



**THE HELMES GROUP, LLP**  
ARCHITECTURE • ENGINEERING  
PROJECT MANAGEMENT

Via E-Mail & Hand Delivered

August 30, 2021

Harold Boxer, Chairman and  
Members of the Zoning Board of Appeals  
Village / Town of Mt. Kisco  
104 Main Street  
Mount Kisco, NY 10549

**Project:** Proposed Second Story Addition & Alterations to Existing Building  
SPENCMORG, LLC. – Richard Stumbo, President  
333 Lexington Avenue, Mount Kisco, NY 10549  
Section 80.48, Block 4, Lot 1, CL-1 Zone District

**Subject:** Zoning Board of Appeals, ZBA - Variances Required

Dear Chairman Boxer & Members of the Board:

On behalf of our client, Richard Stumbo, President, SPENCMORG, LLC – 333 Lexington Avenue, and as directed by Peter Miley, Building Inspector and the Planning Board, we are making this submission to the Zoning Board of Appeals, (ZBA) requesting an area variance of the Village/Town of Mt. Kisco Zoning Ordinance to permit a second story addition and alterations to a one-story concrete block building as indicated on architectural drawings #1 - #6, dated 8/18/21, as prepared by The Helmes Group, LLP, Architects. *The one-story building was constructed in 1978 and is noncomplying with regard to dimensional setbacks.*

ZONING:

- According to Memorandum on file, dated 8/4/21, from the Building Inspector, pursuant to Village/Town of Mount Kisco Code §110-19.1 C. (5) Minimum building setback. The proposed front yard setback (Locust Street) is 10.30 feet, required is 20 feet. Therefore, a 9.70 feet front yard setback variance is required.
- Pursuant to Village/Town of Mount Kisco Code §110-59 Definitions. **Residence or Residential District** includes the following Zoning Districts CL-1 and therefore: pursuant to Village/Town of Mount Kisco Code § 110-19.1 C. (5) Lot Line Abutting Residential District. The proposed side yard is 6.30 feet, required is 30 feet. Therefore; s 23.70 feet side yard setback variance is required.

184 KATONAH AVENUE, KATONAH, NEW YORK 10536

Tel. (914) 232-4633 Fax (914) 232-0768



- Accordingly, enclosed herewith please find the following attachments:
- Zoning Board of Appeals, ZBA Application - (1 original & 10 copies)
- Check #1176 in the amount of \$750 made payable to Village/Town of Mt. Kisco - (10 copies)
- Authorization Letter dated 4/28/21, allowing The Helmes Group, LLP to act as Owner's Architect & Agent - (1 original & 10 copies)
- Architectural Drawings #1 - #6, including Site Plan / Survey, Existing / Proposed Floor Plans, Existing / Proposed Elevations, Architectural Rendering & Photographs – dated 8/18/21, as prepared by The Helmes Group, LLP – Architects and Existing 'As-Built' Survey Drawing, as prepared by H. Stanley Johnson & Company Land Surveyors - (1 original & 10 copies)
- Memorandum dated 8/4/21 - Denial Letter, from Building Inspector. - (1 original & 10 copies)
- Filed Deed / Legal Attachment. - (1 original & 10 copies)
- Block Diagram / Tax Map and list of names and addresses of the owners of all properties on the block diagram within 300' radius from the subject property. - (1 original & 10 copies)
- Architectural Rendering & Reference Photographs. - (1 original & 10 copies)
- Copy of the Public Notice for the public hearing of this application. - (1 original & 10 copies)
- A sworn Affidavit of Mailing, duly notarized, that a true copy of said Public Notice has been sent by mail to all property owners within 300 feet of this premises at least 10 days prior to the public hearing. - (1 original & 10 copies)

Area Variances. In making its determination, the Board of Appeals shall consider the benefit to the applicant if the variance is granted, as weighed against the detriment to the health, safety, and welfare of the neighborhood or community by such grant. In making such determination, the Board shall also consider the following factors listed below:

**A. Chapter 110 Zoning**

(Area Variances Required for Front Yard and Side Yard Building Setbacks)

**We request this Variance be granted based on the following:**

- (1) **Whether an undesirable change will be produced in the character of the neighborhood or whether a detriment to nearby properties will be created by the granting of the variance.** Granting the requested variance will not create an undesirable change in the character of the neighborhood, nor will it be a detriment to nearby properties. The proposed second story addition has been design utilizing existing one-story concrete building footprint, no increase in building coverage, which is needed to create office space which is a permitted use in this CL-1 Zone District. The existing building façade is dated and we feel the proposed second story addition and alterations, etc., are in keeping with the scale and character of the existing neighborhood and would be an improvement.
- (2) **Whether the benefit sought by the applicant can be achieved by some feasible method other than a variance.** The benefit sought cannot be achieved by any other feasible method. The existing one-story building is pre-existing non-conforming with respect to having insufficient front and side yard setbacks making it difficult to expand out on first floor / ground level. Therefore, a second story addition makes the most sense utilizing existing building footprint for increasing the usable square feet of this existing one-story concrete block commercial building on this corner lot.

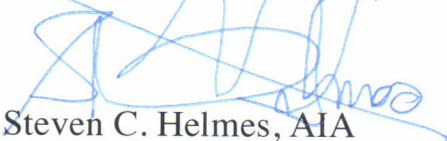
- (3) **Whether the requested variance is substantial.** Based upon existing site conditions and constraints, we feel the requested variances are not substantial since the second story addition and new roof lines does not increase nor change the pre-existing non-conforming front and side yard setbacks. There is no increase in building footprint or increase in encroachment.
- (4) **Whether the proposed variance will have an adverse effect or impact on the physical or environmental conditions in the neighborhood or district.** The proposed variances will not have any adverse effect on the physical or environmental conditions of the neighborhood. The existing building footprint does not change and the site is being improved by removing the portion of existing macadam area located at rear east end of property. Also, the Owner will be planting additional landscaping on site to create a buffer and help screen existing parking areas on site, etc., as indicated on drawings.
- (5) **Whether the alleged difficulty was self-created (this will not necessarily preclude the granting of the area variance).** Although the difficulty may be construed as self-created, the existing building which was constructed in 1978 will be significantly improved, benefiting the Owner and entire neighborhood by improving the overall character and property values of the neighborhood. Nonetheless, a self-created hardship does not preclude the granting of area variances.

It is my understanding that we will be scheduled to appear before the Zoning Board of Appeals, ZBA Meeting on **Tuesday, September 21, 2021 at 7:00 p.m.** and look forward to presenting this application in order to obtain the required variances to allow the second story addition to existing building.

I trust that the above information is in order; however, should you have any questions or require additional information, please do not hesitate to contact me.

Very truly yours,

THE HELMES GROUP, LLP



Steven C. Helmes, AIA  
Architect

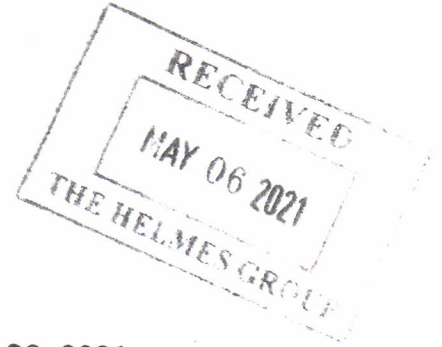
SCH:KA Encl.

cc: SPENCMORG, LLC – Richard Stumbo, President



**SPENCMORG, LLC**  
**Richard Stumbo, President**  
**5 Anderson Lane**  
**Goldens Bridge, NY 10526**

(914) 906-4155  
[richstumbo@aol.com](mailto:richstumbo@aol.com)



April 28, 2021

Peter J. Miley, Building Inspector  
Village / Town of Mount Kisco Building Department  
104 Main Street  
Mount Kisco, NY 10549

**Project: SPENCMORG, LLC – Richard Stumbo, President**  
**333 Lexington Avenue, Mount Kisco, NY 10549**  
**Section 80.48, Block 4, Lot 1, CL-1 Zone District**

Dear Mr. Miley:

I, Richard Stumbo, President – SPENCMORG, LLC., Owner, of the above-subject property, hereby authorize Steven C. Helmes, AIA, of The Helmes Group, Architects, to act as Owner's agent for filing all applications as required, for obtaining Planning Board Approval, Variances from the Zoning Board of Appeals, ZBA, Approval from the Architectural Review Board, ARB and a Building Permit from the Village / Town of Mount Kisco Building Department.

Very truly yours,

A handwritten signature in black ink, appearing to be "R. Stumbo", written over a horizontal line.

SPENCMORG, LLC

Richard Stumbo, President



Village/Town of Mount Kisco Building Department  
104 Main Street  
Mount Kisco, New York 10549  
Ph. (914) 864-0019-fax (914) 864-1085

## MEMORANDUM

TO: Honorable Acting Chair Bainlardi and Members of the Planning Board

FROM: Peter J. Miley, Building Inspector *PJM*

SUBJECT: Spencmorg, LLC (Richard Stumbo)  
333 Lexington Avenue, SBL 80.48-4-1

DATE: Amended August 4, 2021

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### PROJECT

Proposed includes the modification and a second-story addition over an existing one-story concrete block building formerly known as Mount Kisco Glass. The property is a 12,348 square foot lot located in the CL-1 (Mixed Use Residential and Commercial District) Zoning District, on the corner of Lexington Avenue and Locust Street. Proposed is a change of use from retail/storage to office/storage thereby requiring a Change of Use Permit issued by the Planning Board. The building is noncomplying with regard to dimensional setbacks.

*Pursuant to §110-35 Noncomplying buildings and structures, D. Noncomplying buildings and structures may not be enlarged without a variance being obtained from the Zoning Board of Appeals pursuant to this chapter. No building or structure which is noncomplying with respect to applicable developmental regulations (by illustration, but not by limitation, height, setbacks, building and development coverage, lot area or lot width) shall be enlarged or altered in such a manner as to increase any such noncompliance or so as to enlarge or increase the area of such building or structure, including but not limited to the alteration of roof or floor levels or the addition of area above, below or adjacent to such noncomplying building or structure.*

### COMMENTS

- Original comment included a request for a dumpster enclosure. Amended plan indicates that the refuse containers will be stored indoors.
- New A/C units located on concrete pads are located within the required buffer and too close to the side yard property line. Relocate as necessary.

*RELOCATE TO REAR EAST WALL OF BUILDING  
IN PLANTING BED OR WALL MOUNTED-T.B.D.*



## ZONING

- Pursuant to Village/Town of Mount Kisco Code §110-19.1 C. (5) Minimum building setback. The proposed front yard setback (Locust Street) is 10.30 feet, required is 20 feet. Therefore; a 9.70 feet front yard setback variance is required.
- Pursuant to Village/Town of Mount Kisco Code §110-59 Definitions. **Residence or Residential District** includes the following Zoning Districts CL-1 and therefore; pursuant to Village/Town of Mount Kisco Code §110-19.1 C. (5) Lot Line Abutting Residential District. The proposed side yard is 6.30 feet, required is 30 feet. Therefore; a 23.70 feet side yard setback variance is required.

## APPROVALS REQUIRED

- Planning Board
- Change of use of permit
- Zoning Board
- Architectural Review Board
- Property is located in the Designated Main Street Area
- DEP approval may be required ? *EXISTING SITE*

PM/mkr

Date: \_\_\_\_\_

Case No.: 28A21-6

Fee: \$ 750.00

Date Filed: \_\_\_\_\_

Village/Town of Mount Kisco  
Municipal Building  
104 Main Street, Mt. Kisco, NY 10549

**Zoning Board of Appeals**  
**Application**

Appellant: SPENCERMORG, LLC - RICHARD STUMBO, PRESIDENT

Address: 333 LEXINGTON AVENUE, MT. KISCO, NY, 10549

Address of subject property (if different): —

THE HELMES GROUP, LLP - STEVEN C. HELMES AIA, ARCHITECT

Appellant's relationship to subject property: X Owner \_\_\_\_\_ Lessee \_\_\_\_\_ Other \_\_\_\_\_

Property owner (if different): —

Address: \_\_\_\_\_

TO THE CHAIRMAN, ZONING BOARD OF APPEALS: An appeal is hereby taken from the decision of the Building Inspector, PETER J. MILEY - 8/4/21 MEMORANDUM dated AUGUST 4, 2021. Application is hereby made for the following:

X Variation or \_\_\_\_\_ Interpretation of Section \_\_\_\_\_ of the Code of the Village/Town of Mount Kisco, 110-35 (D)  
110-19.1 C. (5)  
110-59  
110-19.1 C. (5)

to permit the: X Erection; \_\_\_\_\_ Alteration; \_\_\_\_\_ Conversion; \_\_\_\_\_ Maintenance of CONSTRUCTION OF A SECOND STORY ADDITION AND ALTERATIONS TO AN EXISTING BUILDING.

\_\_\_\_\_ in accordance with plans filed on (date) 8/31/21 for Property ID # 80-48-4-1 located in the CL-1 Zoning District.

The subject premises is situated on the EAST side of (street) LEXINGTON AVENUE & LOCUST STREET in the Village/Town of Mount Kisco, County of Westchester, NY.

Does property face on two different public streets? Yes/No YES

(If on two streets, give both street names) LEXINGTON AVENUE AND LOCUST STREET

Type of Variance sought: \_\_\_\_\_ Use X Area \_\_\_\_\_



Is the appellant before the Planning Board of the Village of Mount Kisco with regard to this property? YES.

Is there an approved site plan for this property? YES in connection with a \_\_\_\_\_ Proposed or \_\_\_\_\_ Existing building; erected (yr.) 1978

Size of Lot: 50' feet wide 200' feet deep Area 12,348 SF

Size of Building: at street level 33' feet wide 50' feet deep

Height of building: 19'-3" Present use of building: RETAIL/STORAGE  
PROPOSED 28'-3" CHANGE OF USE TO OFFICE/STORAGE

Does this building contain a nonconforming use? NO Please identify and explain: —

Is this building classified as a non-complying use? NO Please identify and explain: —

Has any previous application or appeal been filed with this Board for these premises?  
Yes/No? NO

Was a variance ever granted for this property? NO If so, please identify and explain: —

Are there any violations pending against this property? NO If so, please identify and explain: —

Has a Work Stop Order or Appearance Ticket been served relative to this matter?  
\_\_\_\_ Yes or X No Date of Issue: —

Have you inquired of the Village Clerk whether there is a petition pending to change the subject zoning district or regulations? NO

**I submit the following attached documents, drawings, photographs and any other items listed as evidence and support and to be part of this application:**

The following items **MUST** be submitted:

- a) Attached hereto is a copy of the order or decision (Notice of Denial) issued by the Building Inspector or duly authorized administrative official issued on AUGUST 4, 2021 upon which this application is based.
- b) Copy of notice to the administrative official that I have appealed, setting forth the grounds of appeal and have requested the application to be scheduled for a public hearing.
- c) A typewritten statement of the principal points (facts and circumstances) on which I base my application with a description of the proposed work.
- d) Ten (10) sets of site plans, plat or as-built survey drawings professionally signed and sealed (as may be required).
- e) A block diagram with street names, block and lot numbers, and street frontage showing all property affected within 300' of the subject property, with a North point of the compass indicated.
- f) A full list of names and addresses of the owners of all property shown on the above noted block diagram that lie within or tangent to the 300' radius from the subject property.
- g) A copy of the Public Notice for the public hearing of this application.
- h) A sworn Affidavit of Mailing, duly notarized, that a true copy of said Public Notice has been sent by mail to all property owners within 300 feet of this premises at least 10 days prior to the public hearing.

**NOTE: APPLICANT MUST CAUSE A TRUE COPY OF THE PUBLIC NOTICE TO BE PUBLISHED IN THE OFFICIAL NEWSPAPER OF THE VILLAGE AT LEAST 15 DAYS PRIOR TO THE PUBLIC HEARING.**

- i) A true copy of the filed deed and/or signed lease or contract for the use of the subject property.
- \*j) At least two sets of unmounted photographs, 4" by 6" in size, showing actual conditions on both sides of street, between intersecting streets. Print street names and mark premises in question.
- \*k) A floor plan of the subject building with all the necessary measurements.
- \*l) A longitudinal section of the subject building and heights marked thereon as well as front elevations.

**\* Optional - As Needed**



STEVEN C. HELMES, AIA

I hereby depose & say that all the above statements and the statements contained in the papers submitted herewith are true.

(Appellant to sign here)

Sworn to before me this day of: AUGUST 26, 20 21

Notary Public, Janet Kissling Barreto, County, NY

JANET KISSLING BARRETO  
NOTARY PUBLIC-STATE OF NEW YORK  
No. 01K16393096  
Qualified in Westchester County  
My Commission Expires 06-10-2023

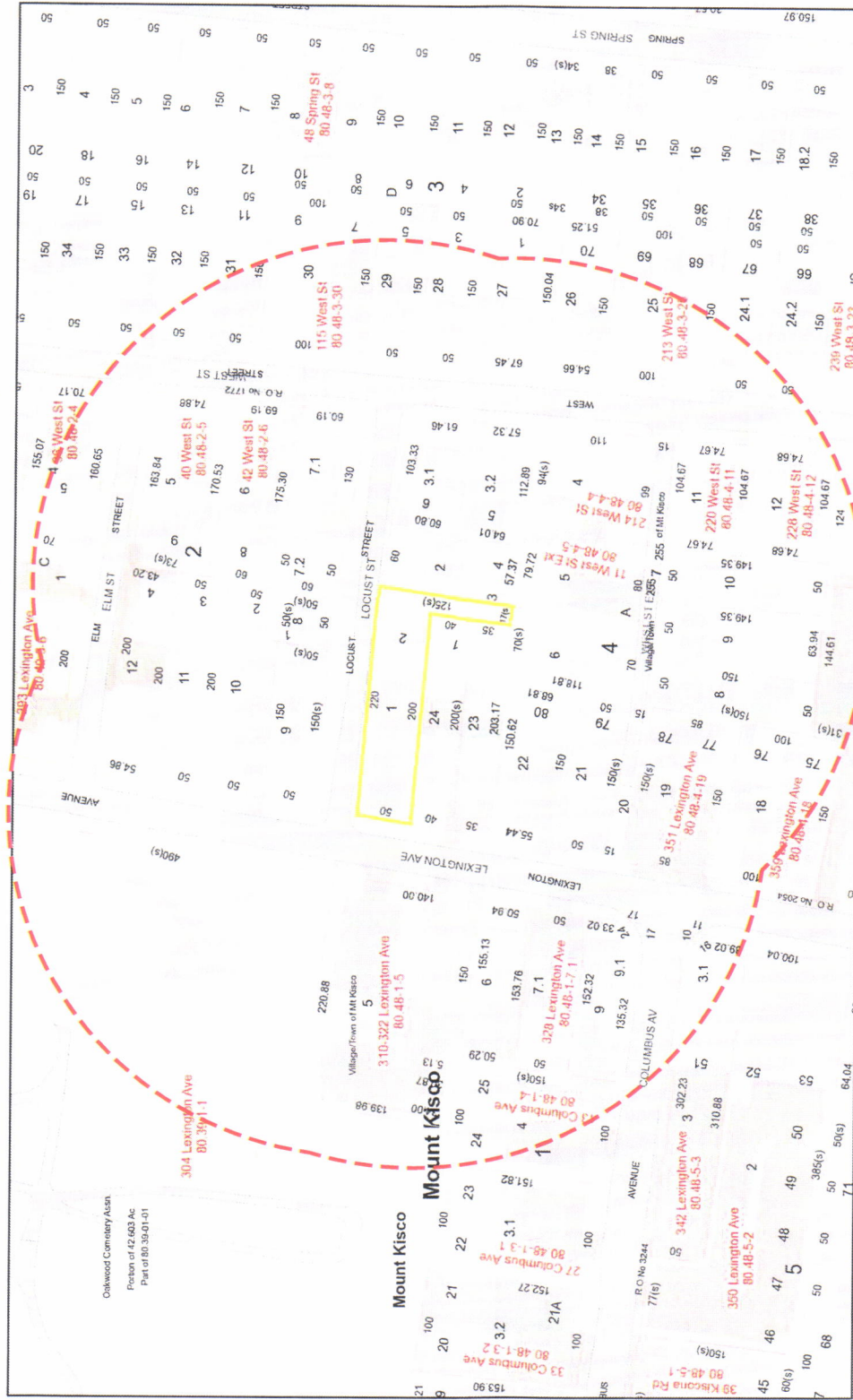
[TO BE COMPLETED IF APPELLANT IS NOT THE PROPERTY OWNER IN FEE]

State of New York                    }  
County of Westchester            } ss

Being duly sworn, deposes and say that he resides at \_\_\_\_\_ in the County of Westchester, in the State of New York, that he is the owner in fee of all that certain lot, piece or parcel of land situated, lying and being in the Village of Mount Kisco, County of Westchester aforesaid and known and designated as number \_\_\_\_\_ and that he hereby authorized \_\_\_\_\_ to make the annexed application in his behalf and that the statements contained in said application are true.

(sign here)

# 333 Lexington Ave. ID: 80.48-4-1 (Mount Kisco)



August 17, 2021

0 70 140 280  
ft

1:1,500

**Westchester County GIS**  
<http://giswww.westchestergov.com>  
 Michaelian Office Building  
 148 Marine Avenue Rm 214  
 White Plains, New York 10601

Tax parcel data was provided by local municipality. This map is generated as a public service to Westchester County residents for general information and planning purposes only, and should not be relied upon as a sole informational source. The County of Westchester hereby disclaims any liability from the use of this GIS mapping system by any person or entity. Tax parcel boundaries represent approximate property line location and should NOT be interpreted as or used in lieu of a survey or property boundary description. Property descriptions must be obtained from surveys or deeds. For more information please contact local municipality assessor's office.

OWNERNAME	PROPADDRESS	PROPCITY	PROPZIP	PROPPRINTKEY	C/O	Mailing Address	City	State	Zip
13 Columbus LLC	13 Columbus Ave	MOUNT KISCO	10549	80.48-1-4		10 Frances Drive	Katonah	NY	10536
James, Delroy	20 West St Ext	MOUNT KISCO	10549	80.48-4-8					
PAL 325 Lexington Ave	325 Lexington Ave	MOUNT KISCO	10549	80.48-2-9		PO BOX 367	Mt. Kisco	NY	10549
Mareschi, Enrico - Alyson R Mareschi	112 West St	MOUNT KISCO	10549	80.48-2-7.1					
People Of The State of NY	1 Lexington Ave	MOUNT KISCO	10549	80.48-1-9.1	Dir Real Estate Westchester Cty	148 Martine Ave, 9th Fl	White Plains	NY	10601
351 Lexington Av Corp	351 Lexington Ave	MOUNT KISCO	10549	80.48-4-19	Henry's Delicatessen	351 Lexington Ave	Mt. Kisco	NY	10549
C & S Lexington Avenue Corp.	347 Lexington Ave	MOUNT KISCO	10549	80.48-4-21		345 Lexington Ave	Mt. Kisco	NY	10549
Conte Bella Casa, LLC	11 West St Ext	MOUNT KISCO	10549	80.48-4-5		110 Blackburn Ave	York	NE	68467
		MOUNT KISCO	10549	80.48-4-13		110 Blackburn Ave	York	NE	68467
PAL 15 Locust St Mt Kisco LLC	15 Locust St	MOUNT KISCO	10549	80.48-2-8		PO BOX 367	Mt. Kisco	NY	10549
J & J Realty of Westchester LL	328 Lexington Ave	MOUNT KISCO	10549	80.48-1-7.1		328-A Lexington Ave	Mt. Kisco	NY	10549
Lexington Avenue Realty LLC	326 Lexington Ave	MOUNT KISCO	10549	80.48-1-6		328-A Lexington Ave	Mt. Kisco	NY	10549
339 Lexington Avenue Mt Kisco - Lexir	339 Lexington Ave	MOUNT KISCO	10549	80.48-4-23		305 Spring Street	Mt. Kisco	NY	10549
Mt Kisco Glass Co Inc	333 Lexington Ave	MOUNT KISCO	10549	80.48-4-1	NA		Mt. Kisco	NY	10549
Cambarelli, Rocco	301 Lexington Ave	MOUNT KISCO	10549	80.48-2-12		RD#2 80 McInain Street	Mt. Kisco	NY	10549
Espinoza, Anderson	206 West St	MOUNT KISCO	10549	80.48-4-3.1		31 Wood Street	Katonah	NY	10536
305 Lexington Avenue LLC	293 Lexington Ave	MOUNT KISCO	10549	80.40-5-6	Spencer Savings Bank, attn:Marlene	611 River Road	Elmwood Park	NJ	07407
Mair Lovett - Andrea Watson	10 Locust St	MOUNT KISCO	10549	80.48-4-2					
Velardo, Giuseppe	213 West St	MOUNT KISCO	10549	80.48-3-25		40 West Street	Mt. Kisco	NY	10549
Salomon, Stefan	201 West St	MOUNT KISCO	10549	80.48-3-28		22 Jo Drive	Cortland Manor		
13 Columbus LLC	330 Lexington Ave	MOUNT KISCO	10549	80.48-1-9		10 Frances Drive	Katonah	NY	10536
Turns, Louise	16 West St Ext	MOUNT KISCO	10549	80.48-4-9	Eugenia Turns	16 West St Ext	Mt. Kisco	NY	10549
Mt Kisco Supply Co Inc	369 Lexington Ave	MOUNT KISCO	10549	80.48-4-17	Robert Pasquale	369 Lexington Ave	Mt. Kisco	NY	10549
Velardo, Giuseppe - Rosaria Velardo	305 Lexington Ave	MOUNT KISCO	10549	80.48-2-11		85 Manchester Dr	Mt. Kisco	NY	10549
Lopez, Jeffrey - Ramiro Lopez	12 West St Ext	MOUNT KISCO	10549	80.48-4-10		32 Rome Ave	Bedford Hills	NY	10507
Randazzo, Serafino	228 West St	MOUNT KISCO	10549	80.48-4-12					
Abreu-Camilo, Raul	211 West St	MOUNT KISCO	10549	80.48-3-26		PO Box 367	Mt. Kisco	NY	10549
15 Locust St Mt Kisco Corp	15 Locust St	MOUNT KISCO	10549	80.48-2-7.2					
Cericola, Paolo - Giuseppina Cericola	42 West St	MOUNT KISCO	10549	80.48-2-6					
Velardo, Giuseppe - Rosaria Velardo	40 West St	MOUNT KISCO	10549	80.48-2-5					
Munoz Elizabeth - Jose Luis Chacon	105 West St	MOUNT KISCO	10549	80.48-3-31					
Roger Case Rlty Corp	342 Lexington Ave	MOUNT KISCO	10549	80.48-5-3	attn: Pedfix Inc	281 Fields Lane	Brewster	NY	10509
People Of The State of NY	1 Lex Ave-Columbus Ave	MOUNT KISCO	10549	80.48-5-3.1	Dir. Real Estate Westch Co	148 Martine Ave, 9th Fl	White Plains	NY	10601
359-363 Lexington LLC	359 Lexington Ave	MOUNT KISCO	10549	80.48-4-18		345 Lexington Avenue	Mt. Kisco	NY	10549
Dennett, Christine	115 West St	MOUNT KISCO	10549	80.48-3-30					
Ching Billy H - Michelle J Ching	36 West St	MOUNT KISCO	10549	80.48-2-4					
335 Lexington Ave. Mt Kisco - 335 Lex	335 Lexington Ave	MOUNT KISCO	10549	80.48-4-24		305 Spring Street	Mt Kisco	NY	10549
Conte, Carmine	19 West St Ext	MOUNT KISCO	10549	80.48-4-6		16 Wood Rd	Mt Kisco	NY	10549
Lopez Veronica	208 West St	MOUNT KISCO	10549	80.48-4-3.2					
Jeffery Lail	101 West St	MOUNT KISCO	10549	80.48-3-32					
Village Of Mount Kisco	310-322 Lexington Ave	MOUNT KISCO	10549	80.48-1-5		104 Main Street	Mt Kisco	NY	10549
Conte Carmine	West St Ext	MOUNT KISCO	10549	80.48-4-20		16 Wood RD	Mt. Kisco	NY	10549
Oakwood Cemetery	304 Lexington Ave	MOUNT KISCO	10549	80.39-1-1	DER Oakwood Solar, LLC Attn:NAMS	101 Summer Street	Boston	MA	02110
Delgado, Luis - Rosa Tapia	341 Lexington Ave	MOUNT KISCO	10549	80.48-4-22		9 West Hyatt Ave	Mt. Kisco	NY	10549
Village Of Mount Kisco	West St Ext	MOUNT KISCO	10549	80.48-4-7		104 Main Street	Mt. Kisco	NY	10549
ABVS Realty Inc	307 Lexington Ave	MOUNT KISCO	10549	80.48-2-10		3 Faraway Rd	Armonk	NY	10504
Velardo, Giuseppe - Rosaria Velardo	220 West St	MOUNT KISCO	10549	80.48-4-11		40 West Street	Mt. Kisco	NY	10549
Conte Bella Casa, LLC	214 West St	MOUNT KISCO	10549	80.48-4-4		110 Blackburn Ave	York	NE	68467
Rodgers Andrew - Sally DelosSantos	225 West St	MOUNT KISCO	10549	80.48-3-24.1					
Bueti, Michael R	207 West St	MOUNT KISCO	10549	80.48-3-27					
Oliveri, Antonio - Grazia Favano	119 West St	MOUNT KISCO	10549	80.48-3-29					



**PUBLIC NOTICE**

PLEASE TAKE NOTICE that the Zoning Board of Appeals of the Village/Town of Mount Kisco, New York will hold a Public Hearing on the 21<sup>st</sup> day of September 2021 at the Municipal Building, Mount Kisco, New York, beginning at 7:00 PM pursuant to the Zoning Ordinance on the Appeal of

**SPENCMORG, LLC – Richard Stumbo, President**

(Name of Applicant)

**333 Lexington Avenue, Mt. Kisco, NY 10549**

(Address of Applicant)

from the decision of Peter J. Miley, Building Inspector, dated August 4, 2021  
(Date of Denial Letter)  
denying the application dated to permit the Second-Story Addition  
**over an Existing One-Story Concrete Block Building.** (Proposed Work)

The property involved is known as 333 Lexington Avenue  
(Address of Property)

and described on the Village Tax Map as Section 80.48 Block 4 Lot 1

and is located on the East side of 333 Lexington Avenue in a  
east/west/n/s (Street Name)

CL-1 Zoning District. Said Appeal is being made to obtain a  
variance from Section(s) 110-35 (D) 110-19.1C. (5) 110-59 of the  
(Identify specific zoning code section number(s))

Code of the Village/Town of Mount Kisco, which requires  
**Front Yard Variance and Side Yard Variances Required.**  
**No Increase in Building Footprint.**

Harold Boxer, Chair  
Zoning Board of Appeals  
Village/Town of Mount Kisco

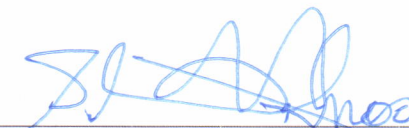
**AFFIDAVIT OF MAILING**

STATE OF NEW YORK                                 }  
  }SS.:  
COUNTY OF WESTCHESTER                         }

I STEVEN C. HELMES, AIA being duly sworn, deposes and says:

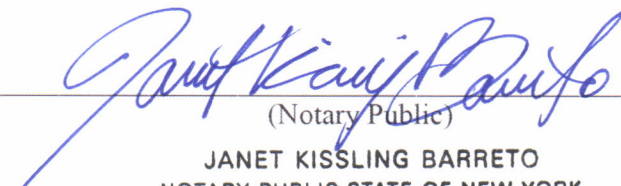
I reside at 184 KATONAH AVENUE, KATONAH, NY 10536

On SEPTEMBER 8 20 21 I served a notice of hearing, a copy of which is attached hereto and labeled Exhibit A, upon persons whose names are listed in a schedule of property owners within 300 feet of the subject property identified in this notice. A copy of this schedule of property owners' names is attached hereto and labeled Exhibit B. I placed a true copy of such notice in a postage paid property addressed wrapper addressed to the addresses set forth in Exhibit B, in a post office or official depository under the exclusive care and custody of the United States Post Office, within the County of Westchester.

  
\_\_\_\_\_  
STEVEN C. HELMES, AIA  
THE HELMES GROUP, LLP

Sworn to before me on this

26 day of August 20 2021

  
\_\_\_\_\_  
(Notary Public)  
JANET KISSLING BARRETO  
NOTARY PUBLIC-STATE OF NEW YORK  
No. 01K16393096  
Qualified in Westchester County  
My Commission Expires 06-10-2023

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.



\*611133308DED001Q\*

## Westchester County Recording & Endorsement Page

### Submitter Information

Name: Attorney's Title Insurance Agency, Inc. Phone: 914-244-3738  
Address 1: 126 Barker Street Fax: 914-244-3814  
Address 2: Email: patrick@attorneytitle.biz  
City/State/Zip: Mount Kisco NY 10549 Reference for Submitter: AT21-15174W / 195-21W

### Document Details

Control Number: **611133308** Document Type: **Deed (DED)**  
Package ID: 2021042300133001001 Document Page Count: **3** Total Page Count: **4**

### Parties

☐ Additional Parties on Continuation page

#### 1st PARTY

1: MT KISCO GLASS CO INC

- Other

2:

1: SPENCMORG LLC

- Other

2:

#### 2nd PARTY

### Property

☐ Additional Properties on Continuation page

Street Address: 333 LEXINGTON AVENUE

Tax Designation: 80.48-4-1

City/Town: MOUNT KISCO

Village:

### Cross-References

☐ Additional Cross-Refs on Continuation page

1:

2:

3:

4:

### Supporting Documents

1: RP-5217

2: TP-584

### Recording Fees

Statutory Recording Fee: \$40.00  
Page Fee: \$20.00  
Cross-Reference Fee: \$0.00  
Mortgage Affidavit Filing Fee: \$0.00  
RP-5217 Filing Fee: \$250.00  
TP-584 Filing Fee: \$5.00  
RPL 291 Notice Fee: \$0.00  
Total Recording Fees Paid: **\$315.00**

### Transfer Taxes

Consideration: \$675,000.00  
Transfer Tax: \$2,700.00  
Mansion Tax: \$0.00  
Transfer Tax Number: 28777

### Mortgage Taxes

Document Date:  
Mortgage Amount:

Basic: \$0.00  
Westchester: \$0.00  
Additional: \$0.00  
MTA: \$0.00  
Special: \$0.00  
Yonkers: \$0.00  
Total Mortgage Tax: **\$0.00**

Dwelling Type:  
Serial #:

Exempt: ☐

RECORDED IN THE OFFICE OF THE WESTCHESTER COUNTY CLERK



Recorded: 05/04/2021 at 09:19 AM  
Control Number: **611133308**  
Witness my hand and official seal

*Timothy C. Idoni*

Timothy C. Idoni  
Westchester County Clerk

### Record and Return To

☐ Pick-up at County Clerk's office

Alan D. Lichenstein, Esq.  
126 Barker Street

Mount Kisco, NY 10549



**THIS INDENTURE**, made the 30th day of April, 2021

**BETWEEN**    **Mt. Kisco Glass Co., Inc., a New York Corporation**  
                  having an address of 333 Lexington Avenue, Mt. Kisco, New York 10549

party of the first part,

-and-

**Spencmorg, LLC, a New York Limited Liability Company**  
with offices at 5 Anderson Lane, Goldens Bridge, New York 10526

party of the second part,

**WITNESSETH**, that the party of the first part, in consideration of Ten Dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

**ALL** that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Town/Village of Mt. Kisco, County of Westchester, State of New York

**SEE SCHEDULE "A" ATTACHED HERETO AND MADE A PART HEREOF**

**BEING AND INTENDED** to be the same premises conveyed to the party of the first part by deed dated September 1, 1977, recorded September 6, 1977 in the County Clerk's Office of the County of Westchester, in Liber 7417 Cp. 654.

**TOGETHER** with all right, title and interest, if any, of the party of the first part of, in and to any streets and roads abutting the above-described premises to the center lines thereof; **TOGETHER** with the appurtenances and all the estate and rights of the party of the first part in and to said premises; **TO HAVE AND TO HOLD** the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

**AND** the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.

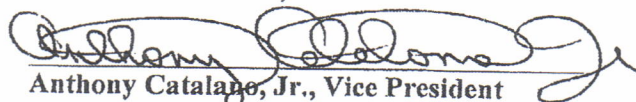
**AND** the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

**IN WITNESS WHEREOF**, the party of the first part has duly executed this deed the day and year first above written.

**IN PRESENCE OF:**

**Mt. Kisco Glass Co., Inc.**

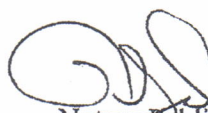

  
**Anthony Catalano, Jr., Vice President**

STATE OF NEW YORK , COUNTY OF WESTCHESTER s.s.:

On the 30<sup>TH</sup> day of April, 2021, before me  
the undersigned, personally appeared

**Anthony Catalano, Jr.**

personally known to me or proved to me on the basis  
of satisfactory evidence to be the individual whose  
name is subscribed to the within instrument and  
acknowledged to me that he executed same in his  
own capacity and that by his signature on the  
instrument, the individual or the person on behalf of  
which the individual acted, executed this instrument.

  
Notary Public **Patrick F. Clowry**  
Notary Public State of New York  
No. 01CL6037849  
Qualified in Dutchess County  
Commission Expires 2-28-2026 

Section: 80.48  
Block: 4  
Lot: 1  
County: Westchester  
Town/Village: Mt. Kisco  
Address: 333 Lexington Avenue  
Mt. Kisco, NY 10549

Record and Return To:

Alan Lichtenstien, Esq.  
126 Barker Street  
Mt. Kisco, NY 10549

BARGAIN AND SALE DEED WITH  
COVENANTS AGAINST GRANTOR'S ACTS

-----  
**Mt. Kisco Glass Co., Inc.**

To

**Spencmorg, LLC**  
-----

Title # AT21-15174W

**SCHEDULE "A"**  
**(DESCRIPTION)**

**ALL** that certain plot, piece or parcel of land situate, lying and being in the Village and Town of Mt. Kisco, County of Westchester, and State of New York, known and designated as Lot No. 2 and part of Lot No. 3 in Block A on a certain map entitled "Map of Subdivision of the Property of Josephine H. Moore" dated June 1907 and filed in the Westchester County Clerk's Office, Division of Land Records, on January 20th, 1908 as Map No. 1772, bounded and described as follows:

**BEGINNING** at the corner formed by the intersection of the southerly side of Locust Street with the easterly side of Lexington Avenue; running thence along the southerly side of Locus Street, South  $82^{\circ} 50' 40''$  East 200 feet and South  $78^{\circ} 02' 00''$  East 20 feet to a point; thence South  $11^{\circ} 57' 05''$  West 124.93 feet to land now or formerly of Van Kleek; thence North  $78^{\circ} 02' 00''$  West 16.90 feet along said land now or formerly of Van Kleek to the division line between Lots 1 and 3 in Block A; thence North  $9^{\circ} 34' 20''$  East 75 feet along said division line to the division line between Lots 1 and 2 in Block A; thence North  $82^{\circ} 50' 40''$  West 200 feet along said last mentioned division line to the easterly side of Lexington Avenue; thence North  $11^{\circ} 58' 00''$  East 50 feet along the easterly side of Lexington Avenue to the point or place of **BEGINNING**.

**Address:** 333 Lexington Avenue, Mt. Kisco

**Village & Town:** Mt. Kisco

**County:** Westchester

**TAX DESIGNATION:** Section: 80.48, Block: 4, Lot: 1





## AFFIDAVIT OF PUBLICATION FROM

State of Wisconsin  
County of Brown, ss.:

On the 3 day of September in the year 2021, before me, the undersigned, a Notary Public in and for said State, personally appeared Linda Tuttle, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed, the instrument.

Linda Tuttle being duly sworn says that he/she is the principal clerk of **THE JOURNAL NEWS**, a newspaper published in the County of Westchester and the State of New York, and the notice of which the annexed is a printed copy, on the editions dated :

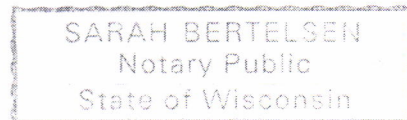
Zone:  
Westchester

Run Dates:  
09/03/2021

Linda Tuttle  
Signature

Sworn to before me, this 3 day of September, 2021

Sarah Bertelsen  
Notary Public, State of Wisconsin, County of Brown



7/27/25

My commission expires

Legend:

### WESTCHESTER:

Amawalk, Ardsley, Ardsley on Hudson, Armonk, Baldwin Place, Bedford, Bedford Hills, Brewster, Briarcliff Manor, Bronxville, Buchanan, Carmel, Chappaqua, Cold Spring, Crompond, Cross River, Croton Falls, Croton on Hudson, Dobbs Ferry, Eastchester, Elmsford, Garrison, Goldens Bridge, Granite Springs, Greenburg, Harrison, Hartsdale, Hastings, Hastings on Hudson, Hawthorne, Irvington, Jefferson Valley, Katonah, Lake Peekskill, Larchmont, Lincoln Dale, Mahopac, Mahopac Falls, Mamaroneck, Millwood, Mohegan Lake, Montrose, Mount Kisco, Mount Vernon, New Rochelle, North Salem, Ossining, Patterson, Peekskill, Pelham, Pleasantville, Port Chester, Pound Ridge, Purchase, Purdys, Putnam Valley, Rye, Scarsdale, Shenorock, Shrub Oak, Somers, South Salem, Tarrytown, Thornwood, Tuckahoe, Valhalla, Verplanck, Waccabuc, White Plains, Yorktown Heights, Yonkers

### ROCKLAND:

Blauvelt, Congers, Garnerville, Haverstraw, Hillburn, Monsey, Nanuet, New City, Nyack, Orangeburg, Palisades, Pearl River, Piermont, Pomona, Slootsburg, Sparkill, Spring Valley, Stony Point, Suffern, Tallman, Tappan, Thiells, Tomkins Cove, Valley Cottage, West Haverstraw, West Nyack

Ad Number: 0004892821

**PUBLIC NOTICE**

PLEASE TAKE NOTICE that the Zoning Board of Appeals of the Village/Town of Mount Kisco, New York will hold a Public Hearing on the **21st day of September, 2021** at the Municipal Building, Mount Kisco, New York, beginning at 7:00 PM pursuant to the Zoning Ordinance on the Appeal of:

**SPENCMORG, LLC-Richard Stumbo,  
President  
333 Lexington Ave., Mt. Kisco, NY 10549**

from the decision of Peter J. Miley, Building Inspector, dated August 4, 2021, denying the application dated to permit the Second-Story Addition over an Existing One-Story Concrete Block Building. The property involved is known as: 333 Lexington Avenue in a CL-1 Zoning District. Said Appeal is being made to obtain a variance from Section(s) 110-35(D), 110-19.1C.(5), 110-59 of the Code of the Village/Town of Mount Kisco, which requires **Front Yard Variance and Side Yard Variances Required. No Increase in Building Footprint.**

Harold Boxer, Chair  
Zoning Board of Appeals  
Village/Town of Mount Kisco

4892821

333 Lx

State of New York     )  
                                  ) ss:  
County of Westchester)

AFFIDAVIT OF POSTING

**Guillermo Gomez**, being duly sworn, says that on the \_\_\_\_\_ day of September 2021, he conspicuously fastened up and posted in seven public places, in the Village/Town of Mount Kisco, County of Westchester, a printed notice of which the annexed is a true copy, to Wit: ---

Municipal Building –  
104 Main Street

\_\_\_\_\_X\_\_\_\_\_

Public Library  
100 Main Street

\_\_\_\_\_X\_\_\_\_\_

Fox Center

\_\_\_\_\_X\_\_\_\_\_

Justice Court – Green Street  
40 Green Street

\_\_\_\_\_X\_\_\_\_\_

Mt. Kisco Ambulance Corp  
310 Lexington Ave

\_\_\_\_\_X\_\_\_\_\_

Carpenter Avenue Community House  
200 Carpenter Avenue

\_\_\_\_\_X\_\_\_\_\_

Leonard Park Multi Purpose Bldg

\_\_\_\_\_X\_\_\_\_\_

  
\_\_\_\_\_  
Guillermo Gomez

Sworn to before me this 15<sup>th</sup> day of September 2021

  
\_\_\_\_\_  
Notary Public

PATRICIA A TIPA  
NOTARY PUBLIC-STATE OF NEW YORK  
No. 01T16170206  
Qualified in Westchester County  
My Commission Expires 07-02-2023





ARCHITECTURAL RENDERING









333 Le  
Mt Kisco  
Lawrence  
House  
Keep your data





"MAP OF RUTLEDGE PARK" FILED MAY 2, 1914 AS MAP NO. 2034

# PROPOSED SECOND STORY ADDITION & ALTERATIONS TO EXISTING BUILDING FOR:

333 LEXINGTON AVENUE

## SPENCMORG, LLC

VILLAGE/TOWN OF MOUNT KISCO, NY

TABLE R301.2(1)  
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN	TOPOGRAPHIC EFFECTS	SPECIAL WIND REGION	WIND-BORNE DEBRIS ZONE	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM WEATHERING	FROST LINE DEPTH	TERMITES	WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARD	AIR FREEZING INDEX	MEAN ANNUAL TEMP
30 PSF	115	NO	YES	NO	B	SEVERE	42"	MODERATE TO HEAVY	15 DAY	YES	NO	1500	48.5

VILLAGE / TOWN OF MOUNT KISCO, NEW YORK

District Regulations

SECTION 80.48, BLOCK 4, LOT 1

ZONING DISTRICT CL-1 (MIXED USE RESIDENTIAL AND COMMERCIAL DISTRICT)

Minimum Gross Site Area	Required 10,000 SF	Existing 12,348 SF	Proposed No Change
-------------------------	-----------------------	-----------------------	-----------------------

Maximum Building Coverage	30%	12.09%	No Change
---------------------------	-----	--------	-----------

Maximum Development Coverage	80%	46.70%	39.24%
------------------------------	-----	--------	--------

Minimum Lot Width	100 FT	50 FT Pre-existing Non-conforming	No Change * (Variance Required)
-------------------	--------	---	------------------------------------

Minimum Building Setback			
Front (Lexington Avenue)	20 FT	49.74 FT	No Change
Front (Locust Street)	20 FT	10.30 FT Pre-existing Non-conforming	No Change * (Variance Required)

Side	10 FT	6.30 FT Pre-existing Non-conforming	No Change * (Variance Required)
Rear (Lot Line Abutting Residential District)	30 FT	122.00 FT	No Change

Maximum Height			
Stories	2 1/2	1 1/2	2
Feet	35 FT	19'-3"	28'-3"

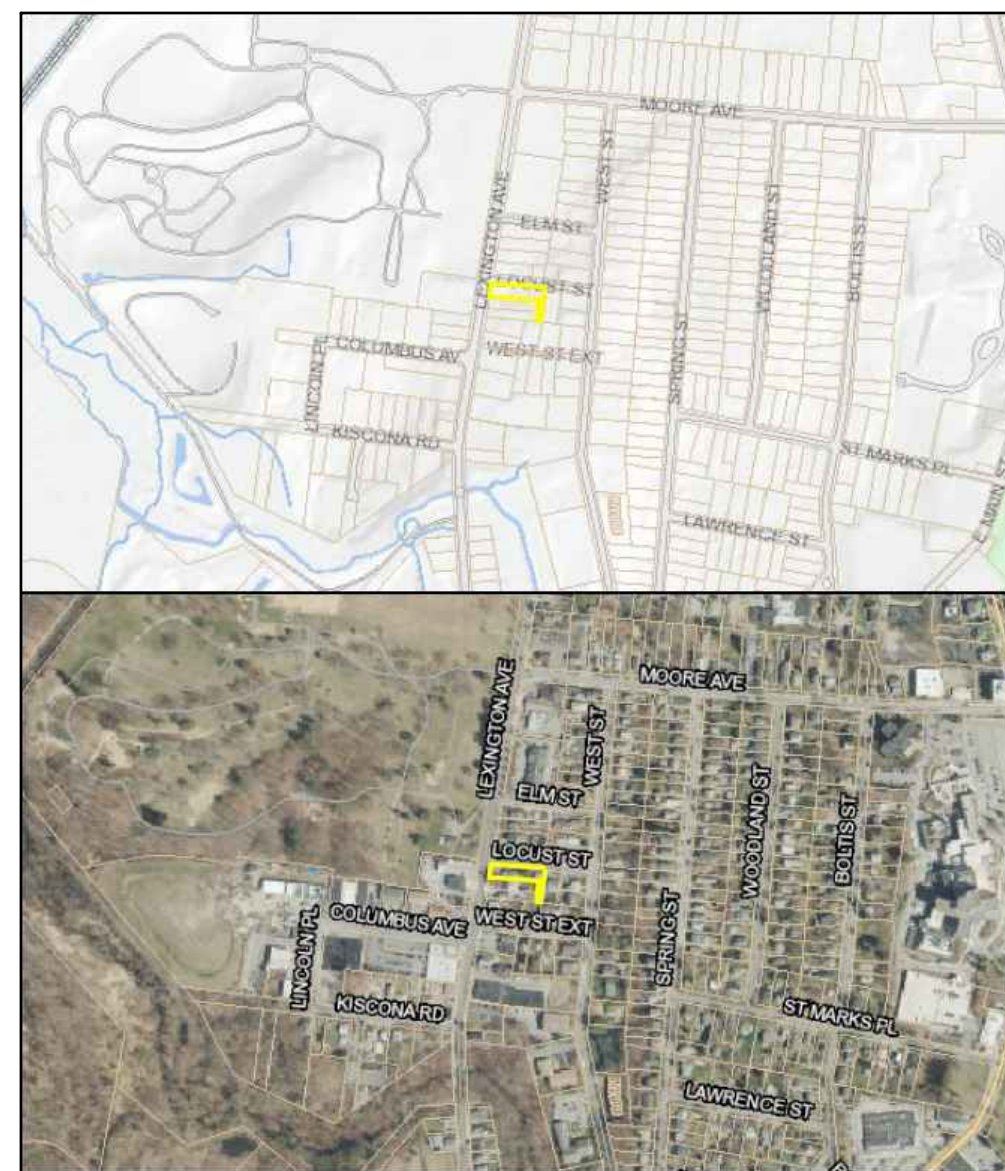
Buffer			
Abutting a nonresidential lot:			
Front	20 FT	No Change	No Change
Rear	5 FT	No Change	No Change
Side	5 FT	No Change	No Change
Abutting a residential lot:			
Front	20 FT	No Change	No Change
Rear	10 FT	No Change	No Change
Side	10 FT	No Change	No Change

Variance Requested \*



ZONING MAP

SCALE: N.T.S.



PARCEL MAPS

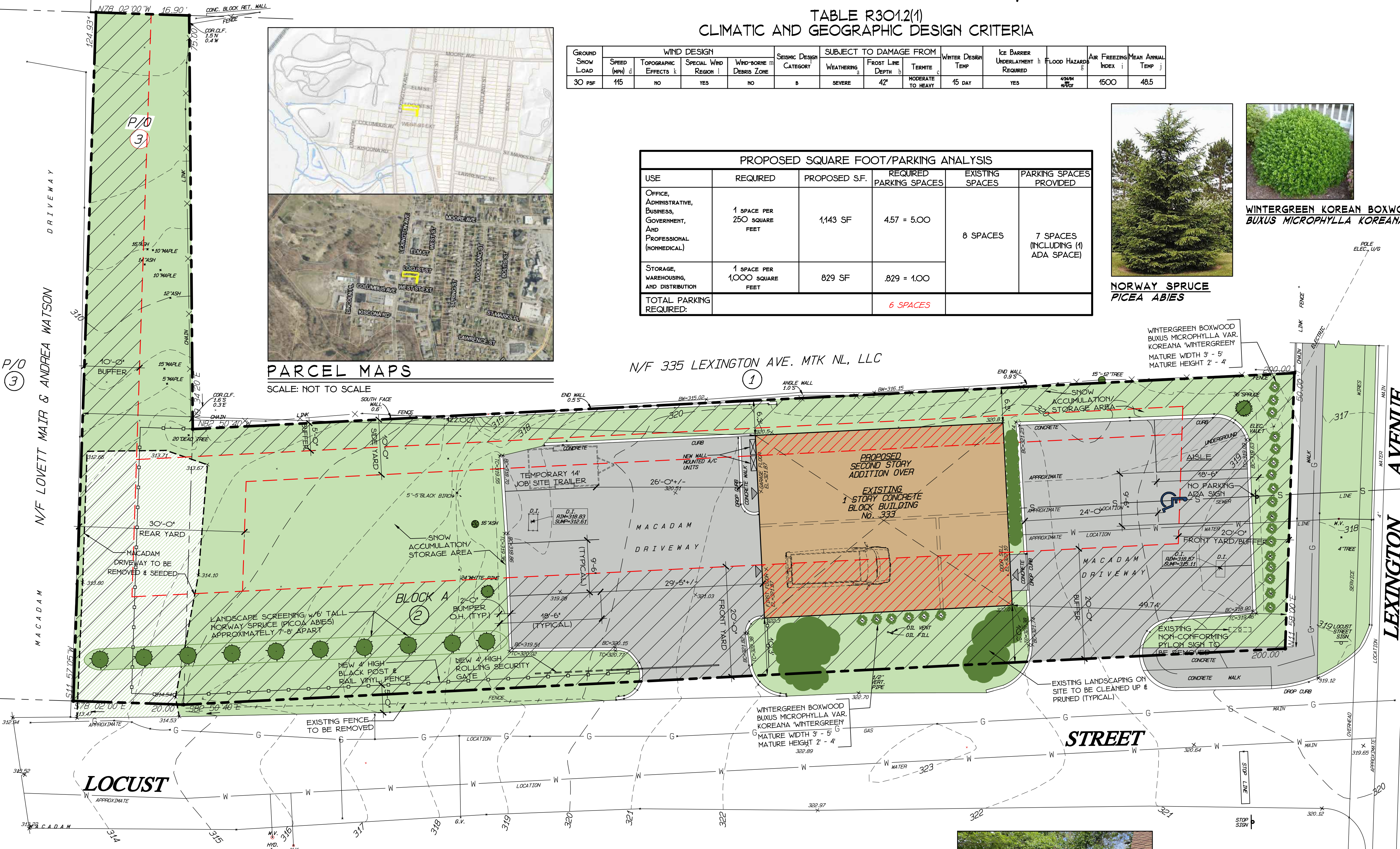
SCALE: NOT TO SCALE

N/F 335 LEXINGTON AVE. MTK NL, LLC

N/F LOVETT MAIR & ANDREA WATSON

P/O  
81

P/O  
81



EXISTING/PROPOSED SITE PLAN

SCALE: 1" = 10'-0"

### SURVEY NOTE:

SURVEY INFORMATION TAKEN FROM A MAP  
PREPARED BY: "H. STANLEY JOHNSON AND COMPANY  
LAND SURVEYORS, P.C." DATED: JANUARY 19, 2021

### NOTES:

DUMPSTER ENCLOSURE NOT REQUIRED FOR  
PROJECT. "OWNER" WILL UTILIZED GARBAGE/REFUSE  
BINS STORED WITHIN EXISTING BUILDING.

THERE WILL BE NO CHANGE TO EXISTING  
DRAINAGE REQUIREMENTS ON SITE

### LOADING NOTES:

LOADING SCHEDULE	LIVE LOAD	DEAD LOAD	TOTAL LOAD
ROOF	45 PSF	10 PSF	55 PSF
ATTIC	20 PSF	10 PSF	30 PSF
FLOORS (1st & 2nd)	40 PSF	20 PSF (10#/WGT OF MAT'L) (10#/PARTITION)	60 PSF
DECKS	50 PSF	10 PSF	60 PSF

### BUILDING CODE NOTES:

- 2020 BUILDING CODE OF NEW YORK STATE  
WAS USED TO DESIGN THIS PROJECT
- 2018 INTERNATIONAL ENERGY CONSERVATION CODE, IECC  
WAS USED TO DESIGN THIS PROJECT



REFERENCE PHOTOGRAPH

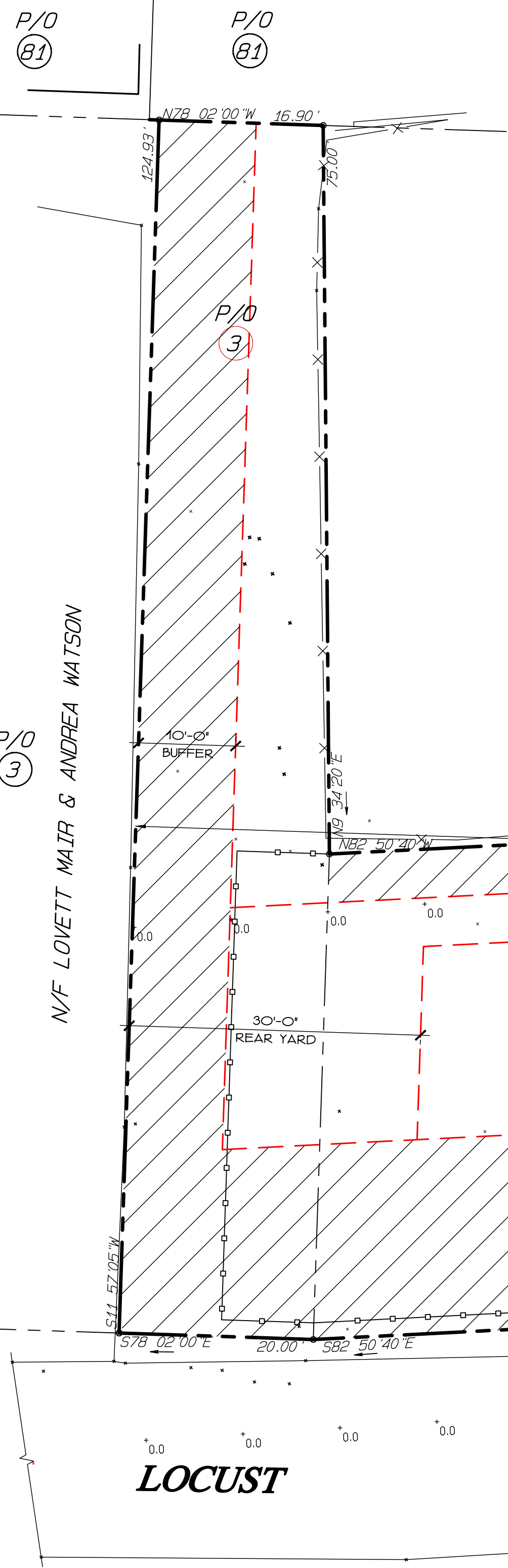
JOB SITE TRAILER

ISSUE DATES:	PROPOSED SECOND STORY ADDITION & ALTERATIONS TO EXISTING BUILDING FOR: SPENCMORG, LLC	VILLAGE/TOWN OF MOUNT KISCO, NY
08/18/21 FOR ZBA & ARB FILING	333 LEXINGTON AVENUE	
07/16/21 FOR SITE PLAN (FORMAL)		
PLANNING BOARD FILING		
05/10/21 FOR PLANNING		
BOARD FILING		
04/07/21 FOR CLIENT'S REVIEW		
03/09/21 FOR VILLAGE/TOWN		
MT. KISCO REVIEW		
02/07/21 FOR CLIENT'S REVIEW		

EXISTING/PROPOSE SITE PLAN/ZONING DATA & REFERENCE PHOTOGRAPHS SCALE: AS NOTED	DRAWN BY: GNA CHECKED BY: SCH
THE HELMES GROUP, LLP ARCHITECTURE • ENGINEERING PROJECT MANAGEMENT 184 KATONAH AVENUE, KATONAH, NY 10536 TEL: (914) 232-4633 FAX: (914) 232-0768 EMAIL: thg@thelmesgroup.com	DRAWING NO:  1 OF 6



"MAP OF RUTLEDGE PARK, ETC.,"  
FILED MAY 2, 1914 AS MAP No. 2054



PROPOSED PHOTOMETRIC PLAN  
SCALE: 1" = 10'-0"

## Clio CBM1701C

The Award-winning Clio offers a contemporary and slim design that is sculpturally beautiful. The highly efficient engine and optical system delivers smooth illumination while the elegant, yet rugged form of Clio make it perfect for use in parks, walkways, pedestrian areas and all public environments.

**LED & OPTICS**

- High power LED available in 3000K & 4000K
- IP67 rating LED optical system
- Type 3 or 5 optics with lightly diffused glass (GGF) enclosure to provide smooth illumination

**ELECTRICAL**

- High power factor (90%) driver
- 120, 208, 240 or 277 volts available
- 10 KA Surge protector supplied standard

**OPTIONAL**

- Button-type photocell (PC)
- Ground fault duplex receptacle (GFI)

**FINISH**

- Available in 10 standard colors
- Textured (TX) or smooth (SM) finish
- Optional RAL colors are also available
- Super durable extremely resistant exterior polyester powder coating meets AAMA 2604 requirements (5 years South Florida exposure)
- For added protection a Marine Grade (MG) pre-finish is available to meet ASTM G7, B117, D1654 and D2247 requirements (salt spray, corrosion and humidity resistance)
- Tamper proof, stainless & black oxide hardware



## BOLLARD LIGHT FIXTURE

NOTE:  
SHIELDS WILL BE INSTALLED ON  
BOLLARDS FACING LEXINGTON AVENUE

N/F 335 LEXINGTON AVE. MTK NL, LLC

## WALL MOUNTED LIGHT FIXTURE

**WDGE1 LED**  
Architectural Wall Sconce

**Specifications**

Depth (D1): 5.5"  
Depth (D2): 1.5"  
Height: 8"  
Width: 9"  
Weight: 9 lbs (without options)

**WDGE1 LED Family Overview**

Series	Model	Power (W)	Color Temp (K)	Beam Angle	Mounting	Notes
WDGE1 LED	4W	4W	3000K	120°	Standard / Right	
WDGE2 LED	10W	10W	3000K	120°	Standard / Right	
WDGE3 LED	15W	15W	3000K	120°	Standard / Right	
WDGE4 LED	20W	20W	3000K	120°	Standard / Right	

**Ordering Information**

EXAMPLE: WDGE1 LED P2 40K 80CRI VF MV02 SRM PE D08XD

Code	Label	Value	Code	Label	Value
W	Wall mounted	WDGE1	W	Wall mounted	WDGE1
P2	Power	20W	P2	Power	20W
40K	Color Temp	4000K	40K	Color Temp	4000K
80CRI	Color Rendering Index	80	80CRI	Color Rendering Index	80
VF	Visual Comfort	VF	VF	Visual Comfort	VF
MV02	Mounting	MV02	MV02	Mounting	MV02
SRM	Surface Mount	SRM	SRM	Surface Mount	SRM
PE	Pre-finish	PE	PE	Pre-finish	PE
D08XD	Dimensions	D08XD	D08XD	Dimensions	D08XD

**Accessories**

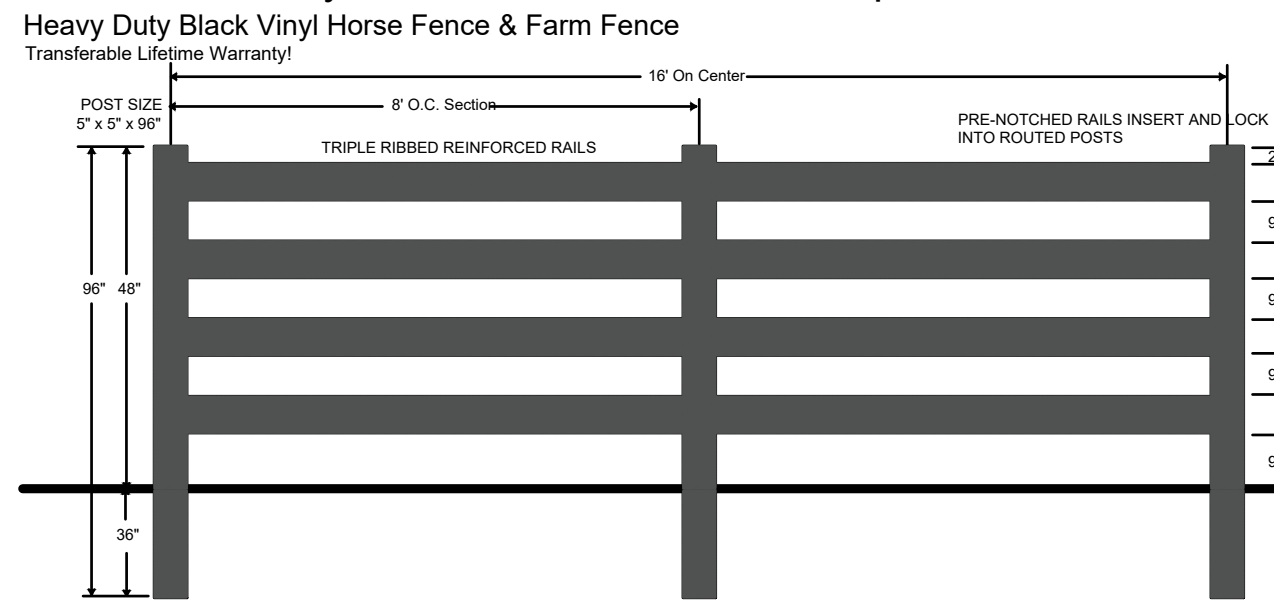
WDGE1 LED P2 40K 80CRI VF MV02 SRM PE D08XD  
WDGE1 LED P2 40K 80CRI VF MV02 SRM PE D08XD

## VINYL FENCE WHOLESALER - Phone (507) 206-4154

### Black 4 Rail Vinyl Horse Fence - Technical Specifications

#### Heavy Duty Black Vinyl Horse Fence & Farm Fence

Transferable Lifetime Warranty!

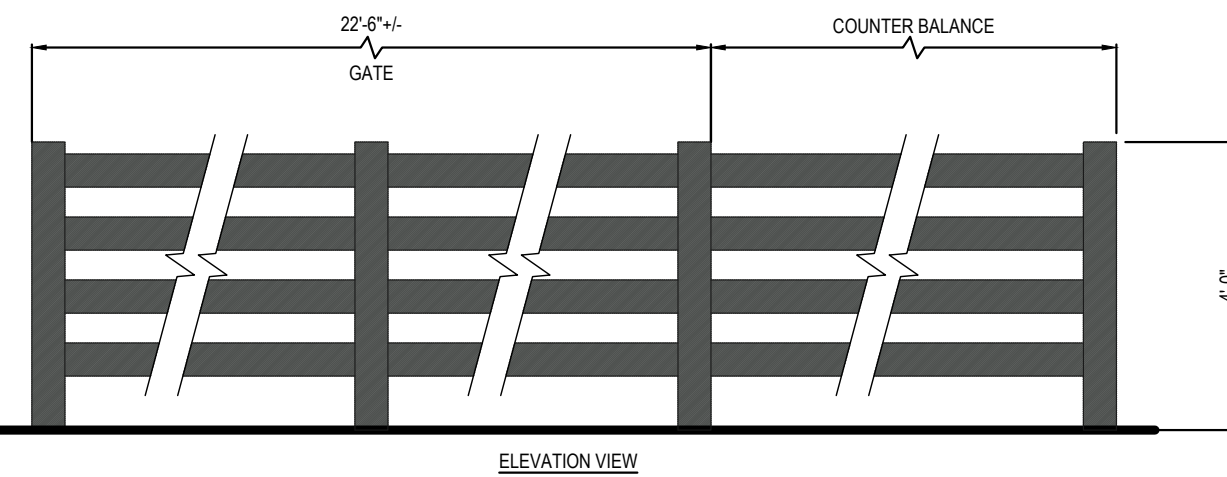
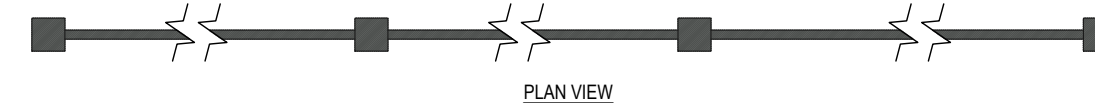


POSTS GO INTO GROUND UP TO 36" CONCRETE IS NOT REQUIRED!  
Custom post sizes available. Contact us 24/7 for a Free quote.

Compare the facts on our Heavy Duty Black Vinyl Commercial Grade Horse & Farm Fence  
Engineered for all climates, available in Minnesota 10' Triple Ribbed and 12' Triple Ribbed and 14' Triple Ribbed  
All rail ends are reinforced with 1/2" x 1/2" x 1/2" steel. No other fence is available in the industry.  
All rail ends are reinforced with 1/2" x 1/2" x 1/2" steel. No other fence is available in the industry.  
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All rail ends are reinforced with 1/2" x 1/2" x 1/2" steel. No other fence is available in the industry.



PROPOSED VINYL POST & RAIL FENCE  
SCALE: NOT TO SCALE



PROPOSED ROLLING GATE DETAIL  
SCALE: NOT TO SCALE

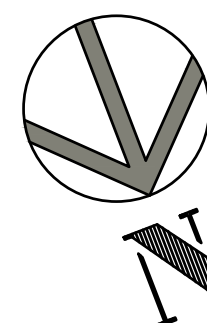
Andrew Zetterstrom, LC, MIES

Sales Representative  
Holophone Sales Channel

Acuity Brands Lighting, Inc.  
5 Penn Plaza, 24th Floor | New York, NY 10001  
m 732 413 3114  
www.acuitybrands.com

Schedule												
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Number Lamps	Filename	Lumens per Lamp	Lumen Multiplier	LLF	Wattage	Distribution
B	B	4	Cyclone Lighting	CBM1701C-RF-3-15W-3K	Clio bollard	1	CBM1701C-RF-3-15W-3K.ies	681	1	0.85	18	
W	W	2	Lithonia Lighting	WDGE1 LED P2 30K 80CRI VF	WDGE1 LED WITH P2 - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT FORWARD OPTIC	1	WDGE1 LED_P2_30K_80CRI_VF.ies	1872	1	0.85	15.0178	TYPE II, VERY SHORT, BUS RATING: 80 - 100

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Border 1	+	0.1 f.c.	0.2 f.c.	0.0 f.c.	N/A	N/A
Border 2	+	0.1 f.c.	0.2 f.c.	0.0 f.c.	N/A	N/A
Parking	+	0.9 f.c.	5.2 f.c.	0.1 f.c.	52.01	9.01
Lexington Ave. Boundary	+	0.0 f.c.	0.0 f.c.	0.0 f.c.	N/A	N/A



ISSUE DATES:

PROPOSED SECOND STORY ADDITION & ALTERATIONS TO EXISTING BUILDING FOR:  
333 LEXINGTON AVENUE  
SPENCERMORG, LLC VILLAGE/TOWN OF MOUNT KISCO, NY

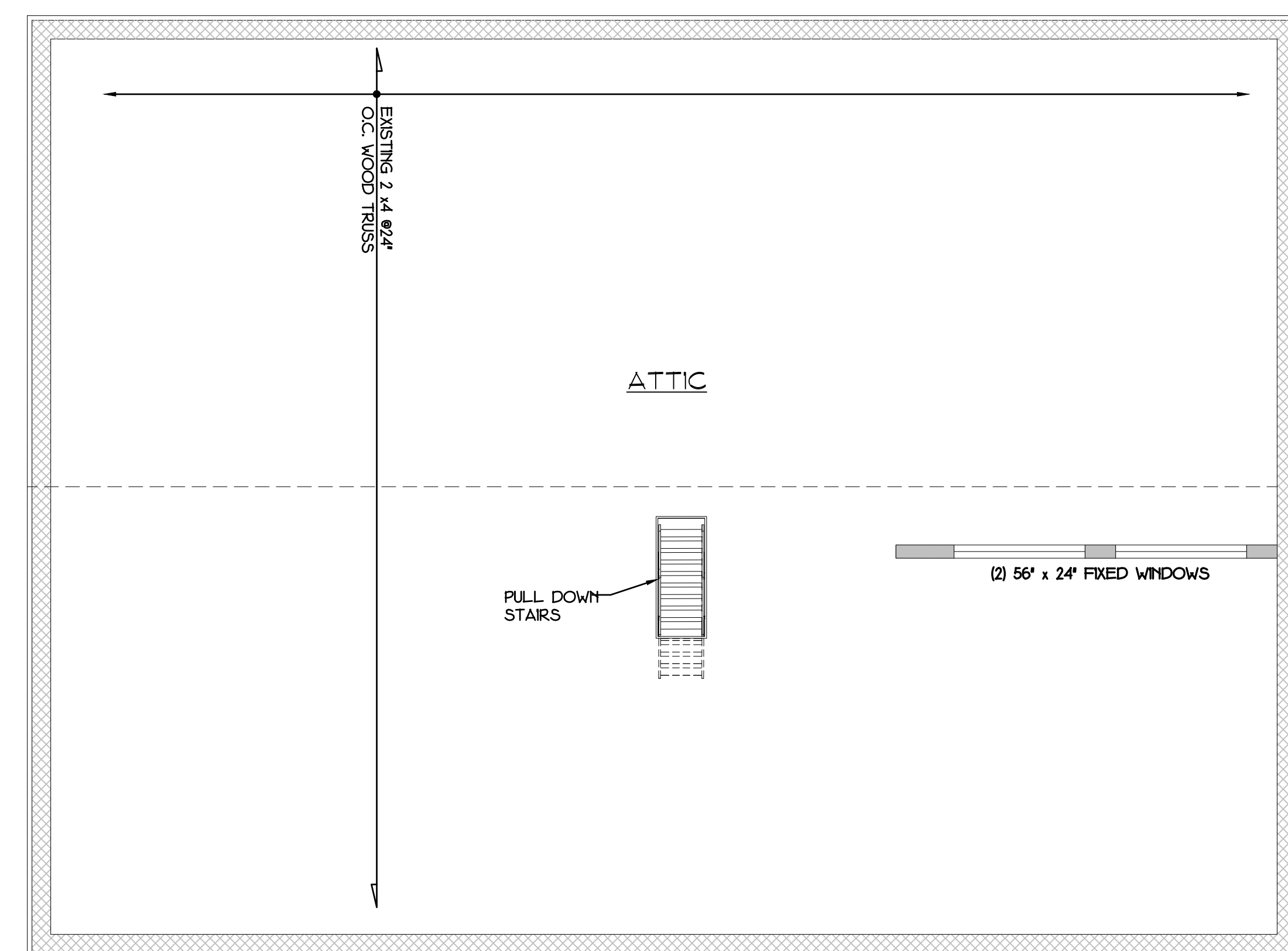
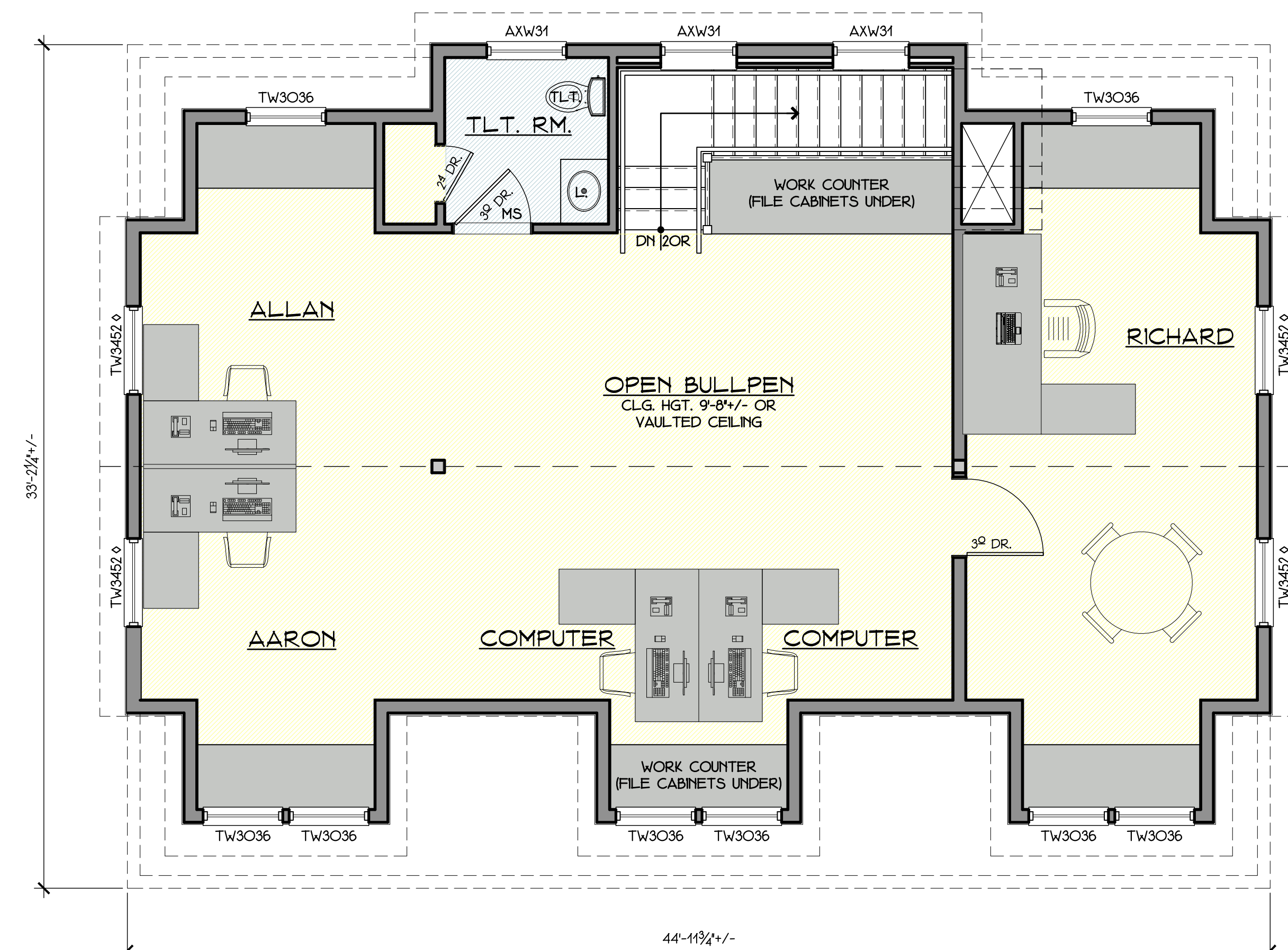
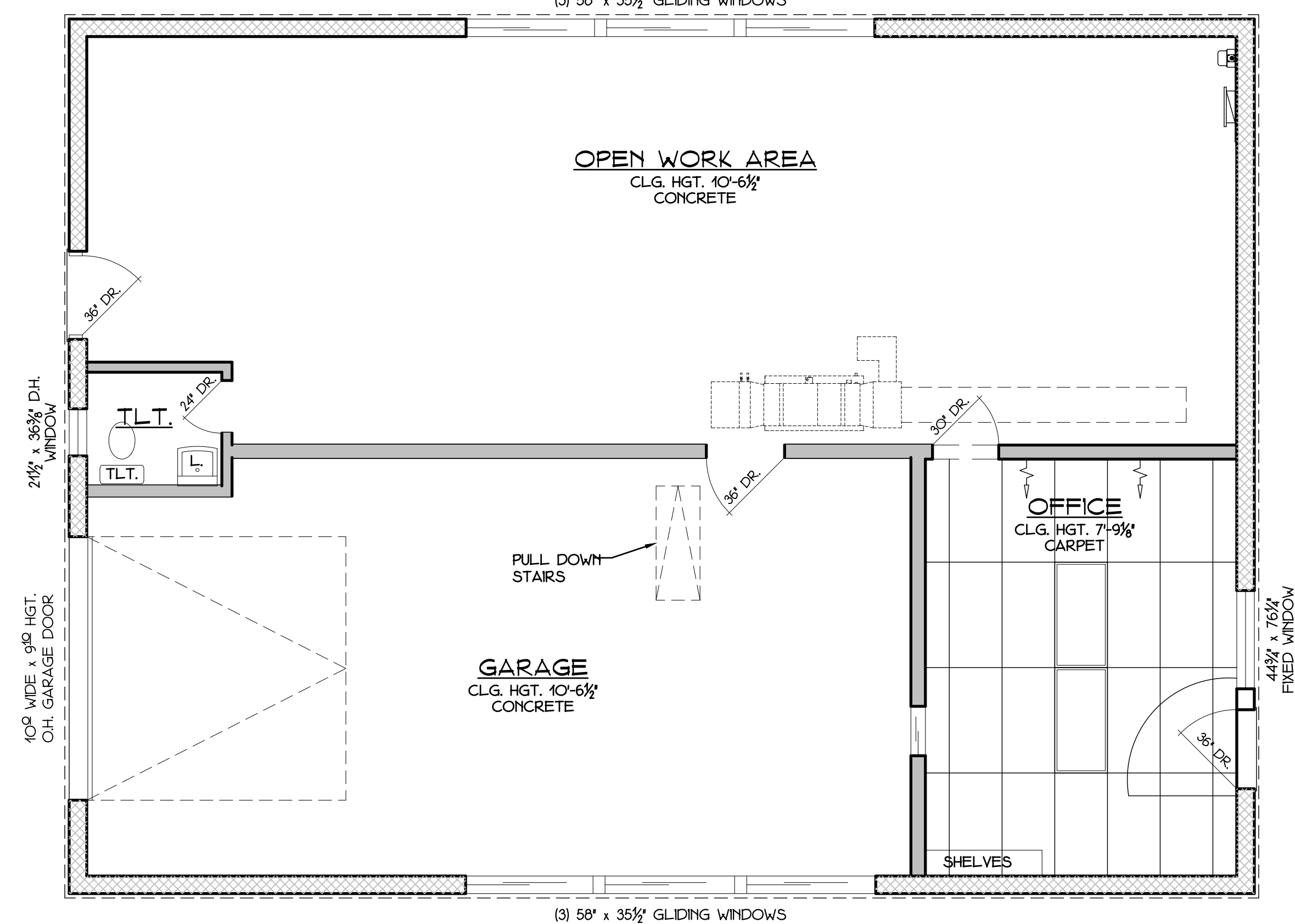
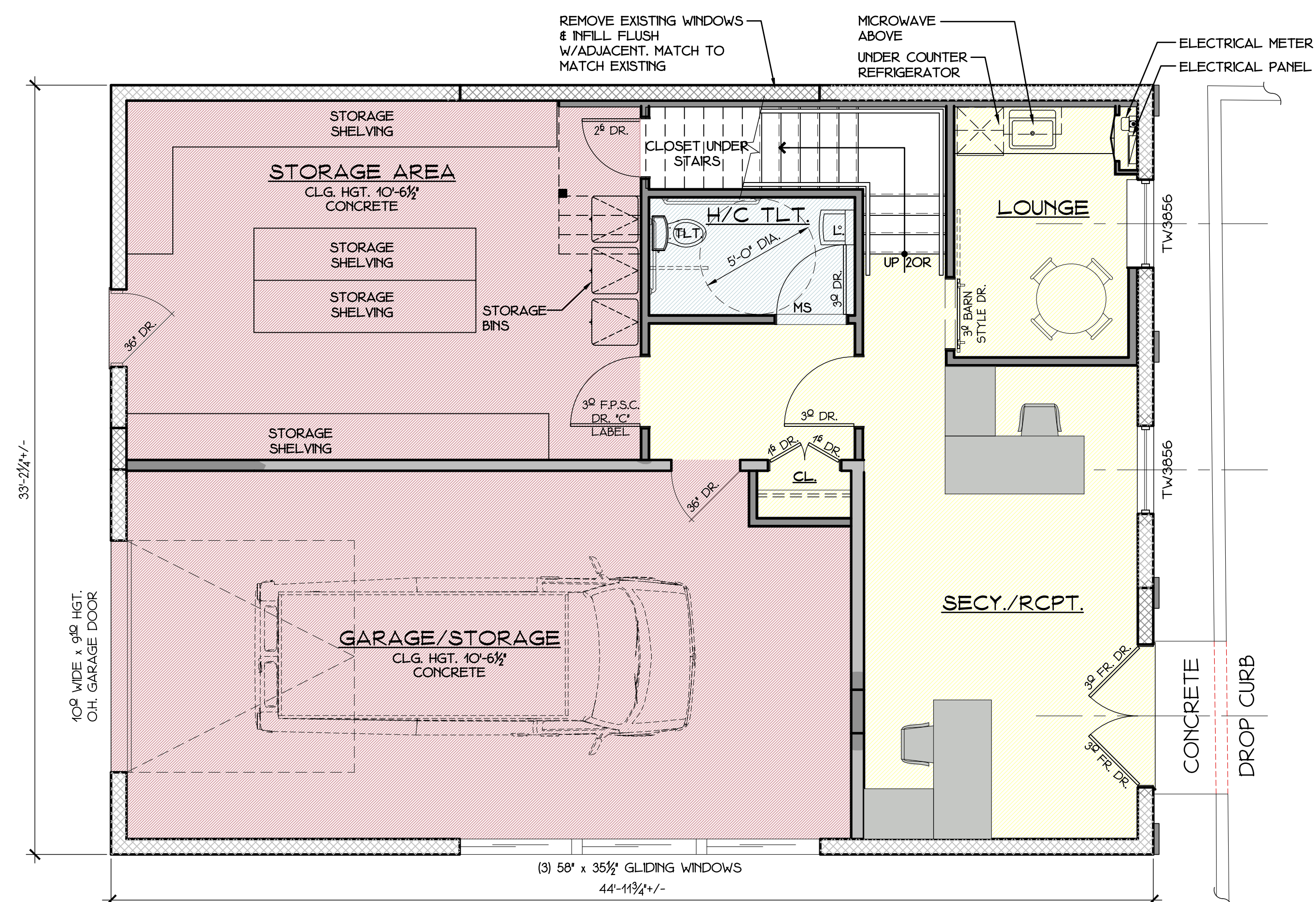
PROPOSED PHOTOMETRIC PLAN & LIGHT  
FIXTURE CUT SHEETS & FENCE DETAIL  
SCALE: AS NOTED


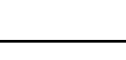
DRAWN BY: GNA  
CHECKED BY: SCH  
DRAWING NO:

THE HELMES GROUP, LLP  
ARCHITECTURE • ENGINEERING  
PROJECT MANAGEMENT  
184 KATONAH AVENUE, KATONAH, NY 10536  
TEL: (914) 232-4633 FAX: (914) 232-0768  
EMAIL: thg@thelmesgroup.com

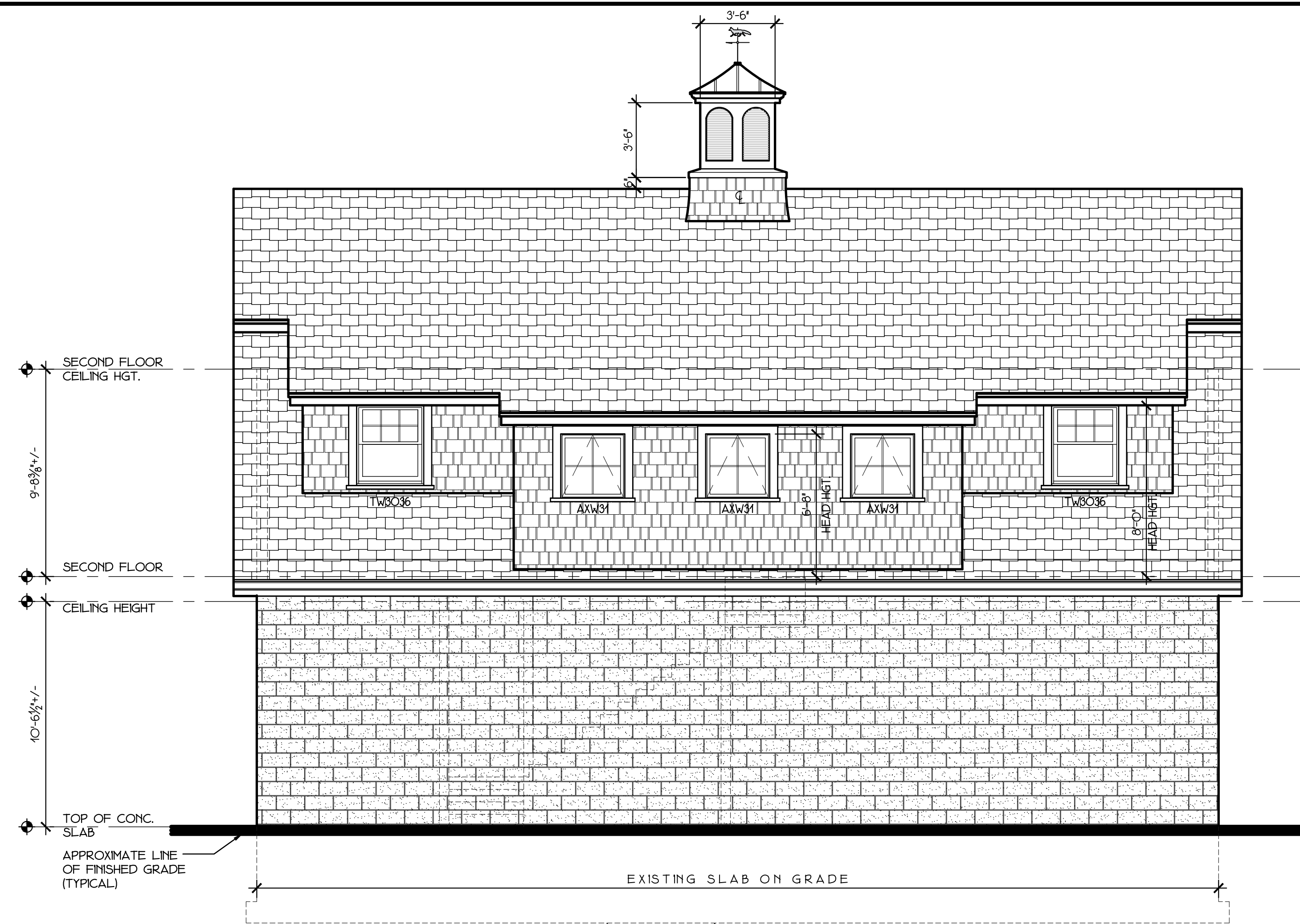
2 OF 6





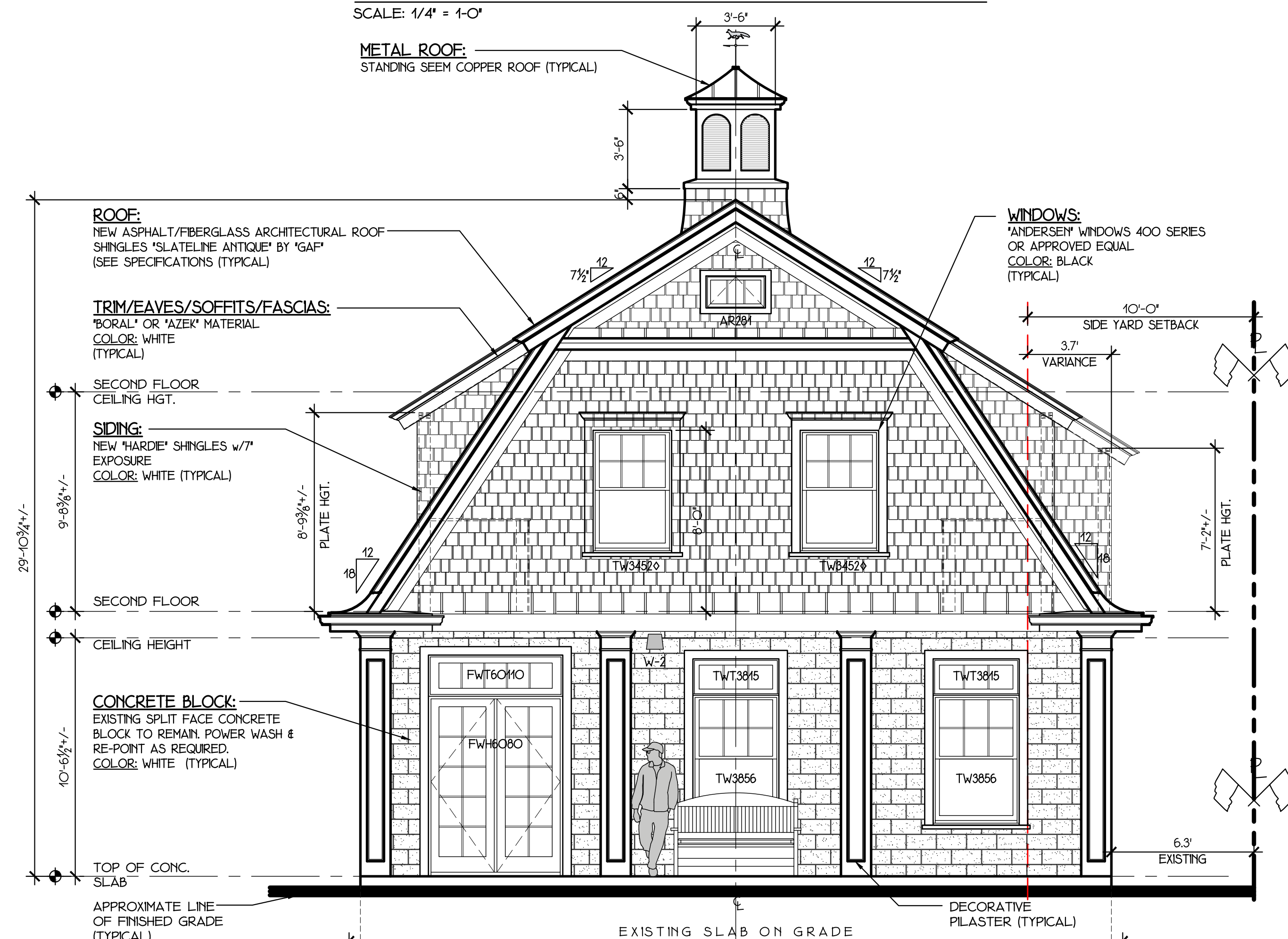
ISSUE DATES:	<b><u>PROPOSED SECOND STORY ADDITION &amp; ALTERATIONS TO EXISTING BUILDING FOR:</u></b>		
	333 LEXINGTON AVENUE	SPENCERMORG, LLC	VILLAGE/TOWN OF MOUNT KISCO, NY
		<b><u>EXISTING FLOOR PLANS &amp; REFERENCE PHOTOGRAPHS</u></b>	DRAWN BY: GNA
		SCALE: AS NOTED	CHECKED BY: SCH
<u>08/19/21 FOR TBA &amp; ARB FLING</u> <u>01/7/21 FOR SITE PLAN (FORMAL)</u> <u>PLANNING BOARD FLING</u> <u>05/10/21 FOR PLANNING</u> <u>BOARD FLING</u> <u>04/07/21 FOR CLIENT'S REVIEW</u> <u>03/03/21 FOR VILLAGE/TOWN</u> <u>MT. KISCO REVIEW</u> <u>01/09/21 FOR CLIENT'S REVIEW</u>	 <b>THE HELMES GROUP, LLP</b> ARCHITECTURE • ENGINEERING PROJECT MANAGEMENT 184 KATONAH AVENUE, KATONAH, NY 10536 TEL: (914) 232-4633 FAX: (914) 232-4768 EMAIL: thg@thehelmesgroup.com	DRAWING NO:	<div style="font-size: 48pt; font-weight: bold;">3</div> <div style="font-size: 24pt; font-weight: bold;">OF 6</div>





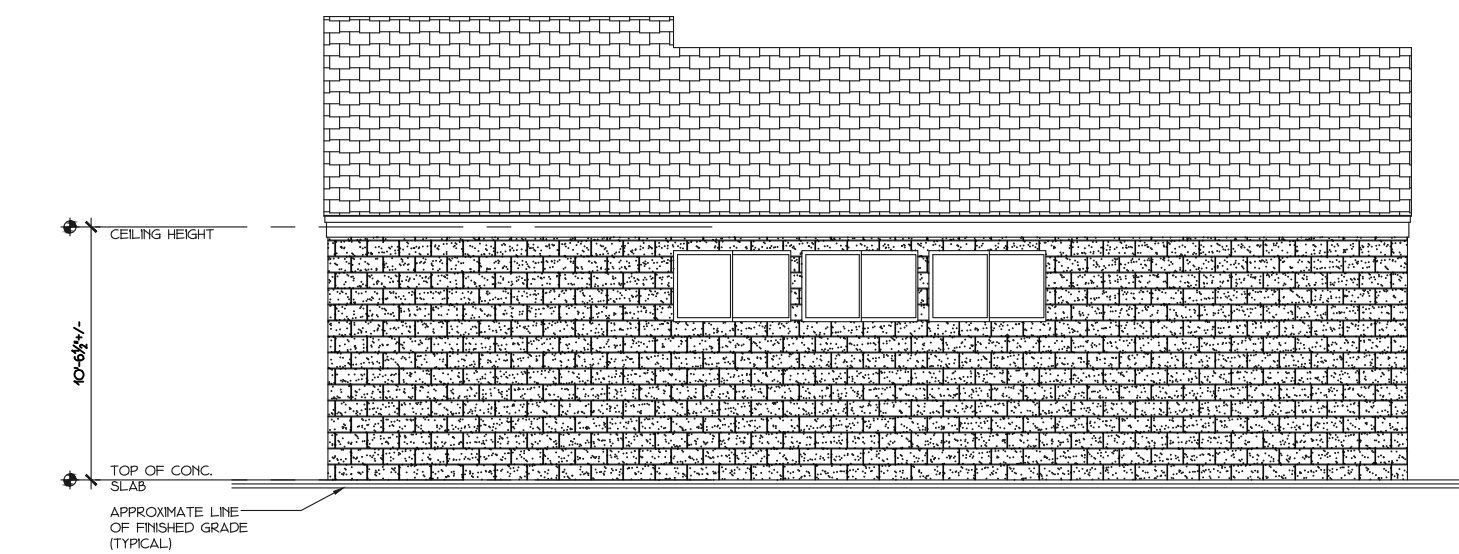
### PROPOSED RIGHT (SOUTH) ELEVATION

SCALE: 1/4" = 1'-0"



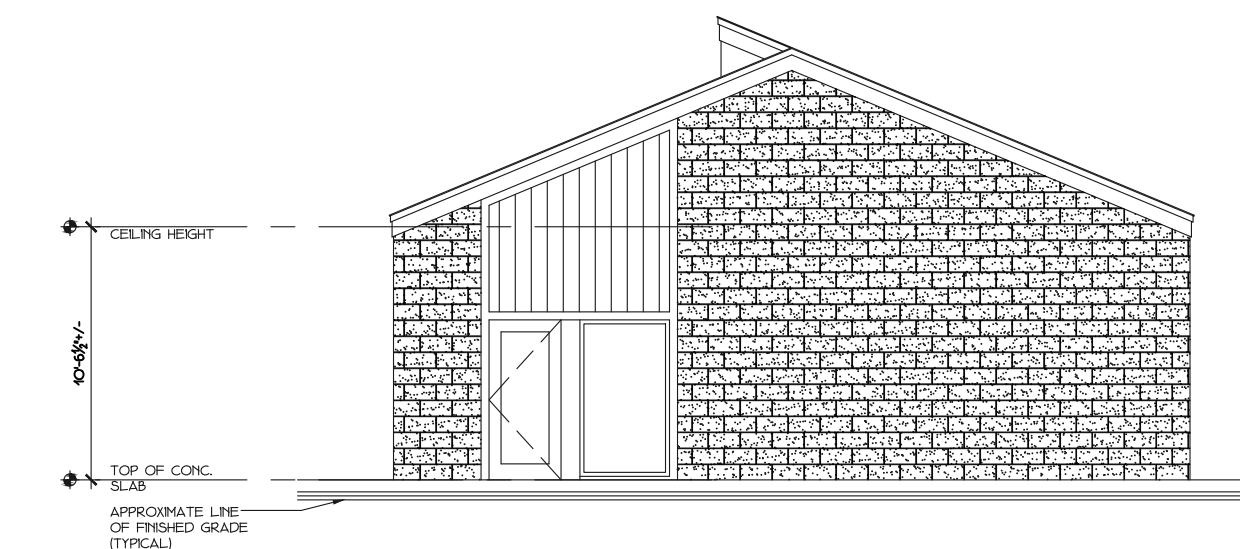
### PROPOSED FRONT (WEST) ELEVATION

SCALE: 1/4" = 1'-0"



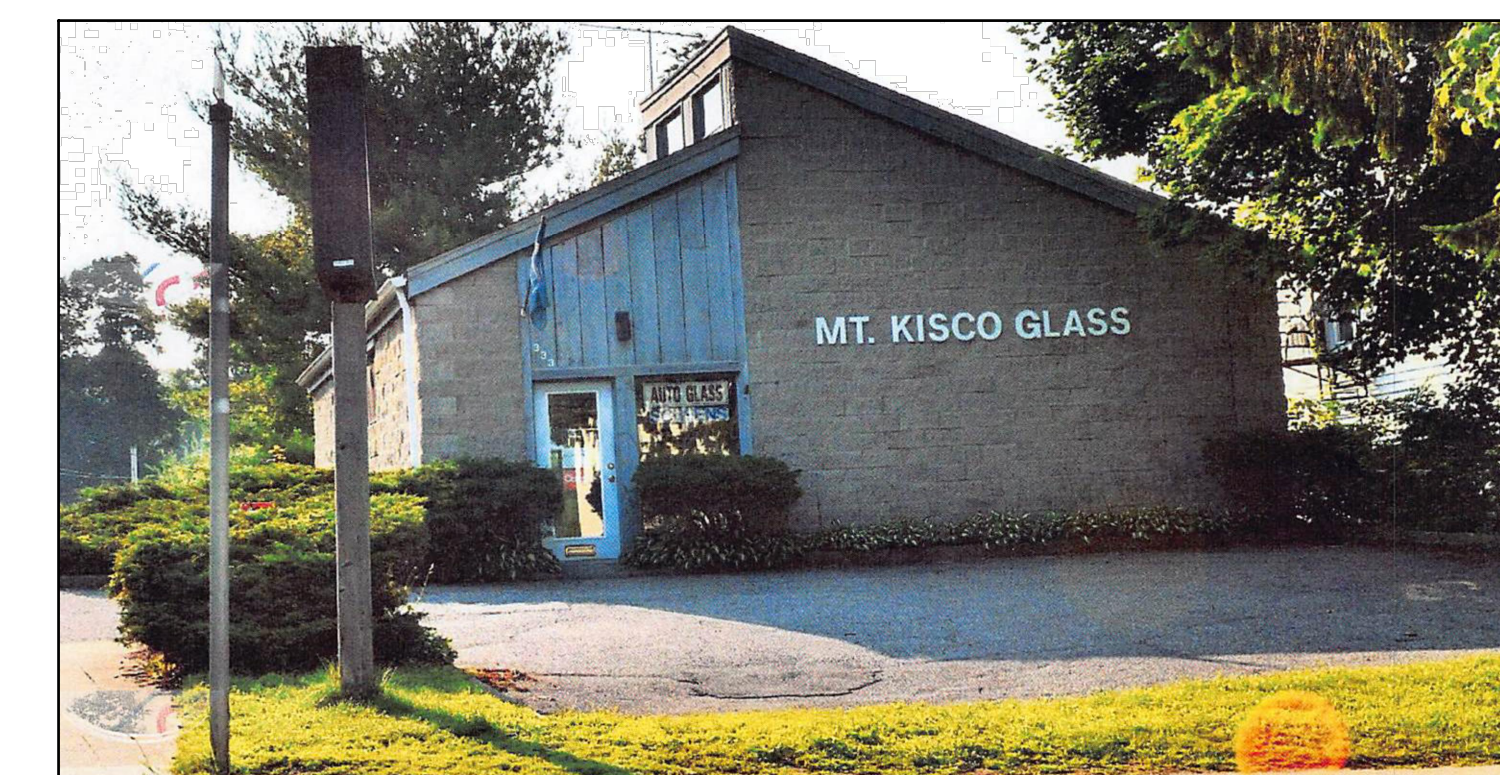
### EXISTING RIGHT (SOUTH) ELEVATION

SCALE: 1/8" = 1'-0"



### EXISTING FRONT (WEST) ELEVATION

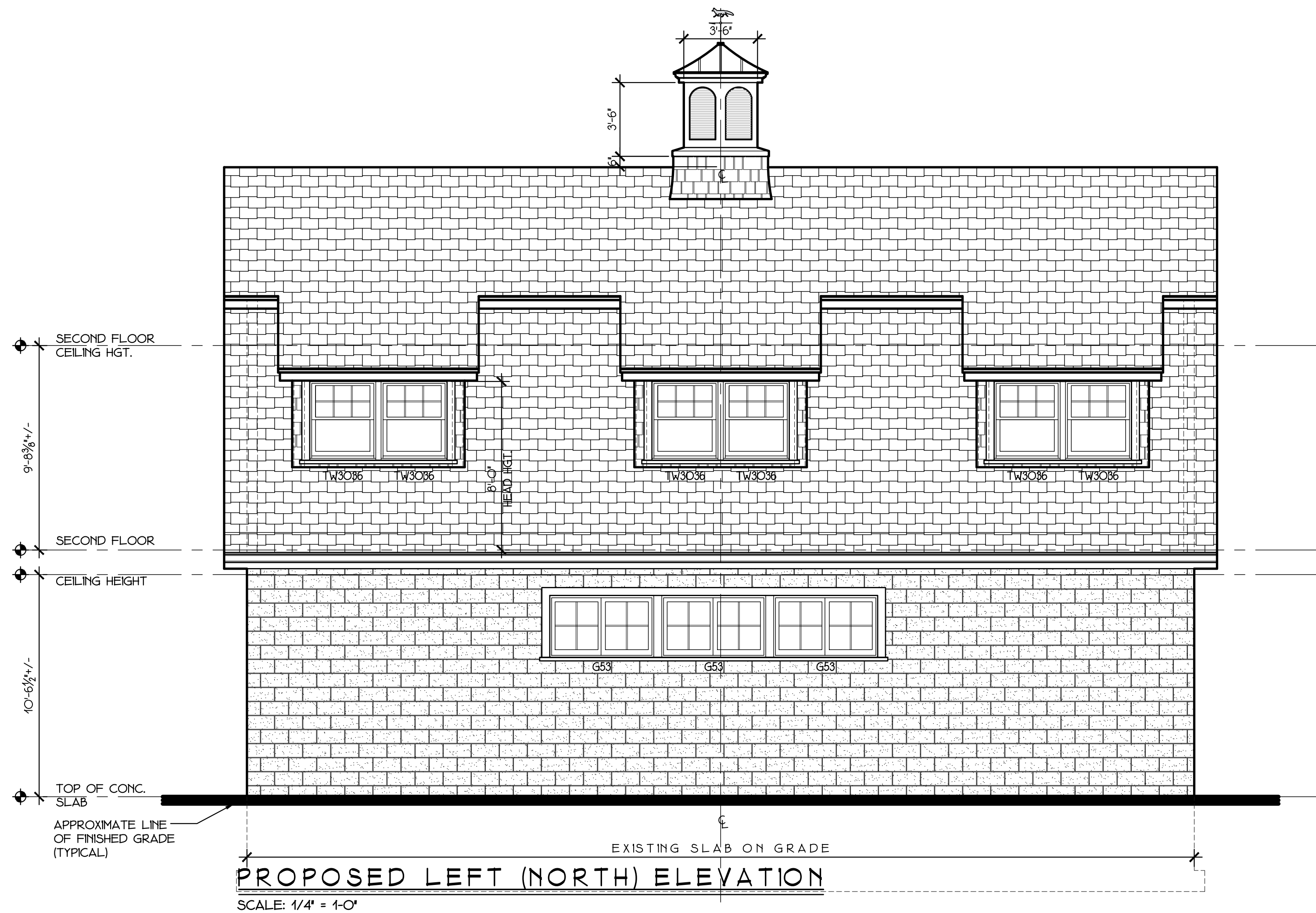
SCALE: 1/4" = 1'-0"



### REFERENCE PHOTOGRAPH

<b>ISSUE DATES:</b> 08/18/21 FOR ZBA & ARB FILING 07/16/21 FOR SITE PLAN (FORMAL) 06/10/21 FOR PLANNING BOARD FILING 04/07/21 FOR CLIENT'S REVIEW 03/03/21 FOR VILLAGE/TOWN MT. KISCO REVIEW 02/09/21 FOR CLIENT'S REVIEW	<b>PROPOSED SECOND STORY ADDITION &amp; ALTERATIONS TO EXISTING BUILDING FOR:</b> SPENCMORG, LLC 333 LEXINGTON AVENUE VILLAGE/TOWN OF MOUNT KISCO, NY	<b>EXISTING/PROPOSED EXTERIOR ELEVATIONS &amp; REFERENCE PHOTOGRAPHS</b> SCALE: AS NOTED	DRAWN BY: GHA CHECKED BY: SCH DRAWING NO:
		184 KATONAH AVENUE, KATONAH, NY 10536 TEL: (914) 232-4633 FAX: (914) 232-0768 EMAIL: thg@thehelmesgroup.com	<b>4 OF 6</b>



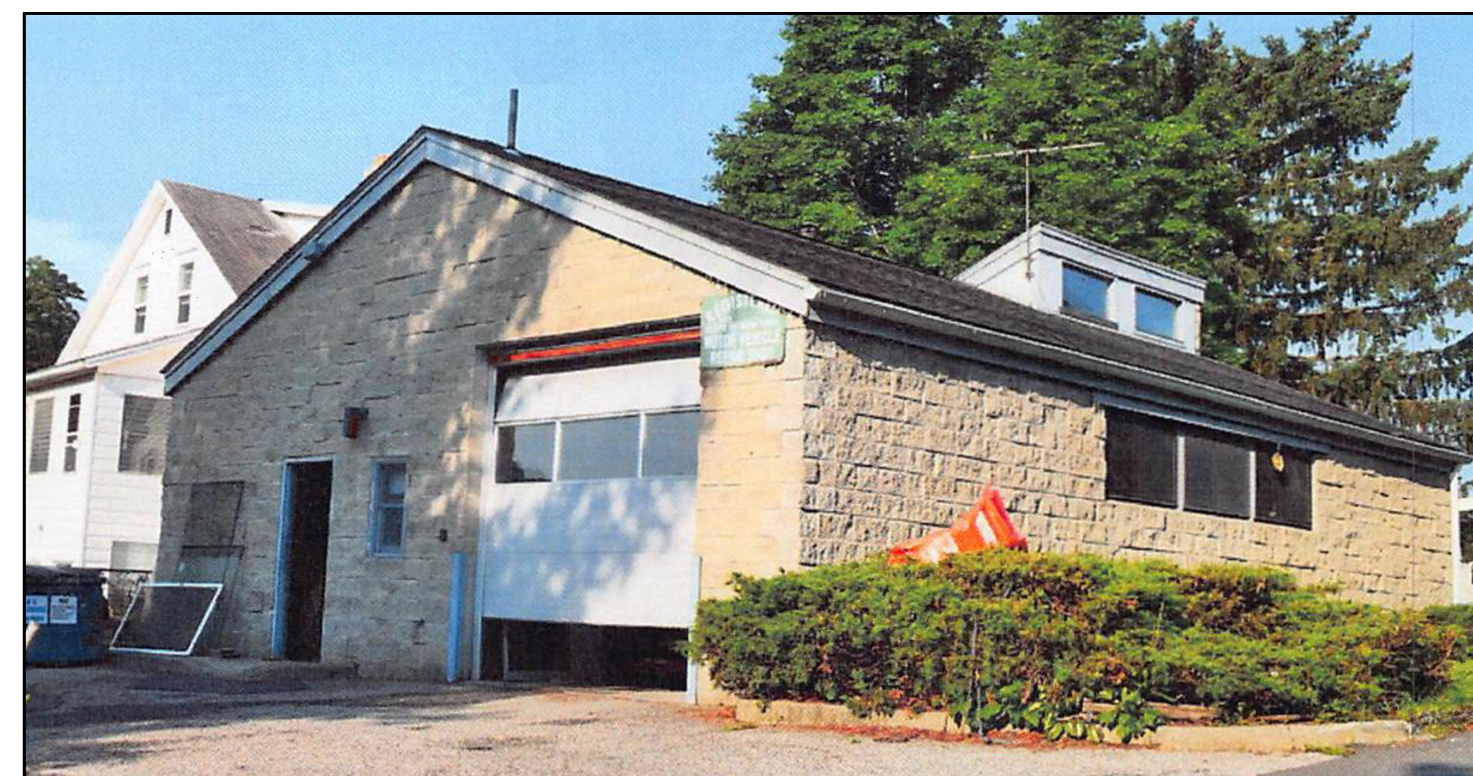
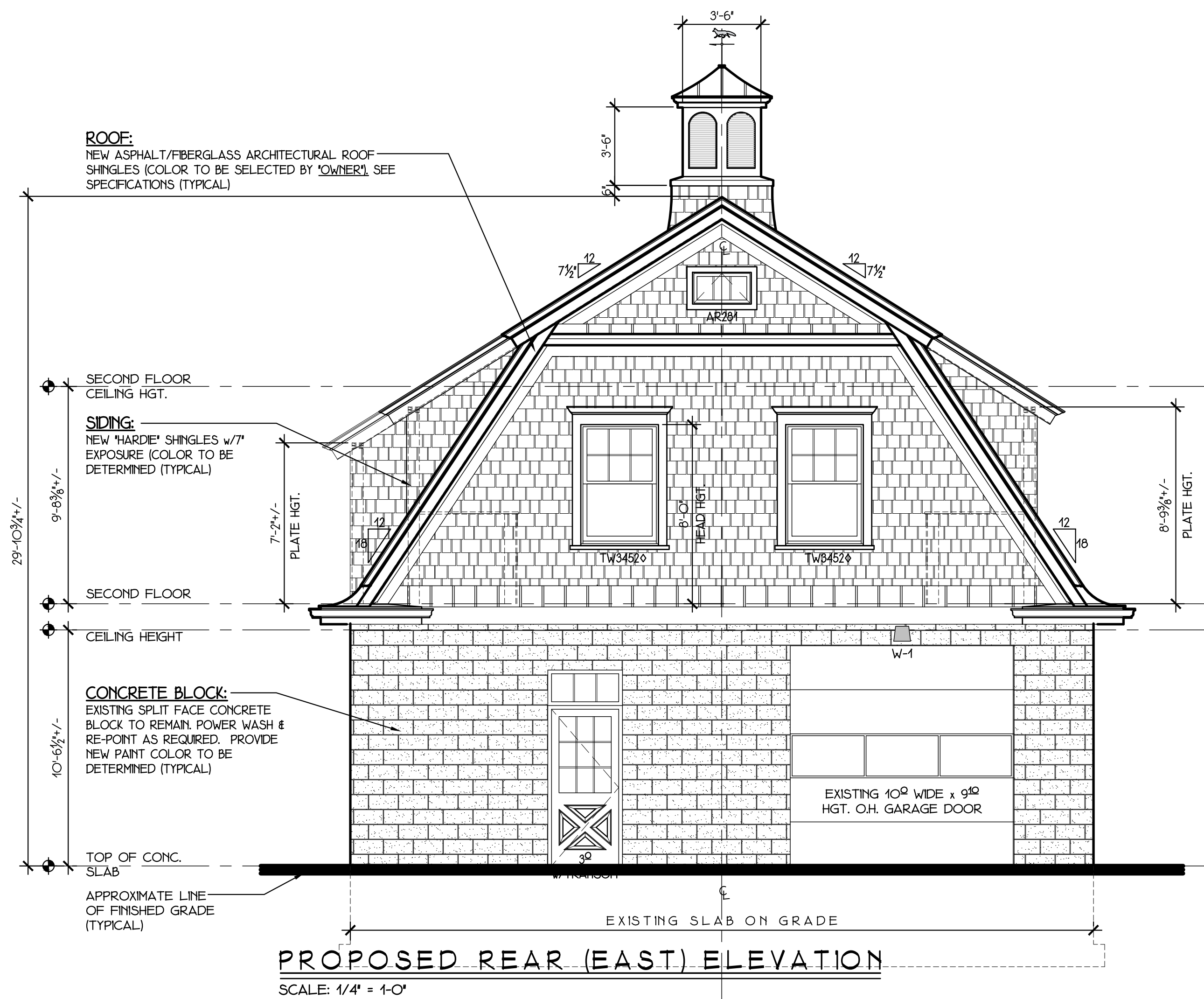


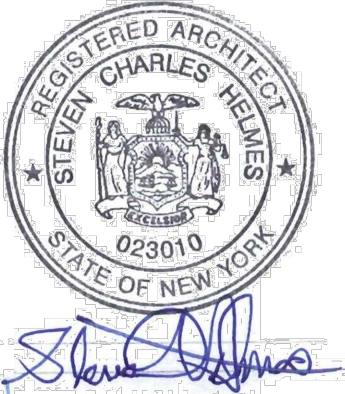
**EXISTING REAR (EAST) ELEVATION**  
SCALE: 1/8" = 1'-0"

**EXISTING LEFT (NORTH) ELEVATION**  
SCALE: 1/8" = 1'-0"



**ARCHITECTURAL RENDERING**



ISSUE DATES:	<b>PROPOSED SECOND STORY ADDITION &amp; ALTERATIONS TO EXISTING BUILDING FOR:</b> 333 LEXINGTON AVENUE SPENCMORG, LLC VILLAGE/TOWN OF MOUNT KISCO, NY	
08/18/21 FOR ZBA & ARB FILING 07/16/21 FOR SITE PLAN (FORMAL) PLANNING BOARD FILING 06/10/21 FOR PLANNING BOARD FILING 04/07/21 FOR CLIENT'S REVIEW 03/09/21 FOR VILLAGE/TOWN MT. KISCO REVIEW 02/09/21 FOR CLIENT'S REVIEW		<b>EXISTING/PROPOSED EXTERIOR ELEVATIONS/REFERENCE PHOTOGRAPHS &amp; ARCHITECTURAL RENDERING</b> SCALE: AS NOTED
		DRAWN BY: GHA CHECKED BY: SCH
		<b>THE HELMES GROUP, LLP</b> ARCHITECTURE • ENGINEERING PROJECT MANAGEMENT 184 KATONAH AVENUE, KATONAH, NY 10536 TEL: (914) 232-4633 FAX: (914) 232-0768 EMAIL: thg@thelmesgroup.com
		DRAWING NO: <b>5 OF 6</b>



P/O  
(81)

①

BLOCK A  
(2)

6. **LEXINGTON AVENUE**

6 OF 6



Date: \_\_\_\_\_

**RECEIVED**

Case No.: 2BA 21-17

Fee: \_\_\_\_\_

**AUG 23 2021**

Date Filed: \_\_\_\_\_

**Zoning Board of Appeals**  
**Village/Town of Mount Kisco**  
**Municipal Building**  
104 Main Street, Mt. Kisco, NY 10549

**Zoning Board of Appeals**  
**Application**

Appellant: Carl J. Lana Executor of Estate of Joseph Lana  
Address: 29 Gregory Avenue, Mt. Kisco, NY 10549  
Address of subject property (if different): \_\_\_\_\_

Appellant's relationship to subject property: X Owner \_\_\_\_\_ Lessee \_\_\_\_\_ Other \_\_\_\_\_

Property owner (if different): \_\_\_\_\_  
Address: \_\_\_\_\_

TO THE CHAIRMAN, ZONING BOARD OF APPEALS: An appeal is hereby taken  
from the decision of the Building Inspector, Peter Miley email of denial  
dated June 8, 2021. Application is hereby made for the following:

X Variation or Interpretation of Section 110-11B.(1)(a)  
of the Code of the Village/Town of Mount Kisco,

to permit the: \_\_\_\_\_ Erection; \_\_\_\_\_ Alteration; \_\_\_\_\_ Conversion; \_\_\_\_\_ Maintenance  
of continued use of an existing Apartment above an existing Accessory Garage.

\_\_\_\_\_ in accordance with plans filed on (date) No plans are on file with 1946 permit  
for Property ID # 80.33-6-12 located in the RT-6 Zoning District.  
The subject premises is situated on the North side of (street) Gregory Avenue  
\_\_\_\_\_ in the Village/Town of Mount Kisco, County of Westchester, NY.  
Does property face on two different public streets? Yes/No No  
(If on two streets, give both street names) \_\_\_\_\_

Type of Variance sought: X Use \_\_\_\_\_ Area \_\_\_\_\_

Is the appellant before the Planning Board of the Village of Mount Kisco with regard to this property? No

Is there an approved site plan for this property? Refer to attached Site Survey in connection with a  
Proposed or X Existing building; erected (yr.) 1946-47

Size of Lot: 293 plus/minus feet wide 100 plus/minus feet deep Area 30,000 plus/minus SF (.67 A)

Size of Building: at street level 25 feet wide 21 feet deep

Height of building: 20 feet Present use of building: Owner occupied Apartment above Garage

Does this building contain a nonconforming use? Yes Please identify and explain: Current zoning does not permit a detached Accessory Building Apartment.

Is this building classified as a non-complying use? Yes Please identify and explain: Accessory Apartment was only recently identified as non-conforming due to lack of Certificate of Occupancy.

Has any previous application or appeal been filed with this Board for these premises?  
Yes/No? No

Was a variance ever granted for this property? No If so, please identify and explain: Accessory Apartment was only recently identified as non-conforming due to lack of Certificate of Occupancy.

Are there any violations pending against this property? No If so, please identify and explain: \_\_\_\_\_

Has a Work Stop Order or Appearance Ticket been served relative to this matter?  
Yes or X No Date of Issue: \_\_\_\_\_

Have you inquired of the Village Clerk whether there is a petition pending to change the subject zoning district or regulations? No

**I submit the following attached documents, drawings, photographs and any other items listed as evidence and support and to be part of this application:**

**The following items MUST be submitted:**

- a) **Attached hereto is a copy of the order or decision (Notice of Denial) issued by the Building Inspector or duly authorized administrative official issued on June 8, 2021 upon which this application is based.**
- b) **Copy of notice to the administrative official that I have appealed, setting forth the grounds of appeal and have requested the application to be scheduled for a public hearing.**
- c) **A typewritten statement of the principal points (facts and circumstances) on which I base my application with a description of the proposed work.**
- d) **Ten (10) sets of site plans, plat or as-built survey drawings professionally signed and sealed (as may be required).**
- e) **A block diagram with street names, block and lot numbers, and street frontage showing all property affected within 300' of the subject property, with a North point of the compass indicated.**
- f) **A full list of names and addresses of the owners of all property shown on the above noted block diagram that lie within or tangent to the 300' radius from the subject property.**
- g) **A copy of the Public Notice for the public hearing of this application.**
- h) **A sworn Affidavit of Mailing, duly notarized, that a true copy of said Public Notice has been sent by mail to all property owners within 300 feet of this premises at least 10 days prior to the public hearing.**

**NOTE: APPLICANT MUST CAUSE A TRUE COPY OF THE PUBLIC NOTICE TO BE PUBLISHED IN THE OFFICIAL NEWSPAPER OF THE VILLAGE AT LEAST 15 DAYS PRIOR TO THE PUBLIC HEARING.**

- i) **A true copy of the filed deed and/or signed lease or contract for the use of the subject property.**
- \*j) **At least two sets of unmounted photographs, 4" by 6" in size, showing actual conditions on both sides of street, between intersecting streets. Print street names and mark premises in question.**
- \*k) **A floor plan of the subject building with all the necessary measurements.**
- \*l) **A longitudinal section of the subject building and heights marked thereon as well as front elevations.**

**\* Optional - As Needed**



I hereby depose & say that all the above statements and the statements contained in the papers submitted herewith are true.

[Signature]  
(Appellant to sign here)

Sworn to before me this day of: August, 03, 20 21

Notary Public, Westchester, County, NY

Laurel M Daley  
LAUREL M DALEY  
NOTARY PUBLIC STATE OF NEW YORK  
WESTCHESTER COUNTY  
LIC. #01DA8414887  
COMM. EXP. 03/01/25

[Signature]

[TO BE COMPLETED IF APPELLANT IS NOT THE PROPERTY OWNER IN FEE]

State of New York                    }  
County of Westchester            } ss

Being duly sworn, deposes and say that he resides at \_\_\_\_\_ in the County of Westchester, in the State of New York, that he is the owner in fee of all that certain lot, piece or parcel of land situated, lying and being in the Village of Mount Kisco, County of Westchester aforesaid and known and designated as number \_\_\_\_\_ and that he hereby authorized \_\_\_\_\_ to make the annexed application in his behalf and that the statements contained in said application are true.

\_\_\_\_\_  
(sign here)

a) Notice of Denial

On Jun 8, 2021, at 12:23 PM, Peter Miley <[pmiley@mountkisco.ny.gov](mailto:pmiley@mountkisco.ny.gov)> wrote:

Good Afternoon Mr. Lana,

I reviewed the recent permit application to renew permit No. 885 issued on March 30, 1946 – what appears in the language section of the permit: “the partitioning of the garage for apt.” Unfortunately, there is not enough information for me to be able to re-issue a permit that expired almost 80 years ago. I looked through the archives to see if there are any drawings that were provided and there are none. In addition, there’s no CO on file or record of any inspections so I can’t establish whether the alteration, including the electric, was ever inspected or safe.

At the time the permit was issued, pursuant to the Building Zone Ordinance adopted 1 -10 -1928, Sec 4 – “Residence A” District Uses (16) Accessory uses and structures customarily incident to any use permitted by this section, such as servants’ quarters, private garages, private stables, or private workshops, provided that none shall be conducted for gain and that those who are employees of the owner, lessee, or tenant of the premises. In other words, the space can’t be rented as a separate dwelling unit and the use “even if it obtained a CO in 1946,” because it would be considered a nonconforming use, would have had to been maintained in accordance with the code for the entire duration and without interruption for no more than a year.

Today, the code doesn’t allow accessory apartments over a garage or two principal residences on a single lot.

Please confirm that the principle residence is a 1 family.

If you disagree with this analysis, you are welcome to appeal my determination within 60 days to the Zoning Board.

If you have any additional questions, please free to contact me.

Regards,

**Peter J. Miley**  
**Building Inspector**  
**Village/ Town of Mount Kisco**  
**104 E Main St.**  
**Mount Kisco, NY 10549**  
**Phone: (914) 864 - 0019**



b) Property Owner Intent to Appeal

From: Carl Lana <carljlaname.com>  
Subject: Zoning Board appeal for 29 Gregory Avenue  
Date: August 2, 2021 at 12:58:42 PM EDT  
To: Michelle Russo <planning@mountkisco.ny.gov>  
Cc: David Coffin <sawmillstudioarchitecture@gmail.com>

Hello Michelle,

I intend to appeal the Notice of Denial issued on June 8, 2021 by Peter J. Miley, Building Inspector. The principal residence is a 1-family residence.

Since the Zoning Board of Appeals is not meeting in August, please advise if we will be on the September 21, 2021 agenda?

Carl J. Lana  
29 Gregory Avenue  
Mount Kisco, NY. 10549



### c) Statement of Principal Points

**CURRENT OWNER:** Carl J. Lana Executor of Estate of Joseph Lana  
**PROPERTY LOCATION:** 29 Gregory Avenue, Mt. Kisco New York 10549  
Tax Map Designation of 80.33-6-12  
Zone: RT-6

**BUILDING DEPARTMENT NOTICE OF DENIAL:**

The Building Department issued a Notice of Denial (*see attachment*) on June 8, 2021 resulting from a request to renew Building Permit No. 885 issued on March 30, 1946. The request was submitted by real estate agent for the current owner, Carl J. Lana when in the process of preparing to sell the property, it was discovered a Certificate of Occupancy was not on file for an Accessory Building. The Accessory Building consists of a Garage (3/4 of which is below grade) and Apt./Living Quarters above.

The Notice of Denial noted a Building Permit could not be re-issued due to a lack of inspections and CO information on-file and its age. Reference is made to a Building Zone Ordinance adopted 1-10-1928, Sec 4-"Residence A" District Uses (16) which notes Accessory uses allowed "provided that none shall be conducted for gain and those who are employees of the owner, lessee, or tenant of the premises". The interpretation is the Apt./Living Quarters cannot be rented as a separate dwelling, otherwise it would be considered a non-conforming use.

The Notice of Denial also noted current zoning does not permit Accessory apartments over a Garage nor does it permit two principal residences on a single lot. Confirmation that principal residence is a 1-family was requested.

**BUILDING PERMIT BACKGROUND:**

Bertha E Horowitz owned the property in 1946 and submitted an Application to the Building Department with a Proposed use: "Living Quarters" within the existing enclosed space above the existing Garage (*see attachment*). The existing Garage was essentially the foundation for the enclosed space above. The application was approved by the Building Inspector, Leonard Dakin, on March 30, 1946 with the Remarks: "Interior partitioning of Gar. To Apt.". The PERMIT TO BUILD (*see attachment*) was issued by the Building Inspector on March 30, 1946.

Electrical Service was installed from Gregory Avenue to the apartment and inspected by J. White on 3-20-46 (*see attachment*). Bertha Horowitz documented on the Westchester Lighting Company envelope that "Inspection Passed 4/4/46" (*see attachment*). Gas Service was installed from Gregory Avenue to the apartment and inspected by J. White on 3-20-46 (*see attachment*).

It appears that Bertha E. Horowitz was very meticulous about documentation. However, there are no records on file documenting a final inspection by the Building Inspector nor the issuance of a Certificate of Occupancy.

**PROPERTY OWNERSHIP AND USE BACKGROUND:**

Upon completion of the apartment in 1946, Bertha E. Horowitz continued the use of the apartment until her death when it was sold to Joseph and Rose Lana. The Lana family purchased the property on December 15, 1967 from the Estate of Bertha E. Horowitz, which included the apartment over the garage. The apartment was first occupied by Rose Lana's aunt. Upon the aunt's death Carl Lana's sister Rosanne, and her husband occupied the apartment for approximately 20 years until the death of their mother Rose Lana in 2015. Upon the death of their mother, Rosanne and her husband moved into the house to provide attendant care for their father Joseph Lana. Carl Lana subsequently moved into the apartment to provide additional care and support to their father. Joseph Lana passed away on January 26, 2021. Carl J. Lana is the executor of the Estate of Joseph Lana. Carl and Rosanne are currently co-owners of the property and upon the passing of their father a decision was made to sell the property. The property is currently listed for sale and an offer has been received and accepted.

**RESPONSE TO NOTICE OF DENIAL:**

It is acknowledged a Certificate of Occupancy has not been found on file and the original Building Permit # 885 cannot be renewed.

Although Bertha E. Horowitz was meticulous about documentation, she left no available records of an Inspection by the Building Department nor a Certificate of Occupancy. Even without the Certificate of Occupancy, it appears Bertha E. Horowitz complied with the Building Zone Ordinance adopted 1-10-1928, Sec 4-"Residence A" District Uses (16) which permitted the Accessory apartment and was in conformance, otherwise the Building Permit would not have been issued.

The apartment has always been used and occupied by the Lana family members and rent was never collected. There is no intent to rent the apartment by the current owners and potential buyers for the property are being advised the apartment cannot be rented.

It is acknowledged current zoning does not permit Accessory apartments over a Garage nor does it permit two principal residences on a single lot. The principal residence is confirmed to be a 1-family residence and the property is comprised of four separate parcels as indicated on the Survey.

**CHAPTER 110. ZONING:****Article III, Section 110-11. RT-6 One-and Two-Family Residence District.**

The property owner is seeking a variance from 110-11 B.(1) (a) which states: "Detached one-family, not to exceed one such dwelling per lot." The principal residence is confirmed to be a 1-family residence. However, the main house property level is considerably higher than Gregory Avenue pavement level; the existing topography of the property appears to have dictated the location of the driveway and Garage with an enclosed open space above. Most likely out of convenience and cost considerations, Mrs. Horowitz decided to partition and finish off this open space above the garage as an apartment. Perhaps a different approach could have been taken if the topography facilitated the Garage and Apartment to be attached to the main house, such that it would not be considered an Accessory Building.



Article II, Section 110-5.C States: "Nothing contained in this (Chapter 110. Zoning) shall require any change of a building complying with local laws in force prior to the effective date of this chapter. Provided that:

- (1) A building permit was duly issued prior to the effective date of this chapter and is in effect at the time of its enactment; and.
- (2) Substantial construction occurred prior to the effective date of this chapter.

This section is only mentioned to further support the continued use of the nonconforming Apartment, since it appears to have been in compliance with the local law in force at the time and prior to the effective date of Chapter 110. A building permit was issued and substantial construction occurred prior to the effective date of Chapter 110. Unfortunately, the building permit was not in effect at the time of this chapter's enactment.

#### REQUEST FOR A DETERMINATION:

The Property Owner is requesting a determination to continue using the Accessory Apartment/Garage for use by the property owner and any of the owner's family. This is not a request to permit rental of the Accessory Apartment. The sale of the property depends upon receiving a favorable determination, otherwise there will be an adverse impact on the sale of the property with significant financial losses. *(Please refer to attached Site Survey, Floor Plans, Photos.)*

The Property Owner is requesting a favorable determination that will consider the following:

1. Neither the character of the neighborhood nor the physical conditions will be impacted by maintaining the apartment. The property is within Zone RT-6 that permits 2-family dwellings and there are numerous properties surrounding this property that are 2-family dwellings.
2. Chapter 110. Zoning addresses nonconformity issues and conformity requirements so as not create extreme hardships on the property owner who may find themselves in situations such as this.
3. This application is in response to the Notice of Denial and seeking a variance. The Property Owner believes submitting an application to the Zoning Board of Appeals and receiving approval is the only feasible way to maintain the Property Owner's use of the apartment.
4. The Property Owner does not feel the request is substantial. The apartment has been in use for almost 80 years and no change in its use is being requested.
5. The Current Property Owner did not create the situation. Although the former owner, Mrs. Horowitz, filed and received a building permit, the property was sold to the Lana Family without their knowledge that a Certificate of Occupancy had not been filed. Neither the Lender nor the Building Department in 1967 questioned the lack of a Certificate of Occupancy. The lack of a CO was identified because Lenders and Building Departments are much more diligent today. If a Certificate of Occupancy had been found on file, the submission of this application to the Zoning Board of Appeals would not have been required.

The End

N. B.

ALT.

VILLAGE OF MOUNT KISCO  
WESTCHESTER COUNTY, N. Y.

March 29 1936

TO THE BUILDING INSPECTOR:

Application is hereby made for permission to perform the work in accordance with the plans and specifications herewith submitted and in compliance with the information given below:

It is agreed that if such permission is granted said building will conform in all respects to said plans and specifications and shall comply with all provisions of the local Building, Plumbing, and Building Zone Ordinance, and all State or Federal Laws or regulations pertaining in any way thereto.

Attached hereto are duplicate copies of plot plan showing to scale position of building on the plot; also duplicate copies of the plans and specifications for said building.

Accompanying this application is the required fee of \$....., being the sum of five dollars plus one dollar for each one thousand dollars of estimated cost or part thereof.

Owner Bertha Horowitz Address 29 Gregory Ave.

Applicant ..... Address .....

Architect ..... Address .....

Builder ..... Address .....

Building is to be located on plot known as No. 29 Gregory Street, Avenue, Place, on the North side thereof, distant from the corner of E. Main Street, Avenue, Place; Section 11, Sheet —, Block —, Lot 36.

Estimated Cost—\$ 800.00

Proposed use: Living quarters

If a tenement house, how many families on each floor? —. How many in the building? —

Number of stories 2; height 20 feet.

Front yard 280 feet.

Rear yard 40 feet.

Side yards 80 feet (Total) Minimum 45 feet.

Type of Construction—Fireproof—Semi-Fireproof—Flame. (cross out all but one).

(OVER)

I hereby certify that the statements and data on the reverse side of this sheet are correct and true to the best of my knowledge and belief.

(Signed) *Bertha Horowitz*

Business Address .....

Residence Address .....

Date ..... 19 .....

NOTES: Before the building for which a permit is issued can be used for any purpose the owner or lessee thereof must obtain a Certificate of Occupancy from the Building Inspector as provided in Section 18 (C) of the Building Zone Ordinance.

Separate application must be made for plumbing on forms obtainable from the Plumbing Inspector.

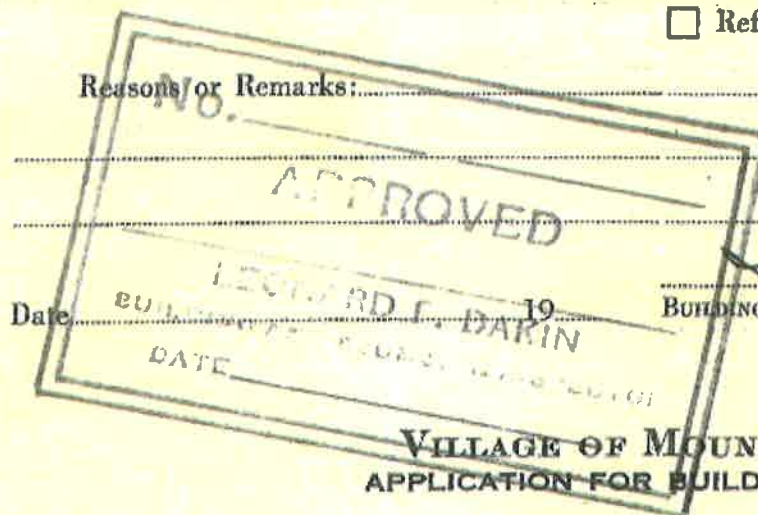
Satisfactory evidence must be submitted that Compensation Insurance has been provided in accordance with the Workmen's Compensation Law before a permit is issued by the Building Inspector.

#### ACTION BY BUILDING INSPECTOR

The foregoing application and accompanying plans and specifications have been examined and considered, and the following action taken by me:

- ☐ Application Rejected.
- ☐ Application Granted.
- ☐ Referred to Board of Appeals.
- ☐ Referred to Board of Trustees.

Reasons or Remarks: .....



*Interior partitioning of Gar.*  
*5/2/8.*  
*Approved May 30<sup>th</sup> 1946*  
*Leonard F. Darin*  
BUILDING INSPECTOR for the Village of Mt. Kisco, N. Y.

VILLAGE OF MOUNT KISCO  
APPLICATION FOR BUILDING PERMIT

Application No. ....

Date Revised ..... 19 .....

Date Approved ..... 19 .....

Date Denied ..... 19 .....

Date Referred ..... 19 .....

Applicant Notified ..... 19 .....

(OVER)



Fee pd. 6<sup>00</sup>

VILLAGE OF MOUNT KISCO  
WESTCHESTER COUNTY, N. Y.

PERMIT TO BUILD

N. B.  
ALT.  
FEE PAID

SPS

19<sup>46</sup>

To John J. ...

Section 11 Sheet 1 Block 1 Lot 1

Satisfactory evidence having been submitted that compensation insurance has been provided in accordance with the Workmen's Compensation Law, a permit is hereby issued for the performance of the work described in the application and approved plans. *This permit does not* give the right to construct or alter plumbing or drainage systems nor to construct, alter or operate any elevator, nor does it permit the use of any street, sidewalk or other public space for storage of materials.

*This permit expires* by limitation provided no substantial work is done within six months from its date.

Received this Permit Edward F. ...  
4/1/46  
Building Inspector

TER LIGHTING COMPANY  
5 East Main Street  
MOUNT KISCO, N. Y.  
St., Ossining, N. Y.

Little Home  
Electric Plaster

3/22/46



Inspected  
& Passed  
4/2/46

Charles  
Service mt.  
The Potter  
House  
1946

WESTCHESTER LIGHTING COMPANY

45 West Main Street

MOUNT KISCO, N. Y.

125 Main St., Ossining, N. Y.

Little Nemo  
Electric Goods

3/22/46



Perfect  
4/14/46

Electric  
Goods  
4/14/46



GAS ☐ ELECT. ☒

## SERVICE LAYOUT

ORDER NO.

ADDRESS

29 GREGORY AVE.

MUNIC. MTN DISTR. PL(MT)

LAYOUT NO.

COMPL. NO.

SURCHARGE NO.

PERMIT NO.

MISC. CHG. NO.

CUSTOMER'S NAME

HARRY HOKOWITZ

ELECTRIC - NEW CONSTRUCTION NO.

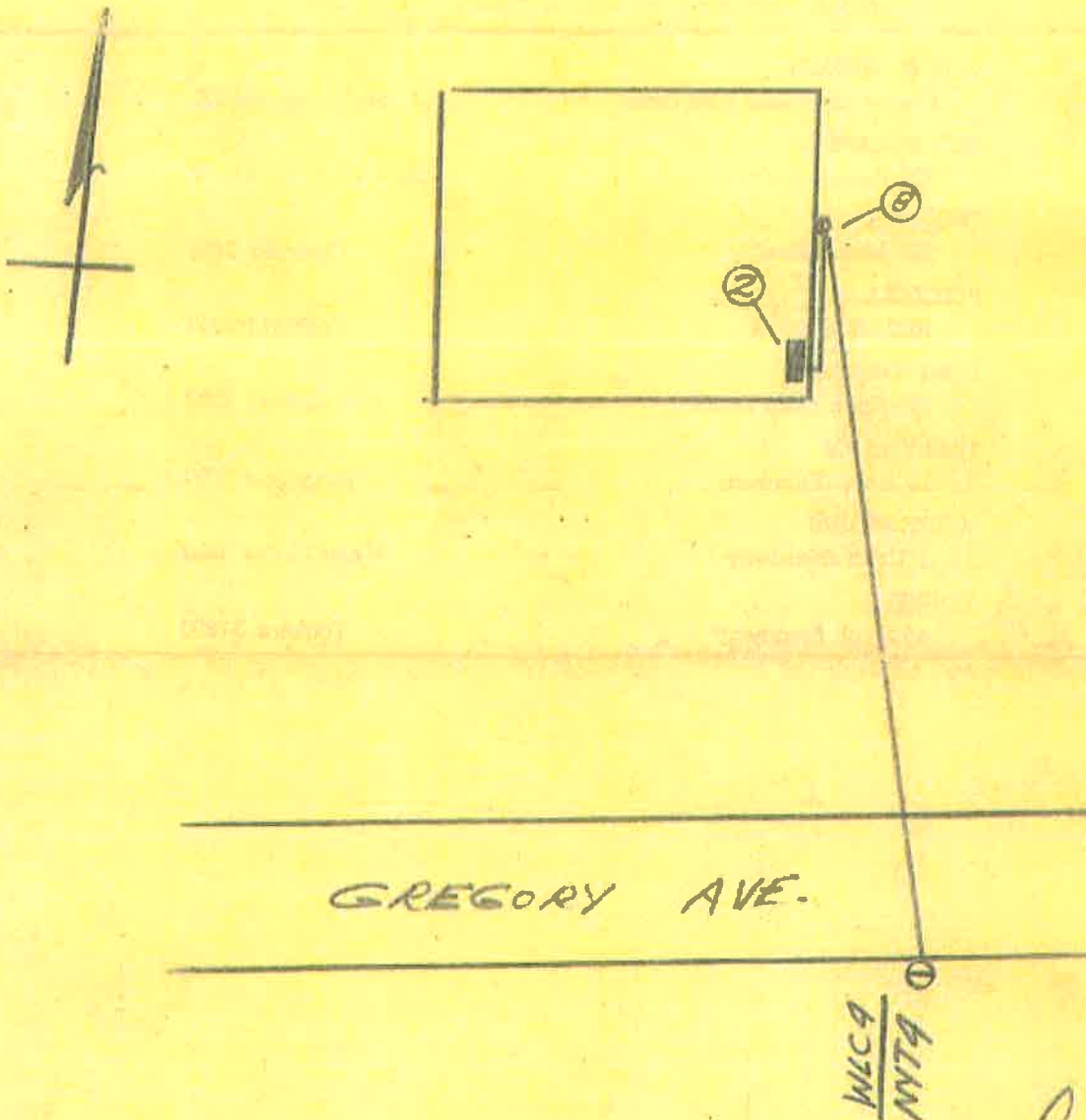
RETIREMENT NO.

GAS - NEW CONSTRUCTION NO.

RETIREMENT NO.

NEW	EXIST	ELECTRIC	LIGHTING	POWER	DEMAND	LAPSELY MOTOR	CU. FT. JHR.	PART SUPPLIED	GAS SERVICE	H.P.	L.P.	U.G.	ELECT. SERVICE	WIRE	VOLTS	PHASE
			2.3	K.W.	H.P.	0.3	K.W.	H.P.								
1			SERV. SWITCH	AMP.												
2			ELEC. METER EQUIP.													
3			AMP.	TYPE												
4			CURRENT TRANS. CABINET													
5			BOX	"X"	"X"	"										
6			CONDUIT	NO.	WIRE											
7																
8			2W STANDPIPE		CLEARANCE	TO PEAK										
9																
10																
11																
12																
13																
14																
15																
16																
17																

SEE REVERSE SIDE FOR GENERAL INSTRUCTION





## SERVICE LAYOUT

ORDER NO.

GAS ☒ ELECT. ☐

ADDRESS

CUSTOMER'S NAME

ELECTRIC - NEW CONSTRUCTION NO.

GAS - NEW CONSTRUCTION NO.

RETIREMENT NO.

RETIREMENT NO.

LAYOUT NO. 6-7735

COMPL. NO. 1794

SURCHARGE NO.

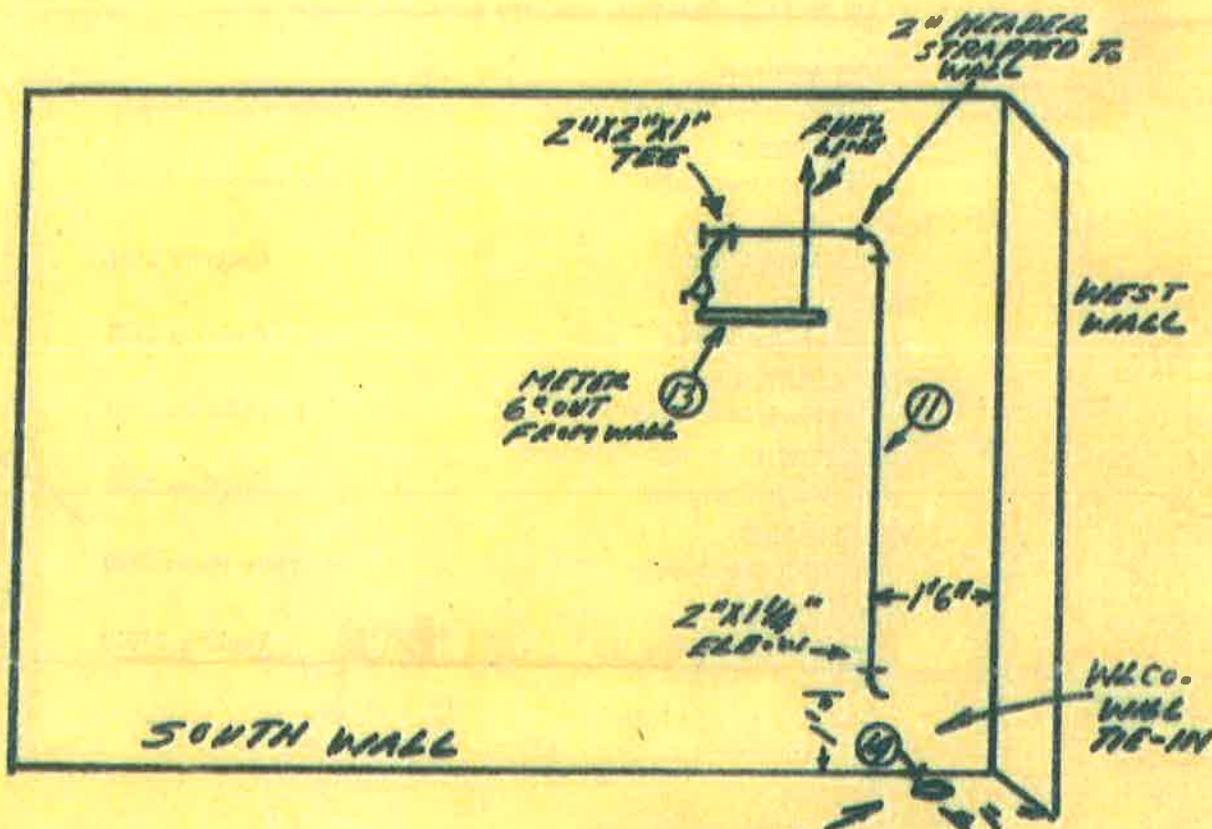
PERMIT NO.

MISC. CHG. NO.

NEW	ELECTRIC	LIGHTING	POWER	DEMAND	LARGEST MOTOR	CU. FT. / HR.	PART SUPPLIED	GAS SERVICE	H.P.	L.P.	U.G.	O.H.	WIRE	VOLTS	PHASE
EXIST		K. W.	H.P.	K. W.	H.P.	230	RES.								
ITEM	QUANT	WIRE	DESCRIPTION	A.F.	WALL	FT. FROM	WALL	ITEM	QUANT	WIRE	DESCRIPTION	A.F.	WALL	FT. FROM	WALL
1			SERV. SWITCH AMP.					9	1	1/2"					
			ELEC. METER EQUIP.					10							
2			AMP. TYPE					11	1	2"					
3			AMP. TYPE					12							
			CURRENT TRANS. CABINET					13							
4			X X					14							
5			BOX "X" "X" "					15							
6			CONDUIT NO. WIRE					16							
7								17							
8			STANDPIPE CLEARANCE												

DATE 3-20-46 INSPECTOR J. White

SEE REVERSE SIDE FOR GENERAL INSTRUCTION

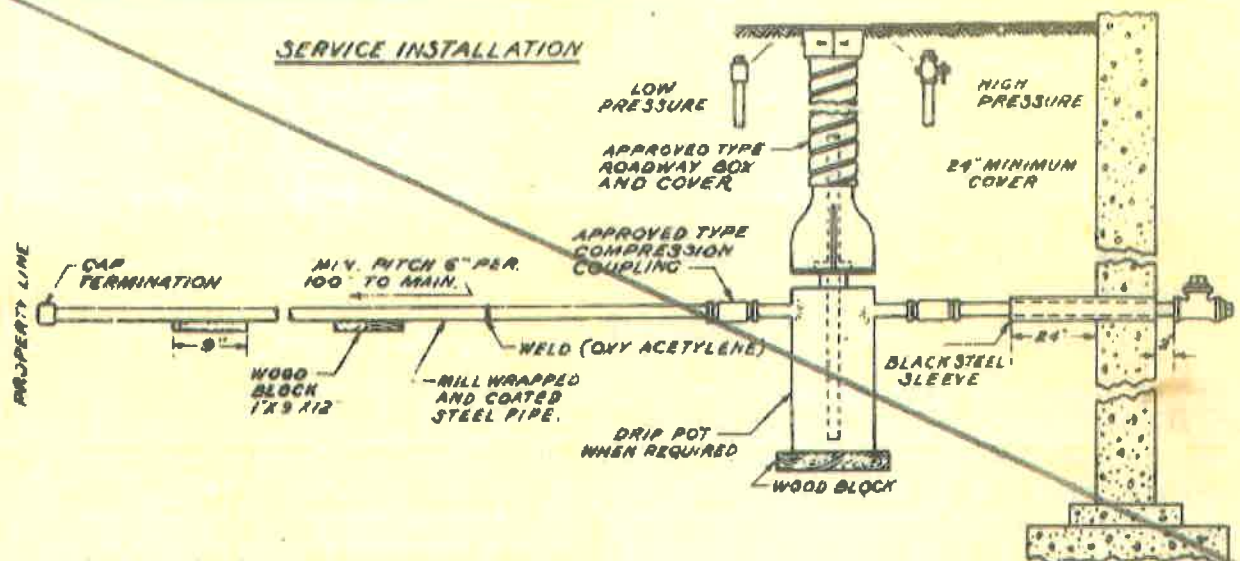
**NOTE**

INSIDE PIPING, PIPE GUARDS,  
AND SLEEVE MUST BE  
INSTALLED IN ADVANCE  
OF SERVICE. (SLEEVE TO BE  
FLUSH WITH FLOOR ON INSIDE  
AND PROJECT 1 FT. BELOW EXTERIOR  
SIDE OF FLOOR.)

INSTALL 2" VERTICAL  
PIPE GUARDS  
IN FRONT OF REGULATOR.  
HUBED SAME IN FLOOR.

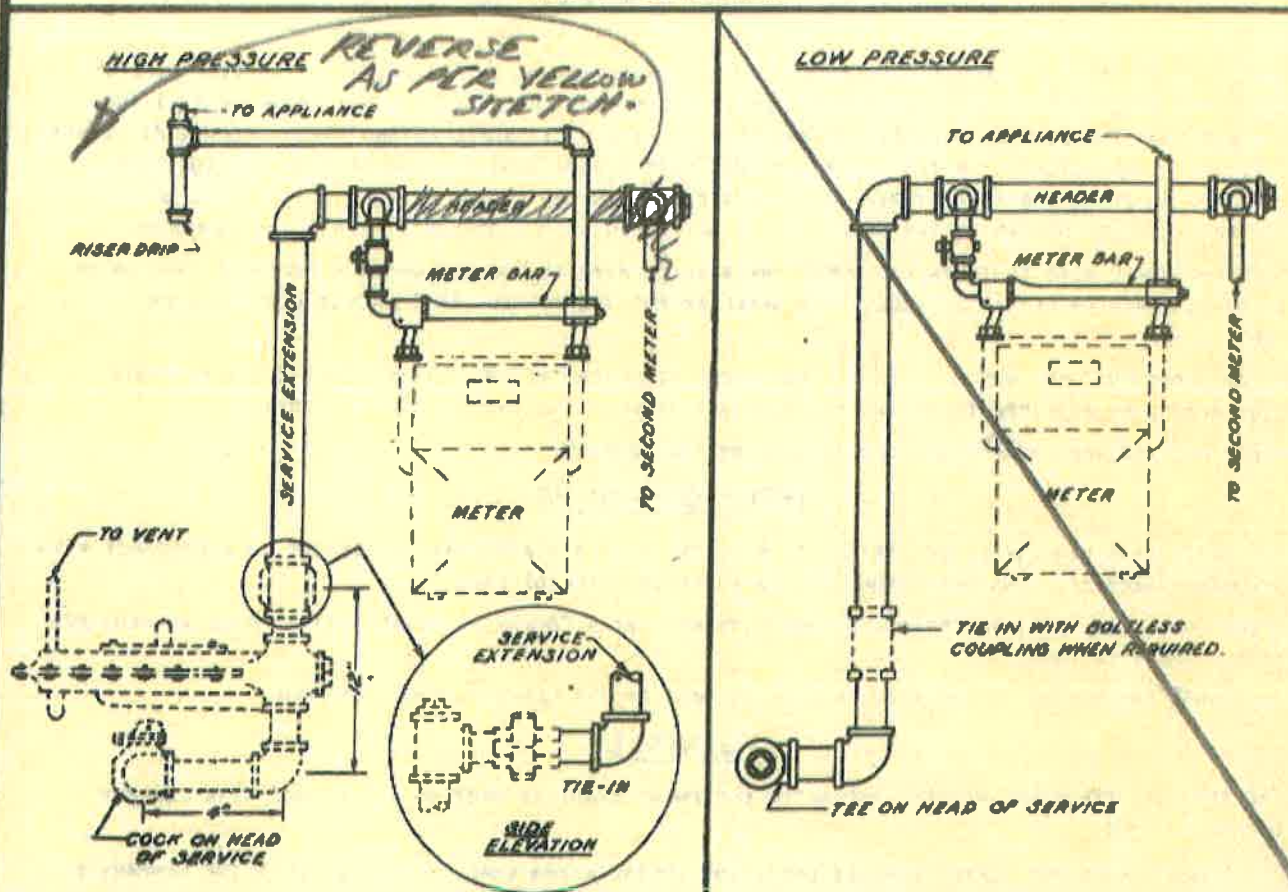


### SERVICE INSTALLATION



SEE INFORMATION ON REVERSE SIDE.

### METER INSTALLATION (WITH METER BAR)



### NOTE:

WORK INDICATED BY DOTTED LINES IS DONE BY WESTCHESTER LIGHTING CO.

### GAS SERVICE AND METER INSTALLATION

WESTCHESTER LIGHTING COMPANY

MT. VERNON, N. Y.

DATE 4-26-45  
LAST REV.

DWG. No. S-8043 REV. 0

## GAS SERVICE TERMINATION AND METER LOCATION

A SERVICE TERMINATION MUST BE ACCESSIBLE AT ALL TIMES AND MUST NOT BE SUBJECT TO DAMAGE. IT SHALL BE NOT LESS THAN TWELVE (12) INCHES FROM ANY RIGHT ANGLE WALL, PARTITION OR OTHER OBSTRUCTION. IT SHALL NOT TERMINATE IN A COAL BIN, BATHROOM, CLOSET, AND CERTAIN OTHER LOCATIONS.

A METER LOCATION MUST BE AS NEAR AS PRACTICAL TO THE POINT OF SERVICE TERMINATION.

IT IS ESSENTIAL THAT SPECIFIC INFORMATION RELATIVE TO EACH INDIVIDUAL INSTALLATION BE OBTAINED FROM THE COMPANY BEFORE STARTING WORK.

### SERVICE

THE SERVICE SHALL BE FULL STANDARD WEIGHT, BLACK STEEL, LAP WELDED, MILL WRAPPED PIPE. IF OTHER THAN MILL WRAPPED PIPE IS USED, IT SHALL BE COATED, WRAPPED AND COATED WITH BITUMASTIC AND CHEESECLOTH. IT SHOULD BE LAID IN A TRENCH ON UNDISTURBED EARTH AND BLOCKED WITH WOOD BLOCKS AT SUITABLE INTERVALS SO THAT THE PIPE WILL NOT SHIFT OR SAG WHEN THE TRENCH IS BACKFILLED.

BEFORE THE SERVICE TRENCH IS BACKFILLED, THE CONTRACTOR SHALL MAKE A PRESSURE TEST, ACCEPTABLE TO AND WITNESSED BY A COMPANY REPRESENTATIVE. WHEN OTHER THAN MILL WRAPPED PIPE IS USED, THE PIPE SHALL NOT BE WRAPPED AND COATED UNTIL AFTER THE TEST.

WHERE IT IS NOT POSSIBLE TO PITCH THE SERVICE TOWARD THE MAIN, AN APPROVED DRIP INSTALLATION WITH ROADWAY BOX SHALL BE MADE AT THE LOW POINT OR POINTS. THE DRIP POT SHALL BE COATED, WRAPPED AND COATED.

A BLACK STEEL SLEEVE SHALL BE INSTALLED IN THE FOUNDATION WALL THRU WHICH THE SERVICE PIPE WILL ENTER THE STRUCTURE. THE INSIDE DIAMETER OF THE SLEEVE SHALL BE AT LEAST ONE-HALF ( $\frac{1}{2}$ ) INCH GREATER THAN THE OUTSIDE DIAMETER OF THE SERVICE PIPE. IT SHALL EXTEND TWENTY-FOUR (24) INCHES OUTSIDE THE STRUCTURE. AFTER THE ACCEPTANCE TEST A RETAINING PACKING OF YARN OR SUITABLE MATERIAL SHALL BE INSTALLED THREE (3) INCHES FROM EACH END OF THE SLEEVE. THE SPACE BETWEEN THE PACKING AND THE END OF THE SLEEVE SHALL BE FILLED WITH A NON-SETTING SEALING COMPOUND.

A SLEEVE SHALL ALSO BE INSTALLED WHERE THE SERVICE PIPE IS LOCATED UNDER A PORCH OR THRU AN UN-EXCAVATED AREA OR RETAINING WALL. IT SHALL EXTEND TWENTY-FOUR (24) INCHES OUTSIDE SUCH STRUCTURE.

ON NEW CONSTRUCTION, WHERE IT IS NOT PRACTICAL TO DETERMINE THE SLEEVE LOCATION, A SUITABLE SLOT SHOULD BE PROVIDED TO PERMIT THE PROPER ALIGNMENT AND GRADING OF THE SERVICE.

THE FINAL SERVICE CONNECTION WILL BE MADE BY THE COMPANY.

### INTERIOR PIPING

ALL INTERIOR PIPING SHALL BE INSTALLED, PROVIDED WITH A RISER DRIP AND BRACED IN ACCORDANCE WITH STANDARD PRACTICE. NO CAST IRON PIPE OR FITTINGS SHALL BE USED.

A MERCURY GAUGE TEST, ACCEPTABLE TO AND WITNESSED BY A COMPANY REPRESENTATIVE, WILL BE REQUIRED ON ALL INSTALLATIONS.

THE FINAL CONNECTION TO THE SERVICE WILL BE MADE BY THE COMPANY, WHEN REQUIRED.

### GENERAL

THE SERVICE EXTENSION, HEADER, AND METER EQUIPMENT SHALL BE MADE IN ACCORDANCE WITH COMPANY SPECIFICATIONS.

THE COMPANY WILL NOT SUPPLY SERVICE UNTIL THE INSTALLATION SHALL HAVE FULFILLED THE COMPANY'S REQUIREMENTS AND SHALL HAVE BEEN APPROVED BY AUTHORITIES HAVING JURISDICTION.

## **GAS SERVICE AND METER INSTALLATION SPECIFICATION**

**WESTCHESTER LIGHTING COMPANY**

**MT. VERNON, N. Y.**

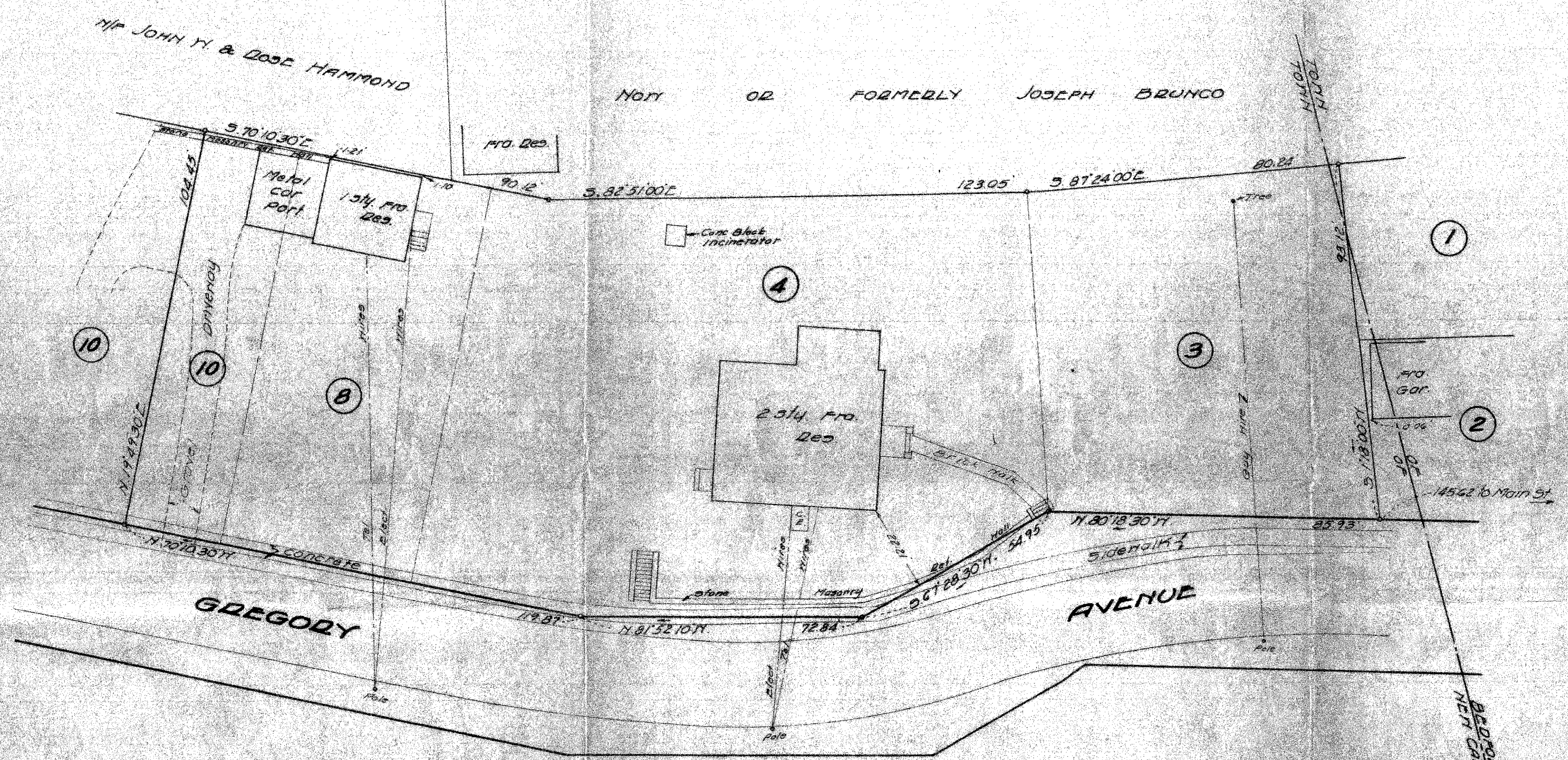
**DATE 4-26-45  
LAST REV. 12-28-45**

**DWG.  
No. W-8043 REV 1**



#### d) Site Plans





**SURVEY OF PROPERTY**  
— prepared for —  
**JOSEPH & ROSE LANA**  
— situate in the —  
**VILLAGE OF MT. MISCO**  
**TOWNS OF NEW CASTLE & BEDFORD**  
**WESTCHESTER COUNTY**  
**N. Y.**  
Scale 1" = 20'

Lot numbers shown hereon are in accordance with those shown on Amended map of Subdivision of Property, Burbank Cushman and Myers etc. filed in the County Clerk's Office, Division of Land Records in Vol. 41, page 17.

This is to certify that the survey on which this map is based was completed Oct 5, 1967 and that this map was completed Oct 5, 1967.  
Guaranteed to HOME TITLE DIVISION, CHICAGO TITLE INSURANCE COMPANY, in accordance with the minimum standards for title surveys of the New York State Land Title Association

FOYLER ENGINEERING CORPORATION  
MT MISCO, N. Y.  
*Frank J. Foyler*  
N.Y. State Licensed Surveyor





SURVEY OF PROPERTY  
JOSEPH A. ROSE LANA  
 VILLAGE OF MT MIDCO  
 TOWNSHIP OF NEW CASTLE & BLENHEIM  
 WASHINGTON COUNTY  
 N. Y.

ALL RIGHTS RESERVED  
 BY THE  
 SURVEYOR  
 J. A. ROSE  
 1910

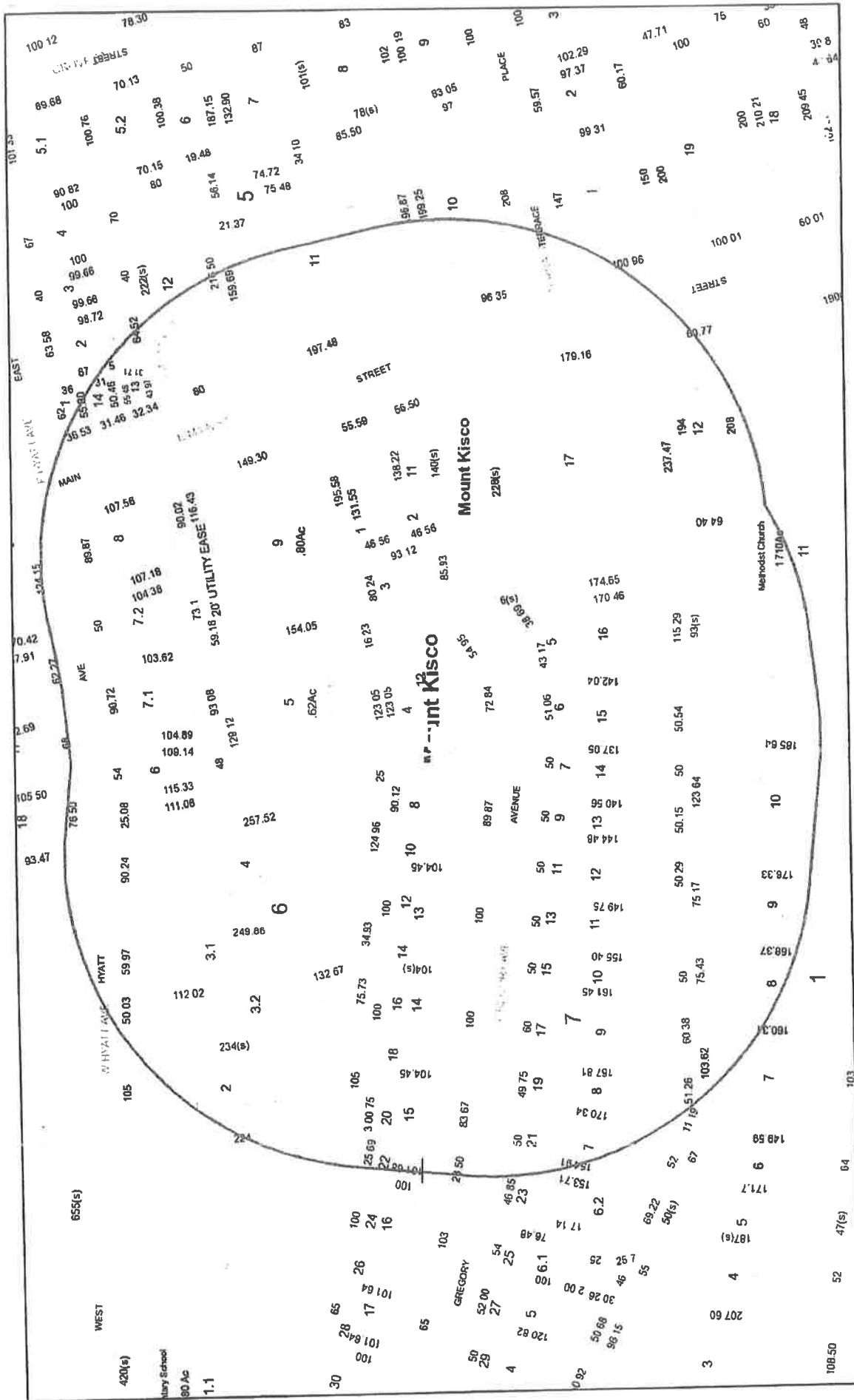
ALL RIGHTS RESERVED  
 BY THE  
 SURVEYOR  
 J. A. ROSE  
 1910

ALL RIGHTS RESERVED  
 BY THE  
 SURVEYOR  
 J. A. ROSE  
 1910



e) Property Owners within 300 feet

# 29 Gregory Ave. ID: 80.33-6-12 (Mount Kisco)



August 2, 2021

1:1,500



Tax parcel data was provided by local municipality. This map is generated as a public service to Westchester County residents for general information and planning purposes only, and should not be relied upon as a sole informational source. The County of Westchester hereby disclaims any liability from the use of this GIS mapping system by any person or entity. Tax parcel boundaries represent approximate property line location and should NOT be interpreted as or used in lieu of a survey or property boundary description. Property descriptions must be obtained from surveys or deeds. For more information please contact local municipality assessor's office.

Westchester County GIS

GIS <http://giswww.westchester.gov.com>

Michaelian Office Building

148 Maritime Avenue Rm 214

White Plains, New York 10601



f) List of Property Owners within 300 feet

OWNERNAME	PROPADDRESS	PROPCITY	PROPZIP	PROPPRINKEY	C/O	Mailing Address	City	State	Zip
Botero Francisco	48 Gregory Ave	MOUNT KISCO	10549	80.33-7-10					
Minchala, Nelson A	36 Gregory Ave	MOUNT KISCO	10549	80.33-7-13			Mt Kisco	NY	10549
Singh,INDERJIT - Amanpreet Singh	38 W Hyatt Ave	MOUNT KISCO	10549	80.33-6-3.2		38 Carlton Srive			
Kornhaber, Eugene	10 W Hyatt Ave	MOUNT KISCO	10549	80.33-6-7.2					
Albanese, Antonio - Carmela Albanese	60 Gregory Ave	MOUNT KISCO	10549	80.33-7-8		55 Cottage Terrace	Bedford Hills	NY	10507
Nibur 278 Main Street Mt Kisco	278 Main St	MOUNT KISCO	10549	80.33-7-17	280 E Main St #2 LLC	90 Merrick Ave, Ste 510	East Meadow	NY	11554
251 Main St. Mt. Kisco Corp.	265 Main St	MOUNT KISCO	10549	80.33-5-10	Attn: MRE Mgmt Corp	27 Radio Circle Drive	Mt Kisco	NY	10549
Lopez Gerardo	64 Gregory Ave	MOUNT KISCO	10549	80.33-7-7					
Hamish & Trotwood LLC	55 Smith Ave	MOUNT KISCO	10549	80.41-1-8		Po Box 180	Mt Kisco	NY	10549
Bedford Central S.D.	W Hyatt Ave	MOUNT KISCO	10549	80.33-6-1.1	Fox Lane Campus	PO Box 502, Stonewall Ln	Brewster	NY	10509
22 W Hyatt Avenue LLC	22 W Hyatt Ave	MOUNT KISCO	10549	80.33-6-6	Robert Gasprini				
Baldwin, Joseph A - Marianne T Baldwin	17 W Hyatt Ave	MOUNT KISCO	10549	80.33-1-17					
Seashell Realty, LLC	275 E Main St	MOUNT KISCO	10549	80.41-2-1	Robert Robostelli	275 E Main St	Mt Kisco	NY	10549
Cambareri, Fortunato	235 Main St	MOUNT KISCO	10549	80.33-5-1		16 Lawrence St	Mt Kisco	NY	10549
237 - 239 East Main Street	239 Main St	MOUNT KISCO	10549	80.33-5-13		16 Lawrence St	Mt Kisco	NY	10549
6 East Hyatt Ave MK LLC	6 E Hyatt Ave	MOUNT KISCO	10549	80.33-5-2		39 Church St	Bedford Hills	NY	10507
Pudding Pie LLC	66 Gregory Ave	MOUNT KISCO	10549	80.33-7-6.2	Nazar Massoul	8 Cole Dr	Armonk	NY	10504
Giuseppe Valvano Irrev Trust - Vincent	52 Gregory Ave	MOUNT KISCO	10549	80.33-7-9		25 Bush Dr	Mt Kisco	NY	10549
Moran, Margaret	34 Gregory Ave	MOUNT KISCO	10549	80.33-7-14					
Tefkros Realty Company, LLC	252 Main St	MOUNT KISCO	10549	80.33-6-9	Mt Kisco Diner	252 Main St	Mt Kisco	NY	10549
Roaring Brook, LLC	242 Main St	MOUNT KISCO	10549	80.33-6-8		25 Main St, Fl#4	Hartford	CT	06106
49 Smith Avenue, LLC	49 Smith Ave	MOUNT KISCO	10549	80.41-1-9					
Pickard Brian R - Crystal M Pickard	40 Gregory Ave	MOUNT KISCO	10549	80.33-7-12	Ulster Savings Bank	PO Box 3337	Kingston	NY	12402
Moran, Mary M - Brendan Moran	30 Gregory Ave	MOUNT KISCO	10549	80.33-7-15					
Cabrera Santos - Rosa Cabrera	28 W Hyatt Ave	MOUNT KISCO	10549	80.33-6-4					
Tefkros Realty Company LLC	24-26 W Hyatt Ave	MOUNT KISCO	10549	80.33-6-5	Mt. Kisco Diner	PO Box 252	Mt Kisco	NY	10549
De Fonce Bruce - Vivian De Fonce	236 Main St	MOUNT KISCO	10549	80.33-1-15		34 Eastview Drive	Valhalla	NY	10595
Gregory Associates LLC	55 Gregory Ave	MOUNT KISCO	10549	80.33-6-15		84 Smith Avenue	Mt Kisco	NY	10549
Delgado, Luis D - Rosa I Tapia	9 W Hyatt Ave	MOUNT KISCO	10549	80.33-1-16					
Lana Joseph - Lana Leigh Irrev. Trust	29 Gregory Ave	MOUNT KISCO	10549	80.33-6-12	NA	401 S Water Street	Newburgh	NY	12553
Mt Kisco Properties, LLC	39 Smith Ave	MOUNT KISCO	10549	80.41-1-10		126 Kitchawan Rd	Pound Ridge	NY	10576
Moreno Luis - Marie Moreno	28 Gregory Ave	MOUNT KISCO	10549	80.33-7-16					
Methodist Church	300 Main St	MOUNT KISCO	10549	80.41-1-11					
Estate of Sally Ann Bronzino - Sally Ann	69 Gregory Ave	MOUNT KISCO	10549	80.33-6-16					
Nicholas, David	46 W Hyatt Ave	MOUNT KISCO	10549	80.33-6-2					
Miyazaki Shuya - Naoko Miyazaki	51 Gregory Ave	MOUNT KISCO	10549	80.33-6-14					
Champlin, Patricia T - William F Cham	23 W Hyatt Ave	MOUNT KISCO	10549	80.33-1-18		31 Bellew Avenue	Eastchester	NY	10709
Kornhaber, Eugene	10 W Hyatt Ave	MOUNT KISCO	10549	80.33-6-7.1		PO Box 770	Mahopac	NY	10541
Cassidy-Flynn Funeral Home	288 Main St	MOUNT KISCO	10549	80.33-6-12					
Big Boy Builders Inc.	241 Main St	MOUNT KISCO	10549	80.33-5-12					
61 Smith Properties LLC	61 Smith Ave	MOUNT KISCO	10549	80.41-1-7		PO Box 267	Mt Kisco	NY	10549
A & M Putnam LLC	44 Gregory Ave	MOUNT KISCO	10549	80.33-7-11					
Salazar, Jose F - Gaby Jackson	34 W Hyatt Ave	MOUNT KISCO	10549	80.33-6-3.1		Po Box 276	Hawthorne	NY	10532
Hartman, William R - Aida J Hartman	45 Gregory Ave	MOUNT KISCO	10549	80.33-6-13		52 Heather Drive	Mahopac	NY	10541
Bedford Central S.D.	W Hyatt Ave	MOUNT KISCO	10549	80.33-1-19	Fox Lane Campus	11 Archer Rd	Mahopac	NY	10541
Oelker & Cox Funeral Home, Inc	266 Main St	MOUNT KISCO	10549	80.33-6-11		PO Box 180	Mt Kisco	NY	10549
237 - 239 East Main Street	237 Main St	MOUNT KISCO	10549	80.33-5-14		16 Lawrence St	Mt Kisco	NY	10549
251 Main St. Mt. Kisco Corp.	259 Main St	MOUNT KISCO	10549	80.33-5-11	Attn: MRE Mgmt Corp	27 Radio Circle Drive	Mt Kisco	NY	10549



## **g) Public Notice**

**PUBLIC NOTICE**

PLEASE TAKE NOTICE that the Zoning Board of Appeals of the Village/Town of Mount Kisco, New York will hold a Public Hearing on the 21<sup>st</sup> day of September 2021 at the Municipal Building, Mount Kisco, New York, beginning at 7:00 PM pursuant to the Zoning Ordinance on the Appeal of Carl J. Lana as Executor of the Estate of Joseph Lana, 29 Gregory Avenue, Mt. Kisco, New York 10549 from the decision of Peter J. Miley, Building Inspector, dated June 8, 2021 denying the permit application to renew permit No. 885 issued March 30, 1946 and continue the use of a detached Accessory Garage with Apartment above and in use since 1946. The property involved is known as 29 Gregory Avenue and described on the Village Tax Map as Section 80.33, Block 6, Lot 12 and is located on the North side of Gregory Avenue in a RT-6 Zoning district. Said Appeal is being made to obtain a variance in accordance with Sections 110-11.B.(1)(a) of the Code of the Village/Town of Mount Kisco, which states: "Detached one-family, not to exceed one such dwelling per lot.", for the continued use of an existing Apartment above a detached Accessory Garage.

Harold Boxer, Chair  
Zoning Board of Appeals  
Village/Town of Mount Kisco



h) Affidavit of Mailing  
(To be Submitted)

i) Deed





\*600633093DED001U\*

## Westchester County Recording & Endorsement Page

### Submitter Information

Name: First Choice Settlement, LLC Phone: 6313932660  
Address 1: 510 Broadhollow Road Fax: 6313932651  
Address 2: Suite 308 Email: apornoy@fcsellie.com  
City/State/Zip: Melville NY 11747 Reference for Submitter: deed lana

### Document Details

Control Number: **600633093** Document Type: **Deed (DED)**  
Package ID: 2020030300063001001 Document Page Count: 3 Total Page Count: 5

### Parties

☒ Additional Parties on Continuation page

#### 1st PARTY

1: LANA CARL - Individual  
2: LANA ROSANNE - Individual

#### 2nd PARTY

1: LANA JOSEPH - Individual  
2:

### Property

☐ Additional Properties on Continuation page

Street Address: 29 GREGORY AVENUE Tax Designation: 80.33-6-12  
City/Town: MOUNT KISCO Village:

### Cross-References

☐ Additional Cross-Refs on Continuation page

1: 2: 3: 4:

### Supporting Documents

1: RP-5217 2: TP-584

### Recording Fees

Statutory Recording Fee: \$40.00  
Page Fee: \$20.00  
Cross-Reference Fee: \$0.00  
Mortgage Affidavit Filing Fee: \$0.00  
RP-5217 Filing Fee: \$125.00  
TP-584 Filing Fee: \$5.00  
RPL 291 Notice Fee: \$10.00  
Total Recording Fees Paid: \$200.00

### Transfer Taxes

Consideration: \$10.00  
Transfer Tax: \$0.00  
Mansion Tax: \$0.00  
Transfer Tax Number: 10408

### Mortgage Taxes

Document Date:  
Mortgage Amount:  
  
Basic: \$0.00  
Westchester: \$0.00  
Additional: \$0.00  
MTA: \$0.00  
Special: \$0.00  
Yonkers: \$0.00  
Total Mortgage Tax: \$0.00

Dwelling Type: Exempt: ☐  
Serial #:

RECORDED IN THE OFFICE OF THE WESTCHESTER COUNTY CLERK



Recorded: 09/16/2020 at 11:44 AM  
Control Number: **600633093**  
Witness my hand and official seal

*Timothy C. Idoni*

Timothy C. Idoni  
Westchester County Clerk

### Record and Return To

☐ Pick-up at County Clerk's office

FIRST CHOICE SETTLEMENT LLC  
510 BROADHOLLOW RD  
SUITE 308  
MELVILLE, NY 11747  
Attn: RECORDING DEPARTMENT

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.

\*600633093DED001U\*

## Westchester County Recording & Endorsement Page

### Document Details

Control Number: **600633093**

Document Type: **Deed (DED)**

Package ID: 2020030300063001001

Document Page Count: 3

Total Page Count: 5

### 1st PARTY Addendum

LEIGH LANA  
LANA JOSEPH

Individual  
Individual

### 2nd PARTY Addendum



CONSULT YOUR LAWYER BEFORE SIGNING THIS INSTRUMENT—THIS INSTRUMENT SHOULD BE USED BY LAWYERS ONLY.

THIS INDENTURE, made the 2<sup>nd</sup> day of March, in the year 2020

BETWEEN Carl Lana, residing at 29 Gregory Avenue, Mount Kisco, NY; Rosanne Lana, residing at 29 Gregory Avenue, Mount Kisco, NY; Lana Leigh residing at 2510 Ocean Avenue, South Bellmore, NY; and Joseph Lana, holder of a life estate, residing at 29 Gregory Avenue, Mount Kisco, NY

party of the first part, and Joseph Lana, residing at 29 Gregory Avenue, Mount Kisco, NY 10549  
party of the second part,

WITNESSETH, that the party of the first part, in consideration of

ten (\$10.00) dollars

paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the

SEE SCHEDULE "A" ATTACHED HERETO AND MADE A PART HEREOF

Section 80.33 Block: 6 Lot: 12

Premises known as: 29 Gregory Avenue, Mount Kisco, NY 10549

BEING AND INTENDED TO BE the same premises as conveyed by deed dated 08/01/2001 and recorded 10/07/2011 in Control No. 511803466 in the County Clerk's Office for Westchester County, State of New York.

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof; TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises; TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.  
AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose. The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF:

Joseph Lana, by Carl Lana, his Agent  
JOSEPH LANA CARL LANA  
Lana Leigh  
LANA LEIGH  
Rosanne Lana  
ROSANNE LANA

being  
rec'd  
simultaneously

**First Choice Settlement, LLC**

Issued on behalf of

**Old Republic National Title Insurance Company****Title No.: FCS23744-NY****SCHEDULE A**

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Town of Mt. Kisco, Village of Mt. Kisco, County of Westchester and State of New York known and designated as to 3, 4, 8 and the easterly one-half lot of Lot 10 as said lots are shown on map entitled "Amended Map of Subdivision of Property of Burbank, Cushman & Myers, now owned by D.F. Dakin Company, situate in the Village of Mt. Kisco, Westchester County, New York," and filed in the Office of the Westchester County Clerk, Division of Land Records on May 19, 1914 in Vol. 41 of maps page 17 said property being more particularly bounded and described as follows:

BEGINNING at a point on the northerly side of Gregory Avenue distant 145.62 feet westerly as measured along the northerly side of Gregory Avenue from the corner formed by the intersection of the northerly side of Gregory Avenue and the westerly side of Main Street, said point of beginning also being where the line dividing Lot 3 on one side and Lots 1 and 2 on the other side intersects the northerly side of Gregory Avenue; running thence along said dividing line north 18 degrees 00 minutes east 93.12 feet to the southerly side of land now or formerly of Joseph Bronco; running thence along the southerly side of said Bronco's land and partly along the southerly line of land now or formerly of John W. and Rose Hammond the following three courses and distances:

North 87 degrees 24 minutes 00 seconds West 80.24 feet;

North 82 degrees 51 minutes 00 seconds West 123.05 feet;

North 70 degrees 10 minutes 30 seconds West 90.12 feet to a point;

running thence through Lot No. 10 south 19 degrees 49 minutes 30 seconds west 104.45 feet to a point on the northerly side of Gregory Avenue; running thence

along the northerly side of Gregory Avenue South 70 degrees 10 minutes 30 seconds East 119.87 feet; south 81 degrees 52 minutes 10 seconds East 72.84

feet; north 67 degrees 28 minutes 30 seconds East 64.95 feet, and south 80

degrees 18 minutes 30 seconds East 85.93 feet to the point or place of beginning.

**SECTION:80.33**

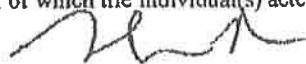
**BLOCK:6**

**LOT:12**



**ACKNOWLEDGEMENT TAKEN IN NEW YORK STATE**State of New York, County of ~~West~~ <sup>Westchester</sup>, ss:On the <sup>2nd</sup> day of ~~March~~ in the year <sup>2020</sup>, before me, the undersigned, personally appearedCARL LANA & Joseph LANA

, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument,

MATTHEW ANTHONY RUBINO  
Notary Public, State of New York  
Reg. No. 02RU6342327  
Qualified in Nassau County  
Commission Expires 05/23/2020**ACKNOWLEDGEMENT BY SUBSCRIBING WITNESS TAKEN IN NEW YORK STATE**

State of New York, County of , ss:

On the day of in the year , before me, the undersigned, a Notary Public in and for said State, personally appeared , the subscribing witness to the foregoing instrument, with whom I am personally acquainted, who, being by me duly sworn, did depose and say that he/she/they reside(s) in

(If the place of residence is in a city, include the street and street number if any, thereof); that he/she/they know(s)

to be the individual described in and who executed the foregoing instrument; that said subscribing witness was present and saw said

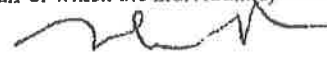
execute the same; and that said witness at the same time subscribed his/her/their name(s) as a witness thereto

**Bargain and Sale Deed  
With Covenants**

Title No. FCS23744-NY

LANA, LANA, LANA AND LEIGH  
TO  
LANA**ACKNOWLEDGEMENT TAKEN IN NEW YORK STATE**State of New York, County of ~~West~~ <sup>Westchester</sup>, ss:On the <sup>2nd</sup> day of ~~March~~ in the year <sup>2020</sup>, before me, the undersigned, personally appearedLANA LEIGH

, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

MATTHEW ANTHONY RUBINO  
Notary Public, State of New York  
Reg. No. 02RU6342327  
Qualified in Nassau County  
Commission Expires 05/23/2020**ACKNOWLEDGEMENT TAKEN OUTSIDE NEW YORK STATE**\*State of ~~New York~~ <sup>New York</sup>, County of ~~West~~ <sup>Westchester</sup>, ss:

\*(Or insert District of Columbia, Territory, Possession or Foreign Country)

On the <sup>2nd</sup> day of ~~March~~ in the year <sup>2020</sup>, before me the undersigned personally appearedMatthew LANA

Personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), that by his/her/their signature(s) on the instrument, the individual(s) or the person upon behalf of which the individual(s) acted, executed the instrument, and that such individual make such appearance before the undersigned in the

(add the city or political subdivision and the state or country or other place the acknowledgment was taken).

MATTHEW ANTHONY RUBINO  
Notary Public, State of New York  
Reg. No. 02RU6342327  
Qualified in Nassau County  
Commission Expires 05/23/2020

SECTION: 80.33

BLOCK: 6

LOT: 12

COUNTY OR TOWN: Westchester

**RETURN BY MAIL TO:**

## J,k,l) Apartment Photos and Floor Plans

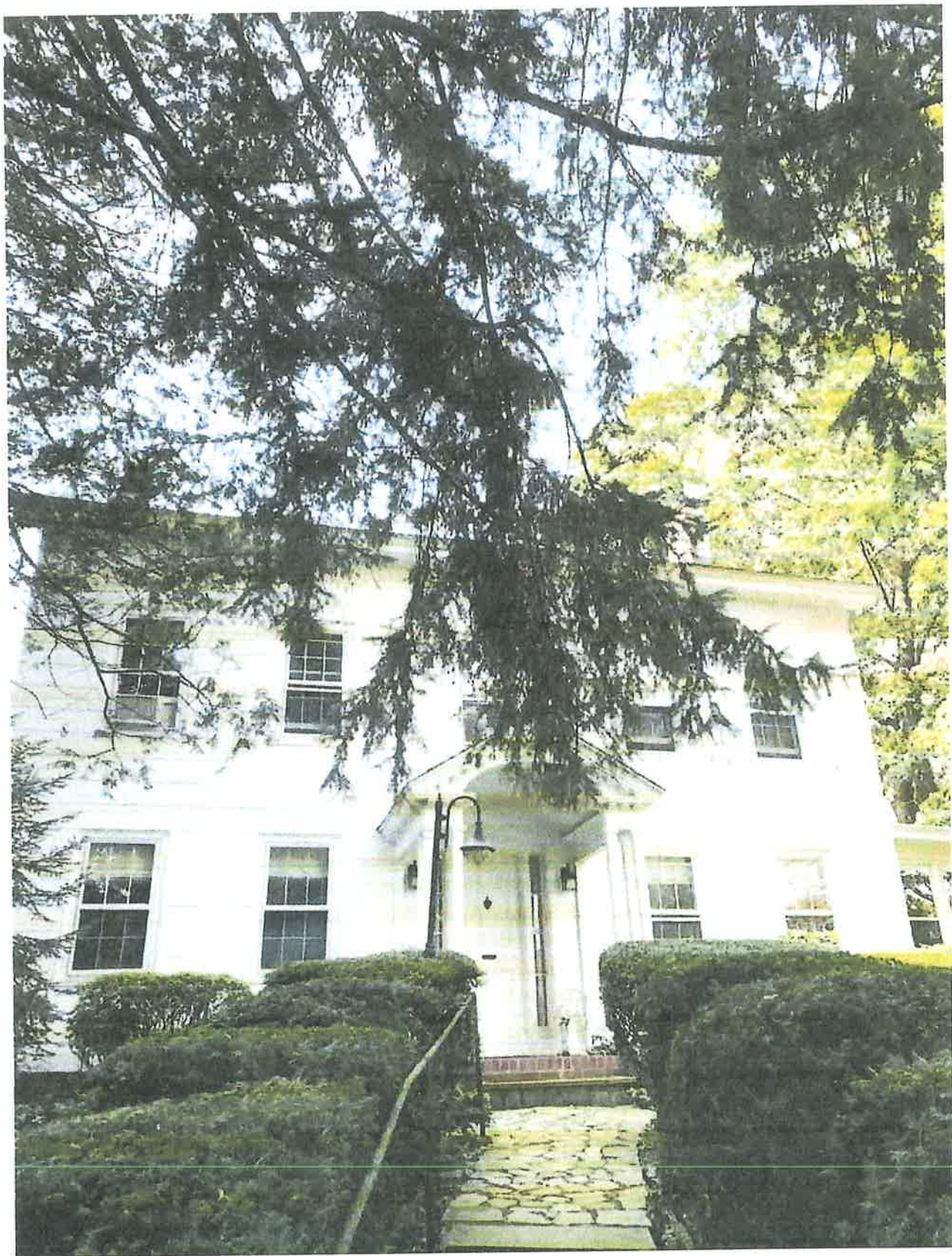




**STREET**

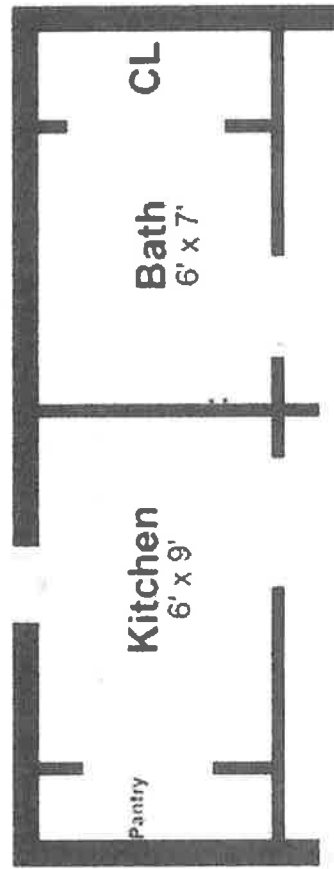






# Cottage First Level

Approx. 535.6 sq feet



Pantry

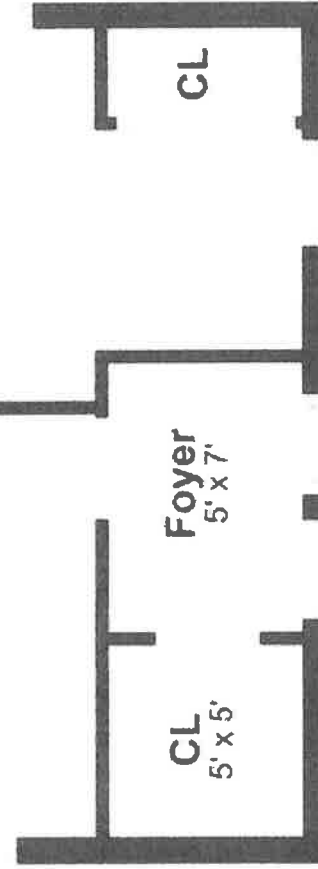
Kitchen  
6' x 9'

Bath  
6' x 7'

CL

Living  
Room  
13' x 11'

Bedroom  
18'4" x 10'



CL  
5' x 5'

Foyer  
5' x 7'

CL

Porch  
5' x 14'

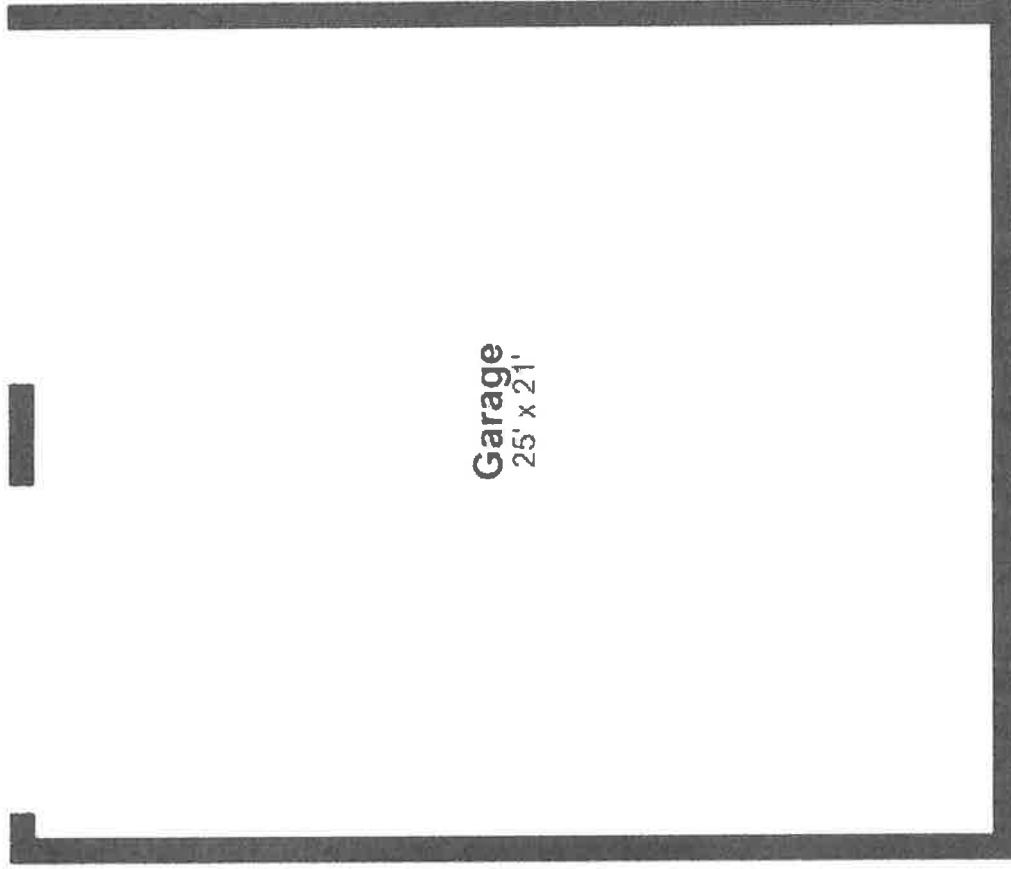


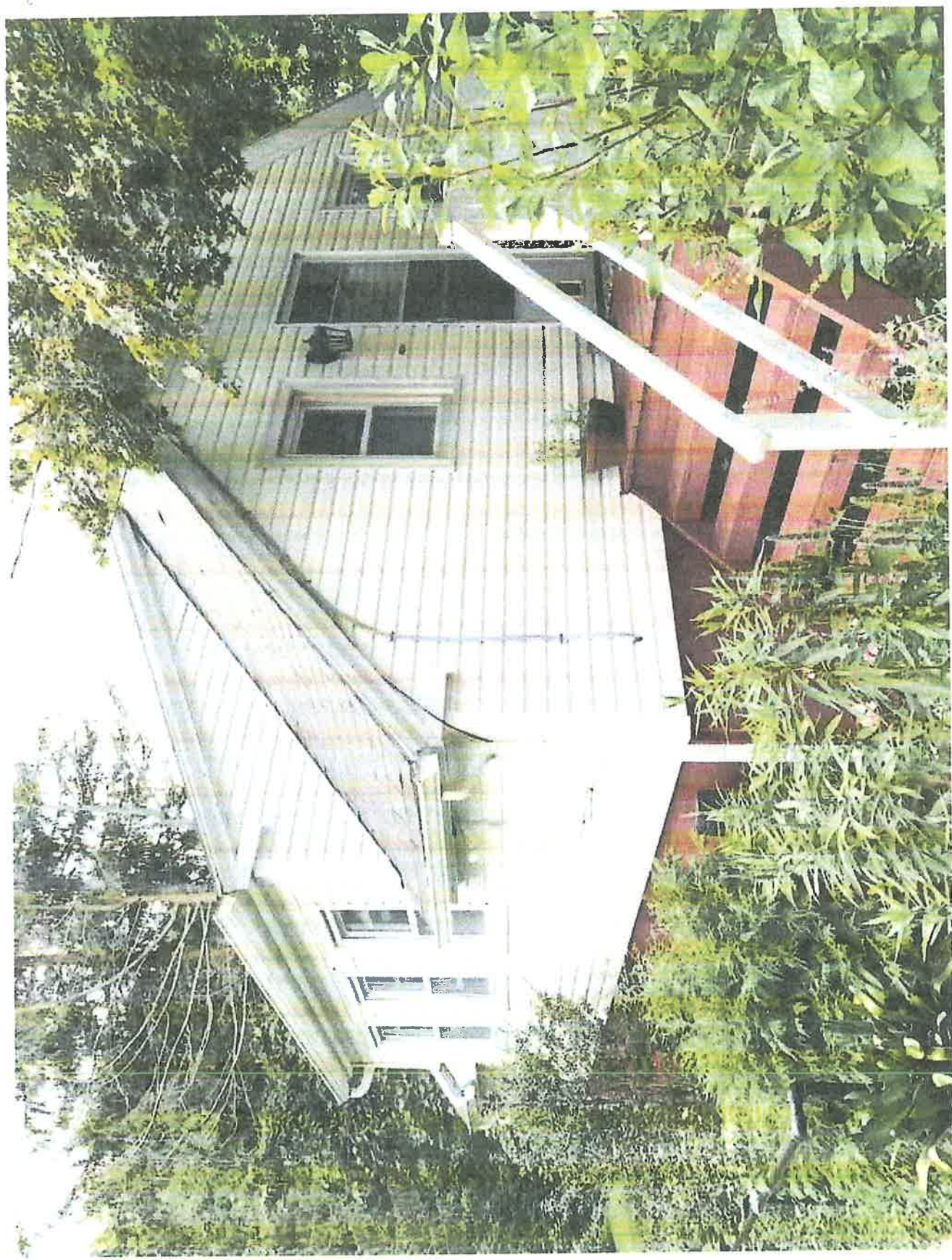
24  
1  
1  
1



## Cottage Lower Level

Approx 516.8 sq feet





**COTTAGE, OVER GARAGE**





**KITCHEN**



**BATH**





**BEDROOM**

**AFFIDAVIT OF MAILING**

Village/Town of Mount Kisco  
Planning Board

AUG 30 2021

RECEIVED

STATE OF NEW YORK

}

}SS.:

}

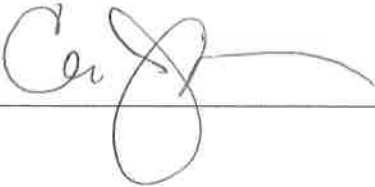
COUNTY OF WESTCHESTER

Carl J. Lana

I being duly sworn, deposes and says:

I reside at 29 Gregory Avenue, Mt. Kisco, NY 10549

On August 30 2021 I served a notice of hearing, a copy of which is attached hereto and labeled Exhibit A, upon persons whose names are listed in a schedule of property owners within 300 feet of the subject property identified in this notice. A copy of this schedule of property owners' names is attached hereto and labeled Exhibit B. I placed a true copy of such notice in a postage paid property addressed wrapper addressed to the addresses set forth in Exhibit B, in a post office or official depository under the exclusive care and custody of the United States Post Office, within the County of Westchester.



Sworn to before me on this

30<sup>th</sup>

day of

August

2021



(Notary Public)

LAUREL M DALEY  
NOTARY PUBLIC STATE OF NEW YORK  
WESTCHESTER COUNTY  
LIC. #01DA6414887  
COMM. EXP. 03/01/25







Village/Town of Mount Kisco  
Planning Board

AUG 30 2021

RECEIVED

## AFFIDAVIT OF PUBLICATION FROM

State of Wisconsin  
County of Brown, ss.:

On the 25 day of August in the year 2021, before me, the undersigned, a Notary Public in and for said State, personally appeared Amy Kokott, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed, the instrument.

Amy Kokott being duly sworn says that he/she is the principal clerk of THE JOURNAL NEWS, a newspaper published in the County of Westchester and the State of New York, and the notice of which the annexed is a printed copy, was published in the newspaper area(s) on the date (s) below:

Zone:  
Westchester

Run Dates:  
08/20/2021

Signature

Sworn to before me, this 25 day of August, 2021

Sarah BerTELSEN  
Notary Public, State of Wisconsin, County of Brown

SARAH BERTELSEN  
Notary Public  
State of Wisconsin

My commission expires

Legend:

### WESTCHESTER:

Amewalk, Ardsley, Ardsley on Hudson, Armonk, Baldwin Place, Bedford, Bedford Hills, Brewster, Briarcliff Manor, Bronxville, Buchanan, Carmel, Chappaqua, Cold Spring, Crompond, Cross River, Croton Falls, Croton on Hudson, Dobbs Ferry, Eastchester, Emsford, Garrison, Goldens Bridge, Granite Springs, Greenburg, Harrison, Hartdale, Hastings, Hastings on Hudson, Hawthorne, Irvington, Jefferson Valley, Katonah, Lake Peekskill, Larchmont, Lincolnville, Mahopac, Mahopac Falls, Mamaroneck, Millwood, Mohegan Lake, Montrose, Mount Kisco, Mount Vernon, New Rochelle, North Salem, Ossining, Patterson, Peekskill, Pelham, Pleasantville, Port Chester, Pound Ridge, Purchase, Purdys, Putnam Valley, Rye, Scarsdale, Shenorock, Shrub Oak, Somers, South Salem, Tarrytown, Thomwood, Tuckahoe, Valhalla, Verplanck, Waccabuc, White Plains, Yorktown Heights, Yonkers

### ROCKLAND:

Blauvelt, Congers, Gamerville, Haverstraw, Hillburn, Monsey, Nanuet, New City, Nyack, Orangeburg, Palisades, Pearl River, Piermont, Pomona, Slootsburg, Spertkill, Spring Valley, Stony Point, Suffern, Tappan, Thibault, Tomkins Cove, Valley Cottage, West Haverstraw, West Nyack

Ad Number: 0004873067

EXHIBIT A



**PUBLIC NOTICE**

PLEASE TAKE NOTICE that the Zoning Board of Appeals of the Village/Town of Mount Kisco, New York will hold a Public Hearing on the 21st day of September 2021 at the Municipal Building, Mount Kisco, New York, beginning at 7:00 PM pursuant to the Zoning Ordinance on the Appeal of Carl J. Lana as Executor of the Estate of Joseph Lana, 29 Gregory Avenue, Mt. Kisco, New York 10549 from the decision of Peter J. Milley, Building Inspector, dated June 8, 2021 denying the permit application to renew permit No. 885 issued March 30, 1946 and continue the use of a detached Accessory Garage with Apartment above and in use since 1946. The property involved is known as 29 Gregory Avenue and described on the Village Tax Map as Section 83.33, Block 6, Lot 12 and is located on the North side of Gregory Avenue in a RT-6 Zoning district. Said Appeal is being made to obtain a variance in accordance with Sections 110-11.8.(1)(a) of the Code of the Village/Town of Mount Kisco, which states: "Detached one-family, not to exceed one such dwelling per lot.", for the continued use of an existing Apartment above a detached Accessory Garage.

Harold Boxer, Chair  
Zoning Board of Appeals  
Village/Town of Mount Kisco 4873067

EXHIBIT A

29 Gregory

State of New York     )  
                                  ) ss:  
County of Westchester)

AFFIDAVIT OF POSTING

**Guillermo Gomez**, being duly sworn, says that on the \_\_\_\_\_ day of September 2021, he conspicuously fastened up and posted in seven public places, in the Village/Town of Mount Kisco, County of Westchester, a printed notice of which the annexed is a true copy, to Wit: ---

Municipal Building --  
104 Main Street

\_\_\_\_\_X\_\_\_\_\_

Public Library  
100 Main Street

\_\_\_\_\_X\_\_\_\_\_

Fox Center

\_\_\_\_\_X\_\_\_\_\_

Justice Court -- Green Street  
40 Green Street

\_\_\_\_\_X\_\_\_\_\_

Mt. Kisco Ambulance Corp  
310 Lexington Ave

\_\_\_\_\_X\_\_\_\_\_

Carpenter Avenue Community House  
200 Carpenter Avenue

\_\_\_\_\_X\_\_\_\_\_

Leonard Park Multi Purpose Bldg

\_\_\_\_\_X\_\_\_\_\_

  
\_\_\_\_\_  
Guillermo Gomez

Sworn to before me this <sup>for</sup> 15 day of September 2021

  
\_\_\_\_\_  
Notary Public

PATRICIA A TIP  
NOTARY PUBLIC-STATE OF NEW YORK  
No. 01TI6170206  
Qualified in Westchester County  
My Commission Expires 07-02-2023





Village/Town of Mount Kisco Building Department  
104 Main Street  
Mount Kisco, New York 10549  
Ph. (914) 864-0019-fax (914) 864-1085

August 9, 2021

SureGreen Properties, LLC  
24 Ledgewood Commons  
Millwood, NY 1046

Re: Notice of Denial  
1 Manchester Drive  
Mount Kisco, NY 10549  
(SBL) 69.80-4-1

To Whom It May Concern:

Your recent Building Permit application for the proposed vertical enlargement and alteration of your home has been denied for the following reasons:

The subject property and residence is located on the corner of Manchester Drive and E. Main Street which is within the RT- 6 (One – and Two – Family Residence) Zoning District.

Pursuant to § 110-59 Definitions: All "corner lots" shall have two front yards, two side yards and no rear yard.

The existing home is dimensionally noncompliant in the following respects:

1. Section 110-11 C(1)(f)[1][b] Minimum building setback Front: is 25 ft. and the existing building is located 2.3 ft. (22.7 ft. less than required) from the north [front] property line (Main Street/Rt 133).
2. Section 110-11 C(1)(f)[1][b] Minimum building setback Front: is 25 ft. and the existing building is located .7 ft. (9.3 ft. less than required) from the east [side] property line (Manchester Avenue).
3. Section 110-11 C(1)(f)[3][a] Minimum building setback Side: is 10 ft. and the existing building is located 1.9 ft. (8.1 ft. less than required) from the south [side] property line.
4. Section 110-11 C(1)(a) requires a minimum lot area of 6,250 square feet. The subject parcel is comprised of only 3,484 square ft. Your lot is substandard by 2766 sq. ft. from the minimum required.
5. Section 110-10 C (1) (c) imposes a maximum permitted development coverage of 40% (1,393 square feet) and the existing development coverage is 69% (2,412 square feet). Your lot exceeds maximum permitted development coverage by 29% (1,019 square feet).

6. Section 110-10 C (1) (c) imposes a maximum permitted building coverage of 25% (870 square feet) and the existing building coverage is 33% (1,150 square feet). Your building coverage exceeds the maximum permitted coverage by 8% (280 square feet).

Your proposed plans seek to increase several of those aforementioned non-conformities<sup>1</sup>, thereby warranting denial. Additionally, you propose to create a new nonconformity regarding the buildings proposed height, similarly warranting denial. The extent to which your application violates zoning and would require variances is set forth below.

### **Variances Required**

Pursuant to § 110-35 (D) Noncomplying buildings and structures **may not** be enlarged without a variance being obtained from the Zoning Board of Appeals pursuant to this chapter. No building or structure which is noncomplying with respect to applicable developmental regulations (by illustration, but not by limitation, height, setbacks, building and development coverage, lot area or lot width) shall be enlarged or altered in such a manner as to increase any such noncompliance or so as to enlarge or increase the area of such building or structure, including, but not limited to: the alteration of roof or floor levels or the addition of area above, below or adjacent to such noncomplying building or structure. Therefore; variances (each described below) to enlarge an existing noncompliant structure are required pursuant to § 110-35 (D) of the Village/Town of Mount Kisco Code.

1. Pursuant to § 110-11. RT-6 One – and Two – Family Residence District, C. Development regulations (f) Minimum building setback [1] Front: is 25 ft. and the existing building is located 2.3 ft. (22.7 ft. less than required) from the northwest corner of the home [front] to the Main Street property line and therefore; a 22.7 ft. front yard setback variance is required.
2. Pursuant to § 110-11. RT-6 One – and Two – Family Residence District, C. Development regulations (f) Minimum building setback [1] Front: is 25 ft. and the existing building along Manchester Road is located 8.8 ft. (16.2 ft. less than required) and therefore; a 16.2 ft. front yard setback variance is required.
3. Pursuant to development regulations C [3], the minimum required side yard setback is 10 ft. The existing building is located .7 ft. (9.3 ft. less than required) and proposal will increase the noncompliance and therefore; a 9.3 ft. variance is required.
4. Pursuant to § 110-10 C (1) (g) of the Village/Town of Mount Kisco Code, the maximum permitted height of the principal structure is 2 ½ stories. The proposed height of the principal structure is three (3) stories and therefore; a building height variance of .5 story is required.

*You have the right to appeal this decision within 60 days.*

---

<sup>1</sup> An enlargement along the of the plane of a noncomplying component of building or structure is deemed to be enlargement of said building or structure.



Sincerely,

Peter J. Miley,  
Building Inspector

A handwritten signature in blue ink, appearing to read 'P. Miley', is written over a horizontal line. The signature is stylized with a large 'P' and a cursive 'Miley'.

PM\mkr

RECEIVED

SEP 13 2021

Zoning Board of Appeals  
Village/Town of Mount Kisco

AFFIDAVIT OF MAILING

STATE OF NEW YORK

}

}SS.:

COUNTY OF WESTCHESTER

}

Michele Celentano being duly sworn, deposes and says:

I reside at 701 Panorama Drive, Mohegan Lake, NY

On September 8 2021 I served a notice of hearing, a copy of which is attached hereto and labeled Exhibit A, upon persons whose names are listed in a schedule of property owners within 300 feet of the subject property identified in this notice. A copy of this schedule of property owners' names is attached hereto and labeled Exhibit B. I placed a true copy of such notice in a postage paid property addressed wrapper addressed to the addresses set forth in Exhibit B, in a post office or official depository under the exclusive care and custody of the United States Post Office, within the County of Westchester.

Michele Celentano

Sworn to before me on this

13<sup>th</sup> day of September 2021

P. Daniel Hollis

(Notary Public)

P. DANIEL HOLLIS  
Notary Public, State of New York  
No. 60-1839675  
Qualified in Westchester County  
Commission Expires July 31, 2025



## **Exhibit A**

**NOTICE OF ADJOURNED PUBLIC HEARING**

PLEASE TAKE NOTICE that the Zoning Board of Appeals of the Village/Town of Mount Kisco, New York will hold a continuation of the Public Hearing opened July 20<sup>th</sup> , 2021 and adjourned to the 21<sup>st</sup> day of September, 2021, at the Municipal Building, Mount Kisco, New York, beginning at 7:00 PM pursuant to the Zoning Ordinance on the Appeal of Suregreen Properties, LLC, of 1 Manchester Drive, New York 10549, from the decisions of Peter J. Miley, Building Inspector, dated February 25<sup>th</sup>, 2021 and August 9<sup>th</sup>, 2021 denying the application to permit it to vertically enlarge and alter the property. The property involved is known as 1 Manchester Drive, Mount Kisco, New York 10549 and described on the Village Tax Map as Section 69.80 Block 4 Lot 1 and is located on the east side of Manchester Drive in a RT-6 Zoning District. Said Appeal is being made to obtain variances pursuant to Section 110-35(D), which prohibits the enlargement of Noncomplying Buildings and Structures, of the Code of the Village/Town of Mount Kisco, specifically seeking two variances from Section 110-11(C)(f)(1) which provides that the minimum front set back requirement is 25 feet, a variance from Section 110-11(C)(f)(3) which provides that the minimum side yard setback is 10 feet, and a variance from Section 110-10(C)(1)(g) which provides that the maximum permitted height of the principal structure is 2 ½ stories.

Harold Boxer, Chair  
Zoning Board of Appeals  
Village/Town of Mount Kisco



## **Exhibit B**

OWNERNAME	PROPADDRESS	PROPERTY	PROPIZIP	PROPPRINTKEY	C/O	Mailing Address	City	State	Zip
Oliverio Michael - Laura Oliverio	81 W Main St	MOUNT KISCO	10549	69.72-4-2					
Amdur, Guy D - Maria C Amdur	29 Manchester Dr	MOUNT KISCO	10549	69.80-4-37					
Malley Scott G - Corinne M Rubicco	50 Hillside Ave	MOUNT KISCO	10549	69.72-4-4					
Federico Elaine M	48 W Main St	MOUNT KISCO	10549	69.80-4-3					
Testa, Antoinette	1 Manchester Dr	MOUNT KISCO	10549	69.80-4-1	NA				
Mohammad, Basheer	43-49 W Main St	MOUNT KISCO	10549	69.72-4-15					
Henry Maurice G Jr - MGH Trust	40 W Main St	MOUNT KISCO	10549	69.80-4-4					
30 West Main St Corp	30 W Main St	MOUNT KISCO	10549	69.80-4-6	MRE Mgt Corp	25 Desert Willow St	Irvine	CA	92606
McCarthy, Brian J	34 Manchester Dr	MOUNT KISCO	10549	69.80-3-5		27 Radio Cir	Mt Kisco	NY	10549
Yustman Jeffrey	20 Manchester Dr	MOUNT KISCO	10549	69.80-3-3.2					
36 Maple Av Mt. Kisco Corp.	36 Maple Ave	MOUNT KISCO	10549	69.80-4-13	PAL	POB 367	Mt. Kisco	NY	10549
Alvarez, Jose - Luz M Alvarez	18 Maple Ave	MOUNT KISCO	10549	69.80-4-9		88 Forest Dr	Mt. Kisco	NY	10549
Chang, Chenkun - Anna Juiyen Chang	57 W Main St	MOUNT KISCO	10549	69.72-4-17		10 Pine View Rd	Mt. Kisco	NY	10549
Wein Jason - Elizabeth Callender	31 Manchester Dr	MOUNT KISCO	10549	69.80-4-36					
Warren, John A - Kathleen Donovan-Warren	11 Manchester Dr	MOUNT KISCO	10549	69.80-4-39					
Pinnetti, Nicola - Mary Pinnetti	27 Manchester Dr	MOUNT KISCO	10549	69.80-4-38					
Cambareri Fortunato	52 W Main St	MOUNT KISCO	10549	69.80-4-2		135 Crow Hill Path	Mt. Kisco	NY	10549
Delgado, Dorian R	10 Maple Ave	MOUNT KISCO	10549	69.80-7		49 Cunningham Ln	Pawling	NY	12564
Armando Chousa LLC	39-41 W Main St	MOUNT KISCO	10549	69.72-4-14		POB 85	Yorktown Heights	NY	10598
Davis-Lorton Bernadette E	90 W Main St	MOUNT KISCO	10549	69.80-3-2	Michael Tosto				
Wilkinson Ellen L	28 Manchester Dr	MOUNT KISCO	10549	69.80-3-4					
Green, Michael	70 W Main St	MOUNT KISCO	10549	69.80-3-3.1					
Williams Aaron James	42 Maple Ave	MOUNT KISCO	10549	69.80-4-14		311 Fernhill Ct	Jonesboro	GA	30236
Delgado, Dorian	22 Maple Ave	MOUNT KISCO	10549	69.80-4-10		49 Cunningham In	Pawling	NY	12564
Delgado, Dorian	14 Maple Ave	MOUNT KISCO	10549	69.80-4-8		49 Cunningham In	Pawling	NY	12564
Hartleben Bruce G - Mary L Voda	93 W Main St	MOUNT KISCO	10549	69.72-4-1					
Gorin, David	54 Hillside Ave	MOUNT KISCO	10549	69.72-4-3					
O'Connor Kathryn E	38-40 Hillside Ave	MOUNT KISCO	10549	69.72-4-5					
Molina, Gilberto - Violeta Molina	28 Maple Ave	MOUNT KISCO	10549	69.80-4-12		32 Maple Ave	Mt. Kisco	NY	10549
Cabrera, Roberto - Graciela Cabrera	26 Maple Ave	MOUNT KISCO	10549	69.80-4-11		46 Bryam Bridge Rd	Armonk	NY	10504
Robustelli Robert - Jessica Robustelli	59 W Main St	MOUNT KISCO	10549	69.72-4-18		80 Chestnut Ridge Rd	Mt. Kisco	NY	10549
Nkoutche Jean Claude	51-55 W Main St	MOUNT KISCO	10549	69.72-4-16		25 Lake St, Unit 4E	White Plains	NY	10603
People of the State of NY	32 W Main St	MOUNT KISCO	10549	69.80-4-5	c/o Dir Real Estate West Co.	145 Martine Avenue	White Plains	NY	10601

RECEIVED

SEP 13 2021

**NOTICE OF ADJOURNED PUBLIC HEARING**

Zoning Board of Appeals  
Village/Town of Mount Kisco

PLEASE TAKE NOTICE that the Zoning Board of Appeals of the Village/Town of Mount Kisco, New York will hold a continuation of the Public Hearing opened July 20<sup>th</sup>, 2021 and adjourned to the 21<sup>st</sup> day of September, 2021, at the Municipal Building, Mount Kisco, New York, beginning at 7:00 PM pursuant to the Zoning Ordinance on the Appeal of Suregreen Properties, LLC, of 1 Manchester Drive, New York 10549, from the decisions of Peter J. Miley, Building Inspector, dated February 25<sup>th</sup>, 2021 and August 9<sup>th</sup>, 2021 denying the application to permit it to vertically enlarge and alter the property. The property involved is known as 1 Manchester Drive, Mount Kisco, New York 10549 and described on the Village Tax Map as Section 69.80 Block 4 Lot 1 and is located on the east side of Manchester Drive in a RT-6 Zoning District. Said Appeal is being made to obtain variances pursuant to Section 110-35(D), which prohibits the enlargement of Noncomplying Buildings and Structures, of the Code of the Village/Town of Mount Kisco, specifically seeking two variances from Section 110-11(C)(f)(1) which provides that the minimum front set back requirement is 25 feet, a variance from Section 110-11(C)(f)(3) which provides that the minimum side yard setback is 10 feet, and a variance from Section 110-10(C)(1)(g) which provides that the maximum permitted height of the principal structure is 2 ½ stories.

Harold Boxer, Chair  
Zoning Board of Appeals  
Village/Town of Mount Kisco





**AFFIDAVIT OF PUBLICATION  
FROM**

**RECEIVED**

**SEP 13 2021**

**State of Wisconsin  
County of Brown, ss.:**

**Zoning Board of Appeals  
Village/Town of Mount Kisco**

On the 30 day of August in the year 2021, before me, the undersigned, a Notary Public in and for said State, personally appeared Linda Tuttle, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed, the instrument.

Linda Tuttle being duly sworn says that he/she is the principal clerk of **THE JOURNAL NEWS**, a newspaper published in the County of Westchester and the State of New York, and the notice of which the annexed is a printed copy, was published in the newspaper area(s) on the date (s) below:

**Zone:  
Westchester**

**Run Dates:  
08/30/2021**

Linda Tuttle  
Signature

Sworn to before me, this 30 day of August, 2021

Sarah Bertelsen  
Notary Public, State of Wisconsin, County of Brown

SARAH BERTELSEN  
Notary Public  
State of Wisconsin

7/27/25

My commission expires

Legend:

**WESTCHESTER:**

Amawalk, Ardsley, Ardsley on Hudson, Armonk, Baldwin Place, Bedford, Bedford Hills, Brewster, Briarcliff Manor, Bronxville, Buchanan, Carmel, Chappaqua, Cold Spring, Crompond, Cross River, Croton Falls, Croton on Hudson, Dobbs Ferry, Eastchester, Elmsford, Garrison, Goldens Bridge, Granke Springs, Greenburg, Harrison, Hartsdale, Hastings, Hastings on Hudson, Hawthorne, Irvington, Jefferson Valley, Katonah, Lake Peekskill, Larchmont, Lincolnville, Mahopac, Mahopac Falls, Mamaroneck, Millwood, Mohegan Lake, Montrose, Mount Kisco, Mount Vernon, New Rochelle, North Salem, Ossining, Patterson, Peekskill, Pelham, Pleasantville, Port Chester, Pound Ridge, Purchase, Purdys, Putnam Valley, Rye, Scarsdale, Shenorock, Shrub Oak, Somers, South Salem, Tarrytown, Thomwood, Tuckahoe, Valhalla, Verplanck, Waccabuc, White Plains, Yorktown Heights, Yonkers

**ROCKLAND:**

Blauvelt, Congers, Garnerville, Haverstraw, Hillburn, Monsey, Nanuet, New City, Nyack, Orangeburg, Palisades, Pearl River, Piermont, Pomona, Sloatsburg, Sparkill, Spring Valley, Stony Point, Suffern, Tallman, Tappan, Thiells, Tomkins Cove, Valley Cottage, West Haverstraw, West Nyack

**Ad Number: 0004885517**

**NOTICE OF ADJOURNED PUBLIC HEARING**

PLEASE TAKE NOTICE that the Zoning Board of Appeals of the Village/Town of Mount Kisco, New York will hold a continuation of the Public Hearing opened July 20th, 2021 and adjourned to the 21st day of September, 2021, at the Municipal Building, Mount Kisco, New York, beginning at 7:00 PM pursuant to the Zoning Ordinance on the Appeal of Suregreen

Properties, LLC, of 1 Manchester Drive, New York 10549, from the decisions of Peter J. Miley, Building Inspector, dated February 25th, 2021 and August 9th, 2021 denying the application to permit it to vertically enlarge and alter the property. The property involved is known as 1

Manchester Drive, Mount Kisco, New York 10549 and described on the Village Tax Map as Section 69.00 Block 4 Lot 1 and is located on the east side of Manchester Drive in a RT-6 Zoning District. Said Appeal is being made to obtain variances pursuant to Section 110-35(D), which prohibits the enlargement of Noncomplying Buildings and Structures, of the Code of the Village/Town of Mount Kisco, specifically seeking two variances from Section 110-11(C)(f)(1) which provides that the minimum front set back requirement is 25 feet, a variance from Section 110-11(C)(f)(3) which provides that the minimum side yard setback is 10 feet, and a variance from Section 110-10(C)(1)(g) which provides that the maximum permitted height of the principal structure is 2 1/2 stories.

Harold Boxer, Chair  
Zoning Board of Appeals  
Village/Town of Mount Kisco

4885517

1 Manchester

State of New York     )  
                                  ) ss:  
County of Westchester)

AFFIDAVIT OF POSTING

**Guillermo Gomez**, being duly sworn, says that on the \_\_\_\_\_ day of September 2021, he conspicuously fastened up and posted in seven public places, in the Village/Town of Mount Kisco, County of Westchester, a printed notice of which the annexed is a true copy, to Wit: ---

Municipal Building –  
104 Main Street

X

Public Library  
100 Main Street

X

Fox Center

X

Justice Court – Green Street  
40 Green Street

X

Mt. Kisco Ambulance Corp  
310 Lexington Ave

X

Carpenter Avenue Community House  
200 Carpenter Avenue

X

Leonard Park Multi Purpose Bldg

X

  
Guillermo Gomez

Sworn to before me this <sup>on</sup> 15 day of September 2021

  
Notary Public

PATRICIA A TIPA  
NOTARY PUBLIC-STATE OF NEW YORK  
No. 01TI6170206  
Qualified in Westchester County  
My Commission Expires 07-02-2023



September 13, 2021

Harold Boxer, Chair  
Zoning Board of Appeals  
Village/Town of Mount Kisco  
104 Main Street  
Mount Kisco, NY 10549

VIA EMAIL ONLY

RECEIVED

SEP 13 2021

Zoning Board of Appeals  
Village/Town of Mount Kisco

**Re: Public Hearing Appeal of Suregreen Properties, LLC  
1 Manchester Drive, Mount Kisco, NY 10549  
Village Map: Section 69.80/Block 4/Lot 1/RT-6 Zoning District**

Dear Mr. Boxer,

I and my family are longtime residents of 79 Manchester Drive, Mount Kisco. I am writing to oppose the variance requested by Suregreen Properties, LLC as it relates to the property at 1 Manchester Drive.

Manchester Drive is a single-family residential neighborhood. The property in question is a corner house that fronts Manchester Drive. It is my understanding that the current owners of the property wish to convert the existing structure from its existing and non-conforming use into a two-family home. In doing so they wish to add a second floor to the property.

While I am all for the rehabilitation of this property, I object to the current plan.

In addition to being a single-family neighborhood, the streetscape itself is windy, narrow in parts and steep in parts. This is especially true at the end of the block where the property in question is located. The vehicle congestion at the intersection of NY 133 and Manchester Drive is already a serious concern. Vehicles park on Manchester Drive (including those who do not live on Manchester Drive) rendering the street a single lane. Vehicles turning onto and off of Manchester are constantly in jeopardy of crashing. Many drivers including my children refuse to turn onto Manchester and instead utilize Marion because of the danger. Adding a two-family unit with no site parking into this situation will only lead to an inevitable tragedy.

Aside from the safety issues related to parking and vehicle congestion, adding additional height to the structure will negatively impact the look of the neighborhood. The house is not set back from the road at all and making it bigger without addressing the parking and set back issues will not be of benefit.

We strongly urge you to completely reject this application and appeal.

Sincerely,



Tim Mohr & Family

CC: Whitney Singleton

September 9, 2021

(Registered Mail) +  
(Hand Delivery)

Harold Boxer, Chair  
Zoning Board Appeals  
Village/Town of Mount Kisco

RECEIVED

SEP 14 2021

Zoning Board of Appeals  
Village/Town of Mount Kisco

Re: Public Hearing Appeal of Suregreen Properties, LLC  
1 Manchester Drive, Mount Kisco, NY 10549  
Village Map: Section 69.80/Block 4/Lot 1/RT-6 Zoning district.

Dear Mr. Boxer,

As homeowners and longtime residents of 28 Manchester Drive on the west side of the street approximately 3 houses from the subject property we are submitting our written opposition to variance request by Surgreen Properties, LLC.

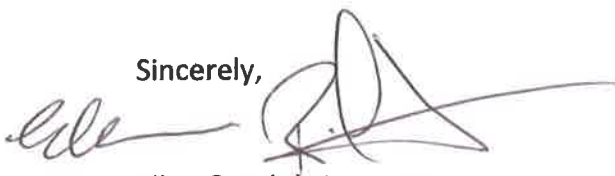
Due to the Covid-19 condition we are not inclined nor required by NY state to publicly appear to strongly oppose and protest our concerns for property values and more importantly safety concerns regarding the proposed changes to the subject dwelling listed above.

There are reasons for set-back requirements and this requested variance is not in keeping with the landscape of this neighborhood and set-back and side-yard requirements. Approving any variances that are currently required will have an adverse, un-repairable, and everlasting impact on this residential neighborhood.

The subject property does not have the appropriate area for parking and will cause significant parking concern with a requirement for additional street parking. In addition, approval of such a variance will create further traffic congestion turning right (east) from Manchester on to NY 133 (also referred to as Main Street) at the traffic light regulating traffic to Kisco Ave (to the north) and Maple Ave (to the south).

We urge the that this appeal be summarily rejected by the Mount Kisco Zoning Board with prejudice.

Sincerely,



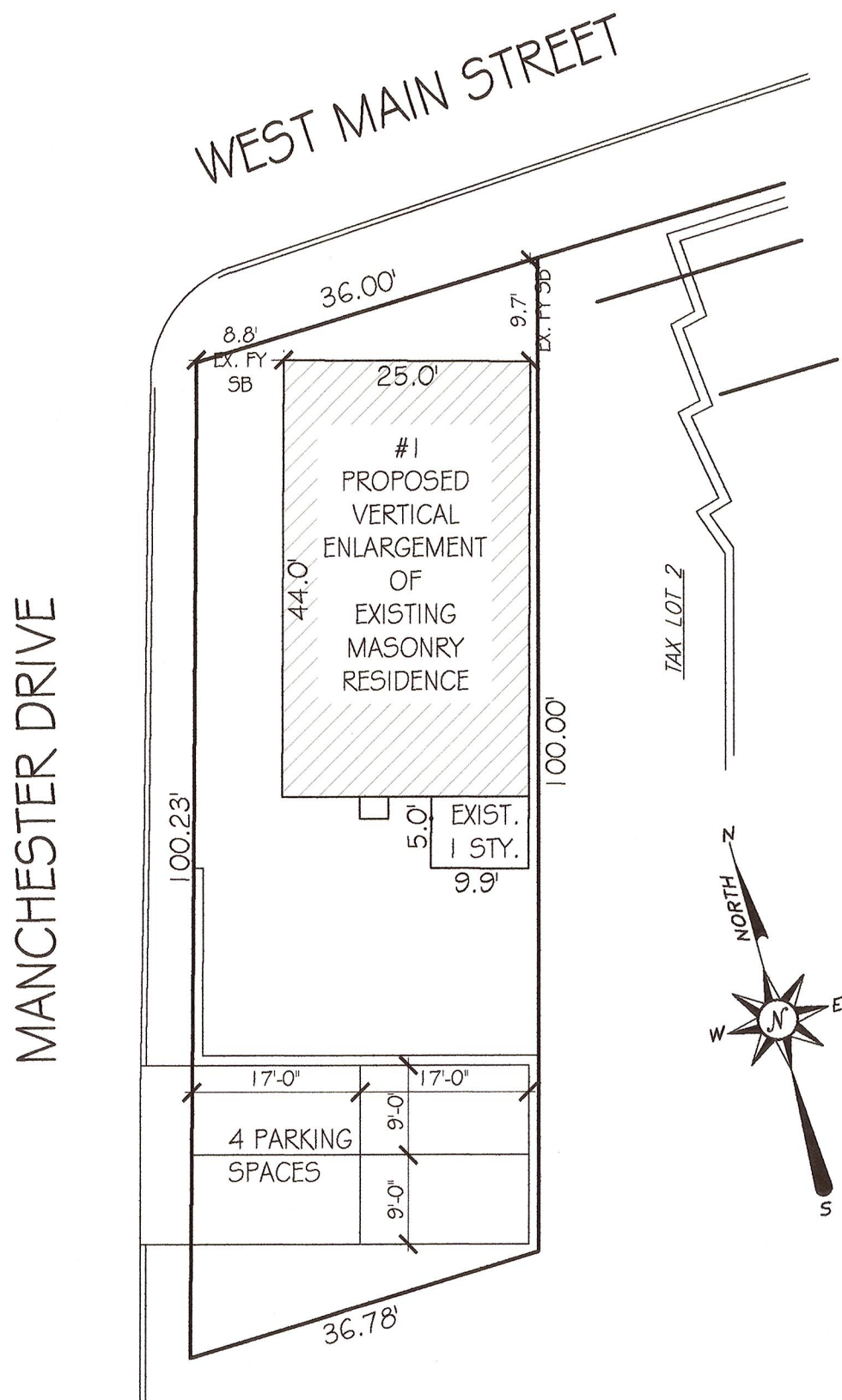
Ellen & Ralph Armenta  
28 Manchester Dr.  
Mount Kisco, NY 10549



VERTICAL ENLARGEMENT  
AND ALTERATIONS AT  
1 MANCHESTER DRIVE  
MT. KISCO, NY 10549



VIEW OF HOME FROM MANCHESTER DRIVE



PLOT PLAN  
SCALE: 1/8" = 1'-0"

PROJECT DIRECTORY

CLIENT:

SUREGREEN PROPERTIES LLC  
24 LEDGEWOOD COMMONS  
MILLWOOD, NY 10546

ARCHITECT:

THOMAS J. CURRO ARCHITECT, P.C.  
32 Harding Parkway  
Mt. Vernon, NY 10552  
914-662-2827

ZONING INFORMATION

ZONING DISTRICT:	RT-6		
SEC. BLK. LOT.	69.80-4-1		
LOT AREA	EXISTING 3,483.57 SF	PROPOSED 3,483.57 SF (NO CHANGE)	PERMITTED
FLOOR AREA	1,149.50 SF	2249.50 SF	
BUILDING COVERAGE	33%	33%	25%
DEVELOPMENT COVER	69%	69%	40%
HEIGHT (STORY)	1 1/2	3	2 1/2

110-35 (D) - VARIANCE REQUIRED DUE TO PROPOSED ENLARGEMENT OF NONCOMPLYING BUILDING.

110-10 C (1) (b) VARIANCE REQUIRED FOR BUILDING COVERAGE OF 8% OVER MAXIMUM PERMITTED

110-10 C (1) (c) VARIANCE REQUIRED FOR PROPOSED DEVELOPMENT COVERAGE OF 29% OVER MAXIMUM PERMITTED

110-10 C (1) (g) VARIANCE REQUIRED FOR PROPOSED HEIGHT OF 3 STORY OVER MAXIMUM PERMITTED

NOTES:

1. ALL FOUNDATIONS ARE EXISTING AND SHALL BE VERIFIED IN THE FIELD.

2. NO CHANGE IS PROPOSED TO THE LOT COVERAGE NOR BUILDING COVERAGE.

MECHANICAL NOTES:

1. Item #3 Whole House Ventilation:

As required by the 2020 Residential Code of NYS Section M1505.4.3 The Continuous Ventilation rate shall be 60 CFM. The Whole House Mechanical Ventilation system shall be provided with the following components:

One (1) Panasonic Model FV-0511VKS2Whisper Green Select Multi-Speed fan, HVI Rated for 1 Sone or less with 4" diameter discharge duct connection

One (1) Panasonic Model FV-VS15VK1 Whisper Green Select Multi-Speed Module

Duct shall be 4" diameter rigid metal duct run to building exterior provided with a spring loaded back draft damper at the building exterior. Provide discharge terminal and insect/bird screen

Fan shall be located in hallway bathroom and be hardwired via a dedicated circuit to run continuously. Circuit breaker shall be labeled "WHOLE HOUSE VENT. FAN"

Upon installation, actual air flow shall be adjusted to and verified to deliver 60 CFM Minimum.

Minimum Efficacy of system shall be 1.4 CFM/watt per Table R403.6.1 (actual Efficacy = 6.0 based upon HVI rating of the specified fan)

2. Item #5 Natural Ventilation:

Existing Basement is considered to be within the Thermal Envelope of the home and is part of the Infiltration Volume. As such, this portion of the home is conditioned and has been accounted for in the Whole House Ventilation Rate. Natural Ventilation would be supplementary.

3. Item #8 Natural Ventilation for Furnace and Hot Water Heater:

Per the "Residential Plans Examiner Review Form for HVAC System Design (Loads, Equipment, Ducts)" The Heating equipment specified has an Annual Fuel Utilization Efficiency (AFUE) of 96%- this means it will be sealed combustion and the source of combustion air is provided directly from outdoors via a PVC fresh air pipe- No natural ventilation for combustion air is required for this type of furnace.

The water heater, if propane fired will also be sealed combustion- no atmospherically vented combustion appliances shall be used. Alternatively a Hybrid electric, heat pump water heater was also being considered as an option.

DRAWING LIST

C-001.00 COVER SHEET

L-001.00 PLOT PLAN, GENERAL NOTES

EN-001.00 RESCHECK COMPLIANCE CERTIFICATE AND INSPECTION CHECKLIST

EX-001.00 EXISTING FLOOR PLANS

DM-001.00 DEMOLITION FLOOR PLAN

DM-002.00 DEMOLITION EXTERIOR ELEVATIONS

A-001.00 PROPOSED FLOOR PLANS, ROOF PLAN AND WALL TYPES

A-002.00 PROPOSED EXTERIOR ELEVATIONS

A-003.00 BUILDING SECTION AND DETAILS

A-004.00 ENLARGED BATHROOM PLANS, PLUMBING RISER DIAGRAM, GAS RISER DIAGRAM, DETAILS AND NOTES

A-005.00 TECHNICAL SPECIFICATIONS

A-006.00 TECHNICAL SPECIFICATIONS

A-007.00 NOTES AND NAILING SCHEDULE

A-108.00 BUILDING CODE NOTES AND DETAILS

S-001.00 FRAMING PLANS

S-002.00 DETAILS

EL-001.00 POWER AND LIGHTING PLANS

SCOPE OF WORK

VERTICAL ENLARGEMENT, ALTERATIONS AND CONVERSION OF ONE FAMILY RESIDENCE TO TWO FAMILY RESIDENCE. NEW PARTITIONS, PLUMBING AND ELECTRICAL WORK AT BASEMENT, FIRST AND SECOND FLOORS.

CODE INFORMATION

BUILDING CODE CLASSIFICATIONS

BUILDING CODES

RESIDENTIAL J-3

CONSTRUCTION TYPE - FRAME

2020 RESIDENTIAL CODE OF NEW YORK STATE

2020 RESIDENTIAL PLUMBING CODE OF NEW YORK STATE

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE

TOWN OF MT. KISCO

SITE LOCATION MAP

THOMAS J. CURRO ARCHITECT, P.C.

32 HARDING PARKWAY MOUNT VERNON, NY 10552

914.662.2827

ISSUED

NO.	DATE	DESCRIPTION	INIT.

REVISION

PROJECT NAME

ENLARGEMENT AND ALTERATIONS TO:  
1 MANCHESTER DRIVE  
MT. KISCO, NY 10549

DRAWING NAME

COVER SHEET

SCALE

AS NOTED

DATE

10-5-2020

PROJECT No.

20-046

BY

TJC

SEAL:

SHEET No.

C-001.00

DWG. 1 OF 18

REGISTERED ARCHITECT

THOMAS JOSEPH CURRO

026145

STATE OF NEW YORK





ISSUED			
NO.	DATE	DESCRIPTION	INIT.

REVISION  
PROJECT NAME  
ENLARGEMENT AND ALTERATIONS TO:  
1 MANCHESTER DRIVE  
MT. KISCO, NY 10549

DRAWING NAME  
RENDERING

SCALE	DATE	PROJECT No.	BY
AS NOTED	10-5-2020	20-046	TJC

SEAL:

SHEET No.  
R-001.00



LAW OFFICES OF  
**SNYDER & SNYDER, LLP**  
94 WHITE PLAINS ROAD  
TARRYTOWN, NEW YORK 10591

NEW YORK OFFICE  
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LESLIE J. SNYDER  
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DAVID L. SNYDER  
(1956-2012)

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

WRITER'S E-MAIL ADDRESS  
rgaudioso@snyderlaw.net

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

REPLY TO:  
TARRYTOWN OFFICE

August 24, 2021

Honorable Chairman Harold Boxer  
and Members of the Zoning Board of Appeals  
Village of Mount Kisco  
104 Main Street  
Mount Kisco, New York 10549

Re: 180 S. Bedford Road  
Public Utility Wireless Telecommunications Facility  
Homeland Towers, LLC & Verizon Wireless

Honorable Chairman and  
Members of the Zoning Board of Appeals:

As you are aware, we are the attorneys for Homeland Towers, LLC ("Homeland Towers") and Verizon Wireless (together "Applicants") in connection with their application to place a public utility wireless telecommunications facility ("Facility") at the above referenced property ("Property").

Enclosed please find 10 copies a driveway geotechnical report confirming the adequacy of the driveway for construction and fire department equipment.

We thank you for your consideration. 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

Enclosures  
RDG/djk

cc: Planning Board  
Applicants

Z:\SSDATA\WPDATA\SS3\RDG\Homelandtowers\Mount Kisco\NY172\ZBA Letter 8.24.21 (driveway).rtf



**DOWN TO EARTH  
CONSULTING, LLC**

GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING

August 23, 2021  
File No. 0032-046.01

Mr. Robert C. Burns, P.E.  
APT Engineering  
567 Vauxhall Street Extension – Suite 311  
Waterford, Connecticut 06385

Via email: [rburns@allpointstech.com](mailto:rburns@allpointstech.com)

Re: Geotechnical Engineering Report  
Slope Evaluation and Recommendations  
Proposed Telecommunications Tower Access Road  
Mount Kisco, New York

Dear Mr. Burns:

Down To Earth Consulting, LLC (DTE) is pleased to submit this report summarizing the results of our geotechnical engineering evaluation associated with an existing access road that will be reconstructed as part of a proposed telecommunications tower project located at 180 South Bedford Road in Mount Kisco, New York (Site). The site location is shown on the attached Area Plan (Figure 1 in Appendix 1). The objective of our services was to complete geotechnical subsurface explorations, prepare slope stability analyses, and to develop construction recommendations for the project.

This report was prepared in general accordance with our proposal, dated January 5, 2021, and is subject to the limitations attached as Appendix A. Geotechnical design and construction recommendations associated with the proposed tower compound are not included in our current scope. Elevations (El.) indicated in this report are in feet and reference the provided Homeland Towers, LLC, Wireless Telecommunications Facility Drawings, prepared by the Client, revision dated July 14, 2021.

Our recommendations reference, in part, the New York Department of Transportation (NYSDOT) May 2021 Standard Specifications.

## **BACKGROUND**

A new telecommunications tower will be located at 180 South Bedford Road (NYS Route 172) in Mount Kisco, New York. A portion of an existing paved access road (approximately 350 feet long) will be reconstructed to accommodate entry to the proposed tower compound area. The access road will be widened in isolated areas to accommodate construction equipment and fire equipment access. We understand that the proposed horizontal and vertical roadway alignments will closely match the existing alignments.

Existing Site conditions consist of an approximate 40- to 55-foot embankment with the proposed tower construction access road at its crest and South Bedford Road at its toe. Existing site grades vary where the proposed tower construction accessway meets the existing driveway (from about El. 440) which slopes down towards South Bedford Road at approximate El. 384 to 400. Resulting slope geometries vary from about 3 Horizontal to 1 Vertical (3H:1V) to 2H: 1V.





## **SUBSURFACE CONDITIONS**

### Geologic Information

Published surficial and bedrock geological map data (1:125,000 scale, *Surficial Geologic Map of New York, Lower Hudson Sheet, Donald H. Cadwell, 1989 and Bedrock Geological Map of New York, Lower Hudson Sheet, Donald W. Fisher, 1970*) was reviewed.

The surficial material within the Site area is mapped as a variable mixture of gravel, sand, silt, and clay that is intermixed with cobbles and boulders (Glacial Till) overlying bedrock that is classified as light and dark banded Gneiss of the Fordham Formation. Sands are also mapped at the entrance to the site.

### Subsurface Explorations

We observed and logged seven test borings (R-1 through R-7) drilled by Associated Borings Co., Inc., on February 8, 2021. Boring locations are depicted on Figure 2 (in Appendix 1) and the logs are included in Appendix 2. The borings were located in the field by taping/pacing from existing site features, thus, their locations and elevations should be considered approximate.

The borings were drilled to explore the soil, bedrock (if encountered), and groundwater conditions along the existing access road alignment. Hollow-stem auger drilling methods were used to advance borings to depths ranging from about 3 to 11 feet below existing grades.

Representative soil samples were obtained for soil classification by split barrel sampling procedures in general accordance with ASTM D-1586. The split-spoon sampling procedure utilizes a standard 2-inch O.D. split-barrel sampler that is driven into the bottom of the boring with a 140-pound hammer falling a distance of 30 inches. The number of blows required to advance the sampler the middle 12-inches of a normal 24-inch penetration is recorded as the Standard Penetration Resistance Value (N). The blows (i.e., "N-Value") are indicated on the boring logs at their depth of occurrence and provide an indication of the relative consistency of the material.

Groundwater levels were measured using a weighted tape in open drill holes or inferred from wet soil samples during drilling (if encountered).

### Generalized Subsurface Profile

Based on the subsurface explorations completed at the Site, the general soil profile consists of Fill overlying natural Glacial Till Deposits and Bedrock. Silty Gravelly Sand was also encountered in Boring R-1 (i.e., at the site entrance). Weathered Rock was encountered in most borings (except for R-1 and R-6) below the Glacial Till and just prior to encountering drilling refusal. These strata are described below in order of increasing depth.

- *Fill* – Fill was encountered below an approximate 1 to 2.5-inch layer of asphalt at each of the exploration locations. This stratum ranged in thickness from about 1 to 8 feet thick and generally consisted of loose to medium dense, dark-brown to brown, fine to coarse sand with varying amounts of gravel and silt. The thickness, character, and consistency of the Fill will vary between exploration locations.



- *Silty Gravelly Sand Deposits (R-1)* – Silty Gravelly Sand was observed below the asphalt in Boring R-1. This stratum generally consisted of brown, medium dense, fine to coarse sand with varying (10 to 35%) amounts of silt and (10 to 60%) gravel.
- *Glacial Till* - Glacial Till was observed below the Fill stratum in each boring except for R-1. This material generally consisted of fine to coarse sand with varying amounts of silt (10 to 35%) and gravel (10 to 50%). Cobbles and boulders were inferred in this stratum based on drill rig behavior and observed auger chatter. Decomposed Rock was encountered below the Glacial Till Deposits ranging from about 3 (R-2) to 7 (R-7) feet bgs, where encountered.

Groundwater was observed in a few of the borings (i.e., R-1, R-5, and R-6) ranging from about 3.5 to 7 feet below grade. Water levels measured in the boreholes may not have had sufficient time to stabilize during the explorations and should be considered approximate. Groundwater levels will vary depending on factors such as temperature, season, precipitation, construction activity, and other conditions, which may be different from those at the time of these measurements.

## GEOTECHNICAL DISCUSSION

Our geotechnical engineering objective was to assess the stability of the existing access road and associated slopes. We understand that proposed access road features (e.g., pull-offs) may encroach on the existing slopes, which would necessitate assessing slope stability under new loading conditions and proposed construction/fire equipment loads.

Based on our observations and the provided topographic survey, the existing slope grade varies from about 3 Horizontal to 1 Vertical (3H:1V) to 2H:1V. In general, the steepest proposed slopes (i.e., 2H:1V) are found where proposed pull-offs and widened turns will be located.

Slope stability analyses were developed to analyze the existing and proposed grading to accommodate the project. A critical cross-section was determined along the proposed pull-off adjacent to South Bedford Road. The results of our analyses are discussed further in the subsequent section.

## SLOPE STABILITY ANALYSES

### General

Global slope stability is analyzed by comparing the difference between driving and resisting forces within potential soil and soil/bedrock interface slip surfaces. Slope instability occurs when driving forces exceed resisting forces, which results when the factor of safety is less than 1.0.

### Stability Model Parameters

The existing and proposed grading conditions developed by APT Engineering were evaluated for global stability. A critical cross section was developed and is shown on Figures 3 and 4. This location was selected based on the proposed access road encroachment to the existing slope. Ground surface elevations, soil and bedrock strata geometries, and groundwater levels were estimated from the representative subsurface data discussed above.



Soil and bedrock materials were reviewed and representative strength and density parameters were selected from a combination of material descriptions, Standard Penetration Resistance Values, back calculation of existing conditions, published correlations, and experience with similar materials. A sensitivity analysis was also performed on the model parameters.

## Results

The results of our preliminary analyses for the existing and proposed slope alternatives are summarized below. Based on these results and assuming the modifications are constructed in accordance with our recommendations contained herein, the proposed access road modifications will satisfy Code stability requirements. The global slope stability results are presented in Figures 3 and 4.

Condition	Minimum Calculated Factor of Safety
	Static Loading Conditions
Existing Conditions (Figure 3)	<b>2.0</b>
Proposed Conditions (Figure 4)	<b>1.4</b>

Note: Minimum Allowable Factor of Safety = 1.3

## **GEOTECHNICAL CONSTRUCTION RECOMMENDATIONS**

### Slopes

Based on the provided drawings, it appears that proposed embankments along the access road will be graded no steeper than 3 Horizontal to 1 Vertical (3H:1V). These slopes are expected to be stable based on the available information and completed global stability analyses. We recommend that slopes be constructed in accordance with NYSDOT Standard 203-3.03.

### Subgrade Preparation

We recommend complete removal of unsuitable bearing materials (e.g., organics, topsoil, and existing fill) and densifying proposed access road and/or embankment subgrades with a minimum of six passes with a vibratory drum roller having a minimum dynamic force of 5,000 lbs per foot of drum width. Proof compaction with smaller vibratory equipment may be used in areas where there is a concern that heavy vibratory equipment could damage buried utilities or other nearby structures.

The subgrade should be observed by an experienced geotechnical engineer during improvement. Areas exhibiting instability and/or containing disturbed or deleterious material should receive additional compaction and/or be over-excavated and replaced with Select Granular Fill under the observation of the geotechnical engineer.

## **MATERIALS**

### On-site Materials

Excavated materials are not anticipated to be suitable for re-use as select granular fill but may be reused as common fill material. The elevated fines content (i.e., soil particles passing the No. 200





sieve) of existing soils could make them difficult to place and compact. Success in using these materials will depend on their moisture content and prevailing weather conditions when they are excavated, placed, and compacted.

#### Select Granular Fill

Select Granular Fill shall consist of NYSDOT 733-11. Select Granular Fill should be compacted to a minimum of 95 percent of its maximum dry density, as determined by AASHTO T180, Method D.

#### **CLOSURE**

Based on the proposed grading, encountered subsurface conditions, anticipated construction/fire equipment surcharge loads, and the geotechnical recommendations contained within this report, the proposed access road will be globally stable. We trust the information presented herein is sufficient for your use to progress design of the proposed telecommunications tower access road. Please do not hesitate to call us if you have any questions.

Sincerely,



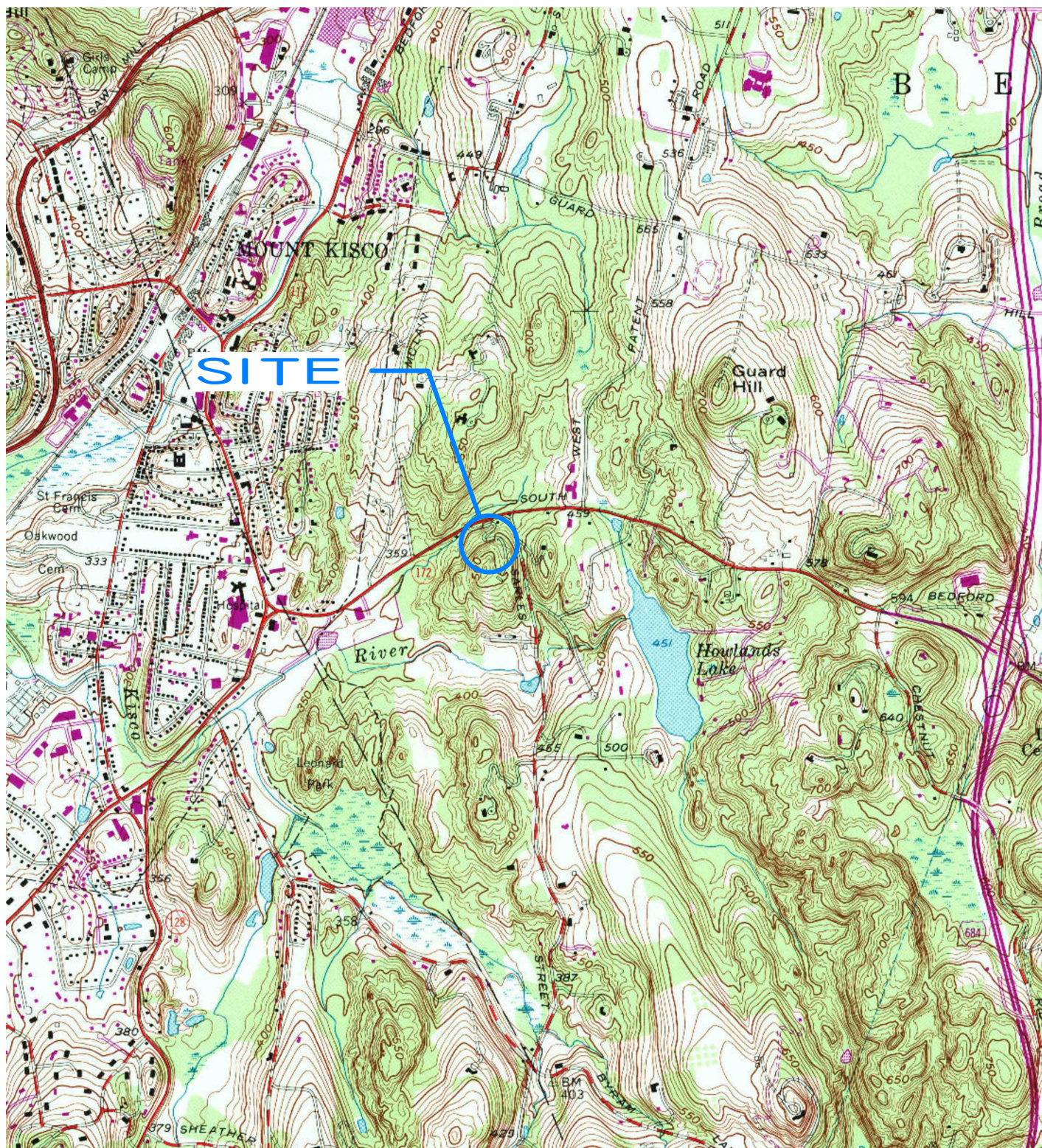
Raymond P. Janeiro, P.E.  
Principal

Thomas Orszulak, P.E.  
Reviewer/Project Manager

Attachments: Figure 1 – Area Plan  
Figure 2 – Site and Boring Location Plan  
Figure 3 – Slope Stability Analysis (Existing Conditions)  
Figure 4 – Slope Stability Analysis (Proposed Grading)  
Appendix A – Limitations  
Appendix B – Exploration Logs







**DOWN TO EARTH  
CONSULTING, LLC**  
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING

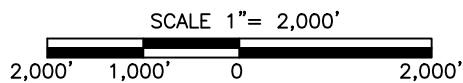
122 CHURCH STREET  
NAUGATUCK, CONNECTICUT 06770



QUADRANGLE LOCATION

**AREA PLAN**  
**PROPOSED TELECOMMUNICATIONS**  
**TOWER ACCESS ROAD**  
**180 S. BEDFORD ROAD, MT. KISCO, NY**

REFERENCE:  
USGS TOPOGRAPHIC QUADRANGLE: MOUNT KISCO, NY



DRAWN BY: RPJ

REVIEWED BY: RPJ

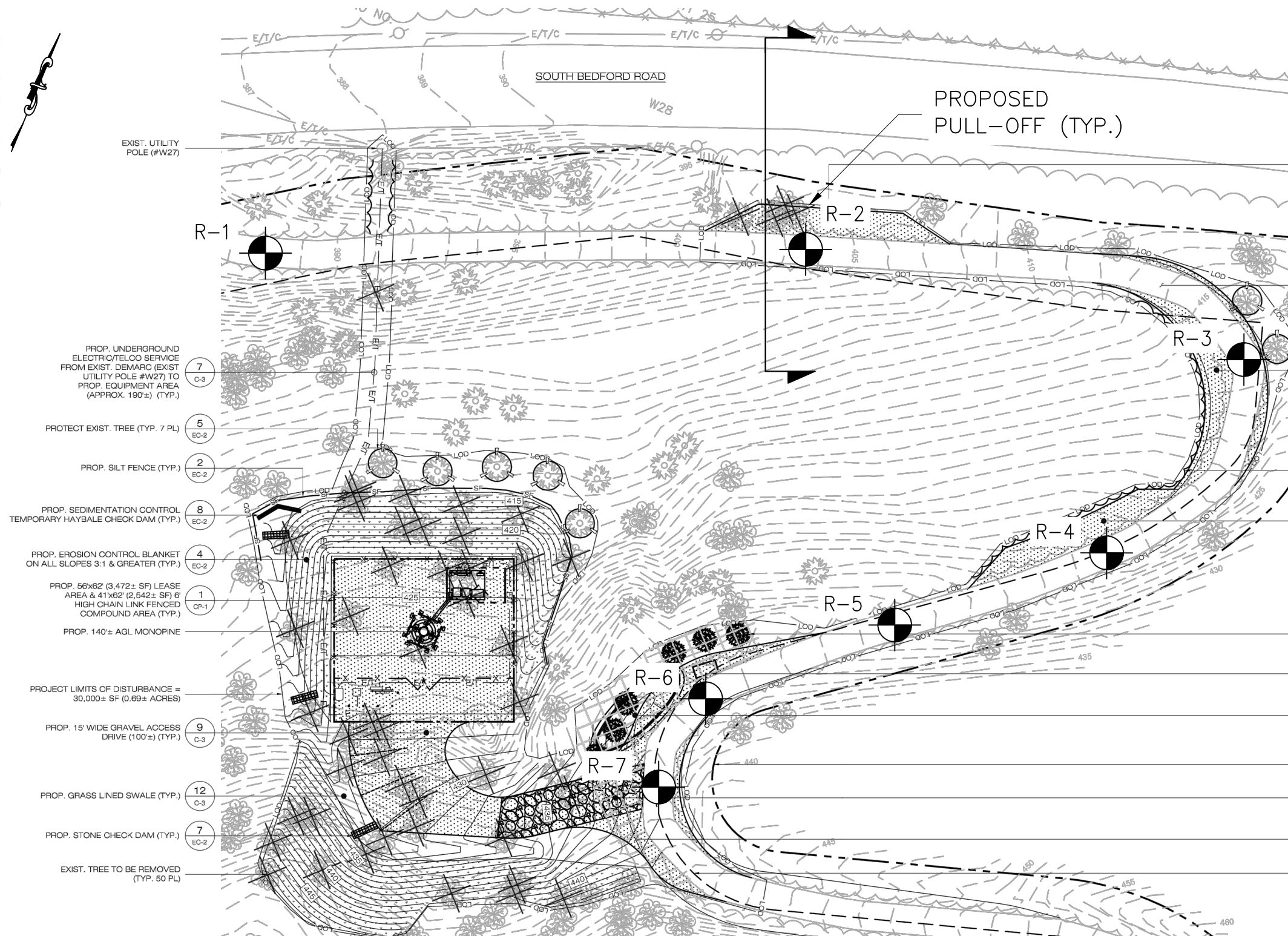
PROJECT NO. 0032-046.01

DATE: 08/18/21



FIGURE NO. 1



G:\My Drive\ITE Root Drive\Client Folders\0032 - All-Points Technology\046 - Mount Kisco Tower Road, NY\CADD\0032-046.00.dwg Raymond Janeiro 8/19/2021 4:38 PM



## LEGEND

- R-1  TEST BORING NO. AND LOCATION  
BY DOWN TO EARTH CONSULTING, LLC
-  SLOPE STABILITY SECTION  
(SEE FIGURES 3 AND 4)

**NOTES:**  
1) BASE MAP DEVELOPED FROM AN ELECTRONIC FILE PREPARED BY APT ENGINEERING, ENTITLED "PARTIAL SITE PLAN, HOMELAND TOWERS MOUNT KISCO, 180 SOUTH BEDFORD ROAD, MOUNT KISCO, NEW YORK". REVISION DATED DECEMBER 22, 2020. ORIGINAL SCALE 1" = 20'.  
2) BORINGS WERE COMPLETED BY ASSOCIATED BORINGS COMPANY, INC. AND OBSERVED BY DOWN TO EARTH CONSULTING, LLC.  
3) THE LOCATIONS OF THE EXPLORATIONS WERE DETERMINED BY TAPING AND VISUAL ESTIMATES FROM EXISTING SITE FEATURES. THESE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

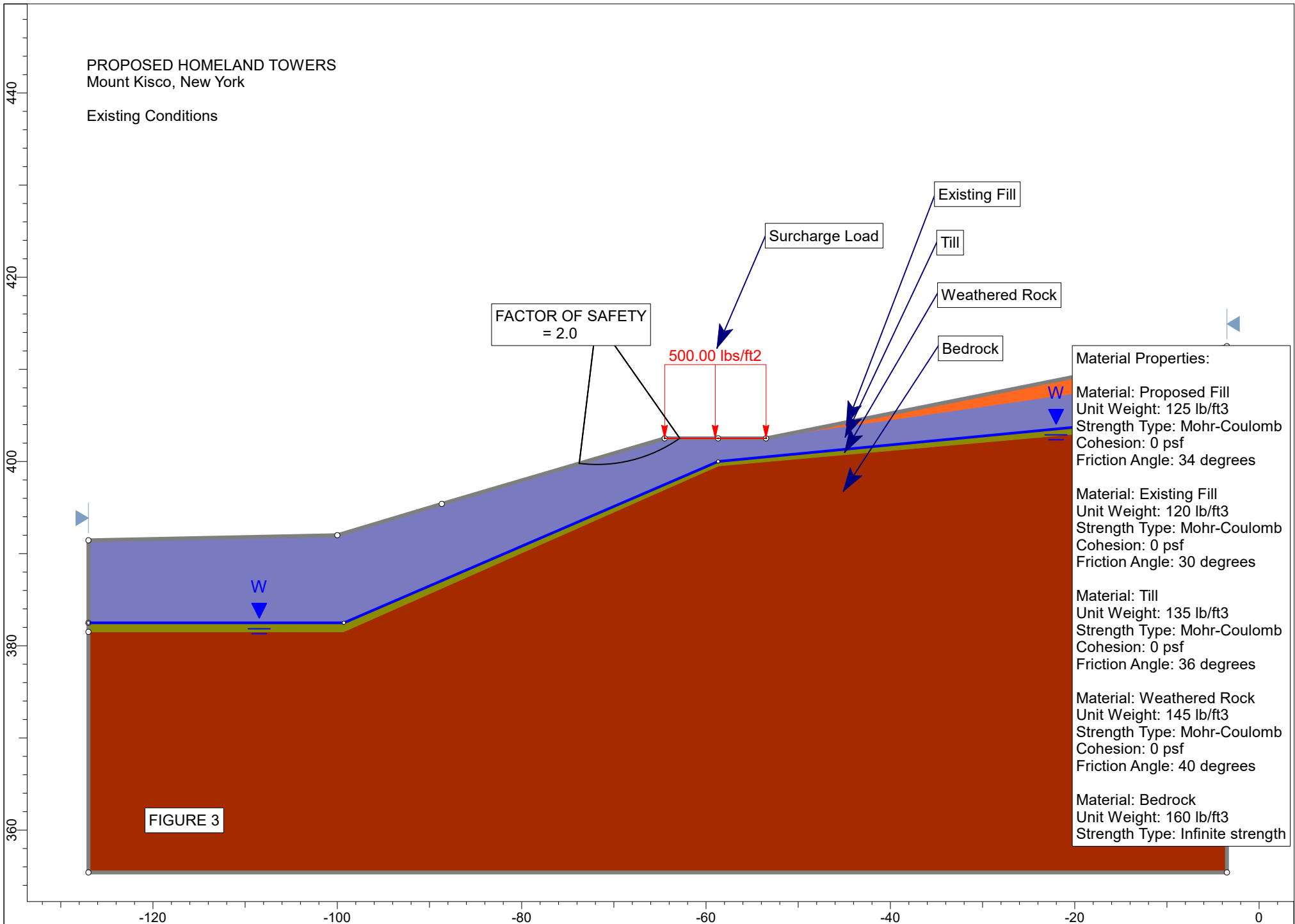
DESIGNED BY OTHERS						
DRAWN BY RPJ						
CHECKED BY DFL						
APPROVED BY RPJ						
	NO.	DATE		DRWN.	CHKD	APPVD
	REVISIONS					

SCALE 1" = 40'

40' 20' 0 40'

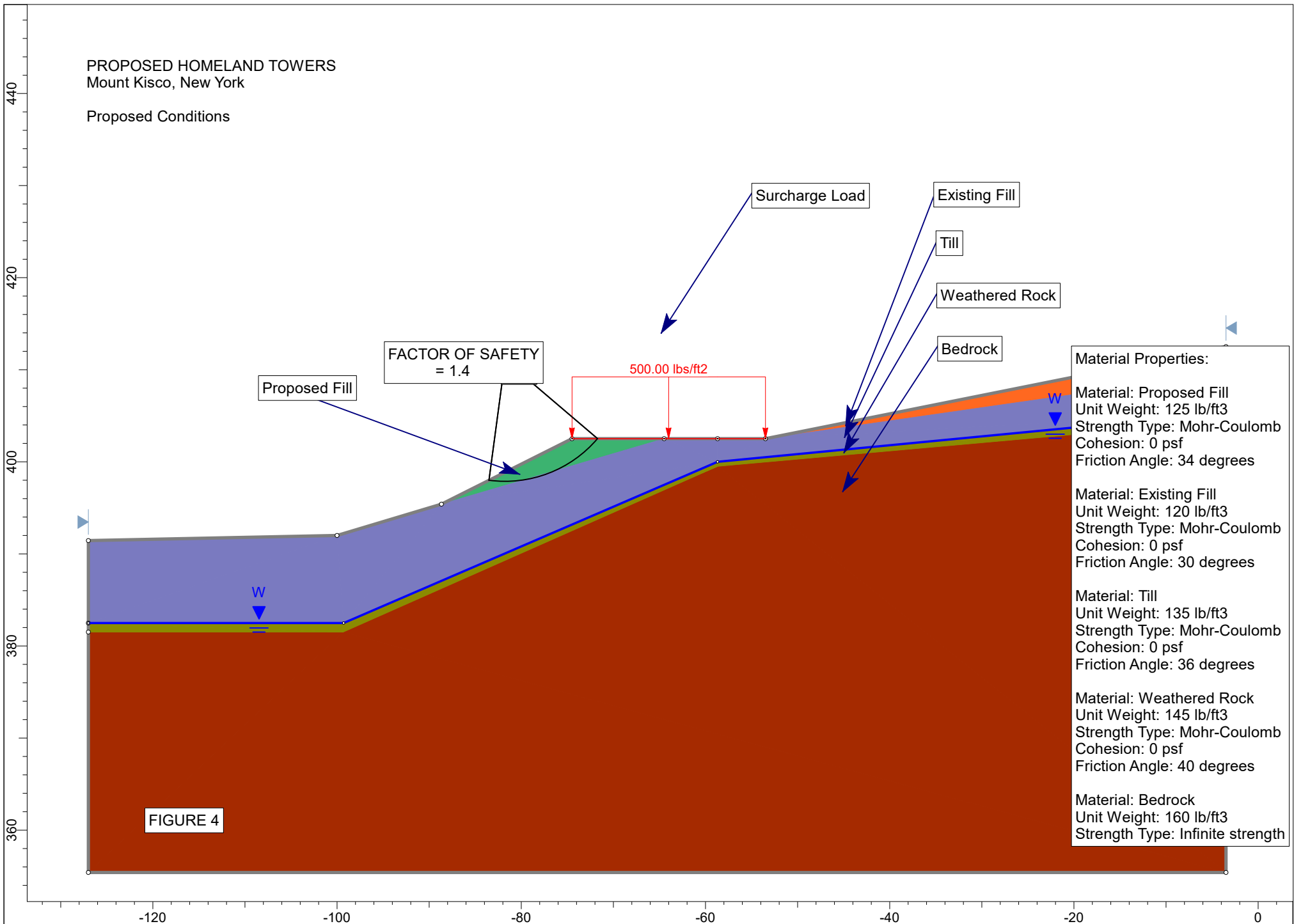


PROJECT PROPOSED TELECOMMUNICATIONS TOWER ACCESS ROAD 180 S. BEDFORD ROAD, MT. KISCO, NY	FILE NO. 0032-046.01
DWG. TITLE. SITE AND BORING LOCATION PLAN	SCALE DATE AS NOTED 8/18/21
	FIGURE NO. 2



PROPOSED HOMELAND TOWERS  
Mount Kisco, New York

Proposed Conditions







## **APPENDIX A - LIMITATIONS**

## **LIMITATIONS**

### Explorations

1. The analyses and recommendations submitted in this report are based in part upon the data obtained from subsurface explorations by Down To Earth Consulting, LLC (DTE) and others. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report.
2. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more erratic. For specific information, refer to the boring logs.
3. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, tidal, temperature, and other factors occurring since the time measurements were made.

### Review

4. In the event that any changes in the nature, design or location of the proposed roadway improvements are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing by DTE. It is recommended that this firm be provided the opportunity for a general review of final design and specifications in order that earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications.

### Construction

5. It is recommended that this firm be retained to provide soil engineering services during construction of the earthworks and foundation phases of the work. This is to observe compliance with the design concepts, specifications, and recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to start of construction.

### Use of Report

6. This report has been prepared for the exclusive use of APT Engineering for specific application to the project noted in this geotechnical report in accordance with generally accepted soil and foundation engineering practices. No other warranty, express or implied, is made.
7. This soil and foundation engineering report has been prepared for this project by DTE. This report is for design purposes only and is not sufficient to prepare an accurate bid. Contractors wishing a copy of the report may secure it with the understanding that its scope is limited to design considerations only.
8. This report may contain comparative cost estimates for the purpose of evaluating alternative foundation schemes. These estimates may also involve approximate quantity evaluations. It should be noted that quantity estimates may not be accurate enough for construction bids. Since DTE has no control over labor and materials cost and design, the estimates of construction costs have been made on the basis of experience. DTE does not guarantee the accuracy of cost estimates as compared to contractor's bids for construction costs.





**APPENDIX B -  
EXPLORATION LOGS**



**DOWN TO EARTH  
CONSULTING, LLC**  
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING

# PROJECT

PROPOSED TELECOMMUNICATIONS TOWER ACCESS ROAD

180 SOUTH BEDFORD ROAD

MOUNT KISCO, NEW YORK

BORING NO. R-1  
SHEET 1 of 1  
FILE NO. 0032-046.00  
CHKD. BY RPJ

Boring Co. Associated Borings Company, Inc. Boring Location See Boring Location Plan  
Driller Jamie Lloret Ground Surface El. 388'± Datum NAVD 88  
Logged By Ray Janeiro, P.E. Date Start 2/8/2021 Date End 2/8/2021

Hammer Type: Safety Hammer Driven by Cathead  
Sampler Size: 1-3/8" I.D. Split Spoon  
Type Drill Rig: Truck CME 45  
Drilling Method: 2.25-inch I.D. Hollow-Stem Augers

**Groundwater Readings (from ground surface)**  
Date Time Depth (ft) Elev. Stabilization Time  
2/8/21 - 6 382'± wet sample

DEPTH (ft)	Casing Blows (ft)	SAMPLE INFORMATION					SAMPLE DESCRIPTION	STRATA DESCRIPTION
		Type & No.	REC/PEN (inches)	DEPTH (feet)	BLOWS PER 6 INCHES	Core Time (min./ft)		
1								2" Asphalt Millings
2		S-1	6/24	1 to 3	16-12-31-13		Dense, brown fine to coarse SAND, some fine Gravel, little Silt	SILTY GRAVELLY SAND
3								
4		S-2	4/24	3 to 5	14-15-11-17		Medium dense, brown fine to coarse GRAVEL and SAND, little Silt	
5								
6		S-3	5/24	5 to 7	20-20-10-8		Medium dense, brown fine to coarse SAND, some fine to coarse Gravel, some Silt, wet	
7								
8		S-4	7/24	7 to 9	8-7-4-3		Medium dense, brown fine to coarse SAND, some Silt, little fine Gravel	END OF EXPLORATION AT 9 FEET BELOW GRADE
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SPT N-Values	SPT N-Values	Proportions	SYMBOL KEY	
0 to 4 - Very Loose 5 to 10 - Loose 11 to 30 - Medium Dense 31 to 50 - Dense Over 50 - Very Dense	0 to 2 - Very Soft 3 to 4 - Soft 5 to 8 - Medium Stiff 9 to 15 - Stiff 16 to 30 - Very Stiff Over 30 - Hard	Trace = 0 to 10% Little = 10 to 20% Some = 20 to 35% And = 35 to 50%	1. S denotes split-barrel sampler. 2. ST denotes 3-inch O.D. undisturbed sample. 3. UO denotes 3-inch Osterberg undisturbed sample. 4. PEN denotes penetration length of sampler. 5. REC denotes recovered length of sample. 6. SPT denotes Standard Penetration Test.	7. WH denotes weight of hammer 8. WR denotes weight of rods 9. PP denotes Pocket Penetrometer. 10. FVST denotes field vane shear test. 11. RQD denotes Rock Quality Designation. 12. C denotes core run number.

FIELD NOTES: 1) Stratification lines represent approximate boundaries between soil types, transitions may be gradual.  
2) Water level readings have been made at times and under conditions stated, fluctuations may occur due to other factors.





**DOWN TO EARTH  
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GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING

# PROJECT

PROPOSED TELECOMMUNICATIONS TOWER ACCESS ROAD

180 SOUTH BEDFORD ROAD

MOUNT KISCO, NEW YORK

BORING NO. R-2  
SHEET 1 of 1  
FILE NO. 0032-046.00  
CHKD. BY RPJ

Boring Co. Associated Borings Company, Inc. Boring Location See Boring Location Plan  
Driller Jamie Lloret Ground Surface El. 404' +/- Datum NAVD 88  
Logged By Ray Janeiro, P.E. Date Start 2/8/2021 Date End 2/8/2021

Hammer Type: Safety Hammer Driven by Cathead  
Sampler Size: 1-3/8" I.D. Split Spoon  
Type Drill Rig: Truck CME 45  
Drilling Method: 2.25-inch I.D. Hollow-Stem Augers

D E P T H	Casing Blows (ft)	SAMPLE INFORMATION					SAMPLE DESCRIPTION	STRATA DESCRIPTION
		Type & No.	REC/PEN (inches)	DEPTH (feet)	BLOWS PER 6 INCHES	Core Time (min./ft)		

1								1" Asphalt Millings
2		S-1	8/17	1.3 to 2.7	8-14-50/5"		Very dense, Top 4": brown fine to medium SAND and SILT, trace (-) Roots, moist; Bottom 4": gray/white decomposed ROCK fragments	TILL
3								WEATH. ROCK
4							END OF EXPLORATION (SAMPLER REFUSAL) AT 2.7 FEET BELOW GRADE	
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SPT N-Values	SPT N-Values	Proportions	SYMBOL KEY	
0 to 4 - Very Loose 5 to 10 - Loose 11 to 30 - Medium Dense 31 to 50 - Dense Over 50 - Very Dense	0 to 2 - Very Soft 3 to 4 - Soft 5 to 8 - Medium Stiff 9 to 15 - Stiff 16 to 30 - Very Stiff Over 30 - Hard	Trace = 0 to 10% Little = 10 to 20% Some = 20 to 35% And = 35 to 50%	1. S denotes split-barrel sampler. 2. ST denotes 3-inch O.D. undisturbed sample. 3. UO denotes 3-inch Osterberg undisturbed sample. 4. PEN denotes penetration length of sampler. 5. REC denotes recovered length of sample. 6. SPT denotes Standard Penetration Test.	7. WH denotes weight of hammer 8. WR denotes weight of rods 9. PP denotes Pocket Penetrometer. 10. FVST denotes field vane shear test. 11. RQD denotes Rock Quality Designation. 12. C denotes core run number.

FIELD NOTES: 1) Stratification lines represent approximate boundaries between soil types, transitions may be gradual.  
2) Water level readings have been made at times and under conditions stated, fluctuations may occur due to other factors.



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GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING

# PROJECT

PROPOSED TELECOMMUNICATIONS TOWER ACCESS ROAD

180 SOUTH BEDFORD ROAD

MOUNT KISCO, NEW YORK

BORING NO. R-3  
SHEET 1 of 1  
FILE NO. 0032-046.00  
CHKD. BY RPJ

Boring Co. Associated Borings Company, Inc. Boring Location See Boring Location Plan  
Driller Jamie Lloret Ground Surface El. 417'+/- Datum NAVD 88  
Logged By Ray Janeiro, P.E. Date Start 2/8/2021 Date End 2/8/2021

Hammer Type: Safety Hammer Driven by Cathead Groundwater Readings (from ground surface)  
Sampler Size: 1-3/8" I.D. Split Spoon Date 2/8/21 Time - Depth (ft) - Elev. - Stabilization Time not encountered  
Type Drill Rig: Truck CME 45  
Drilling Method: 2.25-inch I.D. Hollow-Stem Augers

DEPTH (ft)	Casing Blows (ft)	SAMPLE INFORMATION					SAMPLE DESCRIPTION	STRATA DESCRIPTION
		Type & No.	REC/PEN (inches)	DEPTH (feet)	BLOWS PER 6 INCHES	Core Time (min./ft)		
1								1.5" Asphalt
2		S-1	6/24	1.5 to 3.5	20-7-5-4		Medium dense, brown fine to medium SAND and SILT, trace (-) Roots, moist	FILL
3								
4		S-2	7/15	3.5 to 4.8	11-46-50/3"		Very dense, Top 3": brown fine to coarse SAND, some fine Gravel, little Silt; Bottom 4": gray/white decomposed ROCK fragments	TILL
5								WEATH. ROCK
6							END OF EXPLORATION (SAMPLER REFUSAL) AT 4.8 FEET BELOW GRADE	
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SPT N-Values		SPT N-Values		Proportions		SYMBOL KEY		
0 to 4 - Very Loose 5 to 10 - Loose 11 to 30 - Medium Dense 31 to 50 - Dense Over 50 - Very Dense		0 to 2 - Very Soft 3 to 4 - Soft 5 to 8 - Medium Stiff 9 to 15 - Stiff 16 to 30 - Very Stiff Over 30 - Hard		Trace = 0 to 10% Little = 10 to 20% Some = 20 to 35% And = 35 to 50%		1. S denotes split-barrel sampler. 2. ST denotes 3-inch O.D. undisturbed sample. 3. UO denotes 3-inch Osterberg undisturbed sample. 4. PEN denotes penetration length of sampler. 5. REC denotes recovered length of sample. 6. SPT denotes Standard Penetration Test. 7. WH denotes weight of hammer 8. WR denotes weight of rods 9. PP denotes Pocket Penetrometer. 10. FVST denotes field vane shear test. 11. RQD denotes Rock Quality Designation. 12. C denotes core run number.		

FIELD NOTES: 1) Stratification lines represent approximate boundaries between soil types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations may occur due to other factors.

3) Drilling refusal encountered at about 1 foot below grade on inferred boulder. Boring offset about 2 feet north.





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GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING

# PROJECT

PROPOSED TELECOMMUNICATIONS TOWER ACCESS ROAD

180 SOUTH BEDFORD ROAD

MOUNT KISCO, NEW YORK

BORING NO. R-4  
SHEET 1 of 1  
FILE NO. 0032-046.00  
CHKD. BY RPJ

Boring Co. Associated Borings Company, Inc. Boring Location See Boring Location Plan  
Driller Jamie Lloret Ground Surface El. 425'+/- Datum NAVD 88  
Logged By Ray Janeiro, P.E. Date Start 2/8/2021 Date End 2/8/2021

Hammer Type: Safety Hammer Driven by Cathead  
Sampler Size: 1-3/8" I.D. Split Spoon  
Type Drill Rig: Truck CME 45  
Drilling Method: 2.25-inch I.D. Hollow-Stem Augers

D E P T H	Casing Blows (ft)	SAMPLE INFORMATION					SAMPLE DESCRIPTION	STRATA DESCRIPTION
		Type & No.	REC/PEN (inches)	DEPTH (feet)	BLOWS PER 6 INCHES	Core Time (min./ft)		

1								2.5" Asphalt
2		S-1	5/24	1 to 3	10-9-5-5		Medium dense, brown fine to coarse SAND, some Silt, trace fine Gravel	FILL
3								
4		S-2	7/24	3 to 5	5-3-2-9		Loose, dark brown fine to coarse SAND, some Silt, little fine Gravel, with clay pipe fragments	
5								
6		S-3	11/15	5 to 6.3	11-24-50/3"		Very dense, gray/brown to brown fine to coarse SAND, little Silt, with decomposed rock fragments at sample tip	TILL
7							END OF EXPLORATION (SAMPLER REFUSAL) AT 6.3 FEET BELOW GRADE	WEATH. ROCK
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SPT N-Values	SPT N-Values	Proportions	SYMBOL KEY	
0 to 4 - Very Loose 5 to 10 - Loose 11 to 30 - Medium Dense 31 to 50 - Dense Over 50 - Very Dense	0 to 2 - Very Soft 3 to 4 - Soft 5 to 8 - Medium Stiff 9 to 15 - Stiff 16 to 30 - Very Stiff Over 30 - Hard	Trace = 0 to 10% Little = 10 to 20% Some = 20 to 35% And = 35 to 50%	1. S denotes split-barrel sampler. 2. ST denotes 3-inch O.D. undisturbed sample. 3. UO denotes 3-inch Osterberg undisturbed sample. 4. PEN denotes penetration length of sampler. 5. REC denotes recovered length of sample. 6. SPT denotes Standard Penetration Test.	7. WH denotes weight of hammer 8. WR denotes weight of rods 9. PP denotes Pocket Penetrometer. 10. FVST denotes field vane shear test. 11. RQD denotes Rock Quality Designation. 12. C denotes core run number.

FIELD NOTES: 1) Stratification lines represent approximate boundaries between soil types, transitions may be gradual.  
2) Water level readings have been made at times and under conditions stated, fluctuations may occur due to other factors.



**DOWN TO EARTH  
CONSULTING, LLC**  
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING

# PROJECT

PROPOSED TELECOMMUNICATIONS TOWER ACCESS ROAD

180 SOUTH BEDFORD ROAD

MOUNT KISCO, NEW YORK

BORING NO. R-5  
SHEET 1 of 1  
FILE NO. 0032-046.00  
CHKD. BY RPJ

Boring Co. Associated Borings Company, Inc. Boring Location See Boring Location Plan  
Driller Jamie Lloret Ground Surface El. 431'±/- Datum NAVD 88  
Logged By Ray Janeiro, P.E. Date Start 2/8/2021 Date End 2/8/2021


Hammer Type: Safety Hammer Driven by Cathead  
Sampler Size: 1-3/8" I.D. Split Spoon  
Type Drill Rig: Truck CME 45  
Drilling Method: 2.25-inch I.D. Hollow-Stem Augers

DEPTH (ft)	Casing Blows (ft)	SAMPLE INFORMATION					SAMPLE DESCRIPTION	STRATA DESCRIPTION
		Type & No.	REC/PEN (inches)	DEPTH (feet)	BLOWS PER 6 INCHES	Core Time (min./ft)		
1								2.5" Asphalt
2		S-1	13/24	1.5 to 3.5	9-12-15-18		Medium dense, gray-brown fine to coarse SAND, some Silt, some fine Gravel, moist	TILL
3								
4		S-2	6/8	3.5 to 4.2	19-50/2"		Very dense, gray-brown fine to coarse SAND, some Silt, little fine Gravel, with decomposed rock fragments at sample tip, wet	
5							END OF EXPLORATION (SAMPLER REFUSAL) AT 4.2 FEET BELOW GRADE	
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SPT N-Values	SPT N-Values	Proportions	SYMBOL KEY	
0 to 4 - Very Loose 5 to 10 - Loose 11 to 30 - Medium Dense 31 to 50 - Dense Over 50 - Very Dense	0 to 2 - Very Soft 3 to 4 - Soft 5 to 8 - Medium Stiff 9 to 15 - Stiff 16 to 30 - Very Stiff Over 30 - Hard	Trace = 0 to 10% Little = 10 to 20% Some = 20 to 35% And = 35 to 50%	1. S denotes split-barrel sampler. 2. ST denotes 3-inch O.D. undisturbed sample. 3. UO denotes 3-inch Osterberg undisturbed sample. 4. PEN denotes penetration length of sampler. 5. REC denotes recovered length of sample. 6. SPT denotes Standard Penetration Test.	7. WH denotes weight of hammer 8. WR denotes weight of rods 9. PP denotes Pocket Penetrometer. 10. FVST denotes field vane shear test. 11. RQD denotes Rock Quality Designation. 12. C denotes core run number.

FIELD NOTES: 1) Stratification lines represent approximate boundaries between soil types, transitions may be gradual.  
2) Water level readings have been made at times and under conditions stated, fluctuations may occur due to other factors.



 <b>DOWN TO EARTH CONSULTING, LLC</b> <small>GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING</small>	<b>PROJECT</b>			BORING NO. <u>R-6</u>	
	PROPOSED TELECOMMUNICATIONS TOWER ACCESS ROAD			SHEET <u>1</u> of <u>1</u>	
	180 SOUTH BEDFORD ROAD			FILE NO. <u>0032-046.00</u>	
	MOUNT KISCO, NEW YORK			CHKD. BY <u>RPJ</u>	

Boring Co. <u>Associated Borings Company, Inc.</u>	Boring Location <u>See Boring Location Plan</u>
Driller <u>Jamie Lloret</u>	Ground Surface El. <u>436' +/-</u>
Logged By <u>Ray Janeiro, P.E.</u>	Date Start <u>2/8/2021</u>
	Datum <u>NAVD 88</u>
	Date End <u>2/8/2021</u>

Hammer Type: <u>Safety Hammer Driven by Cathead</u>	<b>Groundwater Readings (from ground surface)</b>				
Sampler Size: <u>1-3/8" I.D. Split Spoon</u>	Date	Time	Depth (ft)	Elev.	Stabilization Time
Type Drill Rig: <u>Truck CME 45</u>	<u>2/8/21</u>	<u>-</u>	<u>7</u>	<u>429' +/-</u>	<u>wet sample</u>
Drilling Method: <u>2.25-inch I.D. Hollow-Stem Augers</u>					

D E P T H	Casing Blows (ft)	SAMPLE INFORMATION					SAMPLE DESCRIPTION	STRATA DESCRIPTION
		Type & No.	REC/PEN (inches)	DEPTH (feet)	BLOWS PER 6 INCHES	Core Time (min./ft)		
1								2" Asphalt
2		S-1	4/24	1 to 3	46-14-5-4		Medium dense, dark brown fine to coarse SAND, little fine to coarse Gravel, little Silt	FILL
3								
4		S-2	8/24	3 to 5	4-8-7-9		Medium dense, brown fine to coarse SAND, some Silt, little fine Gravel, with fractured coarse gravel fragments at sample tip	
5								
6		S-3	11/24	5 to 7	6-3-1-3		Loose, brown fine to coarse SAND, some Silt, little fine Gravel	
7								TILL
8		S-4	12/24	7 to 9	3-4-7-8		Medium dense, Top 6": brown fine to medium SAND, some Silt, trace fine Gravel; Bottom 6": gray-brown fine to coarse SAND, some Silt, little fine Gravel, wet	
9								
10		S-5	10/24	9 to 11	11-17-10-12		Medium dense, brown fine to coarse SAND, some fine Gravel, little Silt, with decomposed rock fragments at sample tip	
11								
12							END OF EXPLORATION AT 11 FEET BELOW GRADE	
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SPT N-Values	SPT N-Values	Proportions	SYMBOL KEY	
0 to 4 - Very Loose 5 to 10 - Loose 11 to 30 - Medium Dense 31 to 50 - Dense Over 50 - Very Dense	0 to 2 - Very Soft 3 to 4 - Soft 5 to 8 - Medium Stiff 9 to 15 - Stiff 16 to 30 - Very Stiff Over 30 - Hard	Trace = 0 to 10% Little = 10 to 20% Some = 20 to 35% And = 35 to 50%	1. S denotes split-barrel sampler. 2. ST denotes 3-inch O.D. undisturbed sample. 3. UO denotes 3-inch Osterberg undisturbed sample. 4. PEN denotes penetration length of sampler. 5. REC denotes recovered length of sample. 6. SPT denotes Standard Penetration Test.	7. WH denotes weight of hammer 8. WR denotes weight of rods 9. PP denotes Pocket Penetrometer. 10. FVST denotes field vane shear test. 11. RQD denotes Rock Quality Designation. 12. C denotes core run number.

**FIELD NOTES:** 1) Stratification lines represent approximate boundaries between soil types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations may occur due to other factors.

3) Sampler broke in borehole during advancement of S-3. Boring offset about 2 feet north and advanced to 5 feet below grade prior to resampling S-3.

 <p><b>DOWN TO EARTH CONSULTING, LLC</b> GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING</p>	<p><b>PROJECT</b></p> <p>PROPOSED TELECOMMUNICATIONS TOWER ACCESS ROAD</p> <p>180 SOUTH BEDFORD ROAD</p> <p>MOUNT KISCO, NEW YORK</p>	<p>BORING NO. <u>R-7</u></p> <p>SHEET <u>1</u> of <u>1</u></p> <p>FILE NO. <u>0032-046.00</u></p> <p>CHKD. BY <u>RPJ</u></p>										
<p>Boring Co. <u>Associated Borings Company, Inc.</u>      Boring Location <u>See Boring Location Plan</u></p> <p>Driller <u>Jamie Lloret</u>      Ground Surface El. <u>439'+/-</u>      Datum <u>NAVD 88</u></p> <p>Logged By <u>Ray Janeiro, P.E.</u>      Date Start <u>2/8/2021</u>      Date End <u>2/8/2021</u></p>												
<p>Hammer Type: <u>Safety Hammer Driven by Cathead</u></p> <p>Sampler Size: <u>1-3/8" I.D. Split Spoon</u></p> <p>Type Drill Rig: <u>Truck CME 45</u></p> <p>Drilling Method: <u>2.25-inch I.D. Hollow-Stem Augers</u></p>		<p><b>Groundwater Readings (from ground surface)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Date</th> <th>Time</th> <th>Depth (ft)</th> <th>Elev.</th> <th>Stabilization Time</th> </tr> <tr> <td>2/8/21</td> <td>-</td> <td>-</td> <td>-</td> <td>not encountered</td> </tr> </table>	Date	Time	Depth (ft)	Elev.	Stabilization Time	2/8/21	-	-	-	not encountered
Date	Time	Depth (ft)	Elev.	Stabilization Time								
2/8/21	-	-	-	not encountered								
<p>D E P T H</p>	<p>Casing Blows (ft)</p>	<p><b>SAMPLE INFORMATION</b></p>					<p><b>SAMPLE DESCRIPTION</b></p>	<p><b>STRATA DESCRIPTION</b></p>				
		Type & No.	REC/PEN (inches)	DEPTH (feet)	BLOWS PER 6 INCHES	Core Time (min./ft)						
1								2" Asphalt				
2		S-1	8/24	1 to 3	36-38-15-21		Very dense, dark brown fine to coarse SAND, some fine to coarse Gravel, little Silt	FILL				
3												
4		S-2	3/24	3 to 5	14-10-5-5							
5							Medium dense, brown fine to coarse SAND, some fine Gravel, little Silt					
6		S-3	12/22	5 to 6.8	18-20-18-50/4"		Dense, Top 6": gray/brown fine to coarse SAND and fine to coarse GRAVEL, little Silt; Bottom 6": gray decomposed ROCK fragments	TILL				
7							END OF EXPLORATION (SAMPLER REFUSAL) AT 6.8 FEET BELOW GRADE	WEATH. ROCK				
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SPT N-Values	SPT N-Values	Proportions	SYMBOL KEY
0 to 4 - Very Loose 5 to 10 - Loose 11 to 30 - Medium Dense 31 to 50 - Dense Over 50 - Very Dense	0 to 2 - Very Soft 3 to 4 - Soft 5 to 8 - Medium Stiff 9 to 15 - Stiff 16 to 30 - Very Stiff Over 30 - Hard	Trace = 0 to 10% Little = 10 to 20% Some = 20 to 35% And = 35 to 50%	<div style="display: flex; justify-content: space-between;"> <div> 1. S denotes split-barrel sampler.  2. ST denotes 3-inch O.D. undisturbed sample.  3. UO denotes 3-inch Osterberg undisturbed sample.  4. PEN denotes penetration length of sampler.  5. REC denotes recovered length of sample.  6. SPT denotes Standard Penetration Test. </div> <div> 7. WH denotes weight of hammer  8. WR denotes weight of rods  9. PP denotes Pocket Penetrometer.  10. FVST denotes field vane shear test.  11. RQD denotes Rock Quality Designation.  12. C denotes core run number. </div> </div>

**FIELD NOTES:** 1) Stratification lines represent approximate boundaries between soil types, transitions may be gradual.  
2) Water level readings have been made at times and under conditions stated, fluctuations may occur due to other factors.



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REPLY TO:  
TARRYTOWN OFFICE

July 15, 2021

Honorable Chairman Boxer  
and Members of the Zoning Board of Appeals  
Village of Mount Kisco  
104 Main Street  
Mount Kisco, New York 10549

Re: 180 S. Bedford Road  
Public Utility Wireless Telecommunications Facility  
Homeland Towers, LLC & Verizon Wireless

Honorable Chairman Boxer and  
Members of the Zoning Board of Appeals:

As you are aware, we are the attorneys for Homeland Towers, LLC ("Homeland Towers") and Verizon Wireless (together "Applicants") in connection with their application to place a public utility wireless telecommunications facility ("Facility") at the above referenced property ("Property").

Enclosed please find ten (10) copies of the materials filed by the Applicants with the Planning Board. 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: Applicants

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REPLY TO:  
TARRYTOWN OFFICE

July 15, 2021

Honorable Chairman Bonforte  
and Members of the Planning Board  
Village of Mount Kisco  
104 Main Street  
Mount Kisco, New York 10549

Re: 180 S. Bedford Road  
Public Utility Wireless Telecommunications Facility  
Homeland Towers, LLC & Verizon Wireless

Honorable Chairman Bonforte and  
Members of the Planning Board:

As you are aware, we are the attorneys for Homeland Towers, LLC ("Homeland Towers") and Verizon Wireless (together "Applicants") in connection with their application to place a public utility wireless telecommunications facility ("Facility") at the above referenced property ("Property").

It is our understanding that AT&T intends to file a separate application to collocate on the Facility. Although AT&T's proposal is separate from the Applicants' proposal, Homeland Towers has amended its materials to account for AT&T as detailed below.

In furtherance of the foregoing, enclosed please find fourteen (14) copies the following:

- 1) Revised Pinnacle Report dated June 11, 2021 demonstrating that cumulatively the facilities will meet FCC regulations regarding radio frequency exposure;
- 2) Supplemental RF Justification Report from VCOMM Engineering dated July 13, 2021, in response to comments received from HDR, the Village's Wireless Consultant. Please note that the Applicants respectfully submit that drive test data is not required by the Village Code and is not necessary. However, based on the Planning Board insistence, the enclosed report includes drive test data and dropped call data that further substantiates the need for the Facility and that the proposed height is the minimum height necessary;
- 3) Report from K. Wimmer of Homeland Towers dated July 1, 2021, detailing the access road to the Mountain Avenue Tower;
- 4) Report from K. Wimmer of Homeland Towers dated July 13, 2021, regarding 21 Linden



Lane speculative alternative site and detailing why such location is more intrusive than the proposed Facility.

- 5) Letter from APT Engineering dated July 13, 2021 responding to the Fire Department comments and detailing revisions to the stormwater calculations and Site Plan;
- 6) Letter from APT Engineering dated July 13, 2021 detailing that the New York State Building and Fire Prevention Code does not apply to the Facility since it is a freestanding tower;
- 7) Revised Stormwater Management Report by APT Engineering revised July 2021; and
- 8) Revised Site Plan.

We thank you for your consideration, and look forward to discussing this matter with the Planning Board at the August 10, 2021 public hearing. 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. Gaudio

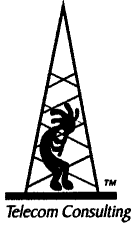
RDG/cae

Enclosures

cc: Zoning Board (10 copies, under separate cover letter)

Applicants

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**PINNACLE TELECOM GROUP**

*Professional and Technical Services*

# **ANTENNA SITE FCC RF COMPLIANCE ASSESSMENT AND REPORT**

## **HOMELAND TOWERS, LLC**

**SITE "NY172 – MT. KISCO"  
180 SOUTH BEDFORD ROAD  
MT. KISCO, NY**

**JUNE 11, 2021**

**14 RIDGEDALE AVENUE, SUITE 260 • CEDAR KNOLLS, NJ 07927 • 973-451-1630**



# CONTENTS

INTRODUCTION AND SUMMARY	3
ANTENNA AND TRANSMISSION DATA	5
COMPLIANCE ANALYSIS	7
COMPLIANCE CONCLUSION	12

## CERTIFICATION

## Appendix A. BACKGROUND ON THE FCC MPE LIMIT

## **INTRODUCTION AND SUMMARY**

At the request of Homeland Towers, LLC, Pinnacle Telecom Group has performed an independent expert assessment of radiofrequency (RF) levels and related FCC compliance for proposed wireless antenna operations on a new 140-foot monopole to be located at 180 South Bedford Road in Mt. Kisco, NY.

Homeland Towers refers to the prospective site as “NY172 – Mt. Kisco”, and the proposed monopole will accommodate the directional panel antennas of up to three wireless carriers. At this time, Verizon Wireless plans to occupy the highest antenna mounting position on the monopole, followed by AT&T.

The FCC requires wireless antenna operators to perform an assessment of the RF levels from all the transmitting antennas at a site whenever antenna operations are added or modified, and ensure compliance with the FCC Maximum Permissible Exposure (MPE) limit in areas of unrestricted public access, i.e., at street level around the site.

In this case, the compliance assessment will include the RF effects of a worst-case hypothetical collocation by T-Mobile.

The analysis will conservatively assume all the wireless carriers are operating at maximum capacity and maximum power in each of their FCC-licensed frequency bands. With that extreme degree of conservatism incorporated in the analysis, we can have great confidence that the actual RF effects from any combination of wireless operators, however they might actually be positioned on the monopole, would be in compliance with the FCC’s MPE limit.

This assessment of antenna site compliance is based on the FCC limit for general population “maximum permissible exposure” (MPE), a limit established as safe for continuous exposure to RF fields by humans of either sex, all ages and sizes, and under all conditions.

The result of an FCC compliance assessment can be described in layman’s terms by expressing the calculated RF levels as simple percentages of the FCC



MPE limit. In that way, the figure 100 percent serves as the reference for compliance, and calculated RF levels below 100 percent indicate compliance with the MPE limit. An equivalent way to describe the calculated results is to relate them to a “times-below-the-limit” factor. Here, we will apply both descriptions.

The result of the FCC compliance assessment in this case is as follows:

- ❑ At street level around the site, the conservatively calculated maximum RF level caused by the combination of antenna operations is 6.1139 percent of the FCC general population MPE limit, well below the 100-percent reference for compliance. In other words, even with calculations designed to significantly overstate the RF levels versus those that could actually occur at the site, the worst-case calculated RF level in this case is still more than 15 times below the limit defined by the federal government as safe for continuous exposure of the general public.
- ❑ The results of the calculations provide a clear demonstration that the RF levels from as many as three wireless carriers, even under worst-case collocation circumstances, would satisfy the FCC requirement for controlling potential human exposure to RF fields. Moreover, because of the conservative methodology and assumptions applied in this analysis, RF levels actually caused by any combination of wireless operators’ antenna operations at this site will be even less significant than the calculation results here indicate.

The remainder of this report provides the following:

- ❑ relevant technical data on the parameters for the three wireless carriers;
- ❑ a description of the applicable FCC mathematical model for assessing compliance with the MPE limit, and application of the relevant technical data to that model; and
- ❑ analysis of the results of the calculations, and the compliance conclusion for the proposed site.

In addition, Appendix A provides background on the FCC MPE limit, along with a list of key FCC references on MPE compliance.

## **ANTENNA AND TRANSMISSION DATA**

As described, the proposed 140-foot monopole will be able to accommodate as many as three wireless carriers' antennas. Verizon Wireless proposes to occupy the highest mounting position on the monopole. This analysis will include an assumption of "worst-case" collocation by two other wireless carriers – AT&T and T-Mobile.

The worst-case collocation methodology basically involves taking the carriers with the most available spectrum and the opportunity for higher power levels and hypothetically positioning them at the lower points on the monopole – thus matching the most power with the shorter distances to the ground.

Typically, the vertical spacing between different wireless carriers' antennas on a monopole is 10 feet. In this case, the Verizon Wireless antennas will mount at a center line of 137 feet, and we will assign antenna centerline-heights to the two other assumed wireless collocators at 127 feet and 117 feet.

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

Verizon Wireless is licensed to operate in the 746 MHz, 869 MHz, 1900 MHz, 2100 MHz and 3.5 GHz frequency bands. In the 746 MHz band, Verizon uses four 40-watt channels per antenna sector. In the 869 MHz band, Verizon uses four 40-watt channels per sector. In the 1900 MHz band, Verizon uses four 40-watt channels per antenna sector. In the 2100 MHz band, Verizon uses four 40-watt channels per sector. In the 3.5 GHz band, Verizon uses two 0.622-watt channels per sector.

AT&T is licensed to operate in the 700, 850, 1900, 2100, and 2300 MHz frequency bands. In the 700 MHz band, AT&T uses 370 watts of input power per sector. In the 850 MHz band, AT&T uses 160 watts of input power per sector. In



the 1900 MHz band, AT&T uses 160 watts of input power per sector. In the 2100 MHz band, AT&T uses 160 watts of input power per sector. Lastly, in the 2300 MHz band, AT&T uses 100 watts of input power per sector.

T-Mobile is licensed to operate in the 600 MHz, 700 MHz, 1900 MHz, 2100 MHz and 2500 MHz frequency bands. In the 600 MHz band, T-Mobile uses four 40-watt channels per sector. In the 700 MHz band, T-Mobile uses one 40-watt channel per sector. In the 1900 MHz band, T-Mobile uses one 40-watt channel and four 30-watt channels per sector. In the 2100 MHz band, T-Mobile uses one 40-watt channel and two 60-watt channels per sector. Lastly, In the 2500 MHz band, T-Mobile uses one 40-watt channel and one 80-watt channel per sector.

The proposed mounting heights are as follows:

- Verizon Wireless: 137 feet
- AT&T: 127 feet
- T-Mobile: 117 feet

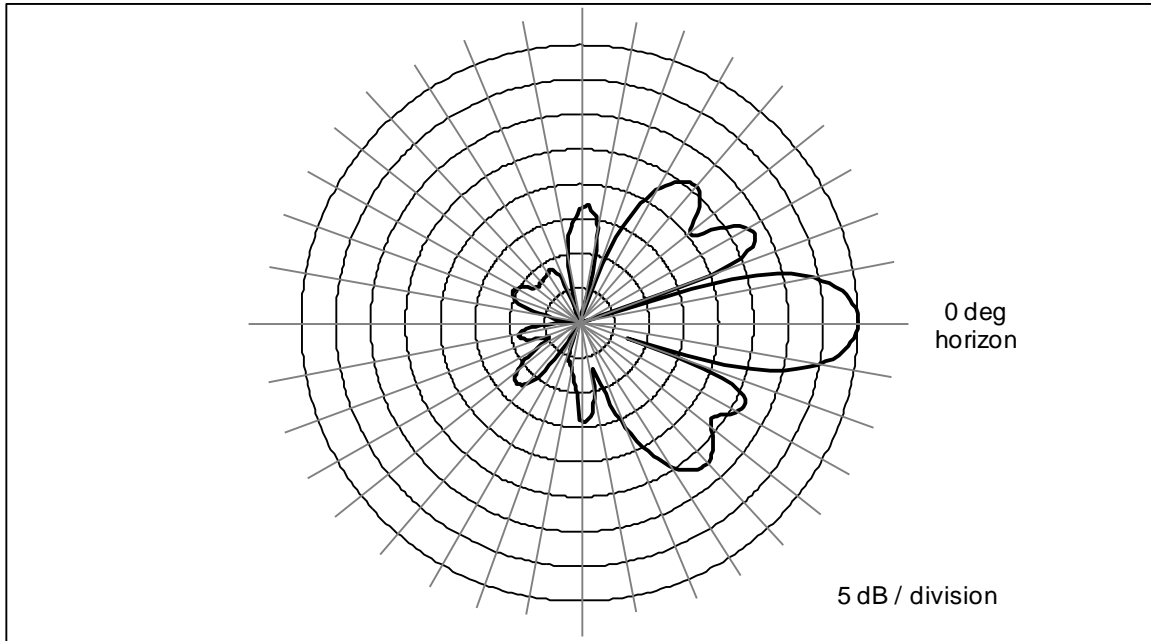
The area below the antennas, at street level, is of interest in terms of potential “uncontrolled” exposure of the general public, so the antenna’s vertical-plane emission characteristic is used in the calculations, as it is a key determinant in the relative level of RF emissions in the “downward” direction.

By way of illustration, Figure 1, below, shows the vertical-plane pattern of a typical 1900 MHz panel antenna. The antenna is effectively pointed at the three o’clock position (the horizon) and the pattern at different angles is described using decibel units. The use of a decibel scale incidentally visually understates the relative directionality characteristic of the antenna in the vertical plane. Where the antenna pattern reads 20 dB, the relative RF energy emitted at the corresponding downward angle is 1/100<sup>th</sup> of the maximum that occurs in the main beam (at 0 degrees); at 30 dB, the energy is 1/1000<sup>th</sup> of the maximum.

Note that the automatic pattern-scaling feature of our internal software may skew side-by-side visual comparisons of different antenna models, or even different

parties' depictions of the same antenna model.

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



## Compliance Analysis

FCC Office of Engineering and Technology Bulletin 65 ("OET Bulletin 65") provides guidelines for mathematical models to calculate potential RF exposure levels at various points around transmitting antennas.

Around an antenna site at ground level (in what is called the "far field" of the antennas), the RF levels are directly proportional to the total antenna input power and the relative antenna gain (focusing effect) in the downward direction of interest – and the levels are otherwise inversely proportional to the square of the straight-line distance to the antenna. Conservative calculations also assume the potential RF exposure is enhanced by reflection of the RF energy from the intervening ground. Our calculations will assume a 100% "perfect", mirror-like reflection, which is the absolute worst-case approach.

The formula for ground-level MPE compliance assessment of any given wireless antenna operation is as follows:

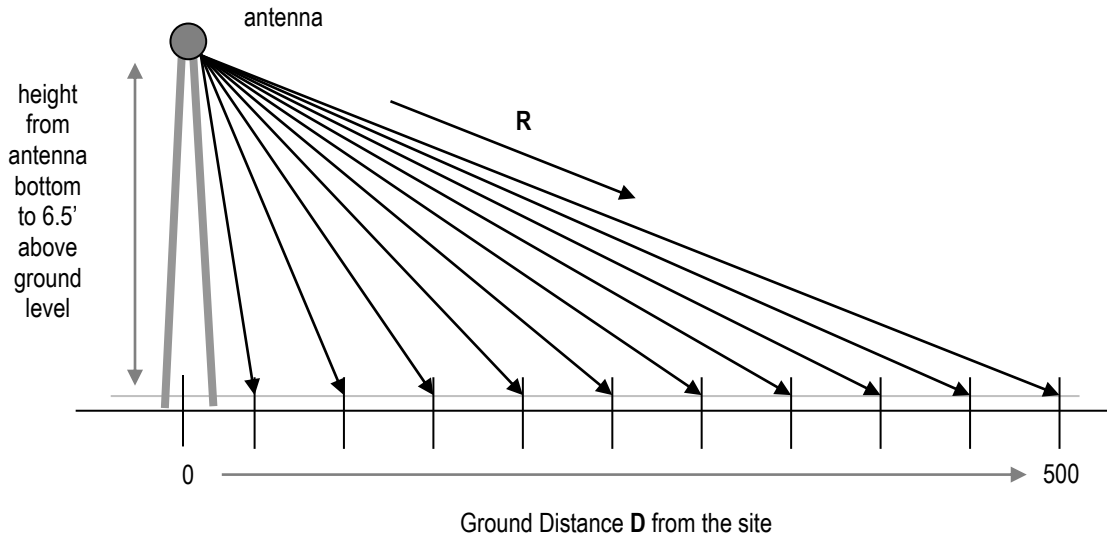


$$\text{MPE\%} = (100 * \text{TxPower} * 10^{(\text{Gmax-Vdisc})/10} * 4) / (\text{MPE} * 4\pi * R^2)$$

where

MPE%	=	RF level, expressed as a percentage of the FCC MPE limit applicable to continuous exposure of the general public
100	=	factor to convert the raw result to a percentage
TxPower	=	maximum net power into antenna sector, in milliwatts, a function of the number of channels per sector, the transmitter power per channel, and line loss
$10^{(\text{Gmax-Vdisc})/10}$	=	numeric equivalent of the relative antenna gain in the direction of interest downward toward ground level
4	=	factor to account for a 100-percent-efficient energy reflection from the ground, and the squared relationship between RF field strength and power density ( $2^2 = 4$ )
MPE	=	FCC general population MPE limit
R	=	straight-line distance from the RF source to the point of interest, centimeters

The MPE% calculations are normally performed out to a distance of 500 feet from the facility to points 6.5 feet (approximately two meters, the FCC-recommended standing height) off the ground, as illustrated in Figure 2 on the next page.



**Figure 2. Street-level MPE% Calculation Geometry**

It is popularly thought that the farther away one is from an antenna, the lower the RF level – which is generally but not universally correct. The results of MPE% calculations fairly close to the site will reflect the variations in the vertical-plane antenna pattern as well as the variation in straight-line distance to the antennas. Therefore, RF levels may actually increase slightly with increasing distance within the range of zero to 500 feet from the site. As the distance approaches 500 feet and beyond, though, the antenna pattern factor becomes less significant, the RF levels become primarily distance-controlled and, as a result, the RF levels generally decrease with increasing distance. In any case, the RF levels more than 500 feet from a wireless antenna site are well understood to be sufficiently low and always in compliance.

FCC compliance for a collocated antenna site is assessed in the following manner. At each distance point away from the site, an MPE% calculation is made for each antenna operation, including the individual components of dual-band operations. Then, at each point, the sum of the individual MPE% contributions is compared to 100 percent, where the latter figure serves as a normalized reference for compliance with the MPE limit. We refer to the sum of the individual MPE% contributions as “total MPE%”, and any calculated total MPE% result exceeding 100 percent is, by definition, higher than the limit and



represent non-compliance and a need to take action to mitigate the RF levels. If all results are below 100 percent, that indicates compliance with the federal regulations on controlling exposure.

Note that the following conservative methodology and assumptions are incorporated into the MPE% calculations on a general basis:

1. The antennas are assumed to be operating continuously at maximum RF power – i.e., with the maximum number of channels and the maximum transmitter power per channel.
2. The power-attenuation effects of any shadowing or visual obstruction to a line-of-sight path from the antennas to the points of interest at ground level are ignored.
3. The calculations intentionally minimize the distance factor (R) by assuming a 6'6" human and performing the calculations from the bottom (rather than the centerline) of the antenna.
4. The potential RF exposure at ground level is assumed to be 100-percent enhanced (increased) via a "perfect" field reflection from the intervening ground.

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

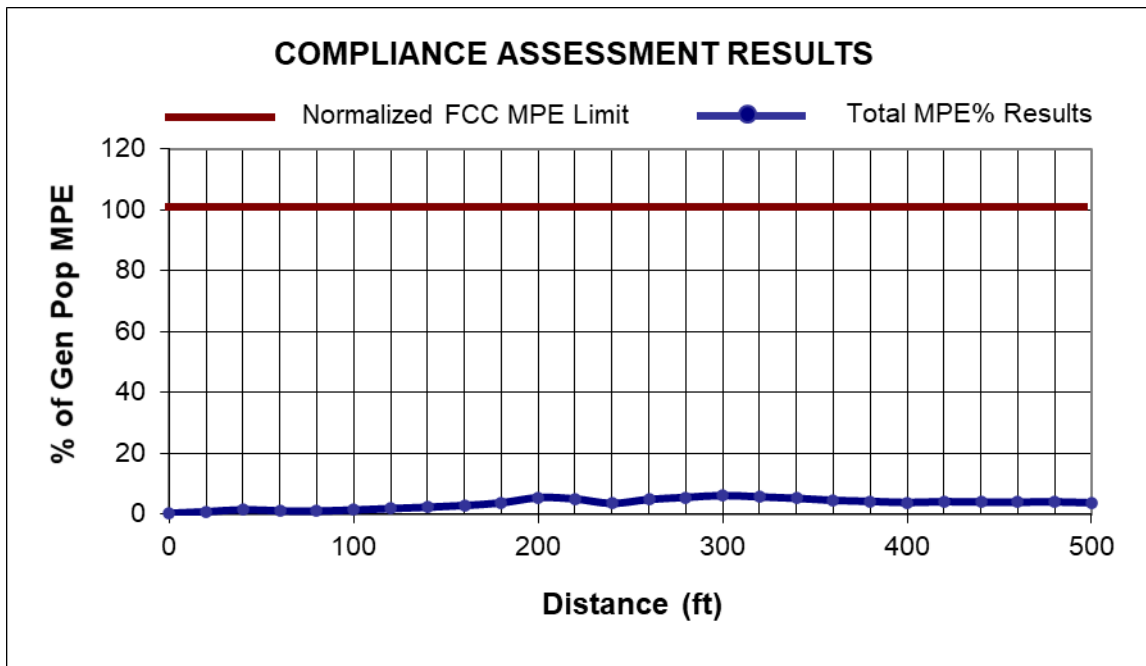
The table that follows provides the results of the MPE% calculations for each antenna operation, with the worst-case overall result highlighted in bold in the last column.

Ground Distance (ft)	Verizon Wireless MPE%	AT&T MPE%	T-Mobile MPE%	Total MPE%
0	0.0416	0.0830	0.3838	0.5084
20	0.1445	0.0873	0.7704	1.0022
40	0.1266	0.1878	1.3247	1.6391
60	0.1849	0.2172	0.8659	1.2680
80	0.3614	0.3630	0.4522	1.1766
100	0.2482	0.8939	0.3798	1.5219
120	0.2120	1.0575	0.7428	2.0123
140	0.3864	0.6826	1.3458	2.4148
160	0.6643	0.2386	2.0530	2.9559
180	0.7193	0.1175	2.9560	3.7928
200	0.5304	0.1861	4.6988	5.4153
220	0.2359	0.2326	4.5843	5.0528
240	0.0650	0.1963	3.3526	3.6139
260	0.0751	0.1172	4.6724	4.8647
280	0.1527	0.1288	5.2163	5.4978
300	0.1883	0.1769	5.7487	<b>6.1139</b>
320	0.2279	0.2423	5.2132	5.6834
340	0.2064	0.3141	4.7116	5.2321
360	0.1754	0.3918	4.0109	4.5781
380	0.1483	0.4843	3.6183	4.2509
400	0.1401	0.6049	3.1453	3.8903
420	0.1595	0.7594	3.2386	4.1575
440	0.1465	0.6965	3.1901	4.0331
460	0.1995	0.8643	2.9332	3.9970
480	0.2928	1.0357	2.7691	4.0976
500	0.2713	0.9588	2.5619	3.7920

As indicated, the overall worst-case calculated result is 6.1139 percent of the FCC general population MPE limit – well below the 100-percent reference for compliance, particularly given the significant conservatism incorporated in the analysis.

A graph of the overall calculation results, provided on the next page, provides perhaps a clearer *visual* illustration of the relative compliance of the calculated RF levels. The line representing the overall calculation results shows an obviously clear, consistent margin to the FCC MPE limit.





## Compliance Conclusion

The FCC MPE limit has been constructed in such a manner that continuous human exposure to RF fields up to and including 100 percent of the MPE limit is acceptable and completely safe.

The conservatively calculated maximum RF effect at street level from the assumed worst-case collocation of as many as three wireless carriers is 6.1139 percent of the FCC general population MPE limit. In other words, even with an extremely conservative analysis intended to dramatically overstate the RF effects of any wireless collocation scenario at the site, the calculated worst-case RF level is still more than 15 times below the FCC MPE limit.

The results of the calculations indicate clear compliance with the FCC regulations and the related MPE limit. Because of the conservative calculation methodology and operational assumptions applied in this analysis, the RF levels actually caused by any more realistic collocation of antennas at this site would be even less significant than the calculation results here indicate, and compliance would be achieved by an even larger margin.

## CERTIFICATION

The undersigned verify as follows:

1. We have read and are familiar with the FCC regulations concerning RF safety and the control of human exposure to RF fields (47 CFR 1.1301 *et seq*).
2. To the best of our knowledge, the statements and information disclosed in this report are true, complete and accurate.
3. The analysis of site RF compliance provided herein is consistent with the applicable FCC regulations, additional guidelines issued by the FCC, and industry practice.
4. The results of the assessment indicate that the subject antenna operations were in full compliance with the FCC regulations concerning the control of potential RF exposure on the date tested.

  
Daniel J. Collins  
Chief Technical Officer

6/11/21  
Date

  
Peter M. Longo,  
Principal  
PML Consulting Engineers, 081318  
New York License No. 081318



6/14/21  
Date



## Appendix A. Background on the FCC MPE Limit

As directed by the Telecommunications Act of 1996, the FCC has established limits for maximum continuous human exposure to RF fields.

The FCC maximum permissible exposure (MPE) limits represent the consensus of federal agencies and independent experts responsible for RF safety matters. Those agencies include the National Council on Radiation Protection and Measurements (NCRP), the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), the American National Standards Institute (ANSI), the Environmental Protection Agency (EPA), and the Food and Drug Administration (FDA). In formulating its guidelines, the FCC also considered input from the public and technical community – notably the Institute of Electrical and Electronics Engineers (IEEE).

The FCC's RF exposure guidelines are incorporated in Section 1.301 *et seq* of its Rules and Regulations (47 CFR 1.1301-1.1310). Those guidelines specify MPE limits for both occupational and general population exposure.

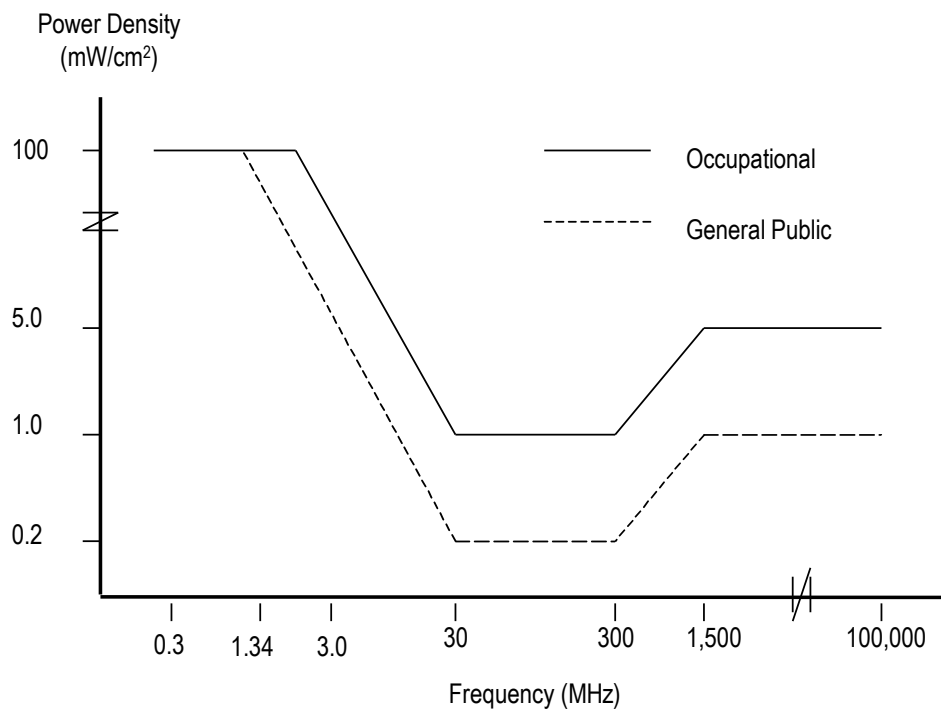
The specified continuous exposure MPE limits are based on known variation of human body susceptibility in different frequency ranges, and a Specific Absorption Rate (SAR) of 4 watts per kilogram, which is universally considered to accurately represent human capacity to dissipate incident RF energy (in the form of heat). The occupational MPE guidelines incorporate a safety factor of 10 or greater with respect to RF levels known to represent a health hazard, and an additional safety factor of five is applied to the MPE limits for general population exposure. Thus, the general population MPE limit has a built-in safety factor of more than 50. Continuous exposure at levels equal to or below the applicable MPE limits is considered to result in no adverse health effects on humans.

The reason for *two* tiers of MPE limits is based on an understanding and assumption that members of the general public are unlikely to have had appropriate RF safety training and may not be aware of the exposures they receive; occupational exposure in controlled environments, on the other hand, is assumed to involve individuals who have had such training, are aware of the exposures, and know how to maintain a safe personal work environment.

The FCC's RF exposure limits are expressed in two equivalent forms, using alternative units of field strength (expressed in volts per meter, or V/m), and power density (expressed in milliwatts per square centimeter, or mW/cm<sup>2</sup>). The table on the next page lists the FCC limits for both occupational and general population exposures, using the mW/cm<sup>2</sup> reference, for the different radio frequency ranges.

Frequency Range (F) (MHz)	Occupational Exposure (mW/cm <sup>2</sup> )	General Public Exposure (mW/cm <sup>2</sup> )
0.3 - 1.34	100	100
1.34 - 3.0	100	$180 / F^2$
3.0 - 30	$900 / F^2$	$180 / F^2$
30 - 300	1.0	0.2
300 - 1,500	$F / 300$	$F / 1500$
1,500 - 100,000	5.0	1.0

The diagram below provides a graphical illustration of both the FCC's occupational and general population MPE limits.



Because the FCC's RF exposure limits are frequency-shaped, the exact MPE limits applicable to the instant situation depend on the frequency range used by the systems of interest.

The most appropriate method of determining RF compliance is to calculate the RF power density attributable to a particular system and compare that to the MPE limit applicable to the operating frequency in question. The result is usually expressed as a percentage of the MPE limit.



For potential exposure from multiple systems, the respective percentages of the MPE limits are added, and the total percentage compared to 100 (percent of the limit). If the result is less than 100, the total exposure is in compliance; if it is more than 100, exposure mitigation measures are necessary to achieve compliance.

### ***References on FCC Compliance***

47 CFR, FCC Rules and Regulations, Part 1 (Practice and Procedure), Section 1.1310 (Radiofrequency radiation exposure limits).

FCC Second Memorandum Opinion and Order and Notice of Proposed Rulemaking (FCC 97-303), *In the Matter of Procedures for Reviewing Requests for Relief From State and Local Regulations Pursuant to Section 332(c)(7)(B)(v) of the Communications Act of 1934 (WT Docket 97-192), Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation (ET Docket 93-62), and Petition for Rulemaking of the Cellular Telecommunications Industry Association Concerning Amendment of the Commission's Rules to Preempt State and Local Regulation of Commercial Mobile Radio Service Transmitting Facilities*, released August 25, 1997.

FCC First Memorandum Opinion and Order, ET Docket 93-62, *In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, released December 24, 1996.

FCC Report and Order, ET Docket 93-62, *In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, released August 1, 1996.

FCC Report and Order, Notice of Proposed Rulemaking, Memorandum Opinion and Order (FCC 19-126), *Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields; Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies*, released December 4, 2019.

FCC Office of Engineering and Technology (OET) Bulletin 65, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", Edition 97-01, August 1997.

FCC Office of Engineering and Technology (OET) Bulletin 56, "Questions and Answers About Biological Effects and Potential Hazards of RF Radiation", edition 4, August 1999.

"RF Field Measurements for Antenna Sites", (video), Richard Tell Associates Inc., 1997.

"EME Awareness for Antenna Site Safety", (video), Motorola (produced in association with Richard Tell Associates Inc.), 1997.



**HOMELAND TOWERS, LLC**

**NY172 MOUNT KISCO 4 SITE**

**180 S BEDFORD ROAD  
MOUNT KISCO  
WESTCHESTER COUNTY, NY**

**THIRD RF SUPPLEMENTAL REPORT**

**JULY 13, 2021**

**DOMINIC C. VILLECCO  
DAVID K. STERN**





Third Supplemental Report  
NY172 Mount Kisco 4 Site  
Mount Kisco, NY  
July 13, 2021

## **THIRD SUPPLEMENTAL RF REPORT**

V-COMM, L.L.C. has been retained by Homeland Towers, LLC to provide expert analysis in association with Verizon Wireless for its proposed wireless communications facility located at 180 S Bedford Road, Mount Kisco, NY.

This third supplemental report is provided in response to the Memorandum (“Memo”) dated March 2021 in response to the Homeland Towers, Alternate Site Analysis Report, 2<sup>nd</sup> Supplemental RF report submitted on 17<sup>th</sup> of March 2021, to the Planning Board. This report will contain drive test analysis for both Scanner and CW data, an analysis of key performance indicator (KPI) data for existing sites neighboring the identified gap in coverage, and an alternate site analysis for 21 Linden Lane.

## **SCANNER AND CW DRIVE TEST ANALYSIS**

V-COMM collected on-air scanner data from the area around the Village covered by the Mount Kisco and Bedford 3 sites to document how these sites are performing today. A calibrated PCTel SeeGull IBflex scanner was configured to measure Verizon’s existing 700 MHz and 2100 MHz LTE channels. The RSRP and SINR data were collected for Verizon’s 700 MHz and 2100 MHz LTE channels.

V-COMM performed Continuous Wave (CW) testing to simulate the coverage from the proposed site at 180 S. Bedford Road. To perform this, a CW signal generator and an antenna were hoisted by a crane to the antenna centerline of the proposed installation. The signal generator was configured to radiate at a power level and frequency that would be equivalent to the RSRP level of the proposed installation. The targeted coverage area around the site was driven to collect the received power levels of the generated signal. The CW test was performed at three different heights to validate the minimum height needed to fill the coverage gap.

Results from the Scanner and CW drive test are attached in Appendix A. The on-air scanner data shows that RSRP for both 700 MHz and 2100 MHz performs below the -95 dBm target level that Verizon uses for allowing for adequate in-building and in-vehicle coverage. The 700 MHz RSRP map (Channel 5230, page 4 of Appendix A) and the 2100 MHz RSRP map (Channel 2050, page 6 of Appendix A) show that there is a coverage gap in the Village along Rt. 117 from Lexington Ave to Rt. 172 and along Rt. 172 to Darlington Rd. This map also shows that the coverage gap also extends south along Byram Lake Rd. and along Sarles St. on the border with the Town of Bedford. These maps also show a coverage gap along McLain St., W. Patent Rd., and Darlington Rd. between Rt. 172 and Guard Hill Rd. There is also a gap in coverage along Stratford Dr., Carlton Dr. and other small streets within this development.

Signal to Interference and Noise Ratio (SINR) data was also collected with the scanner during the drive test. This data shows how dominant a signal is over neighboring sites or other sources of interference. It is typical for SINR to be 10 dB greater than the noise and interference to have



adequate performance on the LTE channel. As the SINR drops below this level, capacity on the LTE channel is reduced as the maximum data rates are reduced with lower SINR. The 700 MHz SINR map (Channel 5230, page 5 of Appendix A) and the 2100 MHz SINR map (Channel 2050, page 7 of Appendix A) show that SINR levels are below the targeted threshold along Rt. 172 to Darlington Rd.; extending south along Byram Lake Rd. and along Sarles St. on the border with the Township of Bedford; along McLain St., W. Patent Rd., and Darlington Rd. between Rt. 172 and Guard Hill Rd; and also along Carlton Dr. and other small streets within this development.

CW Testing was performed at three heights. Both 700 MHz and 2100 MHz were tested at 87 feet, 107 feet, and 137 feet. The 700 MHz CW for testing results for all three centerline heights are shown pages 8 through 10 of Appendix A. The 2100 MHz CW testing results for all three centerline heights are shown on pages 11 through 13 of Appendix A.

The 700 MHz CW test results show that 137 feet (Appendix A page 10), the proposed site can provide reliable in-building coverage (shown by the green dots representing -95 dBm or better) along Rt 117 from Armonk Rd to Rt 172, and along Rt 172 to Darlington Rd. At a 137 foot centerline, the proposed site will fill in coverage in Leonard Park as well as residential areas along Glassbury Ct and Terrace Pl.

As the height drops to a 107 foot centerline (Appendix A page 9), the reliable coverage area along Rt 172 goes from Byram Lake Rd to Linden. The residences around Terrace Pl are also not covered with reliable in-building coverage. As the height drops to an 87 foot centerline (Appendix A page 8), the reliable coverage along Rt 172 shrinks to the area around Leonard Park to W. Patent Rd.

The scanner testing results show that there is an identified gap in coverage along Rt 172 and surrounding residential communities in the Village. The CW test results show that the proposed 137 foot centerline is required to fill the identified gap in coverage to provide reliable in-building and in-vehicle services to areas along Rt 172, Rt 117, and Leonard Park.



## **LTE KPI DATA**

V-COMM has reviewed key performance indicator (KPI) data for Dropped Call Rates for the Mount Kisco site, located at 304 Lexington Avenue, Mount Kisco, and the Bedford 3 site, located at I-684 & Route 172, Bedford, from April through June 2020. Figure 4 details the LTE Dropped Call Rate per day for all three sectors of Mount Kisco (site 266). Figure 5 details the LTE Dropped Call Rate per day for all four sectors of Bedford 3 (site 56).

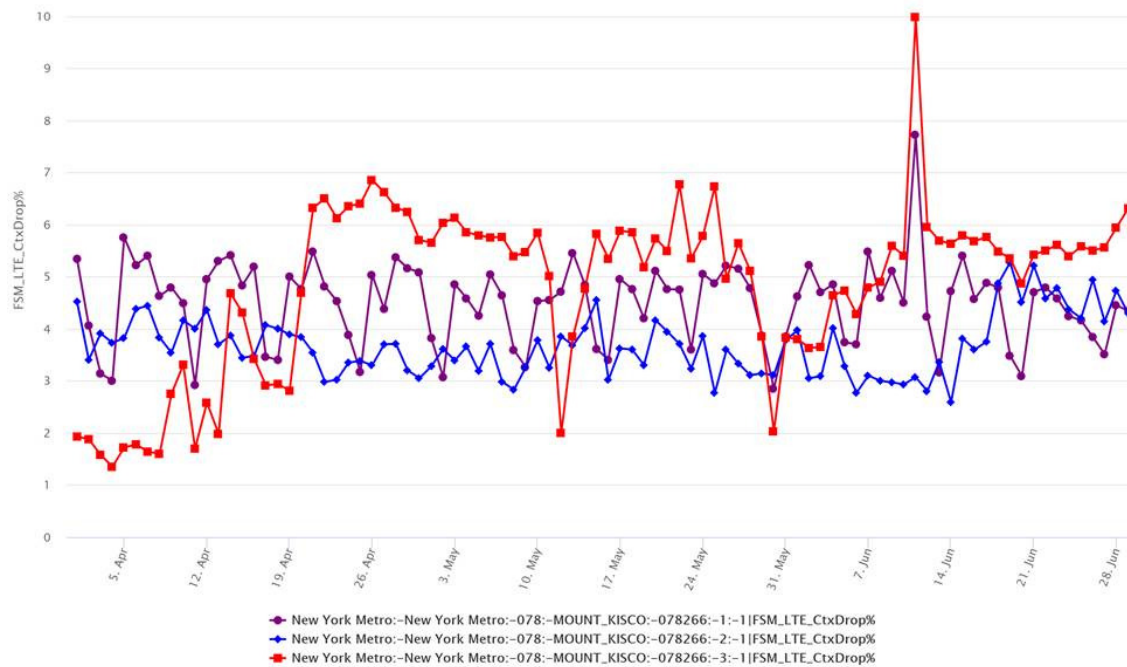
Verizon uses a threshold of 1% for Dropped Call rates to maintain reliable service, which is in line with industry standards. The Mount Kisco Beta sector (blue line in Figure 4) shows the daily LTE Dropped Call rate is between 3% and 4%, exceeding the threshold for reliable service.

The Bedford 3 Gamma sector (blue line in Figure 5) shows that the Dropped Call data is between 0.4% and 1.8 percent, averaging around 1%. Bedford 3 Gamma has started to exceed the Dropped Call threshold to maintain reliable service.

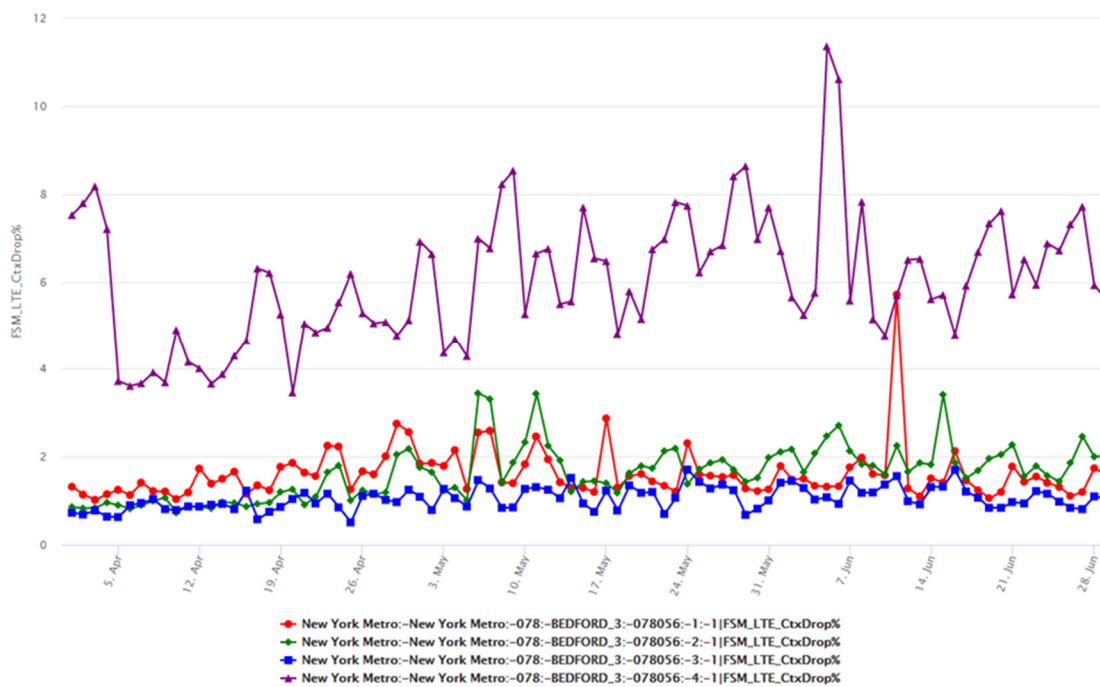
With the Dropped Call Rate threshold exceeded for Mount Kisco Beta sector (site 266), which faces east across the Village, and the Bedford 3 Gamma sector (site 56), which faces west along Rt 172 facing the Village, Verizon requires a new site to improve coverage east of the Mount Kisco site. The proposed site at 180 S. Bedford Road will enhance coverage on the eastern side of the Village of Mount Kisco and along the Rt 172 corridor, reducing the Dropped Call rate reported by Mount Kisco (site 266) and Bedford 3 (site 56).



**Figure 4 – Mount Kisco (Site 266) LTE Dropped Call Rate**



**Figure 5 – Bedford 3 (Site 56) LTE Dropped Call Rate**





## ALTERNATE SITE ANALYSIS

The memorandum has requested an analysis of the property at 21 Linden Lane location, also to determine the lowest height necessary to meet the coverage goals from the location. The Town of Bedford allows for a maximum height of 150 feet in their ordinance for wireless telecommunications facilities. Based on the proposed antennas, the hypothetical centerline of 147 feet would be the maximum height that could be used for this facility.

V-COMM reviewed the location and determined that an antenna centerline of 147 ft at this location would not meet the coverage goals of our proposed site. A hypothetical site at the 21 Linden Lane leaves a gap in coverage to the west on S. Bedford Road, which is a crucial coverage gap area for Verizon. The traffic to and from Mount Kisco and the hospital through the S Bedford Road corridor will suffer from the lack of quality coverage if a new site is not built at the proposed 180 S. Bedford location. This gap in coverage occurs along Rt 172 between Stratford Drive and W. Patent Road, and along portions of Stratford Drive and McLain Street. This gap in coverage also remains along Rt 117 and areas around Leonard Park.

Lowering the height of the antennas below 147 ft at the hypothetical 21 Linden Lane site would not remedy this coverage gap as the antennas would be closer to clutter and have less visibility to the roadway. The terrain at the 180 S Bedford property blocks coverage from the 21 Linden Ln west towards the village of Mt. Kisco, increasing the size of the unremedied gap in coverage along Rt 172 and Rt 117. The list below details the predictive coverage propagations included in this report.

- Map 32 – 21 Linden Lane Coverage at 700 MHz – 147 ft CL
- Map 33 – 21 Linden Lane Coverage at 700 MHz – 137 ft CL
- Map 34 – 21 Linden Lane Coverage at 700 MHz – 107 ft CL
- Map 35 – 21 Linden Lane Coverage at 700 MHz – 87 ft CL
  
- Map 36 – 21 Linden Lane Coverage at 2100 MHz – 147 ft CL
- Map 37 – 21 Linden Lane Coverage at 2100 MHz – 137 ft CL
- Map 38 – 21 Linden Lane Coverage at 2100 MHz – 107 ft CL
- Map 39 – 21 Linden Lane Coverage at 2100 MHz – 87 ft CL



## CONSUMER DEVICE SIGNAL BAR REPORT

Recently, a public commenter submitted a report containing photographs of the signal bars reported by the end user's device at various locations around the Village of Mt. Kisco. The claim was that these pictures show that there is adequate coverage throughout the Village.

First, it is unclear which service provider the public commenter is using. Each service provider can have towers in different locations with antennas oriented in different directions. This will affect each service providers' coverage differently. Without knowing which service provider this commenter used, the results cannot be accurately evaluated. V-COMM's RF reports on file with the Board are detailing how Verizon's network is operating in the area of the Village of Mt. Kisco, and how the proposed site at 180 S. Bedford Rd. will address the gap in coverage.

Second, the signal bars on a user device are not an accurate tool for engineering design purposes. They are not calibrated measuring tools and are not considered scientifically dependable measuring instruments. These are only meant to provide users with an idea of how the signal is performing in a given area. Engineering tools such as propagation plots and calibrated scanner tests are how RF Engineers evaluate where a site is needed and how to design the site to service the need. V-COMM's RF reports have detailed how these tools are used, what the industry standards for minimum service requirements are, and how the proposed site at 180 S. Bedford Rd. will address the service needs in this gap in coverage. V-COMM's Scanner and CW Drive Test report (attached as an appendix) was generated with calibrated measuring tools to validate the existing and proposed coverage in and around the Village of Mount Kisco.

Third, the signal bars on a user device do not supply the frequency band information. It is unclear if this device is measuring at 700 MHz, at 2100 MHz, or at any other frequency this public commenter's device has access to using. Service providers, including Verizon, have to provide adequate coverage across all frequency bands that they have licensed. Therefore, when testing coverage in a drive test, it is required to lock a device to a specific frequency band to accurately evaluate the coverage data properly. V-COMM's scanner drive test discussed earlier in this report was locked to 700 MHz and 2100 MHz to measure each channel separately throughout the Village.

Last, the signal bars on a user device do not show any capacity data. The phone could hypothetically be showing great signal, but if the network is having capacity issues, the user's data session will be slow and unreliable. V-COMM's previous RF reports have detailed the capacity issues of the Mount Kisco site and how the proposed site is planned to remedy them.





Third Supplemental Report  
NY172 Mount Kisco 4 Site  
Mount Kisco, NY  
July 13, 2021

## CONCLUSION

V-COMM reviewed the materials provided by Verizon Wireless and prepared an analysis of the existing cell sites, their respective RF coverage, and System Data usage. With the existing sites, there is a significant gap in coverage and capacity. The maps demonstrate the gap in Verizon's coverage in this area and that the hypothetical alternate site facility at 21 Linden will not provide the additional coverage to significantly fill this gap.

It is our expert opinion that Verizon's proposed site on the 140 ft. proposed monopole located at 180 S. Bedford Road in Mount Kisco, NY will satisfy the coverage and capacity needs of Verizon Wireless and its subscribers in this portion of the Town/Village of Mount Kisco.

Dominic C. Villecco  
President, V-COMM, L.L.C.

7/13/2021

David K. Stern  
Vice President, V-COMM, L.L.C.

7/13/2021

Peter Longo, P.E.  
NY Professional Engineer License #081318  
PML Consulting Engineers, LLC



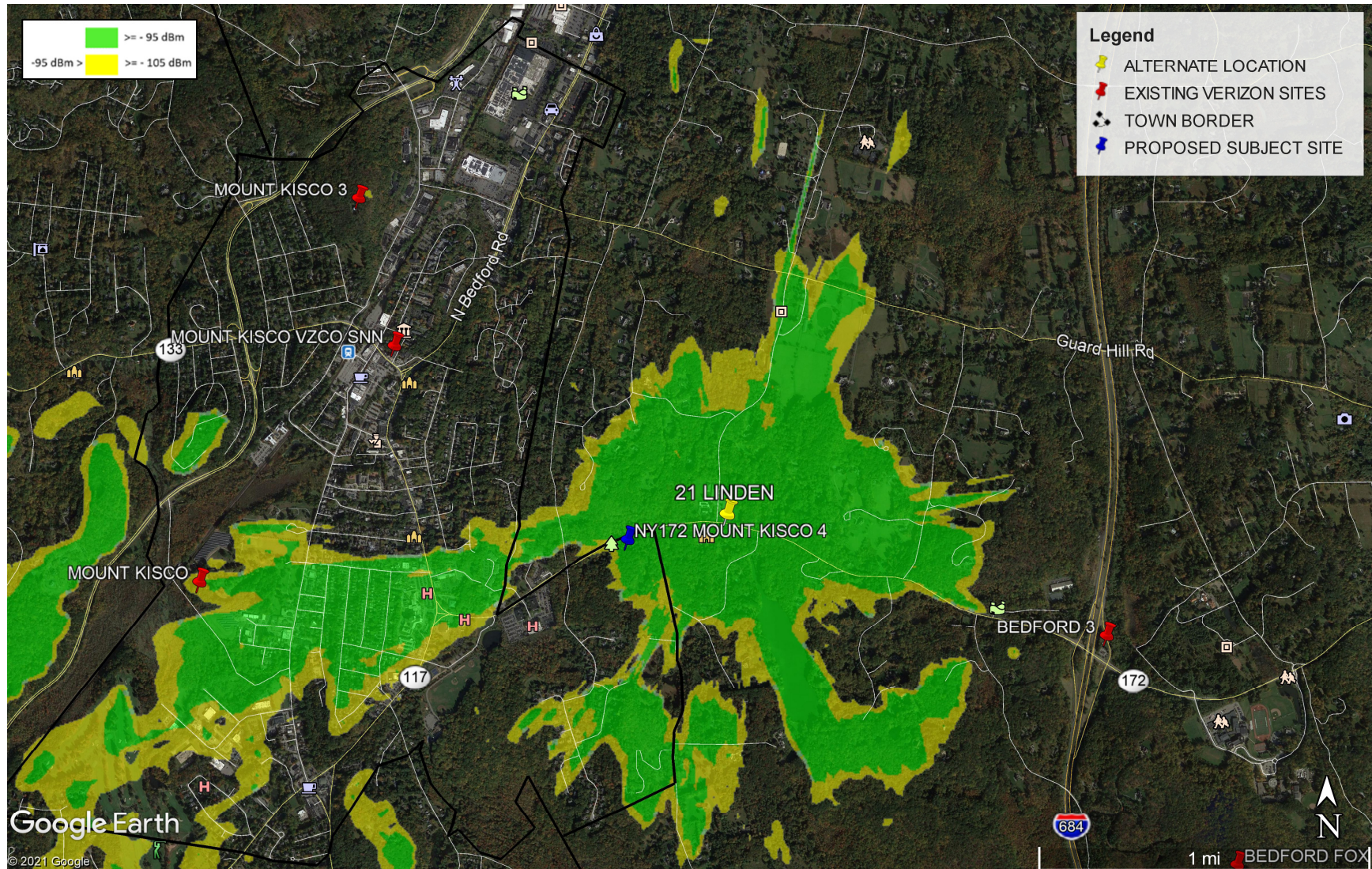
7/13/21

Date

Mr. Longo has reviewed the V-COMM, L.L.C. Third Supplemental RF Report for NY172 Mount Kisco 4 and concurs with the report conclusions.

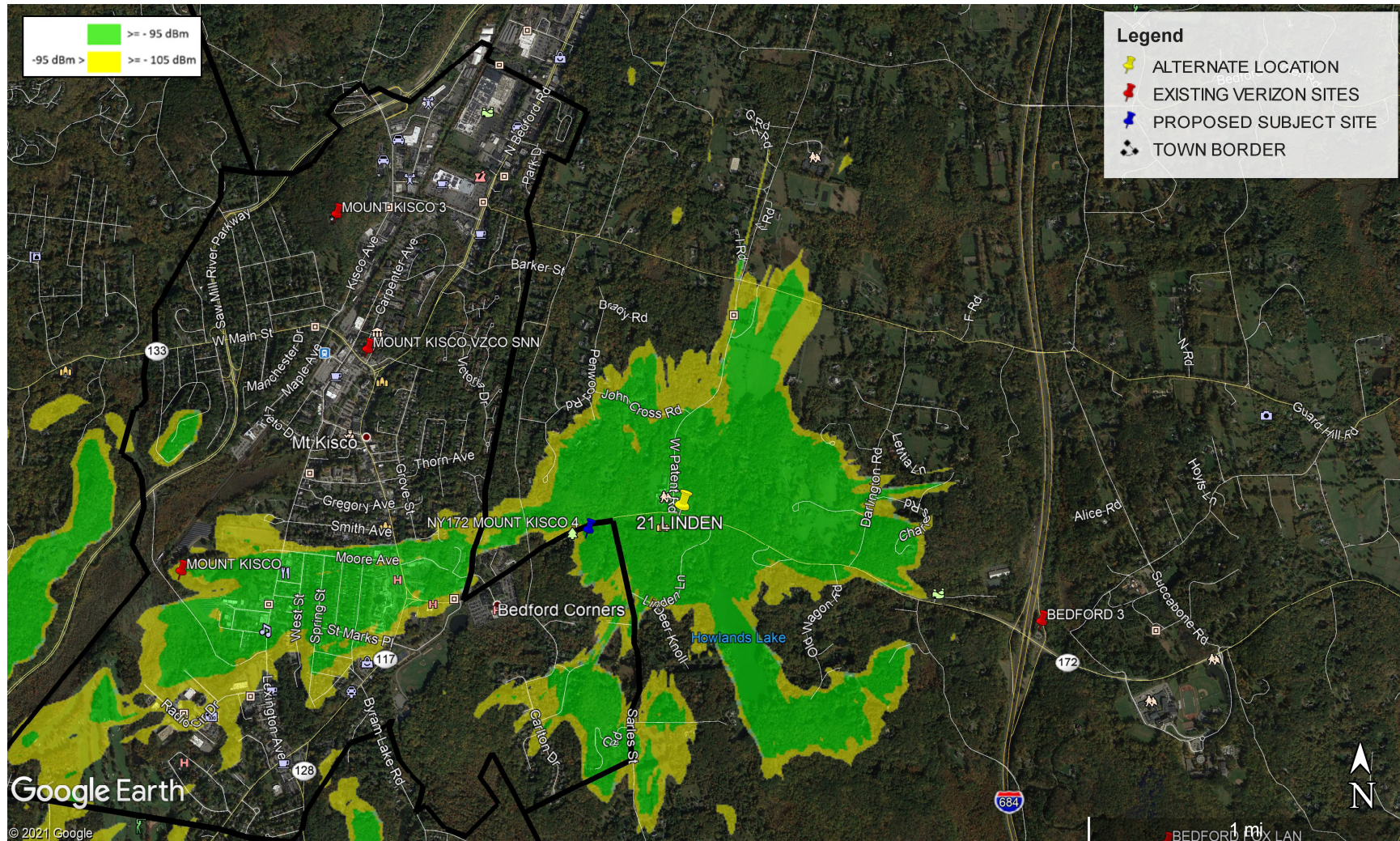


**MAP 32 – 21 LINDEN LANE COVERAGE AT 147 FT. C/L – 700 MHZ**





# MAP 33 – 21 LINDEN LANE COVERAGE AT 137 FT. C/L – 700 MHZ

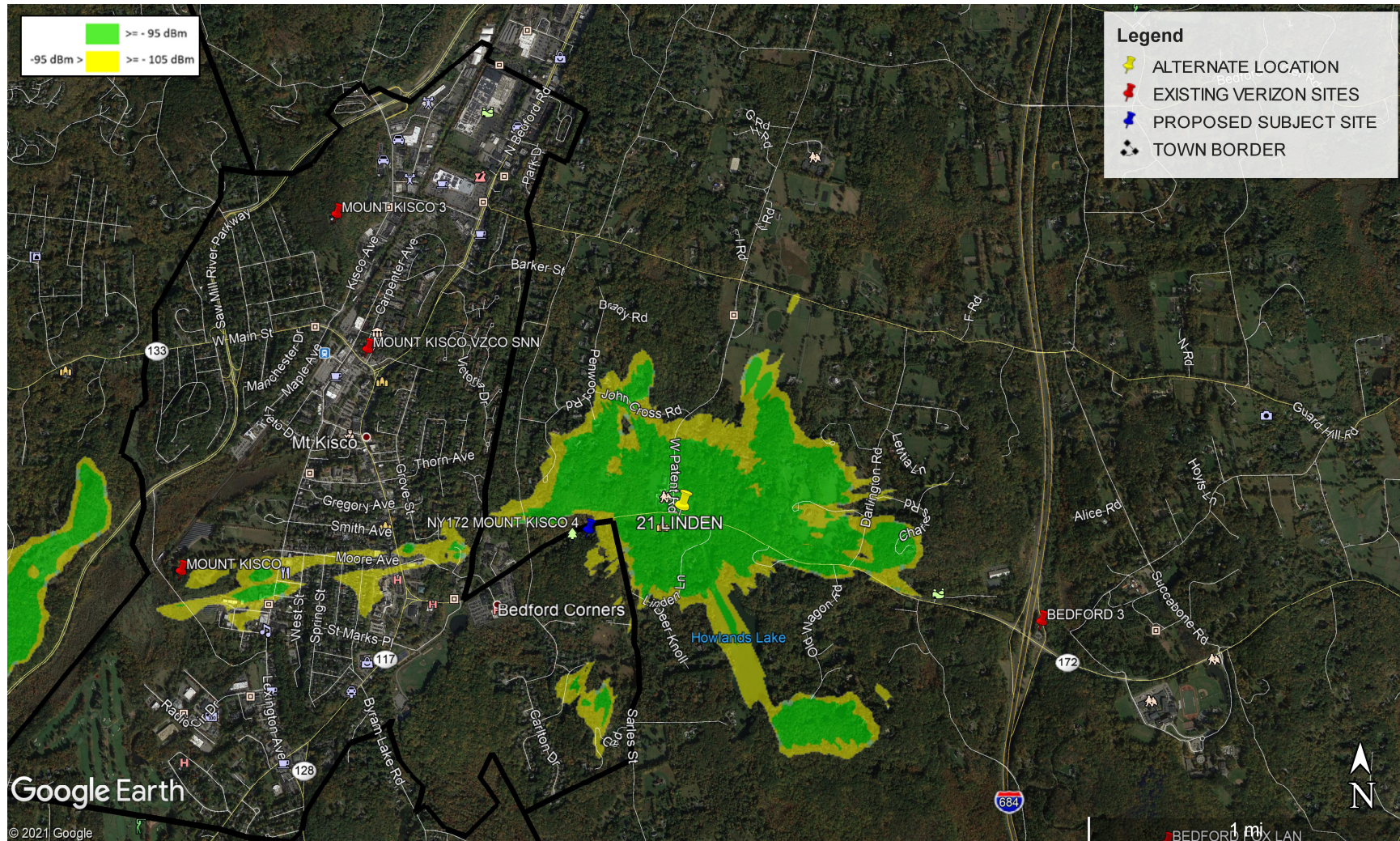






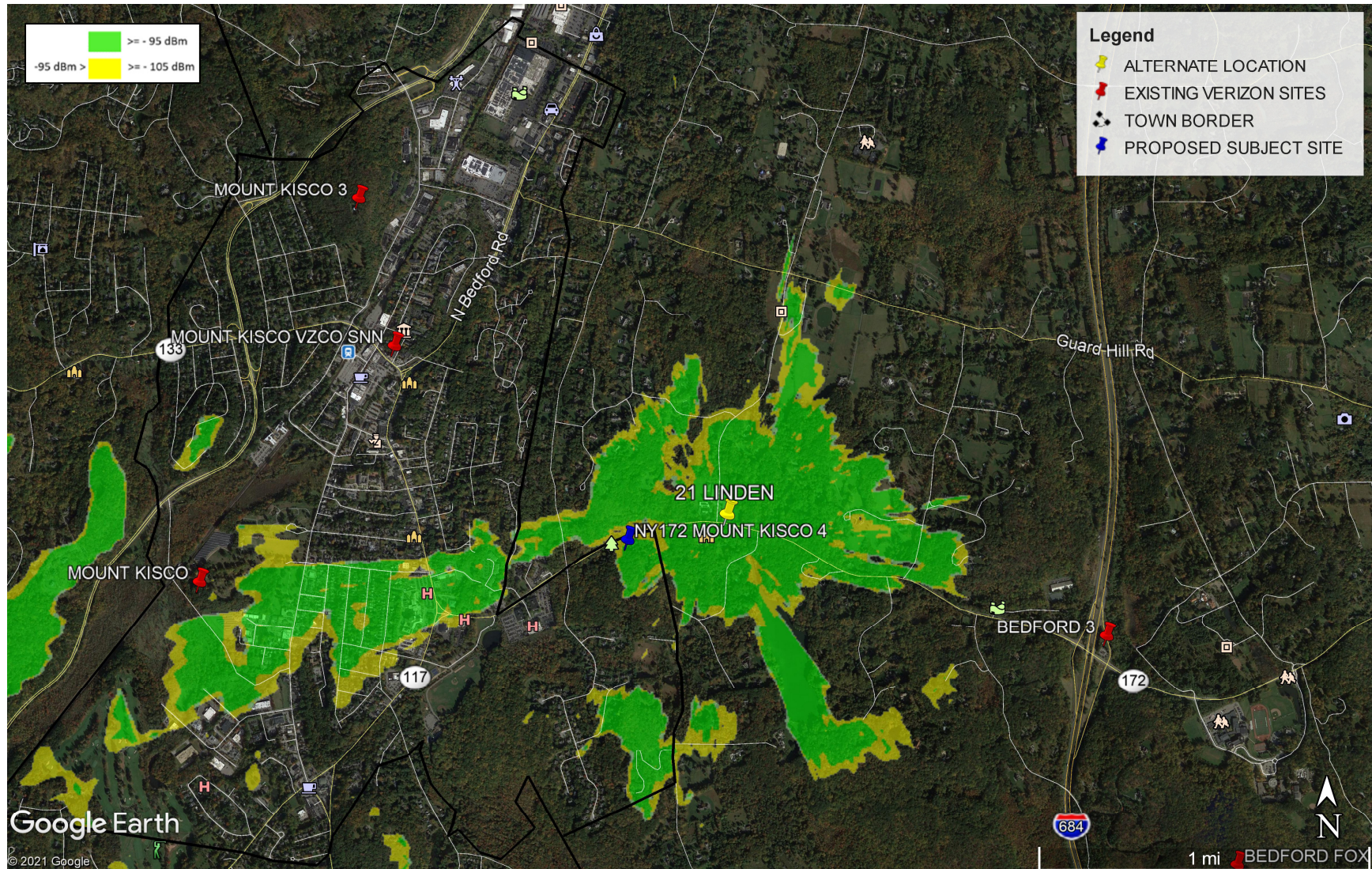


**MAP 35 – 21 LINDEN LANE COVERAGE AT 87 FT. C/L – 700 MHZ**



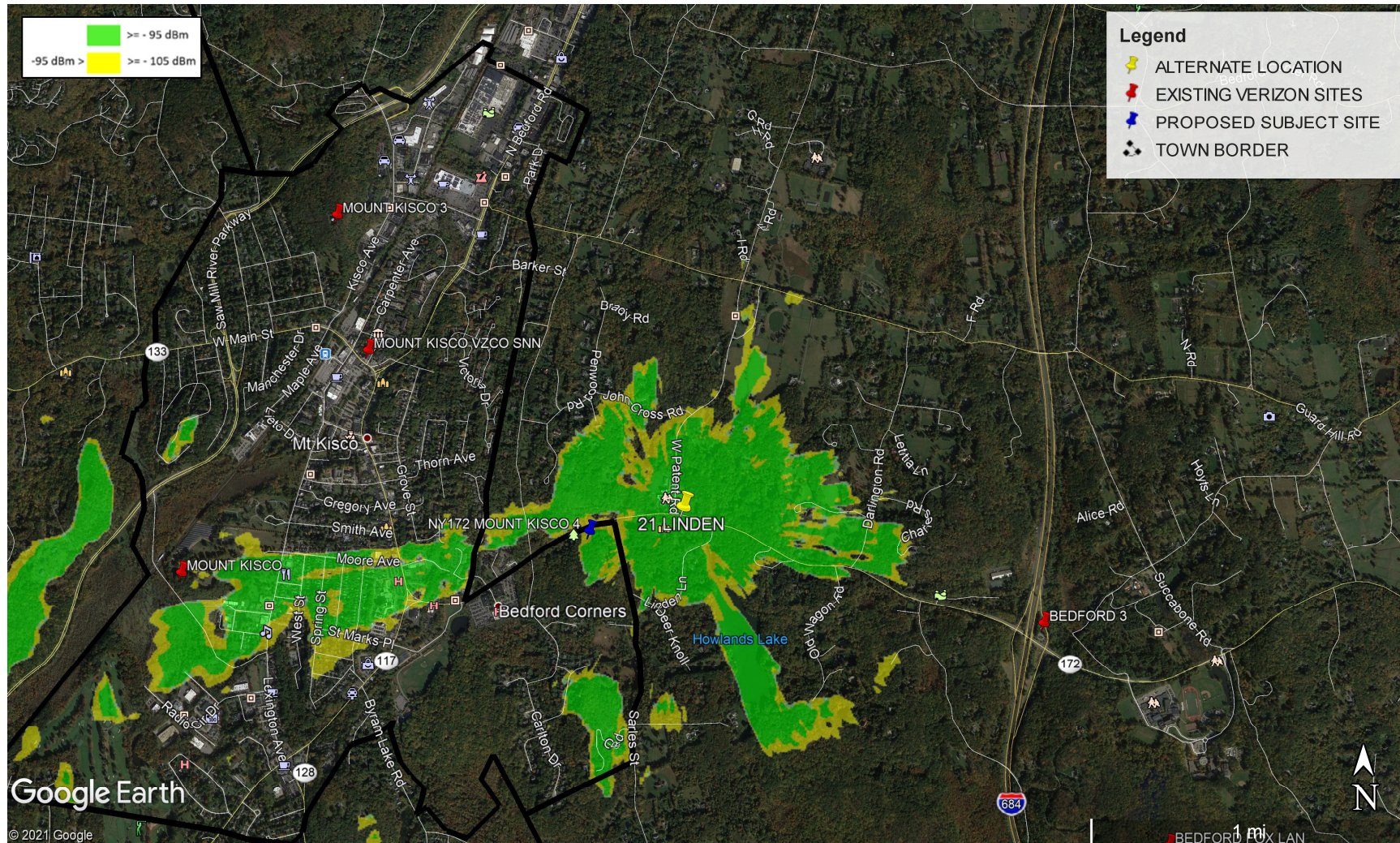


## MAP 36 – 21 LINDEN LANE COVERAGE AT 147 FT. C/L – 2100 MHZ



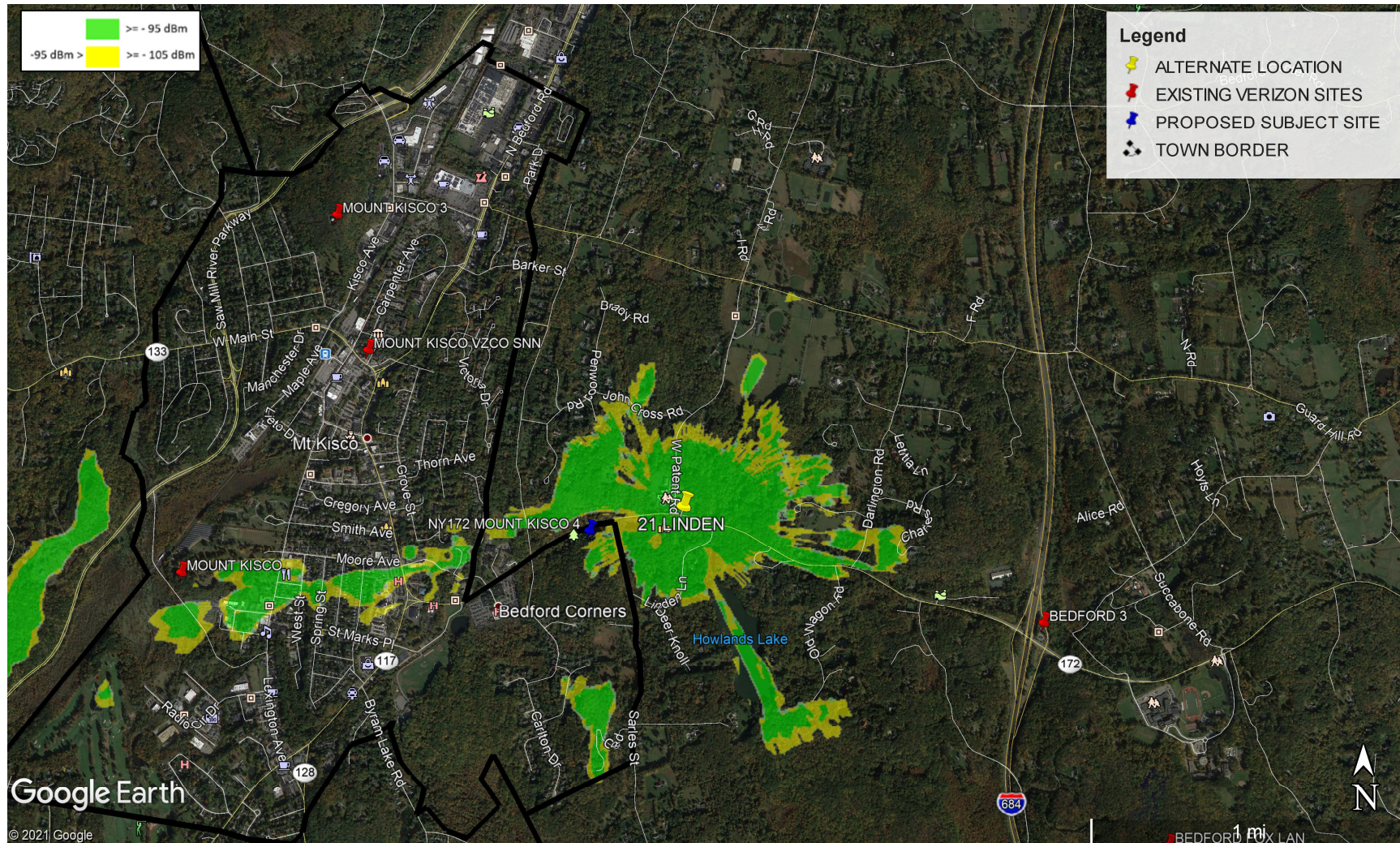


**MAP 37 – 21 LINDEN LANE COVERAGE AT 137 FT. C/L – 2100 MHZ**



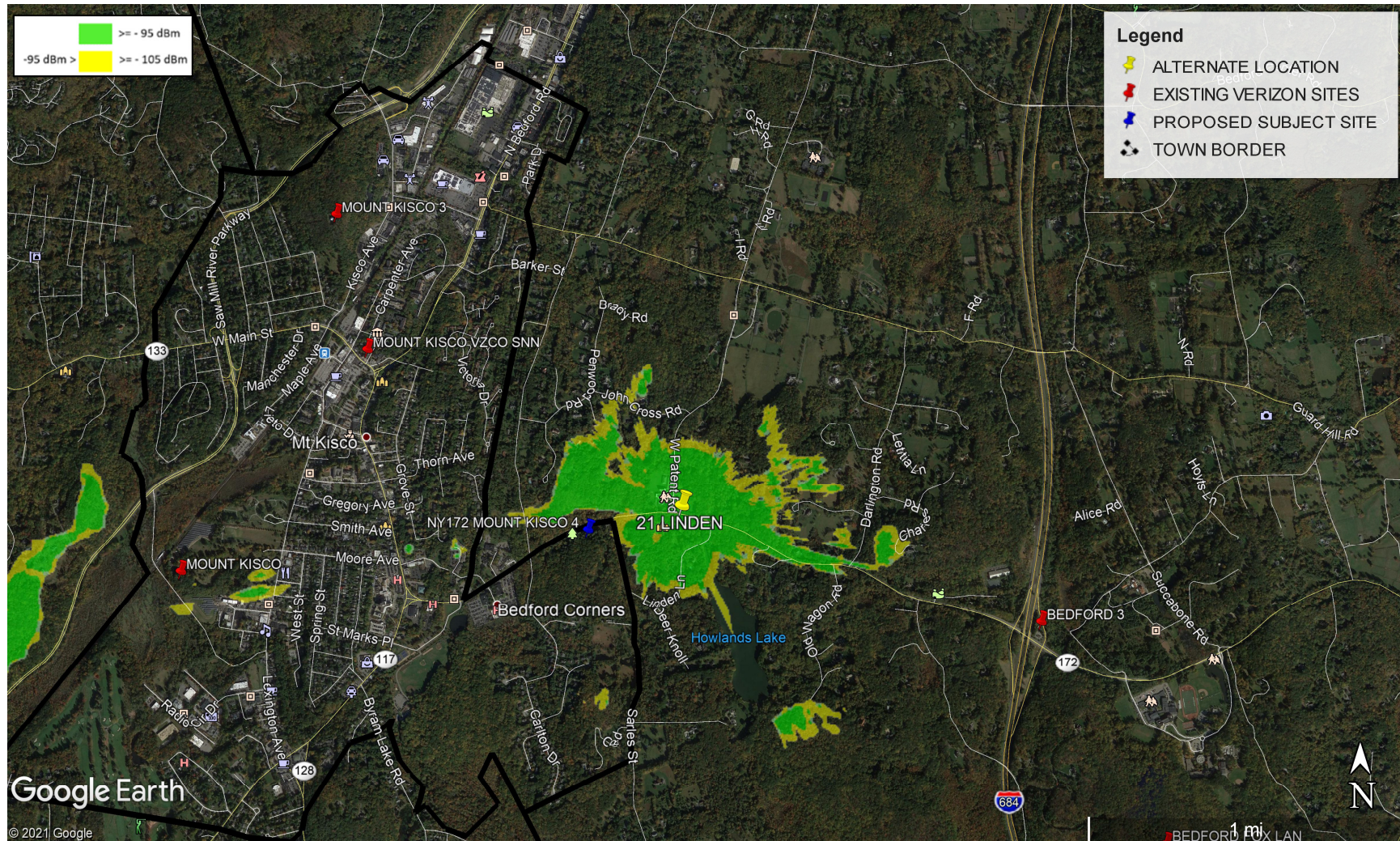


**MAP 38 – 21 LINDEN LANE COVERAGE AT 107 FT. C/L – 2100 MHZ**





**MAP 39 – 21 LINDEN LANE COVERAGE AT 87 FT. C/L – 2100 MHZ**





Third Supplemental Report  
NY172 Mount Kisco 4 Site  
Mount Kisco, NY  
July 13, 2021

## **APPENDIX A**

### **Mount Kisco 4 Scanner and CW Test Results**



# RF Drive Test

July 12, 2021



Proposed Verizon Wireless Site

Mount Kisco 4

180 South Bedford Road,

Mount Kisco, NY 10549

# Mount Kisco 4 – Data Collection Parameters

## Site Location:

Lat: N 41° 11' 58.66"

Long: W 73° 42' 48.55"

## Antenna Heights:

Crane Test: 87 feet, 107 feet, 137 feet  
Above Ground Level

---

## CW Test Setup – 700 MHz

Tx Antenna Gain = 6 dBi

Rx Antenna Gain = 0 dBi

Rx Antenna Mounted on Vehicle Roof

Site RS Tx Power = 30.9 dBm EIRP

## CW Test Setup – 2100 MHz

Tx Antenna Gain = 7 dBi

Rx Antenna Gain = 0 dBi

Rx Antenna Mounted on Vehicle Roof

Site RS Tx Power = 30.8 dBm EIRP

---

## On-Air Measurements

Rx Antenna Mounted on Vehicle Roof

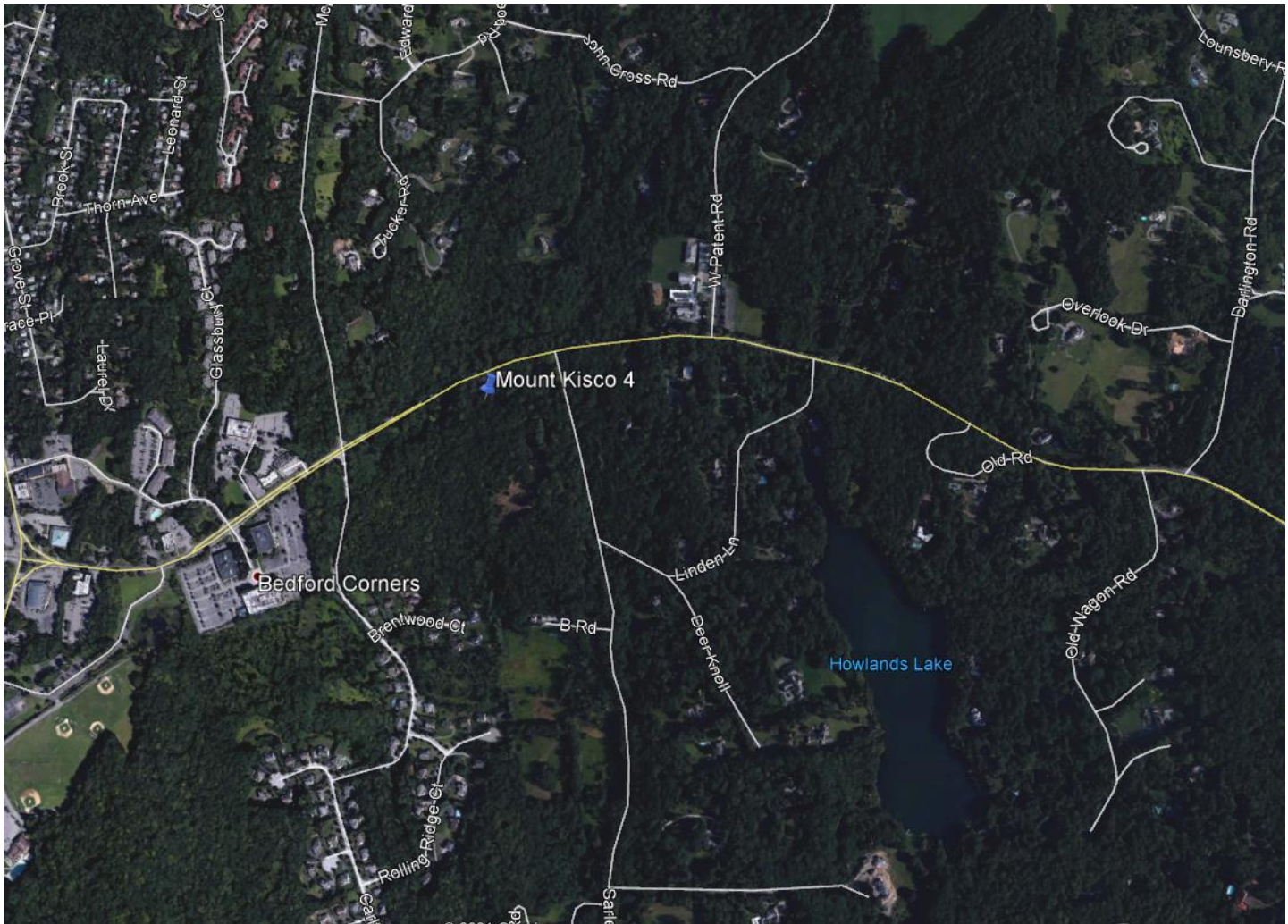
## Test Date

June 24, 2021

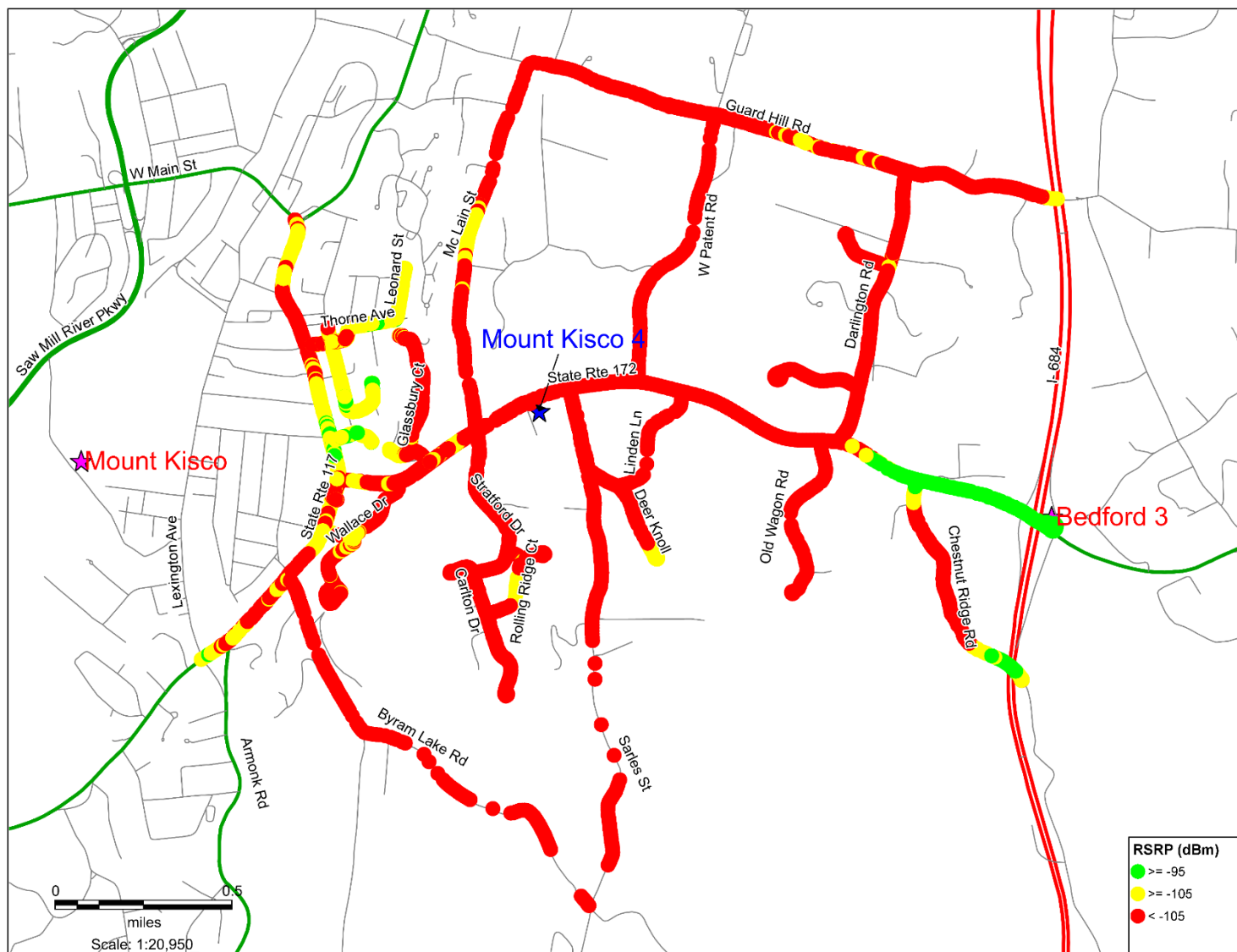
8:00 a.m. to 5:30 p.m.



# Mount Kisco 4 – Site Location

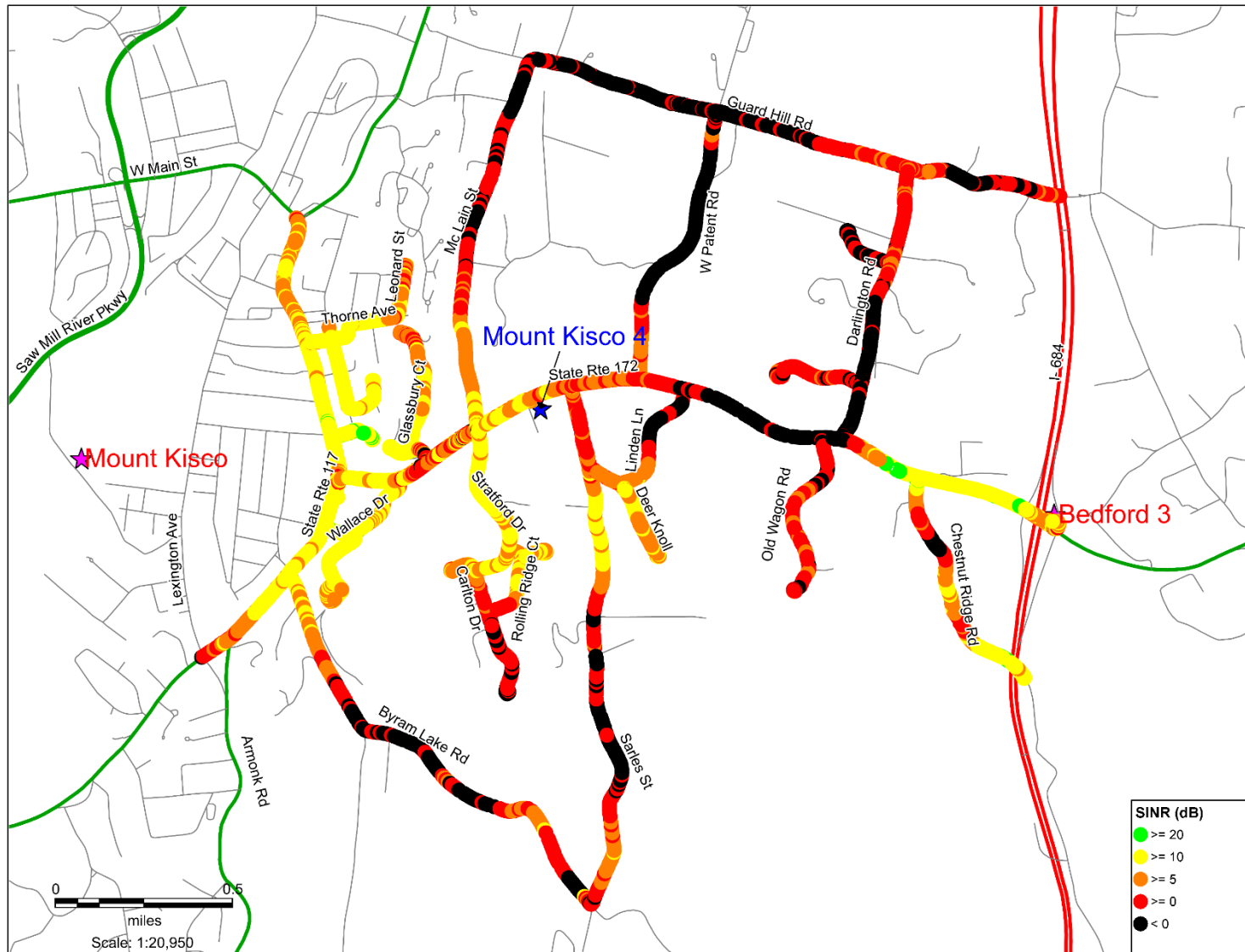


# Mount Kisco 4 On-Air 700 MHz LTE (Channel 5230) – RSRP Level

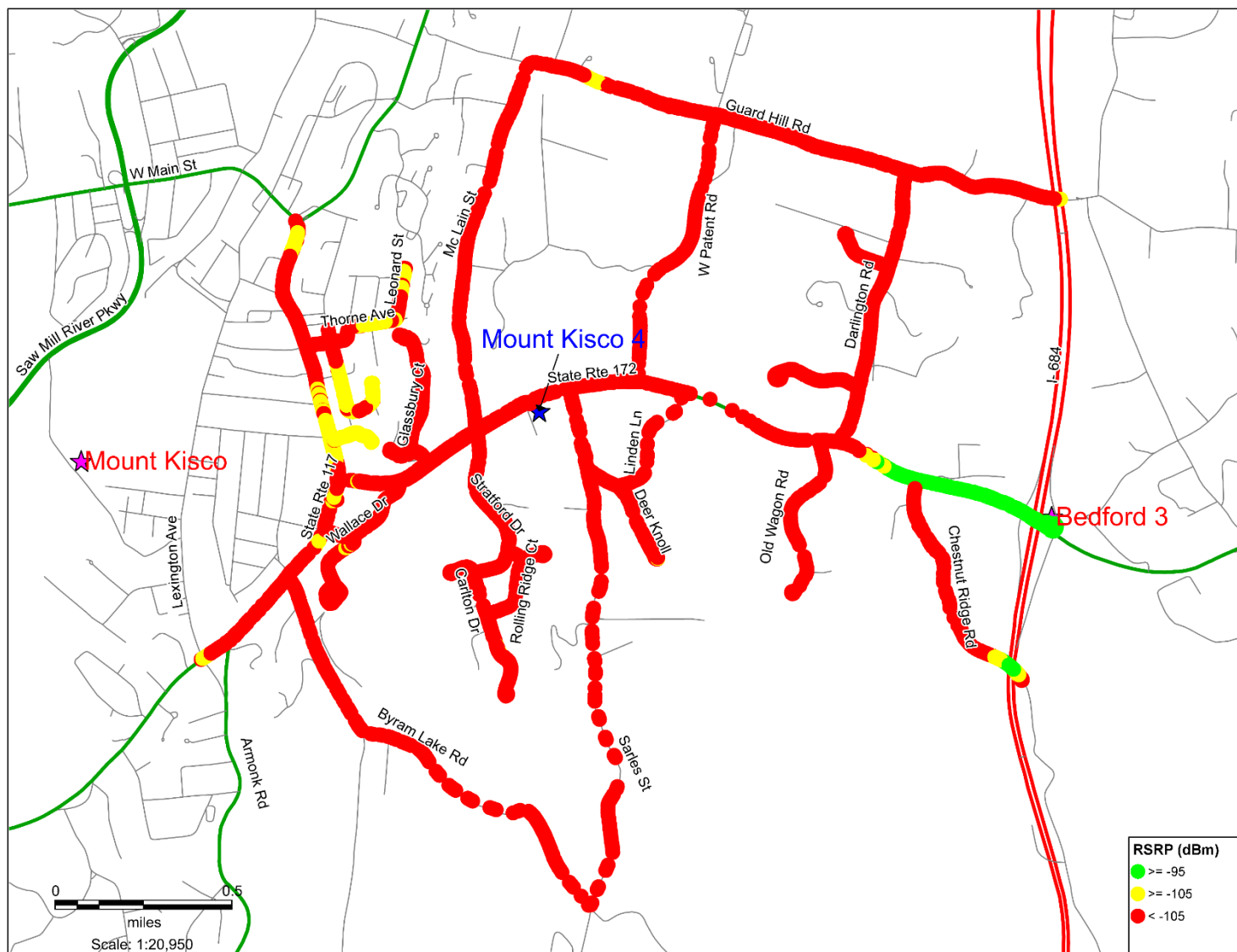




# Mount Kisco 4 On-Air 700 MHz LTE (Channel 5230) – SINR Level

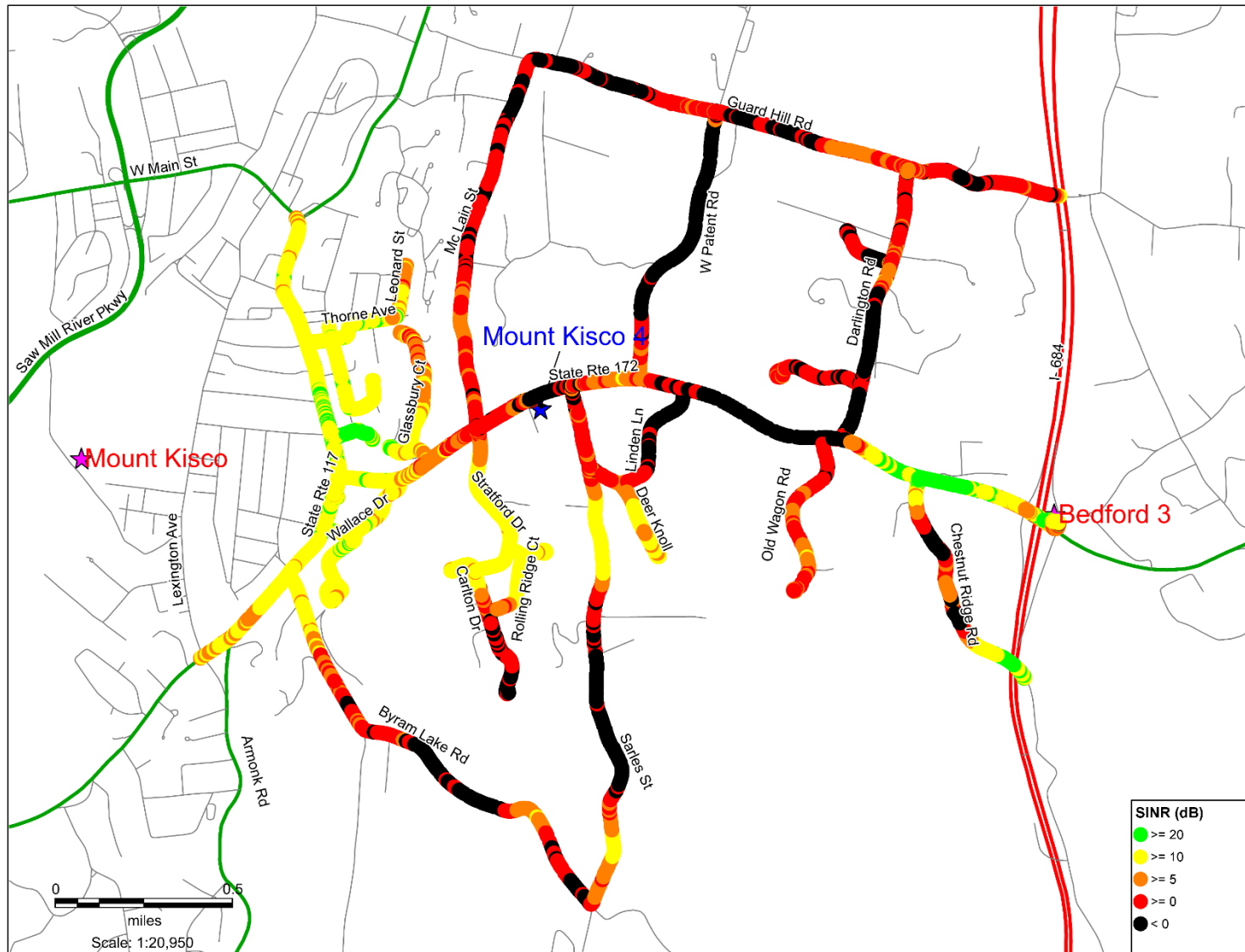


# Mount Kisco 4 On-Air 2100 MHz LTE (Channel 2050) – RSRP Level



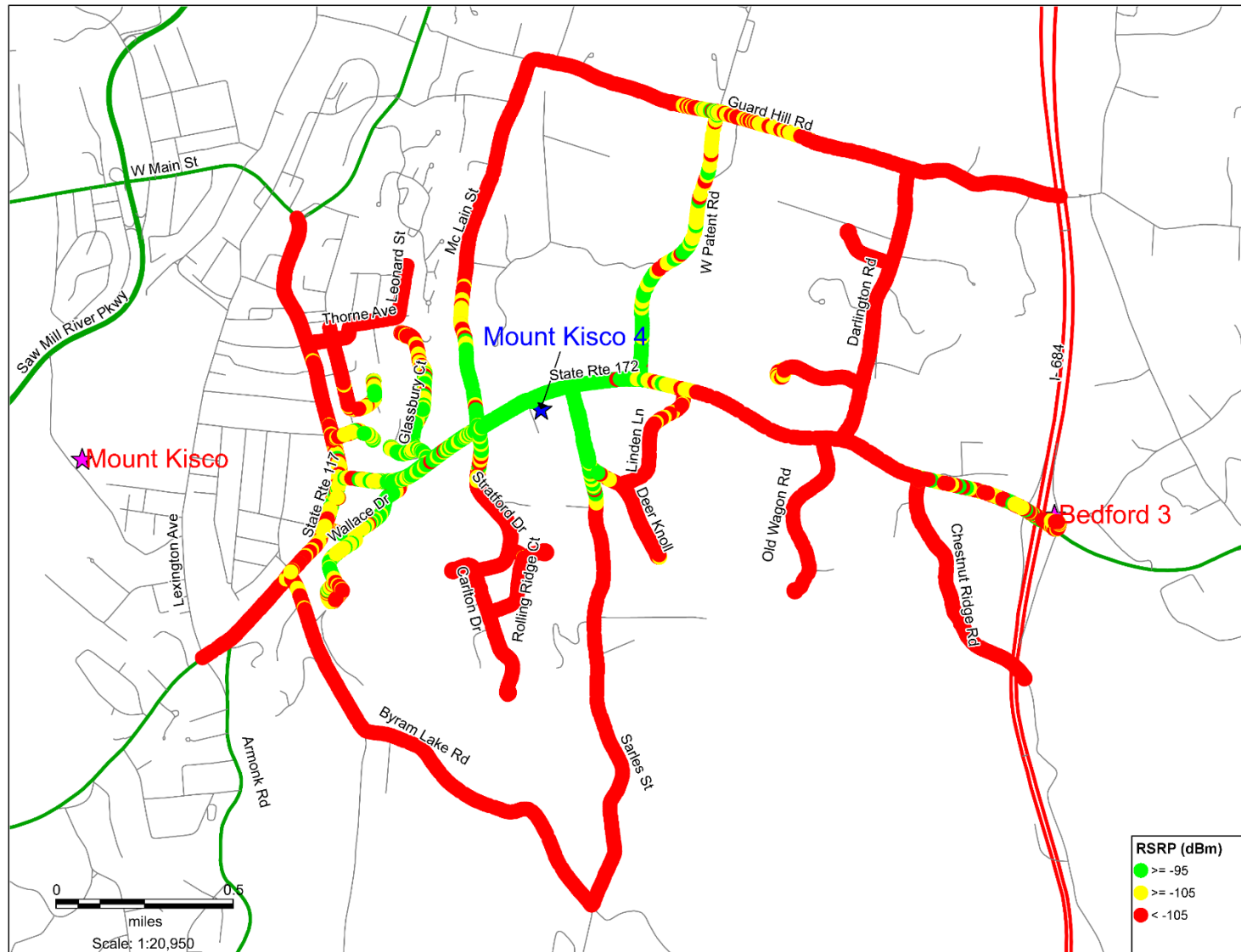


# Mount Kisco 4 On-Air 2100 MHz LTE (Channel 2050) – SINR Level



# Mount Kisco 4 CW Testing

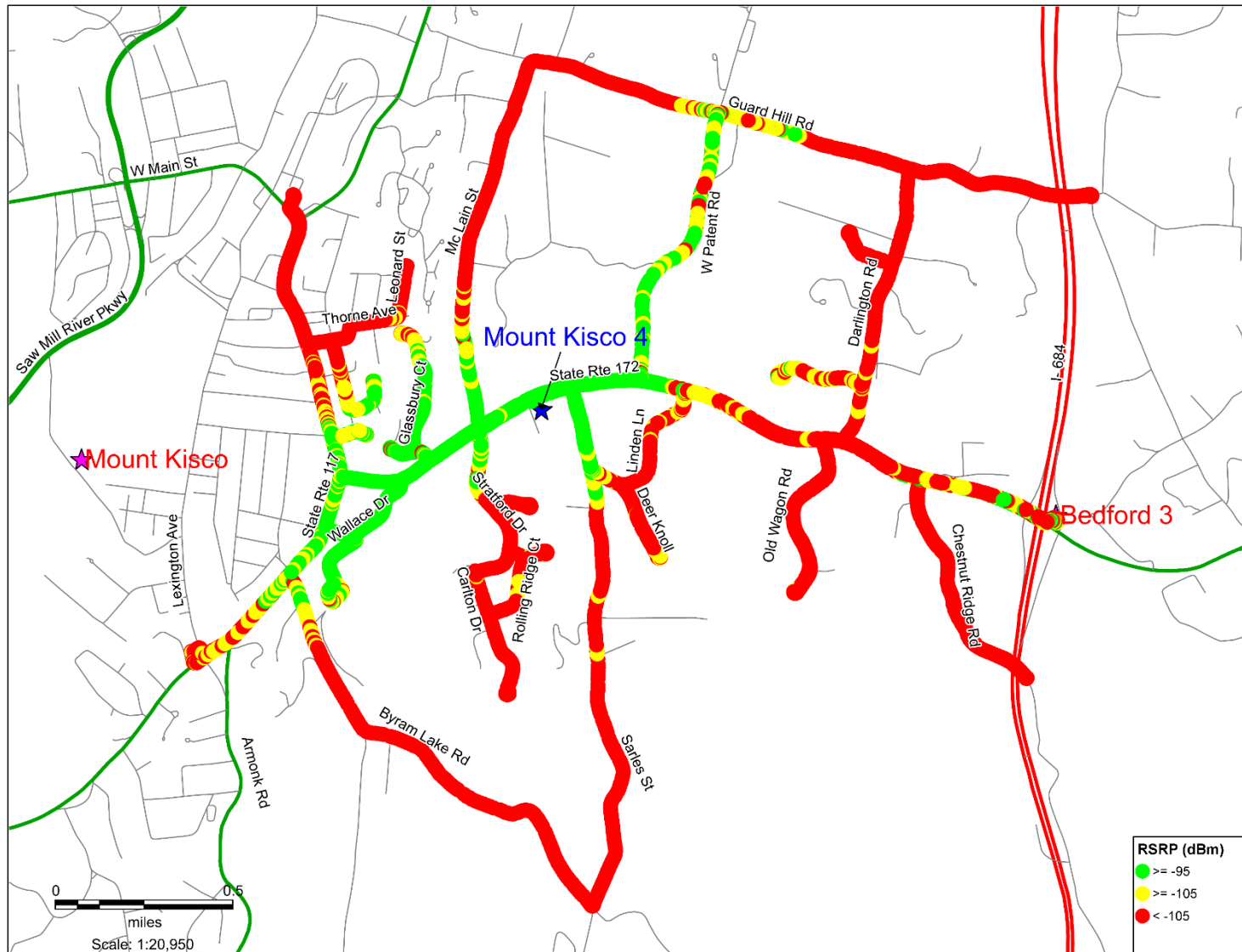
## 700 MHz (756.5 MHz) – 87' C/L





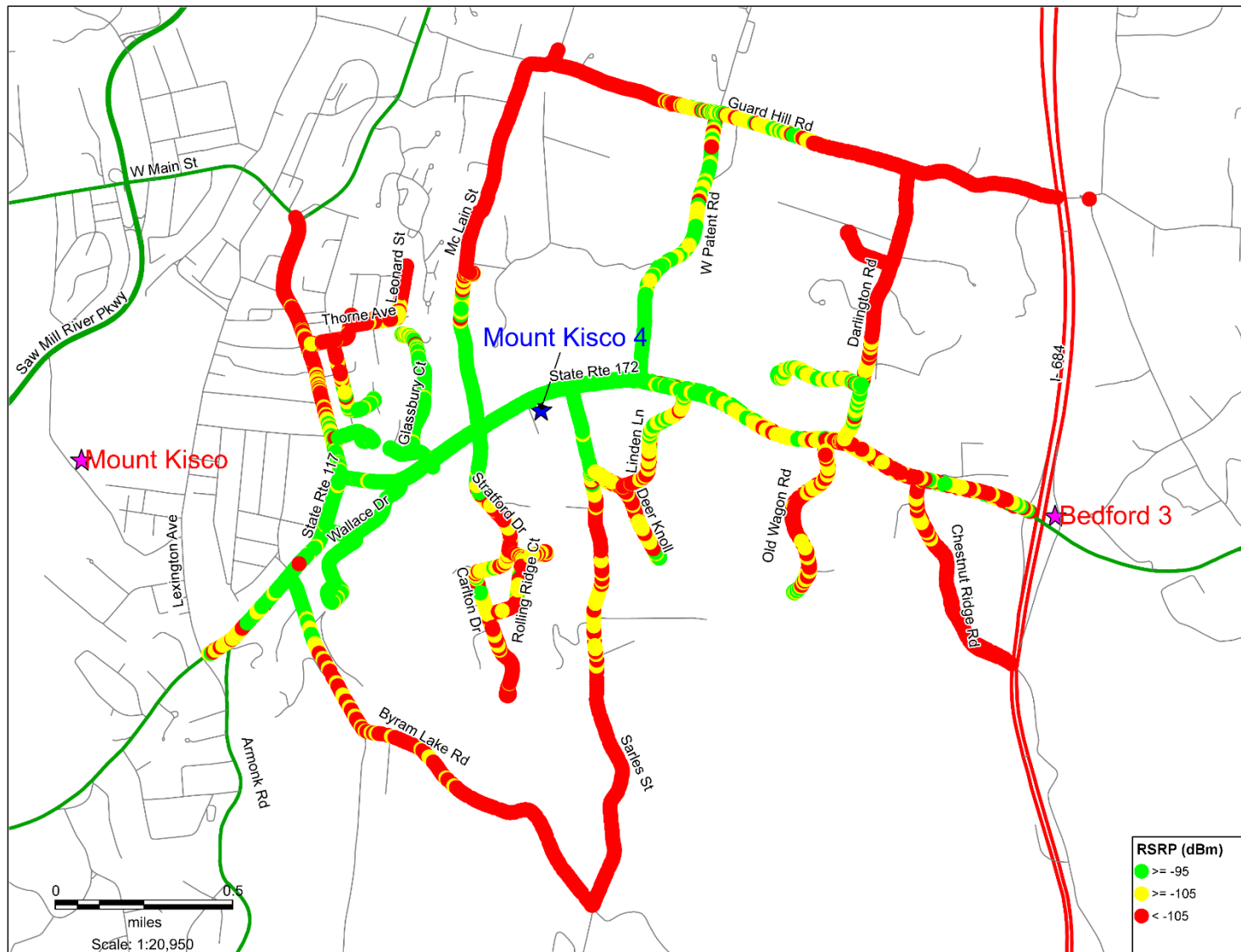
# Mount Kisco 4 CW Testing

## 700 MHz (756.5 MHz) – 107' C/L



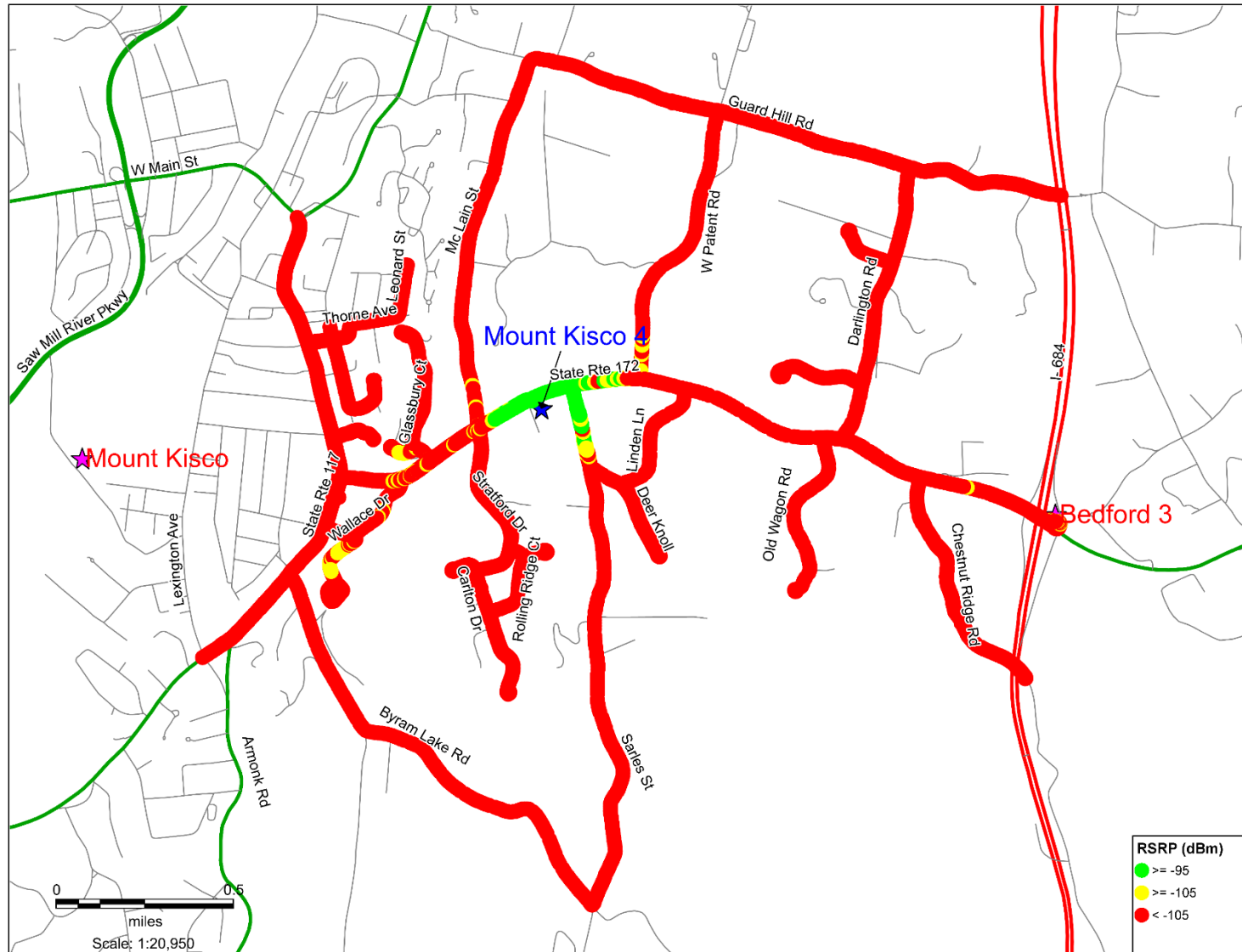
# Mount Kisco 4 CW Testing

## 700 MHz (756.5 MHz) – 137' C/L



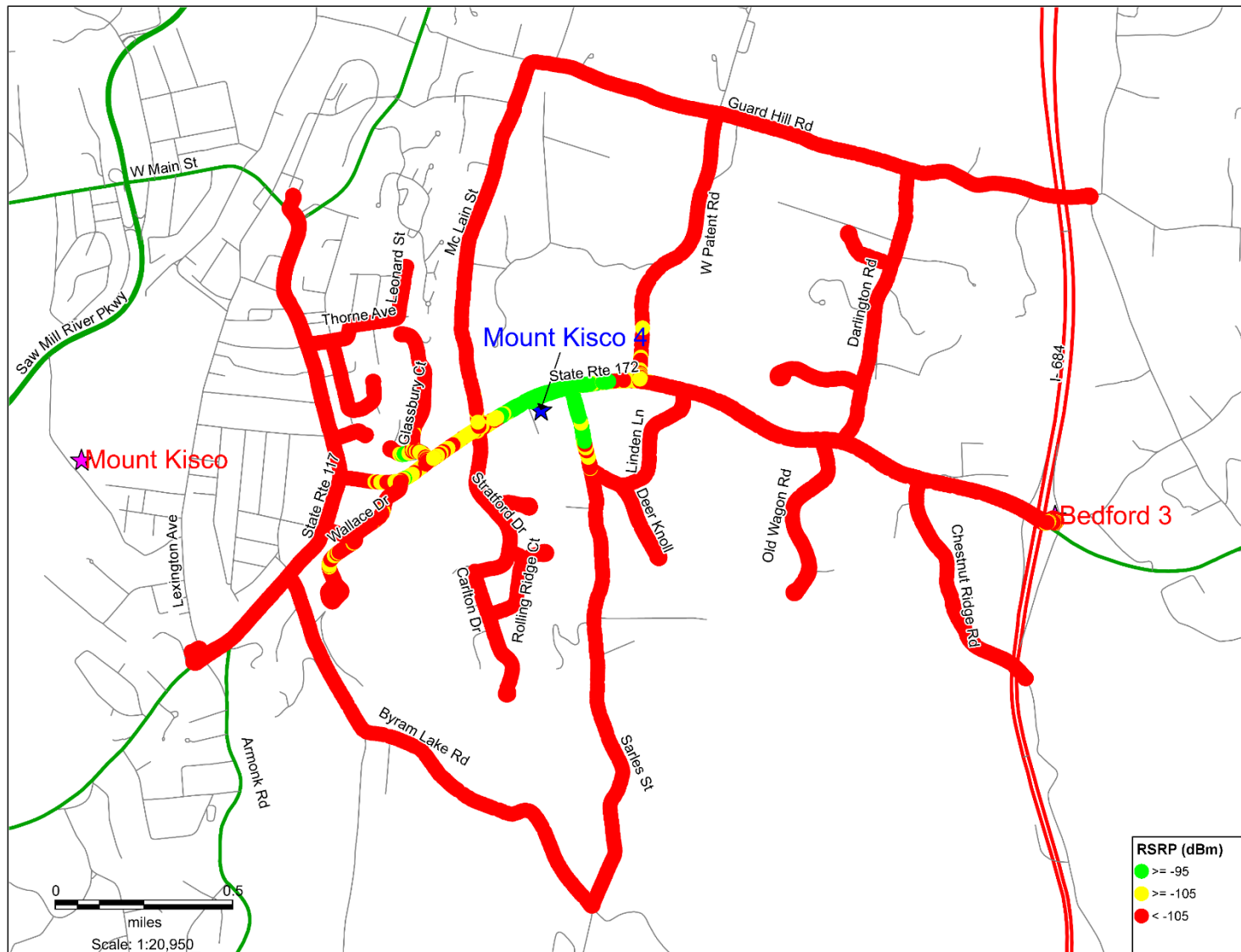


# Mount Kisco 4 CW Testing 2100 MHz (2110.5 MHz) – 87' C/L



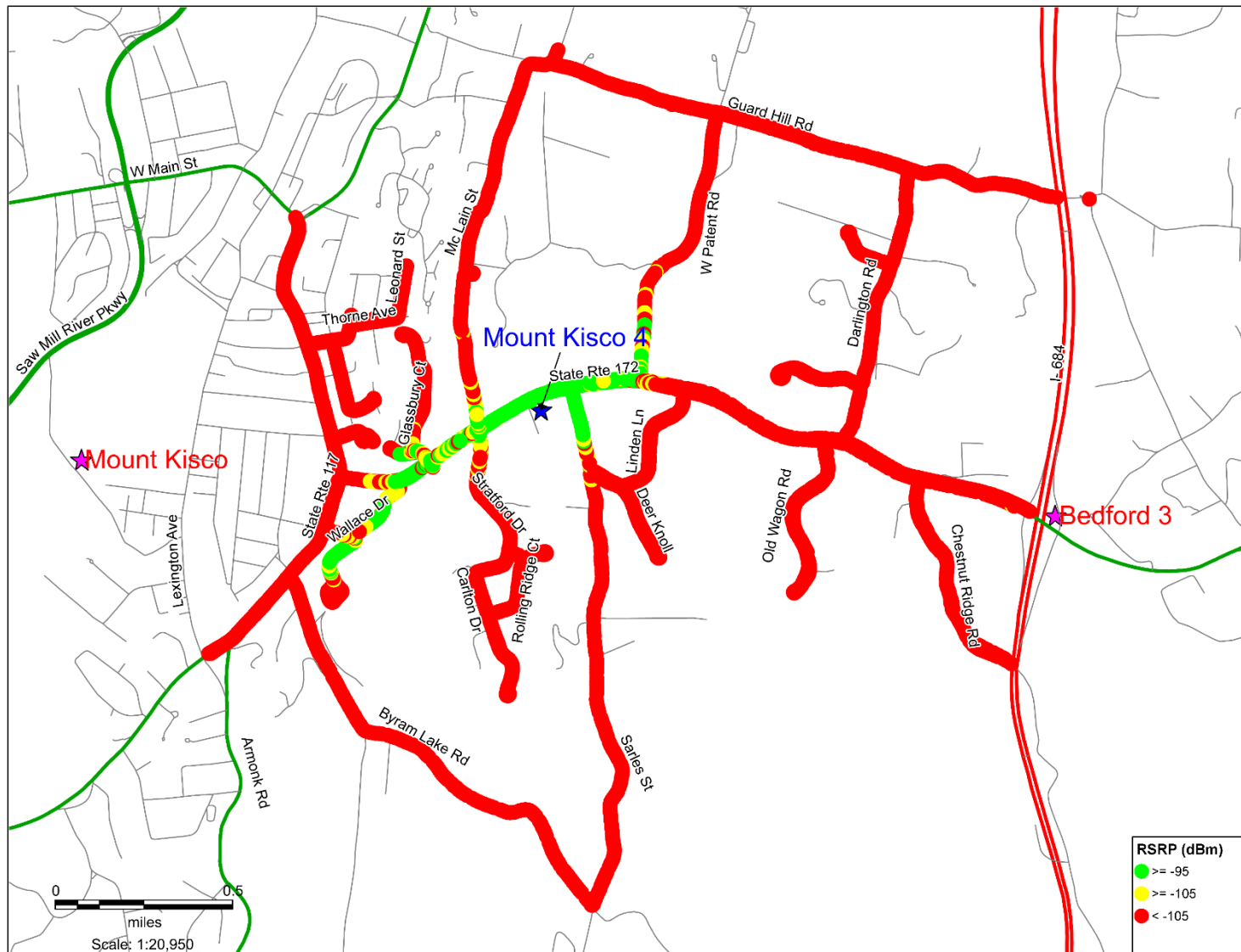
# Mount Kisco 4 CW Testing

## 2100 MHz (2110.5 MHz) – 107' C/L





# Mount Kisco 4 CW Testing 2100 MHz (2110.5 MHz) – 137' C/L





July 1, 2021

Hon. Chairman and Members of the Planning Board  
Village of Mt Kisco  
104 Main St  
Mt Kisco, NY 10549

Re: comparative access drive assessment to the  
Wireless Telecommunications Facility on Village property  
at 1 Mountain Ave, Mount Kisco, NY 10459

Hon. Chairman and Members of the Planning Board:

In response to comments made by the Fire Department regarding the adequacy of the access drive to the proposed site at 180 S Bedford Road, I have prepared a comparative access drive assessment to the Wireless Telecommunications Facility located on Village property at 1 Mountain Ave, Mt Kisco, NY 10459.

In a review memo dated October 6, 2020 the Fire Department states:

*1. Ingress to the site is only "one directional". Fire trucks are only able to access site while heading east on S. Bedford Road. Applicant should demonstrate that fire apparatuses are able to access site coming from both directions, east and west.*

As is shown in Exhibit A attached hereto, the existing access road to the Mountain Ave site can only be accessed coming straight from Mountain Ave. and not from Emery Street without making a multipoint turn in addition to the narrow gate at the entrance.

*2. Applicant should demonstrate that fire apparatuses are able to access site within a reasonable distance without blocking the only access road. Existing access roads are too narrow and turns appear too sharp.*

As is shown in Exhibit B attached hereto, the existing access road to the Mountain Ave site is approximately 10 ft wide and at no point wide enough that a parked fire apparatus would not be blocking the only access road and could be passed by another vehicle. As is also shown in Exhibit A the existing access road to the Mountain Ave site has a very similar sharp turn which is much sharper than the proposed site.

*3. Compound facility turn-around appears too small for a fire apparatus to be able to turn around and not have to back out the entire way to S. Bedford Road.*





As is shown in Exhibit C attached hereto, the existing compound at the Mountain Ave site has no turn around at all and a fire apparatus would not be able to turn around and would have to back out the entire way to Mountain Ave.

*4. Parking areas for incoming fire apparatuses and staging areas should be able to accommodate, at a minimum: one tanker truck, one fire pumper truck, two 15 ft x 15 ft pools on a level surface and an area for additional arriving firefighters. Area should be large enough to enable tanker truck swap during a fire.*

As is shown in Exhibit D attached hereto, the existing site compound at the Mountain Ave site has no parking area or staging area. There is no demonstration that fire apparatus would even be able to access the site at Mountain Ave.

In a review memo dated January 19, 2021 the Fire Department states:

*1. .... Please note\* The New York State Fire Code permits the authority having jurisdiction to require two - separate access roads (refer to 2020 NYSFC 503.1.2 "Additional access." The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access). Having only one proposed access road that leads to the proposed facility site, access to site, should not be further reduced. If access is limited to arriving emergency crews to only one direction, plan should be revised to include a second emergency access road off of Sarles Street.*

As is shown in Exhibit E the existing site at Mountain Ave site has only one single access drive and no secondary emergency access road.

*2. Proposed access road appears too narrow and the turns appear to be too sharp. Proposed should be able to demonstrate that all Mount Kisco Fire Trucks are able to access site to - or within a reasonable distance from the compound without blocking the only access road.*

As is shown in Exhibit A attached hereto, the existing access road to the Mountain Ave site has a similar sharp turn which is sharper than the proposed site. As is also shown in Exhibit A, the existing access road to the Mountain Ave site is approximately 10 ft wide and at no point wide enough that a parked Mount Kisco Fire Truck would not block the only access road and could be passed by another vehicle.

*3. The proposed supply pools location should not be staged directly within the compound. Proposed should include an area away from the compound that is large enough for two 15 X 15 ft. supply pools located in close proximity however, far enough away from the actual compound which would be the anticipated origin of a fire. The area for the supply pools should be large enough for a pumper truck can be located next to the pool, and enough additional area*



*should be provided for a tanker truck to access the pools and fill them with water, leave site to refill tank, and return to fill on a rotating basis.*

As is shown in Exhibit D attached hereto, the existing site compound at the Mountain Ave site has no area for two 15 ft x 15 ft supply pools, any area large enough for a pumper truck and enough additional area for a tanker truck to access the pools and fill them with water, leave the site to refill the tank and return to fill on a rotating basis. There is no indication that the water tank could be used. It is not shown that a fire apparatus would be able to access the site at Mountain Ave.

*4. The proposed area for arriving fire fighters is located too close to the compound and in an area that will be necessary for fire truck access and positioning. Parking for arriving fire fighters should be located further away from the compound.*

As is shown in Exhibit D attached hereto, there is no parking for firefighters anywhere along the access road near the site compound.

*5. Applicant should demonstrate that the access roads and staging areas are designed to support multiple types of fire apparatuses.*

As is shown in Exhibit D attached hereto, it is not shown that the access road for the site at Mountain Ave is designed to support multiple types of fire apparatuses, has any staging area or that a fire apparatus would be able to access the site at all.

*6. The Aerial Fire Truck (43.00 ft.) utilized to demonstrate access and turnaround on site is too small. The Mount Kisco Fire Department utilizes a Tower Ladder that is in excess of 56 feet long.*

As is shown in Exhibit B, C & D attached hereto, it is not shown that the access road for the site at Mountain Ave is designed for a 56 ft long fire apparatus or has any turnaround on site for any fire apparatus.

*7. Applicant should demonstrate on the drawing FD-1 that "pass-by" lanes along the access road are adequately sized for fire trucks to pass one another.*

As is shown in Exhibit B attached hereto, it is not shown that the access road for the site at Mountain Ave has any pass-by lanes along the access road anywhere along the road.

## **Conclusion:**

In conclusion, it appears the comments made by the Fire Department regarding the adequacy of the access road are arbitrary and that no uniform standard for emergency vehicle access is being applied, particularly with respect to other wireless facilities.





Respectfully,

*Klaus Wimmer*

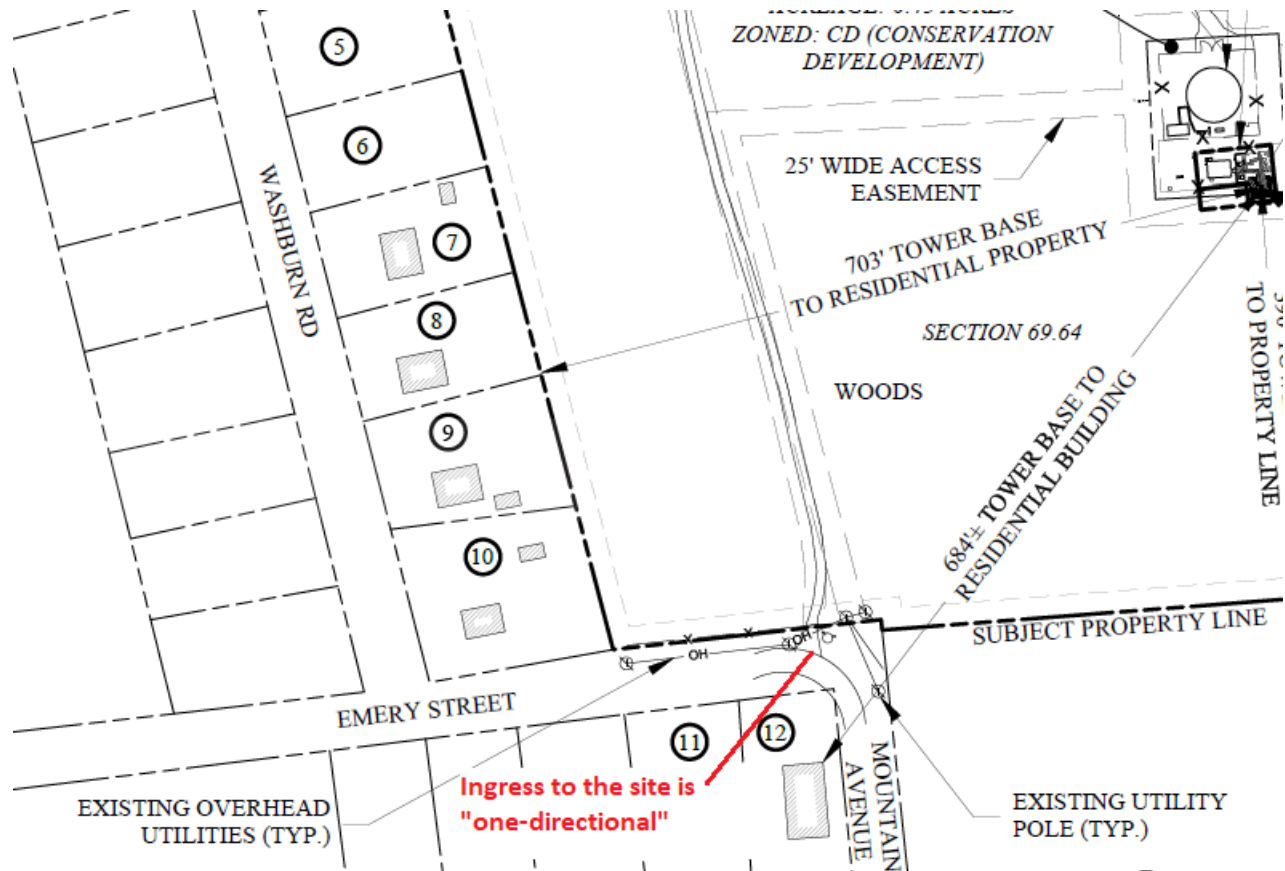
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Klaus Wimmer  
Regional Manager  
Homeland Towers, LLC

cc: Zoning Board

# EXHIBIT A

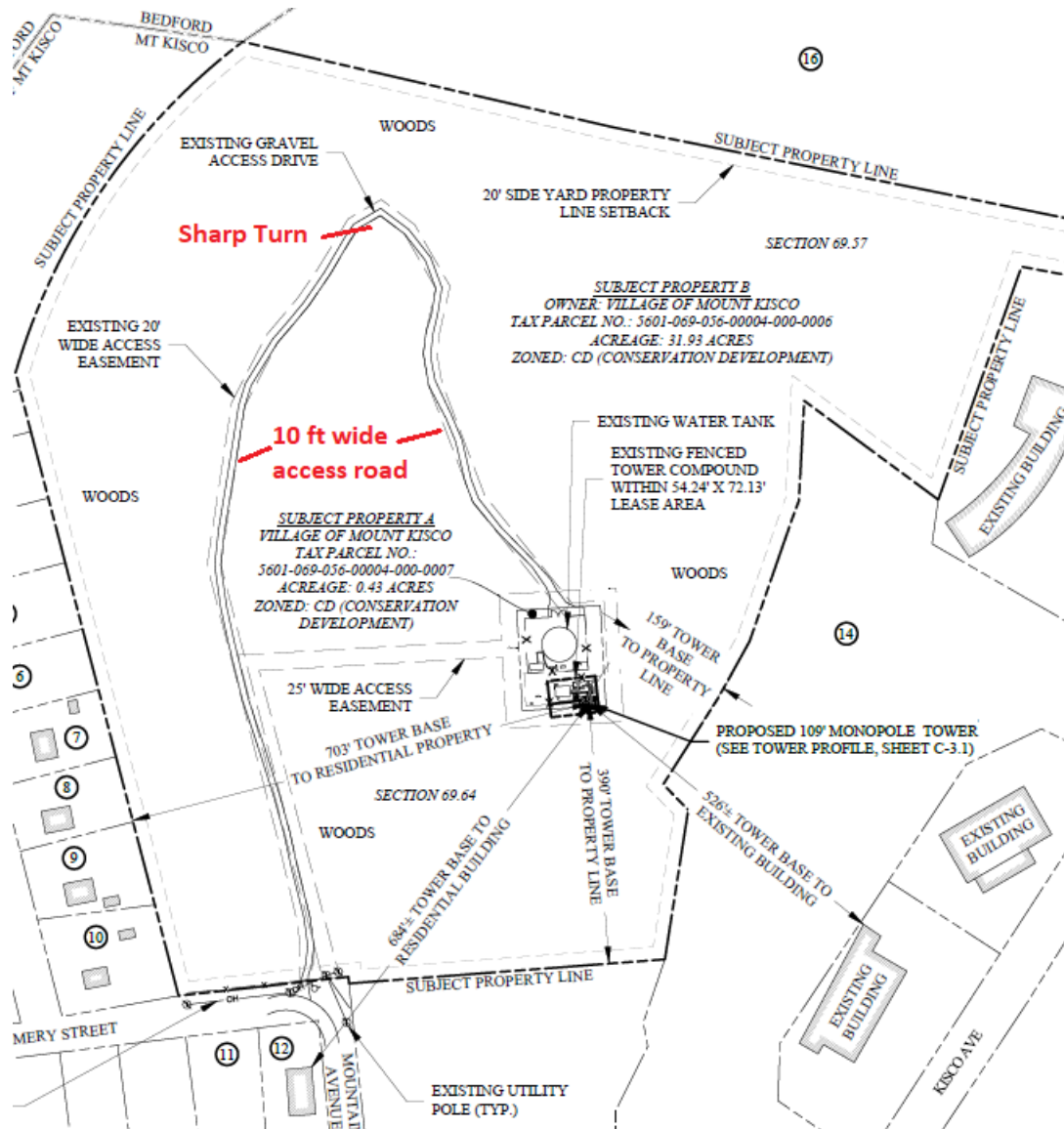
Ingress to the site is "one-directional"



Access from Emery Street (from right) only with multipoint turn



**Showing 10 ft wide access drive and sharp turn**





**10 ft wide access road – not wide enough to park without blocking road**

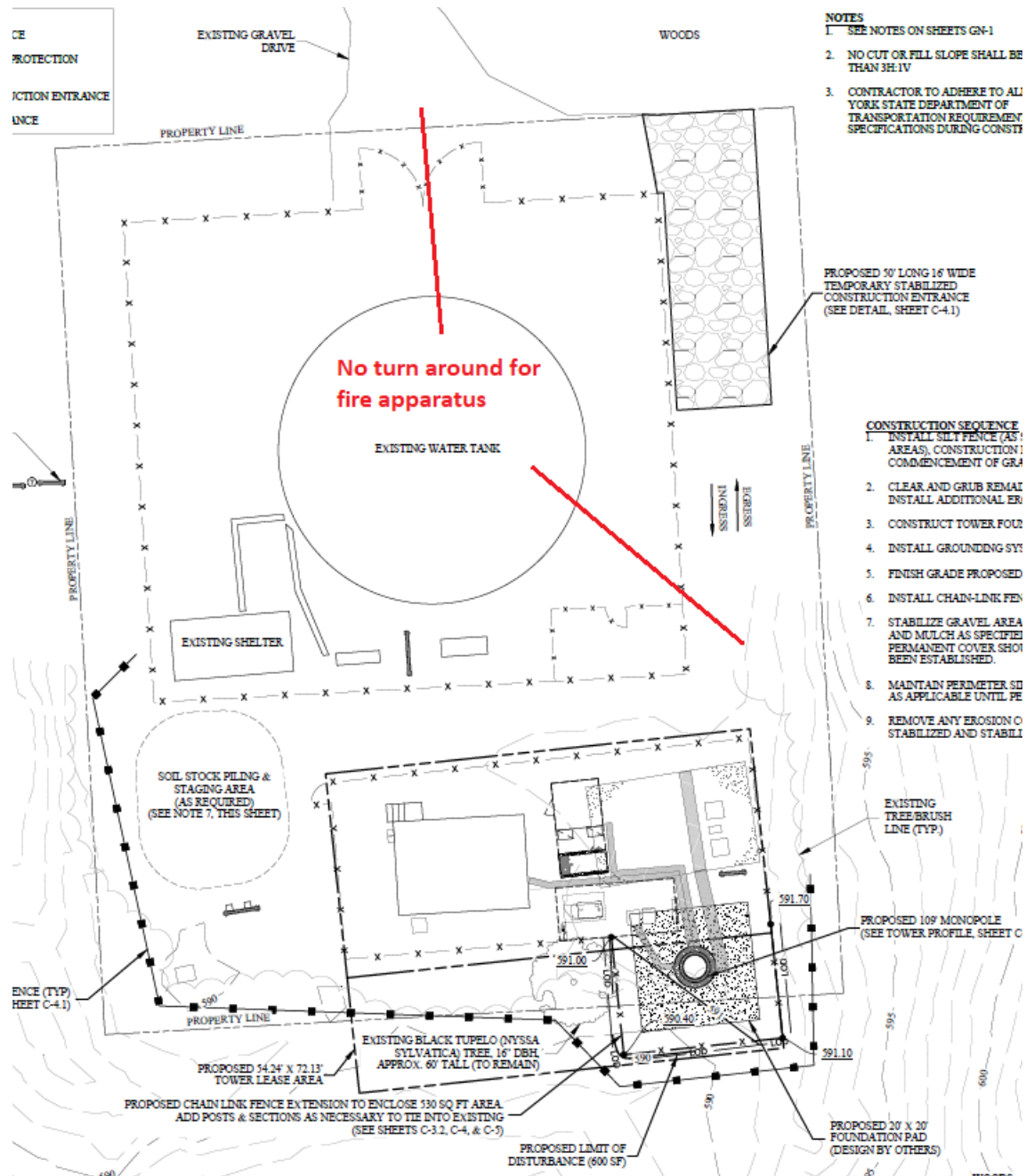


**Sharp turn similar to access drive to proposed site**



# EXHIBIT C

No turn around for fire apparatus





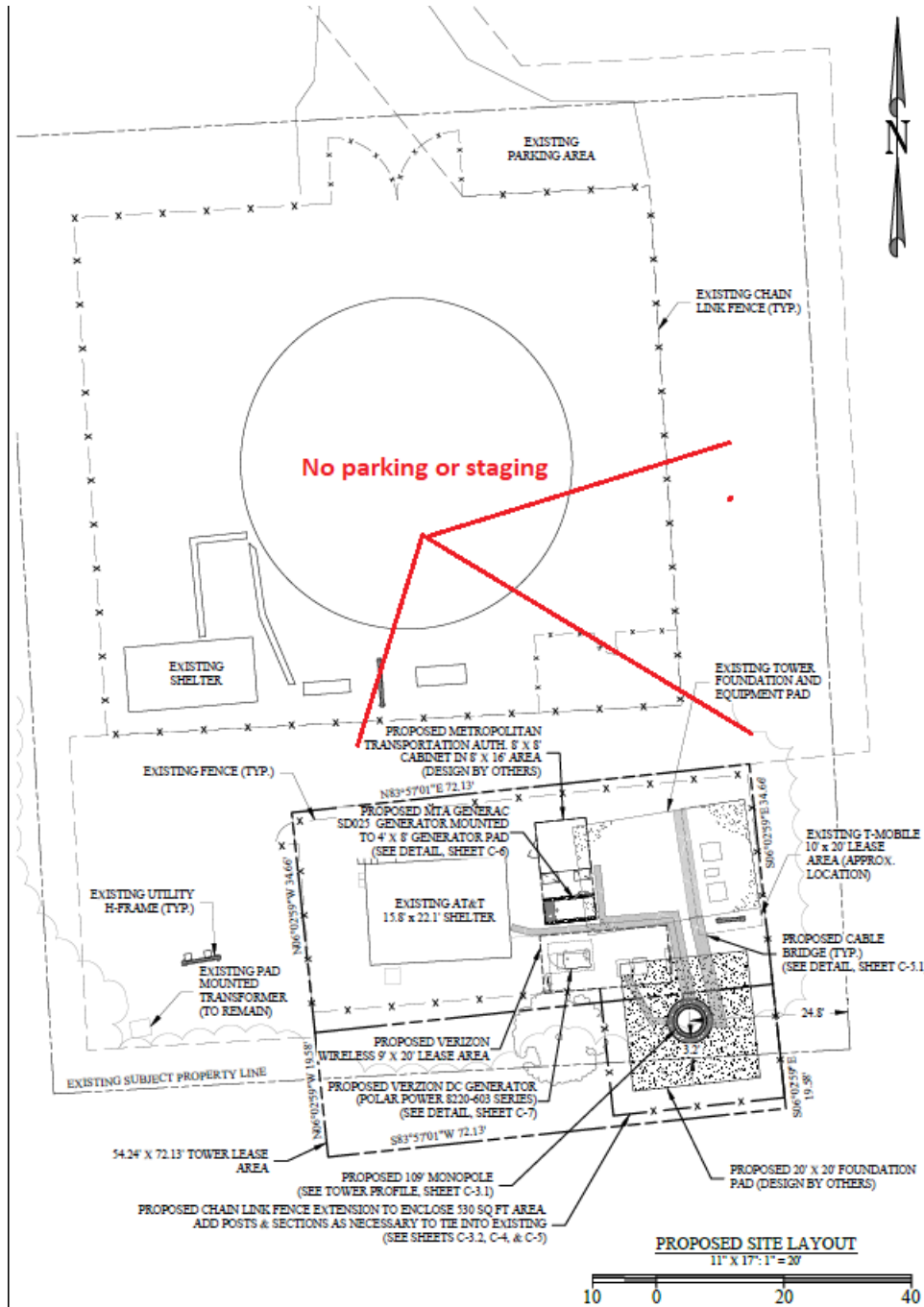
**No turn around for fire apparatus**





# EXHIBIT D

No parking or staging





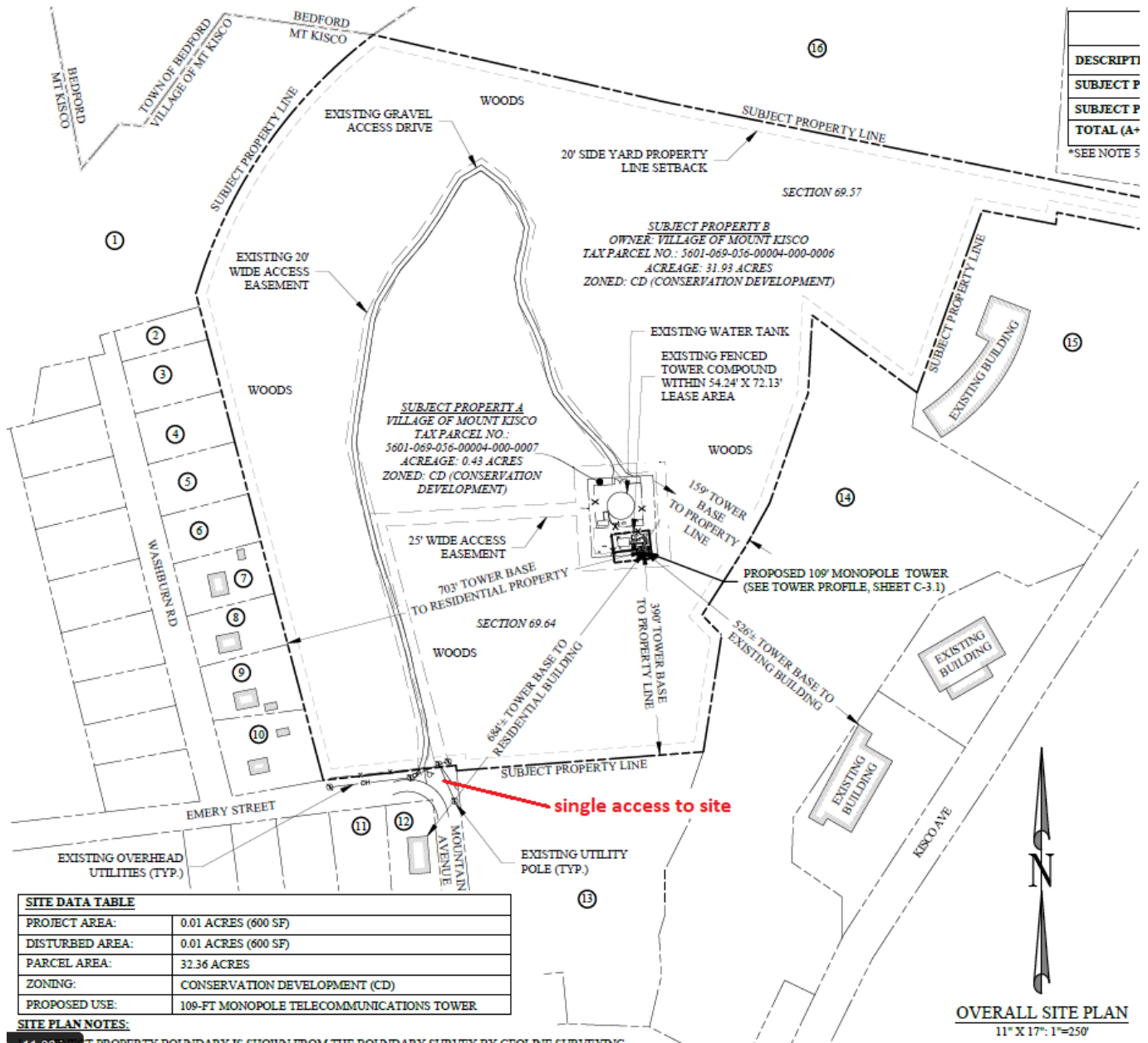
**No parking or staging**





# EXHIBIT E

One single access to Mountain Ave site







July 13, 2021

Honorable Chairman Bonaforte and  
Members of the Planning Board  
Village of Mount Kisco  
104 Main St  
Mount Kisco, NY 10549

RE: Homeland Towers/ Verizon Wireless Telecommunications Facility  
response letter to HDR memo of February 4, 2021  
regarding alternate site analysis of 21 Linden Ln, Bedford, NY

Hon. Chairman and Members of the Planning Board:

I am the Regional Manager for Homeland Towers, LLC. As such I was responsible for identifying a suitable location for a telecommunications facility that would remedy the significant gap in reliable wireless service throughout the eastern portion of Mount Kisco in the vicinity and along Route 172.

In section 1. "Alternate Site Analysis" of Mr. Musso's, HDR review memo of February 4, 2021 Mr. Musso states: *(italic added for emphasis)*

*a. A letter of interest to accommodate a wireless facility was recently submitted to Homeland and the Village Planning Board for a 4-acre (+/-) property located approximately 1200-1300 ft east of the currently proposed tower location, along the south side of Route 172 in the Town of Bedford (21 Linden Lane; see letter from property owner attorney dated January 25, 2021).*

*i. As discussed with the applicant, this property must be evaluated in detail as a viable alternative, including submittal of a technical report that includes:*

*1. Documentations of property owner outreach and correspondences;*

Please see copies of owner outreach and correspondences attached hereto in Exhibit A

*2. Coverage potential – including assumptions for tower height and location on the property (Verizon 145 ACL, 155 ACL should be evaluated, at minimum); coverage maps consistent in scale, frequencies (low and high band), and signal strengths as presented in the V-Comm October 2020 RF assessments that have been provided for 180 S. Bedford Road.*



The alternate site at 21 Linden Lane, Bedford, NY does not meet the required coverage objective. Please see the V-Comm Third Supplemental Report dated July 12, 2021 as part of this application.

*3. Constraints or opportunities that are noted during the applicant's evaluation of this alternate.*

On March 16, 2021 we conducted an on-site meeting with the owner of 21 Linden Lane and APT Engineering to determine a suitable location for a potential site and prepare a preliminary layout and design. On March 31, 2021 we had a site visit with Ecological Solutions to delineate the wetlands located on the property. Please see a copy of the preliminary layout attached in Exhibit B. An initial review of the Bedford zoning code determined the following permitting constraints:

- The Town of Bedford Code Chapter 122. Wetlands § 122-9. (6) (b) states: "Location of construction or area proposed to be disturbed and its relation to property lines, buildings, roads and watercourses within 250 feet". The proposed site is +/- 141 ft from an existing stream therefore a wetlands permit would be required.

- Section 125-85.2(BB) of the zoning code sets the following location priorities:

(1) Applications for special use permits for large wireless facilities shall locate, site and erect said wireless telecommunications facilities in accordance with the following priorities, (a) being the highest priority and (g) being the lowest priority.

(a) Co-location on existing wireless telecommunications facilities on lands owned or controlled by the Town, not including the public right-of-way;

(b) Co-location on a site with existing wireless telecommunications facilities or other tall structures in the Town;

(c) On other lands owned or controlled by the Town, including, but not limited to, the Town public right-of-way;

(d) On lands owned or controlled by other municipal corporations within the Town, to the extent permitted by such other municipal corporation;

(e) On nonresidential zoned properties;

(f) On residential zoned properties; and

(g) No large wireless facilities shall be permitted in the Bedford Historic District, Katonah Historic District, or on any property designated as a Tier I or Tier II property,





## HOMELAND TOWERS

unless the applicant demonstrates to the Planning Board's satisfaction that the selected site is necessary to provide adequate service and no feasible alternative site exists. Approval shall be required from the Bedford Village Historic District Review Commission, the Katonah Historic District Advisory Commission, or the Historic Building Preservation Commission, as appropriate, before any large wireless facility is approved in the Bedford Historic District, Katonah Historic District, or on any property designated as a Tier I or Tier II property.

(2) If the proposed site is not proposed for the highest priority listed above, then a detailed explanation must be provided as to why a site of a higher priority was not selected. The person seeking such an exception must satisfactorily demonstrate the reason or reasons why such a special use permit should be granted for the proposed site and the hardship that would be incurred by the applicant if the permit were not granted for the proposed site.

(3) An applicant may not bypass sites of higher priority by stating the site proposed is the only site leased or selected. An application shall address co-location as an option. If such option is not proposed, the applicant must explain to the reasonable satisfaction of the Planning Board why co-location is commercially impracticable.

- 21 Linden Lane is located in the 4A (4 acres residential) zoning district and thereby falls under the category (f) lowest priority designation which requires a detailed explanation and justification as to why a site of a higher priority was not selected.
- Section 125-85.2(DD) of the zoning code establishes the following Height and Setback requirements:

“All large wireless facilities, including any support structures and accessory equipment, located outside the public right-of-way shall be set back from the property line of the lot on which they are located a distance equal to not less than the total height of the facility, including support structure, measured from the highest point of such support structure to the finished grade elevation of the ground on which it is situated, plus 10% of such total height. The Planning Board may reduce such setback requirements based upon consideration of lot size, topographic conditions, adjoining land uses, landscaping, other forms of screening and/or structural characteristics of the proposed support structure.”

The height of the proposed tower is shown at 150 ft (the maximum height – see below) which requires a setback from any property line of no less than 165 ft (height of structure plus 10%). In the event the Planning Board does not reduce the setback requirement a variance from the Zoning Board of Appeals for the setback to the property line to the north (+/- 103 ft) and the west (+/- 120 ft) would be required.



- Section 125-85.2(CC) states that “wireless telecommunications facility support structures shall be no higher than the minimum height necessary. The proposed height, which may be in excess of the maximum height permitted for other structures in the applicable zone, shall address any additional height necessary to accommodate co-location by additional antenna arrays, but under no circumstances is the height to be in excess of 150 feet.”

As is stated in the V-Comm Third Supplemental Report dated July 12, 2021 which is part of this application, the proposed site does not meet the required coverage objective at 150 ft height. As is stated in this code section “under no circumstances is the height to be in excess of 150 feet.”

#### **Conclusion:**

As is stated herein the alternate location at 21 Linden Lane, Bedford, NY does not meet the coverage objective of the site. In addition, a review of the Town of Bedford Zoning Code finds that a wetland permit is required and the site would not meet the height or 2 setback requirements of the Bedford Code.

As detailed in my “Supplemental Site Justification Report” dated February 12, 2021 Exhibit I, about 16 residences and 3 commercial buildings would be within a ¼ mile distance from a site at 21 Linden Lane as opposed to only 8 residences that would be located within a ¼ mile distance of the proposed site at 180 S. Bedford Road as shown in Exhibit F of the same report.

Moreover, the visual renderings attached hereto as Exhibit C demonstrate that a facility at 21 Linden Lane would be extremely visible, particularly from West Patent Road, Route 172 and the neighboring residential community as predicted by Mr. John Stockbridge.

The speculative alternative site at 21 Linden Lane in the neighboring Town of Bedford is not a feasible alternative site and is not a less intrusive alternative to remedy the significant gap in service in the Village of Mount Kisco as compared to the proposed site at 180 S. Bedford Road, Mount Kisco.

Respectfully,

*Klaus Wimmer*

---

Klaus Wimmer  
Regional Manager  
Homeland Towers, LLC.





## **EXHIBIT A**

Copies of correspondence with the owner and owner's attorney

# FAX

**Date:** 01/25/2021**Pages including cover sheet:** 3

<b>To:</b>	9143330743@rcfax.com
<b>Phone</b>	
<b>Fax Phone</b>	(914) 333-0743

<b>From:</b>	Anthony Cassese
	The Law Offices of Anthony J. Cassese
	7-11 S. Broadway
	White Plains
	NY 10601
<b>Phone</b>	(888) 468-9981 * 101
<b>Fax Phone</b>	18884476385

**NOTE:**

Transmitted herewith please find my letter of January 25, 2021



FROM: Anthony Casseese FAX: 914-333-0743 TO: 914-333-0743 Page: 2 of 3 01/25/2021 2:55 PM

# ANTHONY J. CASSESE, ESQ.

---

ATTORNEY AT LAW

ANTHONY J. CASSESE, ESQ. • †  
ANTHONY@CASSESEBLAW.COM

7-11 S. BROADWAY - SUITE 308  
WHITE PLAINS, NY 10601

+1 914.533.3030 NY

+1 888.447.6385

• MEMBER OF NY BAR

† MEMBER OF CT BAR

Via Facsimile – 914-333-0743  
January 25, 2021

Homeland Towers, LLC  
C/O Snyder and Snyder, LLP  
94 White Plains Road  
Tarrytown, New York 10591

Re: Cell Phone Tower Application;  
Route 172 adjacent to Marsh Sanctuary

Dear Sir/Madam:

My client has recently become aware of your client's cell tower application on a parcel in Mount Kisco along Route 172, next to Marsh Sanctuary. The tower's proposed location is located west of a property that my client owns, known as 21 Linden Lane in Bedford. It is also my client's understanding that you are seeking alternate locations.

After careful consideration, my client believes his property may be a viable alternate to the proposed site, as it is located along the 172 corridor and close to (approximately 1,200 feet east) the currently proposed location. Unlike the sanctuary parcel, my client's parcel is bordered by Route 172, the Unitarian Church, Linden Lane and a wetlands parcel incapable of any development. My client's four-plus acre parcel has over 350 feet of frontage along Route 172 which is densely screened with mature plantings, is roughly the same or higher elevation than your current site, is relatively flat (the 4+ acres range in elevation between 470 and 486 feet and has no steep slopes, wetlands or flood plains. The nearest house to the location that we would anticipate you locating the facility is well over 700 feet.

The proposed subject Premises has dual access between the Premises on Linden Lane and gated access on Route 172. My client's Premises is about the midpoint in the gap in your signal coverage along Route 172.

I am writing this letter to make you aware of my client's interest to accommodate a wireless facility at the above-referenced property, and he interested in speaking with the applicant with respect to options. Kindly contact my office at your earliest convenience to discuss this more fully.

Very truly yours,

  
Anthony J. Cassese

Cc: Client  
Mt. Kisco Planning Board

## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Wednesday, January 27, 2021 3:23 PM  
**To:** anthony@casseselaw.com  
**Subject:** 21 Linden Lane Bedford / Mt Kisco  
**Attachments:** 21 Linden Lane Bedford 1-26-21.pdf; 21 Linden Ln Tax map.pdf

Good Afternoon Mr. Cassese,

I am responding to the fax you sent to attorney Robert Gaudioso regarding 21 Linden Lane, Bedford and the owner's interest to lease us space for a cell tower. We will certainly evaluate your client's property as a possible location. As part of our site due diligence we'll have to perform a coverage analysis. I have attached a tax map of the property. Kindly mark off where the owner would like to locate the site and email it back to me.

Please contact me with any questions or to discuss. I look forward to hear back from you.

Thanks

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:17 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford / Mt Kisco  
**Attachments:** 21 Linden Lane Bedford 1-26-21.pdf; 21 Linden Ln Tax map.pdf

---

**From:** Klaus Wimmer  
**Sent:** Monday, February 1, 2021 1:34 PM  
**To:** anthony@casseselaw.com  
**Cc:** Robert Gaudio <RGaudio@snyderlaw.net>  
**Subject:** FW: 21 Linden Lane Bedford / Mt Kisco

Mr. Cassese,

I am following up on the attached letter you sent to attorney Robert Gaudio (copied) regarding a wireless facility at 21 Linden Lane. Please indicate where on the property this facility should be placed so we can evaluate this location. I look forward to hear back from you at your earliest convenience.

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 3:12 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford / Mt Kisco  
**Attachments:** 20210127\_155417\_resized.jpg

---

**From:** Anthony Cassese <anthony@casseselaw.com>  
**Sent:** Monday, February 1, 2021 1:39 PM  
**To:** Klaus Wimmer <kw@homelandtowers.us>  
**Cc:** Robert Gaudio <RGaudio@snyderlaw.net>  
**Subject:** RE: 21 Linden Lane Bedford / Mt Kisco

Klaus, please see approximate locations in the attached JPG. I am out of the office today, however I will be available tomorrow at 9:30am. Kindly advise if that works for you. If so, we will put it on the calendar.

Best Regards,

Anthony J. Cassese, Esq.  
The Law Offices of Anthony J. Cassese, PLLC  
7-11 S. Broadway - Suite 308  
White Plains, NY 10601  
Ofc: (914) 533-3030  
Fax: (888) 447-6385

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:20 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford / Mt Kisco

---

**From:** Klaus Wimmer  
**Sent:** Monday, February 1, 2021 1:45 PM  
**To:** Anthony Cassese <anthony@casseselaw.com>  
**Cc:** Robert Gaudio <RGaudio@snyderlaw.net>  
**Subject:** RE: 21 Linden Lane Bedford / Mt Kisco

Great, thank you. Yes I am available tomorrow for a call at 9:30  
Looking forward.

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:20 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford / Mt Kisco

**From:** Anthony Cassese <anthony@casseselaw.com>  
**Sent:** Monday, February 1, 2021 1:48 PM  
**To:** Klaus Wimmer <kw@homelandtowers.us>  
**Cc:** Robert Gaudio <RGaudio@snyderlaw.net>; Carelisse Barbosa <carelisse@casseselaw.com>  
**Subject:** RE: 21 Linden Lane Bedford / Mt Kisco

Thank you Klaus. I will call you at 9:30am.

Carelisse, please put this on the calendar.

Best Regards,

Anthony J. Cassese, Esq.  
The Law Offices of Anthony J. Cassese, PLLC  
7-11 S. Broadway - Suite 308  
White Plains, NY 10601  
Ofc: (914) 533-3030  
Fax: (888) 447-6385

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:21 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford / Mt Kisco

**From:** Anthony Cassese <anthony@casseselaw.com>  
**Sent:** Tuesday, February 2, 2021 10:23 AM  
**To:** Klaus Wimmer <kw@homelandtowers.us>  
**Cc:** Robert Gaudio <RGaudio@snyderlaw.net>  
**Subject:** RE: 21 Linden Lane Bedford / Mt Kisco

Klaus, It was good speaking with you this morning.

Kindly advise as to the results of your due diligence. I look forward to speaking with you soon.

Best Regards,

Anthony J. Cassese, Esq.  
The Law Offices of Anthony J. Cassese, PLLC  
7-11 S. Broadway - Suite 308  
White Plains, NY 10601  
Ofc: (914) 533-3030  
Fax: (888) 447-6385

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:21 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford / Mt Kisco

**From:** Klaus Wimmer  
**Sent:** Tuesday, February 2, 2021 10:38 AM  
**To:** Anthony Cassese <anthony@casseselaw.com>  
**Cc:** Robert Gaudio <RGaudio@snyderlaw.net>  
**Subject:** RE: 21 Linden Lane Bedford / Mt Kisco

Hi Anthony, likewise. We'll get back with you as soon as we know more.

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:22 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford / Mt Kisco

**From:** Anthony Cassese <anthony@casseselaw.com>  
**Sent:** Tuesday, February 2, 2021 10:44 AM  
**To:** Klaus Wimmer <kw@homelandtowers.us>  
**Cc:** Robert Gaudio <RGaudio@snyderlaw.net>  
**Subject:** RE: 21 Linden Lane Bedford / Mt Kisco

Thank you Klaus.

Best Regards,

Anthony J. Cassese, Esq.  
The Law Offices of Anthony J. Cassese, PLLC  
7-11 S. Broadway - Suite 308  
White Plains, NY 10601  
Ofc: (914) 533-3030  
Fax: (888) 447-6385

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Monday, March 8, 2021 4:15 PM  
**To:** Anthony Cassese  
**Subject:** 21 Linden Lane Bedford  
**Attachments:** NY172 Mt Kisco - 21 Linden Ln Lease DRAFT 3-8-21.docx

Good afternoon Anthony,

Attached please find a draft of a proposed lease agreement. Kindly review and let me know if you have any comments or questions regarding any of the terms or conditions of the agreement. Please note that we have not yet determined whether 21 Linden Lane is a feasible alternative site and we are in the process of performing our due diligence and need to know if the terms and conditions in the attached lease are acceptable to your client. Please also confirm the name of your client.

As part of our due diligence we would like to schedule a site and design visit to the property to consider a preliminary design. The Town of Bedford and its consultants would also be invited. Please let me know dates and times that would be acceptable. We are available anytime later this week or any day next week. We ask that the property owner attend this visit.

I look forward to hearing back from you.

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
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**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:23 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford

**From:** Anthony Cassese <anthony@casseselaw.com>  
**Sent:** Monday, March 8, 2021 4:21 PM  
**To:** Klaus Wimmer <kw@homelandtowers.us>  
**Subject:** RE: 21 Linden Lane Bedford

Thank you Klaus. I will discuss with my client immediately and advise.

Best Regards,

Anthony J. Cassese, Esq.  
The Law Offices of Anthony J. Cassese, PLLC  
7-11 S. Broadway - Suite 308  
White Plains, NY 10601  
Ofc: (914) 533-3030  
Fax: (888) 447-6385

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:24 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford  
**Attachments:** NY172 Mt Kisco - 21 Linden Ln Lease DRAFT 3-8-21.docx

---

**From:** Klaus Wimmer  
**Sent:** Monday, March 8, 2021 4:23 PM  
**To:** Anthony Cassese <anthony@casseselaw.com>  
**Subject:** RE: 21 Linden Lane Bedford

Anthony,

Revised lease draft attached. Please delete the first copy I just sent, it contained a typo.

Thanks

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:24 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford

**From:** Klaus Wimmer  
**Sent:** Wednesday, March 10, 2021 4:30 PM  
**To:** Anthony Cassese <anthony@casseselaw.com>  
**Subject:** RE: 21 Linden Lane Bedford

Hi Anthony,  
Any word when we can schedule the visit and do you have any comments or questions on the lease ?  
We are hoping to get this done expeditiously.

Please let me know.

Thanks

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:24 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford

**From:** Anthony Cassese <anthony@casseselaw.com>  
**Sent:** Wednesday, March 10, 2021 4:32 PM  
**To:** Klaus Wimmer <kw@homelandtowers.us>  
**Subject:** RE: 21 Linden Lane Bedford

Good afternoon Klaus. I am reviewing with my client and will have a response to you within a couple of days.

I will have dates and times for the walk through for you shortly.

Best Regards,

Anthony J. Cassese, Esq.  
The Law Offices of Anthony J. Cassese, PLLC  
7-11 S. Broadway - Suite 308  
White Plains, NY 10601  
Ofc: (914) 533-3030  
Fax: (888) 447-6385

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:25 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford

---

**From:** Klaus Wimmer  
**Sent:** Wednesday, March 10, 2021 4:35 PM  
**To:** Anthony Cassese <anthony@casseselaw.com>  
**Subject:** RE: 21 Linden Lane Bedford

Ok, thank you !

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:25 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford

**From:** Anthony Cassese <anthony@casseselaw.com>  
**Sent:** Thursday, March 11, 2021 11:11 AM  
**To:** Klaus Wimmer <kw@homelandtowers.us>  
**Subject:** RE: 21 Linden Lane Bedford

Good morning Klaus. I hope all is well.

My client is currently working from home and his schedule is quite flexible. He can be at the property on 15 minutes notice. To make scheduling easier, he has authorized me to provide you with his contact info so you can contact him directly. My client is Neil B Rice and his number is 917 560 0323.

He is looking forward to your call.

Best Regards,

Anthony J. Cassese, Esq.  
The Law Offices of Anthony J. Cassese, PLLC  
7-11 S. Broadway - Suite 308  
White Plains, NY 10601  
Ofc: (914) 533-3030  
Fax: (888) 447-6385

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:26 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford

---

**From:** Klaus Wimmer  
**Sent:** Thursday, March 11, 2021 12:30 PM  
**To:** Anthony Cassese <anthony@casseselaw.com>  
**Subject:** RE: 21 Linden Lane Bedford

Thank you Anthony. I'll check what day works with my team and then contact your client to schedule a visit.

Thanks again !  
Klaus



## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:26 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane Bedford

**From:** Klaus Wimmer  
**Sent:** Friday, March 12, 2021 10:59 AM  
**To:** Anthony Cassese <anthony@casseselaw.com>  
**Subject:** RE: 21 Linden Lane Bedford

Hi Anthony, I just spoke to Neil and we scheduled a visit for Tuesday 3/16 at 10 am.

Thank you for your assistance.

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Friday, March 26, 2021 5:32 PM  
**To:** realtyking72@aol.com  
**Cc:** Anthony Cassese  
**Subject:** 21 Linden Lane site visit  
**Attachments:** Bedford - Gaudioso Letter - 21 Linden Lane 3-24-21.pdf

Hi Neil,

As discussed, I have scheduled a visit for next Wednesday 3/31 at 11 am with our environmental engineer to delineate the wetlands to make sure we are outside the buffer.

As requested in the attached letter we have informed Mr. Gordon / Town of Bedford of this visit. Please call me with any questions

Hope all is well !

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Friday, March 26, 2021 5:33 PM  
**To:** realityking72@aol.com  
**Subject:** FW: 21 Linden Lane site visit  
**Attachments:** Bedford - Gaudio Letter - 21 Linden Lane 3-24-21.pdf

Trying again, I think I had the wrong email address

---

**From:** Klaus Wimmer  
**Sent:** Friday, March 26, 2021 5:32 PM  
**To:** 'realityking72@aol.com' <realityking72@aol.com>  
**Cc:** 'Anthony Cassese' <anthony@casseselaw.com>  
**Subject:** 21 Linden Lane site visit

Hi Neil,

As discussed, I have scheduled a visit for next Wednesday 3/31 at 11 am with our environmental engineer to delineate the wetlands to make sure we are outside the buffer.

As requested in the attached letter we have informed Mr. Gordon / Town of Bedford of this visit. Please call me with any questions

Hope all is well !

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:39 PM  
**To:** Klaus Wimmer  
**Subject:** FW: 21 Linden Lane site visit

**From:** Klaus Wimmer  
**Sent:** Thursday, April 8, 2021 11:09 AM  
**To:** realityking72@aol.com  
**Subject:** RE: 21 Linden Lane site visit

Hi Neil, please send me a pdf copy of your survey as discussed.

Thanks

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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## Klaus Wimmer

---

**From:** Klaus Wimmer  
**Sent:** Tuesday, July 13, 2021 4:39 PM  
**To:** Klaus Wimmer (kw@homelandtowers.us)  
**Subject:** FW: 21 Linden Lane site visit  
**Attachments:** NY172 Mt Kisco - 21 Linden Ln Lease DRAFT 3-8-21.docx; Mt Kisco Linden Lane LE Rev0 04-16-2021.pdf; Rent Escalator 45y \$ 2000 with 2% esc or 35% (\$3500 carrier).pdf

---

**From:** Klaus Wimmer  
**Sent:** Thursday, May 6, 2021 12:21 PM  
**To:** realityking72@aol.com  
**Cc:** Anthony Cassese <anthony@casseselaw.com>  
**Subject:** RE: 21 Linden Lane site visit

Neil,  
As discussed attached is the lease draft, preliminary layout and a 45 year income projection matrix. Please review and call me with any questions.

Thanks

*Klaus Wimmer*

Regional Manager



HOMELAND TOWERS

9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Office:** (203) 297-6345 | **Cell:** (845) 242-3814

**Email:** [kw@homelandtowers.us](mailto:kw@homelandtowers.us)

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# EXHIBIT B

Preliminary design and layout of site





**APT**  
ENGINEERING

567 VAUXHAL STREET EXTENSION SUITE 311  
WATERFORD, CT 06385  
WWW.ALLPOINTSTECH.COM

PHONE: (860)-663-1697  
FAX: (860)-663-0935

**APT FILING NUMBER: NY283830**

**LE-1**

**SCALE: AS NOTED**

**DRAWN BY: ELZ**

**DATE: 04/16/2021**

**CHECKED BY: RCB**



HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810

**HOMELAND TOWERS:**  
**NY172**

**MOUNT KISCO ALT. SITE**  
**21 LINDEN LANE**  
**BEDFORD, NY 10594**

SUBJECT PARCEL:  
PARCEL #83.9-1-11  
N/F  
NBR PROPERTIES LLC  
4.6 ACRES  
ZONE: R-4A



EXIST. STREAM CENTERLINE

PROP. 150'± AGL  
MONOPOLE

PROP. 75' x 75' (5,625± SF)  
LEASE AREA & 50' x 50'  
(2,500± SF) FENCED  
GRAVEL COMPOUND AREA

EXIST. POND

PROP. COMPOUND ACCESS  
FROM POND HILL ROAD  
ALONG EXIST. GRAVEL  
DRIVE TO PROP. COMPOUND  
(APPROX 480'±)

PROP. UNDERGROUND ELEC.  
& TELCO SERVICE FROM EXIST.  
UTILITY POLE (#W23927) TO  
PROP. COMPOUND (APPROX.  
520'±)

EXIST. UTILITY POLE  
(#W23927)

EXIST. GRAVEL ACCESS  
DRIVEWAY

EXIST. RESIDENCE  
PROPERTY LINE (TYP.)



**1 SITE PLAN**  
**LE-1 SCALE: 1" = 150'-0"**

NOTE: EXACT LOCATION AND ORIENTATION OF PROPOSED LEASE AREA PENDING SITE SURVEY & FURTHER ENGINEERING REVIEW AND ANALYSIS. PROPOSED UTILITY ROUTING AND R.O.W. EXTENTS TO BE DETERMINED BY LOCAL UTILITY PROVIDERS.



**APT**  
ENGINEERING

567 VAUXHAL STREET EXTENSION SUITE 311  
WATERFORD, CT 06385  
WWW.ALLPOINTSTECH.COM  
PHONE: (860)-663-1697  
FAX: (860)-663-0935

**APT FILING NUMBER: NY283830**

**LE-2**

**SCALE: AS NOTED**

**DRAWN BY: ELZ**

**DATE: 04/16/2021**

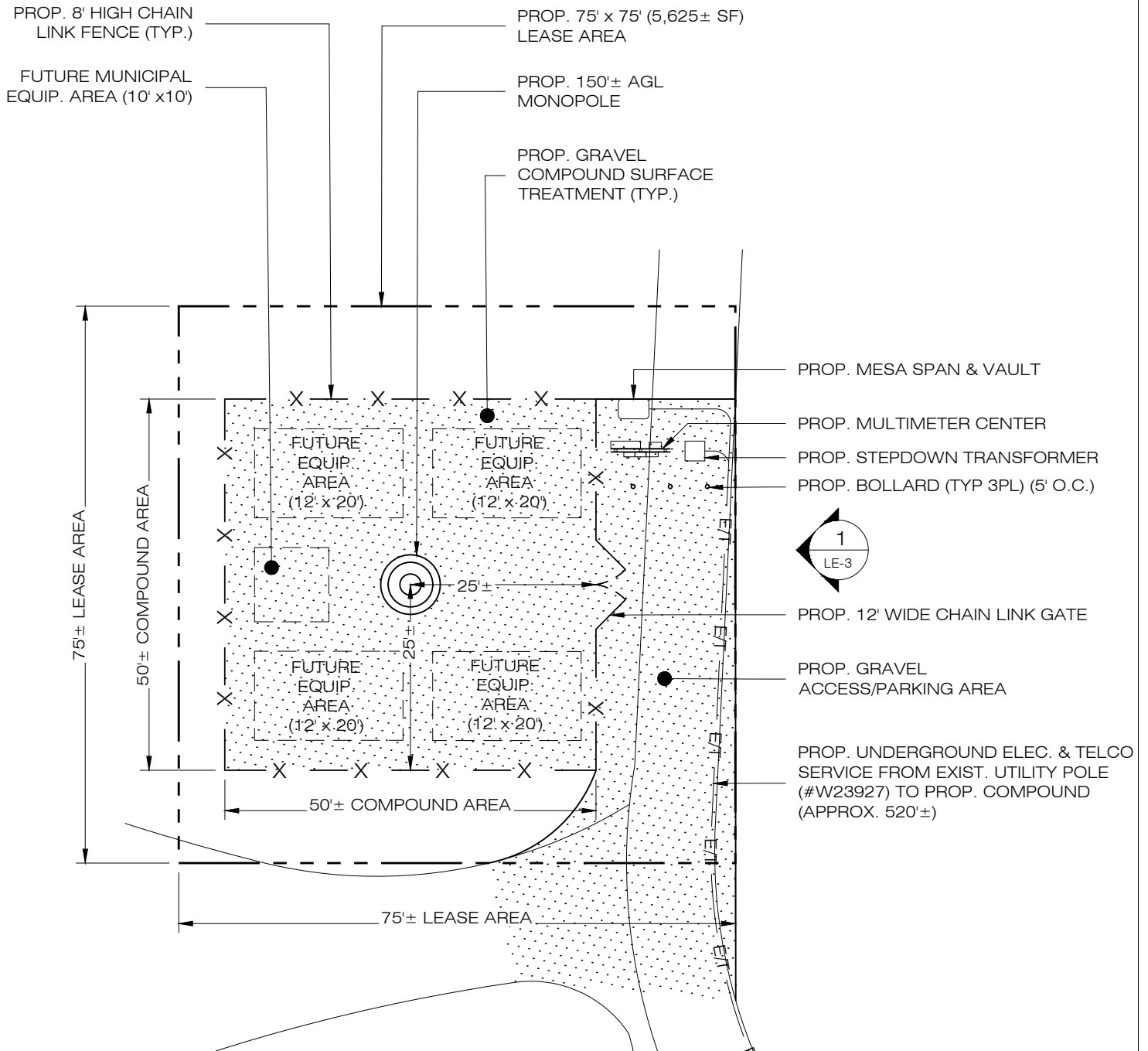
**CHECKED BY: RCB**



HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810

**HOMELAND TOWERS:  
NY172**

**MOUNT KISCO ALT. SITE  
21 LINDEN LANE  
BEDFORD, NY 10594**



**1**  
**LE-2** **COMPOUND PLAN**  
SCALE: 1" = 20'-0"

NOTE: EXACT LOCATION AND ORIENTATION OF PROPOSED LEASE AREA PENDING SITE SURVEY & FURTHER ENGINEERING REVIEW AND ANALYSIS. PROPOSED UTILITY ROUTING AND R.O.W. EXTENTS TO BE DETERMINED BY LOCAL UTILITY PROVIDERS.



**APT**  
ENGINEERING

567 VAUXHAL STREET EXTENSION SUITE 311  
WATERFORD, CT 06385  
WWW.ALLPOINTSTECH.COM  
PHONE: (860)-663-1697  
FAX: (860)-663-0935

**APT FILING NUMBER: NY283830**

**LE-3**

**SCALE: AS NOTED**

**DRAWN BY: ELZ**

**DATE: 04/16/2021**

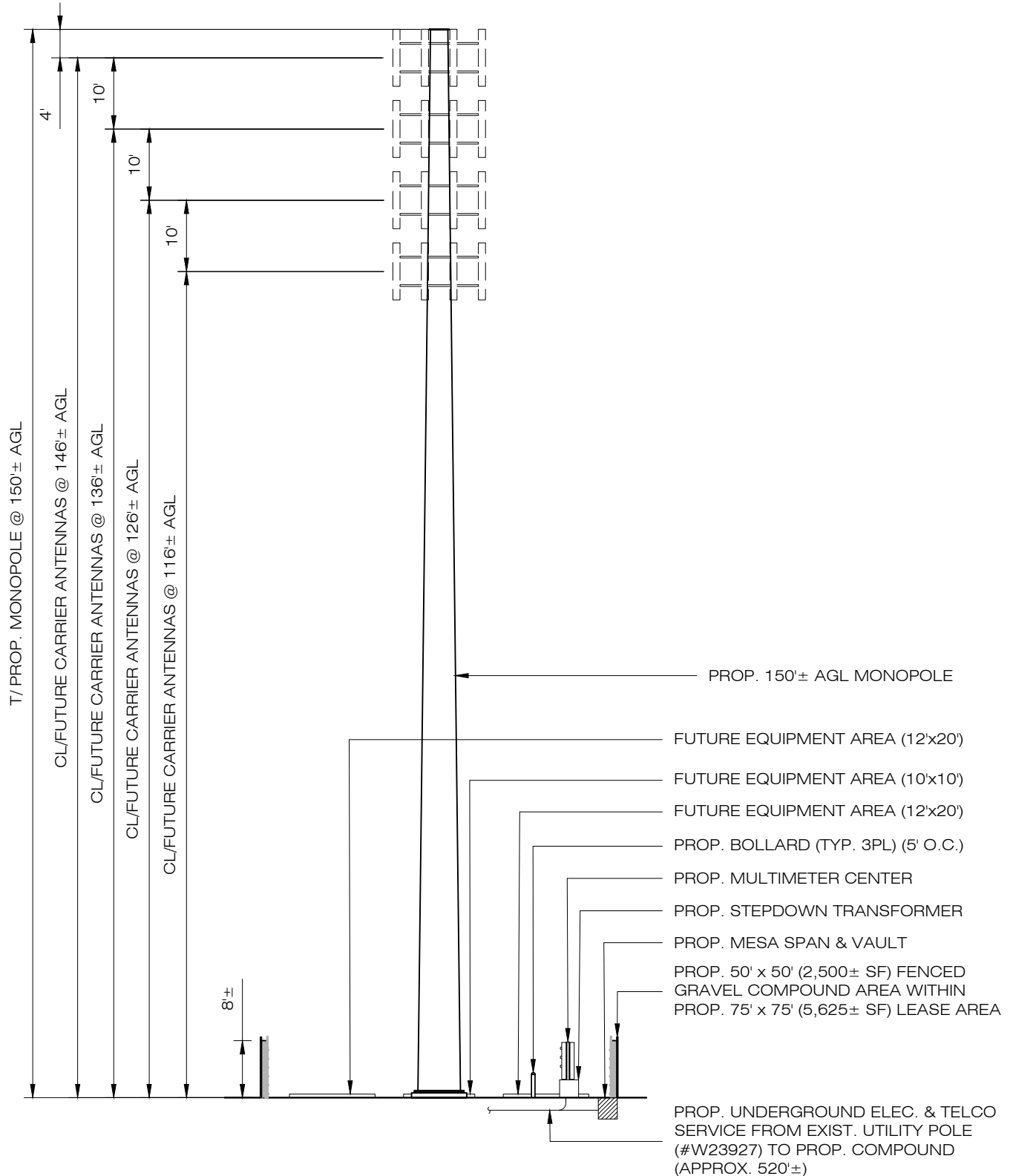
**CHECKED BY: RCB**



HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810

**HOMELAND TOWERS:**  
**NY172**

**MOUNT KISCO ALT. SITE**  
**21 LINDEN LANE**  
**BEDFORD, NY 10594**



**1 WESTERN ELEVATION**  
**LE-3 SCALE : 1" = 20'-0"**

NOTE: EXACT LOCATION AND ORIENTATION OF PROPOSED LEASE AREA PENDING SITE SURVEY & FURTHER ENGINEERING REVIEW AND ANALYSIS. PROPOSED UTILITY ROUTING AND R.O.W. EXTENTS TO BE DETERMINED BY LOCAL UTILITY PROVIDERS.



# **EXHIBIT C**

Photo-simulations of 21 Linden Lane





South Bedford Road at Linden Lane  
EXISTING CONDITION





South Bedford Road at Linden Lane  
SIMULATED CONDITION - 150FT MONOPINE





South Bedford Road at Linden Lane  
SIMULATED CONDITION - 150FT MONOPINE





West Patent Road at Rippowan Cisqua School  
EXISTING CONDITION

FIGURE 5A

PHOTO SIMULATIONS  
21 LINDEN LANE  
Town of Bedford, New York





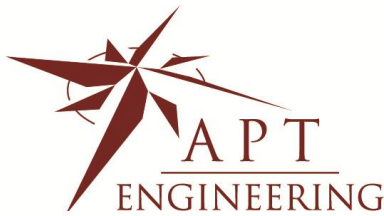
West Patent Road at Rippowan Cisqua School  
SIMULATED CONDITION - 150FT MONOPINE





West Patent Road at Rippowan Cisqua School  
SIMULATED CONDITION - 150FT MONOPINE





Honorable Chairman  
and Members of the Planning Board  
Village of Mount Kisco  
104 Main Street  
Mount Kisco, New York 10549

July 13, 2021

RE: Homeland Towers Site Name: Mt. Kisco NY172  
180 S. Bedford Road  
Mt. Kisco, NY 10594  
Response to Comments

Honorable Chairman and Members of the Board:

Please see the below responses to the comments (in red) from the Anthony Olivieri, P.E. comment memo dated March 9, 2021:

1. A determination regarding consistency with §110-33.1; particularly the standard that states "construction activities shall not be permitted on very steep slopes unless there is no viable alternative", and the applicant's response stating that there are "no viable options that avoid very steep slopes", will need to be made by the Planning Board.  
**No response required.**
2. The submission notes that the comments from Fire Chief David Hughes regarding fire access sufficiency, is "currently being reviewed and revised material will be submitted at a later date"; considering this, it is noted that any resulting changes to the access drive may impact stormwater design and overall disturbance areas and steep slopes. The revised fire access plan will need to be reviewed and found to be acceptable to the fire department.  
**No response required.**
3. The proposed fire department pool areas are not shown on the compound plan or grading plan sheets.  
**The fire department pool areas have been added to the Grading & Drainage Plan (SP-4) and the Compound Plan (CP-1).**
4. We note that the design engineer has indicated that a geotechnical investigation was planned to determine truck loading capacity of the existing access driveway; this information has not yet been provided. The plan currently depicts the existing driveway pavement to remain.  
**The Applicant is in the process of reviewing the Geotechnical Report to determine if any changes to the composition of the existing access drive are warranted.**
5. It is noted that NYCDEP has issued a determination that the SWPPP does not require their approval; once final disturbance areas are determined, a confirmation regarding this must be provided.  
**No response required.**
6. The stone check dams provided at the swale surrounding the equipment compound are a concern in that they do not seem to be sufficiently spaced per NYSDEC guidelines to effectively reduce velocities of conveyed stormwater. There is also concern as to potential of erosion at the proposed discharge point onto steep slope areas.  
**The number of stone check dams within the proposed grass lined swale have been increased (see Drawing SP-4).**
7. Details for the proposed infiltration units along the access drive has not been provided.  
**Details for the proposed infiltration units have been added to Drawings C-5 and C-8.**

8. Cross sections should be provided at the proposed infiltration systems, along the access driveway including the road widening and adjacent steep slopes (note that infiltration should not be proposed in slopes >15%).  
Cross sections of the proposed infiltration systems have been added to Drawing C-8 and Drawing SS-1.
9. Proposed "type c" catch basins along the access drive are noted as "flow splitter" structures in the SWPPP and on the solar panel application; this needs to be coordinated and details provided demonstrating how these will function effectively to separate flows with water entering from the above grate.  
Details for the Flow Splitter structures have been added to Drawing C-8.
10. The proposed gravel equipment compound is shown to provide stormwater detention and infiltration, thus acting and functioning as an infiltration practice under NYSDEC design guidelines. The following are our comments:
- The SWPPP notes 12" of gravel while the details seem to only show 8" (4" of additional fill is shown above).  
The proposed compound area is composed of 12" of gravel (see Detail 1 on Drawing C-4).
  - Infiltration practices should only be located on slopes less than 15%, it appears that there are slopes exceeding this in the footprint.  
The infiltration design at the proposed compound has been revised. An underground infiltration system has been placed on existing slopes less than 15% (see Drawing SP-4 and Detail 4 on Drawing C-5).
  - Infiltration must occur into the existing soil strata, not what would appear to be a layer of fill beneath the gravel.  
The infiltration design at the proposed compound has been revised. An underground infiltration system has been placed below the proposed compound on existing soils. A 6" perforated pipe will capture the runoff collected within the gravel compound and will flow into the infiltration system with (16) Infiltration units. (see Drawing SP-4 and Detail 4 on Drawing C-5).
  - There is a concern that seepage will occur at the base of the filled slopes downhill of the compound area. Infiltration should occur at a lower elevation within the proposed compound cross section.  
The infiltration design at the proposed compound has been revised to be below the proposed compound. (see Drawing SP-4 and Detail 4 on Drawing C-5).
  - A cross section better defining the fill materials should be provided through the compound area.  
The cross section on Drawing SS-1 has been updated to show the revised infiltration design.
  - We recommend sizing of the stormwater detention system utilizing the 100 year storm event as the driveway infiltration practices are sized. This will help provide additional volume to prevent discharges from the system to adjacent steep slopes where erosion is a concern.  
The stormwater detention system has been revised utilizing the 100 year storm event (see revised Stormwater Management Report).

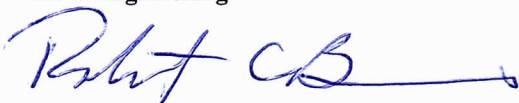
Misc. Items:

- The proposed updated Solar Facility design has been added to the updated Zoning Drawing set.
- AT&T's proposed installation has been added to the updated Zoning Drawing set.

Should you have any questions, please do not hesitate to call me at (860) 552-2036.

Sincerely,

APT Engineering



Robert C. Burns  
Program Manager





Honorable Chairman  
and Members of the Planning Board  
Village of Mount Kisco  
104 Main Street  
Mount Kisco, New York 10549

RE: Homeland Towers Site Name: Mt. Kisco NY172  
180 S. Bedford Road  
Mt. Kisco, NY 10594  
Code Applicability Letter

July 13, 2021

Honorable Chairman and Members of the Board:

APT Engineering (APT) is in receipt of the Mount Kisco Volunteer Fire Department comment memo dated January 19, 2021. The comment memo was issued as part of the Village of Mount Kisco's review of the above referenced proposed telecommunication facility application pending before the Village Planning Board. The memo questions the adequacy of the proposed site access for emergency response in the unlikely event of a fire at the Facility.

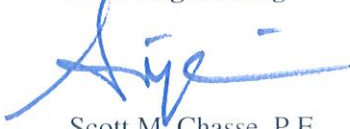
As part of the response to the Fire Department's comments, the Applicant has confirmed that all the comments contained therein have been addressed (see APT's Response to Comment Letter dated December 18, 2020).

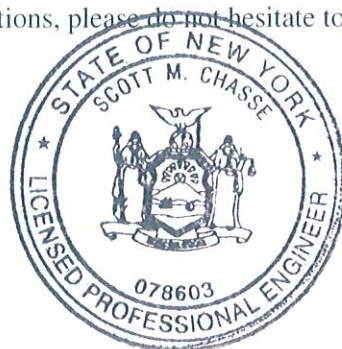
For the Board's reference, pursuant to the 2018 International Building Code (IBC) adopted by New York State – Chapter 3, Section 312, "Towers" fall under the Occupancy classification Group U. Group U is defined as "Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy." However, under the 2020 New York State Uniform Fire Prevention and Building Code; Chapter 1, Section 101.2.4, "Structures such as radio and television transmission, communication and wind generation towers, and ground-mounted photovoltaic arrays that are neither a building appurtenance nor are attached to a building shall not be subject to this code" and are therefore exempt from the requirements of the 2018 International Fire Code and 2018 International Building Code, including requirements regarding fire apparatus access.

Notwithstanding the inapplicability of the New York State Uniform Fire Prevention and Building Code for this application, the applicant has clearly demonstrated that in the unlikely event fire/emergency apparatus would need to be mobilized to the Site, adequate space is available to accommodate the largest Fire Department Apparatus specified by the Mount Kisco Volunteer Fire Department. It is important to note that there are hundreds of thousands of wireless telecommunications towers nationwide and fires involving wireless telecommunications towers are a rare occurrence.

Should you have any questions, please do not hesitate to call me at (860) 663-1697, x101.

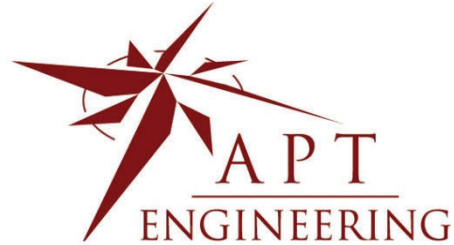
Sincerely,  
APT Engineering

  
Scott M. Chasse, P.E.  
Principal



**APT ENGINEERING**

567 VAUVHALL STREET EXTENSION, SUITE 311 · WATERFORD, CT 06385 · PHONE 860-663-1697 · FAX 860-663-0935



## **STORMWATER MANAGEMENT REPORT**

**PROPOSED WIRELESS  
TELECOMMUNICATIONS FACILITY**

**MOUNT KISCO  
180 S. BEDFORD ROAD  
MOUNT KISCO, NEW YORK 10594**

**Prepared for:**

**Homeland Towers, LLC  
9 Harmony Street, 9<sup>th</sup> Floor  
Danbury, CT**

**Prepared by:**

**APT Engineering, P.C.  
567 Vauxhall Street Extension, Suite 311  
Waterford, CT 06385**

**November 2020**

**Revised:**

**January 2021**

**July 2021**



# Table of Contents

<b>INTRODUCTION .....</b>	<b>1</b>
<b>EXISTING SITE CONDITIONS.....</b>	<b>1</b>
<b>DEVELOPED SITE CONDITIONS .....</b>	<b>1</b>
<b>STORMWATER MANAGEMENT .....</b>	<b>1</b>
<b>CONCLUSION .....</b>	<b>3</b>

## Tables

<b>TABLE 1-1 PRE-DEVELOPED PEAK STORM RUNOFF (Q), CUBIC FEET PER SECOND (CFS) .....</b>	<b>2</b>
<b>TABLE 1-2 POST-DEVELOPED PEAK STORM RUNOFF (Q), CUBIC FEET PER SECOND (CFS) .....</b>	<b>3</b>

## Appendices

<b>APPENDIX A: NRCS SOIL SURVEY</b>	
<b>APPENDIX B: EXISTING DRAINAGE AREA MAP (EDA-1) &amp; HYDROLOGIC COMPUTATION (HYDROCAD)</b>	
<b>APPENDIX C: PROPOSED DRAINAGE AREA MAP (PDA-1) &amp; HYDROLOGIC COMPUTATION (HYDROCAD)</b>	
<b>APPENDIX D: NOAA ATLAS 14 PRECIPITATION FREQUENCY TABLE</b>	
<b>APPENDIX E: NRCS SATURATED HYDRAULIC CONDUCTIVITY</b>	
<b>APPENDIX F: PROPOSED DRIVEWAY DRAINAGE HYDROLOGIC COMPUTATION (HYDROCAD)</b>	
<b>APPENDIX G: HYDRODYNAMICS SEPARATOR SIZING AND MAINTENANCE</b>	



## **Introduction**

At the request of Homeland Towers, LLC, APT Engineering, P.C. (“APT”) has undertaken analysis of and design to address stormwater impacts resulting from development of a proposed wireless telecommunications facility at 180 S. Bedford Road in Mount Kisco, New York (the “Project”). The Project, known as Mount Kisco, involves the installation of a fenced 2,542 SF gravel telecommunications equipment compound with a 140’ AGL Monopine and associated utilities off an existing gravel/paved driveway at 180 S. Bedford Road in Mount Kisco, New York (“Site”).

The purpose of this report is to provide an analysis of the potential stormwater drainage impacts associated with the Project, as well as a description of the design to mitigate such potential stormwater drainage impacts. The design is intended to be in full compliance with the State and Town regulations while taking prevailing site conditions and practical factors into account.

## **Existing Site Conditions**

The Site is a privately-owned irregular shaped parcel located at 180 S. Bedford Road in Mount Kisco, New York, that consists of approximately 25± acres of mostly undeveloped forested land. The center of the lot has a cleared area where a former camp ground was located.

The Site’s existing topography generally slopes downward in all directions from high points in the middle of the parcel. Within the project area, the topography slopes downward to the north from a high point to the south and includes slopes that range from approximately 0 to 50 percent throughout. Elevations within the Site range from approximately 530 feet AMSL in the middle portion of the site to approximately 402 feet AMSL in the southeast corner, 408 in the southwest corner and 386 feet AMSL in the northwest corner of the site. Elevations within the project area range from approximately 446 feet AMSL to the south of the project area to approximately 414 feet AMSL on the north side of the project area.

## **Developed Site Conditions**

The Project will be constructed off an existing gravel/paved access drive in the northwestern area of the Site in an existing forested area. Access to the Site will be provided via an existing gravel/paved access drive off S. Bedford Road. The Project includes the installation of 41’x62’ (2,542± SF) fenced gravel equipment compound with a 140’ AGL Monopine and associated utilities. The project will be located in an existing wooded area to the west of the existing access drive. 50 trees will need to be removed within the project area.

## **Stormwater Management**

### *Analysis Methodology*

The hydrologic analysis was performed using the HydroCAD stormwater modeling system computer program developed by HydroCAD Software Solutions, LLC.

Hydrographs for each watershed were developed using the SCS Synthetic Unit Hydrograph Method with a Type III rainfall distribution. Hydrographs were developed for the NOAA Atlas 14, Volume 10, Version 2 Precipitation 2-, 10-, 25-, and 100-year storm event with rainfall depths of 3.50, 5.36, 6.52 and 8.30 inches respectively.

The existing and proposed drainage areas used in the calculations are illustrated on the Existing and Proposed Drainage Area Plans (EDA-1 & PDA-1). These maps and the corresponding HydroCAD output are attached.

#### *Existing Drainage Patterns*

The proposed Project area drains from the south of the project area overland through existing woodland to the north of the project area and eventually to the existing gravel/paved access drive. The access drive eventually drains to the S. Bedford Road drainage system.

The Site was modeled at one (1) Analysis Point (“AP-1”). AP-1 is the top of the existing slope above the existing access drive to the north of the Project area. Peak discharges have been computed at the point of study for the 2-, 10-, 25-, and 100-year storm events.

The project site soils identified by the United States Department of Agriculture (USDA) Natural Resources Conservation Service consist of Map Unit Symbol ChB, named “Charlton fine sandy loam, 3 to 8 percent slopes,” CsD, named “Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky” and CrC, named “Chatfield-Charlton complex, 0 to 15 percent slopes, very rocky”. Map Unit Symbol ChB, CsD and CrC are classified in the HSG rating of “B”.

The pre-developed discharges at the Analysis Point are tabulated in Table 1-1.

**Table 1-1**

<b><i>Analysis Point</i></b>	<b>Pre-developed Peak Storm Runoff (Q), cubic feet per second (cfs)</b>			
	<b>2-year</b>	<b>10-year</b>	<b>25-year</b>	<b>100-year</b>
AP-1	0.19	1.03	1.76	3.04

#### *Proposed Drainage Patterns*

The Project will require the removal of an existing grass area and the installation of 41’x62’ (2,542± SF) fenced gravel equipment compound with a 140’ AGL Monopine and associated utilities.

To manage the increase in post-development runoff due to the change in cover type associated with converting woodland to grass, gravel and concrete equipment pads, the gravel equipment compound has been designed to be 12” thick crushed stone with 40% voids. The compound will then drain into an underground infiltration system via a 6” perforated PVC pipe located at the north end of the compound. The infiltration system will store the increased runoff created by the



change in ground cover and allow the runoff to infiltrate into the ground and discharge through an outlet control structure which matches or reduces the existing discharges.

The underground infiltration system is modeled as an ADS StormTech Infiltration system utilizing two (2) rows of eight (8) StormTech SC-740 chambers with end caps surrounded by 6" of crushed stone with 40% voids. The system discharges through an outlet control structure manhole to a riprap apron located to the northwest of the compound. The infiltration system is set on native soils so the infiltration rates of the existing soils can be utilized.

The infiltration rate for the underground infiltration system is modeled with a rate of 1.45 inch/hour. The infiltration rate were determined from the Saturated Hydraulic Conductivity Maps by the United States Department of Agriculture (USDA) Natural Resources Conservation Service. The infiltration rates for the CsD soil in the area of the infiltration system are shown to be 1.45 inches/hour (10.1993 micrometers per second).

Since the proposed development mimics the existing conditions, the post-development condition was modeled using the same Analysis Point. Peak discharges have been computed at the point of study for the 2-year, 10-year, 25-year, and 100-year storm events. The post-development discharges at each point of study are tabulated in Table 1-2.

**Table 1-2**

<b><i>Analysis Point</i></b>	<b>Post-developed Peak Storm Runoff (Q), cubic feet per second (cfs)</b>			
	<b>2-year</b>	<b>10-year</b>	<b>25-year</b>	<b>100-year</b>
AP-1	0.17	0.99	1.72	3.04

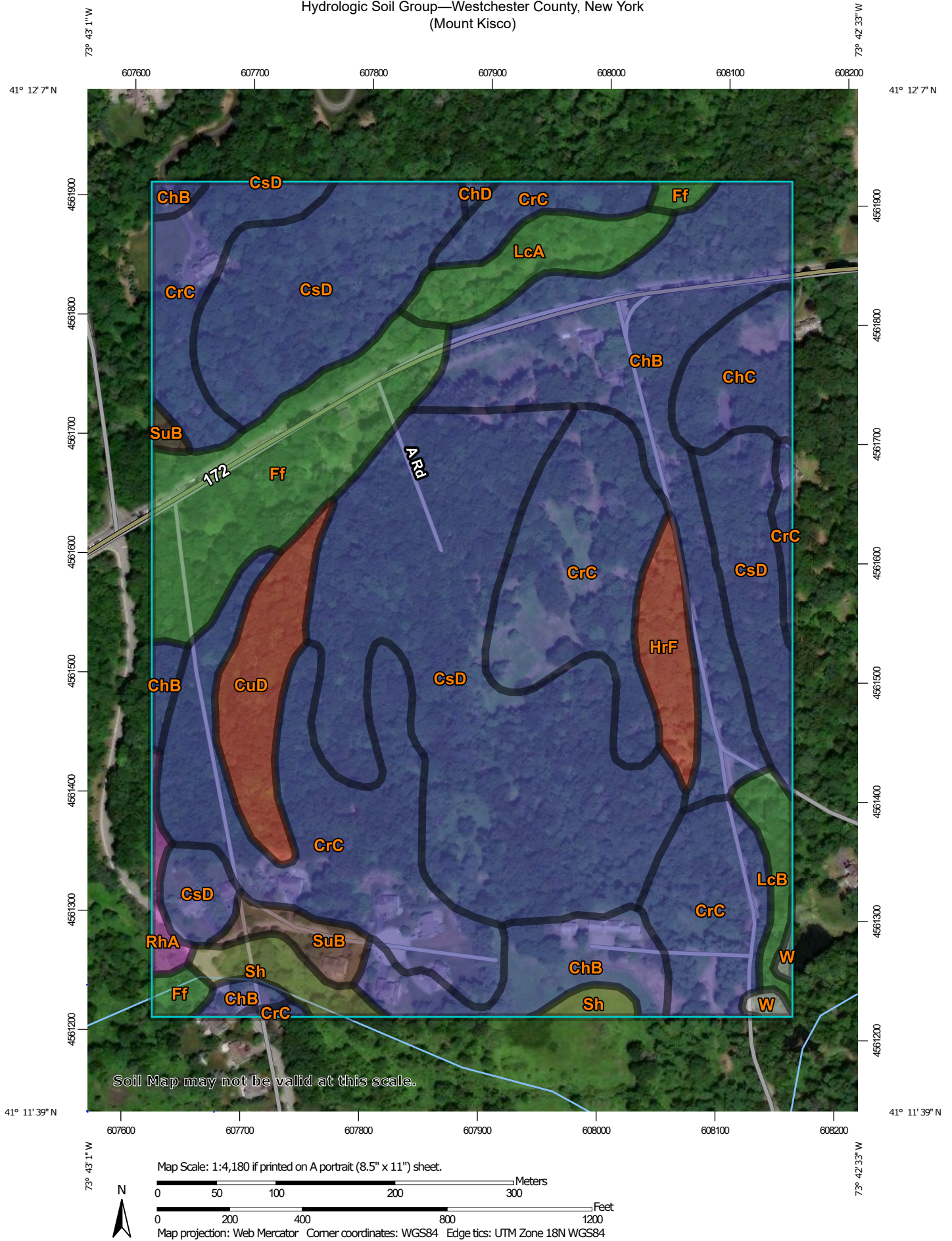
## **Conclusion**

The stormwater management for the proposed site has been designed such that the post-development peak discharges to the waters of the State of New York for the 2-, 5-, 10-, and 25-year storm events are less than the pre-development peak discharges. As a result, the proposed telecommunication facility will not result in any adverse conditions to the surrounding areas and properties.

## **APPENDIX A: NRCS SOIL SURVEY**



# Hydrologic Soil Group—Westchester County, New York (Mount Kisco)



# Hydrologic Soil Group—Westchester County, New York (Mount Kisco)

## MAP LEGEND

### Area of Interest (AOI)









 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons





 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Lines

 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Points

 A  
 A/D  
 B  
 B/D

 C  
 C/D  
 D  
 Not rated or not available

### Water Features

 Streams and Canals

### Transportation

 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

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

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 16, 2017

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.



## Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	B	15.5	16.5%
ChC	Charlton fine sandy loam, 8 to 15 percent slopes	B	2.5	2.7%
ChD	Charlton fine sandy loam, 15 to 25 percent slopes	B	0.1	0.1%
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	B	25.3	27.0%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	B	30.1	32.2%
CuD	Chatfield-Hollis-Rock outcrop complex, 15 to 35 percent slopes	D	3.2	3.4%
Ff	Fluvaquents-Udifluvents complex, frequently flooded	A/D	7.7	8.2%
HrF	Hollis-Rock outcrop complex, 35 to 60 percent slopes	D	1.9	2.0%
LcA	Leicester loam, 0 to 3 percent slopes, stony	A/D	2.5	2.6%
LcB	Leicester loam, 3 to 8 percent slopes, stony	A/D	1.2	1.2%
RhA	Riverhead loam, 0 to 3 percent slopes	A	0.6	0.6%
Sh	Sun loam	C/D	1.7	1.8%
SuB	Sutton loam, 3 to 8 percent slopes	B/D	1.3	1.4%
W	Water		0.3	0.3%
<b>Totals for Area of Interest</b>			<b>93.7</b>	<b>100.0%</b>

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

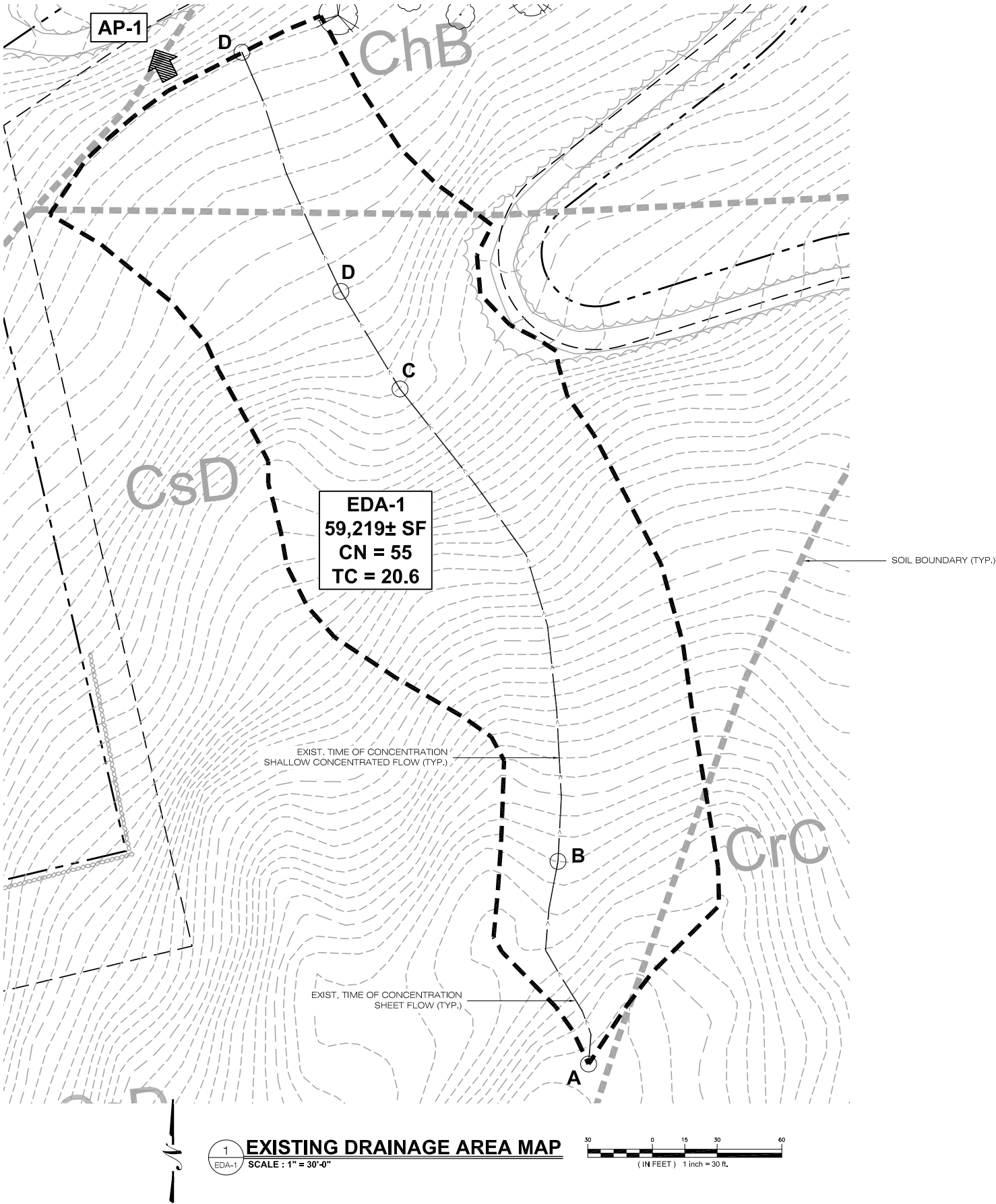
*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher



## **APPENDIX B: EXISTING DRAINAGE AREA MAP (EDA-1) & HYDROLOGIC COMPUTATION (HYDROCAD)**

EXISTING DRAINAGE AREAS			
	TOTAL AREA (SF)	COMPOSITE CN	TC (MINS.)
EDA-1	59,219	55	20.6



HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810  
(203) 297-6345



4 CENTEROCK ROAD  
WEST NYACK, NY 10994



340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960



567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385 PH: (860)-663-1697  
WWW.ALLPOINTS TECH.COM FAX: (860)-663-0935

PERMITTING DOCUMENTS		
NO	DATE	REVISION
0	11/11/20	FOR REVIEW: RCB
1	07/15/21	FOR REVIEW: RCB

DESIGN PROFESSIONALS OF RECORD

PROF: SCOTT M. CHASSE P.E.  
COMP: APT ENGINEERING  
ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

DEVELOPER: HOMELAND TOWERS, LLC  
ADDRESS: 9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810

NOTE:  
IT IS A VIOLATION OF NEW YORK STATE  
EDUCATION LAW ARTICLE 145, SECTION  
7209 (2) FOR ANY PERSON, UNLESS  
ACTING UNDER THE DIRECTION OF A  
LICENSED PROFESSIONAL ENGINEER OR  
LAND SURVEYOR, TO ALTER AN ITEM IN  
ANY WAY, IF AN ITEM BEARING THE SEAL  
OF AN ENGINEER OR LAND SURVEYOR IS  
ALTERED, THE ALTERING ENGINEER OR  
LAND SURVEYOR SHALL AFFIX TO THE  
ITEM HIS SEAL AND THE NOTATION  
"ALTERED BY" FOLLOWED BY THE  
SIGNATURE AND THE DATE OF SUCH  
ALTERATION, AND A SPECIFIC  
DESCRIPTION OF THE ALTERATION.

HOMELAND TOWERS  
MOUNT KISCO

SITE: 180 S. BEDFORD RD.  
ADDRESS: MT. KISCO, NY 10594

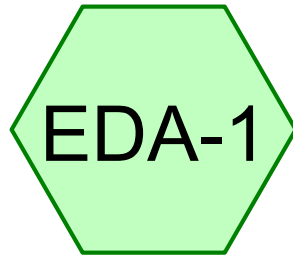
APT FILING NUMBER: NY283830

DATE: 11/11/20	DRAWN BY: CSH
	CHECKED BY: RCB

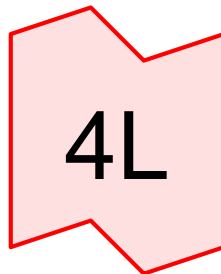
SHEET TITLE:  
  
EXISTING DRAINAGE  
AREA MAP

SHEET NUMBER:  
**EDA-1**

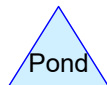
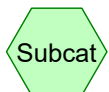




EDA-1



AP 1



**Routing Diagram for Mount Kisco**

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## Mount Kisco

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Page 2

### Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.359	55	Woods, Good, HSG B (EDA-1)
<b>1.359</b>	<b>55</b>	<b>TOTAL AREA</b>



## Mount Kisco

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Page 3

### Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
1.359	HSG B	EDA-1
0.000	HSG C	
0.000	HSG D	
0.000	Other	
<b>1.359</b>		<b>TOTAL AREA</b>

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Page 4

### Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	1.359	0.000	0.000	0.000	1.359	Woods, Good	EDA-1
<b>0.000</b>	<b>1.359</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>1.359</b>	<b>TOTAL</b>	
						<b>AREA</b>	



## Mount Kisco

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Type III 24-hr 2-yr Rainfall=3.50"

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Page 5

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

### Subcatchment EDA-1: EDA-1

Runoff Area=59,219 sf 0.00% Impervious Runoff Depth=0.35"  
Flow Length=513' Tc=20.6 min CN=55 Runoff=0.19 cfs 0.039 af

### Link 4L: AP 1

Inflow=0.19 cfs 0.039 af  
Primary=0.19 cfs 0.039 af

**Total Runoff Area = 1.359 ac Runoff Volume = 0.039 af Average Runoff Depth = 0.35"**  
**100.00% Pervious = 1.359 ac 0.00% Impervious = 0.000 ac**

**Mount Kisco**

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Type III 24-hr 2-yr Rainfall=3.50"

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Page 6

**Summary for Subcatchment EDA-1: EDA-1**

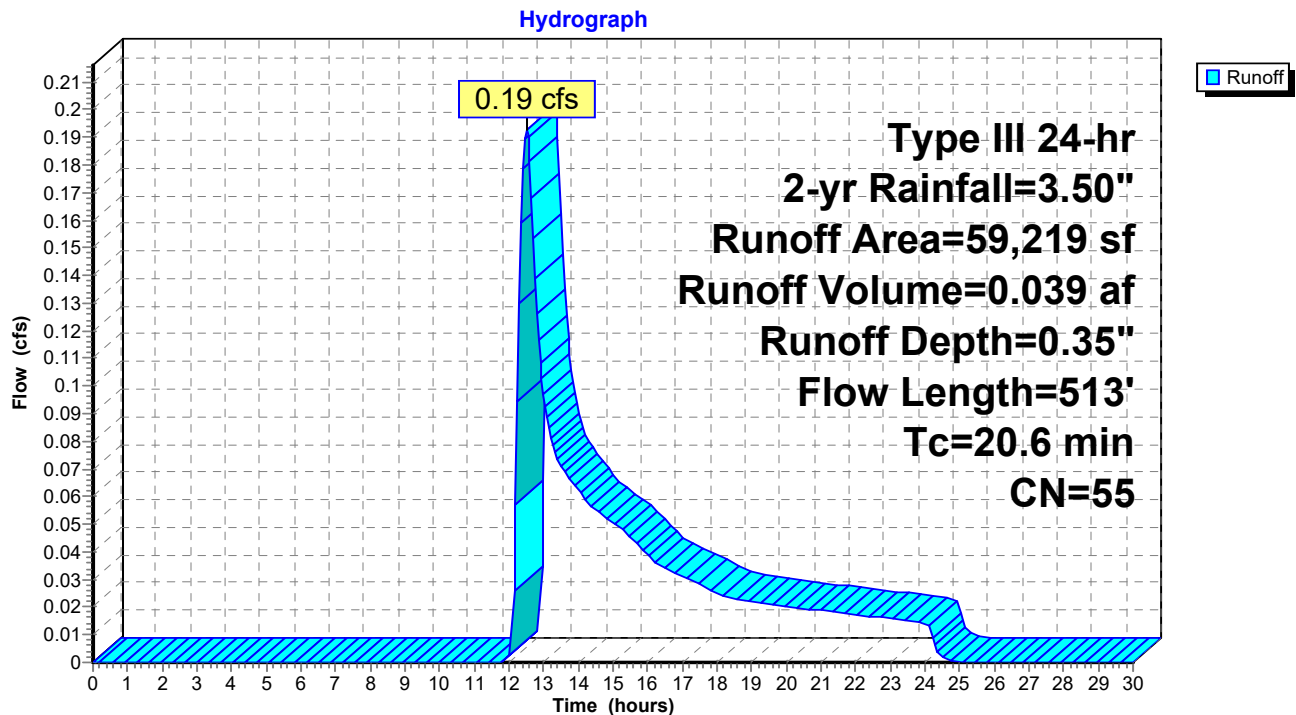
Runoff = 0.19 cfs @ 12.50 hrs, Volume= 0.039 af, Depth= 0.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-yr Rainfall=3.50"

Area (sf)	CN	Description
59,219	55	Woods, Good, HSG B
59,219		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.1900	0.11		<b>Sheet Flow, A-B</b> Woods: Dense underbrush n= 0.800 P2= 3.50"
3.2	240	0.2534	1.26		<b>Shallow Concentrated Flow, B-C</b> Forest w/Heavy Litter Kv= 2.5 fps
0.8	53	0.1887	1.09		<b>Shallow Concentrated Flow, C-D</b> Forest w/Heavy Litter Kv= 2.5 fps
2.1	120	0.1500	0.97		<b>Shallow Concentrated Flow, D-E</b> Forest w/Heavy Litter Kv= 2.5 fps
20.6	513	Total			

**Subcatchment EDA-1: EDA-1**



## Mount Kisco

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Type III 24-hr 2-yr Rainfall=3.50"

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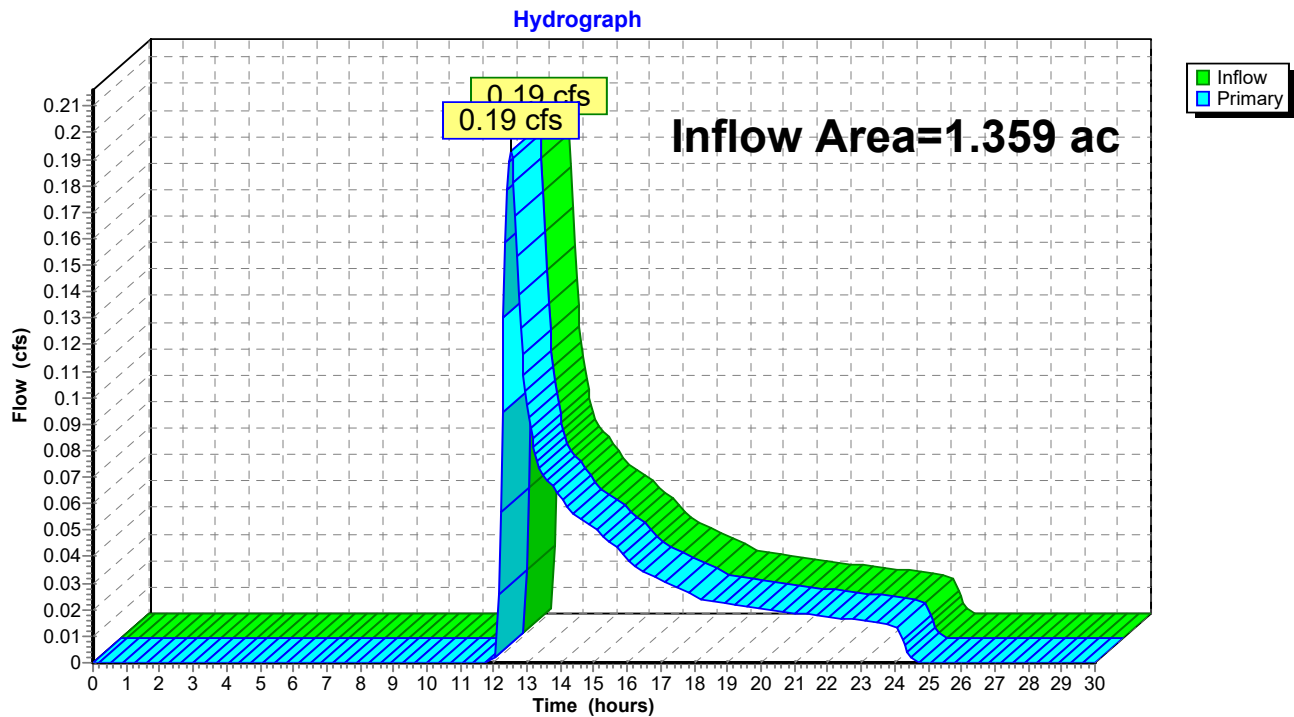
Page 7

### Summary for Link 4L: AP 1

Inflow Area = 1.359 ac, 0.00% Impervious, Inflow Depth = 0.35" for 2-yr event  
Inflow = 0.19 cfs @ 12.50 hrs, Volume= 0.039 af  
Primary = 0.19 cfs @ 12.50 hrs, Volume= 0.039 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

### Link 4L: AP 1



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Type III 24-hr 10-yr Rainfall=5.36"

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Page 8

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

### Subcatchment EDA-1: EDA-1

Runoff Area=59,219 sf 0.00% Impervious Runoff Depth=1.16"  
Flow Length=513' Tc=20.6 min CN=55 Runoff=1.03 cfs 0.132 af

### Link 4L: AP 1

Inflow=1.03 cfs 0.132 af  
Primary=1.03 cfs 0.132 af

**Total Runoff Area = 1.359 ac Runoff Volume = 0.132 af Average Runoff Depth = 1.16"**  
**100.00% Pervious = 1.359 ac 0.00% Impervious = 0.000 ac**

**Mount Kisco**

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Type III 24-hr 10-yr Rainfall=5.36"

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Page 9

**Summary for Subcatchment EDA-1: EDA-1**

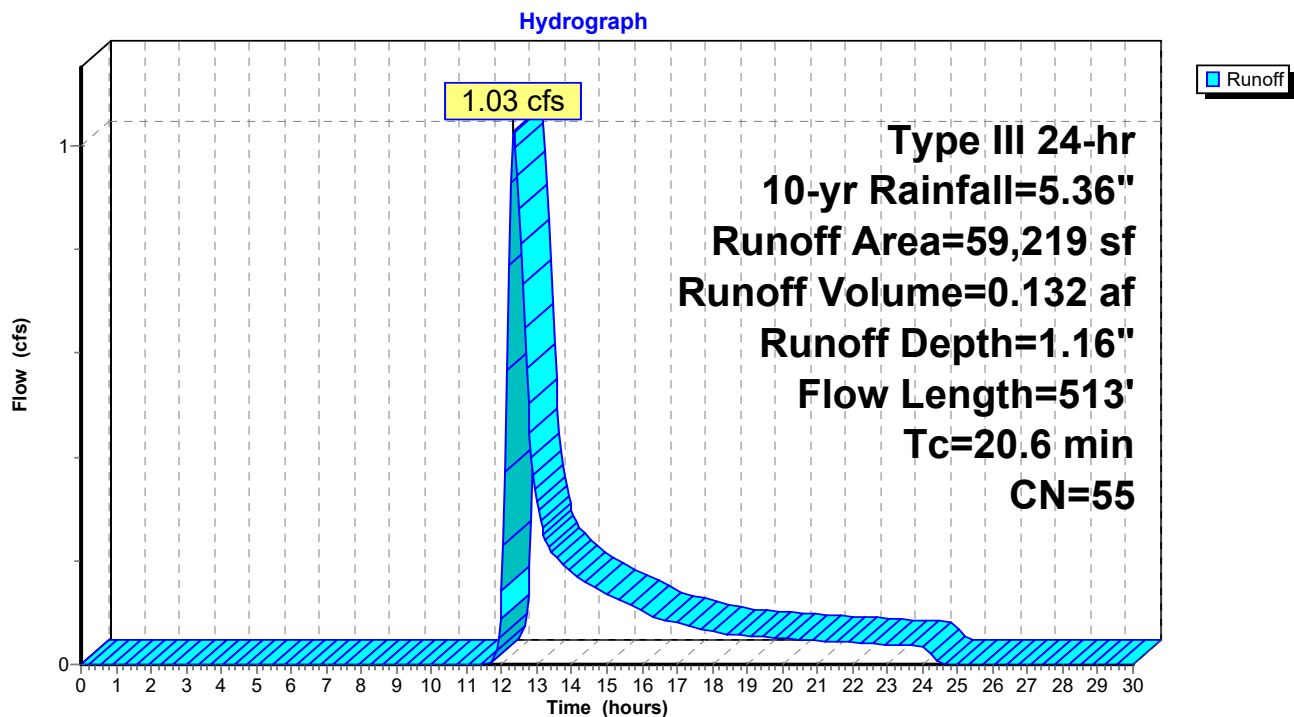
Runoff = 1.03 cfs @ 12.34 hrs, Volume= 0.132 af, Depth= 1.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-yr Rainfall=5.36"

Area (sf)	CN	Description
59,219	55	Woods, Good, HSG B
59,219		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.1900	0.11		<b>Sheet Flow, A-B</b> Woods: Dense underbrush n= 0.800 P2= 3.50"
3.2	240	0.2534	1.26		<b>Shallow Concentrated Flow, B-C</b> Forest w/Heavy Litter Kv= 2.5 fps
0.8	53	0.1887	1.09		<b>Shallow Concentrated Flow, C-D</b> Forest w/Heavy Litter Kv= 2.5 fps
2.1	120	0.1500	0.97		<b>Shallow Concentrated Flow, D-E</b> Forest w/Heavy Litter Kv= 2.5 fps
20.6	513	Total			

**Subcatchment EDA-1: EDA-1**

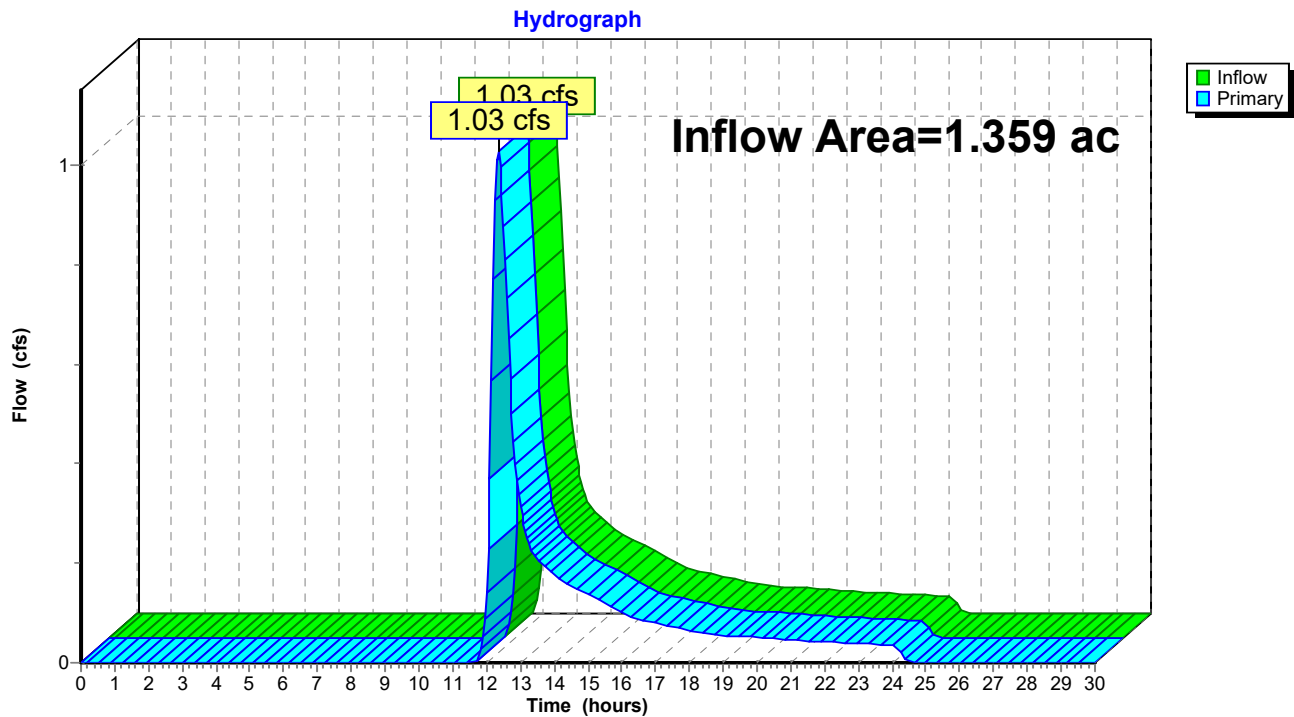


### Summary for Link 4L: AP 1

Inflow Area = 1.359 ac, 0.00% Impervious, Inflow Depth = 1.16" for 10-yr event  
 Inflow = 1.03 cfs @ 12.34 hrs, Volume= 0.132 af  
 Primary = 1.03 cfs @ 12.34 hrs, Volume= 0.132 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

### Link 4L: AP 1



## Mount Kisco

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Type III 24-hr 25-yr Rainfall=6.52"

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Page 11

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

### Subcatchment EDA-1: EDA-1

Runoff Area=59,219 sf 0.00% Impervious Runoff Depth=1.83"  
Flow Length=513' Tc=20.6 min CN=55 Runoff=1.76 cfs 0.207 af

### Link 4L: AP 1

Inflow=1.76 cfs 0.207 af  
Primary=1.76 cfs 0.207 af

**Total Runoff Area = 1.359 ac Runoff Volume = 0.207 af Average Runoff Depth = 1.83"**  
**100.00% Pervious = 1.359 ac 0.00% Impervious = 0.000 ac**

**Mount Kisco**

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Type III 24-hr 25-yr Rainfall=6.52"

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Page 12

**Summary for Subcatchment EDA-1: EDA-1**

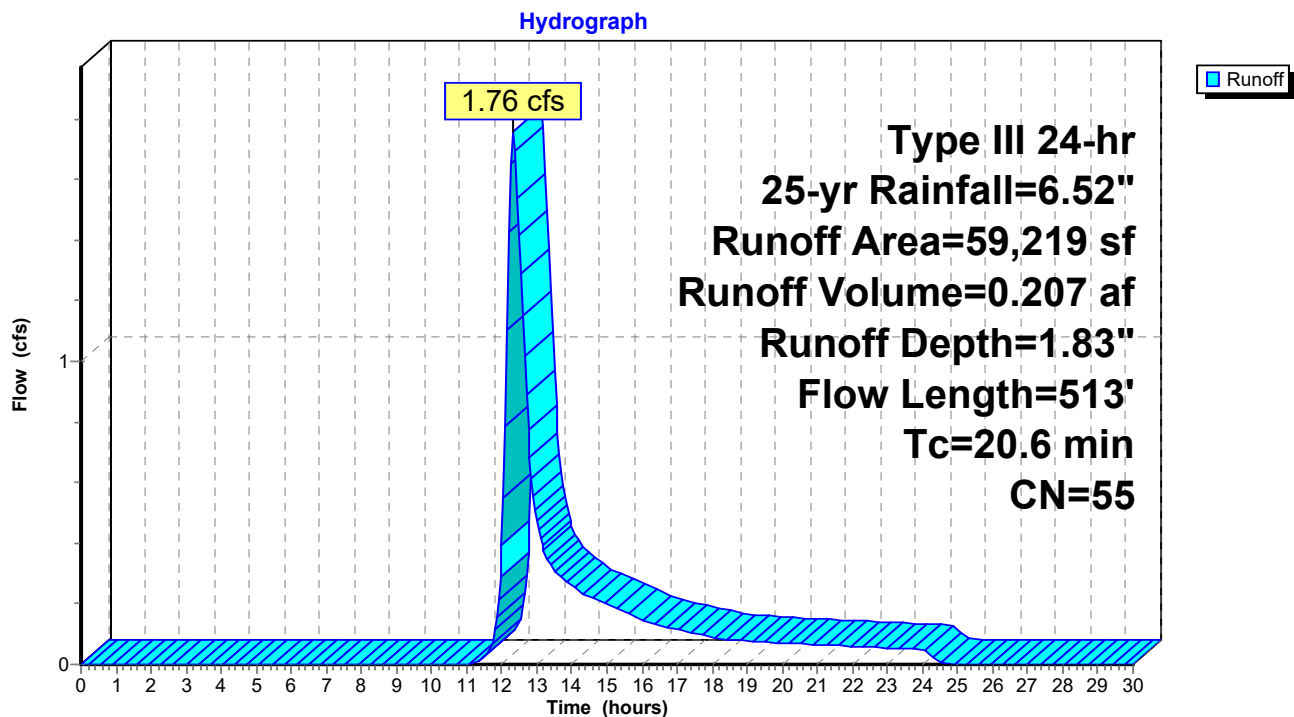
Runoff = 1.76 cfs @ 12.32 hrs, Volume= 0.207 af, Depth= 1.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25-yr Rainfall=6.52"

Area (sf)	CN	Description
59,219	55	Woods, Good, HSG B
59,219		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.1900	0.11		<b>Sheet Flow, A-B</b> Woods: Dense underbrush n= 0.800 P2= 3.50"
3.2	240	0.2534	1.26		<b>Shallow Concentrated Flow, B-C</b> Forest w/Heavy Litter Kv= 2.5 fps
0.8	53	0.1887	1.09		<b>Shallow Concentrated Flow, C-D</b> Forest w/Heavy Litter Kv= 2.5 fps
2.1	120	0.1500	0.97		<b>Shallow Concentrated Flow, D-E</b> Forest w/Heavy Litter Kv= 2.5 fps
20.6	513	Total			

**Subcatchment EDA-1: EDA-1**

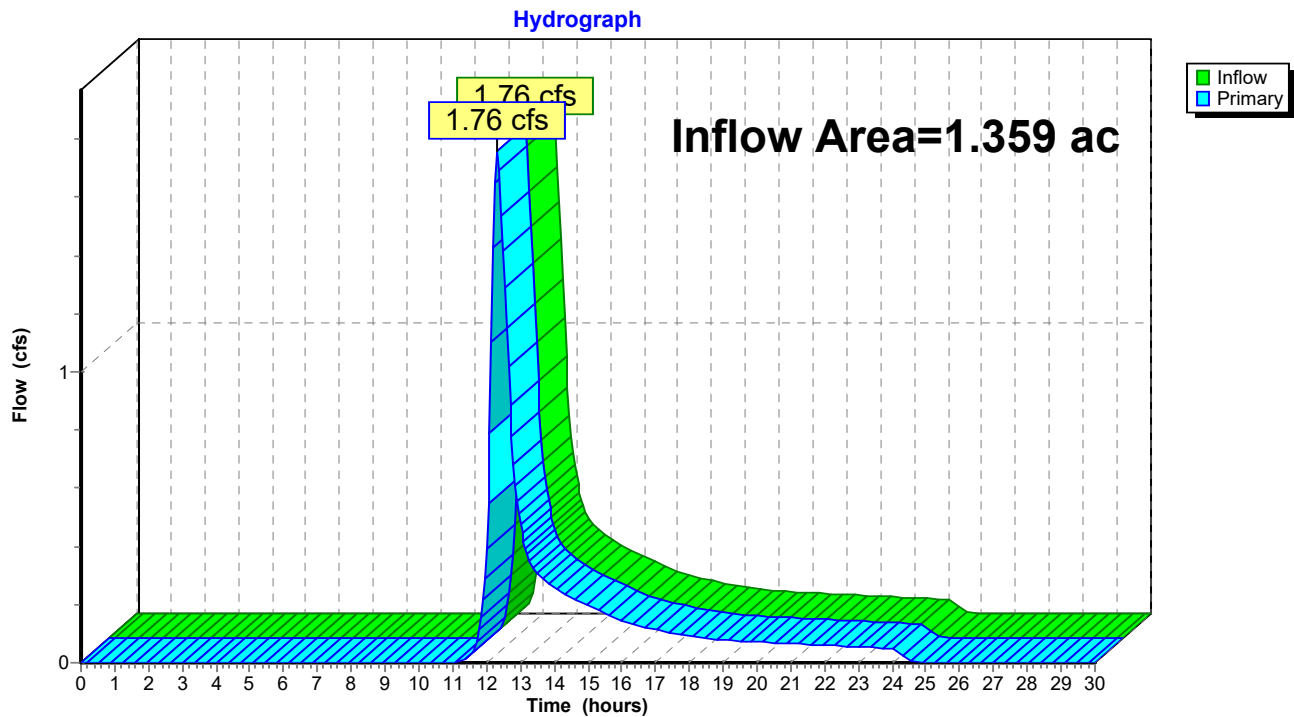


### Summary for Link 4L: AP 1

Inflow Area = 1.359 ac, 0.00% Impervious, Inflow Depth = 1.83" for 25-yr event  
 Inflow = 1.76 cfs @ 12.32 hrs, Volume= 0.207 af  
 Primary = 1.76 cfs @ 12.32 hrs, Volume= 0.207 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

### Link 4L: AP 1



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Type III 24-hr 100-yr Rainfall=8.30"

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Page 14

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

### Subcatchment EDA-1: EDA-1

Runoff Area=59,219 sf 0.00% Impervious Runoff Depth=2.99"  
Flow Length=513' Tc=20.6 min CN=55 Runoff=3.04 cfs 0.339 af

### Link 4L: AP 1

Inflow=3.04 cfs 0.339 af  
Primary=3.04 cfs 0.339 af

**Total Runoff Area = 1.359 ac Runoff Volume = 0.339 af Average Runoff Depth = 2.99"**  
**100.00% Pervious = 1.359 ac 0.00% Impervious = 0.000 ac**

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Type III 24-hr 100-yr Rainfall=8.30"

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Page 15

### Summary for Subcatchment EDA-1: EDA-1

Runoff = 3.04 cfs @ 12.31 hrs, Volume= 0.339 af, Depth= 2.99"

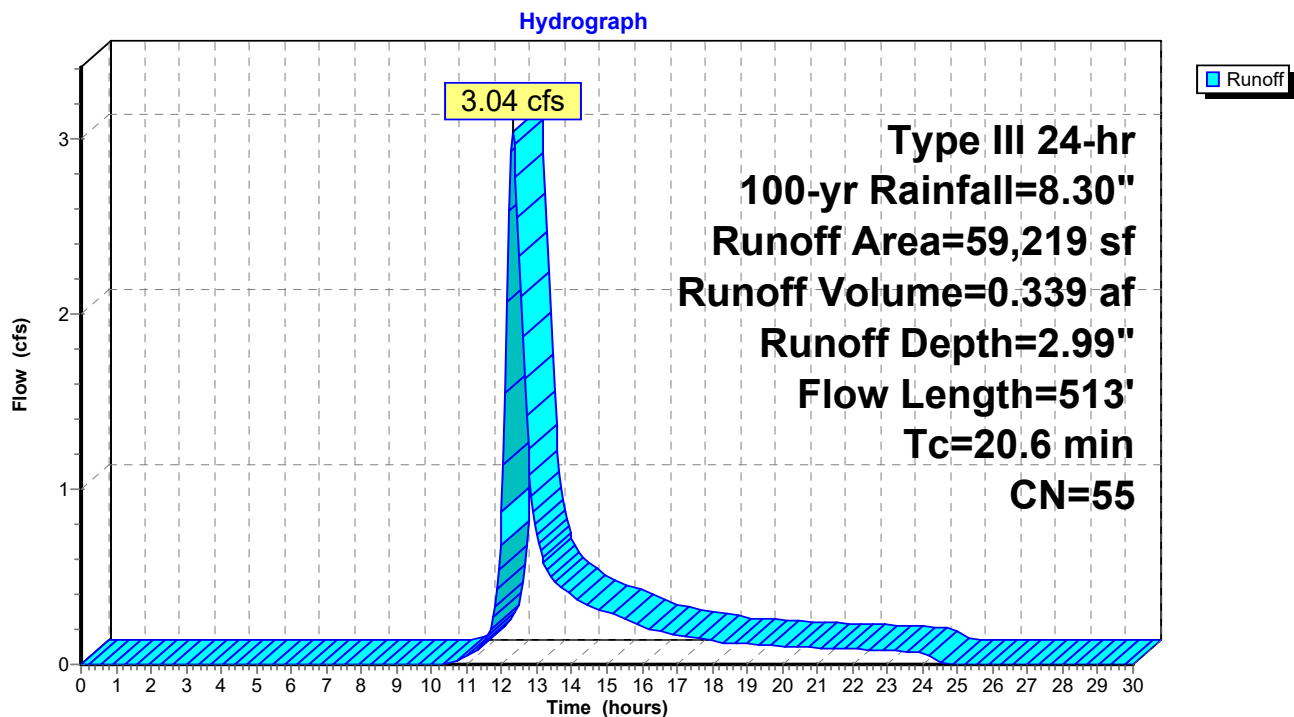
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-yr Rainfall=8.30"

Area (sf)	CN	Description
59,219	55	Woods, Good, HSG B
59,219		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.1900	0.11		<b>Sheet Flow, A-B</b> Woods: Dense underbrush n= 0.800 P2= 3.50"
3.2	240	0.2534	1.26		<b>Shallow Concentrated Flow, B-C</b> Forest w/Heavy Litter Kv= 2.5 fps
0.8	53	0.1887	1.09		<b>Shallow Concentrated Flow, C-D</b> Forest w/Heavy Litter Kv= 2.5 fps
2.1	120	0.1500	0.97		<b>Shallow Concentrated Flow, D-E</b> Forest w/Heavy Litter Kv= 2.5 fps
20.6	513	Total			

### Subcatchment EDA-1: EDA-1





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Type III 24-hr 100-yr Rainfall=8.30"

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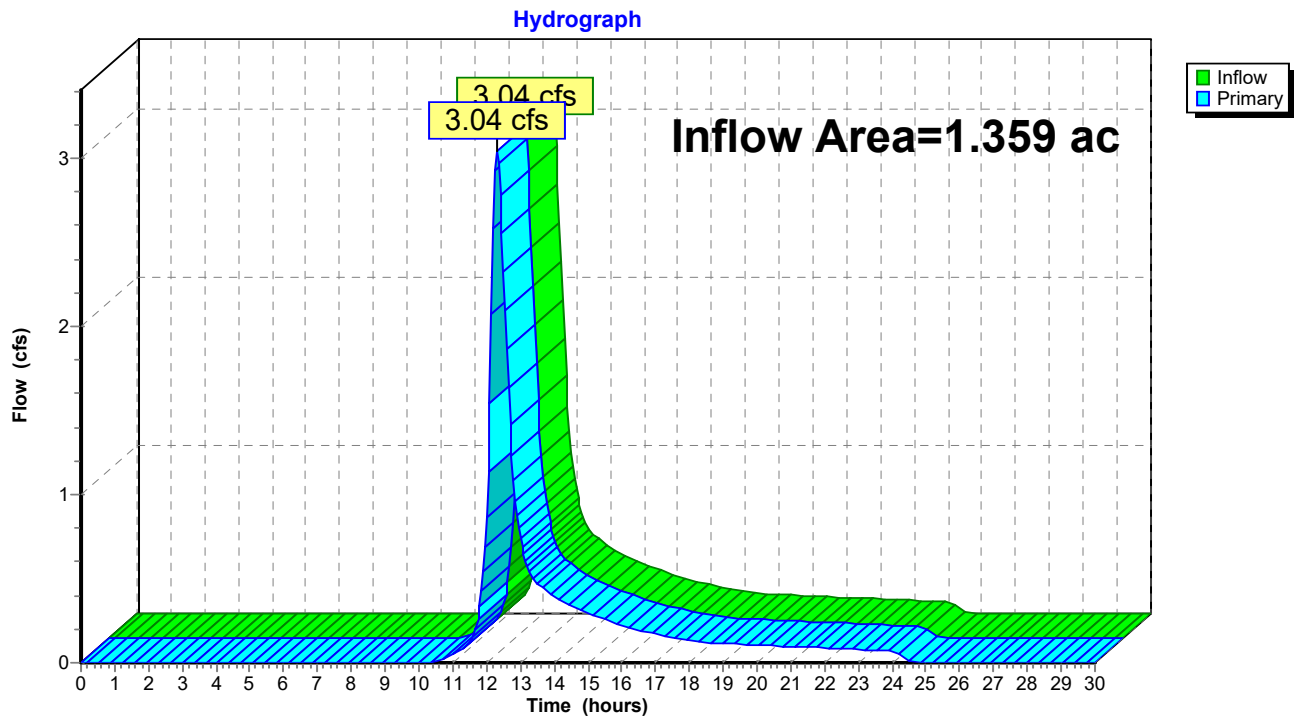
Page 16

### Summary for Link 4L: AP 1

Inflow Area = 1.359 ac, 0.00% Impervious, Inflow Depth = 2.99" for 100-yr event  
Inflow = 3.04 cfs @ 12.31 hrs, Volume= 0.339 af  
Primary = 3.04 cfs @ 12.31 hrs, Volume= 0.339 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

### Link 4L: AP 1

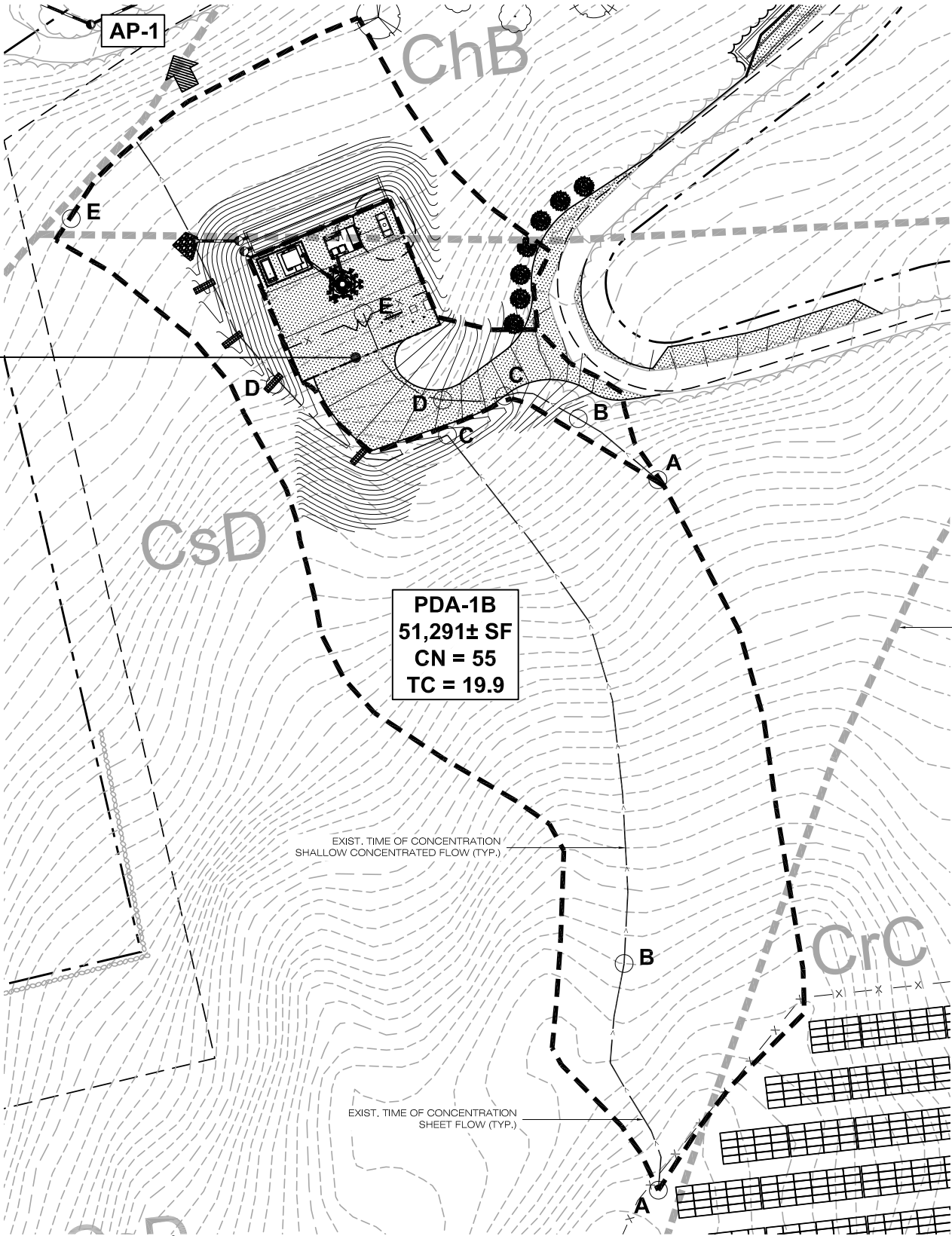


## **APPENDIX C: PROPOSED DRAINAGE AREA MAP (PDA-1) & HYDROLOGIC COMPUTATION (HYDROCAD)**

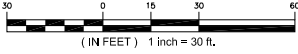
PROPOSED DRAINAGE AREAS			
	TOTAL AREA (SF)	COMPOSITE CN	TC (MINS.)
PDA-1A	7,948	80	5.6
PDA-1B	51,291	55	19.9

PDA-1A  
7,948± SF  
CN = 80  
TC = 5.6

PDA-1B  
51,291± SF  
CN = 55  
TC = 19.9



1  
PDA-1  
**PROPOSED DRAINAGE AREA MAP**  
SCALE : 1" = 30'-0"



HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810  
(203) 297-6345



4 CENTEROCK ROAD  
WEST NYACK, NY 10994



340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960



567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385 PH: (860)-663-1697  
WWW.ALLPOINTS TECH.COM FAX: (860)-663-0935

PERMITTING DOCUMENTS		
NO	DATE	REVISION
0	11/11/20	FOR REVIEW: RCB
1	07/15/21	FOR REVIEW: RCB

DESIGN PROFESSIONALS OF RECORD

PROF: SCOTT M. CHASSE P.E.  
COMP: APT ENGINEERING  
ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

DEVELOPER: HOMELAND TOWERS, LLC  
ADDRESS: 9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810

NOTE:  
IT IS A VIOLATION OF NEW YORK STATE  
EDUCATION LAW ARTICLE 145, SECTION  
7209 (2) FOR ANY PERSON, UNLESS  
ACTING UNDER THE DIRECTION OF A  
LICENSED PROFESSIONAL ENGINEER OR  
LAND SURVEYOR, TO ALTER AN ITEM IN  
ANY WAY. IF AN ITEM BEARING THE SEAL  
OF AN ENGINEER OR LAND SURVEYOR IS  
ALTERED, THE ALTERING ENGINEER OR  
LAND SURVEYOR SHALL AFFIX TO THE  
ITEM HIS SEAL AND THE NOTATION  
"ALTERED BY" FOLLOWED BY THE  
SIGNATURE AND THE DATE OF SUCH  
ALTERATION, AND A SPECIFIC  
DESCRIPTION OF THE ALTERATION.

HOMELAND TOWERS  
MOUNT KISCO

SITE 180 S. BEDFORD RD.  
ADDRESS: MT. KISCO, NY 10594

APT FILING NUMBER: NY283830

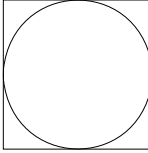
DATE: 11/11/20	DRAWN BY: CSH
	CHECKED BY: RCB

SHEET TITLE:

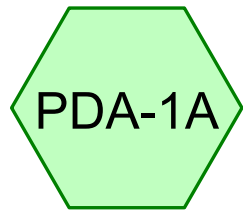
PROPOSED DRAINAGE  
AREA MAP

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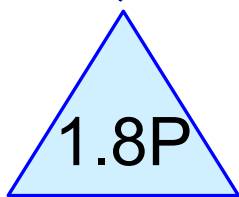
PDA-1



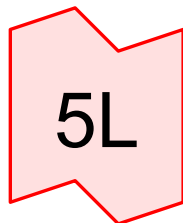




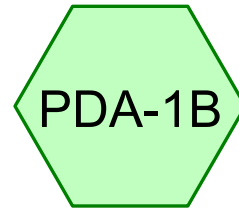
PDA-1A



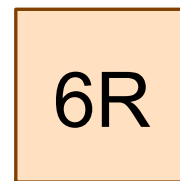
STORMTECH  
INFILTRATION  
SYSTEM



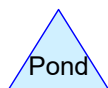
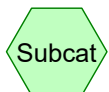
AP-1



PDA-1B



Grass Swale



**Routing Diagram for Mount Kisco**

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## Mount Kisco

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Page 2

### Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.036	61	>75% Grass cover, Good, HSG B (PDA-1A)
0.115	85	Gravel roads, HSG B (PDA-1A)
0.021	98	Unconnected pavement, HSG B (PDA-1A)
1.189	55	Woods, Good, HSG B (PDA-1A, PDA-1B)
<b>1.360</b>	<b>58</b>	<b>TOTAL AREA</b>

## Mount Kisco

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Page 3

### Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
1.360	HSG B	PDA-1A, PDA-1B
0.000	HSG C	
0.000	HSG D	
0.000	Other	
<b>1.360</b>		<b>TOTAL AREA</b>



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Page 4

### Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.036	0.000	0.000	0.000	0.036	>75% Grass cover, Good	PDA-1A
0.000	0.115	0.000	0.000	0.000	0.115	Gravel roads	PDA-1A
0.000	0.021	0.000	0.000	0.000	0.021	Unconnected pavement	PDA-1A
0.000	1.189	0.000	0.000	0.000	1.189	Woods, Good	PDA-1A, PDA-1B
<b>0.000</b>	<b>1.360</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>1.360</b>	<b>TOTAL AREA</b>	

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*Type III 24-hr 2-yr Rainfall=3.50"*

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Page 5

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment PDA-1A: PDA-1A**

Runoff Area=7,948 sf 11.32% Impervious Runoff Depth=1.57"  
Flow Length=154' Tc=5.6 min UI Adjusted CN=79 Runoff=0.33 cfs 0.024 af

**Subcatchment PDA-1B: PDA-1B**

Runoff Area=51,291 sf 0.00% Impervious Runoff Depth=0.35"  
Flow Length=535' Tc=19.9 min CN=55 Runoff=0.17 cfs 0.034 af

**Reach 6R: Grass Swale**

Avg. Flow Depth=0.05' Max Vel=1.69 fps Inflow=0.17 cfs 0.034 af  
n=0.031 L=100.0' S=0.0800 '/' Capacity=48.26 cfs Outflow=0.17 cfs 0.034 af

**Pond 1.8P: STORMTECH INFILTRATION**

Peak Elev=417.09' Storage=0.010 af Inflow=0.33 cfs 0.024 af  
Discarded=0.03 cfs 0.024 af Primary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.024 af

**Link 5L: AP-1**

Inflow=0.17 cfs 0.034 af  
Primary=0.17 cfs 0.034 af

**Total Runoff Area = 1.360 ac Runoff Volume = 0.058 af Average Runoff Depth = 0.51"**  
**98.48% Pervious = 1.339 ac 1.52% Impervious = 0.021 ac**

**Mount Kisco**

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Type III 24-hr 2-yr Rainfall=3.50"

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Page 6

**Summary for Subcatchment PDA-1A: PDA-1A**[49] Hint:  $T_c < 2dt$  may require smaller  $dt$ 

Runoff = 0.33 cfs @ 12.09 hrs, Volume= 0.024 af, Depth= 1.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs,  $dt=0.05$  hrs  
Type III 24-hr 2-yr Rainfall=3.50"

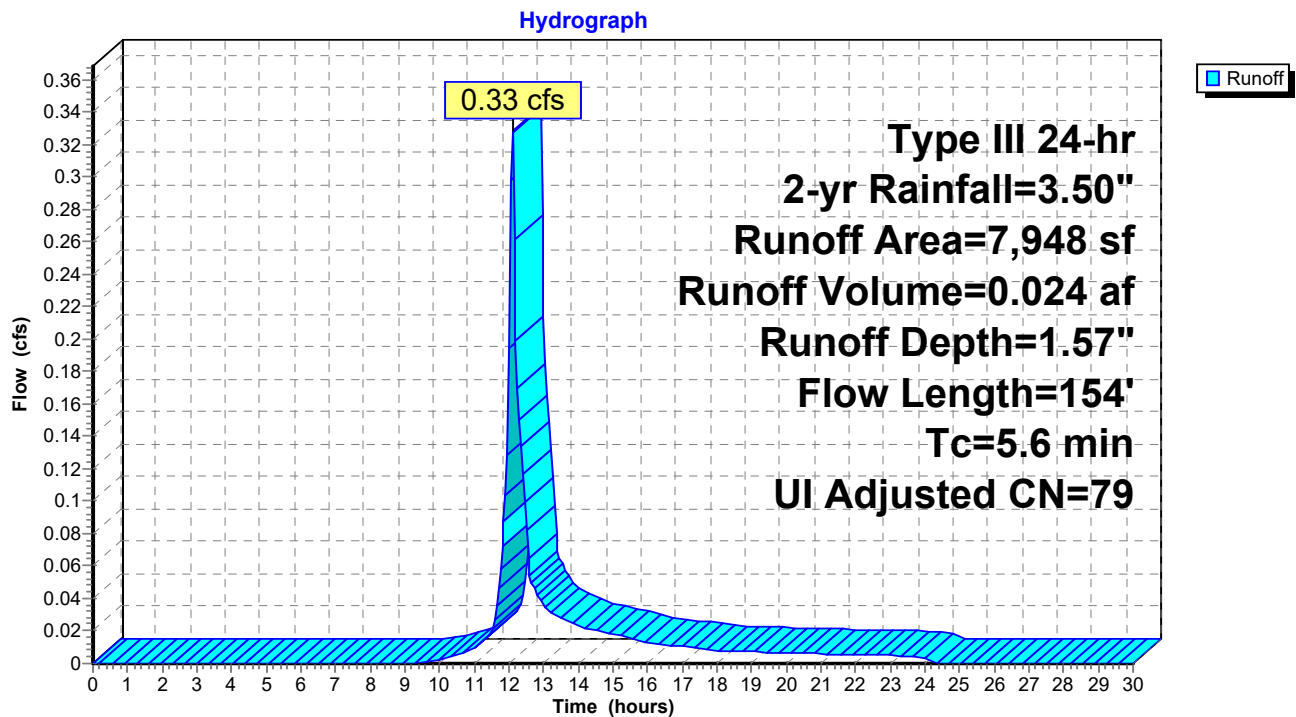
Area (sf)	CN	Adj	Description
5,008	85		Gravel roads, HSG B
1,547	61		>75% Grass cover, Good, HSG B
493	55		Woods, Good, HSG B
900	98		Unconnected pavement, HSG B
7,948	80	79	Weighted Average, UI Adjusted
7,048			88.68% Pervious Area
900			11.32% Impervious Area
900			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	42	0.3810	0.22		<b>Sheet Flow, A-B</b> Woods: Light underbrush $n=0.400$ $P2=3.50"$
2.0	34	0.2647	0.28		<b>Sheet Flow, B-C</b> Grass: Dense $n=0.240$ $P2=3.50"$
0.2	26	0.1153	2.21		<b>Sheet Flow, C-D</b> Smooth surfaces $n=0.011$ $P2=3.50"$
0.2	52	0.1154	5.47		<b>Shallow Concentrated Flow, D-E</b> Unpaved $K_v=16.1$ fps
5.6	154	Total			



Subcatchment PDA-1A: PDA-1A



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Type III 24-hr 2-yr Rainfall=3.50"

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Page 8

**Summary for Subcatchment PDA-1B: PDA-1B**

Runoff = 0.17 cfs @ 12.49 hrs, Volume= 0.034 af, Depth= 0.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-yr Rainfall=3.50"

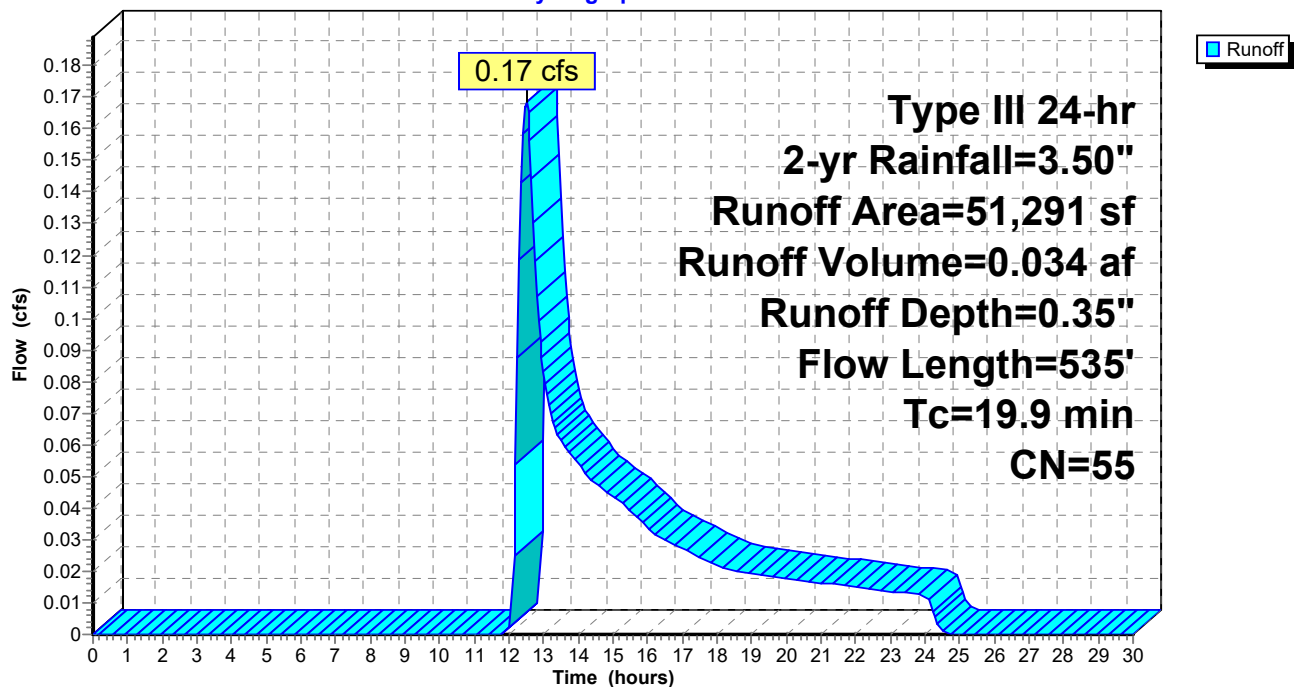
Area (sf)	CN	Description
51,291	55	Woods, Good, HSG B
51,291		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.1900	0.11		<b>Sheet Flow, A-B</b> Woods: Dense underbrush n= 0.800 P2= 3.50"
3.2	240	0.2534	1.26		<b>Shallow Concentrated Flow, B-C</b> Forest w/Heavy Litter Kv= 2.5 fps
0.3	85	0.0800	4.24		<b>Shallow Concentrated Flow, C-D</b> Grassed Waterway Kv= 15.0 fps
1.9	110	0.1500	0.97		<b>Shallow Concentrated Flow, D-E</b> Forest w/Heavy Litter Kv= 2.5 fps
19.9	535	Total			

**Subcatchment PDA-1B: PDA-1B**

Hydrograph



## Mount Kisco

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Type III 24-hr 2-yr Rainfall=3.50"

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Page 9

### Summary for Reach 6R: Grass Swale

Inflow Area = 1.177 ac, 0.00% Impervious, Inflow Depth = 0.35" for 2-yr event  
Inflow = 0.17 cfs @ 12.49 hrs, Volume= 0.034 af  
Outflow = 0.17 cfs @ 12.52 hrs, Volume= 0.034 af, Atten= 0%, Lag= 1.6 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Max. Velocity= 1.69 fps, Min. Travel Time= 1.0 min

Avg. Velocity = 0.86 fps, Avg. Travel Time= 1.9 min

Peak Storage= 10 cf @ 12.50 hrs

Average Depth at Peak Storage= 0.05'

Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 48.26 cfs

2.00' x 1.00' deep channel, n= 0.031

Side Slope Z-value= 3.0 '/' Top Width= 8.00'

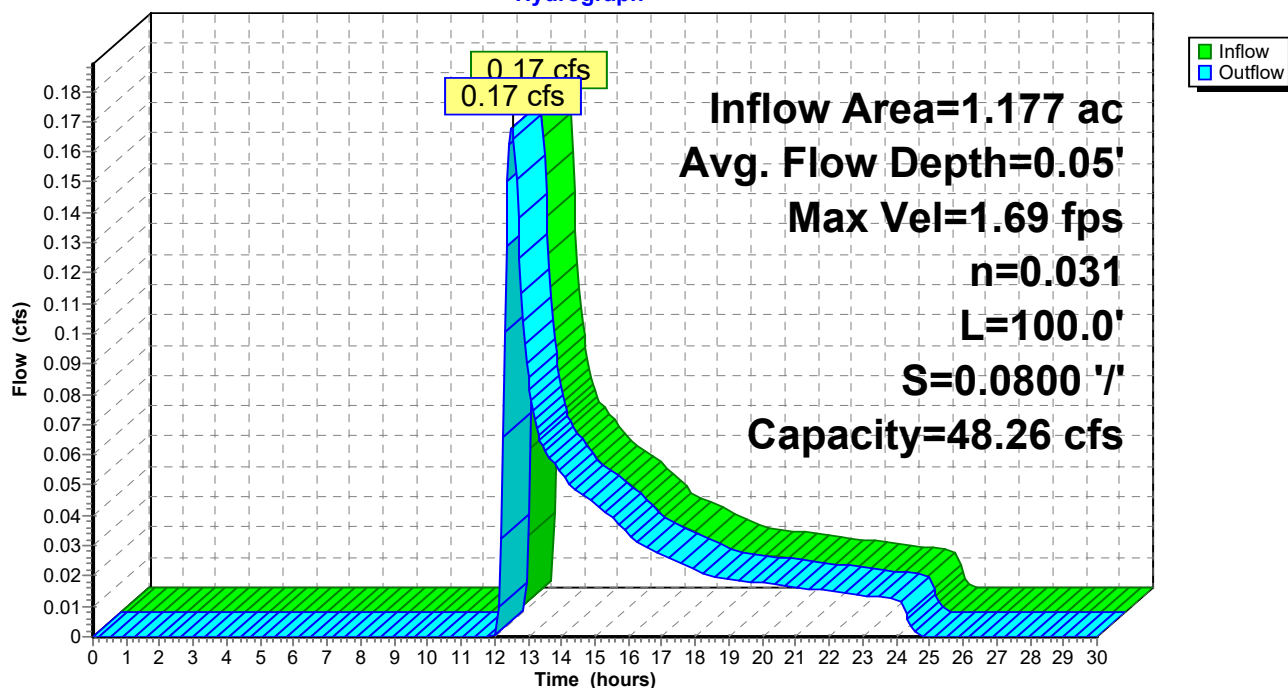
Length= 100.0' Slope= 0.0800 '/'

Inlet Invert= 433.00', Outlet Invert= 425.00'



### Reach 6R: Grass Swale

#### Hydrograph





**Mount Kisco**

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Type III 24-hr 2-yr Rainfall=3.50"

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Page 10

**Summary for Pond 1.8P: STORMTECH INFILTRATION SYSTEM**

Inflow Area = 0.182 ac, 11.32% Impervious, Inflow Depth = 1.57" for 2-yr event  
 Inflow = 0.33 cfs @ 12.09 hrs, Volume= 0.024 af  
 Outflow = 0.03 cfs @ 13.70 hrs, Volume= 0.024 af, Atten= 92%, Lag= 96.7 min  
 Discarded = 0.03 cfs @ 13.70 hrs, Volume= 0.024 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
 Peak Elev= 417.09' @ 13.70 hrs Surf.Area= 0.015 ac Storage= 0.010 af

Plug-Flow detention time= 163.7 min calculated for 0.024 af (100% of inflow)  
 Center-of-Mass det. time= 163.4 min ( 1,004.4 - 840.9 )

Volume	Invert	Avail.Storage	Storage Description
#1A	416.00'	0.015 af	<b>11.00'W x 60.58'L x 3.50'H Field A</b> 0.054 af Overall - 0.017 af Embedded = 0.037 af x 40.0% Voids
#2A	416.50'	0.017 af	<b>ADS_StormTech SC-740 +Cap x 16 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 8 Chambers
		0.032 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	416.50'	<b>12.0" Round Culvert</b> L= 17.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 416.50' / 415.50' S= 0.0588 ' S= 0.0588 ' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Discarded	416.00'	<b>1.450 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 410.00'
#3	Device 1	417.50'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#4	Device 1	419.25'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.03 cfs @ 13.70 hrs HW=417.09' (Free Discharge)↑ **2=Exfiltration** ( Controls 0.03 cfs)**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=416.00' (Free Discharge)↑ **1=Culvert** ( Controls 0.00 cfs)↑ **3=Orifice/Grate** ( Controls 0.00 cfs)↑ **4=Orifice/Grate** ( Controls 0.00 cfs)

**Pond 1.8P: STORMTECH INFILTRATION SYSTEM - Chamber Wizard Field A**

**Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

8 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 58.58' Row Length +12.0" End Stone x 2 = 60.58' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

16 Chambers x 45.9 cf = 735.0 cf Chamber Storage

2,332.2 cf Field - 735.0 cf Chambers = 1,597.2 cf Stone x 40.0% Voids = 638.9 cf Stone Storage

Chamber Storage + Stone Storage = 1,373.9 cf = 0.032 af

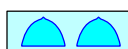
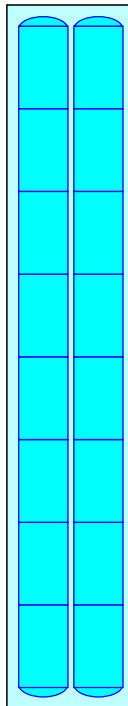
Overall Storage Efficiency = 58.9%

Overall System Size = 60.58' x 11.00' x 3.50'

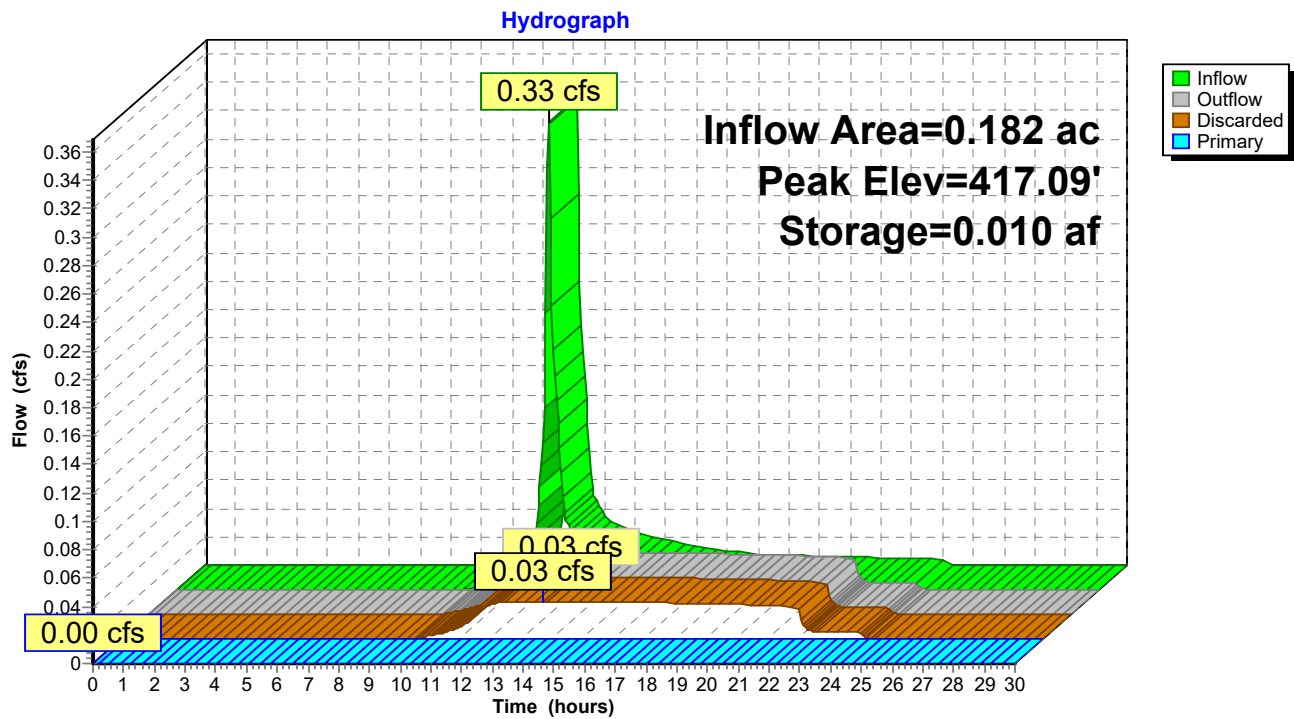
16 Chambers

86.4 cy Field

59.2 cy Stone



# Pond 1.8P: STORMTECH INFILTRATION SYSTEM





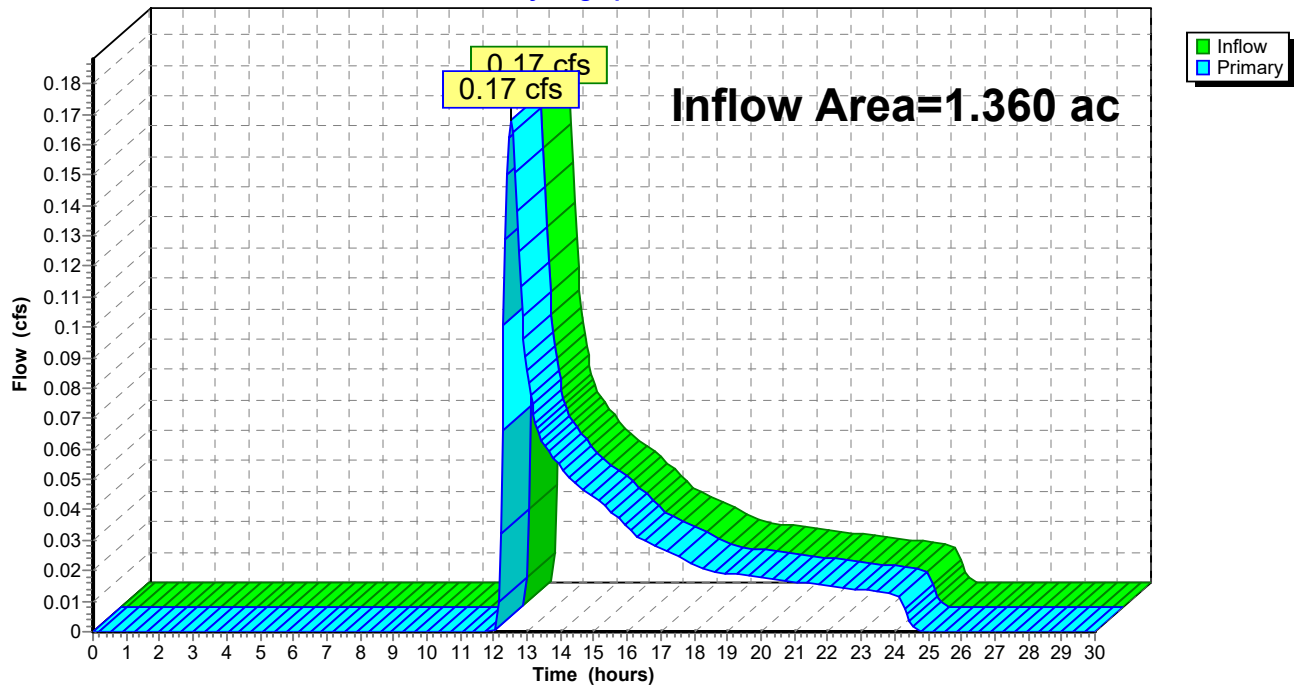
### Summary for Link 5L: AP-1

Inflow Area = 1.360 ac, 1.52% Impervious, Inflow Depth = 0.30" for 2-yr event  
 Inflow = 0.17 cfs @ 12.52 hrs, Volume= 0.034 af  
 Primary = 0.17 cfs @ 12.52 hrs, Volume= 0.034 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

### Link 5L: AP-1

Hydrograph



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*Type III 24-hr 10-yr Rainfall=5.36"*

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Page 14

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment PDA-1A: PDA-1A**

Runoff Area=7,948 sf 11.32% Impervious Runoff Depth=3.11"  
Flow Length=154' Tc=5.6 min UI Adjusted CN=79 Runoff=0.66 cfs 0.047 af

**Subcatchment PDA-1B: PDA-1B**

Runoff Area=51,291 sf 0.00% Impervious Runoff Depth=1.16"  
Flow Length=535' Tc=19.9 min CN=55 Runoff=0.90 cfs 0.114 af

**Reach 6R: Grass Swale**

Avg. Flow Depth=0.12' Max Vel=3.04 fps Inflow=0.90 cfs 0.114 af  
n=0.031 L=100.0' S=0.0800 '/' Capacity=48.26 cfs Outflow=0.90 cfs 0.114 af

**Pond 1.8P: STORMTECH INFILTRATION**

Peak Elev=417.86' Storage=0.019 af Inflow=0.66 cfs 0.047 af  
Discarded=0.03 cfs 0.037 af Primary=0.11 cfs 0.011 af Outflow=0.14 cfs 0.047 af

**Link 5L: AP-1**

Inflow=0.99 cfs 0.125 af  
Primary=0.99 cfs 0.125 af

**Total Runoff Area = 1.360 ac Runoff Volume = 0.162 af Average Runoff Depth = 1.43"**  
**98.48% Pervious = 1.339 ac 1.52% Impervious = 0.021 ac**

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Type III 24-hr 10-yr Rainfall=5.36"

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Page 15

**Summary for Subcatchment PDA-1A: PDA-1A**[49] Hint:  $T_c < 2dt$  may require smaller  $dt$ 

Runoff = 0.66 cfs @ 12.09 hrs, Volume= 0.047 af, Depth= 3.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs,  $dt=0.05$  hrs  
Type III 24-hr 10-yr Rainfall=5.36"

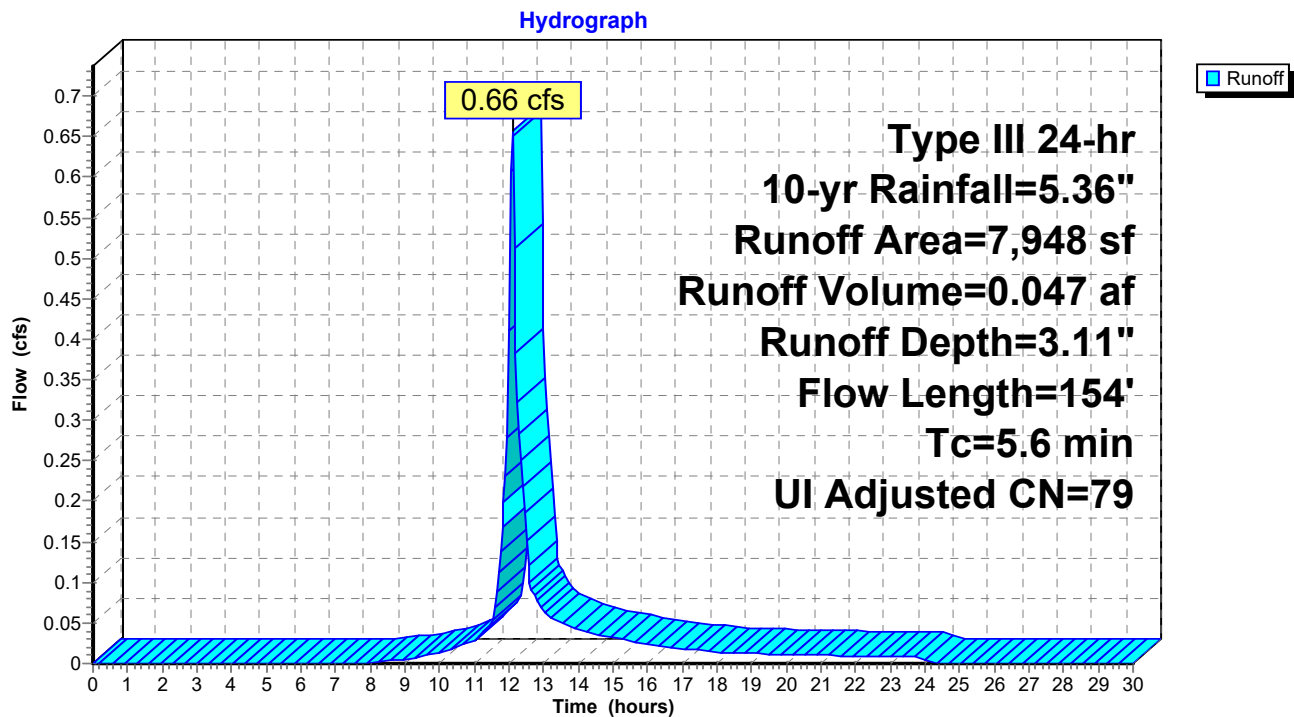
Area (sf)	CN	Adj	Description
5,008	85		Gravel roads, HSG B
1,547	61		>75% Grass cover, Good, HSG B
493	55		Woods, Good, HSG B
900	98		Unconnected pavement, HSG B
7,948	80	79	Weighted Average, UI Adjusted
7,048			88.68% Pervious Area
900			11.32% Impervious Area
900			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	42	0.3810	0.22		<b>Sheet Flow, A-B</b> Woods: Light underbrush $n=0.400$ $P2=3.50"$
2.0	34	0.2647	0.28		<b>Sheet Flow, B-C</b> Grass: Dense $n=0.240$ $P2=3.50"$
0.2	26	0.1153	2.21		<b>Sheet Flow, C-D</b> Smooth surfaces $n=0.011$ $P2=3.50"$
0.2	52	0.1154	5.47		<b>Shallow Concentrated Flow, D-E</b> Unpaved $K_v=16.1$ fps
5.6	154	Total			



Subcatchment PDA-1A: PDA-1A



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Page 17

**Summary for Subcatchment PDA-1B: PDA-1B**

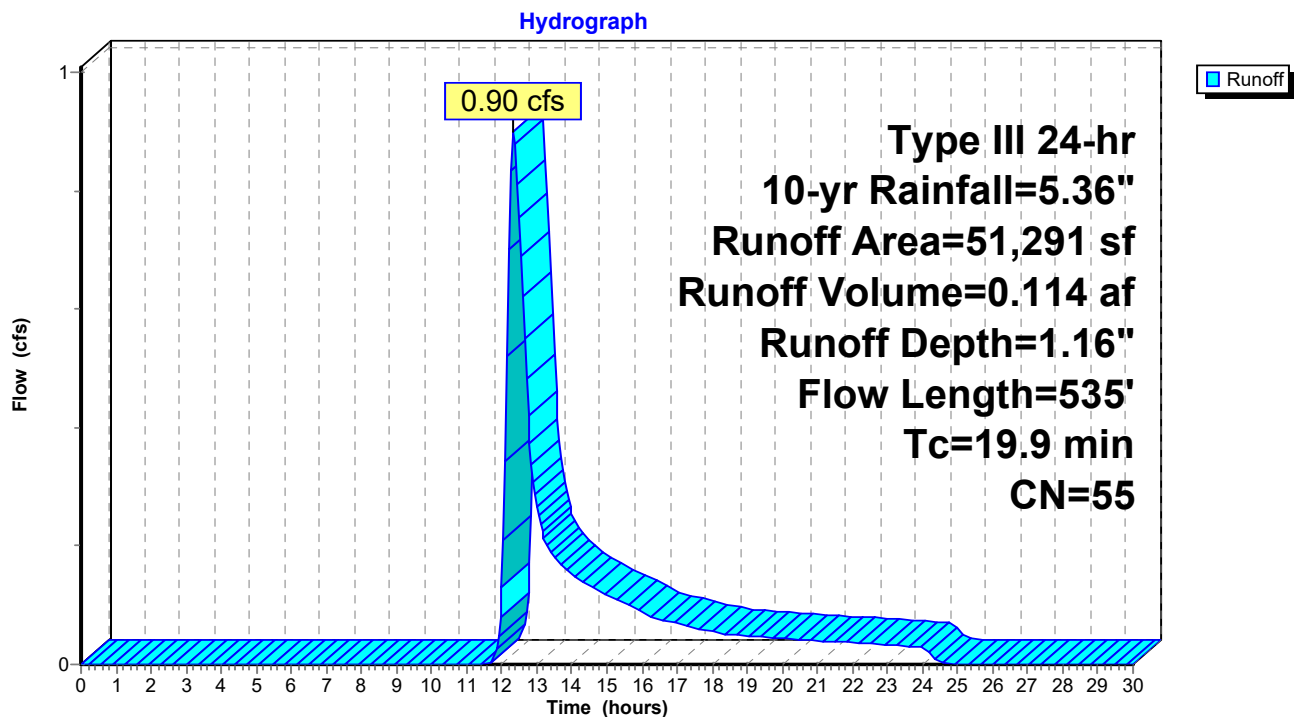
Runoff = 0.90 cfs @ 12.33 hrs, Volume= 0.114 af, Depth= 1.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-yr Rainfall=5.36"

Area (sf)	CN	Description
51,291	55	Woods, Good, HSG B
51,291		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.1900	0.11		<b>Sheet Flow, A-B</b> Woods: Dense underbrush n= 0.800 P2= 3.50"
3.2	240	0.2534	1.26		<b>Shallow Concentrated Flow, B-C</b> Forest w/Heavy Litter Kv= 2.5 fps
0.3	85	0.0800	4.24		<b>Shallow Concentrated Flow, C-D</b> Grassed Waterway Kv= 15.0 fps
1.9	110	0.1500	0.97		<b>Shallow Concentrated Flow, D-E</b> Forest w/Heavy Litter Kv= 2.5 fps
19.9	535	Total			

**Subcatchment PDA-1B: PDA-1B**

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Type III 24-hr 10-yr Rainfall=5.36"

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Page 18

### Summary for Reach 6R: Grass Swale

Inflow Area = 1.177 ac, 0.00% Impervious, Inflow Depth = 1.16" for 10-yr event  
Inflow = 0.90 cfs @ 12.33 hrs, Volume= 0.114 af  
Outflow = 0.90 cfs @ 12.35 hrs, Volume= 0.114 af, Atten= 0%, Lag= 1.2 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Max. Velocity= 3.04 fps, Min. Travel Time= 0.5 min  
Avg. Velocity= 1.24 fps, Avg. Travel Time= 1.3 min

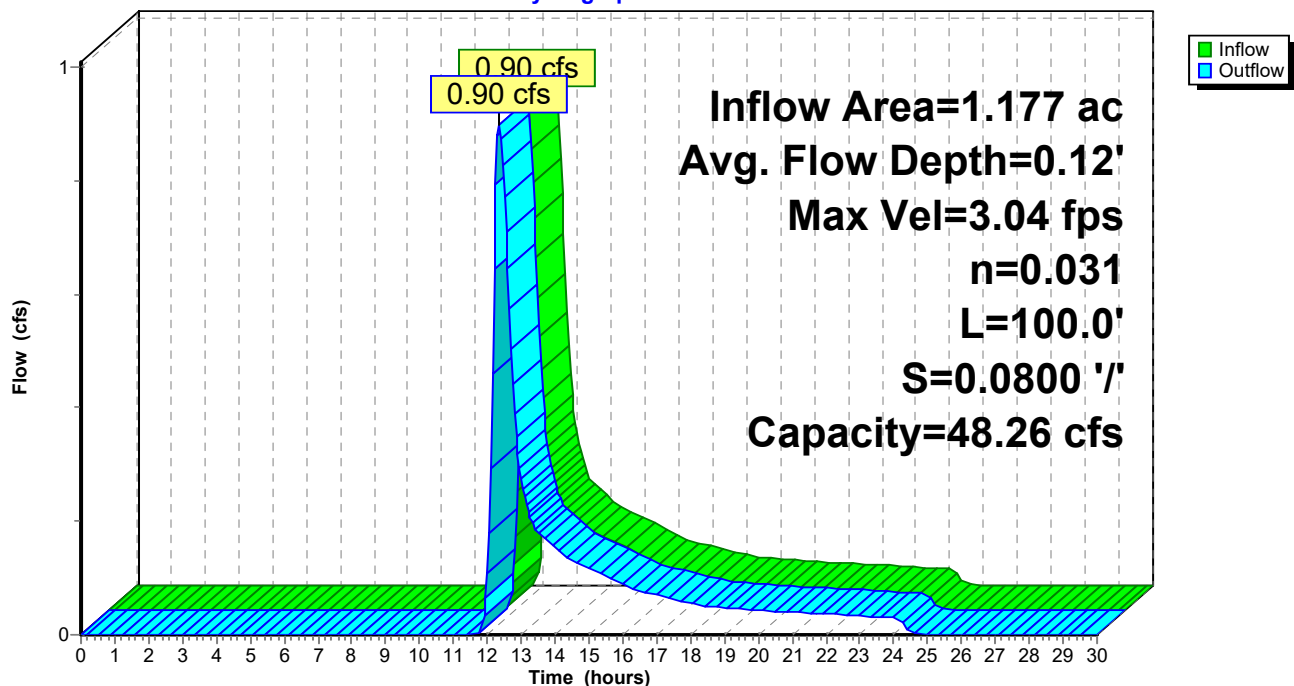
Peak Storage= 30 cf @ 12.34 hrs  
Average Depth at Peak Storage= 0.12'  
Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 48.26 cfs

2.00' x 1.00' deep channel, n= 0.031  
Side Slope Z-value= 3.0 '/' Top Width= 8.00'  
Length= 100.0' Slope= 0.0800 '/'  
Inlet Invert= 433.00', Outlet Invert= 425.00'



### Reach 6R: Grass Swale

#### Hydrograph





**Summary for Pond 1.8P: STORMTECH INFILTRATION SYSTEM**

Inflow Area = 0.182 ac, 11.32% Impervious, Inflow Depth = 3.11" for 10-yr event  
 Inflow = 0.66 cfs @ 12.09 hrs, Volume= 0.047 af  
 Outflow = 0.14 cfs @ 12.51 hrs, Volume= 0.047 af, Atten= 78%, Lag= 25.6 min  
 Discarded = 0.03 cfs @ 12.51 hrs, Volume= 0.037 af  
 Primary = 0.11 cfs @ 12.51 hrs, Volume= 0.011 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
 Peak Elev= 417.86' @ 12.51 hrs Surf.Area= 0.015 ac Storage= 0.019 af

Plug-Flow detention time= 199.9 min calculated for 0.047 af (100% of inflow)  
 Center-of-Mass det. time= 199.9 min ( 1,020.9 - 821.1 )

Volume	Invert	Avail.Storage	Storage Description
#1A	416.00'	0.015 af	<b>11.00'W x 60.58'L x 3.50'H Field A</b> 0.054 af Overall - 0.017 af Embedded = 0.037 af x 40.0% Voids
#2A	416.50'	0.017 af	<b>ADS_StormTech SC-740 +Cap x 16 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 8 Chambers
		0.032 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	416.50'	<b>12.0" Round Culvert</b> L= 17.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 416.50' / 415.50' S= 0.0588 ' S= 0.0588 ' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Discarded	416.00'	<b>1.450 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 410.00'
#3	Device 1	417.50'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#4	Device 1	419.25'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.03 cfs @ 12.51 hrs HW=417.86' (Free Discharge)

↑ **2=Exfiltration** ( Controls 0.03 cfs)

**Primary OutFlow** Max=0.11 cfs @ 12.51 hrs HW=417.86' (Free Discharge)

↑ **1=Culvert** (Passes 0.11 cfs of 3.51 cfs potential flow)

↑ **3=Orifice/Grate** (Orifice Controls 0.11 cfs @ 2.33 fps)

↑ **4=Orifice/Grate** ( Controls 0.00 cfs)

**Pond 1.8P: STORMTECH INFILTRATION SYSTEM - Chamber Wizard Field A****Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H =&gt; 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

8 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 58.58' Row Length +12.0" End Stone x 2 = 60.58' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

16 Chambers x 45.9 cf = 735.0 cf Chamber Storage

2,332.2 cf Field - 735.0 cf Chambers = 1,597.2 cf Stone x 40.0% Voids = 638.9 cf Stone Storage

Chamber Storage + Stone Storage = 1,373.9 cf = 0.032 af

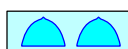
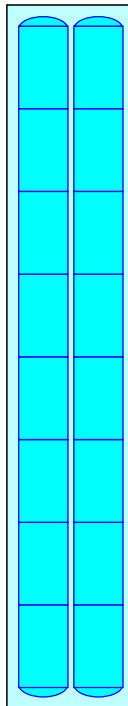
Overall Storage Efficiency = 58.9%

Overall System Size = 60.58' x 11.00' x 3.50'

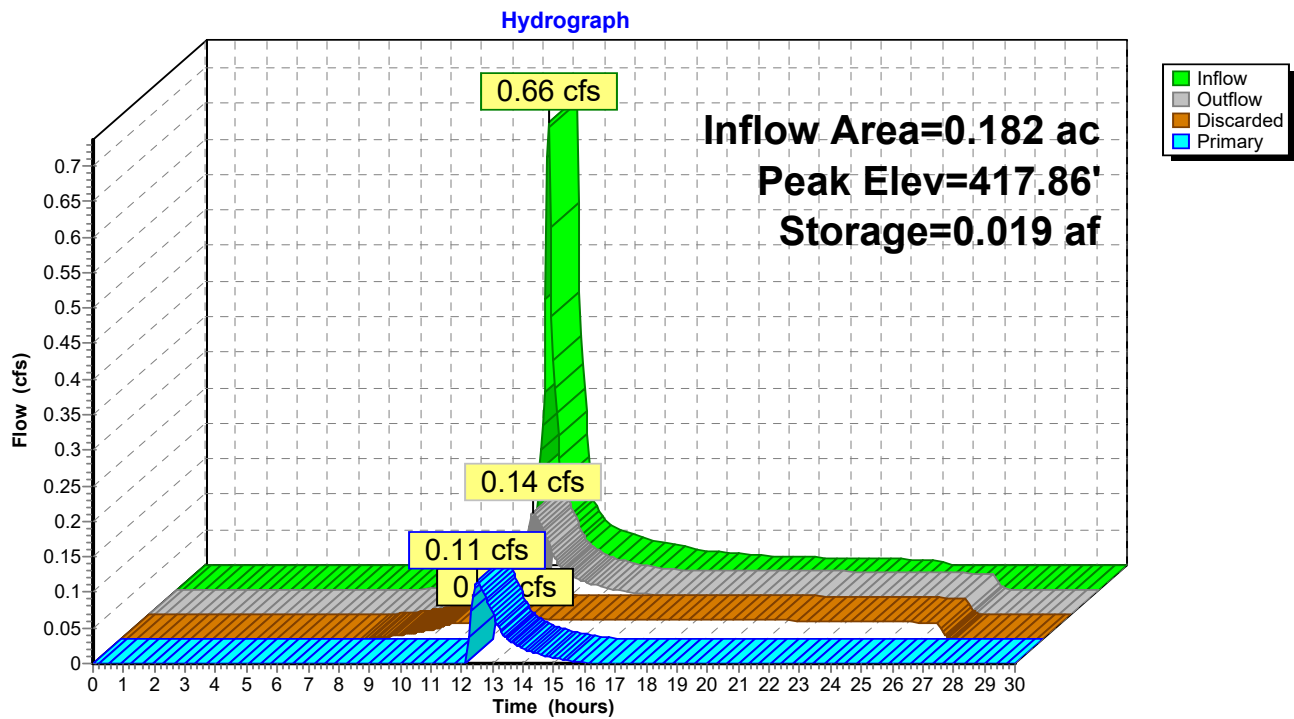
16 Chambers

86.4 cy Field

59.2 cy Stone



**Pond 1.8P: STORMTECH INFILTRATION SYSTEM**





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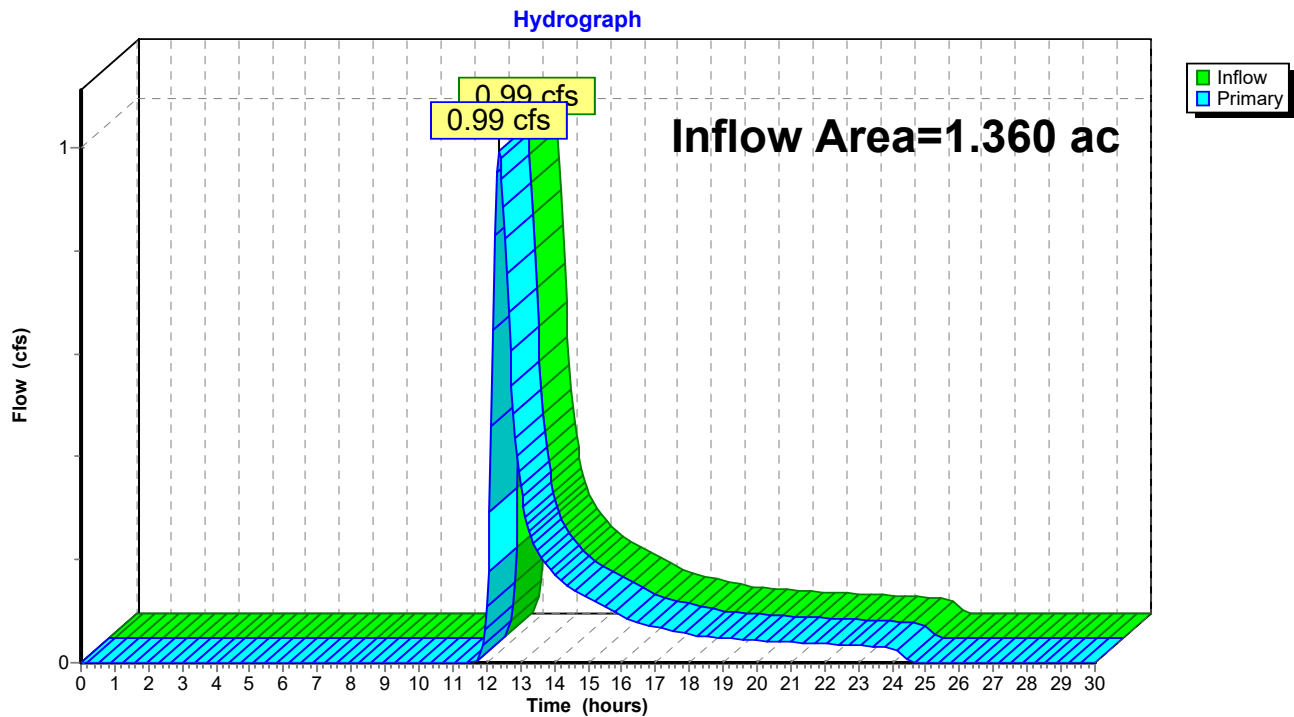
Page 22

### Summary for Link 5L: AP-1

Inflow Area = 1.360 ac, 1.52% Impervious, Inflow Depth = 1.10" for 10-yr event  
Inflow = 0.99 cfs @ 12.36 hrs, Volume= 0.125 af  
Primary = 0.99 cfs @ 12.36 hrs, Volume= 0.125 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

### Link 5L: AP-1



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Page 23

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment PDA-1A: PDA-1A**

Runoff Area=7,948 sf 11.32% Impervious Runoff Depth=4.15"  
Flow Length=154' Tc=5.6 min UI Adjusted CN=79 Runoff=0.87 cfs 0.063 af

**Subcatchment PDA-1B: PDA-1B**

Runoff Area=51,291 sf 0.00% Impervious Runoff Depth=1.83"  
Flow Length=535' Tc=19.9 min CN=55 Runoff=1.54 cfs 0.179 af

**Reach 6R: Grass Swale**

Avg. Flow Depth=0.17' Max Vel=3.63 fps Inflow=1.54 cfs 0.179 af  
n=0.031 L=100.0' S=0.0800 '/' Capacity=48.26 cfs Outflow=1.54 cfs 0.179 af

**Pond 1.8P: STORMTECH INFILTRATION**

Peak Elev=418.35' Storage=0.023 af Inflow=0.87 cfs 0.063 af  
Discarded=0.03 cfs 0.041 af Primary=0.20 cfs 0.022 af Outflow=0.23 cfs 0.063 af

**Link 5L: AP-1**

Inflow=1.72 cfs 0.202 af  
Primary=1.72 cfs 0.202 af

**Total Runoff Area = 1.360 ac Runoff Volume = 0.242 af Average Runoff Depth = 2.14"**  
**98.48% Pervious = 1.339 ac 1.52% Impervious = 0.021 ac**

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Type III 24-hr 25-yr Rainfall=6.52"

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Page 24

**Summary for Subcatchment PDA-1A: PDA-1A**[49] Hint:  $T_c < 2dt$  may require smaller  $dt$ 

Runoff = 0.87 cfs @ 12.09 hrs, Volume= 0.063 af, Depth= 4.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs,  $dt=0.05$  hrs  
Type III 24-hr 25-yr Rainfall=6.52"

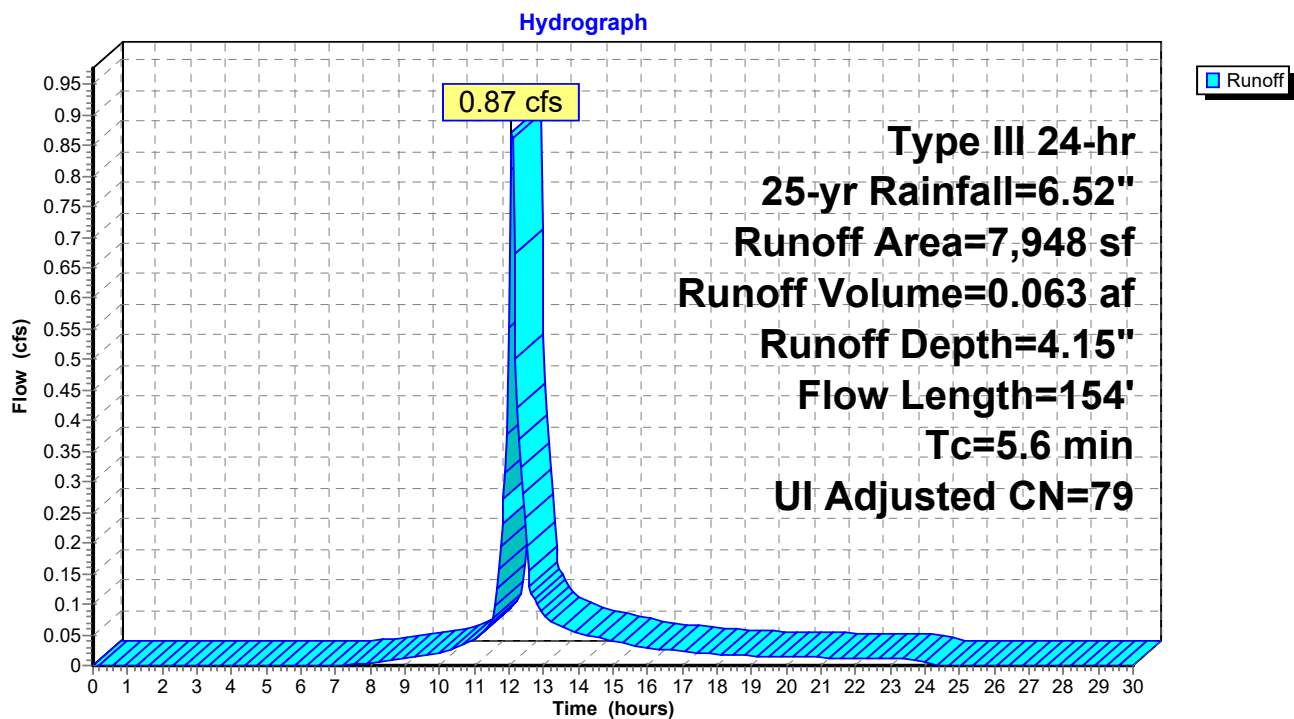
Area (sf)	CN	Adj	Description
5,008	85		Gravel roads, HSG B
1,547	61		>75% Grass cover, Good, HSG B
493	55		Woods, Good, HSG B
900	98		Unconnected pavement, HSG B
7,948	80	79	Weighted Average, UI Adjusted
7,048			88.68% Pervious Area
900			11.32% Impervious Area
900			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	42	0.3810	0.22		<b>Sheet Flow, A-B</b> Woods: Light underbrush $n=0.400$ $P2=3.50"$
2.0	34	0.2647	0.28		<b>Sheet Flow, B-C</b> Grass: Dense $n=0.240$ $P2=3.50"$
0.2	26	0.1153	2.21		<b>Sheet Flow, C-D</b> Smooth surfaces $n=0.011$ $P2=3.50"$
0.2	52	0.1154	5.47		<b>Shallow Concentrated Flow, D-E</b> Unpaved $K_v=16.1$ fps
5.6	154	Total			



Subcatchment PDA-1A: PDA-1A



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Page 26

**Summary for Subcatchment PDA-1B: PDA-1B**

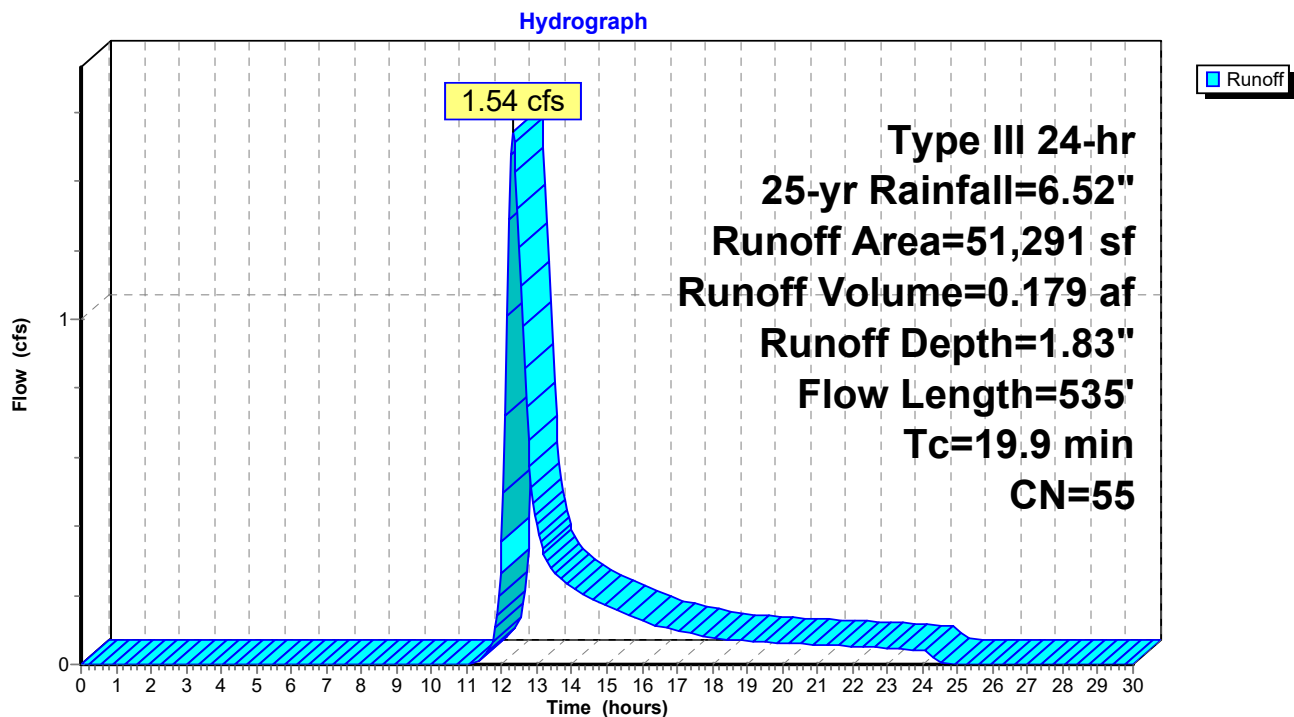
Runoff = 1.54 cfs @ 12.31 hrs, Volume= 0.179 af, Depth= 1.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25-yr Rainfall=6.52"

Area (sf)	CN	Description
51,291	55	Woods, Good, HSG B
51,291		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.1900	0.11		<b>Sheet Flow, A-B</b> Woods: Dense underbrush n= 0.800 P2= 3.50"
3.2	240	0.2534	1.26		<b>Shallow Concentrated Flow, B-C</b> Forest w/Heavy Litter Kv= 2.5 fps
0.3	85	0.0800	4.24		<b>Shallow Concentrated Flow, C-D</b> Grassed Waterway Kv= 15.0 fps
1.9	110	0.1500	0.97		<b>Shallow Concentrated Flow, D-E</b> Forest w/Heavy Litter Kv= 2.5 fps
19.9	535	Total			

**Subcatchment PDA-1B: PDA-1B**

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Type III 24-hr 25-yr Rainfall=6.52"

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Page 27

### Summary for Reach 6R: Grass Swale

Inflow Area = 1.177 ac, 0.00% Impervious, Inflow Depth = 1.83" for 25-yr event  
Inflow = 1.54 cfs @ 12.31 hrs, Volume= 0.179 af  
Outflow = 1.54 cfs @ 12.32 hrs, Volume= 0.179 af, Atten= 0%, Lag= 0.8 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Max. Velocity= 3.63 fps, Min. Travel Time= 0.5 min

Avg. Velocity= 1.41 fps, Avg. Travel Time= 1.2 min

Peak Storage= 43 cf @ 12.31 hrs

Average Depth at Peak Storage= 0.17'

Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 48.26 cfs

2.00' x 1.00' deep channel, n= 0.031

Side Slope Z-value= 3.0 '/' Top Width= 8.00'

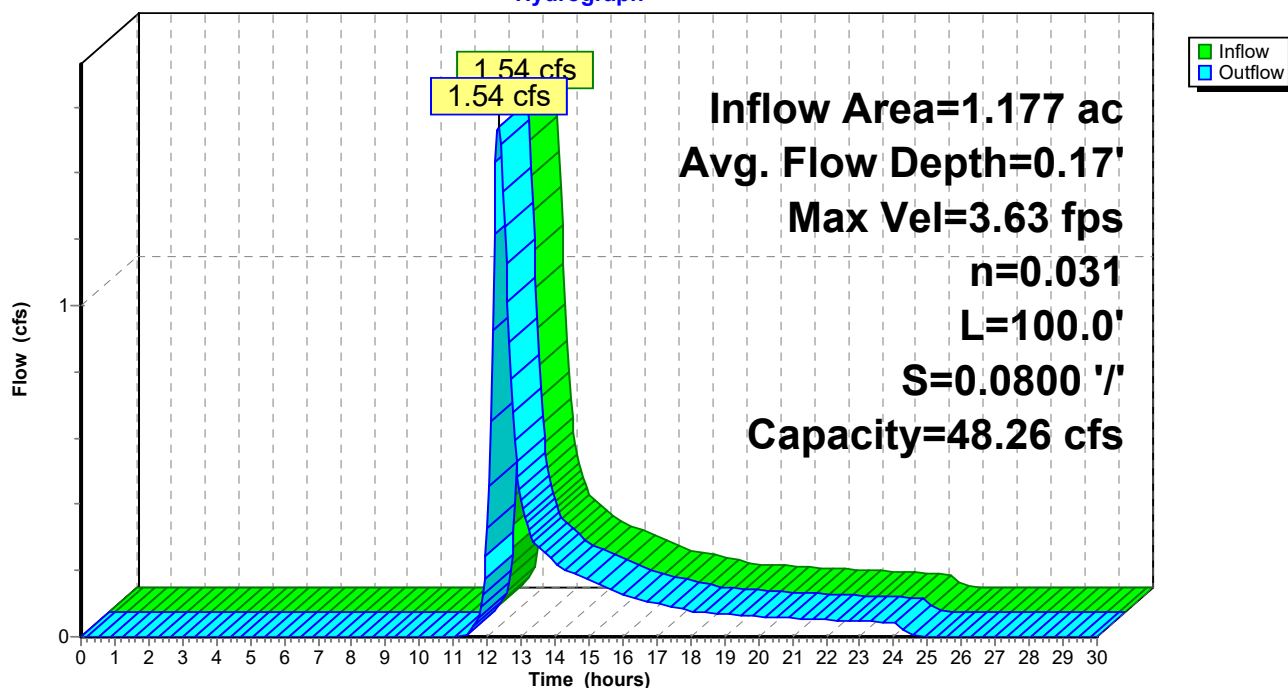
Length= 100.0' Slope= 0.0800 '/'

Inlet Invert= 433.00', Outlet Invert= 425.00'



### Reach 6R: Grass Swale

#### Hydrograph





**Summary for Pond 1.8P: STORMTECH INFILTRATION SYSTEM**

Inflow Area = 0.182 ac, 11.32% Impervious, Inflow Depth = 4.15" for 25-yr event  
 Inflow = 0.87 cfs @ 12.09 hrs, Volume= 0.063 af  
 Outflow = 0.23 cfs @ 12.46 hrs, Volume= 0.063 af, Atten= 73%, Lag= 22.4 min  
 Discarded = 0.03 cfs @ 12.46 hrs, Volume= 0.041 af  
 Primary = 0.20 cfs @ 12.46 hrs, Volume= 0.022 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
 Peak Elev= 418.35' @ 12.46 hrs Surf.Area= 0.015 ac Storage= 0.023 af

Plug-Flow detention time= 173.6 min calculated for 0.063 af (100% of inflow)  
 Center-of-Mass det. time= 173.5 min ( 986.4 - 812.9 )

Volume	Invert	Avail.Storage	Storage Description
#1A	416.00'	0.015 af	<b>11.00'W x 60.58'L x 3.50'H Field A</b> 0.054 af Overall - 0.017 af Embedded = 0.037 af x 40.0% Voids
#2A	416.50'	0.017 af	<b>ADS_StormTech SC-740 +Cap x 16 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 8 Chambers
		0.032 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	416.50'	<b>12.0" Round Culvert</b> L= 17.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 416.50' / 415.50' S= 0.0588 ' S= 0.0588 ' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Discarded	416.00'	<b>1.450 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 410.00'
#3	Device 1	417.50'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#4	Device 1	419.25'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.03 cfs @ 12.46 hrs HW=418.34' (Free Discharge)

↑ **2=Exfiltration** ( Controls 0.03 cfs)

**Primary OutFlow** Max=0.20 cfs @ 12.46 hrs HW=418.34' (Free Discharge)

↑ **1=Culvert** (Passes 0.20 cfs of 4.38 cfs potential flow)

↑ **3=Orifice/Grate** (Orifice Controls 0.20 cfs @ 4.08 fps)

↑ **4=Orifice/Grate** ( Controls 0.00 cfs)

**Pond 1.8P: STORMTECH INFILTRATION SYSTEM - Chamber Wizard Field A**

**Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

8 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 58.58' Row Length +12.0" End Stone x 2 = 60.58' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

16 Chambers x 45.9 cf = 735.0 cf Chamber Storage

2,332.2 cf Field - 735.0 cf Chambers = 1,597.2 cf Stone x 40.0% Voids = 638.9 cf Stone Storage

Chamber Storage + Stone Storage = 1,373.9 cf = 0.032 af

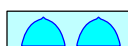
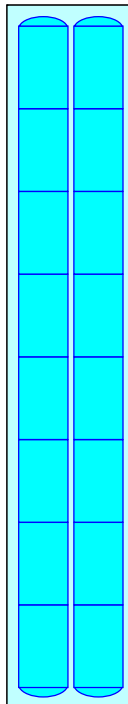
Overall Storage Efficiency = 58.9%

Overall System Size = 60.58' x 11.00' x 3.50'

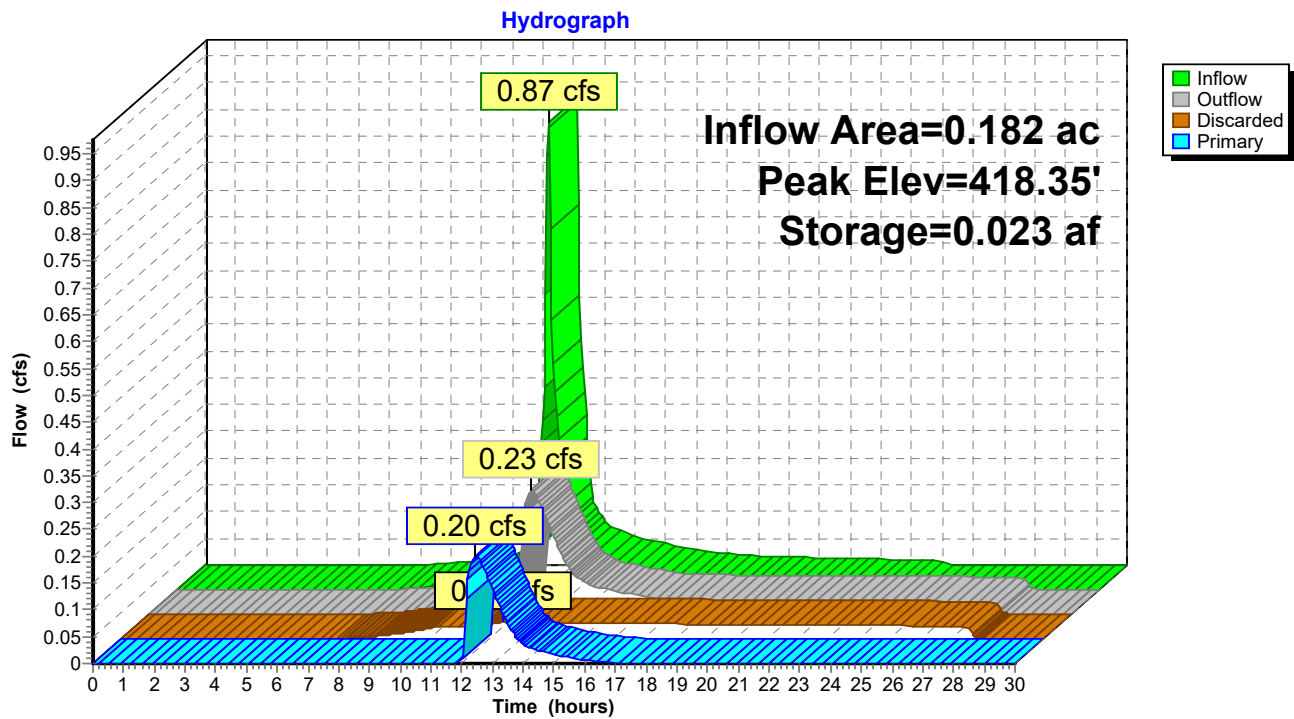
16 Chambers

86.4 cy Field

59.2 cy Stone



## Pond 1.8P: STORMTECH INFILTRATION SYSTEM

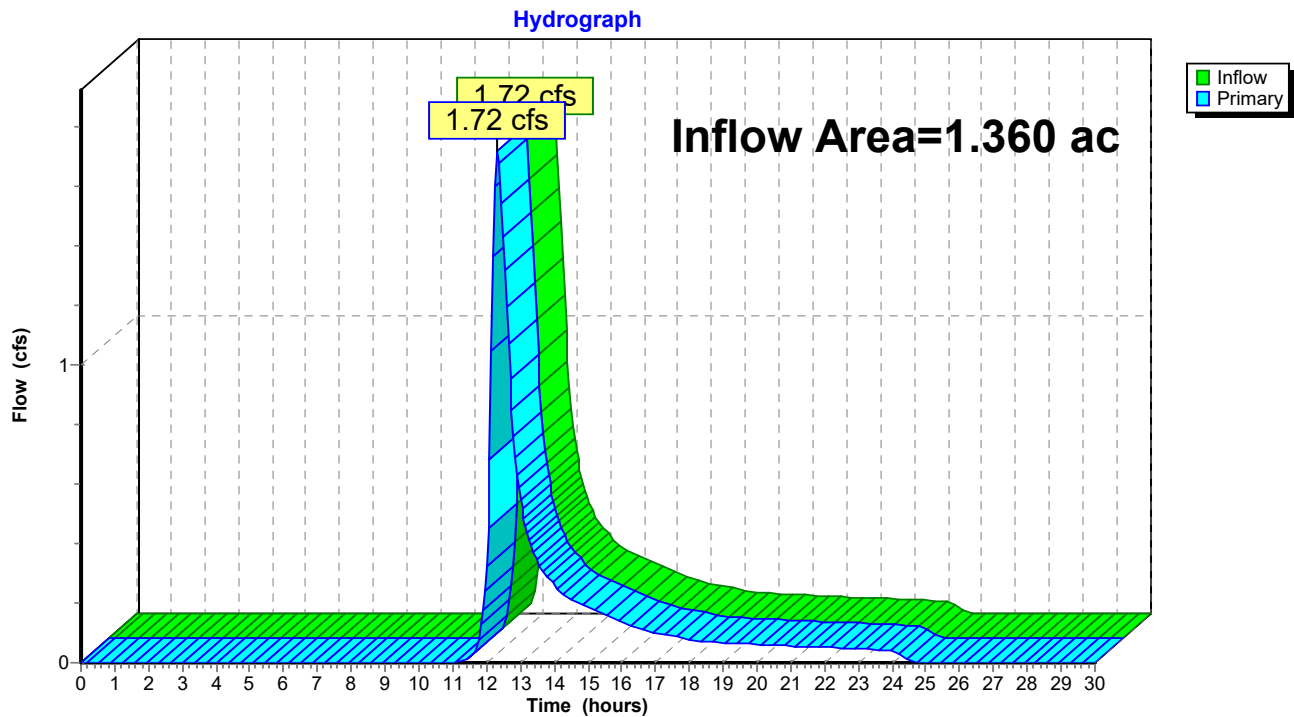




**Summary for Link 5L: AP-1**

Inflow Area = 1.360 ac, 1.52% Impervious, Inflow Depth = 1.78" for 25-yr event  
Inflow = 1.72 cfs @ 12.33 hrs, Volume= 0.202 af  
Primary = 1.72 cfs @ 12.33 hrs, Volume= 0.202 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

**Link 5L: AP-1**

**Mount Kisco**

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*Type III 24-hr 100-yr Rainfall=8.30"*

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Page 32

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment PDA-1A: PDA-1A**

Runoff Area=7,948 sf 11.32% Impervious Runoff Depth=5.79"  
Flow Length=154' Tc=5.6 min UI Adjusted CN=79 Runoff=1.20 cfs 0.088 af

**Subcatchment PDA-1B: PDA-1B**

Runoff Area=51,291 sf 0.00% Impervious Runoff Depth=2.99"  
Flow Length=535' Tc=19.9 min CN=55 Runoff=2.67 cfs 0.293 af

**Reach 6R: Grass Swale**

Avg. Flow Depth=0.23' Max Vel=4.31 fps Inflow=2.67 cfs 0.293 af  
n=0.031 L=100.0' S=0.0800 '/' Capacity=48.26 cfs Outflow=2.66 cfs 0.293 af

**Pond 1.8P: STORMTECH INFILTRATION**

Peak Elev=419.47' Storage=0.031 af Inflow=1.20 cfs 0.088 af  
Discarded=0.04 cfs 0.046 af Primary=0.39 cfs 0.042 af Outflow=0.43 cfs 0.088 af

**Link 5L: AP-1**

Inflow=3.04 cfs 0.336 af  
Primary=3.04 cfs 0.336 af

**Total Runoff Area = 1.360 ac Runoff Volume = 0.381 af Average Runoff Depth = 3.37"**  
**98.48% Pervious = 1.339 ac 1.52% Impervious = 0.021 ac**

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Type III 24-hr 100-yr Rainfall=8.30"

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Page 33

**Summary for Subcatchment PDA-1A: PDA-1A**[49] Hint:  $T_c < 2dt$  may require smaller  $dt$ 

Runoff = 1.20 cfs @ 12.08 hrs, Volume= 0.088 af, Depth= 5.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs,  $dt=0.05$  hrs  
Type III 24-hr 100-yr Rainfall=8.30"

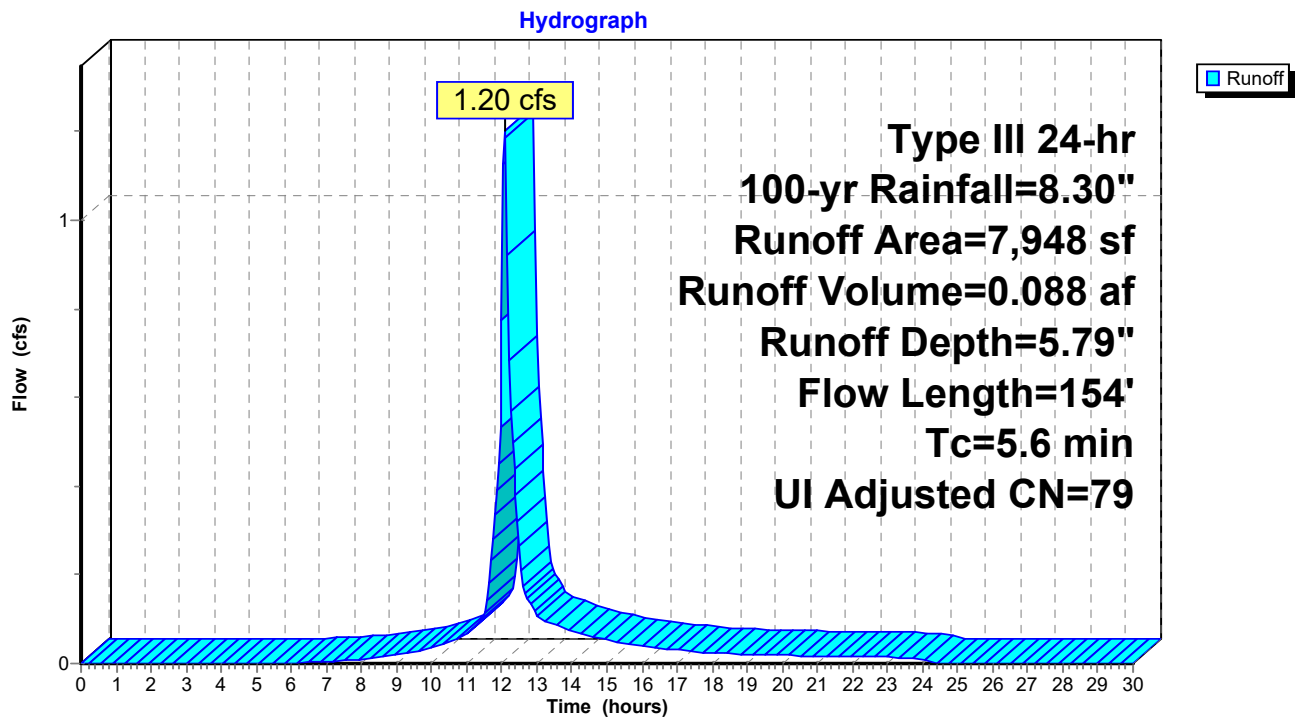
Area (sf)	CN	Adj	Description
5,008	85		Gravel roads, HSG B
1,547	61		>75% Grass cover, Good, HSG B
493	55		Woods, Good, HSG B
900	98		Unconnected pavement, HSG B
7,948	80	79	Weighted Average, UI Adjusted
7,048			88.68% Pervious Area
900			11.32% Impervious Area
900			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	42	0.3810	0.22		<b>Sheet Flow, A-B</b> Woods: Light underbrush $n=0.400$ $P2=3.50"$
2.0	34	0.2647	0.28		<b>Sheet Flow, B-C</b> Grass: Dense $n=0.240$ $P2=3.50"$
0.2	26	0.1153	2.21		<b>Sheet Flow, C-D</b> Smooth surfaces $n=0.011$ $P2=3.50"$
0.2	52	0.1154	5.47		<b>Shallow Concentrated Flow, D-E</b> Unpaved $K_v=16.1$ fps
5.6	154	Total			



Subcatchment PDA-1A: PDA-1A



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Type III 24-hr 100-yr Rainfall=8.30"

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Page 35

**Summary for Subcatchment PDA-1B: PDA-1B**

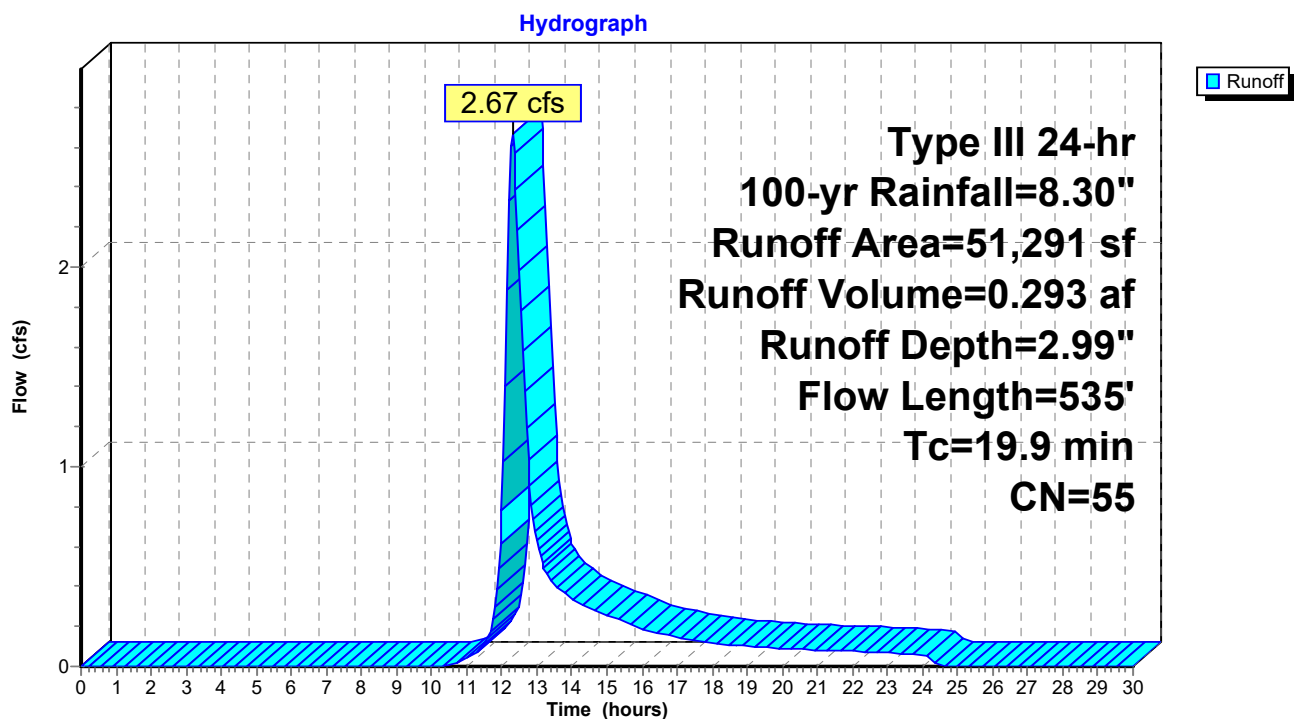
Runoff = 2.67 cfs @ 12.30 hrs, Volume= 0.293 af, Depth= 2.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-yr Rainfall=8.30"

Area (sf)	CN	Description
51,291	55	Woods, Good, HSG B
51,291		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.1900	0.11		<b>Sheet Flow, A-B</b> Woods: Dense underbrush n= 0.800 P2= 3.50"
3.2	240	0.2534	1.26		<b>Shallow Concentrated Flow, B-C</b> Forest w/Heavy Litter Kv= 2.5 fps
0.3	85	0.0800	4.24		<b>Shallow Concentrated Flow, C-D</b> Grassed Waterway Kv= 15.0 fps
1.9	110	0.1500	0.97		<b>Shallow Concentrated Flow, D-E</b> Forest w/Heavy Litter Kv= 2.5 fps
19.9	535	Total			

**Subcatchment PDA-1B: PDA-1B**

## Mount Kisco

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Type III 24-hr 100-yr Rainfall=8.30"

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Page 36

### Summary for Reach 6R: Grass Swale

Inflow Area = 1.177 ac, 0.00% Impervious, Inflow Depth = 2.99" for 100-yr event  
Inflow = 2.67 cfs @ 12.30 hrs, Volume= 0.293 af  
Outflow = 2.66 cfs @ 12.31 hrs, Volume= 0.293 af, Atten= 0%, Lag= 0.7 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
Max. Velocity= 4.31 fps, Min. Travel Time= 0.4 min  
Avg. Velocity= 1.61 fps, Avg. Travel Time= 1.0 min

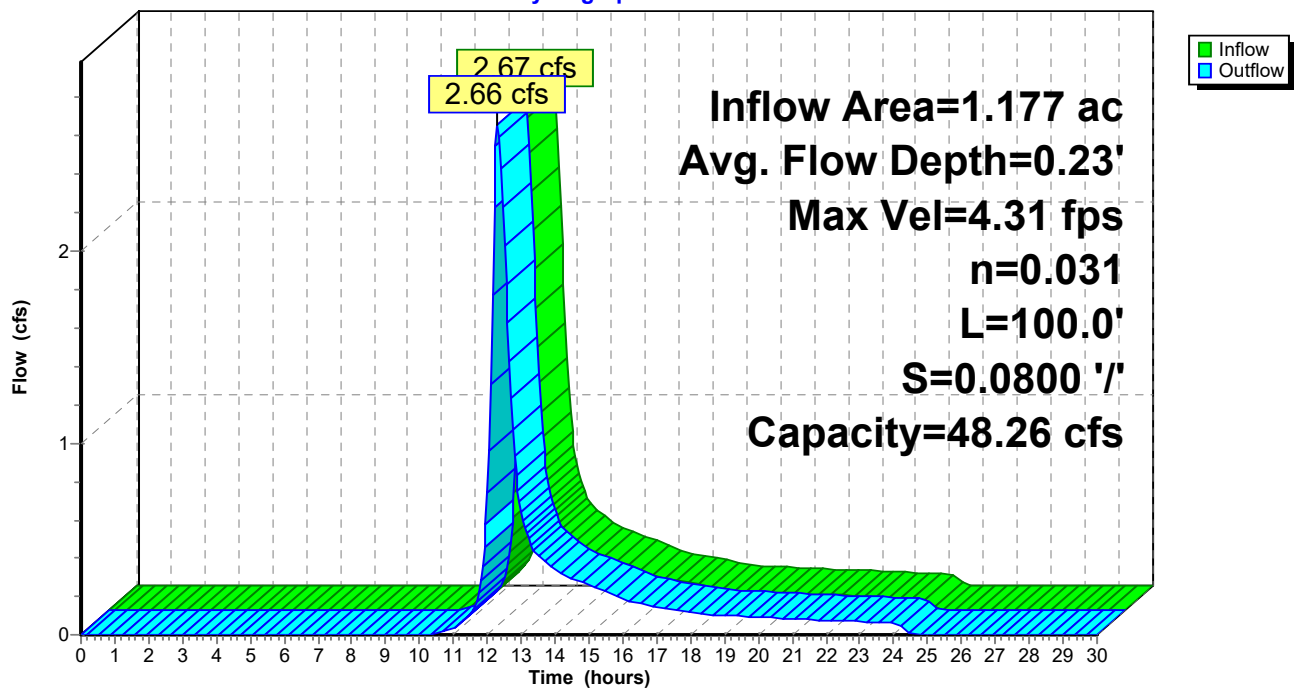
Peak Storage= 62 cf @ 12.30 hrs  
Average Depth at Peak Storage= 0.23'  
Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 48.26 cfs

2.00' x 1.00' deep channel, n= 0.031  
Side Slope Z-value= 3.0 '/' Top Width= 8.00'  
Length= 100.0' Slope= 0.0800 '/'  
Inlet Invert= 433.00', Outlet Invert= 425.00'



### Reach 6R: Grass Swale

#### Hydrograph





**Summary for Pond 1.8P: STORMTECH INFILTRATION SYSTEM**

Inflow Area = 0.182 ac, 11.32% Impervious, Inflow Depth = 5.79" for 100-yr event  
 Inflow = 1.20 cfs @ 12.08 hrs, Volume= 0.088 af  
 Outflow = 0.43 cfs @ 12.36 hrs, Volume= 0.088 af, Atten= 64%, Lag= 16.7 min  
 Discarded = 0.04 cfs @ 12.36 hrs, Volume= 0.046 af  
 Primary = 0.39 cfs @ 12.36 hrs, Volume= 0.042 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs  
 Peak Elev= 419.47' @ 12.36 hrs Surf.Area= 0.015 ac Storage= 0.031 af

Plug-Flow detention time= 149.1 min calculated for 0.088 af (100% of inflow)  
 Center-of-Mass det. time= 149.3 min ( 952.8 - 803.4 )

Volume	Invert	Avail.Storage	Storage Description
#1A	416.00'	0.015 af	<b>11.00'W x 60.58'L x 3.50'H Field A</b> 0.054 af Overall - 0.017 af Embedded = 0.037 af x 40.0% Voids
#2A	416.50'	0.017 af	<b>ADS_StormTech SC-740 +Cap x 16 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 8 Chambers
		0.032 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	416.50'	<b>12.0" Round Culvert</b> L= 17.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 416.50' / 415.50' S= 0.0588 ' S= 0.0588 ' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Discarded	416.00'	<b>1.450 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 410.00'
#3	Device 1	417.50'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#4	Device 1	419.25'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.04 cfs @ 12.36 hrs HW=419.47' (Free Discharge)

↑ **2=Exfiltration** ( Controls 0.04 cfs)

**Primary OutFlow** Max=0.39 cfs @ 12.36 hrs HW=419.47' (Free Discharge)

↑ **1=Culvert** (Passes 0.39 cfs of 5.94 cfs potential flow)

↑ **3=Orifice/Grate** (Orifice Controls 0.32 cfs @ 6.53 fps)

↑ **4=Orifice/Grate** (Orifice Controls 0.07 cfs @ 1.58 fps)

**Pond 1.8P: STORMTECH INFILTRATION SYSTEM - Chamber Wizard Field A****Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H =&gt; 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

8 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 58.58' Row Length +12.0" End Stone x 2 = 60.58' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

16 Chambers x 45.9 cf = 735.0 cf Chamber Storage

2,332.2 cf Field - 735.0 cf Chambers = 1,597.2 cf Stone x 40.0% Voids = 638.9 cf Stone Storage

Chamber Storage + Stone Storage = 1,373.9 cf = 0.032 af

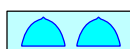
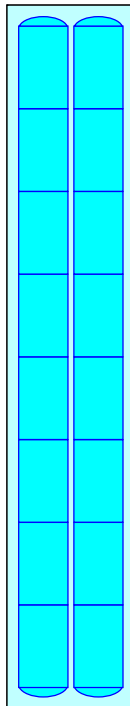
Overall Storage Efficiency = 58.9%

Overall System Size = 60.58' x 11.00' x 3.50'

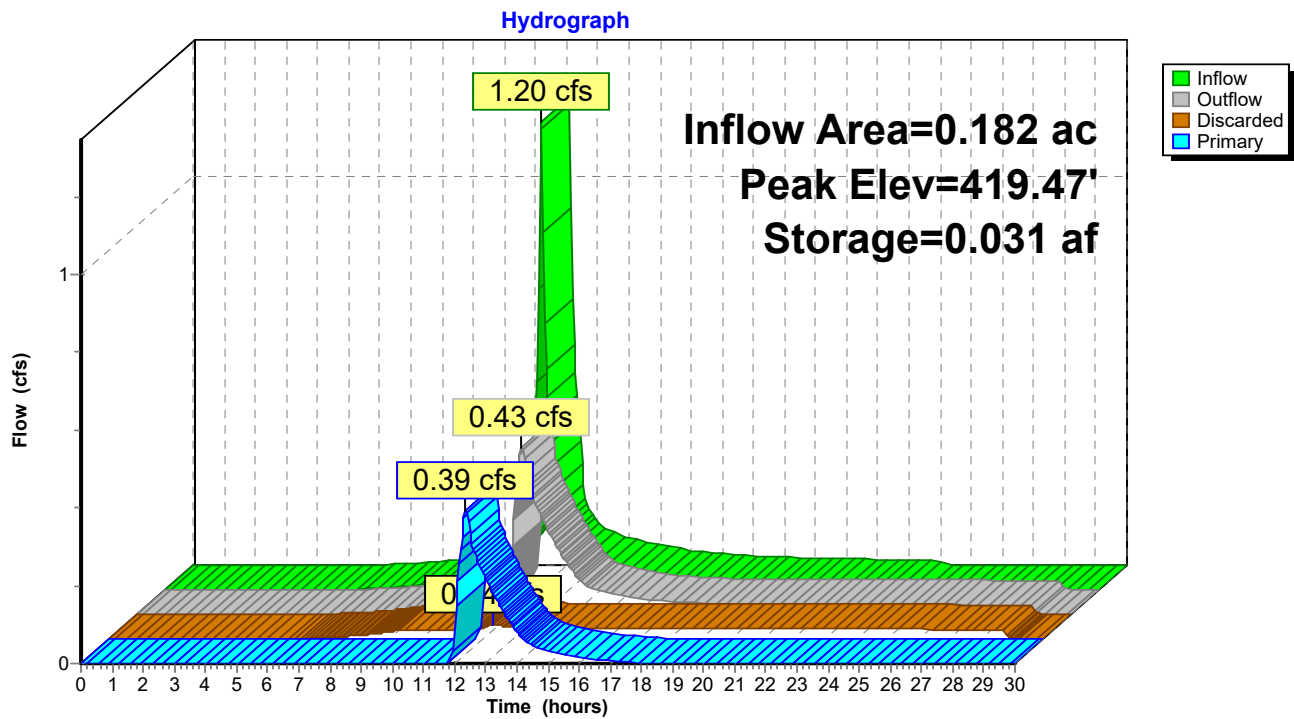
16 Chambers

86.4 cy Field

59.2 cy Stone



**Pond 1.8P: STORMTECH INFILTRATION SYSTEM**





## Mount Kisco

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Type III 24-hr 100-yr Rainfall=8.30"

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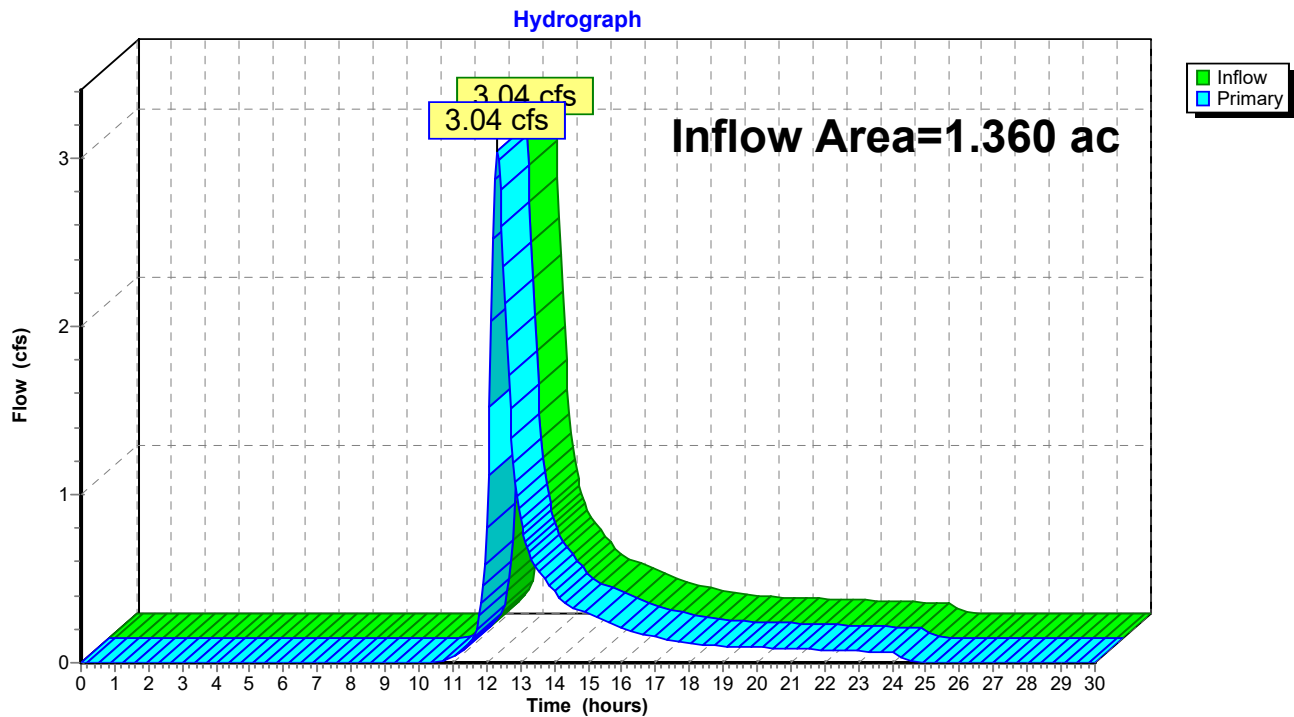
Page 40

### Summary for Link 5L: AP-1

Inflow Area = 1.360 ac, 1.52% Impervious, Inflow Depth = 2.96" for 100-yr event  
Inflow = 3.04 cfs @ 12.31 hrs, Volume= 0.336 af  
Primary = 3.04 cfs @ 12.31 hrs, Volume= 0.336 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

### Link 5L: AP-1



## **APPENDIX D: NOAA ATLAS 14 PRECIPITATION FREQUENCY TABLE**



**NOAA Atlas 14, Volume 10, Version 3**  
**Location name: Mount Kisco, New York, USA\***  
**Latitude: 41.1981°, Longitude: -73.7128°**  
**Elevation: 509.72 ft\*\***  
 \* source: ESRI Maps  
 \*\* source: USGS



### POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

[PF\\_tabular](#) | [PF\\_graphical](#) | [Maps & aerals](#)

### PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) <sup>1</sup>										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.357 (0.280-0.446)	0.417 (0.327-0.522)	0.515 (0.402-0.647)	0.596 (0.463-0.752)	0.708 (0.531-0.926)	0.793 (0.583-1.06)	0.881 (0.625-1.21)	0.975 (0.659-1.37)	1.10 (0.717-1.60)	1.21 (0.764-1.78)
10-min	0.505 (0.397-0.632)	0.590 (0.463-0.739)	0.729 (0.570-0.916)	0.844 (0.656-1.07)	1.00 (0.753-1.31)	1.12 (0.825-1.50)	1.25 (0.886-1.71)	1.38 (0.933-1.94)	1.57 (1.02-2.27)	1.71 (1.08-2.53)
15-min	0.594 (0.467-0.744)	0.694 (0.545-0.870)	0.858 (0.671-1.08)	0.993 (0.772-1.25)	1.18 (0.886-1.54)	1.32 (0.971-1.76)	1.47 (1.04-2.01)	1.62 (1.10-2.29)	1.84 (1.20-2.67)	2.01 (1.27-2.97)
30-min	0.840 (0.660-1.05)	0.980 (0.769-1.23)	1.21 (0.945-1.52)	1.40 (1.09-1.77)	1.66 (1.25-2.17)	1.86 (1.37-2.48)	2.07 (1.46-2.83)	2.28 (1.54-3.20)	2.56 (1.67-3.72)	2.78 (1.76-4.12)
60-min	1.09 (0.853-1.36)	1.27 (0.993-1.59)	1.56 (1.22-1.96)	1.81 (1.40-2.28)	2.14 (1.61-2.80)	2.40 (1.76-3.19)	2.66 (1.88-3.64)	2.93 (1.98-4.12)	3.29 (2.13-4.77)	3.56 (2.25-5.26)
2-hr	1.42 (1.13-1.77)	1.65 (1.31-2.06)	2.03 (1.60-2.54)	2.34 (1.83-2.94)	2.77 (2.09-3.60)	3.10 (2.29-4.10)	3.44 (2.44-4.67)	3.78 (2.57-5.29)	4.25 (2.77-6.13)	4.62 (2.93-6.78)
3-hr	1.64 (1.30-2.04)	1.91 (1.52-2.37)	2.36 (1.86-2.93)	2.72 (2.13-3.40)	3.22 (2.44-4.17)	3.61 (2.67-4.75)	4.00 (2.86-5.42)	4.41 (3.00-6.14)	4.99 (3.26-7.16)	5.43 (3.46-7.95)
6-hr	2.05 (1.64-2.52)	2.41 (1.92-2.97)	3.00 (2.39-3.71)	3.50 (2.76-4.34)	4.17 (3.18-5.37)	4.68 (3.49-6.14)	5.21 (3.76-7.06)	5.80 (3.96-8.02)	6.64 (4.34-9.47)	7.31 (4.67-10.6)
12-hr	2.48 (1.99-3.03)	2.97 (2.38-3.63)	3.77 (3.01-4.62)	4.43 (3.52-5.46)	5.34 (4.10-6.86)	6.03 (4.53-7.89)	6.75 (4.91-9.14)	7.58 (5.19-10.4)	8.81 (5.78-12.5)	9.82 (6.29-14.2)
24-hr	2.88 (2.33-3.49)	3.50 (2.83-4.25)	4.51 (3.63-5.50)	5.36 (4.28-6.56)	6.52 (5.04-8.32)	7.38 (5.58-9.62)	8.30 (6.10-11.2)	9.40 (6.46-12.8)	11.0 (7.27-15.6)	12.4 (7.98-17.8)
2-day	3.24 (2.64-3.91)	3.98 (3.23-4.80)	5.17 (4.19-6.26)	6.17 (4.96-7.50)	7.53 (5.86-9.57)	8.55 (6.51-11.1)	9.64 (7.13-13.0)	11.0 (7.56-14.9)	13.0 (8.56-18.1)	14.7 (9.45-20.9)
3-day	3.52 (2.88-4.23)	4.31 (3.52-5.18)	5.61 (4.56-6.76)	6.69 (5.40-8.10)	8.17 (6.38-10.3)	9.26 (7.08-12.0)	10.4 (7.75-14.0)	11.9 (8.21-16.1)	14.1 (9.30-19.6)	15.9 (10.3-22.6)
4-day	3.77 (3.09-4.52)	4.61 (3.77-5.52)	5.97 (4.87-7.18)	7.11 (5.76-8.58)	8.66 (6.78-10.9)	9.82 (7.52-12.6)	11.1 (8.22-14.8)	12.6 (8.70-17.0)	14.9 (9.84-20.6)	16.8 (10.9-23.8)
7-day	4.48 (3.69-5.33)	5.39 (4.44-6.43)	6.89 (5.65-8.23)	8.13 (6.62-9.76)	9.83 (7.73-12.3)	11.1 (8.53-14.2)	12.5 (9.27-16.5)	14.1 (9.78-18.9)	16.5 (11.0-22.8)	18.5 (12.0-26.1)
10-day	5.17 (4.28-6.13)	6.13 (5.07-7.28)	7.71 (6.35-9.19)	9.02 (7.38-10.8)	10.8 (8.53-13.5)	12.2 (9.37-15.5)	13.6 (10.1-17.9)	15.3 (10.6-20.4)	17.7 (11.8-24.4)	19.8 (12.8-27.7)
20-day	7.29 (6.07-8.59)	8.38 (6.97-9.88)	10.2 (8.41-12.0)	11.6 (9.56-13.8)	13.7 (10.8-16.8)	15.2 (11.7-19.0)	16.8 (12.4-21.7)	18.5 (13.0-24.5)	20.8 (14.0-28.5)	22.7 (14.8-31.6)
30-day	9.09 (7.60-10.7)	10.3 (8.57-12.1)	12.2 (10.1-14.4)	13.8 (11.4-16.3)	16.0 (12.7-19.5)	17.7 (13.6-22.0)	19.4 (14.3-24.8)	21.1 (14.8-27.8)	23.4 (15.7-31.8)	25.2 (16.4-34.9)
45-day	11.3 (9.53-13.3)	12.6 (10.6-14.8)	14.7 (12.3-17.3)	16.5 (13.7-19.4)	18.9 (15.0-23.0)	20.8 (16.1-25.7)	22.6 (16.7-28.7)	24.4 (17.2-32.0)	26.7 (18.0-36.1)	28.4 (18.5-39.2)
60-day	13.3 (11.2-15.4)	14.6 (12.3-17.1)	16.9 (14.2-19.8)	18.8 (15.6-22.1)	21.4 (17.0-25.9)	23.4 (18.1-28.8)	25.4 (18.8-32.0)	27.3 (19.3-35.6)	29.6 (20.0-39.9)	31.2 (20.4-43.0)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

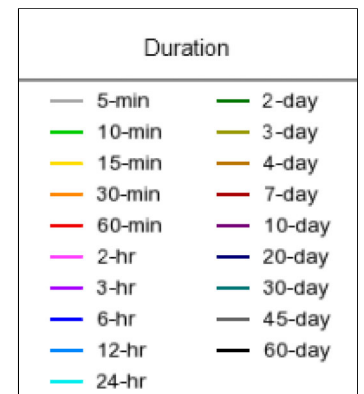
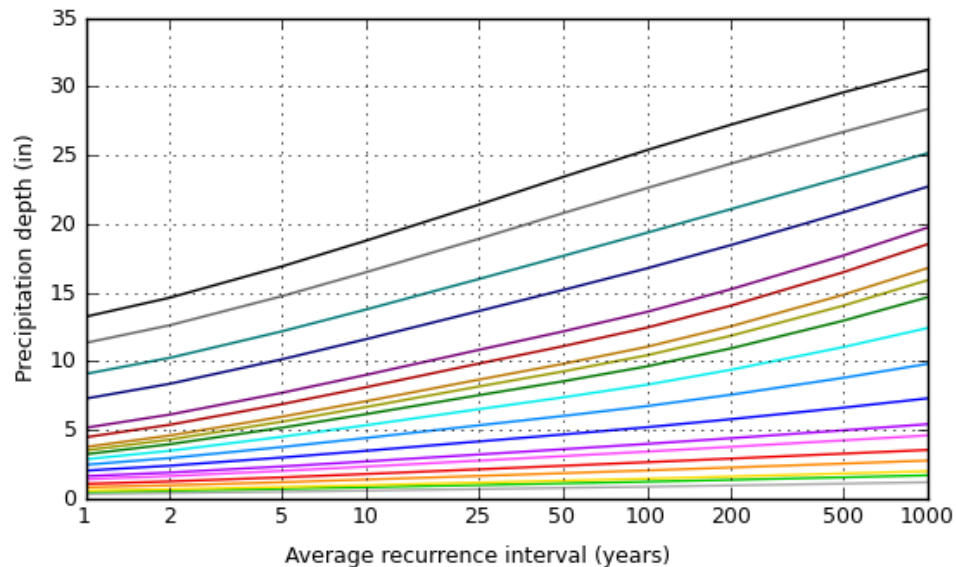
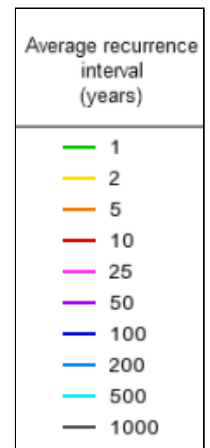
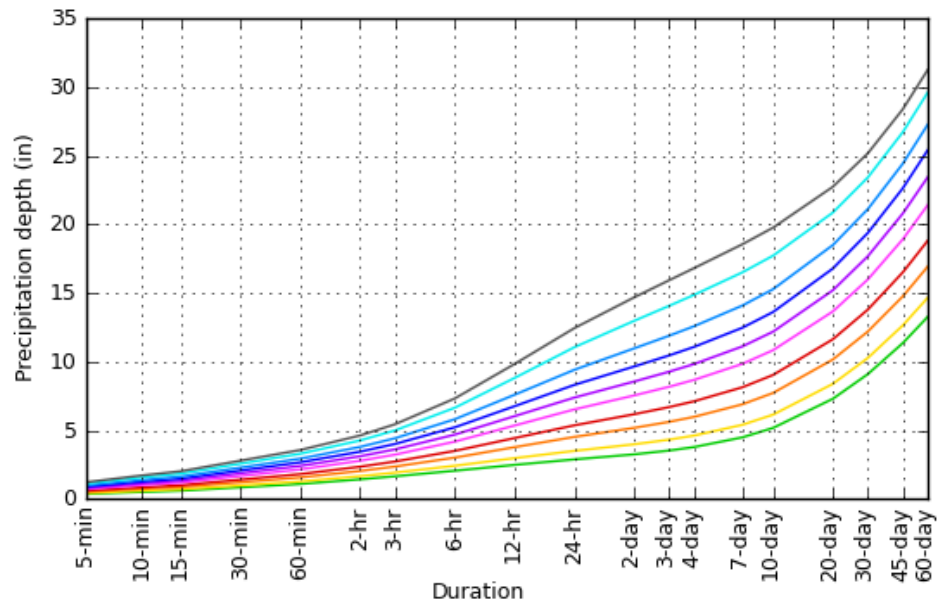
[Back to Top](#)

### PF graphical



## PDS-based depth-duration-frequency (DDF) curves

Latitude: 41.1981°, Longitude: -73.7128°

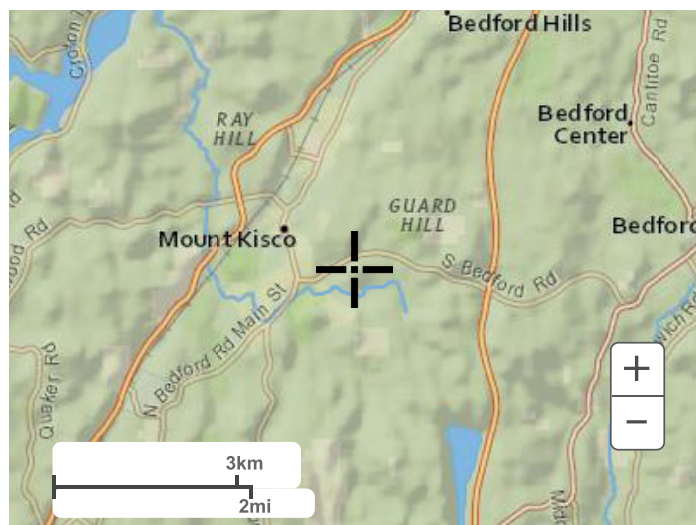


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[Back to Top](#)**Maps & aerials**

Small scale terrain



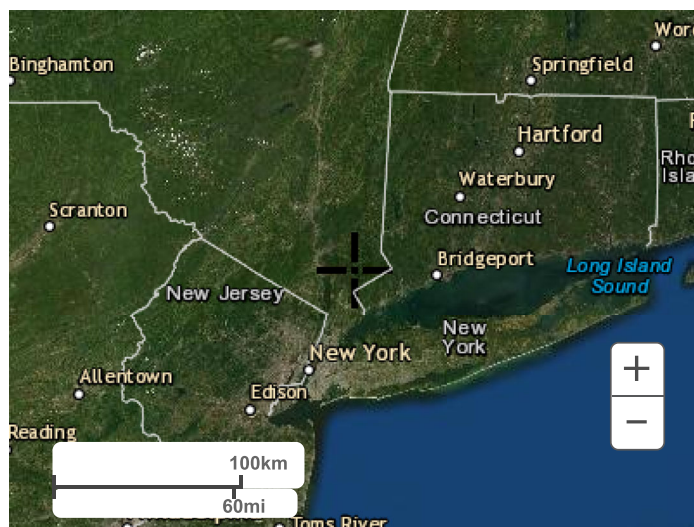
Large scale terrain



Large scale map



Large scale aerial

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[US Department of Commerce](#)  
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[National Weather Service](#)  
[National Water Center](#)  
1325 East West Highway  
Silver Spring, MD 20910  
Questions?: [HDSC.Questions@noaa.gov](mailto:HDSC.Questions@noaa.gov)

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## **APPENDIX E: NRCS SATURATED HYDRAULIC CONDUCTIVITY**


Saturated Hydraulic Conductivity (Ksat)—Westchester County, New York  
(Mount Kisco)



Saturated Hydraulic Conductivity (Ksat)—Westchester County, New York  
(Mount Kisco)







## MAP LEGEND

### Area of Interest (AOI)







 Area of Interest (AOI)

### Soils







#### Soil Rating Polygons

-  ≤ 2.1341
-  > 2.1341 and ≤ 13.0322
-  > 13.0322 and ≤ 51.2895
-  > 51.2895 and ≤ 70.7458
-  > 70.7458 and ≤ 84.5000
-  Not rated or not available

#### Soil Rating Lines

-  ≤ 2.1341
-  > 2.1341 and ≤ 13.0322
-  > 13.0322 and ≤ 51.2895
-  > 51.2895 and ≤ 70.7458
-  > 70.7458 and ≤ 84.5000
-  Not rated or not available






#### Soil Rating Points

-  ≤ 2.1341
-  > 2.1341 and ≤ 13.0322
-  > 13.0322 and ≤ 51.2895
-  > 51.2895 and ≤ 70.7458
-  > 70.7458 and ≤ 84.5000
-  Not rated or not available


### Water Features

 Streams and Canals

### Transportation

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

### Background

-  Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

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

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 16, 2017

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.



## Saturated Hydraulic Conductivity (Ksat)

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	10.0000	15.5	16.5%
ChC	Charlton fine sandy loam, 8 to 15 percent slopes	10.0000	2.5	2.7%
ChD	Charlton fine sandy loam, 15 to 25 percent slopes	10.0000	0.1	0.1%
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	12.1818	25.3	27.0%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	10.1993	30.1	32.2%
CuD	Chatfield-Hollis-Rock outcrop complex, 15 to 35 percent slopes	10.1993	3.2	3.4%
Ff	Fluvaquents-Udfluvents complex, frequently flooded	70.7458	7.7	8.2%
HrF	Hollis-Rock outcrop complex, 35 to 60 percent slopes	13.0322	1.9	2.0%
LcA	Leicester loam, 0 to 3 percent slopes, stony	51.2895	2.5	2.6%
LcB	Leicester loam, 3 to 8 percent slopes, stony	51.2895	1.2	1.2%
RhA	Riverhead loam, 0 to 3 percent slopes	84.5000	0.6	0.6%
Sh	Sun loam	2.1341	1.7	1.8%
SuB	Sutton loam, 3 to 8 percent slopes	10.0000	1.3	1.4%
W	Water		0.3	0.3%
<b>Totals for Area of Interest</b>			<b>93.7</b>	<b>100.0%</b>

## Description

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

## Rating Options

*Units of Measure:* micrometers per second

*Aggregation Method:* Dominant Component

*Component Percent Cutoff:* None Specified

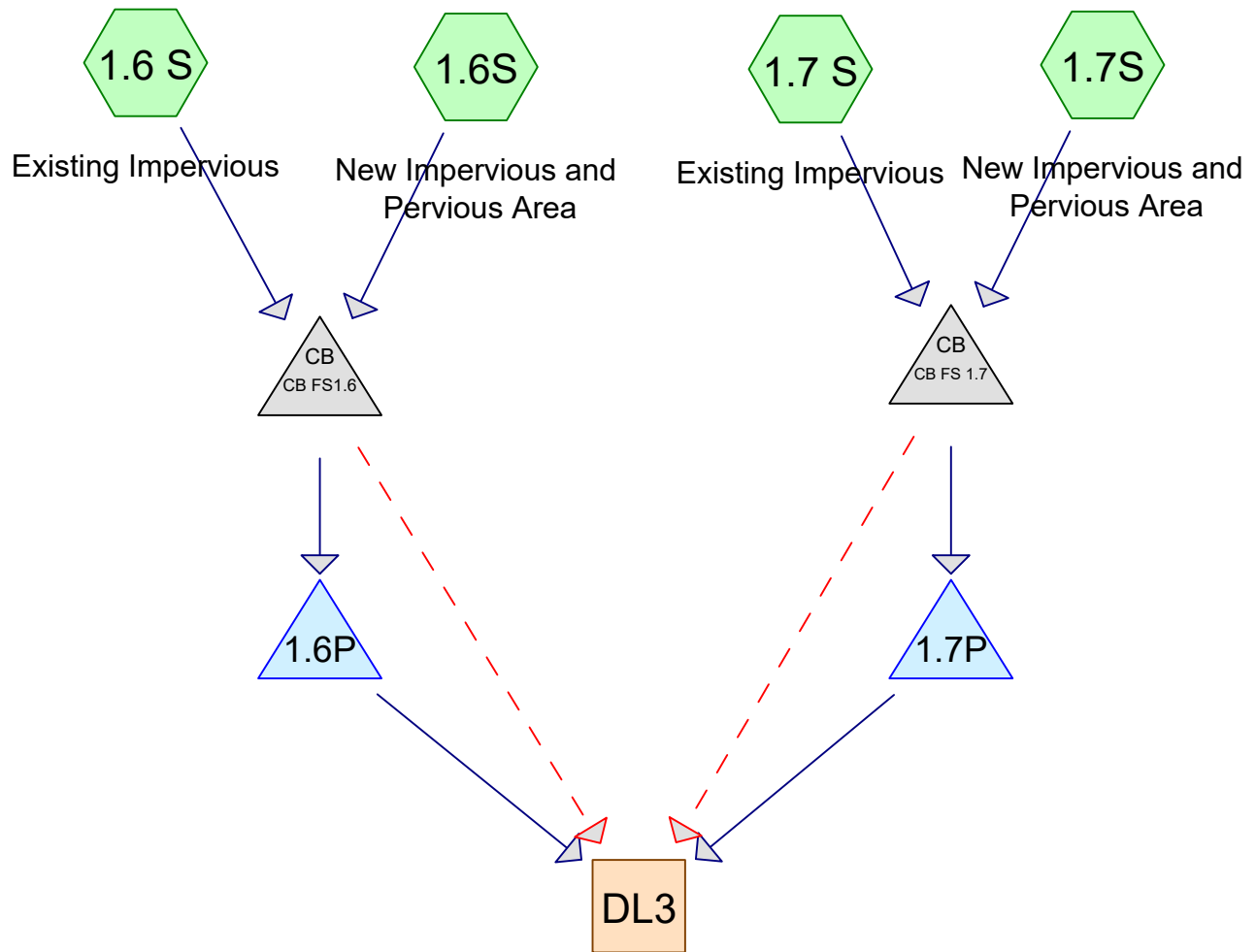
*Tie-break Rule:* Fastest

*Interpret Nulls as Zero:* No

*Layer Options (Horizon Aggregation Method):* All Layers (Weighted Average)

## **APPENDIX F: PROPOSED DRIVEWAY DRAINAGE HYDROLOGIC COMPUTATION (HYDROCAD)**

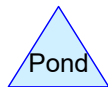




Subcat



Reach



Pond



Link

**Routing Diagram for Mount Kisco - Driveway Drainage**  
 Prepared by APT ENGINEERING, Printed 1/20/2021  
 HydroCAD® 10.00-22 s/n 07402 © 2018 HydroCAD Software Solutions LLC

## Mount Kisco - Driveway Drainage

Prepared by APT ENGINEERING

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Type III 24-hr 1-yr Rainfall=2.88"

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Page 2

### Summary for Subcatchment 1.6 S: Existing Impervious

Runoff = 0.39 cfs @ 12.10 hrs, Volume= 0.033 af, Depth= 2.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 1-yr Rainfall=2.88"

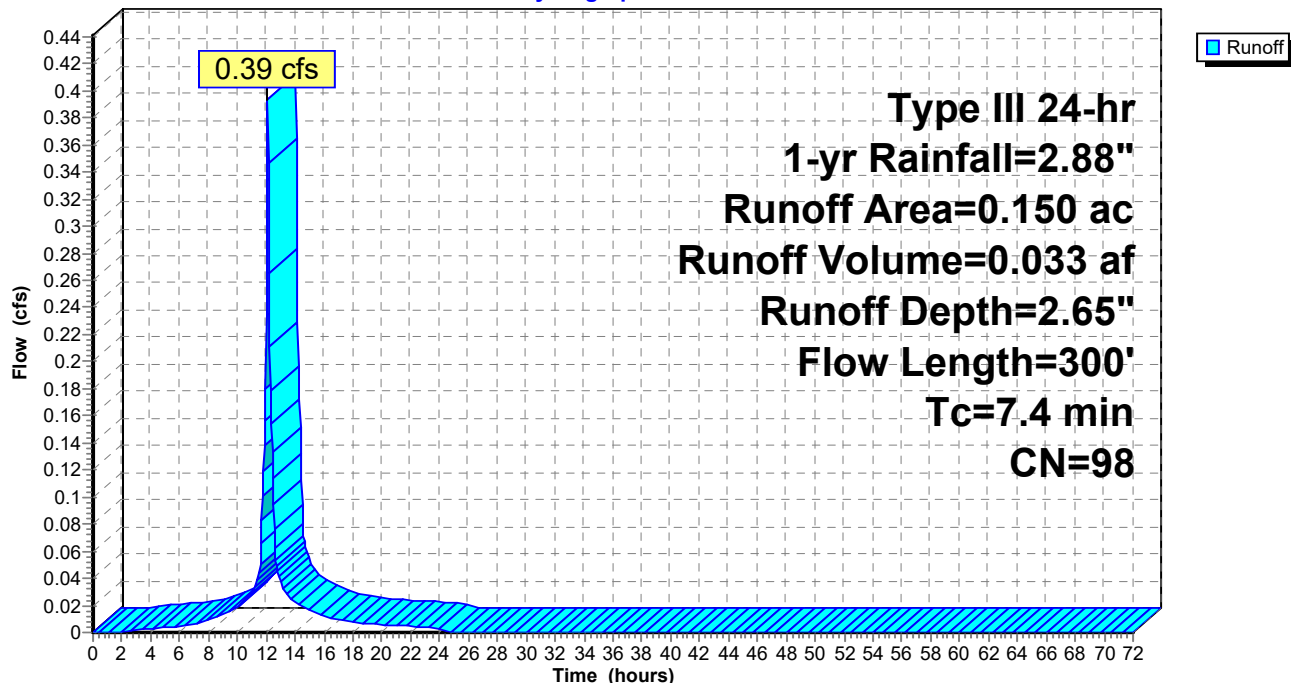
Area (ac)	CN	Description
0.150	98	Paved parking, HSG B
0.150		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.8	50	0.0800	0.12		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.1	20	0.2000	2.24		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.1	40	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
0.3	140	0.2000	6.71		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
0.1	50	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	300	Total			

### Subcatchment 1.6 S: Existing Impervious

Hydrograph



**Mount Kisco - Driveway Drainage**

Prepared by APT ENGINEERING

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Type III 24-hr 1-yr Rainfall=2.88"

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Page 3

**Summary for Subcatchment 1.6S: New Impervious and Pervious Area**

Runoff = 0.11 cfs @ 12.16 hrs, Volume= 0.014 af, Depth= 0.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 1-yr Rainfall=2.88"

Area (ac)	CN	Description
0.050	98	Paved parking, HSG B
0.150	55	Woods, Good, HSG B
0.250	61	>75% Grass cover, Good, HSG B
0.450	63	Weighted Average
0.400		88.89% Pervious Area
0.050		11.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.8	50	0.0800	0.12		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.1	20	0.2000	2.24		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.1	40	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
0.3	140	0.2000	6.71		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
0.1	50	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	300	Total			



# Mount Kisco - Driveway Drainage

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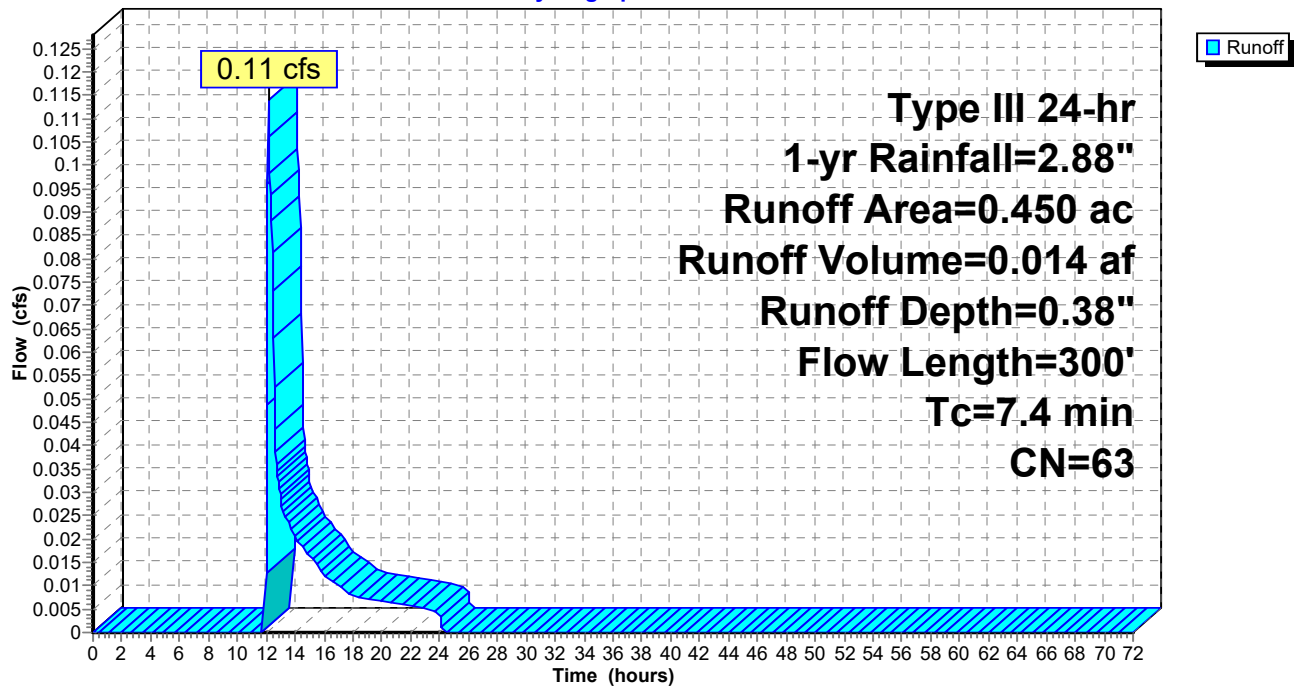
Type III 24-hr 1-yr Rainfall=2.88"

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Page 4

## Subcatchment 1.6S: New Impervious and Pervious Area

Hydrograph



## Mount Kisco - Driveway Drainage

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Type III 24-hr 1-yr Rainfall=2.88"

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Page 5

### Summary for Subcatchment 1.7 S: Existing Impervious

Runoff = 0.13 cfs @ 12.10 hrs, Volume= 0.011 af, Depth= 2.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 1-yr Rainfall=2.88"

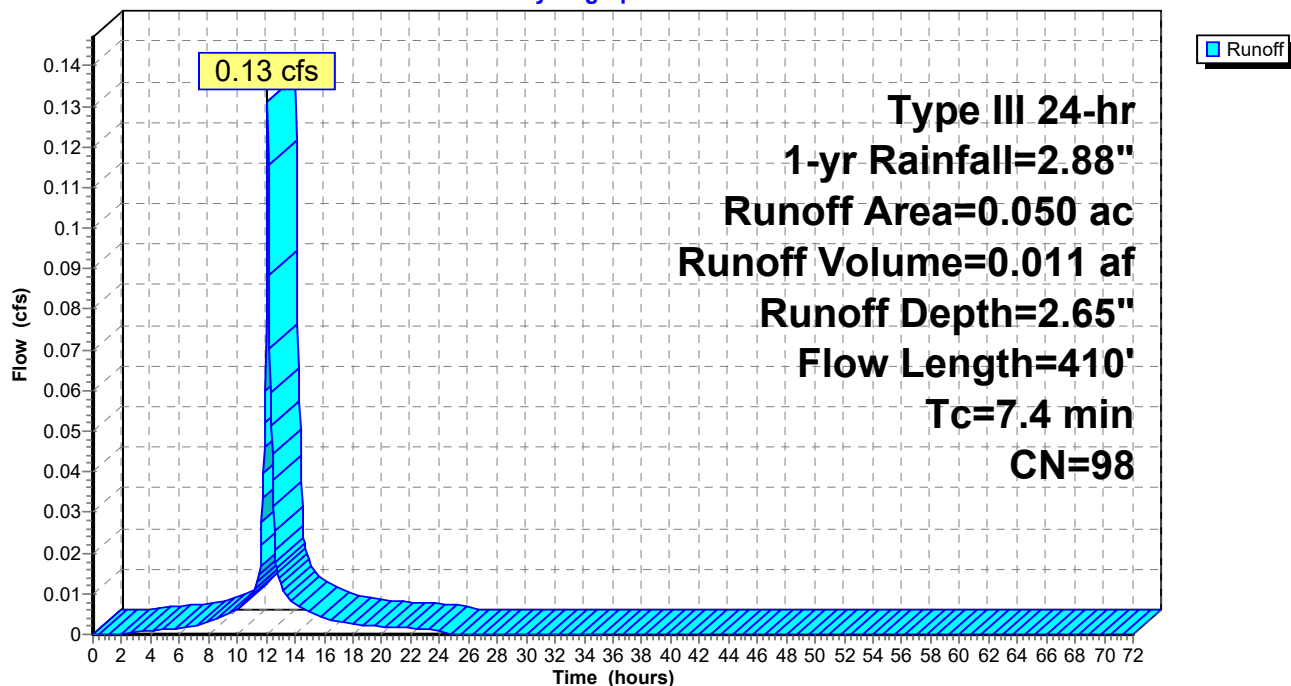
Area (ac)	CN	Description
0.050	98	Paved parking, HSG B
0.050		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	45	0.1000	0.13		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
1.0	140	0.2200	2.35		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.7	225	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	410	Total			

### Subcatchment 1.7 S: Existing Impervious

Hydrograph



## Mount Kisco - Driveway Drainage

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Type III 24-hr 1-yr Rainfall=2.88"

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Page 6

### Summary for Subcatchment 1.7S: New Impervious and Pervious Area

Runoff = 0.12 cfs @ 12.15 hrs, Volume= 0.013 af, Depth= 0.45"

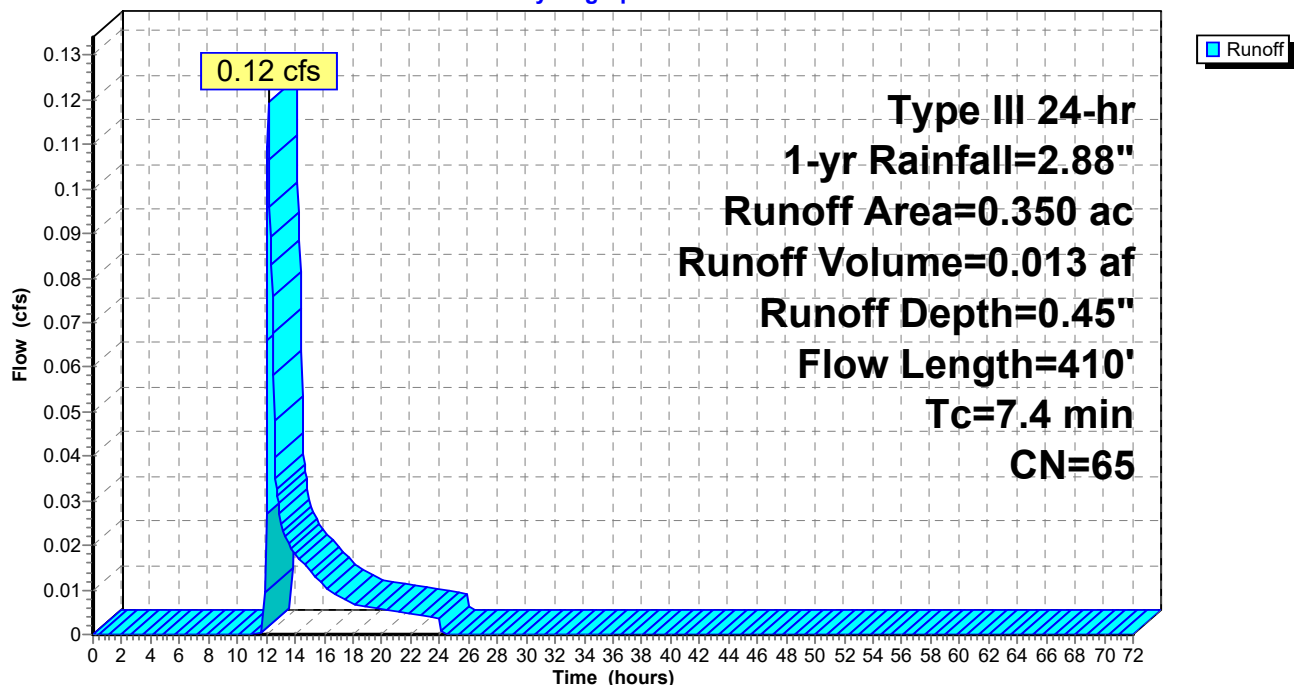
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 1-yr Rainfall=2.88"

Area (ac)	CN	Description
0.050	98	Paved parking, HSG B
0.150	61	>75% Grass cover, Good, HSG B
0.150	58	Meadow, non-grazed, HSG B
0.350	65	Weighted Average
0.300		85.71% Pervious Area
0.050		14.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	45	0.1000	0.13		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
1.0	140	0.2200	2.35		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.7	225	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	410	Total			

### Subcatchment 1.7S: New Impervious and Pervious Area

Hydrograph





## Mount Kisco - Driveway Drainage

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Type III 24-hr 1-yr Rainfall=2.88"

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Page 7

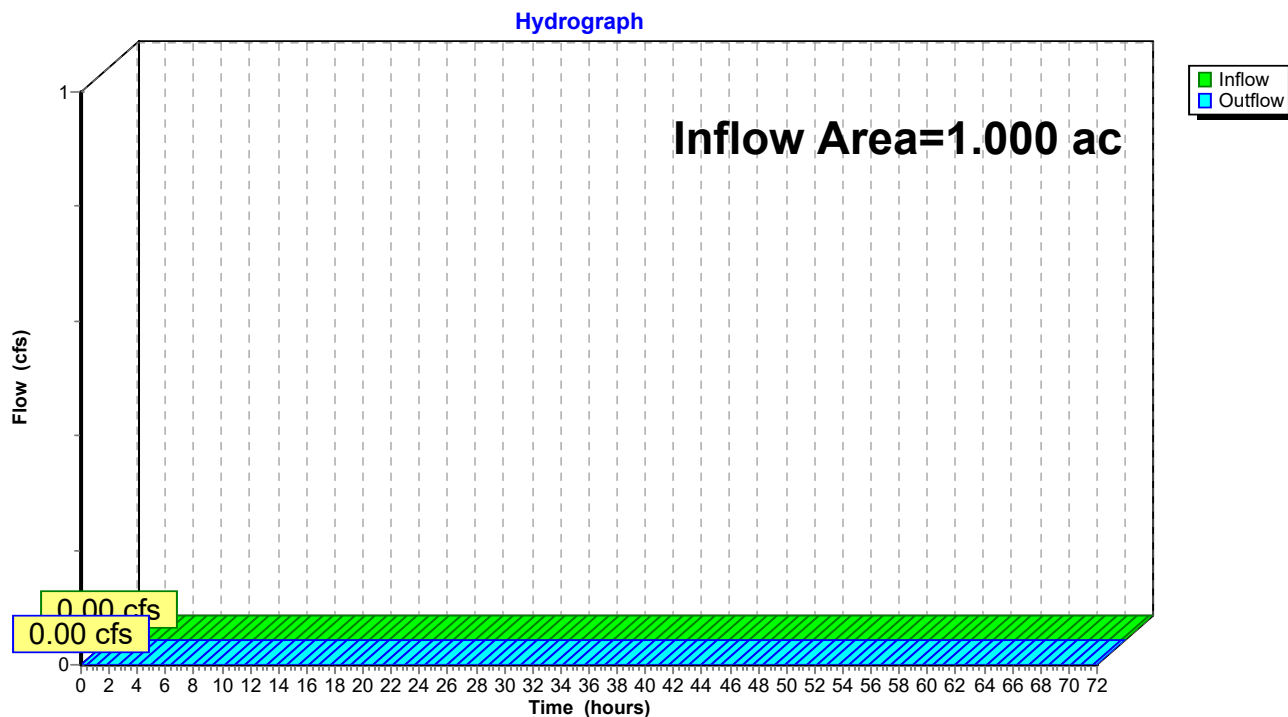
### Summary for Reach DL3:

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.000 ac, 30.00% Impervious, Inflow Depth = 0.00" for 1-yr event  
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

### Reach DL3:



## Mount Kisco - Driveway Drainage

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Type III 24-hr 1-yr Rainfall=2.88"

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Page 8

### Summary for Pond 1.6P:

Inflow Area = 0.600 ac, 33.33% Impervious, Inflow Depth = 0.95" for 1-yr event  
Inflow = 0.50 cfs @ 12.11 hrs, Volume= 0.048 af  
Outflow = 0.31 cfs @ 12.05 hrs, Volume= 0.048 af, Atten= 38%, Lag= 0.0 min  
Discarded = 0.31 cfs @ 12.05 hrs, Volume= 0.048 af  
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Peak Elev= 418.22' @ 12.26 hrs Surf.Area= 0.013 ac Storage= 0.002 af

Plug-Flow detention time= 1.4 min calculated for 0.047 af (100% of inflow)  
Center-of-Mass det. time= 1.4 min ( 809.5 - 808.1 )

Volume	Invert	Avail.Storage	Storage Description
#1A	417.80'	0.013 af	<b>11.00'W x 52.29'L x 3.50'H Field A</b> 0.046 af Overall - 0.015 af Embedded = 0.031 af x 40.0% Voids
#2A	418.30'	0.015 af	<b>ADS_StormTech SC-740 +Cap x 14 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 7 Chambers
		0.027 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	417.80'	<b>23.000 in/hr Exfiltration over Horizontal area</b> Phase-In= 0.05'
#2	Primary	420.30'	<b>6.0" Round 6.0" Round Culvert</b> L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 420.30' / 419.80' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

**Discarded OutFlow** Max=0.31 cfs @ 12.05 hrs HW=417.88' (Free Discharge)  
↑**1=Exfiltration** (Exfiltration Controls 0.31 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=417.80' (Free Discharge)  
↑**2=6.0" Round Culvert** ( Controls 0.00 cfs)

## Mount Kisco - Driveway Drainage

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Type III 24-hr 1-yr Rainfall=2.88"

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Page 9

### Pond 1.6P: - Chamber Wizard Field A

**Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

7 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 51.46' Row Length +5.0" End Stone x 2 = 52.29' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

14 Chambers x 45.9 cf = 643.2 cf Chamber Storage

2,013.2 cf Field - 643.2 cf Chambers = 1,370.0 cf Stone x 40.0% Voids = 548.0 cf Stone Storage

Chamber Storage + Stone Storage = 1,191.2 cf = 0.027 af

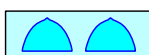
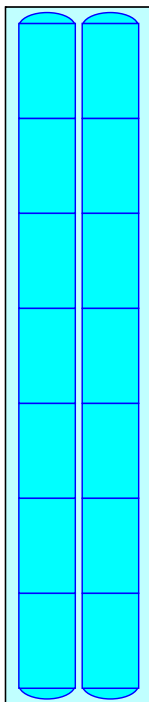
Overall Storage Efficiency = 59.2%

Overall System Size = 52.29' x 11.00' x 3.50'

14 Chambers

74.6 cy Field

50.7 cy Stone





# Mount Kisco - Driveway Drainage

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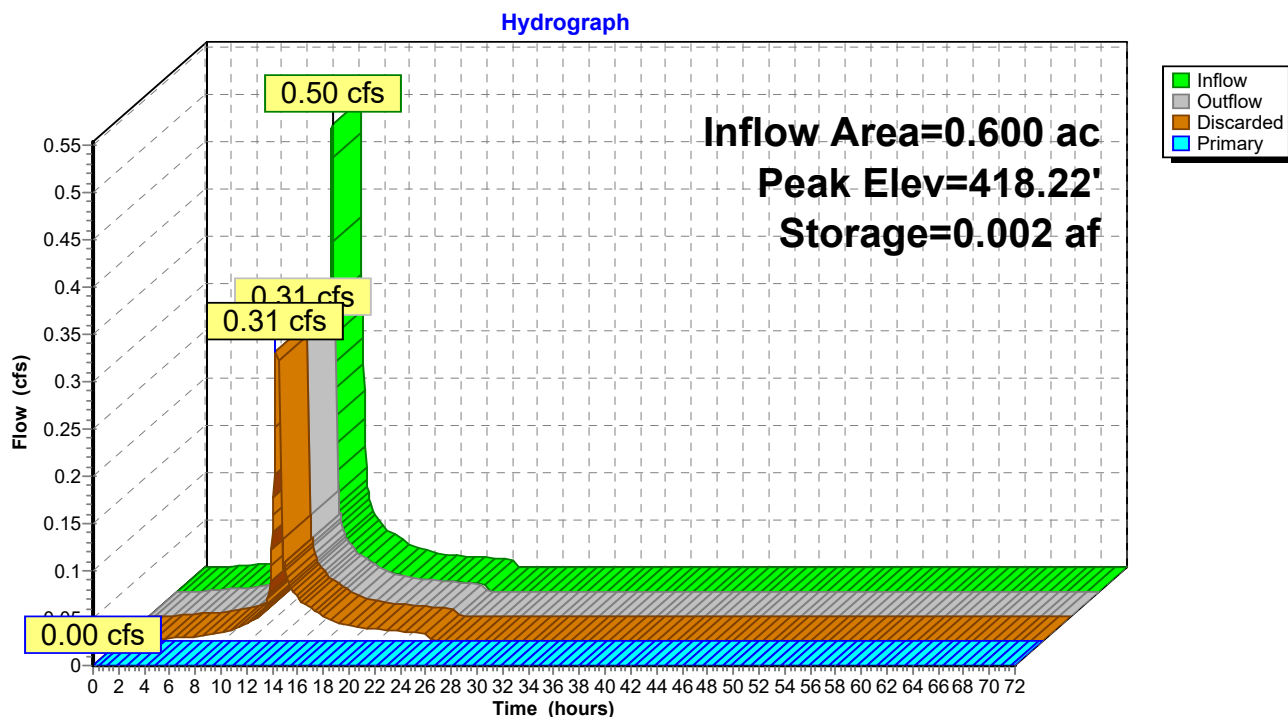
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Page 10

## Pond 1.6P:



**Mount Kisco - Driveway Drainage**

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*Type III 24-hr 1-yr Rainfall=2.88"*

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Page 11

**Stage-Area-Storage for Pond 1.6P:**

Elevation (feet)	Horizontal (acres)	Storage (acre-feet)	Elevation (feet)	Horizontal (acres)	Storage (acre-feet)
417.80	<b>0.013</b>	0.000	420.45	0.013	0.023
417.85	0.013	0.000	420.50	0.013	0.023
417.90	0.013	0.001	420.55	0.013	0.023
417.95	0.013	0.001	420.60	0.013	0.024
418.00	0.013	0.001	420.65	0.013	0.024
418.05	0.013	0.001	420.70	0.013	0.024
418.10	0.013	0.002	420.75	0.013	0.024
418.15	0.013	0.002	420.80	0.013	0.025
418.20	0.013	0.002	420.85	0.013	0.025
418.25	0.013	0.002	420.90	0.013	0.025
418.30	0.013	0.003	420.95	0.013	0.025
418.35	0.013	0.003	421.00	0.013	0.026
418.40	0.013	0.004	421.05	0.013	0.026
418.45	0.013	0.004	421.10	0.013	0.026
418.50	0.013	0.005	421.15	0.013	0.027
418.55	0.013	0.005	421.20	0.013	0.027
418.60	0.013	0.006	421.25	0.013	0.027
418.65	0.013	0.006	421.30	0.013	<b>0.027</b>
418.70	0.013	0.007			
418.75	0.013	0.007			
418.80	0.013	0.008			
418.85	0.013	0.008			
418.90	0.013	0.009			
418.95	0.013	0.009			
419.00	0.013	0.010			
419.05	0.013	0.010			
419.10	0.013	0.011			
419.15	0.013	0.011			
419.20	0.013	0.012			
419.25	0.013	0.012			
419.30	0.013	0.013			
419.35	0.013	0.013			
419.40	0.013	0.014			
419.45	0.013	0.014			
419.50	0.013	0.015			
419.55	0.013	0.015			
419.60	0.013	0.016			
419.65	0.013	0.016			
419.70	0.013	0.016			
419.75	0.013	0.017			
419.80	0.013	0.017			
419.85	0.013	0.018			
419.90	0.013	0.018			
419.95	0.013	0.019			
420.00	0.013	0.019			
420.05	0.013	0.020			
420.10	0.013	0.020			
420.15	0.013	0.020			
420.20	0.013	0.021			
420.25	0.013	0.021			
420.30	0.013	0.022			
420.35	0.013	0.022			
420.40	0.013	0.022			

## Mount Kisco - Driveway Drainage

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Page 12

### Summary for Pond 1.7P:

Inflow Area = 0.400 ac, 25.00% Impervious, Inflow Depth = 0.73" for 1-yr event  
Inflow = 0.25 cfs @ 12.12 hrs, Volume= 0.024 af  
Outflow = 0.05 cfs @ 11.95 hrs, Volume= 0.024 af, Atten= 80%, Lag= 0.0 min  
Discarded = 0.05 cfs @ 11.95 hrs, Volume= 0.024 af  
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Peak Elev= 396.07' @ 12.72 hrs Surf.Area= 0.010 ac Storage= 0.005 af

Plug-Flow detention time= 31.1 min calculated for 0.024 af (100% of inflow)  
Center-of-Mass det. time= 31.1 min ( 871.7 - 840.5 )

Volume	Invert	Avail.Storage	Storage Description
#1A	395.10'	0.009 af	<b>11.00'W x 38.05'L x 3.50'H Field A</b> 0.034 af Overall - 0.011 af Embedded = 0.023 af x 40.0% Voids
#2A	395.60'	0.011 af	<b>ADS_StormTech SC-740 +Cap x 10 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 5 Chambers
		0.020 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	395.10'	<b>5.000 in/hr Exfiltration over Horizontal area</b> Phase-In= 0.05'
#2	Primary	397.60'	<b>6.0" Round 6.0" Round Culvert</b> L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 397.60' / 397.10' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

**Discarded OutFlow** Max=0.05 cfs @ 11.95 hrs HW=395.17' (Free Discharge)  
↑**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=395.10' (Free Discharge)  
↑**2=6.0" Round Culvert** ( Controls 0.00 cfs)



## Mount Kisco - Driveway Drainage

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Type III 24-hr 1-yr Rainfall=2.88"

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Page 13

### Pond 1.7P: - Chamber Wizard Field A

**Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

5 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 37.22' Row Length +5.0" End Stone x 2 = 38.05' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

10 Chambers x 45.9 cf = 459.4 cf Chamber Storage

1,464.9 cf Field - 459.4 cf Chambers = 1,005.5 cf Stone x 40.0% Voids = 402.2 cf Stone Storage

Chamber Storage + Stone Storage = 861.6 cf = 0.020 af

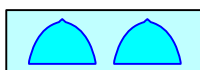
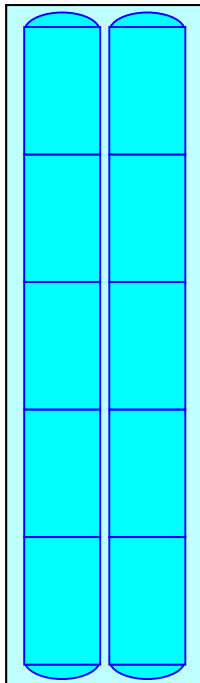
Overall Storage Efficiency = 58.8%

Overall System Size = 38.05' x 11.00' x 3.50'

10 Chambers

54.3 cy Field

37.2 cy Stone



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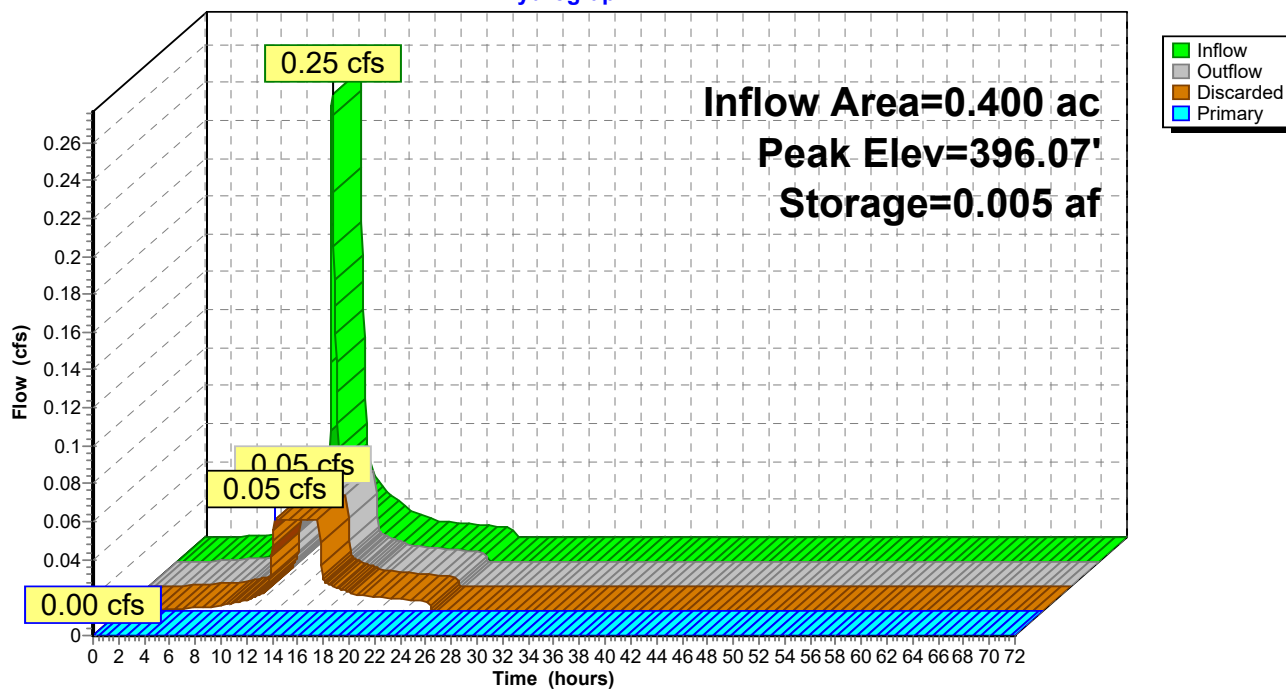
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Page 14

## Pond 1.7P:

Hydrograph



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Page 15

**Stage-Area-Storage for Pond 1.7P:**

Elevation (feet)	Horizontal (acres)	Storage (acre-feet)	Elevation (feet)	Horizontal (acres)	Storage (acre-feet)
395.10	<b>0.010</b>	0.000	397.75	0.010	0.016
395.15	0.010	0.000	397.80	0.010	0.017
395.20	0.010	0.000	397.85	0.010	0.017
395.25	0.010	0.001	397.90	0.010	0.017
395.30	0.010	0.001	397.95	0.010	0.017
395.35	0.010	0.001	398.00	0.010	0.017
395.40	0.010	0.001	398.05	0.010	0.018
395.45	0.010	0.001	398.10	0.010	0.018
395.50	0.010	0.002	398.15	0.010	0.018
395.55	0.010	0.002	398.20	0.010	0.018
395.60	0.010	0.002	398.25	0.010	0.018
395.65	0.010	0.002	398.30	0.010	0.019
395.70	0.010	0.003	398.35	0.010	0.019
395.75	0.010	0.003	398.40	0.010	0.019
395.80	0.010	0.003	398.45	0.010	0.019
395.85	0.010	0.004	398.50	0.010	0.019
395.90	0.010	0.004	398.55	0.010	0.020
395.95	0.010	0.005	398.60	0.010	<b>0.020</b>
396.00	0.010	0.005			
396.05	0.010	0.005			
396.10	0.010	0.006			
396.15	0.010	0.006			
396.20	0.010	0.006			
396.25	0.010	0.007			
396.30	0.010	0.007			
396.35	0.010	0.007			
396.40	0.010	0.008			
396.45	0.010	0.008			
396.50	0.010	0.008			
396.55	0.010	0.009			
396.60	0.010	0.009			
396.65	0.010	0.010			
396.70	0.010	0.010			
396.75	0.010	0.010			
396.80	0.010	0.011			
396.85	0.010	0.011			
396.90	0.010	0.011			
396.95	0.010	0.012			
397.00	0.010	0.012			
397.05	0.010	0.012			
397.10	0.010	0.013			
397.15	0.010	0.013			
397.20	0.010	0.013			
397.25	0.010	0.013			
397.30	0.010	0.014			
397.35	0.010	0.014			
397.40	0.010	0.014			
397.45	0.010	0.015			
397.50	0.010	0.015			
397.55	0.010	0.015			
397.60	0.010	0.016			
397.65	0.010	0.016			
397.70	0.010	0.016			



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Page 16

**Summary for Pond CB FS 1.7:**

[57] Hint: Peaked at 398.31' (Flood elevation advised)

Inflow Area = 0.400 ac, 25.00% Impervious, Inflow Depth = 0.73" for 1-yr event  
 Inflow = 0.25 cfs @ 12.12 hrs, Volume= 0.024 af  
 Outflow = 0.25 cfs @ 12.12 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.25 cfs @ 12.12 hrs, Volume= 0.024 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 398.31' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	398.00'	<b>6.0" Round 6.0" Round Culvert</b> L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 398.00' / 397.80' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	397.50'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 397.50' / 397.00' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	398.40'	<b>2.5' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.24 cfs @ 12.12 hrs HW=398.31' (Free Discharge)

↑1=6.0" Round Culvert (Inlet Controls 0.24 cfs @ 1.89 fps)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=397.50' (Free Discharge)

↑2=Culvert ( Controls 0.00 cfs)

↑3=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

# Mount Kisco - Driveway Drainage

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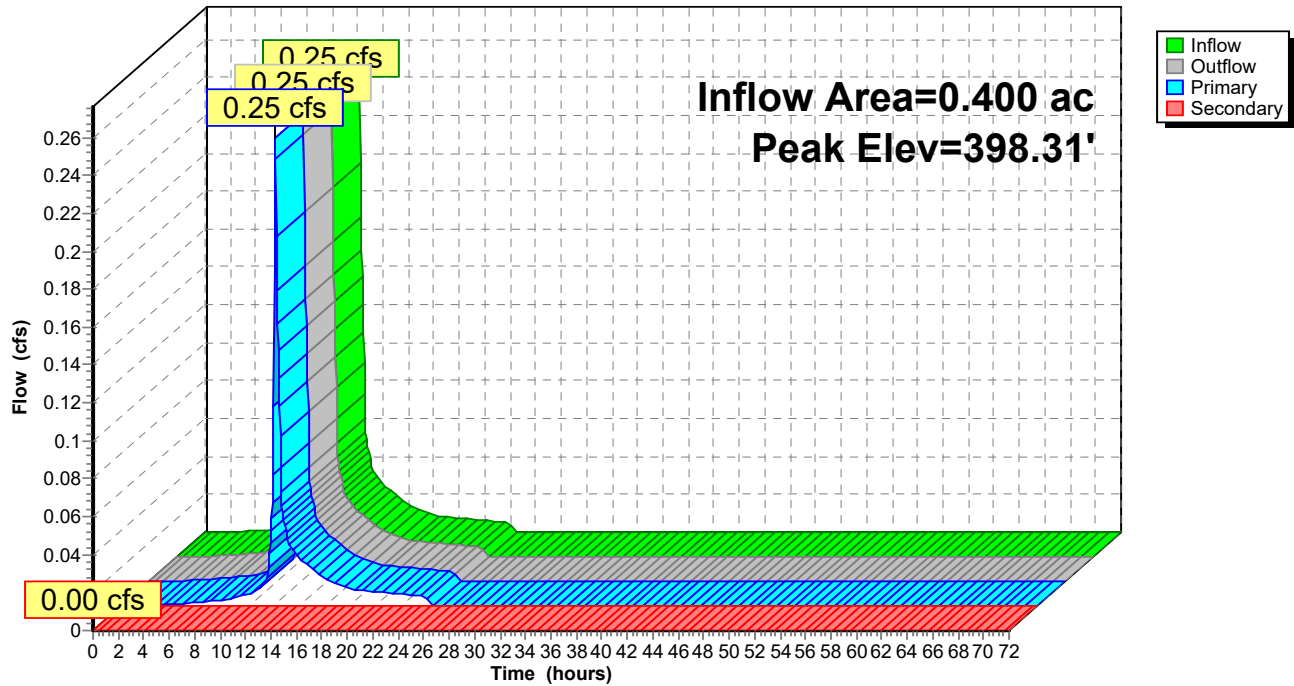
Type III 24-hr 1-yr Rainfall=2.88"

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Page 17

## Pond CB FS 1.7:

Hydrograph



**Mount Kisco - Driveway Drainage**

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Type III 24-hr 1-yr Rainfall=2.88"

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Page 18

**Stage-Area-Storage for Pond CB FS 1.7:**

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
397.50	0	398.03	0
397.51	0	398.04	0
397.52	0	398.05	0
397.53	0	398.06	0
397.54	0	398.07	0
397.55	0	398.08	0
397.56	0	398.09	0
397.57	0	398.10	0
397.58	0	398.11	0
397.59	0	398.12	0
397.60	0	398.13	0
397.61	0	398.14	0
397.62	0	398.15	0
397.63	0	398.16	0
397.64	0	398.17	0
397.65	0	398.18	0
397.66	0	398.19	0
397.67	0	398.20	0
397.68	0	398.21	0
397.69	0	398.22	0
397.70	0	398.23	0
397.71	0	398.24	0
397.72	0	398.25	0
397.73	0	398.26	0
397.74	0	398.27	0
397.75	0	398.28	0
397.76	0	398.29	0
397.77	0	398.30	0
397.78	0	398.31	0
397.79	0	398.32	0
397.80	0	398.33	0
397.81	0	398.34	0
397.82	0	398.35	0
397.83	0	398.36	0
397.84	0	398.37	0
397.85	0	398.38	0
397.86	0	398.39	0
397.87	0	398.40	0
397.88	0	398.41	0
397.89	0	398.42	0
397.90	0	398.43	0
397.91	0	398.44	0
397.92	0	398.45	0
397.93	0	398.46	0
397.94	0	398.47	0
397.95	0	398.48	0
397.96	0	398.49	0
397.97	0	398.50	0
397.98	0		
397.99	0		
398.00	0		
398.01	0		
398.02	0		



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Page 19

### Summary for Pond CB FS1.6:

[57] Hint: Peaked at 421.20' (Flood elevation advised)

Inflow Area = 0.600 ac, 33.33% Impervious, Inflow Depth = 0.95" for 1-yr event  
Inflow = 0.50 cfs @ 12.11 hrs, Volume= 0.048 af  
Outflow = 0.50 cfs @ 12.11 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min  
Primary = 0.50 cfs @ 12.11 hrs, Volume= 0.048 af  
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 421.20' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	420.50'	<b>6.0" Round 6.0" Culvert</b> L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 420.50' / 420.40' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	420.00'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 420.00' / 419.00' S= 0.0400 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	421.20'	<b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.47 cfs @ 12.11 hrs HW=421.17' (Free Discharge)

↑**1=6.0" Culvert** (Barrel Controls 0.47 cfs @ 2.40 fps)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=420.00' (Free Discharge)

↑**2=Culvert** ( Controls 0.00 cfs)

↑**3=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

## Mount Kisco - Driveway Drainage

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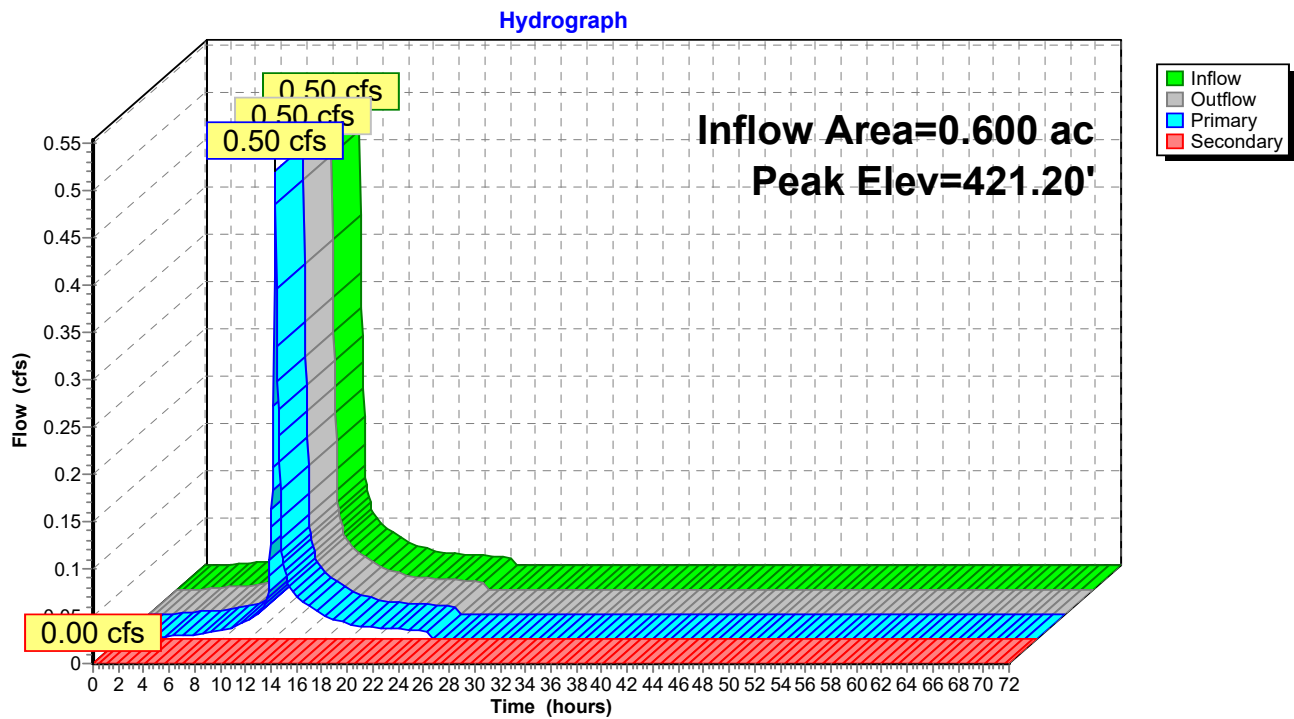
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Type III 24-hr 1-yr Rainfall=2.88"

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Page 20

### Pond CB FS1.6:



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Page 21

**Stage-Area-Storage for Pond CB FS1.6:**

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
420.00	0	420.53	0	421.06	0
420.01	0	420.54	0	421.07	0
420.02	0	420.55	0	421.08	0
420.03	0	420.56	0	421.09	0
420.04	0	420.57	0	421.10	0
420.05	0	420.58	0	421.11	0
420.06	0	420.59	0	421.12	0
420.07	0	420.60	0	421.13	0
420.08	0	420.61	0	421.14	0
420.09	0	420.62	0	421.15	0
420.10	0	420.63	0	421.16	0
420.11	0	420.64	0	421.17	0
420.12	0	420.65	0	421.18	0
420.13	0	420.66	0	421.19	0
420.14	0	420.67	0	421.20	0
420.15	0	420.68	0		
420.16	0	420.69	0		
420.17	0	420.70	0		
420.18	0	420.71	0		
420.19	0	420.72	0		
420.20	0	420.73	0		
420.21	0	420.74	0		
420.22	0	420.75	0		
420.23	0	420.76	0		
420.24	0	420.77	0		
420.25	0	420.78	0		
420.26	0	420.79	0		
420.27	0	420.80	0		
420.28	0	420.81	0		
420.29	0	420.82	0		
420.30	0	420.83	0		
420.31	0	420.84	0		
420.32	0	420.85	0		
420.33	0	420.86	0		
420.34	0	420.87	0		
420.35	0	420.88	0		
420.36	0	420.89	0		
420.37	0	420.90	0		
420.38	0	420.91	0		
420.39	0	420.92	0		
420.40	0	420.93	0		
420.41	0	420.94	0		
420.42	0	420.95	0		
420.43	0	420.96	0		
420.44	0	420.97	0		
420.45	0	420.98	0		
420.46	0	420.99	0		
420.47	0	421.00	0		
420.48	0	421.01	0		
420.49	0	421.02	0		
420.50	0	421.03	0		
420.51	0	421.04	0		
420.52	0	421.05	0		



## Mount Kisco - Driveway Drainage

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Page 22

### Summary for Subcatchment 1.6 S: Existing Impervious

Runoff = 0.71 cfs @ 12.10 hrs, Volume= 0.061 af, Depth= 4.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-yr Rainfall=5.13"

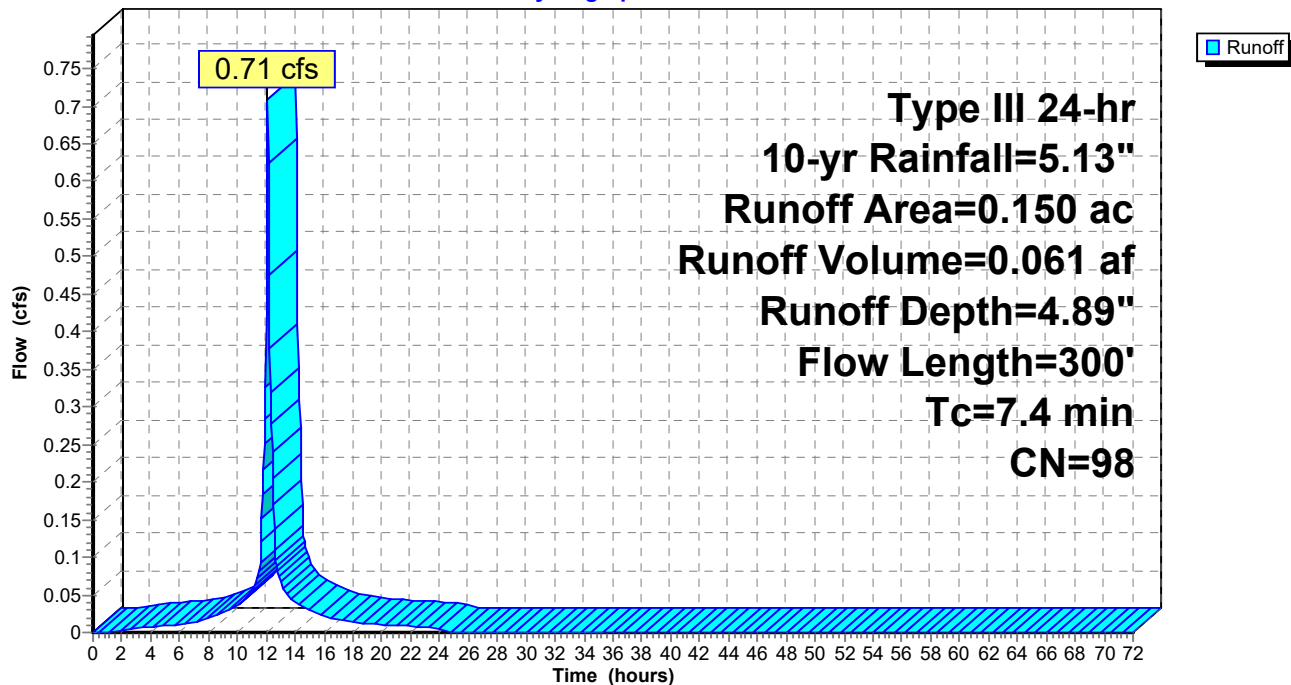
Area (ac)	CN	Description
0.150	98	Paved parking, HSG B
0.150		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.8	50	0.0800	0.12		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.1	20	0.2000	2.24		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.1	40	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
0.3	140	0.2000	6.71		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
0.1	50	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	300	Total			

### Subcatchment 1.6 S: Existing Impervious

Hydrograph



**Mount Kisco - Driveway Drainage**

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Page 23

**Summary for Subcatchment 1.6S: New Impervious and Pervious Area**

Runoff = 0.74 cfs @ 12.12 hrs, Volume= 0.060 af, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-yr Rainfall=5.13"

Area (ac)	CN	Description
0.050	98	Paved parking, HSG B
0.150	55	Woods, Good, HSG B
0.250	61	>75% Grass cover, Good, HSG B
0.450	63	Weighted Average
0.400		88.89% Pervious Area
0.050		11.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.8	50	0.0800	0.12		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.1	20	0.2000	2.24		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.1	40	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
0.3	140	0.2000	6.71		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
0.1	50	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	300	Total			

# Mount Kisco - Driveway Drainage

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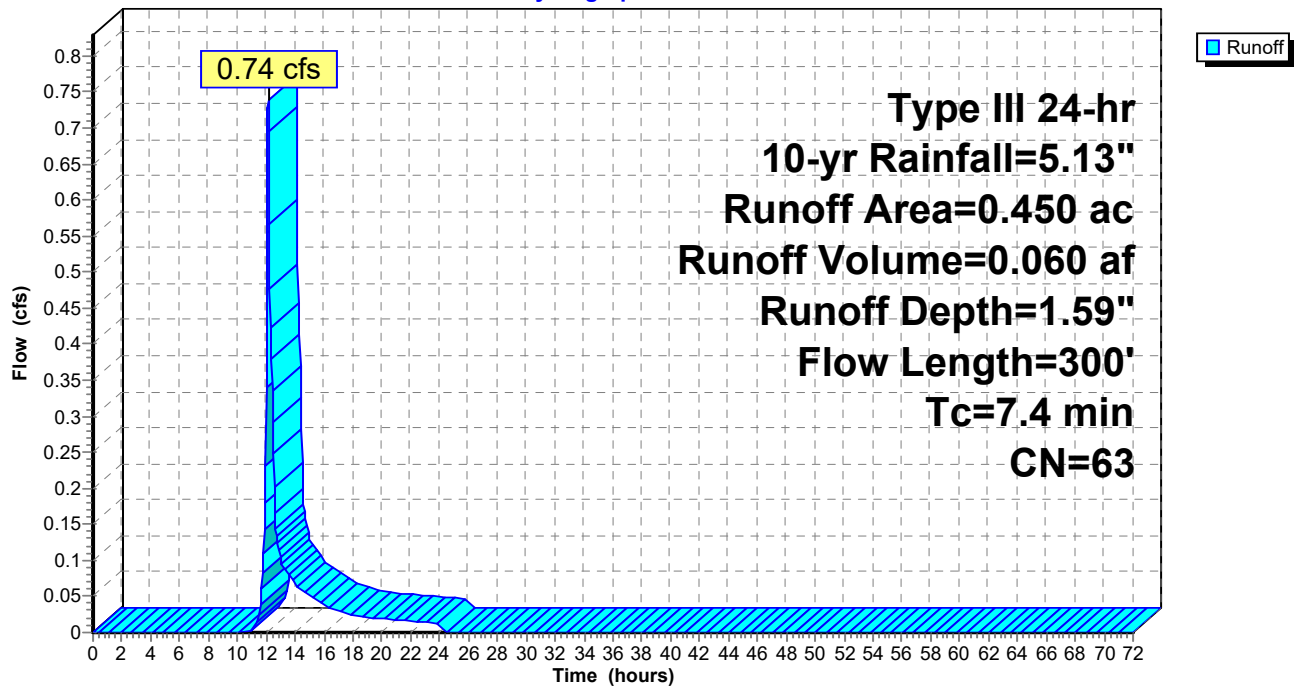
Type III 24-hr 10-yr Rainfall=5.13"

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Page 24

## Subcatchment 1.6S: New Impervious and Pervious Area

Hydrograph





## Mount Kisco - Driveway Drainage

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Page 25

### Summary for Subcatchment 1.7 S: Existing Impervious

Runoff = 0.24 cfs @ 12.10 hrs, Volume= 0.020 af, Depth= 4.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-yr Rainfall=5.13"

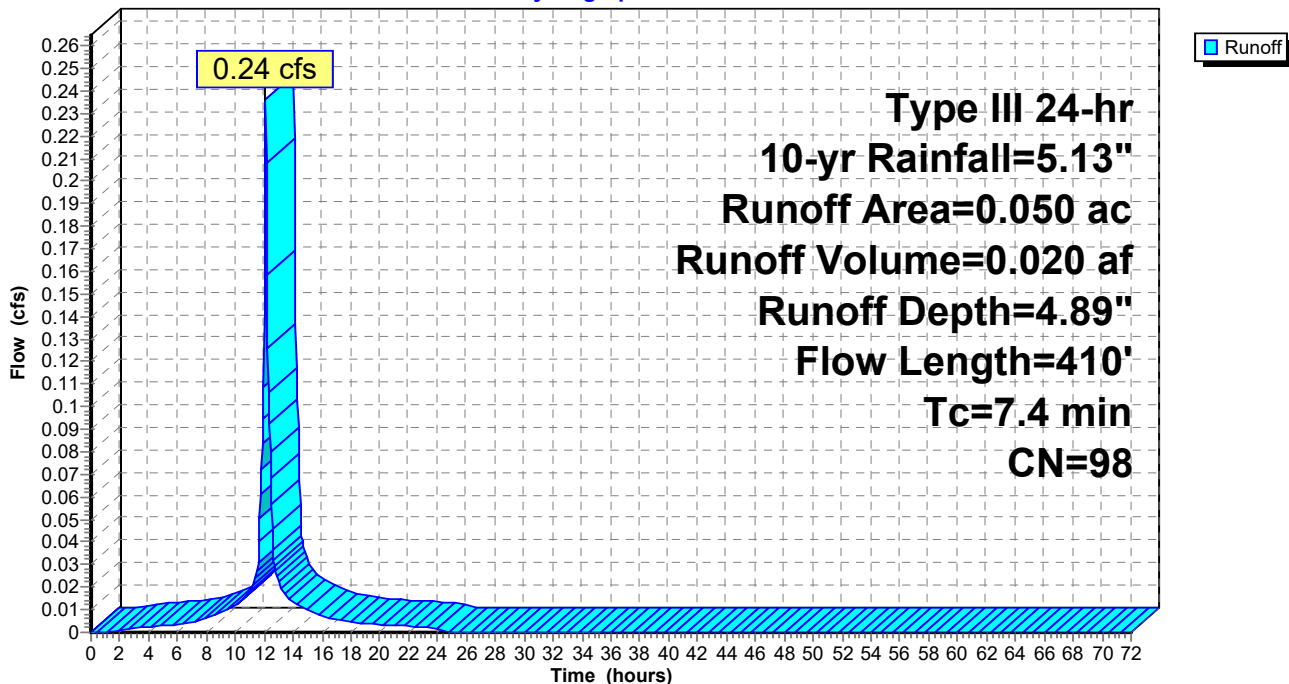
Area (ac)	CN	Description
0.050	98	Paved parking, HSG B
0.050		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	45	0.1000	0.13		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
1.0	140	0.2200	2.35		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.7	225	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	410	Total			

### Subcatchment 1.7 S: Existing Impervious

Hydrograph



## Mount Kisco - Driveway Drainage

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Page 26

### Summary for Subcatchment 1.7S: New Impervious and Pervious Area

Runoff = 0.64 cfs @ 12.12 hrs, Volume= 0.051 af, Depth= 1.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-yr Rainfall=5.13"

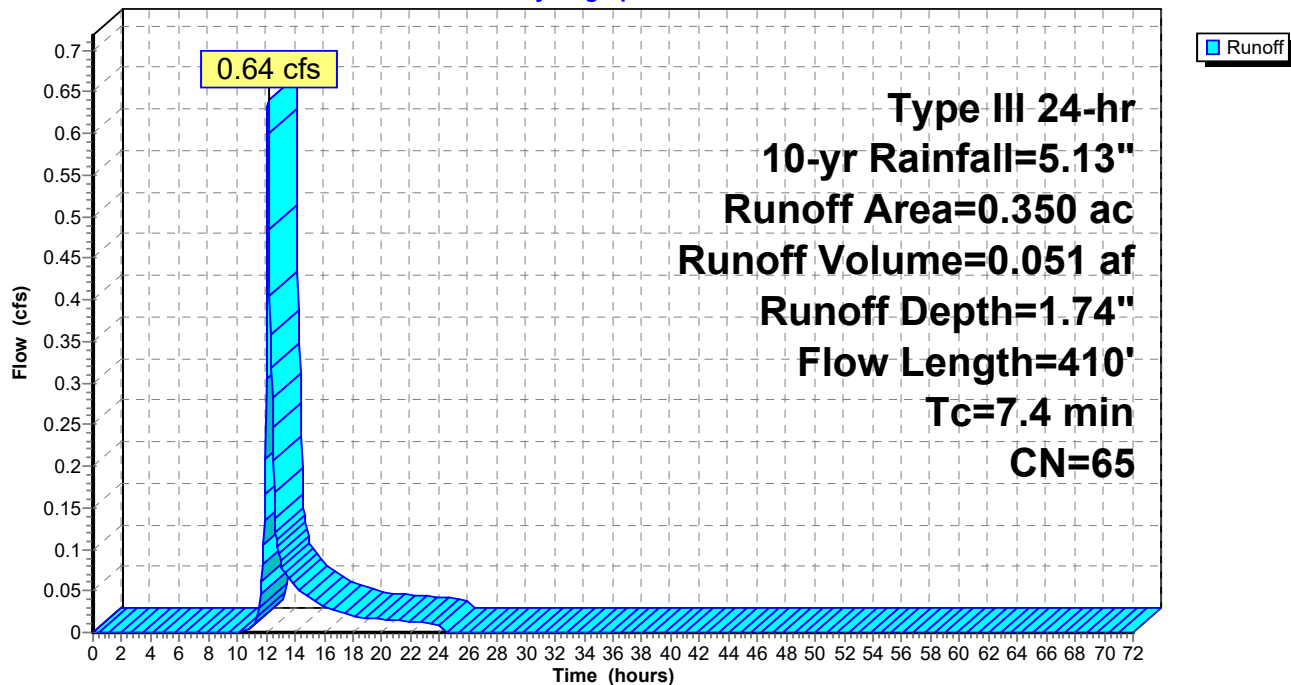
Area (ac)	CN	Description
0.050	98	Paved parking, HSG B
0.150	61	>75% Grass cover, Good, HSG B
0.150	58	Meadow, non-grazed, HSG B
0.350	65	Weighted Average
0.300		85.71% Pervious Area
0.050		14.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	45	0.1000	0.13		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
1.0	140	0.2200	2.35		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.7	225	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	410	Total			

### Subcatchment 1.7S: New Impervious and Pervious Area

Hydrograph



## Mount Kisco - Driveway Drainage

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Page 27

### Summary for Reach DL3:

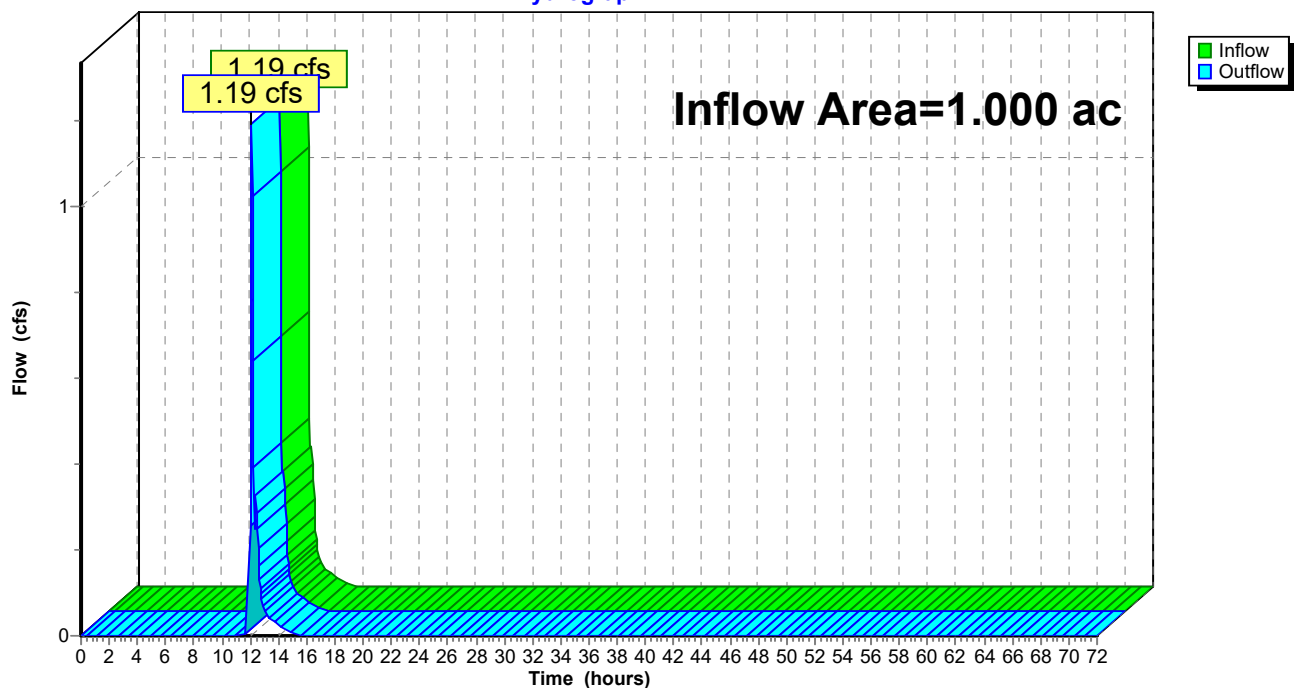
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.000 ac, 30.00% Impervious, Inflow Depth = 0.39" for 10-yr event  
Inflow = 1.19 cfs @ 12.11 hrs, Volume= 0.033 af  
Outflow = 1.19 cfs @ 12.11 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

### Reach DL3:

Hydrograph





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Type III 24-hr 10-yr Rainfall=5.13"

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Page 28

**Summary for Pond 1.6P:**

Inflow Area = 0.600 ac, 33.33% Impervious, Inflow Depth = 2.13" for 10-yr event  
 Inflow = 0.62 cfs @ 12.11 hrs, Volume= 0.106 af  
 Outflow = 0.31 cfs @ 11.85 hrs, Volume= 0.106 af, Atten= 51%, Lag= 0.0 min  
 Discarded = 0.31 cfs @ 11.85 hrs, Volume= 0.106 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 419.36' @ 12.58 hrs Surf.Area= 0.013 ac Storage= 0.013 af

Plug-Flow detention time= 8.3 min calculated for 0.106 af (100% of inflow)  
 Center-of-Mass det. time= 8.3 min ( 825.7 - 817.4 )

Volume	Invert	Avail.Storage	Storage Description
#1A	417.80'	0.013 af	<b>11.00'W x 52.29'L x 3.50'H Field A</b> 0.046 af Overall - 0.015 af Embedded = 0.031 af x 40.0% Voids
#2A	418.30'	0.015 af	<b>ADS_StormTech SC-740 +Cap x 14 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 7 Chambers
		0.027 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	417.80'	<b>23.000 in/hr Exfiltration over Horizontal area</b> Phase-In= 0.05'
#2	Primary	420.30'	<b>6.0" Round 6.0" Round Culvert</b> L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 420.30' / 419.80' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

**Discarded OutFlow** Max=0.31 cfs @ 11.85 hrs HW=417.91' (Free Discharge)  
 ↑**1=Exfiltration** (Exfiltration Controls 0.31 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=417.80' (Free Discharge)  
 ↑**2=6.0" Round Culvert** ( Controls 0.00 cfs)

## Mount Kisco - Driveway Drainage

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Page 29

### Pond 1.6P: - Chamber Wizard Field A

**Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

7 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 51.46' Row Length +5.0" End Stone x 2 = 52.29' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

14 Chambers x 45.9 cf = 643.2 cf Chamber Storage

2,013.2 cf Field - 643.2 cf Chambers = 1,370.0 cf Stone x 40.0% Voids = 548.0 cf Stone Storage

Chamber Storage + Stone Storage = 1,191.2 cf = 0.027 af

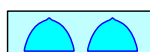
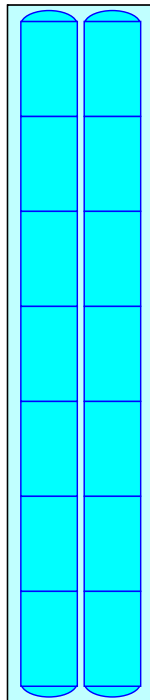
Overall Storage Efficiency = 59.2%

Overall System Size = 52.29' x 11.00' x 3.50'

14 Chambers

74.6 cy Field

50.7 cy Stone



# Mount Kisco - Driveway Drainage

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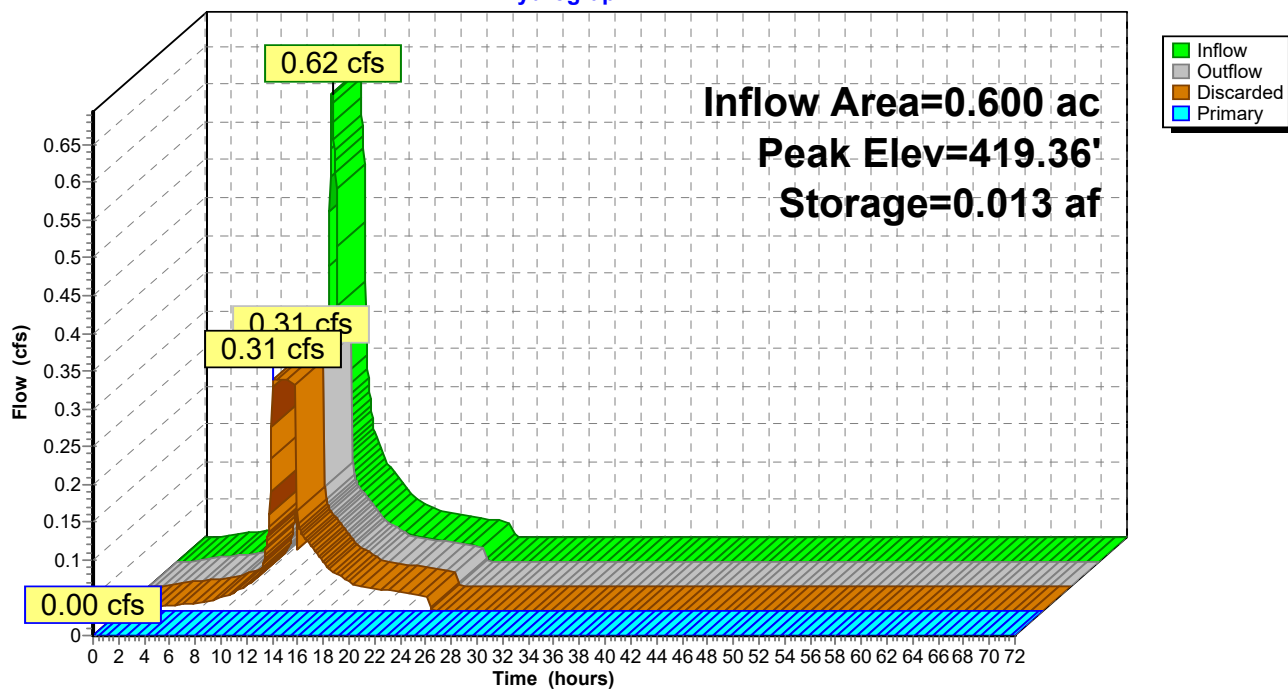
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Page 30

## Pond 1.6P:

Hydrograph





**Mount Kisco - Driveway Drainage**

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*Type III 24-hr 10-yr Rainfall=5.13"*

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Page 31

**Stage-Area-Storage for Pond 1.6P:**

Elevation (feet)	Horizontal (acres)	Storage (acre-feet)	Elevation (feet)	Horizontal (acres)	Storage (acre-feet)
417.80	<b>0.013</b>	0.000	420.45	0.013	0.023
417.85	0.013	0.000	420.50	0.013	0.023
417.90	0.013	0.001	420.55	0.013	0.023
417.95	0.013	0.001	420.60	0.013	0.024
418.00	0.013	0.001	420.65	0.013	0.024
418.05	0.013	0.001	420.70	0.013	0.024
418.10	0.013	0.002	420.75	0.013	0.024
418.15	0.013	0.002	420.80	0.013	0.025
418.20	0.013	0.002	420.85	0.013	0.025
418.25	0.013	0.002	420.90	0.013	0.025
418.30	0.013	0.003	420.95	0.013	0.025
418.35	0.013	0.003	421.00	0.013	0.026
418.40	0.013	0.004	421.05	0.013	0.026
418.45	0.013	0.004	421.10	0.013	0.026
418.50	0.013	0.005	421.15	0.013	0.027
418.55	0.013	0.005	421.20	0.013	0.027
418.60	0.013	0.006	421.25	0.013	0.027
418.65	0.013	0.006	421.30	0.013	<b>0.027</b>
418.70	0.013	0.007			
418.75	0.013	0.007			
418.80	0.013	0.008			
418.85	0.013	0.008			
418.90	0.013	0.009			
418.95	0.013	0.009			
419.00	0.013	0.010			
419.05	0.013	0.010			
419.10	0.013	0.011			
419.15	0.013	0.011			
419.20	0.013	0.012			
419.25	0.013	0.012			
419.30	0.013	0.013			
419.35	0.013	0.013			
419.40	0.013	0.014			
419.45	0.013	0.014			
419.50	0.013	0.015			
419.55	0.013	0.015			
419.60	0.013	0.016			
419.65	0.013	0.016			
419.70	0.013	0.016			
419.75	0.013	0.017			
419.80	0.013	0.017			
419.85	0.013	0.018			
419.90	0.013	0.018			
419.95	0.013	0.019			
420.00	0.013	0.019			
420.05	0.013	0.020			
420.10	0.013	0.020			
420.15	0.013	0.020			
420.20	0.013	0.021			
420.25	0.013	0.021			
420.30	0.013	0.022			
420.35	0.013	0.022			
420.40	0.013	0.022			

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Page 32

### Summary for Pond 1.7P:

[79] Warning: Submerged Pond CB FS 1.7 Primary device # 1 OUTLET by 0.15'

Inflow Area = 0.400 ac, 25.00% Impervious, Inflow Depth = 1.98" for 10-yr event  
Inflow = 0.51 cfs @ 12.11 hrs, Volume= 0.066 af  
Outflow = 0.33 cfs @ 12.44 hrs, Volume= 0.066 af, Atten= 35%, Lag= 19.8 min  
Discarded = 0.05 cfs @ 11.55 hrs, Volume= 0.053 af  
Primary = 0.28 cfs @ 12.44 hrs, Volume= 0.013 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Peak Elev= 397.95' @ 12.44 hrs Surf.Area= 0.010 ac Storage= 0.017 af

Plug-Flow detention time= 113.5 min calculated for 0.066 af (100% of inflow)  
Center-of-Mass det. time= 113.5 min ( 950.2 - 836.6 )

Volume	Invert	Avail.Storage	Storage Description
#1A	395.10'	0.009 af	<b>11.00'W x 38.05'L x 3.50'H Field A</b> 0.034 af Overall - 0.011 af Embedded = 0.023 af x 40.0% Voids
#2A	395.60'	0.011 af	<b>ADS_StormTech SC-740 +Cap x 10 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 5 Chambers
		0.020 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	395.10'	<b>5.000 in/hr Exfiltration over Horizontal area</b> Phase-In= 0.05'
#2	Primary	397.60'	<b>6.0" Round 6.0" Round Culvert</b> L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 397.60' / 397.10' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

**Discarded OutFlow** Max=0.05 cfs @ 11.55 hrs HW=395.17' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

**Primary OutFlow** Max=0.28 cfs @ 12.44 hrs HW=397.95' (Free Discharge)

↑**2=6.0" Round Culvert** (Barrel Controls 0.28 cfs @ 2.68 fps)

## Mount Kisco - Driveway Drainage

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Page 33

### Pond 1.7P: - Chamber Wizard Field A

**Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

5 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 37.22' Row Length +5.0" End Stone x 2 = 38.05' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

10 Chambers x 45.9 cf = 459.4 cf Chamber Storage

1,464.9 cf Field - 459.4 cf Chambers = 1,005.5 cf Stone x 40.0% Voids = 402.2 cf Stone Storage

Chamber Storage + Stone Storage = 861.6 cf = 0.020 af

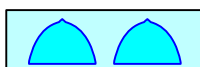
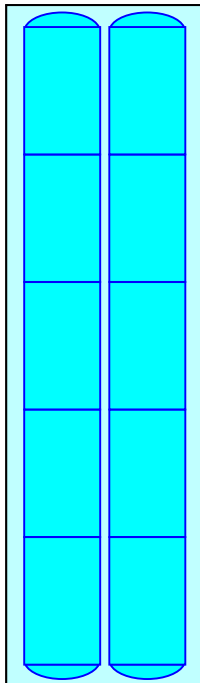
Overall Storage Efficiency = 58.8%

Overall System Size = 38.05' x 11.00' x 3.50'

10 Chambers

54.3 cy Field

37.2 cy Stone





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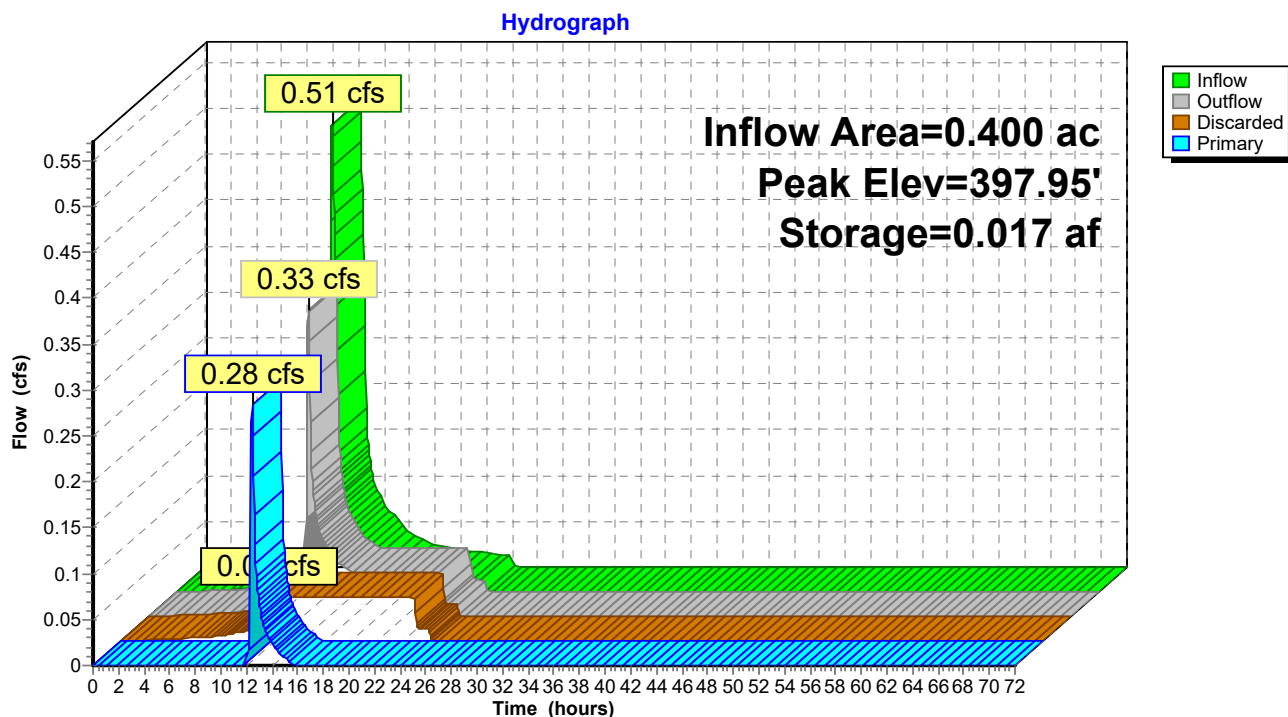
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Page 34

## Pond 1.7P:



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Page 35

**Stage-Area-Storage for Pond 1.7P:**

Elevation (feet)	Horizontal (acres)	Storage (acre-feet)	Elevation (feet)	Horizontal (acres)	Storage (acre-feet)
395.10	<b>0.010</b>	0.000	397.75	0.010	0.016
395.15	0.010	0.000	397.80	0.010	0.017
395.20	0.010	0.000	397.85	0.010	0.017
395.25	0.010	0.001	397.90	0.010	0.017
395.30	0.010	0.001	397.95	0.010	0.017
395.35	0.010	0.001	398.00	0.010	0.017
395.40	0.010	0.001	398.05	0.010	0.018
395.45	0.010	0.001	398.10	0.010	0.018
395.50	0.010	0.002	398.15	0.010	0.018
395.55	0.010	0.002	398.20	0.010	0.018
395.60	0.010	0.002	398.25	0.010	0.018
395.65	0.010	0.002	398.30	0.010	0.019
395.70	0.010	0.003	398.35	0.010	0.019
395.75	0.010	0.003	398.40	0.010	0.019
395.80	0.010	0.003	398.45	0.010	0.019
395.85	0.010	0.004	398.50	0.010	0.019
395.90	0.010	0.004	398.55	0.010	0.020
395.95	0.010	0.005	398.60	0.010	<b>0.020</b>
396.00	0.010	0.005			
396.05	0.010	0.005			
396.10	0.010	0.006			
396.15	0.010	0.006			
396.20	0.010	0.006			
396.25	0.010	0.007			
396.30	0.010	0.007			
396.35	0.010	0.007			
396.40	0.010	0.008			
396.45	0.010	0.008			
396.50	0.010	0.008			
396.55	0.010	0.009			
396.60	0.010	0.009			
396.65	0.010	0.010			
396.70	0.010	0.010			
396.75	0.010	0.010			
396.80	0.010	0.011			
396.85	0.010	0.011			
396.90	0.010	0.011			
396.95	0.010	0.012			
397.00	0.010	0.012			
397.05	0.010	0.012			
397.10	0.010	0.013			
397.15	0.010	0.013			
397.20	0.010	0.013			
397.25	0.010	0.013			
397.30	0.010	0.014			
397.35	0.010	0.014			
397.40	0.010	0.014			
397.45	0.010	0.015			
397.50	0.010	0.015			
397.55	0.010	0.015			
397.60	0.010	0.016			
397.65	0.010	0.016			
397.70	0.010	0.016			

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Page 36

### Summary for Pond CB FS 1.7:

[57] Hint: Peaked at 398.54' (Flood elevation advised)

Inflow Area = 0.400 ac, 25.00% Impervious, Inflow Depth = 2.13" for 10-yr event  
Inflow = 0.88 cfs @ 12.11 hrs, Volume= 0.071 af  
Outflow = 0.88 cfs @ 12.11 hrs, Volume= 0.071 af, Atten= 0%, Lag= 0.0 min  
Primary = 0.51 cfs @ 12.11 hrs, Volume= 0.066 af  
Secondary = 0.37 cfs @ 12.11 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 398.54' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	398.00'	<b>6.0" Round 6.0" Round Culvert</b> L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 398.00' / 397.80' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	397.50'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 397.50' / 397.00' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	398.40'	<b>2.5' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.50 cfs @ 12.11 hrs HW=398.54' (Free Discharge)

↑**1=6.0" Round Culvert** (Inlet Controls 0.50 cfs @ 2.57 fps)

**Secondary OutFlow** Max=0.35 cfs @ 12.11 hrs HW=398.54' (Free Discharge)

↑**2=Culvert** (Passes 0.35 cfs of 2.77 cfs potential flow)

↑**3=Broad-Crested Rectangular Weir** (Weir Controls 0.35 cfs @ 1.03 fps)



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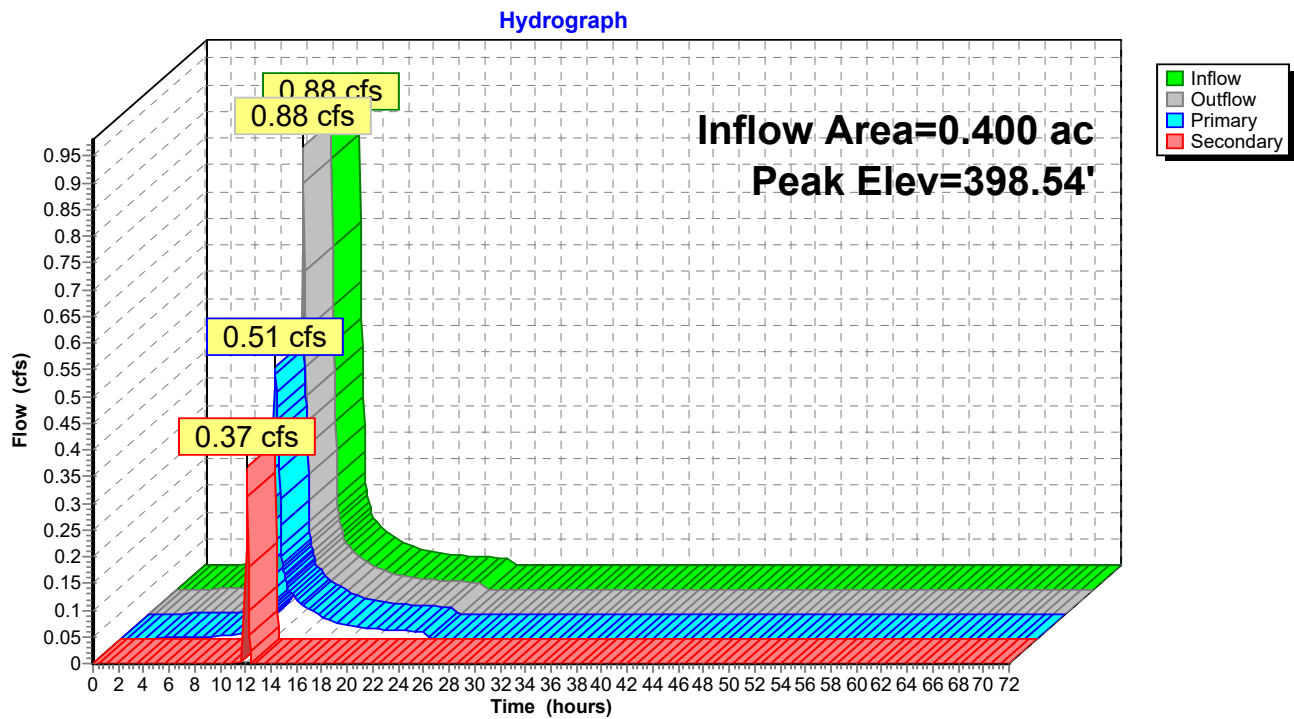
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Page 37

## Pond CB FS 1.7:



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Page 38

**Stage-Area-Storage for Pond CB FS 1.7:**

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
397.50	0	398.03	0
397.51	0	398.04	0
397.52	0	398.05	0
397.53	0	398.06	0
397.54	0	398.07	0
397.55	0	398.08	0
397.56	0	398.09	0
397.57	0	398.10	0
397.58	0	398.11	0
397.59	0	398.12	0
397.60	0	398.13	0
397.61	0	398.14	0
397.62	0	398.15	0
397.63	0	398.16	0
397.64	0	398.17	0
397.65	0	398.18	0
397.66	0	398.19	0
397.67	0	398.20	0
397.68	0	398.21	0
397.69	0	398.22	0
397.70	0	398.23	0
397.71	0	398.24	0
397.72	0	398.25	0
397.73	0	398.26	0
397.74	0	398.27	0
397.75	0	398.28	0
397.76	0	398.29	0
397.77	0	398.30	0
397.78	0	398.31	0
397.79	0	398.32	0
397.80	0	398.33	0
397.81	0	398.34	0
397.82	0	398.35	0
397.83	0	398.36	0
397.84	0	398.37	0
397.85	0	398.38	0
397.86	0	398.39	0
397.87	0	398.40	0
397.88	0	398.41	0
397.89	0	398.42	0
397.90	0	398.43	0
397.91	0	398.44	0
397.92	0	398.45	0
397.93	0	398.46	0
397.94	0	398.47	0
397.95	0	398.48	0
397.96	0	398.49	0
397.97	0	398.50	0
397.98	0	398.51	0
397.99	0	398.52	0
398.00	0	398.53	0
398.01	0	398.54	0
398.02	0		

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Page 39

**Summary for Pond CB FS1.6:**

[57] Hint: Peaked at 421.38' (Flood elevation advised)

Inflow Area = 0.600 ac, 33.33% Impervious, Inflow Depth = 2.42" for 10-yr event  
 Inflow = 1.45 cfs @ 12.11 hrs, Volume= 0.121 af  
 Outflow = 1.45 cfs @ 12.11 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.62 cfs @ 12.11 hrs, Volume= 0.106 af  
 Secondary = 0.83 cfs @ 12.11 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 421.38' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	420.50'	<b>6.0" Round 6.0" Culvert</b> L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 420.50' / 420.40' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	420.00'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 420.00' / 419.00' S= 0.0400 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	421.20'	<b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.62 cfs @ 12.11 hrs HW=421.37' (Free Discharge)↑**1=6.0" Culvert** (Barrel Controls 0.62 cfs @ 3.14 fps)**Secondary OutFlow** Max=0.80 cfs @ 12.11 hrs HW=421.37' (Free Discharge)↑**2=Culvert** (Passes 0.80 cfs of 3.53 cfs potential flow)↑**3=Broad-Crested Rectangular Weir** (Weir Controls 0.80 cfs @ 1.16 fps)



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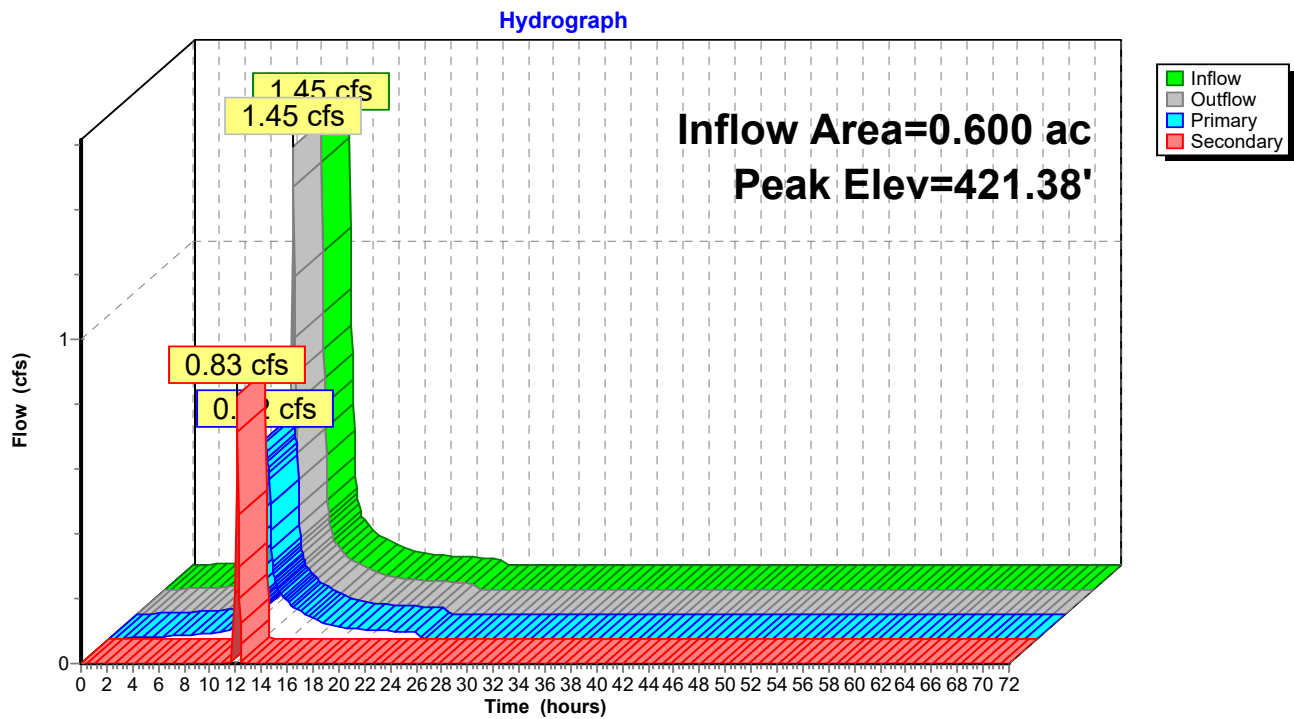
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Page 40

## Pond CB FS1.6:



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Page 41

**Stage-Area-Storage for Pond CB FS1.6:**

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
420.00	0	420.53	0	421.06	0
420.01	0	420.54	0	421.07	0
420.02	0	420.55	0	421.08	0
420.03	0	420.56	0	421.09	0
420.04	0	420.57	0	421.10	0
420.05	0	420.58	0	421.11	0
420.06	0	420.59	0	421.12	0
420.07	0	420.60	0	421.13	0
420.08	0	420.61	0	421.14	0
420.09	0	420.62	0	421.15	0
420.10	0	420.63	0	421.16	0
420.11	0	420.64	0	421.17	0
420.12	0	420.65	0	421.18	0
420.13	0	420.66	0	421.19	0
420.14	0	420.67	0	421.20	0
420.15	0	420.68	0	421.21	0
420.16	0	420.69	0	421.22	0
420.17	0	420.70	0	421.23	0
420.18	0	420.71	0	421.24	0
420.19	0	420.72	0	421.25	0
420.20	0	420.73	0	421.26	0
420.21	0	420.74	0	421.27	0
420.22	0	420.75	0	421.28	0
420.23	0	420.76	0	421.29	0
420.24	0	420.77	0	421.30	0
420.25	0	420.78	0	421.31	0
420.26	0	420.79	0	421.32	0
420.27	0	420.80	0	421.33	0
420.28	0	420.81	0	421.34	0
420.29	0	420.82	0	421.35	0
420.30	0	420.83	0	421.36	0
420.31	0	420.84	0	421.37	0
420.32	0	420.85	0	421.38	0
420.33	0	420.86	0		
420.34	0	420.87	0		
420.35	0	420.88	0		
420.36	0	420.89	0		
420.37	0	420.90	0		
420.38	0	420.91	0		
420.39	0	420.92	0		
420.40	0	420.93	0		
420.41	0	420.94	0		
420.42	0	420.95	0		
420.43	0	420.96	0		
420.44	0	420.97	0		
420.45	0	420.98	0		
420.46	0	420.99	0		
420.47	0	421.00	0		
420.48	0	421.01	0		
420.49	0	421.02	0		
420.50	0	421.03	0		
420.51	0	421.04	0		
420.52	0	421.05	0		

## Mount Kisco - Driveway Drainage

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Type III 24-hr 100-yr Rainfall=8.30"

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Page 42

### Summary for Subcatchment 1.6 S: Existing Impervious

Runoff = 1.15 cfs @ 12.10 hrs, Volume= 0.101 af, Depth= 8.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-yr Rainfall=8.30"

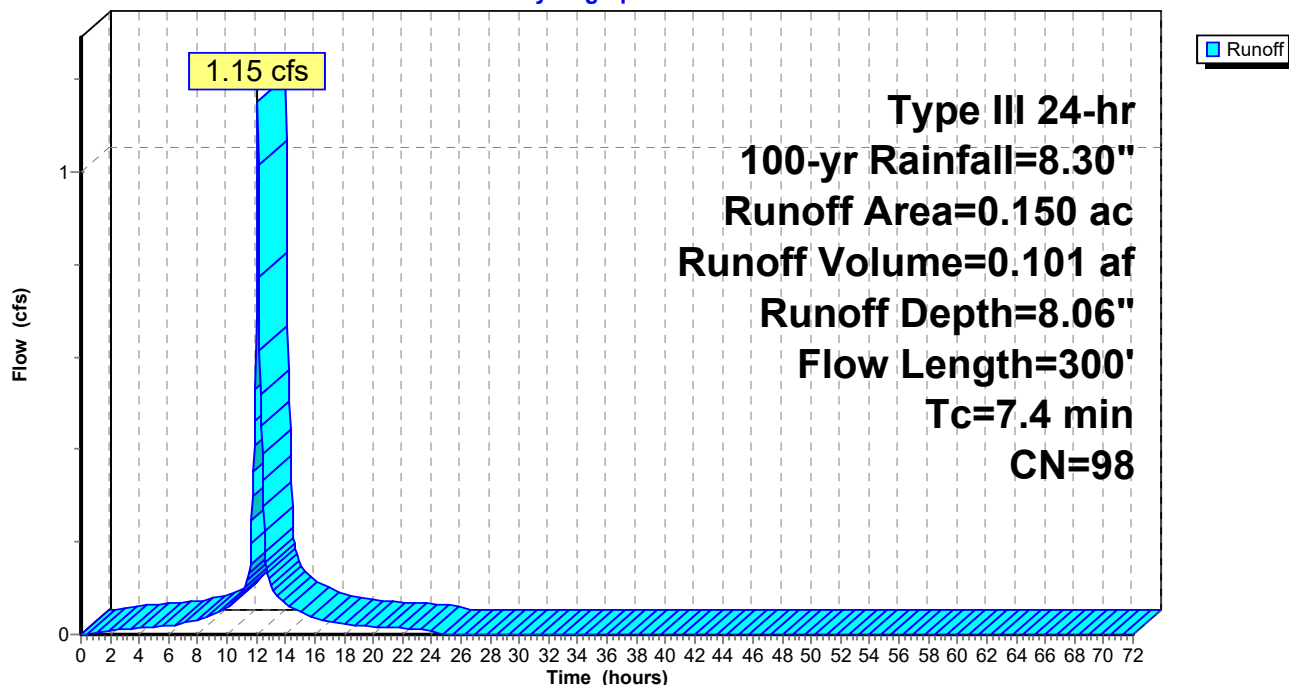
Area (ac)	CN	Description
0.150	98	Paved parking, HSG B
0.150		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.8	50	0.0800	0.12		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.1	20	0.2000	2.24		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.1	40	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
0.3	140	0.2000	6.71		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
0.1	50	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	300	Total			

### Subcatchment 1.6 S: Existing Impervious

Hydrograph





**Mount Kisco - Driveway Drainage**

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Page 43

**Summary for Subcatchment 1.6S: New Impervious and Pervious Area**

Runoff = 1.93 cfs @ 12.11 hrs, Volume= 0.146 af, Depth= 3.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
0.050	98	Paved parking, HSG B
0.150	55	Woods, Good, HSG B
0.250	61	>75% Grass cover, Good, HSG B
0.450	63	Weighted Average
0.400		88.89% Pervious Area
0.050		11.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.8	50	0.0800	0.12		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.1	20	0.2000	2.24		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.1	40	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
0.3	140	0.2000	6.71		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
0.1	50	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	300	Total			

## Mount Kisco - Driveway Drainage

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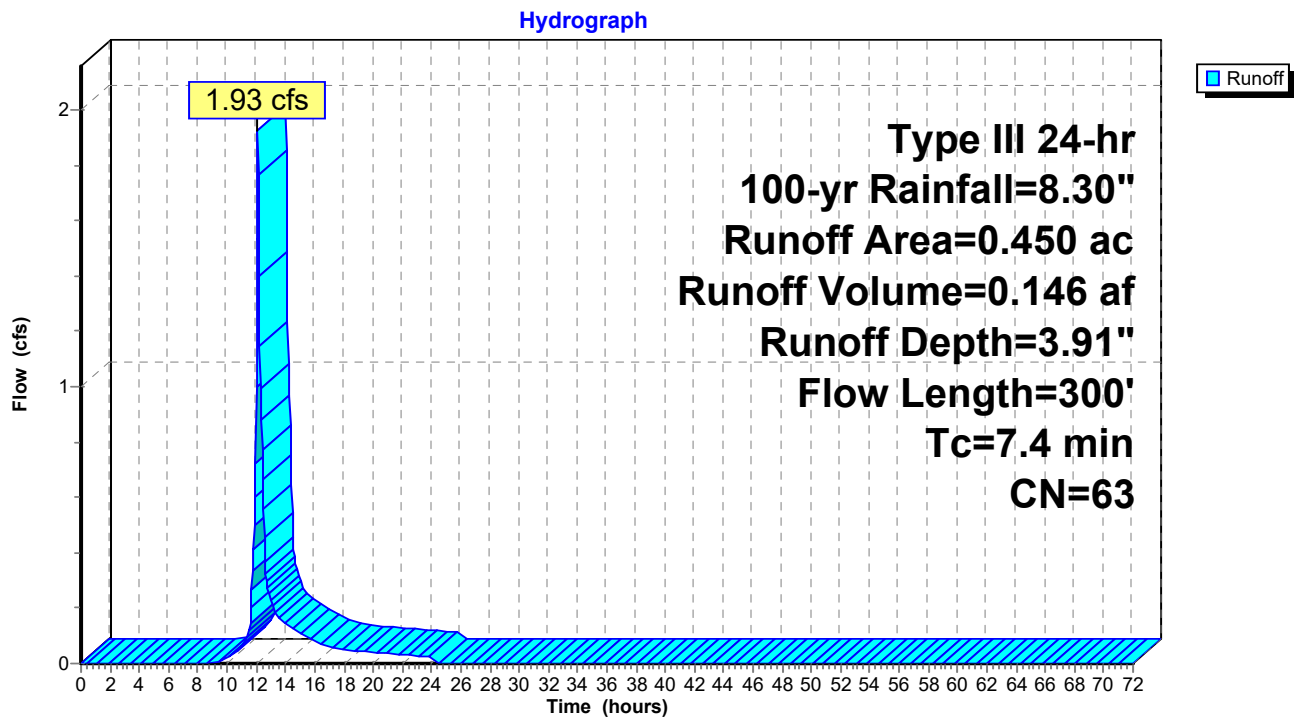
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Type III 24-hr 100-yr Rainfall=8.30"

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Page 44

### Subcatchment 1.6S: New Impervious and Pervious Area



## Mount Kisco - Driveway Drainage

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Page 45

### Summary for Subcatchment 1.7 S: Existing Impervious

Runoff = 0.38 cfs @ 12.10 hrs, Volume= 0.034 af, Depth= 8.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-yr Rainfall=8.30"

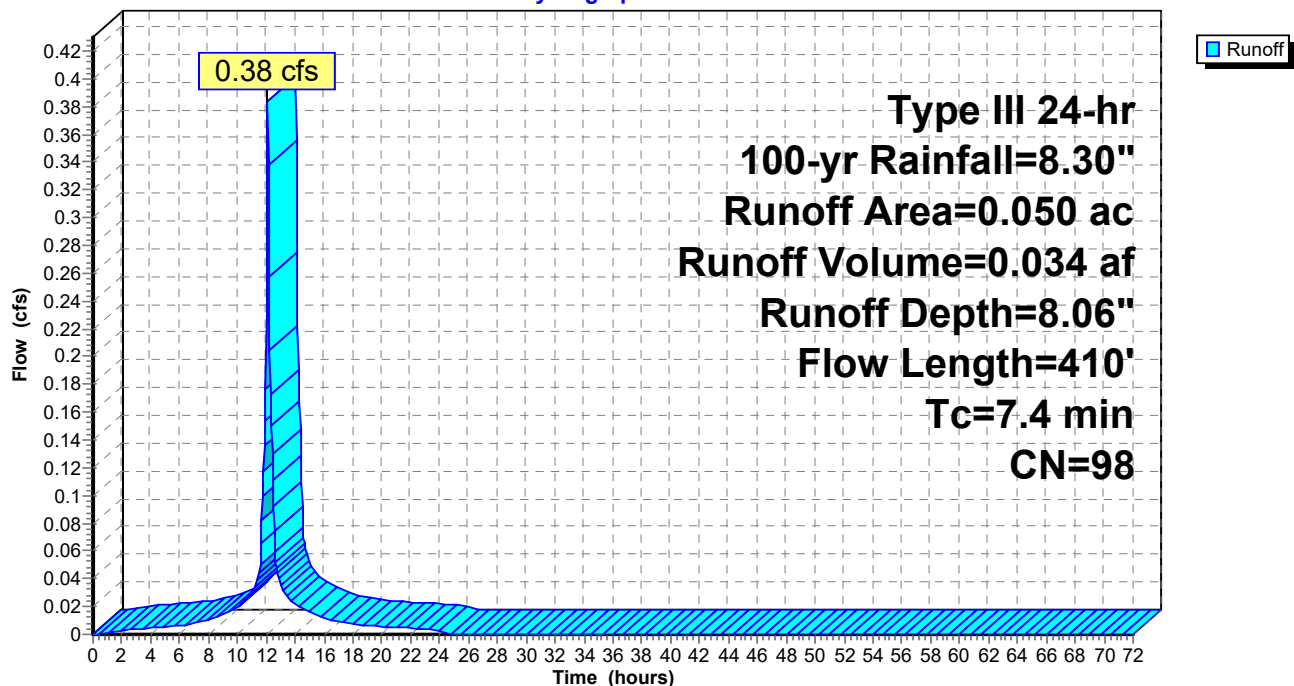
Area (ac)	CN	Description
0.050	98	Paved parking, HSG B
0.050		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	45	0.1000	0.13		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
1.0	140	0.2200	2.35		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.7	225	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	410	Total			

### Subcatchment 1.7 S: Existing Impervious

Hydrograph





## Mount Kisco - Driveway Drainage

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Page 46

### Summary for Subcatchment 1.7S: New Impervious and Pervious Area

Runoff = 1.59 cfs @ 12.11 hrs, Volume= 0.121 af, Depth= 4.14"

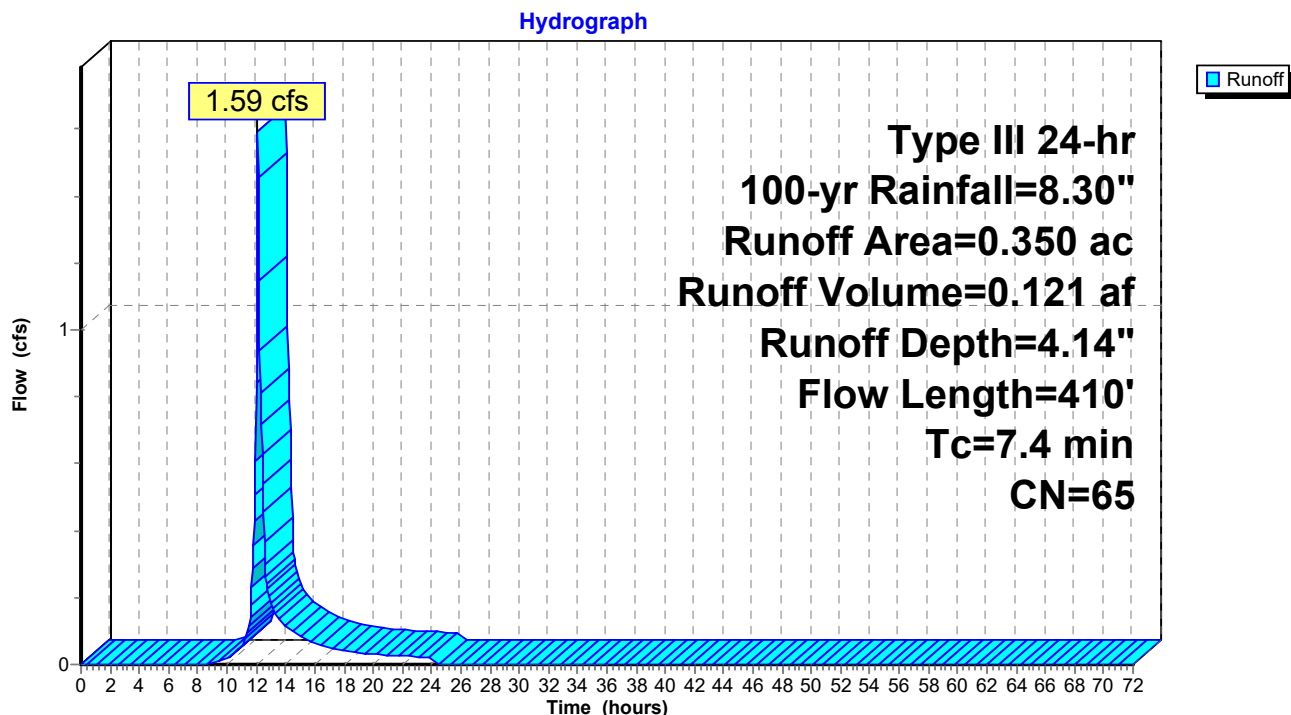
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
0.050	98	Paved parking, HSG B
0.150	61	>75% Grass cover, Good, HSG B
0.150	58	Meadow, non-grazed, HSG B
0.350	65	Weighted Average
0.300		85.71% Pervious Area
0.050		14.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	45	0.1000	0.13		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.50"
1.0	140	0.2200	2.35		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
0.7	225	0.0800	5.74		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
7.4	410	Total			

### Subcatchment 1.7S: New Impervious and Pervious Area



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Page 47

### Summary for Reach DL3:

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.000 ac, 30.00% Impervious, Inflow Depth = 1.79" for 100-yr event

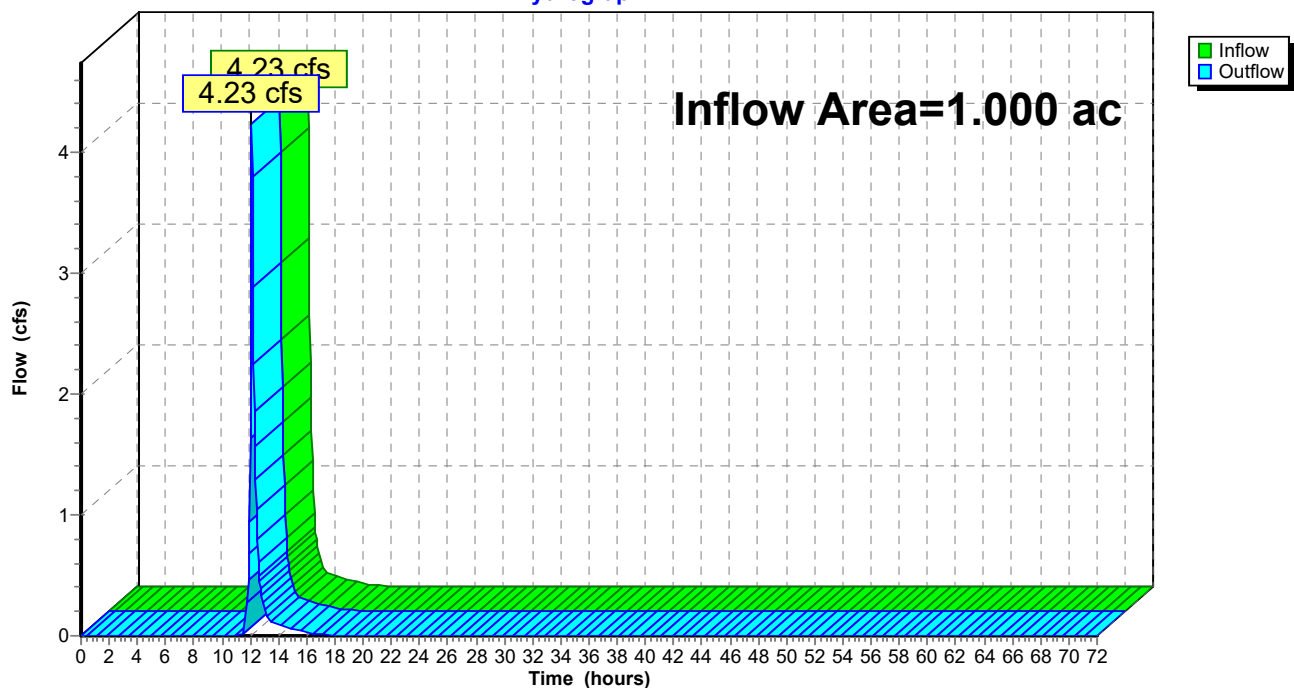
Inflow = 4.23 cfs @ 12.11 hrs, Volume= 0.149 af

Outflow = 4.23 cfs @ 12.11 hrs, Volume= 0.149 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

### Reach DL3:

Hydrograph



## Mount Kisco - Driveway Drainage

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Page 48

### Summary for Pond 1.6P:

[79] Warning: Submerged Pond CB FS1.6 Primary device # 1 INLET by 0.05'

Inflow Area = 0.600 ac, 33.33% Impervious, Inflow Depth = 3.72" for 100-yr event  
Inflow = 0.72 cfs @ 12.11 hrs, Volume= 0.186 af  
Outflow = 0.46 cfs @ 12.68 hrs, Volume= 0.186 af, Atten= 36%, Lag= 34.1 min  
Discarded = 0.31 cfs @ 11.65 hrs, Volume= 0.182 af  
Primary = 0.15 cfs @ 12.68 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Peak Elev= 420.55' @ 12.68 hrs Surf.Area= 0.013 ac Storage= 0.023 af

Plug-Flow detention time= 18.4 min calculated for 0.186 af (100% of inflow)  
Center-of-Mass det. time= 18.3 min ( 841.1 - 822.7 )

Volume	Invert	Avail.Storage	Storage Description
#1A	417.80'	0.013 af	<b>11.00'W x 52.29'L x 3.50'H Field A</b> 0.046 af Overall - 0.015 af Embedded = 0.031 af x 40.0% Voids
#2A	418.30'	0.015 af	<b>ADS_StormTech SC-740 +Cap x 14 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 7 Chambers
		0.027 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	417.80'	<b>23.000 in/hr Exfiltration over Horizontal area</b> Phase-In= 0.05'
#2	Primary	420.30'	<b>6.0" Round 6.0" Round Culvert</b> L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 420.30' / 419.80' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

**Discarded OutFlow** Max=0.31 cfs @ 11.65 hrs HW=417.91' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.31 cfs)

**Primary OutFlow** Max=0.15 cfs @ 12.68 hrs HW=420.55' (Free Discharge)

↑**2=6.0" Round Culvert** (Barrel Controls 0.15 cfs @ 2.31 fps)



## Mount Kisco - Driveway Drainage

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Type III 24-hr 100-yr Rainfall=8.30"

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Page 49

### Pond 1.6P: - Chamber Wizard Field A

**Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

7 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 51.46' Row Length +5.0" End Stone x 2 = 52.29' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

14 Chambers x 45.9 cf = 643.2 cf Chamber Storage

2,013.2 cf Field - 643.2 cf Chambers = 1,370.0 cf Stone x 40.0% Voids = 548.0 cf Stone Storage

Chamber Storage + Stone Storage = 1,191.2 cf = 0.027 af

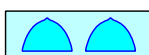
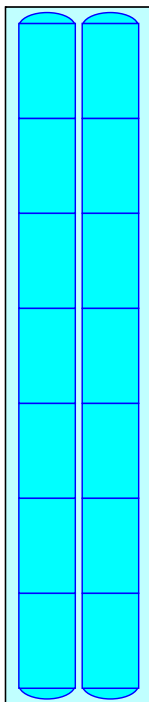
Overall Storage Efficiency = 59.2%

Overall System Size = 52.29' x 11.00' x 3.50'

14 Chambers

74.6 cy Field

50.7 cy Stone



# Mount Kisco - Driveway Drainage

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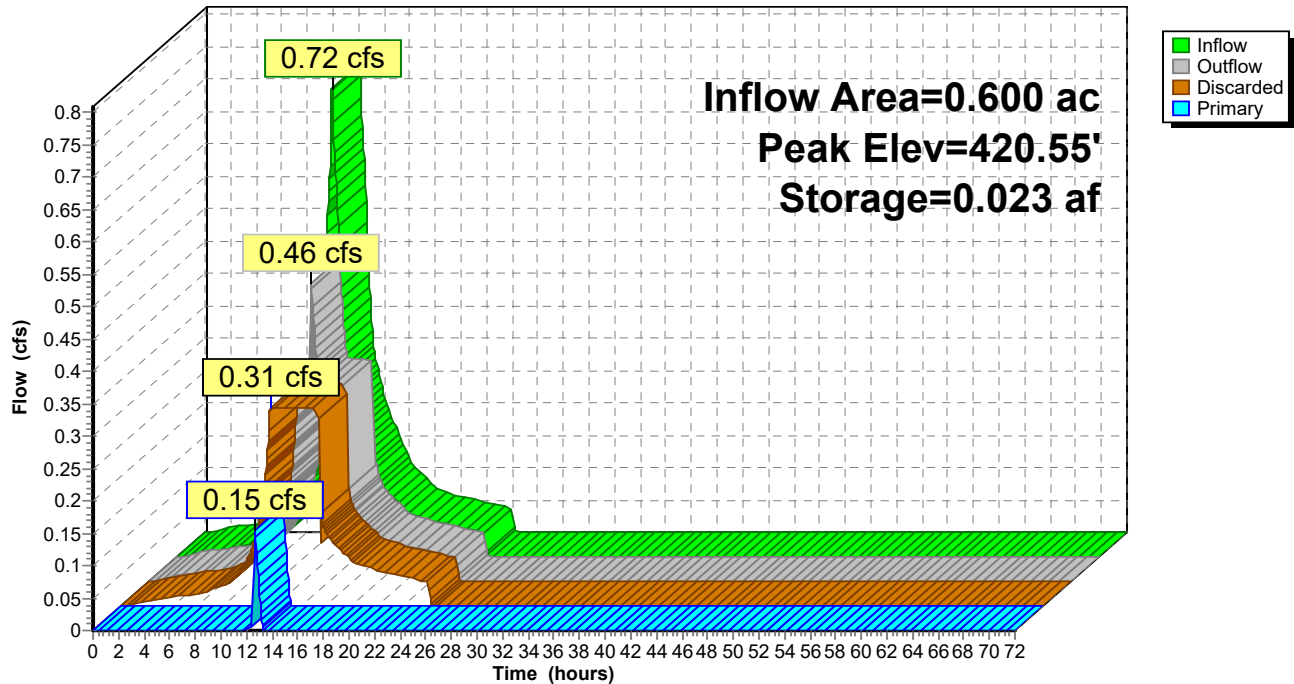
Type III 24-hr 100-yr Rainfall=8.30"

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Page 50

## Pond 1.6P:

Hydrograph



**Mount Kisco - Driveway Drainage**

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Type III 24-hr 100-yr Rainfall=8.30"

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Page 51

**Stage-Area-Storage for Pond 1.6P:**

Elevation (feet)	Horizontal (acres)	Storage (acre-feet)	Elevation (feet)	Horizontal (acres)	Storage (acre-feet)
417.80	<b>0.013</b>	0.000	420.45	0.013	0.023
417.85	0.013	0.000	420.50	0.013	0.023
417.90	0.013	0.001	420.55	0.013	0.023
417.95	0.013	0.001	420.60	0.013	0.024
418.00	0.013	0.001	420.65	0.013	0.024
418.05	0.013	0.001	420.70	0.013	0.024
418.10	0.013	0.002	420.75	0.013	0.024
418.15	0.013	0.002	420.80	0.013	0.025
418.20	0.013	0.002	420.85	0.013	0.025
418.25	0.013	0.002	420.90	0.013	0.025
418.30	0.013	0.003	420.95	0.013	0.025
418.35	0.013	0.003	421.00	0.013	0.026
418.40	0.013	0.004	421.05	0.013	0.026
418.45	0.013	0.004	421.10	0.013	0.026
418.50	0.013	0.005	421.15	0.013	0.027
418.55	0.013	0.005	421.20	0.013	0.027
418.60	0.013	0.006	421.25	0.013	0.027
418.65	0.013	0.006	421.30	0.013	<b>0.027</b>
418.70	0.013	0.007			
418.75	0.013	0.007			
418.80	0.013	0.008			
418.85	0.013	0.008			
418.90	0.013	0.009			
418.95	0.013	0.009			
419.00	0.013	0.010			
419.05	0.013	0.010			
419.10	0.013	0.011			
419.15	0.013	0.011			
419.20	0.013	0.012			
419.25	0.013	0.012			
419.30	0.013	0.013			
419.35	0.013	0.013			
419.40	0.013	0.014			
419.45	0.013	0.014			
419.50	0.013	0.015			
419.55	0.013	0.015			
419.60	0.013	0.016			
419.65	0.013	0.016			
419.70	0.013	0.016			
419.75	0.013	0.017			
419.80	0.013	0.017			
419.85	0.013	0.018			
419.90	0.013	0.018			
419.95	0.013	0.019			
420.00	0.013	0.019			
420.05	0.013	0.020			
420.10	0.013	0.020			
420.15	0.013	0.020			
420.20	0.013	0.021			
420.25	0.013	0.021			
420.30	0.013	0.022			
420.35	0.013	0.022			
420.40	0.013	0.022			

## Mount Kisco - Driveway Drainage

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Page 52

### Summary for Pond 1.7P:

[79] Warning: Submerged Pond CB FS 1.7 Primary device # 1 INLET by 0.21'

Inflow Area = 0.400 ac, 25.00% Impervious, Inflow Depth = 3.70" for 100-yr event  
Inflow = 0.65 cfs @ 12.11 hrs, Volume= 0.123 af  
Outflow = 0.62 cfs @ 12.17 hrs, Volume= 0.123 af, Atten= 5%, Lag= 3.8 min  
Discarded = 0.05 cfs @ 10.40 hrs, Volume= 0.071 af  
Primary = 0.57 cfs @ 12.17 hrs, Volume= 0.052 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Peak Elev= 398.22' @ 12.17 hrs Surf.Area= 0.010 ac Storage= 0.018 af

Plug-Flow detention time= 93.2 min calculated for 0.123 af (100% of inflow)  
Center-of-Mass det. time= 93.2 min ( 929.4 - 836.2 )

Volume	Invert	Avail.Storage	Storage Description
#1A	395.10'	0.009 af	<b>11.00'W x 38.05'L x 3.50'H Field A</b> 0.034 af Overall - 0.011 af Embedded = 0.023 af x 40.0% Voids
#2A	395.60'	0.011 af	<b>ADS_StormTech SC-740 +Cap x 10 Inside #1</b> Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 5 Chambers
		0.020 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	395.10'	<b>5.000 in/hr Exfiltration over Horizontal area</b> Phase-In= 0.05'
#2	Primary	397.60'	<b>6.0" Round 6.0" Round Culvert</b> L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 397.60' / 397.10' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

**Discarded OutFlow** Max=0.05 cfs @ 10.40 hrs HW=395.18' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

**Primary OutFlow** Max=0.57 cfs @ 12.17 hrs HW=398.21' (Free Discharge)

↑**2=6.0" Round Culvert** (Barrel Controls 0.57 cfs @ 3.00 fps)



## Mount Kisco - Driveway Drainage

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Page 53

### Pond 1.7P: - Chamber Wizard Field A

**Chamber Model = ADS\_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)**

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

5 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 37.22' Row Length +5.0" End Stone x 2 = 38.05' Base Length

2 Rows x 51.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.00' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

10 Chambers x 45.9 cf = 459.4 cf Chamber Storage

1,464.9 cf Field - 459.4 cf Chambers = 1,005.5 cf Stone x 40.0% Voids = 402.2 cf Stone Storage

Chamber Storage + Stone Storage = 861.6 cf = 0.020 af

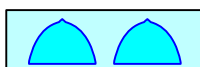
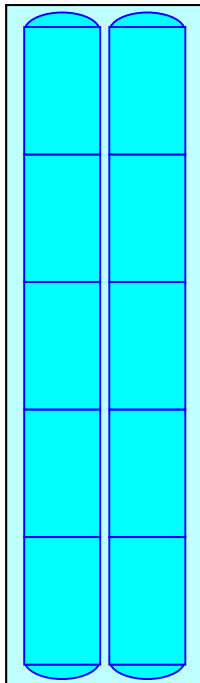
Overall Storage Efficiency = 58.8%

Overall System Size = 38.05' x 11.00' x 3.50'

10 Chambers

54.3 cy Field

37.2 cy Stone



# Mount Kisco - Driveway Drainage

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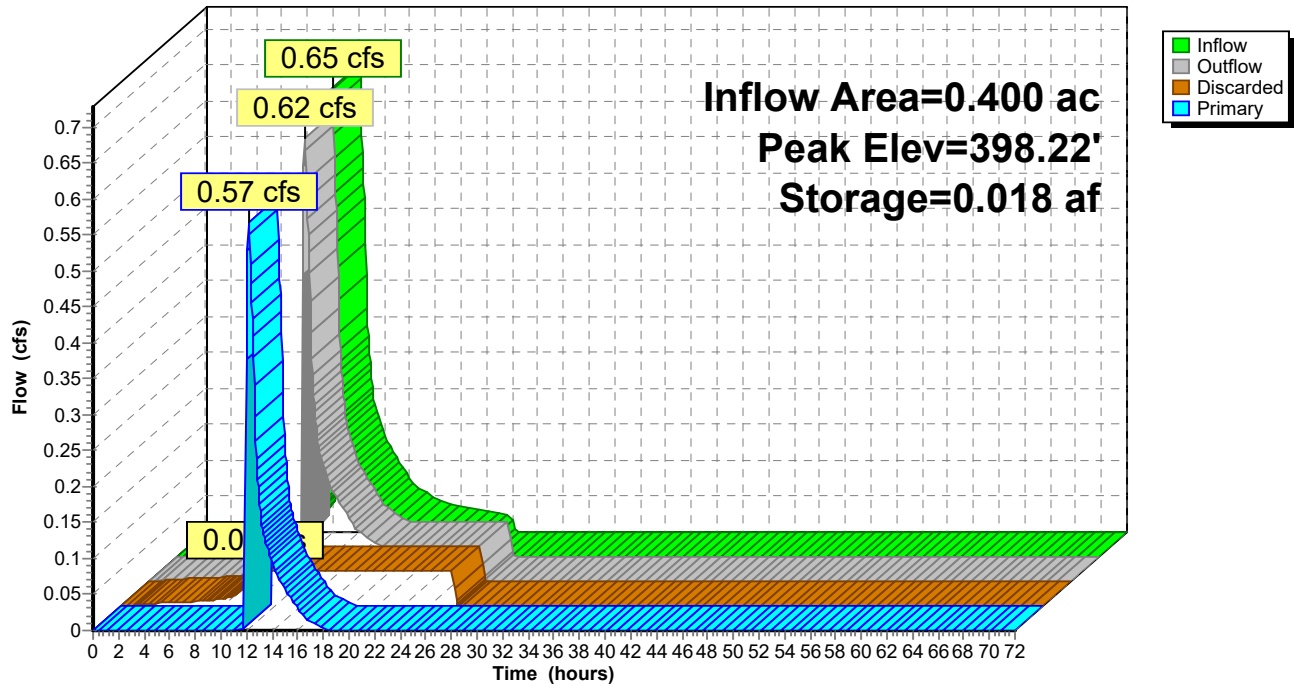
Type III 24-hr 100-yr Rainfall=8.30"

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Page 54

## Pond 1.7P:

Hydrograph



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Page 55

**Stage-Area-Storage for Pond 1.7P:**

Elevation (feet)	Horizontal (acres)	Storage (acre-feet)	Elevation (feet)	Horizontal (acres)	Storage (acre-feet)
395.10	<b>0.010</b>	0.000	397.75	0.010	0.016
395.15	0.010	0.000	397.80	0.010	0.017
395.20	0.010	0.000	397.85	0.010	0.017
395.25	0.010	0.001	397.90	0.010	0.017
395.30	0.010	0.001	397.95	0.010	0.017
395.35	0.010	0.001	398.00	0.010	0.017
395.40	0.010	0.001	398.05	0.010	0.018
395.45	0.010	0.001	398.10	0.010	0.018
395.50	0.010	0.002	398.15	0.010	0.018
395.55	0.010	0.002	398.20	0.010	0.018
395.60	0.010	0.002	398.25	0.010	0.018
395.65	0.010	0.002	398.30	0.010	0.019
395.70	0.010	0.003	398.35	0.010	0.019
395.75	0.010	0.003	398.40	0.010	0.019
395.80	0.010	0.003	398.45	0.010	0.019
395.85	0.010	0.004	398.50	0.010	0.019
395.90	0.010	0.004	398.55	0.010	0.020
395.95	0.010	0.005	398.60	0.010	<b>0.020</b>
396.00	0.010	0.005			
396.05	0.010	0.005			
396.10	0.010	0.006			
396.15	0.010	0.006			
396.20	0.010	0.006			
396.25	0.010	0.007			
396.30	0.010	0.007			
396.35	0.010	0.007			
396.40	0.010	0.008			
396.45	0.010	0.008			
396.50	0.010	0.008			
396.55	0.010	0.009			
396.60	0.010	0.009			
396.65	0.010	0.010			
396.70	0.010	0.010			
396.75	0.010	0.010			
396.80	0.010	0.011			
396.85	0.010	0.011			
396.90	0.010	0.011			
396.95	0.010	0.012			
397.00	0.010	0.012			
397.05	0.010	0.012			
397.10	0.010	0.013			
397.15	0.010	0.013			
397.20	0.010	0.013			
397.25	0.010	0.013			
397.30	0.010	0.014			
397.35	0.010	0.014			
397.40	0.010	0.014			
397.45	0.010	0.015			
397.50	0.010	0.015			
397.55	0.010	0.015			
397.60	0.010	0.016			
397.65	0.010	0.016			
397.70	0.010	0.016			

## Mount Kisco - Driveway Drainage

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Type III 24-hr 100-yr Rainfall=8.30"

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Page 56

### Summary for Pond CB FS 1.7:

[57] Hint: Peaked at 398.72' (Flood elevation advised)

Inflow Area = 0.400 ac, 25.00% Impervious, Inflow Depth = 4.63" for 100-yr event  
Inflow = 1.98 cfs @ 12.11 hrs, Volume= 0.154 af  
Outflow = 1.98 cfs @ 12.11 hrs, Volume= 0.154 af, Atten= 0%, Lag= 0.0 min  
Primary = 0.65 cfs @ 12.11 hrs, Volume= 0.123 af  
Secondary = 1.33 cfs @ 12.11 hrs, Volume= 0.031 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 398.72' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	398.00'	<b>6.0" Round 6.0" Round Culvert</b> L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 398.00' / 397.80' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	397.50'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 397.50' / 397.00' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	398.40'	<b>2.5' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.65 cfs @ 12.11 hrs HW=398.72' (Free Discharge)

↑**1=6.0" Round Culvert** (Inlet Controls 0.65 cfs @ 3.30 fps)

**Secondary OutFlow** Max=1.29 cfs @ 12.11 hrs HW=398.72' (Free Discharge)

↑**2=Culvert** (Passes 1.29 cfs of 3.21 cfs potential flow)

↑**3=Broad-Crested Rectangular Weir** (Weir Controls 1.29 cfs @ 1.62 fps)



# Mount Kisco - Driveway Drainage

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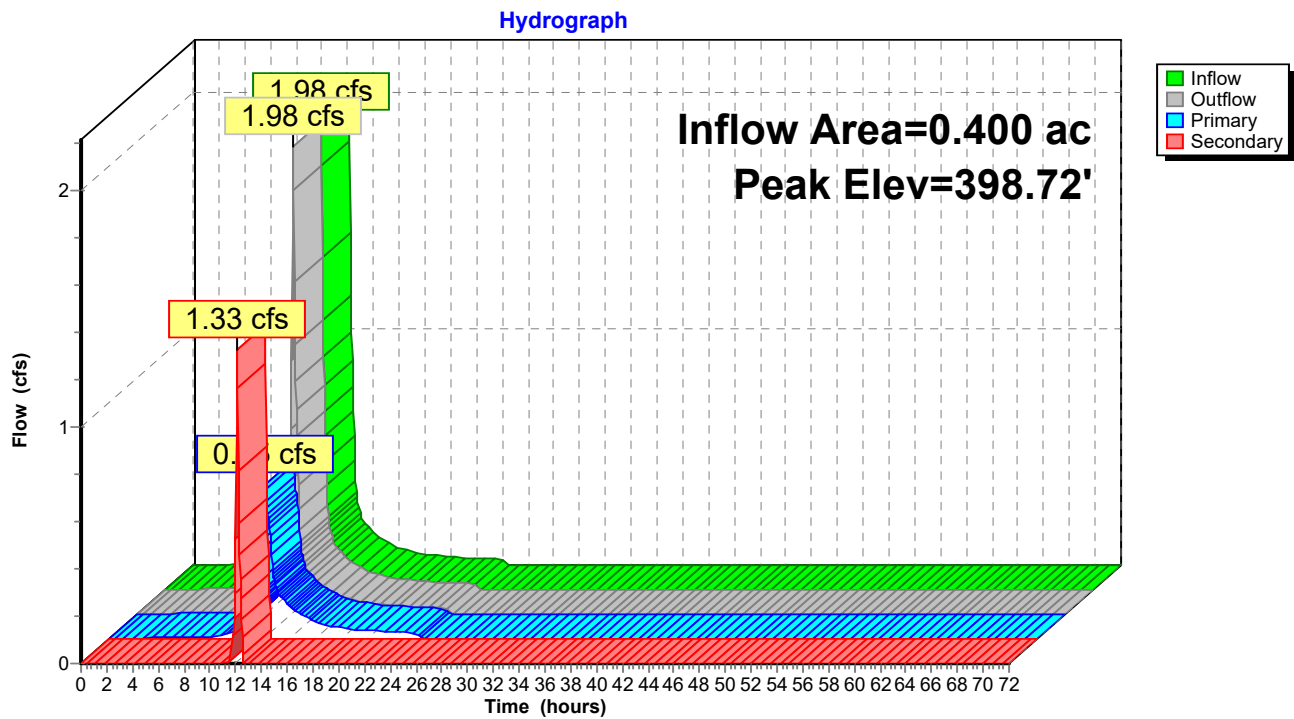
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Page 57

## Pond CB FS 1.7:



**Mount Kisco - Driveway Drainage**

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Page 58

**Stage-Area-Storage for Pond CB FS 1.7:**

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
397.50	0	398.03	0	398.56	0
397.51	0	398.04	0	398.57	0
397.52	0	398.05	0	398.58	0
397.53	0	398.06	0	398.59	0
397.54	0	398.07	0	398.60	0
397.55	0	398.08	0	398.61	0
397.56	0	398.09	0	398.62	0
397.57	0	398.10	0	398.63	0
397.58	0	398.11	0	398.64	0
397.59	0	398.12	0	398.65	0
397.60	0	398.13	0	398.66	0
397.61	0	398.14	0	398.67	0
397.62	0	398.15	0	398.68	0
397.63	0	398.16	0	398.69	0
397.64	0	398.17	0	398.70	0
397.65	0	398.18	0	398.71	0
397.66	0	398.19	0	398.72	0
397.67	0	398.20	0	398.73	0
397.68	0	398.21	0		
397.69	0	398.22	0		
397.70	0	398.23	0		
397.71	0	398.24	0		
397.72	0	398.25	0		
397.73	0	398.26	0		
397.74	0	398.27	0		
397.75	0	398.28	0		
397.76	0	398.29	0		
397.77	0	398.30	0		
397.78	0	398.31	0		
397.79	0	398.32	0		
397.80	0	398.33	0		
397.81	0	398.34	0		
397.82	0	398.35	0		
397.83	0	398.36	0		
397.84	0	398.37	0		
397.85	0	398.38	0		
397.86	0	398.39	0		
397.87	0	398.40	0		
397.88	0	398.41	0		
397.89	0	398.42	0		
397.90	0	398.43	0		
397.91	0	398.44	0		
397.92	0	398.45	0		
397.93	0	398.46	0		
397.94	0	398.47	0		
397.95	0	398.48	0		
397.96	0	398.49	0		
397.97	0	398.50	0		
397.98	0	398.51	0		
397.99	0	398.52	0		
398.00	0	398.53	0		
398.01	0	398.54	0		
398.02	0	398.55	0		

## Mount Kisco - Driveway Drainage

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Page 59

### Summary for Pond CB FS1.6:

[57] Hint: Peaked at 421.55' (Flood elevation advised)

Inflow Area = 0.600 ac, 33.33% Impervious, Inflow Depth = 4.94" for 100-yr event  
Inflow = 3.08 cfs @ 12.11 hrs, Volume= 0.247 af  
Outflow = 3.08 cfs @ 12.11 hrs, Volume= 0.247 af, Atten= 0%, Lag= 0.0 min  
Primary = 0.72 cfs @ 12.11 hrs, Volume= 0.186 af  
Secondary = 2.36 cfs @ 12.11 hrs, Volume= 0.061 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 421.55' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	420.50'	<b>6.0" Round 6.0" Culvert</b> L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 420.50' / 420.40' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	420.00'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 420.00' / 419.00' S= 0.0400 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	421.20'	<b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.72 cfs @ 12.11 hrs HW=421.54' (Free Discharge)

↑**1=6.0" Culvert** (Barrel Controls 0.72 cfs @ 3.66 fps)

**Secondary OutFlow** Max=2.30 cfs @ 12.11 hrs HW=421.54' (Free Discharge)

↑**2=Culvert** (Passes 2.30 cfs of 3.86 cfs potential flow)

↑**3=Broad-Crested Rectangular Weir** (Weir Controls 2.30 cfs @ 1.69 fps)

# Mount Kisco - Driveway Drainage

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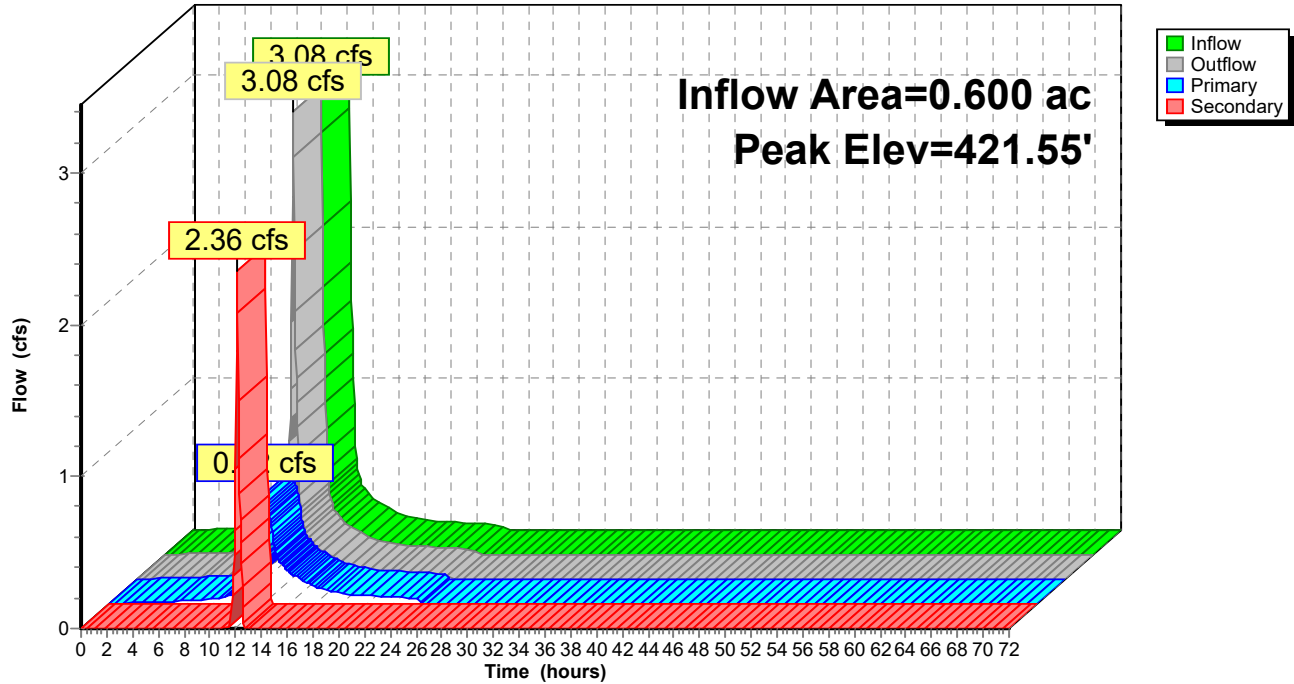
Type III 24-hr 100-yr Rainfall=8.30"

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Page 60

## Pond CB FS1.6:

Hydrograph





**Mount Kisco - Driveway Drainage**

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Type III 24-hr 100-yr Rainfall=8.30"

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Page 61

**Stage-Area-Storage for Pond CB FS1.6:**

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
420.00	0	420.53	0	421.06	0
420.01	0	420.54	0	421.07	0
420.02	0	420.55	0	421.08	0
420.03	0	420.56	0	421.09	0
420.04	0	420.57	0	421.10	0
420.05	0	420.58	0	421.11	0
420.06	0	420.59	0	421.12	0
420.07	0	420.60	0	421.13	0
420.08	0	420.61	0	421.14	0
420.09	0	420.62	0	421.15	0
420.10	0	420.63	0	421.16	0
420.11	0	420.64	0	421.17	0
420.12	0	420.65	0	421.18	0
420.13	0	420.66	0	421.19	0
420.14	0	420.67	0	421.20	0
420.15	0	420.68	0	421.21	0
420.16	0	420.69	0	421.22	0
420.17	0	420.70	0	421.23	0
420.18	0	420.71	0	421.24	0
420.19	0	420.72	0	421.25	0
420.20	0	420.73	0	421.26	0
420.21	0	420.74	0	421.27	0
420.22	0	420.75	0	421.28	0
420.23	0	420.76	0	421.29	0
420.24	0	420.77	0	421.30	0
420.25	0	420.78	0	421.31	0
420.26	0	420.79	0	421.32	0
420.27	0	420.80	0	421.33	0
420.28	0	420.81	0	421.34	0
420.29	0	420.82	0	421.35	0
420.30	0	420.83	0	421.36	0
420.31	0	420.84	0	421.37	0
420.32	0	420.85	0	421.38	0
420.33	0	420.86	0	421.39	0
420.34	0	420.87	0	421.40	0
420.35	0	420.88	0	421.41	0
420.36	0	420.89	0	421.42	0
420.37	0	420.90	0	421.43	0
420.38	0	420.91	0	421.44	0
420.39	0	420.92	0	421.45	0
420.40	0	420.93	0	421.46	0
420.41	0	420.94	0	421.47	0
420.42	0	420.95	0	421.48	0
420.43	0	420.96	0	421.49	0
420.44	0	420.97	0	421.50	0
420.45	0	420.98	0	421.51	0
420.46	0	420.99	0	421.52	0
420.47	0	421.00	0	421.53	0
420.48	0	421.01	0	421.54	0
420.49	0	421.02	0	421.55	0
420.50	0	421.03	0		
420.51	0	421.04	0		
420.52	0	421.05	0		

## **APPENDIX G: HYDRODYNAMICS SEPARATOR SIZING AND MAINTENANCE**



## State of New Jersey

PHILIP D. MURPHY  
*Governor*

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CATHERINE R. McCABE  
*Acting Commissioner*

SHEILA Y. OLIVER  
*Lt. Governor*

Mail Code – 401-02B  
Division of Water Quality  
Bureau of Nonpoint Pollution Control  
P.O. Box 420 – 401 E. State St.  
Trenton, NJ 08625-0420  
Phone: (609) 633-7021 / Fax: (609) 777-0432  
[http://www.state.nj.us/dep/dwq/bnpc\\_home.htm](http://www.state.nj.us/dep/dwq/bnpc_home.htm)

**March 27, 2018**

Graham Bryant, M.Sc., P.E.  
President  
Hydroworks, LLC  
136 Central Avenue  
Clark, NJ 07066

Re: MTD Lab Certification  
HydroStorm Hydrodynamic Separator by Hydroworks, LLC  
Online Installation

### **TSS Removal Rate 50%**

Dear Mr. Bryant:

The Stormwater Management rules under N.J.A.C. 7:8-5.5(b) and 5.7 (c) allow the use of manufactured treatment devices (MTDs) for compliance with the design and performance standards at N.J.A.C. 7:8-5 if the pollutant removal rates have been verified by the New Jersey Corporation for Advanced Technology (NJCAT) and have been certified by the New Jersey Department of Environmental Protection (NJDEP). Hydroworks, LLC has requested an MTD Laboratory Certification for the Hydroworks HydroStorm Hydrodynamic Separator.

The project falls under the “Procedure for Obtaining Verification of a Stormwater Manufactured Treatment Device from New Jersey Corporation for Advance Technology” dated January 25, 2013. The applicable protocol is the “New Jersey Laboratory Testing Protocol to Assess Total Suspended Solids Removal by a Hydrodynamic Sedimentation Manufactured Treatment Device” dated January 25, 2013.

NJCAT verification documents submitted to the NJDEP indicate that the requirements of the aforementioned protocol have been met or exceeded. The NJCAT letter also included a recommended certification TSS removal rate and the required maintenance plan. The NJCAT Verification Report with the Verification Appendix (dated February 2018) for this device is published online at <http://www.njcat.org/verification-process/technology-verification-database.html>.

**The NJDEP certifies the use of the HydroStorm by Hydroworks, LLC at a TSS removal rate of 50% when designed, operated, and maintained in accordance with the information provided in the Verification Appendix and the following conditions:**

1. The maximum treatment flow rate (MTFR) for the manufactured treatment device (MTD) is calculated using the New Jersey Water Quality Design Storm (1.25 inches in 2 hrs) in N.J.A.C. 7:8-5.5.
2. The HydroStorm shall be installed using the same configuration reviewed by NJCAT and shall be sized in accordance with the criteria specified in item 6 below.
3. This HydroStorm cannot be used in series with another MTD or a media filter (such as a sand filter) to achieve an enhanced removal rate for total suspended solids (TSS) removal under N.J.A.C. 7:8-5.5.
4. Additional design criteria for MTDs can be found in Chapter 9.6 of the New Jersey Stormwater Best Management Practices (NJ Stormwater BMP) Manual, which can be found online at [www.njstormwater.org](http://www.njstormwater.org).
5. The maintenance plan for a site using this device shall incorporate, at a minimum, the maintenance requirements for the Hydrostorm. A copy of the maintenance plan is attached to this certification. However, it is recommended to review the maintenance website at <http://www.hydroworks.com/hydrostormo&m.pdf> for any changes to the maintenance requirements.
6. Sizing Requirement:

The example below demonstrates the sizing procedure for the Hydrostorm:

Example: A 0.25-acre impervious site is to be treated to 50% TSS removal using a HydroStorm. The impervious site runoff (Q) based on the New Jersey Water Quality Design Storm was determined to be 0.79 cfs.

Maximum Treatment Flow Rate (MTFR) Evaluation:

The site runoff (Q) was based on the following:

time of concentration = 10 minutes

$i = 3.2$  in/hr (page 5-8, Fig. 5-3 of the NJ Stormwater BMP Manual)

$c = 0.99$  (runoff coefficient for impervious)

$Q = ciA = 0.99 \times 3.2 \times 0.25 = 0.79$  cfs

Given the site runoff is 0.79 cfs and based on Table 1 below, the HydroStorm Model HS4 with a MTFR of 0.88 cfs could be used for this site to remove 50% of the TSS from the impervious area without exceeding the MTFR.

The sizing table corresponding to the available system models is noted below. Additional specifications regarding each model can be found in the Verification Appendix under Table A-1.



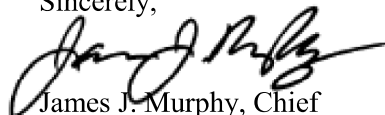
**Table 1 HydroStorm Sizing Information**

<b>HydroStorm Model</b>	<b>NJDEP 50% TSS Maximum Treatment Flow Rate (cfs)</b>	<b>Treatment Area (ft<sup>2</sup>)</b>	<b>Hydraulic Loading Rate (gpm/ft<sup>2</sup>)</b>	<b>50% Maximum Sediment Storage (ft<sup>3</sup>)</b>
HS3	0.50	7.1	31.4	3.6
HS4	0.88	12.6	31.4	6.3
HS5	1.37	19.6	31.4	9.8
HS6	1.98	28.3	31.4	14.2
HS7	2.69	38.5	31.4	19.3
HS8	3.52	50.3	31.4	25.2
HS9	4.45	63.6	31.4	31.8
HS10	5.49	78.5	31.4	39.3
HS11	6.65	95.0	31.4	47.5
HS12	7.91	113.0	31.4	56.5

A detailed maintenance plan is mandatory for any project with a Stormwater BMP subject to the Stormwater Management Rules, N.J.A.C. 7:8. The plan must include all of the items identified in the Stormwater Management Rules, N.J.A.C. 7:8-5.8. Such items include, but are not limited to, the list of inspection and maintenance equipment and tools, specific corrective and preventative maintenance tasks, indication of problems in the system, and training of maintenance personnel. Additional information can be found in Chapter 8: Maintenance and Retrofit of Stormwater Management Measures.

If you have any questions regarding the above information, please contact Brian Salvo or Nick Grotts of my office at (609) 633-7021.

Sincerely,



James J. Murphy, Chief  
Bureau of Nonpoint Pollution Control

Attachment: Maintenance Plan

cc: Chron File  
Richard Magee, NJCAT  
Vince Mazzei, NJDEP - DLUR  
Ravi Patraju, NJDEP - BES  
Gabriel Mahon, NJDEP - BNPC  
Brian Salvo, NJDEP – BNPC  
Nick Grotts, NJDEP – BNPC





Hydroworks® HydroStorm

## Operations & Maintenance Manual

Version 1.0

Please call Hydroworks at 888-290-7900 or email us at [support@hydroworks.com](mailto:support@hydroworks.com) if you have any questions regarding the Inspection Checklist. Please fax a copy of the completed checklist to Hydroworks at 888-783-7271 for our records.

## **Introduction**

The HydroStorm is a state of the art hydrodynamic separator. Hydrodynamic separators remove solids, debris and lighter than water (oil, trash, floating debris) pollutants from stormwater. Hydrodynamic separators and other water quality measures are mandated by regulatory agencies (Town/City, State, Federal Government) to protect storm water quality from pollution generated by urban development (traffic, people) as part of new development permitting requirements.

As storm water treatment structures fill up with pollutants they become less and less effective in removing new pollution. Therefore, it is important that storm water treatment structures be maintained on a regular basis to ensure that they are operating at optimum performance. The HydroStorm is no different in this regard and this manual has been assembled to provide the owner/operator with the necessary information to inspect and coordinate maintenance of their HydroStorm.

## **Hydroworks® HydroStorm Operation**

The Hydroworks HydroStorm (HS) separator is a unique hydrodynamic by-pass separator. It incorporates a protected submerged pretreatment zone to collect larger solids, a treatment tank to remove finer solids, and a dual set of weirs to create a high flow bypass. High flows are conveyed directly to the outlet and do not enter the treatment area, however, the submerged pretreatment area still allows removal of coarse solids during high flows.

Under normal or low flows, water enters an inlet area with a horizontal grate. The area underneath the grate is submerged with openings to the main treatment area of the separator. Coarse solids fall through the grate and are either trapped in the pretreatment area or conveyed into the main treatment area depending on the flow rate. Fines are transported into the main treatment area. Openings and weirs in the pretreatment area allow entry of water and solids into the main treatment area and cause water to rotate in the main treatment area creating a vortex motion. Water in the main treatment area is forced to rise along the walls of the separator to discharge from the treatment area to the downstream pipe.

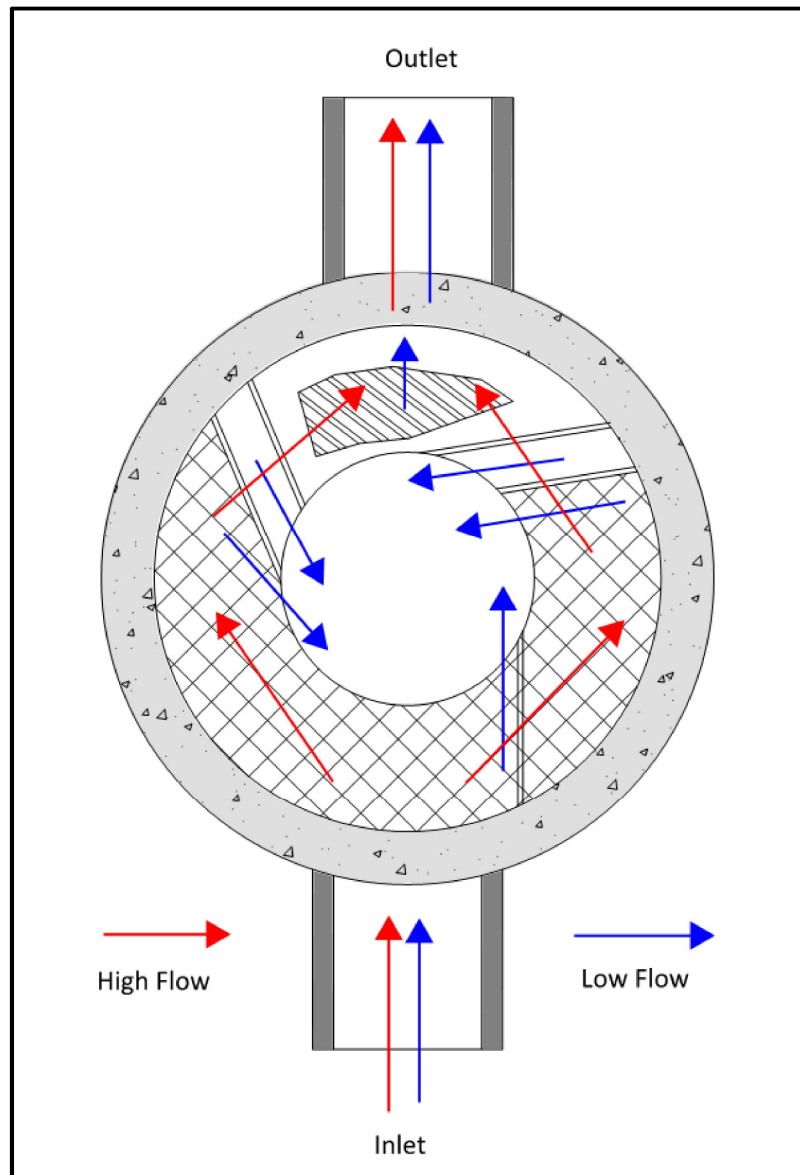
The vortex motion forces solids and floatables to the middle of the inner chamber. Floatables are trapped since the inlet to the treatment area is submerged. The design maximizes the retention of settled solids since solids are forced to the center of the inner chamber by the vortex motion of water while water must flow up the walls of the separator to discharge into the downstream pipe.

A set of high flow weirs near the outlet pipe create a high flow bypass over both the pretreatment area and main treatment chamber. The rate of flow into the treatment area is regulated by the number and size of openings into the treatment chamber and the height of by-pass weirs. High flows flow over the weirs directly to the outlet pipe preventing the scour and resuspension of any fines collected in the treatment chamber.



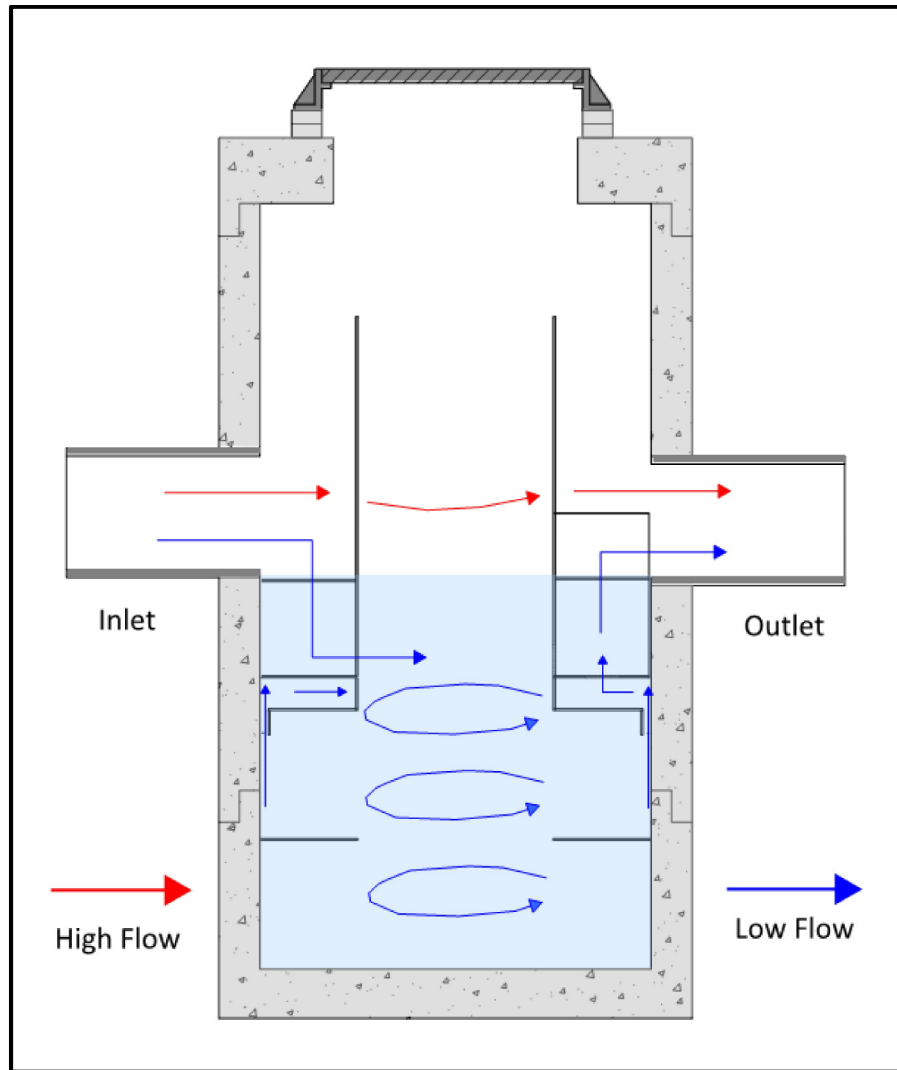


A central access tube is located in the structure to provide access for cleaning. The arrangement of the inlet area and bypass weirs near the outlet pipe facilitate the use of multiple inlet pipes.



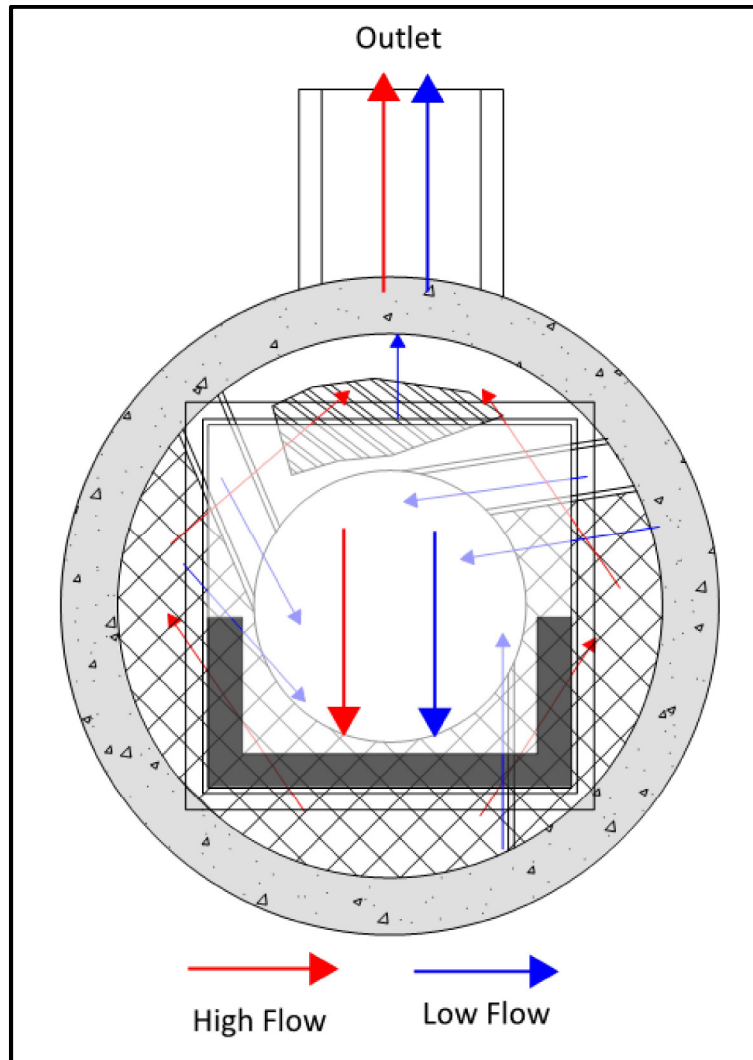
**Figure 1. Hydroworks HydroStorm Operation – Plan View**

Figure 2 is a profile view of the HydroStorm separator showing the flow patterns for low and high flows.



**Figure 2. Hydroworks HydroStorm Operation – Profile View**

The HS 4i is an inlet version of the HS 4 separator. There is a catch-basin grate on top of the HS 4i. A funnel sits underneath the grate on the frame and directs the water to the inlet side of the separator to ensure all low flows are properly treated. The whole funnel is removed for inspection and cleaning.



**Figure 3. Hydroworks HS 4i Funnel**

## **Inspection**

## **Procedure**

### **Floatables**

A visual inspection can be conducted for floatables by removing the covers and looking down into the center access tube of the separator. Separators with an inlet grate (HS 4i or custom separator) will have a plastic funnel located under the grate that must be removed from the frame prior to inspection or maintenance. If you are missing a funnel please contact Hydroworks at the numbers provided at the end of this document.

## TSS/Sediment

Inspection for TSS build-up can be conducted using a Sludge Judge®, Core Pro®, AccuSludge® or equivalent sampling device that allows the measurement of the depth of TSS/sediment in the unit. These devices typically have a ball valve at the bottom of the tube that allows water and TSS to flow into the tube when lowering the tube into the unit. Once the unit touches the bottom of the device, it is quickly pulled upward such that the water and TSS in the tube forces the ball valve closed allowing the user to see a full core of water/TSS in the unit. The unit should be inspected for TSS through each of the access covers. Several readings (2 or 3) should be made at each access cover to ensure that an accurate TSS depth measurement is recorded.

## **Frequency**

### Construction Period

The HydroStorm separator should be inspected every four weeks and after every large storm (over 0.5" (12.5 mm) of rain) during the construction period.

### Post-Construction Period

The Hydroworks HydroStorm separator should be inspected during the first year of operation for normal stabilized sites (grassed or paved areas). If the unit is subject to oil spills or runoff from unstabilized (storage piles, exposed soils) areas the HydroStorm separator should be inspected more frequently (4 times per year). The initial annual inspection will indicate the required future frequency of inspection and maintenance if the unit was maintained after the construction period.

## **Reporting**

Reports should be prepared as part of each inspection and include the following information:

1. Date of inspection
2. GPS coordinates of Hydroworks unit
3. Time since last rainfall
4. Date of last inspection
5. Installation deficiencies (missing parts, incorrect installation of parts)
6. Structural deficiencies (concrete cracks, broken parts)
7. Operational deficiencies (leaks, blockages)
8. Presence of oil sheen or depth of oil layer
9. Estimate of depth/volume of floatables (trash, leaves) captured
10. Sediment depth measured
11. Recommendations for any repairs and/or maintenance for the unit
12. Estimation of time before maintenance is required if not required at time of inspection





A sample inspection checklist is provided at the end of this manual.

## **Maintenance**

### **Procedure**

The Hydroworks HydroStorm unit is typically maintained using a vacuum truck. There are numerous companies that can maintain the HydroStorm separator. Maintenance with a vacuum truck involves removing all of the water and sediment together. The water is then separated from the sediment on the truck or at the disposal facility.

A central access opening (24" or greater) is provided to the gain access to the lower treatment tank of the unit. This is the primary location to maintain by vacuum truck. The pretreatment area can also be vacuumed and/or flushed into the lower treatment tank of the separator for cleaning via the central access once the water level is lowered below the pretreatment floor.

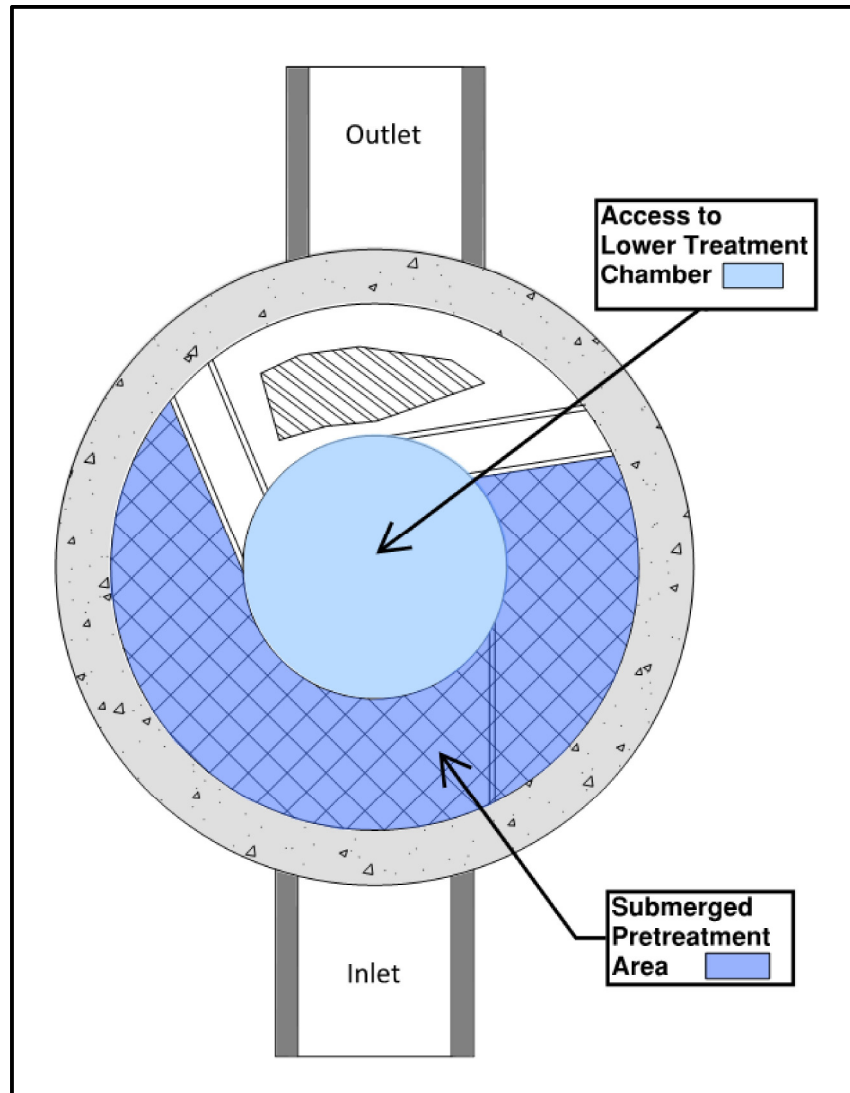
In instances where a vacuum truck is not available other maintenance methods (i.e. clamshell bucket) can be used, but they will be less effective. If a clamshell bucket is used the water must be decanted prior to cleaning since the sediment is under water and typically fine in nature. Disposal of the water will depend on local requirements. Disposal options for the decanted water may include:

1. Discharge into a nearby sanitary sewer manhole
2. Discharge into a nearby LID practice (grassed swale, bioretention)
3. Discharge through a filter bag into a downstream storm drain connection

The local municipality should be consulted for the allowable disposal options for both water and sediments prior to any maintenance operation. Once the water is decanted the sediment can be removed with the clamshell bucket.

Disposal of the contents of the separator depend on local requirements. Maintenance of a Hydroworks HydroStorm unit will typically take 1 to 2 hours based on a vacuum truck and longer for other cleaning methods (i.e. clamshell bucket).





**Figure 3. Maintenance Access**

## **Frequency**

### Construction Period

A HydroStorm separator can fill with construction sediment quickly during the construction period. The HydroStorm must be maintained during the construction period when the depth of TSS/sediment reaches 24" (600 mm). It must also be maintained during the construction period if there is an appreciable depth of oil in the unit (more than a sheen) or if floatables other than oil cover over 50% of the area of the separator

The HydroStorm separator should be maintained at the end of the construction period, prior to operation for the post-construction period.

### Post-Construction Period

The HydroStorm was independently tested by Alden Research Laboratory in 2017. A HydroStorm HS 4 was tested for scour with a 50% sediment depth of 0.5 ft. Therefore, maintenance for sediment accumulation is required if the depth of sediment is 1 ft or greater in separators with standard water (sump) depths (Table 1).

There will be designs with increased sediment storage based on specifications or site-specific criteria. A measurement of the total water depth in the separator through the central access tube should be taken and compared to water depth given in Table 1. The standard water depth from Table 1 should be subtracted from the measured water depth and the resulting extra depth should be added to the 1 ft to determine the site-specific sediment maintenance depth for that separator.

For example, if the measured water depth in the HS-7 is 7 feet, then the sediment maintenance depth for that HS-7 is 2 ft ( $= 1 + 7 - 6$ ) and the separator does not need to be cleaned for sediment accumulation until the measure sediment depth is 2 ft.

The HydroStorm separator must also be maintained if there is an appreciable depth of oil in the unit (more than a sheen) or if floatables other than oil cover over 50% of the water surface of the separator.

**Table 1 Standard Dimensions for Hydroworks HydroStorm Models**

Model	Diameter (ft)	Total Water Depth (ft)	Sediment Maintenance Depth for Table 1 Total Water Depth(ft)
HS-3	3	3	1
HS-4	4	4	1
HS-5	5	4	1
HS-6	6	4	1
HS-7	7	6	1
HS-8	8	7	1
HS-9	9	7.5	1
HS-10	10	8	1
HS-11	11	9	1
HS-12	12	9.5	1



# HYDROSTORM INSPECTION SHEET

Date \_\_\_\_\_  
Date of Last Inspection \_\_\_\_\_

Site \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_  
Owner \_\_\_\_\_

GPS Coordinates \_\_\_\_\_

Date of last rainfall \_\_\_\_\_

## Site Characteristics

	Yes	No
Soil erosion evident	<input type="checkbox"/>	<input type="checkbox"/>
Exposed material storage on site	<input type="checkbox"/>	<input type="checkbox"/>
Large exposure to leaf litter (lots of trees)	<input type="checkbox"/>	<input type="checkbox"/>
High traffic (vehicle) area	<input type="checkbox"/>	<input type="checkbox"/>

## HydroStorm

	Yes	No
Obstructions in the inlet or outlet	<input type="checkbox"/> *	<input type="checkbox"/>
Missing internal components	<input type="checkbox"/> **	<input type="checkbox"/>
Improperly installed inlet or outlet pipes	<input type="checkbox"/> ***	<input type="checkbox"/>
Internal component damage (cracked, broken, loose pieces)	<input type="checkbox"/> **	<input type="checkbox"/>
Floating debris in the separator (oil, leaves, trash)	<input type="checkbox"/>	<input type="checkbox"/>
Large debris visible in the separator	<input type="checkbox"/> *	<input type="checkbox"/>
Concrete cracks/deficiencies	<input type="checkbox"/> ***	<input type="checkbox"/>
Exposed rebar	<input type="checkbox"/> **	<input type="checkbox"/>
Water seepage (water level not at outlet pipe invert)	<input type="checkbox"/> ***	<input type="checkbox"/>
Water level depth below outlet pipe invert _____"		

## Routine Measurements

Floating debris depth	< 0.5" (13mm)	<input type="checkbox"/>	>0.5" 13mm)	<input type="checkbox"/> *
Floating debris coverage	< 50% of surface area	<input type="checkbox"/>	> 50% surface area	<input type="checkbox"/> *
Sludge depth	< 12" (300mm)	<input type="checkbox"/>	> 12" (300mm)	<input type="checkbox"/> *

\* Maintenance required  
\*\* Repairs required  
\*\*\* Further investigation is required









## Hydroworks® HydroStorm

### One Year Limited Warranty

Hydroworks, LLC warrants, to the purchaser and subsequent owner(s) during the warranty period subject to the terms and conditions hereof, the Hydroworks HydroStorm to be free from defects in material and workmanship under normal use and service, when properly installed, used, inspected and maintained in accordance with Hydroworks written instructions, for the period of the warranty. The standard warranty period is 1 year.

The warranty period begins once the separator has been manufactured and is available for delivery. Any components determined to be defective, either by failure or by inspection, in material and workmanship will be repaired, replaced or remanufactured at Hydroworks' option provided, however, that by doing so Hydroworks, LLC will not be obligated to replace an entire insert or concrete section, or the complete unit. This warranty does not cover shipping charges, damages, labor, any costs incurred to obtain access to the unit, any costs to repair/replace any surface treatment/cover after repair/replacement, or other charges that may occur due to product failure, repair or replacement.

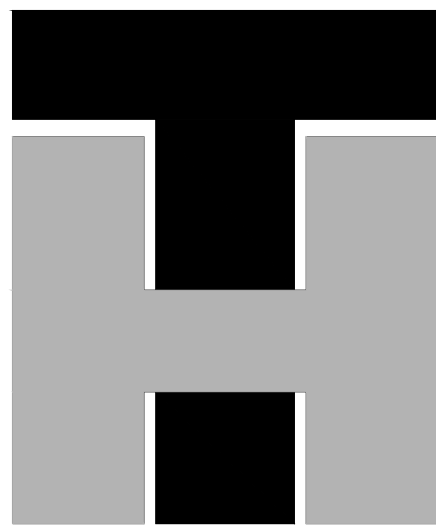
This warranty does not apply to any material that has been disassembled or modified without prior approval of Hydroworks, LLC, that has been subjected to misuse, misapplication, neglect, alteration, accident or act of God, or that has not been installed, inspected, operated or maintained in accordance with Hydroworks, LLC instructions and is in lieu of all other warranties expressed or implied. Hydroworks, LLC does not authorize any representative or other person to expand or otherwise modify this limited warranty.

The owner shall provide Hydroworks, LLC with written notice of any alleged defect in material or workmanship including a detailed description of the alleged defect upon discovery of the defect. Hydroworks, LLC should be contacted at 136 Central Ave., Clark, NJ 07066 or any other address as supplied by Hydroworks, LLC. (888-290-7900).

This limited warranty is exclusive. There are no other warranties, express or implied, or merchantability or fitness for a particular purpose and none shall be created whether under the uniform commercial code, custom or usage in the industry or the course of dealings between the parties. Hydroworks, LLC will replace any goods that are defective under this warranty as the sole and exclusive remedy for breach of this warranty.

Subject to the foregoing, all conditions, warranties, terms, undertakings or liabilities (including liability as to negligence), expressed or implied, and howsoever arising, as to the condition, suitability, fitness, safety, or title to the Hydroworks HydroStorm are hereby negated and excluded and Hydroworks, LLC gives and makes no such representation, warranty or undertaking except as expressly set forth herein. Under no circumstances shall Hydroworks, LLC be liable to the Purchaser or to any third party for product liability claims; claims arising from the design, shipment, or installation of the HydroStorm, or the cost of other goods or services related to the purchase and installation of the HydroStorm. For this Limited Warranty to apply, the HydroStorm must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Hydroworks' written installation instructions.

Hydroworks, LLC expressly disclaims liability for special, consequential or incidental damages (even if it has been advised of the possibility of the same) or breach of expressed or implied warranty. Hydroworks, LLC shall not be liable for penalties or liquidated damages, including loss of production and profits; labor and materials; overhead costs; or other loss or expense incurred by the purchaser or any third party. Specifically excluded from limited warranty coverage are damages to the HydroStorm arising from ordinary wear and tear; alteration, accident, misuse, abuse or neglect; improper maintenance, failure of the product due to improper installation of the concrete sections or improper sizing; or any other event not caused by Hydroworks, LLC. This limited warranty represents Hydroworks' sole liability to the purchaser for claims related to the HydroStorm, whether the claim is based upon contract, tort, or other legal basis.



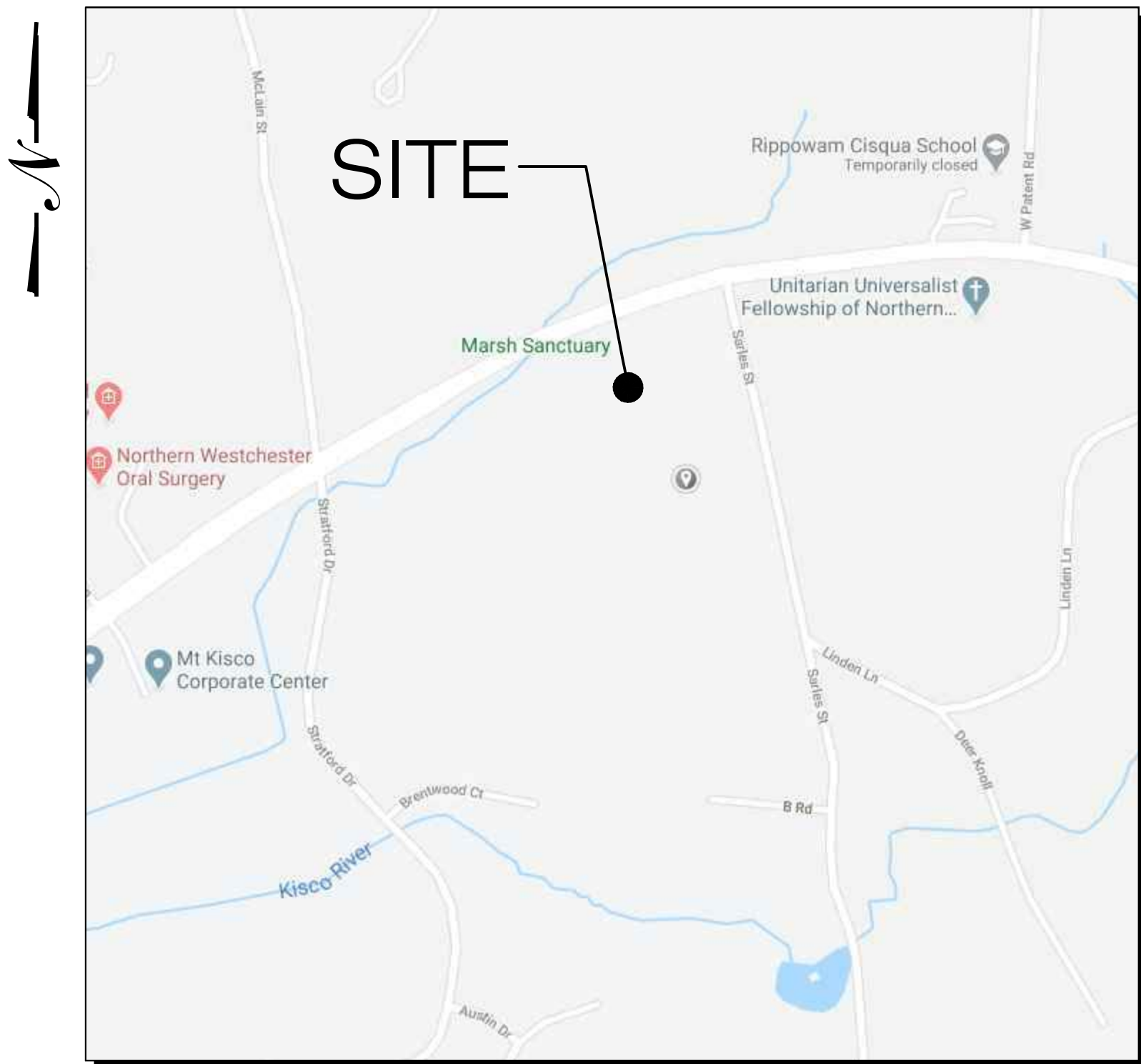
HOMELAND TOWERS, LLC

# WIRELESS TELECOMMUNICATIONS FACILITY

## MOUNT KISCO

### 180 S. BEDFORD RD.

### MT. KISCO, NY 10594



**LOCATION MAP**  
SCALE: 1" = 500'

#### DRAWING INDEX

##### T-1 TITLE SHEET & INDEX

##### 1 OF 2 ABUTTERS PLAN

##### 2 OF 2 PARTIAL EXISTING CONDITIONS SURVEY

##### R-1 500' RADIUS MAP & PROPERTY OWNERS

##### TR-1 1,600' TOWER RADIUS MAP

##### SP-1 SITE PLAN

##### SP-2 PARTIAL SITE PLAN

##### SP-3 PARTIAL SITE PLAN

##### SP-4 GRADING & DRAINAGE PLAN

##### CP-1 COMPOUND PLAN

##### A-1 - A-3 ELEVATIONS & ALTERNATE MONOPOLE ELEVATIONS

##### EC-1 - EC-2 EROSION CONTROL NOTES & DETAILS

##### C-1 - C-3 VERIZON EQUIPMENT, ANTENNA & LIGHTING PLANS & DETAILS

##### C-4 - C-5 SITE DETAILS

##### C-6 - C-7 AT&T EQUIPMENT & ANTENNA PLANS & DETAILS

##### C-8 DRAINAGE DETAILS (BY OTHERS)

##### SS-1 STEEP SLOPE PLAN

##### LS-1 LANDSCAPING & TREE PROTECTION PLAN

##### FD-1 FIRE TRUCK TURNING PLAN

#### SITE INFORMATION

PROJECT LOCATION: 180 S. BEDFORD RD.  
MT. KISCO, NY 10594

PROJECT DESCRIPTION: RAWLAND SITE W/ GROUND EQUIPMENT  
WITHIN 2,542± SF TELECOMMUNICATIONS  
COMPOUND W/ NEW 140'± AGL MONOPINE.

PROPERTY DEVELOPER: HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810

DEVELOPER CONTACT: KLAUS WIMMER  
(203) 297-6345

ENGINEER CONTACT: ROBERT C. BURNS  
(860) 552-2036


LATITUDE: 41° 11' 58.66"N  
LONGITUDE: 73° 42' 48.55"W  
ELEVATION: 426± AMSL

SECTION: 80.44  
BLOCK: 1  
LOT: 1  
ZONE: CD -CONSERVATION DEVELOPMENT DISTRICT

  
HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810  
(203) 297-6345

  
4 CENTEROCK ROAD  
WEST NYACK, NY 10994

  
340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960

  
567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385 PH: (860)-663-1697  
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

PERMITTING DOCUMENTS		
NO	DATE	REVISION
0	08/13/20	FOR REVIEW: RCB
1	08/14/20	CLIENT REVS: RCB
2	11/03/20	TOWN COMMENTS: RCB
3	12/22/20	TOWN COMMENTS: RCB
4	01/25/21	TOWN COMMENTS: RCB
5	03/19/21	TOWN COMMENTS: RCB
6	07/12/21	TOWN COMMENTS: RCB
7	07/13/21	TOWN COMMENTS: RCB
8	07/14/21	TOWN COMMENTS: RCB

#### DESIGN PROFESSIONALS OF RECORD

PROF: SCOTT M. CHASSE P.E.  
COMP: APT ENGINEERING  
ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

DEVELOPER: HOMELAND TOWERS, LLC  
ADDRESS: 9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810

NOTE:  
IT IS A VIOLATION OF NEW YORK STATE  
EDUCATION LAW ARTICLE 145, SECTION  
7209 (2) FOR ANY PERSON, UNLESS  
ACTING UNDER THE DIRECTION OF A  
LICENSED PROFESSIONAL ENGINEER OR  
LAND SURVEYOR, TO ALTER AN ITEM IN  
ANY WAY. IF AN ITEM BEARING THE SEAL  
OF AN ENGINEER OR LAND SURVEYOR IS  
ALTERED, THE ALTERING ENGINEER OR  
LAND SURVEYOR SHALL AFFIX TO THE  
ITEM HIS SEAL AND THE NOTATION  
"ALTERED BY" FOLLOWED BY THE  
SIGNATURE AND THE DATE OF SUCH  
ALTERATION, AND A SPECIFIC  
DESCRIPTION OF THE ALTERATION.

#### HOMELAND TOWERS MOUNT KISCO

SITE 180 S. BEDFORD RD.

ADDRESS: MT. KISCO, NY 10594

APT FILING NUMBER: NY283830

DATE: 08/13/20 DRAWN BY: CSH

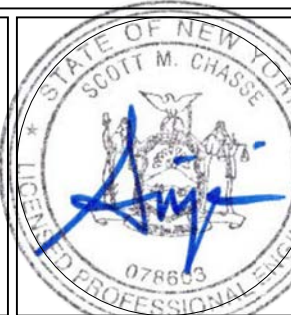
CHECKED BY: RCB

SHEET TITLE:

**TITLE SHEET  
& INDEX**

SHEET NUMBER:

**T-1**



OWNER:  
SKULL ISLAND PARTNERS LLC  
C/O DAVID SELDIN  
1571 OCEANVIEW DRIVE  
TIERRA VERDE, FL 33715-2538

APPLICANTS:  
HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810  
KLAUS WIMMER  
(203) 297-6345  
VERIZON  
4 CENTEROCK RD.  
WEST NYACK, NY 10994

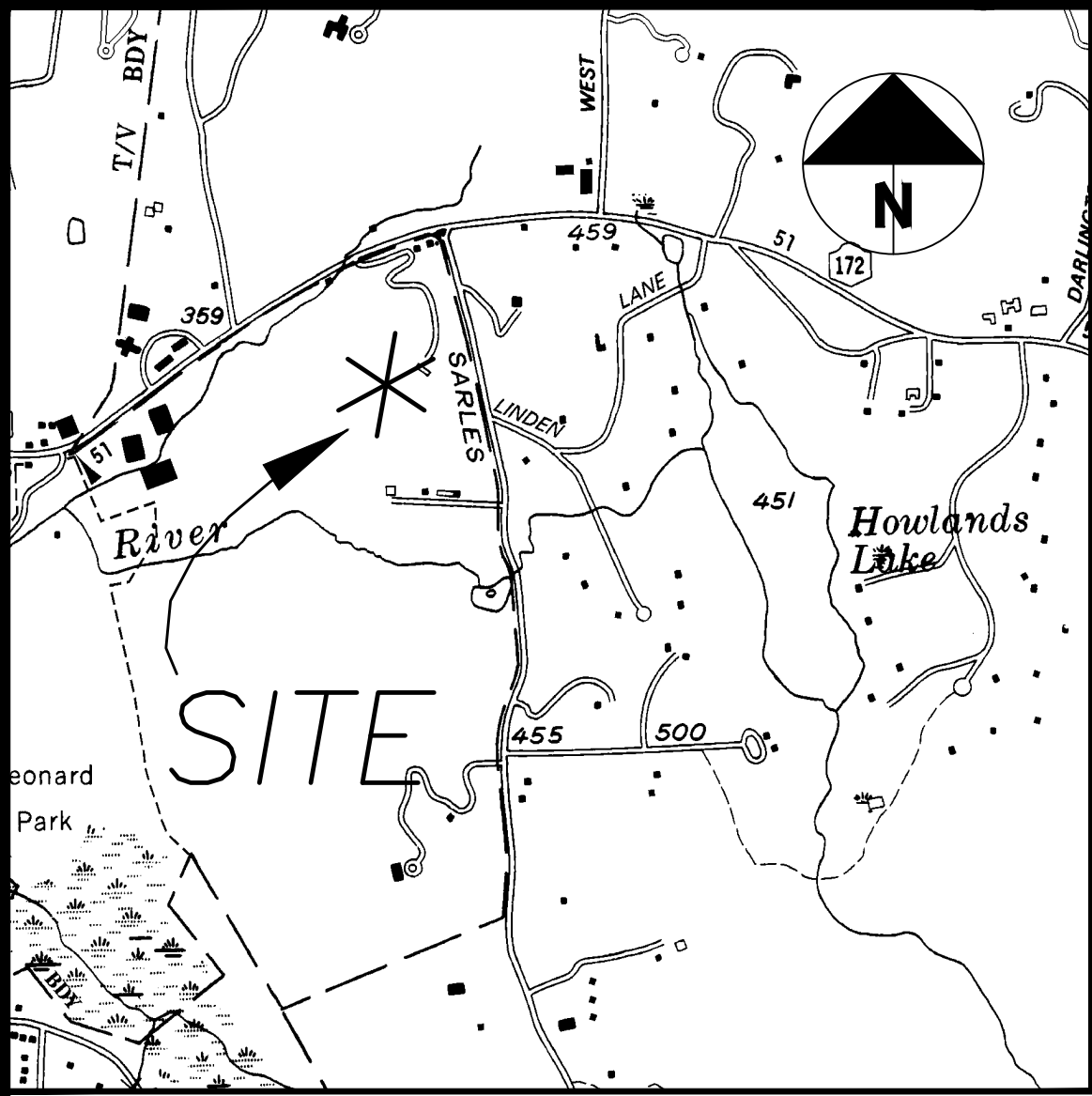
HOMELAND PROJECT ATTORNEY:  
SNYDER & SNYDER, LLP  
94 WHITE PLAINS ROAD  
TARRYTOWN, NY 10591  
(914) 333-0700

POWER PROVIDER:  
CONEDISON: (800) 752-6633

TELCO PROVIDER:  
VERIZON (914) 890-0200

DIG SAFELY NEW YORK:  
(800) 962-7962

GOVERNING CODES:  
2020 NEW YORK STATE UNIFORM  
FIRE PREVENTION & BUILDING CODE  
NATIONAL ELECTRIC CODE  
TIA-222-H



Source: N.Y.S.D.O.T. Quadrangle Sheet — Mt. Kisco, NY

"Copies from the original of this survey map not marked with an original of the land surveyor's inked seal or embossed seal shall not be considered to be a valid true copy."

Alterations not conforming to section 7209, subdivision 2, of the State Education Law, are prohibited.



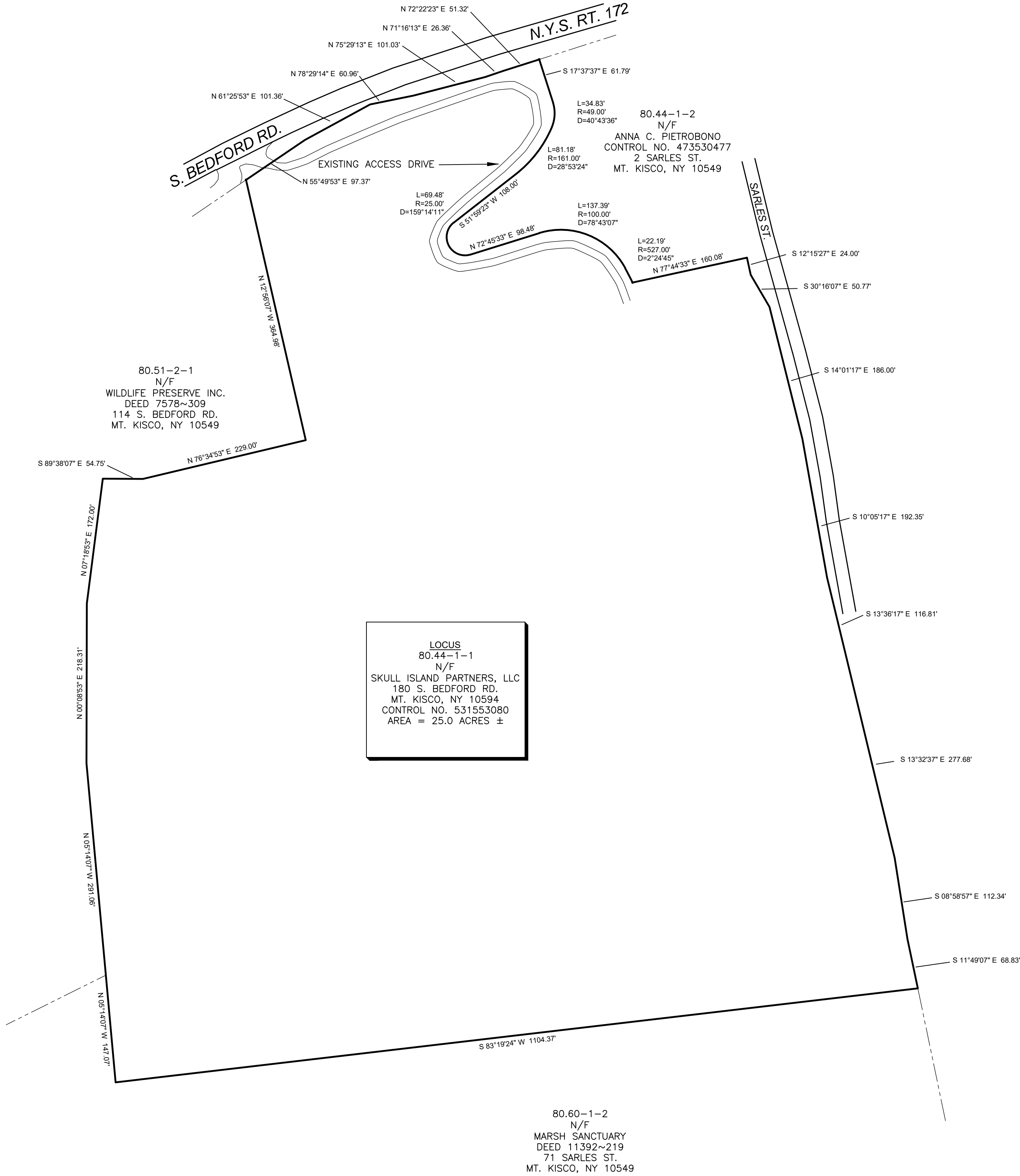
True North  
@ West Longitude

### SURVEY NOTES

1. NO TITLE REPORT WAS REFERENCED FOR THIS SURVEY.
2. AREA 25.0 ± ACRES
3. SUBJECT TO THE RIGHTS OF THE PUBLIC OVER SOUTH BEDFORD RD.
4. BASIS OF BEARINGS - TRUE NORTH @ 74° 30' WEST LONGITUDE.
5. UNDERGROUND FEATURES, FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN LOCATED FROM AVAILABLE RECORDS, FIELD LOCATIONS OF ASSOCIATED ABOVE GROUND STRUCTURES, ANY MARKINGS PROVIDED BY THE CLIENT. THEREFORE, THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE. THERE MAY BE OTHER UNDERGROUND FEATURES, FACILITIES, STRUCTURES AND UTILITIES, THE LOCATION OR EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN. LOCATION OF UNDERGROUND FEATURES, FACILITIES AND STRUCTURES ARE NOT CERTIFIED.
6. IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN THE CONTENTS OF THE SIGNED AND SEALED HARD COPY DRAWING AND THE CORRESPONDING DIGITAL DRAWING FILE, THE HARD COPY WITH AN ORIGINAL STAMP AND SIGNATURE SHALL BE THE CONTROLLING DOCUMENT. BE SURE TO COMPARE THE TWO DOCUMENTS BEFORE USING THE DIGITAL FILE.
7. THIS DRAWING HAS BEEN PREPARED FOR A 24"x36" FORMAT. DO NOT SCALE THIS DRAWING IF PLOTTED ON ANY OTHER FORMAT.
8. VERTICAL DATUM: NAVD83.
9. CONTOUR INTERVAL: 1 FOOT.

### LEGEND

- ⊗ Evidence Found, Labeled
- Boundary Line
- - - County Tax Parcel Line
- 80.44-1-1 County Tax Map Parcel I.D. Number



### SITE SPECIFIC NOTES

1. FIELD SURVEY DATE: AUGUST 6, 2020
2. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)
3. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
4. OWNER: SKULL ISLAND PARTNERS, LLC  
263 13TH AVE. SOUTH SUITE 340  
ST. PETERSBURG, FL. 33701
5. SITE NUMBER: NY172
6. SITE ADDRESS: 180 S. BEDFORD RD.  
MT. KISCO, NY 10594
7. APPLICANT: HOMELAND TOWERS
8. JURISDICTION: VILLAGE OF MT. KISCO  
WESTCHESTER COUNTY, NY
9. TAX ID: 80.44-1-1
10. DEED REFERENCE: CONTROL NO. 531553080
11. ZONING DISTRICT: CD CONSERVATION DEVELOPMENT DISTRICT
12. THE HORIZONTAL DATUM AND VERTICAL DATUM WERE DERIVED FROM A DUAL FREQUENCY GPS SURVEY.
13. ALL UNDERGROUND UTILITY INFORMATION PRESENTED HEREON WAS DETERMINED FROM SURFACE EVIDENCE AND PLANS OF RECORD. ALL UNDERGROUND UTILITIES SHOULD BE LOCATED IN THE FIELD PRIOR TO COMMENCEMENT OF ALL SITE WORK. CALL DIGSAFELY NEW YORK: 1-800-962-7962 A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY.
14. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE PROPOSED IMPROVEMENTS ON THIS PROPERTY ARE LOCATED IN AN AREA DESIGNATED AS ZONE X (UNSHADED), AREA OF MINIMAL FLOODING. COMMUNITY PANEL NO. 36119 C 0154 F  
EFFECTIVE DATE: SEPTEMBER 28, 2007.
15. FIELD SURVEY BY EDM TOTAL STATION.
16. THIS IS NOT A BOUNDARY SURVEY. METES AND BOUNDS SHOWN HEREON ARE COMPILED FROM THE SUBJECT REFERENCED SITE PLAN. DIRECTIONS HAVE BEEN ROTATED INTO MAP DATUM (NAD 83) BASED ON FOUND EVIDENCE AS NOTED. NO BOUNDARY SURVEY WAS PERFORMED.
17. ALL PROPERTY LINES SHOWN ARE FROM DEEDS, PLANS OF RECORD AND WESTCHESTER COUNTY, NY GIS DATABASE AND ARE APPROXIMATE ONLY.
18. ABUTTING PROPERTY LINES AND STREET LINES ARE TAKEN FROM THE REFERENCE PLANS AND THE WESTCHESTER COUNTY, NY GIS DATABASE AND ARE APPROXIMATE ONLY.

Abutters Plan  
Premises of

Skull Island Partners, LLC

Control No. 531553080

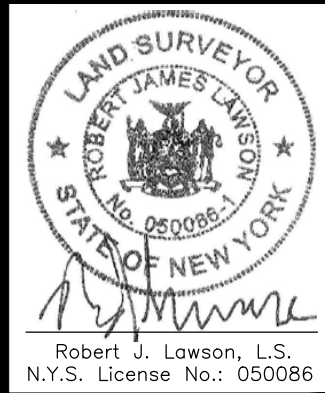
Village of Mount Kisco, County of Westchester  
State of New York

No.	Date	Description

### LAWSON SURVEYING & MAPPING

Boundary ~ Topographic ~ Control ~ Deformation ~ Construction ~ C.I.S. ~ Subdivision ~ C.P.S.  
2959 County Route 6 ♦ Oneonta, New York 13820  
Phone: (807) 432-3300  
Facsimile: (807) 432-4313  
www.lawsonsurveying.com

LSM



DATE: August 6, 2020
W.O. No.: 6969
SCALE: 1 inch = 100 feet
DRAWN BY: J.D.J.
CHECKED BY: R.J.L.
FIELD CHECKED BY: J.D.J.
DWG FILE: 6969.DWG
MAP No.: M 24-1241
SHEET No.: 1 of 2



"Copies from the original of this survey map not marked with an original of the land surveyor's inked seal or embossed seal shall not be considered to be a valid true copy."

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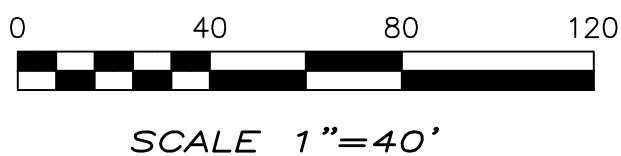
True North  
74°30' West Longitude

#### SURVEY NOTES

1. NO TITLE REPORT WAS REFERENCED FOR THIS SURVEY.
2. AREA -25.0 ± ACRES
3. SUBJECT TO THE RIGHTS OF THE PUBLIC OVER SOUTH BEDFORD RD.
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8. VERTICAL DATUM: NAVD83.
9. CONTOUR INTERVAL: 1 FOOT.

#### LEGEND

- ⊗ Evidence Found, Labeled
- Boundary Line
- County Tax Parcel Line
- ⊙ Utility Pole
- ⊕ Guy Anchor
- E/T/C— Utility Line, Electric/Telephone/Cable T.V.
- 80.44-1-1 County Tax Map Parcel I.D. Number
- Deciduous Tree >4"
- Coniferous Tree >4"



Existing Conditions Survey  
Portion of  
Premises of  
**Skull Island Partners, LLC**  
~  
Control No. 531553080  
Village of Mount Kisco, County of Westchester  
State of New York

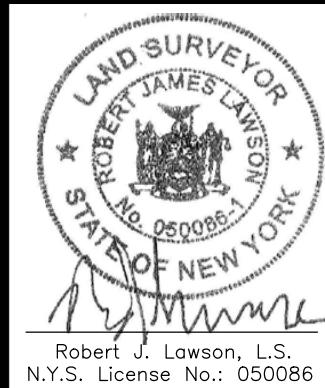
#### REVISIONS

No.	Date	Description

#### LAWSON SURVEYING & MAPPING

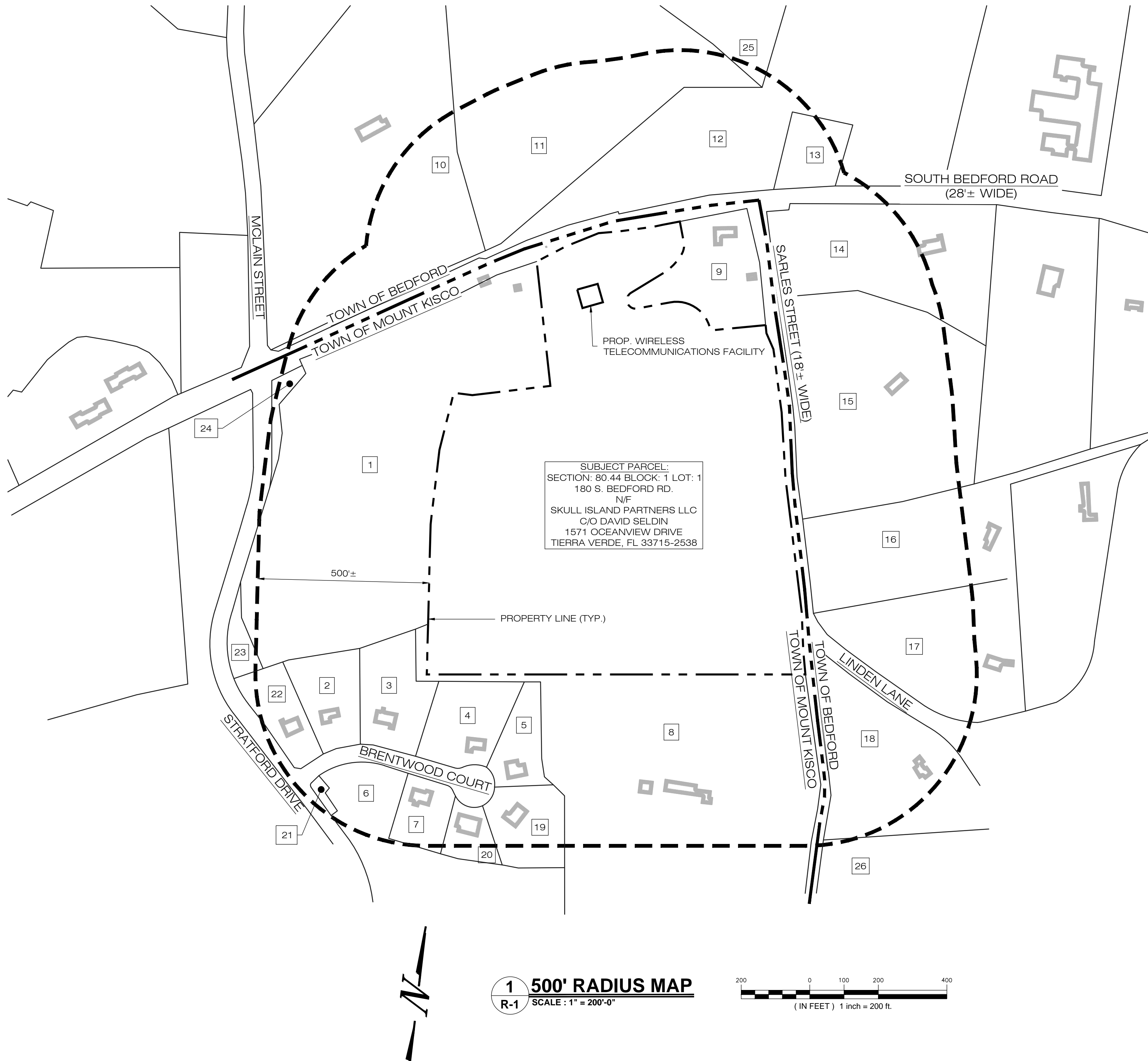
Boundary ~ Topographic ~ Control ~ Deformation ~ Construction ~ C.I.S. ~ Subdivision ~ C.P.S.  
2959 County Route 8 ♦ Oneonta, New York 13820  
Phone: (807) 482-3300  
Facsimile: (807) 482-4813  
www.lawsonsurveying.com

# LSM



DATE: August 6, 2020
W.O. No.: 6969
SCALE: 1 inch = 40 feet
DRAWN BY: J.D.J.
CHECKED BY: R.J.L.
FIELD CHECKED BY: J.D.J.
DWG FILE: 6969.DWG
MAP No.: M 24-1241
SHEET No.: 2 of 2





VILLAGE OF MOUNT KISCO WESTCHESTER COUNTY 500' RADIUS PROPERTY OWNERS						
MAP ID	SECTION	BLOCK	LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
1	80.51	2	1	114 S. BEDFORD RD, MOUNT KISCO, NY 10549	WILDLIFE PRESERVE INC.	71 SARLES ST, MOUNT KISCO, NY 10549
2	80.51	2	3	3 BRENTWOOD CT, MOUNT KISCO, NY 10549	MICHAEL J. INSERRA & MADLYN INSERRA	3 BRENTWOOD CT, MOUNT KISCO, NY 10549
3	80.51	2	4	5 BRENTWOOD CT, MOUNT KISCO, NY 10549	GEORGE COPPOLA & ELLEN MOLLOY	5 BRENTWOOD CT, MOUNT KISCO, NY 10549
4	80.51	2	5	7 BRENTWOOD CT, MOUNT KISCO, NY 10549	MARYANN M. TARNOK	7 BRENTWOOD CT, MOUNT KISCO, NY 10549
5	80.51	2	6	9 BRENTWOOD CT, MOUNT KISCO, NY 10549	FRANK PACCETTI & BARBARA PACCETTI	9 BRENTWOOD CT, MOUNT KISCO, NY 10549
6	80.59	1	1.17	STRATFORD DR, MOUNT KISCO, NY 10549	MT. KISCO CHASE HOA INC	P.O. BOX 265, SOMERS, NY 10589
7	80.51	2	9	6 BRENTWOOD CT, MOUNT KISCO, NY 10549	KARAN GAREWAL & PRATIBHA GAREWAL	6 BRENTWOOD CT, MOUNT KISCO, NY 10549
8	80.60	1	2	71 SARLES ST, MOUNT KISCO, NY 10549	MARSH SANCTUARY INC	71 SARLES ST, MOUNT KISCO, NY 10549
9	80.44	1	2	2 SARLES ST, MOUNT KISCO, NY 10549	ANNA C. PIETROBONO & JOHN G. PIETROBONO	2 SARLES ST, MOUNT KISCO, NY 10549
19	80.51	2	7	10 BRENTWOOD CT, MOUNT KISCO, NY 10549	DAVID M. SCHWARTZ & HOLLY Y. SCHWARTZ	10 BRENTWOOD CT, MOUNT KISCO, NY 10549
20	80.51	2	8	8 BRENTWOOD CT, MOUNT KISCO, NY 10549	GERARD ROMSKI & BETH ROMSKI	8 BRENTWOOD CT, MOUNT KISCO, NY 10549
21	N/A	N/A	N/A	N/A	N/A	N/A
22	80.51	2	2	1 BRENTWOOD CT, MOUNT KISCO, NY 10549	ELIZABETH JACOBS	1 BRENTWOOD CT, MOUNT KISCO, NY 10549
23	N/A	N/A	N/A	N/A	N/A	N/A
24	N/A	N/A	N/A	N/A	N/A	N/A

TOWN OF BEDFORD WESTCHESTER COUNTY 500' RADIUS PROPERTY OWNERS						
MAP ID	SECTION	BLOCK	LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
10	82.12	2	2	35 TUCKER RD, MOUNT KISCO, NY 10549	MICHAEL & CARLA BIRD	35 TUCKER RD, BEDFORD CORNERS, NY 10549
11	82.12	2	1	25 TUCKER RD, MOUNT KISCO, NY 10549	MARCI STEARNS & STEVEN MCCORMICK	25 TUCKER RD, BEDFORD CORNERS, NY 10549
12	83.05	1	6	OPEN SPACE	TOWN OF BEDFORD	321 BEDFORD RD, BEDFORD HILLS, NY 10507
13	83.90	1	1	201 SOUTH BEDFORD RD, MOUNT KISCO, NY 10549	REALIS DEVELOPMENT LLC	356 MANVILLE RD, PLEASANTVILLE, NY 10570
14	83.90	1	19	220 SOUTH BEDFORD RD, MOUNT KISCO, NY 10549	CHABAD OF BEDFORD INC	133 RAILROAD AVE, BEDFORD HILLS, NY 10507
15	83.90	1	18	22 SARLES ST, MOUNT KISCO, NY 10549	ABDELOUAHAB EL BOUHALI & NANCY EL BOUHALI	P.O. BOX 667, BEDFORD HILLS, NY 10507
16	83.90	1	16	43 LINDEN LN, MOUNT KISCO, NY 10549	LAWRENCE LEE & DAISY LEE	43 LINDEN LN, BEDFORD, CORNERS, NY 10549
17	83.90	1	15	69 LINDEN LN, MOUNT KISCO, NY 10549	ROSEMARIE A MAIORANO & VALERI HEDGES	69 LINDEN LN, BEDFORD CORNERS, NY 10549
18	83.13	1	1	72 LINDEN LN, MOUNT KISCO, NY 10549	IHOR ANDREW CZERNYK & NATALIA M CZERNYK	108 SECOND AVE, NEW YORK, NY 10003
25	83.05	1	4	N/A	N/A	N/A
26	83.13	1	17	21 DEER KNL, BEDFORD CORNERS, NY 10549	EDWARD FEINBERG & HARRIET FEINBERG	701 D. BEDFORD RD, BEDFORD HILLS, NY 10549

HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810  
(203) 297-6345

4 CENTEROCK ROAD  
WEST NYACK, NY 10994

340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960

567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385  
PH: (860)-663-1697  
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

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DESIGN PROFESSIONALS OF RECORD

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COMP: APT ENGINEERING  
ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

DEVELOPER: HOMELAND TOWERS, LLC  
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HOMELAND TOWERS  
MOUNT KISCO

SITE 180 S. BEDFORD RD.  
ADDRESS: MT. KISCO, NY 10594

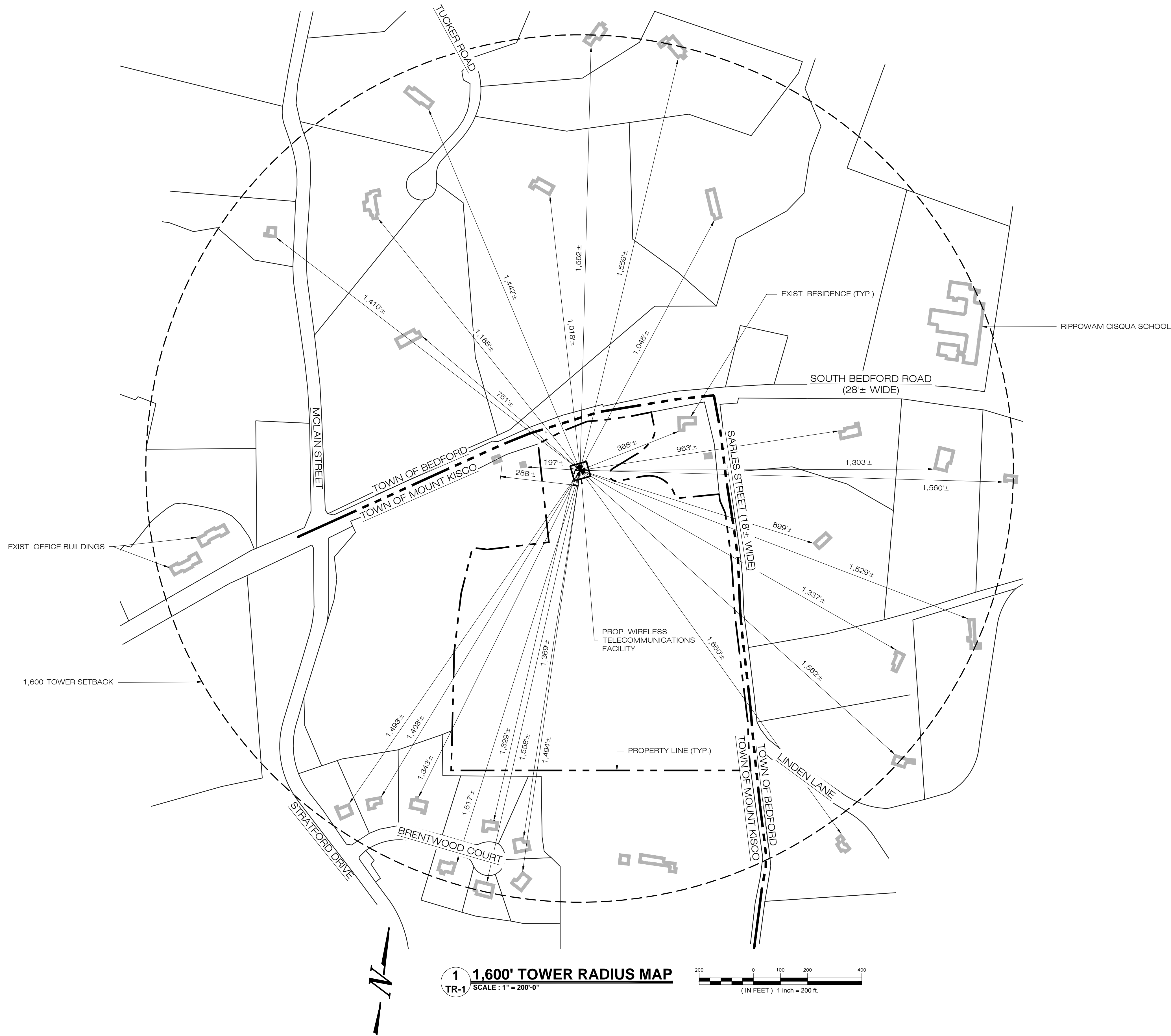
APT FILING NUMBER: NY283830

DATE: 08/13/20 DRAWN BY: CSH  
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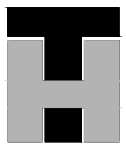
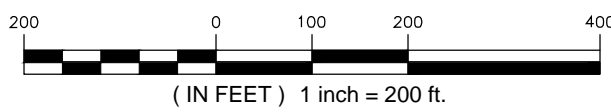
SHEET TITLE:  
**500' RADIUS MAP &  
PROPERTY OWNERS**

SHEET NUMBER:  
**R-1**





1 1,600' TOWER RADIUS MAP  
TR-1 SCALE: 1" = 200'-0"



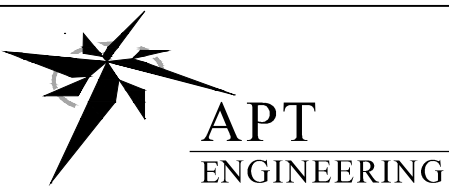
HOMELAND TOWERS, LLC  
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DANBURY, CT 06810  
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HOMELAND TOWERS  
MOUNT KISCO

SITE 180 S. BEDFORD RD.  
ADDRESS: MT. KISCO, NY 10594

APT FILING NUMBER: NY283830

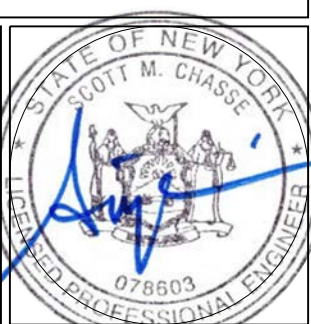
DATE: 08/13/20	DRAWN BY: CSH
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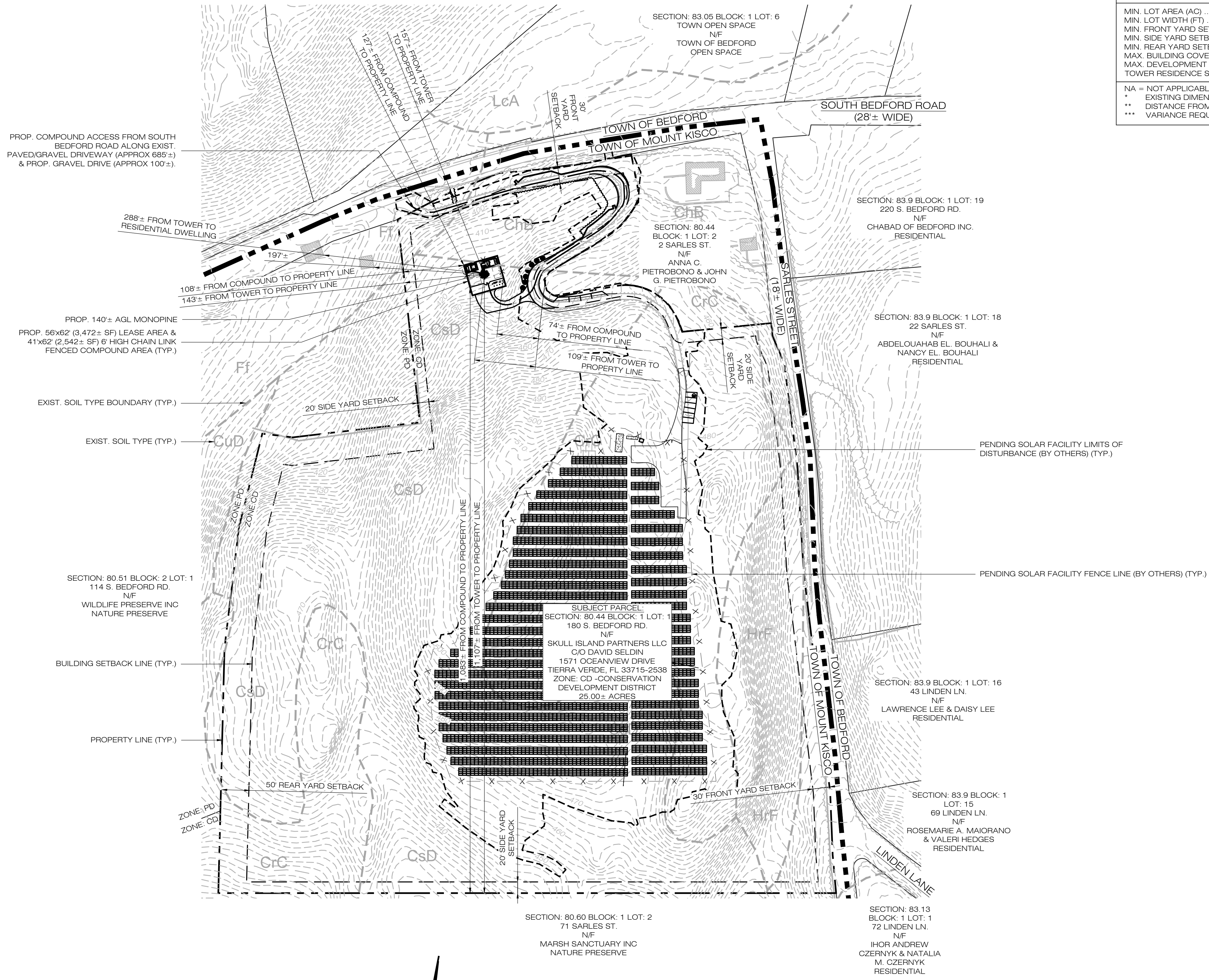
1,600' TOWER  
RADIUS MAP

SHEET NUMBER:

TR-1







ZONING TABLE: VILLAGE OF MOUNT KISCO ZONING DISTRICT CD -CONSERVATION DEVELOPMENT DISTRICT			
ITEM:	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA (AC)	25	25±	NC
MIN. LOT WIDTH (FT)	100	250±	NC
MIN. FRONT YARD SETBACK (FT)	30	N/A	127±**
MIN. SIDE YARD SETBACK (FT)	20	N/A	74±**
MIN. REAR YARD SETBACK (FT)	50	N/A	1,083±**
MAX. BUILDING COVERAGE	20%	N/A	0.3%
MAX. DEVELOPMENT COVERAGE	35%	N/A	0.4%
TOWER RESIDENCE SETBACK (FT)	1,600	N/A	288±***
NA = NOT APPLICABLE NC = NO CHANGE			
* EXISTING DIMENSIONAL NON-CONFORMITY			
** DISTANCE FROM EQUIPMENT COMPOUND TO PROPERTY LINE.			
*** VARIANCE REQUIRED			

LIMITS OF DISTURBANCE:	
COMMUNITY SOLAR FARM	331,459± SF (7.61 ACRES)
HOMELAND TOWERS FACILITY	20,731± SF (0.47 ACRES)
ACCESS DRIVE IMPROVEMENTS	14,269± SF (0.33 ACRES)
OVERALL TOTAL:	366,459± SF (8.41 ACRES)
SEE DRAWING SP-3 FOR HOMELAND TOWERS FACILITY PROJECT LIMITS OF DISTURBANCE	

HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810  
(203) 297-6345

4 CENTEROCK ROAD  
WEST NYACK, NY 10994

340 MOUNT KEMBLE AVENUE  
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WATERFORD, CT 06385	

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HOMELAND TOWERS MOUNT KISCO	
SITE	180 S. BEDFORD RD.
ADDRESS:	MT. KISCO, NY 10594
APT FILING NUMBER:	NY283830
DATE:	08/13/20
DRAWN BY:	CSH
CHECKED BY:	RCB

SHEET TITLE:

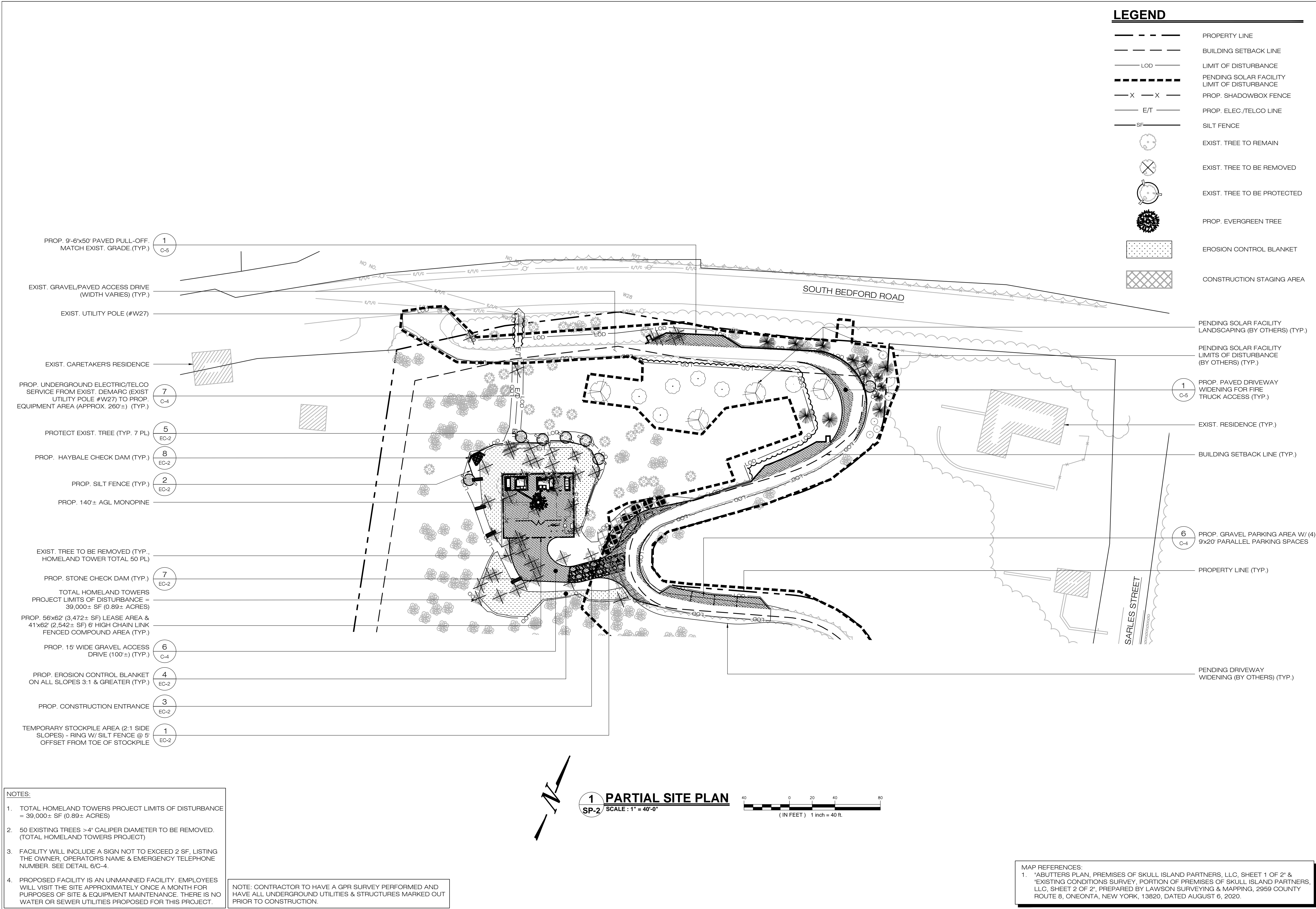
SITE PLAN


SHEET NUMBER:

SP-1


MAP REFERENCES:  
1. "ABUTTERS PLAN, PREMISES OF SKULL ISLAND PARTNERS, LLC, SHEET 1 OF 2" & "EXISTING CONDITIONS SURVEY, PORTION OF PREMISES OF SKULL ISLAND PARTNERS, LLC, SHEET 2 OF 2", PREPARED BY LAWSON SURVEYING & MAPPING, 2959 COUNTY ROUTE 8, ONEONTA, NEW YORK, 13820, DATED AUGUST 6, 2020.








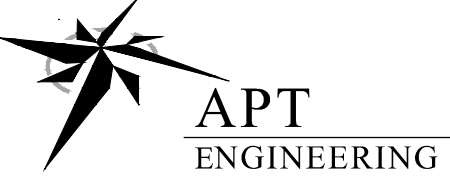
HOMELAND TOWERS, LLC  
9 HARMONY STREET  
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DANBURY, CT 06810  
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PROF: SCOTT M. CHASSE P.E.  
COMP: APT ENGINEERING  
ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

DEVELOPER: HOMELAND TOWERS, LLC  
ADDRESS: 9 HARMONY STREET  
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HOMELAND TOWERS  
MOUNT KISCO

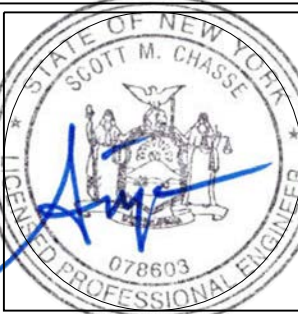
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ADDRESS: MT. KISCO, NY 10594

APT FILING NUMBER: NY283830

DATE: 08/13/20 DRAWN BY: CSH  
CHECKED BY: RCB

SHEET TITLE:  
**PARTIAL SITE PLAN**

SHEET NUMBER:  
**SP-2**





LEGEND

- PROPERTY LINE  
--- BUILDING SETBACK LINE  
--- LOD LIMIT OF DISTURBANCE  
--- PENDING SOLAR FACILITY LIMIT OF DISTURBANCE  
--- X --- PROP. SHADOWBOX FENCE  
--- E/T --- PROP. ELEC./TELOO LINE  
--- SF --- SILT FENCE  
--- EXIST. TREE TO REMAIN  
--- EXIST. TREE TO BE REMOVED  
--- EXIST. TREE TO BE PROTECTED  
--- PROP. EVERGREEN TREE  
--- EROSION CONTROL BLANKET  
--- CONSTRUCTION STAGING AREA

PROP. UNDERGROUND ELECTRIC/TELOO SERVICE FROM EXIST. DEMARC (EXIST UTILITY POLE #W27) TO PROP. EQUIPMENT AREA (APPROX. 260'±) (TYP.)

PROTECT EXIST. TREE (TYP. 7 PL)

PROP. SILT FENCE (TYP.)

PROP. SEDIMENTATION CONTROL TEMPORARY HAYBALE CHECK DAM (TYP.)

PROP. RIPRAP APRON

PROP. 56'x62' (3,472± SF) LEASE AREA & 41'x62' (2,542± SF) 6' HIGH WOODEN SHADOWBOX FENCED COMPOUND AREA (TYP.)

PROP. 140'± AGL MONOPINE

TOTAL HOMELAND TOWERS PROJECT LIMITS OF DISTURBANCE = 39,000± SF (0.89± ACRES)

PROP. 15' WIDE GRAVEL ACCESS DRIVE (100'±) (TYP.)

PROP. GRASS LINED SWALE (TYP.)

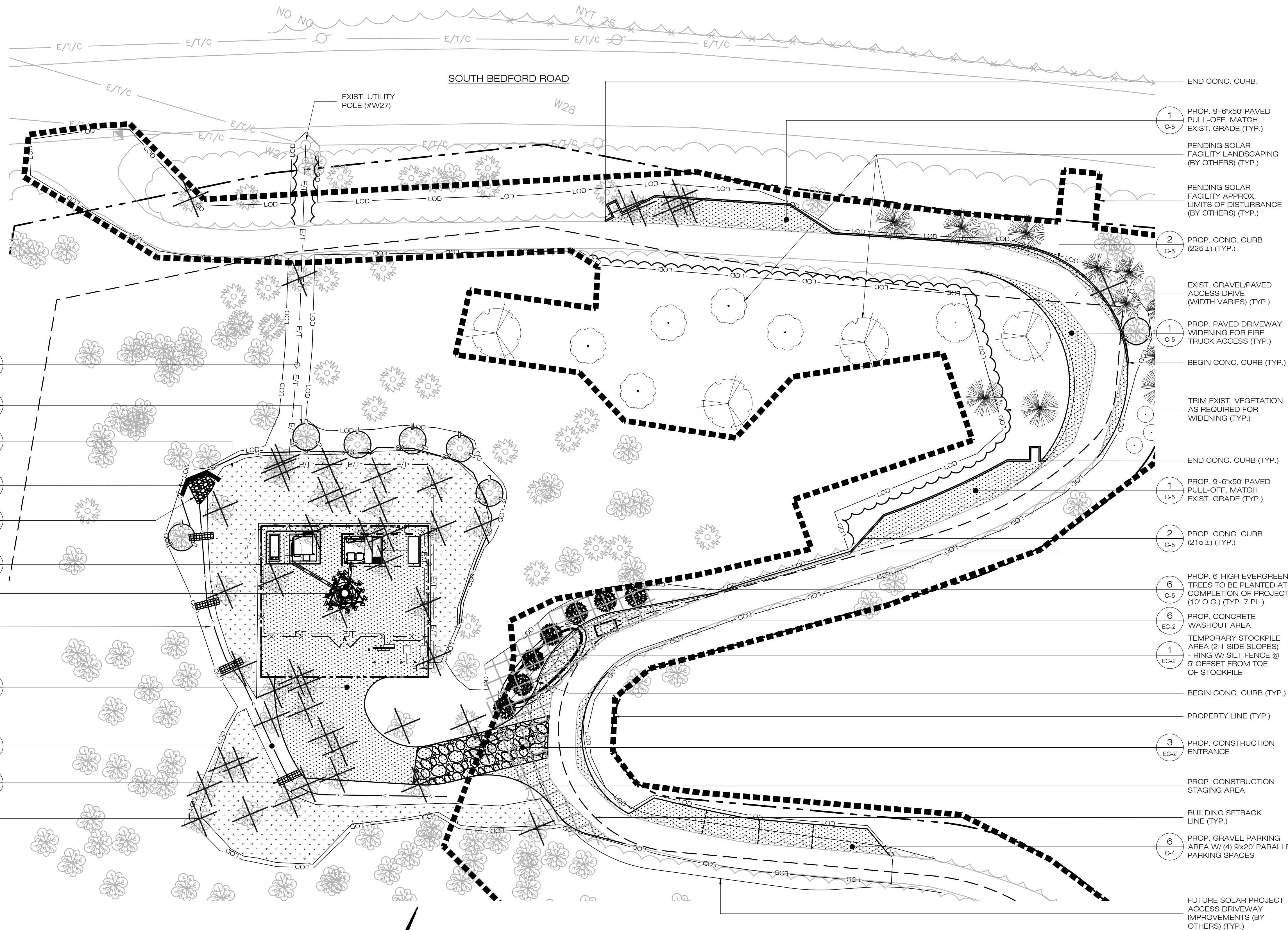
PROP. STONE CHECK DAM (TYP.)

EXIST. TREE TO BE REMOVED (TYP., HOMELAND TOWER TOTAL 50 PL)

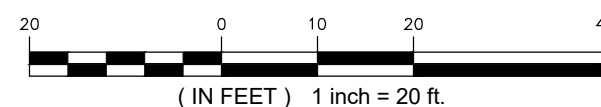
NOTES:

- TOTAL HOMELAND TOWERS PROJECT LIMITS OF DISTURBANCE = 39,000± SF (0.89± ACRES)
- 50 EXISTING TREES >4" CALIPER DIAMETER TO BE REMOVED. (TOTAL HOMELAND TOWERS PROJECT)
- FACILITY WILL INCLUDE A SIGN NOT TO EXCEED 2 SF, LISTING THE OWNER, OPERATOR'S NAME & EMERGENCY TELEPHONE NUMBER. SEE DETAIL 6/C-4.
- PROPOSED FACILITY IS AN UNMANNED FACILITY. EMPLOYEES WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR PURPOSES OF SITE & EQUIPMENT MAINTENANCE. THERE IS NO WATER OR SEWER UTILITIES PROPOSED FOR THIS PROJECT.

NOTE: CONTRACTOR TO HAVE A GPR SURVEY PERFORMED AND HAVE ALL UNDERGROUND UTILITIES & STRUCTURES MARKED OUT PRIOR TO CONSTRUCTION.

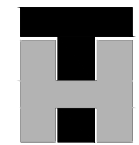


1 PARTIAL SITE PLAN  
SP-3 SCALE: 1" = 20'-0"



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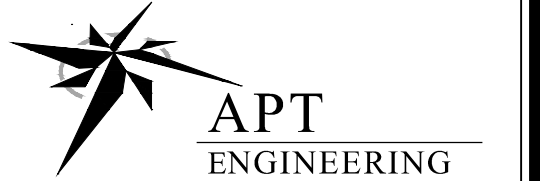
HOMELAND TOWERS, LLC  
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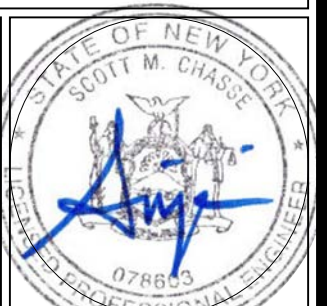
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SHEET TITLE:  
PARTIAL SITE PLAN

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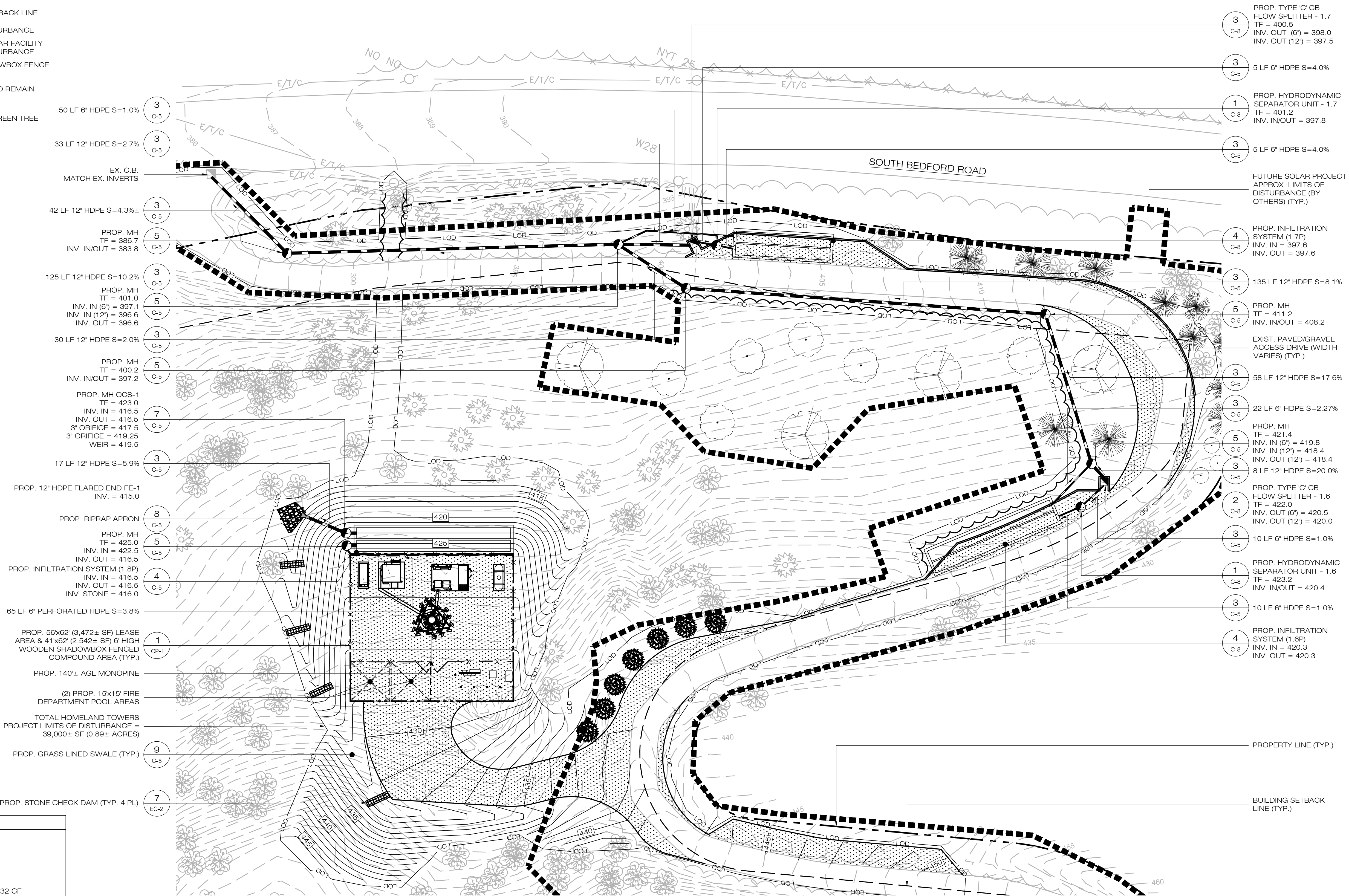
SP-3





## LEGEND

- PROPERTY LINE  
--- BUILDING SETBACK LINE  
--- LOD LIMIT OF DISTURBANCE  
--- PENDING SOLAR FACILITY  
--- LIMIT OF DISTURBANCE  
--- X --- PROP. SHADOWBOX FENCE  
○ EXIST. TREE TO REMAIN  
● PROP. EVERGREEN TREE



### EARTHWORK:

REQUIRED CUT:

315 CY

REQUIRED FILL:

1,065 CY

GRAVEL IMPORT:

215 CY

### STORMWATER

COMPOUND AREA SLOPES:  
EXISTING - 10-25%  
PROPOSED - 5.0%

STORMWATER VOLUME:  
PROPOSED GRAVEL AREA = 6,383 SF  
WATER QUALITY STD VOLUME (1") = 532 CF  
STORAGE VOLUME (12" DEPTH, 40% VOIDS) = 1,016 CF

10-YEAR STORM  
EXISTING - 1.03 CFS  
PROPOSED - 0.99 CFS

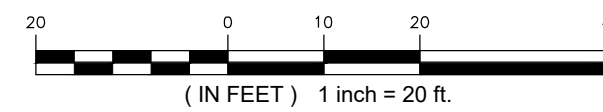
25-YEAR STORM  
EXISTING - 1.76 CFS  
PROPOSED - 1.72 CFS

100-YEAR STORM  
EXISTING - 3.04 CFS  
PROPOSED - 3.04 CFS

NOTE: CONTRACTOR TO HAVE A GPR SURVEY  
PERFORMED AND HAVE ALL UNDERGROUND UTILITIES &  
STRUCTURES MARKED OUT PRIOR TO CONSTRUCTION.

## 1 GRADING & DRAINAGE PLAN

SP-3 SCALE: 1" = 20'-0"



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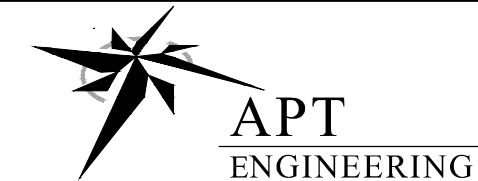
HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810  
(203) 297-6345



4 CENTEROCK ROAD  
WEST NYACK, NY 10994



340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960



567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385 PH: (860)-663-1697  
WWW.ALLPOINTS2TECH.COM FAX: (860)-663-0935

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### DESIGN PROFESSIONALS OF RECORD

PROF. SCOTT M. CHASSE P.E.  
COMP: APT ENGINEERING  
ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

DEVELOPER: HOMELAND TOWERS, LLC  
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### HOMELAND TOWERS MOUNT KISCO

SITE 180 S. BEDFORD RD.  
ADDRESS: MT. KISCO, NY 10594

APT FILING NUMBER: NY283830

DATE: 08/13/20 DRAWN BY: CSH

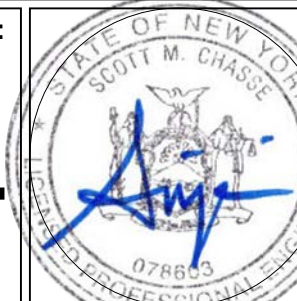
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SHEET TITLE:

### GRADING & DRAINAGE PLAN

SHEET NUMBER:

SP-4







HOMELAND TOWERS, LLC  
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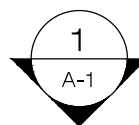
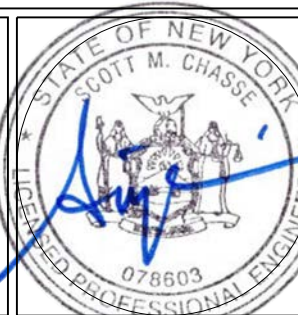
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SHEET TITLE:

COMPOUND PLAN

SHEET NUMBER:

CP-1



62'± LEASE & COMPOUND AREA

PROP. AT&T 30kW DIESEL FIRED  
GENERATOR ON 4'x10' CONCRETE PAD

PROP. AT&T WALK-IN-CABINET (WIC) W/ (1)  
GPS UNIT ON 10'x10' CONCRETE PAD

10' GENERATOR EXHAUST CLEARANCE

PROP. AT&T CABLE ICE BRIDGE FROM  
WIC TO TOWER ENTRY PORT.

PROP. AT&T UNDERGROUND  
ELECTRIC/ TELCO SERVICE FROM  
PROP. MULTIMETER CENTER TO PROP.  
AT&T WIC EQUIPMENT CABINET.

(12) PROP. AT&T PANEL ANTENNAS (30°, 150°, 270°) ON  
PROP. 3-SIDED T-ARM MOUNTED TO PROP. 100'± AGL  
MONOPINE W/ ANTENNA CL @ 86'-0"± AGL & W/ (3) SURGE  
SUPPRESSORS, (9) RRHS MOUNTED TO PROP. EQUIPMENT  
MOUNT W/ MOUNT CL @ 84'-0" AGL. ANTENNAS TO BE  
FITTED W/ MONOPINE SOCKS & ALL HARDWARE &  
APPURTENANCES PAINTED TO MATCH MONOPINE.

PROP. GRAVEL EQUIPMENT COMPOUND

PROP. 12' WIDE, 6' HIGH WOODEN SHADOWBOX GATE

PROP. GRAVEL PARKING/TURNAROUND AREA (TYP.)

(2) PROP. 15'x15' FIRE DEPARTMENT POOL AREAS

PROP. 56'x62' (3,472± SF) LEASE AREA

PROP. 15' WIDE GRAVEL ACCESS DRIVE (100'±) (TYP.)

10' NO SPARK ZONE

PROP. VERIZON 12'x29' (348± SF) LEASE AREA

PROP. VERIZON UNDERGROUND  
PROPANE SERVICE

PROP. VERIZON 500 GAL. PROPANE  
TANKS ON 4'x10' CONCRETE PAD

PROP. VERIZON EQUIPMENT CABINETS,  
PROPANE FIRED GENERATOR, STEEL CANOPY  
& (4) GPS UNITS ON 10'x14' CONCRETE PAD

PROP. VERIZON CABLE ICE BRIDGE FROM  
EQUIPMENT PAD TO TOWER ENTRY PORT  
W/ (3) 6'x12' HYBRID CABLES.

PROP. 140'± AGL GALVANIZED GRAY MONOPINE

PROP. 6' HIGH WOODEN SHADOWBOX FENCE (TYP.)

(8) PROP. VERIZON PANEL ANTENNAS (90°, 180°,  
270°, 20°) W/ (3) MDBs & (12) RRHS ON PROP.  
4-SIDED DOUBLE T-ARM MOUNTED TO PROP.  
140'± AGL MONOPINE W/ ANTENNA CL @ 137'-0"±  
AGL. ANTENNAS TO BE FITTED W/ MONOPINE  
SOCKS & ALL HARDWARE & APPURTENANCES  
PAINTED TO MATCH MONOPINE.

PROP. 41'x62' (2,542± SF) 6' HIGH CHAIN LINK  
FENCED COMPOUND AREA (TYP.)

PROP. VERIZON UNDERGROUND ELECTRIC/  
TELCO SERVICE FROM PROP. MULTIMETER  
CENTER TO PROP. VERIZON EQUIPMENT PAD.

PROP. UNDERGROUND ELECTRIC/TELCO SERVICE  
FROM EXIST. DEMARC (EXIST UTILITY POLE #W27) TO  
PROP. EQUIPMENT AREA (APPROX. 260'±) (TYP.)

PROP. MESA SPAN VAULT

PROP. BOLLARD (5' O.C.) (TYP. 6 PL)

PROP. STEPDOWN TRANSFORMER

PROP. MULTIMETER CENTER

#### 1 COMPOUND PLAN

CP-1 SCALE: 1" = 5'-0"

0 2.5 5 10  
(IN FEET) 1 inch = 5 ft.





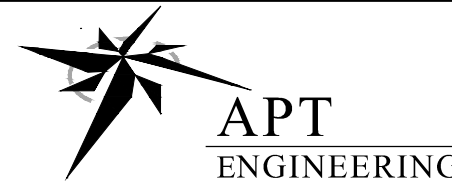
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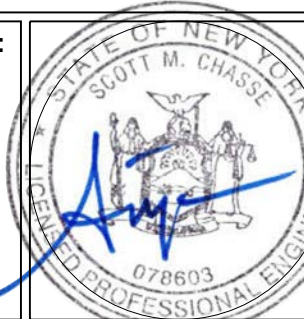
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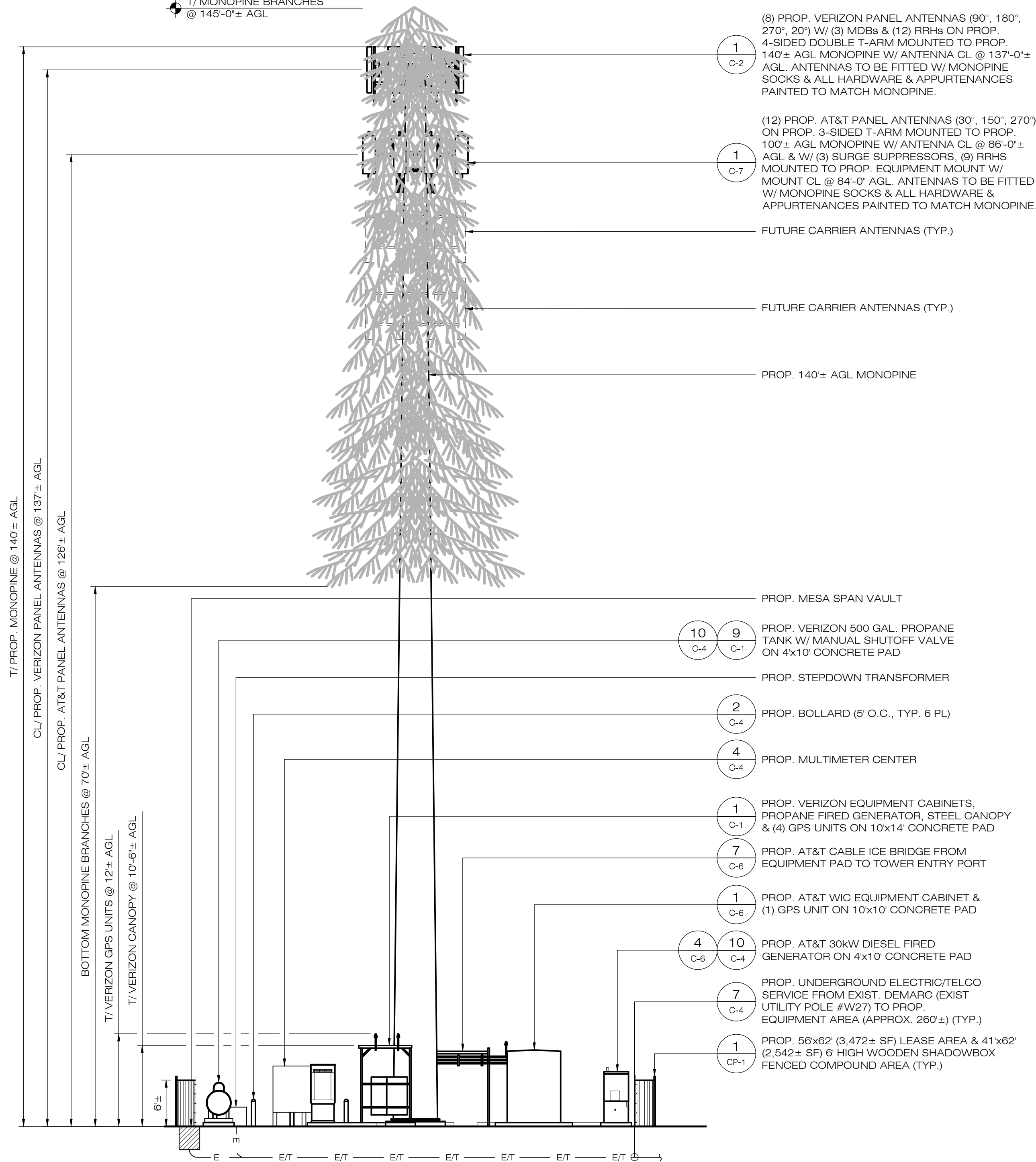
ELEVATIONS

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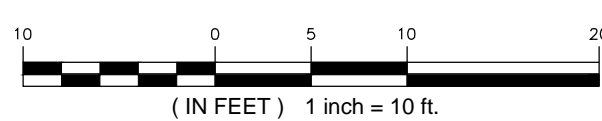
A-1



T/ MONOPINE BRANCHES  
@ 145'-0"± AGL



1 NORTH ELEVATION  
SCALE: 1" = 10'-0"



TOWER TO BE DESIGNED TO SUPPORT  
FUTURE MUNICIPAL ANTENNAS.

(8) PROP. VERIZON PANEL ANTENNAS (90°, 180°, 270°, 20°) W/ (3) MDBs & (12) RRHS ON PROP. 4-SIDED DOUBLE T-ARM MOUNTED TO PROP. 140'± AGL MONOPINE W/ ANTENNA CL @ 137'-0"± AGL. ANTENNAS TO BE FITTED W/ MONOPINE SOCKS & ALL HARDWARE & APPURTENANCES PAINTED TO MATCH MONOPINE.

1

C-2

1

C-7

(12) PROP. AT&T PANEL ANTENNAS (30°, 150°, 270°) ON PROP. 3-SIDED T-ARM MOUNTED TO PROP. 100'± AGL MONOPINE W/ ANTENNA CL @ 86'-0"± AGL & W/ (3) SURGE SUPPRESSORS, (9) RRHS MOUNTED TO PROP. EQUIPMENT MOUNT W/ MOUNT CL @ 84'-0" AGL. ANTENNAS TO BE FITTED W/ MONOPINE SOCKS & ALL HARDWARE & APPURTENANCES PAINTED TO MATCH MONOPINE.

1

C-7

FUTURE CARRIER ANTENNAS (TYP.)

FUTURE CARRIER ANTENNAS (TYP.)

PROP. 140'± AGL MONOPINE

PROP. MESA SPAN VAULT

10

C-4

9

C-1

PROP. VERIZON 500 GAL. PROPANE TANK W/ MANUAL SHUTOFF VALVE ON 4'x10' CONCRETE PAD

PROP. STEPDOWN TRANSFORMER

PROP. BOLLARD (5' O.C., TYP. 6 PL)

PROP. MULTIMETER CENTER

PROP. VERIZON EQUIPMENT CABINETS, PROPANE FIRED GENERATOR, STEEL CANOPY & (4) GPS UNITS ON 10'x14' CONCRETE PAD

PROP. AT&T CABLE ICE BRIDGE FROM EQUIPMENT PAD TO TOWER ENTRY PORT

PROP. VERIZON EQUIPMENT CABINETS, PROPANE FIRED GENERATOR, STEEL CANOPY & (4) GPS UNITS ON 10'x14' CONCRETE PAD

PROP. AT&T CABLE ICE BRIDGE FROM EQUIPMENT PAD TO TOWER ENTRY PORT

PROP. AT&T WIC EQUIPMENT CABINET & (1) GPS UNIT ON 10'x10' CONCRETE PAD

PROP. AT&T 30KW DIESEL FIRED GENERATOR ON 4'x10' CONCRETE PAD

PROP. UNDERGROUND ELECTRIC/TELCO SERVICE FROM EXIST. DEMARC (EXIST UTILITY POLE #W27) TO PROP. EQUIPMENT AREA (APPROX. 260'±) (TYP.)

PROP. 56'x62' (3,472± SF) LEASE AREA & 41'x62' (2,542± SF) 6' HIGH WOODEN SHADOWBOX FENCED COMPOUND AREA (TYP.)

4

C-6

10

C-4

7

C-4

1

CP-1

(12) PROP. AT&T PANEL ANTENNAS (30°, 150°, 270°) ON PROP. 3-SIDED T-ARM MOUNTED TO PROP. 100'± AGL MONOPINE W/ ANTENNA CL @ 86'-0"± AGL & W/ (3) SURGE SUPPRESSORS, (9) RRHS MOUNTED TO PROP. EQUIPMENT MOUNT W/ MOUNT CL @ 84'-0" AGL. ANTENNAS TO BE FITTED W/ MONOPINE SOCKS & ALL HARDWARE & APPURTENANCES PAINTED TO MATCH MONOPINE.

1

C-2

1

C-7

FUTURE CARRIER ANTENNAS (TYP.)

FUTURE CARRIER ANTENNAS (TYP.)

PROP. 140'± AGL MONOPINE

PROP. AT&T WIC EQUIPMENT CABINET & (1) GPS UNIT ON 10'x10' CONCRETE PAD (BEYOND)

1

C-6

PROP. VERIZON EQUIPMENT CABINETS, PROPANE FIRED GENERATOR, STEEL CANOPY & (4) GPS UNITS ON 10'x14' CONCRETE PAD

1

C-1

PROP. VERIZON 500 GAL. PROPANE TANK W/ MANUAL SHUTOFF VALVE ON 4'x10' CONCRETE PAD

9

C-1

10

C-4

PROP. AT&T CABLE ICE BRIDGE FROM EQUIPMENT PAD TO TOWER ENTRY PORT (BEYOND)

7

C-6

PROP. VERIZON CABLE ICE BRIDGE FROM EQUIPMENT PAD TO TOWER ENTRY PORT W/ (3) 6x12 HYBRID CABLES.

7

C-1

PROP. UNDERGROUND ELECTRIC/TELCO SERVICE FROM EXIST. DEMARC (EXIST UTILITY POLE #W27) TO PROP. EQUIPMENT AREA (APPROX. 260'±) (TYP.)

7

C-4

FUTURE EQUIPMENT AREA (12'x20')

PROP. 56'x62' (3,472± SF) LEASE AREA & 41'x62' (2,542± SF) 6' HIGH WOODEN SHADOWBOX FENCED COMPOUND AREA (TYP.)

1

CP-1

PROP. MULTIMETER CENTER

4

C-4

PROP. STEPDOWN TRANSFORMER

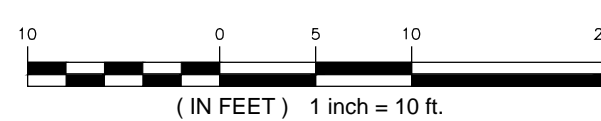
PROP. MESA SPAN VAULT

PROP. BOLLARD (5' O.C., TYP. 6 PL)

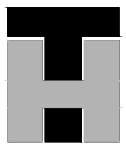
2

C-4

2 EAST ELEVATION  
SCALE: 1" = 10'-0"







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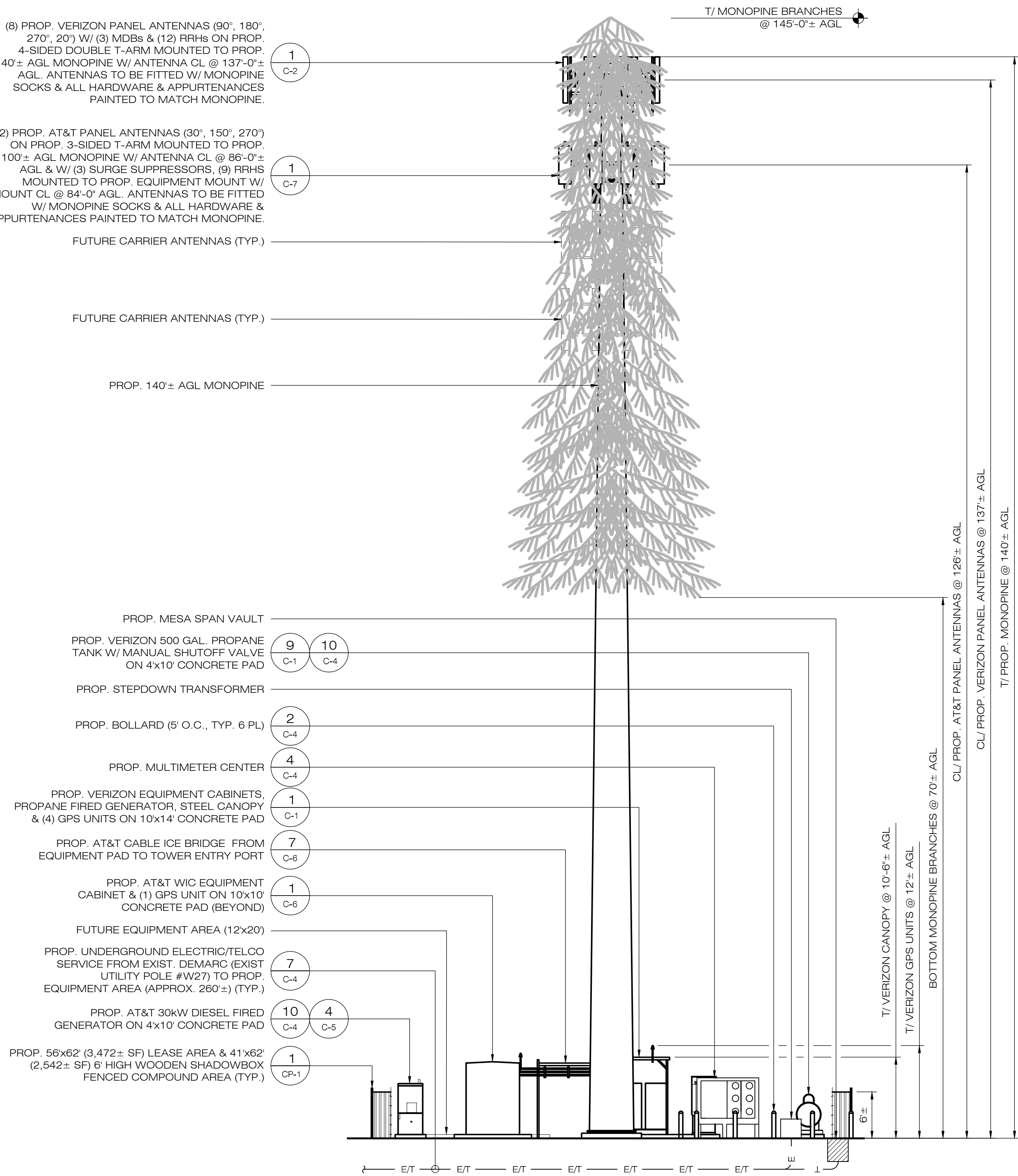
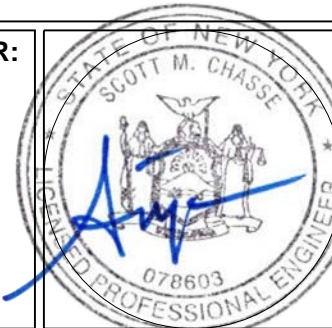
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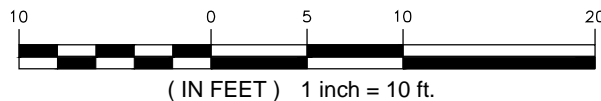
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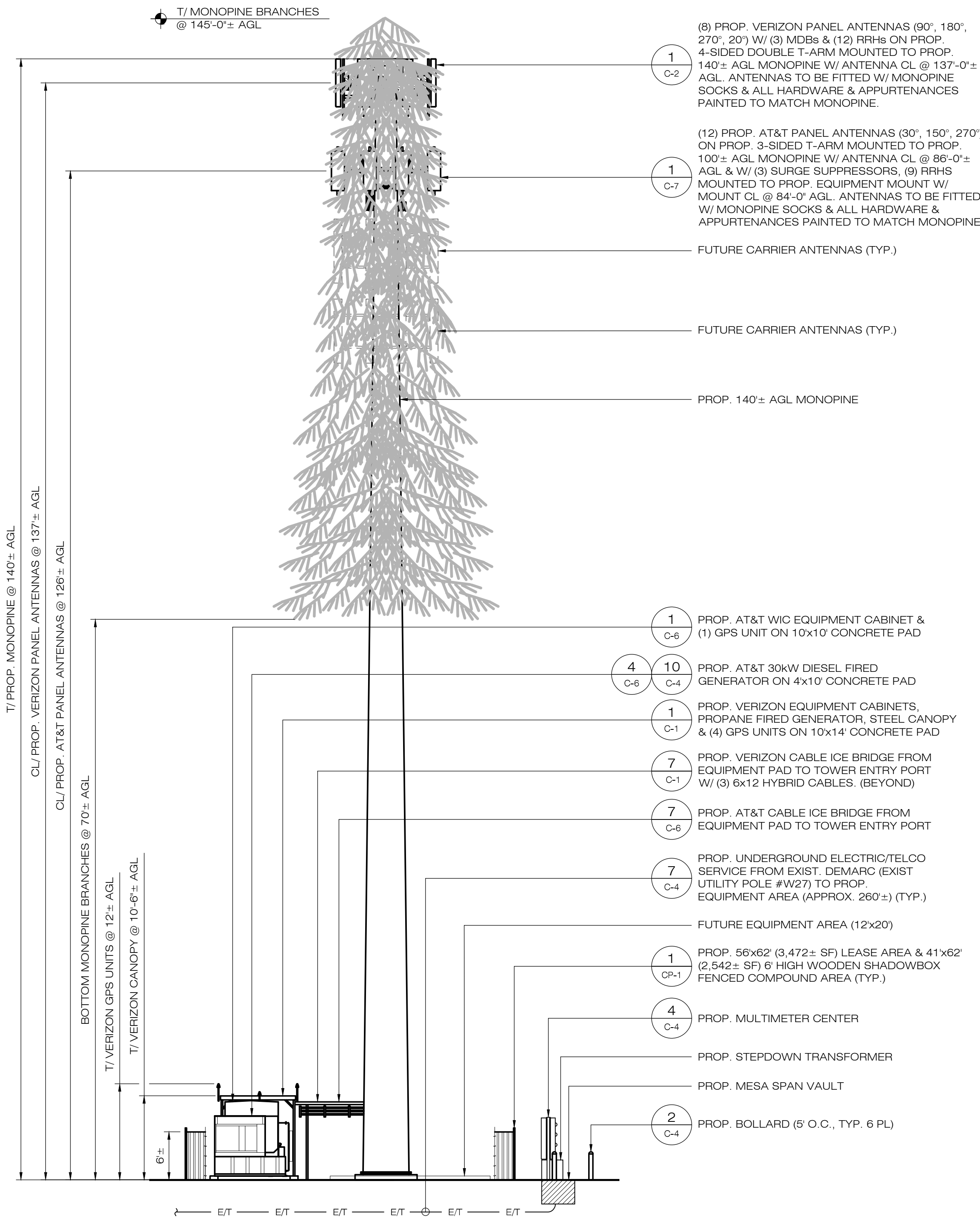
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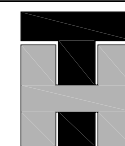
1 SOUTH ELEVATION  
SCALE: 1" = 10'-0"



TOWER TO BE DESIGNED TO SUPPORT  
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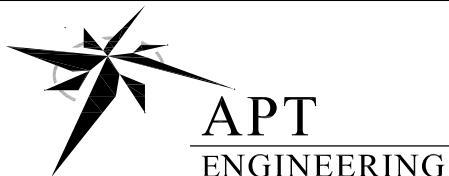
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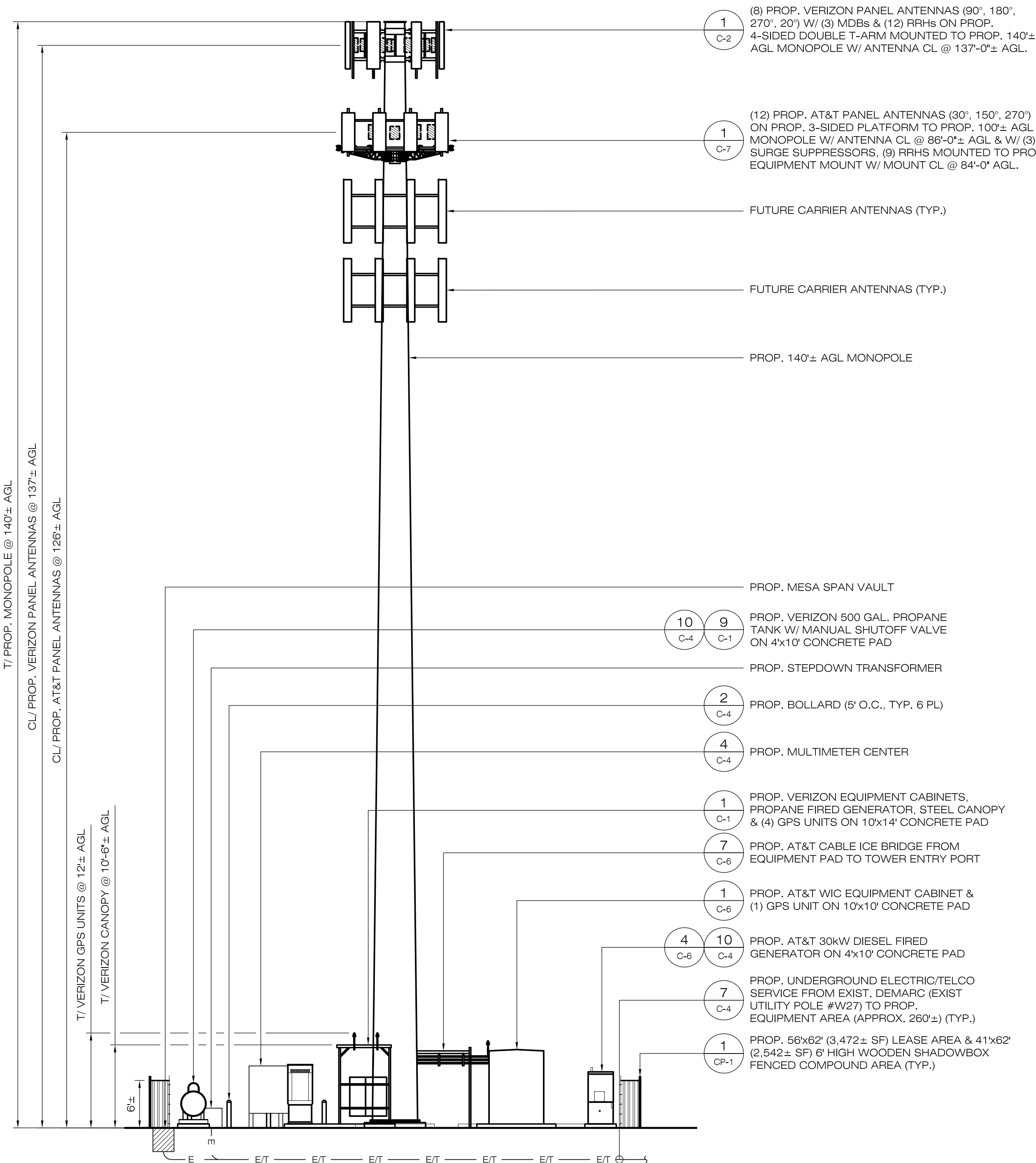
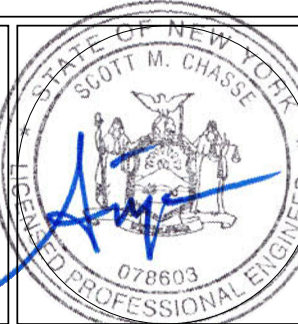
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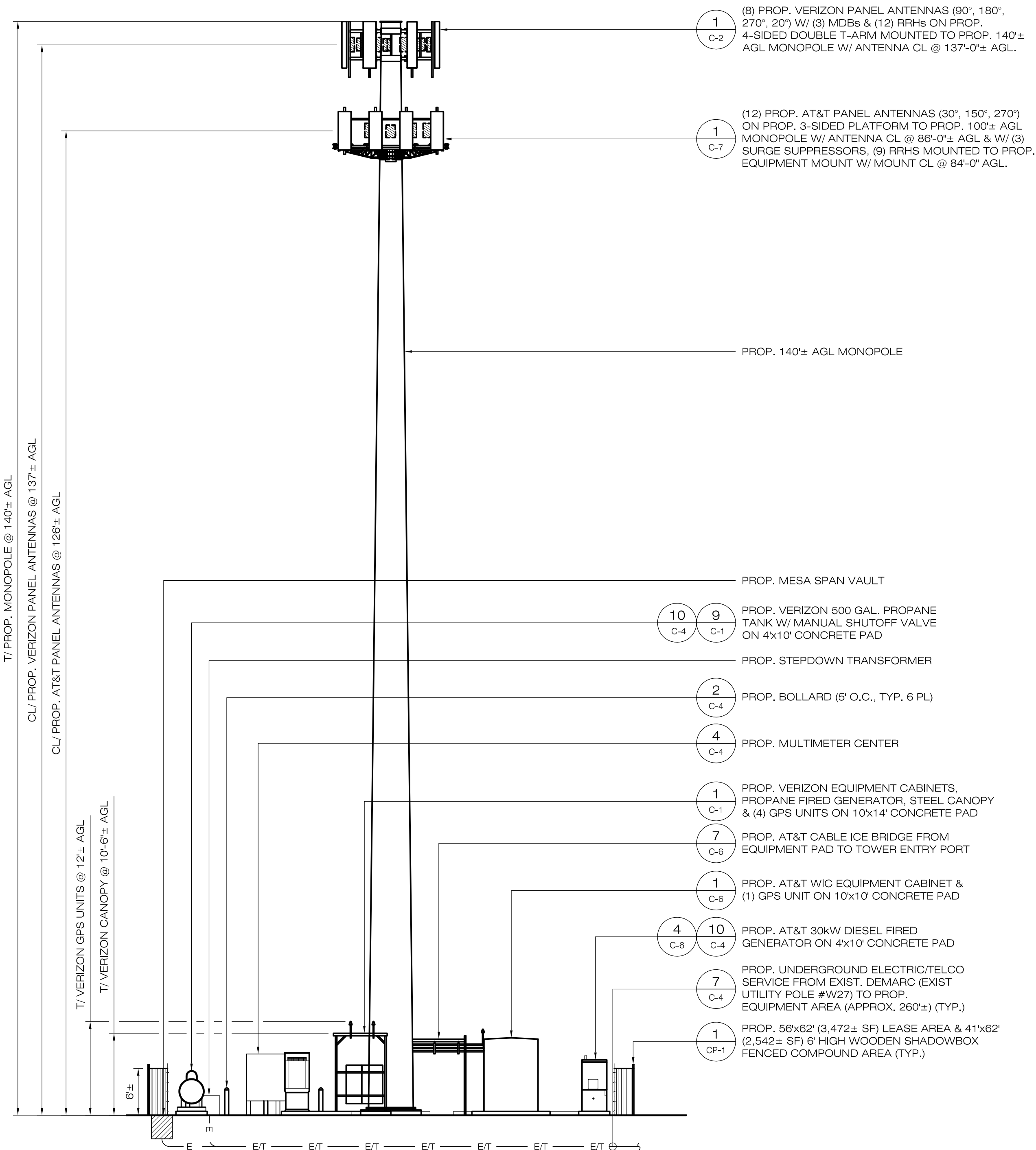
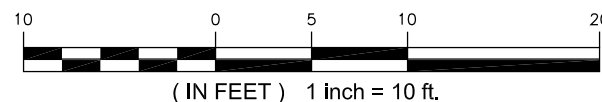
ALTERNATE  
MONOPOLE  
ELEVATIONS

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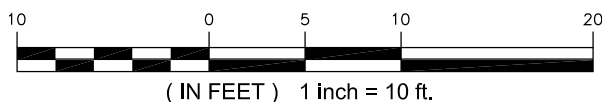
A-3



1 NORTH ELEVATION  
A-1 SCALE : 1" = 10'-0"



1 NORTH ELEVATION  
A-1 SCALE : 1" = 10'-0"





STORMWATER POLLUTION PREVENTION PLAN

STORMWATER POLLUTION PREVENTION PLAN

1. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (BLUE BOOK), LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL KEEP A COPY OF THE CURRENT GUIDELINES ON-SITE FOR REFERENCE DURING CONSTRUCTION. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.
2. THE CONTRACTOR WILL COMPLY WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY PERMIT NO. GP-0-20-001.
3. THESE DRAWINGS ARE ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL MEASURES FOR THIS SITE. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN ARE SHOWN IN A GENERAL SIZE AND LOCATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EROSION CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS AND/OR WATERCOURSES. ACTUAL SITE CONDITIONS OR SEASONAL AND CLIMATIC CONDITIONS MAY WARRANT ADDITIONAL CONTROLS OR CONFIGURATIONS WHEN DIRECTED BY THE ENGINEER. SEE SEDIMENT AND EROSION CONTROL DETAILS AND SUGGESTED CONSTRUCTION SEQUENCE FOR MORE INFORMATION. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.
4. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE SEDIMENT AND EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE PROPER INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED WITH CONSTRUCTION ON THE SITE OF THE REQUIREMENTS AND OBJECTIVES OF THIS PLAN, INFORMING THE GOVERNING AUTHORITY OR INLAND WETLANDS AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY, AND FOR CONVEYING A COPY OF THE SEDIMENT & EROSION CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
5. A BOND MAY BE REQUIRED TO BE POSTED WITH THE GOVERNING AUTHORITY FOR THE EROSION CONTROL INSTALLATION AND MAINTENANCE.
6. THE CONTRACTOR SHALL APPLY THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, SITE ENGINEER, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A STORM WITH A RAINFALL AMOUNT OF 0.2 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS WHERE NECESSARY.
8. THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (HAY BALES, SILT FENCE, JUTE MESH, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.
9. ALL FILL MATERIAL PLACED ADJACENT TO ANY WETLAND AREA SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN). SHALL BE PLACED IN MAXIMUM ONE FOOT LIFTS, AND SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.
10. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING AT THE DRIP LINE, OR AS DETAILED, WITH SNOW FENCE, ORANGE SAFETY FENCE, OR EQUIVALENT FENCING. ANY LIMB TRIMMING SHOULD BE DONE AFTER CONSULTATION WITH AN ARBORIST AND BEFORE CONSTRUCTION BEGINS IN THAT AREA; FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.
11. ANTI-TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED.
12. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SEDIMENT BARRIER UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE BARRIER. STAKED HAY BALES OR SILT FENCES SHALL ALSO BE INSTALLED AT THE DOWNHILL SIDES OF BUILDING EXCAVATIONS, DEWATERING PUMP DISCHARGES, AND MATERIAL STOCKPILES.
13. WASHOUT OF APPLICATORS, CONTAINERS, VEHICLES AND EQUIPMENT FOR CONCRETE SHALL BE CONDUCTED IN A DESIGNATED WASHOUT AREA. NO SURFACE DISCHARGE OF WASHOUT WASTEWATERS FROM THE AREA WILL BE ALLOWED. ALL CONCRETE WASHWATER WILL BE DIRECTED INTO A CONTAINER OR PIT SUCH THAT NO OVERFLOWS CAN OCCUR. WASHOUT SHALL BE CONDUCTED IN AN ENTIRELY SELF-CONTAINED SYSTEM AND WILL BE CLEARLY DESIGNED AND FLAGGED OR SIGNED WHERE NECESSARY. THE WASHOUT AREA SHALL BE LOCATED OUTSIDE OF ANY BUFFERS AND AT LEAST 50 FEET FROM ANY STREAM, WETLAND OR OTHER SENSITIVE WATER OR NATURAL RESOURCES AS DETERMINED OR DESIGNATED BY THE ENGINEER.
14. INSTALL TEMPORARY DIVERSION DITCHES, PLUNGE POOLS, TEMPORARY SEDIMENT TRAPS/BASINS, AND DEWATERING PITS AS SHOWN AND AS NECESSARY DURING VARIOUS PHASES OF CONSTRUCTION TO CONTROL RUNOFF UNTIL UPHILL AREAS ARE STABILIZED. LOCATION OF TEMPORARY SEDIMENT TRAPS/BASINS WILL REQUIRE REVIEW AND APPROVAL BY THE ENGINEER AND GOVERNING OFFICIAL. DEWATERING SETTLING TRAPS SHALL BE USED IF GROUND WATER IS ENCOUNTERED. NO RUNOFF SHALL BE ALLOWED TO EXIT THE SITE PRIOR TO TREATMENT FOR SEDIMENT REMOVAL.
15. AS GENERAL GRADING OPERATIONS PROGRESS, THE TEMPORARY DIVERSION DITCHES SHALL BE RAISED OR LOWERED AND RELOCATED, AS CUT AND FILL SLOPES DICTATE, TO DIVERT SURFACE RUNOFF TO THE SEDIMENT TRAPS/BASINS.
16. TEMPORARY SEDIMENT TRAPS SHALL PROVIDE 134 CUBIC YARDS OF SEDIMENT STORAGE PER DISTURBED ACRE CONTRIBUTING TO THE TRAP/BASIN. PROVIDE TRAP/BASIN VOLUMES FOR ALL DISTURBANCE ON SITE.
17. PERIODICALLY CHECK ACCUMULATED SEDIMENT LEVELS IN SEDIMENT TRAPS/BASINS DURING CONSTRUCTION AND CLEAN ACCUMULATED SILT WHEN NECESSARY OR WHEN ONE FOOT OF SEDIMENT HAS ACCUMULATED. CLEAN ACCUMULATED SEDIMENT FROM CATCH BASIN SUMPS AS NECESSARY. REMOVE ACCUMULATED SEDIMENT FROM BEHIND HAY BALES AND SILT FENCE. EXCAVATED MATERIAL FROM TEMPORARY SEDIMENT TRAPS/BASINS MUST BE STOCKPILED ON UPHILL SIDE OF SILT FENCE.
18. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING. ALL EARTH STOCKPILES SHALL HAVE HAY BALES OR SILT FENCE AROUND THE LIMIT OF PILE. PILES SHALL BE TEMPORARILY SEEDED IF PILE IS TO REMAIN IN PLACE AND UNDISTURBED FOR MORE THAN 30 DAYS.
19. NO CUT OR FILL SLOPES SHALL EXCEED 3:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS, JUTE MESH AND VEGETATION. ALL SLOPES SHALL BE SEEDED, AND THE ROAD SHOULDER AND BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
20. DIRECT ALL DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE SUCH AS TEMPORARY SEDIMENT TRAPS OR GRASS FILTERS WITHIN THE APPROVED LIMIT OF DISTURBANCE. DISCHARGE TO STORM DRAINS OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE ENGINEER.
21. BLOCK THE OPEN UPSTREAM ENDS OF DETENTION BASIN/SEDIMENT TRAP OUTLET CONTROL ORIFICES UNTIL SITE IS STABILIZED AND BLOCK END OF STORM DRAINS IN EXPOSED TRENCHES WITH BOARDS AND SANDBAGS AT THE END OF EACH WORKING DAY WHEN RAIN IS EXPECTED.
22. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON-SITE AT ALL TIMES. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT.
23. MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDING WITH TACKIFIER.
24. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAYS DAMP. CALCIUM CHLORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SHALL BE COVERED.
25. TURF ESTABLISHMENT SHALL BE PERFORMED OVER ALL DISTURBED SOIL, UNLESS THE AREA IS UNDER ACTIVE CONSTRUCTION, IT IS COVERED IN STONE OR SCHEDULED FOR PAVING WITHIN 30 DAYS. TEMPORARY SEEDING OR NON-LIVING SOIL PROTECTION OF ALL EXPOSED SOILS AND SLOPES SHALL BE INITIATED WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK IN AREAS TO BE LEFT LONGER THAN 30 DAYS.
26. IF CONSTRUCTION ACTIVITIES ARE COMPLETE OR HAVE BEEN TEMPORARILY HALTED FOR 7 DAYS, STABILIZATION ACTIVITIES WILL BE IMPLEMENTED WITHIN 3 DAYS.
27. TWO WEEKS BEFORE THE FALL SEEDING SEASON BEGINS (AUGUST 15 TO OCTOBER 15), THE CONTRACTOR SHALL SCHEDULE A MEETING WITH TOWN STAFF TO DISCUSS STABILIZING THE SITE FOR WINTER MONTHS. MEASURES SUCH AS MULCHING AND/OR SEEDING MAY BE REQUIRED.
28. MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK REMOVE ALL TEMPORARY SEDIMENT CONTROLS ONCE THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM THE TOWN AND/OR ENGINEER.
29. SEEDING MIXTURES:  
A. NYSDEC PERMANENT CONSTRUCTION AREA PLANTING MIXTURE #1 FROM THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (BLUE BOOK), LATEST EDITION.
30. POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES ARE NOT REQUIRED FOR THIS PROJECT SINCE THE PROJECT LIMITS OF DISTURBANCE IS UNDER 1 ACRE.
31. THE OWNER OR OPERATOR SHALL ENSURE THERE IS A TRAINED CONTRACTOR INSPECT ALL EROSION CONTROL MEASURES IN CONFORMANCE WITH PART IV SECTION B OF THE GENERAL PERMIT.
32. THE OWNER OR OPERATOR IS NOT REQUIRED TO HAVE A QUALIFIED INSPECTOR CONDUCT SITE INSPECTIONS BECAUSE THE PROJECT LIMITS OF DISTURBANCE IS UNDER 1 ACRE PER PART IV SECTION C SUBSECTION 1d OF THE GENERAL PERMIT.

SEDIMENT & EROSION CONTROL NARRATIVE

1. THE PROJECT INCLUDES THE INSTALLATION OF A 140± AGL MONOPINE WITH ASSOCIATED GROUND MOUNTED EQUIPMENT. ALL DISTURBED AREAS ARE TO BE SEEDED AND STABILIZED PRIOR TO THE INSTALLATION OF THE PROPOSED EQUIPMENT.
- THE PROPOSED PROJECT INVOLVES THE FOLLOWING CONSTRUCTION:  
A. CONSTRUCTION OF 140± AGL MONOPINE.  
C. CONSTRUCTION OF 41'x62' (2,542± SF) FENCED EQUIPMENT COMPOUND W/ GRAVEL SURFACE TREATMENT AND ASSOCIATED UTILITIES.  
D. CONSTRUCTION OF 100± 15' WIDE GRAVEL ACCESS DRIVE.  
E. CONSTRUCTION OF 10'x12' (120± SF) CONCRETE EQUIPMENT PAD.  
F. THE STABILIZATION OF PERVIOUS DISTURBED AREAS WITH PERMANENT GRASS TREATMENTS.
2. FOR THIS PROJECT, THERE ARE APPROXIMATELY 39,000± SF (0.89± AC.) OF THE SITE BEING DISTURBED.
3. A GEOTECHNICAL ENGINEERING REPORT IS TO BE COMPLETED FOR THIS PROJECT AND WILL BE AVAILABLE UNDER SEPARATE COVER.
4. IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED IN APPROXIMATELY 12 WEEKS.
5. REFER TO THE CONSTRUCTION SEQUENCING AND EROSION AND SEDIMENTATION NOTES FOR INFORMATION REGARDING SEQUENCING OF MAJOR OPERATIONS IN THE ON-SITE CONSTRUCTION PHASES.
6. EROSION AND SEDIMENTATION MEASURES ARE BASED UPON ENGINEERING PRACTICE, JUDGEMENT AND THE APPLICABLE SECTIONS OF THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (BLUE BOOK), LATEST EDITION.
7. DETAILS FOR THE TYPICAL EROSION AND SEDIMENTATION MEASURES ARE SHOWN ON PLAN SHEET EC-2 OR PROVIDED AS SEPARATE SUPPORT DOCUMENTATION FOR REVIEW IN THIS PLAN.
8. CONSERVATION PRACTICES TO BE USED DURING CONSTRUCTION AREA:  
A. STAGED CONSTRUCTION;  
B. MINIMIZE THE DISTURBED AREAS DURING CONSTRUCTION;  
C. STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE WITH TEMPORARY OR PERMANENT MEASURES;  
D. MINIMIZE IMPERVIOUS AREAS;  
E. UTILIZE APPROPRIATE CONSTRUCTION EROSION AND SEDIMENTATION MEASURES.

SUGGESTED CONSTRUCTION SEQUENCE

THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION ACTIVITIES IS PROJECTED BASED UPON ENGINEERING JUDGEMENT AND BEST MANAGEMENT PRACTICES. THE CONTRACTOR MAY ELECT TO ALTER THE SEQUENCING TO BEST MEET THE CONSTRUCTION SCHEDULE. THE EXISTING SITE ACTIVITIES AND WEATHER CONDITIONS. CONTRACTOR TO HIRE SURVEYOR FOR PROJECT STAKEOUT AS NEEDED THROUGHOUT CONSTRUCTION ACTIVITIES.

1. CONTACT THE OWNER TO SCHEDULE A PRE-CONSTRUCTION MEETING. PHYSICALLY FLAG THE TREES TO BE REMOVED IN THE FIELD AS NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING.
2. CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL MEASURES. THE MEETING SHOULD BE ATTENDED BY THE OWNER, THE OWNER REPRESENTATIVE(S), THE GENERAL CONTRACTOR, DESIGNATED SUB-CONTRACTORS AND THE PERSON, OR PERSONS, RESPONSIBLE FOR THE IMPLEMENTATION, OPERATION, MONITORING AND MAINTENANCE OF THE EROSION AND SEDIMENTATION MEASURES. THE CONSTRUCTION PROCEDURES FOR THE ENTIRE PROJECT SHALL BE REVIEWED AT THIS MEETING.
3. NOTIFY THE OWNER AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF ANY DEMOLITION, CONSTRUCTION OR REGULATED ACTIVITY ON THIS PROJECT. NOTIFY DIG SAFELY NEW YORK AY (800) 962-7962.
4. CLEAR AND GRUB AS REQUIRED, TO INSTALL THE PERIMETER EROSION AND SEDIMENTATION CONTROL MEASURES AND, IF APPLICABLE, TREE PROTECTION.
5. INSTALL CONSTRUCTION ENTRANCE.
6. PERFORM THE REMAINING CLEARING AND GRUBBING AS NECESSARY. REMOVE CUT WOOD AND STUMPS. CHIP BRUSH AND STOCKPILE FOR FUTURE USE OR REMOVE OFF-SITE. REMOVE AND DISPOSE OF DEMOLITION DEBRIS OFF-SITE.
7. TEMPORARILY SEED DISTURBED AREAS NOT UNDER CONSTRUCTION FOR THIRTY (30) DAYS OR MORE.
8. EXCAVATE AND GRADE NEW ACCESS DRIVE. INSTALL ACCESS ROAD DRAINAGE.
9. EXCAVATE AND ROUGH GRADE EQUIPMENT COMPOUND.
10. EXCAVATE FOR TOWER FOUNDATION & EQUIPMENT PAD.
11. FINALIZE ACCESS ROAD GRADES.
12. PREPARE SUBGRADE AND INSTALL FORMS, STEEL REINFORCING, & CONCRETE FOR TOWER FOUNDATION & EQUIPMENT PAD.
13. INSTALL BURIED GROUND RINGS, GROUND RODS, GROUND LEADS, UTILITY CONDUITS & UTILITY EQUIPMENT.
14. BACKFILL TOWER FOUNDATION.
15. ERECT TOWER.
16. INSTALL TELECOMMUNICATIONS EQUIPMENT ON TOWER & COMPOUND.
17. INSTALL COMPOUND GRAVEL SURFACES.
18. FINALIZE GRADES. INSTALL GRAVEL SURFACES. PAVE ACCESS DRIVE AREAS.
19. INSTALL FENCING.
20. CONNECT GROUNDING LEADS & LIGHTNING PROTECTION.
21. FINAL GRADE AROUND COMPOUND.
22. LOAM & SEED DISTURBED AREAS OUTSIDE COMPOUND, AS REQUIRED.
23. TEST ALL NEW EQUIPMENT.
24. AFTER THE SITE IS STABILIZED AND WITH THE APPROVAL OF THE OWNER, REMOVE PERIMETER EROSION AND SEDIMENTATION CONTROLS.
25. PERFORM FINAL PROJECT CLEANUP.

THE ESTIMATED TIME FOR THE COMPLETION OF THE WORK IS APPROXIMATELY TWELVE (12) WEEKS. THE EXACT PROCESS MAY VARY DEPENDING ON THE CONTRACTORS & SUBCONTRACTORS AVAILABILITY TO COMPLETE WORK & WEATHER DELAYS.

CONSTRUCTION OPERATION AND MAINTENANCE PLAN - BY CONTRACTOR

E&S MEASURE	INSPECTION SCHEDULE	MAINTENANCE REQUIRED
CONSTRUCTION ENTRANCE	DAILY	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT.
HAY BALES	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.2"	REPAIR/REPLACE WHEN FAILURE, OR OBSERVED DETERIORATION, IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE BALE.
SILT FENCE	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.2"	REPAIR/REPLACE WHEN FAILURE, OR OBSERVED DETERIORATION, IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.
SILT SACKS	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.2"	REPAIR/REPLACE WHEN FAILURE, OR OBSERVED DETERIORATION, IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE SACK.
TOPSOIL/BORROW STOCKPILES	DAILY	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.
WATER BARS	DAILY	REPAIR/FRESHAPE AS NECESSARY. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE WATER BAR.
TEMPORARY DIVERSION DITCHES	DAILY & WITHIN 24 HOURS OF RAINFALL > 0.2"	REPAIR/FRESHAPE AS NECESSARY. REVIEW CONDITIONS IF REPETITIVE FAILURES OCCUR.
TEMPORARY SEDIMENT TRAPS/BASINS	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.2"	REMOVE SEDIMENT WHEN IT REACHES 1/2 OF THE MINIMUM REQUIRED WET STORAGE VOLUME.
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.2"	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.

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.

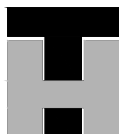
THE OWNER OR OPERATOR SHALL HAVE EACH OF THE CONTRACTORS AND SUBCONTRACTORS IDENTIFIED ABOVE SIGN A COPY OF THE FOLLOWING CERTIFICATION STATEMENT BELOW BEFORE THEY COMMENCE ANY CONSTRUCTION ACTIVITY:

"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 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 VIOLATIONS"

PRINTED NAME \_\_\_\_\_ DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

ALL CONTRACTORS AND SUB-CONTRACTORS SHALL SIGN THE ABOVE STATEMENT AND THEY WILL BE STORED ON-SITE.



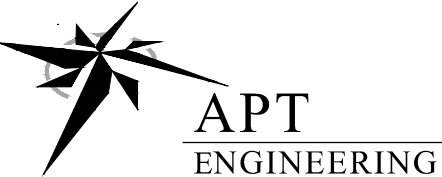
HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810  
(203) 297-6345



4 CENTEROCK ROAD  
WEST NYACK, NY 10994



340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960



567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385 PH: (860)-663-1697  
WWW.ALLPOINTS2TECH.COM FAX: (860)-663-0935

PERMITTING DOCUMENTS

NO	DATE	REVISION
0	08/13/20	FOR REVIEW: RCB
1	08/14/20	CLIENT REVS: RCB
2	11/03/20	TOWN COMMENTS: RCB
3	12/22/20	TOWN COMMENTS: RCB
4	01/25/21	TOWN COMMENTS: RCB
5	03/19/21	TOWN COMMENTS: RCB
6	07/12/21	TOWN COMMENTS: RCB
7	07/13/21	TOWN COMMENTS: RCB
8	07/14/21	TOWN COMMENTS: RCB

DESIGN PROFESSIONALS OF RECORD

PROF: SCOTT M. CHASSE P.E.  
COMP: APT ENGINEERING  
ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

DEVELOPER: HOMELAND TOWERS, LLC  
ADDRESS: 9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810

NOTE:  
IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 (2) FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED. THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THE SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

HOMELAND TOWERS  
MOUNT KISCO

SITE 180 S. BEDFORD RD.  
ADDRESS: MT. KISCO, NY 10594

APT FILING NUMBER: NY283830

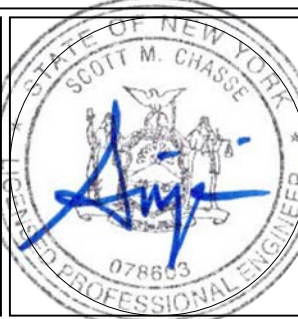
DATE: 08/13/20	DRAWN BY: CSH
	CHECKED BY: RCB

SHEET TITLE:

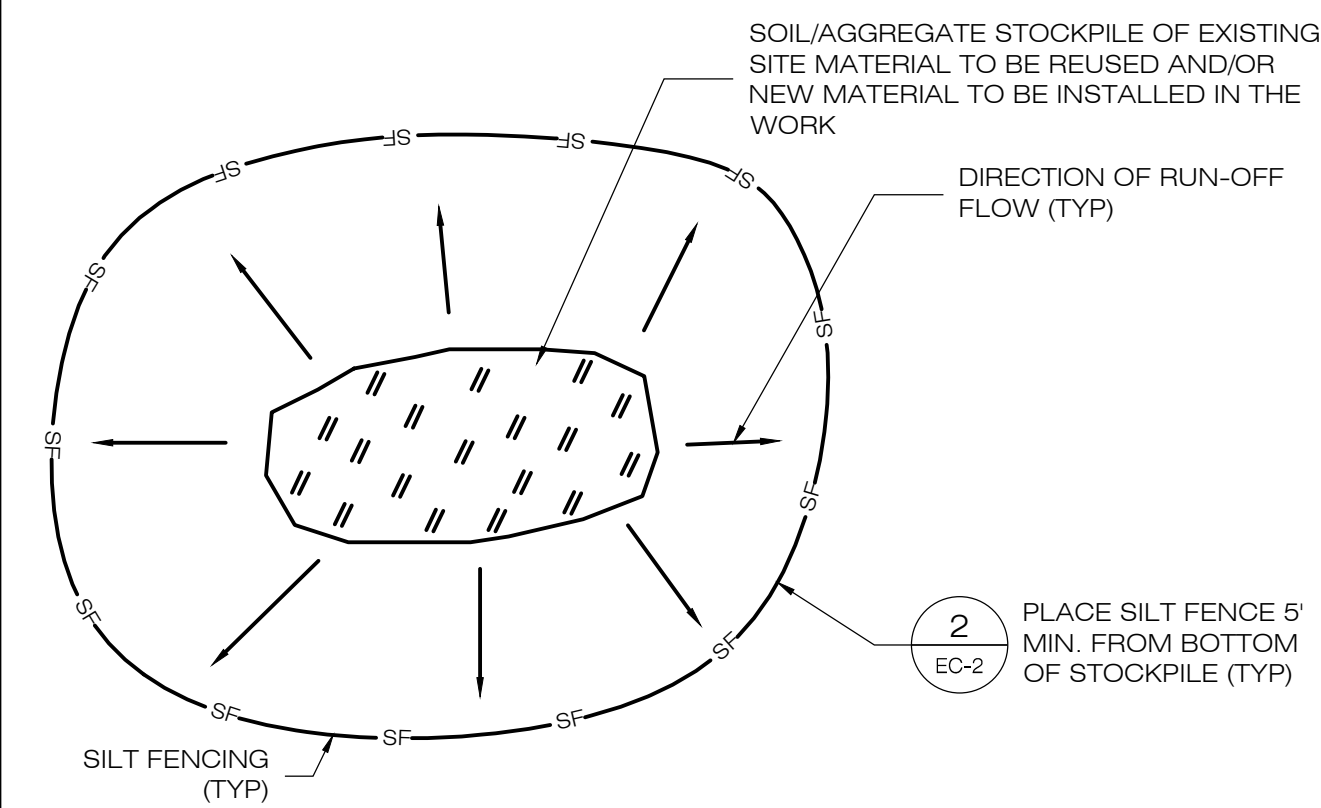
EROSION CONTROL  
NOTES

SHEET NUMBER:

EC-1







- NOTES:
1. ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
  2. SOIL/AGGREGATE STOCKPILE SITES TO BE WHERE SHOWN ON THE DRAWINGS AND ARE NOT PERMITTED ON SLOPES GREATER THAN 10%.
  3. RESTORE STOCKPILE SITES TO PRE-EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.
  4. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
  5. ANY SOIL IN STOCKPILES IN EXCESS OF SEVEN (7) DAYS SHALL BE SEEDED AND MULCHED OR COVERED.

## 1 TEMPORARY STOCKPILE DETAIL

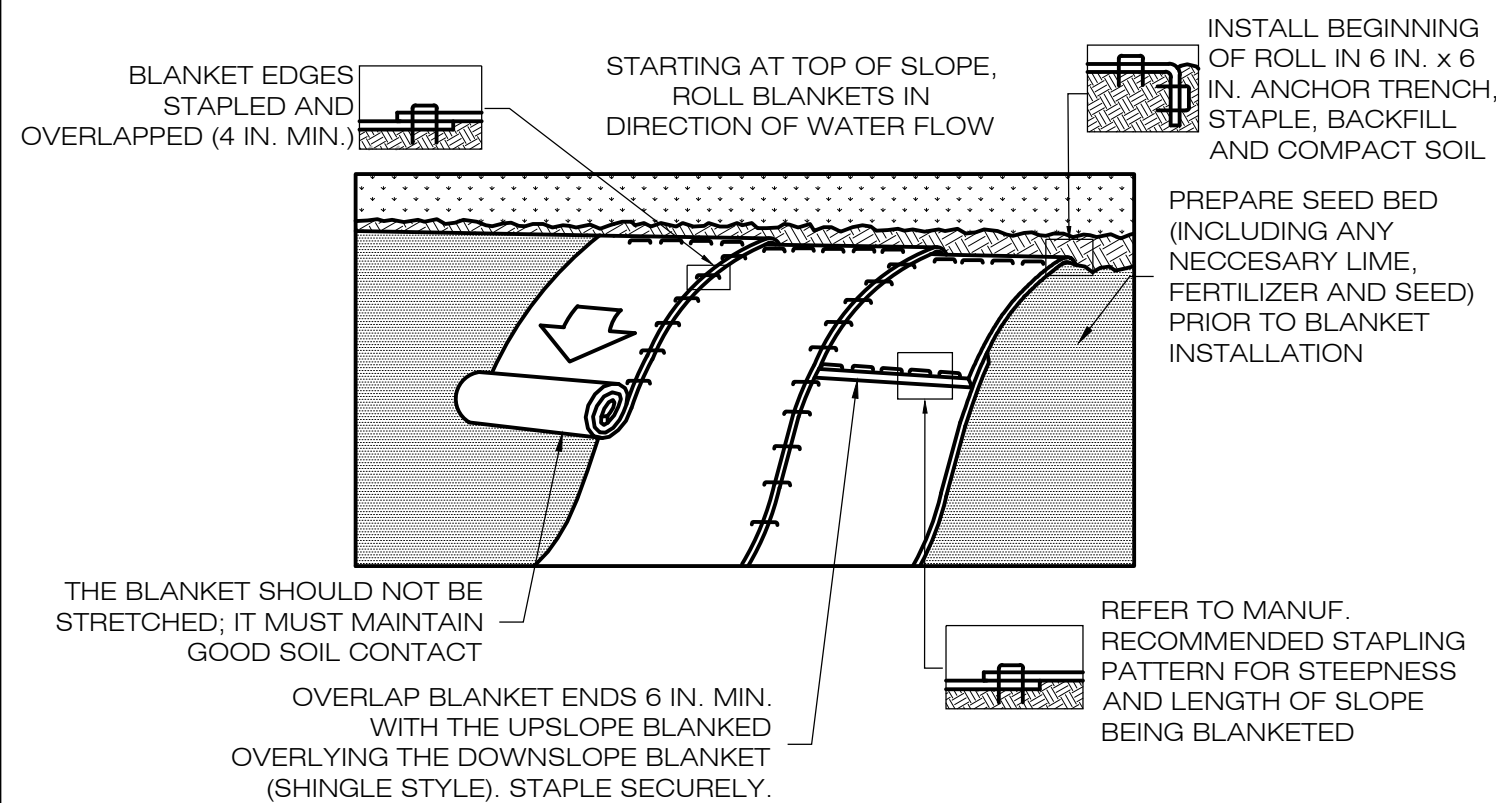
EC-2 SCALE : N.T.S.

### SEQUENCE OF CONSTRUCTION

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

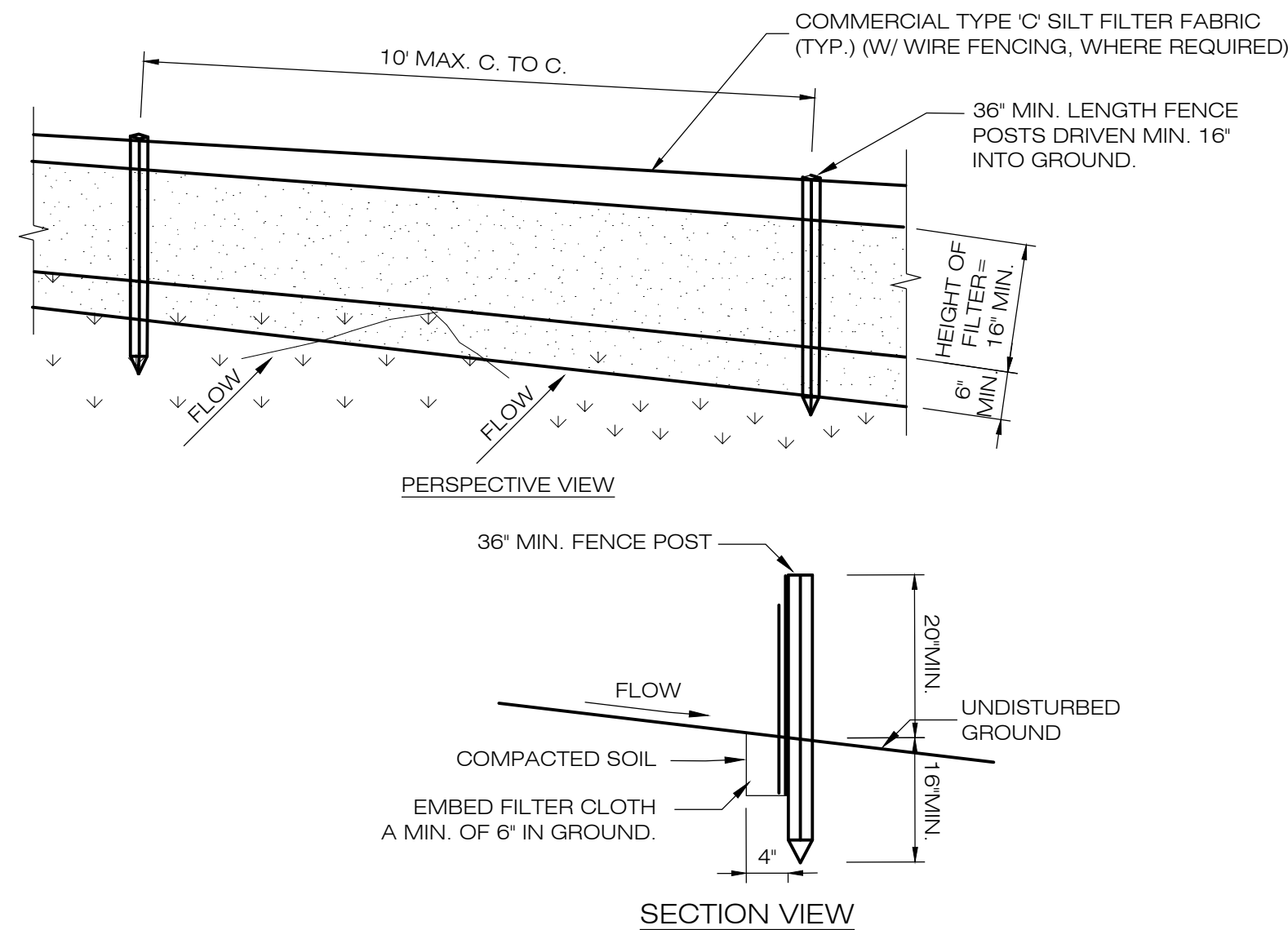
### NOTES:

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



## 4 EROSION CONTROL BLANKET STEEP SLOPES

EC-2 SCALE : N.T.S.

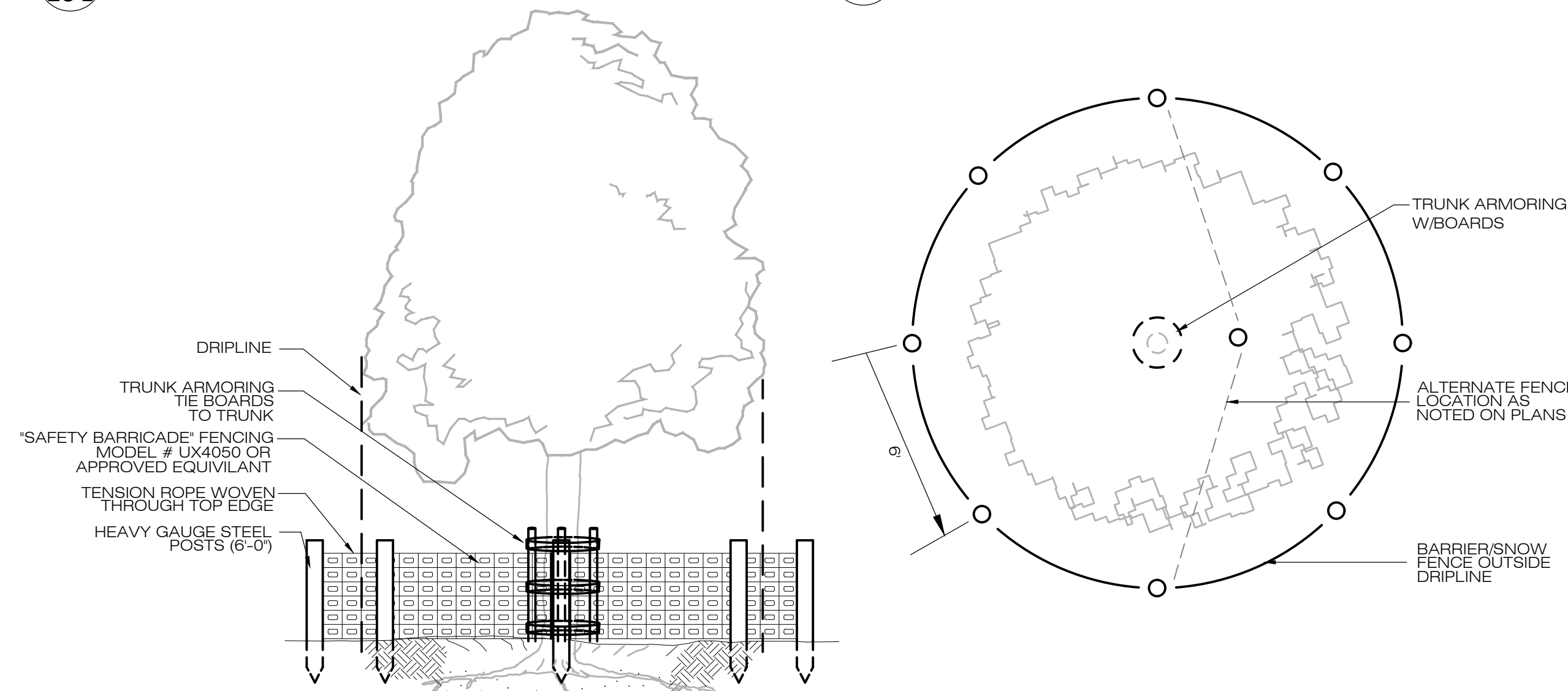


### CONSTRUCTION SPECIFICATIONS

1. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

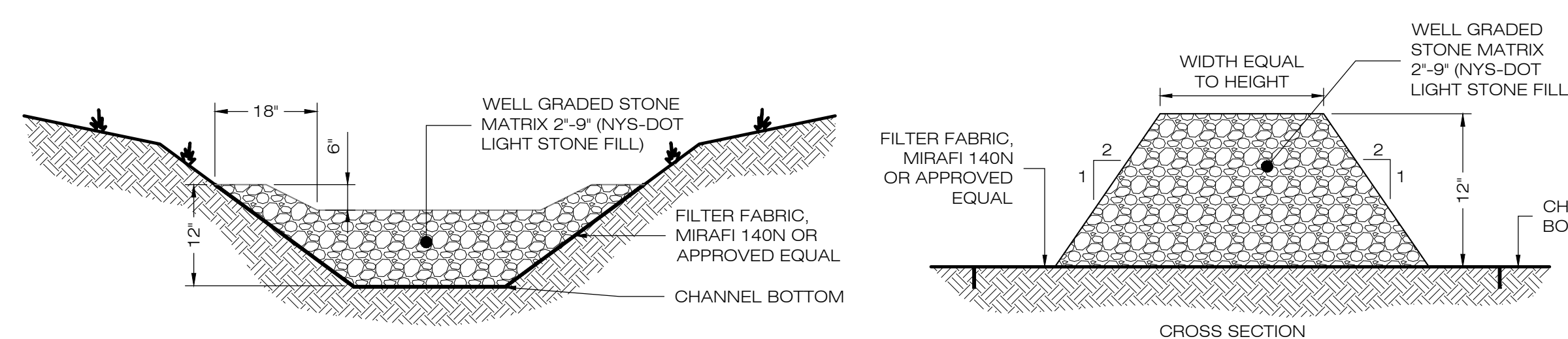
## 2 GEOTEXTILE SILT FENCE DETAIL

EC-2 SCALE : N.T.S.



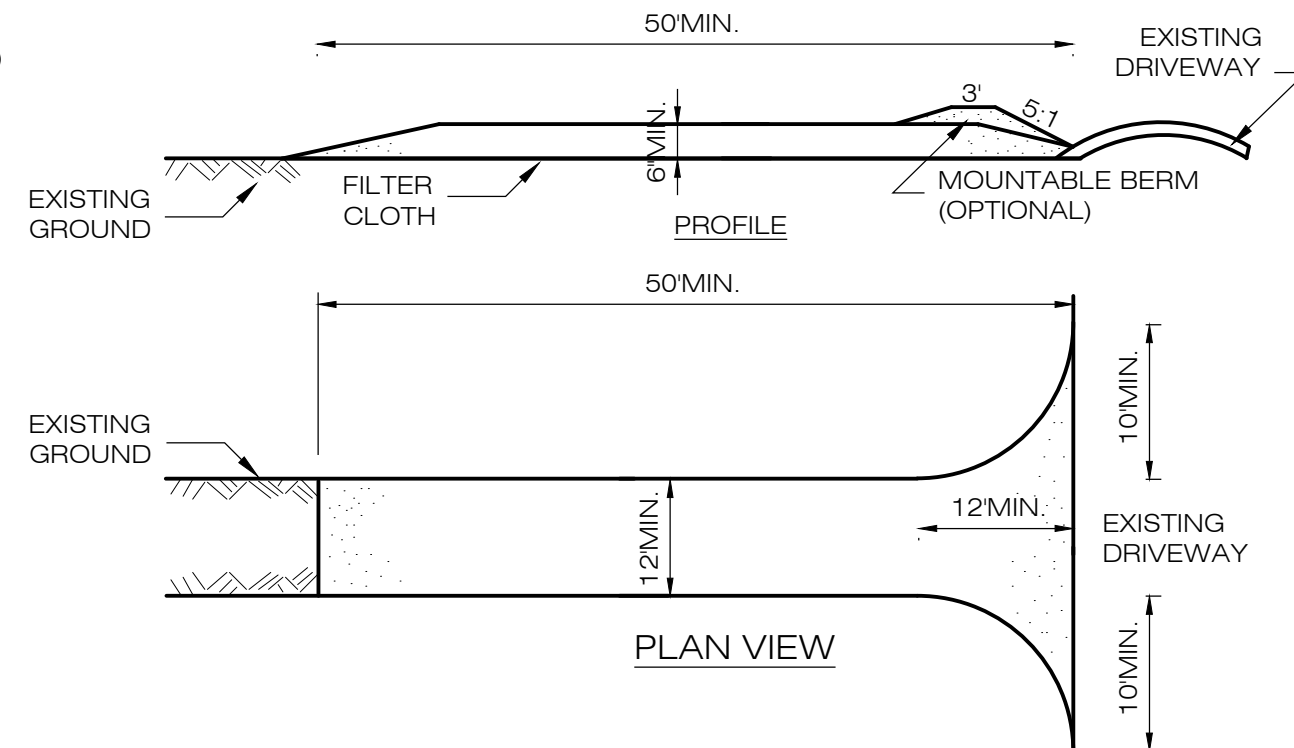
## 5 TREE PROTECTION

EC-2 SCALE : N.T.S.



## 7 STONE CHECK DAM

EC-2 SCALE : N.T.S.

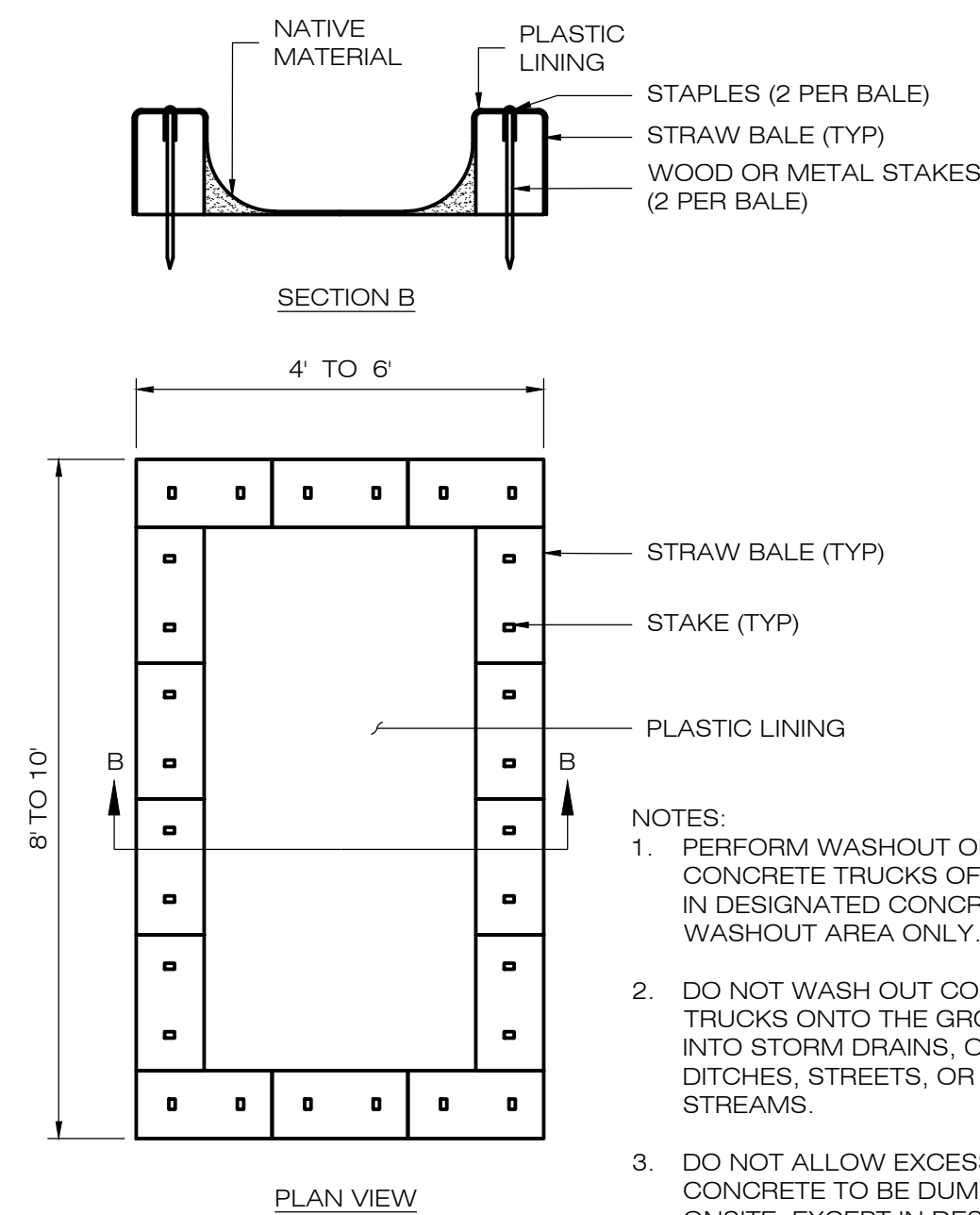


### CONSTRUCTION SPECIFICATIONS:

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.

## 3 CONSTRUCTION ENTRANCE DETAIL

EC-2 SCALE : N.T.S.

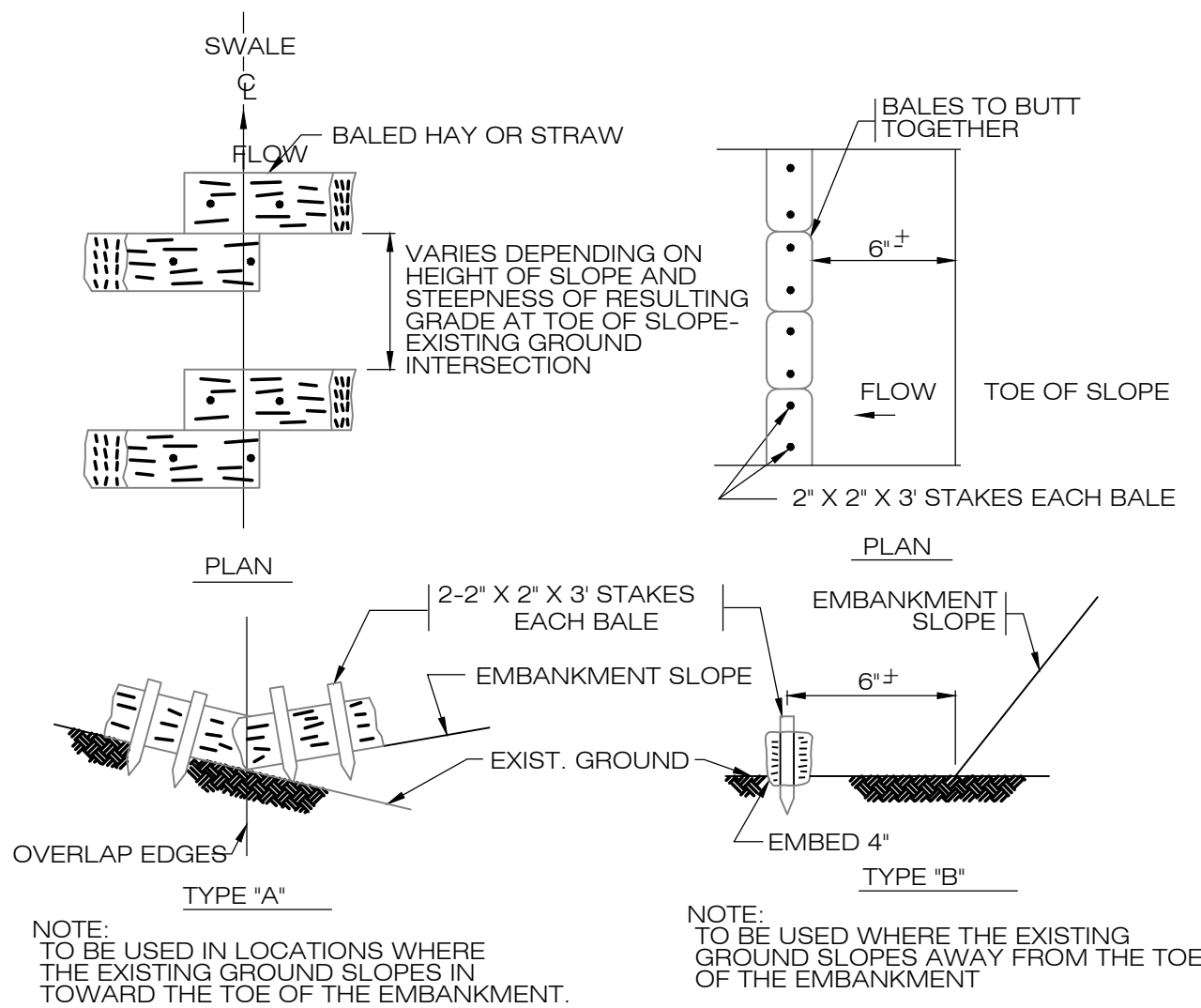


### NOTES:

1. PERFORM WASHOUT OF CONCRETE TRUCKS OFFSITE OR IN DESIGNATED CONCRETE WASHOUT AREA ONLY.
2. DO NOT WASH OUT CONCRETE TRUCKS ONTO THE GROUND, OR INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
3. DO NOT ALLOW EXCESS CONCRETE TO BE DUMPED ONSITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREA.

## 6 CONCRETE WASHOUT DETAIL

EC-2 SCALE : N.T.S.



## 8 HAYBALE CHECK DAM SEDIMENTATION CONTROL BARRIER

EC-2 SCALE : N.T.S.

HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810  
(203) 297-6345

4 CENTEROCK ROAD  
WEST NYACK, NY 10994

340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960

567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385  
PH: (860)-663-1697  
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

PERMITTING DOCUMENTS		
NO	DATE	REVISION
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6	07/12/21	TOWN COMMENTS: RCB
7	07/13/21	TOWN COMMENTS: RCB
8	07/14/21	TOWN COMMENTS: RCB

**DESIGN PROFESSIONALS OF RECORD**

PROF. SCOTT M. CHASSE P.E.  
COMP: APT ENGINEERING  
ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

DEVELOPER: HOMELAND TOWERS, LLC  
ADDRESS: 9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810

NOTE:  
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**HOMELAND TOWERS MOUNT KISCO**

SITE 180 S. BEDFORD RD.  
ADDRESS: MT. KISCO, NY 10594

APT FILING NUMBER: NY283830

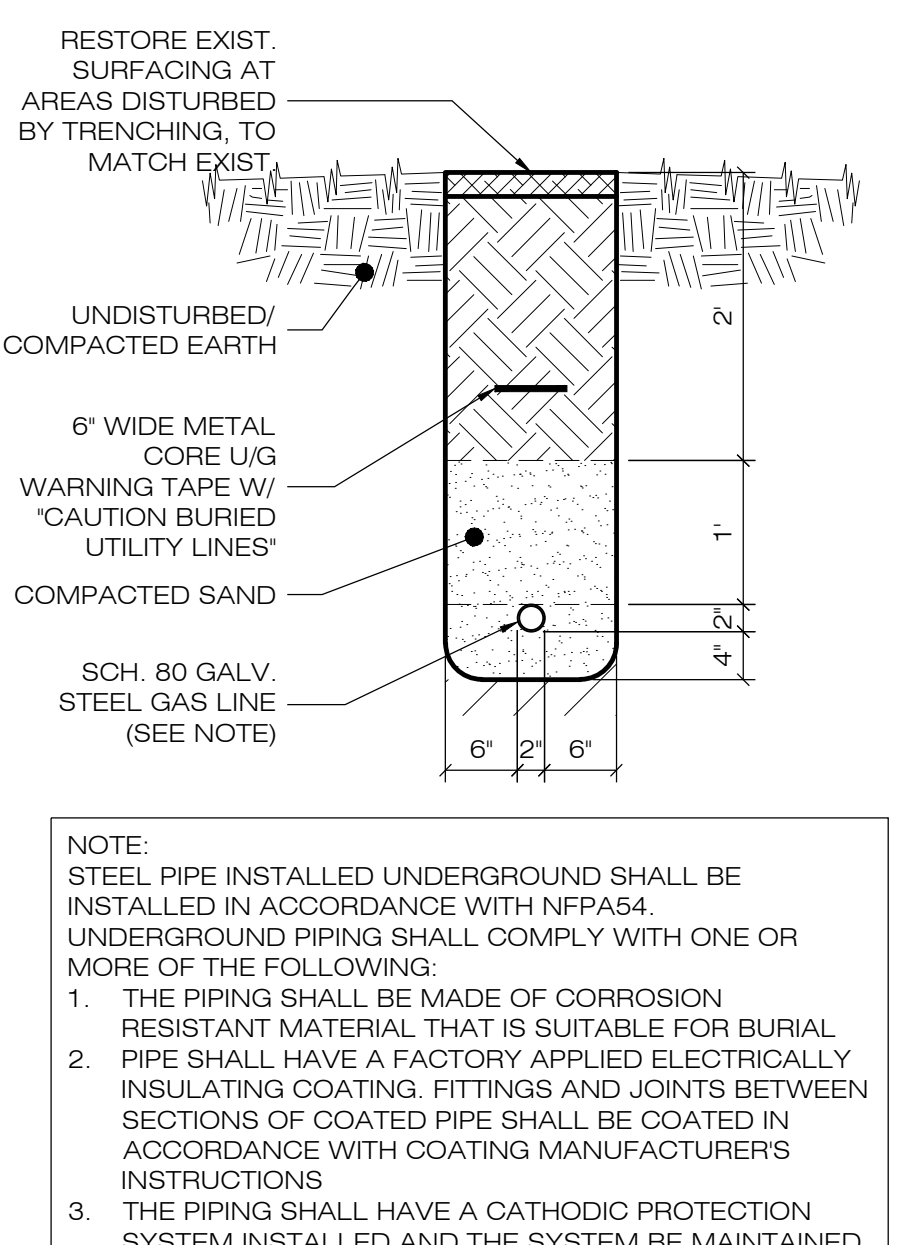
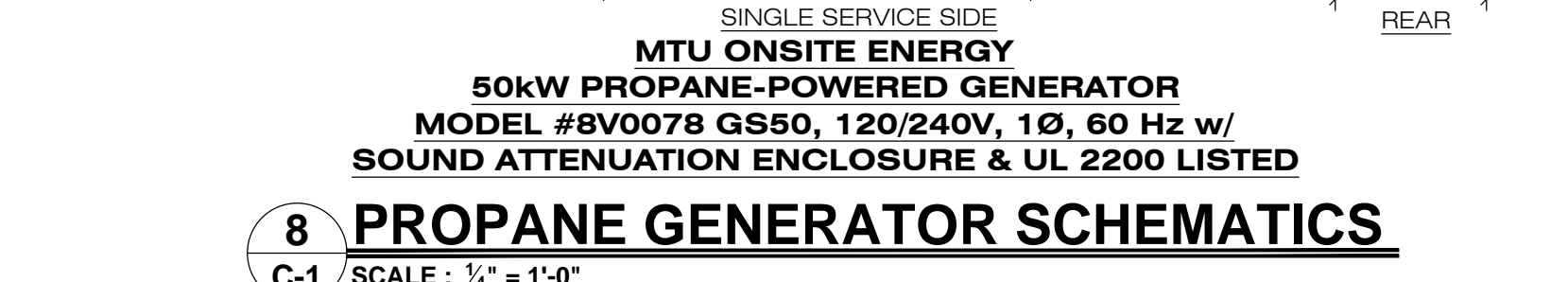
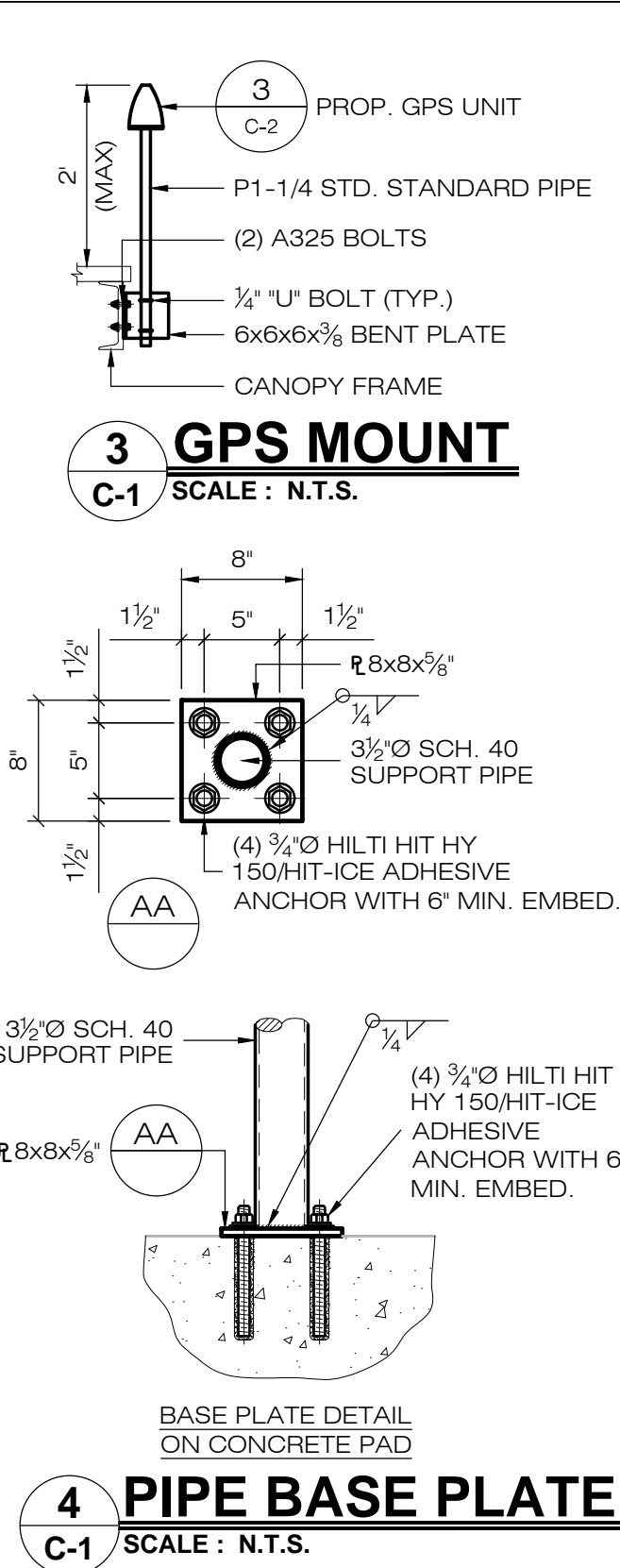
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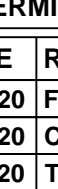

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**EROSION CONTROL DETAILS**

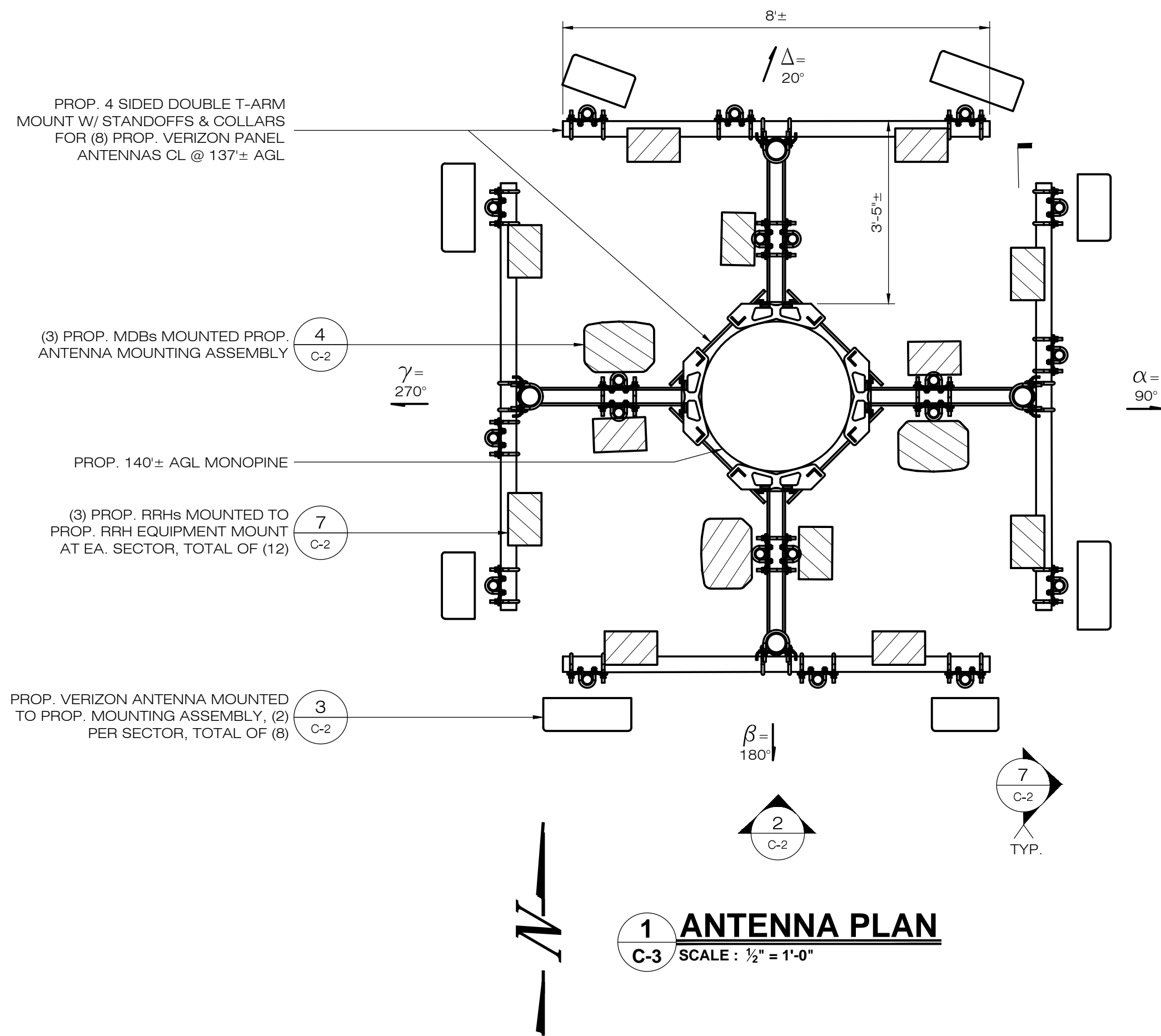
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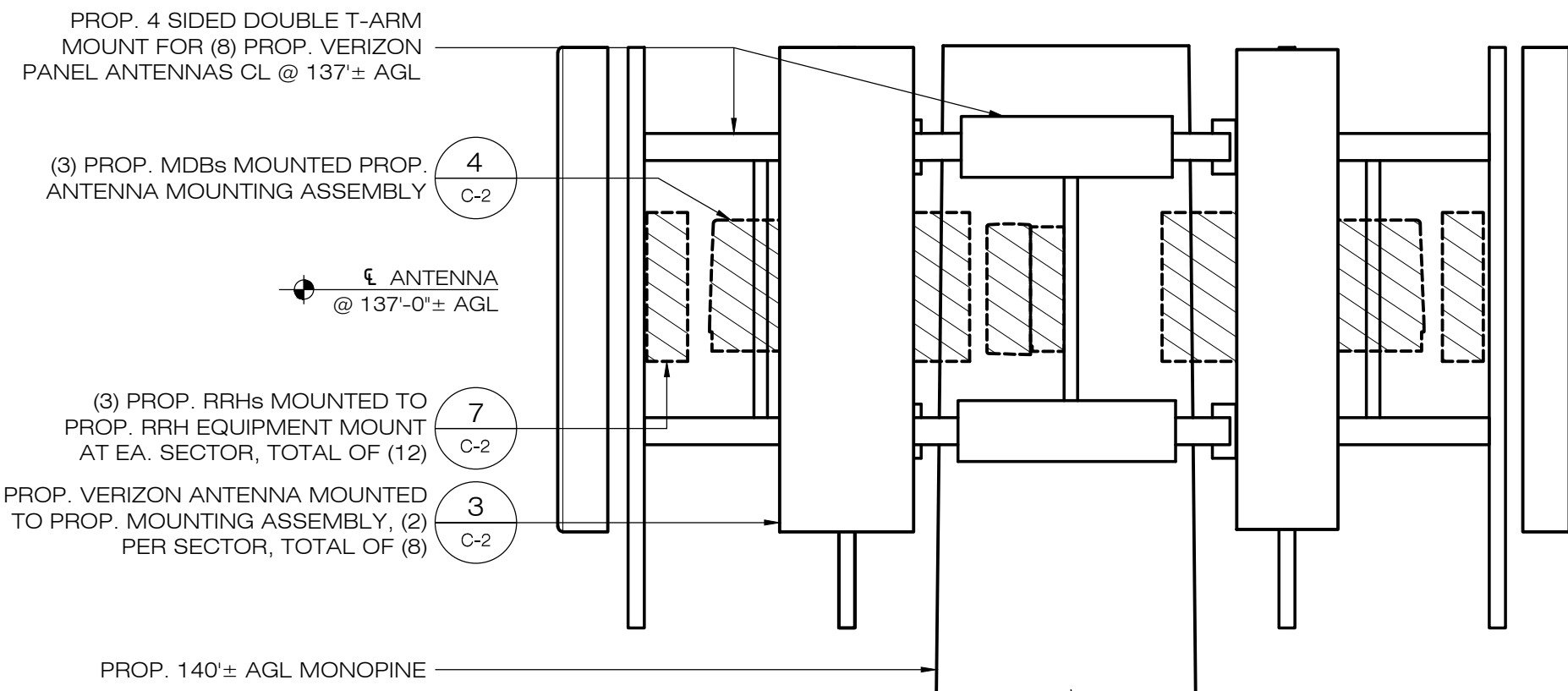


 <b>HOMELAND TOWERS, LLC</b> 9 HARMONY STREET 2nd FLOOR DANBURY, CT 06810 (203) 297-6345		
 <b>4 CENTEROCK ROAD</b> <b>WEST NYACK, NY 10994</b>		
 <b>340 MOUNT KEMBLE AVENUE</b> <b>MORRISTOWN, NEW JERSEY 07960</b>		
 <b>APT</b> ENGINEERING		
567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385      PH: (860)-663-1697 WWW.ALLPOINTSTECH.COM      FAX: (860)-663-0935		
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<b>PROF: SCOTT M. CHASSE P.E.</b> <b>COMP: APT ENGINEERING</b> <b>ADD: 567 VAUXHALL STREET</b> <b>EXTENSION - SUITE 311</b> <b>WATERFORD, CT 06385</b>		
<b>DEVELOPER: HOMELAND TOWERS, LLC</b> <b>ADDRESS: 9 HARMONY STREET</b> <b>2ND FLOOR</b> <b>DANBURY, CT 06810</b>		
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<b>HOMELAND TOWERS</b> <b>MOUNT KISCO</b>		
<b>SITE 180 S. BEDFORD RD.</b> <b>ADDRESS: MT. KISCO, NY 10594</b>		
<b>APT FILING NUMBER: NY283830</b>		
<b>DATE:</b> 08/13/20	<b>DRAWN BY:</b> CSH	
	<b>CHECKED BY:</b> RCB	
<b>SHEET TITLE:</b>		
<b>VERIZON EQUIPMENT</b> <b>PLAN &amp; DETAILS</b>		
<b>SHEET NUMBER:</b>		
<b>C-1</b> 		

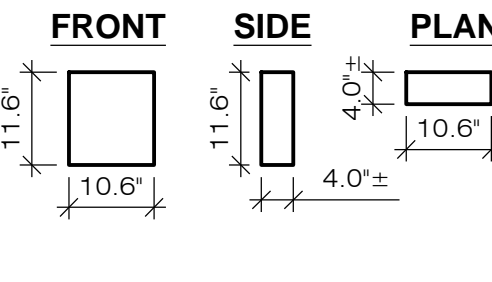
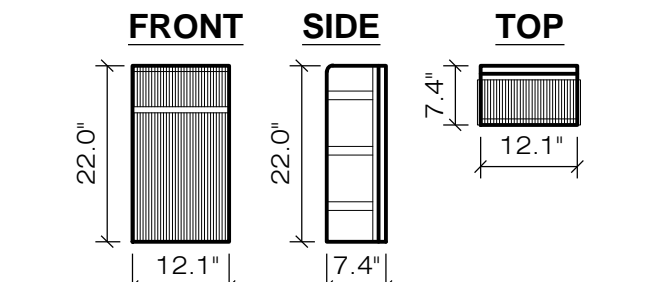
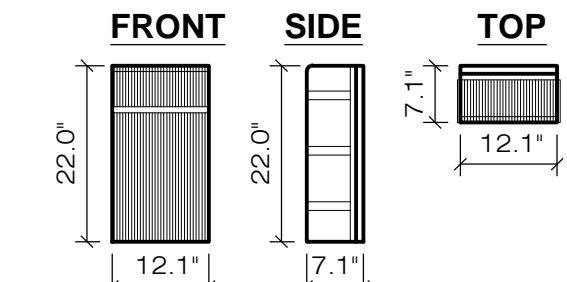
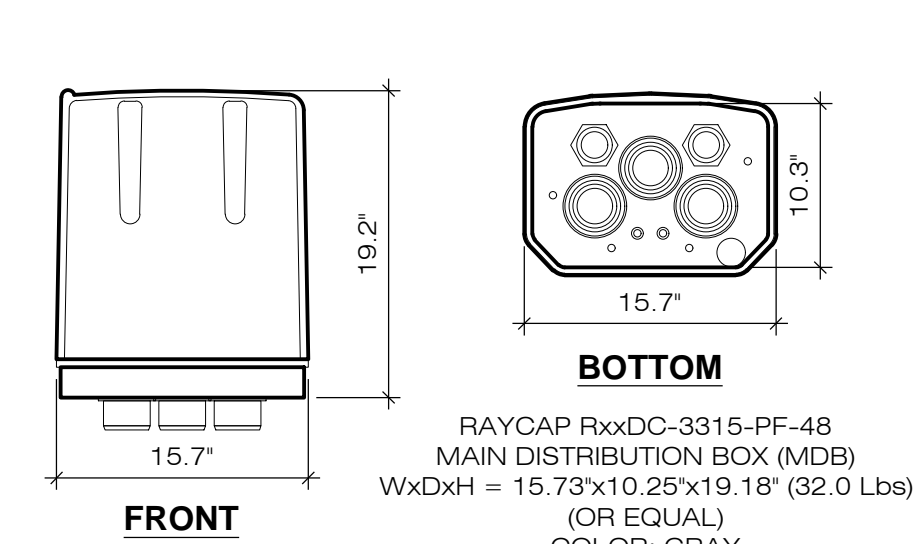
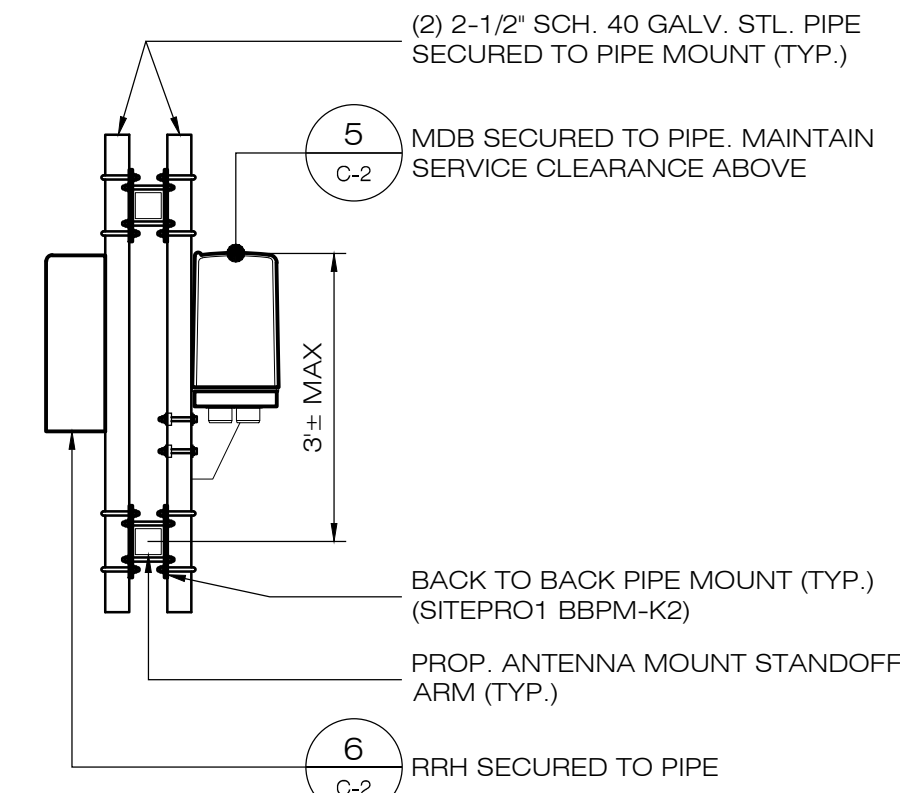
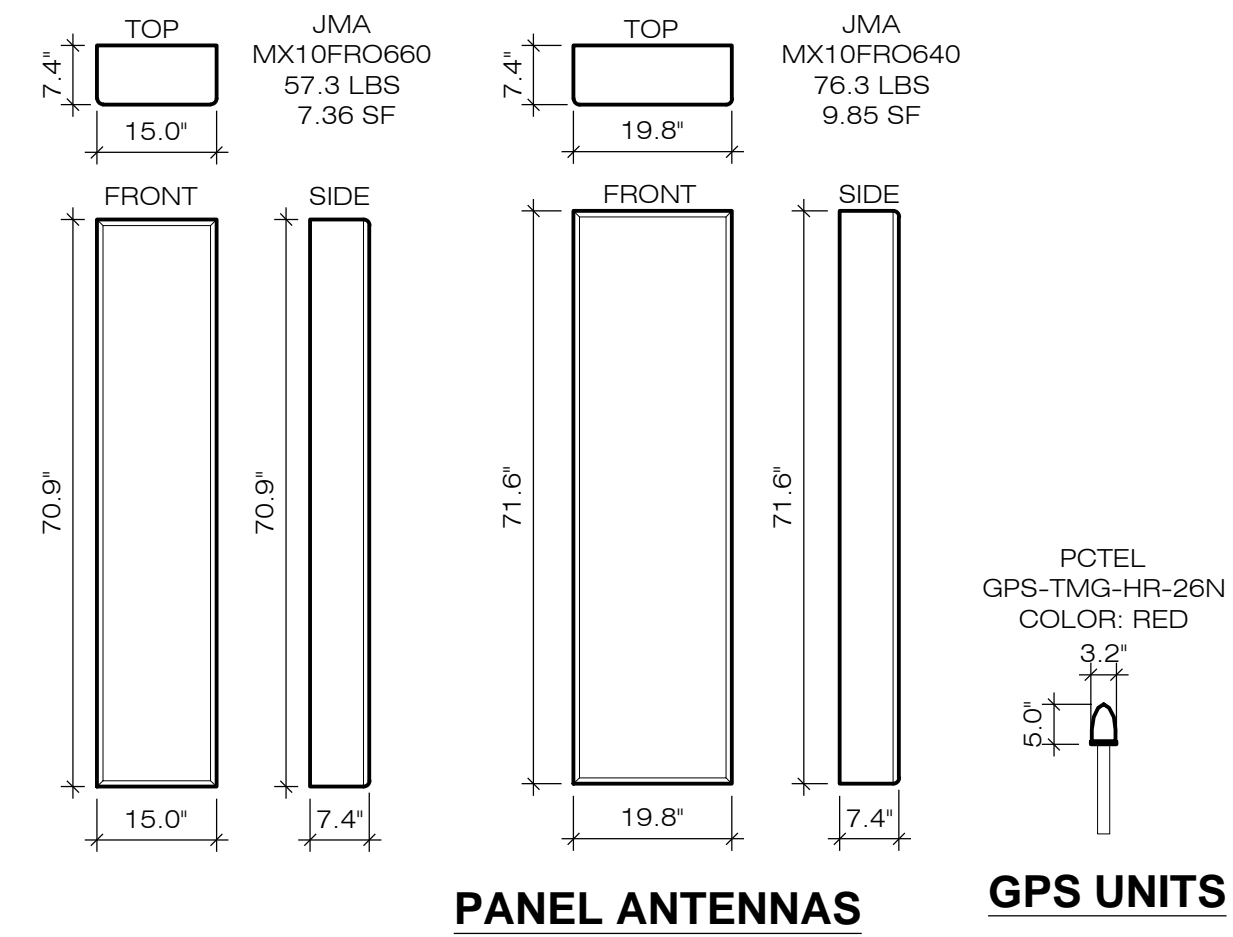




NOTE:  
PAINT MOUNTS, ANTENNAS, CABLING & APPURTENANCES TO MATCH TREE & INSTALL ANTENNA SOCKS ON ALL ANTENNAS.

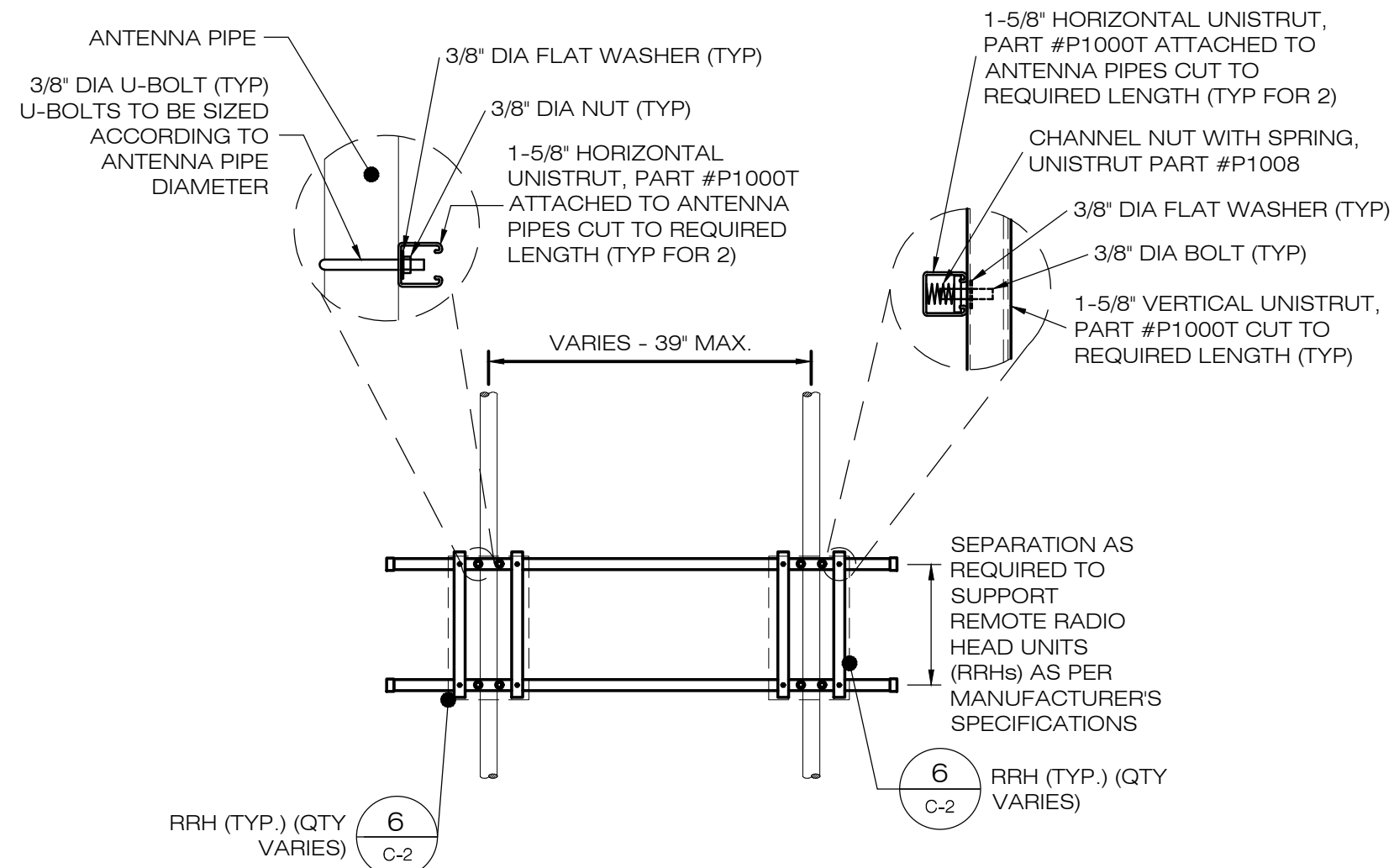


NOTE:  
PAINT MOUNTS, ANTENNAS, CABLING & APPURTENANCES TO MATCH TREE & INSTALL ANTENNA SOCKS ON ALL ANTENNAS.



- NOTES:
- DIMENSIONS SUBJECT TO CHANGE BASED UPON AVAILABILITY AT TIME OF CONSTRUCTION.
  - MANUFACTURER'S RECOMMENDED RRH CLEARANCES: FRONT: 36"; SIDES: 12"; BOTTOM: 24"
  - SFPs ARE PROTOCOL SPECIFIC. THE CONNECTIONS BETWEEN RRHs AND BBUs ARE CPRI CONNECTIONS, AND REQUIRE CPRI SFP (ON BOTH ENDS). THE CONNECTIONS BETWEEN BBUs AND 7705 ARE ETHERNET AND REQUIRE ETHERNET SFP (ON BOTH ENDS).

6 RRH EQUIPMENT  
C-2 SCALE: 1/2" = 1'-0"



- NOTES:
- ALL EXPOSED UNISTRUT ENDS TO BE CAPPED WITH UNISTRUT CAP (MODEL #P2860-10).
  - ONLY 1-5/8" UNISTRUT TO BE USED FOR RACK CONSTRUCTION.
  - EXTEND UNISTRUT AS NEEDED BASED ON LENGTH OF ANTENNA SECTOR. DO NOT CANTILEVER UNISTRUT FOR MORE THAN 24" BEYOND ANTENNA MAST.
  - FOR SPANS GREATER THAN 5'-0" USE UNISTRUT PART #P1001T.

7 MDB/RRH EQUIPMENT ANTENNA MOUNT  
C-2 SCALE: 1/2" = 1'-0"

HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810  
(203) 297-6345

verizon  
4 CENTEROCK ROAD  
WEST NYACK, NY 10994

at&t  
340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960

APT  
ENGINEERING

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DESIGN PROFESSIONALS OF RECORD

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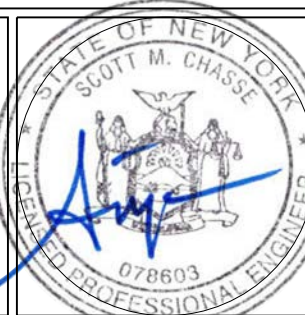
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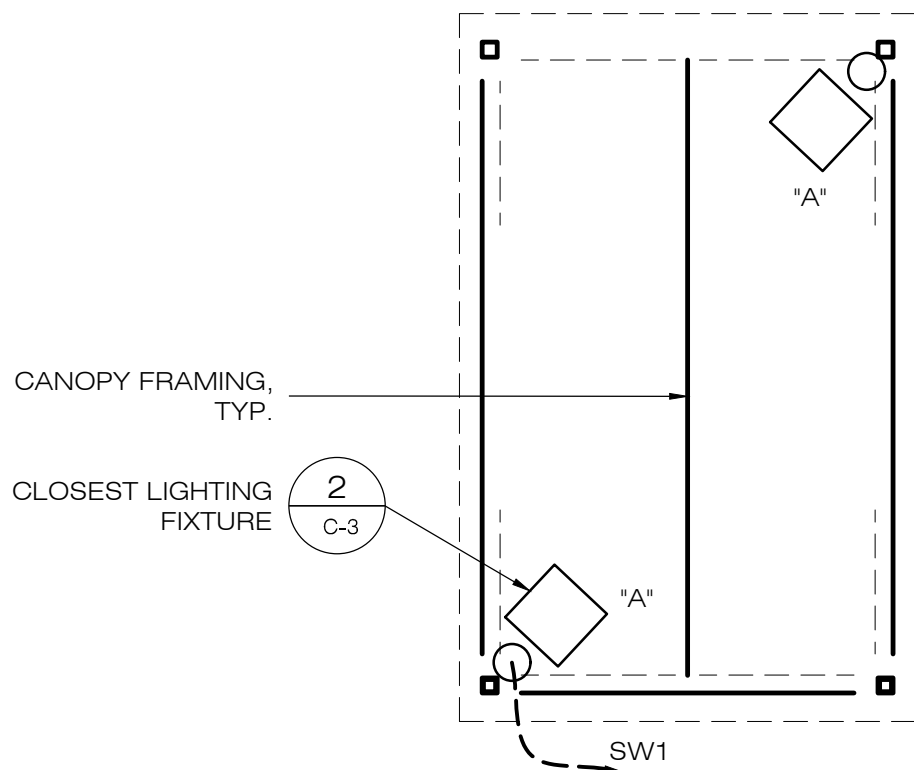
VERIZON ANTENNA  
PLAN & DETAILS

SHEET NUMBER:

C-2







- SW1:
- 15A, 120V, 500W SINGLE POLE 4 HOUR MANUAL TIMER: LEVITON MANUFACTURING CO., INC. MODEL #LTB-1LZ
  - OUTLET BOX: RAB LIGHTING INC. MODEL #B3B
  - 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 AT APPROXIMATELY 9± AGL.

## 1 CANOPY LIGHTING

SCALE : N.T.S.

## WPLEDFC52NW



LED 52W Wallpacks. 3 cutoff options. Patent Pending thermal management system. 100,000 hour L70 lifespan. 5-year, no-compromise warranty.

Color: White Weight: 17.6 lbs

### Technical Specifications

#### Listings

##### UL Listing:

Suitable for wet locations

##### DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities.

DLC Product Code: PX2ZLS6K

##### IESNA LM-79 & IESNA 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.

##### Electrical

###### THD:

6.19% at 120V, 7.09% at 277V

###### Power Factor:

99.2% at 120V, 97.3% at 277V

###### Driver:

Constant Current, 720mA, Class 2, 100 - 277V, 50 - 60 Hz, 100 - 277VAC .8 Amps.

###### Surge Protection:

6kV

###### LED Characteristics

###### Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

###### LEDs:

Two (2) multi-chip, high-output, long-life LEDs

#### Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

#### Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period

#### Color Uniformity:

RAB's range of CCT (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 40°C (104°F)

##### Cold Weather Starting:

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:

Full cutoff (0°)

#### 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.

#### Other

##### Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at

##### 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

RAB Outdoor

Project:	Type:
Prepared By:	Date:

Driver Info	LED Info
Type: Constant Current	Watts: 52W
120V: 0.51A	Color Temp: 4000K (Neutral)
208V: 0.33A	Color Accuracy: 72 CRI
240V: 0.29A	L70 Lifespan: 100,000
277V: 0.24A	Lumens: 7,256
Input Watts: 56W	Efficacy: 130 LPW
Efficiency: 93%	

## WPLEDFC52NW

RAB Outdoor

### Technical Specifications (continued)

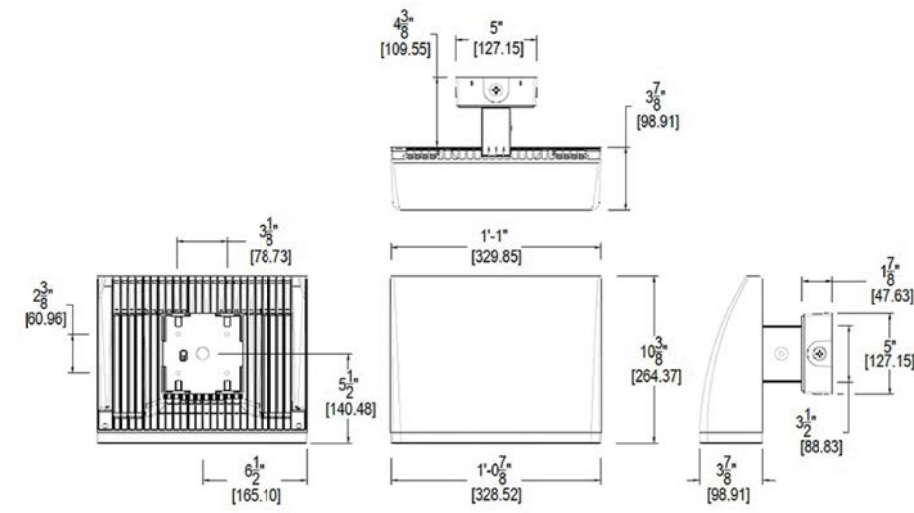
#### Other

**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:**  
B1 U0 G1

### Dimensions

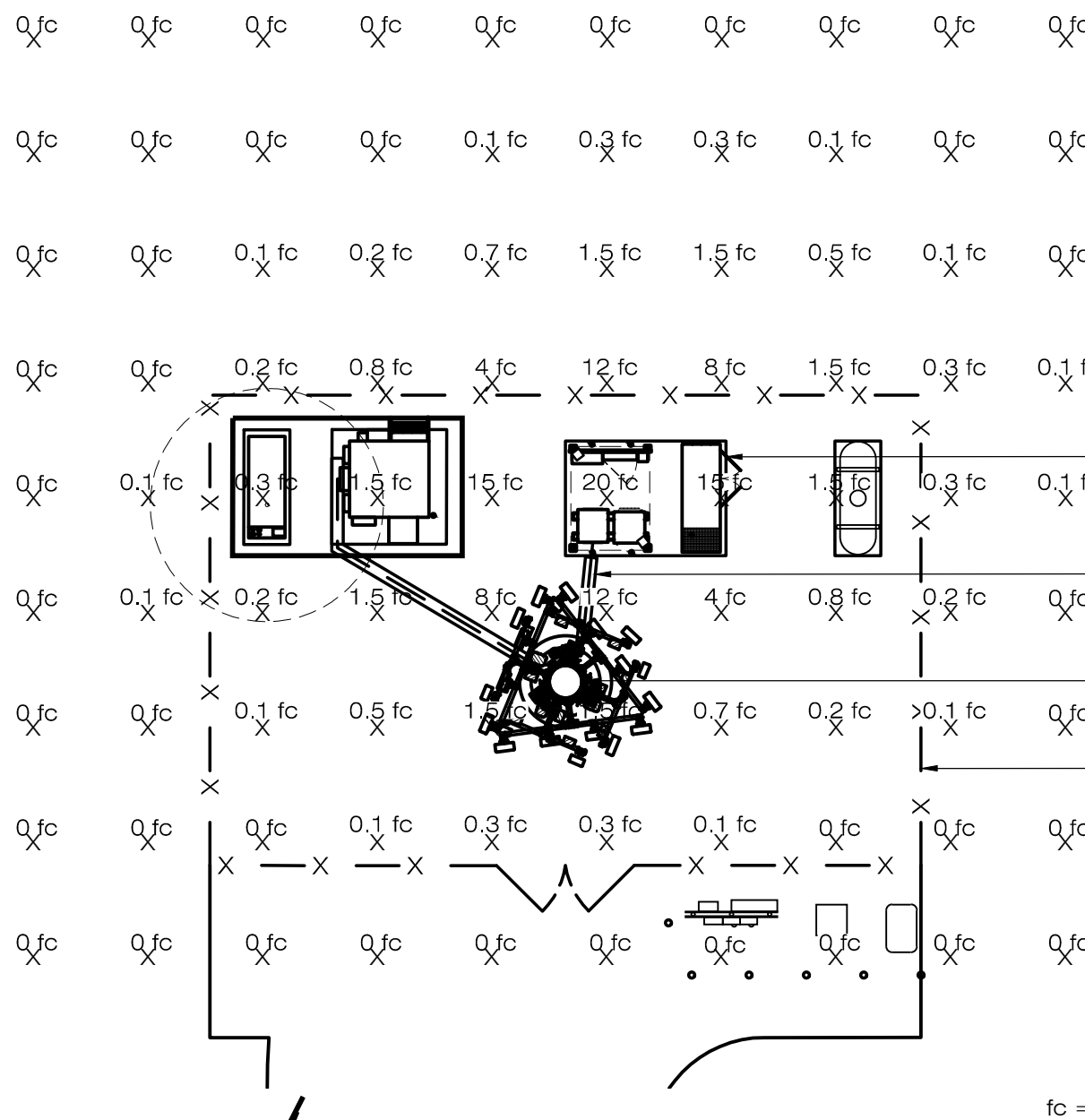


### Features

- 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 aluminum housing and external fins
- Replaces 250W MH
- Traditional wallpack 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	FC	52	N	W	A	A	A
	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	Blank = Standard USA = BAA Compliant



## 3 LIGHTING SPILL PLAN

SCALE : 1" = 15'

Need help? Tech help line: (888) RAB-1000 Email: sales@rablighting.com Website: www.rablighting.com  
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## 2 LIGHTING CUTSHEETS

SCALE : NONE

Need help? Tech help line: (888) RAB-1000 Email: sales@rablighting.com Website: www.rablighting.com  
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9 HARMONY STREET  
2nd FLOOR  
DANBURY, CT 06810  
(203) 297-6345



4 CENTEROCK ROAD  
WEST NYACK, NY 10994



340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960



567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385 PH: (860)-663-1697  
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### DESIGN PROFESSIONALS OF RECORD

#### PROF: SCOTT M. CHASSE P.E.

#### COMP: APT ENGINEERING

ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

#### DEVELOPER: HOMELAND TOWERS, LLC

ADDRESS: 9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810

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### HOMELAND TOWERS MOUNT KISCO

SITE 180 S. BEDFORD RD.  
ADDRESS: MT. KISCO, NY 10594

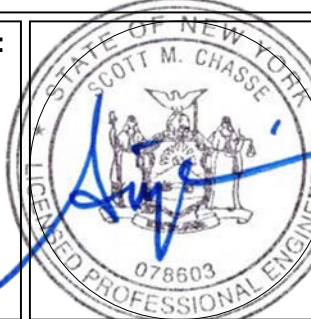
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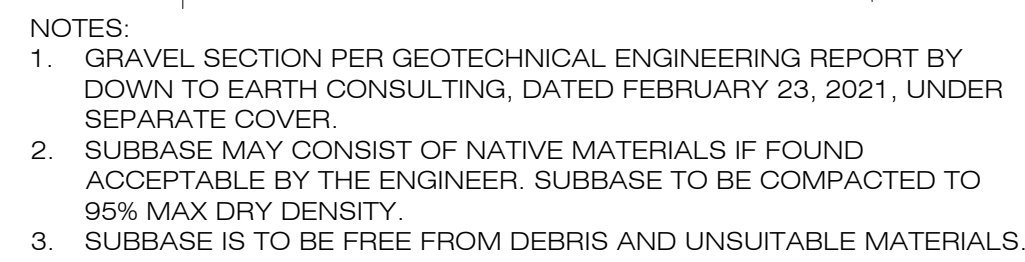
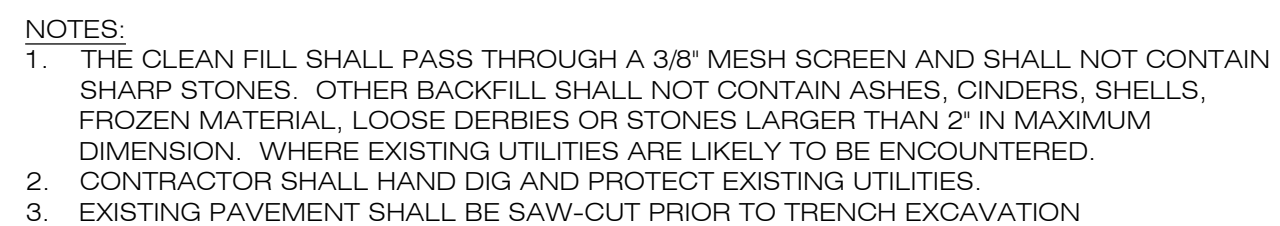
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VERIZON EQUIPMENT  
LIGHTING PLAN &  
DETAILS

SHEET NUMBER:

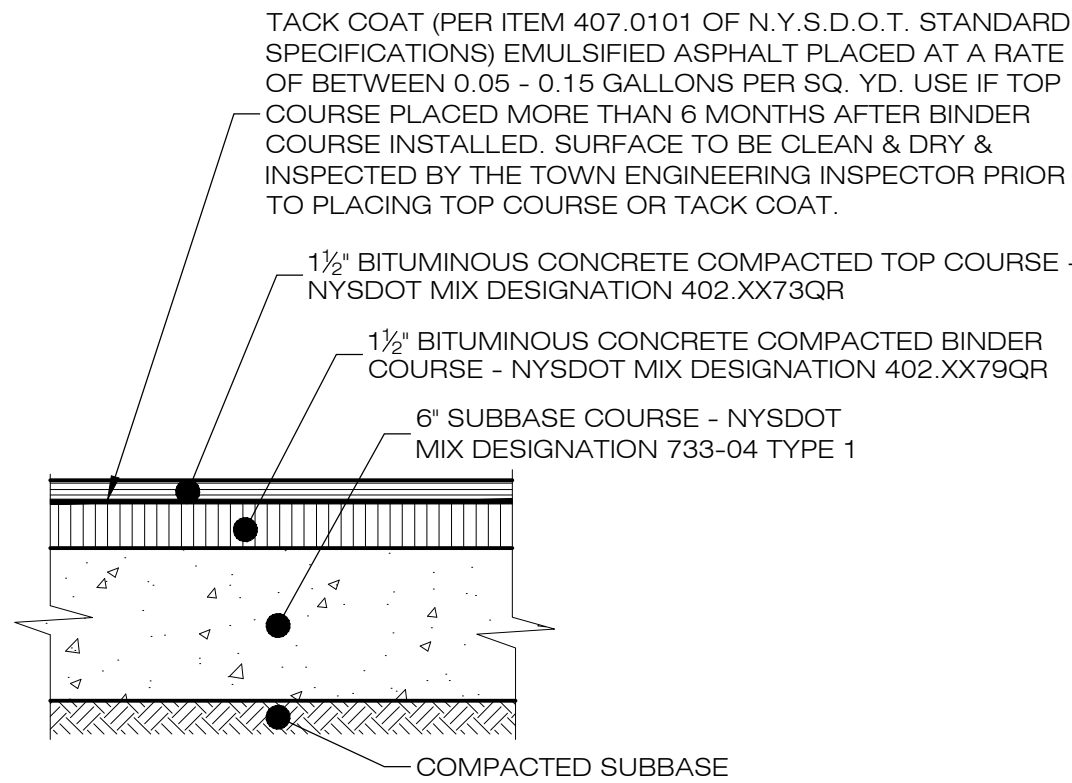
C-3







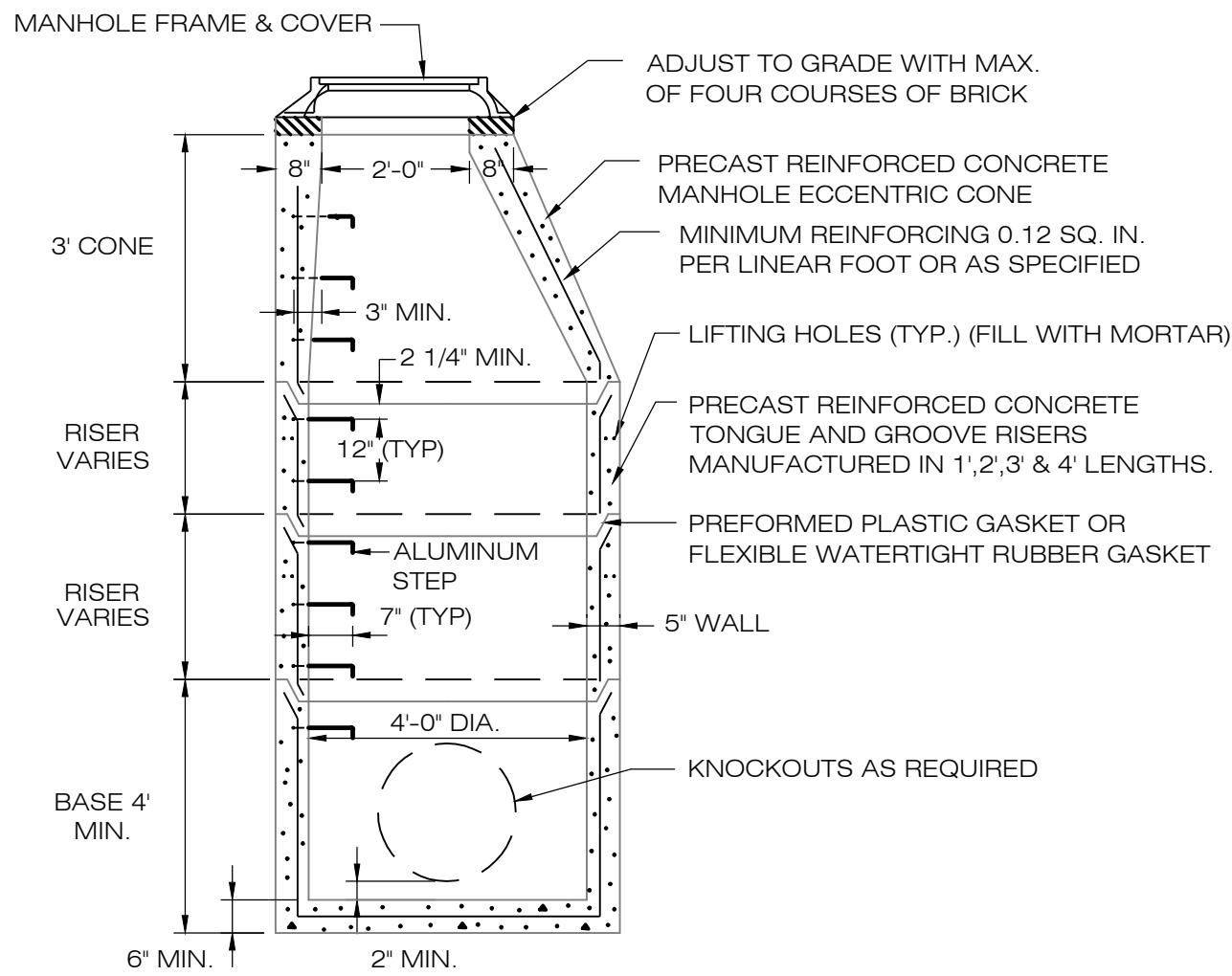




- NOTES:
- PAVEMENT SECTION PER GEOTECHNICAL ENGINEERING REPORT BY DOWN TO EARTH CONSULTING, DATED FEBRUARY 23, 2021, UNDER SEPARATE COVER.
  - SUBBASE MAY CONSIST OF NATIVE MATERIALS IF FOUND ACCEPTABLE BY THE ENGINEER. SUBBASE TO BE COMPACTED TO 95% MAX DRY DENSITY.
  - SUBBASE IS TO BE FREE FROM DEBRIS AND UNSUITABLE MATERIALS.

### 1 PAVED ROAD SECTION

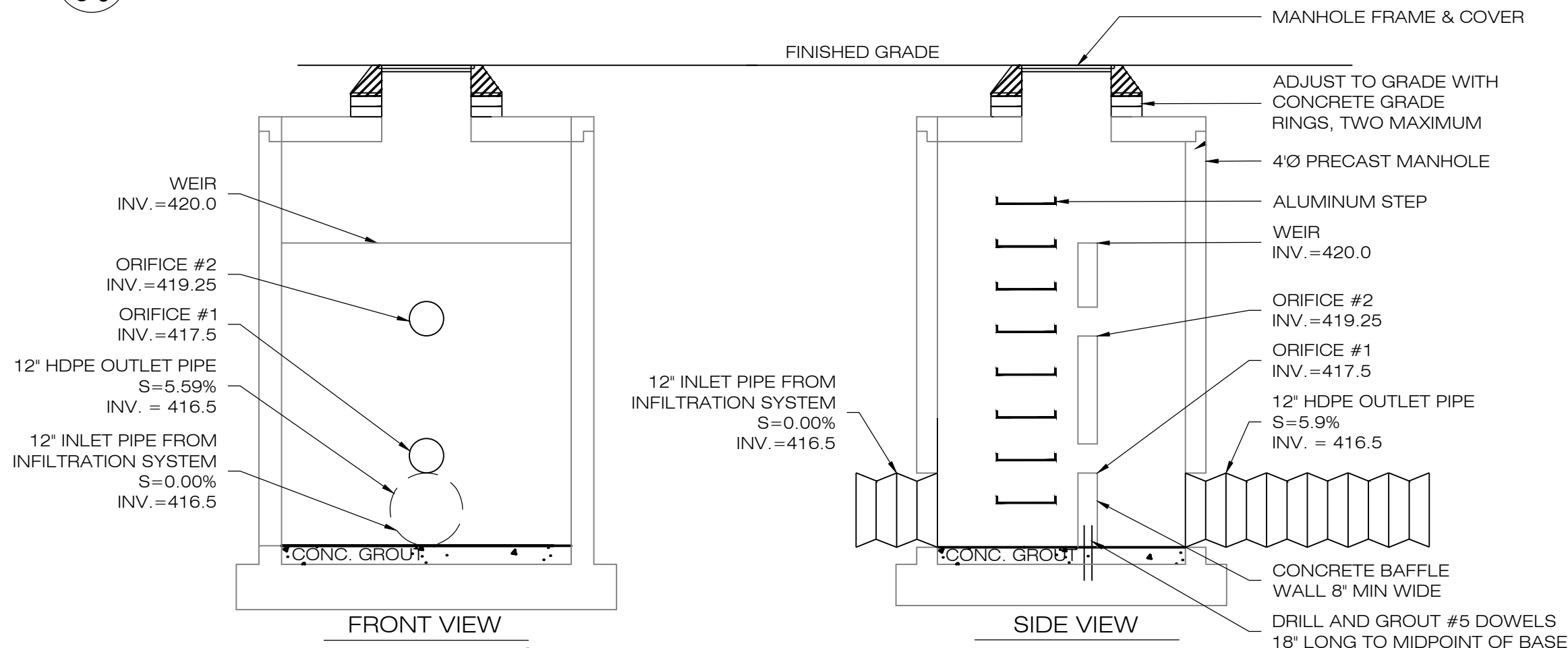
C-5 SCALE: N.T.S.



5' OR 6' DIA. PRECAST BASES MAY BE USED WHEN REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5' & 6' BASES AS DIRECTED BY THE ENGINEER. WALL THICKNESS TO INCREASE 1" FOR EACH 1' OF INSIDE DIAMETER INCREASE.

### 5 PRECAST STORM MANHOLE

C-5 SCALE: N.T.S.

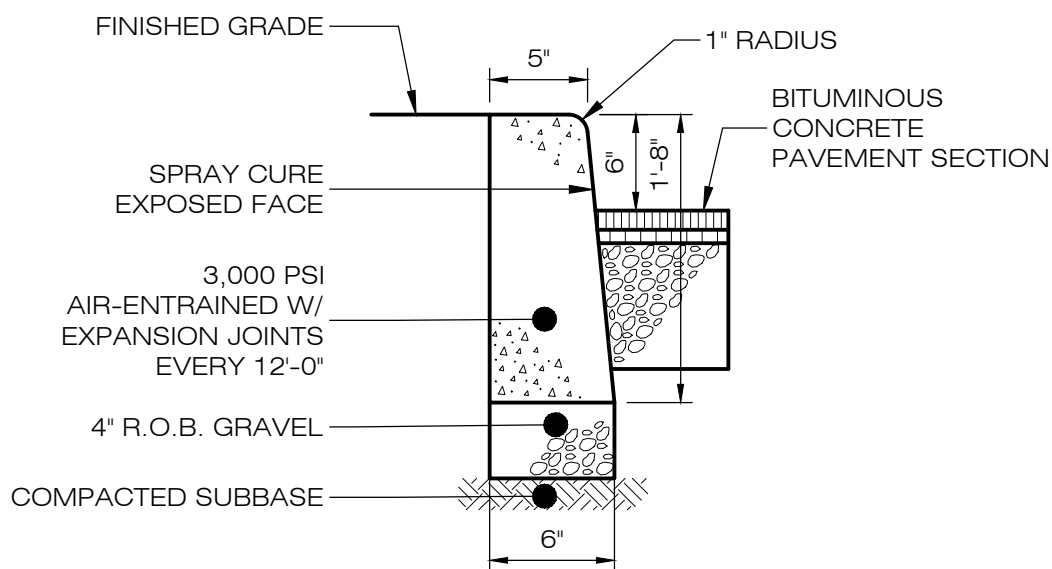


NOTE: ENTIRE MANHOLE STRUCTURE MUST ACCOMMODATE H2O LOADING.

OUTLET CONTROL STRUCTURE	T.F. ELEVATION	ORIFICE #1 SIZE	ORIFICE #1 ELEVATION	ORIFICE #2 SIZE	ORIFICE #2 ELEVATION	INLET/OUTLET PIPE INVERT
OCS-1	423.00	3"	417.50	3"	419.25	416.50

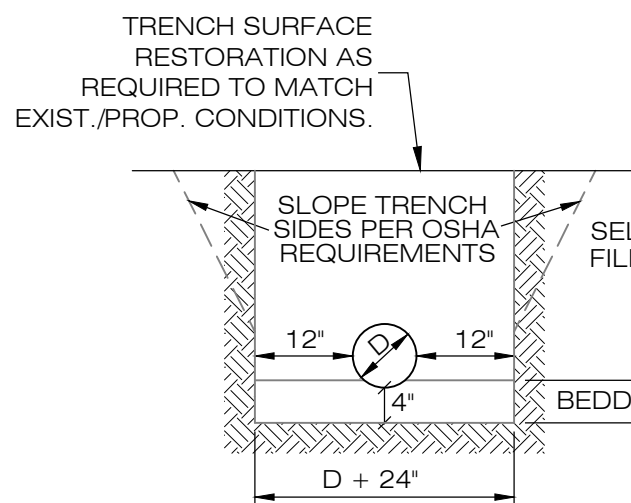
### 7 OUTLET CONTROL STRUCTURE DETAIL

C-5 SCALE: N.T.S.



### 2 CONCRETE CURB DETAIL

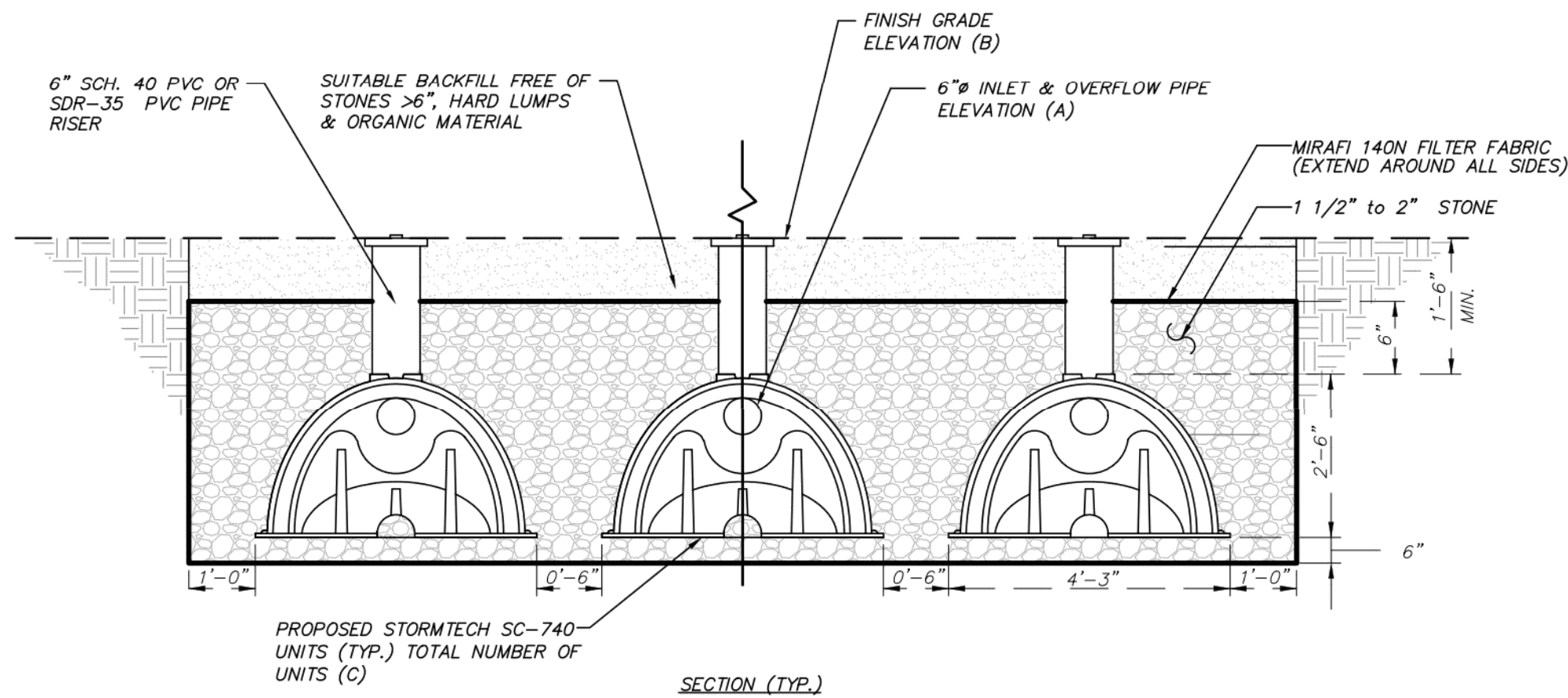
C-5 SCALE: N.T.S.



### 3 STORM TRENCH SECTION

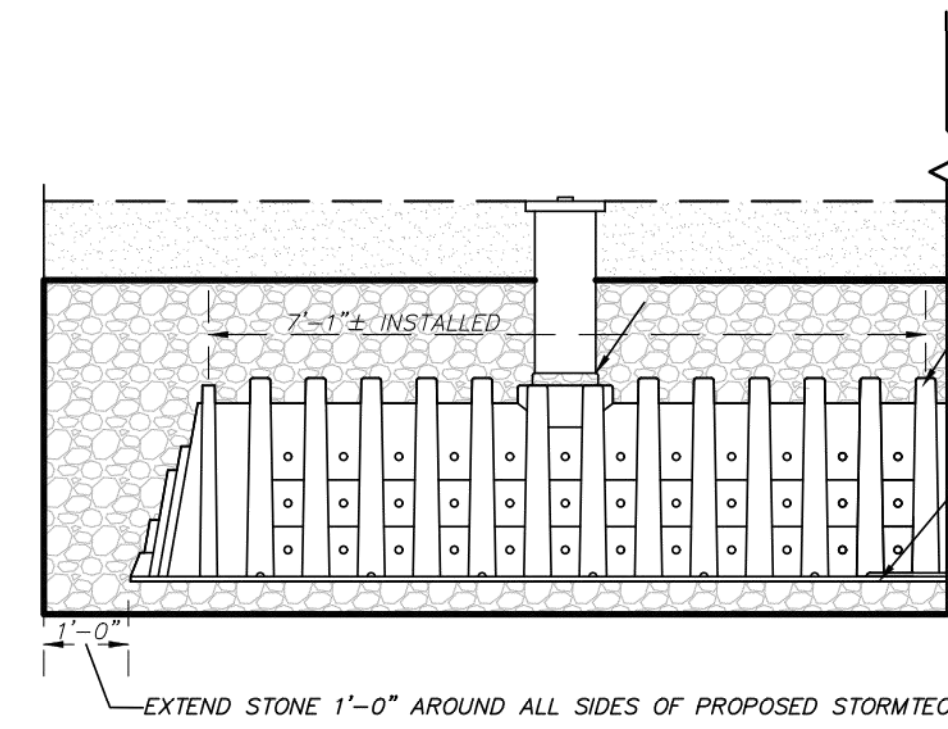
C-5 SCALE: N.T.S.

- BEDDING SHALL BE COMPACTED CRUSHED STONE AND SHALL BE SHAPED TO THE BOTTOM OF THE PIPE.
- SELECT FILL SHALL BE SELECT MATERIAL FREE OR LARGE ROCKS (3"+) AND SHALL BE PLACED IN 8" MAX. LOOSE LIFTS AND COMPACTED TO 95% STANDARD PROCTOR.



PROPOSED STORMTECH SC-740 UNITS (TYP.) TOTAL NUMBER OF UNITS (C)

SECTION (TYP.)

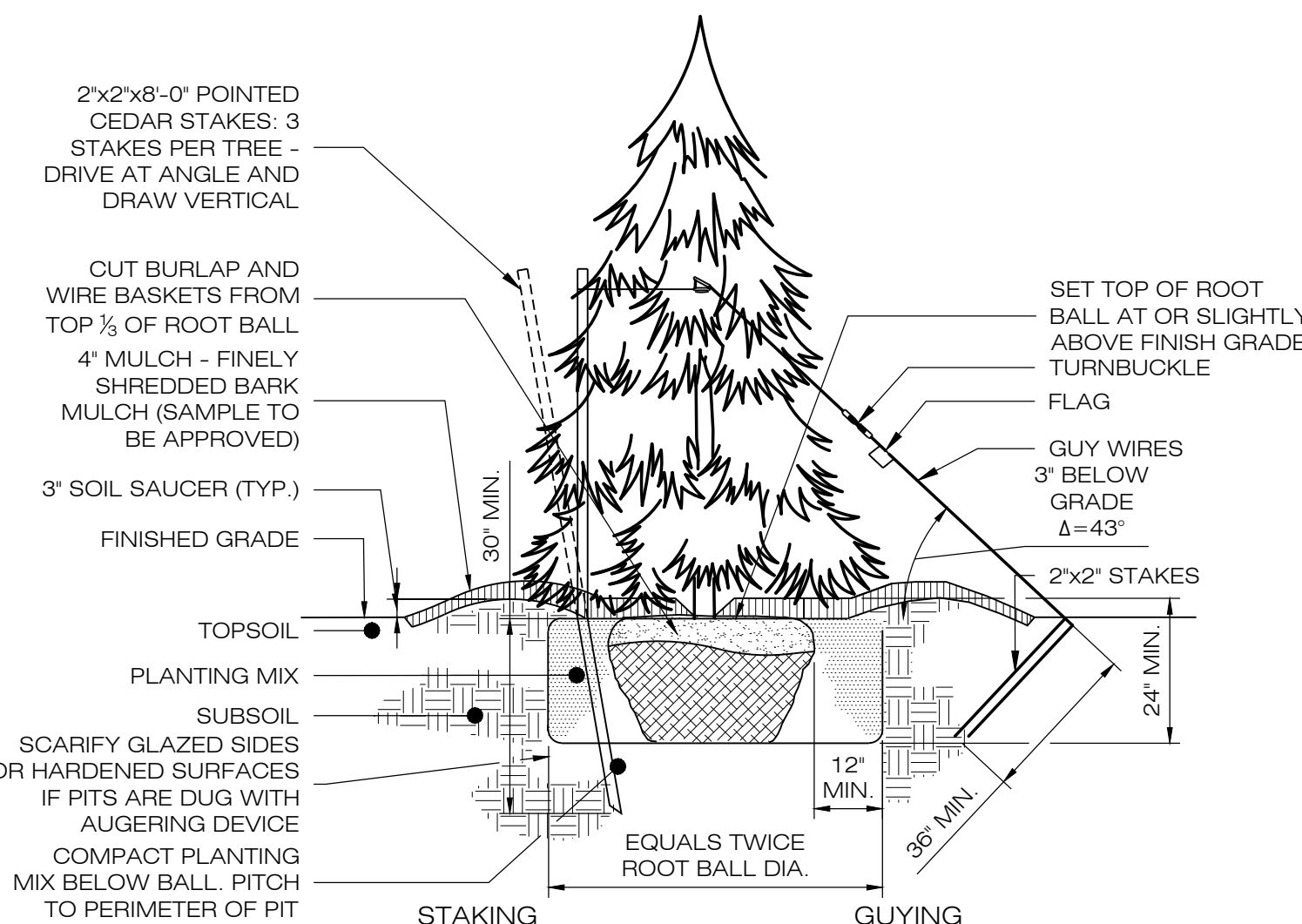


ELEVATION (TYP.)

INFILTRATION SYSTEM	INLET ELEVATION	FINISHED GRADE	NUMBER OF UNITS	BOTTOM OF STONE ELEV.	BOTTOM OF UNIT ELEV.	TOP OF GRAVEL ELEV.
1.8P	416.50	421.50-426.00	16	416.00'	416.50	419.50

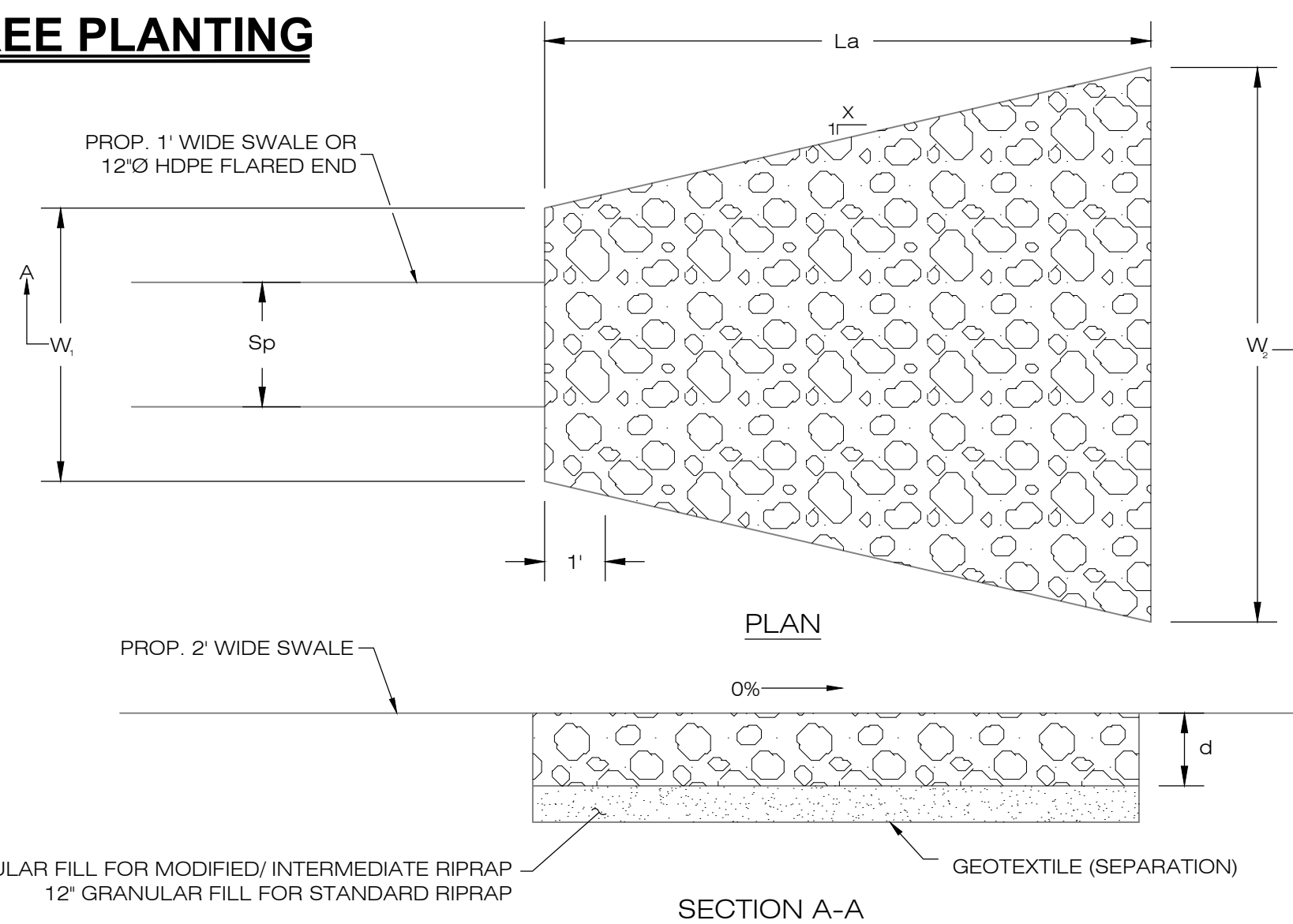
### 4 UNDERGROUND INFILTRATION SYSTEM

C-5 SCALE: N.T.S.



### 6 EVERGREEN TREE PLANTING

C-5 SCALE: N.T.S.



PLAN

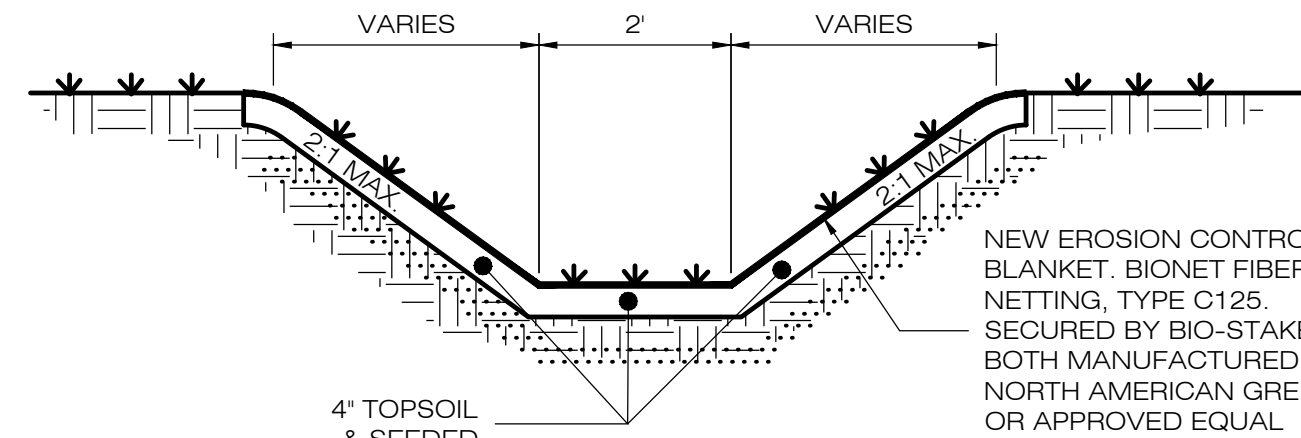
SECTION A-A

LEGEND  
Sp= INSIDE PIPE DIAMETER  
La= LENGTH OF RIPRAP APRON  
d= 12" MODIFIED RIPRAP  
18" INTERMEDIATE RIPRAP  
36" STANDARD RIPRAP

OUTLET	SWALE WIDTH/ PIPE DIAMETER Sp (FT)	APRON LENGTH La (FT)	APRON INITIAL WIDTH W1 (FT)	APRON TERMINAL WIDTH W2 (FT)	RIPRAP SPECIFICATION
SWALE	1	5	3	6.5	MODIFIED
FE-1	1	5	3	6.5	MODIFIED

### 8 RIPRAP APRON

C-5 SCALE: N.T.S.



### 9 GRASS LINED SWALE

C-5 SCALE: N.T.S.

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APT FILING NUMBER: NY283830

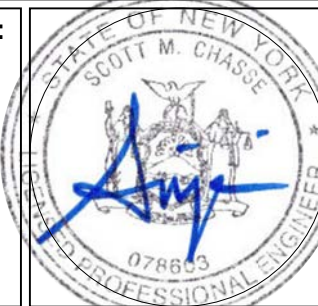
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CHECKED BY: RCB

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#### SITE DETAILS

SHEET NUMBER:

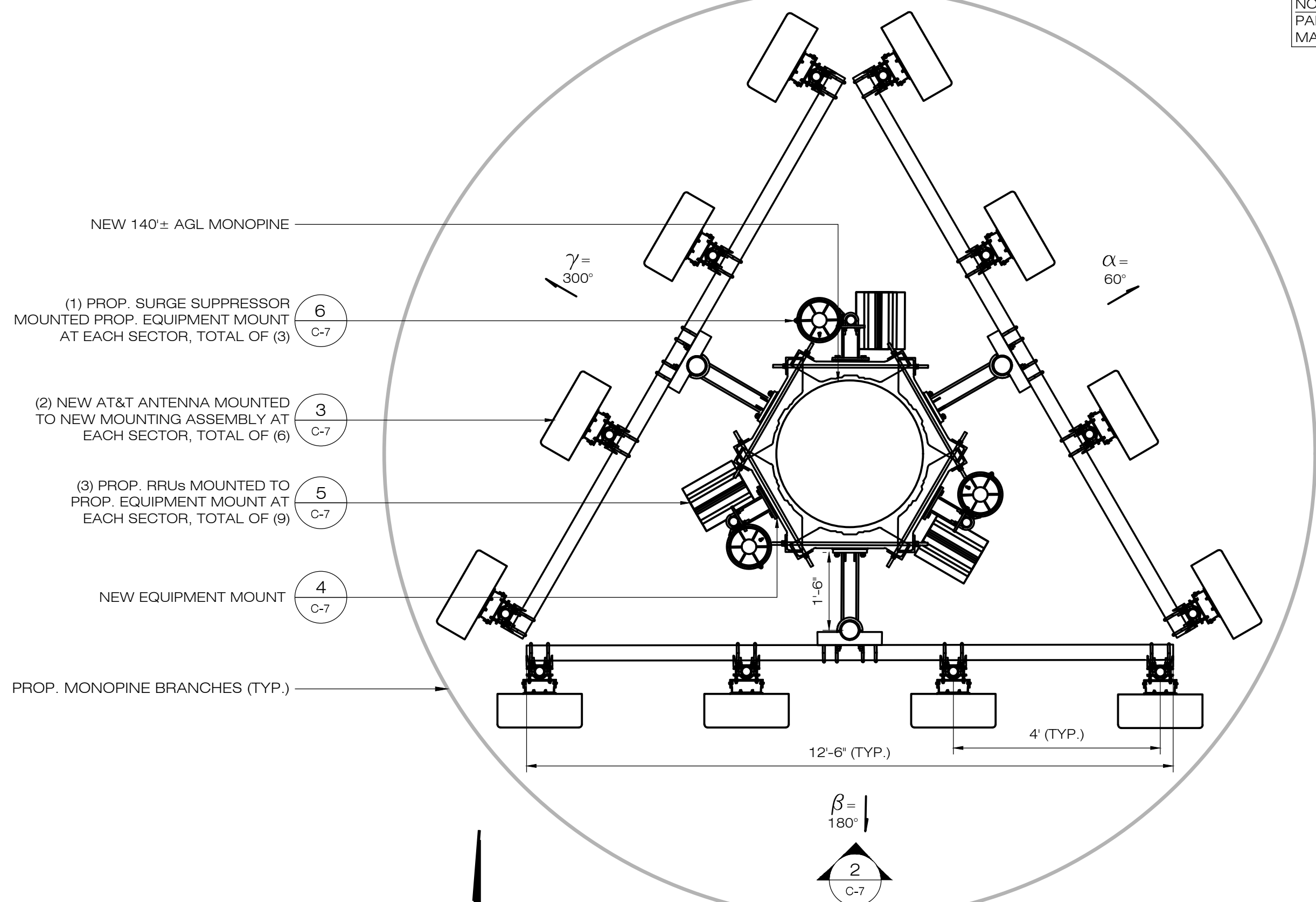
C-5



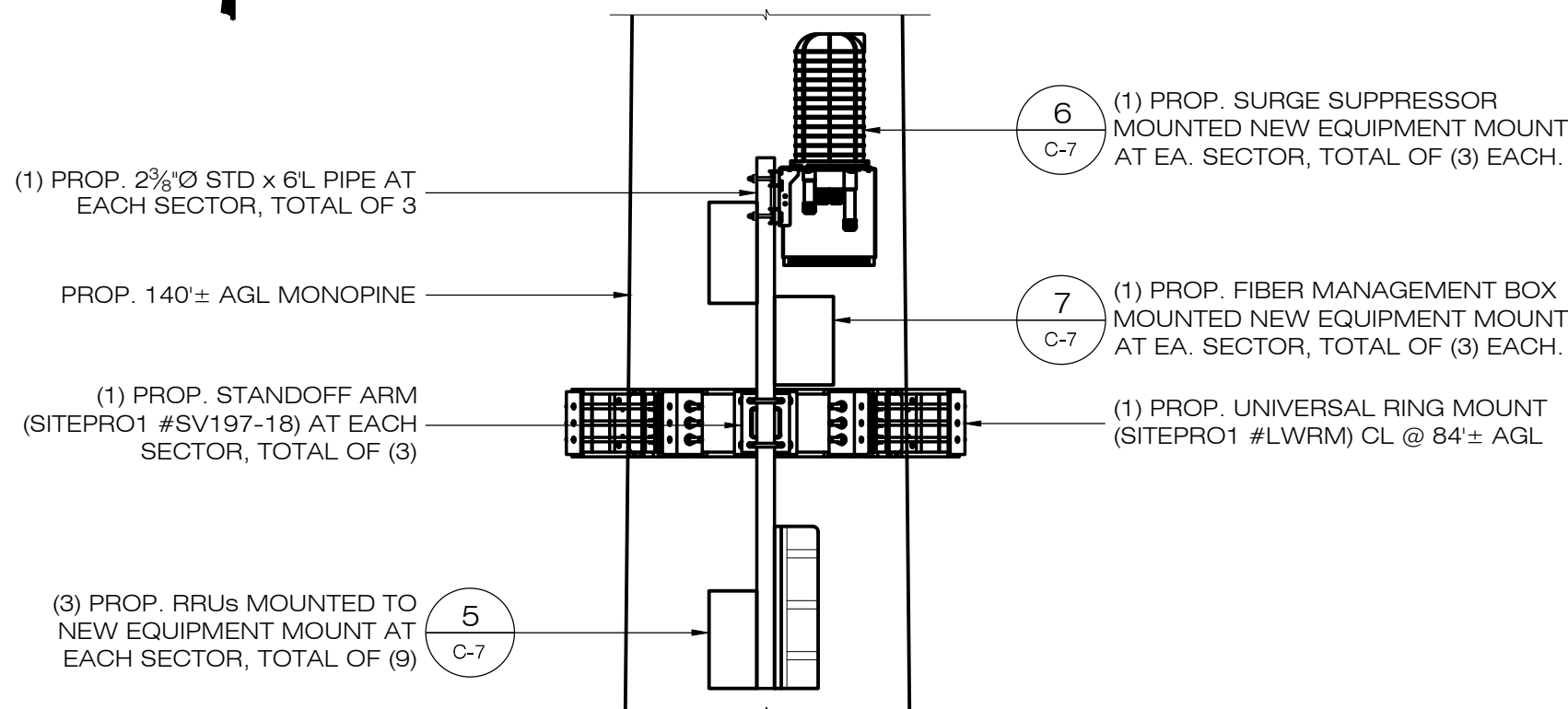




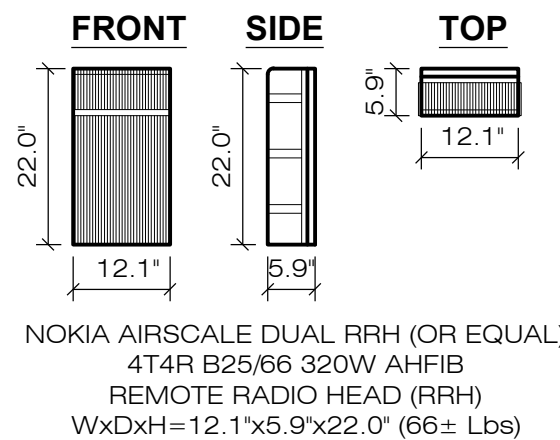




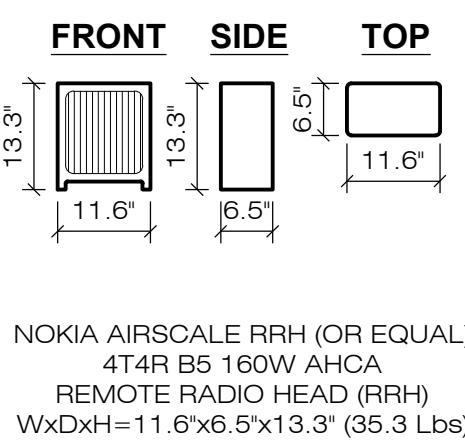
**1 ANTENNA PLAN**  
C-7 SCALE : 1/2" = 1'-0"



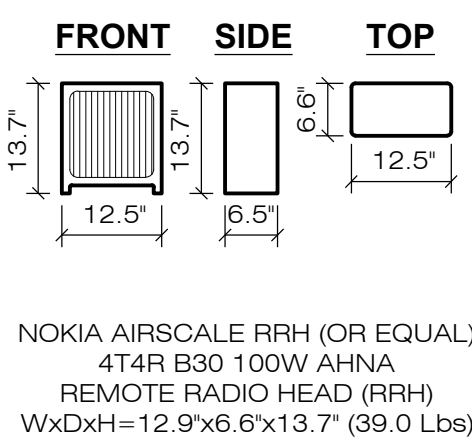
**4 EQUIPMENT MOUNT**  
C-7 SCALE : 1/2" = 1'-0"



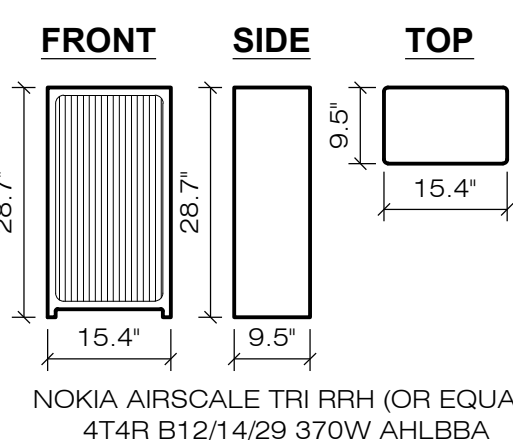
NOKIA AIRSCALE DUAL RRH (OR EQUAL)  
4T4R B25/B6 320W AHFIB  
REMOTE RADIO HEAD (RRH)  
WxDxH=12.1'x5.9'x22.0' (66± Lbs)



NOKIA AIRSCALE RRH (OR EQUAL)  
4T4R B5 160W AHCA  
REMOTE RADIO HEAD (RRH)  
WxDxH=11.6'x6.5'x13.3' (35.3 Lbs)



NOKIA AIRSCALE TRI RRH (OR EQUAL)  
4T4R B30 100W AHNA  
REMOTE RADIO HEAD (RRH)  
WxDxH=12.9'x6.5'x13.7' (39.0 Lbs)



NOKIA AIRSCALE TRH RRH (OR EQUAL)  
4T4R B12/14/29 370W AHLBBA  
REMOTE RADIO HEAD (RRH)  
WxDxH=15.4'x9.5'x28.7' (101.4 Lbs)

- NOTES:  
1. DIMENSIONS SUBJECT TO CHANGE BASED UPON AVAILABILITY AT TIME OF CONSTRUCTION.  
2. MANUFACTURER'S RECOMMENDED RRH CLEARANCES: FRONT: 36"; SIDES: 12"; BOTTOM: 24".  
3. SFPs ARE PROTOCOL SPECIFIC. THE CONNECTIONS BETWEEN RRHs AND BBUS ARE CPRI CONNECTIONS, AND REQUIRE CPRI SFP (ON BOTH ENDS). THE CONNECTIONS BETWEEN BBUS AND 7705 ARE ETHERNET AND REQUIRE ETHERNET SFP (ON BOTH ENDS).

**5 RRU EQUIPMENT**  
C-7 SCALE : 1/2" = 1'-0"

NOTE:  
PAINT MOUNTS, ANTENNAS, CABLING & APPURTENANCES TO  
MATCH TREE & INSTALL ANTENNA SOCKS ON ALL ANTENNAS.

PROP. 3 SIDED SITEPRO1 T-ARM  
MOUNT FOR (12) NEW AT&T PANEL  
ANTENNAS CL @ 86'± AGL

(4) PROP. AT&T ANTENNA MOUNTED  
TO PROP. MOUNTING ASSEMBLY AT  
EACH SECTOR, TOTAL OF (12)

(1) PROP. SURGE SUPPRESSOR  
MOUNTED PROP. EQUIPMENT MOUNT  
AT EACH SECTOR, TOTAL OF (3)

ANTENNA MOUNT  
@ 126'-0"± AGL

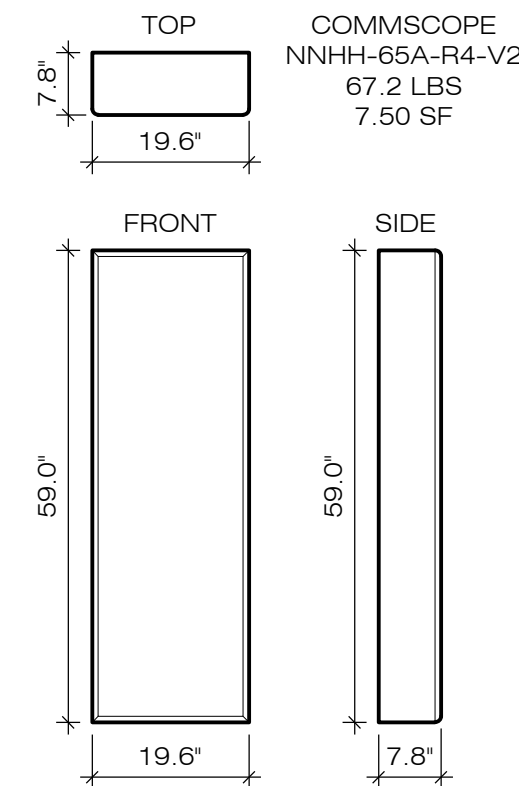
EQUIPMENT MOUNT  
@ 124'-0"± AGL

NEW EQUIPMENT MOUNT

(3) PROP. RRU's MOUNTED TO  
PROP. EQUIPMENT MOUNT AT  
EACH SECTOR, TOTAL OF (9)

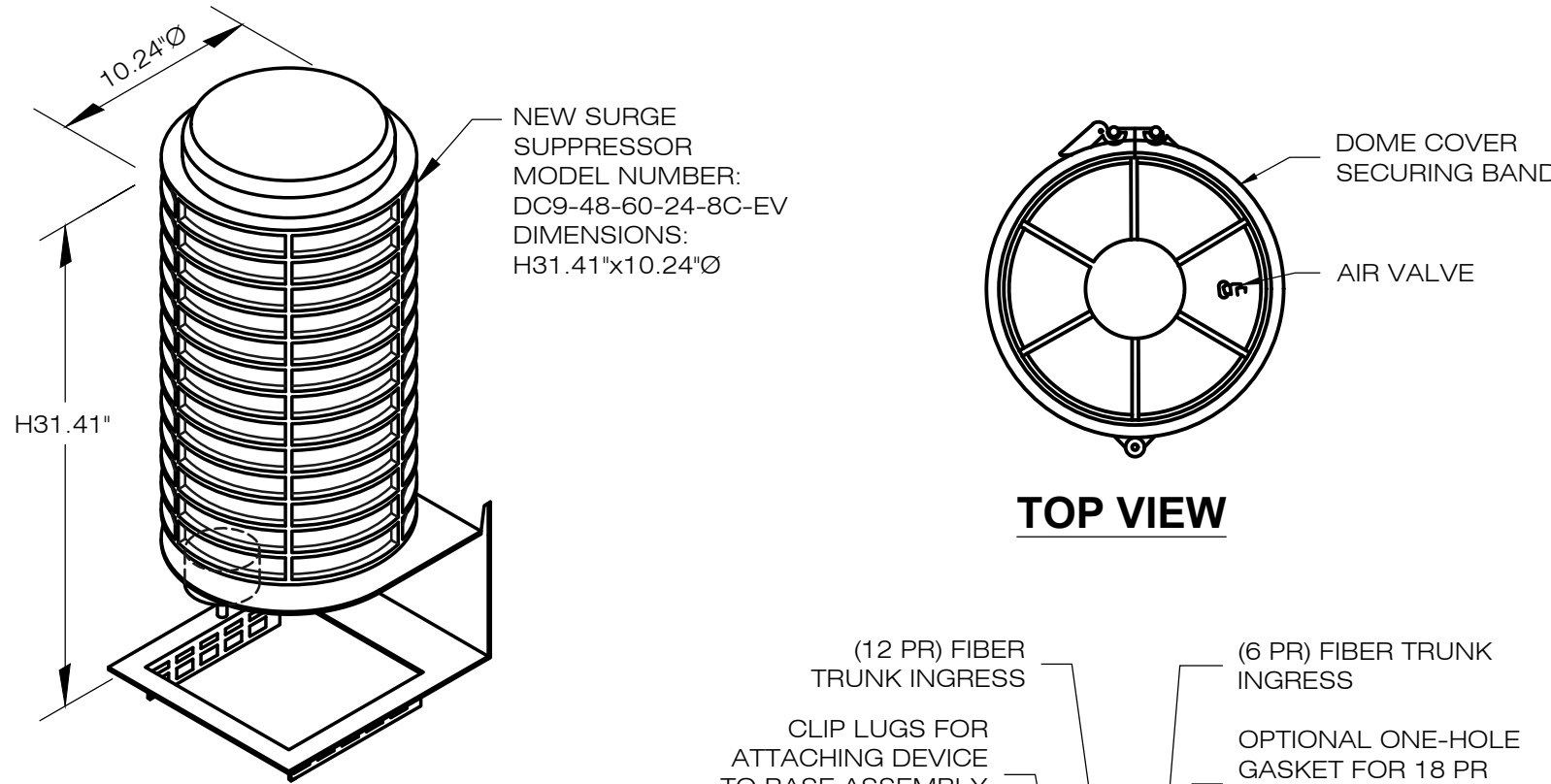
NEW 140'± AGL MONOPINE

**2 ANTENNA MOUNTING DETAIL**  
C-7 SCALE : 1/2" = 1'-0"

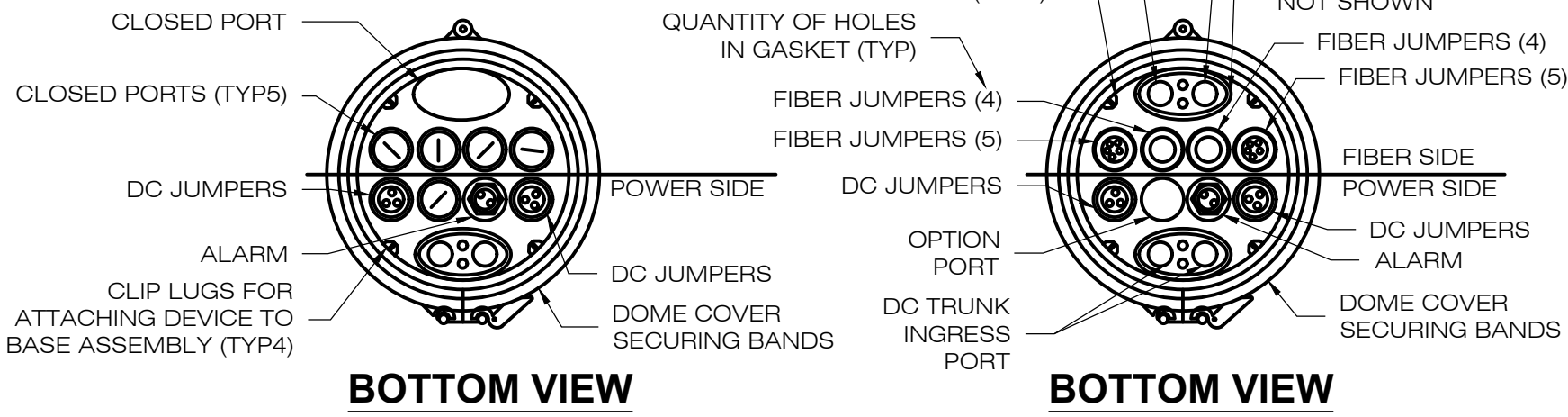


PANEL ANTENNAS

**3 ANTENNA DETAIL**  
C-7 SCALE : 1/2" = 1'-0"



TOP VIEW



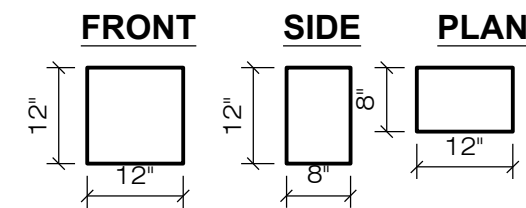
BOTTOM VIEW

BOTTOM VIEW

RAYCAP DC9-48-60-24-8C-EV (SURGE SUPPRESSOR)  
HxDia. = 31.41"x10.24" (26.2 Lbs)  
(OR EQUAL)  
COLOR: GRAY

- NOTES:  
1. MOUNT PER MANUFACTURER'S SPECIFICATIONS.  
2. REMOVE CABLE SEALING GLAND AND INSTALL M32x1.5 METRIC TO 1" NPT ADAPTER (COOPER CROUSE-HINES P/N CAP 740 994 OR EQUIVALENT MFR) WHEN CONNECTING CONDUIT TO OVP

**6 TYPICAL SURGE SUPPRESSOR**  
C-7 SCALE : N.T.S.



JSOURCE FIBER BOX (OR EQUAL)  
WxDxH=12.0'x8.0'x12.0' (8.5Lbs)

NOTE:  
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

**7 FIBER MANAGEMENT BOX**  
C-7 SCALE : 1/2" = 1'-0"

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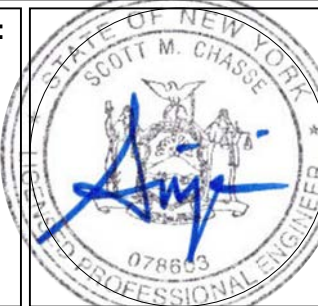
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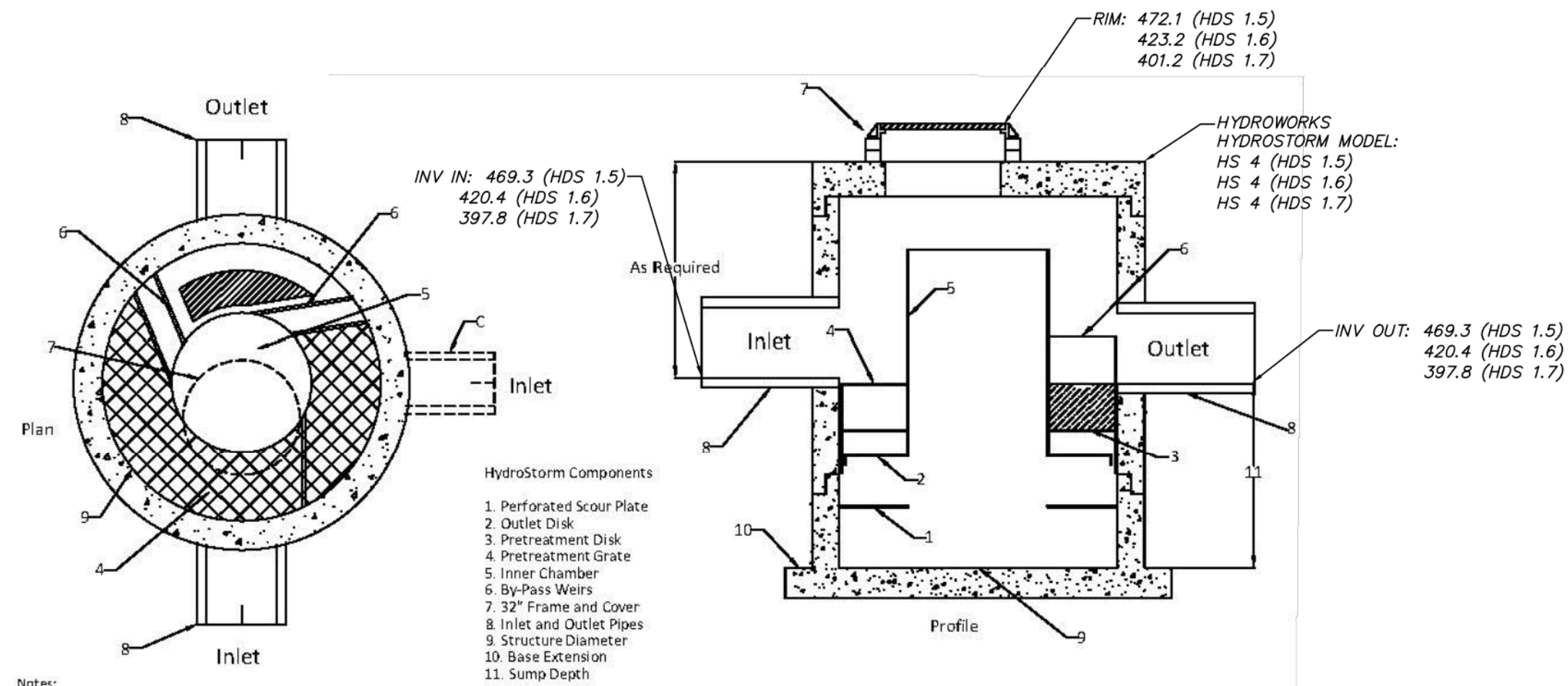
AT&T ANTENNA PLAN  
& DETAILS

SHEET NUMBER:

C-7





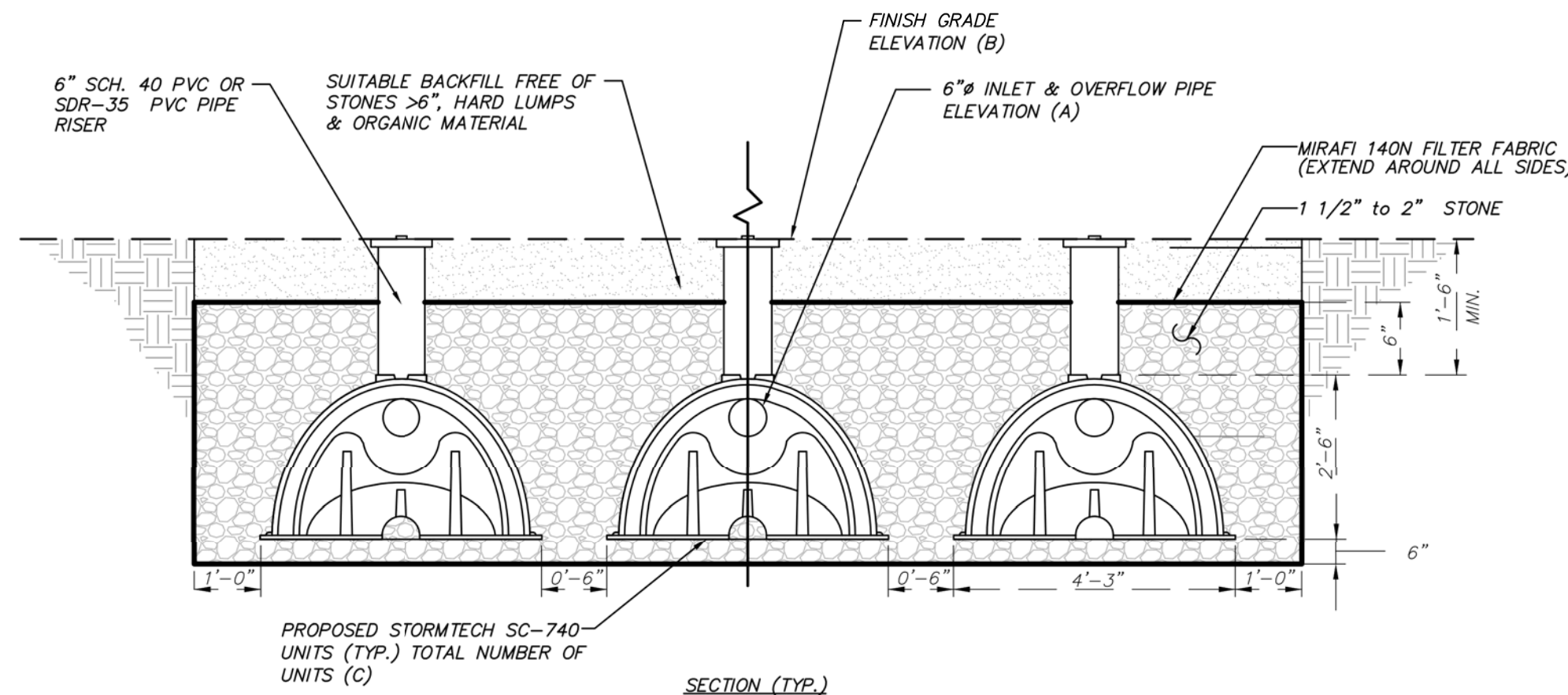


Notes:

- Use a headloss K factor of 1.04 for hydraulic gradeline calculations.
- Sump depths shown are minimums. Additional depth can be added for site specific capacities.
- Multiple inlet pipes allowed.
- Drops allowed.
- Inlet Invert elevations should be the same or higher than the outlet invert elevation. Inlet can be up to 12" lower than outlet if pretreatment area is omitted but 12" must be added to sump depth to maintain overall treatment volume.
- Solid Cover shown. HydroStorm can be designed with an inlet grate if required.
- Oil capacities given are spill capacities. Oil should be removed from the unit once an oil depth of 2" or more is measured in the inner chamber.
- Sediment depths are maximum holding capacities and not recommended capacities for regular maintenance. Maintenance is recommended annually or once every 2 years.
- Capacities are rounded down to nearest 5 gal or ft<sup>3</sup>.

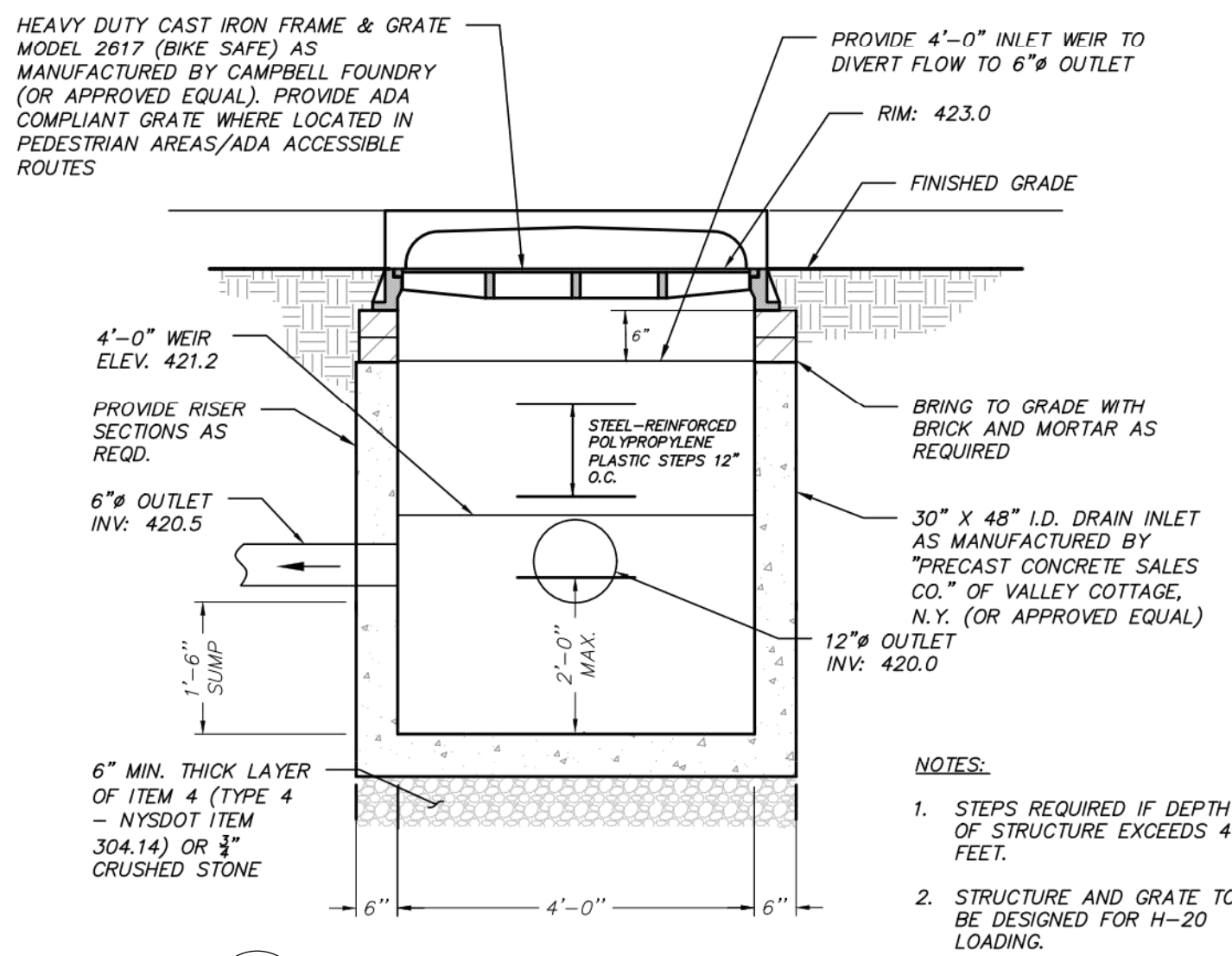
HydroStorm by Hydroworks, LLC  
Patent Pending  
www.hydroworks.com  
888-290-7900

#### 1 HYDROWORKS HYDROSTORM HYDRODYNAMIC SEPARATOR DETAIL

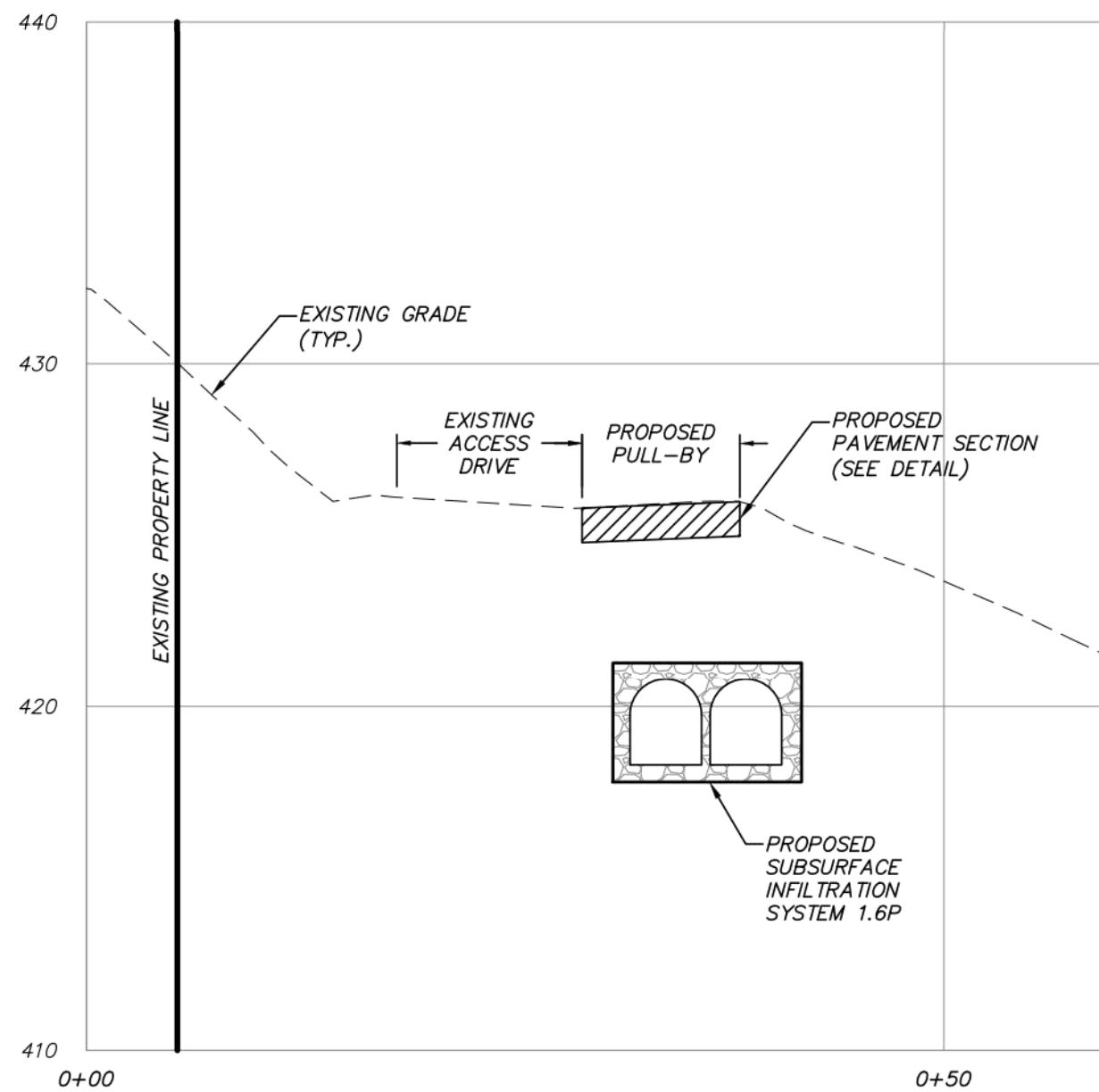


INFILTRATION SYSTEM	INLET/OVERFLOW PIPE ELEV. (A)	FINISHED GRADE ELEV. (B)	NUMBER OF UNITS (C)	BOTTOM OF STONE ELEV. (D)	BOTTOM OF UNIT ELEV. (E)	TOP OF GRAVEL ELEV. (F)
1.5P	469.2	471.5 - 474.0	30	466.7	467.2	470.2
1.6P	420.3	424.0 - 428.0	14	417.8	418.3	421.3
1.7P	397.6	402.0 - 404.5	10	395.1	395.6	398.6

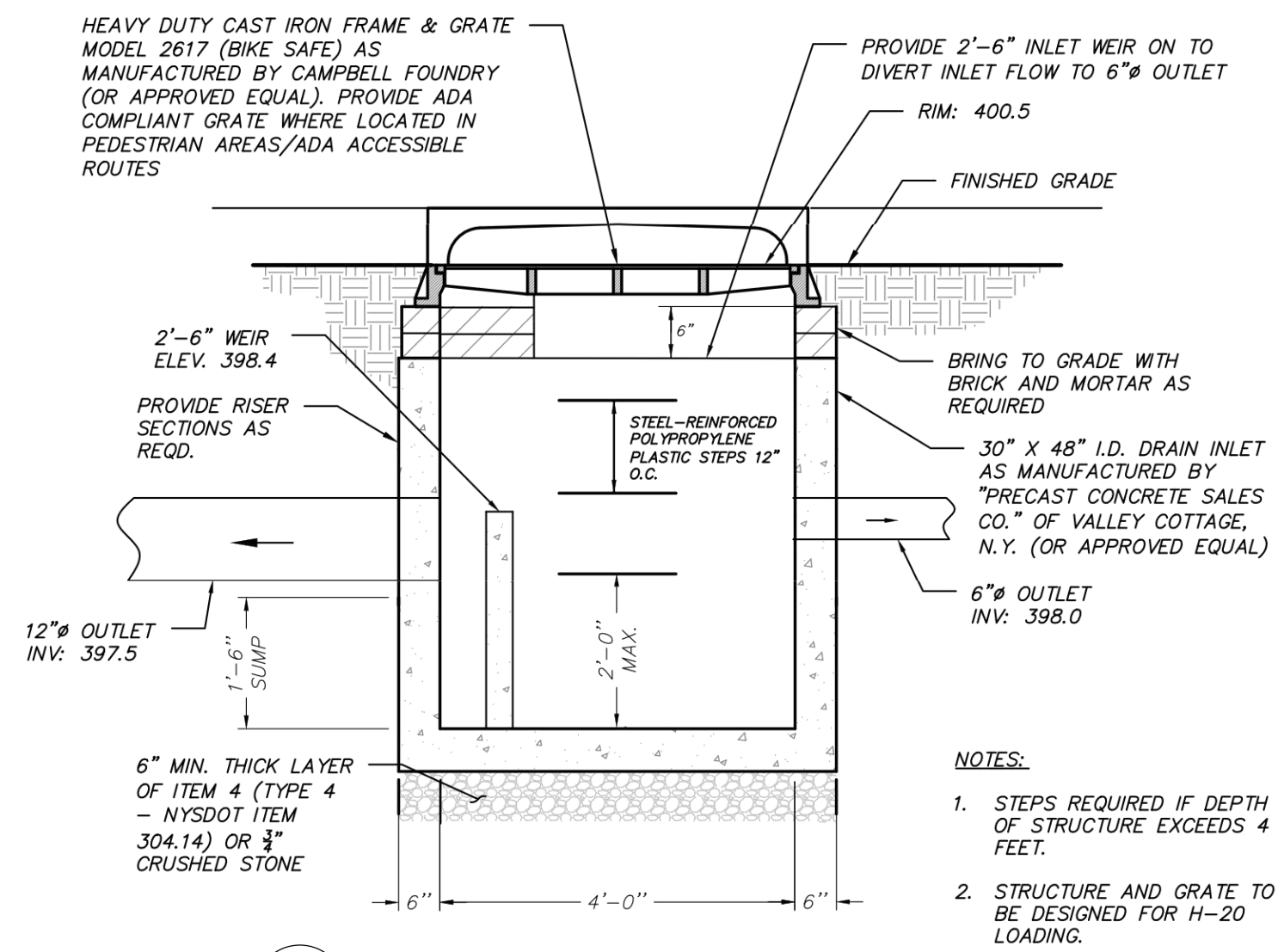
#### 4 STORMWATER INFILTRATION SYSTEM (NYSDEC DESIGN I-4) DETAIL



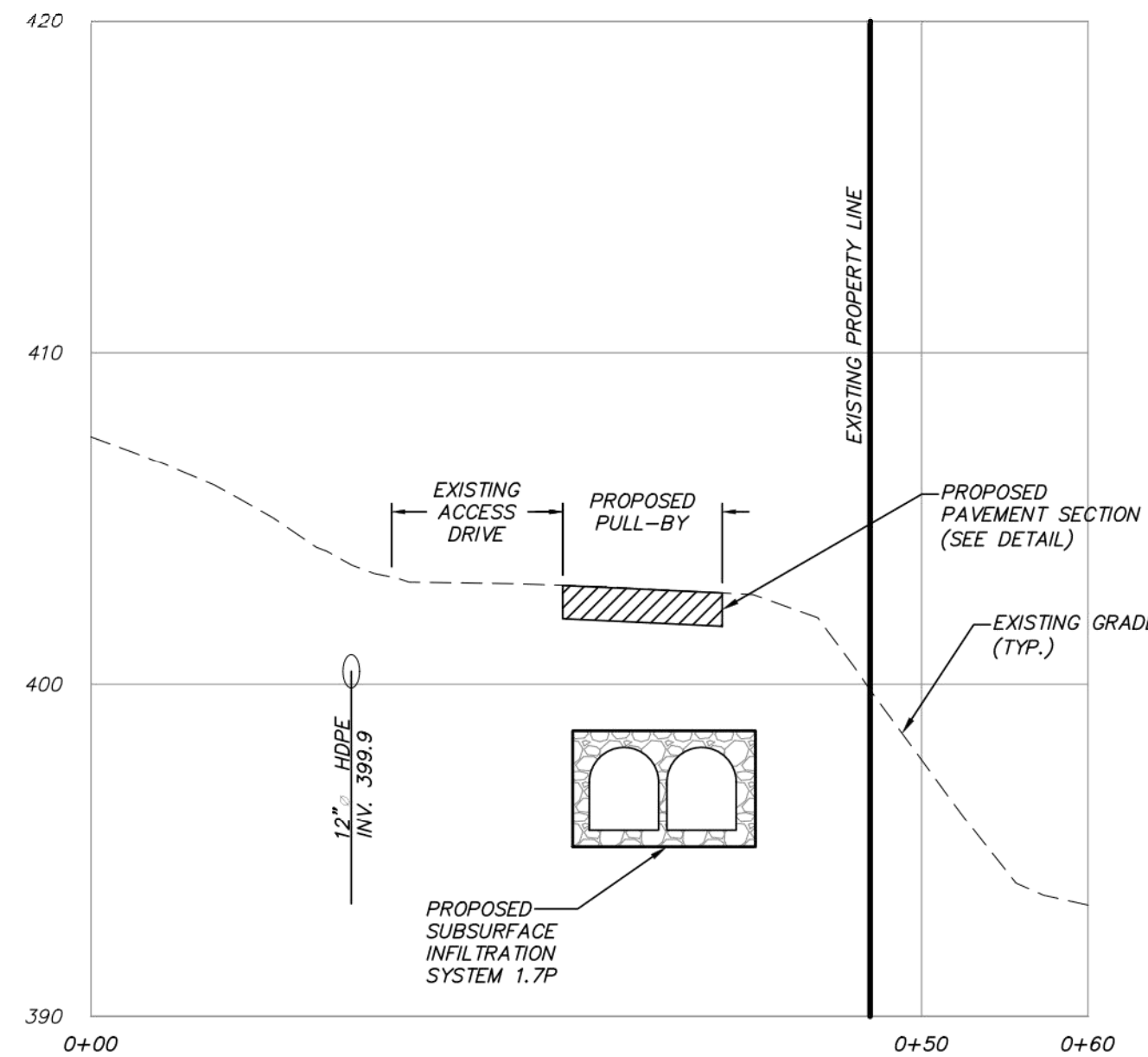
#### 2 FLOW SPLITTER FS 1.6 DETAIL



#### 5 INFILTRATION SYSTEM 1.6P SCHEMATIC SECTION A-A



#### 3 FLOW SPLITTER FS 1.7 DETAIL



#### 6 INFILTRATION SYSTEM 1.7P SCHEMATIC SECTION B-B

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HOMELAND TOWERS  
MOUNT KISCO

SITE 180 S. BEDFORD RD.  
ADDRESS: MT. KISCO, NY 10594

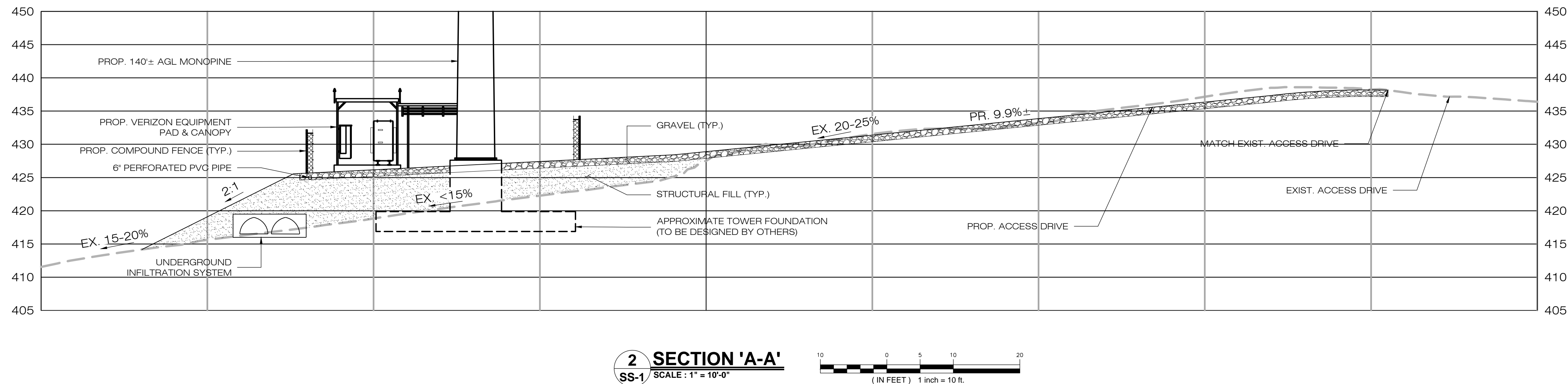
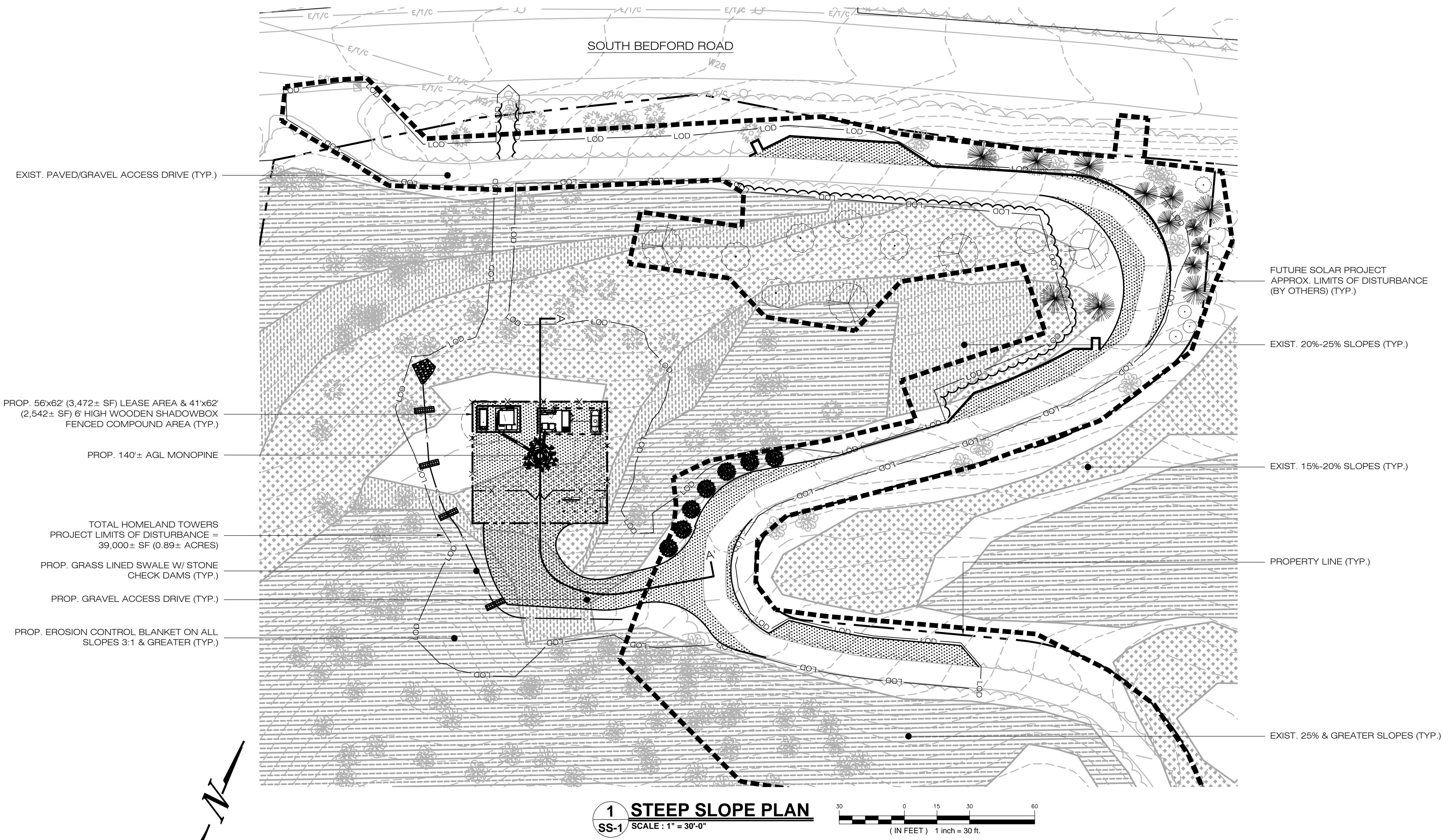
APT FILING NUMBER: NY283830

DATE: 08/13/20 DRAWN BY: CSH  
CHECKED BY: RCB

SHEET TITLE:  
**DRAINAGE DETAILS (BY OTHERS)**

SHEET NUMBER:  
**C-8**





HOMELAND TOWERS, LLC  
9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810  
(203) 297-6345

verizon  
4 CENTEROCK ROAD  
WEST NYACK, NY 10994

at&t  
340 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960

APT  
ENGINEERING  
567 VAUXHALL STREET EXTENSION - SUITE 311  
WATERFORD, CT 06385  
PH: (860)-663-1697  
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

PERMITTING DOCUMENTS

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DESIGN PROFESSIONALS OF RECORD

PROF: SCOTT M. CHASSE P.E.  
COMP: APT ENGINEERING  
ADD: 567 VAUXHALL STREET  
EXTENSION - SUITE 311  
WATERFORD, CT 06385

DEVELOPER: HOMELAND TOWERS, LLC  
ADDRESS: 9 HARMONY STREET  
2ND FLOOR  
DANBURY, CT 06810

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EDUCATION LAW ARTICLE 145, SECTION  
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MOUNT KISCO

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SHEET TITLE:

STEEP SLOPE PLAN

SHEET NUMBER:

SS-1

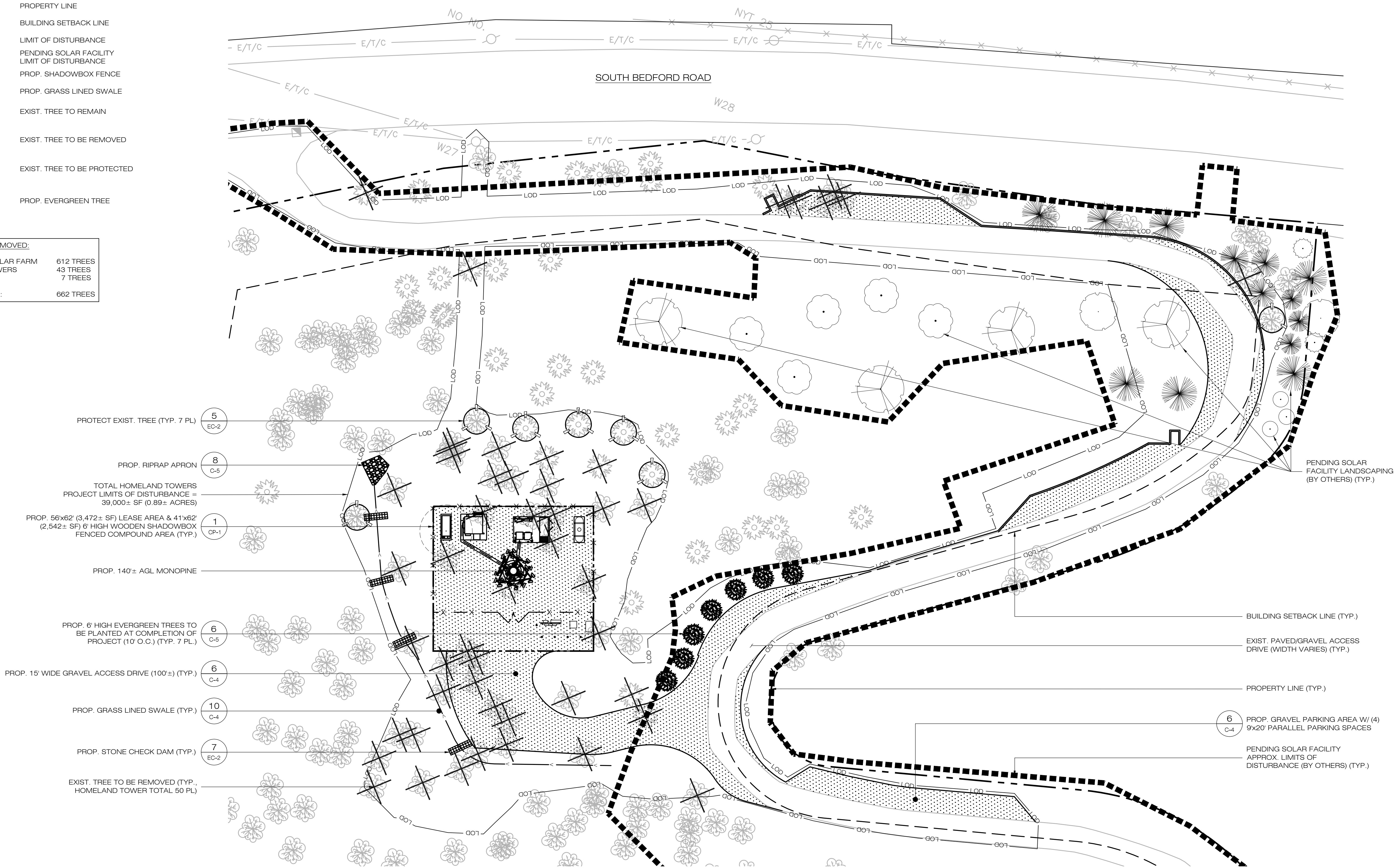
SCOTT M. CHASSE  
P.E.  
078603  
PROFESSIONAL ENGINEER



LEGEND

- PROPERTY LINE  
--- BUILDING SETBACK LINE  
--- LOD LIMIT OF DISTURBANCE  
--- PENDING SOLAR FACILITY  
--- LIMIT OF DISTURBANCE  
--- X --- PROP. SHADOWBOX FENCE  
--- PROP. GRASS LINED SWALE  
○ EXIST. TREE TO REMAIN  
⊗ EXIST. TREE TO BE REMOVED  
⊙ EXIST. TREE TO BE PROTECTED  
● PROP. EVERGREEN TREE

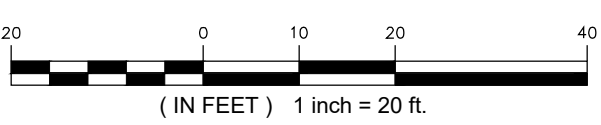
TREES TO BE REMOVED:	
COMMUNITY SOLAR FARM	612 TREES
HOMELAND TOWERS	43 TREES
ACCESS DRIVE	7 TREES
OVERALL TOTAL:	662 TREES



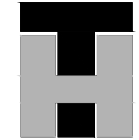
- PROTECT EXIST. TREE (TYP. 7 PL) 5 EC-2
- PROP. RIPRAP APRON 8 C-5
- TOTAL HOMELAND TOWERS  
PROJECT LIMITS OF DISTURBANCE =  
39,000± SF (0.89± ACRES)
- PROP. 56'x62' (3,472± SF) LEASE AREA & 41'x62'  
(2,542± SF) 6' HIGH WOODEN SHADOWBOX  
FENCED COMPOUND AREA (TYP.) 1 OP-1
- PROP. 140'± AGL MONOPINE
- PROP. 6' HIGH EVERGREEN TREES TO  
BE PLANTED AT COMPLETION OF  
PROJECT (10' O.C.) (TYP. 7 PL.) 6 C-5
- PROP. 15' WIDE GRAVEL ACCESS DRIVE (100'±) (TYP.) 6 C-4
- PROP. GRASS LINED SWALE (TYP.) 10 C-4
- PROP. STONE CHECK DAM (TYP.) 7 EC-2
- EXIST. TREE TO BE REMOVED (TYP.,  
HOMELAND TOWER TOTAL 50 PL)

- BUILDING SETBACK LINE (TYP.)
- EXIST. PAVED/GRAVEL ACCESS  
DRIVE (WIDTH VARIES) (TYP.)
- PROPERTY LINE (TYP.)
- 6 C-4 PROP. GRAVEL PARKING AREA W/ (4)  
9'x20' PARALLEL PARKING SPACES
- PENDING SOLAR FACILITY  
APPROX. LIMITS OF  
DISTURBANCE (BY OTHERS) (TYP.)

1 LANDSCAPING PLAN  
LS-1 SCALE : 1" = 20'-0"



MAP REFERENCES:  
1. "ABUTTERS PLAN, PREMISES OF SKULL ISLAND PARTNERS, LLC, SHEET 1 OF 2" &  
"EXISTING CONDITIONS SURVEY, PORTION OF PREMISES OF SKULL ISLAND PARTNERS,  
LLC, SHEET 2 OF 2", PREPARED BY LAWSON SURVEYING & MAPPING, 2959 COUNTY  
ROUTE 8, ONEONTA, NEW YORK, 13820, DATED AUGUST 6, 2020.



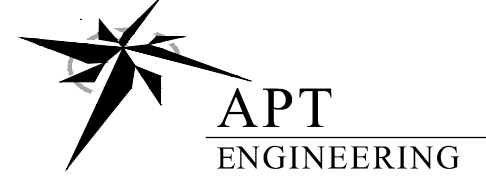
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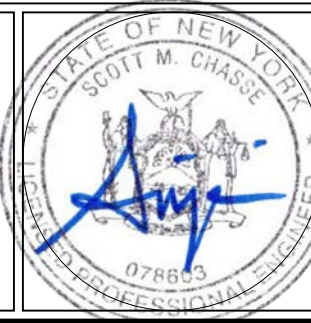
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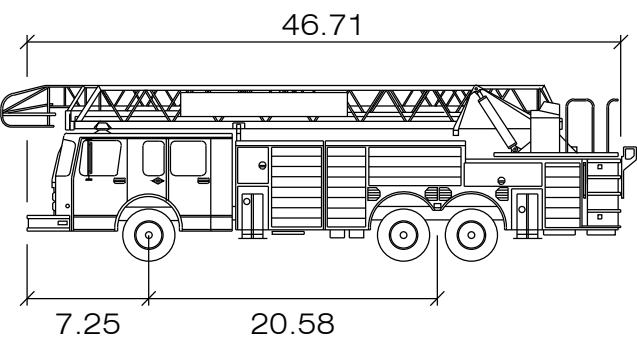
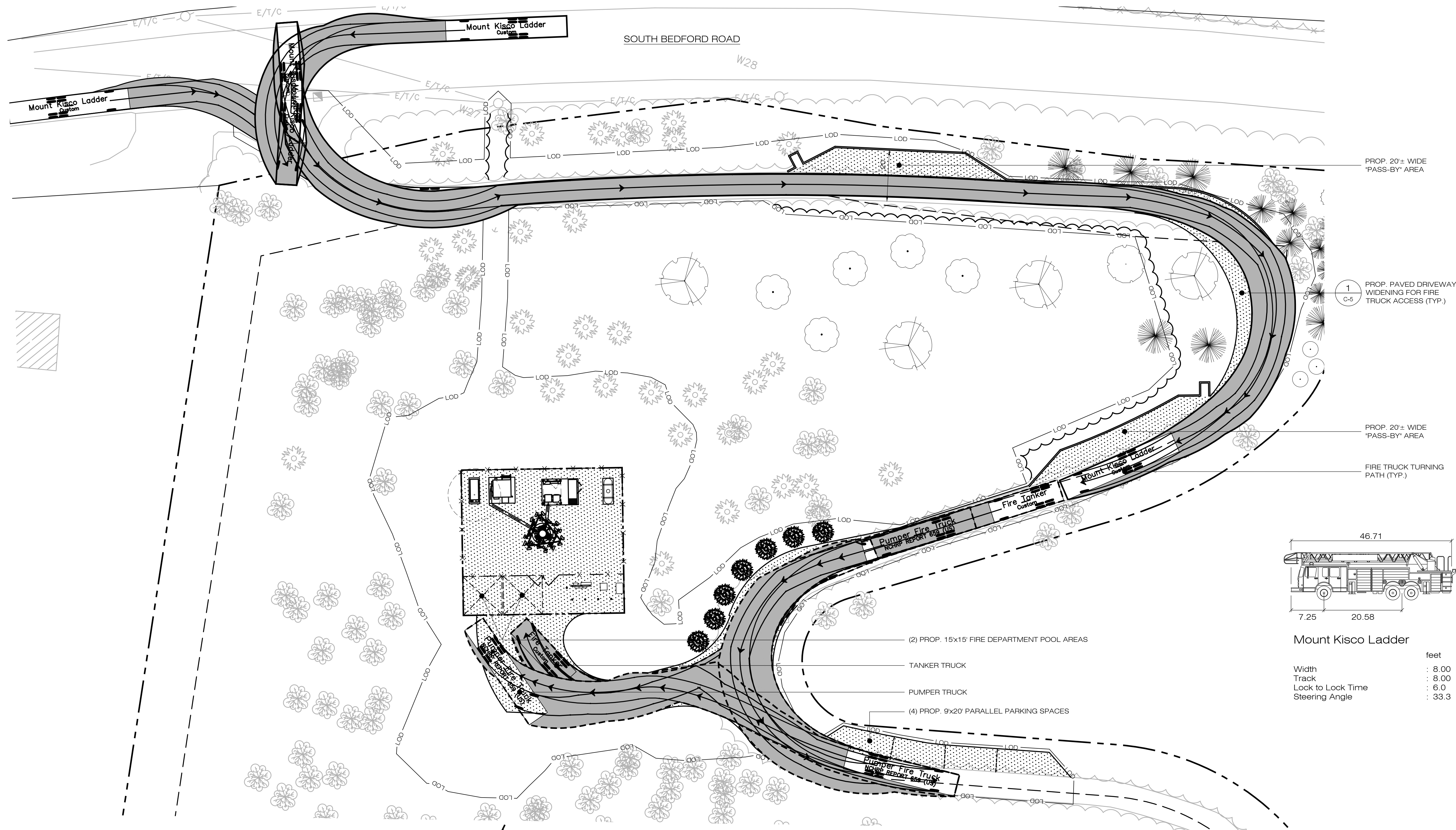
LANDSCAPING & TREE  
PROTECTION PLAN

SHEET NUMBER:

LS-1

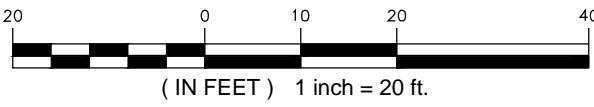




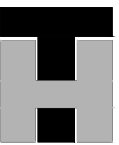


Mount Kisco Ladder	
Width	8.00
Track	8.00
Lock to Lock Time	6.0
Steering Angle	33.3

1 FIRE TRUCK TURNING PLAN  
FD-1 SCALE: 1" = 20'-0"



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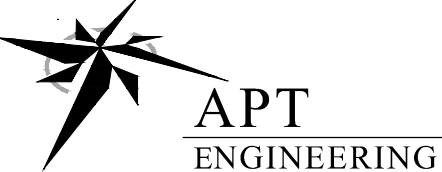
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SHEET TITLE:  
FIRE TRUCK  
TURNING PLAN

SHEET NUMBER:

FD-1

