date and time of inspection;

b. Name and title of person(s) performing inspection;

c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;

d. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This shall include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;

e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;

f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;

g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);

k. Identification and status of all corrective actions that were required by previous inspection; and

l. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

6. All inspection reports shall be signed by the *qualified inspector.* Pursuant to Part II.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.B.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:

   a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;

c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.F. of this permit.

d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.

3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.

4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector*'s final site inspection certification(s) required in Part V.A.3. of this permit.

5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:

a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),

c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,

d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

Part VI. REPORTING AND RETENTION RECORDS

A. Record Retention

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

B. Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.B.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water

Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

B. Continuation of the Expired General Permit

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

C. Enforcement

Failure of the *owner or operator,* its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to $37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

G. Other Information

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit , or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

H. Signatory Requirements

1. All NOIs and NOTs shall be signed as follows:

    a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) the chief executive officer of the agency, or

(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field,

superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.

3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.

4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4,* or by a duly authorized representative of that person.

   It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Requirement to Obtain Coverage Under an Alternative Permit

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall

include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to *discharge* under a general SPDES permit for the same *discharge*(s), the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

L. Proper Operation and Maintenance

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

M. Inspection and Entry

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the owner’s or operator's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.

4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

N. Permit Actions

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. Definitions

Definitions of key terms are included in Appendix A of this permit.

P. Re-Opener Clause

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.

2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

R. Other Permits

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

APPENDIX A – Acronyms and Definitions

Acronyms

APO – Agency Preservation Officer
BMP – Best Management Practice
CPESC – Certified Professional in Erosion and Sediment Control
Cpv – Channel Protection Volume
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
DOW – Division of Water
EAF – Environmental Assessment Form
ECL - Environmental Conservation Law
EPA – U. S. Environmental Protection Agency
HSG – Hydrologic Soil Group
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
OPRHP – Office of Parks, Recreation and Historic Places
Qf – Extreme Flood
Qp – Overbank Flood
RRv – Runoff Reduction Volume
RWE – Regional Water Engineer
SEQR – State Environmental Quality Review
SEQRA - State Environmental Quality Review Act
SHPA – State Historic Preservation Act
SPDES – State Pollutant Discharge Elimination System
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UPA – Uniform Procedures Act
USDA – United States Department of Agriculture
WQv – Water Quality Volume

Definitions

All definitions in this section are solely for the purposes of this permit.

Agricultural Building – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

Agricultural Property –means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both "sewage" and "stormwater".

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for "*Construction Activity(ies)*" also.

Construction Activity(ies) - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Construction Site – means the land area where *construction activity(ies)* will occur. See definition for "*Commence (Commencement of) Construction Activities"* and "*Larger Common Plan of Development or Sale" also.*

Dewatering – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a *construction site* by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a *construction site* to a separate storm sewer system

and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or *point source*.

Embankment –means an earthen or rock slope that supports a road/highway.

Endangered or Threatened Species – see 6 NYCRR Part 182 of the Department's rules and regulations for definition of terms and requirements.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Equivalent (Equivalence) – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

Groundwater(s) - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Historic Property – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

Impervious Area (Cover) - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Infeasible – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term “plan” in “larger common plan of development or sale” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

Minimize – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State*;*
(ii) Designed or used for collecting or conveying stormwater;
(iii) Which is not a *combined sewer*; and
(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Natural Buffer –means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

New Development – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity*.

Nonpoint Source - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

Overbank –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

Performance Criteria – means the design criteria listed under the "Required Elements" sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf) in Part I.C.2. of the permit.

Point Source - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq .

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Redevelopment Activity(ies) – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

Regulated, Traditional Land Use Control MS4 - means a city, town or village with land use control authority that is authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

Routine Maintenance Activity - means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that stabilizes the transition between the road shoulder and the ditch or *embankment*,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

Site limitations – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

Sizing Criteria – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), *Overbank* Flood (Qp), and Extreme Flood (Qf).

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Steep Slope – means land area designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%) , or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

Streambank – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

Stormwater Pollution Prevention Plan (SWPPP) – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporarily Ceased – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and *nonpoint source*s. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standards*, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for *point source* discharges, load allocations (LAs) for *nonpoint source*s, and a margin of safety (MOS).

Trained Contractor - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed

training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

Uniform Procedures Act (UPA) Permit - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

APPENDIX B – Required SWPPP Components by Project Type

Table 1
Construction Activities that Require the Preparation of a SWPPP That Only Includes Erosion and Sediment Controls

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single family home not located in one of the watersheds listed in Appendix C or not *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions with 25% or less impervious cover at total site build-out and not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E
- Construction of a barn or other *agricultural building*, silo, stock yard or pen.

The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects
- Pond construction
- Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover
- Cross-country ski trails and walking/hiking trails
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path.
- Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

Table 1 (Continued) CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that *alter hydrology from pre to post development* conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

Table 2
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family home that disturbs five (5) or more acres of land
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other *agricultural building* (e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- Playgrounds that include the construction or reconstruction of impervious area
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

Table 2 (Continued)

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover,* and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction project
- All other construction activities that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

- Entire New York City Watershed located east of the Hudson River - Figure 1
- Onondaga Lake Watershed - Figure 2
- Greenwood Lake Watershed -Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

Figure 1 - New York City Watershed East of the Hudson

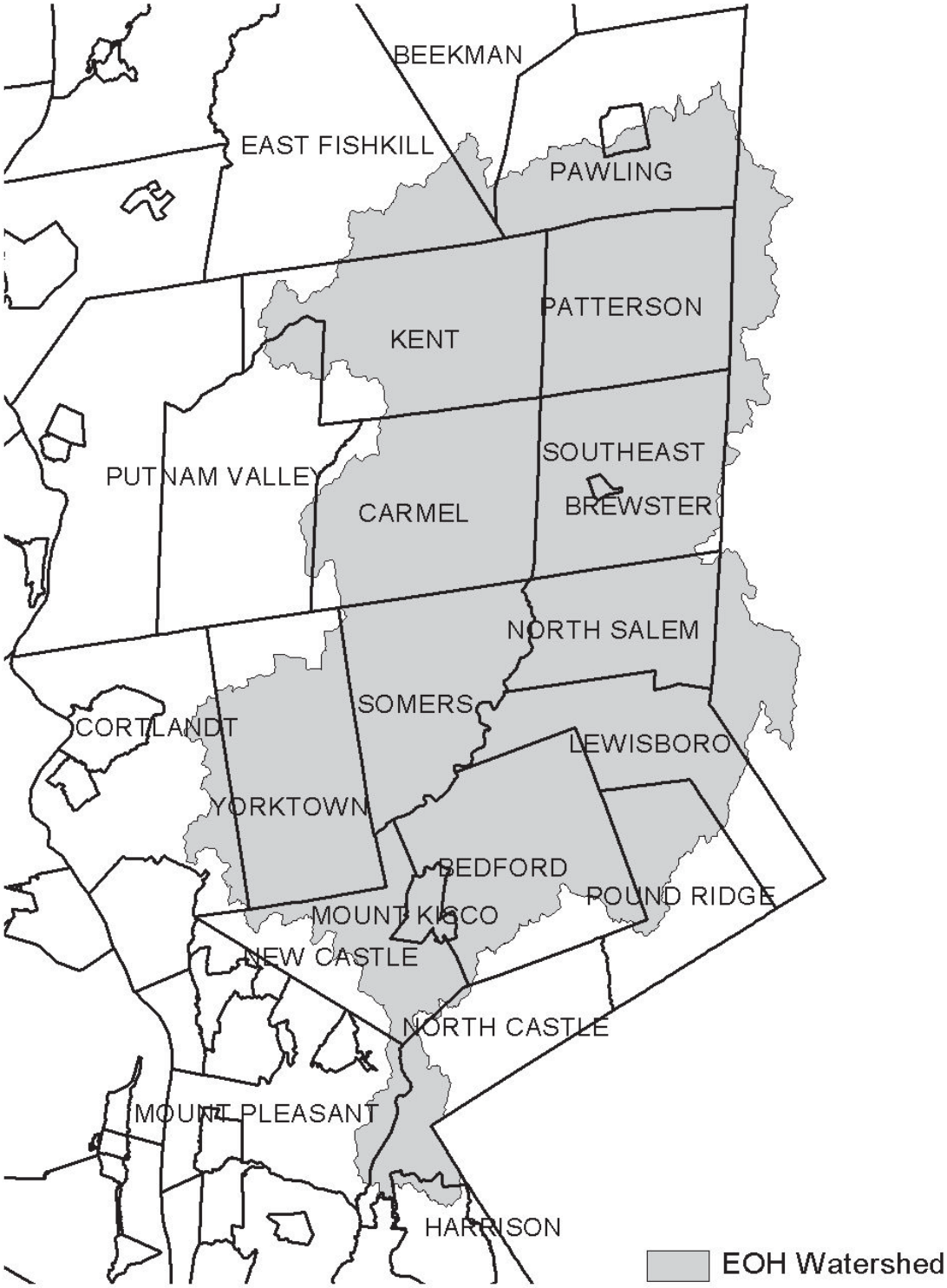


Figure 2 - Onondaga Lake Watershed

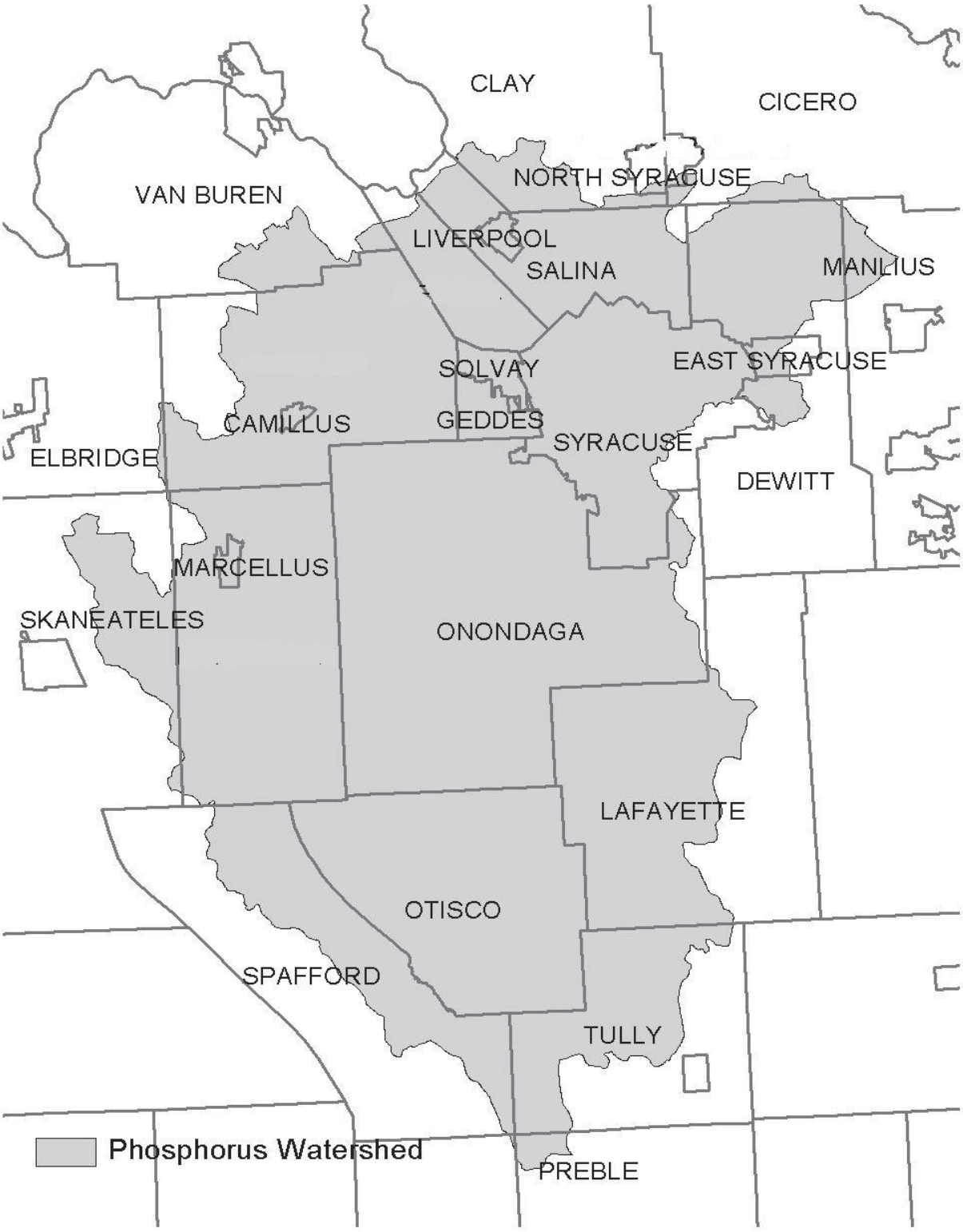


Figure 3 - Greenwood Lake Watershed

Figure 4 - Oscawana Lake Watershed

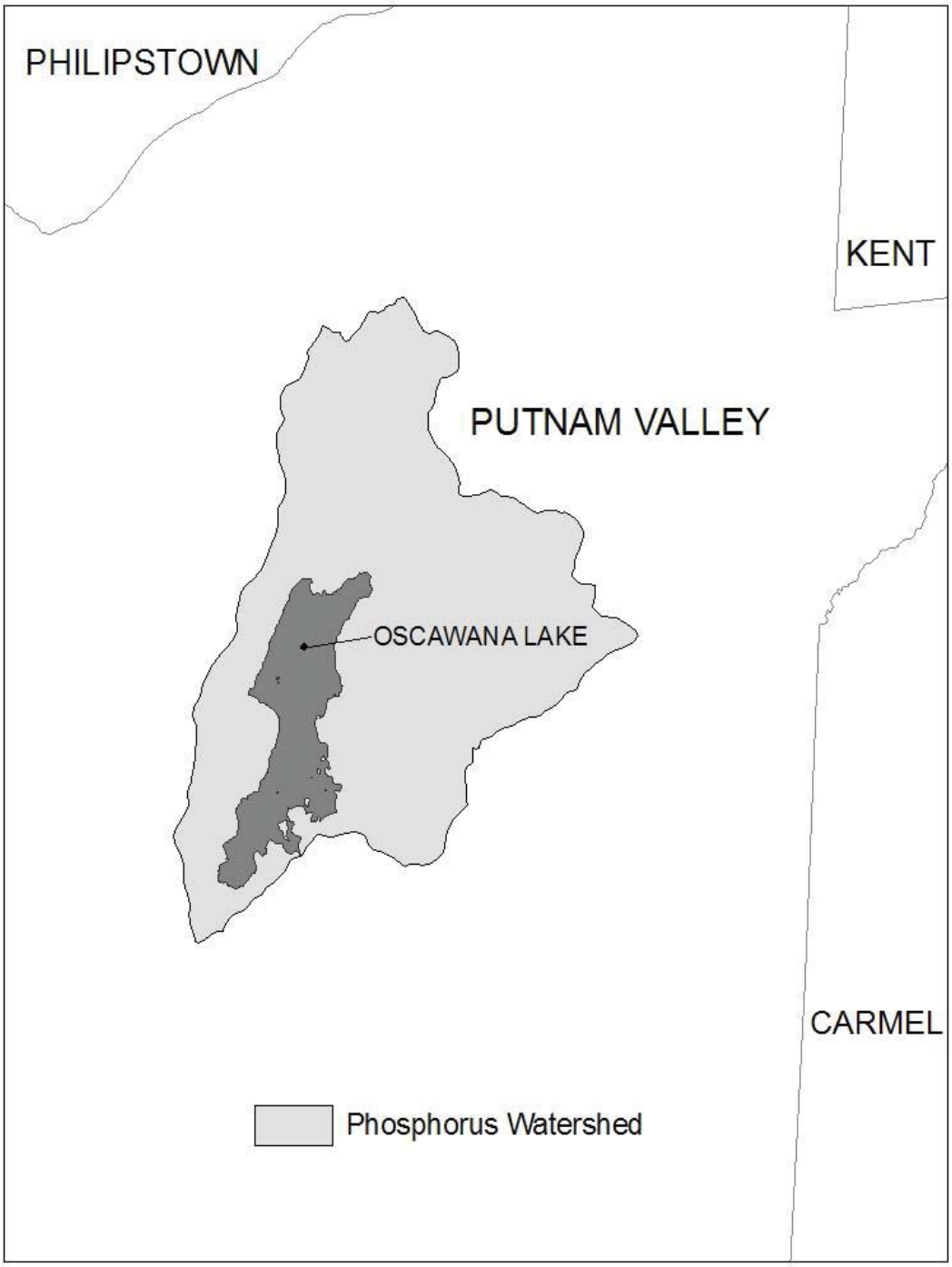
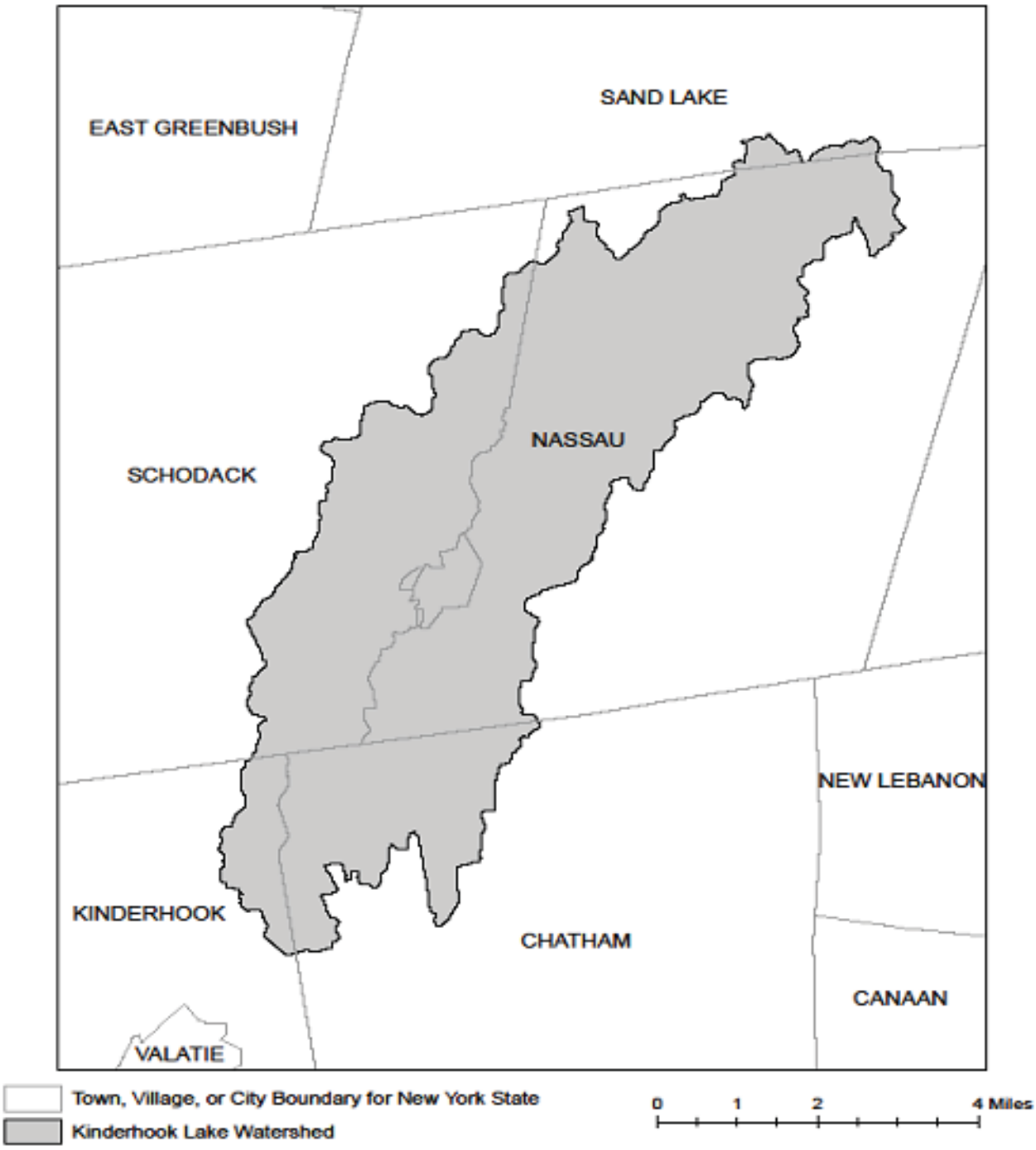


Figure 5 - Kinderhook Lake Watershed



APPENDIX D – Watersheds with Lower Disturbance Threshold

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C

APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

COUNTY	WATERBODY	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	Nutrients
Albany	Basic Creek Reservoir	Nutrients
Allegany	Amity Lake, Saunders Pond	Nutrients
Bronx	Long Island Sound, Bronx	Nutrients
Bronx	Van Cortlandt Lake	Nutrients
Broome	Fly Pond, Deer Lake, Sky Lake	Nutrients
Broome	Minor Tribs to Lower Susquehanna (north)	Nutrients
Broome	Whitney Point Lake/Reservoir	Nutrients
Cattaraugus	Allegheny River/Reservoir	Nutrients
Cattaraugus	Beaver (Alma) Lake	Nutrients
Cattaraugus	Case Lake	Nutrients
Cattaraugus	Linlyco/Club Pond	Nutrients
Cayuga	Duck Lake	Nutrients
Cayuga	Little Sodus Bay	Nutrients
Chautauqua	Bear Lake	Nutrients
Chautauqua	Chadakoin River and tribs	Nutrients
Chautauqua	Chautauqua Lake, North	Nutrients
Chautauqua	Chautauqua Lake, South	Nutrients
Chautauqua	Findley Lake	Nutrients
Chautauqua	Hulburt/Clymer Pond	Nutrients
Clinton	Great Chazy River, Lower, Main Stem	Silt/Sediment
Clinton	Lake Champlain, Main Lake, Middle	Nutrients
Clinton	Lake Champlain, Main Lake, North	Nutrients
Columbia	Kinderhook Lake	Nutrients
Columbia	Robinson Pond	Nutrients
Cortland	Dean Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Dutchess	Fall Kill and tribs	Nutrients
Dutchess	Hillside Lake	Nutrients
Dutchess	Wappingers Lake	Nutrients
Dutchess	Wappingers Lake	Silt/Sediment
Erie	Beeman Creek and tribs	Nutrients
Erie	Ellicott Creek, Lower, and tribs	Silt/Sediment
Erie	Ellicott Creek, Lower, and tribs	Nutrients
Erie	Green Lake	Nutrients
Erie	Little Sister Creek, Lower, and tribs	Nutrients
Erie	Murder Creek, Lower, and tribs	Nutrients
Erie	Rush Creek and tribs	Nutrients
Erie	Scajaquada Creek, Lower, and tribs	Nutrients
Erie	Scajaquada Creek, Middle, and tribs	Nutrients
Erie	Scajaquada Creek, Upper, and tribs	Nutrients
Erie	South Branch Smoke Cr, Lower, and tribs	Silt/Sediment
Erie	South Branch Smoke Cr, Lower, and tribs	Nutrients
Essex	Lake Champlain, Main Lake, South	Nutrients
Essex	Lake Champlain, South Lake	Nutrients
Essex	Willsboro Bay	Nutrients
Genesee	Bigelow Creek and tribs	Nutrients
Genesee	Black Creek, Middle, and minor tribs	Nutrients
Genesee	Black Creek, Upper, and minor tribs	Nutrients
Genesee	Bowen Brook and tribs	Nutrients
Genesee	LeRoy Reservoir	Nutrients
Genesee	Oak Orchard Cr, Upper, and tribs	Nutrients
Genesee	Tonawanda Creek, Middle, Main Stem	Nutrients
Greene	Schoharie Reservoir	Silt/Sediment
Greene	Sleepy Hollow Lake	Silt/Sediment
Herkimer	Steele Creek tribs	Silt/Sediment
Herkimer	Steele Creek tribs	Nutrients
Jefferson	Moon Lake	Nutrients
Kings	Hendrix Creek	Nutrients
Kings	Prospect Park Lake	Nutrients
Lewis	Mill Creek/South Branch, and tribs	Nutrients
Livingston	Christie Creek and tribs	Nutrients
Livingston	Conesus Lake	Nutrients
Livingston	Mill Creek and minor tribs	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs	Nutrients
Monroe	Buck Pond	Nutrients
Monroe	Cranberry Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Monroe	Lake Ontario Shoreline, Western	Nutrients
Monroe	Long Pond	Nutrients
Monroe	Mill Creek and tribs	Nutrients
Monroe	Mill Creek/Blue Pond Outlet and tribs	Nutrients
Monroe	Minor Tribs to Irondequoit Bay	Nutrients
Monroe	Rochester Embayment - East	Nutrients
Monroe	Rochester Embayment - West	Nutrients
Monroe	Shipbuilders Creek and tribs	Nutrients
Monroe	Thomas Creek/White Brook and tribs	Nutrients
Nassau	Beaver Lake	Nutrients
Nassau	Camaans Pond	Nutrients
Nassau	East Meadow Brook, Upper, and tribs	Silt/Sediment
Nassau	East Rockaway Channel	Nutrients
Nassau	Grant Park Pond	Nutrients
Nassau	Hempstead Bay	Nutrients
Nassau	Hempstead Lake	Nutrients
Nassau	Hewlett Bay	Nutrients
Nassau	Hog Island Channel	Nutrients
Nassau	Long Island Sound, Nassau County Waters	Nutrients
Nassau	Massapequa Creek and tribs	Nutrients
Nassau	Milburn/Parsonage Creeks, Upp, and tribs	Nutrients
Nassau	Reynolds Channel, west	Nutrients
Nassau	Tidal Tribs to Hempstead Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Silt/Sediment
Nassau	Tribs to Smith/Halls Ponds	Nutrients
Nassau	Woodmere Channel	Nutrients
New York	Harlem Meer	Nutrients
New York	The Lake in Central Park	Nutrients
Niagara	Bergholtz Creek and tribs	Nutrients
Niagara	Hyde Park Lake	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Oneida	Ballou, Nail Creeks and tribs	Nutrients
Onondaga	Harbor Brook, Lower, and tribs	Nutrients
Onondaga	Ley Creek and tribs	Nutrients
Onondaga	Minor Tribs to Onondaga Lake	Nutrients
Onondaga	Ninemile Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Middle, and tribs	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Onondaga	Onondaga Lake, northern end	Nutrients
Onondaga	Onondaga Lake, southern end	Nutrients
Ontario	Great Brook and minor tribs	Silt/Sediment
Ontario	Great Brook and minor tribs	Nutrients
Ontario	Hemlock Lake Outlet and minor tribs	Nutrients
Ontario	Honeoye Lake	Nutrients
Orange	Greenwood Lake	Nutrients
Orange	Monhagen Brook and tribs	Nutrients
Orange	Orange Lake	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Oswego	Lake Neatahwanta	Nutrients
Oswego	Pleasant Lake	Nutrients
Putnam	Bog Brook Reservoir	Nutrients
Putnam	Boyd Corners Reservoir	Nutrients
Putnam	Croton Falls Reservoir	Nutrients
Putnam	Diverting Reservoir	Nutrients
Putnam	East Branch Reservoir	Nutrients
Putnam	Lake Carmel	Nutrients
Putnam	Middle Branch Reservoir	Nutrients
Putnam	Oscawana Lake	Nutrients
Putnam	Palmer Lake	Nutrients
Putnam	West Branch Reservoir	Nutrients
Queens	Bergen Basin	Nutrients
Queens	Flushing Creek/Bay	Nutrients
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Nutrients
Queens	Kissena Lake	Nutrients
Queens	Meadow Lake	Nutrients
Queens	Willow Lake	Nutrients
Rensselaer	Nassau Lake	Nutrients
Rensselaer	Snyders Lake	Nutrients
Richmond	Grasmere Lake/Bradys Pond	Nutrients
Rockland	Congers Lake, Swartout Lake	Nutrients
Rockland	Rockland Lake	Nutrients
Saratoga	Ballston Lake	Nutrients
Saratoga	Dwaas Kill and tribs	Silt/Sediment
Saratoga	Dwaas Kill and tribs	Nutrients
Saratoga	Lake Lonely	Nutrients
Saratoga	Round Lake	Nutrients
Saratoga	Tribs to Lake Lonely	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Schenectady	Collins Lake	Nutrients
Schenectady	Duane Lake	Nutrients
Schenectady	Mariaville Lake	Nutrients
Schoharie	Engleville Pond	Nutrients
Schoharie	Summit Lake	Nutrients
Seneca	Reeder Creek and tribs	Nutrients
St.Lawrence	Black Lake Outlet/Black Lake	Nutrients
St.Lawrence	Fish Creek and minor tribs	Nutrients
Steuben	Smith Pond	Nutrients
Suffolk	Agawam Lake	Nutrients
Suffolk	Big/Little Fresh Ponds	Nutrients
Suffolk	Canaan Lake	Silt/Sediment
Suffolk	Canaan Lake	Nutrients
Suffolk	Flanders Bay, West/Lower Sawmill Creek	Nutrients
Suffolk	Fresh Pond	Nutrients
Suffolk	Great South Bay, East	Nutrients
Suffolk	Great South Bay, Middle	Nutrients
Suffolk	Great South Bay, West	Nutrients
Suffolk	Lake Ronkonkoma	Nutrients
Suffolk	Long Island Sound, Suffolk County, West	Nutrients
Suffolk	Mattituck (Marratooka) Pond	Nutrients
Suffolk	Meetinghouse/Terrys Creeks and tribs	Nutrients
Suffolk	Mill and Seven Ponds	Nutrients
Suffolk	Millers Pond	Nutrients
Suffolk	Moriches Bay, East	Nutrients
Suffolk	Moriches Bay, West	Nutrients
Suffolk	Peconic River, Lower, and tidal tribs	Nutrients
Suffolk	Quantuck Bay	Nutrients
Suffolk	Shinnecock Bay and Inlet	Nutrients
Suffolk	Tidal tribs to West Moriches Bay	Nutrients
Sullivan	Bodine, Montgomery Lakes	Nutrients
Sullivan	Davies Lake	Nutrients
Sullivan	Evens Lake	Nutrients
Sullivan	Pleasure Lake	Nutrients
Tompkins	Cayuga Lake, Southern End	Nutrients
Tompkins	Cayuga Lake, Southern End	Silt/Sediment
Tompkins	Owasco Inlet, Upper, and tribs	Nutrients
Ulster	Ashokan Reservoir	Silt/Sediment
Ulster	Esopus Creek, Upper, and minor tribs	Silt/Sediment
Warren	Hague Brook and tribs	Silt/Sediment

303(d) Segments Impaired by Construction Related Pollutant(s)

Warren	Huddle/Finkle Brooks and tribs	Silt/Sediment
Warren	Indian Brook and tribs	Silt/Sediment
Warren	Lake George	Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, East Shore	Silt/Sediment
Washington	Wood Cr/Champlain Canal and minor tribs	Nutrients
Wayne	Port Bay	Nutrients
Westchester	Amawalk Reservoir	Nutrients
Westchester	Blind Brook, Upper, and tribs	Silt/Sediment
Westchester	Cross River Reservoir	Nutrients
Westchester	Lake Katonah	Nutrients
Westchester	Lake Lincolndale	Nutrients
Westchester	Lake Meahagh	Nutrients
Westchester	Lake Mohegan	Nutrients
Westchester	Lake Shenorock	Nutrients
Westchester	Long Island Sound, Westchester (East)	Nutrients
Westchester	Mamaroneck River, Lower	Silt/Sediment
Westchester	Mamaroneck River, Upper, and minor tribs	Silt/Sediment
Westchester	Muscoot/Upper New Croton Reservoir	Nutrients
Westchester	New Croton Reservoir	Nutrients
Westchester	Peach Lake	Nutrients
Westchester	Reservoir No.1 (Lake Isle)	Nutrients
Westchester	Saw Mill River, Lower, and tribs	Nutrients
Westchester	Saw Mill River, Middle, and tribs	Nutrients
Westchester	Sheldrake River and tribs	Silt/Sediment
Westchester	Sheldrake River and tribs	Nutrients
Westchester	Silver Lake	Nutrients
Westchester	Teatown Lake	Nutrients
Westchester	Titicus Reservoir	Nutrients
Westchester	Truesdale Lake	Nutrients
Westchester	Wallace Pond	Nutrients
Wyoming	Java Lake	Nutrients
Wyoming	Silver Lake	Nutrients

APPENDIX F – List of NYS DEC Regional Offices

Region	Covering the following counties:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators	DIVISION OF WATER (DOW) Water (SPDES) Program
1	Nassau and Suffolk	50 Circle Road Stony Brook, NY 11790 Tel. (631) 444-0365	50 Circle Road Stony Brook, NY 11790-3409 Tel. (631) 444-0405
2	Bronx, Kings, New York, Queens and Richmond	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4997	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4933
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester	21 South Putt Corners Road New Paltz, NY 12561-1696 Tel. (845) 256-3059	100 Hillside Avenue, Suite 1W White Plains, NY 10603 Tel. (914) 428 - 2505
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie	1150 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2069	1130 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2045
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington	1115 State Route 86, Po Box 296 Ray Brook, NY 12977-0296 Tel. (518) 897-1234	232 Golf Course Road Warrensburg, NY 12885-1172 Tel. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7070

Appendix D

0644089821

NOTICE OF INTENT

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

NYR ☐☐☐☐☐☐
(for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-20-001

All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

-IMPORTANT-
RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Owner/Operator Contact Person First Name

Owner/Operator Mailing Address

City

State ☐☐ Zip ☐☐☐☐☐ - ☐☐☐☐

Phone (Owner/Operator) ☐☐☐ - ☐☐☐ - ☐☐☐☐

Fax (Owner/Operator) ☐☐☐ - ☐☐☐ - ☐☐☐☐

Email (Owner/Operator)

FED TAX ID ☐☐ - ☐☐☐☐☐☐☐ (not required for individuals)

Project Site Information

Project/Site Name
GLENCOMA LAKE CELL TOWER COMPOUND

Street Address (NOT P.O. BOX)
WALTON DRIVE

Side of Street
○ **North** ○ **South** ○ **East** ◉ **West**

City/Town/Village (THAT ISSUES BUILDING PERMIT)
CARMEL

State
NY

Zip
10541 -

County
PUTNAM

DEC Region
3

Name of Nearest Cross Street
SUMMIT CIRCLE DRIVE

Distance to Nearest Cross Street (Feet)
550

Project In Relation to Cross Street
○ **North** ◉ **South** ○ **East** ○ **West**

Tax Map Numbers
Section-Block-Parcel
1-90

Tax Map Numbers
87.9

1. Provide the Geographic Coordinates for the project site. To do this, go to the NYSDEC Stormwater Interactive Map on the DEC website at:

https://gisservices.dec.ny.gov/gis/stormwater/

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located the centroid of your project site, go to the bottom right hand corner of the map for the X, Y coordinates. Enter the coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting)
-7 3.731
Ex. -73.749

Y Coordinates (Northing)
4 1.350
Ex. 42.652

2. What is the nature of this construction project?

◉ **New Construction**

○ **Redevelopment with increase in impervious area**

○ **Redevelopment with no increase in impervious area**

3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

Pre-Development Existing Land Use

- (●) FOREST
- ( ) PASTURE/OPEN LAND
- ( ) CULTIVATED LAND
- ( ) SINGLE FAMILY HOME
- ( ) SINGLE FAMILY SUBDIVISION
- ( ) TOWN HOME RESIDENTIAL
- ( ) MULTIFAMILY RESIDENTIAL
- ( ) INSTITUTIONAL/SCHOOL
- ( ) INDUSTRIAL
- ( ) COMMERCIAL
- ( ) ROAD/HIGHWAY
- ( ) RECREATIONAL/SPORTS FIELD
- ( ) BIKE PATH/TRAIL
- ( ) LINEAR UTILITY
- ( ) PARKING LOT
- ( ) OTHER

Post-Development Future Land Use

- ( ) SINGLE FAMILY HOME
- ( ) SINGLE FAMILY SUBDIVISION — Number of Lots
- ( ) TOWN HOME RESIDENTIAL
- ( ) MULTIFAMILY RESIDENTIAL
- ( ) INSTITUTIONAL/SCHOOL
- ( ) INDUSTRIAL
- (●) COMMERCIAL
- ( ) MUNICIPAL
- ( ) ROAD/HIGHWAY
- ( ) RECREATIONAL/SPORTS FIELD
- ( ) BIKE PATH/TRAIL
- ( ) LINEAR UTILITY (water, sewer, gas, etc.)
- ( ) PARKING LOT
- ( ) CLEARING/GRADING ONLY
- ( ) DEMOLITION, NO REDEVELOPMENT
- ( ) WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ( ) OTHER — CELL TOWER

***Note**: for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area
66.7	0.5	0	0.1

5. Do you plan to disturb more than 5 acres of soil at any one time? ( ) **Yes** (●) **No**

6. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

A	B	C	D
%	100 %	%	%

7. Is this a phased project? ( ) **Yes** (●) **No**

8. Enter the planned start and end dates of the disturbance activities.

Start Date 11/01/2020 - **End Date** / /

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Name

PLUM BROOK - CATEGORY C

AND STATE REGULATED Wetland ID: F-26

9a. Type of waterbody identified in Question 9?

- (●) Wetland / State Jurisdiction On Site (Answer 9b)
- ( ) Wetland / State Jurisdiction Off Site
- ( ) Wetland / Federal Jurisdiction On Site (Answer 9b)
- ( ) Wetland / Federal Jurisdiction Off Site
- (●) Stream / Creek On Site
- ( ) Stream / Creek Off Site
- ( ) River On Site
- ( ) River Off Site
- ( ) Lake On Site
- ( ) Lake Off Site
- ( ) Other Type On Site
- ( ) Other Type Off Site

9b. How was the wetland identified?

- (●) Regulatory Map
- ( ) Delineated by Consultant
- ( ) Delineated by Army Corps of Engineers
- ( ) Other (identify)

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001? ( ) **Yes** (●) **No**

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001? (●) **Yes** ( ) **No**

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? ( ) **Yes** (●) **No**
If no, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? (●) **Yes** ( ) **No**
If Yes, what is the acreage to be disturbed?

0.1

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ( ) **Yes** (●) **No**

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ○ Yes ◉ No ○ Unknown

16. What is the name of the municipality/entity that owns the separate storm sewer system?

TOWN OF CARMEL

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ○ Yes ◉ No ○ Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ○ Yes ◉ No

19. Is this property owned by a state authority, state agency, federal government or local government? ○ Yes ◉ No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ○ Yes ◉ No

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? ◉ Yes ○ No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? ○ Yes ◉ No
If No, skip questions 23 and 27-39.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? ○ Yes ○ No

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- (●) **Professional Engineer (P.E.)**
- ( ) **Soil and Water Conservation District (SWCD)**
- ( ) **Registered Landscape Architect (R.L.A)**
- ( ) **Certified Professional in Erosion and Sediment Control (CPESC)**
- ( ) **Owner/Operator**
- ( ) **Other**

SWPPP Preparer
Dewberry Engineers Inc.

Contact Name (Last, Space, First)
FOLEY ROBERT

Mailing Address
600 PARSIPPANY ROAD

City
PARSIPPANY

State NJ Zip 07054-3715-

Phone 973 576 0148 -

Fax 973-739-9710 -

Email
RFOLEY@DEWBERRY.COM

SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name
ROBERT

MI
J

Last Name
FOLEY

Signature

Date / /

25. Has a construction sequence schedule for the planned management practices been prepared? ◉ Yes ○ No

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

- ○ Check Dams
- ○ Construction Road Stabilization
- ○ Dust Control
- ○ Earth Dike
- ○ Level Spreader
- ○ Perimeter Dike/Swale
- ○ Pipe Slope Drain
- ○ Portable Sediment Tank
- ○ Rock Dam
- ○ Sediment Basin
- ○ Sediment Traps
- ◉ Silt Fence
- ◉ Stabilized Construction Entrance
- ○ Storm Drain Inlet Protection
- ○ Straw/Hay Bale Dike
- ○ Temporary Access Waterway Crossing
- ○ Temporary Stormdrain Diversion
- ○ Temporary Swale
- ○ Turbidity Curtain
- ○ Water bars

Biotechnical

- ○ Brush Matting
- ○ Wattling

Vegetative Measures

- ○ Brush Matting
- ○ Dune Stabilization
- ○ Grassed Waterway
- ◉ Mulching
- ○ Protecting Vegetation
- ○ Recreation Area Improvement
- ◉ Seeding
- ○ Sodding
- ○ Straw/Hay Bale Dike
- ○ Streambank Protection
- ○ Temporary Swale
- ◉ Topsoiling
- ○ Vegetating Waterways

Permanent Structural

- ○ Debris Basin
- ○ Diversion
- ○ Grade Stabilization Structure
- ◉ Land Grading
- ○ Lined Waterway (Rock)
- ○ Paved Channel (Concrete)
- ○ Paved Flume
- ○ Retaining Wall
- ○ Riprap Slope Protection
- ○ Rock Outlet Protection
- ○ Streambank Protection

Other

ANCHORED STABILIZATION MATTING

Post-construction Stormwater Management Practice (SMP) Requirements

Important: Completion of Questions 27-39 is not required if response to Question 22 is No.

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- ○ **Preservation of Undisturbed Areas**
- ○ **Preservation of Buffers**
- ○ **Reduction of Clearing and Grading**
- ○ **Locating Development in Less Sensitive Areas**
- ○ **Roadway Reduction**
- ○ **Sidewalk Reduction**
- ○ **Driveway Reduction**
- ○ **Cul-de-sac Reduction**
- ○ **Building Footprint Reduction**
- ○ **Parking Reduction**

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

- ○ All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- ○ Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total WQv Required

			.				**acre-feet**

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required(#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

	Total Contributing Area (acres)		Total Contributing Impervious Area(acres)
RR Techniques (Area Reduction)			
○ Conservation of Natural Areas (RR-1)	___.___	and/or	___.___
○ Sheetflow to Riparian Buffers/Filters Strips (RR-2)	___.___	and/or	___.___
○ Tree Planting/Tree Pit (RR-3)	___.___	and/or	___.___
○ Disconnection of Rooftop Runoff (RR-4)	___.___	and/or	___.___
RR Techniques (Volume Reduction)			
○ Vegetated Swale (RR-5)			___.___
○ Rain Garden (RR-6)			___.___
○ Stormwater Planter (RR-7)			___.___
○ Rain Barrel/Cistern (RR-8)			___.___
○ Porous Pavement (RR-9)			___.___
○ Green Roof (RR-10)			___.___
Standard SMPs with RRv Capacity			
○ Infiltration Trench (I-1)			___.___
○ Infiltration Basin (I-2)			___.___
○ Dry Well (I-3)			___.___
○ Underground Infiltration System (I-4)			___.___
○ Bioretention (F-5)			___.___
○ Dry Swale (O-1)			___.___
Standard SMPs			
○ Micropool Extended Detention (P-1)			___.___
○ Wet Pond (P-2)			___.___
○ Wet Extended Detention (P-3)			___.___
○ Multiple Pond System (P-4)			___.___
○ Pocket Pond (P-5)			___.___
○ Surface Sand Filter (F-1)			___.___
○ Underground Sand Filter (F-2)			___.___
○ Perimeter Sand Filter (F-3)			___.___
○ Organic Filter (F-4)			___.___
○ Shallow Wetland (W-1)			___.___
○ Extended Detention Wetland (W-2)			___.___
○ Pond/Wetland System (W-3)			___.___
○ Pocket Wetland (W-4)			___.___
○ Wet Swale (O-2)			___.___

Table 2 - Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Alternative SMP	Total Contributing Impervious Area(acres)
○ **Hydrodynamic**	
○ **Wet Vault**	
○ **Media Filter**	
○ **Other**	

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Name

Manufacturer

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

Total RRv provided

. **acre-feet**

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

○ **Yes** ○ **No**

If Yes, go to question 36.
If No, go to question 32.

32. Provide the Minimum RRv required based on HSG.
[Minimum RRv Required = (P)(0.95)(Ai)/12, Ai=(S)(Aic)]

Minimum RRv Required

. **acre-feet**

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

○ **Yes** ○ **No**

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

Note: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29.

WQv Provided

			.			
			.			**acre-feet**

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a).

			.			
			.			

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? ○ **Yes** ○ **No**

If Yes, go to question 36.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

CPv Required

			.			
			.			**acre-feet**

CPv Provided

			.			
			.			**acre-feet**

36a. The need to provide channel protection has been waived because:

○ Site discharges directly to tidal waters or a fifth order or larger stream.

○ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

Total Overbank Flood Control Criteria (Qp)

Pre-Development

			.			
			.			**CFS**

Post-development

			.			
			.			**CFS**

Total Extreme Flood Control Criteria (Qf)

Pre-Development

			.			
			.			**CFS**

Post-development

			.			
			.			**CFS**

37a. The need to meet the Qp and Qf criteria has been waived because:

- ○ Site discharges directly to tidal waters or a fifth order or larger stream.
- ○ Downstream analysis reveals that the Qp and Qf controls are not required

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? ○ **Yes** ○ **No**

If Yes, Identify the entity responsible for the long term Operation and Maintenance

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required(#28). (See question 32a) This space can also be used for other pertinent project information.

40. Identify other DEC permits, existing and new, that are required for this project/facility.

- ○ Air Pollution Control
- ○ Coastal Erosion
- ○ Hazardous Waste
- ○ Long Island Wells
- ○ Mined Land Reclamation
- ○ Solid Waste
- ○ Navigable Waters Protection / Article 15
- ○ Water Quality Certificate
- ○ Dam Safety
- ○ Water Supply
- ○ Freshwater Wetlands/Article 24
- ○ Tidal Wetlands
- ○ Wild, Scenic and Recreational Rivers
- ○ Stream Bed or Bank Protection / Article 15
- ○ Endangered or Threatened Species(Incidental Take Permit)
- ○ Individual SPDES
- ○ SPDES Multi-Sector GP [N Y R]
- ○ Other [ ]
- ○ None

41. Does this project require a US Army Corps of Engineers Wetland Permit? ○ **Yes** ◉ **No**
If Yes, Indicate Size of Impact. [ ].[ ]

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? ◉ **Yes** ○ **No**
(If No, skip question 43)

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ◉ **Yes** ○ **No**

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned. [N Y R]

Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name **MI**

Print Last Name

Owner/Operator Signature

Date / /

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person: | 4a.Telephone:

4b. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. □ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. □ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ___ ___ ___ ___ ___ ___
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. □ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? □ yes □ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? □ yes □ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? □ yes □ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

□ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

□ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

□ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? □ yes □ no

(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:	
Title/Position:	
Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2015)

Appendix E

www.dewberry.com

CONTRACTOR SWPPP CERTIFICATION

I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violation

PROJECT NAME: Glencoma Lake Cell Tower Compound
PROJECT ADDRESS: Walton Drive, Mahopac, New York
PRIME CONTRACTOR
ADDRESS
TELEPHONE NUMBER
SIGNATURE
TYPE OR PRINT NAME
TITLE:
DATE:

EROSION AND SEDIMENT CONTROL
TRAINED INDIVIDUAL

Project Name _____

Trained Individual _____

Training Provided By _____

Date of Training _____

Follow Up Training Dates _____

_____

_____

I certify under penalty of law that the above-named individual has received Erosion and Sediment Control Training as specified in Section 015713, Part 1.1.01 Erosion and Sediment Control.

Signature _____

Type or Print Name _____

Title _____

Date _____

Company Name _____

Address _____

_____

Form 015713

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Owner/Operator Certification Form

SPDES General Permit For Stormwater Discharges From Construction Activity (GP-0-20-001)

Project/Site Name: _____

eNOI Submission Number: _____

eNOI Submitted by: ☐ **Owner/Operator** ☐ **SWPPP Preparer** ☐ **Other**

Certification Statement - Owner/Operator

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Owner/Operator First Name M.I. Last Name

_____

Signature

_____

Date

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

SWPPP Preparer Certification Form

SPDES General Permit for Stormwater Discharges From Construction Activity (GP-0-20-001)

Project Site Information

Project/Site Name

Glencoma Lake Cell Tower Compound

Owner/Operator Information

Owner/Operator (Company Name/Private Owner/Municipality Name)

Homeland Towers, LLC

Certification Statement – SWPPP Preparer

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Robert	J.	Foley
First name	MI	Last Name

Signature

Date

Revised: January 2020

Appendix F

NY Department of Environmental Conservation

Standards for Erosion and Sediment Control

Appendix F

NY Department of Environmental Conservation

Standards for Erosion and Sediment Control

STANDARD AND SPECIFICATIONS FOR PROTECTING VEGETATION DURING CONSTRUCTION

Definition & Scope

The protection of trees, shrubs, ground cover and other vegetation from damage by construction equipment. In order to preserve existing vegetation determined to be important for soil erosion control, water quality protection, shade, screening, buffers, wildlife habitat, wetland protection, and other values.

Conditions Where Practices Applies

On planned construction sites where valued vegetation exists and needs to be preserved.

Design Criteria

1. Planning Considerations

   A. Inventory:

      1) Property boundaries, topography, vegetation and soils information should be gathered. Identify potentially high erosion areas, areas with tree windthrow potential, etc. A vegetative cover type map should be made on a copy of a topographic map which shows other natural and manmade features. Vegetation that is desirable to preserve because of its value for screening, shade, critical erosion control, endangered species, aesthetics, etc., should be identified and marked on the map.

      2) Based upon this data, general statements should be prepared about the present condition, potential problem areas, and unique features of the property.

   B. Planning:

      1) After engineering plans (plot maps) are prepared, another field review should take place and recommendations made for the vegetation to be saved. Minor adjustments in location of roads, dwellings, and utilities may be needed. Construction on steep slopes, erodible soils, wetlands, and streams should be avoided. Clearing limits should be delineated (See "Determine Limits of Clearing and Grading" on page 2.2).

      2) Areas to be seeded and planted should be identified. Remaining vegetation should blend with their surroundings and/or provide special function such as a filter strip, buffer zone, or screen.

      3) Trees and shrubs of special seasonal interest, such as flowering dogwood, red maple, striped maple, serviceberry, or shadbush, and valuable potential shade trees should be identified and marked for special protective treatment as appropriate.

      4) Trees to be cut should be marked on the plans. If timber can be removed for salable products, a forester should be consulted for marketing advice.

      5) Trees that may become a hazard to people, personal property, or utilities should be removed. These include trees that are weak-wooded, disease-prone, subject to windthrow, or those that have severely damaged root systems.

      6) The vigor of remaining trees may be improved by a selective thinning. A forester should be consulted for implementing this practice.

2. Measures to Protect Vegetation

   A. Limit soil placement over existing tree and shrub roots to a maximum of 3 inches. Soils with loamy texture and good structure should be used.

   B. Use retaining walls and terraces to protect roots of trees and shrubs when grades are lowered. Lowered grades should start no closer than the dripline of the tree. For narrow-canopied trees and shrubs, the stem diameter in inches is converted to feet and doubled, such that a 10 inch tree should be protected to 20 feet.

   C. Trenching across tree root systems should be the same minimum distance from the trunk, as in "B". Tunnels under root systems for underground utilities should start 18 inches or deeper below the normal ground surface. Tree roots which must be severed should be cut clean. Backfill material that will be in contact with the roots should be topsoil or a prepared planting soil mixture.

   D. Construct sturdy fences, or barriers, of wood, steel, or other protective material around valuable

vegetation for protection from construction equipment. Place barriers far enough away from trees, but not less than the specifications in "B", so that tall equipment such as backhoes and dump trucks do not contact tree branches.

E. Construction limits should be identified and clearly marked to exclude equipment.

F. Avoid spills of oil/gas and other contaminants.

G. Obstructive and broken branches should be pruned properly. The branch collar on all branches whether living or dead should not be damaged. The 3 or 4 cut method should be used on all branches larger than two inches at the cut. First cut about one-third the way through the underside of the limb (about 6-12 inches from the tree trunk). Then (approximately an inch further out) make a second cut through the limb from the upper side. When the branch is removed, there is no splintering of the main tree trunk. Remove the stub. If the branch is larger than 5-6 inches in diameter, use the four cut system. Cuts 1 and 2 remain the same and cut 3 should be from the underside of the limb, on the outside of the branch collar. Cut 4 should be from the top and in alignment with the 3rd cut. Cut 3 should be 1/4 to 1/3 the way through the limb. This will prevent the bark from peeling down the trunk. Do not paint the cut surface.

H. Penalties for damage to valuable trees, shrubs, and herbaceous plants should be clearly spelled out in the contract.

PROTECTING TREES IN HEAVY USE AREAS

The compaction of soil over the roots of trees and shrubs by the trampling of recreationists, vehicular traffic, etc., reduces oxygen, water, and nutrient uptake by feeder roots. This weakens and may eventually kill the plants. Table 2.6 rates the “Susceptibility of Tree Species to Compaction.”

Where heavy compaction is anticipated, apply and maintain a 3 to 4 inch layer of undecayed wood chips or 2 inches of No. 2 washed, crushed gravel. In addition, use of a wooden or plastic mat may be used to lessen compaction, if applicable.

Table 2.6
Susceptibility of Tree Species to Compaction[1]

Resistant:

Box elder……	*Acer negundo*	Willows……	*Salix spp.*
Green ash……..	*Fraxinus pennsylvanica*	Honey locust……	*Gleditsia triacanthos*
Red elm……..	*Ulmus rubra*	Eastern cottonwood…….	*Populus deltoides*
Hawthornes……	*Crataegus spp.*	Swamp white oak……..	*Quercus bicolor*
Bur oak……..	*Quercus macrocarpa*	Hophornbeam……	*Ostrya virginiana*
Northern white cedar….	*Thuja occidentalis*		

Intermediate:

Red maple…….	*Acer rubrum*	Sweetgum…….	*Liquidambar styraciflua*
Silver maple……..	*Acer saccharinum*	Norway maple…….	*Acer platanoides*
Hackberry…….	*Celtis occidentalis*	Shagbark hickory…….	*Carya ovata*
Black gum……	*Nyssa sylvatica*	London plane……..	*Platanus x hybrida*
Red oak……	*Quercus rubra*	Pin oak…….	*Quercus palustris*
Basswood…….	*Tilia americana*		

Susceptible:

Sugar maple…….	*Acer saccharum*	Austrian Pine……	*Pinus nigra*
White pine……	*Pinus strobus*	White ash…….	*Fraxinus americana*
Blue spruce……..	*Picea pungens*	Paper birch……..	*Betula papyrifera*
White oak……	*Quercus alba*	Moutain ash…….	*Sorbus aucuparia*
Red pine……..	*Pinus resinosa*	Japanese maple……	*Acer palmatum*

[1] If a tree species does not appear on the list, insufficient information is available to rate it for this purpose.

STANDARD AND SPECIFICATIONS FOR STABILIZED CONSTRUCTION ACCESS

Definition & Scope

A stabilized pad of aggregate underlain with geotextile located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk, or parking area. The purpose of stabilized construction access is to reduce or eliminate the tracking of sediment onto public rights-of-way or streets.

Conditions Where Practice Applies

A stabilized construction access shall be used at all points of construction ingress and egress.

Design Criteria

See Figure 2.1 on page 2.31 for details.

Aggregate Size: Use a matrix of 1-4 inch stone, or reclaimed or recycled concrete equivalent.

Thickness: Not less than six (6) inches.

Width: 12-foot minimum but not less than the full width of points where ingress or egress occurs. 24-foot minimum if there is only one access to the site.

Length: As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply).

Geotextile: To be placed over the entire area to be covered with aggregate. Filter cloth will not be required on a single-family residence lot. Piping of surface water under entrance shall be provided as required. If piping is impossible, a mountable berm with 5:1 slopes will be permitted.

Criteria for Geotextile: The geotextile shall be woven or nonwoven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be inert to commonly encountered chemicals, hydro-carbons, mildew, rot resistant, and conform to the fabric properties as shown:

Fabric Properties[3]	Light Duty[1] Roads Grade Subgrade	Heavy Duty[2] Haul Roads Rough Graded	Test Method
Grab Tensile Strength (lbs)	200	220	ASTM D1682
Elongation at Failure (%)	50	60	ASTM D1682
Mullen Burst Strength (lbs)	190	430	ASTM D3786
Puncture Strength (lbs)	40	125	ASTM D751 Modified
Equivalent	40-80	40-80	US Std Sieve
Opening Size			CW-02215
Aggregate Depth	6	10	-

[1]Light Duty Road: Area sites that have been graded to subgrade and where most travel would be single axle vehicles and an occasional multi-axle truck. Acceptable materials are Trevira Spunbond 1115, Mirafi 100X, Typar 3401, or equivalent.

[2]Heavy Duty Road: Area sites with only rough grading, and where most travel would be multi-axle vehicles. Acceptable materials are Trevira Spunbond 1135, Mirafi 600X, or equivalent.

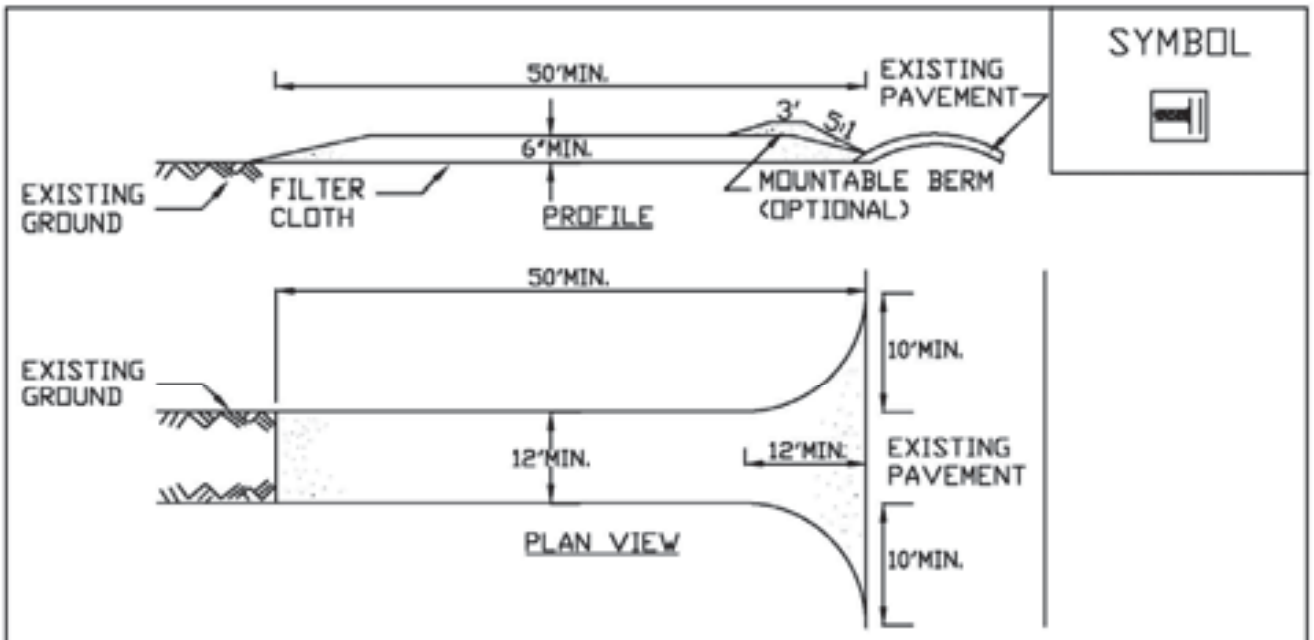
[3]Fabrics not meeting these specifications may be used only when design procedure and supporting documentation are supplied to determine aggregate depth and fabric strength.

Maintenance

The access shall be maintained in a condition which will prevent tracking of sediment onto public rights-of-way or streets. This may require periodic top dressing with additional aggregate. All sediment spilled, dropped, or washed onto public rights-of-way must be removed immediately.

When necessary, wheels must be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device. All sediment shall be prevented from entering storm drains, ditches, or watercourses.

Figure 2.1
Stabilized Construction Access



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

STABILIZED CONSTRUCTION ACCESS

STANDARD AND SPECIFICATIONS FOR WINTER STABILIZATION

Definition & Scope

A temporary site specific, enhanced erosion and sediment control plan to manage runoff and sediment at the site during construction activities in the winter months to protect off-site water resources.

Conditions Where Practice Applies

This standard applies to all construction activities involved with ongoing land disturbance and exposure between November 15th to the following April 1st.

Design Criteria

1. Prepare a snow management plan with adequate storage for snow and control of melt water, requiring cleared snow to be stored in a manner not affecting ongoing construction activities.

2. Enlarge and stabilize access points to provide for snow management and stockpiling. Snow management activities must not destroy or degrade installed erosion and sediment control practices.

3. A minimum 25 foot buffer shall be maintained from all perimeter controls such as silt fence. Mark silt fence with tall stakes that are visible above the snow pack.

4. Edges of disturbed areas that drain to a waterbody within 100 feet will have 2 rows of silt fence, 5 feet apart, installed on the contour.

5. Drainage structures must be kept open and free of snow and ice dams. All debris, ice dams, or debris from plowing operations, that restrict the flow of runoff and meltwater, shall be removed.

6. Sediment barriers must be installed at all appropriate perimeter and sensitive locations. Silt fence and other practices requiring earth disturbance must be installed before the ground freezes.

7. Soil stockpiles must be protected by the use of established vegetation, anchored straw mulch, rolled stabilization matting, or other durable covering. A barrier must be installed at least 15 feet from the toe of the stockpile to prevent soil migration and to capture loose soil.

8. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures should be initiated by the end of the next business day and completed within three (3) days. Rolled erosion control blankets must be used on all slopes 3 horizontal to 1 vertical or steeper.

9. If straw mulch alone is used for temporary stabilization, it shall be applied at double the standard rate of 2 tons per acre, making the application rate 4 tons per acre. Other manufactured mulches should be applied at double the manufacturer's recommended rate.

10. To ensure adequate stabilization of disturbed soil in advance of a melt event, areas of disturbed soil should be stabilized at the end of each work day unless:

    a. work will resume within 24 hours in the same area and no precipitation is forecast or;

    b. the work is in disturbed areas that collect and retain runoff, such as open utility trenches, foundation excavations, or water management areas.

11. Use stone paths to stabilize access perimeters of buildings under construction and areas where construction vehicle traffic is anticipated. Stone paths should be a minimum 10 feet in width but wider as necessary to accommodate equipment.

Maintenance

The site shall be inspected frequently to ensure that the erosion and sediment control plan is performing its winter stabilization function. If the site will not have earth disturbing activities ongoing during the "winter season", **all** bare exposed soil must be stabilized by established vegetation, straw or other acceptable mulch, matting, rock, or other approved material such as rolled erosion control products. Seeding of areas with mulch cover is preferred but seeding alone is not acceptable for proper stabilization.

Compliance inspections must be performed and reports filed properly in accordance with the SWPPP for all sites under a winter shutdown.

References

1. Northeastern Illinois Soil and Sedimentation Control Steering Committee. October 1981. Procedures and Standards for Urban Soil Erosion and Sediment Control in Illinois.
2. J.F. Rushing, V.M. Moore, J.S. Tingle, Q. Mason, and T. McCaffery, 2005. Dust Abatement Methods for Lines of Communication and Base Camps in Temperate Climates. ERDC/GSL TR-05-23, October 2005.

STANDARD AND SPECIFICATIONS FOR ANCHORED STABILIZATION MATTING

Definition and Scope

A **temporary** or **permanent** protective covering placed on a prepared, seeded planting area that is anchored in place by staples or other means to aid in controlling erosion by absorbing rain splash energy and withstand overland flow as well as provide a microclimate to protect and promote seed establishment.

Conditions Where Practice Applies

Anchored stabilization mats are required for seeded earthen slopes steeper than 3 horizontal to 1 vertical; in vegetated channels where the velocity of the design flow exceeds the allowable velocity for vegetation alone (usually greater than 5 feet per second); on streambanks and shorelines where moving water is likely to erode newly seeded or planted areas; and in areas where wind prevents standard mulching with straw. This standard does not apply to slopes stabilized with sod, rock riprap or hard armor material.

Design Criteria

Slope Applications - Anchored stabilization mats for use on slopes are primarily used as mulch blankets where the mesh material is within the blanket or as a netting over previously placed mulch. These stabilization mats are NOT effective in preventing slope failures.

1. Required on all slopes steeper than 3:1
2. Matting will be designed for proper longevity need and strength based on intended use.
3. All installation details and directions will be included on the site erosion and sediment control plan and will follow manufactures specifications.

Channel Applications - Anchored stabilization mats, for use in supporting vegetation in flow channels, are generally a non-degradable, three dimensional plastic structure which can be filled with soil prior to planting. This structure provides a medium for root growth where the matting and roots become intertwined forming a continuous anchor for the vegetated lining.

1. Channel stabilization shall be based on the tractive force method.
2. For maximum design shear stresses less than 2 pounds per square foot, a temporary or bio-degradable mat may be used.
3. The design of the final matting shall be based on the mats ability to resist the tractive shear stress at bank full flow.
4. The installation details and procedures shall be included on the site erosion and sediment control plan and will follow manufacturers specifications.

Construction Specifications

1. Prepare soil before installing matting by smoothing the surface, removing debris and large stone, and applying lime, fertilizer and seed. Refer to manufacturers installation details.
2. Begin at the top of the slope by anchoring the mat in a 6” deep x 6” wide trench. Backfill and compact the trench after stapling.
3. In channels or swales, begin at the downslope end, anchoring the mat at the bottom and top ends of the blanket. When another roll is needed, the upslope roll

should overlay the lower layer, shingle style, so that channel flows do not peel back the material.

4. Roll the mats down a slope with a minimum 4" overlap. Roll center mat in a channel in direction of water flow on bottom of the channel. Do not stretch blankets. Blankets shall have good continuous contact with the underlying soil throughout its entire length.

5. Place mats end over end (shingle style) with a 6" overlap, use a double row of staggered staples 4" apart to secure mats.

6. Full length edge of mats at top of side slopes must be anchored in 6" deep x 6" wide trench; backfill and compact the trench after stapling.

7. Mats on side slopes of a channel must be overlapped 4" over the center mat and stapled.

8. In high flow channel applications, a staple check slot is recommended at 30 to 40 foot intervals. Use a row of staples 4" apart over entire width of the channel. Place a second row 4" below the first row in a staggered pattern.

9. The terminal end of the mats must be anchored in a 6"x6" wide trench. Backfill and compact the trench after stapling.

10. Stapling and anchoring of blanket shall be done in accordance with the manufactures recommendations.

Maintenance

Blanketed areas shall be inspected weekly and after each runoff event until perennial vegetation is established to a minimum uniform 80% coverage throughout the blanketed area. Damaged or displaced blankets shall be restored or replaced within 2 calendar days.

STANDARD AND SPECIFICATIONS FOR LANDGRADING

Definition & Scope

Permanent reshaping of the existing land surface by grading in accordance with an engineering topographic plan and specification to provide for erosion control and vegetative establishment on disturbed, reshaped areas.

Design Criteria

The grading plan should be based upon the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surrounding to avoid extreme grade modifications. Information submitted must provide sufficient topographic surveys and soil investigations to determine limitations that must be imposed on the grading operation related to slope stability, effect on adjacent properties and drainage patterns, measures for drainage and water removal, and vegetative treatment, etc.

Many municipalities and counties have regulations and design procedures already established for land grading and cut and fill slopes. Where these requirements exist, they shall be followed.

The plan must show existing and proposed contours of the area(s) to be graded. The plan shall also include practices for erosion control, slope stabilization, safe disposal of runoff water and drainage, such as waterways, lined ditches, reverse slope benches (include grade and cross section), grade stabilization structures, retaining walls, and surface and subsurface drains. The plan shall also include phasing of these practices. The following shall be incorporated into the plan:

1. Provisions shall be made to safely convey surface runoff to storm drains, protected outlets, or to stable water courses to ensure that surface runoff will not damage slopes or other graded areas; see standards and specifications for Grassed Waterway, Diversion, or Grade Stabilization Structure.

2. Cut and fill slopes that are to be stabilized with grasses shall not be steeper than 2:1. When slopes exceed 2:1, special design and stabilization consideration are required and shall be adequately shown on the plans. (Note: Where the slope is to be mowed, the slope should be no steeper than 3:1, although 4:1 is preferred because of safety factors related to mowing steep slopes.)

3. Reverse slope benches or diversion shall be provided whenever the vertical interval (height) of any 2:1 slope exceeds 20 feet; for 3:1 slope it shall be increased to 30 feet and for 4:1 to 40 feet. Benches shall be located to divide the slope face as equally as possible and shall convey the water to a stable outlet. Soils, seeps, rock outcrops, etc., shall also be taken into consideration when designing benches.

   A. Benches shall be a minimum of six feet wide to provide for ease of maintenance.

   B. Benches shall be designed with a reverse slope of 6:1 or flatter to the toe of the upper slope and with a minimum of one foot in depth. Bench gradient to the outlet shall be between 2 percent and 3 percent, unless accompanied by appropriate design and computations.

   C. The flow length within a bench shall not exceed 800 feet unless accompanied by appropriate design and computations; see Standard and Specifications for Diversion on page 3.9

4. Surface water shall be diverted from the face of all cut and/or fill slopes by the use of diversions, ditches and swales or conveyed downslope by the use of a designed structure, except where:

   A. The face of the slope is or shall be stabilized and the face of all graded slopes shall be protected from surface runoff until they are stabilized.

   B. The face of the slope shall not be subject to any concentrated flows of surface water such as from natural drainage ways, graded ditches, downspouts, etc.

   C. The face of the slope will be protected by anchored stabilization matting, sod, gravel, riprap, or other stabilization method.

5. Cut slopes occurring in ripable rock shall be serrated as shown in Figure 4.9 on page 4.26. The serrations shall be made with conventional equipment as the excavation is made. Each step or serration shall be constructed on the contour and will have steps cut at nominal two-foot intervals with nominal three-foot horizontal shelves. These steps will vary depending on the slope ratio or the cut slope. The nominal slope line is 1 ½: 1. These steps will weather and act to hold moisture, lime, fertilizer, and seed thus producing a much quicker and longer-lived vegetative cover and better slope stabilization. Overland flow shall be diverted from the top of all serrated cut slopes and carried to a suitable outlet.

6. Subsurface drainage shall be provided where necessary to intercept seepage that would otherwise adversely affect slope stability or create excessively wet site conditions.

7. Slopes shall not be created so close to property lines as to endanger adjoining properties without adequately protecting such properties against sedimentation, erosion, slippage, settlement, subsidence, or other related damages.

8. Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris, and other objectionable material. It should be free of stones over two (2) inches in diameter where compacted by hand or mechanical tampers or over eight (8) inches in diameter where compacted by rollers or other equipment. Frozen material shall not be placed in the fill nor shall the fill material be placed on a frozen foundation.

9. Stockpiles, borrow areas, and spoil shall be shown on the plans and shall be subject to the provisions of this Standard and Specifications.

10. All disturbed areas shall be stabilized structurally or vegetatively in compliance with the Permanent Construction Area Planting Standard on page 4.42.

Construction Specifications

See Figures 4.9 and 4.10 for details.

1. All graded or disturbed areas, including slopes, shall be protected during clearing and construction in accordance with the erosion and sediment control plan until they are adequately stabilized.

2. All erosion and sediment control practices and measures shall be constructed, applied and maintained in accordance with the erosion and sediment control plan and these standards.

3. Topsoil required for the establishment of vegetation shall be stockpiled in amount necessary to complete finished grading of all exposed areas.

4. Areas to be filled shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots, or other objectionable material.

5. Areas that are to be topsoiled shall be scarified to a minimum depth of four inches prior to placement of topsoil.

6. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence, or other related problems. Fill intended to support buildings, structures, and conduits, etc., shall be compacted in accordance with local requirements or codes.

7. All fill shall be placed and compacted in layers not to exceed 9 inches in thickness.

8. Except for approved landfills or nonstructural fills, fill material shall be free of frozen particles, brush, roots, sod, or other foreign objectionable materials that would interfere with, or prevent, construction of satisfactory fills.

9. Frozen material or soft, mucky or highly compressible materials shall not be incorporated into fill slopes or structural fills.

10. Fill shall not be placed on saturated or frozen surfaces.

11. All benches shall be kept free of sediment during all phases of development.

12. Seeps or springs encountered during construction shall be handled in accordance with the Standard and Specification for Subsurface Drain on page 3.48 or other approved methods.

13. All graded areas shall be permanently stabilized immediately following finished grading.

14. Stockpiles, borrow areas, and spoil areas shall be shown on the plans and shall be subject to the provisions of this Standard and Specifications.

Figure 4.9
Typical Section of Serrated Cut Slope

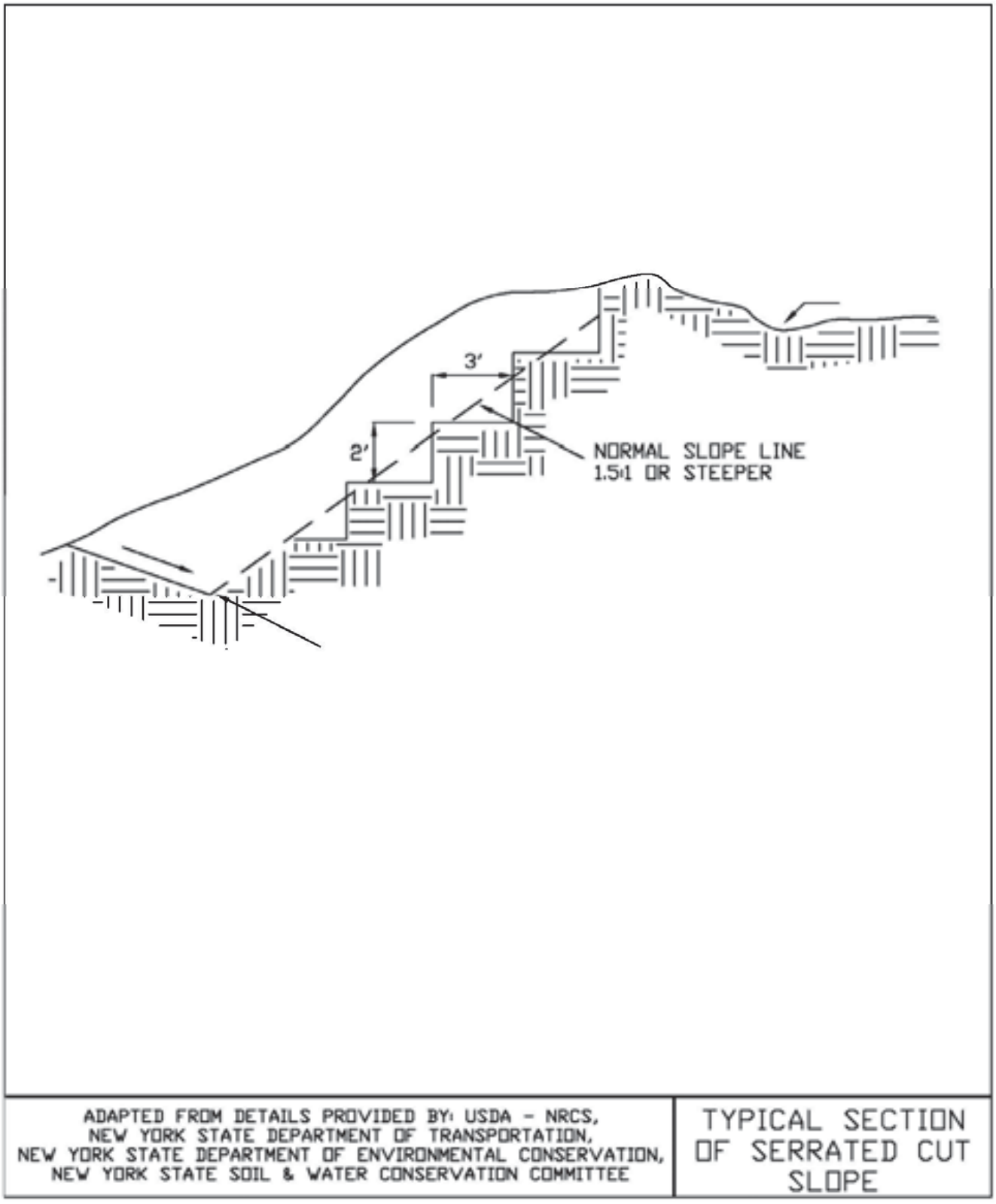


Figure 4.10
Landgrading

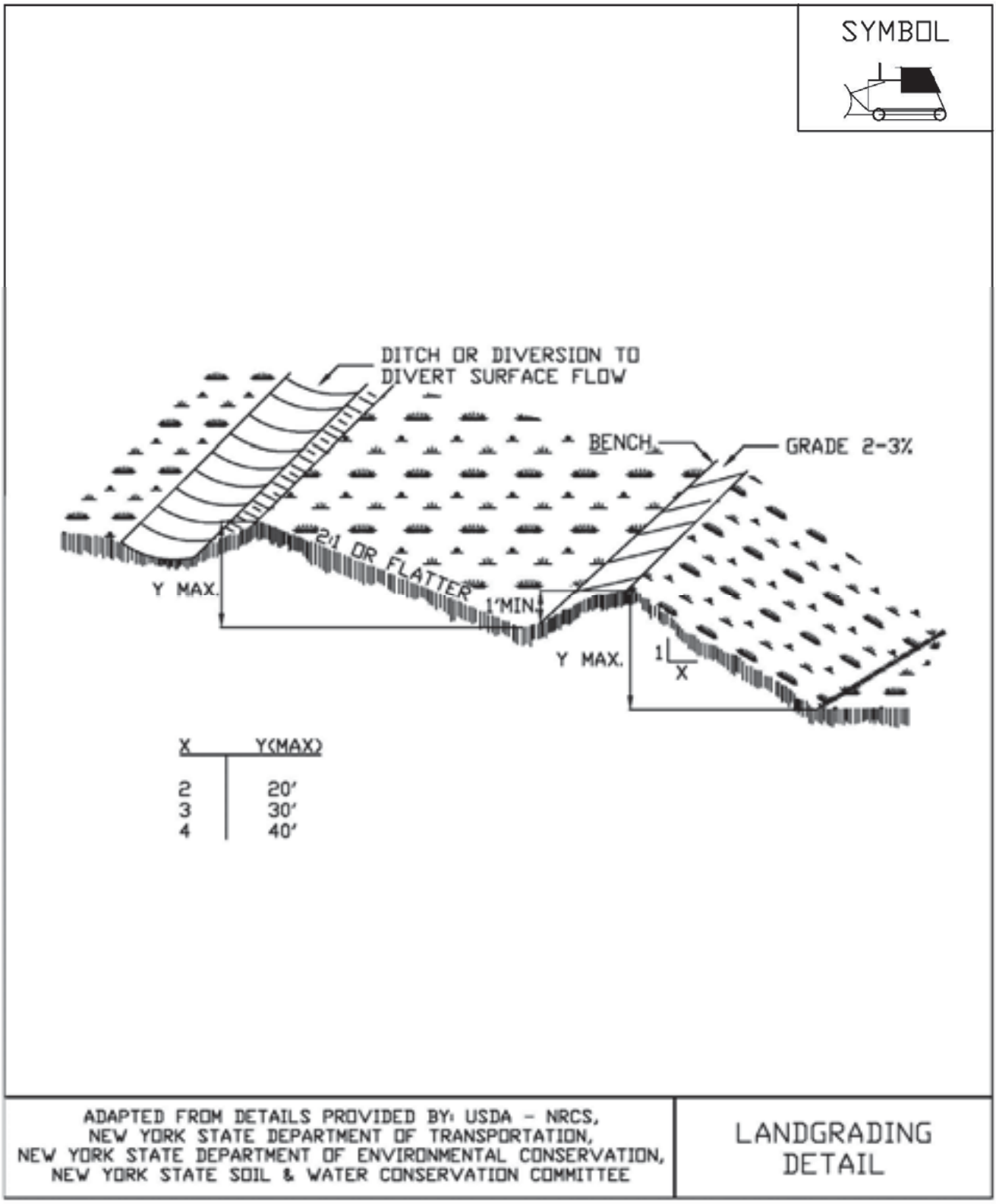


Figure 4.11
Landgrading - Construction Specifications

CONSTRUCTION SPECIFICATIONS

1. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
2. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
5. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.
6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
7. ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
8. EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
9. FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.
10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
11. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
12. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
13. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
14. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.

ADAPTED FROM DETAILS PROVIDED BY: USDA – NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE	LANDGRADING SPECIFICATIONS

STANDARD AND SPECIFICATIONS FOR LOOSE STABILIZATION BLANKETS

Definition and Scope

Blankets of various materials placed pneumatically, hydraulically, or other means on a prepared planting area or a critical area where existing vegetation can remain to reduce rain splash and sheet erosion and promote vegetative stabilization.

Conditions Where Practice Applies

Loose blankets are an appropriate stabilization practice for any soil surface that is rocky, frozen, flat, or steep. They can be used on streambanks, road cuts and embankments, and construction site areas where stormwater runoff occurs as sheet flow. They should not be used in areas of concentrated flow.

Design Criteria

Compost Blanket

Material: The compost infill shall be well decomposed (matured at least 3 months), weed-free, organic matter. It shall be aerobically composted, possess no objectionable odors, and contain less than 1%, by dry weight, of man-made foreign matter. The physical parameters of the compost shall meet the standards listed in Table 5.2 - Compost Standards Table. **Note: All biosolids composts produced in New York State (or approved for importation) must meet NYS DEC's 6 NYCRR Part 360 (Soild Waste Management Facilities) requirements. The Part 360 requirements are equal to or more stringent than 40 CFR Part 503 which ensure safe standards for pathogen reduction and heavy metal content. When using compost blankets adjacent to surface waters, the compost should have a low nutrient value.**

Placement: The method of application and depth of compost depend upon site conditions. Vegetation of the compost blanket is generally archived by incorporating seed into the compost before it is applied. However, seeding may occur after the application if needed.

The compost application rate will be in accordance with the following table. Compost is not recommended for slopes steeper than 2H:1V. Slopes with problem soils and more runoff will require greater application rates.

Compost Application Rates		
Slope Length (ft)	<3H:1V Slopes	3H:1V to 2H:1V Slopes
20 or less	270 cy/acre (2" Layer)	540 cy/acre (4" Layer)
20 to 60	405 cy/acre (3" Layer)	675 cy/acre (5" Layer)
60 to 100	540 cy/acre (4" Layer)	810 cy/acre (6" Layer)*
* For slopes between 2H:1V and 1H:1V use this rate with a max. slope length of 40 ft.		

Construction Specifications

1. Compost shall be placed evenly and must provide 100% soil coverage (no soil visible). On highly unstable soils, use compost in conjunction with appropriate structural measures.

2. Spread the compost uniformly to the design thickness by hand or mechanically (e.g. with a manure spreader, front end loader, dozer, pneumatic blower, etc.) and then track (compact) the compost layer using a bulldozer or other appropriate equipment.

3. When using a pneumatic (blower) unit, shoot the compost directly at soil, to provide a tighter interface between the soil and compost and prevent water from moving between the two layers.

4. Apply compost layer approximately 3 feet beyond the top of the slope or overlap it into existing vegetation.

5. Follow by seeding or ornamental planting as specified.

6. When planting immediate grass, wildflower, or legume seeding or ornamental planting, use only a well composted product that contains no substances toxic to plants.

7. Very coarse composts should be avoided if the slope is to be landscaped or seeded, as it will make planting and crop establishment more difficult. Composts containing fibrous particles that range in size produce a more stable mat.

Hydraulically Applied Blankets

These blankets are formed by mixing different types of materials with water and are then applied using standard hydroseeding equipment. These blankets should not be used in areas of concentrated flow such as ditches and channels.

A. Bonded Fiber Matrix (BFM) - This method makes use of a cross-linked hydrocolloid tackifier to bond thermally processed wood fibers. Application rates vary according to site conditions. For slopes up to 3H:1V the BFM should be applied at a rate of 3,000 lb/ acre. Steeper slopes may need as much as 4,000 lb/ acre in accordance with the manufacturer's recommendations.

   BFMs should only be used when no rain is forecast for at least 48 hours following the application. This is to allow the tackifier sufficient time to cure properly. Once properly applied, a BFM is very effective in preventing accelerated erosion. **Bonded Fiber Matrix should not be applied between September 30 and April 1 to allow for proper curing of the polymer.**

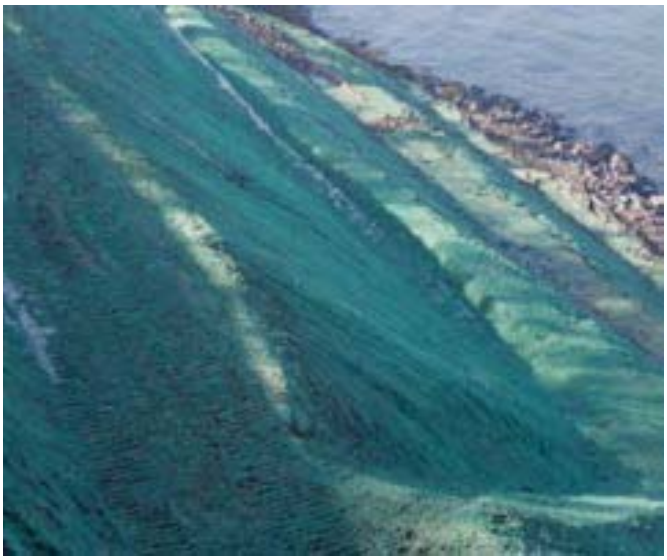
B. Flexible Growth Medium (FGM) - This method has the added component of 1/2 inch long, crimped manmade fibers which add a mechanical bond to the chemical bond provided by BFMs. This increases the blanket's resistance to both raindrop impact and erosion due to runoff. Unlike BFMs, a flexible growth medium typically does not require a curing time to be effective. Properly applied, an FGM is also very effective.

   There is no need to smooth the slope prior to application. In fact some roughening of the surface (either natural or mechanically induced) is preferable. However, large rocks (≥ 9 inches) and existing rills should be removed prior to application. Mixing and application rates should follow manufacturer's recommendations.

C. Polymer Stabilized Fiber Matrix (PSFM) - PSFMs make use of a linear soil stabilization tackifier that works directly on soil to maintain soil structure, maintain pore space capacity and flocculate dislodged sediment that will significantly reduce runoff turbidity. PSFMs can be used in re-vegetation applications and for site winterization and/or dormant seeding - fall planting for spring germination - applications. Application rates vary according to site conditions and should be in accordance with manufacturers recommendations.

Construction Specifications

BFMs, FGMs and PSFMs are typically applied in two stages. Unless specifically recommended to be applied in one application by the manufacturer, the seed mixture and soil amendments should be applied first. If the seed is applied at the same time as the hydraulically applied blankets, the bonded fibers may keep the seed from making sufficient contact with the soil to germinate. After the seed mixture is applied, the hydraulically applied blankets should be sprayed over the area at the required application rate, according to the manufactures recommendations.



STANDARD AND SPECIFICATIONS FOR MULCHING

Definition and Scope

Applying coarse plant residue or chips, or other suitable materials, to cover the soil surface to provide initial erosion control while a seeding or shrub planting is establishing. Mulch will conserve moisture and modify the surface soil temperature and reduce fluctuation of both. Mulch will prevent soil surface crusting and aid in weed control. Mulch can also be used alone for temporary stabilization in non-growing months. Use of stone as a mulch could be more permanent and should not be limited to non-growing months.

Conditions Where Practice Applies

On soils subject to erosion and on new seedings and shrub plantings. Mulch is useful on soils with low infiltration rates by retarding runoff.

Criteria

Site preparation prior to mulching requires the installation of necessary erosion control or water management practices and drainage systems.

Slope, grade and smooth the site to fit needs of selected mulch products.

Remove all undesirable stones and other debris to meet the needs of the anticipated land use and maintenance required.

Apply mulch after soil amendments and planting is accomplished or simultaneously if hydroseeding is used.

Select appropriate mulch material and application rate or material needs. Hay mulch shall not be used in wetlands or in areas of permanent seeding. Clean straw mulch is preferred alternative in wetland application. Determine local availability.

Select appropriate mulch anchoring material.

NOTE: The best combination for grass/legume establishment is straw (cereal grain) mulch applied at 2 ton/acre (90 lbs./1000sq.ft.) and anchored with wood fiber mulch (hydromulch) at 500 – 750 lbs./acre (11 – 17 lbs./1000 sq. ft.). The wood fiber mulch must be applied through a hydroseeder immediately after mulching.

Table 4.2
Guide to Mulch Materials, Rates, and Uses

Mulch Material	Quality Standards	per 1000 Sq. Ft.	per Acre	Depth of Application	Remarks
Wood chips or shavings	Air-dried. Free of objectionable coarse material	500-900 lbs.	10-20 tons	2-7”	Used primarily around shrub and tree plantings and recreation trails to inhibit weed competition. Resistant to wind blowing. Decomposes slowly.
Wood fiber cellulose (partly digested wood fibers)	Made from natural wood usually with green dye and dispersing agent	50 lbs.	2,000 lbs.	—	Apply with hydromulcher. No tie down required. Less erosion control provided than 2 tons of hay or straw.
Gravel, Crushed Stone or Slag	Washed; Size 2B or 3A—1 1/2”	9 cu. yds.	405 cu. yds.	3”	Excellent mulch for short slopes and around plants and ornamentals. Use 2B where subject to traffic. (Approximately 2,000 lbs./cu. yd.). Frequently used over filter fabric for better weed control.
Hay or Straw	Air-dried; free of undesirable seeds & coarse materials	90-100 lbs. 2-3 bales	2 tons (100-120 bales)	cover about 90% surface	Use small grain straw where mulch is maintained for more than three months. Subject to wind blowing unless anchored. Most commonly used mulching material. Provides the best micro-environment for germinating seeds.
Jute twisted yarn	Undyed, unbleached plain weave. Warp 78 ends/yd., Weft 41 ends/yd. 60-90 lbs./roll	48” x 50 yds. or 48” x 75 yds.	—	—	Use without additional mulch. Tie down as per manufacturers specifications. Good for center line of concentrated water flow.
Excelsior wood fiber mats	Interlocking web of excelsior fibers with photodegradable plastic netting	4’ x 112.5’ or 8’ x 112.5’.	—	—	Use without additional mulch. Excellent for seeding establishment. Anchor as per manufacturers specifications. Approximately 72 lbs./roll for excelsior with plastic on both sides. Use two sided plastic for centerline of waterways.
Straw or coconut fiber, or combination	Photodegradable plastic net on one or two sides	Most are 6.5 ft. x 3.5 ft.	81 rolls	—	Designed to tolerate higher velocity water flow, centerlines of waterways, 60 sq. yds. per roll.

Table 4.3
Mulch Anchoring Guide

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
1. Peg and Twine	Hay or straw	After mulching, divide areas into blocks approximately 1 sq. yd. in size. Drive 4-6 pegs per block to within 2" to 3" of soil surface. Secure mulch to surface by stretching twine between pegs in criss-cross pattern on each block. Secure twine around each peg with 2 or more tight turns. Drive pegs flush with soil. Driving stakes into ground tightens the twine.
2. Mulch netting	Hay or straw	Staple the light-weight paper, jute, wood fiber, or plastic nettings to soil surface according to manufacturer's recommendations. Should be biodegradable. Most products are not suitable for foot traffic.
3. Wood cellulose fiber	Hay or straw	Apply with hydroseeder immediately after mulching. Use 500 lbs. wood fiber per acre. Some products contain an adhesive material ("tackifier"), possibly advantageous.
4. Mulch anchoring tool	Hay or straw	Apply mulch and pull a mulch anchoring tool (blunt, straight discs) over mulch as near to the contour as possible. Mulch material should be "tucked" into soil surface about 3".
5. Tackifier	Hay or straw	Mix and apply polymeric and gum tackifiers according to manufacturer's instructions. Avoid application during rain. A 24-hour curing period and a soil temperature higher than 45^0 Fahrenheit are required.

STANDARD AND SPECIFICATIONS FOR PERMANENT CONSTRUCTION AREA PLANTING

Definition & Scope

Establishing **permanent** grasses with other forbs and/or shrubs to provide a minimum 80% perennial vegetative cover on areas disturbed by construction and critical areas to reduce erosion and sediment transport. Critical areas may include but are not limited to steep excavated cut or fill slopes as well as eroding or denuded natural slopes and areas subject to erosion.

Conditions Where Practice Applies

This practice applies to all disturbed areas void of, or having insufficient, cover to prevent erosion and sediment transport. See additional standards for special situations such as sand dunes and sand and gravel pits.

Criteria

All water control measures will be installed as needed prior to final grading and seedbed preparation. Any severely compacted sections will require chiseling or disking to provide an adequate rooting zone, to a minimum depth of 12", see Soil Restoration Standard. The seedbed must be prepared to allow good soil to seed contact, with the soil not too soft and not too compact. Adequate soil moisture must be present to accomplish this. If surface is powder dry or sticky wet, postpone operations until moisture changes to a favorable condition. If seeding is accomplished within 24 hours of final grading, additional scarification is generally not needed, especially on ditch or stream banks. Remove all stones and other debris from the surface that are greater than 4 inches, or that will interfere with future mowing or maintenance.

Soil amendments should be incorporated into the upper 2 inches of soil when feasible. **The soil should be tested to determine the amounts of amendments needed.** Apply ground agricultural limestone to attain a pH of 6.0 in the upper 2 inches of soil. If soil must be fertilized before results of a soil test can be obtained to determine fertilizer needs, apply commercial fertilizer at 600 lbs. per acre of 5-5 -10 or equivalent. If manure is used, apply a quantity to meet the nutrients of the above fertilizer. This requires an appropriate manure analysis prior to applying to the site. Do not use manure on sites to be planted with birdsfoot trefoil or in the path of concentrated water flow.

Seed mixtures may vary depending on location within the state and time of seeding. Generally, warm season grasses should only be seeded during early spring, April to May. These grasses are primarily used for vegetating excessively drained sands and gravels. See Standard and Specification for Sand and Gravel Mine Reclamation. Other grasses may be seeded any time of the year when the soil is not frozen and is workable. When legumes such as birdsfoot trefoil are included, spring seeding is preferred. See Table 4.4, "Permanent Construction Area Planting Mixture Recommendations" for additional seed mixtures.

General Seed Mix:	**Variety**	**lbs./ acre**	**lbs/1000 sq. ft.**
Red Clover[1] OR	Acclaim, Rally, Red Head II, Renegade	8[2]	0.20
Common white clover[1]	Common	8	0.20
PLUS			
Creeping Red Fescue	Common	20	0.45
PLUS			
Smooth Bromegrass OR	Common	2	0.05
Ryegrass (perennial)	Pennfine/Linn	5	0.10

[1] add inoculant immediately prior to seeding
[2] Mix 4 lbs each of Empire and Pardee OR 4 lbs of Birdsfoot and 4 lbs white clover per acre. All seeding rates are given for Pure Live Seed (PLS)

Pure Live Seed, or (PLS) refers to the amount of live seed in a lot of bulk seed. Information on the seed bag label includes the type of seed, supplier, test date, source of seed, purity, and germination. Purity is the percentage of pure seed. Germination is the percentage of pure seed that will produce normal plants when planted under favorable conditions.

To compute Pure Live Seed multiply the "germination percent" times the "purity" and divide that by 100 to get Pure Live Seed.

$$\text{Pure Live Seed (PLS)} = \frac{\%\,\text{Germination} \times \%\,\text{Purity}}{100}$$

For example, the PLS for a lot of Kentucky Blue grass with 75% purity and 96% germination would be calculated as follows:

$$\frac{(96) \times (75)}{100} = 72\%\ \text{Pure Live Seed}$$

For 10lbs of PLS from this lot =

$$\frac{10}{0.72} = 13.9\ \text{lbs}$$

Therefore, 13.9 lbs of seed is the actual weight needed to meet 10lbs PSL from this specific seed lot.

Time of Seeding: The optimum timing for the general seed mixture is early spring. Permanent seedings may be made any time of year if properly mulched and adequate moisture is provided. Late June through early August is not a good time to seed, but may facilitate covering the land without additional disturbance if construction is completed. Portions of the seeding may fail due to drought and heat. These areas may need reseeding in late summer/fall or the following spring.

Method of seeding: Broadcasting, drilling, cultipack type seeding, or hydroseeding are acceptable methods. Proper soil to seed contact is key to successful seedings.

Mulching: Mulching is essential to obtain a uniform stand of seeded plants. Optimum benefits of mulching new seedings are obtained with the use of small grain straw applied at a rate of 2 tons per acre, and anchored with a netting or tackifier. See the Standard and Specifications for Mulching for choices and requirements.

Irrigation: Watering may be essential to establish a new seeding when a drought condition occurs shortly after a new seeding emerges. Irrigation is a specialized practice and care must be taken not to exceed the application rate for the soil or subsoil. When disconnecting irrigation pipe, be sure pipes are drained in a safe manor, not creating an erosion concern.

80% Perennial Vegetative Cover

50% Perennial Vegetative Cover

Table 4.4
Permanent Construction Area Planting Mixture Recommendations

Seed Mixture	Variety	Rate in lbs./acre (PLS)	Rate in lbs./ 1, 000 ft^2
Mix #1			
Creeping red fescue	Ensylva, Pennlawn, Boreal	10	.25
Perennial ryegrass	Pennfine, Linn	10	.25
*This mix is used extensively for shaded areas.			
Mix #2			
Switchgrass	Shelter, Pathfinder, Trailblazer, or Blackwell	20	.50
*This rate is in pure live seed, this would be an excellent choice along the upland edge of a wetland to filter runoff and provide wildlife benefits. In areas where erosion may be a problem, a companion seeding of sand lovegrass should be added to provide quick cover at a rate of 2 lbs. per acre (0.05 lbs. per 1000 sq. ft.).			
Mix #3			
Switchgrass	Shelter, Pathfinder, Trailblazer, or Blackwell	4	.10
Big bluestem	Niagara	4	.10
Little bluestem	Aldous or Camper	2	.05
Indiangrass	Rumsey	4	.10
Coastal panicgrass	Atlantic	2	.05
Sideoats grama	El Reno or Trailway	2	.05
Wildflower mix		.50	.01
*This mix has been successful on sand and gravel plantings. It is very difficult to seed without a warm season grass seeder such as a Truax seed drill. Broadcasting this seed is very difficult due to the fluffy nature of some of the seed, such as bluestems and indiangrass.			
Mix #4			
Switchgrass	Shelter, Pathfinder, Trailblazer, or Blackwell	10	.25
Coastal panicgrass	Atlantic	10	.25
*This mix is salt tolerant, a good choice along the upland edge of tidal areas and roadsides.			
Mix #5			
Saltmeadow cordgrass (Spartina patens)—This grass is used for tidal shoreline protection and tidal marsh restoration. It is planted by vegetative stem divisions. 'Cape' American beachgrass can be planted for sand dune stabilization above the saltmeadow cordgrass zone.			
Mix #6			
Creeping red fescue	Ensylva, Pennlawn, Boreal	20	.45
Chewings Fescue	Common	20	.45
Perennial ryegrass	Pennfine, Linn	5	.10
Red Clover	Common	10	.45
*General purpose erosion control mix. Not to be used for a turf planting or play grounds.			

STANDARD AND SPECIFICATIONS FOR TEMPORARY CONSTRUCTION AREA SEEDING

Definition & Scope

Providing temporary erosion control protection to disturbed areas and/or localized critical areas for an interim period by covering all bare ground that exists as a result of construction activities or a natural event. Critical areas may include but are not limited to steep excavated cut or fill slopes and any disturbed, denuded natural slopes subject to erosion.

Conditions Where Practice Applies

Temporary seedings may be necessary on construction sites to protect an area, or section, where final grading is complete, when preparing for winter work shutdown, or to provide cover when permanent seedings are likely to fail due to mid-summer heat and drought. The intent is to provide temporary protective cover during temporary shutdown of construction and/or while waiting for optimal planting time.

Criteria

Water management practices must be installed as appropriate for site conditions. The area must be rough graded and slopes physically stable. Large debris and rocks are usually removed. Seedbed must be seeded within 24 hours of disturbance or scarification of the soil surface will be necessary prior to seeding.

Fertilizer or lime are not typically used for temporary seedings.

IF: Spring or summer or early fall, then seed the area with ryegrass (annual or perennial) at 30 lbs. per acre (Approximately 0.7 lb./1000 sq. ft. or use 1 lb./1000 sq. ft.).

IF: Late fall or early winter, then seed Certified 'Aroostook' winter rye (cereal rye) at 100 lbs. per acre (2.5 lbs./1000 sq. ft.).

Any seeding method may be used that will provide uniform application of seed to the area and result in relatively good soil to seed contact.

Mulch the area with hay or straw at 2 tons/acre (approx. 90 lbs./1000 sq. ft. or 2 bales). Quality of hay or straw mulch allowable will be determined based on long term use and visual concerns. Mulch anchoring will be required where wind or areas of concentrated water are of concern. Wood fiber hydromulch or other sprayable products approved for erosion control (nylon web or mesh) may be used if applied according to manufacturers' specification. Caution is advised when using nylon or other synthetic products. They may be difficult to remove prior to final seeding and can be a hazard to young wildlife species.

STANDARD AND SPECIFICATIONS FOR TOPSOILING

Definition & Scope

Spreading a specified quality and quantity of topsoil materials on graded or constructed subsoil areas to provide acceptable plant cover growing conditions, thereby reducing erosion; to reduce irrigation water needs; and to reduce the need for nitrogen fertilizer application.

Conditions Where Practice Applies

Topsoil is applied to subsoils that are droughty (low available moisture for plants), stony, slowly permeable, salty or extremely acid. It is also used to backfill around shrub and tree transplants. This standard does not apply to wetland soils.

Design Criteria

1. Preserve existing topsoil in place where possible, thereby reducing the need for added topsoil.

2. Conserve by stockpiling topsoil and friable fine textured subsoils that must be stripped from the excavated site and applied after final grading where vegetation will be established. Topsoil stockpiles must be stabilized. Stockpile surfaces can be stabilized by vegetation, geotextile or plastic covers. This can be aided by orientating the stockpile lengthwise into prevailing winds.

3. Refer to USDA Natural Resource Conservation Service soil surveys or soil interpretation record sheets for further soil texture information for selecting appropriate design topsoil depths.

Site Preparation

1. As needed, install erosion and sediment control practices such as diversions, channels, sediment traps, and stabilizing measures, or maintain if already installed.

2. Complete rough grading and final grade, allowing for depth of topsoil to be added.

3. Scarify all compact, slowly permeable, medium and fine textured subsoil areas. Scarify at approximately right angles to the slope direction in soil areas that are steeper than 5 percent. Areas that have been overly compacted shall be decompacted in accordance with the Soil Restoration Standard.

4. Remove refuse, woody plant parts, stones over 3 inches in diameter, and other litter.

Topsoil Materials

1. Topsoil shall have at least 6 percent by weight of fine textured stable organic material, and no greater than 20 percent. Muck soil shall not be considered topsoil.

2. Topsoil shall have not less than 20 percent fine textured material (passing the NO. 200 sieve) and not more than 15 percent clay.

3. Topsoil treated with soil sterilants or herbicides shall be so identified to the purchaser.

4. Topsoil shall be relatively free of stones over 1 1/2 inches in diameter, trash, noxious weeds such as nut sedge and quackgrass, and will have less than 10 percent gravel.

5. Topsoil containing soluble salts greater than 500 parts per million shall not be used.

6. Topsoil may be manufactured as a mixture of a mineral component and organic material such as compost.

Application and Grading

1. Topsoil shall be distributed to a uniform depth over the area. It shall not be placed when it is partly frozen, muddy, or on frozen slopes or over ice, snow, or standing water puddles.

2. Topsoil placed and graded on slopes steeper than 5 percent shall be promptly fertilized, seeded, mulched, and stabilized by “tracking” with suitable equipment.

3. Apply topsoil in the amounts shown in Table 4.7 below:

Table 4.7 - Topsoil Application Depth		
Site Conditions	**Intended Use**	**Minimum Topsoil Depth**
1. Deep sand or loamy sand	Mowed lawn	6 in.
	Tall legumes, unmowed	2 in.
	Tall grass, unmowed	1 in.
2. Deep sandy loam	Mowed lawn	5 in.
	Tall legumes, unmowed	2 in.
	Tall grass, unmowed	none
3. Six inches or more: silt loam, clay loam, loam, or silt	Mowed lawn	4 in.
	Tall legumes, unmowed	1 in.
	Tall grass, unmowed	1 in.

STANDARD AND SPECIFICATIONS FOR TREES, SHRUBS, AND VINES

Definition & Scope

Establishing trees, shrubs, and vines or selectively reducing stand density and trimming woody plants to protect the soil and plant resources, improve an area for recreation and increase the attractiveness and usefulness of areas.

Conditions Where Practice Applies

On any area planned for recreation or landscape use such as yard areas, leisure areas, picnic areas, and park lands providing outdoor recreational opportunities.

Criteria and Specifications

1. Planting nursery stock

   A. Select species to serve the intended purpose. See Appendix G, Table G.1**,** "Trees Suitable for Landscape and Conservation Plantings in New York." Where planting of trees is to be done in recreation areas, use those species resistant to compaction listed in Table G.2, "Susceptibility of Tree Species to Compaction" whenever possible.

   B. Plant Materials

      1) Plants shall conform to the species, variety, size, number, and conditions as stated in a conservation plan or on a plant list shown on landscape drawings. "American Standard for Nursery Stock," by American Association of Nurserymen, shall be used to develop the plant list for landscape drawings and to check quality of plant materials.

      2) Durable, legible labels with the scientific and common name and cultivar shall be securely attached to plants, bundles of seedlings, containers, and/or flats.

   C. Plant Protection

      Prior to delivery, the trunk, branches, and foliage of the plants shall be sprayed with non-toxic antidesiccant, applied according to the manufacturer's recommendations. This does not apply to state nursery seedlings.

   D. Planting Time

      Deciduous trees and shrubs: April 1 to June 1 and October 15 to December 15. Evergreen trees and shrubs: April 1 to June 1 and September 1 to November 15.

   E. Spacing

      Plant all trees and shrubs well back from buildings to allow for mature crown size. The following are guides for planning:

Large Trees	50-60 feet apart
Small Trees	20-30 feet apart
Columnar Species	6-8 feet apart
Hedges	1-4 feet apart
Shrubs	For clumps, plan spacing so mature shrubs will be touching or overlapping by only 1 or 2 feet

   F. Site Preparation

      1) Individual sites for planting seedlings can be prepared by scalping the sod away from a four foot square area where the seedling is to be planted.

      2) All planting beds shall be cultivated to a depth of 8 inches, or chemically treated for weed control. Remove objectionable objects that will interfere with maintenance of site.

   G. Planting

      1) Plants shall be located as shown on plans and/or drawings and, where necessary, located on the site by stakes, flags or other means.

      2) Prior to planting, remove galvanized wire basket securing root ball, untie and roll down burlap covering from around the stem.

3) The plants shall be set upright in holes as illustrated in Figure G.1 in Appendix G.

4) All plants shall be thoroughly watered on the same day of planting. Plants that have settled shall be reset to grade.

H. Wrapping

Immediately after planting, wrap deciduous tree trunks from the bottom to the first limb with a 4 inch wide bituminous impregnated, insect resistant tape or paper manufactured for that purpose. Tie with jute (bag strings) at top and bottom. The wrap should be removed per nursery recommendations.

I. Mulching

Mulch the disturbed area around individual trees and shrubs with a 2-3" layer of wood chips. Pull wood chips 1 inch away from the base of shrubs to avoid fungus development.

J. Pruning

After planting, prune to remove injured twigs and branches. The natural shape of the plant should not be changed.

K. Cleanup and Maintenance

1) After all work is complete, all excess soil, peat moss, debris, etc., shall be removed from the site.

2) Water plants two weeks after planting. For two years, water plants every two weeks during dry periods, which exceed three weeks without a good soaking rain, or water as needed in accordance with local conditions. Shrubs may require 5 to 10 gallons and trees, 20 to 30 gallons for each watering.

3) Remove trunk wrap per nursery recommendation.

2. Transplanting "Wild" Stock

Successful transplanting of wild stock will require heavy equipment and considerable labor as a large weight of soil must be moved with the roots.

A. Select trees and shrubs with good form and full crowns.

B. Transplant only when plants are dormant and soil is moist. Wrap soil ball with burlap to prevent soil from separating from roots.

C. Table 4.8 shows minimum diameter and approximate weight of soil ball that must be moved with each size plant.

D. Plant and maintain as described above for nursery stock.

PRUNING AND THINNING

Use	Cleared Width Each Side of Trail Tread (ft.)	Cleared Height (ft.)
TRAILS		
Hiking	1	8
Bicycle	2	10
Motorbike	2	10
Horse	2	12
X-Country Ski	Total: 3-12	12[1]
Snowmobile	Total: 6-12	12[1]
PICNIC & CAMPING AREAS		
Campfire/Grill	10 ft. diam.	15

[1] Includes allowance for snow depth and snow load on branches

1. Pruning

A. Remove trees, limbs, and limb stubs to the above widths and heights specified for the intended use.

B. Remove dead, diseased, or dying limbs that may fall.

C. Do not remove more than one-third of the live crown of a tree in a year.

D. Cut limbs flush to the branch bark ridge.

E. Use the 3 or 4 cut pruning method on all branches over 2 inches in diameter: First cut about one-third the way through the underside of the limb (about 6-12 inches from the tree trunk). Then (approximately an inch further out) make a second cut through the limb from the upper side. When the branch is removed, there is no splintering of the main tree trunk. Remove the stub. If the branch is larger than 5-6 inches in diameter, use the four cut system. Cuts 1 and 2 remain the same and cut 3 should be from the underside of the limb, on the outside of the branch collar. Cut 4 should be from the top and in alignment with the 3rd cut. Cut 3 should be 1/4 to 1/3 the way through the limb. This will prevent the bark from peeling down the trunk. Do not paint the cut surface.

2. Thinning

   A. Remove dead, diseased, dying, poorly anchored, or ice damaged trees that pose a hazard to recreationists or that interfere with intended use.

   B. To maintain grass cover in a wooded area, thin according to formula Dx3 (average diameter of the trunk of overstory trees, in inches, times three—the answer is the spacing between trees to be left, in feet). For example, for trees with average diameter of 6 inches, spacing after thinning should leave trees 18 feet apart on average. Crown cover after thinning should be about 50 percent.

   C. Selectively thin as needed to favor those trees that are most "resistant" to compaction around their roots. See Table G.2**,** "Susceptibility of Tree Species to Compaction" in Appendix G. If the soil on the site is naturally well drained, those species in the "intermediate" group may also be favored.

Table 4.8
Size and Weight of Earth Ball Required to Transplant Wild Stock

Shade Trees (Maple, Ash, Oak, Birch, etc.)			Small Trees & Shrubs (Crabapple, Thornapple, Viburnum, Dogwood, etc.)		
Caliper[1] (Inches)	Minimum Diameter Ball (Inches)	Weight of Ball (lbs.)	Up to 6 ft. Height — 6 ft. and Caliper[1]	Minimum Diameter Ball (Inches)	Weight of Ball (lbs.)
1/2	14	88	2	12	55
3/4	16	130	3	14	88
1	18	186	4	16	130
1-1/4	20	227	5	18	186
1-1/2	22	302	3/4	18	186
1-3/4	24	390	1	20	227
2	28	621	1-1/2	22	302
3	32	836	1-3/4	24	390
3-1/2	38	1,400	2	28	621
4	42	1,887	2-1/2	32	836
			3	38	1,400

[1]Caliper is a diameter measurement of trees at a height of 6 inches above the ground.

STANDARD AND SPECIFICATIONS FOR SILT FENCE

Definition & Scope

A **temporary** barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil by temporarily ponding the sediment laden runoff allowing settling to occur. The maximum period of use is limited by the ultraviolet stability of the fabric (approximately one year).

Conditions Where Practice Applies

A silt fence may be used subject to the following conditions:

1. Maximum allowable slope length and fence length will not exceed the limits shown in the Design Criteria for the specific type of silt fence used ; and
2. Maximum ponding depth of 1.5 feet behind the fence; and
3. Erosion would occur in the form of sheet erosion; and
4. There is no concentration of water flowing to the barrier; and
5. Soil conditions allow for proper keying of fabric, or other anchorage, to prevent blowouts.

Design Criteria

1. Design computations are not required for installations of 1 month or less. Longer installation periods should be designed for expected runoff.
2. All silt fences shall be placed as close to the disturbed area as possible, but at least 10 feet from the toe of a slope steeper than 3H:1V, to allow for maintenance and roll down. The area beyond the fence must be undisturbed or stabilized.
3. The type of silt fence specified for each location on the plan shall not exceed the maximum slope length and maximum fence length requirements shown in the following table:

		Slope Length/Fence Length (ft.)		
Slope	Steepness	Standard	Reinforced	Super
<2%	< 50:1	300/1500	N/A	N/A
2-10%	50:1 to 10:1	125/1000	250/2000	300/2500
10-20%	10:1 to 5:1	100/750	150/1000	200/1000
20-33%	5:1 to 3:1	60/500	80/750	100/1000
33-50%	3:1 to 2:1	40/250	70/350	100/500
>50%	> 2:1	20/125	30/175	50/250

Standard Silt Fence (SF) is fabric rolls stapled to wooden stakes driven 16 inches in the ground.
Reinforced Silt Fence (RSF) is fabric placed against welded wire fabric with anchored steel posts driven 16 inches in the ground.
Super Silt Fence (SSF) is fabric placed against chain link fence as support backing with posts driven 3 feet in the ground.

4. Silt fence shall be removed as soon as the disturbed area has achieved final stabilization.

The silt fence shall be installed in accordance with the appropriate details. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent sediment bypass. Butt joints are not acceptable. A detail of the silt fence shall be shown on the plan. See Figure 5.30 on page 5.56 for Reinforced Silt Fence as an example of details to be provided.

Criteria for Silt Fence Materials

1. Silt Fence Fabric: The fabric shall meet the following specifications unless otherwise approved by the appropriate erosion and sediment control plan approval authority. Such approval shall not constitute statewide acceptance.

Fabric Properties	Minimum Acceptable Value	Test Method
Grab Tensile Strength (lbs)	110	ASTM D 4632
Elongation at Failure (%)	20	ASTM D 4632
Mullen Burst Strength (PSI)	300	ASTM D 3786
Puncture Strength (lbs)	60	ASTM D 4833
Minimum Trapezoidal Tear Strength (lbs)	50	ASTM D 4533
Flow Through Rate (gal/min/sf)	25	ASTM D 4491
Equivalent Opening Size	40-80	US Std Sieve ASTM D 4751
Minimum UV Residual (%)	70	ASTM D 4355

2. Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.5 square inches. Steel posts will be standard T and U section weighing not less than 1.00 pound per linear foot. Posts for super silt fence shall be standard chain link fence posts.

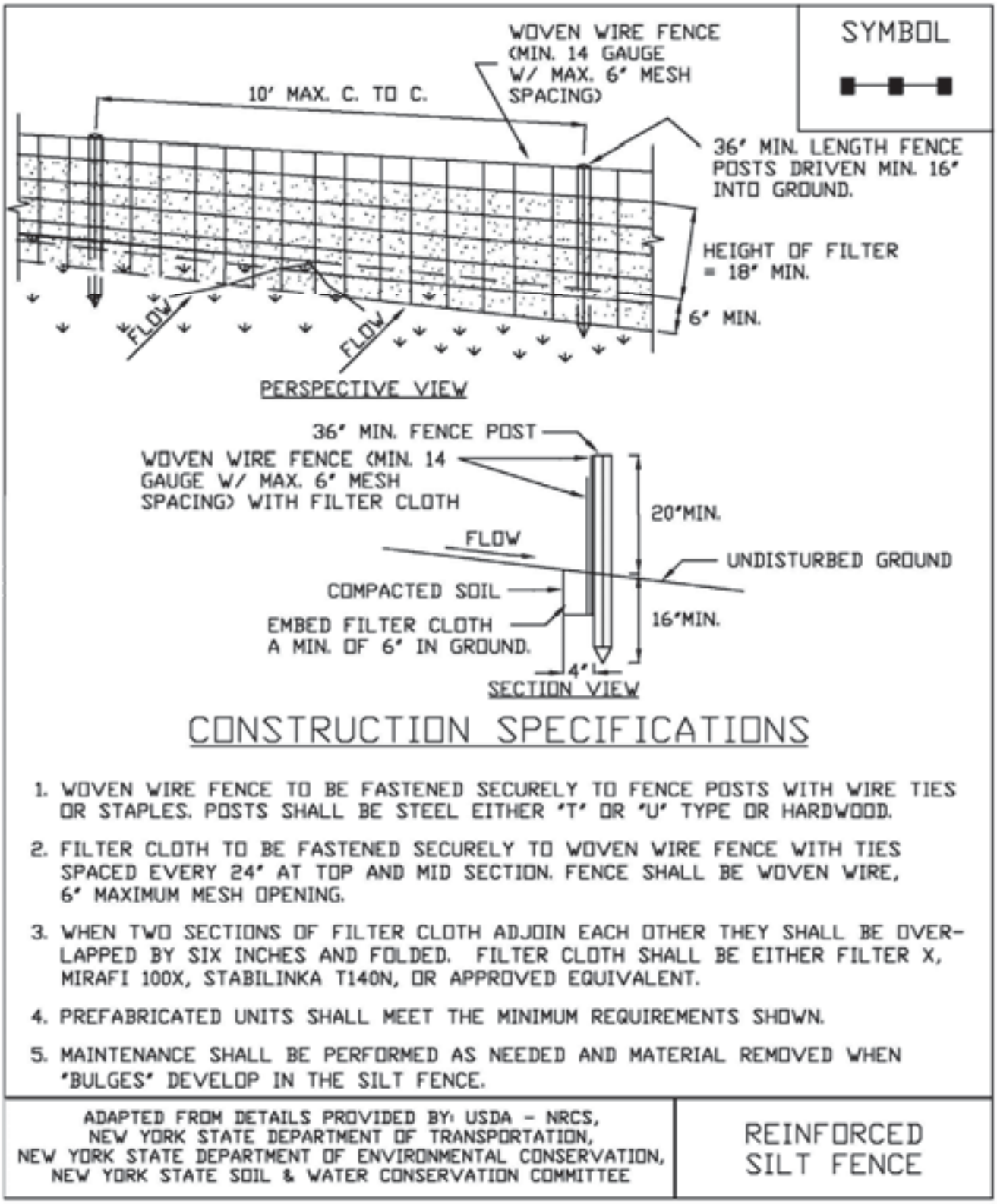
3. Wire Fence for reinforced silt fence: Wire fencing shall be a minimum 14 gage with a maximum 6 in. mesh opening, or as approved.

4. Prefabricated silt fence is acceptable as long as all material specifications are met.

Super Silt Fence

Reinforced Silt Fence

Figure 5.30
Reinforced Silt Fence



STANDARD AND SPECIFICATIONS FOR FLOW DIFFUSER

Definition & Scope

A permanent non-erosive outlet for concentrated runoff constructed to diffuse flow uniformly through a stone matrix onto a stablilized area in the form of shallow, low velocity, sheet flow.

Conditions Where Practice Applies

Where sediment-free stormwater runoff can be released in low velocity sheet flow down stabilized areas without causing erosion; where the ground slope at the outlet of the diffuser is less than 30% and the runoff will not re-concentrate after release; and where construction of a flow spreader is not practicable.

Design Criteria

1. **Drainage area:** The maximum drainage area to the diffuser may not exceed 0.10 acre per foot length of the flow diffuser. The drainage area served by the diffuser discharging directly cannot be 10-20% more than half the size of the receiving buffer area.

2. **Discharge from diffuser onto receiving area:** The peak stormwater flow rate from a flow diffuser onto a receiving area from a 10-year 24-hour storm must be less than 0.25 cubic feet per second (0.25 cfs) per linear foot of weir crest length.

3. **Receiving area of buffer:** Each flow diffuser shall have a vegetated receiving area with a minimum continuous length of 150 feet and the capacity to pass the flow without erosion. The receiving area shall be stable prior to the construction of the flow diffuser. The receiving area shall have topography regular enough to prevent undue flow concentration before entering a stable watercourse but it shall have a slope that is less than 30%. If the receiving area is not presently stable, then the receiving area shall be stabilized prior to construction of the flow diffuser. The receiving area below the flow diffuser shall be protected from harm during construction. Sodding and/or turf reinforcement mat (TRM) in combination with vegetative measures shall stabilize disturbed areas. The receiving area shall not be used by the flow diffuser until stabilization has been accomplished. A temporary diversion may be necessary in this case.

4. **Cross-section:** The minimum stone diffuser cross-section shall be trapezoidal with a height of 1 foot above natural ground; top width equal to 2 foot and side slope equal to 1 horizontal to 1 vertical. The storage area behind the diffuser shall be excavated to a depth of 1 foot and overall width of storage area equal to 6 feet minimum.

   Sizing the diffuser: The length of the stone diffuser is governed by the size of the stone in the structure, the height of the diffuser, and the flow length through it. The following equation is used to establish the design of the diffuser:

$$Q_d = \frac{h^{3/2} W}{[(\frac{L}{D}) + 2.5 + L^2]^{0.5}}$$

Where:

Q_d = Outflow through the stone diffuser (cfs)
h = Ponding depth behind the diffuser (ft.)
W = Linear length of the diffuser along centerline (ft.)
L = Average horizontal flow length through the diffuser perpendicular to the centerline (ft.)
D = Average stone diameter (d_{50}) in the structure (ft.)

The maximum d_{50} size shall be 9" or 0.75'.

The designer shall calculate the length of diffuser needed depending on the geometry of the cross-section and rock size to be used recognizing that the maximum allowable discharge through the diffuser shall be 0.25 cfs per foot of length.

Once the discharge is calculated for the 10 year storm for the drainage area to the diffuser (Q_{10}) it can be divided by the design discharge of the diffuser to determine the diffuser length as follows:

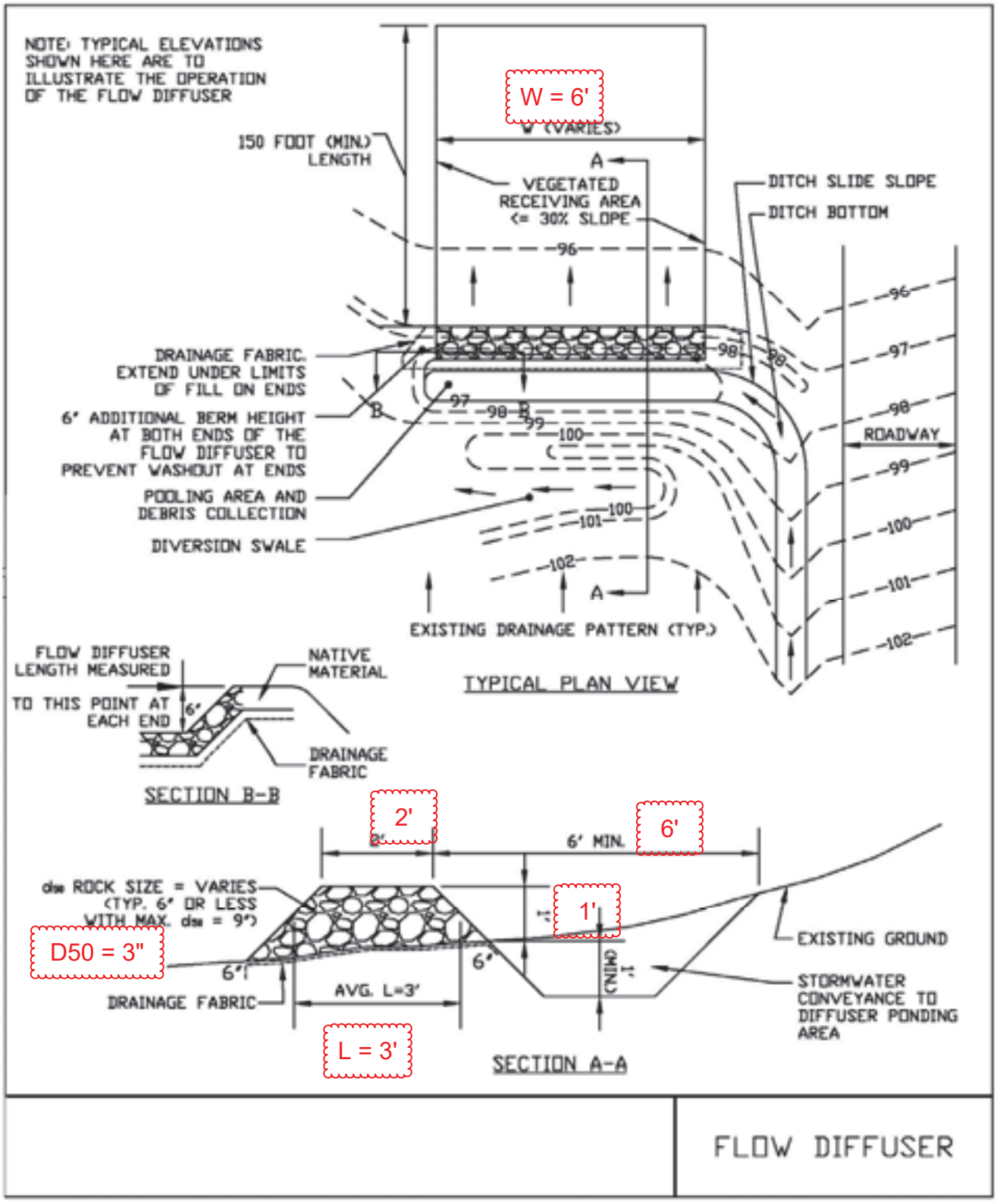
$$W = \frac{Q_{10}}{Q_d}$$

Where:

Q_d = Outflow through the stone diffuser (cfs/ft)
Q_{10} = Discharge rate for the 10 year storm (cfs)
W = Linear length of the diffuser along centerline (ft.)

Design examples are shown in Appendix B.

Figure 3.6
Flow Diffuser Detail



Flow Diffuser - Glencoma Lake Cell Tower Compound SWPPP

Per Standard and Specifications for Flow Diffuser

(NYS Standards and Specifications for Erosion and Sediment Control - November 2016 - page 3.16)

Design Criteria:

1. **Drainage area:** The maximum drainage area to the diffuser may not exceed 0.10 acre per foot length of the flow diffuser. The drainage area served by the diffuser discharging directly cannot be 10-20% more than half the size of the receiving buffer area.
2. **Discharge from diffuser onto receiving area:** The peak stormwater flow rate from a flow diffuser onto a receiving area from a 10-year 24-hour storm must be less than 0.25 cubic feet per second (0.25 cfs) per linear foot of weir crest length.
3. **Receiving area of buffer:** Each flow diffuser shall have a vegetated receiving area with a minimum continuous length of 150 feet and the capacity to pass the flow without erosion. The receiving area shall be stable prior to the construction of the flow diffuser. The receiving area shall have topography regular enough to

Design Storm:	10-year, 24-hour storm	
Tc =	5 minutes (assumed)	
Storm Intensity, i =	7.09 inches/hour (NOAA Atlas 14)	
Drainage Area, A =	1,800 SF	*0.04 acres*
Runoff Coefficient, C =	0.99	

REQUIRED WIDTH OF DIFFUSER

$$W = \frac{Q_{10}}{Q_d}$$

Where:

Q_d = Outflow through the stone diffuser (cfs/ft)
Q_{10} = Discharge rate for the 10 year storm (cfs)
W = Linear length of the diffuser along centerline (ft.)

Sizing the diffuser: The length of the stone diffuser is governed by the size of the stone in the structure, the height of the diffuser, and the flow length through it. The following equation is used to establish the design of the diffuser:

$$Q_d = \frac{h^{3/2} W}{[(\frac{L}{D}) + 2.5 + L^2]^{0.5}}$$

Where:

Q_d = Outflow through the stone diffuser (cfs)
h = Ponding depth behind the diffuser (ft.)
W = Linear length of the diffuser along centerline (ft.)
L = Average horizontal flow length through the diffuser perpendicular to the centerline (ft.)
D = Average stone diameter (d_{50}) in the structure (ft.)

The maximum d_{50} size shall be 9" or 0.75'.

---

1. Discharge Rate of 10-year storm:

Q_{10} = CiA; Q_{10} = 0.29 CFS

2. Required Diffuser Length

$$W = \frac{Q_{10}}{Q_d} = \frac{0.29 \text{ cfs}}{0.25 \text{ cfs/lf}}$$

W = 1.16 LF **USE W =6' (MINIMUM)**

3. Discharge from Diffuser

The peak stormwater flow rate from a flow diffuser onto a receiving area from a 10-year 24-hour storm must be less than 0.25 cfs per linear foot of weir crest length

W = 6 LF

Peak Stormwater Flow Rate from Flow Diffuser =
0.25 cfs/lf x **W** *LF* =
0.25cfs/lf x **6** *LF* = 1.5 cfs
(peak SW flow rate)

$$Q_d = \frac{h^{3/2} W}{[(\frac{L}{D}) + 2.5 + L^2]^{0.5}}$$

W =	6 LF
h =	1 FT
L =	3 LF
D =	3 inches

Q_d = 1.24 CFS < 1.5 CFS
OK

Use d50 = 3", L = 3', W = 6', h =1'

Appendix G

www.dewberry.com

Dewberry

Dewberry Engineers Inc.
600 Parsippany Road, Suite 301
Parsippany, NJ 07054-3715

973.739.9400
973.428.8509 fax
www.dewberry.com

November 23, 2020

Richard J. Franzetti, P.E.
Town Engineer
Office of the Town Engineer
60 McAlpin Avenue
Mahopac, New York 10541

RE: 87.5-1-90 – Glencoma Cell Tower SWPPP DRAFT review #2

Dear Mr. Franzetti,

In response to your memorandum to the Carmel Planning Board dated October 28, 2020 regarding the Glencoma Cell Tower SWPPP, Dewberry Engineers, Inc offers the following responses to your comments:

1. *Show all existing and proposed utilities. It is unclear how electric will be supplied to the site and is any additional disturbance (i.e., trench, tree cleating etc.) is required.*
   Response: Trench to nearest utility pole depicted and limit of disturbance has been revised to account for increased disturbance.

2. *Additional details regarding pre/post runoff conditions must be provided. Assessment of runoff from the site so as not cause erosion, landslides or increased runoff must be provided.*
   Based on discussions with our office on 11/18, flow diffusers are proposed to be installed at the discharge point of each swale. The Flow Diffuser is designed based on the New York State Standards and Specifications for Erosion and Sediment Control and calculations and details are provided within the revised SWPPP and depicted on sheets SWPPP-1 and SWPPP-2.

3. *Drawing SWPPP-1 – identifies a vehicle access off of Walton Drive. Additional details should be provided as to if this proposed road is to be pervious or impervious. Provide driveway profile. Provide driveway cross section and paving detail as applicable.*
   This driveway is now proposed to be paved and a detail has been provided in the construction drawings.

Sincerely,

Robert J. Foley, PE
Senior Associate
NY Professional Engineer License No. 088774

Enclosed:
- Stormwater Pollution Prevention Plan – Glencoma Lake Drawings last revised 11/20/2020
- Construction Drawings – Glencoma Lake" prepared by Dewberry last revised 11/20/2020

\\par-fs\Parsippany\Projects\50114387\50114388\Adm\Correspondence\Letters\(2020-11-20) Town Engineer - SWPPP Memo Response Letter.docx

Flow Diffuser - Glencoma Lake Cell Tower Compound SWPPP

Per Standard and Specifications for Flow Diffuser

(NYS Standards and Specifications for Erosion and Sediment Control - November 2016 - page 3.16)

Design Criteria:

1. **Drainage area:** The maximum drainage area to the diffuser may not exceed 0.10 acre per foot length of the flow diffuser. The drainage area served by the diffuser discharging directly cannot be 10-20% more than half the size of the receiving buffer area.
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Drainage Area, A =	1,800 SF	*0.04 acres*
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$$Q_d = \frac{h^{3/2} W}{[(\frac{L}{D}) + 2.5 + L^2]^{0.5}}$$

Where:

Q_d = Outflow through the stone diffuser (cfs)
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W = Linear length of the diffuser along centerline (ft.)
L = Average horizontal flow length through the diffuser perpendicular to the centerline (ft.)
D = Average stone diameter (d_{50}) in the structure (ft.)

The maximum d_{50} size shall be 9" or 0.75'.

REQUIRED WIDTH OF DIFFUSER

$$W = \frac{Q_{10}}{Q_d}$$

Where:

Q_d = Outflow through the stone diffuser (cfs/ft)
Q_{10} = Discharge rate for the 10 year storm (cfs)
W = Linear length of the diffuser along centerline (ft.)

---

1. Discharge Rate of 10-year storm:

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Peak Stormwater Flow Rate from Flow Diffuser =
0.25 cfs/lf x **W** *LF* =
0.25cfs/lf x **6** *LF* = 1.5 cfs
(peak SW flow rate)

$$Q_d = \frac{h^{3/2} W}{[(\frac{L}{D}) + 2.5 + L^2]^{0.5}}$$

W =	6 LF
h =	1 FT
L =	3 LF
D =	3 inches

Q_d = 1.24 CFS < 1.5 CFS
OK

Use d50 = 3", L = 3', W = 6', h =1'

11/23/20

Ecological Solutions, LLC

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

December 23, 2019

Klaus Wimmer
Homeland Towers, LLC
9 Harmony Street, 2nd Floor
Danbury, CT 06810

Re: Wetland Delineation
Walton Drive Site
Town of Carmel, Putnam County, New York

Dear Klaus:

Ecological Solutions, LLC completed a wetland delineation at the rear and center of the site in accordance with the Army Corps of Engineers (USACE) Wetlands Delineation Manual (January 1987), Routine Determination Method and recent Northcentral/Northeast supplement during April 2018. Federal wetlands and waters of the US do not contain any regulated buffer area. There is no New York State Department of Environmental Conservation (NYSDEC) regulated wetland in the project area however there is a NYSDEC regulated wetland in the vicinity of the project area being about 1,060 ft west of any area of disturbance for the proposed communications tower facility. The NYSDEC in an email dated October 16, 2019 stated that there is no NYSDEC regulated wetland or Adjacent Area on the property. The Town of Carmel also has a wetland law - Chapter 89 and imposes a 100 foot regulated buffer to the wetland boundary.

Federal and Town wetlands were delineated based upon the identification of the three mandatory criteria for wetland determination as outlined in the 1987 Federal Manual and supplement: dominant hydrophytic vegetation, hydric soils, and evidence of wetland hydrology. The Routine Methodology procedure for wetland determination was used. Transects consisting of at several sample points were walked. Dominant vegetation around each sample point was identified and its percent cover quantified. The areas were checked in detail for the presence of wetland hydrologic indicators. Soil profiles were then observed and characterized at each point.

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.

The federal and Town wetlands delineated on the site are best classified as a hillside seep and drainage ditches.

The wetlands delineated in the project area are depicted on the map entitled, "Partial Boundary and Topographic Survey" Sheet VB-102 prepared by Langan Engineering & Surveying and dated April 10, 2018. Based on this delineation no NYSDEC, Federal or Town wetland or watercourse permits are required.

If you need any additional information, please contact me.

Sincerely,
ECOLOGICAL SOLUTIONS, LLC

Michael Nowicki
Biologist

Klaus Wimmer

From: Fisher, Joshua M (DEC) <Joshua.Fisher@dec.ny.gov>
Sent: Wednesday, October 16, 2019 3:43 PM
To: Klaus Wimmer
Cc: Michael Nowicki
Subject: RE: NY054 Glencoma Lake - Walton Drive, Mahopac, NY

Categories: Red Category

Correct, I don't need to inspect it...unless you plan on working about 1,000 feet to the west.

Josh Fisher
Biologist, Bureau of Ecosystem Health
New York State Department of Environmental Conservation
21 South Putt Corners Rd., New Paltz, NY 12561
Office: (845) 256-3113 | joshua.fisher@dec.ny.gov
Cell: (845) 220-8570
www.dec.ny.gov |

From: Klaus Wimmer <kw@homelandtowers.us>
Sent: Wednesday, October 16, 2019 3:26 PM
To: Fisher, Joshua M (DEC) <Joshua.Fisher@dec.ny.gov>
Cc: Michael Nowicki <ecolsol@aol.com>
Subject: RE: NY054 Glencoma Lake - Walton Drive, Mahopac, NY

Thanks Josh, so it's a Town wetland and does that mean you don't need to inspect it ?

Klaus Wimmer
Regional Manager
HOMELAND TOWERS
9 Harmony Street, 2nd Floor
Danbury, CT 06810
Office: (203) 297-6345 | **Cell**: (201) 289-6750
Email: kw@homelandtowers.us

From: Fisher, Joshua M (DEC) <Joshua.Fisher@dec.ny.gov>
Sent: Wednesday, October 16, 2019 3:24 PM
To: Klaus Wimmer <kw@homelandtowers.us>

Cc: Michael Nowicki <ecolsol@aol.com>
Subject: RE: NY054 Glencoma Lake - Walton Drive, Mahopac, NY

Hi Klaus, the wetland shown on your plan is not a NYSDEC regulated wetland.

Josh Fisher
Biologist, Bureau of Ecosystem Health
New York State Department of Environmental Conservation
21 South Putt Corners Rd., New Paltz, NY 12561
Office: (845) 256-3113 | joshua.fisher@dec.ny.gov
Cell: (845) 220-8570
www.dec.ny.gov |

From: Klaus Wimmer <kw@homelandtowers.us>
Sent: Wednesday, October 16, 2019 11:01 AM
To: Fisher, Joshua M (DEC) <Joshua.Fisher@dec.ny.gov>
Cc: Michael Nowicki <ecolsol@aol.com>
Subject: NY054 Glencoma Lake - Walton Drive, Mahopac, NY

Hi Josh,
We have another tower project in Carmel that has a little wetland (runoff from an underground water tank overflow) on the property that I was hoping you can inspect. Mike was out to flag it several months ago. Attached please see the delineation survey and site plan. As you can see we are well over 100' from the wetland. The survey is signed & sealed and I'll bring the originals to the visit. Please let me know if you need the surveyor to sign the validation block first or after your visit.

Please let me know when you're in the area and can take a look at this

Thanks

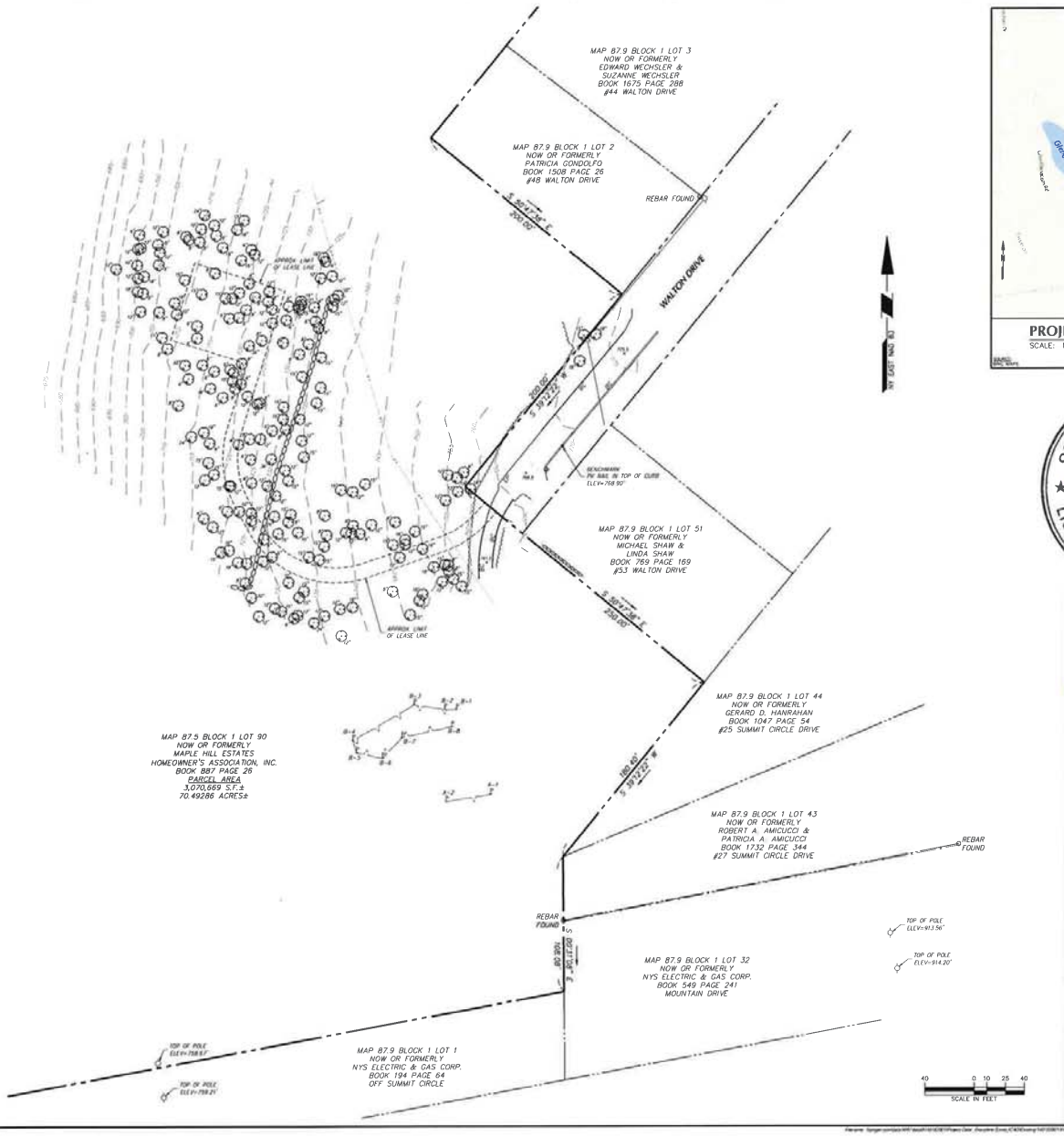
Klaus Wimmer
Regional Manager
HOMELAND TOWERS
9 Harmony Street, 2nd Floor
Danbury, CT 06810
Office: (203) 297-6345 | **Cell**: (201) 289-6750
Email: kw@homelandtowers.us

GENERAL NOTES

1. THIS SURVEY IS BASED UPON EXISTING PHYSICAL CONDITIONS FOUND AT THE SUBJECT SITE, DEED INFORMATION AND THE FOLLOWING REFERENCES:
   A. MAP TITLED "FINAL SUBDIVISION PLAT OF MAPLE HILL ESTATES, SITUATE IN TOWN OF CARMEL, COUNTY OF PUTNAM, STATE OF NEW YORK", SCALE: 1"=100', DATED: MAY 22, 1985, PREPARED BY: CASHIN ASSOCIATES, P.C.
2. THE MERIDIAN OF THIS SURVEY IS REFERENCED TO NEW YORK EAST STATE PLANE COORDINATE SYSTEM NAD 83 AS ESTABLISHED THROUGH GPS METHODS.
3. ELEVATIONS SHOWN ARE REFERENCED TO NAVD 88, AS ESTABLISHED THROUGH GPS METHODS.
4. PLANIMETRIC AND TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C. FIELD WORK COMPLETED DURING THE MONTH OF APRIL 2018.
5. AS PER THE NATIONAL FLOOD INSURANCE PROGRAM FIRM MAP ENTITLED "PUTNAM COUNTY, NEW YORK PANEL 226 OF 256, MAP NUMBER 36079C0226E, EFFECTIVE DATE MARCH 4, 2013" THE PROJECT AREA IS IN ZONE X (UNSHADED), ZONE X (SHADED) AND ZONE AE.
6. UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC.). CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND LOCATIONS WHERE DATA IS OBTAINED. DESPITE MEETING THE REQUIRED STANDARD OF CARE, THE SURVEYOR CANNOT, AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES.
7. ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA IS SHOWN FROM FIELD LOCATED SURFACE MARKINGS (BY OTHERS), EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS.
8. UNLESS SPECIFICALLY NOTED HEREON, THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE SHOWN UNDERGROUND UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.
9. ALL BUILDINGS AND STRUCTURES WERE LOCATED AND MEASURED AT GROUND LEVEL. THE SURVEYOR MAKES NO DETERMINATIONS OR GUARANTEES AS TO THE ABSENCE, EXISTENCE OR LOCATION OF UNDERGROUND STRUCTURES, FOUNDATIONS, FOOTINGS, PROJECTIONS, WALLS, TANKS, SEPTIC SYSTEMS, ETC. NO TEST PITS, EXCAVATIONS OR GROUND PENETRATING RADAR WERE PERFORMED AS PART OF THIS SURVEY.
10. PRIOR TO ANY DESIGN OR CONSTRUCTION, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
11. WETLANDS DELINEATED BY OTHERS.
12. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF N.Y STATE EDUCATION LAW ARTICLE 145.
13. THIS SURVEY IS NOT VALID WITHOUT THE EMBOSSED OR INKED SEAL OF THE PROFESSIONAL.
14. I HEREBY STATE THAT THIS PLAN IS BASED ON A FIELD SURVEY MADE BY ME OR UNDER MY IMMEDIATE SUPERVISION IN ACCORDANCE WITH NYSPLS CODE OF PRACTICE FOR LAND SURVEYS, AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, AND IN MY PROFESSIONAL OPINION, CORRECTLY REPRESENTS THE CONDITIONS FOUND ON THE DATE OF THE FIELD SURVEY AT THE SUBJECT PROPERTY"

LEGEND (NOT SHOWN TO SCALE)

	TREE
WF	WETLAND FLAG
FH	FIRE HYDRANT
GW	GUY WIRE
PP	POWER POLE
X 262.3	SPOT ELEVATION
BW	BOTTOM OF WALL
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CURB
	CHAINLINK FENCE
	TREE LINE
	OVERHEAD WIRE
	WETLAND LINE
	EASEMENT LINE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	CONTOUR LINE
RT	REFERENCE UTILITY LINE (TYPE AS NOTED) - PLOTTED FROM EXISTING MAPPING



PROJECT LOCATION MAP
SCALE: NOT TO SCALE

STATE OF NEW YORK
ANDREW G. IVES
050794
LICENSED LAND SURVEYOR

Date	Description	No.
	REVISIONS	

4/10/2018
ANDREW G. IVES — DATE SIGNED
PROFESSIONAL LAND SURVEYOR
NY STATE LIC. No. 50794

LANGAN
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. is a member of the Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. Langan Engineering and Environmental Services, Inc. Langan IDI, Inc. Langan International LLC Collectively known as Langan.

Project
GLENCOMA LAKE
WALTON DRIVE
HAMLET OF MAHOPAC
TOWN OF CARMEL
PUTNAM COUNTY — STATE OF NEW YORK

Drawing Title
PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY

Project No. 140182901	Drawing No. VB102
Date APRIL 10, 2018	
Scale 1"=40'	
Drawn By JRL / Checked By AGI	
Submission Date	Sheet 2 of 2

PROJECT NO. 140182901

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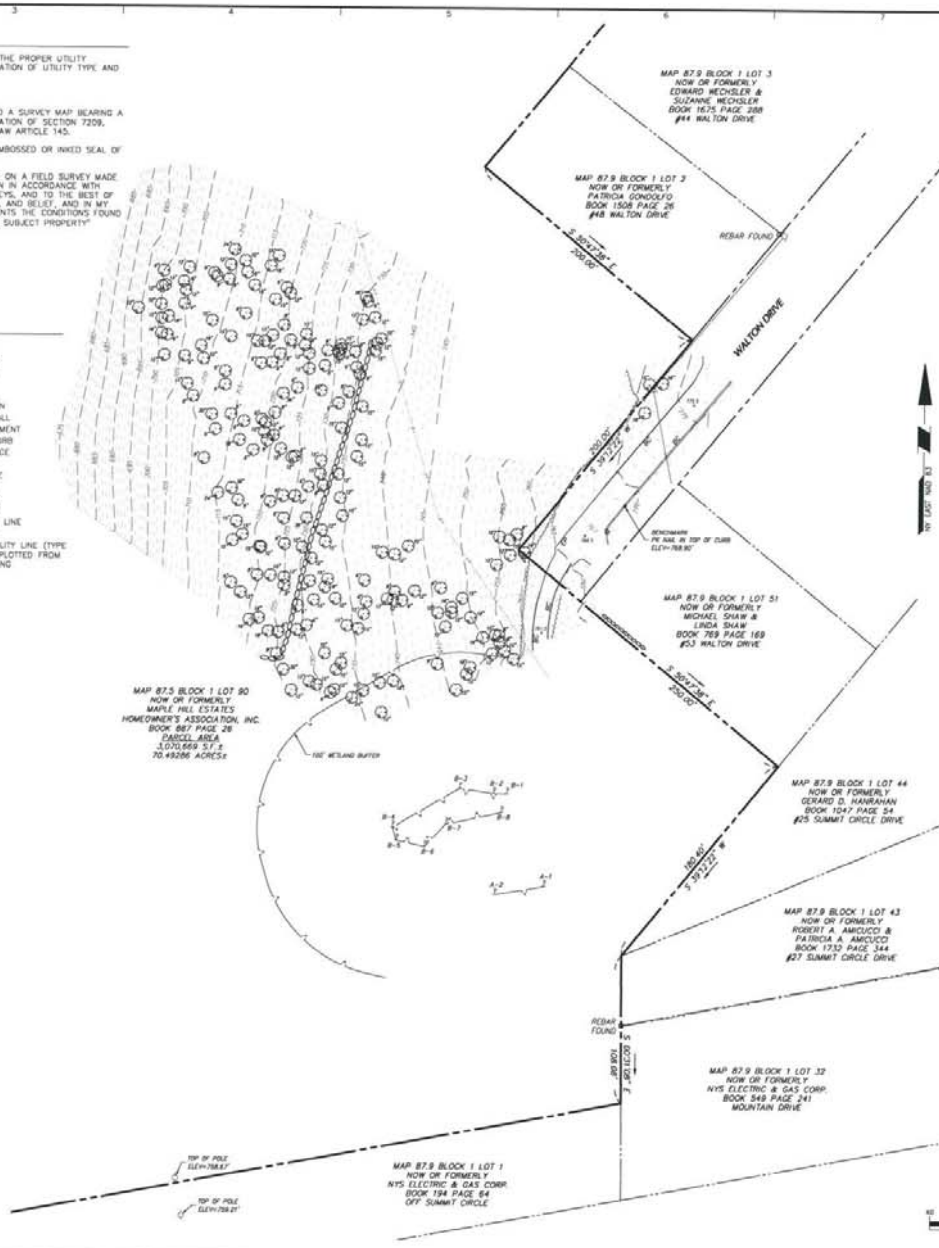
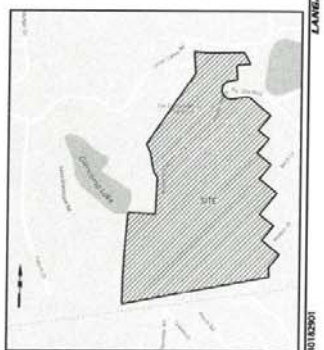
6. UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC.). CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND LOCATIONS WHERE DATA IS OBTAINED. DESPITE MEETING THE REQUIRED STANDARD OF CARE, THE SURVEYOR CANNOT, AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES.
7. ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA IS SHOWN FROM FIELD LOCATED SURFACE MARKINGS (BY OTHERS), EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS.
8. UNLESS SPECIFICALLY NOTED HEREON, THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE SHOWN UNDERGROUND UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.
9. ALL BUILDINGS AND STRUCTURES WERE LOCATED AND MEASURED AT GROUND LEVEL. THE SURVEYOR MAKES NO DETERMINATIONS OR GUARANTEES AS TO THE ABSENCE, EXISTENCE OR LOCATION OF UNDERGROUND STRUCTURES, FOUNDATIONS, FOOTINGS, PROJECTIONS, WALLS, TANKS, SEPTIC SYSTEMS, ETC. NO TEST PITS, EXCAVATIONS OR GROUND PENETRATING RADAR WERE PERFORMED AS PART OF THIS SURVEY.
10. PRIOR TO ANY DESIGN OR CONSTRUCTION, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
11. WETLANDS DELINEATED BY OTHERS.
12. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF N.Y. STATE EDUCATION LAW ARTICLE 145.
13. THIS SURVEY IS NOT VALID WITHOUT THE EMBOSSED OR INKED SEAL OF THE PROFESSIONAL.
14. I HEREBY STATE THAT THIS PLAN IS BASED ON A FIELD SURVEY MADE BY ME, OR UNDER MY IMMEDIATE SUPERVISION IN ACCORDANCE WITH NYSPLS CODE OF PRACTICE FOR LAND SURVEYS, AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, AND IN MY PROFESSIONAL OPINION, CORRECTLY REPRESENTS THE CONDITIONS FOUND ON THE DATE OF THE FIELD SURVEY AT THE SUBJECT PROPERTY."

LEGEND (NOT SHOWN TO SCALE)

- TREE
- WETLAND FLAG
- FIRE HYDRANT
- GUY WIRE
- POWER POLE
- SPOT ELEVATION
- BOTTOM OF WALL
- EDGE OF PAVEMENT
- BITUMINOUS CURB
- CHAINLINK FENCE
- TREE LINE
- OVERHEAD WIRE
- WETLAND LINE
- EASEMENT LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- CONTOUR LINE
- REFERENCE UTILITY LINE (TYPE AS NOTED) – PLOTTED FROM EXISTING MAPPING





PROJECT LOCATION MAP
SCALE: NOT TO SCALE

SOURCE: BING MAPS

PROJECT NO. 140182901

LANGAN

STATE OF NEW YORK
ANDREW G. VES
050794
LICENSED LAND SURVEYOR

New York State Department of Environmental Conservation
21 South Putt Corners Rd., New Paltz, NY 12561-1620
Telephone: (845) 256-3054 • FAX: (845) 255-4659
Website: www.dec.ny.gov

DELINEATING AND SURVEYING FRESHWATER WETLAND BOUNDARIES

1. The purpose of the delineation of freshwater wetland boundaries is to provide a precise identification of the regulated wetland boundary and its 100 foot adjacent area in order to aid in the planning and design of projects which may affect the wetland resource.
2. New York State regulated freshwater wetlands may be delineated by qualified consultants. However, for a delineation to be official (e.g., for use in permit applications), it must be validated by Department of Environmental Conservation (DEC) staff. For more information, contact the appropriate staff, as follows:

(845) 256-3086	Heather Gierloff	Dutchess, & Westchester
(845) 256-3057	Doug Gaugler	Orange, Putnam, Rockland, Sullivan
(845) 256-3091	Brian Dratsin	Ulster

3. In general, DEC requires that sponsors of development projects retain licensed engineers or surveyors to accurately plot the delineated wetland boundary on project plans. However, such surveys may not be needed for very small projects, inquiries of a general nature, or certain land sales.
4. Surveys and development plans for DEC permit applications must include the following validation block:

NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION

The freshwater wetland boundary as represented on these plans accurately depicts the limits of Freshwater Wetland _____ as delineated by _____ on _____

DEC Staff: _____ / _____ Surveyor/Engineer: _____

Date Valid: _____ Expiration Date: _____ SEAL

Wetland boundary delineations as validated by the New York State Department of Environmental Conservation remain valid for five (5) years **unless** existing exempt activities, area hydrology, or land use practices change (e.g., agricultural to residential). **After five (5) years the boundary must be revalidated by DEC staff.** Revalidation may include a new delineation and survey of the wetland boundary.

Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the freshwater wetland or within 100 feet of the wetland boundary as depicted on this plan requires a permit from the NYS Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetlands Act) prior to commencement of work.

5. In addition to the accurate identification of the freshwater wetland boundary, the limit of the 100 foot adjacent area must also be plotted on development plans and survey.
6. Copies of plans or surveys containing the boundary delineation and validation block must be submitted to the appropriate DEC staff person as listed above in item #2 for validation and original signature before applying for a DEC permit. One copy will be retained by DEC as a file copy. **The signature and seal of the surveyor/engineer must be present prior to requesting DEC validation.**

K:\PERMITS\Programs\Freshwater Wetland\FWVALID 04-08-2012.doc

Date	Description	No.
10/15/19	ADDED WETLAND BUFFER	1

REVISIONS

ANDREW G. VES — DATE SIGNED 10/15/2019
PROFESSIONAL LAND SURVEYOR
NY STATE LIC. No. 50794

LANGAN
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
555 Long Wharf Drive
New Haven, CT 06511
T: 203.562.5771 F: 203.789.6142 www.langan.com

Project
GLENCOMA LAKE
WALTON DRIVE
HAMLET OF MAHOPAC
TOWN OF CARMEL
PUTNAM COUNTY STATE OF NEW YORK

Drawing Title
PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY

Project No. 140182901	Drawing No. VB102
Date APRIL 10, 2018	
Scale 1"=40'	
Drawn By JBL	Checked By AGI
Submission Date	Sheet 1 of 1

Dewberry

Dewberry Engineers Inc.
2835 Brandywine Road, Suite 100
Atlanta, GA 30341-4015

678.530.0022
678.530.0044 fax
www.dewberry.com

January 26, 2023

Chairman Craig Paeprer and Members of the Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, New York 10541
(845) 628-1500

RE: Comment Response for Plan Review Comments (Glenacom (a/k/a Glencoma Lake/Walton Dr.) Cell Tower Tm# 87.5-1-90)

Honorable Chairman Paeprer and Members of the Planning Board:

Below is a clarification letter providing a response and clarification to the plan review comments issued on January 12, 2023 from Director of Code Enforcement Michael G. Carnazza, Patrick Cleary of Cleary Consulting, and Town Engineer Richard J. Franzetti P.E.

CARNAZZA MEMO:

Comment:

What is the width of the driveway? How many trips will be generated from this site.

Response:

Please see the revised site plans submitted. The proposed driveway is 12' wide. It is anticipated that one maintenance technician per wireless provider will visit the site once per month for a maximum anticipated trip generation of four (4) trips per month.

Comment:

Will there be lighting at the site? Is all lighting oriented downward?

Response:

Yes, two (2) small dark sky compliant fixtures is proposed at the Verizon equipment location. This fixture will be oriented downward and controlled via manual timer switch only operable by the technician when on site. No adverse lighting spill is anticipated outside of the wireless facility. Please see sheet Z-21 of the Site plan for the lighting details.

Comment:

Provide a note on the Site Plan that reads:
"All obsolete or unused wireless telecommunications antennas (including tower supports) shall be removed within 60 days of cessation of operations at the site. The Town may remove such facilities upon reasonable notice and an opportunity to be heard and treat the cost as a tax lien on the property. The Planning Board may also require, at the time of approval, the posting of a bond sufficient to cover the costs of removing an abandoned wireless telecommunications facility."

Response:

This note has been added to the plans on sheet Z-6

Comment:

Provide a detail of the I.D. sign that will be installed with the owner/operators contact information (not to exceed 6 square feet).

Response:

Proposed site signage is depicted on sheet Z-13.

CLEARY MEMO:

Comment:

It is noted that significant grading is required to create the equipment compound pad, raising the elevation at the rear of the compound from approximately elevation 728 to elevation 750, and lowering the elevation at the front of the site at Walton Drive from elevation 762 down to elevation 750.

Response:

Due to the existing topography the proposed site will need to be built up to create a suitable location to site the proposed wireless tower while allowing for an access drive that is safely passable.

Comment:

Clarify the amount of cut and fill required. Will material need to be imported or exported?

Response:

See note No.11 on sheet Z-9. Approximately 3,346 cu.yd. of fill material will be required.

Comment:

What is the surface of the new driveway?

Response:

The proposed drive will be NYSDOT asphalt. See detail on sheet Z-12.

Comment:

Is lighting proposed in the compound?

Response:

See response above. (2) manually operated dark sky complaint fixtures are proposed.

FRANZETTI MEMO:

Comment:

Requirements of §156-62 P (7) must be met. A landscape plan must be provided.

Response:

See sheet Z-8. Proposed plantings around the tower compound have been revised to be a 20' tall Evergreen.

Comment:

All planting should be verified by the Town of Carmel Wetlands Inspector and all plantings shall be installed per §142 of the Town of Carmel Town Code.

Response:

This has been added as note no.10 on sheet Z-8

Comment:

The overall disturbance for the project is unclear. The FEIS indicates ˜5,800 sq-ft, the October 2020 SWPPP indicates ˜19,6150 [sic] sq-ft, the NOI has 21,780 sq ft and sheet Z-9 indicates an area of disturbance of 20,540 sq ft. These areas need to be clarified. In either case these areas are above the threshold criteria of disturbance for New York State Department of Environmental Conservation (NYSDEC) stormwater regulations. A Stormwater Pollution Prevention Plan (SWPPP) is required and has been provided. uired for the site.

Response:

The proposed area of disturbance ("AOD") is 20,450 sq.ft. as noted on the approved SWPPP last revised, November 2020 and approved by Mr. Franzetti on 12/1/2020. The plans submitted hereto reflect same.

Comment:

The area of disturbance must include the utility trench up the entire length of driveway.

Response:

This trench area is included in the AOD as depicted in the approved SWPPP and plans submitted hereto on sheet Z-8 and Z-9.

Comment:

In accordance with §128-37(E), the following conditions must be met and provided on the drawings:
a. Not exceed 6 % 15' from roadway;
b. Not exceed 7% 30' from house(in this case structure);
c. Must be paved if slope exceed exceeds 7%,
The applicant should note the paving details are 8" base, 3" binder and 2" top.

Response:

See sheet Z-12 of the revised plans. These comments have been incorporated to the proposed design.

Comment:

Details must be provided that address drainage from the proposed driveway and site.

Response:

Please see sheets Z-9 and Z-16 of the plans submitted hereto for drainage details of the proposed site.

Comment(s):

13. Parking on the site must be addressed
15. Graphic representation of all vehicle movements (i.e., cars and trucks) through the site should be provided to illustrate that sufficient space exists to maneuver all types of vehicles anticipated at the site.
16. All turning radii for the site should be graphically provided.

Response:

Please refer to the revised plans submitted. (1) parking stall is provided. It is anticipated that the site would only be visited by maintenance technicians typically driving common commercial SUVs. As depicted on sheet Z-22 a common Chevrolet Suburban is easily able to navigate movements in and out of the proposed site. Turning radii are depicted on sheet Z-8.

Comment:

A lighting spill plan must be provided.

Response:

Please see responses above. (2) downward facing dark-sky complaint fixtures are proposed. With the existing site vegetation and topography, no lighting spill should occur beyond the proposed wireless compound. Please see sheet Z-21.

Sincerely,

Matthew C. Selkirk, P.E.
Project Manager

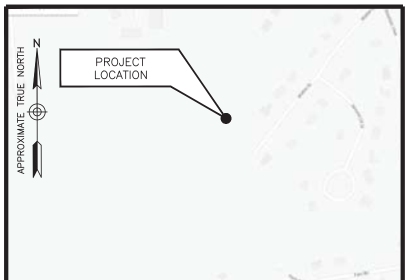
HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
(203) 297-6345

NEW YORK SMSA
LIMITED PARTNERSHIP
d/b/a
verizon
WIRELESS

GLENACOM LAKE

WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

VICINITY MAP N.T.S.



LOCATION MAP N.T.S.

DIRECTIONS FROM 4 CENTEROCK ROAD, WEST NYACK, NY:
GET ON PALISADES INTERSTATE PKWY N FROM CENTEROCK RD AND NY–59 W. FOLLOW PALISADES INTERSTATE PKWY N AND US–6 E TO BEAR MOUNTAIN STATE PKWY TO IN PEEKSKILL. FOLLOW BEAR MOUNTAIN PKWY TO US–6 E IN CORTLANDT. TURN LEFT ONTO US–6 E. CONTINUE ON UNION VALLEY RD. TAKE KIA ORA BLVD TO WALTON DR.

SITE INFORMATION

SITE COORDINATES:
LATITUDE: 41°–20'–56.88" N
LONGITUDE: 73°–43'–49.94" W
(BASED ON FAA 1–A)

ELEVATION DATA
GROUND ELEVATION = 740.8'± A.M.S.L.
(BASED ON FAA 1–A)

MONOPOLE ELEVATION (TO TOP OF MONOPOLE)
140'–0"± A.G.L. (880.8' A.M.S.L.) FAA 1–A

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF RAWLAND SITE W/ GROUND EQUIPMENT WITHIN A 2550 SQUARE FOOT FENCED COMPOUND W/ A NEW 140' MONOPOLE.

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

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A.D.A. COMPLIANCE:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

PROJECT INFORMATION

SITE NAME:
GLENACOM LAKE

LOCATION:
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

TAX MAP DESIGNATION:
MAP: 87.5, BLOCK: 1 LOT: 90

ZONING DESIGNATION:
RESIDENTIAL

PROPERTY OWNER/CO–APPLICANTS:
MAPLE HILL ESTATES HOME OWNERS ASSOCIATION, INC.
WALTON DRIVE
MAHOPAC, NY 10541

APPLICANTS:
HOMELAND TOWERS, LLC
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810

VERIZON WIRELESS
4 CENTEROCK ROAD
WEST NYACK, NY 10994

ATTORNEY:
SNYDER & SNYDER, LLP
94 WHITE PLAINS ROAD
TARRYTOWN, NY 10591

ENGINEER:
DEWBERRY ENGINEERS INC.
CONTACT: DAVID REVETTE, PE
OFFICE: (973) 576–9639

PROJECT MANAGER:
HOMELAND TOWERS, LLC
CONTACT: KLAUS WIMMER
OFFICE: (203) 297–6345
CELL: (201) 289–6750

POWER PROVIDER:
NYSEG
(585) 484–2223

TELCO PROVIDER:
VERIZON
(914) 890–0200

SHEET INDEX

SHEET NUMBER	DESCRIPTION
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Z–1	AERIAL MAP
Z–2	1000' RADIUS MAP
Z–3	PROPERTY OWNERS LIST–1
Z–4	PROPERTY OWNERS LIST–2
Z–5	PROPERTY OWNERS LIST–3
Z–6	SITE PLAN
Z–7	EXISTING CONDITIONS PLAN
Z–8	PARTIAL SITE PLAN
Z–9	SOIL EROSION AND SEDIMENT CONTROL PLAN
Z–10	ELEVATIONS–1
Z–11	ELEVATIONS–2
Z–12	ACCESS DRIVEWAY PROFILE & DETAILS
Z–13	CONSTRUCTION DETAILS I
Z–14	CONSTRUCTION DETAILS II
Z–15	CONSTRUCTION DETAILS III
Z–16	EROSION CONTROL NOTES AND DETAILS
Z–17	VERIZON WIRELESS EQUIPMENT PLAN & DETAILS
Z–18	VERIZON WIRELESS DETAILS I
Z–19	VERIZON WIRELESS DETAILS II
Z–20	VERIZON WIRELESS ANTENNA PLAN & DETAILS
Z–21	VERIZON WIRELESS EQUIPMENT LIGHTING DETAILS
Z–22	AUTO–TURN SIMULATION
Z–23	ELECTRICAL RISER DIAGRAM
Z–24	COMPOUND GROUNDING PLAN
Z–25	GROUNDING DETAILS

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NEW YORK CITY / LONG ISLAND AREA
811 OR 1–800–272–4480

3 WORKING DAYS UTILITY NOTIFICATION
PRIOR TO CONSTRUCTION

HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
(203) 297-6345
NEW YORK SMSA
LIMITED PARTNERSHIP
d/b/a
verizon
WIRELESS
4 CENTEROCK ROAD
WEST NYACK, NY 10994

GLENACOM LAKE

ZONING DRAWINGS

7	01/26/23	ISSUED FOR ZONING
6	12/22/22	ISSUED FOR ZONING
5	12/02/22	ISSUED FOR ZONING
4	11/22/22	ISSUED FOR ZONING
3	11/04/22	ISSUED FOR ZONING
2	10/26/22	ISSUED FOR ZONING
1	05/07/20	ISSUED FOR ZONING
0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

STATE OF NEW YORK
DAVID E REVETTE
101758-01
LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY: JC/KFM

REVIEWED BY: MS

CHECKED BY: DER

PROJECT NUMBER: 50114387

JOB NUMBER: 50114388

SITE ADDRESS:

WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T–1

NOTES:

1. AERIAL PLAN COURTESY OF GOOGLE MAPS.
2. SEE ABUTTER LIST ON Z-3, Z-4 AND Z-5 FOR INFORMATION PROVIDED BY TOWN OF CARMEL.

AERIAL MAP (1)
SCALE: 1"=400' FOR 11"x17"
1"=200' FOR 22"x34"

0' 200' 400'

HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
(203) 297-6345

NEW YORK SMSA
LIMITED PARTNERSHIP
d/b/a
verizon WIRELESS
4 CENTEROCK ROAD
WEST NYACK, NY 10994

GLENACOM LAKE

ZONING DRAWINGS		
7	01/26/23	ISSUED FOR ZONING
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STATE OF NEW YORK
DAVID E. REVETTE
101758
LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

AERIAL MAP

SHEET NUMBER

Z-1

NOTE:

1. RADIUS MAP IS BASED ON PUBLICLY AVAILABLE INFORMATION PROVIDED BY THE TOWNS OF CARMEL AND SOMERS, AND WESTCHESTER & PUTNAM COUNTIES.

1000' RADIUS MAP (1)

SCALE: 1"=600' FOR 11"x17"
1"=300' FOR 22"x34"

0' 300' 600'

HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
(203) 297-6345

NEW YORK SMSA
LIMITED PARTNERSHIP
d/b/a
verizon WIRELESS

4 CENTEROCK ROAD
WEST NYACK, NY 10994

GLENACOM LAKE

ZONING DRAWINGS		
7	01/26/23	ISSUED FOR ZONING
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0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

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STATE OF NEW YORK — DAVID E. REVETTE — 101758 — LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

1000' RADIUS MAP

SHEET NUMBER

Z-2

TOWN OF CARMEL - PUTNAM COUNTY

MAP ID	MAP	BLOCK	LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
1	87.5	1	1	15 BIRCH LN, MAHOPAC, NY 10541	BERNARD SMALL	15 BIRCH LN, MAHOPAC, NY 10541
2	87.5	1	2	11 BIRCH LN, MAHOPAC, NY 10541	GARY PREVOSTO	11 BIRCH LN, MAHOPAC, NY 10541
3	87.5	1	3	5 BIRCH LN, MAHOPAC, NY 10541	THOMAS MIGLIO	5 BIRCH LN, MAHOPAC, NY 10541
4	87.5	1	4	1 BIRCH LN., MAHOPAC, NY 10541	MICHAEL TRAINOR	1 BIRCH LN., MAHOPAC, NY 10541
5	87.5	1	5	123 KIA ORA BLVD, MAHOPAC, NY 10541	JOSE HERNANDEZ	123 KIA ORA BLVD, MAHOPAC, NY 10541
6	87.5	1	6	163 KIA ORA BLVD, MAHOPAC, NY 10541	PENNY FIORIO	163 KIA ORA BLVD, MAHOPAC, NY 10541
7	87.5	1	7.-9000	90 MAPLE HILL DR, MAHOPAC, NY 10541	JESSICA FELICIANO	23 MAPLE HILL DR, MAHOPAC, NY 10541
8	87.5	1	8.-9100	91 MAPLE HILL DR, MAHOPAC, NY 10541	MARIANNE SCOFIELD	3 MAPLE HILL DR, MAHOPAC, NY 10541
9	87.5	1	9.-9200	92 MAPLE HILL DR, MAHOPAC, NY 10541	JOAN SEGAL	18 MAPLE HILL DR, MAHOPAC, NY 10541
10	87.5	1	10.-100	1 MAPLE HILL DR, MAHOPAC, NY 10541	KYLE TRILLAS	1 MAPLE HILL DR, MAHOPAC, NY 10541
11	87.5	1	11.-200	2 MAPLE HILL DR, MAHOPAC, NY 10541	NUNZIO SQUILLANTE	2 MAPLE HILL DR, MAHOPAC, NY 10541
12	87.5	1	12.-300	3 MAPLE HILL DR, MAHOPAC, NY 10541	MARIANNE SCOFIELD	3 MAPLE HILL DR, MAHOPAC, NY 10541
13	87.5	1	13.-400	4 MAPLE HILL DR, MAHOPAC, NY 10541	ROSETTA DELUCA	4 MAPLE HILL DR, MAHOPAC, NY 10541
14	87.5	1	14.-500	5 MAPLE HILL DR, MAHOPAC, NY 10541	ARMINDO CARVALHO	5 MAPLE HILL DR, MAHOPAC, NY 10541
15	87.5	1	15.-600	6 MAPLE HIL DR, MAHOPAC, NY 10541	JOAN BURTT	39 BLAIR HEIGHTS, CARMEL, NY 10512
16	87.5	1	16.-700	7 MAPLE HILL DR, MAHOPAC, NY 10541	KRISTINE DAGNINO	7 MAPLE HILL DR, MAHOPAC, NY 10541
17	87.5	1	17.-800	8 MAPLE HILL DR, MAHOPAC, NY 10541	MICHAEL CIRILLO	8 MAPLE HILL DR, MAHOPAC, NY 10541
18	87.5	1	18.-900	9 MAPLE HILL DR, MAHOPAC, NY 10541	SUSAN PALDIN	9 MAPLE HILL DR, MAHOPAC, NY 10541
19	87.5	1	19.-7200	72 MAPLE HILL DR, MAHOPAC, NY 10541	ANTHONY FABIANO	PO BOX 634, MAHOPAC, NY 10541
20	87.5	1	20.-7300	73 MAPLE HILL DR, MAHOPAC, NY 10541	MICHAEL MURPHY	12 MAPLE HILL DR, MAHOPAC, NY 10541
21	87.5	1	21.-7400	74 MAPLE HILL DR, MAHOPAC, NY 10541	CORINNE MARANO	14 MAPLE HILL DR, MAHOPAC, NY 10541
22	87.5	1	22.-1000	10 MAPLE HILL DR, MAHOPAC, NY 10541	MARY JANE MARCHUT	10 MAPLE HILL DR, MAHOPAC, NY 10541
23	87.5	1	23.-1100	11 MAPLE HILL DR, MAHOPAC, NY 10541	DANIEL CAHILL	11 MAPLE HILL DR, MAHOPAC, NY 10541
24	87.5	1	24.-1200	12 MAPLE HILL DR, MAHOPAC, NY 10541	MICHAEL MURPHY	12 MAPLE HILL DR, MAHOPAC, NY 10541
25	87.5	1	25.-1300	13 MAPLE HILL DR, MAHOPAC, NY 10541	FRANK LOMBARDI	13 MAPLE HILL DR, MAHOPAC, NY 10541
26	87.5	1	26.-1400	14 MAPLE HILL DR, MAHOPAC, NY 10541	CORINNE MARANO	14 MAPLE HILL DR, MAHOPAC, NY 10541
27	87.5	1	27.-1500	15 MAPLE HILL DR, MAHOPAC, NY 10541	HALIMA ANDERSON	15 MAPLE HILL DR, MAHOPAC, NY 10541
28	87.5	1	28.-1600	16 MAPLE HILL DR, MAHOPAC, NY 10541	LINDA MORREALE	16 MAPLE HILL DR, MAHOPAC, NY 10541
29	87.5	1	29.-1700	17 MAPLE HILL DR, MAHOPAC, NY 10541	ANTHONY FABIANO	PO BOX 634, MAHOPAC, NY 10541
30	87.5	1	30.-1800	18 MAPLE HILL DR, MAHOPAC, NY 10541	JOAN SEGAL	18 MAPLE HILL DR, MAHOPAC, NY 10541
31	87.5	1	31.-1900	19 MAPLE HILL DR, MAHOPAC, NY 10541	RICHARD SALAT	19 MAPLE HILL DR, MAHOPAC, NY 10541
32	87.5	1	32.-2000	20 MAPLE HILL DR, MAHOPAC, NY 10541	JOSEPH DE CLEMENTE	20 MAPLE HILL DR, MAHOPAC, NY 10541
33	87.5	1	33.-2100	21 MAPLE HILL DR, MAHOPAC, NY 10541	LORETTA MCGRATH	21 MAPLE HILL DR, MAHOPAC, NY 10541
34	87.5	1	34.-2200	22 MAPLE HILL DR, MAHOPAC, NY 10541	JAMES MASSI	22 MAPLE HILL DR, MAHOPAC, NY 10541
35	87.5	1	35.-2300	23 MAPLE HILL DR, MAHOPAC, NY 10541	JESSICA FELICIANO	23 MAPLE HILL DR, MAHOPAC, NY 10541
36	87.5	1	36.-7500	75 MAPLE HILL DR, MAHOPAC, NY 10541	MICHAEL GIBBONS	47 MAPLE HILL DR, MAHOPAC, NY 10541
37	87.5	1	37.-7600	76 MAPLE HILL DR, MAHOPAC, NY 10541	LARESSSA GJONAJ	45 MAPLE HILL DR, MAHOPAC, NY 10541
38	87.5	1	38.-7700	77 MAPLE HILL DR, MAHOPAC, NY 10541	CHERIE SCHILIO	48 MAPLE HILL DR, MAHOPAC, NY 10541
39	87.5	1	39.-7800	78 MAPLE HILL DR, MAHOPAC, NY 10541	LINDA MINNECI	49 MAPLE HILL DR, MAHOPAC, NY 10541
40	87.5	1	40.-7900	79 MAPLE HILL DR, MAHOPAC, NY 10541	JOANNE CRUZ	35 MAPLE HILL DR, MAHOPAC, NY 10541
41	87.5	1	41.-8000	80 MAPLE HILL DR, MAHOPAC, NY 10541	ANGELO SAVINO	140B FLINTLOCK WAY, YORKTOWN HEIGHTS, NY 10598
42	87.5	1	42.-3400	34 MAPLE HILL DR, MAHOPAC, NY 10541	JAMES DAVID MOORE	34 MAPLE HILL DR, MAHOPAC, NY 10541
43	87.5	1	43.-3500	35 MAPLE HILL DR, MAHOPAC, NY 10541	JOANNE CRUZ	35 MAPLE HILL DR, MAHOPAC, NY 10541
44	87.5	1	44.-4500	45 MAPLE HILL DR MAHOPAC, NY 10541,	LARESSSA GJONAJ	45 MAPLE HILL DR MAHOPAC, NY 10541,
45	87.5	1	45.-4600	46 MAPLE HILL DR MAHOPAC, NY 10541,	YOUNG-SUK LEE	46 MAPLE HILL DR MAHOPAC, NY 10541,

MAP ID	MAP	BLOCK	LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
46	87.5	1	46.-4700	47 MAPLE HILL DR, MAHOPAC, NY 10541	MICHAEL GIBBONS	47 MAPLE HILL DR, MAHOPAC, NY 10541
47	87.5	1	47.-4800	48 MAPLE HILL DR, MAHOPAC, NY 10541	CHERIE SCHILIO	48 MAPLE HILL DR, MAHOPAC, NY 10541
48	87.5	1	48.-4900	49 MAPLE HILL DR, MAHOPAC, NY 10541	LINDA MINNECI	49 MAPLE HILL DR, MAHOPAC, NY 10541
49	87.5	1	49.-5000	50 MAPLE HILL DR, MAHOPAC, NY 10541	ANGELA LOPANE	50 MAPLE HILL DR, MAHOPAC, NY 10541
50	87.5	1	50.-5100	51 MAPLE HILL DR, MAHOPAC, NY 10541	THOMAS GRIMALDI	51 MAPLE HILL DR, MAHOPAC, NY 10541
51	87.5	1	51.-5200	52 MAPLE HILL DR, MAHOPAC, NY 10541	LISA SPENCER	52 MAPLE HILL DR, MAHOPAC, NY 10541
52	87.5	1	52.-5300	53 MAPLE HILL DR, MAHOPAC, NY 10541	DENNIS LUSARDI	53 MAPLE HILL DR, MAHOPAC, NY 10541
53	87.5	1	53.-5400	54 MAPLE HILL DR, MAHOPAC, NY 10541	PATRICIA DESANTIS FAMILY TRUST	54 MAPLE HILL DR, MAHOPAC, NY 10541
54	87.5	1	54.-5500	55 MAPLE HILL DR, MAHOPAC, NY 10541	EBONY HUNTLEY	55 MAPLE HILL DR, MAHOPAC, NY 10541
55	87.5	1	55.-5600	56 MAPLE HILL DR, MAHOPAC, NY 10541	MIKE DI LIETO	56 MAPLE HILL DR, MAHOPAC, NY 10541
56	87.5	1	56.-5700	57 MAPLE HILL DR, MAHOPAC, NY 10541	KATHLEEN DEMEO	57 MAPLE HILL DR, MAHOPAC, NY 10541
57	87.5	1	57.-5800	58 MAPLE HILL DR, MAHOPAC, NY 10541	GEORGE MARTINEZ, SR.	58 MAPLE HILL DR, MAHOPAC, NY 10541
58	87.5	1	58.-5900	59 MAPLE HILL DR, MAHOPAC, NY 10541	JOHN STABILE	59 MAPLE HILL DR, MAHOPAC, NY 10541
59	87.5	1	59.-6000	60 MAPLE HILL DR, MAHOPAC, NY 10541	ROSANNE DINARDO	60 MAPLE HILL DR, MAHOPAC, NY 10541
60	87.5	1	60.-6100	61 MAPLE HILL DR, MAHOPAC, NY 10541	CHARLES BARTON	61 MAPLE HILL DR, MAHOPAC, NY 10541
61	87.5	1	61.-8100	81 MAPLE HILL DR, MAHOPAC, NY 10541	KATHLEEN DEMEO	57 MAPLE HILL DR, MAHOPAC, NY 10541
62	87.5	1	62.-8200	82 MAPLE HILL DR, MAHOPAC, NY 10541	GEORGE MARTINEZ, SR.	58 MAPLE HILL DR, MAHOPAC, NY 10541
63	87.5	1	63.-8300	83 MAPLE HILL DR, MAHOPAC, NY 10541	CHARLES BARTON	61 MAPLE HILL DR, MAHOPAC, NY 10541
64	87.5	1	64.-6200	62 MAPLE HILL DR, MAHOPAC, NY 10541	EDWARD BALLUS	62 MAPLE HILL DR, MAHOPAC, NY 10541
65	87.5	1	65.-6300	63 MAPLE HILL DR, MAHOPAC, NY 10541	DIANE MATELSKY	63 MAPLE HILL DR, MAHOPAC, NY 10541
66	87.5	1	66.-6400	64 MAPLE HILL DR, MAHOPAC, NY 10541	ANGELO PRESTAMO	64 MAPLE HILL DR, MAHOPAC, NY 10541
67	87.5	1	67.-6500	65 MAPLE HILL DR, MAHOPAC, NY 10541	VALENTINA DUHANI	65 MAPLE HILL DR, MAHOPAC, NY 10541
68	87.5	1	68.-6600	66 MAPLE HILL DR, MAHOPAC, NY 10541	WILLIAM LORETTA BOWENS	66 MAPLE HILL DR, MAHOPAC, NY 10541
69	87.5	1	69.-6700	67 MAPLE HILL DR, MAHOPAC, NY 10541	ELIZABETH BARKSDALE	67 MAPLE HILL DR, MAHOPAC, NY 10541
70	87.5	1	70.-6800	68 MAPLE HILL DR, MAHOPAC, NY 10541	ANDREW ROBERTO	68 MAPLE HILL DR, MAHOPAC, NY 10541
71	87.5	1	71.-6900	69 MAPLE HILL DR, MAHOPAC, NY 10541	JEANNE MCGUIGAN	69 MAPLE HILL DR, MAHOPAC, NY 10541
72	87.5	1	72.-7000	70 MAPLE HILL DR, MAHOPAC, NY 10541	KAREN CONTI	70 MAPLE HILL DR, MAHOPAC, NY 10541
73	87.5	1	73.-7100	71 MAPLE HILL DR, MAHOPAC, NY 10541	DOMINICK DIMICCO	71 MAPLE HILL DR, MAHOPAC, NY 10541
74	87.5	1	74.-8600	86 MAPLE HILL DR, MAHOPAC, NY 10541	ANGELO PRESTAMO	64 MAPLE HILL DR, MAHOPAC, NY 10541
75	87.5	1	75.-8500	85 MAPLE HILL DR, MAHOPAC, NY 10541	ANDREW ROBERTO	68 MAPLE HILL DR, MAHOPAC, NY 10541
76	87.5	1	76.-8400	84 MAPLE HILL DR, MAHOPAC, NY 10541	VALENTINA DUHANI	65 MAPLE HILL DR, MAHOPAC, NY 10541
77	87.5	1	77.-3300	33 MAPLE HILL DR, MAHOPAC, NY 10541	ROBERT KELLY	33 MAPLE HILL DR, MAHOPAC, NY 10541
78	87.5	1	78.-3200	32 MAPLE HILL DR, MAHOPAC, NY 10541	MARY TYSON	32 MAPLE HILL DR, MAHOPAC, NY 10541
79	87.5	1	79.-3100	31 MAPLE HILL DR, MAHOPAC, NY 10541	ASSER TANTAWI	220 BRIARWOOD DR, SOMERS, NY 10589
80	87.5	1	80.-3000	30 MAPLE HILL DR, MAHOPAC, NY 10541	RICHARD SANTOS	30 MAPLE HILL DR, MAHOPAC, NY 10541
81	87.5	1	81.-2900	29 MAPLE HILL DR, MAHOPAC, NY 10541	GLORIA CLEMENTE	29 MAPLE HILL DR, MAHOPAC, NY 10541
82	87.5	1	82.-2800	28 MAPLE HILL DR, MAHOPAC, NY 10541	LINDA ALIOTTA-FOLEY	28 MAPLE HILL DR, MAHOPAC, NY 10541
83	87.5	1	83.-2700	27 MAPLE HILL DR, MAHOPAC, NY 10541	FREDERICK CAMILLI	27 MAPLE HILL DR, MAHOPAC, NY 10541
84	87.5	1	84.-2600	26 MAPLE HILL DR, MAHOPAC, NY 10541	ROBERT DELEON	26 MAPLE HILL DR, MAHOPAC, NY 10541
85	87.5	1	85.-2500	25 MAPLE HILL DR, MAHOPAC, NY 10541	GARY ULLRICH	25 MAPLE HILL DR, MAHOPAC, NY 10541
86	87.5	1	86.-2400	24 MAPLE HILL DR, MAHOPAC, NY 10541	BRIAN KENNEALLY	24 MAPLE HILL DR, MAHOPAC, NY 10541
87	87.5	1	87.-8900	89 MAPLE HILL DR, MAHOPAC, NY 10541	ASSER TANTAWI	220 MITCHELL RD, SOMERS, NY 10589
88	87.5	1	88.-8800	88 MAPLE HILL DR, MAHOPAC, NY 10541	BRIAN KENNEALLY	24 MAPLE HILL DR, MAHOPAC, NY 10541
89	87.5	1	89.-8700	87 MAPLE HILL DR, MAHOPAC, NY 10541	ROBERT KELLY	33 MAPLE HILL DR, MAHOPAC, NY 10541
90	87.5	1	91	205 UNION VALLEY ROAD, MAHOPAC, NY 10541	DAVID W - EST. PARENT	PO BOX 396, MAHOPAC, NY 10541

MAP ID	MAP	BLOCK	LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
91	87.5	1	92	191 UNION VALLEY ROAD, MAHOPAC, NY 10541	PHUONG HUYNH	2935 EAST COLONIAL DR, ORLANDO, FL 32803
92	87.5	1	93	185 UNION VALLEY RD, MAHOPAC, NY 10541	JONATHAN ZAMORA	185 UNION VALLEY RD, MAHOPAC, NY 10541
92	87.5	1	93	185 UNION VALLEY RD, MAHOPAC, NY 10541	YESENIA BARRERA	185 UNION VALLEY RD, MAHOPAC, NY 10541
93	87.5	1	94	179 UNION VALLEY RD, MAHOPAC, NY 10541	WILLIAM PEARCE	179 UNION VALLEY RD, MAHOPAC, NY 10541
94	87.5	1	95	UNION VALLEY RD, MAHOPAC, NY 10541	DAVID W PARENT - EST. ATTN: DAVID PARENT JR.	PO BOX 396, MAHOPAC, NY 10541
95	87.5	2	10	202 LAKEVIEW COURT, MAHOPAC, NY 10541	MICHAEL RYAN	PO BOX 769, MAHOPAC, NY 10541
96	87.5	2	11	210 LAKEVIEW CT, MAHOPAC, NY 10541	ANNETTE ROMITO	210 LAKEVIEW CT, MAHOPAC, NY 10541
97	87.5	2	12	214 LAKEVIEW CT, MAHOPAC, NY 10541	ADRIENNE WEXLER	55 E 11TH ST, NEW YORK, NY 10003
98	87.5	2	13	218 LAKEVIEW CT, MAHOPAC, NY 10541	RAEANN MAZZEI	218 LAKEVIEW CT, MAHOPAC, NY 10541
99	87.5	2	14	222 LAKEVIEW CT, MAHOPAC, NY 10541	LORNA LEVANT CLEMENTS	PO BOX 826, MAHOPAC, NY 10541
100	87.5	2	15	226 LAKEVIEW CT, MAHOPAC, NY 10541		
101	87.5	2	16	228 LAKEVIEW CT, MAHOPAC, NY 10541	GERARD AQUILINO	228 LAKEVIEW CT, MAHOPAC, NY 10541
102	87.5	2	17	230 LAKEVIEW CT, MAHOPAC, NY 10541	NICHOLAS CAPALBO	230 LAKEVEIW CT, MAHOPAC, NY 10541
103	87.5	2	18	234 LAKEVIEW CT, MAHOPAC, NY 10541	JOHN MORRIS	PO BOX 395, MAHOPAC, NY 10541
104	87.5	2	19	238 LAKEVIEW CT, MAHOPAC, NY 10541	SHAKUNTALA BALRAM	238 LAKEVIEW CT, MAHOPAC, NY 10541
105	87.5	2	20	242 LAKEVIEW CT, MAHOPAC, NY 10541	ANTHONY & LAURIE TROTTA	242 LAKEVIEW CT, MAHOPAC, NY 10541
106	87.5	2	21	244 LAKEVIEW CT, MAHOPAC, NY 10541	RANDY ABRAMS	244 LAKEVIEW CT, MAHOPAC, NY 10541
107	87.5	2	22	110 KIA ORA BLVD, MAHOPAC, NY 10541	JOHN HLINKA	110 KIA ORA BLVD, MAHOPAC, NY 10541
108	87.5	2	23	106 KIA ORA BLVD, MAHOPAC, NY 10541	VINCENTS ETTERE	106 KIA ORA BLVD, MAHOPAC, NY 10541
109	87.5	2	24	102 KIA ORA BLVD, MAHOPAC, NY 10541	KEITH BEHLER	102 KIA ORA BLVD, MAHOPAC, NY 10541
110	87.5	2	25	98 KIA ORA BLVD, MAHOPAC, NY 10541	KOENIGSMANN & SEPE TRUST	98 KIA ORA BLVD, MAHOPAC, NY 10541
111	87.5	2	26	94 KIA ORA BLVD, MAHOPAC, NY 10541	DARRYL MACK	94 KIA ORA BLVD, MAHOPAC, NY 10541
112	87.5	2	27	84 KIA ORA BLVD, MAHOPAC, NY 10541	ANTHONY LAUREN FORMALE	84 KIA ORA BLVD, MAHOPAC, NY 10541
113	87.5	2	28	78 KIA ORA BLVD, MAHOPAC, NY 10541	KIM SMITH	78 KIA ORA BLVD, MAHOPAC, NY 10541
114	87.5	2	29	74 KIA ORA BLVD, MAHOPAC, NY 10541	JAMES R STIRPE LIVING TRUST	74 KIA ORA BLVD, MAHOPAC, NY 10541
115	87.5	2	30	72 KIA ORA BLVD, MAHOPAC, NY 10541	LEONARD CIFFONE	72 KIA ORA BLVD, MAHOPAC, NY 10541
116	87.5	2	45	67 KIA ORA BLVD, MAHOPAC, NY 10541	PASKA DEDVUKAJ PASHKA LULI	67 KIA ORA BLVD, MAHOPAC, NY 10541
117	87.5	2	46	75 KIA ORA BLVD, MAHOPAC, NY 10541	CHRISTOPHER MARINO	75 KIA ORA BLVD, MAHOPAC, NY 10541
118	87.5	2	47	85 KIA ORA BLVD, MAHOPAC, NY 10541	JASON SAVINO	85 KIA ORA BLVD, MAHOPAC, NY 10541
119	87.5	2	48	506 OVERLOOK DR SOUTH, MAHOPAC, NY 10541	HUDSON VIANNA	191 MARBLE AVE, PLEASANTVILLE, NY 10570
120	87.5	2	49	510 OVERLOOK DR SOUTH, MAHOPAC, NY 10541	THOMAS E ROGAN PATRICIA A ROGAN	510 OVERLOOK DR SOUTH, MAHOPAC, NY 10541
121	87.5	2	50	514 OVERLOOK DR SOUTH, MAHOPAC, NY 10541	THOMAS M KEHRER VIRGINIA C KNOX	514 OVERLOOK DR SOUTH, MAHOPAC, NY 10541
122	87.5	2	55	527 OVERLOOK DR SOUTH, MAHOPAC, NY 10541	KEVIN CONNORS	527 OVERLOOK DR SOUTH, MAHOPAC, NY 10541
123	87.5	2	56	3 WALTON DR, MAHOPAC, NY 10541	IRREV TRUST, STOEFFLER FAMILY	3 WALTON DR, MAHOPAC, NY 10541
124	87.5	2	57	22 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	DAVID FREIMAN	22 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
125	87.5	2	58	517 OVERLOOK DRIVE SOUTH, MAHOPAC, NY 10541	BASEM SAYEGH	517 OVERLOOK DRIVE SOUTH, MAHOPAC, NY 10541
126	87.5	2	59	513 OVERLOOK DRIVE SOUTH, MAHOPAC, NY 10541	JULIA ALONGE	513 OVERLOOK DRIVE SOUTH, MAHOPAC, NY 10541
127	87.5	2	60	89 KIA ORA BLVD, MAHOPAC, NY 10541	BRIAN MILLER	89 KIA ORA BLVD, MAHOPAC, NY 10541
128	87.5	2	61	93 KIA ORA BLVD, MAHOPAC, NY 10541	JAVIER ACEVEDO	93 KIA ORA BLVD, MAHOPAC, NY 10541
129	87.5	2	62	99 KIA ORA BLVD, MAHOPAC, NY 10541	BESSIE POWELL	99 KIA ORA BLVD, MAHOPAC, NY 10541
130	87.5	2	63	103 KIA ORA BLVD, MAHOPAC, NY 10541	AHLERS FAMILY TRUST	103 KIA ORA BLVD, MAHOPAC, NY 10541
131	87.5	2	64	12 WALTON DR, MAHOPAC, NY 10541	VICTOR RIVERA	12 WALTON DR, MAHOPAC, NY 10541
132	87.5	2	65	26 WALTON DR, MAHOPAC, NY 10541	CRAIG VIEIRA	26 WALTON DR, MAHOPAC, NY 10541

NOTE:

1. ABUTTER INFORMATION PROVIDED BY THE TOWN OF CARMEL.

HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
(203) 297-6345

NEW YORK SMSA
LIMITED PARTNERSHIP
d/b/a
verizon WIRELESS
4 CENTEROCK ROAD
WEST NYACK, NY 10994

GLENACOM LAKE

ZONING DRAWINGS

7	01/26/23	ISSUED FOR ZONING
6	12/22/22	ISSUED FOR ZONING
5	12/02/22	ISSUED FOR ZONING
4	11/22/22	ISSUED FOR ZONING
3	11/04/22	ISSUED FOR ZONING
2	10/26/22	ISSUED FOR ZONING
1	05/07/20	ISSUED FOR ZONING
0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

STATE OF NEW YORK — DAVID E. REVETTE — 101758 — LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

PROPERTY
OWNER'S LIST–1

SHEET NUMBER

Z–3

TOWN OF CARMEL - PUTNAM COUNTY

MAP ID	MAP	BLOCK	LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
133	87.5	2	66	22 WALTON DR, MAHOPAC, NY 10541	ENZO TEDESCO	22 WALTON DR, MAHOPAC, NY 10541
134	87.5	2	67	3 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	DENNIS RECK	3 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
135	87.5	2	68	6 BIRCH LN, MAHOPAC, NY 10541	DONALD NAILOR	6 BIRCH LN, MAHOPAC, NY 10541
136	87.5	2	69	10 BIRCH LN, MAHOPAC, NY 10541	ERIC OLIVER	10 BIRCH LN, MAHOPAC, NY 10541
137	87.5	2	70	14 BIRCH LN, MAHOPAC, NY 10541	AJDIN MESHAJ	14 BIRCH LN, MAHOPAC, NY 10541
138	87.5	2	71	18 BIRCH LN, MAHOPAC, NY 10541	ZACHARY OLIVA	18 BIRCH LN, MAHOPAC, NY 10541
139	87.5	3	1	212 UNION VALLEY RD, MAHOPAC, NY 10541	CHRISTINE BROWN	212 UNION VALLEY RD, MAHOPAC, NY 10541
140	87.5	3	2	218 UNION VALLEY RD, MAHOPAC, NY 10541	CHARLES PAROUBEK	PO BOX 956, BALDWIN PLACE, NY 10505
141	87.5	3	3	226 UNION VALLEY RD, MAHOPAC, NY 10541	SAVERIO SADOVIA	226 UNION VALLEY RD, MAHOPAC, NY 10541
142	87.5	3	4	240 UNION VALLEY RD, MAHOPAC, NY 10541	SCOTT JENNINGS	240 UNION VALLEY RD, MAHOPAC, NY 10541
143	87.5	3	5	9 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	RAYMOND GENOVESE	9 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
144	87.5	3	6	11 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	EDWARD NIEVES	11 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
145	87.5	3	7	15 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	KEVIN KIERNAN	15 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
146	87.5	3	8	12 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	WALDIE MURRAY	12 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
147	87.5	3	9	250 UNION VALLEY RD, MAHOPAC, NY 10541	SELIM BRAHIMI	250 UNION VALLEY RD, MAHOPAC, NY 10541
148	87.5	3	10	260 UNION VALLEY RD, MAHOPAC, NY 10541	JOHN DELUCCA	22 CUNNINGHAM DR, LAGRANGEVILLE, NY 12540
149	87.5	3	11	264 UNION VALLEY RD, MAHOPAC, NY 10541	ANGELA FUSCO	264 UNION VALLEY RD, MAHOPAC, NY 10541
150	87.5	3	12	268 UNION VALLEY RD, MAHOPAC, NY 10541	JAMES STIRPE	268 UNION VALLEY RD, MAHOPAC, NY 10541
151	87.5	3	13	3 NORTHVIEW DR, MAHOPAC, NY 10541	EDWIN PERCICH	3 NORTHVIEW DR, MAHOPAC, NY 10541
152	87.9	1	2	48 WALTON DR, MAHOPAC, NY 10541	PATRICIA GONDOLFO	48 WALTON DR, MAHOPAC, NY 10541
153	87.9	1	3	44 WALTON DR, MAHOPAC, NY 10541	EDWARD WECHSLER	24 SHADY LN, MAHOPAC, NY 10541
154	87.9	1	4	40 WALTON DR, MAHOPAC, NY 10541	JOSEPH ARMISTO	122 CRANE RD, CARMEL, NY 10512
155	87.9	1	5	36 WALTON DR, MAHOPAC, NY 10541	GUS GETSOS	36 WALTON DR, MAHOPAC, NY 10541
156	87.9	1	6	30 WALTON DR, MAHOPAC, NY 10541	PEARL MOHAMMED	30 WALTON DR, MAHOPAC, NY 10541
157	87.9	1	7	22 BIRCH LN, MAHOPAC, NY 10541	AMANDA LEVINE	22 BIRCH LN, MAHOPAC, NY 10541
158	87.9	1	8.-3600	36 MAPLE HILL DR, MAHOPAC, NY 10541	GEORGE BICKEL	PO BOX 303, LINCOLNDALE, NY 10540
159	87.9	1	9.-3700	37 MAPLE HILL DR, MAHOPAC, NY 10541	ROBERT FALAGUERRA	37 MAPLE HILL DR, MAHOPAC, NY 10541
160	87.9	1	10.-3800	38 MAPLE HILL DR, MAHOPAC, NY 10541	ANDRZEJ REJMAN	38 MAPLE HILL DR, MAHOPAC, NY 10541
161	87.9	1	11.-3900	39 MAPLE HILL DR, MAHOPAC, NY 10541	CAROL ANN BURKE	39 MAPLE HILL DR, MAHOPAC, NY 10541
162	87.9	1	12.-4000	40 MAPLE HILL DR, MAHOPAC, NY 10541	ANTHEYA MELY	40 MAPLE HILL DR, MAHOPAC, NY 10541
163	87.9	1	13.-4100	41 MAPLE HILL DR, MAHOPAC, NY 10541	VALERIA LOPEZ	41 MAPLE HILL DR, MAHOPAC, NY 10541
164	87.9	1	14.-4200	42 MAPLE HILL DR, MAHOPAC, NY 10541	SHEILA TRUC	42 MAPLE HILL DR, MAHOPAC, NY 10541
165	87.9	1	15.-4300	43 MAPLE HILL DR, MAHOPAC, NY 10541	ANDREW LOMBARDI	43 MAPLE HILL DR, MAHOPAC, NY 10541
166	87.9	1	16.-4400	44 MAPLE HILL DR, MAHOPAC, NY 10541	ANGELO SAVINO	140B FLINTLOCK WAY, YORKTOWN HEIGHTS, NY 10598
167	87.9	1	17	534 OVERLOOK DR S, MAHOPAC, NY 10541	THOMAS JUDGE	534 OVERLOOK DR S, MAHOPAC, NY 10541
168	87.9	1	19	63 HILLSIDE TER, MAHOPAC, NY 10541	JOAO DE MELO	63 HILLSIDE TER, MAHOPAC, NY 10541
169	87.9	1	20	57 HILLSIDE TER, MAHOPAC, NY 10541	FRANK MERENDA	57 HILLSIDE TER, MAHOPAC, NY 10541
170	87.9	1	21	51 HILLSIDE TER, MAHOPAC, NY 10541	SALVATORE DIGRANDI	51 HILLSIDE TER, MAHOPAC, NY 10541
171	87.9	1	23	531 OVERLOOK DR S, MAHOPAC, NY 10541	ALFONSO & ANN GALLO IRREV TRUST	531 OVERLOOK DR S, MAHOPAC, NY 10541
172	87.9	1	24	26 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	AUGUST WINES	26 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
173	87.9	1	25	32 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	IRENE NARULA	32 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
174	87.9	1	26	36 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	TIMUR FILIPPOV	36 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
175	87.9	1	27	40 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	KIERAN CLARKE	40 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
176	87.9	1	28	44 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	REBECCA BIERHOFF	44 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
177	87.9	1	29	48 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	WALTER BECKER	48 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
178	87.9	1	30	54 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	RICHARD DEPOLO	54 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
179	87.9	1	31		NYS ELEC & GAS CORP	1 CITY CENTER FL 5, PORTLAND, ME 04101
180	87.9	1	32		NYS ELEC & GAS CORP	1 CITY CENTER FL 5, PORTLAND, ME 04101
181	87.9	1	33	26 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	PATRICK KOHLMAN	26 SUMMIT CIRCLE DR, MAHOPAC, NY 10541
182	87.9	1	34	8 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	PATRICK BOYLE	8 SUMMIT CIRCLE DR, MAHOPAC, NY 10541
183	87.9	1	35	35 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	AISLING O'HANLON	35 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
184	87.9	1	36	31 MOUNTAIN VIEW DR, MAHOPAC, NY 10541	PHILIP GOLDSTEIN	31 MOUNTAIN VIEW DR, MAHOPAC, NY 10541
185	87.9	1	37	25 WALTON DR, MAHOPAC, NY 10541	JASON SIMONE	25 WALTON DR, MAHOPAC, NY 10541
186	87.9	1	38	29 WALTON DR, MAHOPAC, NY 10541	LINDA BOWMAN-WILLIAMS	29 WALTON DR, MAHOPAC, NY 10541
187	87.9	1	40	14 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	VINCENT GENTILE	14 SUMMIT CIRCLE DR, MAHOPAC, NY 10541
188	87.9	1	41	18 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	LUIGI PAGANELLI	18 SUMMIT CIRCLE DR, MAHOPAC, NY 10541
189	87.9	1	42	22 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	CARL VU	22 SUMMIT CIRCLE DR, MAHOPAC, NY 10541
190	87.9	1	43	27 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	ROBERT AMICUCCI	27 SUMMIT CIRCLE DR, MAHOPAC, NY 10541
191	87.9	1	44	25 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	GERARD HANRAHAN	25 SUMMIT CIRCLE DR, MAHOPAC, NY 10541
192	87.9	1	45	19 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	DENNIS NORBY	271 HILL ST, MAHOPAC, NY 10541
193	87.9	1	47	11 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	DONNA AQUILATO	11 SUMMIT CIRCLE DR, MAHOPAC, NY 10541
194	87.9	1	48	1 SUMMIT CIRCLE DR, MAHOPAC, NY 10541	MARY PALMER	1 SUMMIT CIRCLE DR, MAHOPAC, NY 10541
195	87.9	1	49	43 WALTON DR, MAHOPAC, NY 10541	TODD MCCORMACK	43 WALTON DR, MAHOPAC, NY 10541
196	87.9	1	50	49 WALTON DR, MAHOPAC, NY 10541	ROBERT CAVALLARO	49 WALTON DR, MAHOPAC, NY 10541
197	87.9	1	51	53 WALTON DR, MAHOPAC, NY 10541	LINDA SHAW	53 WALTON DR, MAHOPAC, NY 10541
198	86.8	2	29	136 UNION VALLEY RD, MAHOPAC, NY 10541	MARIE SWARM SANDRA SWARM MCDERMOTT	136 UNION VALLEY RD, MAHOPAC, NY 10541
199	86.8	2	30	146 UNION VALLEY RD, MAHOPAC, NY 10541	VIRGINIA NICHOLSON	146 UNION VALLEY RD, MAHOPAC, NY 10541
200	86.8	2	31	153 UNION VALLEY RD, MAHOPAC, NY 10541	DAVID W EST. PARENT	PO BOX 396, MAHOPAC, NY 10541
201	86.8	2	32.1	29 DAHLIA DR, MAHOPAC, NY 10541	PETER J CUOMO KATHERYN L CUOMO	29 DAHLIA DR, MAHOPAC, NY 10541
202	86.8	2	32.2.	25 DAHLIA DR, MAHOPAC, NY 10541	THOMAS DAZI	25 DAHLIA DR, MAHOPAC, NY 10541
203	86.8	2	32.3.	30 DAHLIA DR, MAHOPAC, NY 10541	JOHN GRASSIA	30 DAHLIA DR, MAHOPAC, NY 10541
204	86.8	2	32.4	156 UNION VALLEY RD, MAHOPAC, NY 10541	DANIEL HORTON	156 UNION VALLEY RD, MAHOPAC, NY 10541
205	86.8	2	32.5	158 UNION VALLEY RD, MAHOPAC, NY 10541	CHANDRA PRASAD	158 UNION VALLEY RD, MAHOPAC, NY 10541
206	86.8	2	39	48 DAHLIA DR, MAHOPAC, NY 10541	ERIK BAKKEN ALAYEN A BAKKEN	48 DAHLIA DR, MAHOPAC, NY 10541
207	86.8	2	40	44 DAHLIA DR, MAHOPAC, NY 10541	ARTHUR K HANRATTY ANN M HANRATTY	44 DAHLIA DR, MAHOPAC, NY 10541
208	86.8	2	41	40 DAHLIA DR, MAHOPAC, NY 10541	RAYMOND MARZIANO	40 DAHLIA DR, MAHOPAC, NY 10541
209	86.8	2	42	32 DAHLIA DR, MAHOPAC, NY 10541	MCGLYNN FAMILY TRUST	32 DAHLIA DR, MAHOPAC, NY 10541
210	86.8	2	43	173 UNION VALLEY RD, MAHOPAC, NY 10541	DAVID W - EST. PARENT	PO BOX 396, MAHOPAC, NY 10541
211	86.8	2	44	163 UNION VALLEY RD, MAHOPAC, NY 10541	JAMES RISPOLI	163 UNION VALLEY RD, MAHOPAC, NY 10541
212	86.8	2	45	159 UNION VALLEY RD, MAHOPAC, NY 10541	ELIZABETH SALVESEN	159 UNION VALLEY RD, MAHOPAC, NY 10541
213	86.8	2	46	155 UNION VALLEY RD, MAHOPAC, NY 10541	THOMAS MAFFUCCI	155 UNION VALLEY RD, MAHOPAC, NY 10541
214	86.8	2	47		COUNTY OF PUTNAM	40 GLENEIDA AVE, CARMEL, NY 10512
215	86.8	2	48	16 GLENACOM RD, MAHOPAC, NY 10541	DAVID MAHOSKEY	779 GLENDALE AVE, NAPLES, FL 34110
216	86.8	2	49	22 GLENACOM RD, MAHOPAC, NY 10541	RAFAEL CLAUDIO	23 GLENACOM RD, MAHOPAC, NY 10541
217	86.8	2	50	28 GLENACOM RD, MAHOPAC, NY 10541	ERIN YOUNG	29 GLENACOM RD, MAHOPAC, NY 10541
218	86.8	2	51	29 GLENACOM RD, MAHOPAC, NY 10541	ERIN YOUNG	29 GLENACOM RD, MAHOPAC, NY 10541
219	86.8	2	52	23 GLENACOM RD, MAHOPAC, NY 10541	MONIQUE DANIELS	23 GLENACOM RD, MAHOPAC, NY 10541
220	86.8	2	53	19 GLENACOM ROAD, MAHOPAC, NY 10541	DAVID M MAHOSKEY ANTIONETTE MAHOSKEY	19 GLENACOM ROAD, MAHOPAC, NY 10541
221	86.8	2	86			
222	86.8	2	56	11 FASSITT DR, MAHOPAC, NY 10541	PATSY LEONE	11 FASSITT DR, MAHOPAC, NY 10541
223	86.12	1	21	23 FASSIT DR, MAHOPAC, NY 10541	ROBERT GOUVEIA	23 FASSIT DR, MAHOPAC, NY 10541
224	86.12	1	22	35 FASSITT DR, MAHOPAC, NY 10541	VICTOR SHKRELI	35 FASSITT DR, MAHOPAC, NY 10541
225	86.12	1	23	47 FASSITT DR, MAHOPAC, NY 10541	THOMAS BAIER	47 FASSITT DR, MAHOPAC, NY 10541
226	86.12	1	24	53 FASSITT DR, MAHOPAC, NY 10541	GREGORY SCAVELLI	53 FASSITT DR, MAHOPAC, NY 10541
227	86.12	1	25	61 FASSITT DR, MAHOPAC, NY 10541	GEORGE KOKKINAKIS	61 FASSITT DR, MAHOPAC, NY 10541
228	86.12	1	26	67 FASSITT DR, MAHOPAC, NY 10541	MARSILIO LANGELLA	67 FASSITT DR, MAHOPAC, NY 10541
229	86.12	1	28.1.	59 CENTER RD, MAHOPAC, NY 10541	MATTHEW ROSOLEN	59 CENTER RD, MAHOPAC, NY 10541
230	86.12	1	28.2.	60 FASSITT DR, MAHOPAC, NY 10541	CHRISTOPHER VENNARD	60 FASSITT DR, MAHOPAC, NY 10541
231	87.5	3	14	UNION VALLEY RD, MAHOPAC, NY 10541	TOWN OF CARMEL	60 MCALPIN AVE, MAHOPAC, NY 10541
232	86.12	1	30	34 GLENACOM RD, MAHOPAC, NY 10541	EMIL D'ONOFRIO	34 GLENACOM RD, MAHOPAC, NY 10541
233	86.12	1	31	38 GLENACOM RD, MAHOPAC, NY 10541	RALPH NARDO	35 GLENACOM RD, MAHOPAC, NY 10541
234	86.12	1	32	42 GLENACOM RD, MAHOPAC, NY 10541	CHARLENE WOOD	42 GLENACOM RD, MAHOPAC, NY 10541
235	86.12	1	33.1.	56 GLENACOM RD, MAHOPAC, NY 10541	VINCENT DECICCO	56 GLENACOM RD, MAHOPAC, NY 10541
236	86.12	1	33.2.	GLENACOM RD, MAHOPAC, NY 10541	CHRISTOPHER DECICCO	56 GLENACOM RD, MAHOPAC, NY 10541
237	86.12	1	34	59 GLENACOM RD, MAHOPAC, NY 10541	IRENE SOSA	59 GLENACOM RD, MAHOPAC, NY 10541
238	86.12	1	35	71 GLENACOM RD, MAHOPAC, NY 10541	JOHN VOUGHT	71 GLENACOM RD, MAHOPAC, NY 10541
239	86.12	1	36	55 GLENACOM RD, MAHOPAC, NY 10541	MICHAEL DAVIS	55 GLENACOM RD, MAHOPAC, NY 10541
240	86.12	1	37	53 GLENACOM RD, MAHOPAC, NY 10541	DEIRDRE FOLEY	53 GLENACOM RD, MAHOPAC, NY 10541
241	86.12	1	39	47 GLENACOM RD, MAHOPAC, NY 10541	CHRISTINE PERI	47 GLENACOM RD, MAHOPAC, NY 10541
242	86.12	1	41	41 GLENACOM RD, MAHOPAC, NY 10541	CODY LECLAIRE	41 GLENACOM RD, MAHOPAC, NY 10541
243	86.12	1	42	35 GLENACOM RD, MAHOPAC, NY 10541	RALPH NARDO	35 GLENACOM RD, MAHOPAC, NY 10541
244	75.2	1	18	51 DAHLIA DR, MAHOPAC, NY 10541	JAMES PACIULO ROSE PACIULO	51 DAHLIA DR, MAHOPAC, NY 10541
245	75.2	1	19	57 DAHLIA DR, MAHOPAC, NY 10541	RAYMOND A KOLKMANN JON APPELBERGH	57 DAHLIA DR, MAHOPAC, NY 10541
246	75.2	1	30	74 DAHLIA DR, MAHOPAC, NY 10541	PATRICK TARPEY CATHERINE TARPEY	74 DAHLIA DR, MAHOPAC, NY 10541
247	75.2	1	31	68 DAHLIA DR, MAHOPAC, NY 10541	JOSEPH KIRINCIC DEBORAH KIRINCIC	68 DAHLIA DR, MAHOPAC, NY 10541
248	75.2	1	32	64 DAHLIA DR, MAHOPAC, NY 10541	JACK SCHIAVONE DIANE KLINGLER	64 DAHLIA DR, MAHOPAC, NY 10541
249	75.2	1	33	60 DAHLIA DR, MAHOPAC, NY 10541	ROBERT KNAPP	60 DAHLIA DR, MAHOPAC, NY 10541
250	75.2	1	34	54 DAHLIA DR, MAHOPAC, NY 10541	PAT COLABELLO SHARON COLABELLO	54 DAHLIA DR, MAHOPAC, NY 10541
251	76.17	1	1	21 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	FRANK KIERNAN	10 FRANCES KIERNAN WAY, CARMEL, NY 10512
252	76.17	1	2	23 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	RUSSELL BRAUN	23 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
253	76.17	1	3	25 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	GERALD MCGUIRE	25 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
254	76.17	1	4	31 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	DENNIS BRADY	31 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
255	76.17	1	5	35 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	PETER ERICKSON	35 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
256	76.17	1	6	27 TEAKETTLE SPT RD, MAHOPAC, NY 10541	AUGUSTUS PEREZ	27 TEAKETTLE SPT RD, MAHOPAC, NY 10541
257	87.5	3	15	237 UNION VALLEY RD, MAHOPAC, NY 10541	TOWN OF CARMEL	60 MCALPIN AVE, MAHOPAC, NY 10541
258	76.17	1	28	200 UNION VALLEY RD, MAHOPAC, NY 10541	PARENT ESTATE	PO BOX 396, MAHOPAC, NY 10541
259	87.5	3	16	151 KIA ORA BLVD, MAHOPAC, NY 10541	TOWN OF CARMEL	60 MCALPIN AVE, MAHOPAC, NY 10541
260	76.17	2	9	30 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	KEVIN KIERNAN	30 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
261	76.17	2	10	24 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541	GARY KIERNAN	24 TEAKETTLE SPOUT RD, MAHOPAC, NY 10541
262	76.17	2	14	33 PLUM RD, MAHOPAC, NY 10541	SUSIE DELLA MURA	33 PLUM RD, MAHOPAC, NY 10541
263	76.17	2	15	35 PLUM RD, MAHOPAC, NY 10541	LEON SWACK	35 PLUM RD, MAHOPAC, NY 10541
264	76.17	2	16	39 PLUM RD, MAHOPAC, NY 10541	JOHN CUOMO	39 PLUM RD, MAHOPAC, NY 10541
265	87.9	1	1	OFF SUMMIT CIRCLE	NYS ELEC & GAS CORP	1 CITY CENTER FL 5, PORTLAND, ME 04101
266	87.5	2	54	KIA ORA BVLD, MAHOPAC, NY 10541	GEORGE CAVALIERE	530 OVERLOOK DRIVE SOUTH, MAHOPAC, NY 10541

NOTE:

1. ABUTTER INFORMATION PROVIDED BY THE TOWN OF CARMEL.

HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
(203) 297-6345

NEW YORK SMSA
LIMITED PARTNERSHIP
d/b/a
verizon WIRELESS
4 CENTEROCK ROAD
WEST NYACK, NY 10994

GLENACOM LAKE

ZONING DRAWINGS

7	01/26/23	ISSUED FOR ZONING
6	12/22/22	ISSUED FOR ZONING
5	12/02/22	ISSUED FOR ZONING
4	11/22/22	ISSUED FOR ZONING
3	11/04/22	ISSUED FOR ZONING
2	10/26/22	ISSUED FOR ZONING
1	05/07/20	ISSUED FOR ZONING
0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

STATE OF NEW YORK — DAVID E REVETTE — 101758 — LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

PROPERTY
OWNER'S LIST-2

SHEET NUMBER

Z-4

TOWN OF SOMERS - WESTCHESTER COUNTY

MAP ID	MAP	BLOCK	LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
1	5.18	1	3.1	50 LOOMIS DR, MAHOPAC, NY 10541	BEAVER BROOK/SOMERS ACQ LLC	118 N BEDFORD ROAD
2	5.18	1	4.1	66 TRAVIS RD, MAHOPAC, NY 10541	BEAVER BROOK/SOMERS ACQ LLC	118 N BEDFORD ROAD MT., KISCO,, NY 10549
3	5.14	1	2	0 POWER LINES, MAHOPAC, NY 10541	NYS ELECTRIC & GAS CORP	ONE CITY CENTER 5TH FLOOR, PORTLAND,, ME 04101
4	5.14	1	5	0 POWER LINES, MAHOPAC, NY 10541	NYS ELECTRIC & GAS CORP	ONE CITY CENTER 5TH FLOOR PORTLAND,, ME 04101,
5	5.14	1	7	13 SYCAMORE RD, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS, NY 10589
6	5.14	1	8	9 SYCAMORE RD, MAHOPAC, NY 10541	MULTARI, NICOLA & SOPHIA	9 SYCAMORE ROAD, MAHOPAC, NY 10541
7	5.14	1	9	7 SYCAMORE RD, MAHOPAC, NY 10541	ALEXANDER, RICHARD & MARGARET	7 SYCAMORE ROAD, MAHOPAC, NY 10541
8	5.14	1	10	5 SYCAMORE RD, MAHOPAC, NY 10541	CULLEN, MARTIN R & KATHLEEN	5 SYCAMORE ROAD, MAHOPAC, NY 10541
9	5.14	1	11	3 SYCAMORE RD, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS, NY 10589
10	5.14	1	12	1 SYCAMORE RD, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS, NY 10589
11	5.14	1	15	6 TULIP RD, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS, NY 10589
12	5.14	1	16.5	20 BOXWOOD DR, MAHOPAC, NY 10541	SCHWARZE, PATRICK P. AUSANIO, ANNA KRISTINE	20 BOXWOOD DRIVE, MAHOPAC,, NY 10541
13	5.14	1	18	18 BOXWOOD DR, MAHOPAC, NY 10541	SCHLEISSMANN, DAVID & MARY	18 BOXWOOD DRIVE, MAHOPAC,, NY 10541
14	5.14	1	19	16 BOXWOOD DR, MAHOPAC, NY 10541	GIBSON, JONATHAN & YAMILY	19 ACACIA DRIVE, MAHOPAC,, NY 10541
15	5.14	1	20	2 TULIP RD, MAHOPAC, NY 10541	RUCKERT, EDWARD	28 EAST WHIPPOORWILL ROAD, ARMONK, NY 10504
16	5.14	1	21	17 ACACIA DR, MAHOPAC, NY 10541	GIBSON, JONATHAN & YAMILY	19 ACACIA DRIVE, MAHOPAC,, NY 10541
17	5.14	1	22	19 ACACIA DR, MAHOPAC, NY 10541	GIBSON, JONATHAN & YAMILY	19 ACACIA DRIVE, MAHOPAC,, NY 10541
18	5.14	1	23	23 ACACIA DR, MAHOPAC, NY 10541	MARTIN, MANUEL & MANTARING, CECILLE M.	23 ACACIA DRIVE, MAHOPAC, NY 10541
19	5.14	1	24.5	16 ACACIA DR, MAHOPAC, NY 10541	SALERNO, PAUL & STEPHANIE	16 ACACIA DRIVE, MAHOPAC,, NY 10541
20	5.14	1	26	3 RAMBLER RD, MAHOPAC, NY 10541	MC GUIRE, ANNE M.	3 RAMBLER ROAD, MAHOPAC, NY 10541
21	5.14	1	27	5 RAMBLER RD, MAHOPAC, NY 10541	SALVATI, RICHARD & MADELINE	P.O. BOX 17 LINCOLNDALE,, NY 10540,
22	5.14	1	28	7 RAMBLER RD, MAHOPAC, NY 10541	SHIRES, ANDREW & STACY K.	7 RAMBLER RD, MAHOPAC, NY 10541
23	5.14	1	29	6 RAMBLER RD, MAHOPAC, NY 10541	DONOVAN, MICHAEL & SHERRI	P.O. BOX 442 LINCOLNDALE,, NY 10540,
24	5.14	1	30	12 ACACIA DR, MAHOPAC, NY 10541	DONOVAN, MICHAEL P	P.O. BOX 442 LINCOLNDALE, NY 10540,
25	5.14	1	31	10 ACACIA DR, MAHOPAC, NY 10541	MC CORMACK, JULIA A MC CORMACK,	P.O. BOX 153 LINCOLNDALE, NY 10540,
26	5.14	1	32	8 ACACIA DR, MAHOPAC, NY 10541	FAWCETT, RICHARD J. (JR.) NICOLE	8 ACACIA ROAD, MAHOPAC,, NY 10541
27	5.14	1	33	1 PEACH RD, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS,, NY 10589
28	5.14	1	34	3 PEACH RD, MAHOPAC, NY 10541	TOOMA, THOMAS J. (JR) & BARBARA A.	PO BOX 341, LINCOLNDALE, NY 10540
29	5.14	1	35	5 PEACH RD, MAHOPAC, NY 10541	DURAN, DONTAE J. & EMMA J.	5 PEACH RD., MAHOPAC, N.Y., 10541
30	5.14	1	36	7 PEACH RD, MAHOPAC, NY 10541	CHEYSVIN, BORIS & JULIA	7 PEACH ROAD, MAHOPAC, NY 10541
31	5.14	1	37	9 PEACH RD, MAHOPAC, NY 10541	CHEYSVIN, BORIS & JULIA	7 PEACH ROAD, MAHOPAC, NY 10541
32	5.14	1	38	8 RAMBLER RD, MAHOPAC, NY 10541	KOEHNKEN, STEVEN & SHANNON	8 RAMBLER RD, MAHOPAC, NY 10541
33	5.14	1	39	8 QUEEN RD, MAHOPAC, NY 10541	CHEYSVIN, BORIS & JULIA	7 PEACH ROAD, MAHOPAC,, NY 10541
34	5.14	1	40	104 TRAVIS RD, MAHOPAC, NY 10541	MC CULLOUGH, JOHN & WENDY	104 TRAVIS ROAD BALDWIN PLACE,, NY 10505,
35	5.14	1	41	102 TRAVIS RD, MAHOPAC, NY 10541	TERCEIRA, CHRIS & CHRISTINE	102 TRAVIS ROAD BALDWIN PLACE,, NY 10505,
36	5.14	1	42	100 TRAVIS RD, MAHOPAC, NY 10541	CHORNY, DENNIS T. & OKSANA	100 TRAVIS ROAD BALDWIN PLACE,, NY 10505,
37	5.15	1	1	13 ACACIA DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS,, NY 10589
38	5.14	1	2	11 ACACIA DR, MAHOPAC, NY 10541	MASTRANTONI, PAUL & THOMASINE	10 BOXWOOD DRIVE, MAHOPAC,, NY 10541
39	5.15	1	3	9 ACACIA DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS,, NY 10589
40	5.15	1	4	7 ACACIA DR, MAHOPAC, NY 10541	TOLEDO, CLAUDIA	7 ACACIA DRIVE, MAHOPAC,, NY 10541
41	5.15	1	5	5 ACACIA DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS,, NY 10589
42	5.15	1	7.1	3 ACACIA DR, MAHOPAC, NY 10541	WILLIAM D & ANN C FITZGERALD	63 ARBOR LN, DIX HILLS, NY 11746
43	5.15	1	8	0 ACACIA DR, MAHOPAC, NY 10541	MICHAEL J JR & TAMMY REPP	2 BOXWOOD DR, MAHOPAC, NY 10541
44	5.15	1	9	0 ACACIA DR, MAHOPAC, NY 10541	MICHAEL J JR & TAMMY REPP	2 BOXWOOD DR, MAHOPAC, NY 10541
45	5.15	1	10	2 BOXWOOD DR, MAHOPAC, NY 10541	MICHAEL J JR & TAMMY REPP	2 BOXWOOD DR, MAHOPAC, NY 10541
46	5.15	1	11	4 BOXWOOD DR, MAHOPAC, NY 10541	MONTY & KAREN DOMAN	745 WARREN ST, SOMERS, NY 10589
47	5.15	1	12	6 BOXWOOD DR, MAHOPAC, NY 10541	JUDY A, DONALD D & BRUCE A RATH	6 BOXWOOD DR, MAHOPAC, NY 10541
48	5.15	1	13	8 BOXWOOD DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS,, NY 10589
49	5.15	1	14	8 BOXWOOD DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS,, NY 10589
50	5.15	1	15	10 BOXWOOD DR, MAHOPAC, NY 10541	PAUL/THOMASINE MASTRANTONI	10 BOXWOOD DRIVE, MAHOPAC,, NY 10541
51	5.15	1	16	12 BOXWOOD DR, MAHOPAC, NY 10541	PATRICIA A FOLEY	PO BOX 245, 12 BOXWOOD DR, LINCOLNDALE, NY 10541
52	5.15	1	17.5	11 BOXWOOD DR, MAHOPAC, NY 10541	ROBERT & ANNE MARIE DE CRENZA	11 BOXWOOD DRIVE, MAHOPAC, NY 10541
53	5.15	1	19	7 BOXWOOD DR, MAHOPAC, NY 10541	THOMAS SCHNEIDER FAMILY TRUST	108 LONGDALE RD, MAHOPAC, NY 10541
54	5.15	1	20	5 BOXWOOD DR, MAHOPAC, NY 10541	KEVIN & CAROLYN MOSS	PO BOX 74, LINCOLNDALE, NY 10541
55	5.15	1	21	3 BOXWOOD DR, MAHOPAC, NY 10541	KEVIN & CAROLYN MOSS	PO BOX 74, LINCOLNDALE, NY 10541
56	5.15	1	22	11 OLIVE DR, MAHOPAC, NY 10541	MICHAEL & ELIZABETH ALLEN	11 OLIVE DR, MAHOPAC, NY 10541
57	5.15	1	18			
58	5.15	1	25	10 COTTONWOOD DR, MAHOPAC, NY 10541	STEVE & DEBORAH PILLA	PO BOX 73, LINCOLNDALE, NY 10541
59	5.15	1	65.5	16 OLIVE DR, MAHOPAC, NY 10541	PAUL & AMY ESKRIDGE	16 OLIVE DR, MAHOPAC, NY 10541
60	5.15	1	67	18 OLIVE DR, MAHOPAC, NY 10541	ROBERT & CHERYL BOUZA	PO BOX 519, LINCOLNDALE, NY 10541
61	5.15	1	68	18 OLIVE DR, MAHOPAC, NY 10541	ROBERT & CHERYL BOUZA	PO BOX 519, LINCOLNDALE, NY 10541
62	5.15	1	69	18 OLIVE DR, MAHOPAC, NY 10541	ROBERT & CHERYL BOUZA	PO BOX 519, LINCOLNDALE, NY 10541
63	5.15	1	70	20 OLIVE DR, MAHOPAC, NY 10541	ROBERT & CHERYL BOUZA	PO BOX 519, LINCOLNDALE, NY 10541
64	5.15	1	71	25 NARCISSUS DR, MAHOPAC, NY 10541	SEYMOUR WEINSTEIN	PO BOX 32, LINCOLNDALE, NY 10541
65	5.15	1	72	23 NARCISSUS DR, MAHOPAC, NY 10541	SEYMOUR WEINSTEIN	PO BOX 32, LINCOLNDALE, NY 10541
66	5.15	1	73	21 NARCISSUS DR, MAHOPAC, NY 10541	ROBERT & CHERYL BOUZA	PO BOX 519, LINCOLNDALE, NY 10541
67	5.15	1	74	19 NARCISSUS DR, MAHOPAC, NY 10541	EVELYN PFAFFENBACH	19 NARCISSUS DR, MAHOPAC, NY 10541
68	5.15	1	76	24 OLIVE DR, MAHOPAC, NY 10541	BRAD & LISA ROBERTS	24 OLIVE DR, MAHOPAC, NY 10541
69	5.15	1	77	26 OLIVE DR, MAHOPAC, NY 10541	DEFILIPPIS FAMILY TRUST 2013 TRUST; MICHAEL DEFILIPPIS AS TRUSTEEE	83 MORTON BLVD, PLAINVIEW, NY 11803
70	5.15	1	78	26 OLIVE DR, MAHOPAC, NY 10541	DEFILIPPIS FAMILY TRUST 2013 TRUST; MICHAEL DEFILIPPIS AS TRUSTEEE	83 MORTON BLVD, PLAINVIEW, NY 11803
71	5.15	1	79	28 OLIVE DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS, NY 10589
72	5.15	1	80	30 OLIVE DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS, NY 10589
77	5.15	1	85	4 PEACH RD, MAHOPAC, NY 10541	CIVITA, LYNNE	4 PEACH RD., MAHOPAC, NY 10541
78	5.15	1	86	8 PEACH RD, MAHOPAC, NY 10541	SIGNORILE, CHARLES F & FELICE	8 PEACH ROAD, MAHOPAC, NY 10541
79	5.15	1	87	0 PEACH RD, MAHOPAC, NY 10541	SMITH, DAVID E. & DORIS JANE	PO BOX 147, LINCOLNDALE, NY 10540
80	5.15	1	88	10 PEACH RD, MAHOPAC, NY 10541	CLERICO, ALFRED J	18 PONDER LN, DEER PARK, NY 11729
81	5.15	1	89	12 PEACH RD, MAHOPAC, NY 10541	SMITH, DAVID & DORIS	P. O. BOX 147 LINCOLNDALE, N. Y., 10540,
82	5.15	1	90	19 OLIVE DR, MAHOPAC, NY 10541	PUTNAM/WESTCHESTER BUILDERS, INC.	361 ROUTE 6, MAHOPAC, NY 10541
83	5.15	1	91	2 ACACIA DR, MAHOPAC, NY 10541	MARLENE FERRELL	2 ACACIA DR, MAHOPAC, NY 10541
84	5.15	2	1	6 FERN RD, MAHOPAC, NY 10541	STEVEN & LAURAL WINES	6 FERN RD, MAHOPAC, NY 10541
85	5.15	2	2	4 FERN RD, MAHOPAC, NY 10541	VICTOR K III & JOANNE M BOYD	PO BOX 255, LINCOLNDALE, NY 10541
86	5.15	2	3	2 FERN RD, MAHOPAC, NY 10541	ERNEST / LUCY SANTANIELLO (TRUST)	4126 STRATFORD DR, NEW PORT RICHIE, FL 34652
87	5.15	2	4	34 NARCISSUS DR, MAHOPAC, NY 10541	MICHAEL J COOGAN & MARIE S RICE	PO BOX 429, SOMERS, NY 10589
88	5.15	2	5	32 NARCISSUS DR, MAHOPAC, NY 10541	LINDA IRENE SCHERIFF	32 NARCISSUS DR, MAHOPAC, NY 10541
89	5.15	2	6	32 NARCISSUS DR, MAHOPAC, NY 10541	LINDA IRENE SCHERIFF	32 NARCISSUS DR, MAHOPAC, NY 10541
90	5.15	2	7	32 NARCISSUS DR, MAHOPAC, NY 10541	LINDA IRENE SCHERIFF	32 NARCISSUS DR, MAHOPAC, NY 10541
91	5.15	2	8	28 NARCISSUS DR, MAHOPAC, NY 10541	MICHAEL PFAFFENBACK	28 NARCISSUS DR, MAHOPAC, NY 10541
92	5.15	2	9	26 NARCISSUS DR, MAHOPAC, NY 10541	JAVIER ROBLES	PO BOX 504, LINCOLNDALE, NY 10540
93	5.15	2	10	24 NARCISSUS DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 220, SOMERS, NY 10589
94	5.15	2	11	0 NARCISSSUS DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 220, SOMERS, NY 10589
95	5.15	2	12	22 NARCISSUS DR, MAHOPAC, NY 10541	JOSE & MARIA CABRERA	22 NARCISSUS DR, MAHOPAC, NY 10541
96	5.15	2	13	20 GREENWOOD DR, MAHOPAC, NY 10541	MICHAEL & THERESE DRISCOLL	PO BOX 58, LINCOLNDALE, NY 10540
97	5.15	2	14	18 GREENWOOD DR, MAHOPAC, NY 10541	ELIZABETH KELLY	PO BOX 275, LINCOLNDALE, NY 10540
98	5.15	2	15	16 GREENWOOD DR, MAHOPAC, NY 10541	ADNAN & SELVET ASLLANI	16 GREENWODD DR, MAHOPAC, NY 10541
99	5.15	2	16	3 MAGNOLIA DR, MAHOPAC, NY 10541	JOHN PAUL J & JOAN M KAMINSKI	3 MAGNOLIA DR, MAHOPAC, NY 10541
100	5.15	2	17	5 MAGNOLIA DR, MAHOPAC, NY 10541	KEVIN HARRIGAN & JOHN R. JR	5 MAGNOLIA DR, MAHOPAC, NY 10541
101	5.15	2	18	7 MAGNOLIA DR, MAHOPAC, NY 10541	YAROSLAV & OLGA ROMANKIV	7 MAGNOLIA DR, MAHOPAC, NY 10541
102	5.15	2	19	9 MAGNOLIA DR, MAHOPAC, NY 10541	JAMES & PATRICIA WHITE	9 MAGNOLIA DR, MAHOPAC, NY 10541
103	5.15	2	20	11 MAGNOLIA DR, MAHOPAC, NY 10541	NICOLAS & ELIZABETH BORDIGA	PO BOX 329, LINCOLNDALE, NY 10540
104	5.15	2	21	13 MAGNOLIA DR, MAHOPAC, NY 10541	NICOLAS & ELIZABETH BORDIGA	PO BOX 329, LINCOLNDALE, NY 10540
105	5.15	2	22	11 FERN RD, MAHOPAC, NY 10541	LINDA IRENE SCHERIFF	32 NARCISSUS DR, MAHOPAC, NY 10541
106	5.15	2	23	7 FERN RD, MAHOPAC, NY 10541	MICHAEL J & KRISTIE A EVERS	7 FERN RD, MAHOPAC, NY 10541
107	5.15	2	24	6 MAGNOLIA DR, MAHOPAC, NY 10541	JAMES B & CAROLANN WILSON	PO BOX 425, LINCOLNDALE, NY 10540
108	5.15	2	27	13 LOCUST DR, MAHOPAC, NY 10541	CATHERINE BUTTERWORTH ET AL	68 CHURCH ST, TEANECK, NY 07666
109	5.15	2	28	15 LOCUST DR, MAHOPAC, NY 10541	CHRISTOPHER L MERWIN	18 LOCUST DR, MAHOPAC, NY 10541
110	5.15	2	29	17 LOCUST DR, MAHOPAC, NY 10541	JAMES B & CAROLANN WILSON	PO BOX 425, LINCOLNDALE, NY 10540
111	5.15	2	30	19 LOCUST DR, MAHOPAC, NY 10541	JOHN & JOHANNE YURSA	PO BOX 222, LINCOLNDALE, NY 10540
112	5.15	2	31	0 LOCUST DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS, NY 10589
113	5.15	2	32.1	21 LOCUST DR, MAHOPAC, NY 10541	ANTHONY & PAMELA BEADLE	21 LOCUST DR, MAHOPAC, NY 10541
114	5.15	2	34	3 FERN RD, MAHOPAC, NY 10541	JOHN & JOHANNE YURSA	PO BOX 222, LINCOLNDALE, NY 10540
115	5.15	2	35	5 FERN RD, MAHOPAC, NY 10541	JOSEPH V MCCARTHY & CATHERINE F ANDREOLI, C/O BRIAN ANDREOLI	15 FRESCENIUS RD, WESTPORT, CT 06880
116	5.15	2	36	5 FERN RD, MAHOPAC, NY 10541	JOSEPH V MCCARTHY & CATHERINE F ANDREOLI, C/O BRIAN ANDREOLI	15 FRESCENIUS RD, WESTPORT, CT 06880
117	5.15	2	37	7 FERN RD, MAHOPAC, NY 10541	MICHAEL J & KRISTIE A EVERS	7 FERN RD, MAHOPAC, NY 10541
118	5.15	2	38	26 LOCUST DR, MAHOPAC, NY 10541	ERNEST / LUCY SANTANIELLO (TRUST)	4136 STRATFORD DR, NEW PORT RICHIE, FL 34652
119	5.15	2	39	24 LOCUST DR, MAHOPAC, NY 10541	DAVID B MEGLAUGHLIN	PO BOX 354, LINCOLNDALE, NY 10540
120	5.15	2	40	22 LOCUST DR, MAHOPAC, NY 10541	ROSELYN SCHWARTZ & M SAMBORSKY	8224 NORTHVIEW RD, DUNDALK, MD 21222
121	5.15	2	41	20 LOCUST DR, MAHOPAC, NY 10541	NORA E. BELTRAN & MANUEL J. BELTRAN LOBOS	20 LOCUST DR, MAHOPAC, NY 10541
122	5.15	2	42	18 LOCUST DR, MAHOPAC, NY 10541	CHRISTOPHER L MERWIN	18 LOCUST DR, MAHOPAC, NY 10541
123	5.15	2	43	16 LOCUST DR, MAHOPAC, NY 10541	JAMES B & EDITH PUFF	16 LOCUST DR, MAHOPAC, NY 10541
124	5.15	2	44	14 LOCUST DR, MAHOPAC, NY 10541	JOHN A & AGNES STOWBRIDGE	12 BEDFORD AVE, STATEN ISLAND, NY 10306
125	5.15	2	45	14 LOCUST DR, MAHOPAC, NY 10541	JOHN A & AGNES STOWBRIDGE	12 BEDFORD AVE, STATEN ISLAND, NY 10306
126	5.15	2	46	14 GREENWOOD DR, MAHOPAC, NY 10541	LAWRENCE FREDERICK SUSI	680 81ST ST. / APT. 1C, BROOKLYN, NY 11228
127	5.15	2	47	13 HEMLOCK DR, MAHOPAC, NY 10541	MICHAEL KELLEHER	13 HEMLOCK DR, MAHOPAC, NY 10541
128	5.15	2	48	0 HEMLOCK DR, MAHOPAC, NY 10541	DENISE ERICA HANCHET	23 MOHEGAN DR, CHAPPAQUA, NY 10514
129	5.15	2	49	19 HEMLOCK DR, MAHOPAC, NY 10541	DAVID B MEGLAUGHLIN	PO BOX 354, LINCOLNDALE, NY 10540
130	5.15	2	50	21 HEMLOCK DR, MAHOPAC, NY 10541	KATHERYN D SEMEL	9 GREAT BEAR RD, HOLMES, NY 12531
131	5.15	2	51	25 HEMLOCK DR, MAHOPAC, NY 10541	TOWN OF SOMERS	335 ROUTE 202, SOMERS,NY 10589
132	5.15	2	52	28 HEMLOCK DR, MAHOPAC, NY 10541	LOUIS A FINGER JR.	PO BOX 399, SOMERS, NY 10589
133	5.15	2	53	26 HEMLOCK DR, MAHOPAC, NY 10541	SHEILA A & LOUIS A JR. FINGER	PO BOX 399, SOMERS, NY 10589
134	5.15	2	54.1	24 HEMLOCK DR, MAHOPAC, NY 10541	FEDERICK & ANNA OSTROFSKY	PO BOX 396, SOMERS, NY 10589
135	5.15	2	55.1	22 HEMLOCK DR, MAHOPAC, NY 10541	DAVID B MEGLAUGHLIN	PO BOX 354, LINCOLNDALE, NY 10540
136	5.15	2	56	20 HEMLOCK DR, MAHOPAC, NY 10541	WILLIAM J MARI	21 GERANIUM DR, MAHOPAC, NY 10541
137	5.15	2	57	20 HEMLOCK DR, MAHOPAC, NY 10541	ELIZABETH C MARI	21 GERANIUM DR, MAHOPAC, NY 10541
138	5.15	1	1	1 LOCUST DR, MAHOPAC, NY 10541		
139	5.15	1	2	1 LOCUST DR, MAHOPAC, NY 10541		

NOTE:

1. ABUTTER INFORMATION PROVIDED BY THE TOWN OF SOMERS.

HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
(203) 297-6345

NEW YORK SMSA
LIMITED PARTNERSHIP
d/b/a
verizon WIRELESS
4 CENTEROCK ROAD
WEST NYACK, NY 10994

GLENACOM LAKE

ZONING DRAWINGS

7	01/26/23	ISSUED FOR ZONING
6	12/22/22	ISSUED FOR ZONING
5	12/02/22	ISSUED FOR ZONING
4	11/22/22	ISSUED FOR ZONING
3	11/04/22	ISSUED FOR ZONING
2	10/26/22	ISSUED FOR ZONING
1	05/07/20	ISSUED FOR ZONING
0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

STATE OF NEW YORK
DAVID E. REVETTE
021758
LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

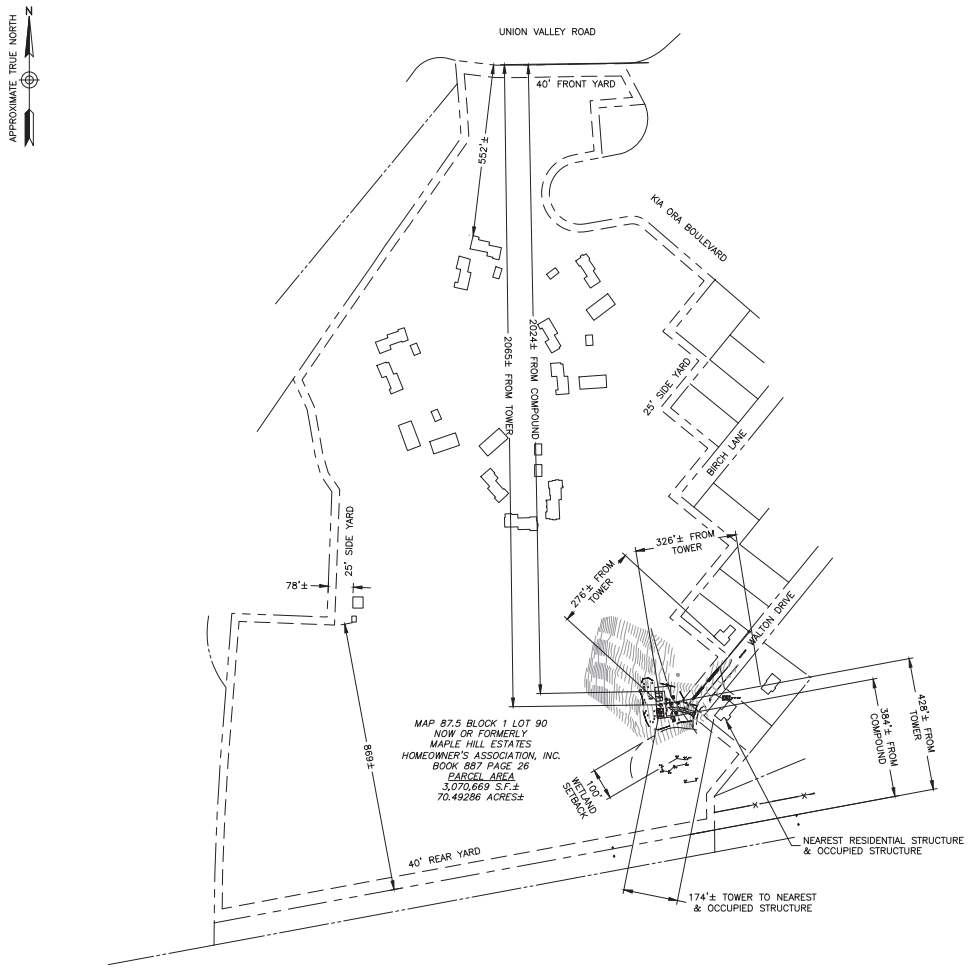
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

PROPERTY
OWNER'S LIST-3

SHEET NUMBER

Z-5



SITE PLAN 1

SCALE: 1"=400' FOR 11"x17"
1"=200' FOR 22"x34"

0' 200' 400'

ZONING TABLE: CARMEL ZONING DISTRICT RESIDENTIAL

ITEM	REQUIRED	EXISTING	PROPOSED	REMARKS
MAX. HEIGHT (FT)	35	30±	NO CHANGE	COMPLIES
MIN. LOT AREA (SF)	120,000	3,070,669±	NO CHANGE	COMPLIES
MIN. LOT WIDTH (FT)	200	448±	NO CHANGE	COMPLIES
MIN. LOT DEPTH (FT)	200	2,562±	NO CHANGE	COMPLIES
MIN. FRONT YARD SETBACK (FT)	40	552±	NO CHANGE	COMPLIES
MIN. SIDE YARD SETBACK (FT)	25	78±	NO CHANGE	COMPLIES
MIN. REAR YARD SETBACK (FT)	40	384±	NO CHANGE	COMPLIES
MAX. BUILDING COVERAGE	15%	2.4%	NO CHANGE	COMPLIES
TOWER SETBACK (FT) **	280	N/A	174±	***
TOWER HEIGHT (FT) ***	75	N/A	140	***

NA = NOT APPLICABLE

* EXISTING DIMENSIONAL NON-CONFORMITY.

** IN RESIDENTIAL ZONES, TOWER SETBACK TO ALL RESIDENTIAL BUILDINGS ON ABUTTING LOTS MUST BE 2 TIMES THE HEIGHT OF PROPOSED TOWER.

*** VARIANCE REQUIRED

NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
3. THE PROPOSED USE IS FOR TELECOMMUNICATIONS AND IS NOT INTENDED FOR PERMANENT EMPLOYEE OCCUPANCY. THEREFORE, POTABLE WATER, SANITARY SEWERS, AND ADDITIONAL ON SITE PARKING ARE NOT REQUIRED.
4. THE FACILITY SHALL BE VISITED ON THE AVERAGE OF ONCE A MONTH FOR MAINTENANCE AND SHALL BE CONTINUOUSLY MONITORED FROM A REMOTE FACILITY FOR BOTH FIRE AND INTRUSION.
5. THE FACILITIES ARE REMOTELY OPERATED AND CONTROLLED, AND AS SUCH, ARE NORMALLY UNMANNED. A COMPUTERIZED EQUIPMENT AND FACILITY ALARM SYSTEM CONTINUOUSLY MONITORS AN EXTENSIVE NUMBER OF OPERATING AND BUILDING FUNCTIONS. UNPLANNED EVENTS WILL TRIGGER ALARM REPORTS TO VERIZON WIRELESS HEADQUARTERS LOCATION IN BEDMINSTER, NJ, RANGING FROM ROUTINE REPORTS TO IMMEDIATE ACTIVATION OF LOCAL PERSONNEL OR EMERGENCY SERVICES, 24 HOURS A DAY.
6. CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK @ 811" AND LOCATE ALL EXISTING UTILITIES WITHIN THE AREA OF WORK PRIOR TO START OF EXCAVATION.
7. CONTRACTOR SHALL COORDINATE & COMPLY WITH EXISTING UTILITY COMPANIES' REQUIREMENTS.
8. THERE ARE NO PROPOSED ALTERATIONS, IMPROVEMENTS OR RELOCATIONS FOR ANY STREAMS OR EXISTING DRAINAGE STRUCTURES WITHIN THE PROPERTY.
9. SITE PLAN BASED ON "VB101, GLENCOMA LAKE, WALTON DRIVE, COMPILATION PLAN", SHEET 1 OF 2 & "VB102, GLENACOM LAKE, WALTON DRIVE, PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY", SHEET 2 OF 2, PREPARED BY LANGAN, 555 LONG WHARF DRIVE, NEW HAVEN, CT 06511. SHEET 1 OF 1, DATED APRIL 10, 2018.
10. THE FACILITIES SECURITY AND OTHER LIGHTING SYSTEMS WILL BE DESIGNED, INSTALLED AND MAINTAINED IN SUCH A MANNER (THROUGH MOTION DETECTION, AUTOMATIC SHUT-OFF, PROJECTING DOWNWARD, SHIELDING, AND MINIMUM WATTAGE) AS TO MINIMIZE OR ELIMINATE LIGHT POLLUTION; THE FACILITIES WILL BE DESIGNED, INSTALLED AND MAINTAINED IN SUCH A MANNER AS TO MINIMIZE OR ELIMINATE NOISE POLLUTION;
11. DISTANCES TO NEARBY STRUCTURES WERE VERIFIED BASED ON PUBLICLY AVAILABLE LOT SURVEYS FROM THE TOWN OF CARMEL: 48 WALTON DRIVE, J.F. DOWLING, 09/15/1992; 49 WALTON DRIVE, BADEY & WATSON, 04/18/1946; 53 WALTON DRIVE, BURGESS & BEHR, P.C., 02/26/1980.

ALL OBSOLETE OR UNUSED WIRELESS TELECOMMUNICATIONS ANTENNAS (INCLUDING TOWER SUPPORTS) SHALL BE REMOVED WITHIN 60 DAYS OF CESSATION OF OPERATIONS AT THE SITE. THE TOWN MAY REMOVE SUCH FACILITIES UPON REASONABLE NOTICE AND AN OPPORTUNITY TO BE HEARD AND TREAT THE COST AS A TAX LIEN ON THE PROPERTY. THE PLANNING BOARD MAY ALSO REQUIRE, AT THE TIME OF APPROVAL, THE POSTING OF A BOND SUFFICIENT TO COVER THE COSTS OF REMOVING AN ABANDONED WIRELESS TELECOMMUNICATIONS FACILITY.

HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
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GLENACOM LAKE

ZONING DRAWINGS		
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1	05/07/20	ISSUED FOR ZONING
0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
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PARSIPPANY, NJ 07054
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FAX: 973.739.9710

STATE OF NEW YORK — DAVID E. REVETTE — 101758 — LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

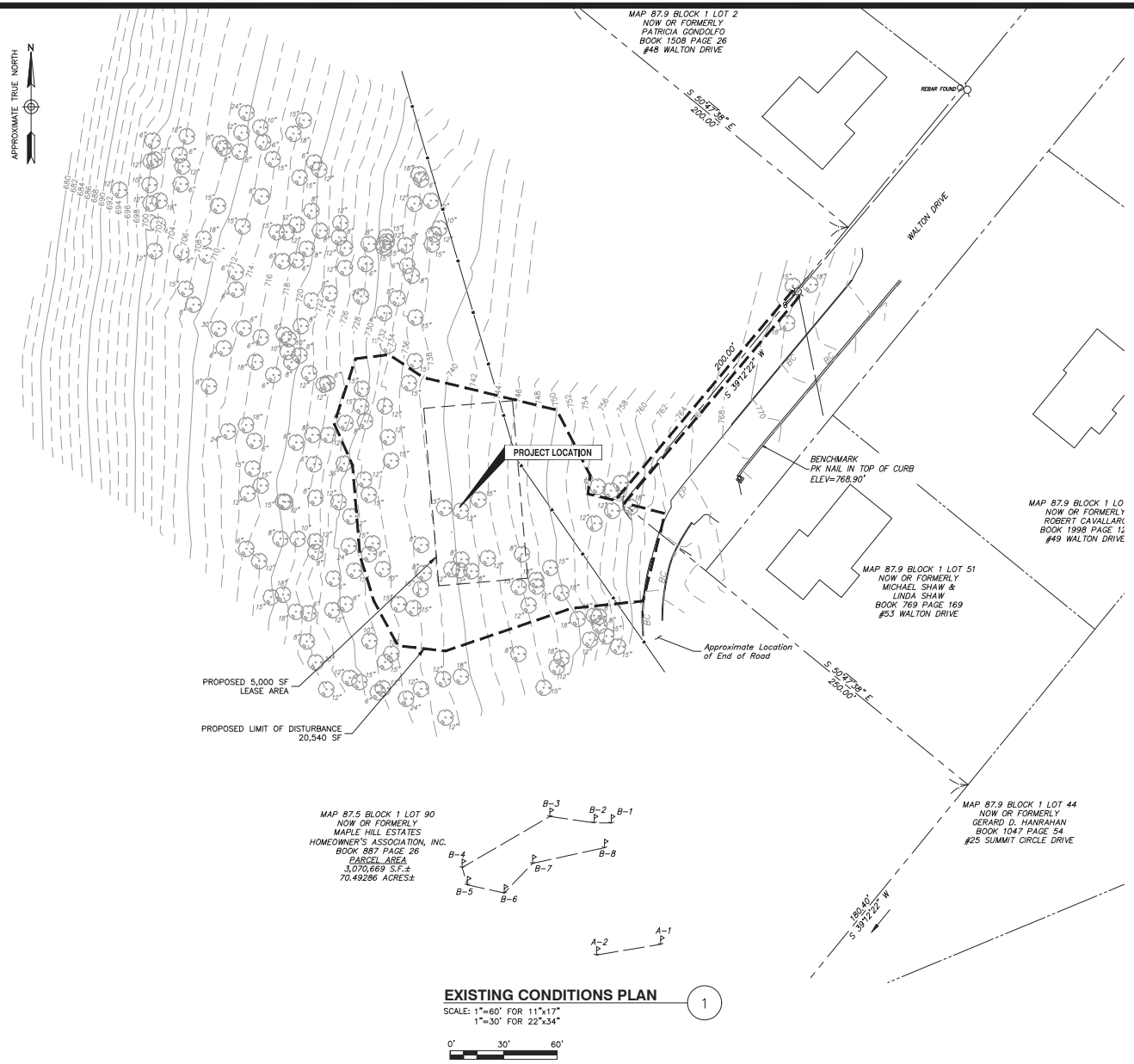
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

SITE PLAN

SHEET NUMBER

Z-6



EXISTING CONDITIONS PLAN

1

SCALE: 1"=60' FOR 11"x17"
1"=30' FOR 22"x34"

0' 30' 60'

NOTES:

1. EXISTING CONDITIONS PLAN IS BASED ON A SURVEY BY LANGAN ENGINEERING DATED 04/10/18.
2. THE SURVEY IS BASED UPON EXISTING PHYSICAL CONDITIONS AT THE SUBJECT SITE, DEED INFORMATION AND THE FOLLOWING REFERENCES:
   - MAP TITLED "FINAL SUBDIVISION PLAT OF MAPLE HILL ESTATES, SITUATE IN TOWN OF CARMEL, COUNTY OF PUTNAM, STATE OF NEW YORK", SCALE: 1"=100', DATED: MAY 22, 1985, PREPARED BY: CASHIN ASSOCIATES, P.C.
3. THE MERIDIAN OF THIS SURVEY IS REFERENCED TO NEW YORK EAST STATE PLANE COORDINATE SYSTEM NAD 83 AS ESTABLISHED THROUGH GPS METHODS.
4. ELEVATIONS SHOWN ARE REFERENCED TO NAVD 88, AS ESTABLISHED THROUGH GPS METHODS.
5. PLANIMETRIC AND TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS AND LANDSCAPE ARCHITECTURE, DPC FIELD WORK COMPLETED DURING THE MONTH OF APRIL 2018.
6. AS PER THE NATIONAL FLOOD INSURANCE PROGRAM FIRM MAP ENTITLED "PUTNAM COUNTY, NEW YORK PANEL 226 OF 256, MAP NUMBER 36079C0226E, EFFECTIVE DATE MARCH 4, 2013" THE PROJECT AREA IS IN ZONE X (UNSHADED).
7. UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC) CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND LOCATIONS WHERE DATA IS OBTAINED DESPITE MEETING THE REQUIRED STANDARD OF CARE, THE SURVEYOR CANNOT, AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES.
8. ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA IS SHOWN FROM FIELD LOCATED SURFACE MARKINGS (BY OTHERS), EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS.
9. UNLESS SPECIFICALLY NOTED HEREON, THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES THE UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.
10. ALL BUILDINGS AND STRUCTURES WERE LOCATED AND MEASURED AT GROUND LEVEL, THE SURVEYOR MAKES NO DETERMINATIONS OR GUARANTEED AS TO THE ABSENCE, EXISTENCE OR LOCATIONS OF UNDERGROUND STRUCTURES, FOUNDATIONS, FOOTINGS, PROJECTIONS, WALLS, TANKS, SEPTIC SYSTEMS, ETC NO TEST PITS, EXCAVATIONS OR GROUND PENETRATING RADAR WERE PERFORMED AS PART OF THIS SURVEY.
11. PRIOR TO ANY DESIGN OR CONSTRUCTION, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
12. WETLANDS DELINEATED BY OTHERS.

HOMELAND TOWERS, LLC
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GLENACOM LAKE

ZONING DRAWINGS		
7	01/26/23	ISSUED FOR ZONING
6	12/22/22	ISSUED FOR ZONING
5	12/02/22	ISSUED FOR ZONING
4	11/22/22	ISSUED FOR ZONING
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0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

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STATE OF NEW YORK
DAVID E REVETTE
101758
LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

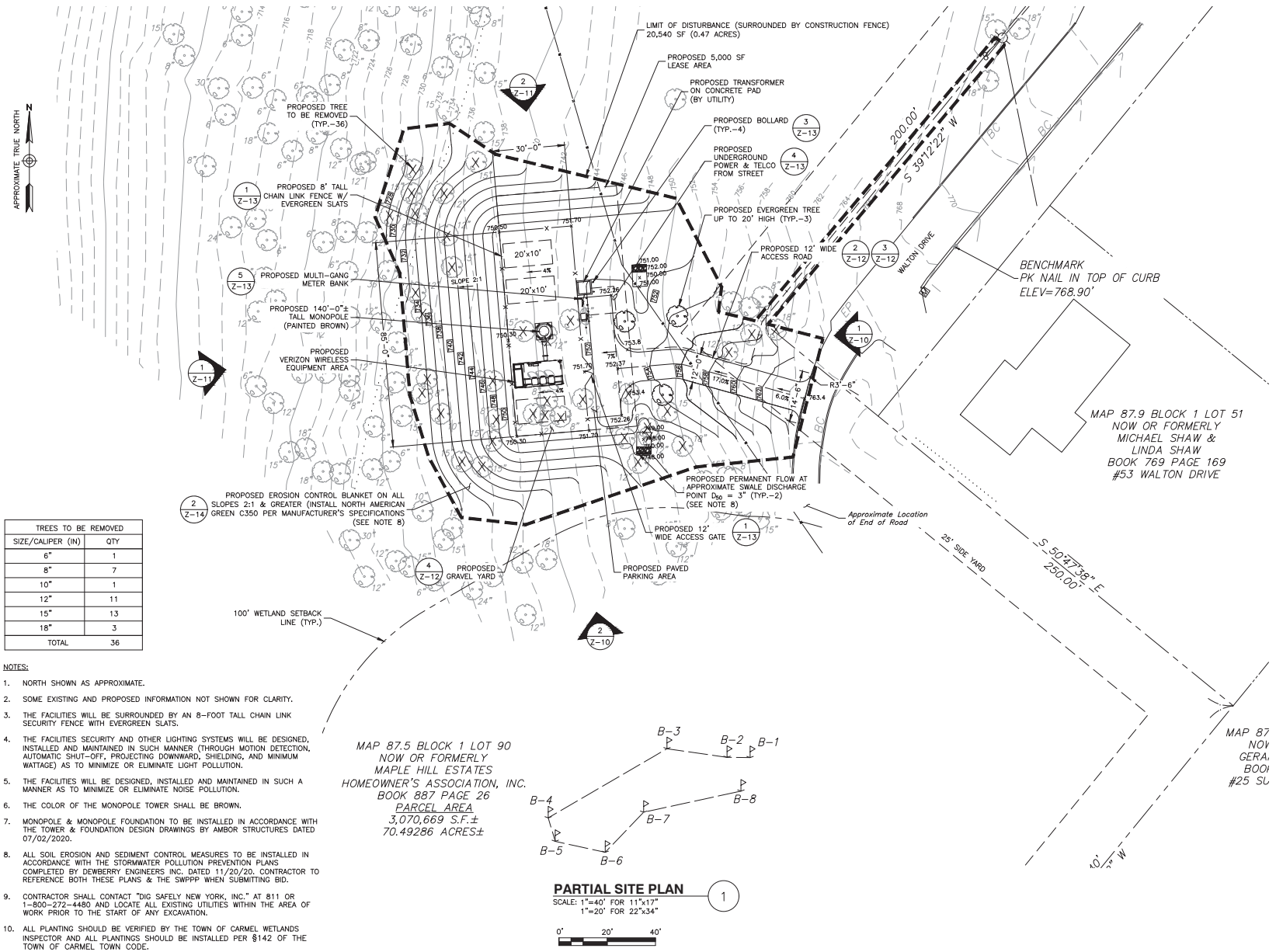
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

EXISTING CONDITIONS PLAN

SHEET NUMBER

Z-7



PARTIAL SITE PLAN

SCALE: 1"=40' FOR 11"x17"
1"=20' FOR 22"x34"

0' 20' 40'

TREES TO BE REMOVED	
SIZE/CALIPER (IN)	QTY
6"	1
8"	7
10"	1
12"	11
15"	13
18"	3
TOTAL	36

NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
3. THE FACILITIES WILL BE SURROUNDED BY AN 8-FOOT TALL CHAIN LINK SECURITY FENCE WITH EVERGREEN SLATS.
4. THE FACILITIES SECURITY AND OTHER LIGHTING SYSTEMS WILL BE DESIGNED, INSTALLED AND MAINTAINED IN SUCH MANNER (THROUGH MOTION DETECTION, AUTOMATIC SHUT-OFF, PROJECTING DOWNWARD, SHIELDING, AND MINIMUM WATTAGE) AS TO MINIMIZE OR ELIMINATE LIGHT POLLUTION.
5. THE FACILITIES WILL BE DESIGNED, INSTALLED AND MAINTAINED IN SUCH A MANNER AS TO MINIMIZE OR ELIMINATE NOISE POLLUTION.
6. THE COLOR OF THE MONOPOLE TOWER SHALL BE BROWN.
7. MONOPOLE & MONOPOLE FOUNDATION TO BE INSTALLED IN ACCORDANCE WITH THE TOWER & FOUNDATION DESIGN DRAWINGS BY AMBOR STRUCTURES DATED 07/02/2020.
8. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLANS COMPLETED BY DEWBERRY ENGINEERS INC. DATED 11/20/20. CONTRACTOR TO REFERENCE BOTH THESE PLANS & THE SWPPP WHEN SUBMITTING BID.
9. CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK, INC." AT 811 OR 1-800-272-4480 AND LOCATE ALL EXISTING UTILITIES WITHIN THE AREA OF WORK PRIOR TO THE START OF ANY EXCAVATION.
10. ALL PLANTING SHOULD BE VERIFIED BY THE TOWN OF CARMEL WETLANDS INSPECTOR AND ALL PLANTINGS SHOULD BE INSTALLED PER §142 OF THE TOWN OF CARMEL TOWN CODE.

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SITE ADDRESS:	

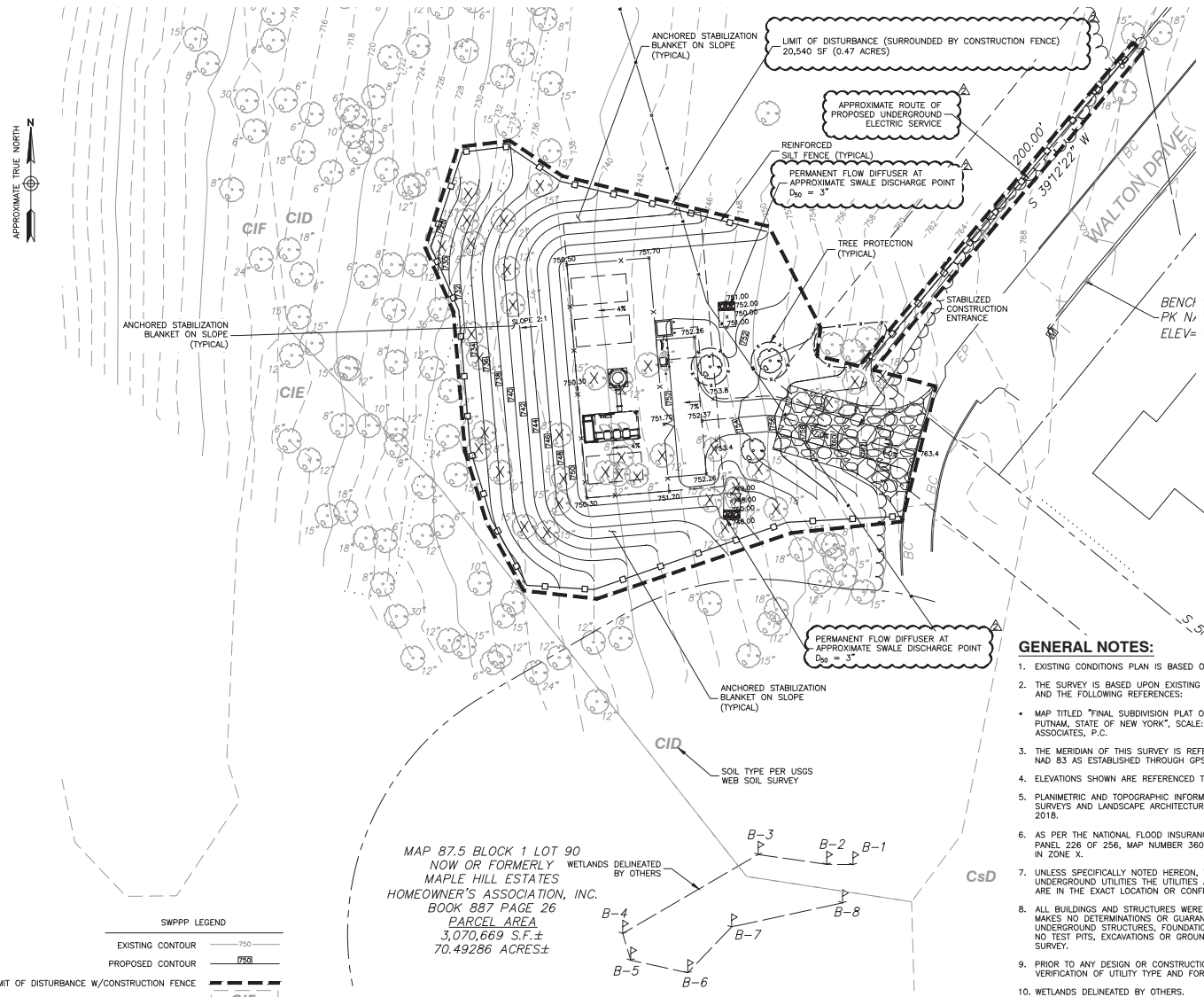
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

PARTIAL SITE PLAN

SHEET NUMBER

Z-8



SOIL EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1"=40' FOR 11"x17"
1"=20' FOR 22"x34"

0' 20' 40'

SEQUENCE OF OPERATIONS

1 Pre-Construction Activities

- Conduct pre-construction meeting.
- Identify contractor / subcontractor trained contractor responsible for implementation of the SWPPP and provide certification (see Appendix F for a copy of the certification).
- Identify on-site and downstream surface water bodies and install controls to protect them from sedimentation.
- Establish temporary stone construction entrance pad to capture mud and debris from the tires of construction vehicles.
- Install perimeter sediment controls such as silt fences, as shown on the project plans.
- Install temporary construction fencing as shown on the project plans or as directed by the site engineer.
- All earth disturbances during this phase should be limited to work necessary to install erosion and sedimentation controls.
- Owner's qualified inspector to inspect completed erosion and sediment control measures as required

2 During Construction Activities

- Stabilize soils with seed and mulch and plantings upon completion of work and at the end of each phase. The maximum time limit for any soil exposure shall be 7 days.
- Maintain soil erosion and sediment control measures throughout construction phase. Remove phased measures as appropriate at the end of phase.
- Completely stabilize with seed, mulch, plantings and other measures, or impervious cover.
- The applicant or developer or their representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices per NYS DEC requirements

Total Disturbance: 20,540 SF

3 Post Construction Activities

- Ensure that all surfaces are completely stabilized with seed and mulch or impervious cover. Do not leave any exposed soil.
- After site work is completed perform routine inspection and maintenance and insure proper vegetative cover is maintained at the site.
- Remove temporary erosion and sediment control measures.
- Submit Notice of Termination.

GENERAL NOTES:

1. EXISTING CONDITIONS PLAN IS BASED ON A SURVEY BY LANGAN ENGINEERING DATED 04/10/18.
2. THE SURVEY IS BASED UPON EXISTING PHYSICAL CONDITIONS AT THE SUBJECT SITE, DEED INFORMATION AND THE FOLLOWING REFERENCES:
   - MAP TITLED "FINAL SUBDIVISION PLAT OF MAPLE HILL ESTATES, SITUATE IN TOWN OF CARMEL, COUNTY OF PUTNAM, STATE OF NEW YORK", SCALE: 1"=100', DATED: MAY 22, 1985, PREPARED BY: CASHIN ASSOCIATES, P.C.
3. THE MERIDIAN OF THIS SURVEY IS REFERENCED TO NEW YORK EAST STATE PLANE COORDINATE SYSTEM NAD 83 AS ESTABLISHED THROUGH GPS METHODS.
4. ELEVATIONS SHOWN ARE REFERENCED TO NAVD 88, AS ESTABLISHED THROUGH GPS METHODS.
5. PLANIMETRIC AND TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS AND LANDSCAPE ARCHITECTURE, DPC FIELD WORK COMPLETED DURING THE MONTH OF APRIL 2018.
6. AS PER THE NATIONAL FLOOD INSURANCE PROGRAM FIRM MAP ENTITLED "PUTNAM COUNTY, NEW YORK PANEL 226 OF 256, MAP NUMBER 36079C0226E, EFFECTIVE DATE MARCH 4, 2013" THE PROJECT AREA IS IN ZONE X.
7. UNLESS SPECIFICALLY NOTED HEREON, THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES THE UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.
8. ALL BUILDINGS AND STRUCTURES WERE LOCATED AND MEASURED AT GROUND LEVEL, THE SURVEYOR MAKES NO DETERMINATIONS OR GUARANTEED AS TO THE ABSENCE, EXISTENCE OR LOCATIONS OF UNDERGROUND STRUCTURES, FOUNDATIONS, FOOTINGS, PROJECTIONS, WALLS, TANKS, SEPTIC SYSTEMS, ETC NO TEST PITS, EXCAVATIONS OR GROUND PENETRATING RADAR WERE PERFORMED AS PART OF THIS SURVEY.
9. PRIOR TO ANY DESIGN OR CONSTRUCTION, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
10. WETLANDS DELINEATED BY OTHERS.
11. ALL FILL BROUGHT TO THE SITE MUST BE CERTIFIED PER NYSDEC REGULATIONS AND MANIFESTS/CERTIFICATION OF THE FILL MATERIAL BEING DELIVERED SHOULD BE PROVIDED.
    a. APPROXIMATE VOLUME OF FILL REQUIRED TO ESTABLISH PROPOSED GRADES: 3,346 CUBIC YARDS.
12. TREE REMOVAL WILL OCCUR BETWEEN OCTOBER 1 AND MARCH 31, WHEN BATS ARE IN HIBERNATION; AND
13. BRIGHT ORANGE CONSTRUCTION FENCING AND/OR FLAGGING (OR SIMILAR) WILL BE USED TO DEMARCATE TREES TO BE PROTECTED COMPARED WITH THOSE TO BE CUT PRIOR TO TEH INITIATION OF ANY CONSTRUCTION.

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0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

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STATE OF NEW YORK — DAVID E. REVETTE — 101758 — LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

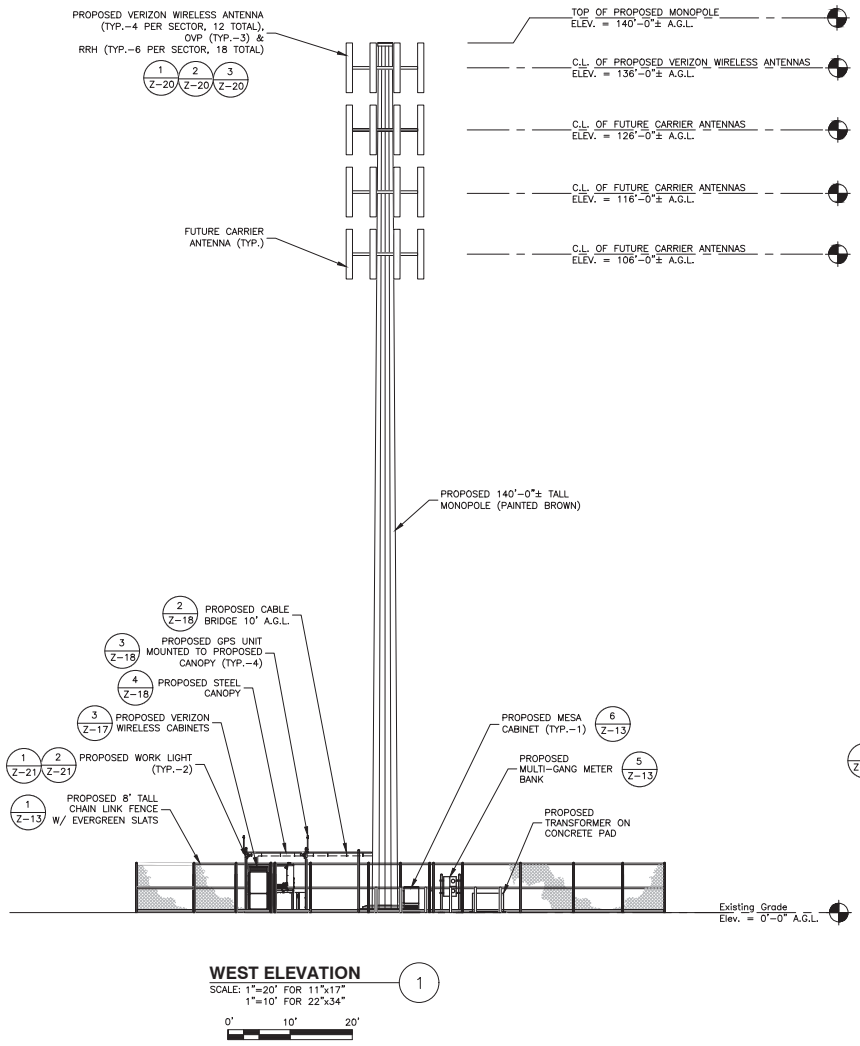
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

SOIL EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER

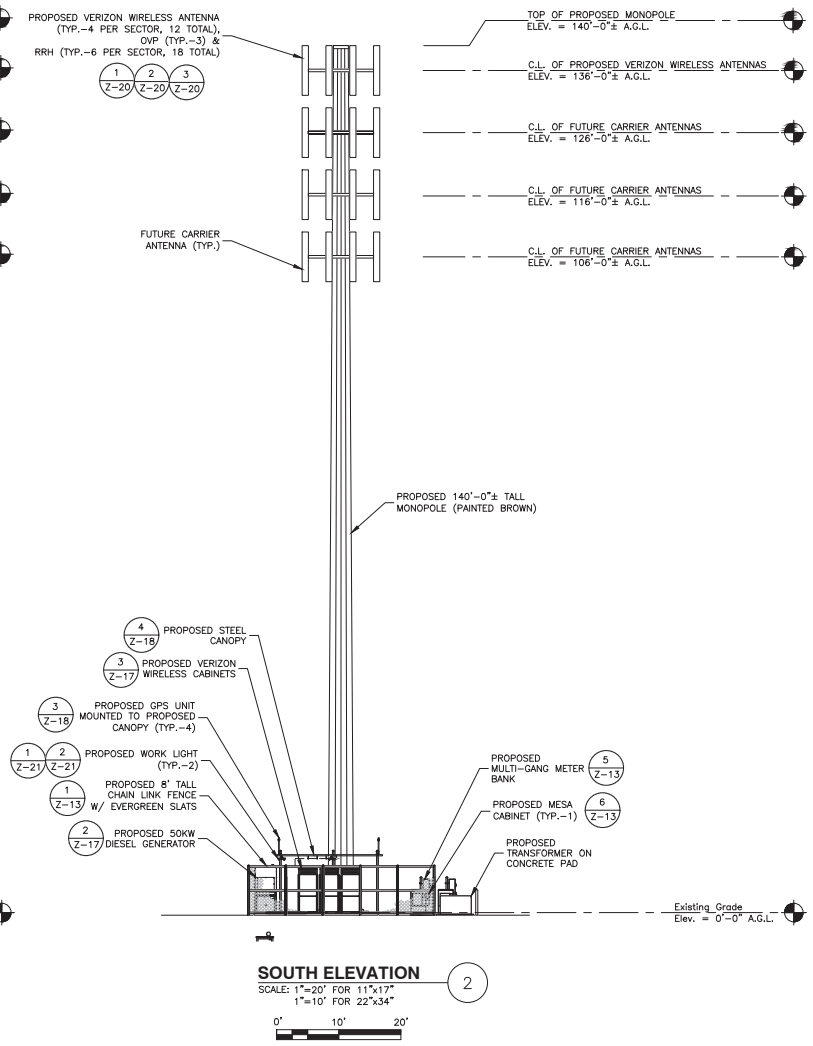
Z-9



WEST ELEVATION 1

SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

0' 10' 20'



SOUTH ELEVATION 2

SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

0' 10' 20'

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PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

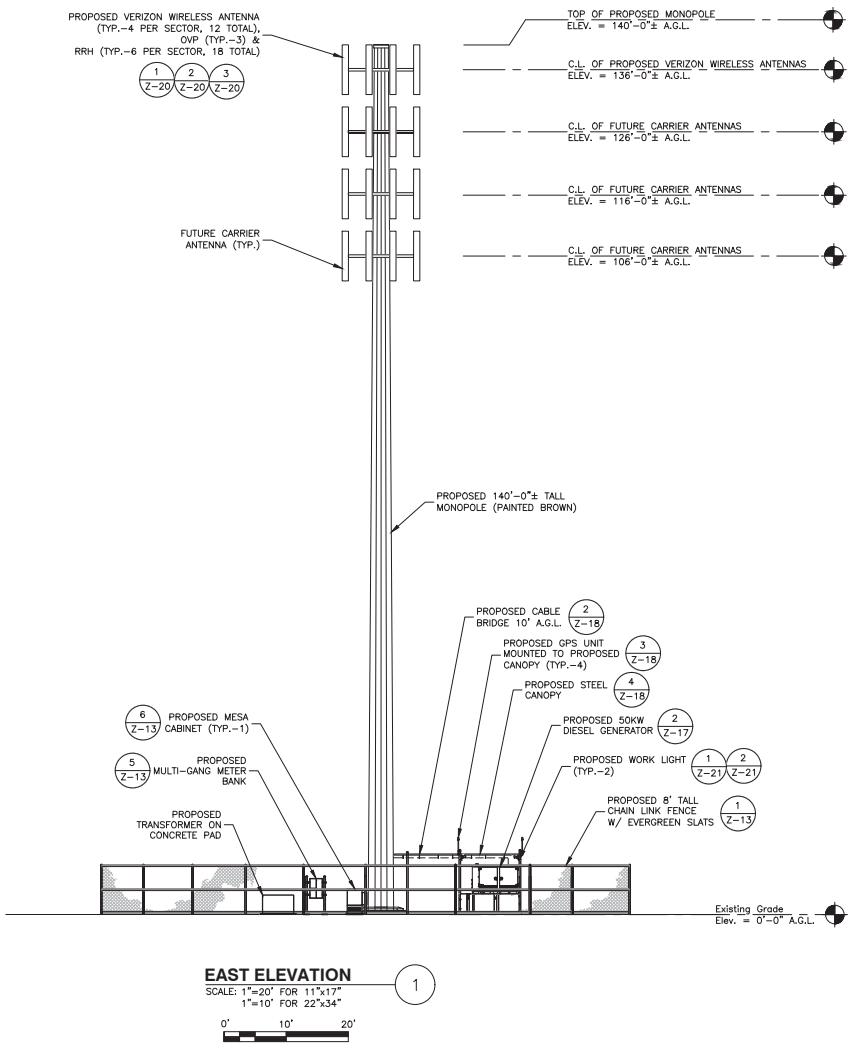
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

ELEVATIONS–1

SHEET NUMBER

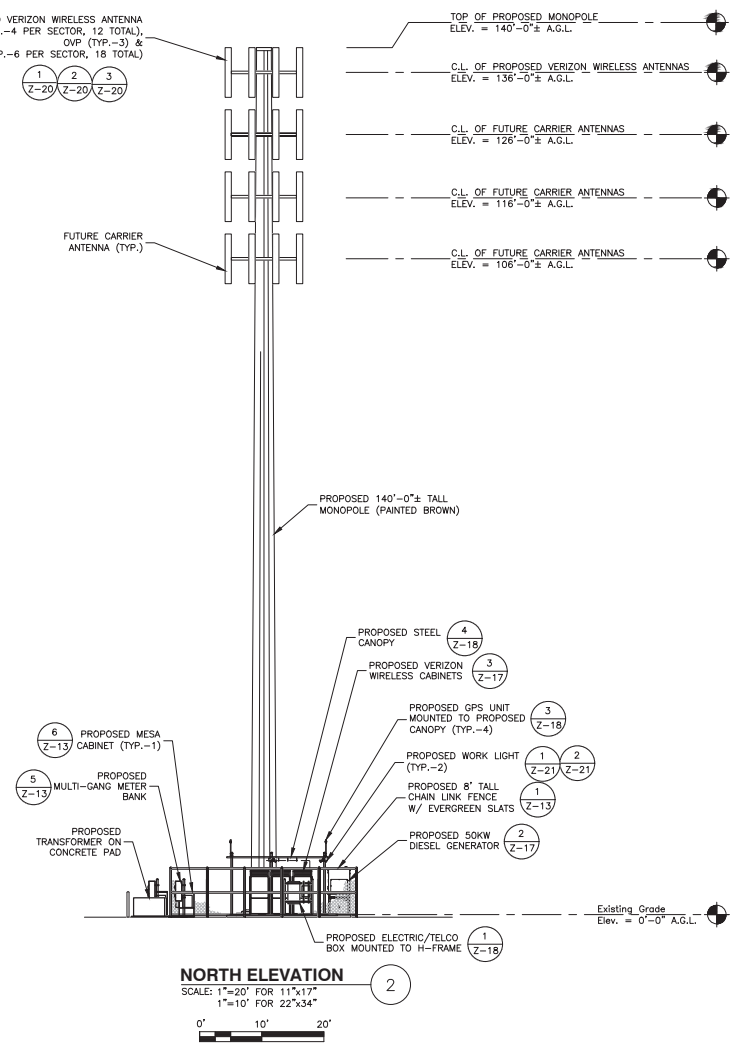
Z–10



EAST ELEVATION 1

SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

0' 10' 20'



NORTH ELEVATION 2

SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

0' 10' 20'

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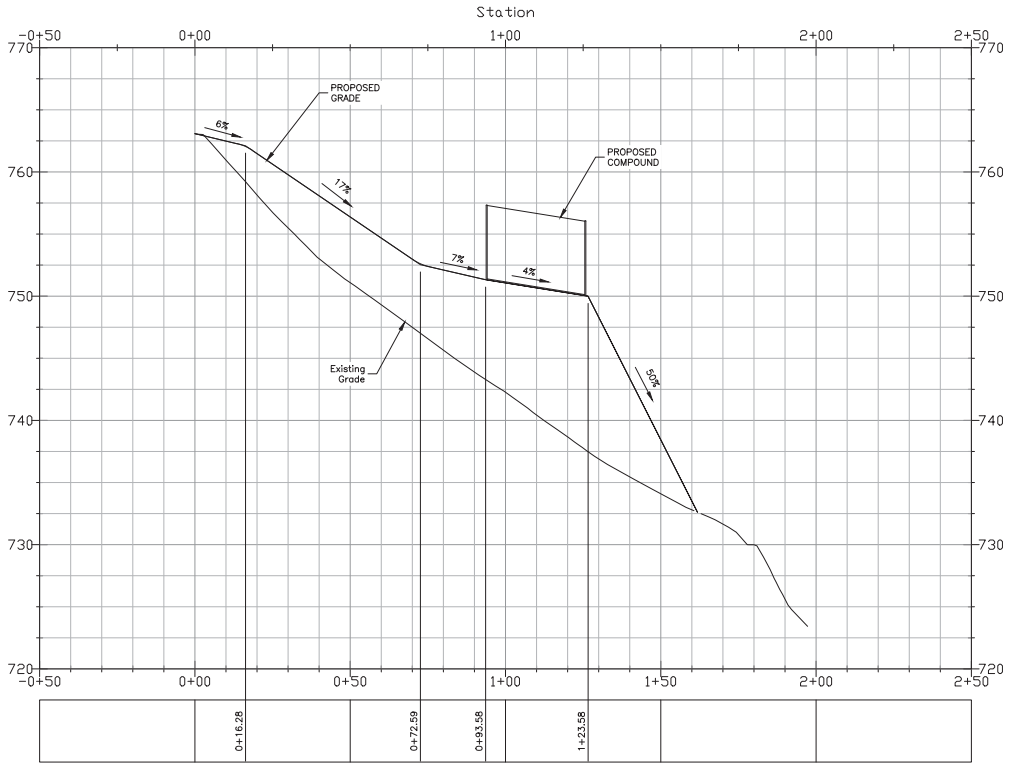
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

ELEVATIONS–2

SHEET NUMBER

Z–11

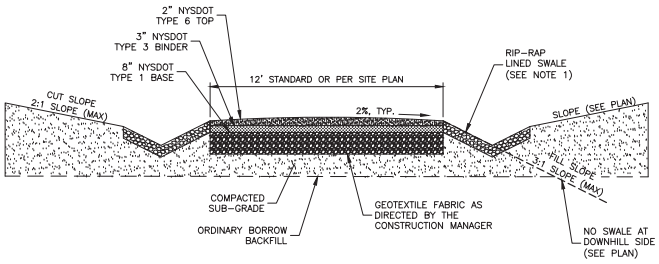


ACCESS DRIVEWAY PROFILE 1

SCALE: HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

0' 20' 40'
HORIZONTAL: 1"=20'

0' 5' 10'
VERTICAL: 1"=5'

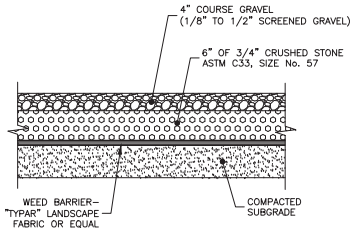


NOTES:

1. LINE SWALE WITH RIP-RAP 6" MIN. DIA. LOCATION AS NOTED ON PLANS.
2. SUBGRADE AND FILL SHALL CONSIST OF CLEAN SOIL. NO DELETERIOUS MATERIALS OR ORGANICS TO BE USED.
3. REMOVE MINIMUM OF 12" OF TOP SOIL AND ORGANICS BEFORE COMMENCING ACCESS ROAD.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING.
5. THE CONTRACTOR SHALL COMPLY WITH THE RECOMMENDATIONS CONTAINED WITHIN THE GEOTECHNICAL REPORT PREPARED FOR THIS SITE WHEN NECESSARY.
6. ALL GRANULAR FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR WITHIN 3% OF OPTIMUM MOISTURE CONTENT OR AS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER.

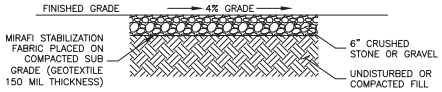
ROAD CROSS SECTION WITH SWALES 2

SCALE: N.T.S.



TEMPORARY GRAVEL ACCESS ROAD DETAIL 3

SCALE: N.T.S.



GRAVEL YARD DETAIL 4

SCALE: N.T.S.

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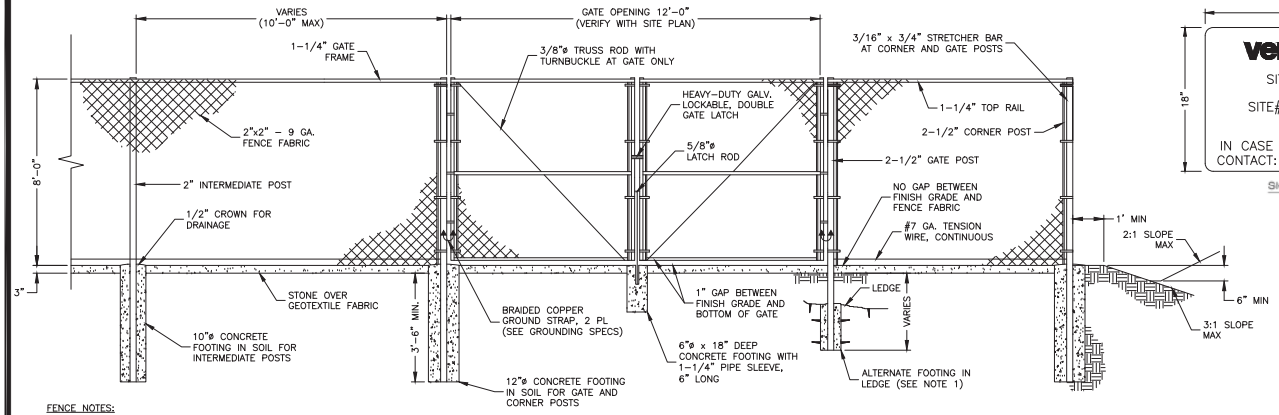
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

ACCESS DRIVEWAY PROFILE & DETAILS

SHEET NUMBER

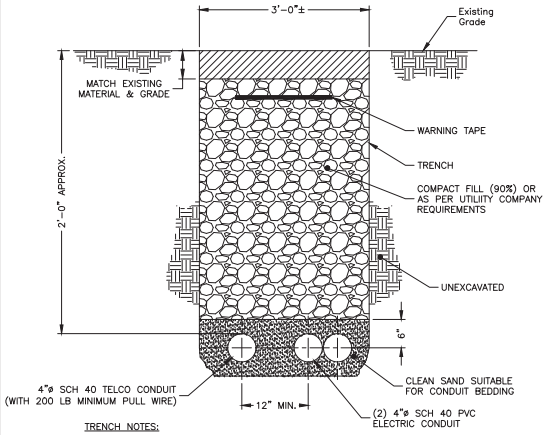
Z-12



FENCE NOTES:

1. ALTERNATE FOOTINGS FOR ALL FENCE POSTS IN LEDGE: IF LEDGE IS ENCOUNTERED AT GRADE, OR AT A DEPTH SHALLOWER THAN 3'-6", CORE DRILL AN 8" DIA HOLE 18" INTO THE LEDGE. CENTER POST IN THE HOLE AND FILL WITH CONCRETE OR GROUT. IF LEDGE IS BELOW FINISH GRADE, COAT BACKFILLED SECTION OF POST WITH COAL TAR, AND BACKFILL WITH WELL-DRAINING GRAVEL.
2. ATTACH EACH GATE WITH 1-1/2 PAIR OF NON-LIFT-OFF TYPE, MALLEABLE IRON OR FORGING, PIN-TYPE HINGES. ASSEMBLIES SHALL ALLOW FOR 180° OF GATE TRAVEL.
3. INSTALL SWALE AROUND COMPOUND (MIN. DEPTH: 6") TO ALLOW FOR DRAINAGE.
4. CONCRETE FOOTINGS SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI UNLESS OTHERWISE NOTED.
5. INSTALL PRIVACY EVERGREEN SLATS.

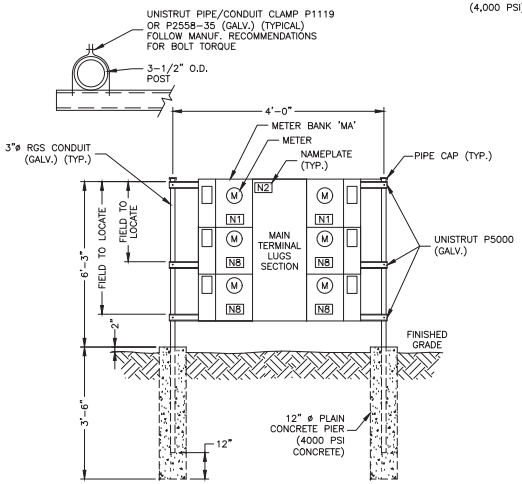
FENCE AND ACCESS GATE (1)
SCALE: N.T.S.



TRENCH NOTES:

1. IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.
2. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL. COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
3. IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE, CONTRACTOR SHALL HAND DIG U/G TRENCHING.

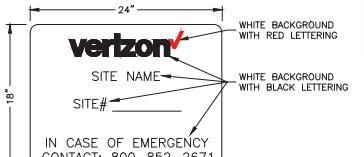
JOINT SERVICE TRENCH BURIED CONDUIT (ELECTRIC/TELEPHONE) (4)
SCALE: N.T.S.



NOTE:

1. MOUNT METER BANK AND MAIN LUGS SECTION PER MANUFACTURER'S RECOMMENDATION AND INSTRUCTIONS.

MULTIPLE POWER METER MOUNTING (5)
SCALE: N.T.S.



SIGNAGE DETAIL (2)
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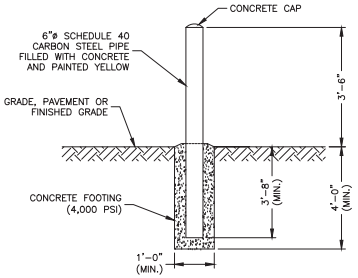

BOLLARD DETAIL (3)
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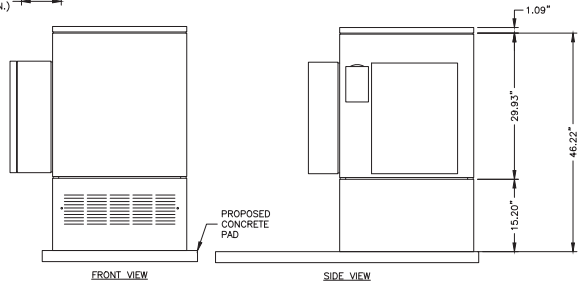

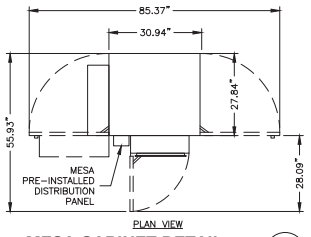

NOTE:

MESA CABINET BASE NOT NEEDED ON STEEL PLATFORMS

MESA CABINET DETAIL (6)
SCALE: N.T.S.

HOMELAND TOWERS, LLC
9 HARMONY STREET
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(203) 297-6345

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verizon WIRELESS
4 CENTEROCK ROAD
WEST NYACK, NY 10994

GLENACOM LAKE

ZONING DRAWINGS		
7	01/26/23	ISSUED FOR ZONING
6	12/22/22	ISSUED FOR ZONING
5	12/02/22	ISSUED FOR ZONING
4	11/22/22	ISSUED FOR ZONING
3	11/04/22	ISSUED FOR ZONING
2	10/26/22	ISSUED FOR ZONING
1	05/07/20	ISSUED FOR ZONING
0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

Dewberry®
Dewberry Engineers Inc.
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PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

STATE OF NEW YORK — DAVID REVETTE — 101758 — LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

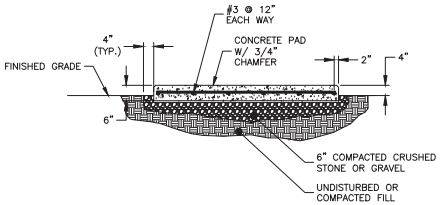
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

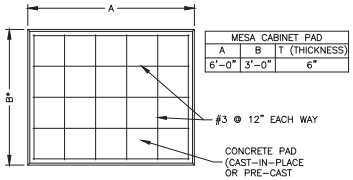
SHEET TITLE

CONSTRUCTION DETAILS

SHEET NUMBER

Z-13





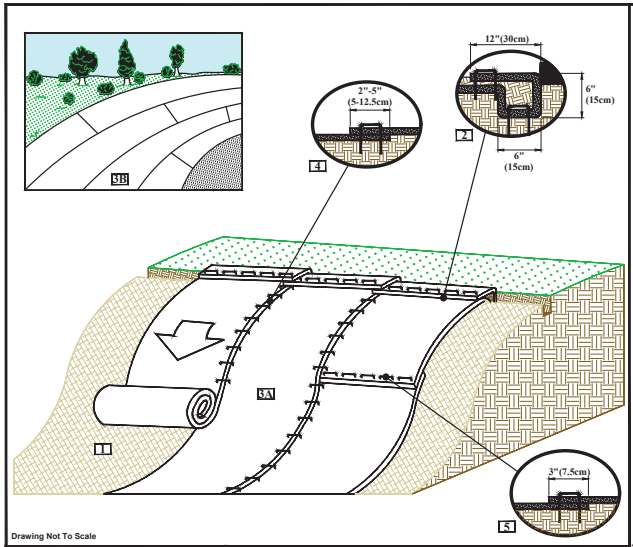
MESA CABINET PAD		
A	B	T (THICKNESS)
6'-0"	3'-0"	6"

NOTES:

1. USE GALVANIZED HILTI EXPANSION ANCHORS (OR APPROVED EQUAL) FOR EQUIPMENT ANCHORAGE.
2. VERIFY THE SIZE OF THE CABINET STAND WITH THE SUPPLIER & UTILITY.
3. FOR SIZE AND LOCATION OF ANCHORS AND OTHER REQUIREMENTS, SEE EQUIPMENT VENDOR DRAWINGS.

OUTDOOR PAD FOR MINOR EQUIPMENT

SCALE: N.T.S. — 1



SLOPE INSTALLATION DETAIL

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2" - 5" (5-12.5cm) overlap depending on the RECPs type.
5. Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire RECPs width.

*NOTE:
In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd.
Poseyville, IN 47633
PH: 800-772-2040
www.nagreen.com

Disclaimer:
The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

Drawn on: 5-4-17

NOTE:

1. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLANS COMPLETED BY DEWBERRY ENGINEERS INC. DATED 11/20/20. CONTRACTOR TO REFERENCE BOTH THESE PLANS & THE SWPPP WHEN SUBMITTING BID.

EROSION CONTROL BLANKET DETAIL

SCALE: N.T.S. — 2

HOMELAND TOWERS, LLC
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STATE OF NEW YORK — DAVID REVETTE — 101758 — LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

CONSTRUCTION DETAILS II

SHEET NUMBER

Z-14

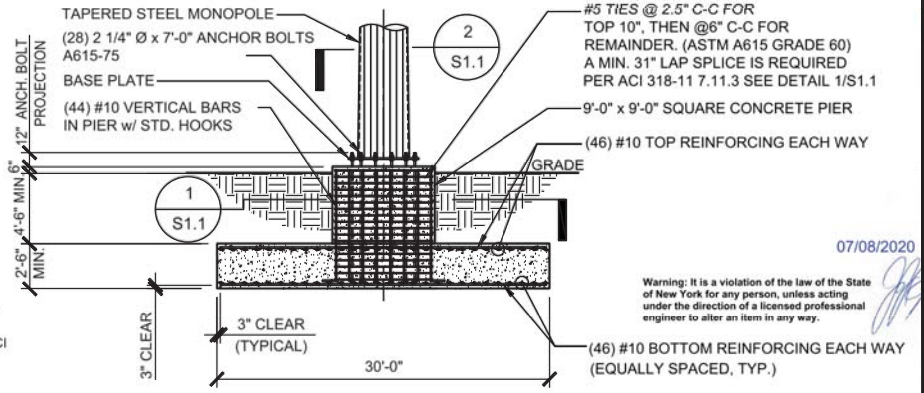
GENERAL NOTES:

1. FOUNDATION DESIGN PER 2020 NEW YORK STATE BUILDING CODE (2018 INTERNATIONAL CODES) AND PER SOIL REPORT BY DELTA OAKS GROUP PROJECT NO.GEO20-06521-08 DATED JUNE 25, 2020.

   SOIL PARAMETERS:

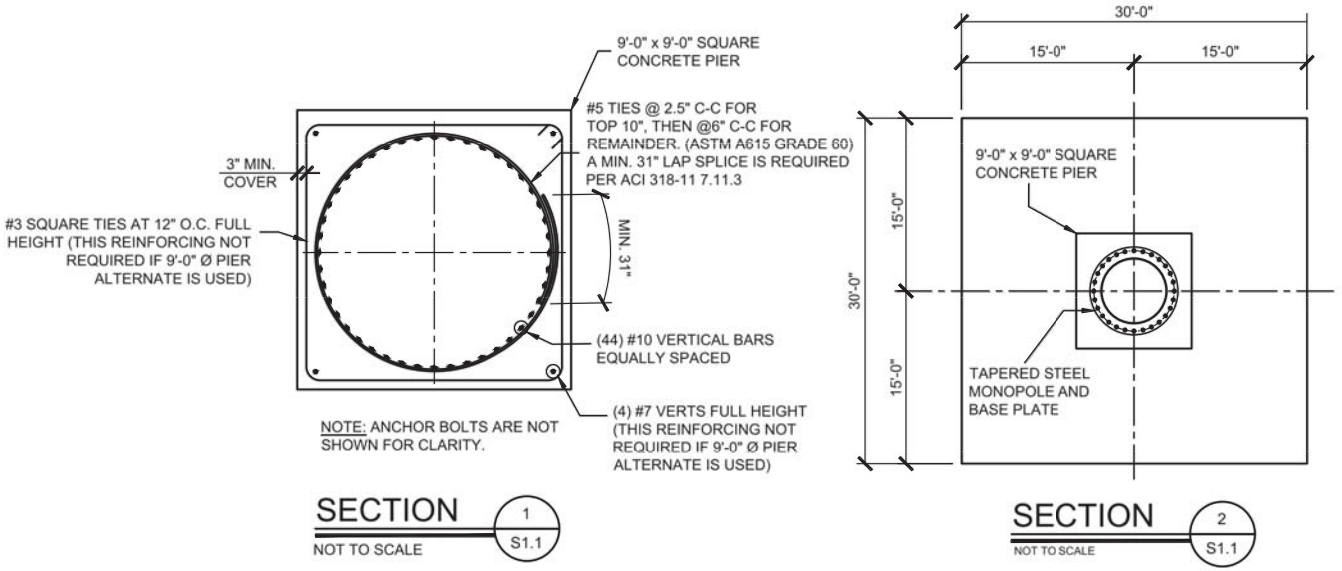
TOP	BOT.	UNIT WT. (PCF)	NET ULTIMATE BEARING (PSF)	COHESION (PSF)	FRICTION ANGLE (DEG.)
0	0.3	105	-	0	0
0.3	2.0	105	-	0	28
2.0	5.0	125	-	0	36
5.0	7.0	120	30,000	0	35

2. CONCRETE SHALL BE 4500 P.S.I. (MINIMUM) @ 28 DAYS COMPRESSIVE STRENGTH.
3. FOUNDATION INSTALLATION SHALL BE OBSERVED BY AN ENGINEER FROM DELTA OAKS GROUP.
4. MAT/PIER FOUNDATION INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 318 LATEST EDITION.
5. ALL REINFORCING SHALL BE A.S.T.M. A615 GRADE 60.
6. REFER TO SOIL REPORT FOR PROPER PREPARATION AND INSTALLATION REQUIREMENTS.
7. CONTRACTOR IS RESPONSIBLE FOR SHORING WORK ETC.



SPREAD FOUNDATION

NOT TO SCALE



SECTION 1/S1.1

NOT TO SCALE

SECTION 2/S1.1

NOT TO SCALE

NOTE:

1. MONOPOLE FOUNDATION TO BE INSTALLED IN ACCORDANCE WITH THE TOWER & FOUNDATION DESIGN DRAWINGS BY AMBOR STRUCTURES DATED 07/02/2020.

FOUNDATION DESIGN 1

SCALE: N.T.S.

AMBOR STRUCTURES

bennett&pless

Experience Structural Expertise
Atlanta, Georgia • Chattanooga, Tennessee
Boca Raton, Florida

750 Park of Commerce Dr., Suite 200
Boca Raton, Florida 33487
Tel 561 282 2676

B & P Job Number 20.03.008.033

STATE OF NEW YORK
JOHN BOZZETTO
LICENSED PROFESSIONAL ENGINEER
90068

07/08/2020

Revisions:

NO:	DESCRIPTION:	DATE:

DATE: 07/07/2020

SITE NAME (LOCATION): NY054 GLENCOMA LAKE
WALTON DRIVE MAHOPAC, NEW YORK 10541

JOB NAME: MONOPOLE CELL TOWER - FOUNDATION DESIGN

DRAWING TITLE: SPREAD FOUNDATION DETAIL AND SECTION

SCALE: NOT TO SCALE

REVIEWED BY: JB

DRAWN BY: CS

SHEET NUMBER: S-1.1

HOMELAND TOWERS, LLC
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NEW YORK SMSA LIMITED PARTNERSHIP
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ZONING DRAWINGS		
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STATE OF NEW YORK
DAVID M. REVETTE
101758
LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
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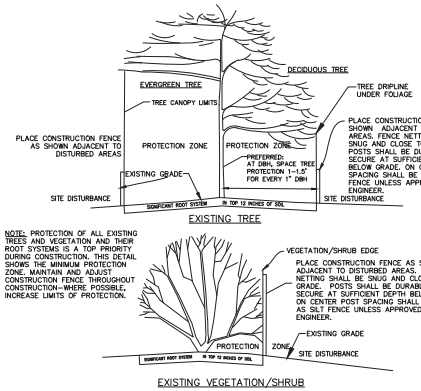
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

CONSTRUCTION DETAILS III

SHEET NUMBER

Z-15



EXISTING TREE

NOTE: PROTECTION OF ALL EXISTING TREES AND VEGETATION AND THEIR ROOT SYSTEMS IS A TOP PRIORITY DURING CONSTRUCTION. THIS DETAIL SHOWS THE MINIMUM PROTECTION ZONE. MAINTAIN AND ADJUST CONSTRUCTION FENCE THROUGHOUT CONSTRUCTION--WHERE POSSIBLE, INCREASE LIMITS OF PROTECTION.

EXISTING VEGETATION/SHRUB

1 TREE / VEGETATION PROTECTION CONSTRUCTION FENCE DETAILS

N.T.S.

SEDIMENT AND EROSION CONTROL NOTES

1. INSTALL ALL SOIL EROSION CONTROLS REQUIRED BY THE CONTRACT BEFORE ANY CONSTRUCTION ACTIVITIES BEGIN. NOTIFY THE ENGINEER TO PERFORM A PRECONSTRUCTION STORMWATER INSPECTION. NO DISTURBANCE OF THE SITE SHALL OCCUR UNTIL STORMWATER AND EROSION CONTROL MEASURES ARE ACCEPTED BY THE ENGINEER.
2. NECESSARY MEASURES SHALL BE TAKEN TO REDUCE THE DISTURBANCE OF EXISTING VEGETATED AREAS TO THE MINIMUM AS REQUIRED BY THE WORK. THESE MEASURES SHALL INCLUDE THE CLEAR MARKING OF ALL CONSTRUCTION LIMITS AND THE DELINEATION OF ALL VEGETATED AREAS TO BE PROTECTED SO AS TO EXCLUDE ALL EQUIPMENT.
3. PROVIDE TEMPORARY SEEDING AND MULCH ON ANY AREA WHERE THE EXISTING VEGETATED COVER OR OTHER PROTECTIVE SURFACE HAS BEEN REMOVED OR SUBSTANTIALLY DISTURBED AND FURTHER WORK ON THAT AREA WILL NOT OCCUR WITHIN THE SUCCEEDING 14 CALENDAR DAYS.
4. LIMIT ACCESS ON UNSTABILIZED SOIL SURFACES TO THOSE VEHICLES NECESSARY FOR THE WORK. DO NOT PARK EMPLOYEES VEHICLES ON ERODIBLE SOIL SURFACES. STABILIZED AND PROTECT SOIL SURFACES TO MINIMIZE THE GENERATION OF DUST AND THE OFF-SITE VEHICLE TRACKING OF SOIL MATERIALS.
5. THE CONDITION OF ALL EROSION CONTROL MEASURES IN THE CONSTRUCTION SITE SHALL BE JOINTLY INSPECTED AT LEAST ONCE EVERY WEEK BY THE CONTRACTOR. DEFICIENCIES FOUND SHALL BE CORRECTED WITHIN THREE CALENDAR DAYS OF INSPECTION.
6. NO DEVIATIONS FROM THE DETAILS SHOWN SHALL BE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

WINTER STABILIZATION NOTES

ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED AND MAINTAINED ACCORDING TO THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

1. SITE STABILIZATION – ALL BARE/EXPOSED SOILS SHALL BE STABILIZED BY AN ESTABLISHED VEGETATION, STRAW OR MULCH, MATTING, ROCK OR OTHER APPROVED PRODUCT SUCH AS ROLLED EROSION CONTROL PRODUCT. SEEDING OF AREAS ALONG WITH MULCHING MAY BE USED, HOWEVER SEEDING ALONE IS NOT CONSIDERED ACCEPTABLE FOR PROPER STABILIZATION.

2. SILT FENCE – SILT FENCE BARRIERS SHALL BE PROPERLY INSTALLED AT ALL LOCATIONS SHOWN ON THE CONTRACT DRAWINGS.

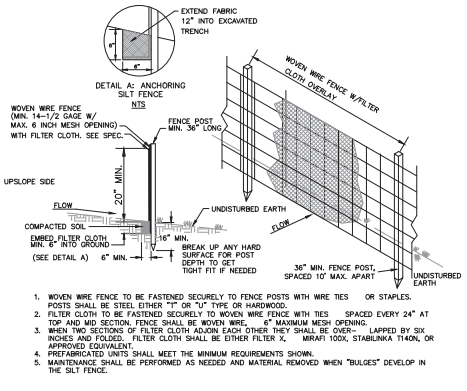
3. SLOPES – ALL SLOPES AND GRADES SHALL BE PROPERLY STABILIZED. ROLLED EROSION CONTROL PRODUCTS SHALL BE USED ON ALL SLOPES GREATER THAN 3:1 (H:V), OR AS CALLED FOR ON THE CONTRACT DRAWINGS.

4. SOIL STOCKPILES – STOCKPILED SOILS SHALL BE PROTECTED BY THE USE OF ESTABLISHED VEGETATION, AN ANCHORED--DOWN STRAW OR MULCH, ROLLED EROSION CONTROL PRODUCT OR OTHER DURABLE COVERING. A BARRIER SHALL BE INSTALLED AROUND THE PILE TO PREVENT ANY EROSION AWAY FROM THAT LOCATION.

5. CONSTRUCTION ENTRANCE – ALL ENTRANCE/EXIT LOCATIONS TO THE SITE SHALL BE PROPERLY STABILIZED AND MAINTAINED TO ACCOMMODATE SNOW MANAGEMENT AS SET FORTH IN THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

6. SNOW MANAGEMENT – SNOW MANAGEMENT SHALL NOT DESTROY OR DEGRADE EROSION AND SEDIMENT CONTROL PRACTICES.

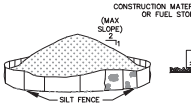
FROZEN GROUND, WINTER CONDITIONS AND EQUIPMENT CAN AFFECT EROSION AND SEDIMENT CONTROL PRACTICES. CHECK FOR DAMAGE DURING MONTHLY INSPECTIONS AND REPAIR AS NECESSARY. THIS IS ESPECIALLY IMPORTANT DURING THAWS AND PRIOR TO SPRING RAIN EVENTS. WEEKLY INSPECTIONS SHALL RESUME NO LATER THAN MARCH 15 OR AS DIRECTED BY THE ENGINEER.



1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE. 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER- LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

2 REINFORCED SILT FENCE DETAIL

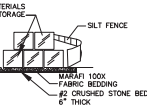
N.T.S.



SOIL OR MATERIAL STOCKPILE

NTS

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE. THE AREA SHALL NOT BE WITHIN THE DRIPLINE OR CANOPY OF EXISTING TREES. THE LOCATION MUST BE PRE-APPROVED BY THE ENGINEER PRIOR TO DELIVERY OF ANY MATERIALS.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2(H) TO 1(V).
3. SILT FENCING SHALL BE PLACED FIVE (5)-FEET DOWNSLOPE OF EACH PILE. UPON COMPLETION OF SOIL STOCKPILING, TOPSOIL SHALL BE STABILIZED WITH SEED AND MULCH IF NOT TO BE DISTURBED/UTILIZED WITHIN FOURTEEN (14) DAYS.
4. SEE ADDITIONAL DETAILS FOR INSTALLATION OF SILT FENCE
5. TEMPORARY PERIMETER DIKES MAY BE REQUIRED TO DIRECT CLEAN RUNOFF FROM STOCKPILE AREAS.



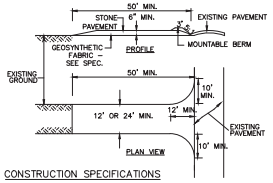
FUEL, EQUIPMENT, OR MATERIAL STORAGE AREA

NTS

1. AREA CHOSEN FOR STORAGE OPERATIONS SHALL BE DRY AND STABLE. THE AREA SHALL NOT BE WITHIN THE DRIPLINE OR CANOPY OF TREES. THE LOCATION MUST BE PRE-APPROVED BY THE ENGINEER PRIOR TO DELIVERY OF ANY MATERIALS.
2. NO STOCKPILE AREA SHALL BE LOCATED WITHIN FIFTY (50) FEET OF SURFACE WATER, FLOODPLAIN, SLOPE, DRAINAGE FACILITY OR ROADWAY.
3. IF STABLE SURFACE NOT AVAILABLE, THE TOP SIX (6) INCHES OF NATIVE MATERIAL SHALL BE EXCAVATED FROM THE MATERIAL/FUEL STORAGE AREA AND STOCKPILED TO REUSE FOR RESTORATION OF THIS AREA. IN THE AREA EXCAVATED, PLACE SEPARATION FABRIC AND SIX (6) INCHES OF #2 CRUSHED STONE BEDDING. SEE SPECIFICATIONS. IF APPROVED BY THE ENGINEER, USE OF EXISTING GRAVEL AREAS MAY BE USED IN LIEU OF EXCAVATION, STONE, AND FABRIC.
4. SILT FENCING SHALL BE PLACED FIVE (5) FEET DOWNSLOPE OF STORAGE AREA.
5. TEMPORARY PERIMETER DIKES MAY BE REQUIRED TO DIRECT CLEAN RUNOFF FROM STORAGE AREAS.
6. REMOVE ALL MATERIALS INCLUDING STONE AND FABRIC WHEN NEED FOR STORAGE IS OVER. RESTORE TO ORIGINAL GRADE WITH STOCKPILED EXCAVATED SOIL (NO FOREIGN DEBRIS) APPROVED BY THE ENGINEER.

5 CONSTRUCTION STOCKPILE / STORAGE AREA DETAILS

N.T.S.



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

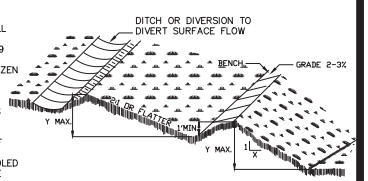
6 STABILIZED CONSTRUCTION ENTRANCE DETAILS

N.T.S.

1. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
2. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
5. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.
6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
7. ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
8. EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
9. FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.
10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
11. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
12. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
13. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
14. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.

3 LANDGRADING SPECIFICATIONS

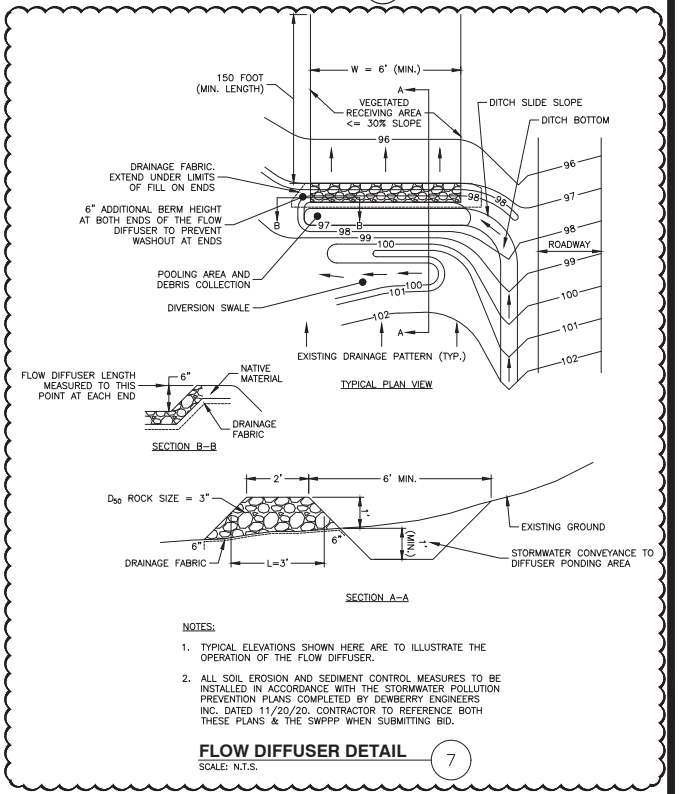
N.T.S.



X	Y(MAX)
2	20'
3	30'
4	40'

4 LANDGRADING DETAIL

N.T.S.



NOTES:

1. TYPICAL ELEVATIONS SHOWN HERE ARE TO ILLUSTRATE THE OPERATION OF THE FLOW DIFFUSER.
2. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLANS COMPLETED BY DEWBERRY ENGINEERS INC. DATED 11/20/20. CONTRACTOR TO REFERENCE BOTH THESE PLANS & THE SWPPP WHEN SUBMITTING BID.

FLOW DIFFUSER DETAIL

SCALE: N.T.S.

7

HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
(203) 297-6345

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verizon WIRELESS
4 CENTEROCK ROAD
WEST NYACK, NY 10994

GLENACOM LAKE

ZONING DRAWINGS		
7	01/26/23	ISSUED FOR ZONING
6	12/22/22	ISSUED FOR ZONING
5	12/02/22	ISSUED FOR ZONING
4	11/22/22	ISSUED FOR ZONING
3	11/04/22	ISSUED FOR ZONING
2	10/26/22	ISSUED FOR ZONING
1	05/07/20	ISSUED FOR ZONING
0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

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SUITE 301
PARSIPPANY, NJ 07054
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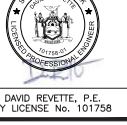


DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

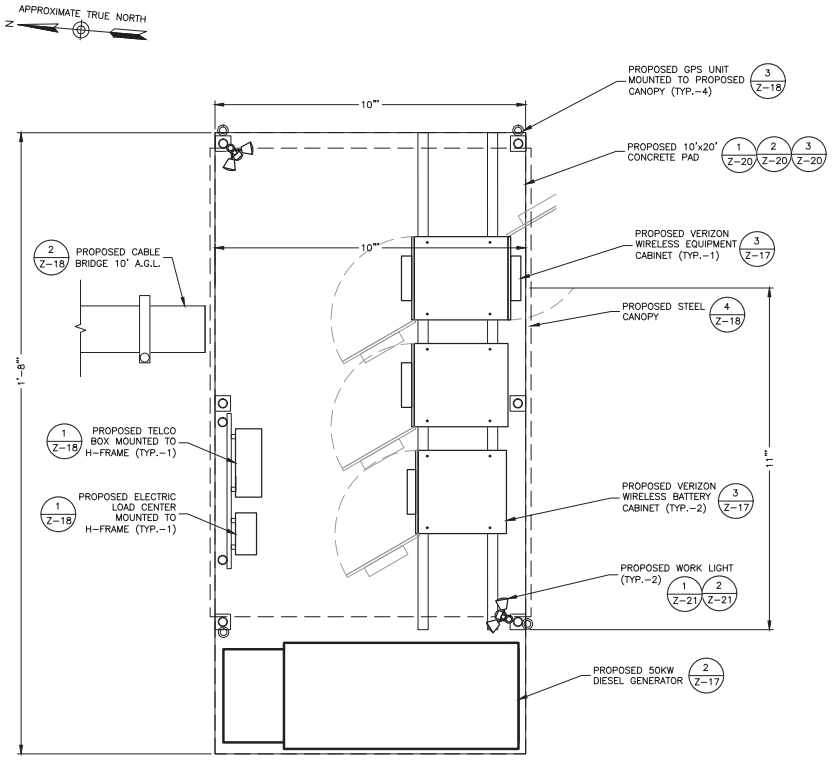
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

EROSION CONTROL NOTES & DETAILS

SHEET NUMBER

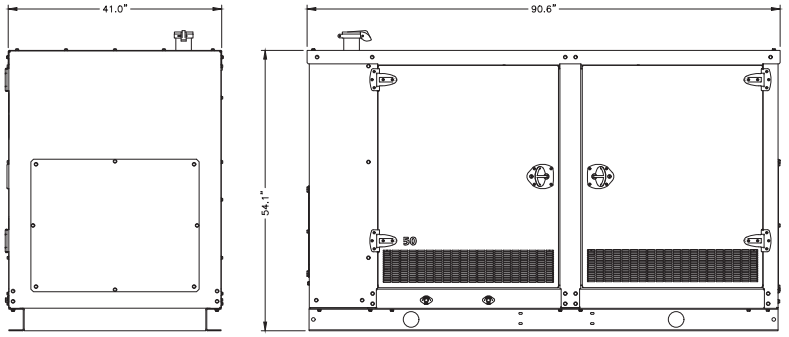
Z-16



PROPOSED EQUIPMENT PLAN 1

SCALE: 1/4"=1' FOR 11"x17"
1/2"=1' FOR 22"x34"

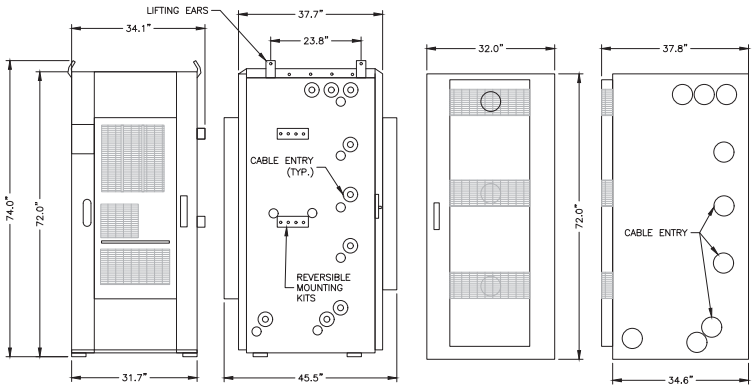
0' 1' 2' 4'



KOHLER 50kW DIESEL GENERATOR MODEL 50REOZK	
HEIGHT:	54.1"
WIDTH:	41.0"
DEPTH:	90.6"
WEIGHT:	APPROX. 2369 LBS WITH ENCLOSURE (RECTIFIERS AND EQUIPMENT EXCLUDED)

DIESEL GENERATOR DETAIL 2

SCALE: N.T.S.



ESOF016-ECA01 (DC-AIR/DAC) POWER/EQUIPMENT	
HEIGHT:	72.0"
WIDTH:	31.7"
DEPTH:	45.5"
WEIGHT:	578 LBS (RECTIFIERS AND EQUIPMENT EXCLUDED)

ESOF024-ECx01 CABINET	
HEIGHT:	72.0"
WIDTH:	32.0"
DEPTH:	34.6"
WEIGHT:	APPROX. 690 LBS (RECTIFIERS AND EQUIPMENT EXCLUDED)

EQUIPMENT CABINET DETAIL 3

SCALE: N.T.S.

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GLENACOM LAKE

ZONING DRAWINGS		
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0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

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DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

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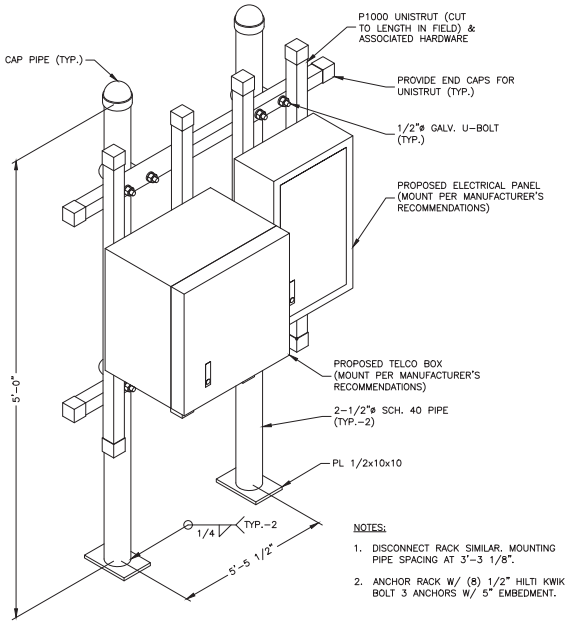
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

VERIZON WIRELESS EQUIPMENT PLAN & DETAILS

SHEET NUMBER

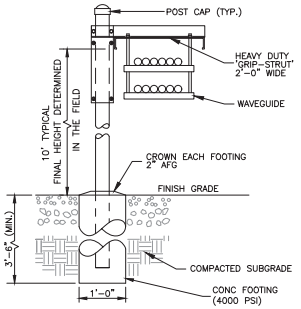
Z-17



NOTES:

1. DISCONNECT RACK SIMILAR. MOUNTING PIPE SPACING AT 3'-3 1/8".
2. ANCHOR RACK W/ (8) 1/2" HILTI KWIK BOLT 3 ANCHORS W/ 5" EMBEDMENT.

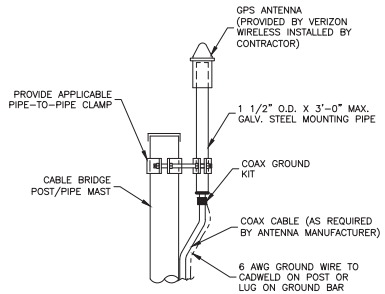
ELECTRIC/TELCO RACK DETAIL 1
SCALE: N.T.S.



NOTES:

1. CABLE BRIDGE SHALL BE SITE PRO 1 GRIP STRUT TRANSMISSION LINE BRIDGE KIT (P/N: 1B24D-216T3) OR APPROVED EQUAL.
2. ALL COMPONENTS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
3. CONTRACTOR SHALL DETERMINE REQUIRED QUANTITY OF ALL CABLE BRIDGE COMPONENTS.
4. SNAP-IN HANGERS, SPLICE KITS, HINGE KITS, EXTENSION KITS, STIFFENERS, AND OTHER MISCELLANEOUS HARDWARE SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED.
5. CABLE BRIDGE SHALL BE ROUTED TO ACCOMMODATE THE MINIMUM BENDING RADIUS OF THE COAXIAL CABLE.
6. CABLE BRIDGE COMPONENTS SHOWN ARE SCHEMATIC, CONSULT MANUFACTURER FOR EXACT AND CURRENT SPECIFICATIONS.

CABLE BRIDGE DETAIL 2
SCALE: N.T.S.

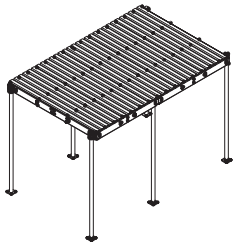


FRONT ELEVATION

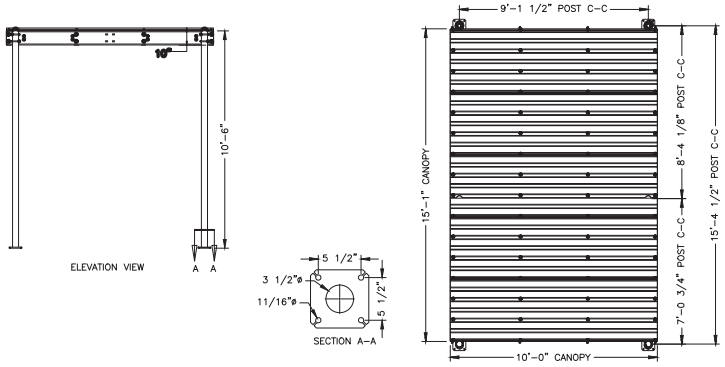
NOTES:

1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.

GPS ANTENNA 3
SCALE: N.T.S.



PERFECT VISION PV-WC1016-B	
CANOPY DIMENSIONS	15'-1" X 10'-0"
WEIGHT	1777 LBS.



NOTES:

1. INSTALL ICE CANOPY PER MANUFACTURER'S RECOMMENDATIONS.

ICE CANOPY DETAIL 4
SCALE: N.T.S.

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ZONING DRAWINGS		
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6	12/22/22	ISSUED FOR ZONING
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0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

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DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

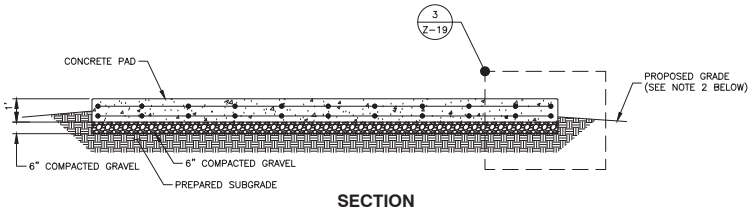
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

VERIZON WIRELESS DETAILS I

SHEET NUMBER

Z-18



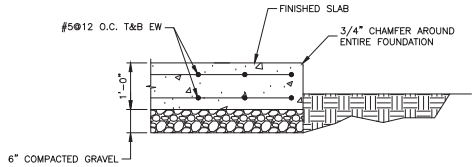
SECTION

USE	PAD LENGTH	PAD WIDTH
CABINET	20'-0"	10'-0"

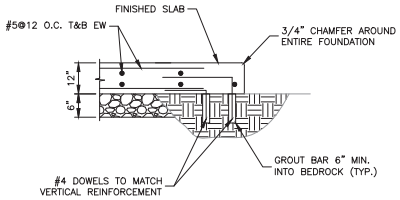
NOTES:

1. CONTRACTOR TO VERIFY FINAL PAD DIMENSIONS PRIOR TO CONSTRUCTION OF FOUNDATION.
2. GRADE SHALL SLOPE AWAY FROM THE CONCRETE PAD TO ALLOW FOR PROPER WATER RUNOFF.
3. ANCHOR EQUIPMENT TO FOUNDATION PER EQUIPMENT MANUFACTURER RECOMMENDATIONS.
4. IF BEDROCK IS ENCOUNTERED AT A SHALLOW DEPTH, USE DETAIL 3, THIS SHEET.
5. BEARING STRATA MEDIUM TO DENSE INSET GRANULAR MATERIAL OR COMPACTED GRAVEL FILL. 95% COMPACTION.
6. FILL SHALL CONSIST OF CLEAN SOIL. NO DELETERIOUS MATERIALS OR ORGANICS TO BE USED.
7. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4,000 PSI.
8. MAINTAIN 3" MIN. COVER ON ALL STEEL REINFORCEMENT.

CONCRETE PAD FOUNDATION 1
SCALE: N.T.S.



CONCRETE PAD DETAIL 2
SCALE: N.T.S.



FOUNDATION SLAB DETAIL @ BEDROCK 3
SCALE: N.T.S.

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C	01/02/20	ISSUED FOR REVIEW

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DAVID REVETTE, P.E.
NY LICENSE No. 101758

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PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

WALTON DRIVE
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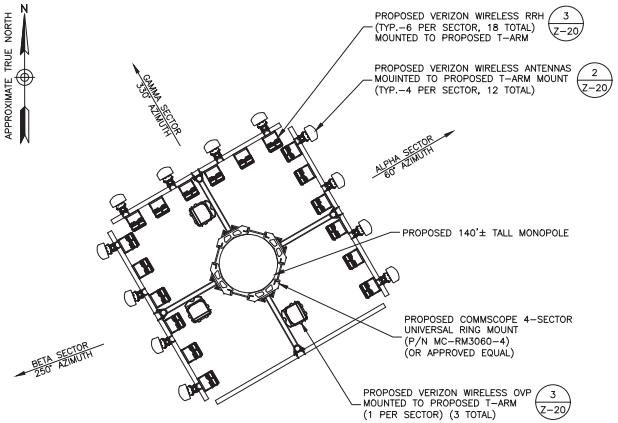
PUTNAM COUNTY

SHEET TITLE

VERIZON WIRELESS
DETAILS II

SHEET NUMBER

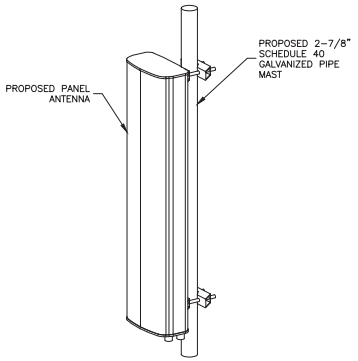
Z-19



NOTES:

1. AZIMUTHS TBD.
2. CONTRACTOR TO VERIFY FINAL AZIMUTHS WITH RF ENGINEER PRIOR TO ANTENNA INSTALLATION.

ANTENNA ORIENTATION PLAN 1
SCALE: N.T.S.



NOTES:

1. MOUNT ANTENNA PER MANUFACTURER'S RECOMMENDATIONS.
2. WEIGHT INCLUDES MOUNTING BRACKETS.
3. DIMENSIONS OF PROPOSED ANTENNAS SHOWN ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON AVAILABILITY OF ANTENNAS AT TIME OF CONSTRUCTION. ANTENNAS MAY INCLUDE RRHS, TMA'S AND/OR DIPLEXERS.
4. ANTENNA SIZE, MAKE AND MODEL SUBJECT TO CHANGE BASED ON FUTURE TECHNOLOGY UPDATES AND COVERAGE/CAPACITY NEEDS PER VERIZON WIRELESS REQUIREMENTS.

ANTENNA DETAIL 2
SCALE: N.T.S.

NOTES:

1. MOUNT EQUIPMENT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
2. CONTRACTOR TO CONFIRM RRH CLEARANCE REQUIREMENTS ARE MET.
3. RRH AND DISTRIBUTION BOX SIZE, MAKE AND MODEL SUBJECT TO CHANGE BASED ON FUTURE TECHNOLOGY UPDATES AND COVERAGE/CAPACITY NEEDS PER VERIZON WIRELESS REQUIREMENTS.

RRH & OVP DETAIL 3
SCALE: N.T.S.

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9 HARMONY STREET
2nd FLOOR
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ZONING DRAWINGS		
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DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
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JOB NUMBER:	50114388
SITE ADDRESS:	

WALTON DRIVE
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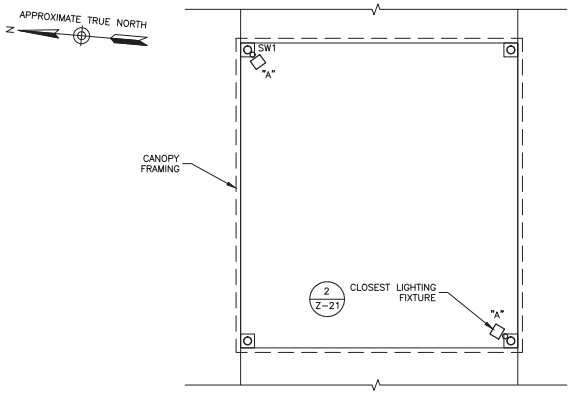
PUTNAM COUNTY

SHEET TITLE
VERIZON WIRELESS ANTENNA PLAN & DETAILS

SHEET NUMBER
Z-20



SW1:

1. 120V MOTION SENSOR RAB PART # LS300W.
2. OUTLET BOX: RAB LIGHTING INC. MODEL # B3B.
3. WEATHERPROOF COVER: RAB LIGHTING INC. MODEL #TCB.

"A":

1. FIXTURES (2 TOTAL): FULL CUTOFF, RAB LIGHTING INC. MODEL #WPLEDFC52NW.

NOTE:

1. LIGHTING TO BE MOUNTED BELOW CANOPY. BOTTOM OF LIGHT FIXTURE APPROXIMATELY 9'± A.G.L.
2. LIGHTING TO BE OPERATED ON A MOTION SENSOR.

CANOPY LIGHTING
SCALE: N.T.S. — 1

LIGHT FIXTURE MOUNTING HEIGHT (MH) = 9'

DISTANCE TO PROPERTY LINE (D) = 70'-0"

MAXIMUM MOUNTING HEIGHT (MMH) = D/3 + 3'

MMH = 70 / 3 + 3'

MMH = 26'

26' MMH > 9' MH ~ NO LIGHT TRESPPASS

LIGHTING CALCULATIONS
SCALE: N.T.S. — 3

WPLED52

RAB

LED 52W Wall packs. 3 cutoff options, patent-pending thermal management system. 100,000 hour L70 lifespan. 5-year, no-compromise warranty.

Color: Bronze Weight: 17.7 lbs

Project: | Type:

Prepared By: | Date:

Driver Info		LED Info	
Type	Constant Current	Watts	52W
120V	0.51A	Coor Temp	5000K (Cool)
208V	0.33A	Coor Accuracy	72 CRI
240V	0.29A	L70 Lifespan	100,000 Hours
277V	0.24A	Lumens	7,392 lm
Input Watts	57.9W	Efficacy	127.7 lm/W

Technical Specifications

Compliance

UL Listed: Suitable for wet locations

IESNA LM-79 & LM-80 Testing: RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

Performance

Lifespan: 100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency: Equivalent to 250W Metal Halide

LED Characteristics

LEDs: Two (2) multi-chip, high-output, long-life LEDs

Color Consistency: 7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability: LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity: RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Ambient Temperature: Suitable for use in up to 40°C (104°F)

Cold Weather Starting: The minimum starting temperature is -40°C (-40°F)

Housing: Precision die-cast aluminum housing, lens frame

Mounting: Die-cast aluminum wall bracket with (5) 1/2" conduit openings with plugs. Two-piece bracket with tether for ease of installation and wiring.

Arm: Die-cast aluminum with wiring access plate

Cutoff: Standard (15°)

Technical Specifications (continued)

Construction

Reflector: Specular vacuum-metallized polycarbonate

Gaskets: High-temperature silicone

Lens: Tempered glass

Finish: Formulated for high durability and long-lasting color

Green Technology: Mercury and UV free. RoHS-compliant components.

Electrical

Driver: Constant Current, 720mA, Class 2, 100 - 277V, 50 - 60 Hz, 100 - 277VAC .8 Amps.

THD: 7.64% at 120V, 5.72% at 277V

Power Factor: 99.1% at 120V, 97.5% at 277V

Surge Protection: 6kV

Other

Patents: The WPLED design is protected by patents in the U.S. Pat D653,377, Canada Pat. 142252, China Pat. ZL201130356930.8, and Mexico Pat. 36921 and pending patent in TW.

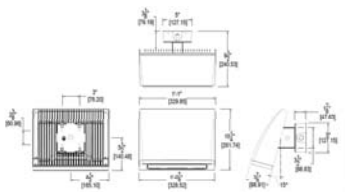
Replacement: Replaces 250W HID

Buy American Act Compliance: RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating: B0 U2 G3

Dimensions



Features

- High performance LED light engine
- Maintains 70% of initial lumens at 100,000-hours
- Weatherproof high temperature silicone gaskets
- Superior heat sinking with die cast alumnum housing and external fins
- Replaces 250W MH
- Traditional wall pack look from the front
- 3 cutoff options
- 5-Year, No-Compromise Warranty

Ordering Matrix

Family	Cutoff	Wattage	Color Temp	Finish	Driver Options	Options	Other Options
WPLED		52					
	Blank = Standard (15 degrees) C = Cutoff (7.5 degrees) FC = Full Cutoff (0 degrees)	52 = 52W 80 = 80W	Blank = 5000K Cool N = 4000K Neutral Y = 3000K Warm	Blank = Bronze W = White	Blank = 120-277V /480 = 480V /BL = Bi-Level /D10 = 0-10V Dimming	Blank = No Option /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell /PCS4 = 480V Swivel Photocell /LC = Lightcloud® Controller	USA = BAA Compliant Blank = Standard

LIGHTING CUTSHEETS
SCALE: N.T.S. — 2

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9 HARMONY STREET
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DANBURY, CT 06810
(203) 297-6345

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LIMITED PARTNERSHIP
d/b/a
verizon WIRELESS
4 CENTEROCK ROAD
WEST NYACK, NY 10994

GLENACOM LAKE

ZONING DRAWINGS		
7	01/26/23	ISSUED FOR ZONING
6	12/22/22	ISSUED FOR ZONING
5	12/02/22	ISSUED FOR ZONING
4	11/22/22	ISSUED FOR ZONING
3	11/04/22	ISSUED FOR ZONING
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1	05/07/20	ISSUED FOR ZONING
0	01/20/20	ISSUED FOR ZONING
C	01/02/20	ISSUED FOR REVIEW

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Dewberry Engineers Inc.
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PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

STATE OF NEW YORK — DAVID E. REVETTE — 101758 — LICENSED PROFESSIONAL ENGINEER

DAVID REVETTE, P.E.
NY LICENSE No. 101758

DRAWN BY:	JC/KFM
REVIEWED BY:	MS
CHECKED BY:	DER
PROJECT NUMBER:	50114387
JOB NUMBER:	50114388
SITE ADDRESS:	

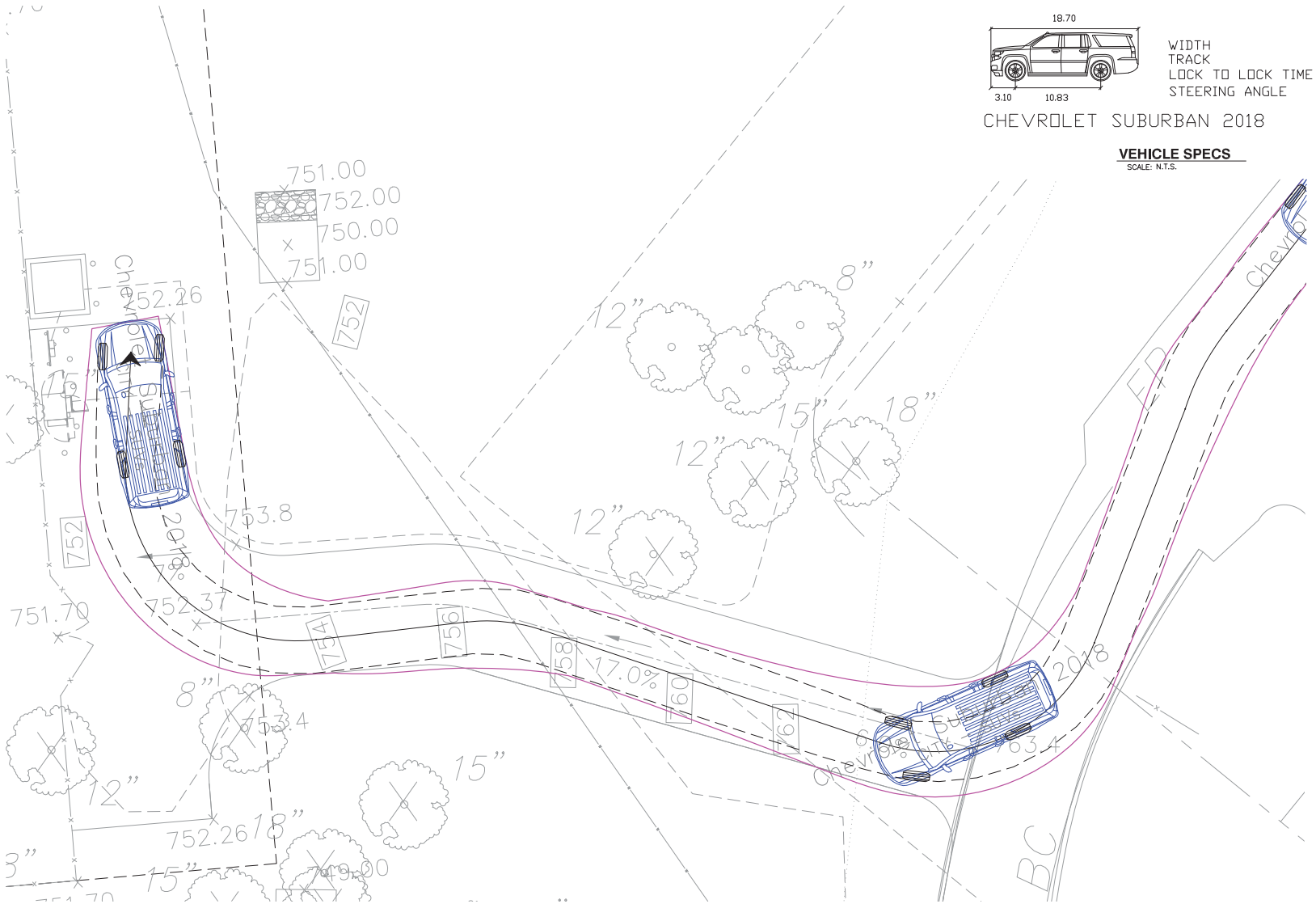
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

VERIZON WIRELESS
EQUIPMENT LIGHTING
DETAILS

SHEET NUMBER

Z-21



	FEET
WIDTH	: 6.71
TRACK	: 6.63
LOCK TO LOCK TIME	: 6.0
STEERING ANGLE	: 35.4

CHEVROLET SUBURBAN 2018

VEHICLE SPECS
SCALE: N.T.S.

AutoTurn SIMULATION (1)
SCALE: 1"=10' FOR 11"x17"
1"=5' FOR 22"x34"

0' 5' 10'

HOMELAND TOWERS, LLC
9 HARMONY STREET
2nd FLOOR
DANBURY, CT 06810
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WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

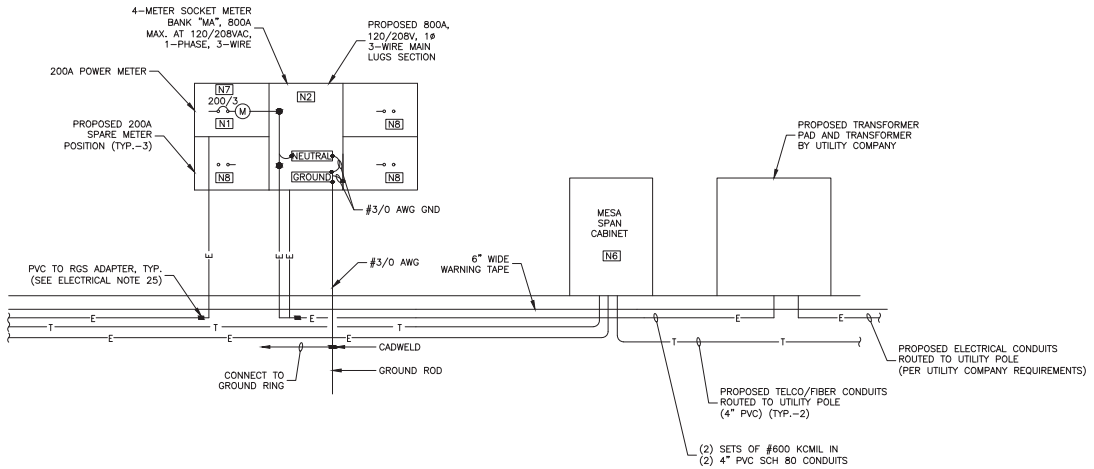
AutoTurn SIMULATION

SHEET NUMBER

Z-22

NOTES:

1. CONFIRM ALL ATS, PANELBOARDS, ETC WITH CM PRIOR TO CONSTRUCTION.
2. CONFIRM GENERATOR WIRING & CONTROLS PRIOR TO CONSTRUCTION.
3. MAKE ALL CONNECTIONS AS PER UTILITY COMPANY REQUIREMENTS.
4. REFER TO ALL OTHER ELECTRICAL AND GROUNDING NOTES ON SHEET G-1 OF THESE PLANS.



ELECTRICAL RISER DIAGRAM & SERVICE ENTRANCES

SCALE: N.T.S.

1

GENERAL ELECTRICAL NOTES

1. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
2. CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
3. HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
4. THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
5. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (O.S.H.A.)
6. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
7. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "U" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NBFU.
8. CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
9. CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS AND PAY ALL REQUIRED FEES
10. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
11. ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
12. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
13. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
14. USE T-TAP CONNECTIONS ON ALL MULTI-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR FOR LIGHTING FIXTURE.
15. ALL CONDUCTORS SHALL BE COPPER.
16. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED.
17. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY NEC.
18. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
19. IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, M PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
20. LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND, THEREFORE, MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
21. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH 2009 INTERNATIONAL BUILDING CODE, NEW JERSEY EDITION.
22. WIRE AND CABLE CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM UNLESS SPECIFICALLY STATED OTHERWISE ON DRAWINGS.
23. VERIFY ALL CONDUIT ROUTING W/OWNER REP.
24. ALL MATERIALS SHALL BE U.L. LISTED.
25. CONDUIT:

a. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.

b. ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.

c. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "LAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.

d. CONDUIT RUNS MAY BE SURFACE MOUNTED IN CEILINGS OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.

26. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
27. COORDINATE THE ELECTRICAL SERVICE SHUTDOWN WITH BUILDING OWNER.
28. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. SUBMIT TEST REPORTS AND FURNISH TO DISPATCH COMMUNICATIONS ONE COMPLETE SET OF PRINTS SHOWING "INSTALLED WORK".
29. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, AND FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
30. ALL WALL PENETRATIONS SHALL BE FIRE STOPPED WITH FS-ONE HIGH PERFORMANCE INTUMESCENT FIRE STOP BY HILTI OR APPROVED EQUAL INSTALL PER MANUFACTURERS RECOMMENDATIONS.

ELECTRICAL AND TELEPHONE GENERAL NOTES:

1. FOLLOWING COMPLETION OF WORK, PROVIDE OWNER WITH AS-BUILT DRAWINGS SHOWING TELEPHONE AND ELECTRIC LOCATIONS.
2. WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, NEC 2011.
3. COORDINATE WITH UTILITY AND LOCAL ELECTRICAL INSPECTOR FOR FINAL POWER CONNECTION.
4. UTILITY WILL SUPPLY METER. COORDINATE WITH UTILITY FOR METER TYPE AND INTERCONNECTION.
5. CONTRACTOR SHALL CONTACT "DIG SAFELY NEW YORK, INC." AT 811 OR 1-800-272-4480 AND LOCATE ALL EXISTING UTILITIES WITHIN THE AREA OF WORK PRIOR TO THE START OF ANY EXCAVATION.
6. SEE PAGE E-2 FOR GENERAL GROUNDING NOTES.
7. COORDINATE WITH LOCAL TELEPHONE COMPANY FOR ALL ROUTING AND DESIGN.
8. CONTRACTOR TO VERIFY CONTROL WIRING SIZE WITH GENERATOR MANUFACTURER PRIOR TO CONSTRUCTION.
9. CONTRACTOR TO CONFIRM STUB UP LOCATIONS OF WIRING CONDUITS PRIOR TO CONSTRUCTION.

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SITE ADDRESS:	

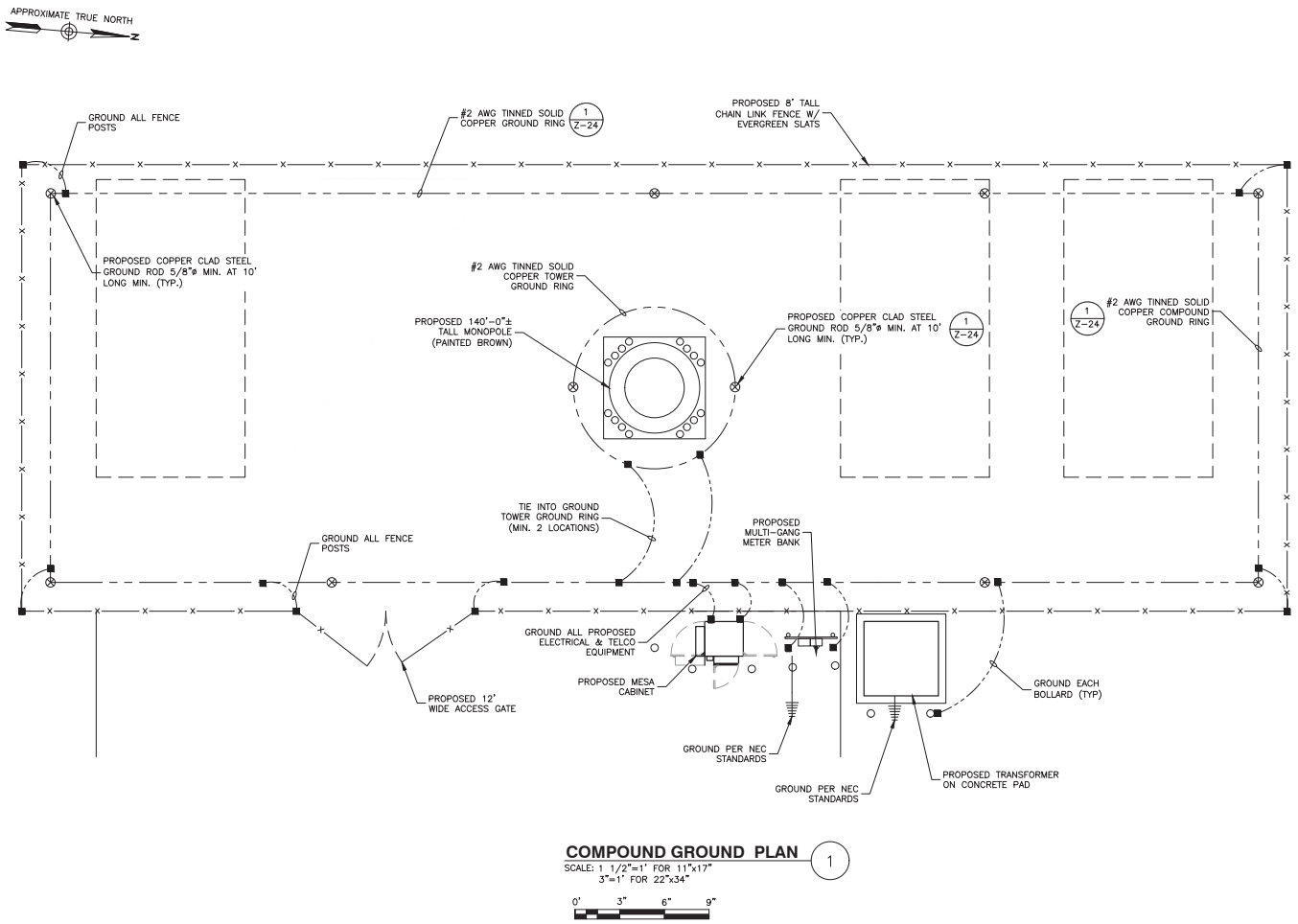
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

ELECTRICAL RISER DIAGRAM

SHEET NUMBER

Z-23



COMPOUND GROUND PLAN 1

SCALE: 1 1/2"=1' FOR 11"x17"
3"=1' FOR 22"x34"

0' 3" 6" 9"

GROUNDING LEGEND

- GROUND BAR
- GROUND COPPER WIRE, SIZE AS NOTED
- MECHANICAL GROUND CONNECTION
- 5/8"X10' COPPER CLAD STEEL GROUND ROD
- EXOTHERMIC (CADWELD) CONNECTION

GROUNDING GENERAL NOTES

1. ALL DOWN CONDUCTORS AND THE GROUND RING CONDUCTOR SHALL BE #2 AWG, SOLID, BARE, TINNED COPPER, UNLESS OTHERWISE NOTED. ALL CONNECTIONS TO GROUND RING SHALL BE EXOTHERMICALLY WELDED. CONDUCTOR SHALL BE AT A MINIMUM DEPTH BELOW GRADE OF 18 INCHES OR TO LEDGE. MINIMUM BEND RADIUS SHALL BE 8 INCHES. CONDUCTOR SHALL BE AT LEAST 24 INCHES FROM ANY FOUNDATION, UNLESS OTHERWISE NOTED.
2. GROUND RODS SHALL BE 5/8" DIAMETER COPPER CLAD, HARGER, T&B, ERICO, OR EQUIVALENT. TOP OF ROD SHALL BE A MINIMUM OF 18" BELOW GRADE. IF LEDGE IS ENCOUNTERED, INSTALL GROUND ROD AT AN ANGLE. ELECTRICAL METER GROUND ROD EXCEPTED.
3. WHERE MECHANICAL CONNECTIONS ARE SPECIFIED, BOLTED, COMPRESSION-TYPE, CLAMPS OR SPLIT-BOLT TYPE CONNECTORS SHALL BE USED.
4. GRIND OFF GALVANIZING IN AFFECTED AREA. EXOTHERMICALLY WELD #2 CONDUCTOR AT 6" ABOVE GRADE OR FOUNDATION, WHICHEVER IS HIGHER. COLD-GALV AFTER. EXOTHERMICALLY WELD OTHER END TO GROUND RING.
5. INSTALL GROUNDING KITS AT ANTENNA CENTERLINE, AND TOWER EXIT POINTS. GROUND COAX LINES. EXOTHERMICALLY WELD #2 DOWN CONDUCTOR TO PLATES, RUN DOWN TOWER, AND TIE INTO GROUNDING SYSTEM.
6. ALL GROUNDING WORK SHALL COMPLY WITH AT&T CONSTRUCTION CONTRACT STANDARDS. FOLLOWING COMPLETION OF WORK, GROUND SYSTEM MUST BE TESTED AND SHALL HAVE A RESISTANCE OF 5 OHMS OR LESS SUBMIT AN INDEPENDENT "FALL POTENTIAL" TESTING REPORT.
7. ALL GROUNDING CONDUCTORS ON EXTERIOR WALL OF SHELTER SHALL BE INSTALLED IN 3/4" SCH 40 PVC CONDUIT TO 12" BELOW GRADE. ATTACH PVC WITH GALVANIZED "C" CLAMPS.
8. CONTRACTOR SHALL HAND-DIG IN AREAS AROUND EXISTING UTILITIES.
9. NOTIFY CONSTRUCTION ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
10. GROUNDING RING IS SHOWN AS SCHEMATIC ONLY. IT IS DESIGNED WITHOUT BENEFIT OF RESISTIVITY TESTING AND DOES NOT NECESSARILY REPRESENT A GROUNDING SYSTEM TO MEET ANY SPECIFIC GROUND RESISTANCE.
11. PRIOR TO POURING CONCRETE, ALL REBAR LOCATED NEAR THE BOTTOM OF THE FOUNDATION SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING ELECTRODE, BY STEEL TIES OF OTHER EFFECTIVE MEANS APPROVED BY NEC 2011 AND STRUCTURAL ENGINEER, AND BONDED TO THE GROUND RING AS DETAILED IN THESE PLANS. (INSPECTION MAY BE REQUIRED PRIOR TO POURING CONCRETE AND MUST BE COORDINATED BY CONTRACTOR.)
12. IN ACCORDANCE WITH NEC 2011 REQUIREMENTS, ALL GROUNDING ELECTRODES PRESENT ON SITE SHALL BE BONDED TOGETHER (REFERENCE 2011 NEC ARTICLE 250.50).
13. CAULK AND SEAL ALL NON-FACTORY SHELTER PENETRATIONS.

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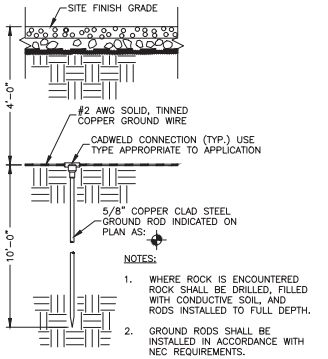
WALTON DRIVE
MAHOPAC, NY 10541
PUTNAM COUNTY

SHEET TITLE

COMPOUND
GROUNDING PLAN

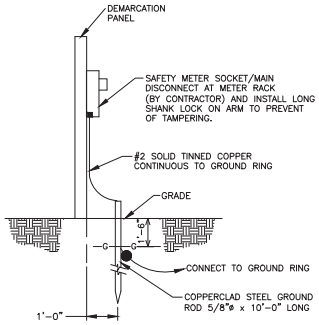
SHEET NUMBER

Z-24



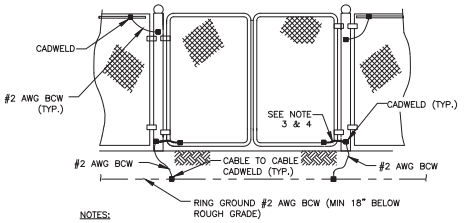
GROUND ROD AND RING DETAIL 1

SCALE: N.T.S.



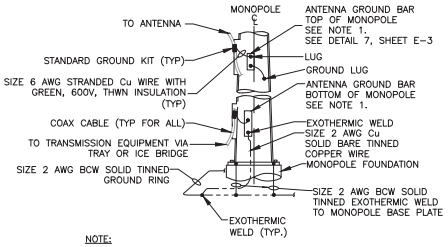
METER SOCKET GROUNDING 2

SCALE: N.T.S.



FENCE GROUNDING DETAIL 3

SCALE: N.T.S.

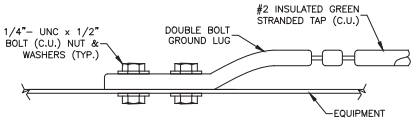


NOTE:

1. NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF MONOPOLE, ANTENNA LOCATION AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED. GROUND BAR IS NOT REQUIRED FOR SITES WITH ONE COAX CABLE.

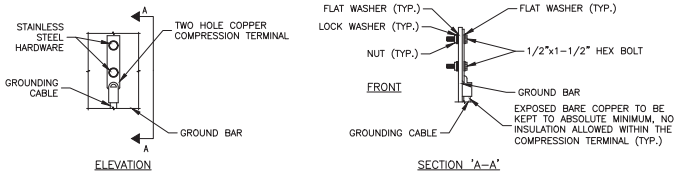
MONOPOLE GROUNDING 4

SCALE: N.T.S.



CONNECTION TO EQUIPMENT DETAIL 5

SCALE: N.T.S.

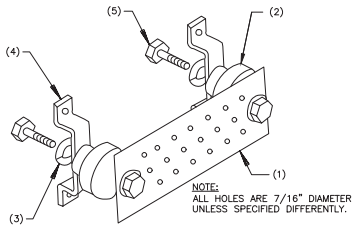


NOTES:

1. DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

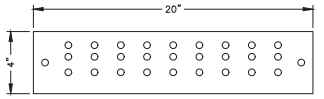
TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL 6

SCALE: N.T.S.



LEGEND:

1. COPPER GROUND BAR, 1/4"x4"x20", GBIT 14420 J 2-7. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
2. STANDOFF INSULATORS, HARGER LIGHTNING PROTECTION, INC. CAT. No. 5263-A8.
3. 1/2" LOCKWASHERS, HARGER CO. CAT. No. LWBS.
4. WALL MOUNTING STAINLESS STEEL, MOUNTING BRACKET, HARGER CAT NO. WBKT-1.
5. 1/2-13 x 1" HEX HEAD CAP SCREW, HARGER, CAT No. CS88S.



THE GROUND BAR IS 1/4" THICK, 4" WIDE, 20" LONG. IT HAS A HOLE PATTERN "J" WITH A NO. 2 AWG SOLID TINNED TAIL.

GBIT 14420 J 2-7

STYLE SIZE HOLE PATTERN TAIL

STYLE: GBIT – GROUND BAR WITH WALL MOUNTING BRACKETS, INSULATORS AND A 25' EXOTHERMICALLY WELDED TAIL.

SIZE: THICKNESS, WIDTH, LENGTH IN INCHES.

HOLE PATTERN: HOLE PATTERN CENTERS MATCH NEMA DOUBLE LUG CONFIGURATION. SEE ISOMETRIC.

TAIL: SPECIFY AMERICAN WIRE GAUGE (AWG) SIZE AND STRANDING REQUIRED. 25' LENGTH IS STANDARD UNLESS OTHERWISE REQUESTED.

GROUND BAR DETAIL 7

SCALE: N.T.S.

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SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

Z-25

INSITE
ENGINEERING, SURVEYING &
LANDSCAPE ARCHITECTURE, P.C.

January 20, 2023

Town of Carmel Planning Board
Carmel Town Hall
60 McAlpin Avenue
Mahopac, New York 10541
Via Email: Rose Trombetta - rtrombetta@ci.carmel.ny.us

RE: MK Realty Site Plan
U.S. Route 6 and Old Route 6
Tax Map No. 55.06-1-44 & 45

Dear Chairman Paeprer and Members of the Board:

The above referenced Site Plan was re-granted Site Plan Approval in February of 2021 with a one year extension granted in February of 2022. Since the project was originally approved in 2006, the Bond amount was reviewed by the Board's consultants in 2015 and increased to reflect the current construction costs for with the project. It should be noted that the applicant is currently marketing the property and has kept all of the regulatory permits associated with the subject project current.

It is respectfully requested that this project be placed on the Planning Board's next available agenda for consideration of a re-grant of Site Plan Approval. The $3,000.00 approval extension fee will be forwarded under separate cover.

Should you have any questions or comments regarding this information, please do not hesitate to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: _____
Zachary M. Pearson
Principal Engineer

ZM

Enclosure(s)

cc: Kevin Dwyer, Via Email: kevinbdwyer@msn.com

Insite File No. 04235.100