

CRAIG PAEPRER
Chairman

ANTHONY GIANNICO
Vice Chairman

BOARD MEMBERS
KIM KUGLER
RAYMOND COTE
ROBERT FRENKEL
VICTORIA CAUSA

TOWN OF CARMEL
PLANNING BOARD



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

MICHAEL CARNAZZA
*Director of Code
Enforcement*

RICHARD FRANZETTI, P.E.
Town Engineer

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

PLANNING BOARD AGENDA
FEBRUARY 10, 2022 – 7:00 P.M.

TAX MAP # PUB. HEARING MAP DATE COMMENTS

PUBLIC HEARING

1. Vitiello, Naraez & Kassimis – 137 Wellington Drive 66.18-1-18,19,20 2/10/22 1/12/22 Public Hearing/Resolution

SITE PLAN

2. Suez Water New York Inc – Mahopac Wells -
Coventry Circle 75.20-2-68 1/25/22 Site Plan

3. Suez Water New York Inc – Chateau Wells
59 McNair Drive 75.20-1-16 1/25/22 Site Plan

4. Gateway Summit Multi-Family – Lot 6
Gateway Drive 55.-2-24.6-1, 55.-2-24.6-2 1/28/22 Amended Site Plan

5. The Fairways Multi-Family – Lot 7
Gateway Drive 55.-2-24.8-1, 55.-2-24.8-2 1/28/22 Amended Site Plan

SUBDIVISION

6. G & F Subdivision – Lots 5, 6 & 7
Gateway Drive 55.-2-24.5, 6-1, 7-2 & 8-2 1/28/22 Amendment to Approved
Plat

MISCELLANEOUS

7. Gateway Summit Senior Housing – Lot 6
Gateway Drive 55.-2-24.6-1, 55.-2-24.6-2 Extension of Amended
Final Site Plan

8. The Fairways Senior Housing – Lot 7
Gateway Drive 55.-2-24.8-1, 55.-2-24.8-2 Extension of Amended
Final Site Plan

OWNERS WITHIN 500'

71.01-1-18
Joachim Pariza
114 Wellington Dr
Carmel, NY 10812

71.01-1-19
Kevin Laughey
126 Wellington Dr
Carmel, NY 10812

71.01-1-16
Richard Podivis
105 Wellington Dr
Carmel, NY 10812

66.18-1-19
Rene Narvaez
133 Wellington Dr
Carmel, NY 10812

66.18-1-23
Anthony Witkowski
134 Wellington Dr
Carmel, NY 10812

66.18-1-18
Gregory Kassimis
129 Wellington Dr
Carmel, NY 10812

66.18-1-22
Joseph Lopez
138 Wellington Dr
Carmel, NY 10812

66.18-1-21
William A Dault
141 Wellington Dr
Carmel, NY 10812

66.18-1-20
Emanouil V. Violeto
137 Wellington Dr
Carmel, NY 10812

77.6-1-15
Elizabeth S Blackmar
225 West Shore Dr
Carmel, NY 10812

66.17-1-30
Louis Conte
24 Fairview Rd
Carmel, NY 10812

66.17-1-31
Town Of Carmel
60 McAlpin Ave
Mahopac, NY 10541

66.18-1-26
Kevin Wong
253 West Shore Dr
Carmel, NY 10812

66.18-1-25
Carolyn Sidorowski
261 West Shore Dr
Carmel, NY 10812

66.18-1-27
Lawrence A Raba
245 West Shore Dr
Carmel, NY 10812

66.18-1-2
Charles Ematis
275 West Shore Dr
Carmel, NY 10812

66.18-1-3
Lynne M Minam
291 West Shore Dr
Carmel, NY 10812

66.18-1-24
William Hornado
269 West Shore Dr
Carmel, NY 10812

66.18-1-5
Jack Niewinski
309 West Shore Dr
Carmel, NY 10812

66.18-1-4
Michael A Illesco
313 West Shore Dr
Carmel, NY 10812

66.18-1-4
Douglas Schneider
301 West Shore Dr
Carmel, NY 10812

66.18-1-17
Louis A Depogno
34 Fairview Rd
Carmel, NY 10812

66.18-1-16
Steven Cerini
38 Fairview Rd
Carmel, NY 10812

66.18-1-7
Elsane Rosson
317 West Shore Dr
Carmel, NY 10812

77.6-1-1
Town Of Carmel
60 McAlpin Ave
Mahopac, NY 10541

66.18-1-15
Patrick Caulfield
44 Fairview Rd
Carmel, NY 10812

66.18-1-15
Patrick Caulfield
44 Fairview Rd
Carmel, NY 10812

CONSENT TO FILE
THE UNDERSIGNED OWNER(S) HEREBY CONSENTS TO THE FILING OF THIS MAP.
DATE _____
DATE _____
DATE _____
DATE _____
DATE _____
DATE _____

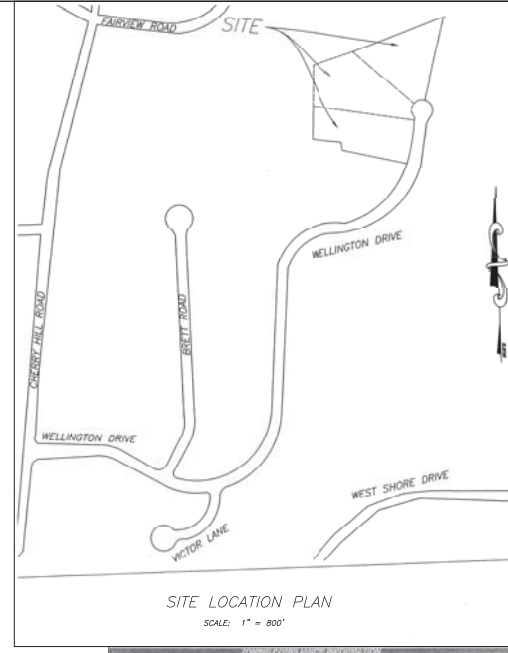
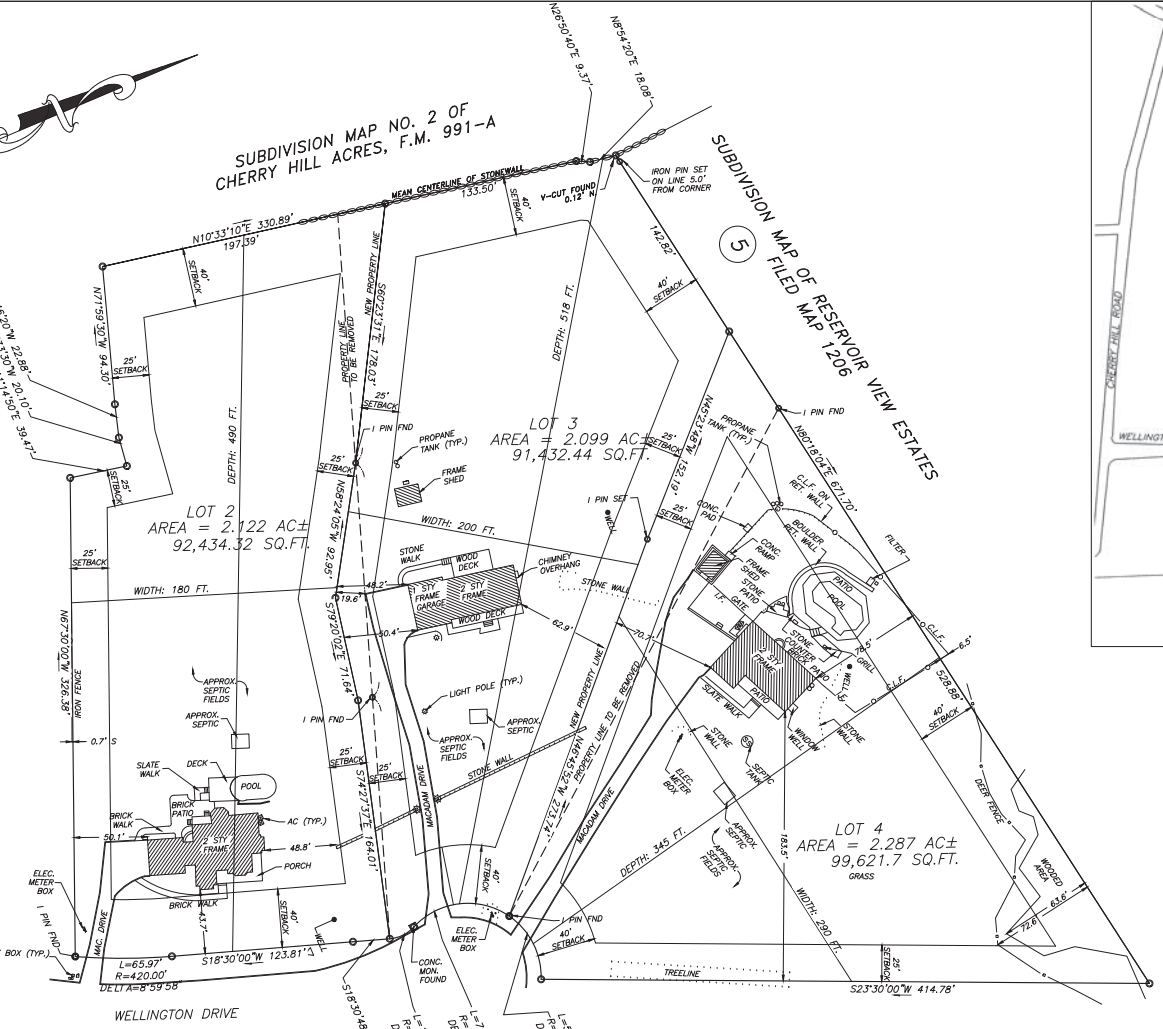
GREGORY KASSIMIS & NICOLE KASSIMIS
129 WELLINGTON DR
CARMEL, NY 10812

RENE NARVAEZ & DEBRA LYNCH-NARVAEZ
133 WELLINGTON DR
CARMEL, NY 10812

ERASMO R. VITIELLO & JOSEPHINE VITIELLO
137 WELLINGTON DR
CARMEL, NY 10812

PARCEL DATA

PARCEL INFO	AREA (OLD)	AREA (NEW)	CHANGE
LOT 2 OWNER(S): GREGORY KASSIMIS & NICOLE KASSIMIS TAX LOT: 66.18-1-18 ZONING: R	2,122 AC±	2,122 AC±	0%
LOT 3 OWNER(S): RENE NARVAEZ & DEBRA LYNCH-NARVAEZ TAX LOT: 66.18-1-19 ZONING: R	92,434.32 SF±	92,434.23 SF±	0%
LOT 3 OWNER(S): RENE NARVAEZ & DEBRA LYNCH-NARVAEZ TAX LOT: 66.18-1-19 ZONING: R	2,356 SF±	2,099 AC±	0.257/2.356 = 10.9%
LOT 3 OWNER(S): RENE NARVAEZ & DEBRA LYNCH-NARVAEZ TAX LOT: 66.18-1-19 ZONING: R	102,627.36 SF±	91,432.44 SF±	-11,194.94/102,627.36 = 10.9%
LOT 4 OWNER(S): ERASMO R. VITIELLO & JOSEPHINE VITIELLO TAX LOT: 66.18-1-20 ZONING: R	2,030 AC±	2,287 AC±	0.257/2.287 = 11.24%
LOT 4 OWNER(S): ERASMO R. VITIELLO & JOSEPHINE VITIELLO TAX LOT: 66.18-1-20 ZONING: R	88,426.80 SF±	99,621.70 SF±	-11,194.94/88,426.80 = 12.66%



ZONING COMPLIANCE

Zoning Provision	Proposed	Existing	Lot 1	Lot 3	Lot 4	Lot 5
Lot Area	150,700 SF±	150,700 SF±	150,700 SF±	150,700 SF±	150,700 SF±	150,700 SF±
Lot Coverage	15%	15%	15%	15%	15%	15%
Lot Width	200 FT	200 FT	200 FT	200 FT	200 FT	200 FT
Front Yard	40 FT	40 FT	40 FT	40 FT	40 FT	40 FT
Side Yard (total of both)	50 FT	50 FT	50 FT	50 FT	50 FT	50 FT
Rear Yard	40 FT	40 FT	40 FT	40 FT	40 FT	40 FT
Minimum Floor Area	None	None	None	None	None	None
Height	30 FT	30 FT	30 FT	30 FT	30 FT	30 FT

If more than 3 lots are proposed, include additional zoning compliance information on a separate sheet.
Will variances be required?
Yes: No:

ARCHITECTURAL VISIONS LLC
2 MILS COTT ROAD NORTH
MAHOPOAC, NY 10541
JULIE.ONES@ARCHITECTURALVISIONS.COM

P: 845-628-6613
F: 845-628-2807

PROJECT: VITIELLO, NARVAEZ, KASSIMIS
PROJECT ADDRESS: 129 WELLINGTON DR, CARMEL, NY 10812
MAILING ADDRESS: SAME AS PROJECT ADDRESS
TAX MAP NO: 66.18-1-18,19,20

SITE PLAN FOR LOT LINE CHANGE/SUBDIVISION

ISSUANCE: 02/28/2021
REVISION: 02/28/2021

SCALE: AS SHOWN
DRAWN BY: JKH/DK
PROJECT NO: 052/11/21

S-100

TERRY BERGENDORFF COLLINS
32 SHAW REESE ROAD
BREWSTER, NEW YORK 10809
TEL: 878-4701 FAX: 878-9838
WWW.TERRYBERGENDORFFCOLLINS.COM

N.Y.S. LICENSE NO. 49691

SURVEYOR'S SEAL

PUTNAM COUNTY DEPARTMENT OF HEALTH

THIS IS TO CERTIFY THAT THE DIVISION OF LAND AS REPRESENTED ON THIS MAP DOES NOT FALL WITHIN THE DEFINITION OF SUBDIVISION AS SPECIFIED IN SECTION 1115 OF THE PUBLIC HEALTH LAW AND SECTION 1117 OF THE PUBLIC HEALTH LAW IS THEREFORE NOT APPLICABLE. THIS MAP IN NO WAY EXPLICIT OR IMPLIED CONVEYS THE APPROVAL OF THE PUTNAM COUNTY DEPARTMENT OF HEALTH. APPROVAL OF THIS PLAN IS NOT REQUIRED, BUT ALL OTHER PROVISIONS OF THE PUTNAM COUNTY SANITARY CODE APPLY.

SIGNED: _____ DATE: _____
CHAIR PERSON, CARMEL PLANNING BOARD

THIS PLAN VALID FOR FILING UNTIL: _____ (DATE)

PLANNING BOARD

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK, ON _____ DAY OF _____, 2021, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERRASURE, MODIFICATION OR REVISION OF THE PLAN AS APPROVED SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____

LOT LINE ADJUSTMENT
PREPARED FOR
TAX LOTS 66.18-1-18, 19, & 20
BEING
LOTS No. 2, 3, & 4
AS SHOWN ON
TOWN OF CARMEL PUTNAM CO., N.Y.
AUGUST 17, 2021
COPYRIGHT © 2021 TERRY BERGENDORFF COLLINS, ALL RIGHTS RESERVED

REVISIONS

DATE	DESCRIPTION	BY
10/8/21	LOT LINE ADJUSTMENT	LT
10/28/21	LOT LINE ADJUSTMENT	LT

THE ALTERATION OF SURVEY MAPS BY ANYONE OTHER THAN THE ORIGINAL PREPARER IS MISLEADING, CONFUSING AND NOT IN THE GENERAL WELFARE AND BENEFIT OF THE PUBLIC. LICENSED LAND SURVEYORS SHALL NOT ALTER SURVEY MAPS, SURVEY PLANS OR SURVEY PLATS PREPARED BY OTHERS. UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 17209 OF THE NEW YORK STATE EDUCATION LAW. THE LOCATION OF UNDESIRABLE IMPROVEMENTS OR ENCROACHMENTS, IF ANY EXIST OR ARE SHOWN HEREON ARE NOT CERTIFIED. ALL CERTIFICATIONS HEREON ARE VALID FOR THIS MAP AND COPIES THEREOF ONLY IF SAID MAP OR COPIES BEAR THE IMPRESSED SEAL OF THE SURVEYOR WHOSE SIGNATURE APPEARS HEREON. THIS MAP MAY NOT BE USED IN CONNECTION WITH A "SURVEY AFFIDAVIT" OR SIMILAR DOCUMENT, STATEMENT OR MECHANISM TO OBTAIN TITLE INSURANCE FOR ANY SUBSEQUENT OR FUTURE GRANTEE.



ATZL, NASHER & ZIGLER P.C.

ENGINEERS - SURVEYORS - PLANNERS

Web: www.anzny.com

January 26, 2022

Planning Board
Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541
Attn: Craig Paepre, Chairman

Re: Suez Water (Mahopac Wells 1,2 &3)
Coventry Circle, Mahopac, NY 10541
Tax Lot 75.20-2-68

Dear Chairman Paepre and Honorable Board Members,

The following is our response to Michael G. Carnazza, Director of Code Enforcement for the Town of Carmel, letter dated January 13, 2022:

1. Comment: The applicants propose to add a GAC Treatment Facility Building to the water treatment facility off Bucks hollow Rd. in Mahopac.

Response: No response required.

2. Comment: A Use Variance is not required for the Private Utility. The ZBA interpreted that Private and Public Utilities are permitted in the Town of Carmel.

Response: No response required.

3. Comment: Provide a detail of the buffer. Code §156-37C requires "A landscaped buffer area at least 10 feet in width and six feet in height shall be provided and maintained along all property lines to satisfactorily screen public utility substations and any other buildings from surrounding uses of land". The

buffer that is provided in the picture could be re-located closer to the building, therefore, allowing for more coverage of the building.

Response: The current screening is located at a higher elevation which would give more visual coverage of the proposed structure.

4. Comment: Referral to the ECB, Fire Department and Putnam County Dept. of Health are required by code.

Response: No response required.

The following is our response to Patrick Cleary, AICP, CEP, PP, LEED AP of Cleary Consulting, letter dated January 13, 2022:

1. Comment: The ZBA ruled that the Applicant is a public water company, and as such, the proposed use is a permitted principal use.

Response: No response required.

2. Comment: The Applicant has clarified that the project will require USACOE and NYSDEC wetland permits.

Response: No response required.

3. Comment: The Applicant has clarified that the project is not located within the Plumb Brook floodplain.

Response: No response required.

4. Comment: The Applicant has clarified that the PFAS treatment facility will be a permanent and on-going operation.

Response: No response required.

5. Comment: No new fencing is proposed.
Response: No response required.
6. Comment: The Applicant has clarified that the new pumps will be located within the wells and are between 100' and 189' below grade. No noise impacts are expected, and the project will comply with the sound level standards for residential districts established in Chapter 105 of the Town Code.
Response: No response required.
7. Comment: The Applicant has clarified that all chemical storage tanks will have secondary containment structures designed to accommodate the entire volume of chemical storage. Chemical levels are constantly monitored remotely.
Response: No response required.
8. Comment: The Applicant has clarified that the operator will visit the site twice per day as required by the Health Dept. for the operation of the iron/ manganese pilot treatment system. Additionally, approximately once every week and a half the backwash water from the pilot treatment system is removed by a waste hauler.
Response: No response required.
9. Comment: Lighting illumination details have been added to the Lighting Plan.
Response: No response required.
10. Comment: A new landscaping plan has been provided which adds screening plantings new the residences along Coventry Circle.

Response: No response required.

11. Comment: The Applicant has located a vendor that can provide the prefabricated building to meet the project timeframe. The building will be a prefabricated metal building with steel framing, a standing seam roof system and a cast in place concrete foundation. The color of the building will be "hemlock green." The roof trim, gutters and downspouts will be "cool harvest." A 4' split face masonry wall is proposed around the building, to be "Tribeca tan." Revised project renderings have been provided.

A color sample of "hemlock green", "cool harvest" and Tribeca tan" should be provided.

Response: These samples will be provided to the Planning Board for review.

The following is our response to Richard J. Franzetti, P.E, letter dated January 5, 2022:

General Comments

1. Comment: The following referrals are required:
- a. New York State Department of Environmental Conservation (NYSDEC).
 - b. Putnam County Department of Health (PCDOH).
 - c. The Town of Carmel Environmental Conservation Board (ECB).
 - d. The Town of Carmel Highway Department.
 - e. Mahopac Fire Department.

The applicant has noted these referrals

Response: No response required.

2. Comment: The following permits are required.
- a. NYSDEC - for stormwater and wetlands.
 - b. PCDOH for well and treatment system.

- c. Town of Carmel Highway- work permit.
- d. ECB for wetlands.

The applicant has noted these permit requirements

Response: No response required.

3. Comment: The area of disturbance for the work as provided is 18,644 sf. The threshold criteria of disturbances for the NYSDEC stormwater regulation are between 5,000 square feet and one (1) acre and over one (1) acre. The project will require coverage under the NYSEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) and the development of Stormwater Pollution Prevention Plan (SWPPP) that has erosion and sediment controls.

The applicant has provided a SWPPP which is currently under review. The applicant should note the area of disturbance must include the areas for the proposed underground utility service.

Response: Area of disturbance has been revised on plans. SWPPP will be revised.

4. Comment: All re-grading required to accomplish the intended development should be provided. It is unclear from the drawings provide the extent of cut and fill proposed for the site. This includes the areas for the proposed underground utility service.

The applicant has provided a grading plan. The amount of fill, if any, being brought to the site should be provided.

All fill brought to the site must be certified per NYSDEC regulations and manifests/certification of the fill material being delivered should be provided. A note should be added to the drawing.

Response: Cut and fill analysis will be provided. Any fill required will be certified per NYSDEC regulations.

5. Traffic and Vehicle Movement Plans should be provided which provide the following:

- a. Comment: All turning radii for the site should be graphically provided. This includes the turning radii into the site entrance. All calculations should be provided.

Response: All radii provided on drawing 8.

- b. Comment: Slopes at the entrance way need to be defined. It is suggested that slopes of less than 6% be used for the first 20 feet of entry and that slopes of no greater than 8% be used entering the site. Please refer to AASHTO guidelines for commercial properties.

A driveway profile should be provided.

Response: Driveway profile off Bucks Hollow Road provided. Entrance conforms with AASHTO requirements.

6. Comment: All easement information regarding the areas for the proposed underground utility service must be provided.

Applicant has provided easement information. This should be reviewed by Planning Counsel.

Response: No response required.

7. Comment: Should any public improvements be deemed necessary as part of the development of the tract, a Performance Bond and associated Engineering Fee must eventually be established for the work. The applicant will need to develop a quantity take off for bonding purposes.

The applicant has noted this requirement. The applicant should note that a Performance Bond and associated Engineering fee is minimally required for the stormwater management practices, erosion and sediment control drainage features, landscaping etc. installed on the site. Please see §156-61 J and K of the Town Code for additional information.

Response: No public improvements are required. Performance Bond and Engineering Fee is noted.

Detailed Comments

1. Comment: A landscaping plan should be provided to show the location and extent of all plantings.

Applicant has requested a waiver of this requirement and have provided a tree removal plan.

Response: We have filled the gaps with proposed screening as shown on the tree plan. This will mitigate any visual impacts to the nearby residences. A waiver is no longer requested.

2. Comment: The rain garden locations have been provided. The applicant should note that they must meet the criteria as defined by the NYSDEC. This includes providing sufficient depth to groundwater.

Applicant indicated that the calculation will be provide prior to construction. Minimally these calculations will need to be provided/approved as part of the ECB approval and prior to seeking coverage under the NYSDEC general stormwater permit.

Response: Per discussion, required testing for groundwater, percolation etc. will be performed when the weather permits.

3. Comment: Adequate protection should be provided in the stormwater management practice (SMP) areas to minimize disturbance during construction. Details should be provided to show how the rain garden will be protected during construction.

Response: Rain gardens will be installed in the final stage of the project. No disturbance to the rain gardens due to construction is anticipated.

4. Comment: It is unclear if additional electrical utilities are being installed.
- Applicant indicated that an electrical upgrade is being installed underground. The extent of the underground utilities should be provided.
- Response: Three phase electric is required for the new facility. The existing underground electric from Coventry Circle is not adequate and will be abandoned. Three phase electric service will be brought in from Bucks Hollow Road as provided on plans.*
5. Comment: The wastewater report should provide loading values (#/dy) for the proposed system.
- The applicant has provided a wastewater report. It needs to provide loadings from the system. The applicant should refer to §120 of the Town Code. The report should provide the parameters in alphabetical order.
- Response: The loading rates were provided in the wastewater report. We have received confirmation of receipt of the loading rates and additional comments from Rich Franzetti which we are in the process of addressing.*
6. Comment: Details for the proposed connection into the Town of Carmel Sewer system must be provided.
- The applicant should note that all sewers must meet the Town of Carmel Town Code §120. The full set of drawings should provide this information.
- Response: Per the Town Code, we will be connecting directly to the existing sewer and have provided a connection detail with this response letter. This detail will be added to the site plan.*
7. Comment: Road cut details must be provided.
- The applicant should note that Town road specifications are 12" item 4, 3" base, 2" binder and 1" top course. This should be identified on the drawings.
- Response: Pavement specifications for macadam apron have been provided on*

drawing 4.

8. Comment: Gate valves shall be AWWA non-rising stem type, as manufactured by Mueller Company, Model A-2360-23, or approved equal, conforming to the latest AWWA Standard for Gate Valves - 3" through 48" - for Water and Other Liquids, AWWA Designation C-509.

Response: No response required.

9. Comment: Sizes up to and including 12" shall be 250 psi working pressure. The valve body and bonnet shall be ductile iron. All interior and exterior metal surfaces shall be coated with a two-part thermo setting epoxy complying with AWWA C550.

Response: No response required.

10. Comment: Valves shall have dual "O" ring seals, inside screw, resilient wedge seats in accordance with AWWA Designation C-550 and shall be constructed so as to provide unobstructed full port clearance when fully open and immediate complete closure when closed. The ends of the valves shall be mechanical joint.

Response: No response required.

11. Comment: All valves shall be arranged to open in counterclockwise direction unless otherwise specifically indicated and operating nuts shall be 2" square.

Response: No response required.

12. Comment: Valves shall be tested to a pressure of not less than two times the working pressure.

Response: No response required.

13. Comment: All hydrants shall be six inches in size with six-inch mechanical joint inlet connection and shall be equal to the Mueller Centurion A-421, with one (1) 4 ½" pumper nozzle and two (2) 2½ " hose nozzles.

Response: No response required.

14. Comment: Water Service Saddles shall be equal to those manufactured by Mueller, Model 7 ½" x 1" SS Series Stainless Steel Saddle, Double Stud.

Response: No response required.

15. Comment: Corporation stops shall be equal to those as manufactured by Mueller Company, Model B- 25000Series, NRS and of the size required. Such corporation stops shall meet the requirements of AWWA Specification No. C800.

Response: No response required.

16. Comment: Curb valves (stops) shall be equal to those as manufactured by Mueller Company, Model H- 15214 and shall conform to AVVWA Specification No. C800.

Response: No response required.

17. Comment: Curb boxes shall be equal to those as manufactured by Mueller Company and similar to Mueller extension type with arch pattern base model H- 10314 all extension rods shall be stainless steel.

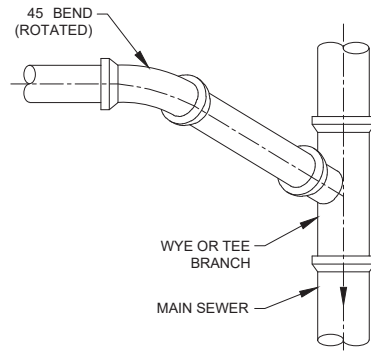
Response: No response required.

18. Comment: All fire hydrants shall be the approved AWWA type fire hydrants in conformance with the American Water Works Association Standard for Fire Hydrants for Ordinary Water Works Service, AWWA Designation C502, and shall have a 5-1/4" valve opening, a 6" mechanical joint inlet complete with an auxiliary gate valve (close coupled), a 6" mechanical joint shoe, and all appurtenances.

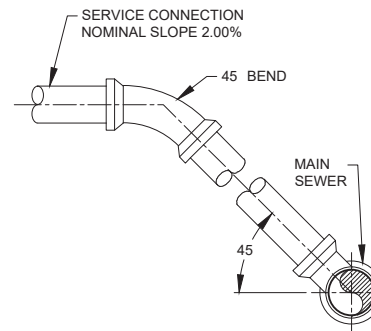
Response: No response required.

19. Comment: Fire hydrants shall be rated for a working pressure of 250 Psi. Fire hydrants shall be sized for a 4'-6" bury.

Response: No response required.



PLAN



ELEVATION

SERVICE CONNECTION

NO SCALE

THIS DRAWING IS AND SHALL REMAIN THE PROPERTY OF GANNETT FLEMING, INC. ANY REUSE, REUSE, ALTERATIONS, ADDITIONS AND/OR DELETIONS OF THESE DRAWINGS ON PROJECTS EXTENDING OR OTHER PROJECTS SHALL BE AT THE USER'S SOLE RISK AND RESPONSIBILITY TO GANNETT FLEMING, INC. IN THE EVENT THAT A CONFLICT ARISES BETWEEN THE SEALED DRAWINGS AND THE ELECTRONIC FILES, THE SEALED DRAWINGS WILL GOVERN.

© GANNETT FLEMING, INC. 2021

No.	DESCRIPTION	DATE	BY

DESIGNED	CADD	SCALE
		AS NOTED
CHECKED	APPROVED	APPROVED


GANNETT FLEMING
 ENGINEERS AND ARCHITECTS, P.C.

SUEZ WATER NEW YORK INC.
 WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

90% SUBMISSION

 JOB No.
68577
 DATE
JANUARY 2022

SHEET No.
 1

KIRKPATRICK LAW, LLC
120 BLOOMINGDALE ROAD
WHITE PLAINS, NEW YORK 10605
OFFICE (914) 997-2747
CELL (914) 420-5756
jkirk@kirklawllc.com

January 27, 2022

Planning Board
Town of Carmel
60 McAlpin Avenue
Mahopac NY 10541

Dear Members of the Board:

Clarification has been requested regarding the easement rights which my client, Suez Water New York, holds to make necessary connection to the sewer line in Coventry Circle.

For convenience, our prior maps have always indicated a 20-foot wide right of way centered on the existing waterline.

In actuality, however, Suez holds an easement to install and maintain necessary utility lines anywhere within, and over any of the lots in, this subdivision.

Attached is the original grant of easement, made April 12, 1988, from the developer of the subdivision (Aphrodite Acquisitions, Inc.) to the predecessor of Suez (Forest Park Water Company and Buckshollow Sewer Corporation). The language thereof, beginning on the first page in the second paragraph grants "an exclusive and permanent general right of way and easement over lands owned by the Grantee to install, construct, extend, replace, relocate, operate, repair, maintain and renew wells, water and sewer pipes and lines and such other appurtenant and supporting equipment, apparatus or structures as the Grantee, or such assignees as the Grantee may elect, may now or shall from time to time hereafter deem necessary or appropriate for the providing of sewer and water service to the residential development presently under construction on the premises and known as "Hunters Run", together with the right of ingress and egress over the premises for the passage of men, vehicles and machines as shall be deemed

necessary or appropriate by the grantee for all of the above purposes."

While this grant is remarkably broad, it is not the intention of Suez to start excavating the lawns and landscaping on these residential lot without care and consideration for the residents thereof. Every effort will be made to keep the installation of the new sewer line as unintrusive as practicable. Likewise, every effort will be made to restore all of the disturbed ground to its condition prior to any excavation.

Sincerely,

A handwritten signature in black ink that reads "John Kirkpatrick". The signature is written in a cursive style with a large, prominent initial "J".

John B. Kirkpatrick

CREAMER

J. FLETCHER CREAMER & SON, INC.

POWERED BY **API Group**

Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541

Re: **Site Plan Application**
SUEZ Water New York, Inc. – Mahopac Wells 1, 2, & 3
Proposed Building Materials Narrative

All,

Due to extensive lead time delays for the design, fabrication and delivery of the original prefabricated metal building, we explored other material or manufacturer options for the building to better meet schedule requirements.

After exploring several different options, we were able to proceed with a different prefabricated metal building vendor to furnish and install the building. We were able to expedite the design process and improve the fabrication duration of the prefabricated building in order to meet our schedule.

We will be installing a prefabricated metal building, with steel framing, insulated metal wall panels with an exterior color, standing seam roof system, with a cast in place concrete foundation designed to accommodate the load of the building structure, equipment, vessels, and all other loads impacting the foundation.

The color of the building will be Hemlock Green and the roof trim, gutters and downspouts color will be cool harvest. The building will have a 4' masonry façade along the perimeter of the building for aesthetics and durability and will be Hemlock Green to match the building. Please refer to renderings for visual representation of the building and masonry facade.

Sincerely,
J. Fletcher Creamer & Son, Inc.

101 East Broadway
Hackensack, NJ 07601-6851
Phone (201) 488-9800 | Fax (201) 488-2901

Copy to:

JFCSON.COM



January 28, 2022

Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, NY 10541

Re: Suez Water, Forest Park Wells
Archer, Geymer, Chateau,
Mahopac, & London Bridge

Dear Members of the Board.

During the Planning Board meeting held on January 13, 2022 you asked the Suez Water PFAS Team if we could relocate the generators that are currently installed at the Chateau and Mahopac facilities. In this letter I will explain why the generators were installed and why their locations are critical to the Suez Operations.

In June 2016, prior to Suez taking ownership of the Forest Park water treatment facilities, the Forest Park Water Company had charges brought against them by the Putnam County Board of Health for failing to install an "Electric Manual Transfer Switch(s) so as to facilitate the immediate plug in to portable on-site Emergency Electric Power Generation". Upon taking ownership of the Forest Park facilities, Suez became responsible for these improvements. In a letter dated January 3, 2018 from Suez to Michael Budzinski, P.E. of the Putnam County Department of Health (PCDOH), Suez provided a schedule for these improvements and advised the PCDOH that an initial quantity of 4 portable generators would be purchased. Additional generators were purchased in the subsequent years. The schedule in the 2018 letter showed that the transfer switches for the Chateau and Mahopac facilities were the first to be installed and had already been installed. These facilities were prioritized because they have historically experienced power failures and they are our two largest systems in Putnam County.

After the January 13th Planning Board meeting, I met with my operators to discuss the feasibility of relocating the Chateau and Mahopac generators offsite. The current location of the generators has been selected due to the need for 120 volt power to run the integral battery charger and engine block heater, as well as proximity to the transfer switch. My operators expressed concern with relocating the generators offsite. First, the addition of backup power was required by the PCDOH, so they feel that moving the generators could result in a violation from the PCDOH. My operators further explained that moving the generators off site would not be a prudent decision. The generators are typically needed during storm events, as a result of trees or branches damaging a power line feeding the water treatment plant. Trying to tow a generator to the Chateau or Mahopac sites, when the roadways may be blocked due to downed trees and branches may not be possible. Further, the Chateau site is equipped with an automatic transfer switch. Therefore in the event of a power loss the facility will



transfer to backup power, without operator intervention, which maintains uninterrupted service to our customers.

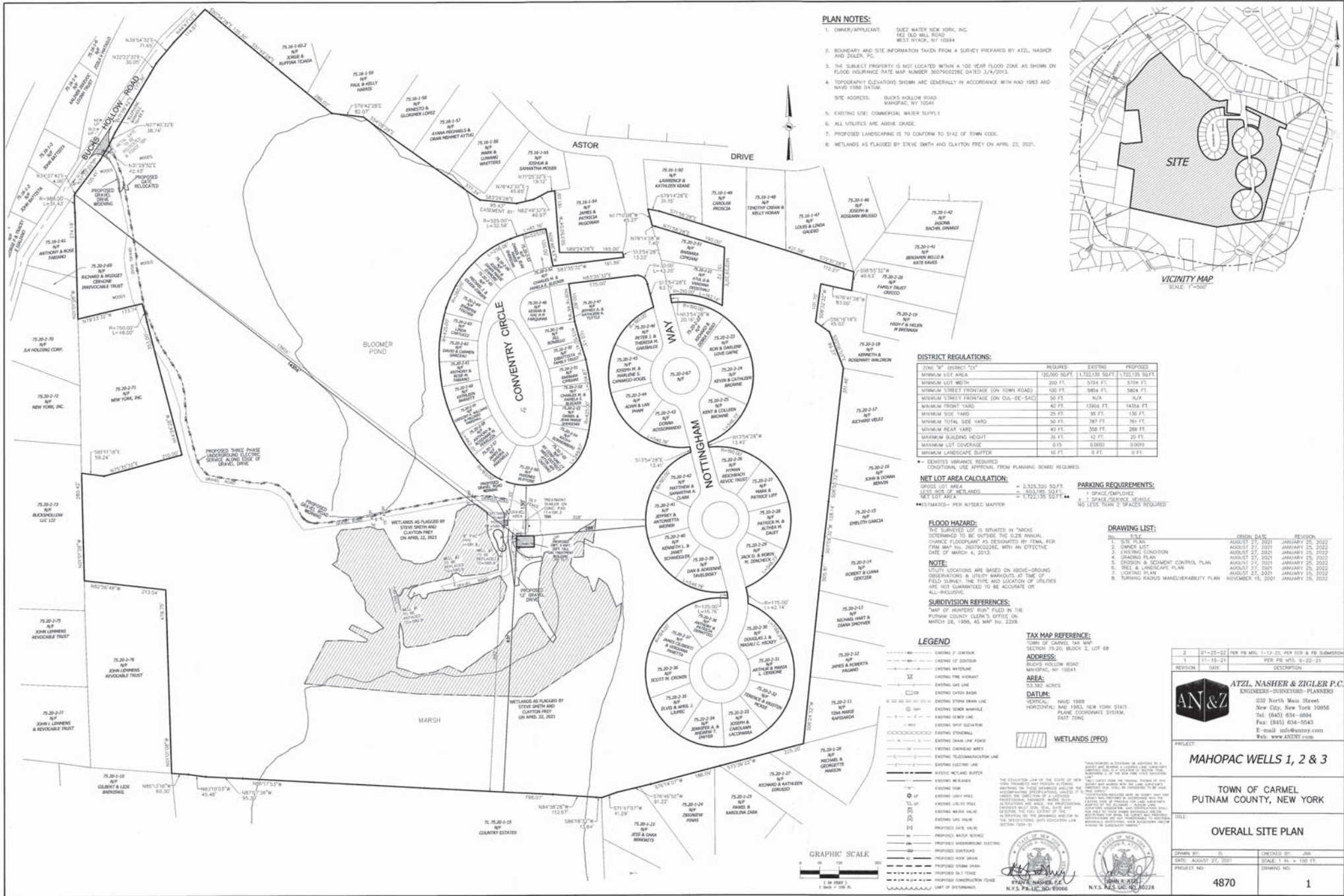
Since we cannot relocate the generators, we have considered alternatives that can help hide them from view. At the Chateau site, we will paint the generator and the existing pump house to match the proposed PFAS building (i.e., Hemlock Green). In addition, the eastern property line will be landscaped with sky rocket junipers, which have a mature height of 20'. This will further hide the generator from view. For the Mahopac facility we will also paint the generator to match the proposed PFAS building so it blends into the woodlands. The existing vegetation and the proposed landscaping along the northern border should further reduce the visibility of the generator.

As discussed in this letter, Suez cannot relocate the existing generators, which have been required by the PCDOH. We can however, offer alternatives to help the generators blend into their surroundings, making them less visible to the nearby residents. Should you have any questions or comments, please don't hesitate to contact me.

Regards,

A handwritten signature in blue ink, appearing to read "S. Garabed", written over a horizontal line.

Steven R. Garabed, P.E.
Manager of Engineering
Suez Water NY Operations



ATZL, NASHOR & ZIGLER P.C.
 ENGINEERS-SURVEYORS-PLANNERS

232 North Main Street
 New City, New York 10986
 Tel: (845) 634-6884
 Fax: (845) 634-5543
 E-mail: info@anzty.com
 Web: www.ANZTY.com

PROJECT:

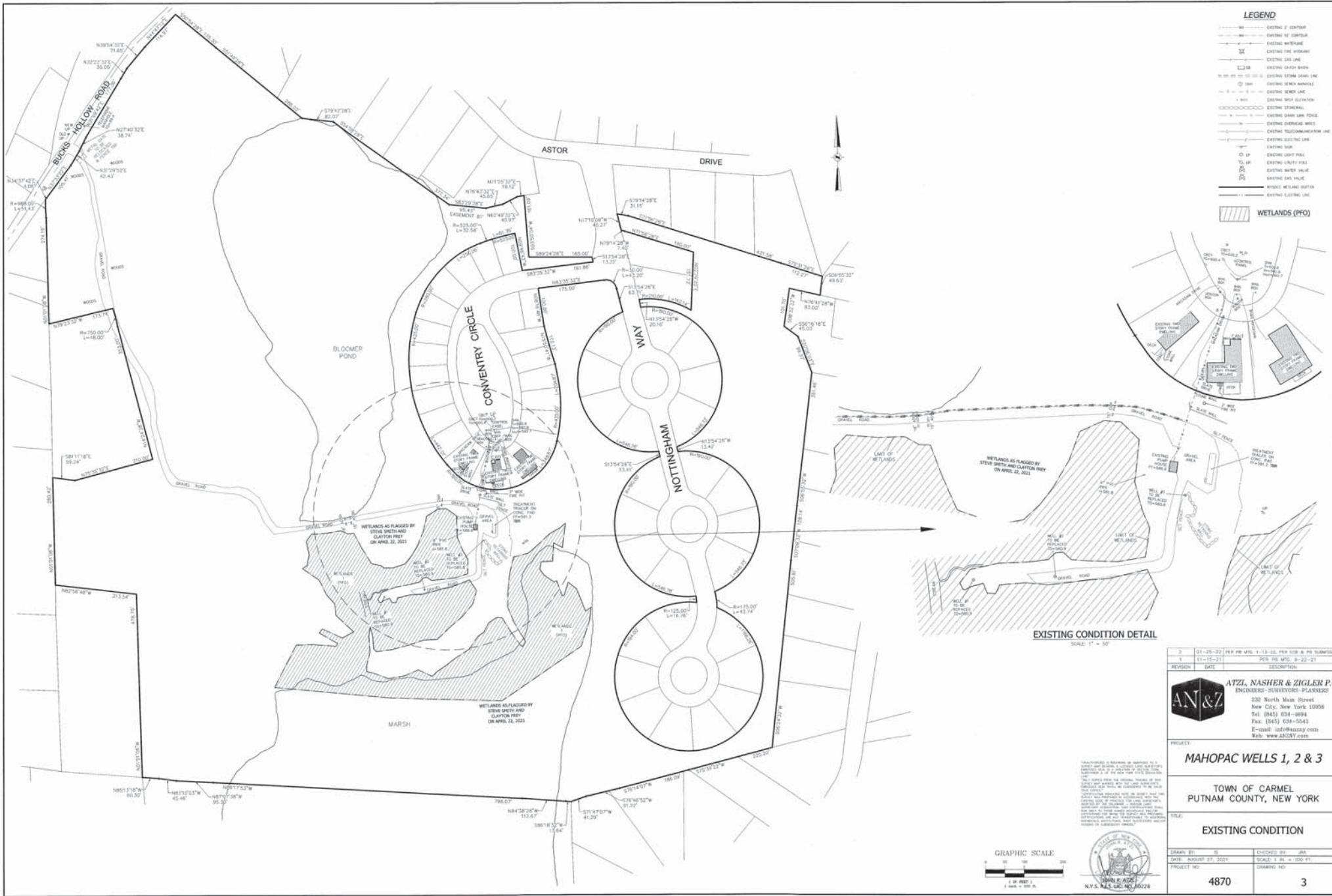
MAHOPAC WELLS 1, 2 & 3

**TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK**

OVERALL SITE PLAN

DRAWN BY: [Signature]
DATE: AUGUST 27, 2021
PROJECT NO.: 4870

CHECKED BY: [Signature]
SCALE: 1" = 300 FT.
DRAWING NO.: 1



LEGEND

- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING WATERLINE
- EXISTING GAS LINE
- EXISTING SAN LINE
- EXISTING CATCH BASIN
- EXISTING STORM DRAIN LINE
- EXISTING SEWER MANHOLE
- EXISTING SENDER LINE
- EXISTING SPOT ELEVATION
- EXISTING STRENGTH
- EXISTING DRAIN LINE TIE-IN
- EXISTING CATCHMENT WELLS
- EXISTING TELECOMMUNICATION LINE
- EXISTING EXISTING LINE
- EXISTING DRAIN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING SAN TIE-IN
- EXISTING WETLAND BUFFER
- EXISTING ELEVATION LINE

WETLANDS (PFO)



3	01-25-22	FOR PER MTS. 1-13-22, PER USG & PER SUBMISSION
1	11-15-21	FOR PER MTS. 9-22-21
REVISION	DATE	DESCRIPTION

ATZL, NASHER & ZICLER P.C.
 ENGINEERS - SURVEYORS - PLANNERS

AN&Z

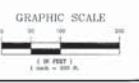
232 North Main Street
 New City, New York 10956
 Tel: (845) 634-1094
 Fax: (845) 634-5543
 E-mail: info@nazny.com
 Web: www.ANZNY.com

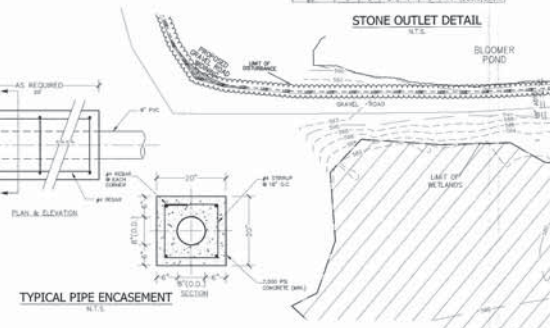
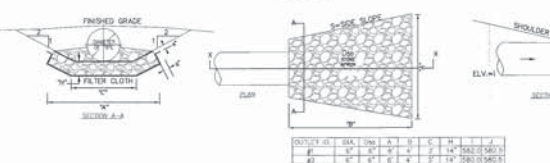
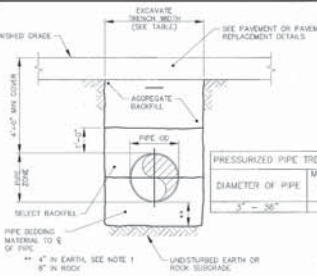
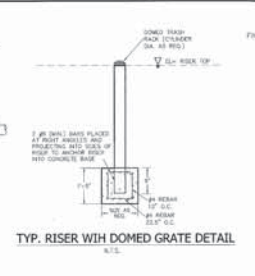
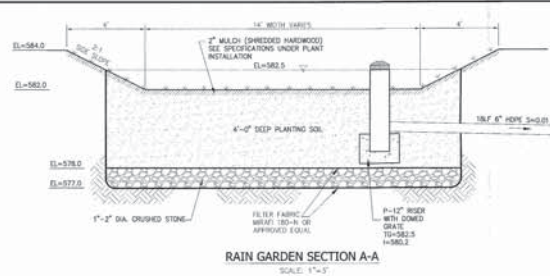
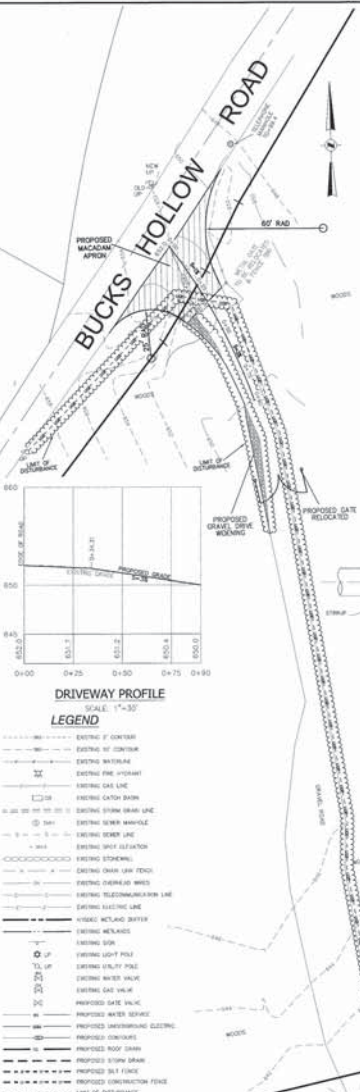
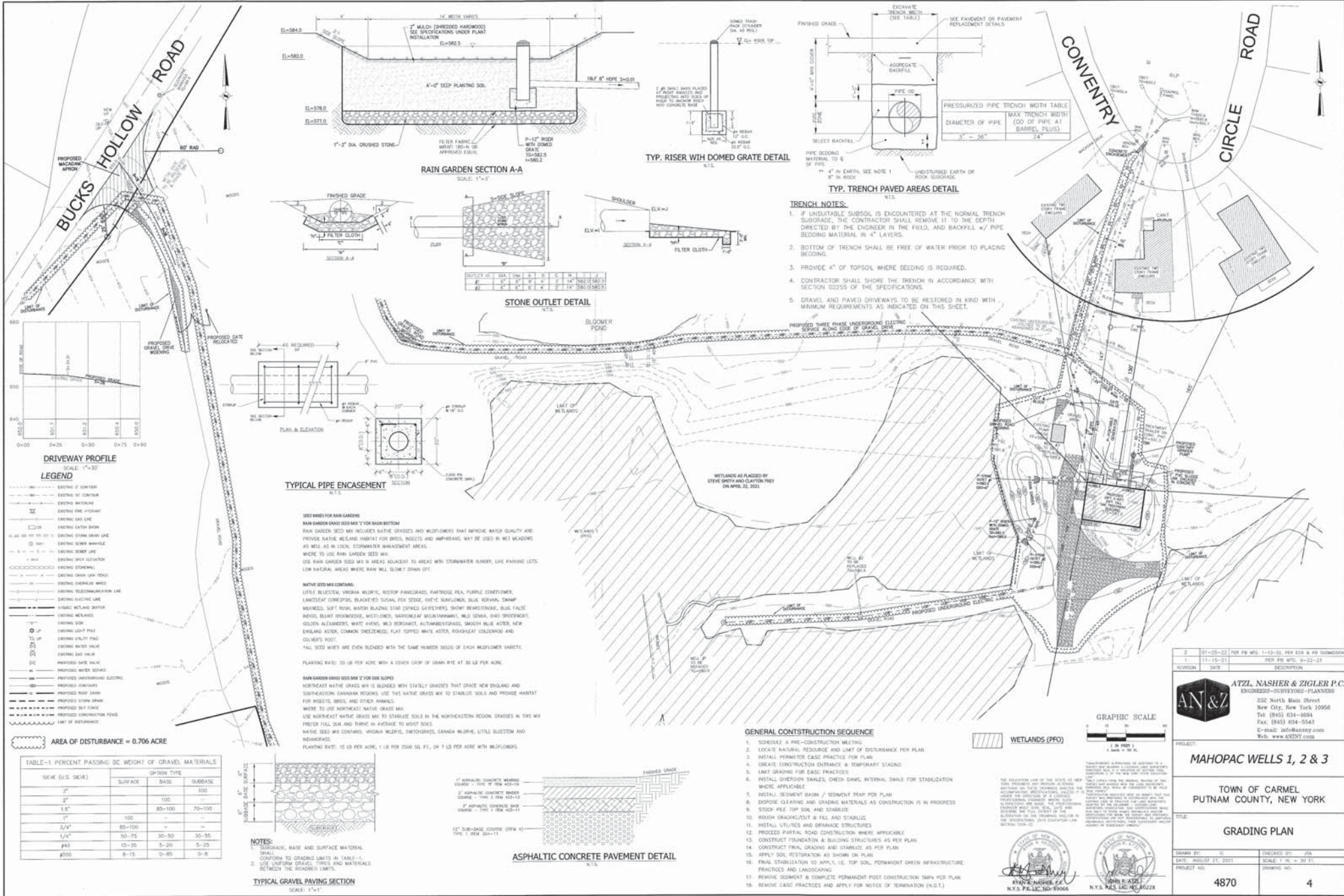
PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK

SCALE:
EXISTING CONDITION

DRAWN BY: SS	CHECKED BY: JM
DATE: NOVEMBER 27, 2021	SCALE: 1" = 100 FT.
PROJECT NO: 4870	DRAWING NO: 3





SEE NOTES FOR RAIN GARDENS
RAIN GARDEN GRASS SEED MIX FOR BAIN BOTTOM
 RAIN GARDEN SEED MIX INCLUDES NATIVE GRASSES AND WILDFLOWERS THAT REMOVE WATER QUALITY AND PROVIDE NATIVE WETLAND HABITAT FOR BIRDS, INSECTS AND AMPHIBIANS. MAY BE USED IN WET MEADOWS AS WELL AS IN LOCAL FOREWATER MANAGEMENT AREAS.
 WHERE TO USE RAIN GARDEN SEED MIX:
 USE RAIN GARDEN SEED MIX IN AREAS ADJACENT TO STORMWATER RUNOFF, LAKE PARKING LOTS, LOW WATERSHED AREAS WHERE RAIN WILL SLOWLY DRAIN OFF.

NATIVE SEED MIX CONTAINS:
 LITTLE BLUESTEM, VIRGINIA WILDFLOWERS, NESTOR PANICGRASS, PARROTGRASS, PURPLE CONEFLOWER, LANCELEAF CONEFLOWER, BRACKETED SUNFLOWER, COYOTE BARKLING, BLUE SPYGLASS, SHARP MANEWEED, SOFT MOSS, WATSON BLADING STAR (SPREAD GAYLARDIA), SHORT PRAIRIE DOGWOOD, BLUE FALSTICK, BLUNT BROOMCLOVER, WITLIFELOW, SANDWICH MOUNTAINMINT, WILD GINGER, OHIO SPICEWORT, GOLDEN ALEXANDER, WHITE ANEMONE, WILD BERGAMOT, AUTUMNHEMPHYSALIS, SMOOTH BLUE ASTER, NEW ENGLAND ASTER, COMMON SWEETWILLOW, FLAT TOPPED WHITE WETTER, ROYALBLUE GOLDENROD, AND COLICHA'S ROOT.

ALL SEED MIXES ARE EVEN BLENDED WITH THE SAME NUMBER SEEDS OF EACH WILDFLOWER VARIETY.

PLANTING RATE: 20 LB PER ACRE WITH A COVER CROP OF GRASS RYE AT 30 LB PER ACRE.

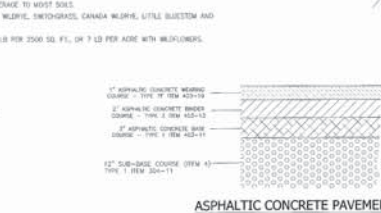
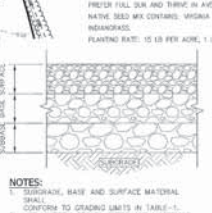
RAIN GARDEN GRASS SEED MIX FOR SIDE SLOPE
 NORTHEAST NATIVE GRASS MIX IS BLENDED WITH STABLE GRASSES THAT GRACE NEW ENGLAND AND SOUTHEASTERN CHESAPEAKE REGIONS. USE THE NATIVE GRASS MIX TO STABILIZE SOILS AND PROVIDE HABITAT FOR INSECTS, BIRDS, AND OTHER ANIMALS.
 WHERE TO USE NORTHEAST NATIVE GRASS MIX:
 USE NORTHEAST NATIVE GRASS MIX TO STABILIZE SOILS IN THE NORTHEASTERN REGIONS. GRASSES IN THIS MIX PREFER FULL SUN AND THRIVE IN ADVANCE TO MOST SOILS.
 NATIVE SEED MIX CONTAINS: VIRGINIA WILDFLOWERS, SANDWICH CANADA WILDFLOWERS, UTILE BLUESTEM AND PENNSYLVANIA.

PLANTING RATE: 15 LB PER ACRE, 1 LB PER 2500 SQ. FT., OR 1 LB PER ACRE WITH WILDFLOWERS.



AREA OF DISTURBANCE = 0.706 ACRE

SIEVE (U.S. SIEVE)	PERCENT PASSING BY WEIGHT OF GRAVEL MATERIALS		
	SURFACE	BASE	SUBBASE
3/8"	100	100	100
2"	100	100	100
1 1/2"	100	85-100	70-100
1"	100	—	—
3/4"	85-100	—	—
1/4"	50-75	30-50	30-50
#40	15-25	5-20	5-25
#100	8-15	0-5	0-8



- TRENCH NOTES:**
- IF UNSUITABLE SUBSOIL IS ENCOUNTERED AT THE NORMAL TRENCH SUBGRADE, THE CONTRACTOR SHALL REMOVE IT TO THE DEPTH DIRECTED BY THE ENGINEER IN THE FIELD, AND BACKFILL w/ PIPE BEDDING MATERIAL IN 4" LAYERS.
 - BOTTOM OF TRENCH SHALL BE FREE OF WATER PRIOR TO PLACING BEDDING.
 - PROVIDE 4" OF TOPSOIL WHERE SEEDING IS REQUIRED.
 - CONTRACTOR SHALL SHORE THE TRENCH IN ACCORDANCE WITH SECTION 02255 OF THE SPECIFICATIONS.
 - GRAVEL AND PAVED DRIVEWAYS TO BE RESTORED IN KIND WITH MINIMUM REQUIREMENTS AS INDICATED ON THIS SHEET.

- GENERAL CONSTRUCTION SEQUENCE**
- SCHEDULE A PRE-CONSTRUCTION MEETING
 - LOCATE NATURAL RESOURCE AND LIMIT OF DISTURBANCE PER PLAN
 - INSTALL PERMANENT EASE ACCESS PER PLAN
 - CREATE CONSTRUCTION ENTRANCE & TEMPORARY STAGING
 - LIMIT GRADING FOR EASE ACCESS
 - INSTALL DIVERSION CHANNELS, CHECK DAMS, INTERNAL SWALS FOR STABILIZATION WHERE APPLICABLE
 - INSTALL SEDIMENT BASIN / SEDIMENT TRAP PER PLAN
 - EXPLORE CLEARING AND GRADING MATERIALS AS CONSTRUCTION IS IN PROGRESS
 - STOOD PILE TOP SOIL AND STORED
 - ROUGH GRADING/OUT & FILL AND STABILIZE
 - INSTALL UTILITIES AND BRANCH STRUCTURES
 - PROCEED PARTIAL ROAD CONSTRUCTION WHERE APPLICABLE
 - CONSTRUCT FOUNDATION & BUILDING STRUCTURES AS PER PLAN
 - CONSTRUCT FINAL GRADING AND STABILIZE AS PER PLAN
 - APPLY SOIL RESTORATION AS SHOWN ON PLAN
 - FINAL ESTABLISHMENT TO APPLY 1.0" TOP SOIL, PERMANENT GREEN INFRASTRUCTURE PRACTICES AND LANDSCAPING
 - REMOVE SEDIMENT & COMPLETE PERMANENT POST CONSTRUCTION SWM PER PLAN
 - REMOVE EASE ACCESS AND APPLY FOR NOTES OF TERMINATION (N.O.T.)



ATZL, NASHER & ZIGLER P.C.
 ENGINEERS-SURVEYORS-PLANNERS

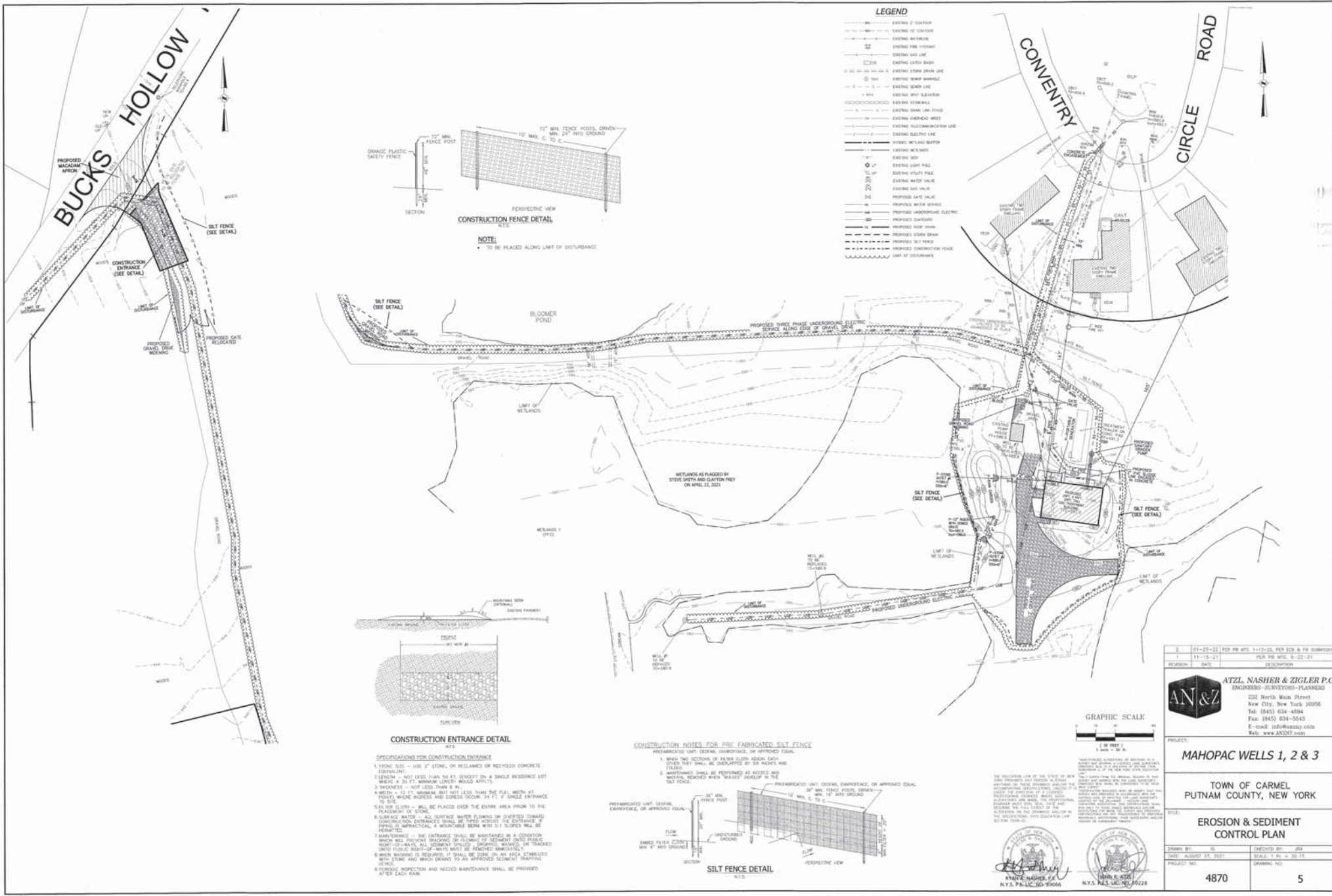
232 North Main Street
 New City, New York 10956
 Tel: (845) 634-6664
 Fax: (845) 634-5543
 E-mail: info@atzlz.com
 Web: www.atznl.com

MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK

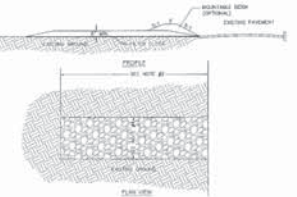
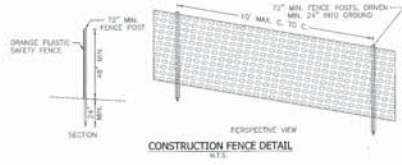
GRADING PLAN

DATE: AUGUST 27, 2023
 PROJECT NO: 4870
 DRAWING NO: 4



LEGEND

- EXISTING OF CONDUIT
- EXISTING OF CONDUIT
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING GAS LINE
- EXISTING CATCH BASIN
- EXISTING STORM DRAIN LINE
- EXISTING WEAVER MANHOLE
- EXISTING SEWER LINE
- EXISTING SPOUT GLENNER
- EXISTING STORMWALL
- EXISTING GROUND LAM FENCE
- EXISTING OVERHEAD WIRES
- EXISTING TELECOMMUNICATION LINE
- EXISTING ELECTRIC LINE
- WETLAND BUFFER
- EXISTING WETLAND
- EXISTING SOIL
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING GAS VALVE
- PROPOSED GATE VALVE
- PROPOSED WATER SERVICE
- PROPOSED UNDERGROUND ELECTRIC SERVICE
- PROPOSED OVERHEAD
- PROPOSED HOOP JOINT
- PROPOSED STORM DRAIN
- PROPOSED SOI FENCE
- PROPOSED CONSTRUCTION FENCE
- LIMIT OF DISTURBANCE



SPECIFICATIONS FOR CONSTRUCTION ENTRANCE

1. STONE CURB - USE 2" STONE, OR REINFORCED OR RECYCLED CONCRETE (EQUIVALENT)
2. LENGTH - NOT LESS THAN 30 FT. EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FT. MINIMUM LENGTH WOULD APPLY
3. THICKNESS - NOT LESS THAN 8 IN.
4. WIDTH - 30 FT. MINIMUM (NOT LESS THAN THE 30 FT. WIDTH AT POINTS WHERE ACCESS AND EGRESS OCCUR, 24 IN. 2" SINGLE ENTRANCE TO SITE)
5. SLOPE CURB - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACEMENT OF STONE
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE RIPPED ACROSS THE ENTRANCE IF PERIODIC MAINTENANCE & REPAIRABLE WITH 3/4" SLOPES WILL BE REQUIRED
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRAPPING OR FLOWING OF SEDIMENT OVER PUBLIC RIGHT-OF-WAYS. ALL SEDIMENT SPILLED, DEPOSITED, WASHED, OR TRACKED OVER PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY
8. WHEN MAINTENANCE IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH SEED AND MULCH GRASS TO AN APPROVED SCIENTIST TRAINING SERVICE
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN

CONSTRUCTION NOTES FOR PRC FABRICATED SILT FENCE

PREFABRICATED UNIT, GEOTAIL, EMERGENCY, OR APPROVED EQUAL

1. WHEN TWO SECTIONS OF SILT FENCE ADJOIN, EACH SECTION SHALL BE OVERLAPPED BY SIX INCHES AND TIEED
2. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND NOTING REMOVED WHEN "BRAES" DEVELOP IN THE SILT FENCE

PREFABRICATED UNIT, GEOTAIL, EMERGENCY, OR APPROVED EQUAL

3 1/2" MIN. FENCE POSTS DRIVEN INTO 1 1/2" MIN. x 6" TO C.

SILT FENCE DETAIL
N.T.S.

2	01-20-22	FOR PW WTS. 1-13-22, PER E&S & PE SUBMISSION
1	11-15-21	FOR PW WTS. 9-22-21
REVISION	DATE	DESCRIPTION

ATZL, NASHER & ZIGLER P.C.
ENGINEERS-SURVEYORS-PLANNERS

232 North Main Street
New City, New York 10956
Tel: (845) 634-4894
Fax: (845) 634-5543
E-mail: info@wazzy.com
Web: www.ANZ.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

**TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK**

DATE:
AUGUST 27, 2021

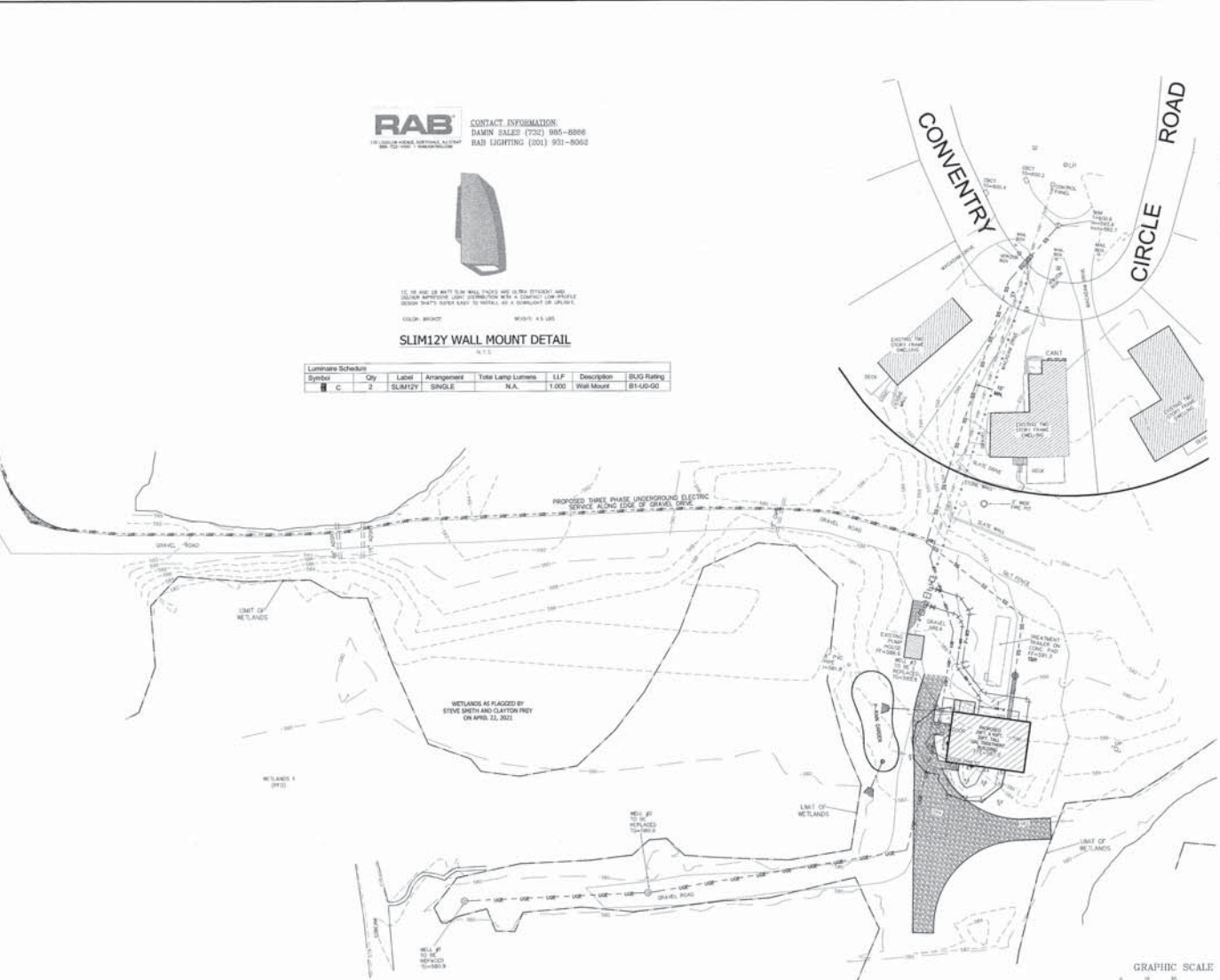
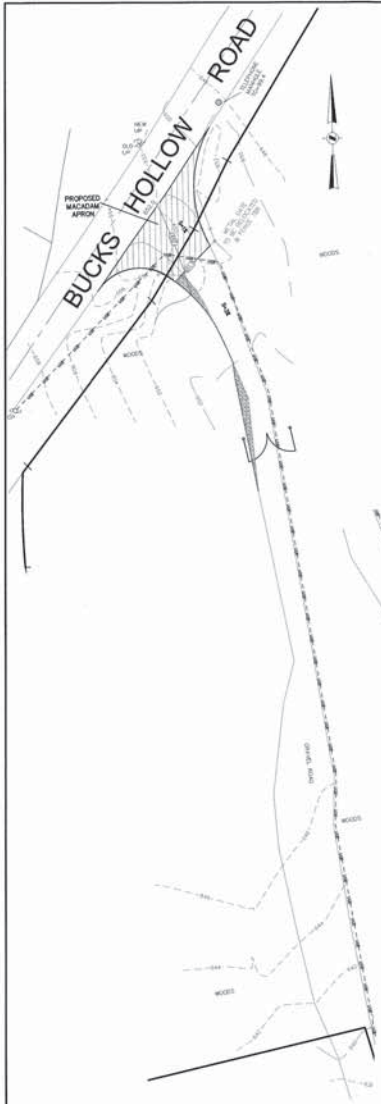
SCALE:
1 IN. = 30 FT.

PROJECT NO.:
4870

DRAWN BY:
JGA

CHECKED BY:
JGA

DRAWING NO.:
5



RAB CONTACT INFORMATION
 DAMIN SALES (732) 885-8866
 RAB LIGHTING (201) 931-8068

SLIM12Y WALL MOUNT DETAIL
 N.Y.C.

Luminaire Schedule	Symbol	Qty	Label	Arrangement	Total Lamp Lumens	L.F.	Description	BLDG Rating
1	C	2	SLIM12Y	SINGLE	N.A.	1,000	Wall Mount	B1-U0-G0

1/8" = 1' OR 3/16" = 1' (SEE WALL FINISH AND ULTRA STREET) AND
 3/16" = 1' (SEE WALL FINISH AND ULTRA STREET) WITH A CONTACT OR WIRELESS
 SIGNAL THAT WERE LAID TO BE IN A COMPLETION OF PROJECT.
 COLOR: WHITE HEIGHT: 4.5' (SEE)

2	01-25-21	PER PER WELLS 1, 2 & 3, PER CIVIL & PLS SUBMISSION
1	11-15-21	PER PER WELLS 1, 2 & 3
		DESCRIPTION

ATZL, NASHER & ZIGLER P.C.
 ENGINEERS - SURVEYORS - PLANNERS
 232 North Main Street
 New City, New York 10956
 Tel: (845) 634-6884
 Fax: (845) 634-5543
 E-mail: info@wnazny.com
 Web: www.AN&Z.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK

TITLE:
LIGHTING PLAN

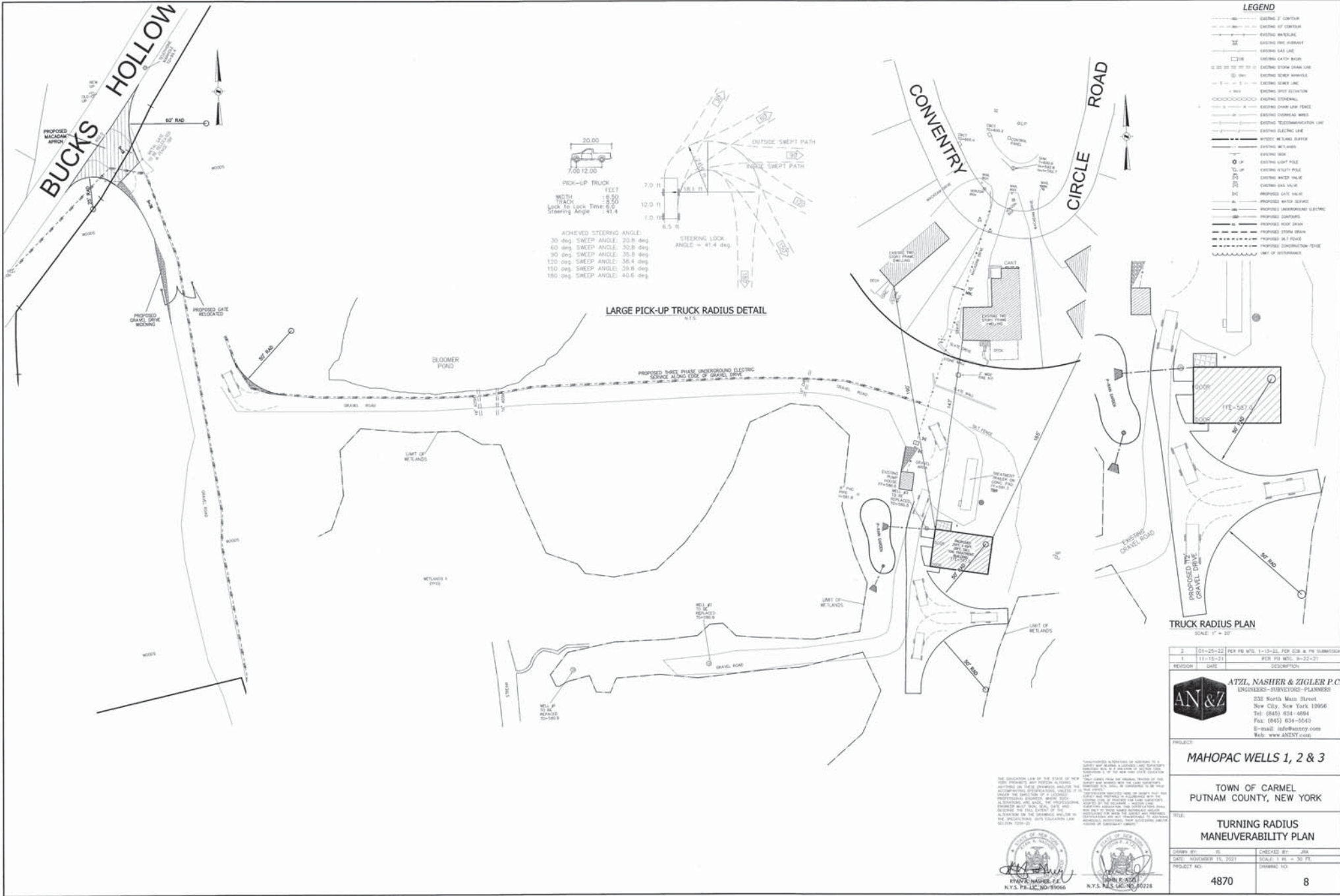
DRAWN BY: JSA
 DATE: AUGUST 27, 2021
 PROJECT NO: 4870
 SHEETED BY: JSA
 SCALE: 1" = 30' FT.
 DRAWING NO: 7

THE ENGINEER HAS BEEN ADVISED BY THE STATE OF NEW YORK THAT THIS PLAN IS NOT TO BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. ANY ALTERATIONS TO THIS PLAN SHALL BE MADE BY THE ENGINEER AND SHALL BE MADE IN THE ORIGINAL SET OF PLANS AND SHALL BE FILED WITH THE ENGINEER. THE ENGINEER HAS BEEN ADVISED BY THE STATE OF NEW YORK THAT THIS PLAN IS NOT TO BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. ANY ALTERATIONS TO THIS PLAN SHALL BE MADE BY THE ENGINEER AND SHALL BE MADE IN THE ORIGINAL SET OF PLANS AND SHALL BE FILED WITH THE ENGINEER.

John E. Atzl
 N.Y.S. P.E. LIC. NO. 19066

John E. Atzl
 N.Y.S. E.S. LIC. NO. 10228





NO.	DATE	DESCRIPTION
2	01-25-22	FOR PER. MTS. 1-1-DRAW FOR JOB & PER SUBMISSION
1	11-15-21	FOR PER. MTS. 9-22-21

ATZL, NASHER & ZIGLER P.C.
ENGINEERS-SURVEYORS-PLANNERS

232 North Main Street
New City, New York 10956
Tel: (845) 634-6664
Fax: (845) 634-5543
E-mail: info@atznz.com
Web: www.AZNZ.com

PROJECT:
MAHOPAC WELLS 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
TURNING RADIUS
MANEUVERABILITY PLAN

DRAWN BY	CHECKED BY
DAVID	JOHN

DATE: NOVEMBER 15, 2021
SCALE: 1" = 30 FT

PROJECT NO: 4870
DRAWING NO: 8





ATZL, NASHER & ZIGLER P.C.

ENGINEERS - SURVEYORS - PLANNERS

Web: www.anzny.com

January 26, 2022

Planning Board
Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541
Attn: Craig Paeprer, Chairman

Re: Suez Water (Chateau Wells 1, 2 & 3)
59 McNair Drive, Mahopac, NY
10541
Tax Lot 75.20-1-16

Dear Chairman Paeprer and Honorable Board Members,

The following is our response to Michael G. Carnazza, Director of Code Enforcement for the Town of Carmel, letter dated January 13, 2022:

1. Comment: The applicants propose to add a PFAS Treatment Building to the water treatment facility off McNair Dr. in Mahopac.

Response: No response required.

2. Comment: A Use Variance is not required for the Private Utility. The ZBA interpreted that Private and Public Utilities are permitted in the Town of Carmel.

Response: No response required.

3. Comment: Provide a detail of the buffer. Code§ 156-37C requires "A landscaped buffer area at least 10 feet in width and six feet in height shall be provided and maintained along all property lines to satisfactorily screen public utility substations and any other buildings from surrounding uses of land". The submission includes 6-8 ft. trees and 20 ft. trees. The building is somewhat close to the McNair cul-de-sac. It makes it more difficult to screen the building. Is there any issue with security? Screening buildings

from the street makes it more difficult to see if somebody is tampering with the building. Is there a happy medium.

Response: To clarify, the submission shows the landscaping as it will look when initially completed using 6' and 8' trees. It also shows how the site will look when the trees have had a few years to grow and have reached a height of 20'. We are not planning to plant 20' trees. While we would prefer a landscaping alternative that allows the residents to view activities on the site so they can call the police if any illegal activities are observed, we have created a plan to hide as much of the property as possible. In an October 22, 2021 letter from the residents of McNair Drive, we received comments about the need for "appropriate landscaping" to hide the view of the on-site structures. To address the resident's concerns, our plan was developed to hide as much of the facility as possible.

We would be open to discussing with the Board an alternative that offers increased visibility of the site and a reduction in the number of trees.

4. Comment: Referral to the ECB, Fire Department and Putnam County Dept. of Health are required by code.

Response: No response required.

5. Comment: Lot area variance 120,000 s.f. req'd, 47,745 provided, 72,255 s.f. variance needed.

Response: No response required.

The following is our response to Patrick Cleary, AICP, CEP, PP, LEED AP of Cleary Consulting, letter dated January 13, 2022:

1. Comment: The ZBA ruled that the Applicant is a public water company, and as such, the proposed use is a permitted principal use.

Response: No response required.

2. Comment: The Applicant will seek a variance from the ZBA for the non-compliant side yard setback.

Response: No response required.

3. Comment: The Applicant will seek NYSDEC and USACOE permits for the wetland buffer encroachment.

Response: No response required.

4. Comment: The plans have been revised to reflect the boundary of Plumb Brook and the on-site pond.

Response: No response required.

5. Comment: New landscaping is now proposed on the east side of the building (in the area of the deficient side yard setback).

Response: No response required.

6. Comment: The Applicant has clarified that the PFAS treatment facility will be a permanent and on-going operation.

Response: No response required.

7. Comment: The Applicant has clarified that a single building to house the existing pump house and the proposed PFAS building is not feasible, due primarily to the fact that the pump house must remain operational during construction.

Response: No response required.

8. Comment: No new fencing is proposed.

Response: No response required.

9. Comment: The Applicant has clarified that the new pumps will be located within the wells and are 168' below grade. No noise impacts are expected, and the project will comply with the sound level standards for residential districts established in Chapter 105 of the Town Code.

Response: No response required.

10. Comment: The Applicant has clarified that all chemical storage tanks will have secondary containment structures designed to accommodate the entire volume of chemical storage. Chemical levels are constantly monitored remotely.

Response: No response required.

11. Comment: The Applicant has clarified that site visits the site once per day. The carbon in the system will need to be replaced every one or two years.

Response: No response required.

12. Comment: The Lighting Plan has been revised to include illumination levels. Levels along the eastern property line (near the closest neighbor) will be well below 1 footcandle.

Response: No response required.

13. Comment: The Applicant has located a vendor that can provide the prefabricated building to meet the project timeframe. The building will be a prefabricated metal building with steel framing, a standing seam roof system and a cast in place concrete foundation. The color of the building will be "hemlock green." The roof trim, gutters and downspouts will be "cool harvest." A 4' split face masonry wall is proposed around the building, to be "Tribeca tan." Revised project renderings have been provided.

A color sample of "hemlock green", "cool harvest" and Tribeca tan" should be provided.

Response: These samples will be provided to the Planning Board for review.

The following is our response to Richard J. Franzetti, P.E, letter December 30, 2021:

General Comments

1. Comment: The following referrals are required:
- a. New York State Department of Environmental Conservation (NYSDEC).
 - b. Putnam County Department of Health (PCDOH).
 - c. The Town of Carmel Environmental Conservation Board (ECB).
 - d. Mahopac Fire Department.

The applicant has noted these referrals

Response: No response required.

2. Comment: The following permits are required:
- a. NYSDEC - for stormwater and wetlands.
 - b. PCDOH for well and treatment system.
 - c. ECB for wetlands.

The applicant has noted these permit requirements.

Response: No response required.

3. Comment: The area of disturbance for the work as provided is 13,607 sf. The threshold criteria of disturbances for the NYSDEC stormwater regulation are between 5,000 square feet and one (1) acre and over one (1) acre. The project will require coverage under the NYSEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) and the development of Stormwater Pollution Prevention Plan (SWPPP) that has erosion and sediment controls.

The applicant has provided a SWPPP which is currently under review.

Response: No response required.

4. Comment: All re-grading required to accomplish the intended development should be provided. It is unclear from the drawings provide the extent of cut and fill proposed for the site.

The applicant has provided a grading plan. The amount of fill, if any, being brought to the site should be provided.

All fill brought to the site must be certified per NYSDEC regulations and manifests/certification of the fill material being delivered should be provided. A note should be added to the drawing.

Response: Cut and fill analysis will be provided. Any fill required will be certified per NYSDEC regulations.

5. Traffic and Vehicle Movement Plans should be provided which provide the following:

- a. Comment: Slopes at the entrance way need to be defined. It is suggested that slopes of less than 6% be used for the first 20 feet of entry and that slopes of no greater than 8% be used entering the site. Please refer to AASHTO guidelines for commercial properties.

A driveway profile should be provided.

Town driveway specifications are 8 inches base course, 3 inches binder and 2 inches top course.

Response: Slope for existing drive off the cul-de-sac is 12%. We are revising to 10% due to physical limitations(neighbor's wall and property line). Please note that the site is currently accessed without any difficulty. There will be no change in the type of vehicle (four wheel drive pick up trucks) upon completion. Driveway profile has been provided.

6. Comment: Should any public improvements be deemed necessary as part of the development of the tract, a Performance Bond and associated Engineering Fee must eventually be established for the work. The applicant will need to develop a quantity take off for bonding purposes.

The applicant has noted this requirement. The applicant should note that a Performance Bond and associated Engineering fee is minimally required for the stormwater management practices, erosion and sediment control drainage features, landscaping etc. installed on the site. Please see § 156-61 J and K of the Town Code for additional information.

Response: No response required.

Detailed Comments

1. Comment: A landscaping plan has been provided. The applicant should add a note that all plantings shall be installed per §142 of the Town of Carmel Town Code.

Applicant indicated that Note 8 was added to the drawings. This note is not provided.

Response: Note 8 has been provided on the site plan.

2. Comment: The rain garden locations have been provided. The applicant should note that they must meet the criteria as defined by the NYSDEC. This includes providing sufficient depth to groundwater.

Applicant indicated that the calculation will be provided prior to construction. Minimally these calculations will need to be provided/approved as part of the ECB approval and prior to seeking coverage under the NYSDEC general stormwater permit.

Response: Per discussion, required testing for groundwater, percolation etc. will be performed when the weather permits.

3. Comment: It is unclear if additional electrical utilities are being installed.

Applicant has indicated that the electrical service will be upgraded using overhead wires. The installation of the upgraded electrical service should be buried.

Response: Existing overhead electrical service will not be upgraded. Proposed electrical work will consist of connecting to the existing service at the existing pump house and installing electrical underground duct banks to the proposed building and existing wells.

4. Comment: Gate valves shall be AWWA non-rising stem type, as manufactured by Mueller Company, Model A-2360-23, or approved equal, conforming to the latest AWWA Standard for Gate Valves - 3" through 48" - for Water and Other Liquids, AWWA Designation C-509.

Response: No response required.

5. Comment: Sizes up to and including 12" shall be 250 psi working pressure. The valve body and bonnet shall be ductile iron. All interior and exterior metal surfaces shall be coated with a two-part thermosetting epoxy complying with AWWA C550.
- Response: No response required.*
6. Comment: Valves shall have dual "O" ring seals, inside screw, resilient wedge seats in accordance with AWWA Designation C-550 and shall be constructed so as to provide unobstructed full port clearance when fully open and immediate complete closure when closed. The ends of the valves shall be mechanical joint.
- Response: No response required.*
7. Comment: All valves shall be arranged to open in counterclockwise direction unless otherwise specifically indicated and operating nuts shall be 2" square.
- Response: No response required.*
8. Comment: Valves shall be tested to a pressure of not less than two times the working pressure.
- Response: No response required.*
9. Comment: All hydrants shall be six inches in size with six-inch mechanical joint inlet connection and shall be equal to the Mueller Centurion A-421, with one (1) 4 ½ " pumper nozzle and two (2) 2 ½ " hose nozzles.
- Response: No response required.*
10. Comment: Water Service Saddles shall be equal to those manufactured by Mueller, Model 7 ½" x 1" SS Series Stainless Steel Saddle, Double Stud.
- Response: No response required.*
11. Comment: Corporation stops shall be equal to those as manufactured by Mueller Company, Model B-25000Series, NRS and of the size required. Such

corporation stops shall meet the requirements of AWWA Specification No. C800.

Response: No response required.

12. Comment: Curb valves (stops) shall be equal to those as manufactured by Mueller Company, Model H-15214 and shall conform to AWWA Specification No. C800.

Response: No response required.

13. Comment: Curb boxes shall be equal to those as manufactured by Mueller Company and similar to Mueller extension type with arch pattern base model H-10314 all extension rods shall be stainless steel.

Response: No response required.

14. Comment: All fire hydrants shall be the approved AWWA type fire hydrants in conformance with the American Water Works Association Standard for Fire Hydrants for Ordinary Water Works Service, AWWA Designation C502, and shall have a 5-1/4" valve opening, a 6" mechanical joint inlet complete with an auxiliary gate valve (close coupled), a 6" mechanical joint shoe, and all appurtenances.

Response: No response required.

15. Comment: Fire hydrants shall be rated for a working pressure of 250 Psi. Fire hydrants shall be sized for a 4'-6" bury.

Response: No response required.



January 28, 2022

Town of Carmel Planning Board
60 McAlpin Avenue
Mahopac, NY 10541

Re: Suez Water, Forest Park Wells
Archer, Geymer, Chateau,
Mahopac, & London Bridge

Dear Members of the Board.

During the Planning Board meeting held on January 13, 2022 you asked the Suez Water PFAS Team if we could relocate the generators that are currently installed at the Chateau and Mahopac facilities. In this letter I will explain why the generators were installed and why their locations are critical to the Suez Operations.

In June 2016, prior to Suez taking ownership of the Forest Park water treatment facilities, the Forest Park Water Company had charges brought against them by the Putnam County Board of Health for failing to install an "Electric Manual Transfer Switch(s) so as to facilitate the immediate plug in to portable on-site Emergency Electric Power Generation". Upon taking ownership of the Forest Park facilities, Suez became responsible for these improvements. In a letter dated January 3, 2018 from Suez to Michael Budzinski, P.E. of the Putnam County Department of Health (PCDOH), Suez provided a schedule for these improvements and advised the PCDOH that an initial quantity of 4 portable generators would be purchased. Additional generators were purchased in the subsequent years. The schedule in the 2018 letter showed that the transfer switches for the Chateau and Mahopac facilities were the first to be installed and had already been installed. These facilities were prioritized because they have historically experienced power failures and they are our two largest systems in Putnam County.

After the January 13th Planning Board meeting, I met with my operators to discuss the feasibility of relocating the Chateau and Mahopac generators offsite. The current location of the generators has been selected due to the need for 120 volt power to run the integral battery charger and engine block heater, as well as proximity to the transfer switch. My operators expressed concern with relocating the generators offsite. First, the addition of backup power was required by the PCDOH, so they feel that moving the generators could result in a violation from the PCDOH. My operators further explained that moving the generators off site would not be a prudent decision. The generators are typically needed during storm events, as a result of trees or branches damaging a power line feeding the water treatment plant. Trying to tow a generator to the Chateau or Mahopac sites, when the roadways may be blocked due to downed trees and branches may not be possible. Further, the Chateau site is equipped with an automatic transfer switch. Therefore in the event of a power loss the facility will



transfer to backup power, without operator intervention, which maintains uninterrupted service to our customers.

Since we cannot relocate the generators, we have considered alternatives that can help hide them from view. At the Chateau site, we will paint the generator and the existing pump house to match the proposed PFAS building (i.e., Hemlock Green). In addition, the eastern property line will be landscaped with sky rocket junipers, which have a mature height of 20'. This will further hide the generator from view. For the Mahopac facility we will also paint the generator to match the proposed PFAS building so it blends into the woodlands. The existing vegetation and the proposed landscaping along the northern border should further reduce the visibility of the generator.

As discussed in this letter, Suez cannot relocate the existing generators, which have been required by the PCDOH. We can however, offer alternatives to help the generators blend into their surroundings, making them less visible to the nearby residents. Should you have any questions or comments, please don't hesitate to contact me.

Regards,

A handwritten signature in blue ink, appearing to read "S. R. Garabed", written in a cursive style.

Steven R. Garabed, P.E.
Manager of Engineering
Suez Water NY Operations

CREAMER

J. FLETCHER CREAMER & SON, INC.

POWERED BY **API Group**

Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541

Re: **Site Plan Application**
SUEZ Water New York, Inc. – Chateau Well 1, 2 & 3
Proposed Building Materials Narrative

All,

Due to extensive lead time delays for the design, fabrication and delivery of the original prefabricated metal building, we explored other material or manufacturer options for the building to better meet schedule requirements.

After exploring several different options, we were able to proceed with a different prefabricated metal building vendor to furnish and install the building. We were able to expedite the design process and improve the fabrication duration of the prefabricated building in order to meet our schedule.

We will be installing a prefabricated metal building, with steel framing, insulated metal wall panels with an exterior color, standing seam roof system, with a cast in place concrete foundation designed to accommodate the load of the building structure, equipment, vessels, and all other loads impacting the foundation.

The color of the building will be Hemlock Green and the roof trim, gutters and downspouts color will be cool harvest. The building will have a 4' masonry façade along the perimeter of the building for aesthetics and durability and will be Hemlock Green to match the building. Please refer to renderings for visual representation of the building and masonry facade.

Sincerely,
J. Fletcher Creamer & Son, Inc.

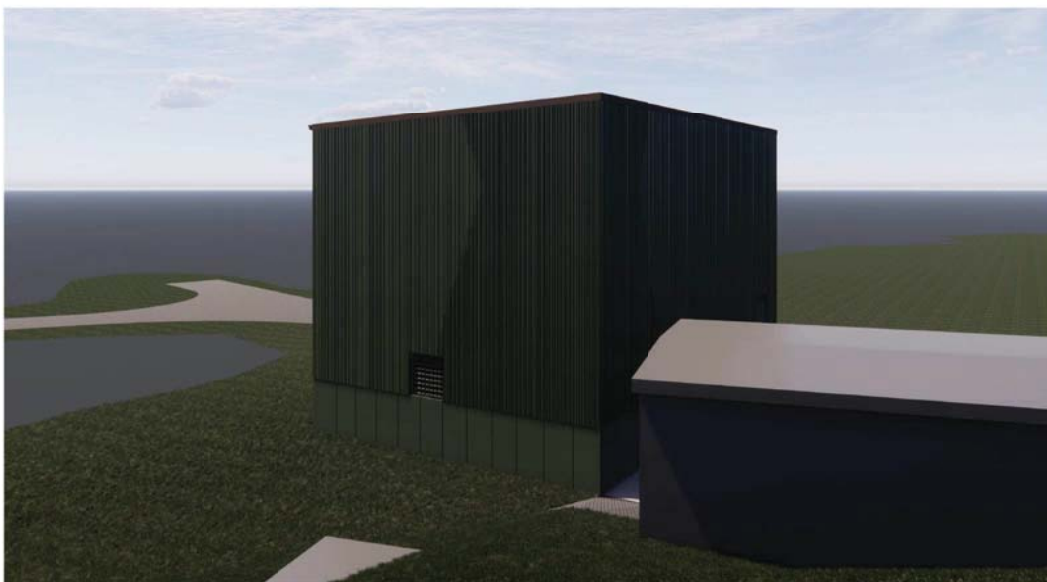
101 East Broadway
Hackensack, NJ 07601-6851
Phone (201) 488-9800 | Fax (201) 488-2901

Copy to:

JFCSON.COM



PFAS COMPLIANCE AT
CHATEAU WELL

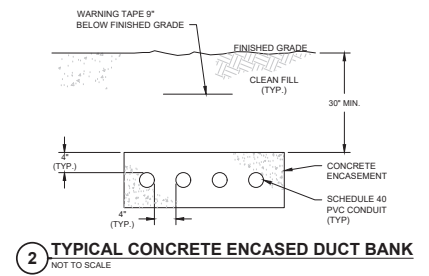
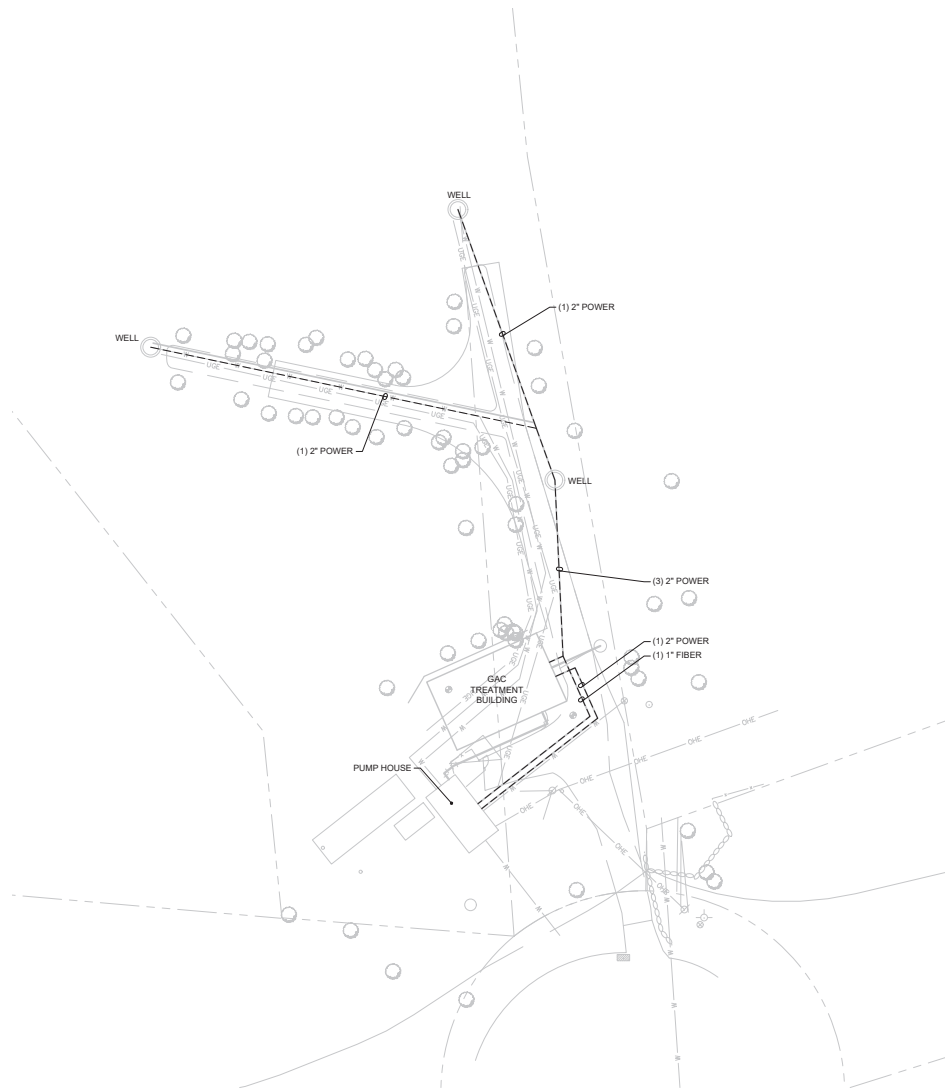


SWNY PFAS Compliance - Chateau Well Site
8 FT Trees



SWNY PFAS Compliance - Chateau Well Site
20 FT Trees





THIS DRAWING IS AND SHALL REMAIN THE PROPERTY OF GANNETT FLEMING, INC. ANY REVISION, HOUSE, ALTERATIONS, ADDITIONS AND/OR DELETIONS OF THESE DRAWINGS ON PROJECTS EXTENSIONS OR OTHER PROJECTS SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO GANNETT FLEMING, INC. IN THE EVENT THAT A DISCREPANCY ARISES BETWEEN THE SEALED DRAWINGS AND THE ELECTRONIC FILES, THE SEALED DRAWINGS WILL GOVERN.

© GANNETT FLEMING, INC. 2021

No.	DESCRIPTION	DATE	BY

DESIGNED	CADD	SCALE
		AS NOTED
CHECKED	APPROVED	

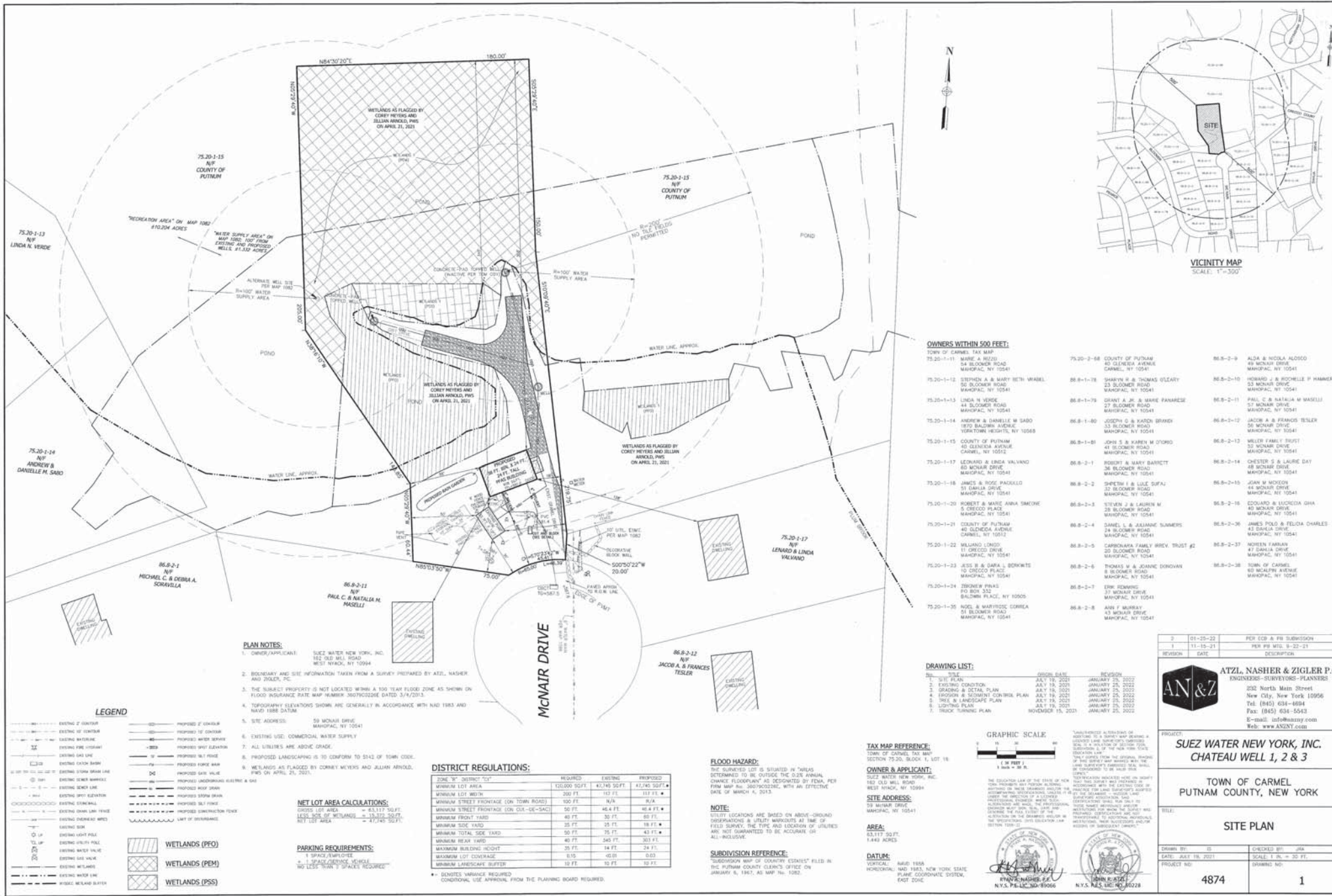
GANNETT FLEMING
ENGINEERS AND ARCHITECTS, P.C.

SUEZ WATER NEW YORK INC.
WEST NYACK, ROCKLAND COUNTY, NEW YORK

PFAS COMPLIANCE

90 DESIGN SUBMISSION	JOB No. 68577	SHEET No. E-200
CHATEAU PFAS	DATE OCTOBER 2021	
SITE PLAN & DUCTBANK DETAILS		





OWNERS WITHIN 500 FEET:

75-20-1-11 MARE A. RIZZO 54 BLOOMER ROAD MANHAC, NY 10541	75-20-1-12 STEPHEN A. & MARY BETH WRAHEL 23 BLOOMER ROAD MANHAC, NY 10541	75-20-1-13 LINDA W. TENDS 24 BLOOMER ROAD MANHAC, NY 10541	75-20-1-14 ANDREW & DANIELLE B. SARD 1870 BALDWIN AVENUE TURTLE CREEK, NY 10588	75-20-1-15 COUNTY OF PUTNAM 40 OLNEYDA AVENUE CARMEL, NY 10512	75-20-1-16 LEONARD & LINDA YALOWAN 63 MCNAIR DRIVE MANHAC, NY 10541	75-20-1-17 LEONARD & LINDA YALOWAN	75-20-1-18 JAMES & ROSE PASCELO 51 DANILA DRIVE MANHAC, NY 10541	75-20-1-19 ROBERT & MARIE ANNA SMOKE 5 CRESCO PLACE MANHAC, NY 10541	75-20-1-20 COUNTY OF PUTNAM 40 OLNEYDA AVENUE CARMEL, NY 10512	75-20-1-21 WILSHAW LINDA 11 CRESCO PLACE MANHAC, NY 10541	75-20-1-22 ASS B & DARA L. BORNWITS 10 CRESCO PLACE MANHAC, NY 10541	75-20-1-23 ZBONER FRANK PO BOX 322 BALDWIN PLACE, NY 10505	75-20-1-24 NOEL & MARYDORIS CORREA 51 BLOOMER ROAD MANHAC, NY 10541	75-20-2-58 COUNTY OF PUTNAM 40 OLNEYDA AVENUE CARMEL, NY 10512	86-8-1-76 SHAWN W. & THOMAS O'LEARY 23 BLOOMER DRIVE MANHAC, NY 10541	86-8-1-79 PAUL C. & BRANNE FARRARSE 27 BLOOMER DRIVE MANHAC, NY 10541	86-8-1-80 JOHN & KAREN M. TORNO 47 BLOOMER DRIVE MANHAC, NY 10541	86-8-1-81 ROBERT & MARY BARRETT 36 BLOOMER DRIVE MANHAC, NY 10541	86-8-2-1 SHARON & LUCIE SUFAL 32 BLOOMER DRIVE MANHAC, NY 10541	86-8-2-2 STEVEN J. & LAURIN M. 28 BLOOMER ROAD MANHAC, NY 10541	86-8-2-4 DANIEL & JEANNE SUMMERS 24 BLOOMER DRIVE MANHAC, NY 10541	86-8-2-5 CAROLANNA FAMILY TRUST #2 25 BLOOMER DRIVE MANHAC, NY 10541	86-8-2-6 THOMAS W. & JENNIFER DONOVAN 8 BLOOMER ROAD MANHAC, NY 10541	86-8-2-7 ERIK REMMING 37 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-8 ANU F. MURRAY 43 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-9 ALAN & NICOLA ALOISO 49 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-10 WENDELL & JOYCE P. HAMMER 33 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-11 PAUL C. & BRANNA W. MASULLI 57 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-12 JACQUE & FRANCIS TESLER 56 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-13 WELER FAMILY TRUST 50 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-14 CHESTER S. & LAURIE DAY 48 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-15 JOHN W. MOYSON 44 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-16 EDOUARD & ANTHONIE GHIA 40 MCNAIR DRIVE MANHAC, NY 10541	86-8-2-18 JAMES POLO & FELICIA CHARLES 43 DANILA DRIVE MANHAC, NY 10541	86-8-2-17 NORMAN FARRAN 47 DANILA DRIVE MANHAC, NY 10541	86-8-2-18 TOWN OF CARMEL 60 MCNAIR AVENUE MANHAC, NY 10541
--	--	---	--	---	--	---------------------------------------	---	---	---	--	---	---	--	---	--	--	--	--	--	--	---	---	--	---	--	---	---	---	---	--	---	--	---	--	---	---

PLAN NOTES:

- OWNER/APPLICANT: SUZIE WATER NEW YORK, INC. 152 OLD MILL ROAD WEST NYACK, NY 10994
- BOUNDARY AND SITE INFORMATION TAKEN FROM A SURVEY PREPARED BY ATZ, NASHER AND ZIGLER, P.C.
- THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A 100 YEAR FLOOD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 36070C0202E DATED 3/4/2013.
- TOPOGRAPHY ELEVATIONS SHOWN ARE GENERALLY IN ACCORDANCE WITH NAD 1983 AND NAED 1985 DATUM.
- SITE ADDRESS: 59 MCNAIR DRIVE MANHAC, NY 10541
- EXISTING USE: COMMERCIAL WATER SUPPLY
- ALL UTILITIES ARE ABOVE GRADE.
- PROPOSED LANDSCAPING IS TO CONFORM TO §143 OF TOWN CODE.
- WETLANDS AS FLAGGED BY CORNEY MEYERS AND JILLIAN ANKOLD, PWS ON APRIL 21, 2011.

DISTRICT REGULATIONS:

ZONE "B" DISTRICT "C1"	REGULATED	EXISTING	PROPOSED
MINIMUM LOT AREA	120,000 SQ FT	42,745 SQ FT	42,745 SQ FT
MINIMUM LOT WIDTH	200 FT	143 FT	117 FT
MINIMUM STREET FRONTAGE (ON TOWN ROAD)	100 FT	N/A	N/A
MINIMUM STREET FRONTAGE (ON CUR-VE-SIDE)	50 FT	44.4 FT	44.4 FT
MINIMUM FRONT YARD	40 FT	30 FT	30 FT
MINIMUM SIDE YARD	35 FT	35 FT	18 FT
MINIMUM TOTAL SIDE YARD	50 FT	75 FT	43 FT
MINIMUM REAR YARD	40 FT	50 FT	30 FT
MAXIMUM BUILDING HEIGHT	25 FT	14 FT	24 FT
MINIMUM LOT COVERAGE	0.15	<0.01	0.03
MINIMUM LANDSCAPE BUFFER	10 FT	10 FT	10 FT

NET LOT AREA CALCULATIONS:

COEFFICIENT OF AREA = 83,117 SQ FT
 LESS: SOLE OF WETLANDS = 13,622 SQ FT
 NET LOT AREA = 47,745 SQ FT

PARKING REQUIREMENTS:

1 SPACE/EMPLOYEE
 1 SPACE/DRIVEWAY
 NO LESS THAN 5 SPACES REQUIRED

DRAWING LIST:

NO.	TITLE	DATE	REVISION
1	SITE PLAN	JULY 19, 2011	JANUARY 25, 2012
2	EXISTING CONDITION	JULY 19, 2011	JANUARY 25, 2012
3	GRADING & DETAIL PLAN	JULY 19, 2011	JANUARY 25, 2012
4	EROSION & SEDIMENT CONTROL PLAN	JULY 19, 2011	JANUARY 25, 2012
5	TREE & LANDSCAPE PLAN	JULY 19, 2011	JANUARY 25, 2012
6	LIGHTING PLAN	JULY 19, 2011	JANUARY 25, 2012
7	TRUCK TURNING PLAN	NOVEMBER 15, 2011	



TAX MAP REFERENCE:

TOWN OF CARMEL TAX MAP SECTION 75-20, BLOCK 1, LOT 18

OWNER & APPLICANT:

SUZIE WATER NEW YORK, INC. 152 OLD MILL ROAD WEST NYACK, NY 10994

SITE ADDRESS:

59 MCNAIR DRIVE MANHAC, NY 10541

AREA:

83,117 SQ. FT. 1.948 ACRES

DATUM:

VERTICAL: NAED 1985 HORIZONTAL: NAD 1983 NEW YORK STATE PLUMB COORDINATE SYSTEM, FOOT ZONE

FLOOD HAZARD:
 THE SURVEYED LOT IS SITUATED IN "AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD ZONE AS DESIGNATED BY FEMA, PER CHANCE FLOODING AS DESIGNATED BY FEMA, PER FIRM MAP NO. 36070C0202E, WITH AN EFFECTIVE DATE OF MARCH 4, 2013.

NOTE:
 UTILITY LOCATIONS ARE BASED ON ABOVE-GROUND INVESTIGATIONS & UTILITY MAPS. UTILITY LOCATIONS ARE NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE.

SUBDIVISION REFERENCE:
 "SUBDIVISION MAP OF COUNTY ESTATES" FILED IN THE PUTNAM COUNTY CLERK'S OFFICE ON JANUARY 6, 1947, AS MAP NO. 1022.



2 01-25-22 PER EOP & PB SUBMISSION
 1 11-15-21 PER PB MTS, 9-22-21

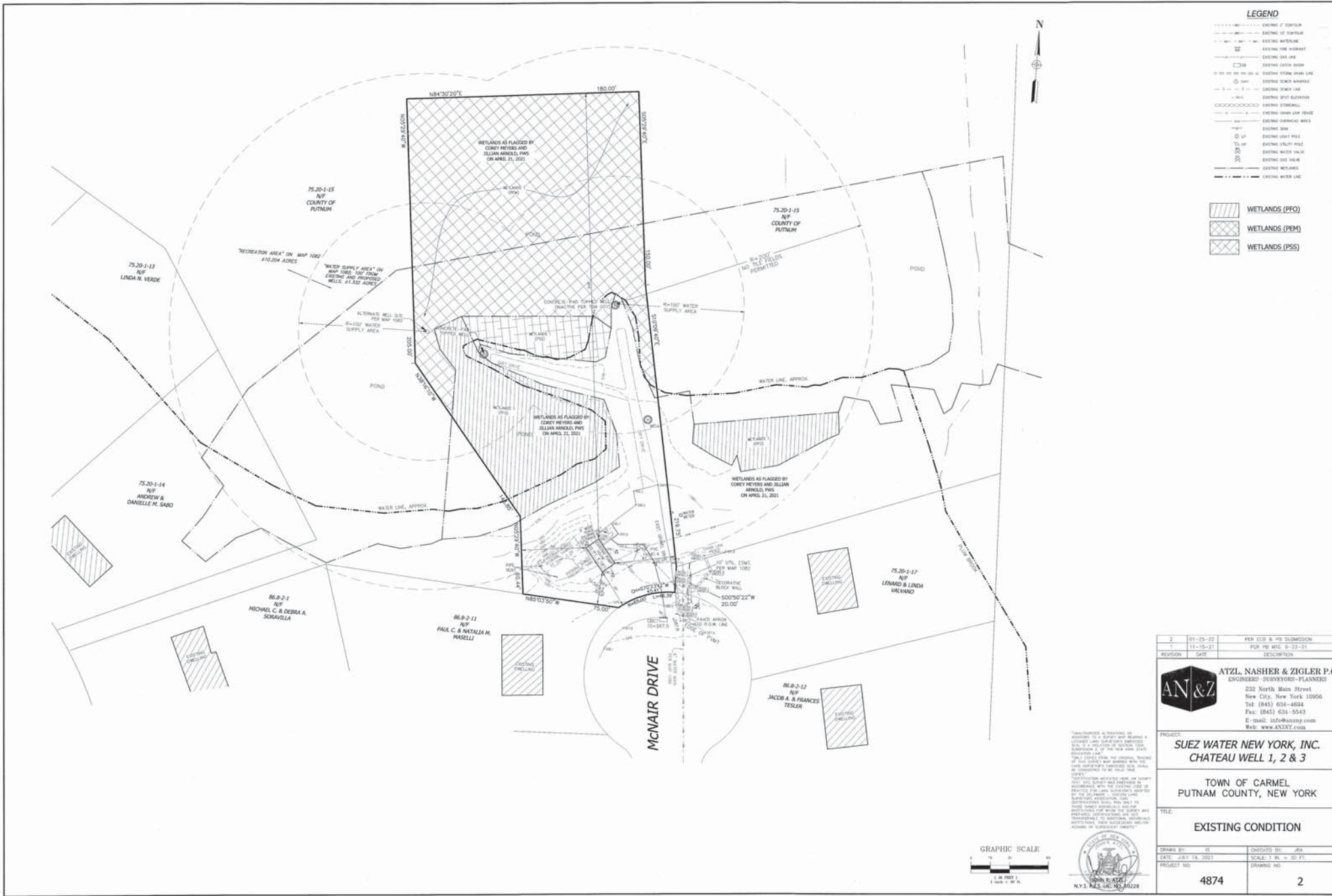
ATZ, NASHER & ZIGLER P.C.
 ENGINEERS-SURVEYORS-PLANNERS
 252 North Main Street
 New City, New York 10956
 Tel: (845) 634-8841
 Fax: (845) 634-5543
 E-mail: info@atnz.com
 Web: www.AZSNY.com

SUEZ WATER NEW YORK, INC.
 CHATEAU WELL 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE:
SITE PLAN

DRAWN BY: DS CHECKED BY: JSA
 DATE: JULY 19, 2011 SCALE: 1" = 30 FT.
 PROJECT NO: DRAWING NO:
4874 **1**

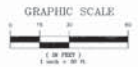


- LEGEND**
- - - - - EXISTING LOT BOUNDARY
 - - - - - EXISTING LOT CENTERLINE
 - - - - - EXISTING WETLINE
 - ▨ EXISTING FINE WETLAND
 - ▩ EXISTING GAS LINE
 - EXISTING CATCH BASIN
 - EXISTING FLOOD ZONE LINE
 - EXISTING SEWER MANHOLE
 - EXISTING SEWER LINE
 - EXISTING WATER LINE
 - EXISTING SPOT ELEVATION
 - EXISTING CORNER
 - EXISTING SHANK LINE
 - EXISTING OVERHEAD WIRE
 - EXISTING SIGN
 - EXISTING LIGHT POLE
 - EXISTING UTILITY POLE
 - EXISTING WATER VALVE
 - EXISTING GAS VALVE
 - EXISTING WATER LINE
-
- ▨ WETLANDS (PFO)
 - ▩ WETLANDS (PEM)
 - ▧ WETLANDS (PSS)

2	01-05-22	PER ECR & PWS SUBMISSION
1	11-15-21	PER PWS MTD, 9-22-21
REVISION	DATE	DESCRIPTION

	ATZL NASHER & ZIGLER P.C. ENGINEERS - SURVEYORS - PLANNERS	
	232 North Main Street New City, New York 10956 Tel: (845) 634-4004 Fax: (845) 634-5543 E-mail: info@anzy.com Web: www.ANZNY.com	
	PROJECT: SUEZ WATER NEW YORK, INC. CHATEAU WELL 1, 2 & 3	
	TOWN OF CARMEL PUTNAM COUNTY, NEW YORK	

TITLE: EXISTING CONDITION	
Drawn by: JS DATE: JULY 18, 2021 PROJECT NO:	CHECKED BY: JSA SCALE: 1" = 30' FT. DRAWING NO:
4874	2



THIS DRAWING IS THE PROPERTY OF ATZL NASHER & ZIGLER P.C. AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, REPRODUCED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF ATZL NASHER & ZIGLER P.C. ANY UNAUTHORIZED USE OF THIS DRAWING IS PROHIBITED AND WILL BE CONSIDERED TO BE A VIOLATION OF THE PROFESSIONAL ENGINEERING AND SURVEYING LAWS OF THE STATE OF NEW YORK.

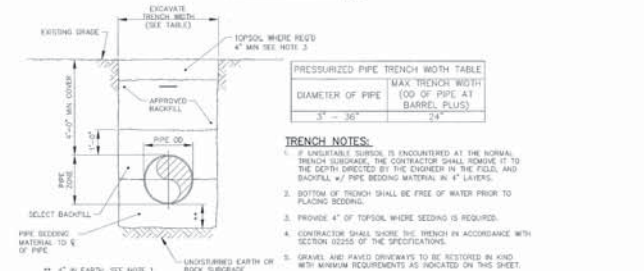
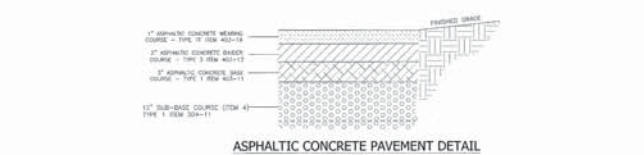
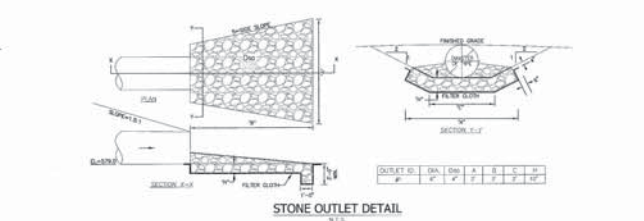
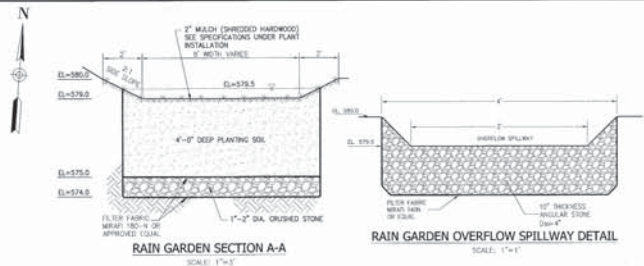
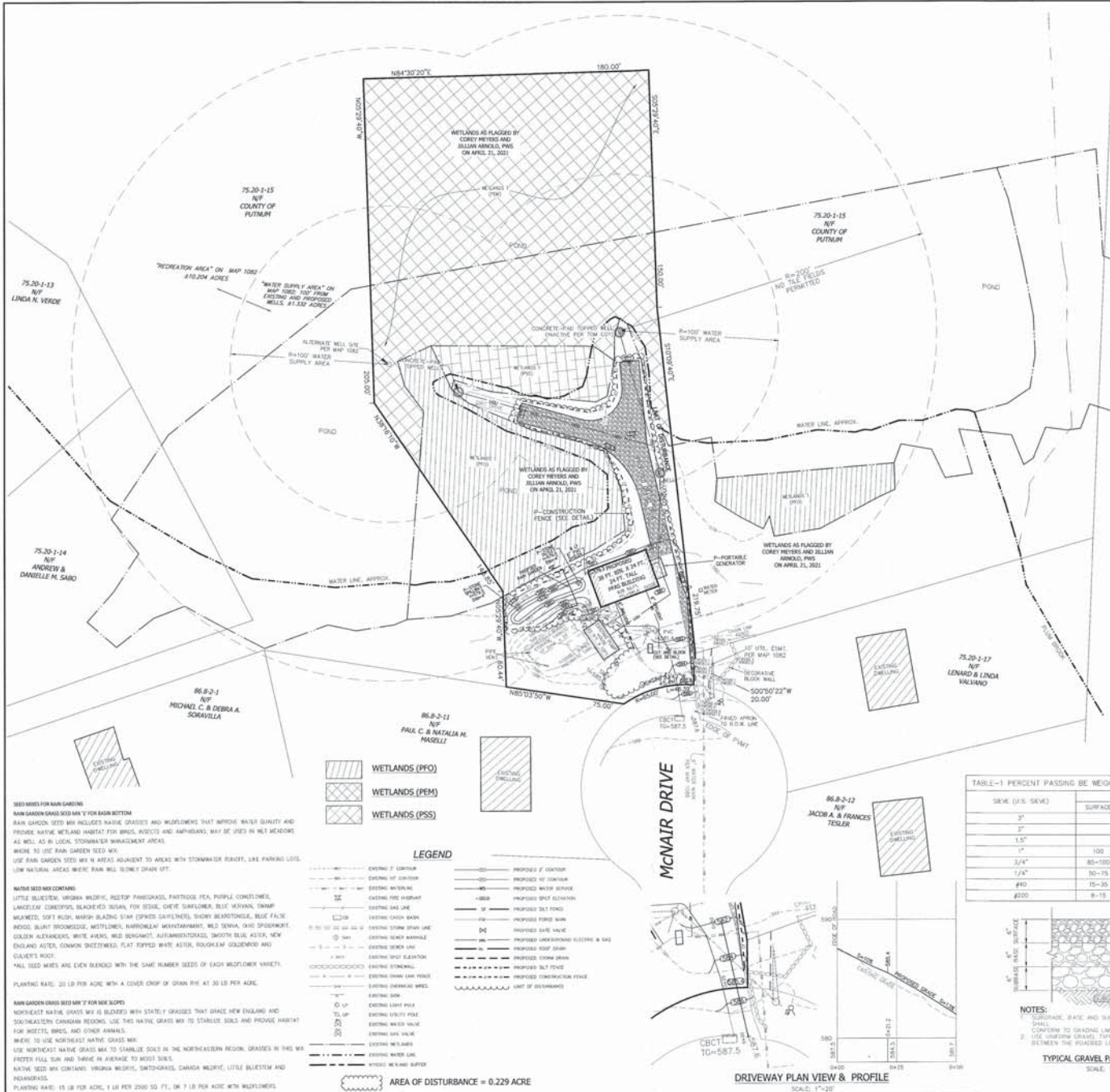
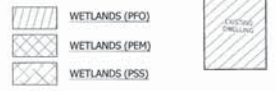


TABLE-1 PERCENT PASSING BY WEIGHT OF GRAVEL MATERIALS

SEIVE (U.S. SEIVE)	OPTION TYPE		
	SURFACE	BASE	SUBBASE
3"	100	100	100
1.5"	100	85-100	70-100
0.75"	100	—	—
0.425"	100	85-100	—
0.25"	100	70-75	30-55
#40	15-35	5-20	5-25
#100	8-15	0-8	0-8

CONSTRUCTION SEQUENCE:

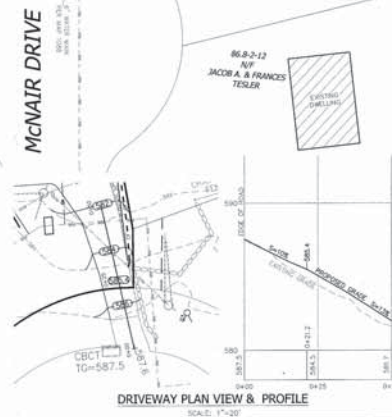
- INSTALL EXCAVATION & SEGMENT CONTROL MEASURES.
- CONSTRUCT PROPOSED FOUNDATION.
- INSTALL PROPOSED PAVEMENT.
- INSTALL PROPOSED CURBING.
- INSTALL PROPOSED SIDEWALKING.
- INSTALL PROPOSED SIDEWALKING.
- REMOVE EXCAVATION & SEGMENT CONTROL MEASURES.



SEED MIXES FOR RAIN GARDENS:
 RAIN GARDEN SEED MIX SHALL INCLUDE NATIVE GRASSES AND BULMOUSERS THAT IMPROVE WATER QUALITY AND PROVIDE NATIVE WETLAND HABITAT FOR BIRDS, INSECTS AND AMPHIBIANS. MAY BE USED IN NET WETLANDS AS WELL AS IN LOCAL STORMWATER MANAGEMENT AREAS.
 WHERE TO USE RAIN GARDEN SEED MIX:
 USE RAIN GARDEN SEED MIX IN AREAS ADJACENT TO AREAS WITH STORMWATER RUNOFF, LIKE PARKING LOTS, LOW NATURAL AREAS WHERE RAIN WILL SLOWLY DRAIN OFF.

NATIVE SEEDS CONTAINS:
 LITTLE BLUESTEM, VIRGINIA WILDRIE, REESEP PANGLOSS, PASTURE PEA, PURPLE CONJUGER, LANCELEAF COCKSCOMB, BLACKHEADED SUSAN, FOX SEED, CHEVE SWARTFOWER, BLUE VERNAL, DRUM MAJORET, SOFT WIG, MARSH BLADING STAR (FORWARD GARDENERS), SNOWY BEARDTONGUE, BLUE FALSE PEGGIE, SLANTY THROATLESS, WETLANDS, HARRISWALK MOUNTAINWAVE, WILD TERNIA, TOWN SPINDLEWEEB, GOLDEN ALEXANDER, WHITE ARK, WILD BURGOMASTER, AFRICANWATERHOLE, SMOOTH BLUE ASTER, NEW ENGLAND ASTER, COMMON SHEEPHEED, FLAT TOPPED WARE ASTER, ROUGHLEAF GOLDENROD AND GARDEN'S ROSE.
 ALL SEED MIXES ARE EVEN BLENDED WITH THE SAME NUMBER SEEDS OF EACH WETLANDER VARIETY.
 PLANTING RATE: 20 LB PER ACRE WITH A COVER CROP OF GRASS MIX AT 30 LB PER ACRE.

RAIN GARDEN GRASS SEED MIX FOR SIX SLOPES:
 NORTHEAST NATIVE GRASS MIX IS BLENDED WITH STATELY GRASSES THAT GRACE NEW ENGLAND AND SOUTHEASTERN CANADIAN REGIONS. USE THIS NATIVE GRASS MIX TO STABILIZE SOILS AND PROVIDE HABITAT FOR INSECTS, BIRDS, AND OTHER ANIMALS.
 REFER TO USE NORTHEAST NATIVE GRASS MIX.
 USE NORTHEAST NATIVE GRASS MIX TO STABILIZE SOILS IN THE NORTHEASTERN REGION. GRASSES IN THIS MIX PREFER FULL SUN AND THRIVE IN AVERAGE TO MOIST SOILS.
 NATIVE SEED MIX CONTAINS: VIRGINIA WILDRIE, SWAMPWISS, CANADA WILDRIE, LITTLE BLUESTEM AND PANGLOSS.
 PLANTING RATE: 15 LB PER ACRE, 1 LB PER 2500 SQ. FT., OR 7 LB PER ACRE WITH WETLANDERS.



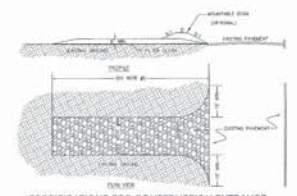
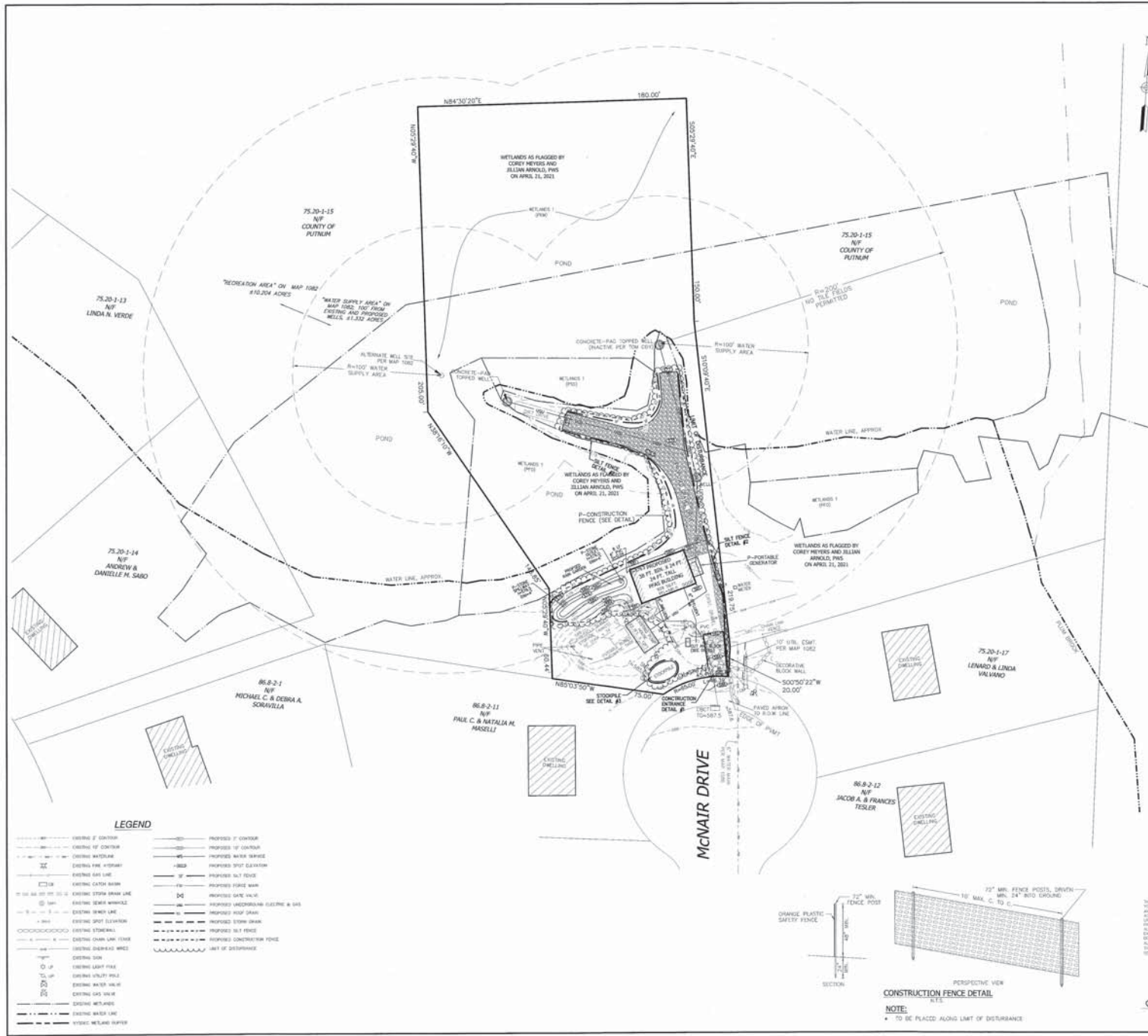
ATZL, NASHER & ZIGLER P.C.
 ENGINEERS-SURVEYORS-PLANNERS
 232 North Main Street
 New City, New York 10986
 Tel: (845) 634-4684
 Fax: (845) 634-5543
 E-mail: info@anzny.com
 Web: www.anzny.com

SUEZ WATER NEW YORK, INC.
 CHATEAU WELL 1, 2 & 3

TOWN OF CARMEL
 PUTNAM COUNTY, NEW YORK

GRADING PLAN

DATE: JULY 19, 2021
 PROJECT NO: 4874
 DRAWING NO: 3



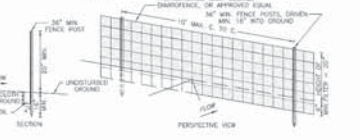
SPECIFICATIONS FOR CONSTRUCTION ENTRANCE

1. STONE SILT - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE (SPECIALTY)
2. LENGTH - NOT LESS THAN 50 FT. (EXCEPT ON A SINGLE RESIDENCE LOT WHERE 8 TO 10 FT. MINIMUM LENGTH SHOULD APPLY)
3. THICKNESS - NOT LESS THAN 6 IN.
4. WIDTH - 12 FT. MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE BARRIERS AND EXPOSED OCCUR. 24 FT. IF SINGLE ENTRANCE TO SITE
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACEMENT OF STONE
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION LOCATIONS SHALL BE FILTERED THROUGH THE ENTRANCE BY PASSING THROUGH A REINFORCED, A REINFORCED BERM WITH 5 FT. SLOPES WILL BE MAINTAINED
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOWING OR STAGNANT (PAID PUBLIC) MUD OR SOIL. ALL SEDIMENT DEPOSITED (SPECIALTY) BARRIERS OR TRACKED (PAID) PUBLIC MUD OR SOIL MUST BE REMOVED IMMEDIATELY
8. BERM MAINTENANCE - BARRIERS, IF SHALL BE DONE IN AN AREA STABILIZED WITH STONE AND MUST CHAINS TO AN APPROVED SEDIMENT TRAPPING DEVICE
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN

STABILIZED CONSTRUCTION ENTRANCE DETAIL #1

CONSTRUCTION NOTES FOR PRE FABRICATED SILT FENCE

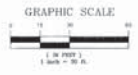
1. WHEN TWO SECTIONS OF SILT FENCE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY TEN INCHES AND FOLDED
2. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "MUDS" DEVELOP IN THE SILT FENCE



SILT FENCE DETAIL #2

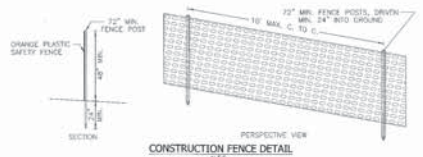


STOCKPILE DETAIL #3



LEGEND

---	EXISTING 2" CONDUIT	---	PROPOSED 2" CONDUIT
---	EXISTING 4" CONDUIT	---	PROPOSED 4" CONDUIT
---	EXISTING WATER SERVICE	---	PROPOSED WATER SERVICE
---	EXISTING SPOT ELEVATION	---	PROPOSED SPOT ELEVATION
---	EXISTING SILT FENCE	---	PROPOSED SILT FENCE
---	EXISTING FORCE MAIN	---	PROPOSED FORCE MAIN
---	EXISTING GATE VALVE	---	PROPOSED GATE VALVE
---	EXISTING UNDERGROUND ELECTRIC & GAS	---	PROPOSED UNDERGROUND ELECTRIC & GAS
---	EXISTING SANDY GRAIN	---	PROPOSED SANDY GRAIN
---	EXISTING STONE GRAIN	---	PROPOSED STONE GRAIN
---	EXISTING SILT FENCE	---	PROPOSED SILT FENCE
---	EXISTING CONSTRUCTION FENCE	---	PROPOSED CONSTRUCTION FENCE
---	LIMIT OF DISTURBANCE	---	
---	EXISTING LOT FIRE	---	
---	EXISTING LOTTY POLE	---	
---	EXISTING WATER MAIN	---	
---	EXISTING GAS VALVE	---	
---	EXISTING METEOROLOGICAL	---	
---	EXISTING WATER LINE	---	
---	EXISTING WETLAND BUFFER	---	

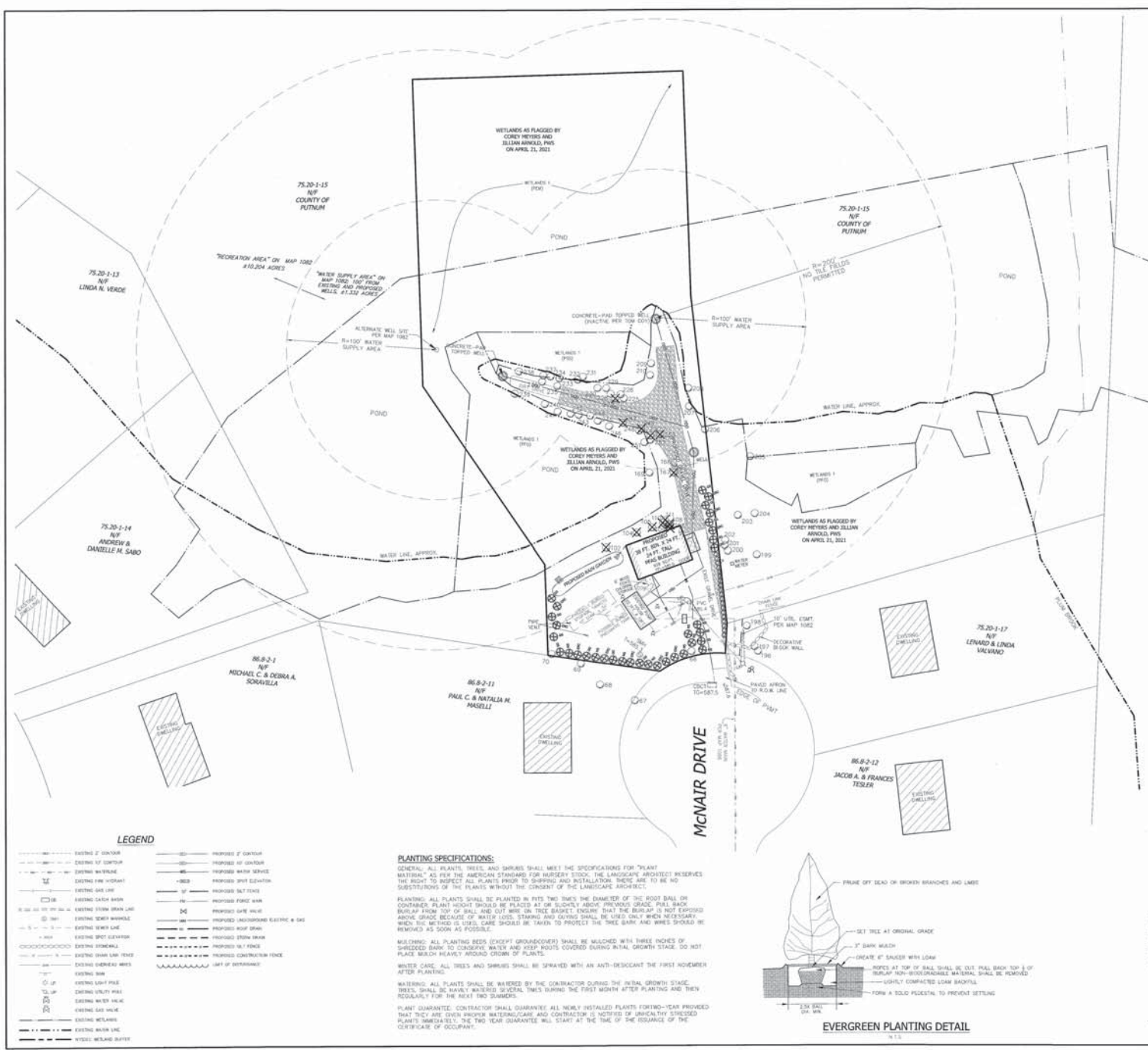


CONSTRUCTION FENCE DETAIL

NOTE:
* TO BE PLACED ALONG LIMIT OF DISTURBANCE

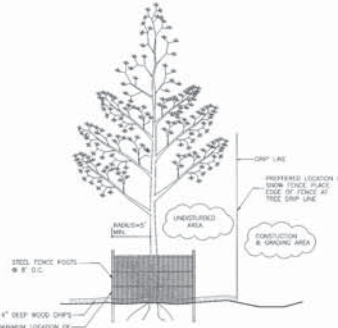


2	01-25-22	PER ECR & PSD SUBMISSION
1	11-15-21	FOR PG. MFG. 9-22-21
REVISION	DATE	DESCRIPTION
<p>ATZL, NASHER & ZIGLER P.C. ENGINEERS-SURVEYORS-PLANNERS 232 North Main Street New City, New York 10956 Tel: (845) 634-4884 Fax: (845) 634-5543 E-mail: info@anzny.com Web: www.AZSNT.com</p>		
PROJECT: SUEZ WATER NEW YORK, INC. CHATEAU WELL 1, 2 & 3		
TOWN OF CARMEL PUTNAM COUNTY, NEW YORK		
TITLE: EROSION & SEDIMENT CONTROL PLAN		
DRAWN BY: DJ	CHECKED BY: JSA	
DATE: JULY 28, 2021	SCALE: 1" = 30' FT	
PROJECT NO: 4874	DRAWING NO: 4	



TREE LIST

No.	SIZE	DESCRIPTION	CONDITION	No.	SIZE	DESCRIPTION	CONDITION
06	30"	MAPLE	GOOD	216	12"	MAPLE	POOR
07	10"	PINE	GOOD	225	8"	MAPLE	POOR
08	8"	PINE	GOOD	226	8"	MAPLE	GOOD
09	8"	LOCUST	GOOD	227	8"	MAPLE	POOR
10	8"	LOCUST	GOOD	228	10"	MAPLE	POOR
11	8"	MAPLE	POOR	229	6"	MAPLE	POOR
12	8"	MAPLE	POOR	230	8"	MAPLE	POOR
13	8"	MAPLE	POOR	231	7"	MAPLE	POOR
14	8"	MAPLE	POOR	232	12"	MAPLE	POOR
15	8"	MAPLE	POOR	233	8"	MAPLE	GOOD
16	8"	MAPLE	POOR	234	8"	MAPLE	GOOD
17	8"	MAPLE	POOR	235	6"	MAPLE	POOR
18	8"	MAPLE	POOR	236	8"	MAPLE	GOOD
19	8"	MAPLE	POOR	237	8"	MAPLE	GOOD
20	8"	MAPLE	POOR	238	8"	MAPLE	POOR
21	8"	MAPLE	POOR	239	7"	TRIN MAPLE	POOR
22	14"	MAPLE	POOR	240	6"	MAPLE	GOOD
23	12"	MAPLE	GOOD	241	8"	MAPLE	GOOD
24	18"	TRIN MAPLE	GOOD	242	13"	MAPLE	POOR
25	18"	MAPLE	GOOD	243	8"	MAPLE	POOR
26	14"	QUAD MAPLE	GOOD	244	8"	MAPLE	POOR
27	10"	ASH	GOOD	245	12"	MAPLE	POOR
28	14"	MAPLE	GOOD	246	8"	MAPLE	POOR
29	8"	TRIN MAPLE	POOR	247	8"	MAPLE	POOR
30	8"	TRIN MAPLE	POOR	248	8"	MAPLE	POOR
31	10"	TRIN MAPLE	GOOD	249	8"	MAPLE	POOR
32	10"	TRIN MAPLE	GOOD	250	10"	TRIN MAPLE	GOOD
33	16"	MAPLE	GOOD	251	18"	MAPLE	GOOD
34	8"	MAPLE	GOOD	252	11"	MAPLE	GOOD
35	8"	QUAD MAPLE	GOOD	253	8"	MAPLE	POOR
36	10"	MAPLE	POOR				



- NOTES:**
- INSTALL SHOW FENCE TREE PROTECTION PRIOR TO ANY CLEARING OR EXCAVATION.
 - MAINTAIN SHOW FENCE FOR THE DURATION OF THE CONSTRUCTION PERIOD.

PLANT LIST

SYMBOL	No.	PLANT NAME	HEIGHT	QUANTITY	SIZE & REMARKS
⊙ 1	1	SHRUB PLACATA	6FT TO 8FT	11	4FT x 8FT, N. Plant 2 x 8FT, C.
⊙ 2	2	LAMPERTS VIRGINIANA	6FT TO 8FT	11	4FT x 8FT, N. Plant 2 x 8FT, C.
⊙ 3	3	NORWAY SPRUCE	8FT TO 10FT	12	4FT x 8FT, N. Plant 2 x 8FT, C.
⊙ 4	4	LAMPERTS SCOPULORUM	8FT	15	4FT x 8FT, N. Plant 2 x 8FT, C.

GRAPHIC SCALE

01-25-22 PER EOB & FB SUBMISSION

11-15-21 PER FB MTD. 8-25-21

ATZL, NASHER & ZIGLER P.C.
ENGINEERS-SURVEYORS-PLANNERS

232 North Main Street
New City, New York 10986
Tel: (845) 634-4684
Fax: (845) 634-5543
E-mail: info@anzy.com
Web: www.ANZNY.com

PROJECT: SUEZ WATER NEW YORK, INC. CHATEAU WELL 1, 2 & 3

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE: TREE & LANDSCAPE PLAN

DESIGN BY: JS	CHECKED BY: JNA
DATE: JULY 18, 2021	SCALE: 1" = 30' (1")
PROJECT NO:	DRAWING NO:

4874
5

LEGEND

- - - - -	EXISTING 2' CONTOUR	- - - - -	PROPOSED 2' CONTOUR
- - - - -	EXISTING 5' CONTOUR	- - - - -	PROPOSED 5' CONTOUR
- - - - -	EXISTING WATERLINE	- - - - -	PROPOSED WATER SERVICE
- - - - -	EXISTING SPT. ELEVATION	- - - - -	PROPOSED SPT. ELEVATION
- - - - -	EXISTING GAS LINE	- - - - -	PROPOSED GAS MAIN
- - - - -	EXISTING 36" WATER MAIN	- - - - -	PROPOSED 36" WATER MAIN
- - - - -	EXISTING 30" WATER MAIN	- - - - -	PROPOSED 30" WATER MAIN
- - - - -	EXISTING 24" WATER MAIN	- - - - -	PROPOSED 24" WATER MAIN
- - - - -	EXISTING 18" WATER MAIN	- - - - -	PROPOSED 18" WATER MAIN
- - - - -	EXISTING 12" WATER MAIN	- - - - -	PROPOSED 12" WATER MAIN
- - - - -	EXISTING 6" WATER MAIN	- - - - -	PROPOSED 6" WATER MAIN
- - - - -	EXISTING 4" WATER MAIN	- - - - -	PROPOSED 4" WATER MAIN
- - - - -	EXISTING 2" WATER MAIN	- - - - -	PROPOSED 2" WATER MAIN
- - - - -	EXISTING WETLAND BUFFER	- - - - -	PROPOSED WETLAND BUFFER

PLANTING SPECIFICATIONS:

GENERAL: ALL PLANTS, TREES, AND SHRUBS SHALL MEET THE SPECIFICATIONS FOR "PLANT MATERIALS" AS PER THE AMERICAN STANDARDS FOR HURTSLEY STOCK. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT ALL PLANTS PRIOR TO SHIPPING AND INSTALLATION THERE ARE TO BE NO SUBSTITUTIONS OF THE PLANTS WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT.

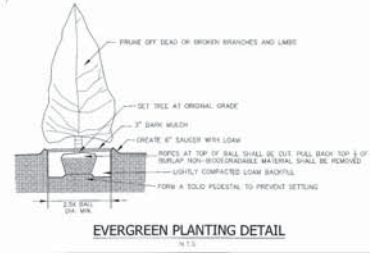
PLANTING: ALL PLANTS SHALL BE PLANTED IN PITS TWO TIMES THE DIAMETER OF THE ROOT BALL OR CONTAINER. PLANT HEIGHT SHOULD BE PLACED AT OR SLIGHTLY ABOVE PREVIOUS GRADE. FULL BACK BUILDUP FROM TOP OF BALL AND OUT 8" TO 10" FROM TRUNK. SURETY COVERING SHOULD BE PLACED ABOVE GRADE BECAUSE OF WATER LOGS, STAKING AND COVERING SHALL BE USED ONLY WHEN NECESSARY. WHEN THIS METHOD IS USED, CARE SHOULD BE TAKEN TO PROTECT THE TREE BARK AND BRANCHES SHOULD BE REMOVED AS SOON AS POSSIBLE.

MULCHING: ALL PLANTING BEDS (EXCEPT GROUNDCOVER) SHALL BE MULCHED WITH THREE INCHES OF SUEZCED BARK TO CONSERVE WATER AND KEEP ROOTS COVERED DURING INITIAL GROWTH STAGE. DO NOT PLACE MULCH HEAVY AROUND CROWN OF PLANTS.

WATERING: CARE, ALL TREES AND SHRUBS SHALL BE SPRAYED WITH AN ANTI-DESICCANT THE FIRST NOVEMBER AFTER PLANTING.

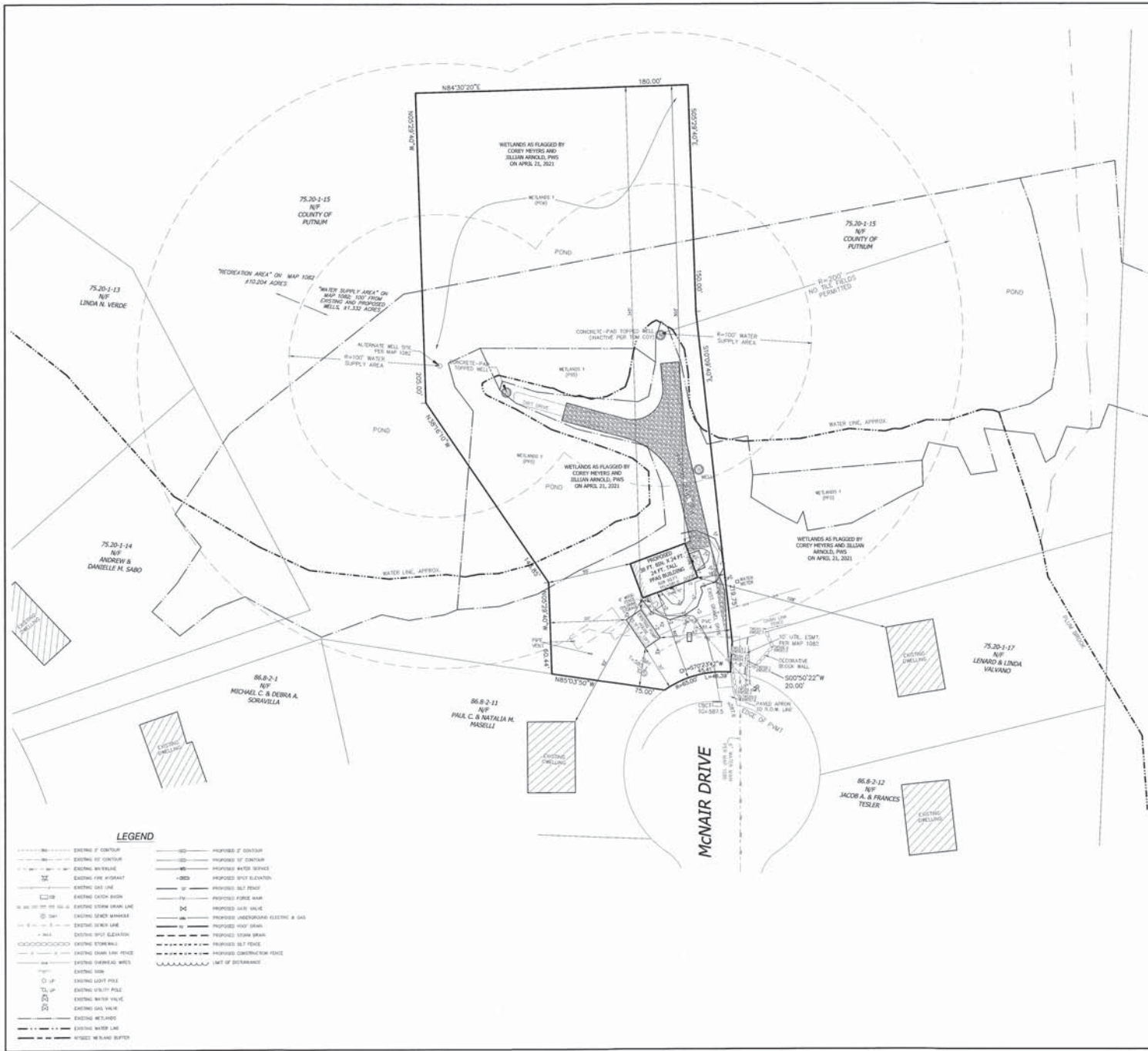
WATERING: ALL PLANTS SHALL BE WATERED BY THE CONTRACTOR DURING THE INITIAL GROWTH STAGE. TREES SHALL BE HEAVILY WATERED SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND THEN REGULARLY FOR THE NEXT TWO SUMMERS.

PLANT GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL NEWLY INSTALLED PLANTS FORTY-FIVE (45) MONTHS PROVIDED THAT THEY ARE GIVEN PROPER WATERING/CARE AND CONTRACTOR IS NOTIFIED OF UNUSUALITY STRESSED PLANTS IMMEDIATELY. THE TWO-YEAR GUARANTEE WILL START AT THE TIME OF THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.



Jonathan A. Nasher, P.E.
N.Y.S. P.E. Lic. No. 89666

John P. Atzl, P.E.
N.Y.S. P.E. Lic. No. 80228



CONTACT INFORMATION
 DAMON SALES (732) 965-8866
 RAB LIGHTING (201) 931-8062

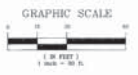


SLIM1ZY WALL MOUNT DETAIL

Luminaire Schedule								
Quantity	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	BLD Rating	
1	C	2	SLIM1ZY	SINGLE	N.A.	1,000	Wall Mount	B1-U0-00

LEGEND

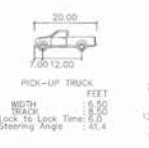
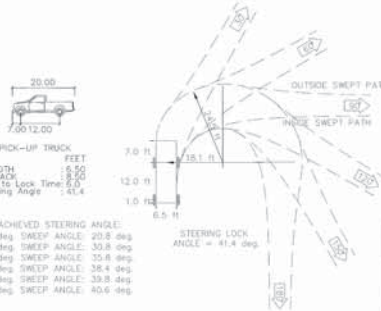
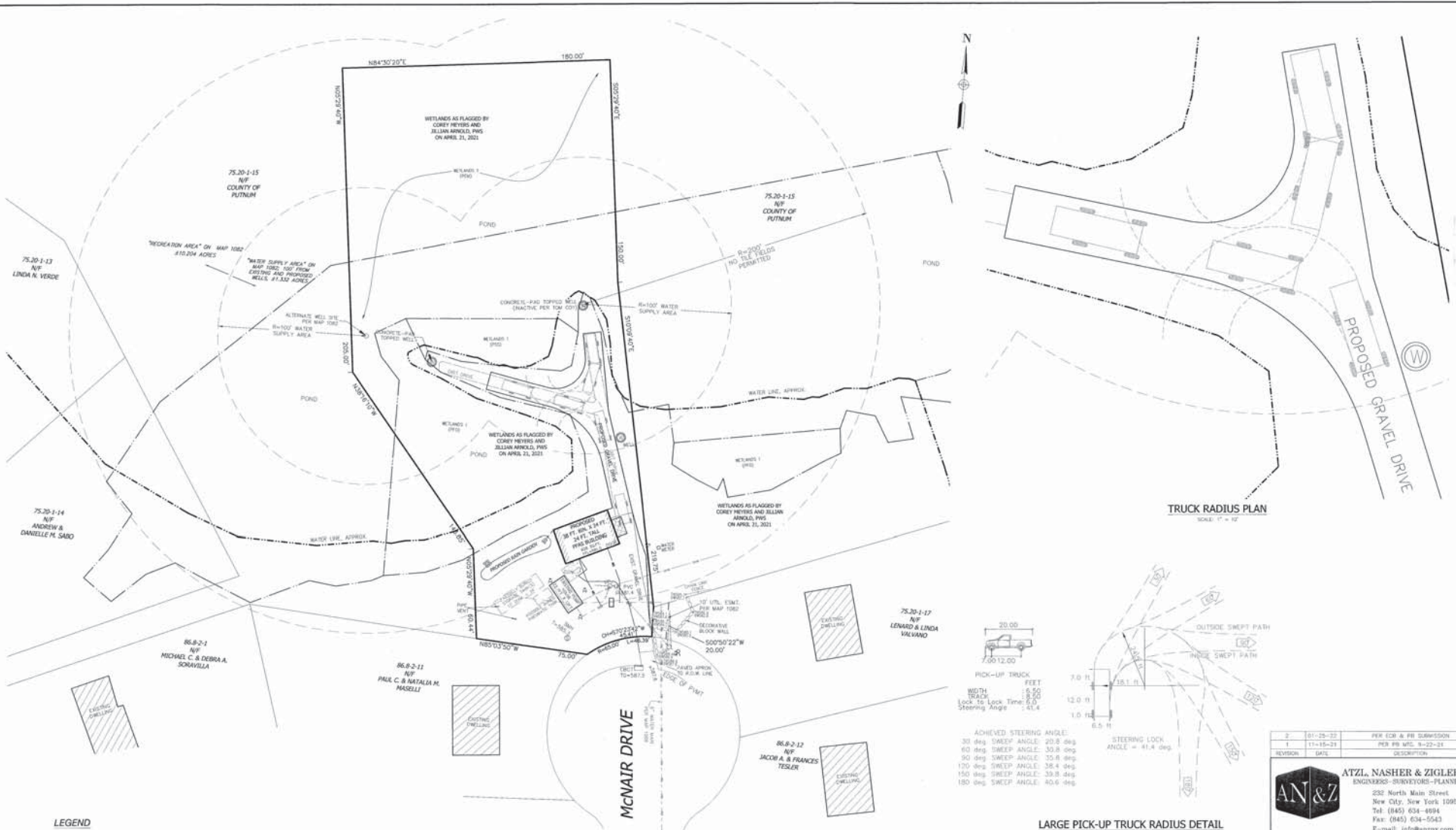
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- EXISTING WATER SERVICE
- PROPOSED WATER SERVICE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING GAS LINE
- PROPOSED GAS LINE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING STORM SEWER LINE
- PROPOSED STORM SEWER LINE
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- EXISTING UNDER LINE
- PROPOSED UNDER LINE
- EXISTING SIDE ELEVATION
- PROPOSED SIDE ELEVATION
- EXISTING STORMWALL
- PROPOSED STORMWALL
- EXISTING CHAIN LINK FENCE
- PROPOSED CHAIN LINK FENCE
- EXISTING CONCRETE WELLS
- PROPOSED CONCRETE WELLS
- EXISTING SIGN
- PROPOSED SIGN
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- EXISTING GAS VALVE
- PROPOSED GAS VALVE
- EXISTING WETLANDS
- PROPOSED WETLANDS
- EXISTING WATER LINE
- PROPOSED WATER LINE
- WETLAND BUFFER



THE ENGINEERING LAW OF THE STATE OF NEW YORK...
 I, **ATZL NASHER & ZIGLER P.C.**, a limited liability partnership organized under the laws of the State of New York, do hereby certify that I am a duly licensed Professional Engineer in the State of New York, No. 10000, and that I am the author of the above design. I am not providing any services in violation of the provisions of the Engineering Law of the State of New York, No. 10000, or any other laws or regulations of the State of New York. My commission expires on 12/31/2022.

ATZL NASHER & ZIGLER P.C.
 232 North Main Street
 New York, New York 10036
 Tel: (845) 634-6884
 Fax: (845) 634-5543
 E-mail: info@anzny.com
 Web: www.anzny.com

2	01-25-22	FOR EOB & PD SUBMISSION
1	11-15-21	FOR PD MTC 8-22-21
REVISION	DATE	DESCRIPTION
<p>ATZL NASHER & ZIGLER P.C. ENGINEERS-SURVEYORS-PLANNERS 232 North Main Street New York, New York 10036 Tel: (845) 634-6884 Fax: (845) 634-5543 E-mail: info@anzny.com Web: www.anzny.com</p>		
PROJECT: SUEZ WATER NEW YORK, INC. CHATEAU WELL 1, 2 & 3		
TOWN OF CARMEL PUTNAM COUNTY, NEW YORK		
TITLE: LIGHTING PLAN		
DRAWN BY: JS	CHECKED BY: JSA	
DATE: JULY 15, 2021	SCALE: 1" = 30' FT	
PROJECT NO: 4874	DRAWING NO: 6	



WIDTH	FEET
TRUCK	20.00
TRACK	12.00
Lock to Lock Time:	8.0
Steering Angle:	41.4

ACHIEVED STEERING ANGLE:	DEGREE
30 deg SWEEP ANGLE:	20.8 deg
60 deg SWEEP ANGLE:	33.8 deg
90 deg SWEEP ANGLE:	35.8 deg
120 deg SWEEP ANGLE:	36.4 deg
150 deg SWEEP ANGLE:	33.8 deg
180 deg SWEEP ANGLE:	20.8 deg

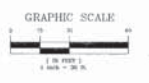


LARGE PICK-UP TRUCK RADIUS DETAIL

TRUCK RADIUS PLAN

LEGEND

---	EXISTING CENTERLINE	---	PROPOSED CENTERLINE
---	EXISTING 10' CENTERLINE	---	PROPOSED 10' CENTERLINE
---	EXISTING WATERLINE	---	PROPOSED WATER SERVICE
---	EXISTING FIRE HYDRANT	---	PROPOSED STREET ELEVATION
---	EXISTING GAS LINE	---	PROPOSED S&W FENCE
---	EXISTING CATCH BASIN	---	PROPOSED S&W VALVE
---	EXISTING STORM DRAIN LINE	---	PROPOSED UNDERGROUND SEWER & GAS
---	EXISTING SUMP WAKE	---	PROPOSED ROOF DRAIN
---	EXISTING SEWER LINE	---	PROPOSED STORM DRAIN
---	EXISTING SEWER ELEVATION	---	PROPOSED S&W FENCE
---	EXISTING CONCRETE	---	PROPOSED S&W FENCE
---	EXISTING CHAIN LINK FENCE	---	PROPOSED CONSTRUCTION FENCE
---	EXISTING SHED	---	LIMIT OF DISTURBANCE
---	EXISTING DRIVEWAY		
---	EXISTING SIGN		
---	EXISTING LIGHT POLE		
---	EXISTING UTILITY POLE		
---	EXISTING WATER VALVE		
---	EXISTING GAS VALVE		
---	EXISTING WETLANDS		
---	EXISTING WATER LINE		
---	WETLAND BUFFER		



REVISION	DATE	DESCRIPTION
2	01-25-22	PER EDR & FBI SUBMISSION
1	11-15-21	PER FB MTS. 9-22-21

ATZL, NASH & ZIGLER P.C.
ENGINEERS - SURVEYORS - PLANNERS
232 North Main Street
New City, New York 10956
Tel: (845) 634-4994
Fax: (845) 634-5543
E-mail: info@anzny.com
Web: www.anzny.com

PROJECT: **SUEZ WATER NEW YORK, INC. CHATEAU WELL 1, 2 & 3**

TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

TITLE: **TRUCK TURNING PLAN**

DRAWN BY: JS	CHECKED BY: JBA
DATE: NOVEMBER 15, 2021	SCALE: 1" = 30 FT.
PROJECT NO: 4874	DRAWING NO: 7



January 28, 2022

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

RE: Gateway Summit Multi-Family Housing Lot 6
Gateway Drive
Tax Map No. 55.-2-24.6-1 & 55.-2-24.6-2

Dear Chairman Paepfer and Members of the Board:

Enclosed please find the following in support of

- Site Plan Set consisting of (20 sheets), dated January 28, 2022. (5 copies)
- Amended Stormwater Pollution Prevention Plan, dated January 28, 2022. (2 copies)
- Water Engineering Report for G&F Subdivision Lots 6 & 7, dated January 28, 2022. (2 copies)
- Wastewater Engineering Report for G&F Subdivision Lot 6, dated January 28, 2022. (2 copies)

With regards to comments received from the town consultants, we offer the following:

Memorandum from Michael G. Carnazza, Town of Carmel Code Enforcement, dated October 27, 2021:

1. The required area variances were granted by the ZBA and are noted on the enclosed plans.
2. Although ample parking is available at each unit, visitor parking areas have been added as suggested.

Memorandum from Patrick Cleary, AICP of Cleary Consulting, dated October 27, 2021:

SEQR:

1. SEQR comments are being addressed by Tim Miller Associates. A letter and attachments are submitted under separate cover.

Zoning Compliance:

2. As noted above, required area variances were granted by the ZBA and are noted on the enclosed plans.

B. Plan Modifications Impacts:

3. Impacts are addressed in the SEQR response prepared by Tim Miller Associates.


Memorandum from Richard J. Franzetti, P.E., Town of Carmel Town Engineer, dated October 25, 2021:

1. Water and wastewater flows and related design info is included in the attached plans and report.
2. Stormwater management improvements are addressed in the attached Amended Stormwater Pollution Prevention Plan.
3. The SEQR documents submitted by Tim Miller Associates demonstrates the proposed project traffic is within thresholds established for the completed highway improvements.

We request this project be placed on the February 10th meeting for review of the enclosed information. Should you have any questions or comments regarding the above information, please feel free to contact me.

Very truly yours,

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

By: 

Jeffrey J. Contelmo, PE
Senior Principal Engineer

JJC/dlm/amk

Enclosure

cc: Paul Camarda, CRI

Insite File No. 04232.106



WASTEWATER ENGINEERING REPORT

For

**G and F Subdivision Lot 6
Town of Carmel, New York**

Revised for Re-Approval January 28, 2022

Prepared By
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

1.0 INTRODUCTION

The G and F Subdivision is an overall development plan totaling approximately 183 acres in the Town of Carmel. The site is located along the northern side of US Route 6 with frontage stretching from the intersection with Old Brewster Road east to the Southeast Town line. This report has been prepared to address the wastewater service for Lot 6 of the G and F Subdivision. The parcels are designated as tax map numbers 55.-2-24.6-1 and 55.-2-24.7-2. Lot 6 will be developed with a mix of senior housing and multifamily housing.

Domestic water for the Lot 6 will be supplied by Town of Carmel Water District #2 (CWD#2). Wastewater from the lot will be received by Town of Carmel Sewer District #2 (CSD#2).

2.0 PROJECT DESIGN FLOWS

The maximum daily design flows for Lot 6 are based on the hydraulic loading rates listed in the New York State Department of Environmental Conservation's (NYSDEC) publication *Design Standards for Wastewater Treatment Works – 2014* (DSWTF). The following table lists the proposed uses, associated hydraulic loading rates, and the design flow rates (gallons per day or gpd) for Lot 6. Note that while no additional flow is expected for the clubhouse because it is proposed to serve residents and their guests, 400 gpd has been included for potential visitors.

Proposed Use	Hydraulic Loading Rate	Maximum Daily Design Flow (gpd)
Gateway Summit 115 2-BR Senior Housing Units 35 3-BR Multifamily Units Clubhouse (Visitors)	2 x 110 gpd/BR 3 x 110 gpd/BR 400 gpd	25,300 11,550 400
Maximum Daily Design Flow Total		37,250

The average daily flow for the project is expected to be significantly less than the maximum daily design flow. The maximum daily design flows represent conservative flows to ensure that the proposed sewer and water works are designed with an ample factor of safety.

The anticipated actual flows are based on anticipated occupancy rates and measured data for water use. Based on the project environmental review, the expected number of residents anticipated for the project is 323 persons in Gateway Summit. Data from the American Water Works Association (AWWA) shows that the average in home water use is 69 gpd per person. This number is reduced to 45 gpd per person when water saving fixtures are used, which is the case for this project. Based on a projected population of 323, the average daily flow is anticipated to be 14,535 gpd. The design flow of the WWTP is based on a 30-day average flow. Therefore, for the district WWTP, the average flow of 14,535 gpd should be referenced when assessing the district's available flow capacity.

3.0 PROPOSED CONNECTION TO CARMEL SEWER DISTRICT #2

Wastewater from Lot 6 will be collected and conveyed to a proposed 8" sewer main extension of the existing CSD#2 collection system. The proposed extension will be constructed in conjunction with the proposed Town road through the subdivision, which connects to the existing sewer in Old Route 6, as discussed in the *Wastewater Engineering Report for the G and F Subdivision*. The capacity of existing CSD#2 facilities and the current flow in the receiving system were also estimated in the aforementioned report. The report concluded that there is sufficient capacity in the collection system and the WWTP to serve the proposed G and F Subdivision (of which the subject lot is part), as well as other major proposed projects currently under review in the district.

The 37,250 gpd maximum daily design flow for Lot 6 is part of the previously approved flow for the G & F Subdivision. The approved allocation for Lots 2 through 7 of the G & F Subdivision is 113,630 gpd per a July 11, 2018 memo from Richard Franzetti, P.E. Town Engineer.

The flows from the senior housing units will reach an existing sewer pump station in Old Route 6 near the WWTP. Based on discussions with Thomas Brann of Inframark, who operates the pump station, the subject pump station is operating well and in acceptable condition.

4.0 PROPOSED SYSTEM COMPONENTS

Wastewater will be conveyed to the proposed G and F Subdivision sewer main extension. The sewer for Lot 6 will be composed on approximately 4,400 feet of 8" PVC SDR 35 sewer pipe and 25 pre-cast concrete manholes.

The 35 multifamily units will share sewer improvements with Lot 7. The 11,550 gpd flow will be included in the sewer pump station sizing for Lot 7. For additional information see the Lot 7 Wastewater Report.



WATER ENGINEERING REPORT

For

**G and F Subdivision Lots 6 and 7
Town of Carmel, New York**

January 28, 2022

Prepared By
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

CONTENTS

	PAGE
1.0 INTRODUCTION	1
2.0 DESIGN FLOW	1
3.0 PROPOSED STANDARD PRESSURE IMPROVEMENTS	2
3.1 Design Flow	2
3.2 Storage Tank	2
3.3 Distribution System	2
4.0 PROPOSED HIGH SYSTEM IMPROVEMENTS	3
4.1 Design Flow	3
4.2 Booster Pump Station	3
4.3 Distribution System	4

FIGURES

Figure 1 Location Map

APPENDICES

Appendix A EPANET 2.0 Model
Appendix B Pump and System Curves

1.0 INTRODUCTION

The G and F Subdivision is an overall development plan totaling approximately 183 acres in the Town of Carmel. The site is located along the northern side of US Route 6 with frontage stretching from the intersection with Old Brewster Road east to the Southeast Town line. This report is prepared for the water supply for Lot 6 and Lot 7 of the G&F Subdivision. The tax map numbers for Lot 6 and Lot 7 are 55.-2-24.6-1, 55.2-24.7-2, and 55.2-24.8-2.

Lot 6 is proposed to be developed with 115 units of senior housing and 35 units of multifamily housing and Lot 7 with 150 units of multifamily housing and a shared clubhouse. Water for the two parcels will be provided by a connection to the Carmel Water District #2. Lot 7 will use existing system pressure and Lot 6 will include a pump station to provide a high-pressure system.

2.0 DESIGN FLOW

The maximum daily design flows for Lots 6 and 7 are based on the hydraulic loading rates listed in the New York State Department of Environmental Conservation's (NYSDEC) publication *Design Standards for Wastewater Treatment Works – 2014* (DSWTF). The following table lists the proposed uses, associated hydraulic loading rates, and the design flow rates (gallons per day or gpd) for Lots 6 and 7. Note that while no additional flow is expected for the clubhouse because it is proposed to serve residents and their guests, 400 gpd has been included for potential visitors.

Proposed Use	Hydraulic Loading Rate	Maximum Daily Design Flow (gpd)
Gateway Summit 115 2-BR Senior Housing Units 35 3-BR Multifamily Units Clubhouse (Visitors)	2 x 110 gpd/BR 3 x 110 gpd/BR 400 gpd	25,300 11,550 400
The Fairway 150 3-BR Senior Housing Units Clubhouse (visitors)	3 x 110 gpd/BR 400 gpd	49,500 400
Maximum Daily Design Flow Total		87,150

The average daily flow for the project is expected to be significantly less than the maximum daily design flow. The maximum daily design flows represent conservative flows to ensure that the proposed sewer and water works are designed with an ample factor of safety.

The anticipated actual flows are based on anticipated occupancy rates and measured data for water use. The expected number of residents anticipated for the project is 323 persons in Gateway Summit and 435 persons in The Fairways for a total of 758 persons. Data from the American Water Works Association (AWWA) shows that the average in home water use is 69 gpd per person. This number is reduced to 45 gpd per person when water saving fixtures are used, which is the case for this project. Based on a projected population of 758, the average daily flow is anticipated to be 34,110 gpd. Therefore, the average flow of 34,110 gpd should be referenced when assessing the district's available flow capacity.

The 87,150 gpd maximum daily design flow for Lots 6 and 7 is part of the previously approved flow for the G & F Subdivision. The approved allocation for Lots 2 through 7 of the G & F Subdivision is 113,630 gpd per a July 11, 2018 memo from Richard Franzetti, P.E. Town Engineer.

3.0 PROPOSED STANDARD PRESSURE IMPROVEMENTS

3.1 Design Flow

CWD #2 currently includes three storage tanks, located at approximately the same elevation and are spread throughout the system. In order to determine the proposed distribution system improvements, the following assumptions were made: each tank provides $\frac{1}{3}$ of the flow, all flow comes from storage and none from the treatment plant, a 1.5 factor of safety is applied to the flow. The following calculations are the basis of the design of the proposed distribution system improvements as described in Section 3.3 and modeled in Appendix A.

*Estimated existing peak flow from existing tank = 600 gpm (1.5 factor of safety x 400 gpm)

*Proposed booster pump station design flow (Lot 6) = 71 gpm (see Section 3.1)

*Proposed G and F Subdivision (Lots 1 to 5) design flow = 51 gpm

*Proposed G and F Subdivision (Lot 6 and Lot 7) design flow = 172 gpm

*These flows are utilized in the EPANET 2.0 model in Appendix A.

3.2 Storage Tank

CWD #2 has recently completed a design for replacement of the 300,000-gallon Everett Road Tank with a 500,000-gallon tank. This project is scheduled for bidding and construction in 2022. This improvement is intended to address current and future storage demands for the district. The Gateway Summit project continues to propose a 139,000-gallon water storage tank to supplement the existing 300,000-gallon tank, if the district's plan for the new 500,000 gallon is delayed or aborted. Should the district complete the new 500,000-gallon tank as envisioned the 139,000-gallon tank will not be necessary and will be eliminated from the Gateway Summit project improvements.

If the 139,000-gallon tank is installed the proposed tank will operate in the same manner as the existing adjacent 300,000-gallon storage tank. It will have a single connection to the proposed main and its level will be controlled with an altitude valve. The settings for the operation of the valve will be the same as the existing adjacent tank.

3.3 Distribution System

The proposed standard pressure system distribution system improvements include approximately 5,700 l.f. of 8" diameter PVC watermain in proposed Lots 6 and 7 of the G and F Subdivision. Please note that the proposed watermain through Lot 6 is proposed to loop the standard pressure system through Lot 7 and that no services are proposed for the senior housing units from the Lot 6 portion of the main. The Lot 6 senior housing units will be supplied with water from the proposed high system (see Section 4.0).

The computer program EPANET 2.0 (see Appendix A) was used to model the proposed distribution system improvements. The EPANET 2.0 program was also used to assess the proposed domestic flow pressures in proposed Lot 7 as well as fire flow conditions. As seen in Appendix A the pressure in the proposed main in Lot 7 (for domestic flows) will be 35 psi or greater. During a fire flow of 600 gpm (based on proposed fire protection system requirements for Lots 6 and 7) the pressure in the proposed standard pressure distribution system will be maintained at 20 psi or greater.

4.0 PROPOSED HIGH SYSTEM IMPROVEMENTS

Kelley Ridge Pressure

CWD #2 recently completed a significant distribution system cleaning and pipe lining contract. This contract included the mains servicing the Kelley Ridge area and beyond. These improvements will

improve the pressure and flow characteristics in the system. The G&F project proposes multiple connections to the CWD #2 distribution system at Old Route 6, Kelley Ridge Road and Everett Road providing multiple looping of the water mains. This network arrangement will also provide for redundant and improved flow and pressure conditions.

The proposed high system improvements include a new booster pump station and approximately 5,000 l.f. of 6" and 8" diameter PVC watermain. The proposed booster pump station will provide water to the senior housing portion of proposed Lot 6.

4.1 Design Flow

Though the actual flows are anticipated to be lower, the maximum daily design flow is used for booster pump station and watermain sizing. The proposed booster pump station will supply water to the 115 senior housing units on lot 6.

	Hydraulic Loading Rate	Maximum Daily Design Flow (gpd)
Lot 6 115 2-BR senior housing units	2 x 110 gpd/bedroom	25,300
Total		25,300

As calculated above the maximum daily design flow for these units is 25,300 gpd. The Peak hourly flow for domestic use is calculated using a peaking factor that is based on the population of the subject project. The publication Recommend Standards for Wastewater Facilities (2014) was used to determine a peaking factor of 4.

Peak Domestic Flow

$$25,300\text{gpd} \div 24\text{hr/day} \div 60 \text{ min/hr} = 17.6 \text{ gpm}$$

$$\text{Peak Domestic Hourly flow} = 17.6 \text{ gpm} \times 4 = 70.4 \text{ (use 71)}$$

The pump will also be sized to provide a 600 gpm fire flow.

The booster pump station total design flow is as follows:

Domestic peak flow	=	71 gpm
Fire protection flow	=	600 gpm
Total design flow	=	671 gpm

4.2 Booster Pump Station

The booster pump station is designed to provide water to the senior housing units of Lot 6. The station is also designed to provide the required fire flow for Lot 6. Variable frequency drives will be utilized to maintain a constant discharge pressure from the pump station. An emergency generator is proposed to provide back up power. The design parameters for the system are provided below.

Static Head Loss

Elevation of Pump House	=	730 ft
Pressure Head to be maintained at pumphouse 40 psi (40 psi * 2.31 ft/psi)	=	92 ft
Elevation of Highest House	=	726 ft
Static Head at highest house	=	96 ft (42 psi)

Elevation of Lowest house	=	660 ft
Static Head at Lowest house	=	162 ft (70 psi)

Friction Head Loss

Head loss ft/100ft in		
8" PVC DR 14 at Peak Hourly Flow (71 gpm)	=	0.024 ft/100 ft
6" PVC DR 14 at Peak Hourly Flow (36 gpm (two directions))	=	0.025 ft/100 ft
8" PVC DR 14 at Fire Flow (671 gpm)	=	0.900 ft/100 ft
6" PVC DR 14 at Fire Flow (336 gpm (two directions))	=	0.644ft/100 ft
Length of 8" main to tee (Includes 20% for fittings)	=	300 ft
Max Length of 6" main to center of loop (Includes 20% for fittings)	=	1600 ft
Max headloss Peak Hourly Flow (0.024*300/100+0.098*1600/100)	=	2 ft/1psi
Max headloss Fire Flow (10.900*300/100+0.934*1600/100)	=	18 ft/8psi

The control system will be designed to maintain 40 psi at the pump station. With a Domestic Pressure loss of 1 psi the lowest system pressure under domestic slow will be 39 psi. With a loss of 8 psi under fire flows the minimum pressure would be 32 psi for fire flows. As shown above this allows the system to meet RSWW minimum pressure at service connection of 35 psi and the RSWW and AWWA M31 fire flow pressure requirement of 20 psi.

The original pump station was sized to provide 210 gpm domestic and 810 gpm total flow. As the flows have been reduced to 71 gpm domestic and 761 gpm total flow (reduced unit flow rates for modern plumbing fixtures and 35 units will be connected to the standard pressure system) the original pumps discussed below are now oversized for the system. The pump selections will be revisited in the future submissions.

The system will consist of four pumps. Two Grundfos CR20 pumps running in parallel will handle the domestic flow. These pumps will maintain 40 psi at the booster pump station and supply the peak domestic demand of 210 gpm. Two Berkeley 4 x 5 x 13 BH (B4JPBH) will provide the required fire flow. These pumps are each capable of providing the 810-gpm total design flow. With the redundant pump, all service will be maintained even with the best pump out of service. A small hydro-pneumatic tank is also included in the system to maintain proper pump cycling. See Appendix B for pump and system curves.

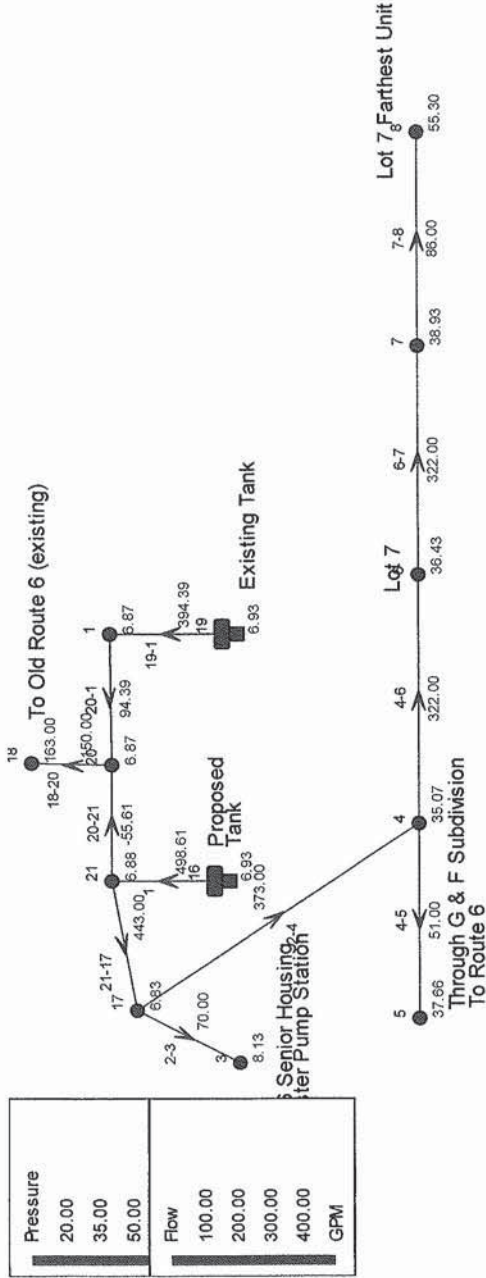
4.3 Distribution System

The proposed high system distribution system improvements include approximately 5,000 l.f. 6" and 8" diameter PVC watermain. Six fire hydrants are proposed for the high system. Two hydrants connected to the standard pressure system are proposed to supplement the booster pump system. These hydrants will be a different color to distinguish between the systems.

APPENDIX A
EPANET 2.0 Model

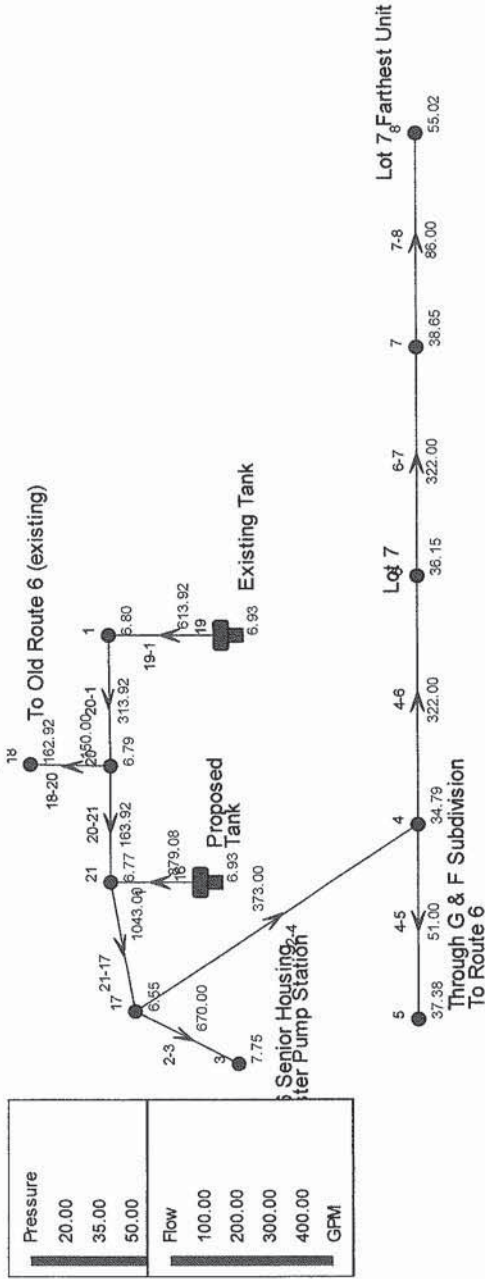
Junction Pressure and Pipe Flow (Lot 6 and Lot 7 Domestic Flow)

Day 1, 12:00



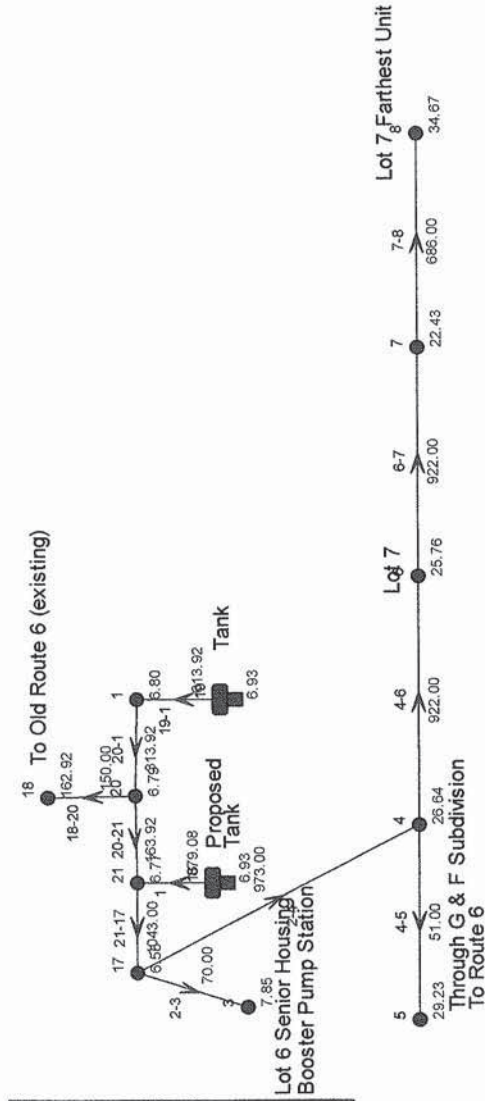
Junction Pressure and Pipe Flow (Lot 6 Fire Flow)

Day 1, 12:00



Junction Pressure and Pipe Flow (Lot 7 Fire Flow)

Day 1, 12:00

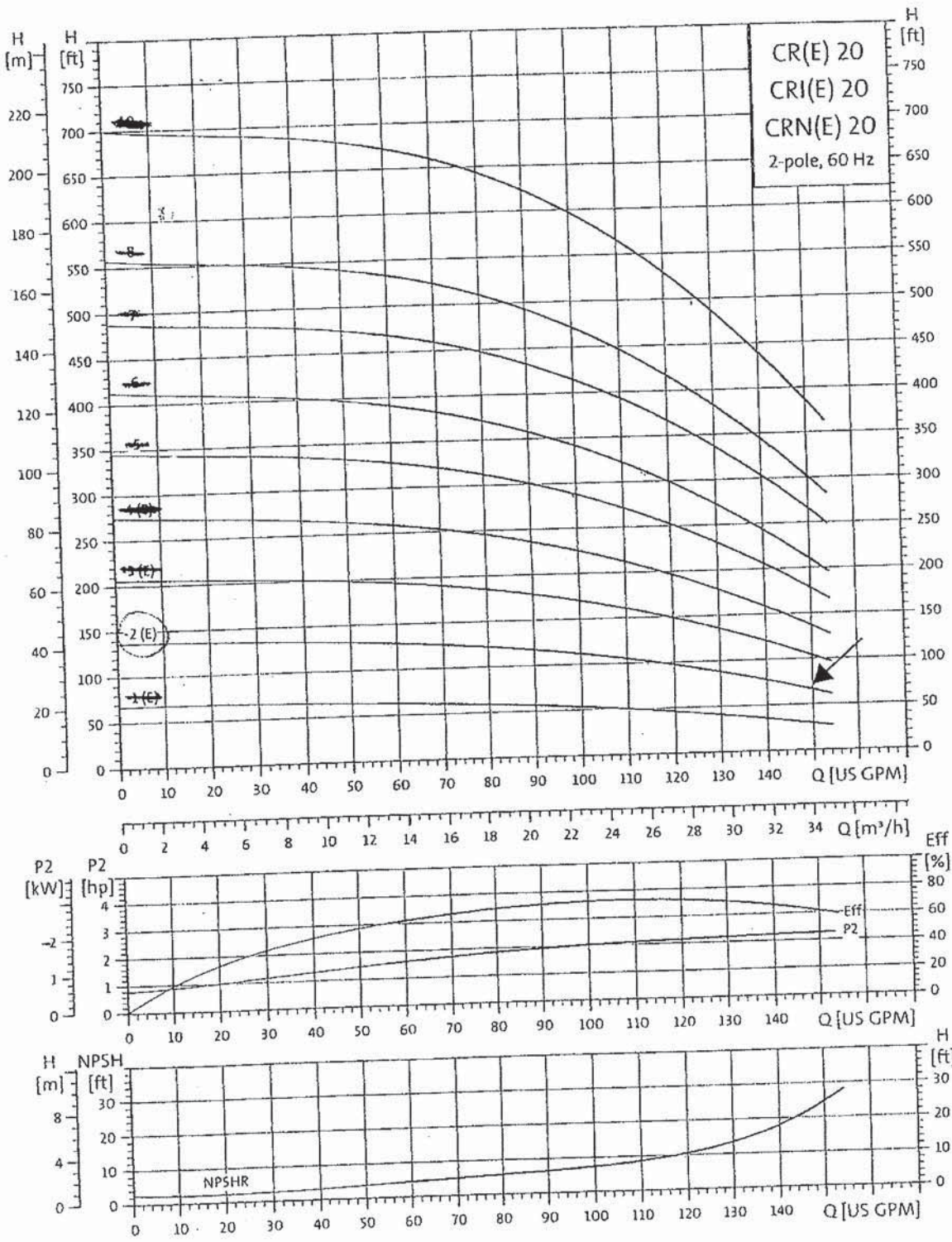


Lot 6 Fire Flow

APPENDIX B
Pump and System Curves

Performance curves

CR(E) 20
CRI(E) 20
CRN(E) 20
2-pole, 60 Hz



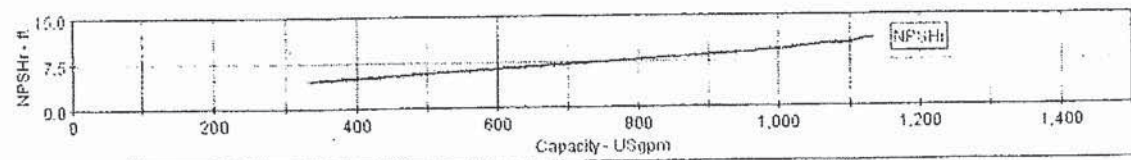
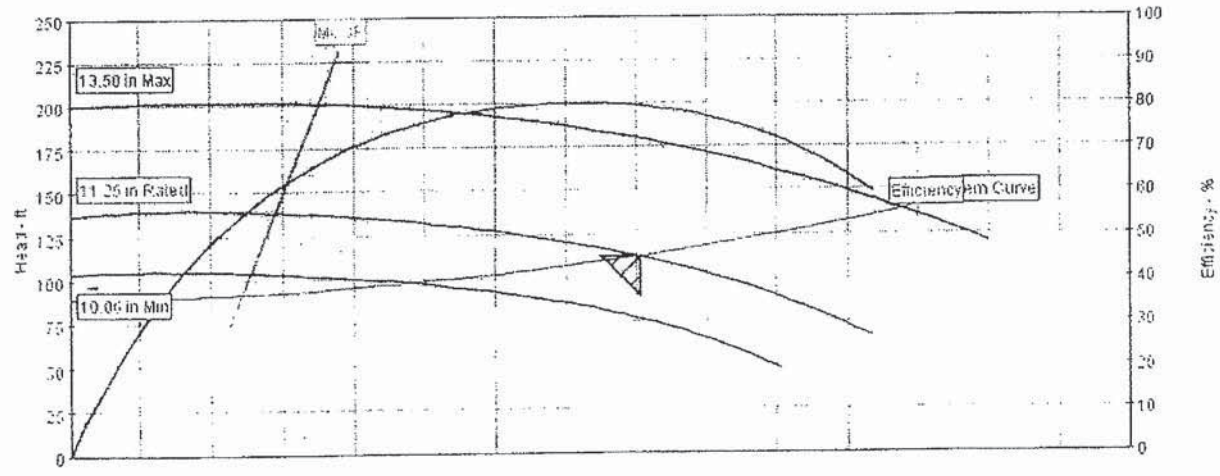
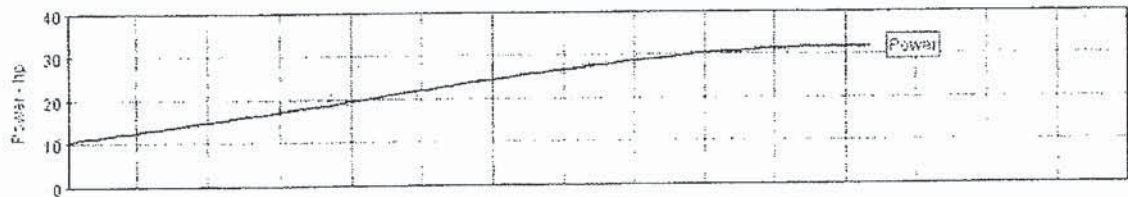
TM402 7223 2803

Pump Performance Datasheet

Customer	:	Quote number	:
Customer reference	:	Pump size	: 4 x 5 x 13 BH (B4JPBH)
Item number	:	Stages	: 1
Service	:	Based on curve number	: 9013
Quantity of pumps	: 1	Date last saved	: 11 Jun 2007

Operating Conditions		Liquid	
Flow, rated	: 805.0 USgpm	Liquid type	: --Water
Head, rated (requested)	: 112.0 ft	Additional liquid description	:
Head, rated (actual)	: 112.3 ft	Solids diameter, max	: 0.00 in
Suction pressure, rated / max	: 0.00 / 0.00 psi.g	Temperature, max	: 68.00 deg F
NPSH available, rated	: Ample	Fluid density, rated / max	: 0.998 / 0.998 SG
Frequency	: 60 Hz	Viscosity, rated	: 1.00 cP

Performance		Material	
Pump speed, rated	: 1,750 rpm	Material requested	: Not specified
Impeller diameter, rated	: 11.25 in	Material selected	: Not specified
Impeller diameter, maximum	: 13.50 in	Pressure Data	
Impeller diameter, minimum	: 10.06 in	Maximum working pressure	: 60.36 psi.g
Efficiency	: 79.35 %	Maximum allowable working pressure	: 165.0 psi.g
NPSH required / margin required	: 7.74 / 0.00 ft	Maximum allowable suction pressure	: N/A
Specific speed / Suction specific speed	: 1,087 / 10,646 US units	Hydrostatic test pressure	: N/A
MCSF	: 289.4 USgpm	Driver & Power Data	
Head, maximum, rated diameter	: 139.5 ft	Driver sizing specification	: Rated power
Head rise to shutoff	: 21.96 %	Margin over specification	: 0.00 %
Flow, best eff. point (BEP)	: 718.3 USgpm	Service factor	: 1.00 (used)
Flow ratio (rated / BEP)	: 112.08 %	Power, hydraulic	: 22.73 hp
Diameter ratio (rated / max)	: 83.33 %	Power, rated	: 28.64 hp
Head ratio (rated dia / max dia)	: 62.34 %	Power, maximum, rated diameter	: 31.74 hp
Viscous coefficients (CQ / CH / CE)	: 1.00 / 1.00 / 1.00	Minimum recommended motor rating	: 30.00 hp / 22.37 kW
Selection status	: Acceptable		



SEQRA ENVIRONMENTAL ASSESSMENT

SEQRA Full Environmental Assessment Form and Supplemental Studies

Gateway Summit and The Fairways Site Plan, Subdivision and Special Permit Applications

Town of Carmel
Putnam County, New York

Lead Agency:

TOWN OF CARMEL PLANNING BOARD
60 McAlpin Avenue
Mahopac, New York 10541
Contact: Rose Trombetta
(845) 628-1500 x190

Project Sponsors:

HUDSON VALLEY REALTY CORP (GATEWAY SUMMIT)
&
PAR FOUR REALTY COMPANY LLC (THE FAIRWAYS)
1699 Route 6, Suite 1
Carmel, NY 10512
Contact: Mr. Paul Camarda
(845) 228-1400

Prepared by:

TIM MILLER ASSOCIATES, INC.
10 North Street
Cold Spring, New York 10516
Contact: Jon P. Dahlgren
(845) 265-4400

January 28, 2022



Gateway Summit and The Fairways

Site Plan, Subdivision and Special Permit Applications

SEQRA ENVIRONMENTAL ASSESSMENT

SEQRA Full Environmental Assessment Form and Supplemental Studies

Table of Contents

1.0 FULL ENVIRONMENTAL ASSESSMENT FORM (EAF)

EAF Part 1 - Project and Setting

2.0 EAF Part 3 - Evaluation of Potential Impacts

Expanded assessments for impacts identified in Part 1 topics:

2.0	Project Description
3.0	Community Services
4.0	Traffic

List of Figures

2-1	Location Map
2-2	Aerial Photograph
2-3	Gateway Summit and The Fairways Site Plan
2-4	2016 SEQRA Site Plan
2-5	2006 Approved Site Plan
3-1	School District Boundary

List of Attachments

A.	SEQRA Findings Statement and SEQRA Evaluation Forms
B.	Carmel CSD and Brewster CSD Information
C.	Traffic – Trip Generation Tables
D.	Correspondence

**Full Environmental Assessment Form
Part 1 - Project and Setting**

Instructions for Completing Part 1

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

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

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

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Gateway Summit and the Fairways		
Project Location (describe, and attach a general location map): Route 6, Carmel New York (see attached location map)		
Brief Description of Proposed Action (include purpose or need): The Gateway Summit and the Fairways development proposes two multi-family residential communities on a total of 145 acres located on the north side of Route 6 in the Town of Carmel, Putnam County, New York. The two communities are referred to as "Gateway Summit" and "The Fairways". The Gateway Summit development would include a mix of 150 units of active adult single family homes, active adult townhomes and non-age restricted townhomes. The Fairways development would consist of 150 units of non-age restricted townhomes with varied designs. The Gateway Summit and The Fairways developments were the subject of a thorough coordinated review under the SEQRA by the Town of Carmel Planning Board (the lead agency) for Subdivision Approval, Special Use Permits, and Site Plan approvals, and to the Town of Carmel Environmental Conservation Board for a Wetland Permit during the period 2003 through 2007. The proposed action involves amended Site Plan, Subdivision and Special Use permits and setback variances from the Town Zoning Board of Appeals (see attached Expanded EAF). The proposed action will provide needed senior and non-age restricted housing in the Town of Carmel.		
Name of Applicant/Sponsor: Hudson Valley Realty Corp (Gateway) / Par Four Realty Company LLC (The Fairways)	Telephone: 845-228-1400	E-Mail: crillc@comcast.net
Address: 1699 Route 6, Suite 1		
City/PO: Carmel	State: New York	Zip Code: 10512
Project Contact (if not same as sponsor; give name and title/role): Mr. Paul Camarda	Telephone: 845-228-1400	E-Mail: crillc@comcast.net
Address: SAME		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone:	E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, <input type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Planning Board or Commission	Town of Carmel Planning Board: Site plan, subdivision, special permit	Pending
c. City, Town or <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Village Zoning Board of Appeals	Town of Carmel ZBA: setback variances	Pending
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input type="checkbox"/> No

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part I 	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, identify the plan(s): NYC Watershed Boundary _____ _____ _____	
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s): _____ _____ _____	

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
 If Yes, what is the zoning classification(s) including any applicable overlay district?
R-Residential and C/BP Commercial / Business Park

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

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

C.4. Existing community services.

a. In what school district is the project site located? Carmel Central School District and Brewster Central School District

b. What police or other public protection forces serve the project site?
Town of Carmel Police

c. Which fire protection and emergency medical services serve the project site?
Town of Carmel Fire Department

d. What parks serve the project site?
Putnam Trailway, Fred Dill Wildlife Sanctuary, Ninham Mountain Multiple Use Area

D. Project Details

D.1. Proposed and Potential Development

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

b. a. Total acreage of the site of the proposed action? _____ 144.65 acres
 b. Total acreage to be physically disturbed? _____ TBD acres
 c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ 179.65 acres

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

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
 If Yes,
 i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
Residential
 ii. Is a cluster/conservation layout proposed? Yes No
 iii. Number of lots proposed? 2
 iv. Minimum and maximum proposed lot sizes? Minimum 42.89 Maximum 101.76

e. Will the proposed action be constructed in multiple phases? Yes No
 i. If No, anticipated period of construction: _____ months
 ii. If Yes:
 • Total number of phases anticipated _____ TBD
 • Anticipated commencement date of phase 1 (including demolition) _____ June month 2022 year
 • Anticipated completion date of final phase _____ June month 2028 year
 • Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:
A Construction Phasing Plan will be provided as part of the Amended Site Plan approval process.

f. Does the project include new residential uses? Yes No
 If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase	_____	_____	_____	_____
At completion of all phases	68	_____	_____	232

g. Does the proposed action include new non-residential construction (including expansions)? Yes No
 If Yes,
 i. Total number of structures _____
 ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length
 iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? Yes No
 If Yes,
 i. Purpose of the impoundment: _____
 ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____
 iii. If other than water, identify the type of impounded/contained liquids and their source. _____
 iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres
 v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length
 vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:
 i. What is the purpose of the excavation or dredging? _____
 ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
 • Volume (specify tons or cubic yards): _____
 • Over what duration of time? _____
 iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____

iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres
 vi. What is the maximum area to be worked at any one time? _____ acres
 vii. What would be the maximum depth of excavation or dredging? _____ feet
 viii. Will the excavation require blasting? Yes No
 ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No
 If Yes:
 i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): NYSDEC Wetland LC-27

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:
 NYSDEC and Town wetland buffer will be disturbed for walking trails and the installation of a dock. The dock will provide recreational lake access. Wetland permits have been reapproved for the disturbance by the NYSDEC and the Town Environmental Conservation Board.

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

If Yes, describe: Piles will be installed for a dock.

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

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

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

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

If Yes:

i. Total anticipated water usage/demand per day: 87,260 max. day design gallons/day

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

If Yes:

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

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

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

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

If Yes:

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

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

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

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

If Yes:

i. Total anticipated liquid waste generation per day: 87,260 max. day gallons/day

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

Sanitary wastewater

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

If Yes:

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

<ul style="list-style-type: none"> • Do existing sewer lines serve the project site? _____ • Will a line extension within an existing district be necessary to serve the project? If Yes: <ul style="list-style-type: none"> • Describe extensions or capacity expansions proposed to serve this project: _____ 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? If Yes:</p> <ul style="list-style-type: none"> • Applicant/sponsor for new district: _____ • Date application submitted or anticipated: _____ • What is the receiving water for the wastewater discharge? _____ <p>v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans): _____</p> <p>vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? If Yes:</p> <p>i. How much impervious surface will the project create in relation to total size of project parcel? _____ Square feet or <u>TBD</u> acres (impervious surface) _____ Square feet or <u>144.6</u> acres (parcel size)</p> <p>ii. Describe types of new point sources. <u>Roof drains, swales, pipes</u></p> <p>iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? <u>Stormwater will be detained and treated by on-site stormwater management facilities</u></p> <ul style="list-style-type: none"> • If to surface waters, identify receiving water bodies or wetlands: _____ • Will stormwater runoff flow to adjacent properties? _____ 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?</p> <p>f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? If Yes, identify:</p> <p>i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)</p> <p>ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)</p> <p>iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? If Yes:</p> <p>i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)</p> <p>ii. In addition to emissions as calculated in the application, the project will generate:</p> <ul style="list-style-type: none"> • _____ Tons/year (short tons) of Carbon Dioxide (CO₂) • _____ Tons/year (short tons) of Nitrous Oxide (N₂O) • _____ Tons/year (short tons) of Perfluorocarbons (PFCs) • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆) • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs) • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs) 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No

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

If Yes:

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

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

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

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

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

If Yes:

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

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ 0 _____ Proposed _____ 600 _____ Net increase/decrease _____ 600

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

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:
 A new driveway for the project has been constructed at Route 6, including a turning lane and traffic signal.

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? Yes No

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

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

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

If Yes:

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

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

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

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

i. During Construction:

- Monday - Friday: _____ 8:00 am to 6:00 pm _____
- Saturday: _____ 8:00 am to 6:00 pm _____
- Sunday: _____ N/A _____
- Holidays: _____ N/A _____

ii. During Operations:

- Monday - Friday: _____ 24 hrs. _____
- Saturday: _____ 24 hrs. _____
- Sunday: _____ 24 hrs. _____
- Holidays: _____ 24 hrs. _____

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

If yes:

i. Provide details including sources, time of day and duration:
 Noise from construction will occur during the construction period and will vary depending upon location and activity.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
 Describe: Existing vegetation will be removed from areas of development

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

If yes:

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

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
 Describe: Existing vegetation will be removed from areas of development

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

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

If Yes:

i. Product(s) to be stored _____

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

iii. Generally, describe the proposed storage facilities: _____

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

If Yes:

i. Describe proposed treatment(s): _____

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

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

If Yes:

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

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

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

- Construction: _____
- Operation: _____

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

- Construction: _____
- Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No
 If Yes:
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____
 ii. Anticipated rate of disposal/processing:
 • _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
 • _____ Tons/hour, if combustion or thermal treatment
 iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No
 If Yes:
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

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

 iii. Specify amount to be handled or generated _____ tons/month
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

 v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No
 If Yes: provide name and location of facility: _____
 If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

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

a. Existing land uses.
 i. Check all uses that occur on, adjoining and near the project site.
 Urban Industrial Commercial Residential (suburban) Rural (non-farm)
 Forest Agriculture Aquatic Other (specify): Golf Course
 ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site. *

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

* Note: Land use/Cover type to be provided during Amended Site Plan Review.

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: _____

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

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection: _____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No
• If yes, cite sources/documentation: Former Putnam County landfill is inactive and closed
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:
Former Putnam County landfill is located adjacent to the southern portion of Gateway Summit property.
iii. Describe any development constraints due to the prior solid waste activities: _____
None

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): 344031
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):
Site reference 344031 is from NYSDEC database and mapped in error. Site 344031 is the Grant Hardware site, in the NYS Superfund program, and is located in West Nyack, Rockland County, NY

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

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

E.2. Natural Resources On or Near Project Site

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

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ 5 %

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

Pn - Paxton loam	_____	35 %
CIE - Charlton loam	_____	15 %
RdB - Ridgebury	_____	10 %

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

e. Drainage status of project site soils: Well Drained: _____ 60 % of site
 Moderately Well Drained: _____ 25 % of site
 Poorly Drained _____ 15 % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ 30 % of site
 10-15%: _____ 20 % of site
 15% or greater: _____ 50 % of site

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

h. Surface water features.

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

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No
 If Yes to either i or ii, continue. If No, skip to E.2.i.

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

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

- Streams: Name 864-194 Classification C
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, NYS Wetland, Federal Waters, Fe... Approximate Size NYS Wetland (in a...
- Wetland No. (if regulated by DEC) LC-27

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

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

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

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

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

<p>m. Identify the predominant wildlife species that occupy or use the project site:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Whitetail deer</td> <td style="width: 50%;">American Opossum</td> </tr> <tr> <td>Grey Squirrel</td> <td>Raccoon</td> </tr> <tr> <td>American Crow</td> <td>groundhog</td> </tr> </table>		Whitetail deer	American Opossum	Grey Squirrel	Raccoon	American Crow	groundhog
Whitetail deer	American Opossum						
Grey Squirrel	Raccoon						
American Crow	groundhog						
<p>n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p>ii. Source(s) of description or evaluation: _____</p> <p>iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 							
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Species and listing (endangered or threatened): _____</p> <p>Northern Long-eared Bat</p>							
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Species and listing: _____</p>							
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p>							
<p>E.3. Designated Public Resources On or Near Project Site</p>							
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, provide county plus district name/number: _____</p>							
<p>b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>i. If Yes: acreage(s) on project site? _____</p> <p>ii. Source(s) of soil rating(s): _____</p>							
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p>ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p>							
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. CEA name: _____</p> <p>ii. Basis for designation: _____</p> <p>iii. Designating agency and date: _____</p>							

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? Yes No

If Yes:

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

ii. Name: _____

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

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

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

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

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

If Yes:

i. Identify resource: Putnam Trailway, Fred Dill Wildlife Sanctuary, Ninham Mountain Multiple Use Area

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

iii. Distance between project and resource: _____ 0.1 miles.

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

If Yes:

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

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

F. Additional Information

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

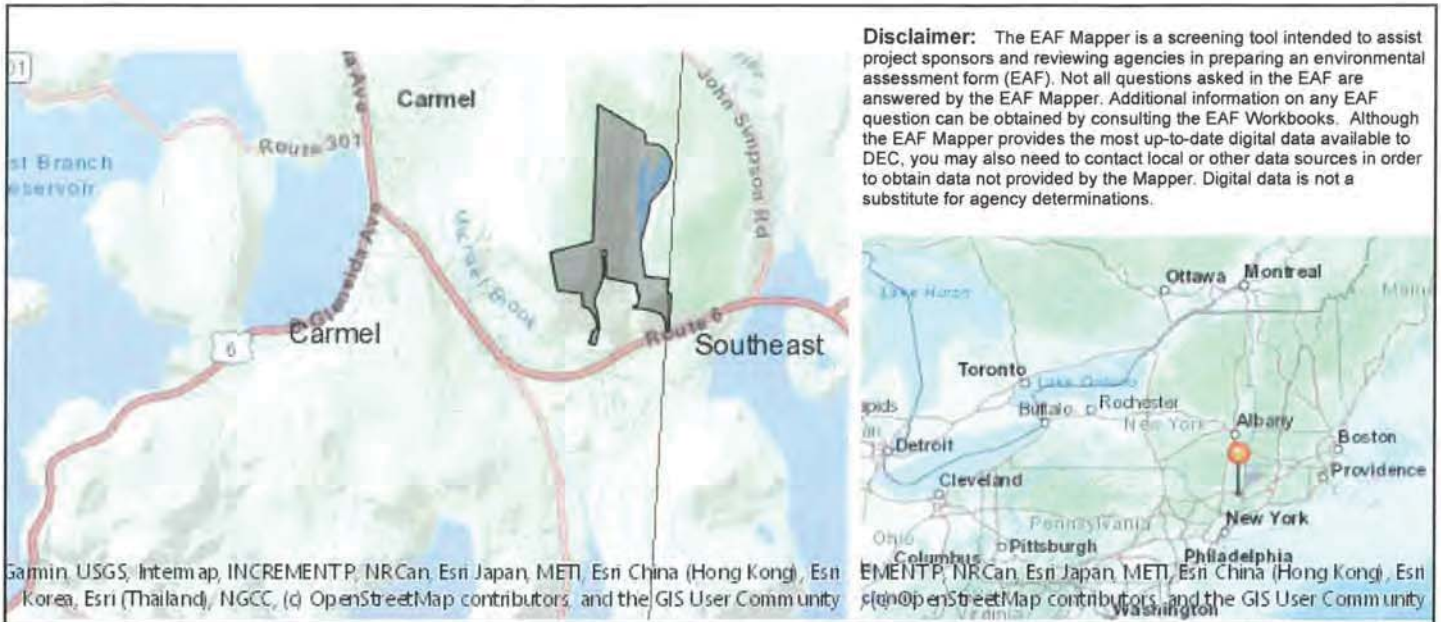
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

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

Applicant/Sponsor Name Hudson Valley Realty Corp. (Gateway)
Par Four Realty Company LLC (Fairway) Date 10.13.21

Signature  Title Planner for Applicant



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYC Watershed Boundary
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	344031
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	864-194
E.2.h.iv [Surface Water Features - Stream Classification]	C
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters, NYS Wetland
E.2.h.iv [Surface Water Features - Wetlands Size]	NYS Wetland (in acres):31.4

E.2.h.iv [Surface Water Features - DEC Wetlands Number]	LC-27
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Northern Long-eared Bat
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

2.0 PROJECT DESCRIPTION

The Gateway Summit and the Fairways development proposes two multi-family residential communities on a total of 145 acres located on the north side of Route 6 in the Town of Carmel, Putnam County, New York. The two communities are referred to as “Gateway Summit” and “The Fairways”. The Gateway Summit development would include a mix of 150 units of active adult single family homes, active adult townhomes and non-age restricted townhomes. The Fairways development would consist of 150 units of non-age restricted townhomes with varied designs.

The Fairways development consists of two tax parcels: 55.-2-24.8-1 and 55.-2-24.8-2, with a total area of 101.76 acres. The Gateway Summit development consists of four (4) tax parcels: 55.-2-24.6-1, 55.-2-24.6-2, 55.-2-24.7-1, and 55.-2-24.7-2 with a total area of 42.89 acres.

The location of the site is shown on Figure 2-1 and an Aerial Photograph provided as Figure 2-2. The site is currently vacant wooded land and is served by public water and sewer service.

Project Background

The Gateway Summit and The Fairways developments were the subject of a thorough coordinated review under the SEQRA by the Town of Carmel Planning Board (the lead agency) for Subdivision Approval, Special Use Permits, and Site Plan approvals, and to the Town of Carmel Environmental Conservation Board.

The applicants, Hudson Valley Realty Corporation (Gateway Summit) and Mid Hudson Realty Corp. (The Fairways) submitted separate applications to the Planning Board at the same time for the two respective projects. The two developments are and will be divided into multiple separate site plan applications. The Planning Board, as Lead Agency, elected to review the projects together to allow it to better evaluate cumulative impacts.

Following a public scoping session, a scoping document was adopted by the Planning Board on May 14, 2003. The applicant prepared a Draft Generic Environmental Impact Statement (DGEIS) for the two developments and their combined potential impacts. Following intensive review and comment by the Lead Agency, Involved and Interested Agencies, the public, and environmental advocacy organizations, the October 15, 2004 DGEIS (revised January 3, 2005) was accepted as complete on January 5, 2005. A Public Hearing on the DGEIS, which fully evaluated the potential environmental impacts anticipated from the proposed action, was held on February 2, 2005.

Between the time the DGEIS was accepted on January 5, 2005, and the January 11, 2006 release of the Draft Final Generic Environmental Impact Statement (FGEIS), the proposed Gateway Summit and The Fairways projects were significantly revised. Modifications to the proposed action were made, in large part, in response to testimony at the February 2, 2005 public hearing on the DGEIS, and comments from the Lead Agency, the New York State Watershed Inspector General, the NYCDEP, the public, and various environmental organizations including Riverkeeper, Croton Watershed Clean Water Coalition and the Putnam County Coalition to Preserve Open Space. Following the revisions, the applicant received letters of support for the development from the NYS Watershed Inspector General and the Riverkeeper. The current site plan closely adheres to the layout and road network that were supported in 2005.

The FGEIS modifications to the development plans for both projects addressed specific reviewer comments, and provided further mitigation of potential adverse environmental impacts. Modifications to the projects reflected in the FGEIS refined the two project specific SWPPPs, and significantly reduced the area of overall site disturbance by reducing the intensity of the proposed development, decreasing impervious surfaces, decreasing disturbance of steep slopes, reducing roadway length and reducing the overall site grading.

It is noted that the site plan for the Gateway Summit project evaluated in the DGEIS and FGEIS was a mixed-use development which included the following components: a 150-room hotel and 12,000-square foot banquet / conference center, 13,900 square feet of commercial space consisting of two restaurants, 16,000 square feet of office space of which 400 square feet was retail, a 68,000-square foot YMCA, and 150 senior residential units. The Gateways Summit project described and evaluated in this expanded EAF involves only the residential development portion of the overall Gateways Summit property. Any future commercial or office projects will be reviewed under separate specific site plan applications.

On August 23, 2006 the Planning Board adopted a SEQRA Findings Statement that provided conditions for future development for the Gateway Summit and The Fairways properties. The Findings Statement acknowledged that *"SEQRA allows a GEIS to "be broader and more general" than a regular EIS and requires that a GEIS and its findings set forth specific conditions or criteria and thresholds under which future actions will be undertaken or approved"*.

The GEIS process and the related 2006 conceptual site plans established a general development plan for each individual project, establishing development guidelines such as limits of disturbance and impervious surface limits. The Findings Statement stated that subsequent specific site plan applications may, and most likely will change from the concept development plans included in the FGEIS and that such site plans will require no further environmental review provided they substantially comply with the development guidelines developed in the GEIS process and the approved Findings Statement.

"Accordingly, such elements such as building location and design, and location of the interior roads for the commercial and residential uses may change from the concept development plans in the FGEIS to the specific individual site plans without additional environmental review, provided they substantially meet the development thresholds established in the GEIS process and specifically set forth in this Findings Statement".

The Planning Board developed a "SEQRA Evaluation Form" for both the Gateway Summit and The Fairways projects that were intended to be used at the time of future site plan review in order to determine whether such future site plan applications stay substantially within, or alternately, measurably exceed these thresholds and whether further SEQRA review is necessary. The Findings Statement provided that *"if a site plan application proposed after the issuance of this Findings Statement substantially complies with the thresholds set forth herein, as determined through the SEQRA Evaluation Form, no additional environmental review under SEQRA is required, including but not limited to lead agency designations and determinations of significance (negative declaration)"*. The Findings Statement indicated that if certain environmental thresholds are exceeded by any site plan, then either further environmental review would be necessary or that the application may be amended.

The "SEQRA Evaluation Forms" for the current site plans have been completed and are further described below. The Forms are provided as Attachment A.

In 2007 the subdivision of both the Gateway Summit and The Fairways properties was approved by the Planning Board, establishing the property boundaries for the respective future developments in the approved site plans.

In 2016, site plan applications were made for the residential portion of the Gateway project and for The Fairways project. Following the applications' review, the Planning Board made a referral to the Zoning Board of Appeals for a variance to permit 3 stories over enclosed parking. That variance was granted. The 2016 site plan applications were not finalized and the developments were not constructed.

For comparative purposes, the currently proposed site plans are described herein as "Current Site Plans", the 2016 SEQRA plans are referred to as the "2016 SEQRA Site Plans", and the 2006 plans are referred to as the "2006 Approved Site Plans". The Town of Carmel Planning Board site plan approvals as well as other agency approvals for the two projects all remain valid. The Town Environmental Conservation Board recently reapproved a permit for construction of the trail system.

Project Location and Setting

Land uses abutting the east-west and north-south transportation corridors of Route 6 and Route 52 generally define the land use patterns of the surrounding area. Historically, commercial development has followed the Route 6 corridor, with residential development filling in areas north and south of the corridor. The pattern of commercial development has generally included individual buildings with accessory parking and individual curb cuts onto Route 6.

Centennial Golf Course abuts The Fairway site to the north, east and west and the Gateway Summit site to the northeast. A former railway right-of-way and a former County landfill are located west of the Gateway Summit site. Retail commercial businesses are located on both sides of Route 6 to the west of the project site. These uses include the Putnam Plaza and a supermarket on the east side of Route 6, and a shopping center with satellite stores on the west side of Route 6.

Apart from commercial uses along Route 6, predominant land uses in the site vicinity include low- to medium-density residential neighborhoods beyond the Centennial Golf Course to the north, northeast, and northwest. The pattern of residential development has generally entailed single-family lots of about one-third acre in size and larger. Newer multi-family residential developments include the Pulte and Stoneleigh Woods developments located southwest of the project site. Lands both south and northeast of Route 6 have remained largely undeveloped, likely due to the steeper, more rugged terrain and proximity to the New York City reservoirs. The subject property is located in the New York City Department of Environmental Preservation (NYCDEP) regulated watershed and on-site mapped streams are tributary to the Middle Branch reservoir.

Property Zoning

The Fairways site and lands to the north are located within the Town of Carmel's R - Residential District. This single category of Town residential zoning was established as a result of the Town's Comprehensive Plan and subsequent Zoning Ordinance revision processes in the early 2000's.

The Gateway Summit residential development is located in two zoning districts. The majority of Lot 6 is located in the Commercial/Business Park district (C/BP zoning district) and a portion of the site is located in the R (Residential) zoning district. The areas immediately south and southeast of the site are designated as part of the Town's Commercial/Business Park (C/BP) district, one of two commercial districts established as part town-wide rezoning adopted in 2002. Land west of the site along Route 6 is designated as the Commercial District, with the former railway right-of-way that abuts the site being zoned for Recreation/Trailway. The applicant dedicated a portion of the Gateway Summit property to the County to extend the bikeway.

The two project's compliance with the zoning code is further described below.

Current Site Plan

The Gateway Summit and The Fairways residential communities have been assessed as separate developments during the previous SEQRA process, but the overall environmental impacts of the two projects have been considered in total. The two projects share infrastructure such as access roads and water and sewer infrastructure. The two developments are described separately below and their overall impacts are considered independently and cumulatively in this assessment.

The Fairways

The proposed Fairways site plan includes 150 residential townhomes, all of them non-age restricted, which is the primary change from previous proposals for the project. The proposed The Fairways plan proposes 66 2-story townhome units and 84 3-story townhome units. The 3-story units allow for greater square-footage for the residential units while reducing the footprint and impervious surface related to the buildings. Each of the Fairways units will include 3 bedrooms and a flex room. The combination of bedrooms and a flex room are proposed to meet the growing demand for flexible additional space in homes including: room for guests and visiting adult children, home exercise space, room for hobbies and crafts and much desired home offices.

A total of 150 residential units for the Fairways development was considered in the previous DGEIS, FGEIS and 2006 approved site plan and in the 2016 SEQRA application plan considered by the Planning Board. The approved 2006 site plan included a similar road layout and cul-de-sac as the current plan but involved some larger multi-family buildings. The current site plan involves attached 2 and 3-story townhouse residential units situated close to the internal access drive.

This new plan eliminates the larger 16-unit multi-family building provided in the 2006 and 2016 site plans and replaces them with much smaller 3 to 5-unit clustered townhome buildings. The 2006 approved site plan included 6 16-unit multifamily buildings and the 2016 site plan included 4 large multifamily buildings.

The modified building type proposed for the current site plan results in an overall greater number of bedrooms than provided in the previous 2006 approved site plan and the 2016 site plan. The greater number of bedrooms results in both an increase in population and in the resultant water use and sewer demand, as compared to the previous plans. The increase in population for the two projects is thoroughly analyzed in Section 3.0 Community Services of this Expanded EAF. Water use and sewer demand for the current Fairways development is described below.

The areas of grading and impervious surface coverage for the current The Fairways development are similar to the 2016 SEQRA site plan and the approved 2006 site plan. The current building and internal road layout are very similar to the 2006 site plan. The current Fairways site plan is shown in Figure 2-3 and the attached Site Plan drawings.

The current proposed site plan provides recreational amenities consistent with the 2006 approved plan. Recreational amenities include a clubhouse, two tennis courts, bocce courts and an outdoor swimming pool. A major recreational feature proposed in the 2006 approved plan is an extensive looped trail system that extends from the southern portion of the site to the northern portion of the site providing access to mature wooded areas, wetland buffer areas and to the lake at the eastern edge of the property. A trail and dock access to the lake will be provided for canoeing and kayaking by residents of both Gateway Summit and the Fairways.

An emergency access drive (gated at both ends) is proposed from Kelly Ridge Road into the approximate center of the residential development, consistent with the approved 2006 site plan. A series of four stormwater management basins are proposed in the approximate same locations as the 2006 site plan layout. Landscaping will be provided throughout the development, and a landscaping plan will be provided for review by the Planning Board during the amended site plan review process.

Gateway Summit

The proposed Gateway Summit plan includes 150 residential townhomes including 114 units reserved for active adults (seniors) and 36 non-age restricted units. The proposed Gateway Summit Plan would include 68 single-family senior cottage units, 46 two-story senior townhome units, and 36 3-story non-age restricted units. All of the 36 non-age restricted townhouse Gateway Summit units will include 3 bedrooms and a flex room. The 68 active adult cottage units will have 2 bedrooms and a flex room. Similar to the Fairways residential design, the combination of bedrooms and flex rooms are proposed to meet the growing demand for flexible additional space in homes including: rooms for guests and visiting adult children, home exercise space, craft and hobby rooms and much desired home offices.

A total of 150 residential units for the Gateway Summit development was considered in the previous DGEIS, FGEIS and approved 2006 site plan and in the 2016 SEQRA application plan considered by the Planning Board. The approved 2006 site plan included a combination of townhouse residences, attached cottages and units in 4 large multi-family buildings. The current plan occupies a similar area as the 2006 approved plan, but the road and building layout has been updated and modified slightly for the current plan. The current Site Plan provides a layout consistent with the SEQRA application plan (2016) with similar road and residential building layout as compared to the 2006 approved plan and the 2016 plan.

Similar to The Fairways development, the previously proposed large 16-unit multifamily buildings have been replaced with smaller 3 to 5-unit clustered townhome buildings in the current Gateway Summit site plan. The 2006 site plan included 4 large 16-unit buildings and the 2016 site plan included 5 larger buildings.

The modified building type in the current Gateway Summit site plans will result in an increase in the number of bedrooms/flexrooms, population and water use/ sewer demand, as compared to previous plans (see discussion of water use and sewer demand, below).

The areas of grading and impervious surface coverage for the current Gateway Summit development are very similar to the 2016 SEQRA site plan and the approved 2006 site plan. The current building and internal road layout are very similar to the 2006 site plan. The current Gateway Summit site plan is shown in Figure 2-3 and the attached Site Plan drawings.

The current proposed Gateway Summit site plan provides recreational amenities consistent with the 2006 approved plan. Recreational amenities include a clubhouse, bocce courts and an outdoor swimming pool. The clubhouse will provide space for community events and gatherings. The extensive looped trail system provided on the Fairways property will be accessible for Gateway Summit residents, including trail and dock access to the lake for canoeing and kayaking. Access to the trail system is provided at the northern portion of the Gateway Summit property, by crossing an access road.

Water and Sewer Flow Estimates

The maximum daily design flows for Lots 6 and 7 are based on the hydraulic loading rates listed in the New York State Department of Environmental Conservation’s (NYSDEC) publication *Design Standards for Wastewater Treatment Works – 2014* (DSWTF). The following table lists the proposed uses, associated hydraulic loading rates, and the design flow rates (gallons per day or gpd) for Lots 6 and 7. Note that while no additional flow is expected for the clubhouse because it is proposed to serve residents and their guests, 400 gpd has been included for potential visitors.

Proposed Use	Hydraulic Loading Rate	Maximum Daily Design Flow (gpd)
Gateway Summit 114 2-BR Senior Housing Units 36 3-BR Multifamily Units Clubhouse (Visitors)	2 x 110 gpd/BR 3 x 110 gpd/BR 400 gpd	25,080 11,880 400
The Fairway 150 3-BR Senior Housing Units Clubhouse (visitors)	3 x 110 gpd/BR 400 gpd	49,500 400
Maximum Daily Design Flow Total		87,260

Actual Water and Sewer Flows

The average daily flow for the project is expected to be significantly less than the maximum daily design flow. The maximum daily design flows represent conservative flows to ensure that the proposed sewer and water works are designed with an ample factor of safety.

The anticipated actual flows are based on anticipated occupancy rates and measured data for water use. The expected number of residents anticipated for the project is 323 persons in Gateway Summit and 435 persons in The Fairways for a total of 758 persons. Data from the American Water Works Association (AWWA) shows that the average in home water use is 69 gpd per person. This number is reduced to 45 gpd per person when water saving fixtures are used, which is the case for this project. Based on a projected population of 758, the average daily flow is anticipated to be 34,110 gpd. The design flow of the WWTP is based on a 30-day average flow. Therefore, for the district WWTP, the average flow of **34,110 gpd should be referenced when assessing the district’s available flow capacity.**

Project Purpose and Need

The proposed The Fairways townhome residential development, and Gateway Summit residential development with a mix of active adult and non-age restricted townhome and single-family cottages would provide needed housing opportunities in an area of the Town where infrastructure and roadway networks are capable of handling such development. The development of two multi-family and single family (Gateway Summit) residential communities on the subject property is appropriate, given that the environmental impacts have been thoroughly reviewed by the Town of Carmel Planning Board and involved and interested agencies in an extensive coordinated SEQRA review process.

The proposed development addresses the current high demand for new senior and market rate housing in the Town of Carmel and in Putnam County, especially multi-family housing for seniors and young families that do not want the responsibility of maintaining yards, driveways and single-family properties. The active adult (senior) residences in the Gateway Summit development will provide opportunities for current Town of Carmel residents to remain in the Town.

In 2018 the Town of Carmel Planning Board consultant, Mr. Pat Cleary, prepared a memorandum to the Planning Board explaining the need for multi-family housing in Carmel. The memorandum discussed the current zoning code and its limitations on multi-family housing in the Town. The demographics of the Town of Carmel were discussed including US Census data that shows slowing population growth, especially in the population of persons 35-55 years old, the group most likely to have children. These demographic changes support the need for multi-family housing in the Town.

The project would produce long-term economic benefits with respect to tax revenues from the property. The development would add considerably more ratables to the various taxing jurisdictions over the long-term than the site currently generates.

Objectives of the Project Sponsor

The applicant's proposal intends to accomplish the following:

- To address the high demand for multi-family senior and non-age restricted housing in the Town of Carmel and in Putnam County.
- To provide long-term economic benefit to the Town of Carmel through increase tax revenues from the property.
- To preserve over 60 acres of mature woods, wetlands and a lake and to provide access to this land with a network of trails.

Compliance with Zoning Code

The Fairways development is located in the R (Residential) zoning district. The proposed residential community will be compatible with nearby development, which primarily consists of the Centennial Golf Club and the dense residential community west of the property on Kelly Ridge Road and Everett Road. A large area of undeveloped land including wetlands (DEC Wetland LC-27) and a lake are located east of the Fairways property.

Multi-family dwellings are allowed as of right in the Residential district. In a meeting in the spring, 2021 the Town of Carmel Zoning Board granted an interpretation that Chapter 156-28 of the Town Code permits the development of non-age restricted multifamily developments in an R-zone. The use is permitted in the R district with lots that meet specific criteria, including a minimum lot size of 10.0 acres, required setbacks, and availability of municipal sewer and water, among others.

The proposed The Fairways residential development meets the zoning Code bulk and area requirements for the R (Residential) zoning district, with the exception of two setback requirements: 1) building separation and 2) perimeter building setback. The applicant will seek variances from the Town Zoning Board of Appeals for these two code requirements. Section 156-28 A.(6) (Multi-family Developments) of the zoning code requires a minimum of 50 feet between all buildings. The applicant will request a minimum building separation of 20 feet. The zoning code (Section 156-28 A.(8)) requires a perimeter building setback of 100 feet. The applicant will request a minimum perimeter building setback of 40 feet.

The variances are necessary, in part, due to the elimination of the large 16-unit multifamily buildings for the Fairways development and their replacement by 3 to 5-unit townhome buildings. These smaller clustered buildings require a greater building density and less separation between buildings. These two variances for The Fairways will allow a setback previously approved by the Planning Board and make the setbacks for the multi-family development consistent with the code requirements for the adjoining senior multi-family developments.

It is noted that the code requirement for “Senior citizens multifamily dwellings” (Section 156-39) has a 40-foot minimum setback requirement for any yard, including the perimeter building setback. In addition, the townhome units which require a variance for perimeter setback all abut the Centennial Country Club golf course and do not abut residential development.

The Gateway Summit residential development is located in two zoning districts. A total of 36 townhome units are located in the R (Residential) zoning district. The balance of the residential units (68 active adult single family cottages and 46 2-story active adult townhomes) are located in the Commercial/Business Park zoning district (C/BP zoning district). Multi-family residential uses are allowed in the C/BP zoning district by special permit, since all uses listed as special permit uses in the Residential – R district use schedule are allowed in the district.

The Gateway Summit non-age restricted residential development will require area variances from the Town Zoning Board of Appeals for building separation and perimeter building setback, as described for The Fairways development above. These area variances would apply only for the 36 townhome units located in the R Residential zoning district. The proposed residential development in the C/PB zoning district meets all bulk and area requirements in that district.

The two proposed residential developments greatly exceed the density requirements for the two respective zoning districts. The maximum permitted multifamily density in an R district is 5 units per acre (Section 156-28 A.(2)). Therefore, the 150 units proposed for the Fairways project requires 30 acres, while the current site plan involves 101.8 acres, more than three times the code requirement.

The maximum permitted density for senior multifamily dwellings is 8 units per acre in the C/BP district (Section 156-39 B.(5)). Therefore, the proposed 114 senior residential and the 36 non-age restricted units in this development would require a minimum of 14.5 acres for senior

residential and approximately 7 acres for the non-age restricted units for a total of approximately 22 acres. The Gateway Summit residential property contains approximately 42.9 acres, almost twice the code requirement. For the two projects the overall density is approximately 2 units per acre.

SEQRA Review

A SEQRA Findings Statement for Gateway Summit and the Fairways was adopted by the Town of Carmel Planning Board on August 23, 2006. A copy of the Findings Statement is provided for reference in Attachment A. As described above, the Findings Statement provided thresholds for the lead agency to evaluate future individual site plan applications for the various parcels on the two properties. Descriptions of thresholds are provided below. These thresholds were developed as a result of discussions with, and evaluation by, the Planning Board and other Involved and Interested Agencies and organizations. Text from the approved Findings Statement is provided in italics, below.

a. *Screening and Buffers*

All future development plans for Gateway Summit and The Fairways parcels shall provide a densely planted vegetated perimeter buffer adjacent to existing residential homes. The amount, type and size of the buffer plantings shall be as determined necessary by the Planning Board at the time of site plan review to sufficiently screen the proposed development from adjacent existing residential homes. No proposed parking lots or other paved surfaces shall be located within this buffer. Areas may be identified where additional screening plantings, including evergreen trees and shrubs, may be required.

A landscaping plan will be provided by the project engineer for the Gateway Summit and The Fairways project that provides the vegetative screening and buffer plantings acceptable to the Planning Board. We note that no residential properties abut either the Gateway Summit or The Fairways properties.

b. *Steep Slopes*

The conceptual development plans for the two projects show approximately 40 acres of grading and other land disturbance on slopes of 15 percent or greater. Conceptual development plans that show significantly greater grading of such slopes may be subject to further SEQRA review or special erosion control practices.

Grading and steep slopes disturbance for the current Gateway Summit and The Fairways plans are very similar to the approved 2006 plans and the 2016 SEQRA plans, as shown in the site plans provided. Grading or disturbance on slopes 15 percent or greater will not be significantly greater than the approved plans.

c. *Erosion and Sedimentation Control*

All future site plan submissions will include detailed erosion and sediment control plans, that are generally based upon the project specific Stormwater Pollution Prevention Plans and are prepared in conformance with NYSDEC, New York City Department of Environmental Protection (NYCDEP) and Town of Carmel design

standards, with special consideration given to erosion control on any land to be disturbed with slopes greater than 15 percent.

Project specific erosion and sediment control plans will be developed for both the Gateway Summit project site and The Fairways project site, as part of the SWPPP's for both developments.

d. Post Construction Stormwater Management

All individual site plan applications will include Stormwater Management Plans that are generally based upon the project specific Stormwater Pollution Prevention Plans and conform with the New York State General Permit for Stormwater Discharge (GP- 02-01) and the New York City Watershed Rules and Regulations. Adherence to these rules shall be a condition of site plan approval.

Stormwater management plans will be developed for both Gateway Summit and The Fairways in conformance with the NYS General Permit for Stormwater Discharge and the NYC Watershed Rules and regulations.

e. Wetlands

The analysis of potential wetlands impacts in the FGEIS identified the extent to which federal, State, and municipally regulated wetlands and wetland buffers, would be disturbed by development of the site. All individual site plans will be required to demonstrate that no significant increase in wetland and wetland buffer disturbance will result from specific uses proposed on individual parcels.

No significant increase in wetland and wetland buffer disturbance is proposed related to both projects. Any wetland buffer/wetland disturbance has been reapproved by the NYSDEC and the Town Environmental Conservation Board in 2019 and 2021, respectively.

On May 20, 2021, a natural resources specialist from Tim Miller Associates walked the Gateway/Fairways to confirm that site conditions had not changed significantly since the early 2000's. The wetland line along the stream corridor and lake were also re-confirmed. While the site continues to show signs of use by ATV riders, the tree cover and condition of the understory remain the same. No additional tree clearing has occurred outside of the areas that were historically used for the municipal garage facility. This was corroborated by a review of historic aerial photographs of the site dating back to 1994.

One change that was identified was the absence of the beaver dam at the south end of the lake that had previously raised the water elevation in the lake. With the dam gone, the water level in the wetland at the south end of the lake has gone down, thereby allowing for a healthy growth of emergent wetland vegetation in an area that had previously been submerged. Similarly, the shores of the lake (at least on the western side) also have a functional vegetative fringe compared to the past condition. This represents a beneficial ecological change, and appears to be the only change of significance since the prior review of the property.

f. Future Landscaping and Lighting of Individual Parcels

During the site plan review process, individual site plans will include landscaping and lighting plans designed to enhance the visual qualities of the proposed uses with additional screening where necessary adjacent to residentially-zoned properties. Stormwater treatment basins will be planted with aesthetic and functional wetland and transitional plantings to provide additional water quality treatment, wildlife habitat and visual enhancement. Landscaping and lighting shall comply with Sections 63- 27C(4), C(5) and C(6) of the Town of Carmel Zoning Ordinance, at a minimum. Future application for development of Gateway Summit and The Fairways must provide landscaping plans that comply with Town of Carmel regulations and the GEIS Findings as apply to setbacks and landscaped buffers to adjacent properties.

Site specific landscaping and lighting plans will be developed for the Gateway summit and The Fairways development, consistent with the Town of Carmel regulations. Plans will include buffer and screening plantings for adjacent residentially zoned property and appropriate wetland and transitional plantings for the proposed stormwater treatment basins.

g. Traffic

The traffic analysis in the DGEIS and FGEIS projected the number of entering and exiting vehicular trips for uses under the proposed projects and Modified Road Configuration Alternative for Gateway Summit. As indicated in Section 5.6, (Traffic and Transportation) of the Findings Statement, traffic mitigation may be required only after the projected trip generation for additional proposed uses exceeds specific thresholds set forth under the subsection Traffic and Transportation Mitigation Proposed. It is noted that only NYSDOT has the authority to allow improvements on Route 6 since it is a State Road. If NYSDOT finds that traffic mitigation proposed after certain levels of additional traffic are generated is not required, the applicable development components may be developed and issued Certificates of Occupancy without the implementation of such traffic mitigation.

In 2010, the NYSDOT completed a series of major traffic improvements that were identified in the 2006 Findings Statement, including: the replacement of a bridge on Route 6 directly west of the project entrance, construction of an eastbound left-turn lane and striping on Route 6 and the installation of a traffic light at the project entrance. The light was installed by NYSDOT in 2010, but has since been put into storage pending the opening of the intersection. These improvements were completed by NYSDOT with a 1.1-million dollar contribution by the applicant, in advance of any approved site plan applications for the Gateway Summit and The Fairways projects. These traffic improvements were developed to accommodate the full build-out of the two developments. Therefore, based upon the Findings Statement no further traffic mitigation is warranted for the two residential developments.

The trip generation was developed for the current Gateway Summit and The Fairways residential developments with a total of 300 residential units. The trip generation tables are provided in Attachment C.

The trip generation rates for non-age restricted residential development are somewhat higher than for senior residential development. The type of housing (attached vs. detached) also influences the trip generation rates, whereas multi-family residences have slightly lower trip generation rates than single family residences. These factors were considered in the development of the trip generation rates for the current non-age restricted The Fairways project and the mixed (senior and non-age restricted) Gateway Summit project.

The overall trip generation for the current projects were compared to the trip generation for the residential portion of the approved 2006 Gateway Summit and the Fairways projects. The comparison of overall residential trip generation is provided in Table 6 in Attachment C. As shown in Table 6, the estimated trip generation for the current project will be greater than estimated for the 2006 site plan. It is noted that this increase would result in a maximum of approximately 54 additional trips entering and departing the site during the Peak PM hour for the combined Gateway Summit and the Fairways developments.

Further discussion of current traffic conditions, including the change in residential trip generation patterns resulting from the Covid-19 pandemic is provided in Section 4.0 Traffic and Transportation.

Summary

This anticipated increase is still well below the thresholds for total trip generation provided in the SEQRA Evaluation Worksheets for each project (see Attachment A). As noted, the traffic mitigation described in the FGEIS was fully completed for the full build-out as of 2010 and therefore, no further traffic mitigation is warranted.

h. Open Space

Future development plans will ensure that approximately 60 acres of open space located on the Fairways site is preserved.

The current plan for The Fairways preserves approximately 60 acres of open space, consistent with the Findings Statement.

i. Development

The parcels will require a building setback from the adjacent existing residential neighborhoods to the south, east and west, and a screening buffer within the building setbacks and generally along the property lines. The following includes the list of conditions for development:

- All building setbacks shall conform to Town of Carmel Zoning regulations;*
- There shall be a buffer zone of green space as described in the GEIS. Such space shall be landscaped, or consist of natural vegetation and shall contain no impervious surfaces;*
- The Applicants shall be permitted those principal uses set forth in the applicable zoning*

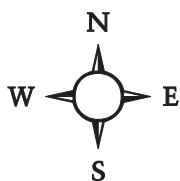
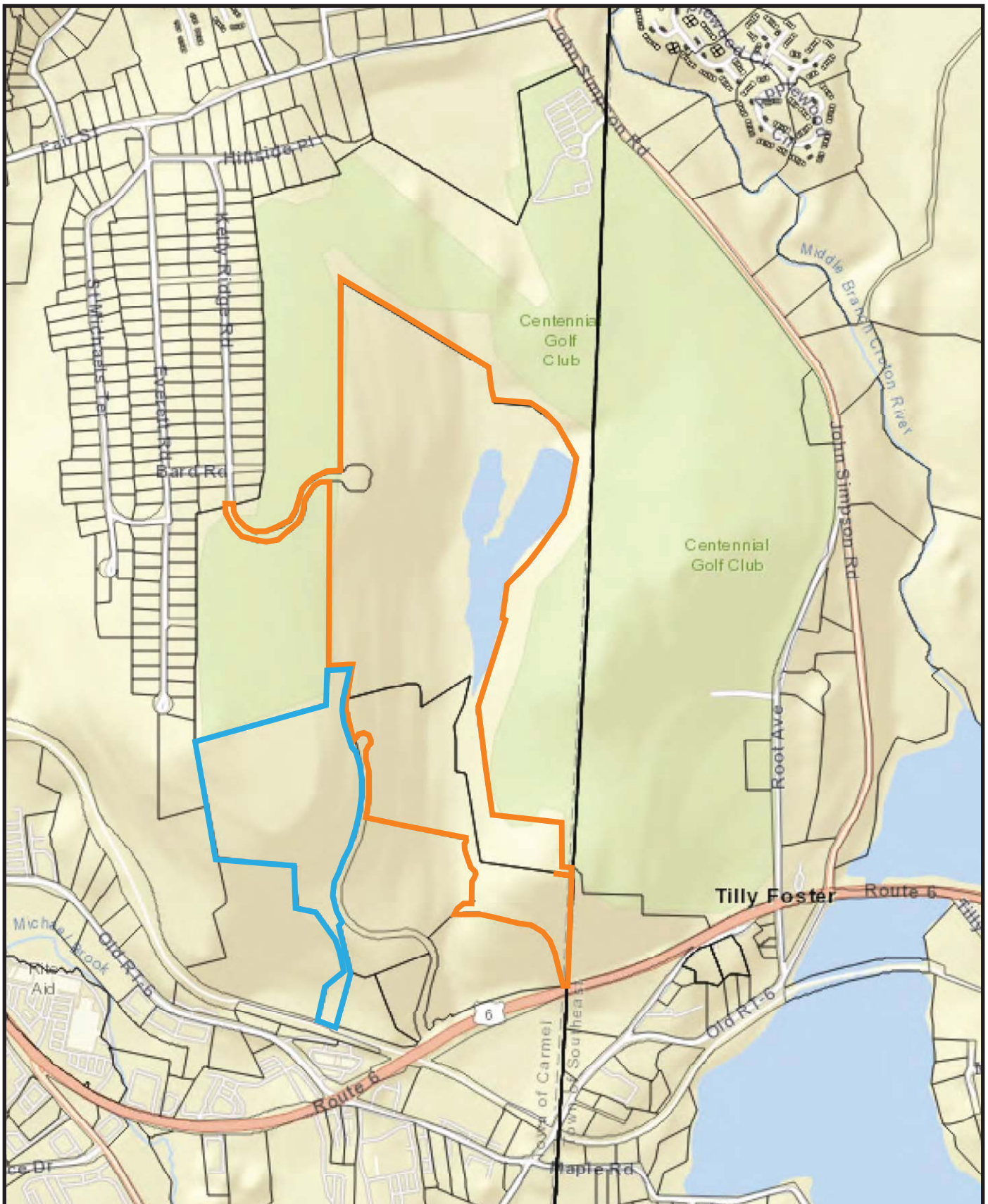
- *There shall be no ingress or egress to any use through residential neighborhood or roadway, except for emergency access as described in the FGEIS.*

The current site plan meets and development thresholds as described in the Findings Statement with the exception of conforming to the building setbacks in the Town of Carmel Zoning regulations. As described in the *Compliance with the Zoning Code* section above, a variance will be requested from the Zoning Board of Appeals for 1) building separation and 2) for building perimeter setback for multi-family buildings. The need for these variances resulted from the elimination of large 16-unit multi-family buildings, as provided in the 2016 site plan and the approved 2006 site plan, and replacing them with 3 to 5-unit clustered buildings. These two variances will allow a setback previously approved by the Planning Board and make the setbacks for the multi-family development consistent with the code requirements for the senior multi-family developments. **In addition, the townhome units which require a variance for perimeter setback all abut the Centennial Country Club golf course and do not abut residential development.**

The primary difference between the current Gateways Summit and The Fairways projects, as compared to the approved 2006 Site Plans is the provision of non-age restricted residences, which will introduce school age children into the Carmel Central School District and to the Brewster Central School District. The respective school district boundaries cross both the Gateway Summit and The Fairways properties. The implications for the Town of Carmel and the Town of Brewster and their respective school districts have been thoroughly analyzed in this Expanded EAF and are presented in Section 3.0.

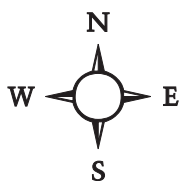
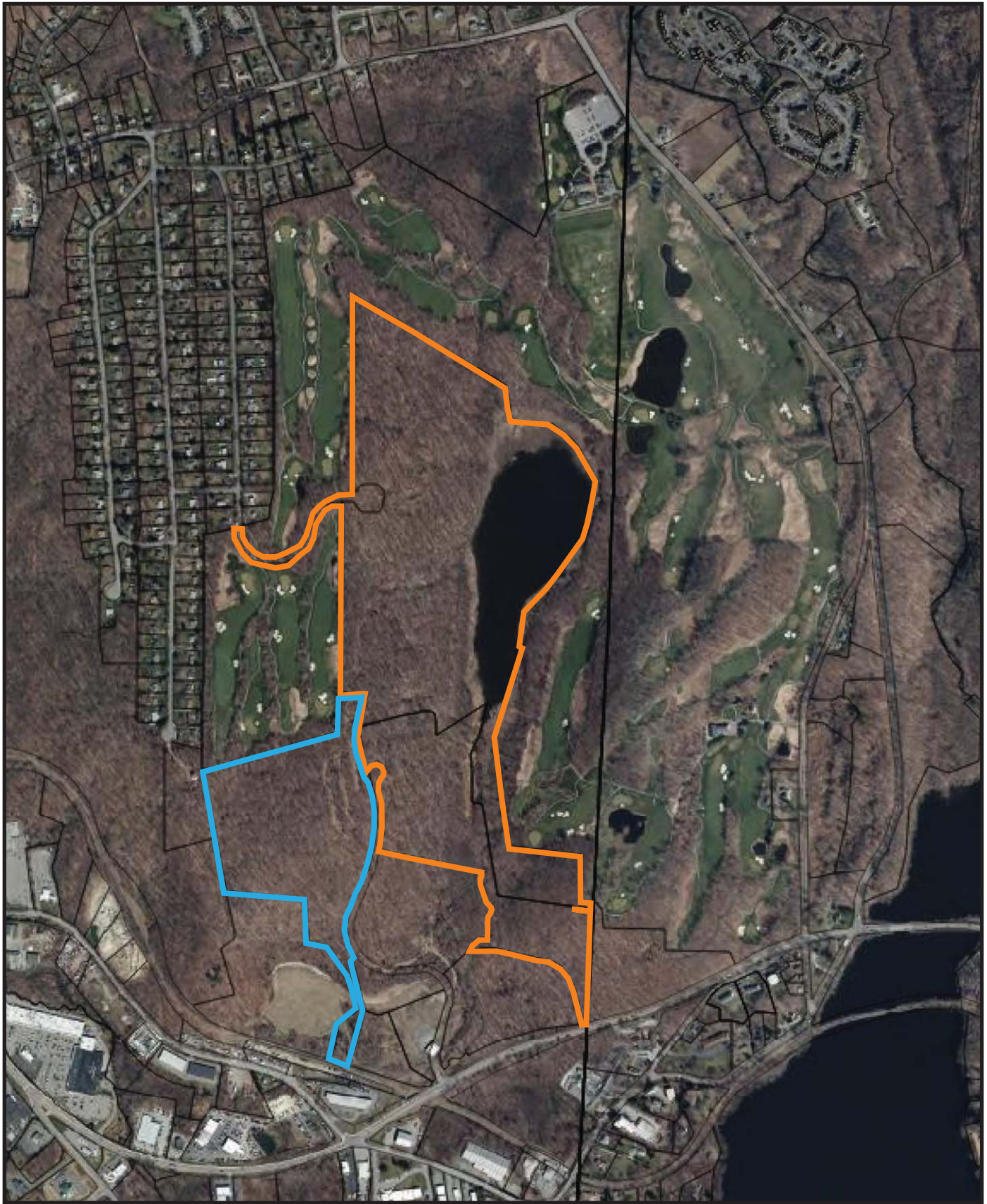
This Expanded EAF is prepared in accordance with Section 8-0101 of the New York State Environmental Conservation Law and the regulations promulgated by the New York State Department of Environmental Conservation (NYSDEC) thereunder, which appear at 6NYCRR Part 617 (known as the New York State Environmental Quality Review Act, SEQRA).

This document includes the EAF form Parts 1, and supplemental information as Part 3. Part 1 of the EAF Form provides project details and its environmental setting. The Part 3 evaluations provided in this Expanded EAF provide background information, technical studies and analyses of the potential impact categories as may result from the development.



- Gateway Summit, Lot 6
- The Fairways, Lot 7

Figure 2-1: Location Map
 Gateway Summit and The Fairways
 Town of Carmel, Putnam County, New York
 Base Map: Putnam County GIS





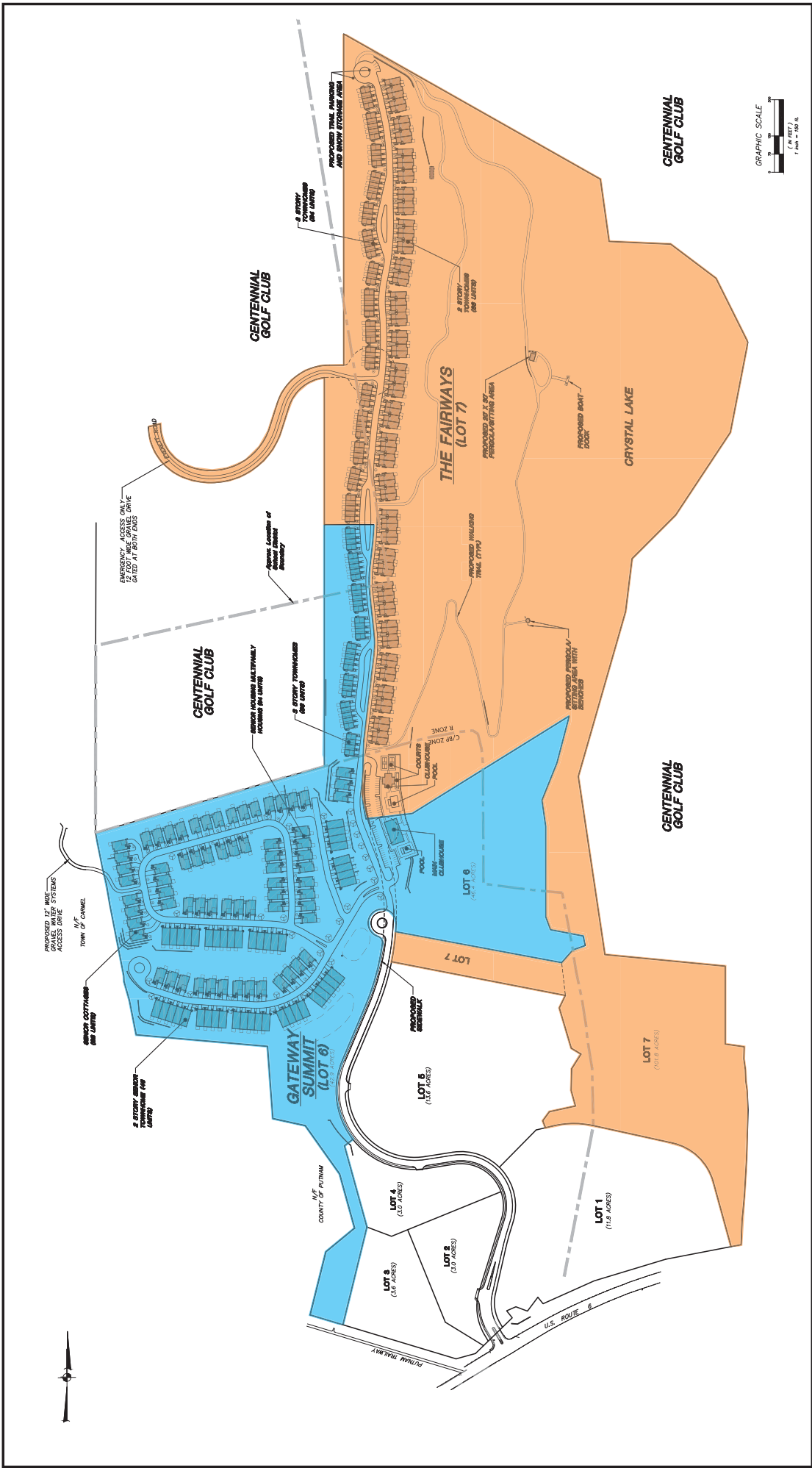
-  - Gateway Summit, Lot 6
-  - The Fairways, Lot 7

Figure 2-2: Aerial Photograph
Gateway Summit and The Fairways
Town of Patterson, Putnam County, New York
Base Map: Putnam County GIS



- Gateway Summit
- The Fairways

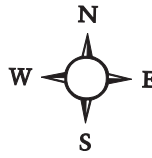


Figure 2-3: Gateway Summit and The Fairways Site Plan
 Gateway Summit and The Fairways
 Town of Carmel, Putnam County, New York
 Source: Insite Engineering Surveying &
 Landscape Architecture, P.C.

Tim Miller Associates, Inc., 10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

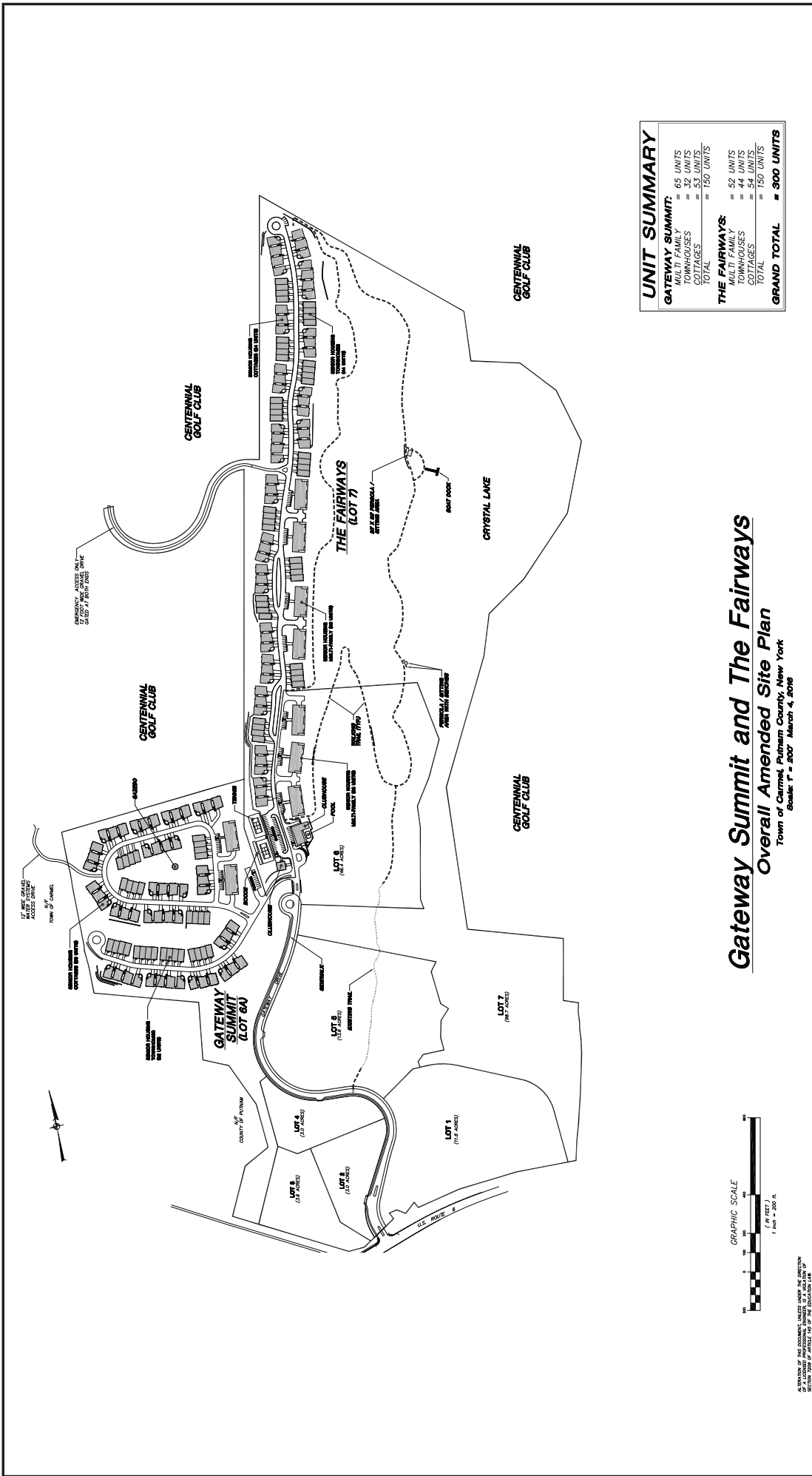
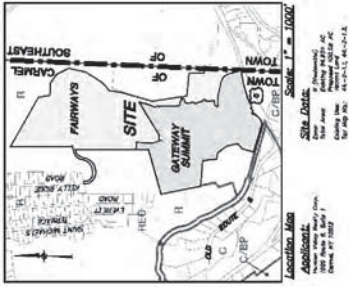


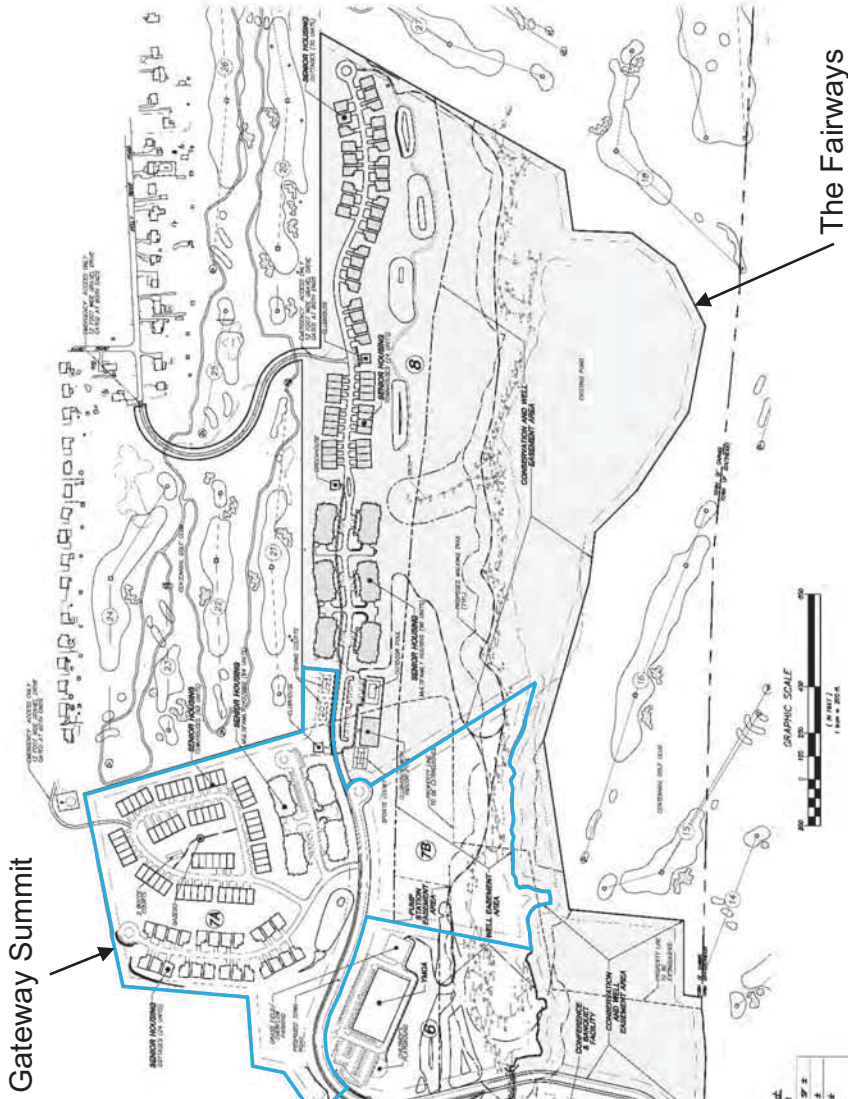
Figure 2-4: 2016 SEQRA Site Plan
 Gateway Summit and The Fairways
 Town of Carmel, Putnam County, New York
 Source: Insite Engineering, Surveying, &
 Landscape Architecture, P.C.
 Scale: Graphic

Tim Miller Associates, Inc., 10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418



General Notes:

1. This site plan is prepared in accordance with the provisions of the Unified Land Use Ordinance of the Town of Carmel, New York, as amended.
2. The subject application requires special exceptions use as permitted in accordance with Local Law # 1 of 1988. The project conforms to the requirements of said law as follows:
 - a) The subject property is situated in an R-1 (Residential) Zone.
 - b) The subject property is zoned in an R-1 (Residential) Zone.
 - c) The site exceeds the minimum area of fifty thousand (50,000) square feet.
 - d) The site is served by municipal water and sewerage.
 - e) The proposed density is 1.5 dwelling units/acre, which is less than the permitted maximum of forty (40) dwelling units/acre.
 - f) The project is consistent with the Comprehensive Zoning Ordinance of the Town of Carmel, New York, as amended.
 - g) All buildings are set back a minimum of forty (40) feet from the property lines.
 - h) The site is served by municipal water and sewerage.
 - i) All multi-unit buildings shall contain an elevator.
 - j) All buildings shall comply with the applicable codes.
 - k) The project exceeds the minimum of three hundred (300) square feet of recreation space per unit with a minimum of one hundred (100) square feet of recreation space per unit.
 - l) All units shall be occupied annually by persons of fifty-five (55) years of age or older and the spouse of any such person.
 - m) The applicant shall provide the minimum of six hundred (600) square feet of recreation space per unit.
 - n) The site is an R-1 (Residential) Zone.
 - o) The site is within 2000 feet of retail and service establishments.
 - p) The site is within 2000 feet of a public park.
 - q) All requirements of the New York State Fire and Building Code shall be met. In addition, the applicant shall provide all utilities and other services as required by section 407 of the Town Code.



R-Zone Requirements:

Req.	Lot B	Proposed
Min. Lot Area	100,000 SF	4,432,000 SF ±
Min. Lot Width	200'	1,230' ±
Min. Lot Depth	200'	4,111' ±
Min. Lot Setback	40'	> 40'
Min. Building Height	20'	> 20'
Min. Building Footprint	40'	> 40'
Min. Building Coverage	15%	< 35%

Multi-Family Dwellings for Elderly Requirements:

Req.	Lot B	Proposed
Min. Lot Area	90,000 SF	4,432,000 SF ±
Min. Lot Width	150'	311' ±
Min. Lot Depth	40'	1,470' ±
Min. Building Height	40'	> 40'
Min. Building Footprint	40' / 2 stories	> 40' / 2 stories
Min. Building Coverage	1.1 spaces / unit	2.1 spaces / unit ±

Figure 2-5: 2006 Approved Site Plan
Gateway Summit and The Fairways
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying &
Landscape Architecture, P.C.
Date: 12/01/06, rev. 06/23/06
Scale: Graphic

3.0 COMMUNITY SERVICES AND FISCAL

3.1 Demographic Resources

Existing Conditions

As discussed, The Project Sponsor proposes to build 300-units of mixed townhouse style units to develop neighboring residential communities on a total of approximately 146-acres located on the northside of US Route 6 in the Town of Carmel, Putnam County, New York. The project is known as “Gateway Summit and The Fairways”. The development site lies immediately north of US Route 6, east of the Town of Southeast boundary and adjoins the Centennial Golf Course. The location of the site is shown on Figure 2-1. The site is currently vacant wooded land and is served by public water and sewer service.

Project Description

The Gateway Summit and The Fairways residential development consists of the two sister developments. Gateway Summit includes 150 units of housing including both general and senior housing units; and the Fairways includes 150 townhouse units located in proximity to Centennial Golf Course. The layout is illustrated in Figure 2-1, when combined the overall residential plan includes 300 residential market rate units for sale.

For the purpose of this analysis the Gateway Summit Development is envisioned to include 114 senior units including 68 two-bedroom Cottages and 46 three-bedroom townhouse units. In addition, Gateway Summit will have 36 three-bedroom townhouse units for the general population. Units at Gateway Summit are anticipated to sell for approximately \$550,000 to \$750,000 depending upon the unit type and number of bedrooms.

The Fairways Townhouse development is envisioned to include 150 3-bedroom plus flex room units and 84 two-story units and 66 three-story units. These units are anticipated to sell for approximately \$750,000.

Demographic multipliers published by the Rutgers University Center for Urban Policy Research (CUPR) were used to project the future population of the proposed Gateway Summit and The Fairways community. Population projections are based upon the geographic region, type of unit, number of bedrooms, and the anticipated market value. The CUPR multipliers are more specific because they are calculated based upon the specifics of geographic location, bedroom count and unit type. The researchers, Burchell and Listoken are considered the experts in demographic projections and the CUPR multipliers are considered the standard in this field of study. As shown in Table 2.2-1, based upon the nature of this development, the multipliers used to project the population are as follows; Three story, three-bedroom townhouse units house 3.00 persons per unit; two story, three-bedroom townhouse units house 2.83 persons per unit. Senior townhouse and senior cottage units are 1.88 persons per unit. By comparison, 2010 U.S. Census data indicate that the average household size for a combination of all housing types in the Town of Carmel is 2.70 persons.

As shown in Table 3.1, Based upon the CUPR residential multipliers, approximately 759 persons, including 93 school age children are projected to reside in the Gateway Summit and The Fairways development. Of the 93 school age students expected to reside in the proposed

development 68 will be located in the Brewster School District and 25 will be located in the Carmel School District.

It should be noted that the 93 school age students expected to reside in the proposed development will enter the two school systems gradually over the six-year buildout of the respective projects. Figure 3-1 shows the boundary between the Carmel and the Brewster School Districts.

Table 3.1 Population Projections					
Unit Type	Number of Units	Population Multiplier	Population	School Age Children Multiplier	School Age Population
Gateway 3-Story Townhouse - Carmel School District					
3-BR plus Flex room	9	3.00	27	0.59	5
Gateway 3-Story Townhouse - Brewster School District					
3-BR plus Flex room	27	3.00	81	0.59	16
Gateway 2-Story Senior Townhouse - Carmel School District					
3-BR plus Flex room	46	1.88	87	0.00	0
Gateway Senior Cottage - Carmel School District					
2-BR plus Flex room	68	1.88	128	0.00	0
Fairways 2-Story Townhouse - Brewster School District					
2-BR plus Flex room	75	2.83	212	0.39	29
Fairways 2-Story Townhouse - Carmel School District					
2-BR plus Flex room	9	2.83	25	0.39	4
Fairways 3-Story Townhouse - Brewster School District					
3-BR plus Flex room	39	3.00	117	0.59	23
Fairways 3-Story Townhouse - Carmel School District					
3-BR plus Flex room	27	3.00	81	0.59	16
Total	300	--	759	--	93

Source: Rutgers University Center for Urban Policy Research. Table prepared by TMA, 2021.

The Flex room that is being included was built into the floor plans is being included to meet the changing needs of today's society. Flexible work hours and/or working at home either full time or part time is likely here to stay. People will be going back to work at some point but maybe only on a part time basis of 2-3 days a week. People need private rooms away from noise and confusion to work from home. People need private home offices for work at home which many times include daily zoom calls. Today's families typically include two earners in a household and two separate private spaces are needed. Today people use extra rooms for home offices, possibly one for the husband and a separate one for the wife.

A guest bedroom is also a must for some, for their visiting parents and close relatives, brothers and sisters who visit for the holidays as people shy away from hotels. In addition, a hobby or crafts room is desired as is a children's homework / study room. There has been a trend away from gym memberships in favor of purchasing home gym equipment to avoid close contact at crowded gyms. Housing units need rooms for movie watching as people shy away from movie theaters and for craft or art rooms as people are spending more time at home and are looking for more private spaces. The flex rooms provide these types of spaces.

More space is needed in a townhouse unit than just bedrooms. The task of schooling children at home highlighted the need for desk space as many students are learning at home via on line classes, for classes that range from early elementary through to college course work.

It should also be noted that the School Age Children multipliers are likely overstated. It's a known fact that couples today are working into their mid to late thirties before they have children. These working professionals want the low maintenance and ease of living townhouses provide. The bottom line is people today are having fewer children and doing it later in life.

Based upon an aging demographic trend, the real estate sales today are dominated by the 55 plus market. It is anticipated that approximately 76% of the units at Gateway Summit and the Fairways will be sold to 55 plus residents. Based upon the maintenance free lifestyle provided by townhouse communities, the other part of the market is expected to be singles and young professional couples without children or with pre-school age children. Families with multiple school age children typically tend to buy single family homes with more space and a backyard.

The bottom line is the size of the average family unit has been decreasing over the last 20 years. People want and need additional private bedrooms but not necessarily to be used to sleep in. Bedroom count today does not mean more students in the school system. Although housing units are getting bigger, the family size has been getting smaller over the past 20 years. The pandemic highlighted the need for more space in our housing units. The pandemic will hopefully come to an end eventually; however, the lifestyle changes that have been made are likely to last much longer.

3.2 Police, Fire and Emergency Services

Police Protection

Existing Conditions

The Carmel Police Department is a “full service” department and participates in many community crime prevention and awareness programs in addition to its normal law enforcement tasks. The department operates 24/7 and has 19 patrol cars, one boat and a canine patrol. The department consists of the patrol division, detective division, a records division, and a seasonal marine division. The Town of Carmel Police headquarters are located at Town Hall at 60 McAlpin Avenue just east of US Route 6 in Mahopac, New York, approximately 4 miles from the project site.

The full-service department presently consists of 35 sworn police officers and eight civilian employees.¹ The Putnam County Sheriff's Department also exhibits a regular presence in the area, as does the New York State Police and Metro-North Police. The Putnam County Sheriff's headquarters is located in the Town of Carmel, within two miles of the Gateway and the Fairways site. According to the department website, the Town of Carmel Police Department handled approximately 35,000 calls for service in each year for the past three years 2018, 2019 and 2020.

¹“History of the Police Department.” Town of Carmel. Town of Carmel. July 15, 2021. Webpage: [www. https://www.ci.carmel.ny.us/police-department/pages/history-of-the-department](https://www.ci.carmel.ny.us/police-department/pages/history-of-the-department).

With a 2010 population of 34,305 persons, which has declined to 34,113 persons in 2020, the current ratio of Town of Carmel police officers (35) to population is consistent with the ULI recommended standard of 1 to 1,000 persons. This is in addition to the protection services provided by the Putnam County Sheriff's Department, who regularly patrol the Carmel area. It should also be noted the Putnam County Sheriff Department is Headquartered in Carmel just two miles from the project site. The typical response time of the police department, depending on the type of call, call volume, weather conditions and time of day, is from three to thirty minutes

Sworn personnel are involved in various programs including Crime Prevention, Accident Investigation, STOP DWI, Commercial Vehicle Enforcement, Intelligence, Youth Court and the D.A.R.E. program.

Potential Impacts

The development of 300 housing units on the project site would create a demand for additional police services. Based on planning standards contained in the Development Impact Assessment Handbook published by the Urban Land Institute (ULI), two police personnel should be provided per 1,000 persons. Using this standard, the projected increase of 759 persons from the Gateway Summit and The Fairways development has the potential to increase police staffing needs by 1.5 police personnel. The ULI multipliers assume no existing services, thus the actual demand on police personnel and vehicles is expected to be minimal. The Town population has decreased from 34,305 persons to 34,113 persons, a reduction of 192 persons with no reduction in the Town's police staffing, further reducing any need for additional personnel, vehicle usage or need for office space. The increase in annual taxes generated to the Town by both projects is expected to total almost \$735,000 annually. These revenues could potentially be used to meet any increased need for police staffing or expand hours of operation, if necessary. This also does not take into consideration the police services provided by the Putnam County Sheriff nor the NYS Police which would be available to offset any potential incremental increase in demand resulting from the proposed projects.

A letter was received from Police Chief Anthony Hoffman, dated January 24, 2022, which corroborates the information provided in this section. The letter is included in Attachment D for reference. The Chief notes that any increase in police personnel or equipment would be a decision by the Town Board. As noted, the ratio of Town of Carmel police personnel to population is within the recommended standard of two police personnel suggested in the Development Impact Assessment Handbook. Therefore, the need for additional manpower and equipment should be limited for the Town of Carmel Police Department. The increased tax revenue to the Town, derived from this development, is sufficient to cover any additional need for police officers or vehicles. The potential for impact to the provision of police protection is considered insignificant.

Fire Protection

Existing Conditions

The Carmel Fire Department is located at 94 Gleneida Avenue in the Town of Carmel, approximately two miles from the project site. The Department is a fully volunteer organization. Presently, there is a county wide Mutual Aid Agreement in place in Putnam County², which is a

²Adam Stiebeling, Deputy Commissioner of Putnam County Bureau of Emergency Services.

plan to allow assistance between all County Fire Departments. The Officer-in-Charge of the fire has the capability to request assistance whenever it is deemed necessary.

There are approximately 50 active members who serve the community by providing Fire, Rescue, Disaster Relief and Emergency Medical Services to anyone in need. The Carmel Fire Department is also dedicated to community service by supporting Scouting organizations of America, supporting other local charities and participating in fireman's parades throughout the region. The Carmel Fire Department is in the process of constructing a major expansion and rehabilitation of its current facility which should be completed in the first half of 2022.

The Carmel Fire Department currently operates 3 engines, 1 tanker truck, 1 ladder truck, 2 light duty rescue vehicles, a gator, a rescue trailer and a marine safety vehicle, plus 2 Chiefs' vehicles. These units are staffed by the 50 active volunteer members who respond from a fire station at 94 Gleneida Ave. The station is approximately 2.0 miles (driving distance) from the subject site. The department typically responds to approximately 400 alarms annually. These alarms consist of structural fires, motor vehicle accidents (MVA's), automatic alarms, vehicle fires, mutual aid, and various other calls for assistance.

Potential Impacts

Calls for fire/medical emergencies from the proposed development would be routed through the emergency 911 system, where dispatchers would notify the Carmel Fire Department. All proposed buildings would be constructed and all operations would be permitted in accordance with the provisions of the State Fire Prevention Code. Buildings and operations of the development are subject to inspection by the Town Building Inspector. The adequacy of construction materials used, building design and material storage practices, fire flow rates, and water system capacity was assessed by the Fire Department during the DEIS and FEIS studies.

The existing Mutual Aid Agreement would ensure that additional fire-fighting and rescue resources are available to the Town of Carmel Fire Department, as required.

As noted above, the Proposed Action would potentially increase the Town's population by 759 persons. Also noted earlier, the Town's population has declined by 192 persons since 2010, partially offsetting this increase. Based on planning standards contained in the Urban Land Institute's Development Impact Handbook, it is estimated that 1.65 fire personnel and 0.2 vehicles per 1,000 population is required to serve a new population. The anticipated increase in population of 759 persons would generate a demand for 1.25 additional fire personnel and less than 0.1 additional fire vehicles. However, The ULI multipliers assume no existing services, thus the actual demand on fire personnel and vehicles would be reduced. The increase in annual taxes generated to the Fire District by both projects is expected to total almost \$103,537 annually. These revenues could potentially be used to supplement firematic operations if needed.

Since, the ULI multipliers assume no existing services; the actual demand on fire personnel and vehicles from the proposed project is expected to be insignificant.

The Town of Carmel Building code requires Senior Multifamily housing to be fully sprinklered. The proposed senior housing at Gateway Summit is in conformance with this requirement. Out of an abundance of caution, the Applicant has volunteered to fully sprinkler the 186 non-age restricted units, thus all units in the entire Gateway Summit and the Fairways Development will have sprinkler coverage.

The amended plans for Gateway and the Fairways have eliminated the large 3-story 15-unit buildings over parking, which are now replaced by smaller scale Cottages and Townhouses. The current project design has the Fairways layout similar to the Gateway layout. The project as proposed has received a required variance to utilize a minimum of 20' distance between the Fairways buildings. This setback is similar to the Gateway setback, previously considered and is mitigated by the presence of sprinklers in all units.

The potential for impact to the provision of fire protection is considered insignificant.

Emergency Medical Services

Existing Conditions

The Carmel Volunteer Ambulance Corps provides emergency medical services to the site area. The Corps is a New York State-certified agency that provides basic life support ambulance service. The ambulance headquarters are located off at 6 Garrett Place, behind the Carmel Fire Department.

The Carmel Volunteer Ambulance Corps (CVAC) provides emergency ambulance service to the project area. The CVAC currently has 63 active members and responds to approximately 1,000 calls for service annually. Based upon these figures, annual average calls per capita equates to 0.03. According to the CVAC website, the corps currently operates 3 ambulances including 31-7-1 and 31-7-2. The Corps also has a fully equipped first response vehicle. Each ambulance is staffed by a crew chief who is a New York State Certified Emergency Medical Technician, and a driver. Most calls have a third crew member, who may or may not be an EMT.

The primary hospital serving the project area is Putnam Hospital Center located on Stoneleigh Avenue in Carmel immediately north of the Project site. Putnam Hospital Center is a 164-bed acute care hospital facility. Acute care is a branch of secondary health care where a patient receives active but short-term treatment for a severe injury or episode of illness, an urgent medical condition, or during recovery from surgery. In medical terms, care for acute health conditions is the opposite from chronic care, or longer-term care.

According to the Hospital website, the hospital offers innovative technologies, including robot-assisted surgery. The Hospitals specializes in advanced surgical services including orthopedics, spine and bariatric surgery. Other services include, stroke care, a blood management program, cardiac care, psychiatric care including a partial-hospitalization program, maternity care and outpatient physical rehabilitation.

Potential Impacts

Based on planning standards contained in the Development Impact Assessment Handbook published by the Urban Land Institute, 36.5 calls per 1,000 population per year would be the multiplier used to project the increase in Emergency Medical Service (EMS) calls for new development. Based upon the ULI multiplier, the projected 759 residents that will reside at the Gateway Summit and The Fairways development could increase EMS calls by 28 annually. Currently 63 volunteers handle 1,000 calls for service annually or on average 16 calls per year per volunteer. An increase of 28 calls represents a 3% increase in call volume and equates to less than half of an additional call per volunteer. This is not considered a significant increase. Since the volunteers work out of their homes no increase in vehicles or physical space is anticipated.

The increase in population from the proposed development is not expected to impact the services or quality of service of the Carmel Volunteer Ambulance Corps. Coordination with EMS providers would occur as individual site plans are reviewed. The Applicant would comply with any reasonable requirements imposed during that review.

The ULI multipliers assume no existing services, thus the actual demand on EMS personnel and vehicles is expected to be insignificant.

Hospital

Based on planning standards contained in the Development Impact Assessment Handbook, four (4.0) hospital beds should be provided per 1,000 persons. Based on this standard, the projected population increase associated with the proposed residential development has the potential to increase the need for beds in hospitals serving the Northern Westchester County area by 3.0 beds. This is not considered a significant impact.

3.3 Fiscal Resources

Current Assessed Value

The proposed Gateway Summit & The Fairways community is contained on the following Town Tax Parcels:

Gateway:

- Section 55.-2-24.6-1
- Section 55.-2-24.6-2
- Section 55.-2-24.7-1
- Section 55.-2-24.7-2

Fairways:

- Section 55.-2-24.8-1
- Section 55.-2-24.8-2

The current equalized assessed value of the six undeveloped parcels is \$1,204,700. This represents 100 percent of the total market value of the six parcels. According to a review of the 2021 tax bills for the subject parcels, the total annual property taxes paid to the Town of Carmel are \$5,856 and the municipal taxes paid to the Fire Department are \$1,343. The municipal taxes paid to Putnam County are \$3,650. Thus, the total municipal taxes paid are \$11,354. The annual taxes property taxes paid to the Brewster Central School District (BCSD) are \$27,330, while the annual property taxes paid to the Carmel Central School District (CCSD) are \$6,248.

Potential Impacts

The New York State Office of Real Property Services (NYSRPS) requires that multifamily properties are assessed in terms of the value of the income they provide. Based upon the income value of the proposed development, the total market value of the proposed community is estimated to be \$92,866,780. Using the current Town of Carmel 2021 equalization rate of 100 percent, the total future Assessed Value for this analysis is estimated to be \$92,866,780.

Projected Revenues

Table 3-2 compares the revenues generated presently by the property to the revenues to be generated after the proposed community is complete. Revenues are based on the most current 2021 municipal tax rates (2021-2022 tax rate for the Brewster and Carmel Central School Districts). According to the Town budget, the Town's tax rate includes Town governmental services, highway maintenance, justice court, police services, and parks & recreation.

As presented in Table 3-2, annual revenues to the Town of Carmel are projected to be approximately \$451,395. Tax revenues to the Fire Department #3 are estimated to be \$103,537. The tax revenues to Putnam County would be approximately \$281,363 annually. The total municipal revenue is estimated to be \$1,025,377.

Table 3-2 also indicates the annual revenues to the Brewster and Carmel Central School Districts would be approximately \$1,492,512 and \$1,047,578 respectively. The net *increase* between the current tax revenues generated by the site and paid to the School Districts and the total future project-generated revenues to the school district are projected to be approximately \$1,465,182 to the Brewster School District and \$1,041,330 to the Carmel School District annually.

As can be seen in Table 3.9-2, overall, the combined tax revenues from each jurisdiction are projected to total more than \$2.5 million annually.

Table 3-2 Current & Projected Taxes Generated by the Gateway Summit and The Fairways				
Taxing Authority	Current Tax Rate	Current Taxes (\$)	Projected Taxes Total (\$)	Net Increase Between Current & Projected Taxes (\$)
Putnam County	\$3.029745	\$3,650	\$281,363	\$277,713
Town of Carmel	\$4.860676	\$5,856	\$451,395	\$445,540
Ambulance #1	\$0.200208	\$241	\$18,593	\$18,351
Fire #3	\$1.114895	\$1,343	\$103,537	\$102,194
Reed Library	\$0.218858	\$264	\$20,325	\$20,061
Carmel Water #2	\$1.616989	\$1,947	\$150,165	\$148,217
Total Town		\$7,704	\$744,014	\$734,362
Total Municipal		\$11,354	\$1,025,377	\$1,012,075
Brewster Central School District	\$28.315408	\$27,330	\$1,492,512	\$1,465,182
Carmel Central School District	\$26.087342	\$6,248	\$1,047,578	\$1,041,330
TOTAL	\$39.356779	\$44,932	\$3,565,466	\$3,518,586
Notes:				
Municipal taxes are based upon Town of Carmel 2021 Tax Rates.				
Brewster Central School District Tax Rates are for the 2020-2021 school year.				
Carmel Central School District Tax Rates are for the 2020-2021 school year.				

Infrastructure Costs

A management company will operate and maintain all common areas, facilities and infrastructure included in the proposed action. All of the community aspects of the project will be privately maintained, including the roadways. There are no aspects of the project which are anticipated to result in an ownership, maintenance or operational responsibility to the Town of Carmel, thus reducing municipal costs to the maximum extent practicable.

The Gateway Summit and The Fairways community will each have their own recreational facilities including a clubhouse with billiards and card rooms, pool, tennis, bocce courts, and workout gym equipment. All facilities will be shared and will thus be available to all residents of both communities.

3.3 Schools

Existing Conditions

The project site is served by both the Brewster and the Carmel School Districts.

Brewster School District.

The Brewster Central District includes one K-2 elementary school, one grade 3 to 5 intermediate school, one grade 6 to 8 middle school, and one grade 9 to 12, high school. The Brewster School District geographically includes the majority of the Town of Southeast, approximately half of the Town of Patterson and a small area of the Town of Carmel, which contains a portion of the Gateway Summit and The Fairways development.

According to information provided in the Demographic Study Update for the Brewster Central School District³, enrollments have been steadily decreasing for more than the past 10 years. (Refer to Attachment B). The study documents a steady cumulative decline of more than 10% in student enrollment between 2011/12 and 2020/21 resulting in a reduction of more than 350 students and projects this decline is likely to continue over the next 5 years, thus leaving available ample capacity to handle an increase in student enrollment. This could result in a loss of approximately 500 students by 2026

As of October 2020, 2,984 students were enrolled in the District. Table 2.2-3 below summarizes the current 2020/2021 grade distributions and enrollments of the various schools within the District:

Table 3-3 Brewster Central School District (2020-2021 School Year)		
School	Grades Served	2020/21 Enrollment
JFK Elementary School	K-2	608
Starr Intermediate School	3-5	625
Wells Middle School	6-8	755
Brewster High School	9-12	996
TOTAL		2,984
Brewster Central School District 2021.		

³NYS Department of Education BEDS Enrollment Data for Central School District 2019/2020, July 2021.

Potential Impacts

As shown in Table 3-1, based upon demographic multipliers published by the Rutgers University Center for Urban Policy Research, a total of 93 students are projected to reside in the Gateway Summit and The Fairways residential development of which 68 students will reside in the Brewster School District and 25 of which will reside in the Carmel School District. Given changing trends in family size and make-up. It is likely the projection of school age children is overstated, and thus provides a conservative analysis of future conditions. The additional students will gradually enter the school system over a 6-year period once the unit construction starts in 2023. It is projected that the Student enrollment will decline by over 500 students by 2026 when full buildout is anticipated. The addition of 68 students to a current population of almost 3,000 students represents an increase of approximately 2 percent. The Brewster CSD has availability in its existing infrastructure to accommodate this increase in student population.

Brewster School District Costs Associated with the Proposed Project

Any costs to the Brewster District would be related specifically to programming, which are referred to as marginal costs. The total budget for 2021-2022 school year for the Brewster School District is \$104,903,457. The District allocates \$85,600,000 to be spent on instruction and transportation. Approximately 75 percent of this cost is derived from property tax revenue. With a current enrollment of approximately 3,000 students, programming costs paid for by the tax levy are estimated to be \$19,476 per student. Projected costs as a result of the proposed Gateway Summit and The Fairways development to the school district would be \$1,324,368 annually based on an estimated 68 new students that would be living in the district. There will be no cost to the School District associated with the senior residential portion of the development.

The proposed Gateway Summit and The Fairways will generate \$1,492,512 in annual property tax revenues directly to the school district compared to the cost of \$1,324,368. Thus, the overall effect on the district's budget is projected to be positive. At today's tax rates, the Gateway Summit and The Fairways project would be projected to generate approximately \$69,860 in tax revenue annually **after** covering the educational costs for the increase in student population.

This anticipated increase in student population will not have a significant impact on administrative or capital needs of the district. The Demographic Study referenced above, demonstrates the district's existing facilities have capacity to handle at least 350 additional students.

With an enrollment of 2,984 students, an increase of an estimated 68 students represents a 2.3% increase in total student enrollment. Construction is anticipated to begin in 2023 and continue to 2029. Thus, construction is expected to take up to 72 months which is likely to be spread over a minimum of six school years. When broken down into a six-year period, this represents an average of less than half of a percent (0.38%) annually. The increased student population is also expected to be distributed throughout the grade levels, resulting in an average of one new student per grade, per year. The multi-year phasing and distribution of students will allow for an additional 68 students to be integrated to the local schools with minimal impact.

Carmel Central School District

The Carmel District includes three K-4 elementary schools, one middle school (grades 5, 6, 7 and 8), and one high school (grades 9 to 12). The Carmel Central School District geographically includes the majority of the Town of Carmel, the Carmel Hamlet Area, portions of the Town of Philipstown and portions of the Town of Kent.

According to information provided by the Carmel School District⁴, enrollments have been steadily decreasing for more than the past 10 years. A study entitled School Age Children, Carmel Central School District Student Enrollment, dated July 14, 2021, was prepared by Tim Miller Associates and is included in Attachment B. The study documents the continued decline in student enrollment and identifies the available capacity to handle an increase in student enrollment. This study indicates ***continuing declines for the Carmel School District by more than 30% compared to peak enrollments***. This substantial declining enrollment trend has the potential to result in excess infrastructure, where the number of students is significantly lower than the enrollment capacity. The potential for the elimination of school clubs, sports teams and other extra-curricular activities could increase as enrollments continue to decline.

As of October 2020, 3,979 students were enrolled in the District. Table 3-4 below summarizes the current 2020/2021 grade distributions and enrollments of the various schools within the District:

Table 3-4 Carmel Central School District (2020-2021 School Year)		
School	Grades Served	2014 Enrollment
Kent Primary School	K-4	378
Kent Elementary School	K-4	372
Matthew Patterson Elementary School	K-4	476
George Fisher Middle School	5-8	1,194
Carmel High School	9-12	1,410
TOTAL		3,979
Carmel Central School District 2021.		

Potential Impacts

As shown in Table 3-1, based upon demographic multipliers published by the Rutgers University Center for Urban Policy Research, approximately 93 students are projected to reside in the Gateway Summit and The Fairways residential development of which 16 will reside in the Carmel School District. The addition of 16 students to a population of more than 3,900 students represents an increase of less than half a percent. This increase will occur over a 6-year period as the units get built between 2023 and 2029. The Carmel CSD has tremendous availability in its existing infrastructure to accommodate increases in student population.

Carmel School District Costs Associated with the Proposed Project

The school budget for the 2021/2022 school year was defeated twice by the residents of the school district.

⁴NYS Department of Education BEDS Enrollment Data for Central School District 2019/2020, July 2021.

Any costs to the District's would be related specifically to programming, which are referred to as marginal costs, the contingency budget for 2021-2022 school year for the Carmel Central School District allocates \$106,694,416 to be spent on student programming. Approximately 70 percent of this cost is derived from property tax revenue. With a current enrollment of approximately 4,000 students, programming costs paid for by the tax levy are approximately \$18,770 per student. Projected costs as a result of the proposed Gateway Summit and The Fairways development to the school district would be \$469,250 annually based on an estimated 25 students that would be living in the residential units. There will be no cost to the School District associated with the senior residential portion of the development.

The proposed Gateway Summit and The Fairways will generate \$1,047,578 in annual property tax revenues directly to the Carmel school district compared to the cost of \$469,250. Thus, the overall effect on the district's budget is projected to be a significant windfall. At today's tax rates, the Gateway Summit and The Fairways project would be projected to generate more than \$578,000 in net additional funds annually **after** covering the educational costs for the increase in student population.

With an enrollment of 3,979 students, an increase of an estimated 25 students over a period of 6 years, represents a minimal increase in student enrollment. Conversation with the Business Administrator for the Carmel Central School District indicated absorption of the new students should not present a capacity problem for the school district, particularly in light of the declining enrollment trend the district is experiencing.

This anticipated increase in student population **will not** have a significant impact on administrative or capital needs of the district. The School Age Children Enrollment Study referenced above, demonstrates the district's existing facilities have capacity to handle up to approximately 1,000 additional students.

An increase in residential development will also result in an increase in the assessed valuation of each School District, which translates into additional school tax revenues. Since the infrastructure and staff resources are already in place, the costs for new students associated with multi-family housing would be minimal. The increased tax revenue funds may be used to off-set any cost increase necessary.

It should also be noted that while market-rate multifamily housing would provide a significant increase in both districts assessed valuation, the ratio of students associated with multifamily housing is low compared to traditional single-family housing - and as such would not over-burden the schools. Additionally, the trend today is for increased utilization of private schools continuing to drain students from the public-school system.

This analysis, plus a request for comments, was sent to both School Districts as part of the review process. Responses from the two school districts are included in Attachment D for reference.

The Brewster School District indicated they acknowledged the assessment provided herein and did not have any further comment.

The Carmel School District indicated their desire to increase the student population through an increase in non-age restricted housing. This is in light of the districts continued declining enrollment. The Carmel District also requested confirmation of the boundary between the two

school districts, again likely based on their desire to increase student population. The applicant has no authority over this boundary line and is not in a position to make any adjustments to it.

The applicant has no objection to the two school districts working together to determine how to best serve the anticipated student population at Gateway Summit and the Fairways and will willingly support the efforts of the School Districts to meet this need.

Beyond the anticipated school tax revenue, no mitigation is required or proposed.

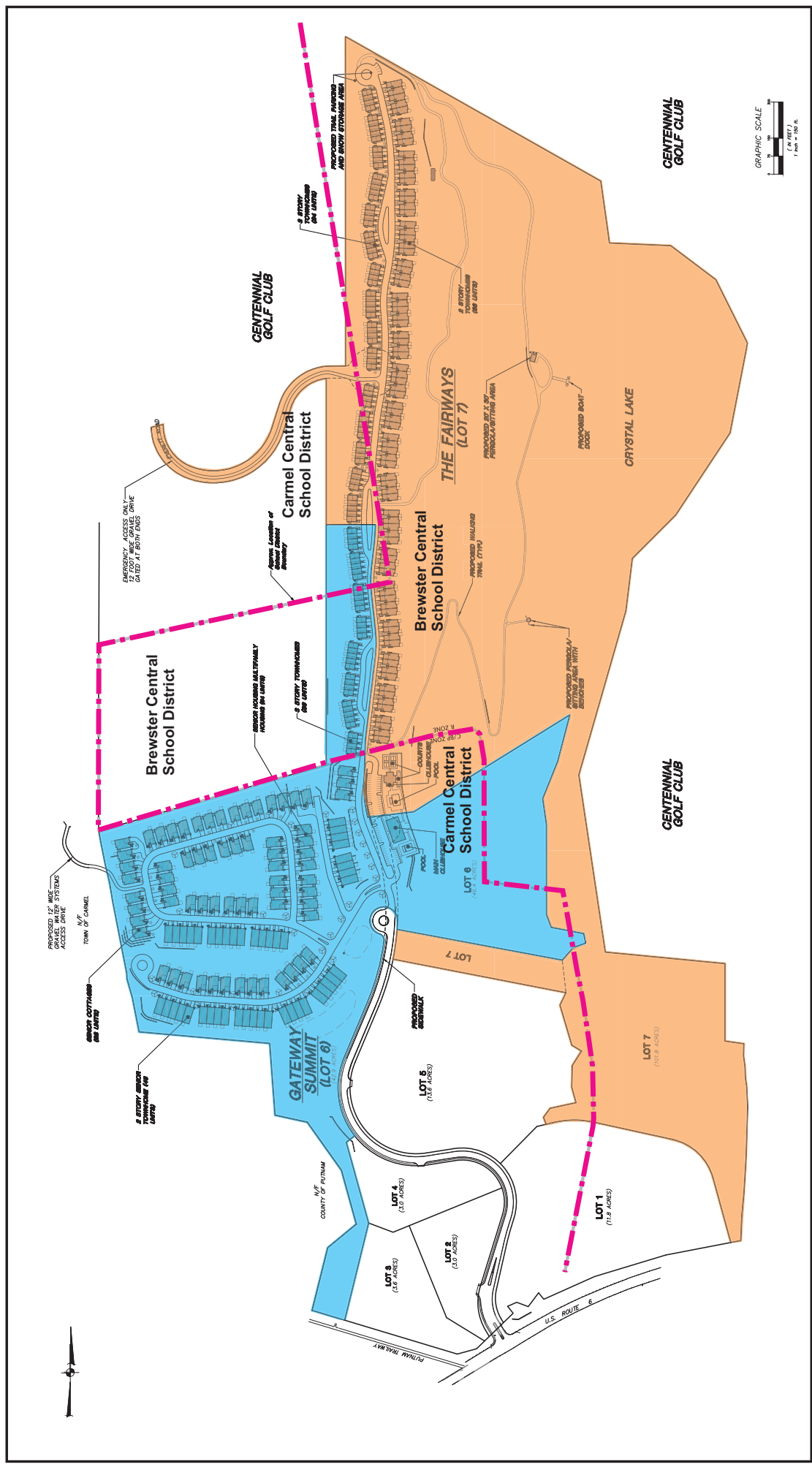


Figure 3-1: School District Boundaries Gateway Summit and The Fairways
 Town of Carmel, Putnam County, New York
 Source: Insite Engineering Surveying & Landscape Architecture, P.C.
 Town of Carmel Tax Map

Tim Miller Associates, Inc., 10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

4.0 TRAFFIC AND TRANSPORTATION

The 2006 Findings Statement for the Gateway Summit and The Fairways developments provided traffic (trip generation) thresholds for the overall project, when exceeded, required the applicant to implement specific traffic mitigation. The traffic mitigation included a traffic light at the project entrance and a left-turn lane for east-bound traffic on US Route 6 to enter the project site. The thresholds were described in the Findings as follows:

g. Traffic

The traffic analysis in the DGEIS and FGEIS projected the number of entering and exiting vehicular trips for uses under the proposed projects and Modified Road Configuration Alternative for Gateway Summit. As indicated in Section 5.6, (Traffic and Transportation) of the Findings Statement, traffic mitigation may be required only after the projected trip generation for additional proposed uses exceeds specific thresholds set forth under the subsection Traffic and Transportation Mitigation Proposed. It is noted that only NYSDOT has the authority to allow improvements on Route 6 since it is a State Road. If NYSDOT finds that traffic mitigation proposed after certain levels of additional traffic are generated is not required, the applicable development components may be developed and issued Certificates of Occupancy without the implementation of such traffic mitigation.

In 2010, the NYSDOT completed a series of major traffic improvements that were identified in the 2006 Findings Statement, including: the replacement of a bridge on Route 6 directly west of the project entrance, construction of an eastbound left-turn lane and striping on Route 6 and the installation of a traffic light at the project entrance. The light was installed by NYSDOT in 2010, but has since been put into storage pending the opening of the intersection. These improvements were completed by NYSDOT with a 1.1-million-dollar contribution by the applicant, in advance of any approved site plan applications for the Gateway Summit and The Fairways projects. These traffic improvements were developed to accommodate the full build-out of the entire Gateway Summit and The Fairways projects. Therefore, based upon the Findings Statement no further traffic mitigation is warranted for the two residential developments and the other lots within Gateway Summit. All future developments in the Gateway Summit property will require Site Plan review, and traffic from those developments will be assessed as part of that review. The original 2006 traffic study included a YMCA recreation center and the YMCA was a significant contributor to the original traffic projections. The YMCA has since dropped their proposal for the property. The traffic estimated for the YMCA development will no longer be included in future assessments of site generated traffic.

Trip Generation

The trip generation was developed for the current Gateway Summit and The Fairways residential developments with a total of 300 residential units. The trip generation tables are provided in Attachment C.

The trip generation rates for non-age restricted residential development are somewhat higher than for senior residential development. The type of housing (attached vs. detached) also influences the trip generation rates, whereas multi-family residences have slightly lower trip

generation rates than single family residences. These factors were considered in the development of the trip generation rates for the current non-age restricted The Fairways project and the mixed (senior and non-age restricted) Gateway Summit project.

The overall trip generation for the current projects were compared to the trip generation for the residential portion of the approved 2006 Gateway Summit and the Fairways projects. The comparison of overall residential trip generation is provided in Table 6 in Attachment C. As shown in Table 6, the estimated trip generation for the current project will be greater than estimated for the 2006 site plan. It is noted that this increase would result in a maximum of approximately 54 additional trips entering and departing the site during the Peak PM hour for the combined Gateway Summit and the Fairways developments.

Impact of Covid-19

The ongoing Covid-19 pandemic has altered commuting and overall traffic patterns, and these changes may be long-term. Planning and transportation professionals nationwide are assessing the short-term and long effects of the pandemic upon remote work, commuting patterns and resulting traffic conditions. The NYSDOT has provided guidance on the collection of traffic data during the Covid-19 pandemic, acknowledging the effect of the pandemic on traffic volumes¹.

A survey of over 1000 hiring managers was completed by Upwork in December of 2020². At that time 41.8 percent of the U.S. workforce was still working remotely. The survey findings indicate that by 2025 remote workers will be approximately 22 percent of the workforce (36.2 million), as compared to 12 percent of the workforce (19.4 million) prior to the pandemic. This is an 87 percent increase from pre-pandemic to post-pandemic conditions. These estimates will vary by region, locality and type of work but the trend is towards increased remote work opportunities. With such large shifts in work and commuting habits, it is likely that less commuter trips will occur during peak traffic periods in the near future.

Local Traffic Volumes

New York State Department of Transportation collects average annual daily traffic (AADT) in the vicinity of the project site on US Route 6. The AADT data is not collected annually, but at a minimum every 5 years. Average annual daily traffic volumes were available for two segments of US Route 6: West of Stoneleigh Avenue to Route 52, and east of Stoneleigh Avenue to Route 312. This segment of US Route 6 includes the project entrance. The AADT data indicates that traffic volumes on US Route 6, since 2006 were stable or decreasing before the 2020 Covid-19 pandemic (see Table 4-1).

¹ Memorandum – Traffic Data Collection Guidance during COVID-19 Pandemic, New York State Department of Transportation, August 11, 2020.

² <https://www.businesswire.com/news/home/20201215005287/en/Upwork-Study-Finds-22-of-American-Workforce-Will-Be-Remote-by-2025>

Table 4-1 Pre-Pandemic Average Annual Daily Traffic (AADT)		
Year	US Route 6 NYS Route 52 to Stoneleigh Avenue (CR 35)	US Route 6 Stoneleigh Avenue (CR 35) to NYS Route 312
2003		18616
2004	16421	
2005		
2006		16974
2007	14755	
2008		
2009		16518
2010		
2011	14470	
2012		
2013		
2014		
2015		17498
2016		
2017	14379	
2018		15657

¹ New York State Department of Transportation Highway Data Services. <https://www.dot.ny.gov/highway-data-services>, Nov. 2021. Counts are not taken yearly.

The 2018 average daily traffic on US Route 6, in the vicinity of the site, was approximately 8 percent lower than in 2006. The 2015 average daily volumes were higher than in 2006. The average daily traffic on US Route 6 east of Stoneleigh Avenue declined slightly over the period 2007 through 2017. This data indicates that traffic in the vicinity of the project site has remained stable or declined since the original traffic study. These trends in local traffic were prior to the effects of the Covid-19 pandemic.

The Gateway Summit and The Fairways will result in an increase in residential vehicle trips as compared to the estimated residential trips in the DEIS traffic study. NYSDOT data since 2006 indicate stable or declining traffic volumes near the project site. In 2010, the NYSDOT completed a series of major traffic improvements that were developed to accommodate the full build-out of the entire Gateway Summit and The Fairways developments, including a traffic light at the project entrance and an eastbound left-turn lane from US Route 6 into the site. Since these improvements are in place, the traffic thresholds in the Findings are no longer relevant. The proposed Gateway Summit and The Fairways residential development is not anticipated to result in any significant traffic impacts.

ATTACHMENT A

SEQRA Findings Statement and
SEQRA Evaluation Forms

**SEQRA Evaluation Form
for
Gateway Summit Individual Site Plans**

Gateway Summit Lot 6
Project Name: Mixed Residential Development **Date:** 1-28-2022
Applicant: Hudson Valley Realty Corp
Parcel No(s): 56-2-24.6-1 and 2, 56-2-24.7-1 and 7-2 **Total Acreage:** 42.9
Proposed Use: Mixed senior and non-age restricted residential
Peak Hour Traffic Generation: **AM** 53; **PM** 68; **Saturday** 50

The Findings Statement for the Gateway Summit subdivision was adopted following the preparation and review of a Generic Environmental Impact Statement (GEIS). That GEIS evaluated the potential impacts of a generic design for a Mixed Use Development that included a variety of potential land uses allowed by zoning on the subject site. The GEIS also evaluated a Modified Road Configuration Alternative, that does not cross a New York City DEP regulated watercourse (the base subdivision plan's road does cross that watercourse).

The GEIS established minimum thresholds and criteria for the future review of individual site plans when they are submitted to the Town of Carmel Planning Board for approval. The purpose of this form, which is an appendix to the Findings Statement adopted for this project by the Planning Board, is to provide a basis for determining if the submitted site plans fall within the thresholds that the Planning Board has determined would mitigate adverse effects to the maximum extent practicable. Site plan elements such as location and design of buildings, and location and design of interior roads for both the commercial and residential uses may change from the concept development plan in the FGEIS without any additional environmental review, provided they substantially meet the development thresholds established in the GEIS process and specifically set forth in the Findings Statement.

If the proposed plans and any supplemental documentation submitted demonstrate that potential effects of the proposed use, design, size, and location of future development projects site plan fall substantially within the established thresholds as determined through use of this form, the Planning Board may complete site plan review as provided in 6 NYCRR 617.10 without any additional environmental review under the SEQRA regulations.

If the established thresholds are not met, further SEQRA review will be required including the issuance of a determination of significance. It is noted that the applicant may amend a proposal site plan or submit a new plan. If such revised or new site plan submission does not substantially exceed the established thresholds, no additional environmental review will be required.

The established threshold evaluation follows:

1. Landscape Plans. All future development of the Gateway Summit parcels must provide landscaping plans that comply with Town of Carmel regulations and the GEIS Findings as they apply to setbacks and landscaped buffers to adjacent properties.

During the site plan review process, individual site plans must include landscaping plans designed to enhance the visual qualities of the use. Further, stormwater treatment basins must be planted with aesthetic and functional wetland and transitional plantings

to provide water quality treatment, wildlife habitat and visual enhancement and generally comply with Section 63-27C(4) and (5) of the Town Code.

Does the submitted site plan meet these requirements?

Yes No (See attached Site Plan drawings)

If not, can the plan meet this requirement if minor revisions are made?

Yes No

2. Site Disturbance. The conceptual development plans analyzed in the GEIS indicate that approximately 55 acres of the Gateway Summit site would be graded to accommodate the proposed development, and of that amount, approximately 25 acres would be on slopes exceeding fifteen percent. Further, no significant grading would take place in areas outside of those shown in the Overall Development Plans for the project, and that Erosion and Sediment Control Plans must accompany any site plan application. In addition to complying with the Findings Statement, these plans must be prepared in conformance with applicable New York State Department of Environmental Conservation (NYSDEC) and New York City Department of Environmental Protection (NYCDEP) design guidelines, with special consideration given to erosion control on any land to be disturbed on slopes greater than 15 percent.

Do the submitted Site Plans reflect overall site disturbance and disturbance of steep slopes, for the construction of roads, buildings and other components of the proposed project that are generally within the areas of potential disturbance shown on the Grading Plans (GEIS Figures 3.1-8 and 3.1-10)?

Yes No (See attached Grading Plan)

If not, can the plan meet this requirement if minor revisions are made?

Yes No

Has a detailed Erosion and Sediment Control Plan been submitted in conformance with the project specific SWPPP, and NYSDEC and NYCDEP design guidelines?

Yes No (Previous Erosion and Sediment Control Plan to be updated as part of Amended Site Plan).

If not, can the erosion control plan be revised to meet this requirement?

Yes No

3. Stormwater Management. All individual site plan applications are to include Stormwater Management Plans developed in general accordance with the project specific Stormwater Pollution Prevention Plan (SWPPP) prepared for Gateway Summit, and that comply with the New York State General Permit for Stormwater Discharge, and the New York City Watershed Rules and Regulations. Adherence to these criteria will be a condition of site plan approval.

Does the application package include the project specific SWPPP?

Yes No (Project currently has NYSDEC General Permit coverage. SWPPP to be updated as part of Amended Site Plan).

4. Traffic. Note: *In the event that the Modified Road Configuration Alternative is proposed, skip to 4A, Traffic Alternative, below.*

A work permit application for any work in the state right-of-way of US Route 6 shall be submitted and approved by NYS DOT, as may be applicable. A concept plan for access improvements shall be provided to NYS DOT as well as to the Town of Carmel Planning Board for the Board's review for compliance with the Findings Statement and input to the NYSDOT.

Mitigation measures were proposed in the GEIS for the eastern access road to mitigate impacts to traffic flow on US Route 6 due to the combined Gateway Summit and The Fairways projects. Thresholds have been established relative to the generation of site traffic and timing of mitigation measures as noted below. It is noted that construction of development gaining access from the westerly access road (secondary access road, in this case) can proceed at any time, and Certificates of Occupancy may be issued, without any road improvements or other traffic mitigation.

Note: If mitigation measures are installed in connection with prior applications, these thresholds may be moot.

Site development plans and construction activities that do not exceed the thresholds noted below may proceed without further review other than NYSDOT work permits as may be required for any work in the State Right of Way. Additionally, site development plans and construction not exceeding such thresholds may be constructed and receive certificates of occupancy without any additional traffic mitigation.

What is the projected peak hour trip generation for pending or approved uses to date at the eastern access road? N/A entering trips; N/A exiting trips

Left Turn Lane Threshold (See attached Traffic discussion in Expanded EAF)

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of more than 60 peak hour entering vehicles at the eastern access road?

 N/A Yes No

If so, has the Applicant applied to the NYS DOT for a left turn lane on US Route 6 into the eastern access road to mitigate potential traffic impacts?

 N/A Yes No

Certificates of occupancy for the additional site development plans and construction projected to generate more than another 60 peak hour entering trips at the eastern access road shall be issued when either; i) NYS DOT approves a permit for the left lane and it is installed; or ii) the NYS DOT finds that such improvement is not required.

Traffic Signal Threshold (See Traffic discussion in Expanded EAF)

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of 100 or more peak hour exiting vehicles at the eastern access road from the Gateway Summit and The Fairways projects?

 N/A Yes No

If so, has the Applicant applied to NYSDOT to construct a traffic light at the eastern site access intersection with US Route 6?

 Yes No

Certificates of occupancy shall be issued for additional site development plans and construction projected to generate more than 100 peak hour exiting vehicles, at the eastern access road when either; i) NYS DOT approves a permit for the traffic light and it is installed; or ii) the NYS DOT finds that such traffic light is not required.

Any signal design and installation shall have the potential to accommodate a left turn lane if determined necessary and approved by NYSDOT.

4A. Modified Access Alternative. In the likely event that this access alternative is pursued the following thresholds shall apply.

A work permit application for any work in the state right-of-way of US Route 6 shall be submitted and approved by NYS DOT, as may be applicable. The developer of the site will need to provide a concept plan for access improvements to NYS DOT as well as to the Town of Carmel Planning Board for the Board's review for compliance with the Findings Statement and input to the NYSDOT. The applicant will need to provide designs for the betterment project to widen the railtrail crossing structure of US Route 6 to permit a left turn lane into the site.

Mitigation measures were proposed in the GEIS for the westerly access road to mitigate impacts to traffic flow on US Route 6 due to the combined Gateway Summit and The Fairways projects. Thresholds have been established relative to the generation of site traffic and timing of mitigation measures as noted below for the Modified Access Alternative. It is noted that construction for development gaining access from the easterly access road (secondary access road in this case) can proceed at any time, and Certificates of Occupancy can be issued without any road improvements or other traffic mitigation.

Note: If mitigation measures are installed in connection with prior applications, these thresholds may be moot.

Site development plans and construction activities that do not exceed the thresholds noted below may proceed without further review other than NYSDOT work permits as may be required for any work in the State Right of Way. Additionally, development not exceeding such thresholds may be constructed and receive certificates of occupancy without any additional traffic mitigation.

What is the projected peak hour trip generation for pending or approved uses to date at the western access road? _____ entering trips; _____ exiting trips.

31 AM, 89 PM, 68 Sat. 83 AM, 57 PM, 67 Sat.

(For both The Fairways and Gateway Summit)

Traffic Signal Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate more than 60 entering and 90 peak hour exiting vehicles at the western access road from the Gateway Summit and The Fairways projects?
___ Yes X No (both thresholds must be met).

If so, has the Applicant applied to NYSDOT to construct a traffic light at the western site access intersection with US Route 6?

X Yes ___ No (Note, traffic signal has been installed)

Note: As per the Findings, Certificates of occupancy shall be issued for development projected to generate more than 60 peak hour entering and 90 peak hour exiting vehicles, at the western access road when either; i) NYS DOT approves a permit for the traffic light and it is installed; or ii) the NYS DOT finds that such traffic light is not required.

Any signal design and installation shall have the potential to accommodate a left turn lane if determined necessary and approved by NYSDOT.

Left Turn Lane Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of more than 70 additional peak hour entering trips, for a cumulative total of more than 130 entering trips at the western road access?

___ Yes X No (Note, left turn lane has been constructed)

If so, the Applicants shall apply to the NYS DOT for a left turn lane at that location. Certificates of Occupancy for the additional development projected to generate more than another 70 additional peak hour entering trips (130 cumulative peak hour trips) at the western access road shall be granted if: i) NYS DOT approves a permit for the left hand turn land and it is installed, or ii) the NYS DOT finds such improvement is not required.

5. Community Services. The mitigation requirements for community services relative to the water supply system require two separate distribution systems, "high" and "low".

The high-pressure water system will be designed and constructed to include a new pump station and the extension of the high pressure distribution system to service the existing homes on Kelly Ridge Road, Everett Drive and Bard Road above elevation 660 (approximately 3,500 linear feet of new water main pipe will be installed to service existing homes on those roads). This system will be on line prior to the first Certificate of Occupancy (CO), being issued for the Gateway Summit Senior Housing Project.

The system will include a new pump station and a new 135,000 gallon water storage tank (average daily project design flow) next to the existing tank at the end of Everett Drive. This new tank would be located south of the existing tank on the Carmel Water District #2 parcel. This tank will be online prior to the first Certificate of Occupancy being

issued for the Gateway Senior Housing Project or The Fairways Senior Housing Project. All new water mains, pump station, tank, and appurtenances internal to the site would be installed at no cost to the water district. It is noted that the other lots within the Gateway Summit may be developed, and Certificates of Occupancy issued, before the above described improvements to the water district are made relative to the senior housing developments in Gateway Summit, as well as The Fairways.

All project buildings will be protected by an automatic fire sprinkler system so as not to increase the Carmel Water District #2 fire protection needs. Each building system will be operational prior to the issuance of the C.O. for each building.

The project's deeds will include a restrictive covenant prohibiting the use of the municipal water system for irrigation purposes. A restrictive covenant establishing such restriction will be filed with the County at the time the subdivision plat is filed.

A Water Supply Easement is proposed to be granted to the District over an approximately 50-acre area located in the area to the north and east of the proposed YMCA on the Gateway Summit and The Fairways sites. This easement will allow the CWD #2 the right to develop, construct and maintain a groundwater supply if ever desired. This easement will also define a specific area where the Town could potentially locate a booster station. The Water Supply easement will run through the Gateway Summit senior housing lot and The Fairways, and will provide access through proposed Lot 6 (the "YMCA" lot). This easement will be as shown on the subdivision plat and an easement filed with the County at the time the subdivision plat is filed.

Does the submitted Site Plan address the construction phasing of the aforementioned mitigation measures?

Yes **No** (Construction phasing to comply with approved sequencing and scope of improvements)

If not, can the plan be adjusted to meet this requirement?

Yes **No**

6. Blasting. The GEIS concludes that development of some of the parcels at the Gateway Summit may require blasting. Any blasting which is required will be done in full conformance with the New York State Code. A blasting protocol is summarized in the GEIS, which includes pre-blasting inspections, test blasting, seismographic monitoring and daily logs of seismographic data, explosive use and field conditions.

Can the proposed site plan be implemented without the need for blasting?

Yes **No** (Based upon the grading plan for Gateway Summit, blasting is not anticipated)

If not, has a blasting plan been prepared?

Yes **No**

7. Recreation Facilities. The site plan analyzed for the GEIS provides recreation facilities that will be available for use by the future residents of the Gateway Summit project. These facilities include two tennis courts, an approximately 1,600 sf tennis clubhouse, two bocce courts, a courtyard with a gazebo, and access to the existing lake for recreation use. These specific recreation components may be altered without additional environmental review provided that they meet the recreational needs of the senior housing and do not substantially exceed the areas of disturbance previously anticipated and create new potentially significant adverse environmental impacts.

Does the submitted Site Plan include provision for recreation facilities in a manner consistent with the above?

Yes **No** (See attached Site Plan drawings)

If not, can the plan meet this requirement if minor revisions are made?

Yes **No**

Conclusion:

Does the site plan substantially conform to the thresholds outlined above as established by the GEIS and the Findings Statement for the Gateway Summit and The Fairways projects? *_(It is noted that the applicant may modify the site plan so that it substantially conforms to such thresholds.)*

Yes **No**

If yes, as proposed or modified, no further SEQRA review is required.

If no, the Planning Board will conduct additional SEQRA review, specifically limited to the potentially significant adverse environmental impacts arising from the site plan exceeding the above described specific thresholds.

Accepted by resolution of the Town of Carmel Planning Board:

Planning Board Chairman Date

**SEQRA Evaluation Form
for
The Fairways Site Plan**

Project Name: The Fairways - Lot 7 Residential Development **Date:** 1-28-2022
Applicant: Par Four Realty Company LLC
Parcel No(s). 55.-2-24.8-1, 55.-2-24.8-2 **Total Acreage:** 101.8
Proposed Use: Residential
Peak Hour Traffic Generation: **AM** 56 ; **PM** 78 ; **Saturday** 85

The conceptual development plan for The Fairways was approved following the preparation and review of a Generic Environmental Impact Statement (GEIS). That GEIS evaluated the potential impacts of a Senior Housing development, which may be constructed and operated on the site and established minimum thresholds and criteria for the future review of individual site plans when they are submitted to the Town of Carmel Planning Board for approval. The reviewed concept plan included 150 senior units including a mix of multi-family, town-home and single family cottage style units.

The GEIS established minimum thresholds and criteria for the future review of individual site plans when they are submitted to the Town of Carmel Planning Board for approval. The purpose of this form, which is an attachment to the Findings Statement adopted for this project by the Planning Board, is to provide a basis for determining if the submitted site plans fall within the thresholds that the Planning Board has determined would mitigate adverse environmental effects to the maximum extent practicable. Site plan elements such as location and design of buildings, and location and design of interior roads for both the commercial and residential uses may change from the concept development plans in the FGEIS without any additional environmental review, provided they substantially meet the specific development threshold established in the GEIS process and specifically set forth in the Findings Statement.

If the proposed plans and any supplemental documentation submitted demonstrate that potential effects of the proposed use, design, size, and location of future development projects site plan fall substantially within the established thresholds as determined through use of this form, the Planning Board may complete site plan review as provided in 6 NYCRR 617.10 without any additional environmental review under the SEQRA regulations.

If the established thresholds are not met, further SEQRA review will be required including the issuance of a determination of significance. It is noted that the applicant may amend a proposed site plan or submit a new plan. If such revised or new site plan submission does not substantially exceed the established thresholds, no additional environmental review will be required.

The established thresholds consider the following:

1. Landscape Plans. Future application for development of The Fairways must provide landscaping plans that comply with Town of Carmel regulations and the GEIS Findings as they apply to setbacks and landscaped buffers to adjacent properties.

During the site plan review process, individual site plans must include landscaping plans designed to enhance the visual qualities of the use. Further, stormwater treatment basins must be planted with aesthetic and functional wetland and transitional plantings to provide water quality treatment, wildlife habitat and visual enhancement, and generally comply with Section 63-27C(4) and (5) of the Town Code.

Does the submitted site plan meet these requirements? Yes
(See attached Site Plan drawings)
If not, can the plan meet this requirement if minor revisions are made? _____

2. **Site Disturbance.** The conceptual development plan for The Fairways analyzed in the GEIS indicates that approximately 25 acres of The Fairways site would be graded to accommodate proposed development, and of that, approximately 15 acres would be on slopes that exceed 15 percent. Significant grading activities should occur substantially within the areas of disturbance established in the concept development plans in the final GEIS. Further, the GEIS indicates that no significant grading or other land disturbance activities are expected in areas outside of those shown in the Overall Development Plan for The Fairways project and that Erosion and Sediment Control Plans must accompany site plan applications. In addition to complying with the Finding Statement, these plans must be prepared in conformance with New York State Department of Environmental Conservation (NYSDEC) and New York City Department of Environmental Protection (NYCDEP) design guidelines, with special consideration given to erosion control on any land to be disturbed on slopes greater than 15 percent.

Do the submitted Site Plans reflect overall site disturbance and disturbance of steep slopes for the construction of roads, buildings and other components of the proposed project that are generally within the areas of potential disturbance shown on the Grading Plans included in the GEIS and that do not significantly exceed the disturbance estimates in described in the GEIS?

If not, can the plan meet this requirement if minor revisions are made?
 X **Yes** **No** (See attached Site Plan drawings)

Has a detailed Erosion and Sediment Control Plan been submitted in conformance with NYSDEC and NYCDEP design guidelines?
 X **Yes** **No** (Previous approved Erosion and Sediment Control Plan to be updated as part of detailed Amended Site Plan).

If not, can the Erosion and Sediment Control Plan be revised to comply with these standards?
 Yes **No**

3. **Stormwater Management.** The individual site plan application is to include Management Plan that generally conforms to the Stormwater Pollution Prevention Plan (SWPPP) prepared for The Fairways generally and that complies with the New York State General Permit for Stormwater Discharge (GP-02-01) and the New York City Watershed Rules and Regulations. Adherence to these rules will be a condition of site plan approval.

Does the application include site plan specific SWPPP?
 X **Yes** **No** (Project currently has NYSDEC General Permit coverage. SWPPP to be updated as part of Amended Site plan).

4. **Traffic.** Note: In the event that the Modified Road Configuration Alternative is proposed, skip to 4A, Traffic Alternative, below.

A work permit application for any work in the state right-of-way of US Route 6 shall be submitted and approved by NYS DOT, as may be applicable. A concept plan for access improvements shall be provided to NYS DOT as well as to the Town of Carmel Planning Board for the Board's review for compliance with the findings statement and input to NYS DOT.

Mitigation measures were proposed in the GEIS for the eastern access road to mitigate impacts to traffic flow on US Route 6 due to the combined Gateway Summit and The Fairways projects. Thresholds have been established relative to the generation of site traffic and timing of mitigation measures as noted below. It is noted that construction of development gaining access from the westerly access road (secondary access road in this case) can proceed at any time, and certificates of occupancy issued, without any road improvements or other traffic mitigation.

Note: If mitigation measures are installed in connection with prior applications, these thresholds may be moot.

Site development plans and construction activities that do not exceed the thresholds noted below may proceed with out further review other than NYSDOT work permits as may be required for any work in the State Right of Way. Additionally, site development plans and construction activities not exceeding such thresholds may be constructed and receive certificates of occupancy without any additional traffic mitigation.

What is the projected peak hour trip generation for pending or approved uses to date at the eastern access road? N/A entering trips; N/A exiting trips
(See discussion of Traffic in Expanded EAF)

Left Turn Lane Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of more than 60 peak hour entering vehicles at the eastern access road?

N/A Yes No (See discussion of Traffic in Expanded EAF)

If so, has the Applicant applied to the NYS DOT for a left turn lane on US Route 6 into the eastern access road to mitigate potential traffic impacts?

N/A Yes No

Certificates of occupancy for the additional site development plans and construction activities projected to generate more than another 60 peak hour entering trips at the eastern access road shall be issued when either; i) NYS DOT approves a permit for the left lane and it is installed; or ii) the NYS DOT finds that such improvement is not required.

Traffic Signal Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of 100 or more peak hour exiting vehicles at the eastern access road from the Gateway Summit and The Fairways projects?

N/A Yes No (See discussion of traffic in Expanded EAF)

If so, has the Applicant applied to NYSDOT to construct a traffic light at the eastern site access intersection with US Route 6?

N/A Yes No

Certificates of occupancy shall be issued for additional site development plans and construction activities projected to generate more than 100 peak hour exiting vehicles, at

the eastern access road when either; i) NYS DOT approves a permit for the traffic light and it is installed; or ii) the NYS DOT finds that such traffic light is not required.

Any signal design and installation shall have the potential to accommodate a left turn lane if determined necessary and approved by NYSDOT.

4A. Modified Access Alternative. In the likely event that this access alternative is pursued the following thresholds shall apply.

A work permit application for any work in the state right-of-way of US Route 6 shall be submitted and approved by NYS DOT, as may be applicable. The developer of the site will need to provide a concept plan for access improvements to NYS DOT as well as to the Town of Carmel Planning Board for the Board's review for compliance with the findings statement and input to NYS DOT. The applicant will need to provide designs for the betterment project to widen the railtrail crossing structure of US Route 6 to permit a left turn lane into the site.

Mitigation measures were proposed in the GEIS for the western access road to mitigate impacts to traffic flow on US Route 6 due to the combined Gateway Summit and The Fairways projects. Thresholds have been established relative to the generation of site traffic and timing of mitigation measures as noted below for the Modified Access Alternative. It is noted that construction of development gaining access from the eastern access road (secondary access road in this case) can proceed at any time, and certificates of occupancy issued, without and good improvement, or other traffic mitigation.

Note: If mitigation measures are installed in connection with prior applications, these thresholds may be moot.

Site development plans and construction activities that do not exceed the thresholds noted below may proceed with out further review, other than NYSDOT work permits as may be required for any work in the State Right of Way. Additionally, development not exceeding such thresholds may be constructed and receive certificates of occupancy without any additional traffic mitigation.

What is the projected peak hour trip generation for pending or approved uses to date at the western site access drive? _____ entering trips; _____ exiting trips.
31 AM, 89 PM, 68 Sat. 83 AM, 57 PM, 67 Sat.

(See Traffic discussion in Expanded EAF)

Traffic Signal Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate more than 60 peak hour entering and 90 peak hour exiting vehicles at the western site access road from the Gateway Summit and The Fairways projects?

Yes No (both thresholds must be met).

If so, has the Applicant applied to NYSDOT to construct a traffic light at the western site access intersection with US Route 6?

Yes No (Traffic signal has been installed)

Note: As per the Findings, Certificates of occupancy shall be issued for development projected to generate more than 60 entering and 90 exiting at the western access road during peak hours when either; i) NYS DOT approves a permit for the traffic light and it is installed; or ii) the NYS DOT finds that such traffic light is not required.

Any signal design and installation shall have the potential to accommodate a left turn lane if determined necessary and approved by NYSDOT.

Left Turn Lane Threshold (See Traffic discussion in Expanded EAF)

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of more than 70 additional peak hour entering trips, for a cumulative total of more than 130 peak hour entering trips at the western access road?

Yes No (Left turn lane has been installed)

If so, the Applicants shall apply to the NYS DOT for a left turn lane at that location. Certificates of occupancy for the additional development projected to generate more than another 70 additional entering trips (130 cumulative trips) at the western access road shall be granted if: i) NYS DOT approves a permit for the left hand access road land and it is installed, or ii) the NYS DOT finds such improvement is not required.

5. Open Space Preservation. The conceptual development plan analyzed in the GEIS includes provisions for preserving approximately 60 acres of the Fairways site to be within conservation easement areas. These are intended to permanently protect and preserve wetlands, wetland buffers and open space. This preserved area will include trails for hiking and access to the lake and may include water well installation.

Does the submitted Site Plan include provisions for long term preservation of open space in a manner consistent with this mitigation measure?

Yes No (See attached Site Plan drawings)

8/18/06, 4:15 pm

6. Community Services. The mitigation requirements for community services relative to the water supply system require two separate distribution systems, "high" and "low".

The high-pressure water system will be designed and constructed to include a new pump station and the extension of the high pressure distribution system to service the existing homes on Kelly Ridge Road, Everett Drive and Bard Road above elevation 660 (approximately 3,500 linear feet of new water main pipe will be installed to service existing homes on those roads). This system will be on line prior to the first Certificate of Occupancy (C.O), being issued for the Project.

The system will include a new pump station and a new 135,000 gallon water storage tank (average daily project design flow) next to the existing tank at the end of Everett Drive. This new tank would be located south of the existing tank on the Carmel Water District #2 parcel. This tank will be online prior to the first C.O. being issued for the Gateway Senior Housing Project or The Fairways Senior Housing Project. All new water mains, pump station, tank, and appurtenances internal to the site would be installed at no cost to the water district.

All project buildings will be protected by an automatic fire sprinkler system so as not to increase the Carmel Water District #2 fire protection needs. Each building system will be operational prior to the issuance of the C.O. for each building.

The project's deeds will include a restrictive covenant prohibiting the use of the municipal water system for irrigation purposes. A restrictive covenant establishing such restriction will be filed with the County at the time the subdivision plat is filed.

A Water Supply Easement is proposed to be granted to the District over an approximately 50-acre area located in the area to the east of the proposed YMCA on the Gateway Summit and The Fairways sites. This easement will allow the CWD #2 the right to develop, construct and maintain a groundwater supply if ever desired. This easement will also define a specific area where the Town could potentially locate a booster station. The Water Supply easement will run through the Gateway Summit senior housing lot and The Fairways, and will provide access through lot 6 (the "YMCA" lot). This easement will be as shown on the subdivision plat and an easement filed with the County at the time the subdivision plat is filed.

**Does the submitted Site Plan address the construction phasing of the
aforementioned mitigation measures? Yes No**

(Construction phasing to comply with approved sequencing and scope of improvements)

If not, can the plan be adjusted to meet this requirement? _____

7. **Blasting.** The GEIS concludes that development of The Fairways may require blasting. Any blasting which is required will be done in full conformance with the New York State Code. A blasting protocol is summarized in the GEIS, which includes pre-blasting inspections, test blasting, seismographic monitoring and daily logs of seismographic data, explosive use and field conditions.

Can the proposed site plan be implemented without the need for blasting? X
Yes ___ **No** (Based upon the grading plan for The Fairways, blasting is not anticipated)

If not, has a blasting plan been prepared? ___ **Yes** ___ **No**

8. **Recreation Facilities.** The site plan analyzed for the GEIS provides recreation facilities that will be available for use by the future residents of the Fairways. . These facilities include a main clubhouse with two stories and a footprint that can be as large as 15,000 square feet, an indoor pool within the main clubhouse, a sport court, an approximately 1,500 square feet greenhouse, an outdoor pool and terrace, and access to the existing lake for recreation use. The specific recreation components may be altered without additional environmental review provided they meet the recreational needs of the senior housing and do not substantially exceed the areas of disturbance and create new significant adverse environmental impacts.

Does the submitted Site Plan include provision for recreation facilities in a manner consistent with the above? X **Yes** ___ **No** (See attached Site Plan drawings)

If not, can the plan meet this requirement if minor revisions are made?
___ **Yes** ___ **No**

Conclusion:

Does this site plan application substantially conform with the thresholds outlined above as established by the GEIS and the Findings Statement for the Gateway Summit and Gateway Summit and The Fairways projects? *(It is noted that the applicant may modify the site plan so that it is substantially conforms to the thresholds.)* X **Yes** ___ **No**

If yes, as proposed or modified, no further SEQRA review is required.

If no, the Planning Board will conduct additional SEQRA review, specifically limited to the potentially significant adverse environmental impacts arising from the site plan exceeding the above described specific thresholds.

Accepted by resolution of the Town of Carmel Planning Board:

Planning Board Chairman Date

**LEAD AGENCY
SEQRA FINDINGS STATEMENT**

Gateway Summit and The Fairways
Proposed Mixed-Use and Senior Housing Developments

ROUTE 6
TOWN OF CARMEL
PUTNAM COUNTY, NEW YORK

Lead Agency:
TOWN OF CARMEL PLANNING BOARD
Carmel Town Hall
60 McAlpin Avenue
Mahopac, New York 10541
Contact: Mr. Harold Gary, Chairman
(845) 628-1500

ADOPTED

August 23, 2006

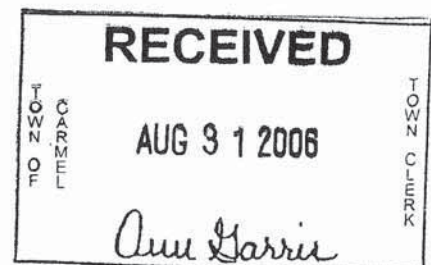


TABLE OF CONTENTS

	Page
1.0 INTRODUCTION	3
2.0 BACKGROUND	9
3.0 DESCRIPTION OF PROPOSED ACTION	11
3.1 Site Access	11
3.2 Site Layout	12
3.3 Construction, Operation, and Maintenance	14
4.0 APPROVALS	16
5.0 STATEMENT OF FACTS AND BASIS FOR CONCLUSIONS	17
5.1 Geology, Soils and Topography	17
5.2 Wetlands,	18
5.3 Water Resources	19
5.4 Terrestrial and Aquatic Ecology	23
5.5 Land Use and Zoning	23
5.6 Traffic and Transportation	24
5.7 Tax Base and Community Services	29
5.8 Cultural Resources	35
5.9 Alternatives Reviewed	36
No Action Alternative	36
Reduced Environmental Impact Alternative for the Gateway Summit Site	36
Alternative Road Configuration for Gateway Summit Sit	36
Through Road Alternative	37
Maximum Build-out Plan for Gateway Summit Site	37
Conventional Subdivision on The Fairways Site	38
Reduced Environmental Impact Alternative for The Fairways Site	38
Modified Road Configuration Alternative for Gateway Summit	39
6.0 CERTIFICATION OF FINDINGS TO APPROVE	40

**GATEWAY SUMMIT AND THE FAIRWAYS
SEQRA FINDINGS STATEMENT**

Lead Agency: Town of Carmel Planning Board

Address: Carmel Town Hall
60 Mc Alpin Avenue
Mahopac, New York 10541

Title of Action: PB-06 The revised applications of Hudson Valley Realty Corporation and Mid Hudson Realty Corp. (the Applicants) to the Town of Carmel Planning Board for Subdivision Approval, Special Use Permits and Site Plan Approvals, and to the Town of Carmel Environmental Conservation Board for a Wetland Permit for the Gateway Summit mixed-use development and The Fairways senior housing development. The Applicants submitted separate applications to the Planning Board at different times for the Gateway Summit and The Fairways projects, with Hudson Valley Realty Corporation as applicant for Gateway Summit and Mid Hudson Realty Corp. the applicant for The Fairways (alternatively referred to as the "Applicant" and the "Applicant's" herein). Moreover, both projects are to be divided into multiple separate site plan applications by the Applicants as described below. The Planning Board, as Lead Agency, elected to review these projects together to allow it to better evaluate cumulative impacts.

1.0 INTRODUCTION

This document is a Findings Statement prepared pursuant to Section 8-0101 et seq. of the Environmental Conservation Law (SEQRA) and the regulations promulgated by the New York State Department of Environmental Conservation (NYSDEC), which appear at 6 N.Y.C.R.R. Part 617 (SEQRA). This Findings Statement pertains to the proposed Gateway Summit and The Fairways projects described below. The Findings Statement draws upon the facts and conclusions of the Draft Generic Environmental Impact Statement (the "DGEIS") accepted by the Town of Carmel Planning Board (the Planning Board) on January 5, 2005, and the Final Generic Environmental Impact Statement (the "FGEIS") accepted by the Planning Board on August 9, 2006, along with related oral and written comments and correspondence.

This Findings Statement attests to the fact that the Town of Carmel Planning Board, as Lead Agency, has complied with all of the applicable procedural requirements of Part 617 in reviewing this mater, including but not limited to:

- Coordinated designation of the Planning Board as Lead Agency;
- Issuance of a Positive Declaration by the Planning Board;
- Public Scoping Session and adoption of Scoping Document for DGEIS;
- Preparation of a DGEIS by the Project Sponsor;
- Acceptance of the DGEIS by the Planning Board;

Filing of the DGEIS and a Notice of Completion;

Establishment of a Comment Period and the holding of a Public Hearing on the DGEIS by the Planning Board;

Preparation of a FGEIS;

Acceptance of the FGEIS by the Planning Board;

Filing of the FGEIS and a Notice of Completion by the Planning Board;

Establishment of a Comment Period on the FGEIS; and

Preparation and adoption of this Findings Statement by the Planning Board.

This Findings Statement also attests to the fact that the Planning Board has given due consideration to the GEIS prepared in conjunction with this action. Further, this Findings Statement contains the facts and conclusions in the GEIS relied upon by the Planning Board to support its future decisions and indicates the social, economic and other factors and standards which will form the basis for its decisions.

Generic Environmental Impact Statement

SEQRA allows a GEIS to "be broader and more general" than a regular EIS and requires that a GEIS and its findings set forth specific conditions or criteria and thresholds under which future actions will be undertaken or approved. Potential impacts have been addressed at this time by incorporating appropriate mitigation measures in the form of criteria or thresholds which have been established as guidelines for future development. The GEIS process and the related conceptual site development plans establish a general development plan for each individual project, establishing development guidelines such as limits of disturbance and impervious surface limits (see limits of disturbance illustrated in Gateway Summit Erosion Control Plan, drawing SP-4, and The Fairways Erosion Control Plan, drawing SP-4, in the FGEIS). Subsequent specific site plan applications may, and most likely will change from the concept development plans included in this FGEIS. Such site plans will require no further environmental review provided they substantially comply with the development guidelines developed in the GEIS process and this Findings Statement. Accordingly, such elements such as building location and design, and location of the interior roads for the commercial and residential uses may change from the concept development plans in the FGEIS to the specific individual site plans without additional environmental review, provided they substantially meet the development thresholds established in the GEIS process and specifically set forth in this Findings Statement.

Appended to this Finding Statement is a form for evaluation of future individual site plan applications on these properties. The Planning Board will use the "SEQRA Evaluation Form" at the time of future site plan review in order to determine whether such future site plan applications stay substantially within, or alternately, measurably exceed these thresholds and whether further SEQRA review is necessary. If a site plan application proposed after the issuance of this Findings Statement substantially complies with the thresholds set forth herein, as determined through the SEQRA Evaluation Form, no additional environmental review under SEQRA is required, including but not limited to lead agency designations and determinations of significance (negative declaration). During subsequent review of this "SEQRA Evaluation Form," the Planning Board may determine that a threshold has been exceeded. If this occurs, the Planning

Board may require supplemental environmental review under SEQRA or, alternatively, the Applicants may amend the application to conform to the established thresholds. Similarly, if the Planning Board believes that the proposed site plan differs substantially from the conceptual site plan(s) provided with the GEIS in terms of disturbance to environmentally-sensitive areas shown as undisturbed on the conceptual plans, the Planning Board may require supplemental review under SEQRA that is specifically targeted to the potential significant adverse environmental impacts caused by the site plan exceeding the specific thresholds. The Planning Board shall complete the SEQRA Evaluation Form, and make the above described determination; at the beginning of the site plan review process as soon as possible after it receives the site plan application.

SEQRA Thresholds

Descriptions of thresholds are provided below. These thresholds have evolved as a result of discussions with, and evaluation by, the Planning Board and other Involved and Interested Agencies and organizations.

a. Screening and Buffers

All future development plans for Gateway Summit and The Fairways parcels shall provide a densely planted vegetated perimeter buffer adjacent to existing residential homes. The amount, type and size of the buffer plantings shall be as determined necessary by the Planning Board at the time of site plan review to sufficiently screen the proposed development from adjacent existing residential homes. No proposed parking lots or other paved surfaces shall be located within this buffer. Areas may be identified where additional screening plantings, including evergreen trees and shrubs, may be required.

b. Steep Slopes

The conceptual development plans for the two projects show approximately 40 acres of grading and other land disturbance on slopes of 15 percent or greater. Conceptual development plans that show significantly greater grading of such slopes may be subject to further SEQRA review or special erosion control practices.

c. Erosion and Sedimentation Control

All future site plan submissions will include detailed erosion and sediment control plans, that are generally based upon the project specific Stormwater Pollution Prevention Plans and are prepared in conformance with NYSDEC, New York City Department of Environmental Protection (NYCDEP) and Town of Carmel design standards, with special consideration given to erosion control on any land to be disturbed with slopes greater than 15 percent.

d. Post Construction Stormwater Management

All individual site plan applications will include Stormwater Management Plans that are generally based upon the project specific Stormwater Pollution Prevention Plans and conform with the New York State General Permit for Stormwater Discharge (GP-02-01) and the New York City Watershed Rules and Regulations. Adherence to these rules shall be a condition of site plan approval.

e. Wetlands

The analysis of potential wetlands impacts in the FGEIS identified the extent to which federal, State, and municipally regulated wetlands and wetland buffers, would be disturbed by development of the site. All individual site plans will be required to demonstrate that no significant increase in wetland and wetland buffer disturbance will result from specific uses proposed on individual parcels.

f. Future Landscaping and Lighting of Individual Parcels

During the site plan review process, individual site plans will include landscaping and lighting plans designed to enhance the visual qualities of the proposed uses with additional screening where necessary adjacent to residentially-zoned properties. Stormwater treatment basins will be planted with aesthetic and functional wetland and transitional plantings to provide additional water quality treatment, wildlife habitat and visual enhancement. Landscaping and lighting shall comply with Sections 63-27C(4), C(5) and C(6) of the Town of Carmel Zoning Ordinance, at a minimum. Future application for development of Gateway Summit and The Fairways must provide landscaping plans that comply with Town of Carmel regulations and the GEIS Findings as apply to setbacks and landscaped buffers to adjacent properties.

g. Traffic

The traffic analysis in the DGEIS and FGEIS projected the number of entering and exiting vehicular trips for uses under the proposed projects and Modified Road Configuration Alternative for Gateway Summit. As indicated in Section 5.6, (Traffic and Transportation) of this Findings Statement, traffic mitigation may be required only after the projected trip generation for additional proposed uses exceeds specific thresholds set forth under the subsection Traffic and Transportation Mitigation Proposed. It is noted that only NYSDOT has the authority to allow improvements on Route 6 since it is a State Road. If NYSDOT finds that traffic mitigation proposed after certain levels of additional traffic are generated is not required, the applicable development components may be developed and issued Certificates of Occupancy without the implementation of such traffic mitigation.

h. Open Space

Future development plans will ensure that approximately 60 acres of open space located on the Fairways site is preserved.

i. Development

The parcels will require a building setback from the adjacent existing residential neighborhoods to the south, east and west, and a screening buffer within the building setbacks and generally along the property lines. The following includes the list of conditions for development:

- All building setbacks shall conform to Town of Carmel Zoning Regulations;

- There shall be a buffer zone of green space as described in the GEIS. Such space shall be landscaped, or consist of natural vegetation and shall contain no impervious surfaces;
- The Applicants shall be permitted those principal uses set forth in the applicable zoning
- There shall be no ingress or egress to any use through residential neighborhood or roadway, except for emergency access as described in the FGEIS.

The conceptual development plans represent reasonable maximum development potential for the proposed parcels considering the limitations and requirements imposed by the Town Zoning Ordinance and other development regulations, environmental constraints, the requirements of the NYCDEP, constraints imposed by the site itself, and other considerations. It is acknowledged that the specific site plans for each lot may, and most likely will, change from the conceptual development plans. It is further acknowledged that that building location and design, and location of the interior roads and other improvements for the commercial and residential uses can change from the conceptual development plans in the FGEIS to more specific individual site plans without additional environmental review provided they substantially meet the development thresholds established in the GEIS process and specifically set forth in this Findings Statement.

It is noted that this Findings Statement contains the facts and conclusions in the DGEIS and FGEIS relied upon by the Planning Board to support its decision and indicates the social, economic and other considerations that form the basis for its decision, as required under 6 N.Y.C.R.R. Part 617.11 (d). This Findings Statement also reflects the Planning Board's effort, as Lead Agency, to involve Interested and Involved Agencies, as well as Town staff and consultants, throughout the SEQRA review process. The Planning Board actively solicited and encouraged the Applicants to seek input and comment from Interested and Involved Agencies, and Town staff and consultants.

Much of the interactions with, and input from, these parties came after the Planning Board accepted and filed the DGEIS. The Planning Board encouraged this interaction to address comments raised during the public hearing and subsequent written comment period on the DGEIS in order to help further mitigate the potential impacts of the proposed projects in such areas as stormwater, wetlands, water quality, erosion control, water and sewer facilities, traffic and impact to neighborhood character.

The Applicants fully considered the comments from the public and Interested and Involved Agencies, and met and consulted numerous times with representatives of NYSDEC, NYCDEP, Putnam County Department of Health, the Town Engineer, the Town Consulting Engineer, and the Town Planner to refine the proposed projects to further mitigate project impacts. Additionally, the Applicants and its engineers held a series of meetings over an approximately four month period from March 2005 to late June 2005 with the Riverkeeper and the Watershed Inspector General from the New York State Attorney General's Office. The Applicants and their consulting engineers also met separately with Mr. Marc Yaggi of the Riverkeeper in the Riverkeeper's offices in White Plains, and Mr. James Tierney, the Watershed Inspector General, in the Attorney General's

office in Albany. The Applicants subsequently met separately with the Watershed Inspector General's engineer in the offices of the Applicants' engineer to further refine the Stormwater Pollution Prevention Plans, and erosion controls, and develop other ways to further protect water quality and reduce steep slope disturbance. The Applicants also spoke multiple times to Mr. James Bacon, the attorney for the Croton Watershed Clean Water Coalition, Inc., to offer to meet with Coalition representatives to discuss their concerns. The Applicants' engineers also consulted with the Town Engineer and the Town's Consulting Engineers through the winter and spring of 2006, up to the acceptance of the FGEIS, to adequately mitigate impacts to the public water and sewer systems.

Based on these meetings and consultations, the Applicants significantly decreased the density of the proposed projects and further refined elements of the development related plans prepared for both the Gateway Summit and The Fairways projects, including but not limited to the Stormwater Pollution Prevention Plans (SWPPPs), and Wastewater Engineering Reports and Water Engineering Reports. The project revisions resulting from these meetings and related public comments included, among other things, significant reductions in the projects' overall square footage, number of buildings, impervious area, and area of disturbance, resulting in a substantial reduction in the overall scope of the proposed projects. The specific revisions to both projects: 1) substantially modified and decreased the roadway network for The Fairways, including eliminating the interior road linking the project to Fair Street, thereby eliminating more than 2,000 linear feet of impervious roadway; 2) replaced a 45,000-square foot, two-story auto dealership with a 6,300-square foot, one-story restaurant; 3) eliminated 41 units of senior housing units from the Gateway Summit project; and; 4) reduced the amount of proposed office space by 2,000 square feet. The specific revisions to both projects are set forth in Table 1-1 of the FGEIS, and are further described below.

The project revisions were proposed to ameliorate the stated concerns of the Planning Board and its staff, the Interested and Involved Agencies, and the public. The Applicants appeared before the Planning Board to review the plan revisions stemming from comments by the public and Involved and Interested Agencies, and such meetings and discussions. The Planning Board considered all the refinements to the proposed projects and related underlying analysis and development plans, as well as all the written comments related to such refinements, along with all the previous oral and written comments and correspondence, in developing this Findings Statement. It has determined that the revisions reduce physical site impacts to the maximum extent practicable while still allowing the proposed Gateway Summit and The Fairways projects to be developed in an economically feasible manner.

Reduced stormwater impacts. Throughout the SEQRA review process, the Applicants refined the project specific SWPPPs based on comments from NYSDEC, the New York State Watershed Inspector General, NYCDEP, The Riverkeeper, the Croton Watershed Clean Water Coalition, the Town Engineer, the Town's Consulting Engineer, and the Town Planner. These revisions improve stormwater controls during and following construction, and water quality protection both during and after construction.

- ☒ The proposed crossing of a stream with the access road to the Gateway Summit and The Fairways sites has also been revised to further mitigate potential adverse impacts on wetlands and surface waters. Despite this, the Applicants have been notified by NYCDEP that construction of the impervious road within the 100-foot limiting distance to a watercourse requires a variance from NYCDEP. Accordingly, the Applicants currently plan to submit an application for the variance to NYCDEP. That application would seek to demonstrate to NYCDEP that the need for the variance is not self imposed, that the proposed mitigation measures are at least as protective of the water supply as the provision of New York City's watershed regulations from which the variance is sought, and that the variance is the minimum necessary to afford relief from the regulations.

- ☒ The Applicants have further developed the alternative first presented in the DGEIS that includes a road layout avoiding the stream crossing and the construction of impervious surface within the NYCDEP imposed limiting distance of 100 feet to the watercourse. This alternative, described in the FGEIS as the Modified Road Configuration Alternative for Gateway Summit, would provide access for the Gateway Summit and The Fairways sites from Route 6 some 1,000 feet to the west of the proposed access. The alternative access would eliminate 10,000 square feet of development and reduce the amount of roadway by approximately 500 linear feet, thereby further decreasing the amount of impervious surface created by the projects. The alternative access also would reduce the area of Town wetland buffer encroachment by approximately 0.56 acres. Two optional layouts for this alternative have been prepared that replace one of the two proposed restaurants with either a pharmacy or an office building.

The above-described project revisions further reduce project impacts beyond that previously discussed with the Planning Board and other interested parties.

2.0 BACKGROUND

The proposed Gateway Summit and The Fairways projects are located in the Town of Carmel, which is in the southeast corner of Putnam County, adjacent to the Town of Putnam Valley. The existing Fairways project site consists of approximately ±95 acres of land in a Residential zoning district, while the existing Gateway Summit site consists of ± 88 acres in a Commerce/Business Park district. Both sites are located immediately north of Route 6.

The Gateway Summit and The Fairways project sites are designated on the Town of Carmel Tax Maps as Section 55, Block 2, Lots 23.1, 24 & 25; Section 55.11, Block 1, Lot 32; Section 44, Block 2, Lot 1.1 and 1.2.

The Applicants, Hudson Valley Realty Corporation and Mid Hudson Realty Corp. prepared the DGEIS in response to a Positive Declaration issued by the Town of Carmel Planning Board, and a scoping document adopted by the Planning Board on May 14, 2003, after a public scoping session. Following intensive review, and comment, by the Lead Agency, Involved and Interested Agencies, the public, and environmental advocacy organizations, the October 15, 2004 DGEIS (revised January 3, 2005) was accepted as complete on January 5, 2005. A Public Hearing on the DGEIS, which fully evaluated the potential environmental impacts anticipated from the proposed action, was held on February 2, 2005.

Between the time the DGEIS was accepted on January 5, 2005, and the January 11, 2006 release of the Draft Final Generic Environmental Impact Statement (FGEIS), the proposed Gateway Summit and The Fairways projects were significantly revised. Modifications to the proposed action were made, in large part, in response to testimony at the February 2, 2005 public hearing on the DGEIS, and comments from the Lead Agency, the New York State Watershed Inspector General, the NYCDEP, the public, and various environmental organizations including Riverkeeper, Croton Watershed Clean Water Coalition and the Putnam County Coalition to Preserve Open Space, as further described in the preceding background section.

Accordingly, the post-DGEIS modifications to the development plans for both projects, which include two project specific SWPPPs, address specific reviewer comments, and provide further mitigation of potential adverse environmental impacts. Modifications to the projects reflected in the FGEIS refined the two SWPPPs, and significantly reduced the area of overall site disturbance by reducing the intensity of the proposed development, decreasing impervious surfaces, decreasing disturbance of steep slopes, reducing roadway and reducing the overall site grading.

Gateway Summit

The revised Gateway Summit plan consists of the following components: a 150 room hotel and 12,000-square foot banquet/conference center, 13,900 square feet of commercial space consisting of two restaurants, 16,000 square feet of office space of which 400 square feet is retail, a 68,000-square foot YMCA, and 150 senior housing units on the approximately 81 acre reconfigured site. The previous plan for Gateway Summit, as evaluated in the Gateway/Fairways DGEIS, proposed 191 senior housing units, 52,000 square feet of commercial development facing Route 6 including a 45,000 square foot, two story automobile dealership, the currently proposed hotel and 12,000-square foot banquet hall/conference center, 18,000 square feet of office space, and the YMCA.

Fairways

The amended Fairways plan continues to propose 150 senior housing units, although the previously proposed interior road that would have linked the interior of the site to Fair Street was eliminated from the proposal, thereby eliminating more than 2,000 linear feet of impervious roadway, reducing post-construction increases in runoff, and significantly reducing site disturbance. This modification also eliminated potential impacts on wetlands located between the proposed residential buildings and Fair Street.

The proposed Fairways plan also includes the dedication of a conservation easement to permanently preserve approximately 60 acres of regulated wetlands and open space, consisting of undisturbed woodland and fields, for conservation and passive recreation purposes that will be accessible through a trail way system. The open space will be owned and maintained by a Homeowners Association. The open space allows for the preservation of wetlands on the property. The walking trail system will include access points at the YMCA, the community recreation center and the end of The Fairways internal road. The project site also would be connected to the County bike path system scheduled to be constructed past the project site in 2007.

3.0 DESCRIPTION OF PROPOSED ACTION

3.1 Site Access

The southern section of the overall project site has 1,250 linear feet of road frontage on Route 6, approximately 3,000 feet west of John Simpson Road. Vehicular access to the Gateway Summit site currently is available from the parking area at the former Town of Carmel Highway Department.

The proposed action includes the creation of two access roads from Route 6. The primary access road will provide access to all residential units for both the Gateway Summit and The Fairways sites, along with the associated recreational facilities for each project site, the YMCA, the hotel and conference center and 6,000 square feet of office space. This primary access will be a boulevard type entrance with a landscaped median in the center and will terminate in a cul-de-sac at the boundaries of the Gateway Summit and The Fairways sites. The interior roads for the individual site plans are approximately 7,300 linear feet in length, generally will have a total width of 24 feet, and be designed without curbs in some places to prevent stormwater from concentrating and causing erosion. The primary access road is approximately 3,220 linear feet and will be constructed to Town standards and specifications and dedicated to the Town of Carmel.

Access to the remaining 10,000 square feet of office space and the two restaurants will be taken directly from Route 6 by a second access road that will also be constructed in a boulevard style. This access road right-of-way and boulevard median will be landscaped.

A private roadway will extend north from the Town road ending in a cul-de-sac on Lot 7B to provide access to The Fairways. The Internal roads for The Fairways will be maintained by a Homeowners Association.

The proposed access road serving the Gateway Summit site has been carefully designed to limit disturbance of steep slopes. The access road crosses a small, southerly flowing watercourse. The crossing will be accomplished with a large arch culvert that will allow the continued, unimpeded flow of the stream from north to south, and the movement of wildlife in the steam corridor. A proposed pedestrian bridge would also span this watercourse, which will require minor temporary disturbance within the stream buffer to install foundations to support the bridge.

The road crossing involves the discharge of less than twenty-five cubic yards of fill into Waters of the United States, as defined by the United States Army Corps of Engineers (Corps). Accordingly, this activity does not require authorization from the Corps. A permit from the Town of Carmel Environmental Conservation Board will be secured prior to constructing the regulated stream crossing.

The NYCDEP commented that it believes that the Applicants will need to obtain a variance under Section 18-39 (a) (1) of the Watershed Rules and Regulations in order to pave the roadway associated with the watercourse crossing. It is noted that the FGEIS Appendix includes a letter from the NYSDOT dated June 20, 2006 indicating that it prefers that the Primary Easterly Access Road serve as the main access, as proposed, since it provides the most separation from the existing traffic signal at Route 6 and Old Route 6. The NYSDOT did, however, indicate that both the easterly and westerly driveway locations are adequate from an access standpoint. The Applicant may apply for a variance from the NYC DEP restriction.

Additionally, based on NYCDEP's comments, the Applicants have evaluated an alternate road layout that restricts the primary easterly access road under the proposed plan (The Primary Easterly Access Road) as an access drive for the proposed hotel, thus eliminating the watercourse crossing. Under this alternative, the secondary westerly access road is extended and becomes the primary access and Town road to all uses except the hotel. The extension of the Secondary Westerly Access Road requires that the 10,000-square foot office building be removed from the proposed plan. The proposed new traffic light would be relocated from the Primary Easterly Access Road to the Secondary Westerly Access Road, when required. The Applicants would install this light once a certain level of construction is completed, and a specific level of traffic generation is met as further explained in the traffic section included herein.

As explained in that traffic section herein, the traffic light and related traffic mitigations measures do not need to be installed before construction commences. This alternative is set forth in detail in the FGEIS, specifically in Chapter 4.0, Alternatives (referred to herein and in the FGEIS and related documents as the "Modified Road Configuration Alternative for Gateway Summit" and the "Modified Road Configuration Alternative"). This alternative would decrease the amount of proposed development, roadway, construction, impervious surface and site disturbance, including construction on steep slopes as further described later herein.

In addition to the two proposed entrances from Route 6, the proposed action includes a separate emergency - only access road from Kelly Ridge Road to The Fairways. The emergency access connection from The Fairways site to Kelly Ridge Road will be a 12-foot wide gravel drive, gated at both ends to prevent unauthorized use by residents or visitors. The Applicants also offered to provide the Town an emergency only access easement from the interior roads located in the northwest corner of the Gateway Summit residential development to the adjacent Town owned property containing the existing water tank. This emergency only access easement was not required by the Planning Board, but was offered by the Applicant to provide fire trucks and other emergency vehicles a third way to access the projects' road networks if the Town so desires. The Applicant would gravel this access drive and gate it at the property line to limit through traffic to emergency vehicles if the Town wishes to establish this third emergency only access drive.

3.2 Site Layout

The proposed Gateway Summit development comprises a seven-lot subdivision. Separate site plans will be submitted for each lot after adoption of this Findings Statement. The conceptual site development plans evaluated in the GEIS includes a mix of commercial, semi-public, and permitted residential uses. Lot 1, located on the corner of the main access road and Route 6, contains a 150-room hotel and the 12,000-square foot conference and banquet facility. Lots 2, 3, and 4 gain access from Route 6 via the secondary access road. Lots 2, 3, and 4 contain two restaurants, constituting approximately 14,000 square feet of commercial development, and a 10,000-square foot office building. Lot 5, located in the interior of the site along the main internal road, contains an approximately 6,000-square foot building occupied by 5,600 square feet of office space and 400 square feet of convenience retail. The YMCA facility will be located on Lot 6, while the 150 senior dwelling units will be located on Lot 7A. The proposed Fairways development consists of a total of 150 units. Approximately 60 acres of The Fairways site will remain undeveloped and permanently preserved as open space, by conservation easement. It is recognized that the individual site plans for each lot can, and likely will, change the layout, design, unit mix, and interior road layout somewhat from the conceptual site development plans.

Provided these individual site plans substantially conform to the conceptual site development plans, no additional environmental review will be necessary.

Utilities serving the projects, including water, sewer, electric, telephone and cable will be installed within the right-of-way of the proposed internal roadway system. The property is located within the Carmel Water District #2 and Carmel Sewer District #2. Water and sewage for the projects will be serviced by pipes proposed along the internal roadway system and connected to the existing systems.

Appropriate traffic signage and street name signs will be installed at the Route 6 entrance/exit and within the development. Street lighting will be provided throughout the Gateway Summit and The Fairways developments.

Revisions to the development plans for the two projects have resulted in significant reductions of proposed impervious surfaces. Proposed impervious areas have been reduced from approximately 25 acres to approximately 22 acres on the Gateway Summit site and from approximately 13 to approximately 10 acres on The Fairways parcel. Overall site disturbance has also been dramatically reduced from approximately 74 acres to approximately 56 acres on the Gateway Summit site and from approximately 42 acres to approximately 30 acres on The Fairways site with the revised plans.

The revised project development plans were developed concurrently with SWPPPs on both the Gateway and Fairways projects in order to integrate the impact mitigation components of the SWPPPs with site features and all components of the proposed projects, and to ensure the long term effectiveness of the stormwater management practices. The SWPPPs, which include detailed Erosion and Sediment Control Plans and Stormwater Management Plans, were significantly refined since the issuance, and acceptance, of the DGEIS. These plan revisions were the direct result of input from the Town, outside agencies, and interested parties.

Amendments to the development plans have also resulted in relocation of on-site recreation facilities. The proposed recreation facilities for Gateway Summit senior housing development will include two tennis courts, an approximately 1,600-square foot tennis clubhouse, two bocce courts and a courtyard with a gazebo, or substantially similar elements providing equal or better recreational value. The Fairways will include a main clubhouse with two stories, each approximately 10,000 square feet (this clubhouse footprint may be expanded to 15,000 square feet), an indoor pool within the main clubhouse, a sport court, an approximately 1,500-square foot greenhouse and an outdoor pool and terrace, or substantially similar elements providing equal or better recreation value. Additionally, both the Gateway Summit and The Fairways projects will have trail ways leading to the lake located within The Fairways and Gateway Summit. Residents of both projects will be able to use this lake for multiple recreation purposes including passive and active uses such as fishing and boating including canoeing and kayaking. The construction phasing for the project has also been revised to specify the construction of certain recreation facilities during the initial phase of development.

It is recognized that the square footage numbers set forth above may differ somewhat in the site plan applications to be filed after the adoption of this Findings Statement. Such revisions are permitted without additional environmental review provided they do not substantially exceed the thresholds and do not create substantial new disturbance in areas shown as undisturbed.

As described above, the Applicants evaluated a Modified Road Configuration Alternative that eliminates the watercourse crossing. The Easterly Access Road would serve only the hotel. The Westerly Access Road would connect to the upper portions of the site west of the subject watercourse. Under the Modified Road Configuration Alternative, a traffic light is no longer warranted for the intersection of Route 6 and the Easterly Access Road, servicing only the hotel. A left turn lane from Route 6 into the hotel also is no longer warranted under this alternative. The Applicants would install a traffic light at the Westerly Access Road as warranted after certain uses are constructed and a specific level of traffic generation is met.

An existing bridge over the old railroad bed currently makes it impossible to install a left hand turn lane into the Secondary Westerly Access Road. The NYSDOT, however, plans to replace this bridge, independent of the Gateway Summit and The Fairways projects, in connection with the County Bike Path Project. Under this project a new crossing would be installed in place of the existing bridge to allow the bike path to continue along the old railroad bed and under Route 6. The Applicants have agreed to work cooperatively with NYSDOT and the County to design and complete this improvement, including the addition of a left hand turn lane and sidewalk. The NYS DOT would complete this with the County and the Applicants under its reverse betterment program, with the Applicants contributing toward the cost to complete such improvements. The Applicants' costs will cover design, new left turn lane, new sidewalk, and any other incremental costs related to its projects.

3.3 Constructions, Operation, and Maintenance

Construction

To mitigate potential impacts associated with erosion and sedimentation, construction of the two projects has been carefully phased, and sequenced, in the amended Erosion and Sediment Control Plan components of the two refined SWPPPs. These SWPPPs, and the construction sequences included in them, will be subject to further review, and possible further refinements during the State and New York City permit application review process.

The overall construction sequence for Gateway Summit and The Fairways is fully detailed in the SWPPPs found as Appendix D and E of the FEIS.

The refined, site specific, Erosion and Sediment Control Plans developed for the two projects provide temporary and permanent erosion control practices that have been prepared in accordance with current New York State and City guidance documents. Erosion control specifications in the phasing plans include:

- All sediment and erosion control measures will be installed in accordance with applicable standards and prior to any clearing and grubbing operations;
- All topsoil is to be stripped and stockpiled in appropriate locations for future use on the site. All stockpiled soil areas are to be appropriately stabilized and protected;
- All finished slopes greater than 3:1 are to be stabilized immediately upon completion of grading activities;
- Modifications to phasing may be made during construction only with approval of the permitting authorities; and,

- Clean water will be diverted around all areas disturbed by construction activities.

The Applicants will hire a qualified Professional (CPESC, CPSWQ, P.E., or RLA) to oversee implementation of the two SWPPPs during the entire construction period. The Professional will maintain weekly progress reports at the site, which will be available for review by State, City and Town of Carmel officials. The Town's construction inspection costs also will be funded by the Applicants through inspection fees required by Town code.

The project's construction manager, in consultation with the independent Professional retained by the Applicants, will be responsible for the vigorous maintenance and operation of all erosion and sediment control and stormwater management facilities during construction. The Applicants will be responsible for monitoring construction progress and the construction contractor's compliance with the approved plans and specifications, and permit conditions.

The internal roads and infrastructure will be maintained by the Applicants throughout the construction period as necessary to provide safe and adequate site access and to ensure properly functioning stormwater management facilities. Any Town, County or State road surfaces impacted during construction will be cleaned at the end of each workweek, at a minimum, to remove tracked soil from truck movements. Road surfaces will be cleared on a more frequent basis, as needed or directed by the Town. Any damage attributed to construction traffic on local roads from this site will be repaired by the Applicants. Following construction, the Town Roads on the Gateway Summit site and utilities, such as water and sewer mains, will be dedicated to the Town.

Operation and Maintenance

Once construction of the projects is completed, and the sites have been stabilized, normal operations of the facilities will begin. Normal operations include maintenance of the stormwater management components of the two SWPPPs to ensure that they continue to operate as designed.

Each of the proposed facilities and the infrastructure associated with the two developments will be subject to a comprehensive inspection and maintenance program. Elements of the proposal that will be subject to such inspection and maintenance activities include the stormwater management component of the two SWPPP, all roads, and water and wastewater infrastructure. Responsibility for maintenance of permanent stormwater facilities will be transferred to the Town, or to a homeowners association, depending upon the ultimate disposition of the facilities. The stormwater ponds will be maintained by the entity that owns the property draining into such basins, i.e., the basins on the hotel site will be maintained by the hotel owners, and the basins on Lots 3, 4, and 5 will be maintained by the owners of Lots 3, 4, and 5. The basins on Gateway Summit and The Fairways will be maintained by the Homeowners Associations for each, and the basin on the YMCA site, which also collects stormwater from the Town road, will be maintained by the Town. The individual site applicants will be responsible for the maintenance of all landscape plantings and other permanent erosion control measures on the site.

4.0 APPROVALS

The following regulatory approvals are required for the Gateway Summit and The Fairways Projects.

Town of Carmel:

- Planning Board – Subdivision Approval, Special Use Permit Approval and Site Plan Approval
- Architectural Review Board – Architectural Review
- Environmental Conservation Board - Town Wetland Permit

Putnam County:

- Department of Health – Realty Subdivision Approval, Sewer and Water Main Extensions

New York City:

- Department of Environmental Protection – Stormwater Pollution Prevention Plan, Sewer Main Extensions

New York State:

- Department of Environmental Conservation - SPDES General Permit for Stormwater, State Wetland Permit for Regulated Activity in Adjacent Area
- Department of Transportation – Highway Work Permit

The Town of Carmel will be included on all correspondence to and from other agencies during the regulatory approval process.

5.0 STATEMENT OF FACTS AND BASIS FOR CONCLUSIONS

5.1 Geology, Soils and Topography

Grading and Soil Erosion

In response to specific comments from NYCDEP, the Watershed Inspector General, the Croton Clean Water Coalition, and other organizations concerning construction sequencing, erosion and sediment control, and related water quality impacts, the development plans for the two projects were amended to reduce its overall scope, impervious surfaces, construction on steep slopes, and overall site grading and to enhance the effectiveness of erosion control methods to be applied during construction. Under the proposed plan, approximately 26 acres of The Fairways site and 56 acres of the Gateway Summit Site would be graded to accommodate the proposed development. The total area of disturbance on slopes greater than 15 percent is estimated to be 15 acres on The Fairways site and 25 acres for the Gateway Summit site. Based upon engineering cut and fill estimates, the combined Gateway Summit and The Fairways development plans would require an estimated 494,000 cubic yards to be excavated (cut) and 453,000 cubic yards of fill. The Modified Road Configuration Alternative for Gateway Summit would further decrease the amount of development and road construction, thereby further reducing impervious surface, grading and construction in steep slopes. As noted in the Introduction, the site plans can and likely will change from the concept development plans in the FGEIS. The above describe disturbance numbers may change without additional environmental review provided such changes in disturbance do not have the potential to create new significant adverse environmental impacts.

Grading and Soil Erosion Mitigation Proposed:

Erosion and Sediment Control Plans have been developed for the two projects to prevent erosion of soils exposed during construction. The proposed soil erosion control features would be installed in accordance with Erosion and Sediment Control Guidelines specified in the NYSDEC SPDES General Permits for Stormwater Discharges from Construction Activities (GP-02-01 and GP-93-06), and their appendices, and the Town of Carmel Municipal Code.

As detailed in the two projects specific SWPPPs, construction of the two projects will be carefully phased, and sequenced, to further control erosion and sedimentation. As specified, the phasing plan will limit the area of disturbance on either site to a maximum of five acres at any time on each project site. Detailed construction sequencing plans have been developed that significantly reduces the potential for erosion from the project sites during construction.

The SWPPPs for the two projects are required to obtain coverage under NYSDEC SPDES General Permit GP-02-01 and approval from the NYCDEP. Inspections are required under NYSDEC and NYCDEP approvals and will be conducted by the independent qualified Professional retained by the Applicants.

Prior to construction, the proposed erosion and sediment control features would be installed according to the Erosion and Sediment Control Plan. As required, these features would be closely monitored, and maintained in effective condition, and left in place until permanent vegetative cover is established. All disturbances of steep slopes would be conducted in accordance with the Town Code. If necessary, the Applicants will provide the Town of Carmel required construction.

security to insure the proper installation and maintenance of erosion and sediment control measures and completion of site restoration.

These measures also would be monitored during construction by the project construction manager, by representatives of the Town, and by the professional engaged by the Applicants. Inspection fees will be funded by the Applicants pursuant to the Town Code.

Blasting

Implementing the proposed development plan may require blasting for the construction of the internal road on the Gateway Summit site. The project engineer identified areas of potential blasting as all areas with greater than twenty feet of required cut.

The closest structure to an area of potential rock removal is approximately 420 feet southeast of the site entrance, across Route 6 from the Gateway Summit site. The use of proper blasting techniques and mitigation measures will minimize the potential affects of blasting on nearby properties and structures.

Blasting Mitigation Proposed

Any blasting which is required will be done in full conformance with the New York State Code. A blasting protocol is included as part of the GEIS and is summarized below:

All blasting will be conducted in compliance with New York State requirements [(Title 12 of the New York Code of Rules and Regulations (12 NYCRR Part 39)].

Blasting will be conducted by licensed and insured blasting contractors.

Pre-blasting inspections will be conducted of all off-site structures located within 500 feet of the excavation area, if authorized by the property owner. These inspections will include photographic or video documentation.

The contractor will conduct test blasting and seismographic monitoring prior to any blasting to determine appropriate on-site blasting techniques.

Seismographic monitoring will continue throughout the periods of blasting at the site, and daily logs of seismographic data, explosive use and field conditions will be maintained.

5.2 Wetlands

The bulk of NYSDEC, and Town of Carmel, regulated wetland, LC-27, is located on The Fairways site, with a portion extending onto the Gateway Summit site (proposed Lot 6). With the exception of one area at the southern end of the wetland, the boundaries of the NYSDEC and the Town of Carmel regulated wetland are the same. No disturbance of any NYSDEC or ACOE wetland is proposed as part of the proposed action. Construction of the proposed culvert associated with the watercourse crossing would result in approximately 0.04 acres of Town wetland disturbance. The construction of the stormwater treatment basins would result in approximately 0.42 acres of DEC "adjacent area" disturbance on the Gateway Summit parcel, and approximately 0.05 acres of disturbance of adjacent area on the Fairways. Additional buffer encroachment on the Gateway parcel

will be necessary within the town regulated buffer. Both NYSDEC and Town of Carmel Wetland Permits are required for the construction of the treatment basins. The Applicants have evaluated criteria for a Wetland Permit as required by Chapter 179 of the Town Code, and the NYSDEC Freshwater Wetland Regulations, and concluded that the proposed activity meets all criteria for permitting.

Some disturbance within and adjacent to the existing stream flowing south out of the wetland is proposed for the main road crossing just north of Route 6. This crossing involves the discharge of less than twenty-five cubic yards of fill into waters of the United States, as defined by the Corps. Accordingly, under Nationwide Permit No. 18, this activity does not require further authorization from the Corps nor does it require the submission of a Pre-construction Notification to the Corps. A permit from the Town of Carmel Environmental Conservation Board will be secured prior to conducting any regulated activity.

Neither an Article 15, Protection of Waters Permit (stream disturbance permit) nor a Water Quality Certification from the NYSDEC is required for the proposed watercourse crossing with the road.

Wetland Mitigation Proposed

No development activities are proposed in any NYSDEC wetland, while minimal encroachment in the Town regulated wetland is required for construction of the stream crossing with the proposed access road. Grading will be required within the 100-foot adjacent area (buffer) to NYSDEC and Town regulated wetlands for the construction of the stormwater treatment basins. To mitigate potential impacts on wetlands and their buffers from the effects of erosion and sedimentation, the two SWPPPs specify that all soil disturbed adjacent to the wetland and the stream will be stabilized immediately upon completion of construction. The stormwater quality basins, in conjunction with the other components of the SWPPPs, including the Erosion and Sediment Control Plan, will ensure that there will be no long term impacts to the water quality in the wetland system. The SWPPP has been designed to ensure that flow patterns are not significantly altered from the existing condition. The Applicants are also proposing conservation easement areas that encompass the entire NYS DEC wetland and adjacent areas, as well as significant upland areas upslope of the wetlands on The Fairways parcel. This will offer long term protection to the wetland habitat for those species that are dependant on the wetland ecosystem and adjacent uplands.

No measures to mitigate potential adverse impacts on wetlands, beyond those incorporated into the project development plans, are necessary or proposed.

5.3 Water Resources

Throughout the site planning and SEQRA environmental review processes, the Applicants have paid particular attention to the need to fully identify and mitigate potential adverse impacts to water resources, including those to water quality in New York City's public drinking water supply watershed.

Potential adverse impacts are associated with stormwater during and following construction and result from the level of site development and disturbance and construction of new impervious surfaces. The scope of the proposed action has been modified since the DGEIS and has resulted in a significant reduction of proposed site development, disturbance, and impervious surfaces.

The proposed access road to the Gateway Summit site crosses a small watercourse. The watercourse flows southerly through the property. The access road involves the installation of a large arch culvert, which will allow the continued unimpeded flow of water from north to south and movement of wildlife. A proposed pedestrian bridge would also span this watercourse and will involve minor temporary disturbance within the stream buffer to install foundations to support the bridge.

As recognized above herein, the NYCDEP has opined that the impervious surfaces associated with the crossing require a variance under Section 18-39(a)(1) of the Watershed Rules and Regulations. While the Applicants may apply for said variance, it has further refined the alternative road configuration set forth in the DGEIS so that it avoids this stream crossing and associated impervious surfaces. This refined alternative includes a modified road layout designed to reduce disturbance to steep slopes and impacts on water resources associated with erosion and sedimentation associated with steep slope disturbance.

Water Resources Mitigation Proposed

The project site lies in the Croton System, a portion of New York City drinking water supply watershed that supplies, on average, 10% of New York City's water supply.

As noted, the two project SWPPPs have been significantly refined since the issuance of the DGEIS and now provide further mitigation of potential impacts on wetlands and other on and off site water resources. Construction cannot be initiated until the SWPPPs are approved by the NYSDEC and NYCDEP. The plans may also be reviewed by the Stormwater Project Review Committee established pursuant to the New York City Watershed Regulations. The Stormwater Project Review Committee is comprised of representatives from NYCDEP, the Putnam County Health Department, the Town of Carmel, and the NYSDEC. Once NYCDEP deems the SWPPP application(s) complete, and notifies the Committee of such, the Committee may, at its discretion, review the applications and convene a meeting to discuss the SWPPPs.

Significant refinements that were made to the December 2003 Stormwater Management Reports, included in the DGEIS, are now found in the March 2006 SWPPPs included in the FGEIS. In addition to the Applicant's commitment in the FGEIS to engage an independent qualified Professional to oversee implementation of the two SWPPPs, enhancements to the SWPPPs since the DGEIS include:

- More Detailed Erosion and Sediment Control Plans and Narratives;
- More Detailed Construction Sequencing;
- Specifications that limit the area of disturbed soil on either site to five acres at any time;
- Provisions for Maintenance of a Construction Site Log Book and Inspections per GP-02-01
- More Detailed Erosion Control Facilities Inspection and Maintenance Program
- More Detailed Stormwater Management Plans
- Further Engineered Stormwater Management Practices
- Detailed Pollutant loading analyses that confirm post construction level of Total Nitrogen, Total Phosphorous Total Suspended Solids and Biological Oxygen Demand are below pre construction levels
- More Detailed Facility Maintenance Program

Other refinements to the development plans that reduce potential adverse impacts include significant reductions in the scope of the proposed development, reduced area of disturbance and preservation of approximately 60 acres of open space, and the elimination of the previously proposed impervious road from The Fairways site to Fair Street.

As now proposed, the SWPPPs provide substantial mitigation of potential impacts on water resources, including the Croton portion of New York City's public water supply system.

Groundwater

All water for the proposed residences would be provided by the Carmel Water District #2. Groundwater is not utilized as a source of drinking water for properties in the vicinity of the project site. No subsurface sewage treatment systems are proposed as part of the proposed action as the proposed uses will be connected to Town Sewer.

Groundwater recharge would be slightly affected by the installation of road, driveways and other impervious surfaces. The projects will add approximately 22 acres of impervious surface to the Gateway Summit site and approximately 10 acres of impervious surfaces to The Fairways site. The substantial amount of pervious surface remaining on both project sites will allow precipitation to continue to recharge the aquifer providing groundwater to both sites. Stormwater collected from these impervious surfaces would be directed into the stormwater management basins, which are designed for extended detention and limited infiltration. Considering the above, no significant adverse impacts to groundwater are expected to result from the project.

Groundwater Mitigation Proposed

No measures beyond those incorporated into the project designs are necessary to mitigate potential adverse impacts on groundwater resources.

Stormwater and Flooding

The separate SWPPPs for Gateway Summit and The Fairways projects were provided in Appendixes D and E of the FGEIS. These plans were developed to comply with all relevant NYSDEC and NYCDEP regulations, and were significantly refined since issuance of the DGEIS. Upon closure of the SEQRA process, the site specific SWPPPs must be reviewed and approved by NYSDEC, NYCDEP and the Town of Carmel, with possible input from the Stormwater Project Review Committee established by the NYCDEP.

Attenuation of increases in peak rate of runoff for the 10, 25, and 100-year, 24-hour design storms is provided to meet the requirements of the NYSDEC and NYCDEP. In order to address the water quality requirements of NYSDEC, stormwater ponds have been designed in series to capture and treat 90 percent of the average stormwater runoff from the project sites.

The stormwater ponds will be maintained by the owner of the property draining into them, i.e., the basins on the hotel site will be maintained by the hotel owners, and the basins on Lots 3, 4 and 5 will be maintained by the owners of lots 3, 4, and 5. The basins on the Gateway Summit and The Fairways senior housing sites will be maintained by the Homeowners Associations for each site, and the basins located on the YMCA site, which also collects stormwater from the Town Road, will be maintained by the Town. All stormwater ponds are located outside of steep slopes and inappropriate soils. To accomplish this, it was necessary to locate some ponds within the Town wetland buffer and State adjacent area, resulting in 0.47 acres of disturbance in these areas. The minor grading associated with this buffer disturbance will not cause significant adverse environmental impacts to the associated wetland area. The ponds within the wetland buffer are adjacent to and upland from an existing stonewall, providing a natural demarcation and barrier against intrusion further into the wetland buffer.

Detention of the 1-year, 24-hour design storm for 24 hours has also been provided to meet the NYSDEC requirements for Stream Channel Protection. Attenuation of the 10-year and 100 year 24-hour design storm has been provided to meet the NYSDEC requirements for Overbank Flood Control and Extreme Flood Control respectively.

Stormwater and Flooding Mitigation Proposed:

The two projects' specific SWPPPs include Erosion and Sediment Control Plans that minimize erosion and sedimentation during construction, and Stormwater Management Plans that ensure that post construction stormwater characteristics are not changed substantially from pre construction characteristics.

Treated stormwater discharging from Centennial Golf Club is proposed to be collected and conveyed along the western boundary of The Fairways project. The eroded drainage channels on The Fairways site were created by the concentration of stormwater runoff resulting from the construction of the golf course. In the existing condition, treated stormwater currently discharges from the golf course onto the site and to the drainage channels that flow down the slope towards the onsite wetland. As part of The Fairways project, stormwater will be collected at the critical points along the common property line and conveyed through the proposed development towards the existing onsite wetlands. A combination of grass cut-off swales, drainage structures, and drainage piping will be used to collect the off-site stormwater to be piped through the subject property. In general grass cut-off swales are proposed along the majority of the common property line to collect the stormwater runoff. Additionally, drainage structures are proposed adjacent to the property line in areas where there are pipe discharges onto the subject property from stormwater management practices on the golf course. The grass cut-off swales in combination with the drainage structures will provide the necessary means to collect the off-site runoff and safely convey the stormwater through the proposed development, continuing the current drainage patterns. The existing eroding onsite drainage channels will be repaired and stabilized with appropriately sized stone lining.

Given the proposed SWPPP, no significant adverse stormwater or flooding-related impacts are anticipated.

5.4 Terrestrial and Aquatic Ecology

The revised development plans for the Gateway Summit and The Fairways projects further reduce the potential impacts on existing habitat, as compared to the initially proposed plans. Under the revised plans, the total construction disturbance for the Gateway Summit site is reduced to approximately 56 acres compared to approximately 74 acres in the previous plan. The Fairways site disturbance is reduced to approximately 26 acres from approximately 42 acres previously proposed. The plan will preserve approximately 12.0 acres of existing upland woods and approximately 1.8 acres of upland fields. No encroachment on any wetlands is proposed. Total disturbance to wetland buffer areas is approximately 3.7 acres, including approximately 0.47 acres of NYSDEC wetland buffer. The crossing of the Gateway Summit watercourse involves the discharge of less than twenty-five cubic yards of fill into waters of the United States. As noted in the Introduction, the above described disturbance levels may change between the concept development plans in the FGEIS and the site plans. No additional environmental review will be necessary unless increases in disturbances create new significant adverse environmental impacts, such as creating substantial new disturbances in areas shown as undisturbed.

The site is not known to provide habitat for any rare and endangered species. Correspondence from the NYSDEC to this effect was provided in the DGEIS. Multiple site walks of the project sites confirmed the absence of rare or unusual habitat or species on the site. These site walks were conducted over several days in the fall of 2001, July and December of 2003, and between late March and early June of 2005. The Specific dates of these site walks were August 17, 2001, September 7, 2001, September 13, 2001, October 15, 2001, July 18th, 2003, July 22nd, 2003, December 1st, 2003, December 11th, 2003, December 12th, 2003, March 30th, 2005, April 20th, 2005, April 28th, 2005, and June 1st, 2005.

Terrestrial and Aquatic Ecology Mitigation Proposed

The proposed development would result in the permanent preservation of approximately 60 acres (nearly 70 percent of the Fairways site) of open space by conservation easement. These natural areas are located on the eastern portion of the project parcel and are contiguous to the NYSDEC wetland corridor. This preserved area also consists of significant wooded upland habitat east of the wetland and south of the existing golf course, and wooded upland slopes to the west of the wetland on the Fairways parcel.

Implementation of The Gateway Summit and The Fairways SWPPPs, including the construction sequencing plans, will mitigate short-term impacts resulting from erosion and sedimentation that may occur during construction. The proposed stream crossing on the Gateway Summit site provides uninterrupted flow of water and animal movement below the proposed road.

5.5 Land Use Zoning and Neighborhood Character

Construction of Gateway Summit will replace vacant land and a vacant building with commercial development along Route 6 where existing and proposed zoning allows for such uses. Proposed senior housing uses on both sites are expected to be compatible from a land use perspective with adjacent land uses, including residential development to the north and the Centennial Golf Course. Both the Gateway Summit and The Fairways projects will conform to existing Town of Carmel zoning, with the

exception of area variances needed for Gateway Summit Lot 4 (the alternate layout designed for Lot 4 in response to comments by the Town Planner Ed Burroughs eliminates the need for a variance), and are consistent with the Town's 2000 Draft Comprehensive Plan. Specifically, the 2000 Draft Town of Carmel Comprehensive Plan recommends that the Gateway Summit site be developed for commerce/business park use and that The Fairways site be developed for residential use. The commerce/business park category is also intended to allow for assisted living facilities and day care centers. The Comprehensive Plan recommends that the Town pursue attracting certain regional uses, such as hotels and corporate offices, to designated campus commercial areas in order to strengthen the tax base and to provide convenient services to residents without adversely impacting the Town's hamlet business area and established residential neighborhoods. The proposed development is consistent with these policies. It would represent appropriate development in an area where infrastructure and roadway networks are capable of handling such development. By minimizing impacts to wetlands and steep slopes, and minimizing the amount of land disturbance necessary for the proposed projects, the Gateway Summit and The Fairways projects are also consistent with the Comprehensive Plan's recommendations related to environmental protection. Therefore, the proposed projects are expected to conform to policies of the Town's Land Use Plan and the 2000 Draft Comprehensive Plan.

Modifications have been made to both the Gateway Summit and The Fairways plans in response to comments on the DGEIS. The Gateway Summit project has been reduced in intensity of use for both the commercial and residential portions of the development. Specific changes to the proposed mix of uses on the Gateway site include a reduction in the number of senior housing units by 41 units, a reduction in the office space by 2,000 square feet and replacement of the previously proposed 45,000-square foot auto dealership with a 7,600-square foot restaurant. An additional area of buffer is provided between the proposed senior dwelling units and the existing residences to the west to mitigate potential adverse visual impacts and impacts to neighborhood character.

The Fairways plan was modified to address a number of land use concerns related to the effects on nearby residences and the adjacent golf course. These modifications include additional buffers of natural wooded area between the proposed senior dwellings and both the Centennial Golf Course and the nearest residences located at the end of Everett Road. The Applicants note that elimination of the through road connection further mitigates potential impacts on the adjacent residential neighborhood. The senior housing within the Gateway Summit and The Fairways represent an appropriate transitional use between the commercial uses on Route 6 and the existing residences to the northwest.

Land Use and Zoning Mitigation Proposed:

All potential impacts anticipated from the proposed density have been identified, analyzed and mitigated through the design of the projects. No specific land use-related mitigation measures are proposed.

5.6 Traffic and Transportation

The DGEIS evaluated the operation of nearby intersections to ascertain the potential impacts and to identify the mitigation measures required of the proposed development. Intersection analyses (rather than roadway segment analyses) were performed because the capacities of the intersections that feed the interconnecting roadway segments are the limiting factor on the ability of the subject roadway system to efficiently support the movement of people and goods. Traffic analyses done by the Applicants were reviewed

by John Collins Engineers and traffic consultants working for the Town of Carmel. Vehicular demand on individual roadway segments is typically well below capacity, even when it is at capacity at the intersections that feed into the roadway.

The intersection analyses were performed for future conditions both with (Build) and without (No-Build) the Project. Both future conditions factored in increased traffic volumes associated with background growth and other proposed developments. The No-Build condition is used as a baseline for comparisons with future conditions resulting from the proposed development.

In addition to performing intersection capacity analyses to evaluate the operational impacts of the proposed development, the DGEIS evaluated the performance of the surrounding roadways with respect to traffic safety (both intersections and intervening roadway segments) and identified safety improvements.

In response to comments regarding physical impacts such as the degree of site disturbance and impacts to steep slopes, wetlands and water resources, the Gateway Summit and Fairways projects were revised to eliminate the connection to Fair Street and significantly reduce the amount of residential and commercial uses. The Gateway Summit plan was modified in part to reduce traffic generation by eliminating 41 senior residential units, 38,100 square feet of commercial development and 2,000 square feet of office space.

The revised plan addresses a number of concerns raised in response to the DGEIS regarding the transportation network. Most significantly, the revisions to The Fairways allow residential access from the south only, eliminating the Fair Street access and potential through traffic. As a result of this change, the previously identified improvements to Hill and Dale Road at Fair Street are no longer proposed as part of the proposed projects.

The revised plan provides an internal road for vehicular access to all of the proposed residential development. The road connection to Route 6 remains unchanged from the initial plan. This connection would consist of a boulevard style entrance road with a landscaped island separating the inbound and outbound traffic. The primary access point would have three lanes and would be signalized, with left turn lanes provided for entering and exiting vehicles. A second connection to Route 6 will provide access to the commercial development and a portion of the office space. This connection is also boulevard style with a landscaped island.

The revised Gateway Summit project will generate 129 fewer trips in the AM peak hour, 93 fewer trips in the PM peak hour and 99 fewer trips in the Saturday Peak hour than the original plan. The revised Gateway Summit and Fairways developments are projected to generate approximately 317 trips during the peak AM traffic hour compared to 446 trips proposed in the original plans, which is a reduction of nearly 30 percent. There are approximately 421 trips during the peak PM traffic hour compared to 514 trips originally proposed, a reduction of 18 percent. A total of 447 trips are anticipated for the Saturday peak hour, down from 546 trips, which is also a reduction of 18 percent.

In addition to the two proposed entrances from Route 6, the proposed action includes a separate emergency - only access road from Kelly Ridge Road to The

Fairways. The emergency access connection from The Fairways site to Kelly Ridge Road will be a 12-foot wide gravel drive, gated at both ends to prevent unauthorized use by residents or visitors. The Applicants also offered to provide the Town an emergency only access easement from the interior roads located in the northwest corner of the Gateway Summit residential development to the adjacent Town owned property containing the existing water tank. This emergency only access easement was not required by the Planning Board, but was offered by the Applicant to provide fire trucks and other emergency vehicles a third way to access the projects' road networks if the Town so desires. The Applicant would gravel this access drive and gate it at the property line to limit through traffic to emergency vehicles if the Town wishes to establish this third emergency only access drive.

Traffic volumes along the Route 6 corridor will be increased slightly as a result of the proposed projects. However, since the affected sections of Route 6 have not experienced elevated accident histories and because the proposed primary access point will be signalized and will provide more than adequate sight distance, the proposed development should not have a noticeable impact on area traffic safety. Furthermore, the level of service analysis for the unsignalized site accesses to US Route 6 presented in the FGEIS do not account for breaks in the traffic created by adjacent nearby US Route 6 traffic signals located at Old Route 6 and John Simpson Road, which allow vehicles to more easily turn out of the accesses, and to make left turns into the accesses, than would otherwise be the case if these traffic signals were not present.

As discussed above, the Applicants also evaluated the Modified Road Configuration Alternative to avoid the watercourse crossing. The Easterly Access Road connects only to the hotel use. The Westerly Access Road connects to the upper portion of the site west of the watercourse, and leads to all other uses while avoiding the watercourse crossing. In other words, under the Modified Road Configuration Alternate Layout, the main and secondary access driveways to the project sites are reversed from the Proposed Project, as first investigated in the DGEIS, so that the main access point is from the west and the secondary access (for only the hotel) is from the easterly access driveway. Under the Modified Road Configuration Alternative the hotel would be constructed along with its exclusive easterly access drive. The balance of the development could be built along with the westerly access drive.

It is noted that in a letter to the Applicants dated June 20, 2006, NYSDOT expressed preference for the eastern most driveway serving as the "Major" driveway into the project sites, as it provides the most separation from the traffic signal at Route 6 and Old Route 6. The NYSDOT letter does, however, recognize that both the easterly and westerly driveways from Route 6 would be adequate from an access standpoint. Moreover, NYSDOT's preference must be balanced by the Planning Board, as Lead Agency, against NYCDEP's comments regarding the watercourse crossing and its concerns regarding water quality.

The Applicants may apply for a variance from NYCDEP to allow the impervious surfaces associated with the stream crossing. If NYCDEP grants such variance, the Planning Board hereby finds that the proposed action, with the Primary Easterly Access Road and watercourse crossing adequately mitigates environmental impacts to the greatest extent practicable and is acceptable.

If the NYCDEP denies such variance, or the Applicants elect not to pursue such variance or withdraws its request for such variance, the Planning Board hereby finds that the Alternate Road Layout is also consistent with social, economic, and other essential

considerations to the maximum extent practicable, and that adverse environmental effects revealed in the environmental impact statement process will be minimized or avoided.

While the separation from the traffic signal at Route 6 and Old Route 6 is not as great under this alternative, it is still adequate to allow safe traffic flow. As indicated above, the NYSDOT indicated that both the easterly and westerly driveways would be adequate from an access standpoint. The Applicants' agreement to install a traffic light and left hand turn lane, as the Gateway Summit and The Fairways Projects are developed, if determined to be necessary and approved by the NYSDOT, would provide a more than adequate alternative access. The Modified Road Configuration Alternative for Gateway Summit also provides additional environmental benefits by decreasing development, roadway construction, impervious surface and site disturbance, while eliminating the stream crossing.

Additionally, the Modified Road Configuration Alternative will advance improvements necessary to facilitate the County Bike Path Project. The pedestrian trail way system through the project sites, and connection to the bike path, along with the bridge replacement project allowing the bike path to continue, and adding a sidewalk to Route 6, are very positive elements of the Modified Road Configuration Alternative. The Planning Board finds that both road plans are consistent with social, economic, and other essential considerations to the maximum extent practicable, and that adverse environmental effects revealed in the environmental impact statement process will be minimized or avoided for all development permitted under the proposed plan and the Modified Road Configuration Alternative, including the Pharmacy and Office options included in the FGEIS. Accordingly, the Applicants may select either road alternative subject to implementing the mitigation described herein and in the FGEIS (if determined to be necessary and approved by NYSDOT) and which may be required by NYCDEP in connection with the variance application.

Traffic and Transportation Mitigation Proposed

The Applicants are proposing certain mitigation measures at various stages of development of the subject site. A highway work permit will need to be procured before the subdivision road is installed at US Route 6 and any associated work in the right-of-way takes place or when any other curb cut on the State Highway is proposed. The NYS DOT may require additional minor measures as part of its permit. For example, it is believed that NYS DOT will direct that the guardrail on the south side of Route 6 be moved back approximately five feet starting from the easterly property line extended, and tapering down to its current location approximately 100 feet to the west. NYS DOT also may direct the Applicant to mill the shoulder along this same area to eliminate the existing bump in the pavement so that stormwater drains away from the roadway. Beyond those work permits, no other road improvements are warranted until overall development reaches a threshold that is projected to generate certain levels of traffic that may then require either a traffic signal and/or a left turn lane.

Under the subdivision plan as proposed, construction activity may be initiated and buildings occupied so long as the proposed uses generate fewer than 60 entering trips during the peak hour periods at the eastern most driveway. (the vehicular trips associated to each use are described in chapter 4.0 of the FGEIS). A left turn lane on US Route 6 at the eastern most driveway may be needed when the development is projected to exceed 60 entering trips at the eastern most driveway during peak hour periods. For example, the hotel is projected to generate less than 60 entering trips, and therefore can be built without the left turn lane improvement on US Route 6.

As with the proposed action, the level of service analysis for the unsignalized hotel site access presented in the FGEIS does not account for breaks in traffic created by adjacent nearby traffic signals. The breaks in traffic should reduce vehicle delay and allow vehicles to more easily turn out of the hotel access, and to make left turns into the hotel access, than would otherwise be the case without these nearby traffic signals present.

When site development activity is proposed that cumulatively generates more than 60 entering trips at the eastern most driveway, a left hand turn lane may be necessary, subject to approval by the NYS DOT. Accordingly, if a proposed development is projected to cause overall development to exceed the 60 entering trip threshold at the eastern most driveway, then the Applicants shall apply to the NYS DOT for a US Route 6 left turn lane and if the DOT grants that permit, the left turn lane shall be installed before a certificate of occupancy (C.O.) is granted for the site development activity that exceeds the aforementioned traffic threshold. For example, if the hotel and recreation community center (the "YMCA") are under construction, a C.O. for one of those facilities may be issued since neither generates more than the 60 entering trips threshold at the eastern most driveway, but a C.O. for the second one may not be issued unless an application for the left hand turning lane is made to NYS DOT and either: i) NYS DOT denies such left turn lane because it finds it is not required; or ii) NYS DOT grants such permit and the left had turn lane is constructed..

Once site development activity occurs or is proposed that is projected to cumulatively exceed 100_exiting trips at the eastern most driveway, the Applicants shall apply to the NYS DOT for a US Route 6/subdivision road traffic signal. If the NYS DOT grants that permit such signal shall be installed before a certificate of occupancy is granted for the site development activity that exceeds the aforementioned traffic threshold.

As noted above herein, the Applicant may elect to construct the Modified Road Configuration Alternative with the mitigation measures and thresholds found necessary as described below and included in Chapter 4.0 of the FGEIS. As with the proposed project, no road improvements other than a highway work permit for the subdivision road and any associated work in the US Route 6 right of way are warranted under the Modified Road Configuration Alternative until overall development reaches a threshold that is projected to generate certain levels of traffic that may then require either a traffic signal and/or a left turn lane. Construction activity may be initiated and buildings occupied so long as approved uses generate fewer than 60 entering trips during the peak hour periods at the western most driveway. In other words, no road improvements on Route 6 will be needed if the development is projected to generate fewer than 90 exiting trips or 60 entering trips during peak hour periods at the western most driveway. For example, all the Gateway residential housing is expected to generate 28 peak hour entering trips, and therefore can be built without any major road improvements on US Route 6.

If site development activity under the Modified Road Configuration Alternative cumulatively generates more than 90 exiting trips or 60 entering trips during peak hour periods at the western most driveway, a traffic signal may be necessary, subject to approval by the NYS DOT. Accordingly, if the development is projected to exceed this threshold the applicants shall apply to the NYS DOT for a US Route 6 traffic signal at that location and if the DOT grants that permit, such traffic signal shall be installed before being granted a certificate of occupancy for the site development activity that exceeds the aforementioned traffic threshold. For example, if the two restaurants are under construction, a C.O. for either one alone may be issued since each one individually generates less than the 90 exiting trips or 60 entering trips threshold at the

western most driveway, but a C.O. for a second restaurant may not be issued until an application for the traffic signal is made to NYS DOT and either: i) NYS DOT finds such signal is not required and denies such application;; or ii) NYS DOT grants a permit and the traffic signal is installed.

When additional site development activity subsequently is proposed that is projected to generate more than 70 additional entering trips, for a cumulative total of more than 130 trips at the western most driveway, the Applicants shall apply to the NYS DOT for a left turn lane at that location. Certificates of occupancy for the additional development projected to generate more than another 70 additional entering trips at the western most driveway shall not be granted until: i) NYS DOT approves a permit for the left hand turn lane and it is installed, or ii) the NYS DOT finds such improvement is not required, and denies such application.

It is acknowledged that only the NYS DOT has the authority to allow improvements on Route 6 since it is a State Road. It is therefore determined that if NYS DOT finds such improvements are not warranted, and therefore should not be permitted, each development component described in the FGEIS for the proposed projects and the Modified Road Configuration Alternative for Gateway Summit, including the Pharmacy and Office options, may be developed and granted certificate of occupancy without such traffic improvements. As indicated above, the applicants may secure building permits and commence construction on all approved uses prior to a final determination by NYSDOT. All traffic mitigation described herein, however, must be: i) applied for and denied by NYSDOT because it finds such improvements are not necessary; or ii) installed pursuant to NYSDOT approval, before certificates of occupancy can be issued for uses that are projected to generate vehicle trips beyond the above described thresholds. Uses not projected to generate vehicle trips beyond the above described thresholds may be issued certificates of occupancy without such traffic improvements being applied for or installed.

The Planning Board, as Lead Agency, specifically considered how long the findings and conclusions set forth herein should remain legitimate, along with the analysis in the FGEIS, and determined that any site plan application that is submitted five years after the adoption of this Findings Statement should include updated traffic counts.

5.7 Tax Base and Community Services

Fiscal Analysis

The existing assessed valuation of The Fairways property is \$510,929 and the net property taxes currently generated by the project sites are \$65,537. The projected future assessed valuation for The Fairways project site with the proposed development plan will be approximately \$22,153,176. The net project-generated tax revenues would be approximately \$835,655, an increase in the revenues currently generated by the property of \$770,118 annually.

The existing assessed valuation of the Gateway Summit property is \$484,400 and the net property taxes currently generated by the project site are \$80,276. The projected future assessed valuation for the Gateway Summit project site with the proposed development plan will be approximately \$30,318,005. The net project-generated tax revenues would be \$1,311,911 or over 16 times the revenues currently generated by the property.

The post-development taxes generated by the two projects will result in an increase in annual taxes to Putnam County of approximately \$142,077 and an increase to Carmel Town of approximately \$232,161. Revenues to the Brewster Central School District and Carmel Central School District are discussed below.

In addition to property taxes, the commercial development at Gateway Summit will generate sales taxes to New York State, Putnam County and the MTA. The DGEIS estimated future sales taxes generated from the proposed development in the order of magnitude of \$2.7 million. Even with the reduction in proposed development proposed in the FGEIS, annual sales taxes from the proposed uses would still be expected to total over \$2 million.

Fiscal Mitigation Proposed

No specific measures to mitigate impacts related to fiscal impacts are necessary or proposed.

Employment

The revised plan eliminates the auto dealership and 2,000 square feet of office space that was proposed on the Gateway Summit site in order to reduce environmental impacts. However, employment benefits will not decrease significantly since the restaurant that is proposed in place of the auto dealership is expected to employ 52 workers, which is nine more than the auto dealership was expected to employ.

Employment Mitigation Proposed

No additional measures to mitigate impacts related to employment are necessary or proposed.

Education Facilities

Both the Gateway Summit and the Fairways properties are located in the Brewster Central School District and the Carmel Central School District.

The proposed senior housing and commercial development will add no school-aged children to either District and will result in no additional costs to the Districts as a result of the proposed development. However, the Gateway Summit and Fairways projects will result in an estimated increase in annual taxes to the Brewster Central School District of \$605,702 and an estimated increase in annual taxes to the Carmel Central School District of \$665,089. These estimated increases in revenue to the school districts are very conservative to reflect the fact that they depend in part on sales prices and market factors out of the control of the applicant.

Education Facilities Mitigation Proposed

No additional measures to mitigate impacts related to education facilities are necessary or proposed.

Police Protection / Traffic Enforcement

The Town of Carmel Police Department provides service to the Gateway Summit and The Fairways sites. The revised plans will have less demand on community service

providers such as police protection than the plan originally proposed. However, the proposed Gateway Summit and Fairways developments may still result in a requirement for approximately one additional police staff for the Town of Carmel Police Department. As previously noted, the increase in annual taxes generated to the Town by both projects is expected to total \$232,161. These revenues can potentially be used to increase police staffing or expand hours of operation. State and County Police services would also be available to offset any potential incremental increase in demand resulting from the proposed projects.

Police and Traffic Enforcement Mitigation Proposed

No additional measures to mitigate impacts related to police or traffic enforcement are necessary or proposed. It is noted that the County Police Headquarters is located in Carmel less than one mile from the project sites and that the County Police actively patrol the area around the project sites.

Fire Protection

The project site is located within the service area of the Camel Fire Department. The Carmel Fire Department was consulted throughout the planning and design of the projects. Their input included fire hydrant locations and other water supply issues related to fire protection. The proposed buildings would be constructed to meet all applicable state and local fire codes and safety requirements. All new buildings, including the residential units, will be protected by an automatic fire sprinkler system so as not to increase CWD #2 fire protection needs. Each building system will be operational prior to issuance of the Certificate of Occupancy for such building. Fire hydrants will be located within the development and a separate emergency access drive will be provided to The Fairways from Kelly Ridge Road. The Applicants also offered to provide the Town an emergency only access easement from the interior roads located in the northwest corner of the Gateway Summit residential development to the adjacent Town owned property where the existing water tower is located. This easement would allow fire trucks and other emergency vehicles a third way to access the projects' road networks if the Town so desires.

The Fire Department has requested the existing dead end water supply system be looped to ensure adequate water supply for fire protection measures. During construction of the Gateway Summit/Fairways projects, the two systems will be linked to provide this redundancy that currently does not exist.

The Department has also requested money to help with the purchase of new equipment. The revised plan will decrease the demand on community service providers such as fire protection. The increase in annual tax revenue generated to the Fire Department as a result of the proposed development, which total approximately \$70,000 annually, could be used to help the Fire District purchase new equipment and train new members.

Fire Protection Mitigation Proposed

No additional measures to mitigate impacts related to fire protection are necessary or proposed.

Emergency Medical Services

The Carmel Volunteer Ambulance Corps provides emergency medical services to the Gateway Summit and Fairways project sites. The proposed residents that the Gateway

Summit and Fairways development will add to the service area will result in an increase in calls for service. The originally proposed plan was estimated to increase the calls for service by approximately 43 calls annually. The elimination of 41 residential units on Gateway Summit site reduces the projected population and the anticipated number of calls for service. The Gateway Summit development will result in \$13,425 in additional taxes generated to Carmel Ambulance. The Fairways will generate \$9,739 in additional tax revenues to Carmel Ambulance. These funds, which total \$23,164, could be used to provide training for additional members.

Emergency Medical Mitigation Proposed

No specific measures to mitigate impacts on emergency medical services are necessary or proposed. It is recognized that the private shuttle bus to service both the Gateway Summit and The Fairways Senior Housing Projects may be used to transport residents for non-life threatening medical situations as well as ordinary medical appointments.

Solid Waste Disposal

Dumpsters and compactors will be located at appropriate locations within the project sites and will be screened. Garbage collection will be provided by private contractors for transportation to the RESCO plant at Charles Point in Westchester County.

Solid Waste Disposal Mitigation Proposed

No specific measures to mitigate impacts related to solid waste are necessary or proposed.

Water Service

The projects will utilize public water from the Carmel Water District #2 (CWD#2). The CWD#2 is operated under contract by Severn Trent Environmental Services and is supplied by Lake Gleneida. The existing water supply district has a plant capacity of 1.5 million gallons per day (mgd).

The Fairways design flow water demand is projected to be approximately 45,400 gallons per day (gpd) for the residences. The Gateway Summit design flow water demand is projected to be 89,520 gpd. Actual water usage is typically 50 to 80 percent of the design flow.

The impacts of the Gateway Summit and Fairways projects on the water system were assessed in conjunction with several other major proposed developments in the District, including the Carmel Corporate Park and Hillcrest Commons development. This information is provided in the Water Engineering Report, provided in the FGEIS. The 2004 average daily flow of 0.85 mgd was added to the 0.27 mgd design flow calculated for the four projects. This was subtracted from the plant capacity of 1.5 mgd to determine there will be an excess capacity of 0.38 mgd. Based on this analysis, the existing water supply has sufficient capacity for the Gateway Summit and Fairways projects, after considering the impacts of other major proposed projects located within the District. The existing water storage capacity for the water supply system is provided in three storage tanks that have a total capacity of 1.1 million gallons. The system has an estimated equalization storage of 570,000 gallons and fire protection storage of 530,000 gallons.

The existing water distribution system has problems of low pressure for areas in the Kelly Ridge and Everett Road. Normal working pressures should be approximately 60 to 80 pounds per square inch (PSI), and not less than 35 psi at ground level. The current static pressure level in the Kelly Ridge and Everett Road area ranges from 31.6 to 38.3 psi. Therefore, the revised plans for the Gateway Summit project include a high-pressure service zone for the senior units. This high-pressure system will be composed of booster pumps to build pressure for distribution to the site, as well as a hydro-pneumatic tank to cycle the pumps. The high-pressure system will utilize booster pumps to supply adequate pressure to the proposed dwellings on Lot 7A of Gateway Summit and will draw from a connection to the existing system. As part of this project, the high elevation residences along Everett Road and Kelly Ridge Road will be connected to this system in order to resolve existing pressure problems. The high-pressure system will be designed to supply the fire sprinkler systems in its service area and to alleviate the low pressures that currently exist near Kelly Ridge Road and Everett Road.

Water Service Mitigation Proposed

Two separate distribution systems, a "high" and "low" system, will supply the Gateway Summit and Fairways domestic water. These systems will be looped during the installation of the water lines for the projects, and will provide water supply redundancy that is currently not available.

A high-pressure water distribution system will be used to alleviate the low-pressure problems for the Gateway Summit site and surrounding area. This high-pressure water system will be designed and constructed to include a new pump station and the extension of the high pressure distribution system to service the existing homes on Kelly Ridge Road, Everett Drive and Bard Road above elevation 660 (approximately 3,500 linear feet of new water main pipe will be installed to service existing homes on those roads). This system will be on line prior to the first Certificate of Occupancy (C.O), being issued for the Gateway Summit Senior Housing Project.

The project's high pressure system will be designed and constructed to include a new pump station and a new 135,000 gallon water storage tank (average daily project design flow) next to the existing tank at the end of Everett Drive. This new smaller tank would be located south of the existing tank on the Carmel Water District #2 parcel to mitigate visual impacts from existing adjacent residences. This tank will be engineered into the proposed booster pump station to buffer peak domestic flows from the new development and supplement available water volume for fire protection needs. This tank will be online prior to the first C.O. being issued for the Gateway Senior Housing Project or The Fairways Senior Housing Project.

All new water mains and appurtenances internal to the site would be installed at no cost to the water district.

All project buildings will be protected by an automatic fire sprinkler system so as not to increase the Carmel Water District #2 fire protection needs. Each building system will be operational prior to the issuance of the C.O. for each building.

The project's deeds will include a restrictive covenant prohibiting the use of the municipal water system for irrigation purposes. A restrictive covenant establishing such restriction will be filed with the County at the time the subdivision plat is filed.

All work would be done in accordance with standards and specifications of the Carmel Water District #2 and the Putnam Department of Health. Tax revenues to the Carmel Water District #2 generated by the Gateway Summit site will total approximately \$39,400 annually and Carmel Water District #2 tax revenues from The Fairways site will total approximately \$28,800.

A Water Supply Easement is proposed to be granted to the District over an approximately 50-acre area located in the area to the east of the proposed YMCA on the Gateway Summit and The Fairways sites. This easement will allow the CWD #2 the right to develop, construct and maintain a groundwater supply if ever desired. This easement will also define a specific area where the Town could potentially locate a booster station. The Water Supply easement will run through the Gateway Summit senior housing lot and The Fairways, and will provide access through the YMCA lot. This easement will be as shown on the subdivision plat and an easement filed with the County at the time the subdivision plat is filed.

Sewage Disposal

Wastewater from the proposed action will be treated by the Town of Carmel Sewer District #2 (CSD#2). The Fairways average daily wastewater flow is calculated as 36,400 gallons per day, while Gateway Summit is expected to generate 80,520 gallons per day. Actual flows can reasonably be expected to be 50% to 80% lower than design flows.

The Wastewater Engineering Report, provided in the FGEIS, assessed the combined impacts of wastewater flows from the Gateway Summit, Fairways, Carmel Corporate Park and Hillcrest Commons developments on the existing wastewater treatment plant. The 2005 average daily flow of 0.76 million gallons per day (mgd) was added to the 0.24 mgd design flow calculated for the four projects. The sum 1.00 mgd was subtracted from the plant capacity of 1.10 mgd to determine there will be an excess capacity of 0.10 mgd. Based on this analysis, the existing wastewater treatment plant has sufficient capacity to treat flows from the Gateway Summit and Fairways projects, after considering the impacts of other major proposed projects now located within the District. The Applicants also note that recent flow data (following the meter calibration) for the wastewater treatment plant indicates that flows are well below those previously presented, suggesting a decrease in inflow. The February 2006 to June 2006 average flow was 697,800 gpd, which leaves over 400,000 gallons excess capacity at the plant today. The June and July flows were even lower, at 646,000 gpd and 648,000 gpd respectively. This reflects a greater excess capacity than indicated by the 2005 average daily flow numbers.

Sewage Disposal Mitigation Proposed

No additional measures to mitigate impacts related to sewage disposal are necessary or proposed. It is noted, however, that the CSD #2 is conducting video inspection and flow monitoring of the existing sewer system to evaluate existing conditions and potential deficiencies, including inflow into such system. Recent dataflow (following the meter calibration) for the wastewater treatment plant indicates flows are well below those previously indicated prior to the meter calibration, suggesting little or no inflow. For example, the February 2006 to June 2006 average flow was 697,800 gallons per day (gpd). The June average daily flow was 646,000 gpd during a period of 8.5 inches of rainfall. Despite this, the CSD #2 wishes to further investigate the existing sewer system relative to inflow. In order to assist the CSD #2 in this effort, and avoid duplicating tasks, the Applicants have offered to contribute \$30,000 to offset the cost to investigate the

existing sewer mains downstream of the subject projects. This monetary contribution would cover the cost of: 1) three monitoring locations for a period of one month; 2) video inspection of the sewer mains in Kelly Road, Fair Street, the sewer trunk line south of Fair Street and the sewer main in Old Route 6; and 3) engineering oversight and data analysis. The Applicants shall make this contribution to the Carmel Sewer District #2 in two separate payments as follows: 1) \$5,000 within 21 days of the Planning Board issuing the Findings Statement; and 2) the remaining \$25,000 prior to the Planning Board's signing of the project's first site plan.

Additionally, The Fairways will generate approximately \$45,900 annually for the CSD#2. Gateway Summit taxes for the District will be approximately \$128,825.

5.8 Cultural Resources

Visual Resources

No views from significant aesthetic resources have been identified that will be adversely affected by the projects. The proposed combination of residential development, commercial uses and intertwining areas of open space will complement the developed residential and commercial character that exists in the project vicinity.

The revised plan eliminates the access for The Fairways to Fair Street, reducing potential visual impacts to the Centennial Golf Course. Additionally, the proposed residential buildings and internal private road for The Fairways has been shifted away from residential dwellings located along Kelly Ridge Road, resulting in a greater visual buffer. The existing vegetative buffer between the project and both Kelly Ridge Road and Hillside Place will remain undisturbed and will be supplemented with evergreen plantings. The new buildings to be constructed on the project sites are located at a lower elevation compared to these residences and the golf course, hiding the new buildings from view on the adjacent properties, and thereby further reducing any potential visual impact.

A landscaping plan will be part of the construction documents approved for both The Fairways and Gateway Summit projects.

Visual Resource Mitigation Proposed

No additional measures to mitigate impacts on visual resources are necessary or proposed.

Archaeological Resources

A Phase I archaeological investigation was conducted for the project parcels, including a sensitivity analysis and subsurface sampling. Two areas of Native American cultural resources were identified; additional subsurface sampling was conducted as part of a complete Phase II investigation. No concentrations of cultural material were located during this more intensive study, and it was determined it was unlikely the project parcel contained any significant cultural resources. All testing and submissions followed the Office of Parks, Recreation and Historic Preservation (OPRHP) standards.

Archaeological Resource Mitigation Proposed

OPRHP has requested additional Phase II testing prior to concluding that impacts in two limited areas noted as Site One and Site Two are adequately mitigated. Site One is

on the proposed Hotel lot. Prior to any construction on this site, a letter will be procured from OPRHP stating that impacts to cultural resources are adequately mitigated. Site Two is on The Fairways site and is in an area that is no longer proposed for disturbance.

5.9 Alternatives Analyzed

Alternatives presented in the DGEIS and the Modified Road Configuration Alternative for Gateway Summit prepared following the DGEIS are summarized below:

- **No Action Alternative**

The No Action Alternative is the scenario that would occur if no development were to take place on the project site. This is effectively an open space preservation alternative. The sites would remain in their current undeveloped and underutilized state.

- **Alternative 1: Reduced Environmental Impact Alternative for the Gateway Summit Site;**

In order to reduce the level of site disturbance, only three lots would be created on the Gateway Summit portion of the site under Alternative 1. This alternative limits development to the Route 6 frontage only (see DGEIS Figure 4-1). All of the Route 6 frontage would be developed with commercial uses. Lot 1 on the eastern side of the site would be developed with a 60,120-square foot retail use such as a furniture store. Lot 3, occupying the western portion of the site where an auto dealership is located under the proposed action, would be developed with a 45,000-square foot retail use consisting of an office supply store or similar retail. In between the two retail sites would be a 6,000-square foot restaurant.

This alternative substantially reduces the amount of development proposed and eliminates the YMCA (a quasi-public use), hotel with banquet hall and conference center, senior housing, dedicated open space and office uses that are part of the proposed action. As such, it does not meet the key objectives of both the Applicants and the Town. No access road would be created leading to the upper portions of the site, and no development would occur on the portions of the Gateway Summit site proposed for a YMCA (Lot 8), Corporate/Professional Offices and Convenience Retail (Lot 7), Assisted Living or Senior Housing (Lot 6), and 143 units of Senior Housing (Lot 5) under the DGEIS proposed action. While this alternative would result in less site disturbance and impacts to natural features, it would also return substantially lower amounts of tax revenues and would not achieve the open space and recreational benefits of the proposed plan. With no site residents and fewer visitors related to its lower amount of commercial development, this alternative would result in less impact than the DGEIS proposed action in terms of impacts to community services, and socioeconomic conditions, including lower levels of fiscal benefits. This alternative does not meet the Town and County's need for additional revenue and does not represent an economically viable alternative.

- **Alternative 2: Alternative Road Configuration for Gateway Summit Site;**

Alternative 2 described in the DGEIS entails an alternative roadway configuration for the Gateway Summit portion of the project site with a more winding roadway, and two points of access on Route 6. Proposed lot lines would be configured differently and an additional lot would be created. Traffic impacts from this alternative would be greater at

Route 6, potentially requiring the construction of safety improvements and the widening of a nearby bridge.

Alternative 2 entails a more intensive commercial program for the Gateway Summit site, with 132,800 square feet of retail use facing Route 6 and two office buildings and restaurants located in the middle portion of site. Other major differences include the replacement of the hotel, and auto dealership facing Route 6 proposed in the DGEIS proposed action with retail use, and the addition of an Assisted Living or Senior Housing complex on the upper portion of the project site. The Assisted Living or Senior Housing proposed on Lot 6 under Alternative 2 would be slightly taller than that of the proposed action given the smaller area of that lot under Alternative 2.

- Alternative 2A: Through Road Alternative;

The Applicants have discussed a through road alternative in the project description of the DGEIS that would provide for a physical connection between the Gateway and Fairways site, but would be gated. This alternative would provide through access to residents, guests and service personnel of the Fairways site. Traffic impacts for such an alternative would be minor, as the Senior Project on the Fairways site is a low intensity trip generator. The Applicants are willing to provide such a connection, and the currently proposed action includes a connection between the project sites, although no connection to Fair Street is provided in the currently proposed action.

An alternative to this configuration would be to have an unrestricted through road, as a dedicated Town Road from Route 6 to Fair Street. This alternative is not evaluated in detail in the DGEIS, as it is not consistent with the objectives of the Applicants not consistent with the objectives of the Centennial Golf Club, and would not offer significant traffic relief in view of the existing operational benefits already realized by John Simpson Road, which connects to Route 6 and Fair Street at signalized intersections immediately east of the site.

This alternative is not consistent with the goals of the Applicants, who seeks to maintain the roadway through The Fairways Senior Housing site as a low intensity, low volume road, compatible with the quiet residential atmosphere that he believes is important to the senior residential community.

Because the road would traverse a portion of the Centennial golf course and would result in a golf cart crossing, it is more desirable to have that crossing be a narrower, low volume, private road than a town road, to minimize impacts to the golf course operation.

Finally, John Simpson Road already provides a north-south option to local travelers that is operationally sound. There would be no significant benefit derived by turning the Fairways Road into a town, through road. For these reasons, pursuant to ECL Part 617.9(5)(v) (which states that alternatives must be reasonable considering the objectives of the project sponsor), the unrestricted, Town dedicated, through road alternative is not investigated further. The option of having the through road connection with a private road, however, does reduce traffic on John Simpson Road and Fair Street and would reduce traffic crossing the Centennial Golf Course, a positive benefit.

- Alternative 3: Maximum Build-out Plan for Gateway Summit Site;

Alternative 3 that is described in the DGEIS entails the maximum build out of the Gateway Summit portion of the project site pursuant to zoning, with the further

subdivision of the site for three additional lots. As with Alternative 1, the Route 6 frontage would be more intensively developed than under the proposed action. Alternative 3 includes a 60,120-square foot retail use, a 7,000-square foot restaurant, and a 150-room hotel with a 12,000-square foot banquet hall and conference center located on its western side. Two additional office buildings and an additional restaurant are added to the central portion of the site. Under this alternative, the area of Lot 5 that is proposed for 143 units of Senior Housing under the proposed action is divided into two lots containing a 250-room hotel with a conference center and spa on the northwestern corner of the site (Lot 5), and a 112-unit Senior Housing complex oriented around a cul de sac located closer to the access roadway (Lot 4). A 10,000-square foot, two-story office is located to the rear of the Route 6 development, with access from the main access roadway.

Development of this alternative would result in the most construction disturbance and associated impacts to woods and steep slopes of all of the alternatives examined, including 75.7 acres of disturbance area and 41.9 acres of disturbance to slopes of 15 percent or more. Alternative 3 would result in over 50 percent more traffic in the p.m. peak hour than under the DGEIS proposed action. There would be a greater increase in traffic in the Saturday peak hour. Impacts to water resources, vegetation and wildlife, community services, and visual conditions would also be greater under this alternative.

- Alternative 4: Conventional Subdivision on The Fairways Site;

The fourth alternative development scenario examined in the DGEIS includes a conventional single-family residential subdivision on The Fairways site with proposed uses on the Gateway Summit site remaining unchanged. This alternative would include 17 detached single-family homes based on current zoning, which permits the development of homes on lots of 120,000 square feet or more in size. Homes would be laid out along a single north-south running roadway.

This large-lot alternative would result in larger homes and a decrease in preserved open space on the project site in comparison to the proposed action. Such development would occur on an as-of-right basis with no requirement for a Special Use Permit. This level of development would not be economically feasible to construct due to the small number of lots that would be created relative to the amount of roadway that would need to be constructed.

This alternative would not meet the objectives of the project sponsor in terms of return on investment. It would also not result in the construction of much needed senior housing in the Town of Carmel. At the same time, it would result in impacts to the school district that would not otherwise occur with the proposed action. A conventional subdivision would be expected to generate approximately 15 new school age children, increasing demands on the local school district. The layout of the homes under this alternative would not represent an efficient use of the project site, particularly compared to the compact layout of the senior housing included in the proposed action.

- Alternative 5: Reduced Environmental Impact Alternative for The Fairways Site.

The fifth alternative development scenario described in the DGEIS examines an alternative mix of senior housing on The Fairways site with reduced environmental impacts, with proposed uses on the Gateway Summit site remaining unchanged. Also consistent with current zoning, this alternative would include 29 attached single-family homes for seniors (meeting Zoning Code definition of multiple-family senior housing), 57

senior townhouse units, and 64 multi-family senior housing units. As with the proposed action for The Fairways site, a Special Use Permit would be required, and tennis courts and a swimming pool would be included as recreational facilities for the future residents.

This alternative maintains the same number of units as the DGEIS proposed action, but provides a greater diversity in the type of senior housing proposed while lowering the amount of site disturbance and impacts to steep slopes and wooded areas in comparison to the DGEIS proposed action. Following the February 2005 Public Hearing and the above-described discussions with Riverkeeper, the Attorney General's office, the NYCDEP, NYSDEC and the Town of Carmel representatives, this alternative was modified and further detailed, with the resulting design now serving as the currently proposed action for The Fairways.

- Modified Road Configuration Alternative for Gateway Summit

This alternative considers a revised access to the Gateway Summit site originally considered in the DGEIS that would avoid the watercourse crossing and the need for a variance from NYCDEP to construct impervious surfaces within the limiting distance to the watercourse. The Applicant further refined this alternative from that first considered in the DGEIS based on discussions with NYCDEP. Refinements include elimination of a 10,000 square foot office building and reduction in steep slope disturbance and in possible related erosion and sedimentation impacts. This refined alternative also would significantly reduce wetland buffer encroachments and would further reduce the intensity of development on the Gateway Summit project site. Additional contiguous areas of undeveloped land and wildlife habitat would remain. With this alternative, environmental impacts are further reduced, and a generally similar level of development is included in comparison to the proposed action, although one of two proposed office buildings is eliminated. Several options for one of the proposed uses under this alternative have also been considered. These replace one of the proposed restaurants with either an office building or a pharmacy.

This alternative would involve the removal of the Route 6 bridge and the construction of a turning lane from Route 6 into the site. The existing bridge along Route 6 over the former railroad bed presently prevents the construction of such a left hand turn lane, as it is too narrow to accommodate an additional lane. The Applicant met with the NYSDOT representatives to determine its plans to remove and replace this bridge, which is included in the NYSDOT list of planned roadway improvements. NYSDOT now wishes to coordinate this bridge project with Putnam County's plan to extend the bike path further north along the former railroad bed and under the subject bridge (The "Putnam County Bike Path Project"). Putnam County is entering stage three of the eight stages of its rails-to-trails program, and expects to run the bike path under the subject bridge by the end of the summer of 2007. Considering this, NYSDOT has agreed to hold to its 2007 construction date so that it can be coordinated with the Putnam County Bike Path Project

The Applicants held meetings with representatives of the NYSDOT and Putnam County to coordinate the bridge project and Putnam County Bike Path Project, and expand the bridge project to add a left hand turn lane and sidewalk. All three entities will enter into a formal agreement to complete the bridge improvement project, including adding a left hand turn lane and sidewalk into the project, under NYSDOT's Reverse Betterment Program. Under the agreement, the Applicants will pay its incremental share of the additional project costs with NYS DOT paying for the costs of the bridge improvements it had already slated for completion. This agreement will allow the NYSDOT bridge project to be coordinated with the Putnam County Bike Path Project, and provide a sidewalk

over the bridge into the project site at no additional cost to the County and the State. The new bike path and sidewalk improvements will provide significant pedestrian connections to the Gateway Summit and The Fairways projects. The existing bridge would be removed and replaced with a new structure wide enough to accommodate the left hand turn lane. The bridge removal and reconstruction would be staged so that two lanes of traffic can be kept open during construction to the maximum extent practicable. Traffic controls during construction will be determined in consultation with NYSDOT and Putnam County. It is noted that the Putnam County Bike Path Project, which is a totally separate action from the proposed projects and is being advanced by Putnam County, will include a disturbance to federally regulated wetlands. Putnam County will provide a wetland mitigation area in conformance with U.S. Army Corps of Engineers standards. The bridge removal and replacement project would not adversely impact wetlands. As noted above in the traffic section, the bridge improvements with the left hand turn lane and the traffic light do not need to be installed before construction starts on individual site plans for both Gateway Summit and The Fairways.

6.0 CERTIFICATION OF FINDINGS TO APPROVE

The Town of Carmel makes the following findings that include the Board's rationale for its decision.

1. The Carmel Planning Board has carefully and thoroughly weighed and balanced the relevant potential environmental impacts anticipated from the revised proposed action and the Modified Road Configuration Alternative for Gateway Summit set forth in the FGEIS with social, economic and other considerations, and hereby certifies that the requirements of SEQRA and the SEQRA Regulations have been met.
2. Consistent with social, economic and other essential considerations from among the reasonable alternatives available, the revised proposed action and the Modified Road Configuration Alternative for Gateway Summit (including the pharmacy and the office option, and the restaurant and office options) set forth in the FGEIS avoid or minimize adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.
3. The revised proposed action and the Modified Road Configuration Alternative for Gateway Summit (including the pharmacy and the office option, and the restaurant and office options) set forth in the FGEIS are subject to the mitigation measures described in the DGEIS, FGEIS and set forth in this Findings Statement. These findings are substantiated by the analyses in the DGEIS and FGEIS, which disclose potential environmental impacts and demonstrates that the potential environmental impacts associated with the action would be fully mitigated.

The preceding facts, as documented in the DGEIS, the FGEIS, and in the public record associated with these proceedings support these findings. After due consideration, the lead agency finds that this revised proposed action and the Modified Road Configuration Alternative for Gateway Summit (including the pharmacy and the office option, and the restaurant and office options) set forth in the FGEIS will achieve a balance between the protection of the environment and the need to accommodate social, economic and other considerations.

Findings Statement
Gateway Summit and The Fairways

Name of Agency:

Town of Carmel Planning Board

Name of Responsible Officer:

Mr. Harold Gary

Signature of Responsible Officer:

Harold Gary

Title:

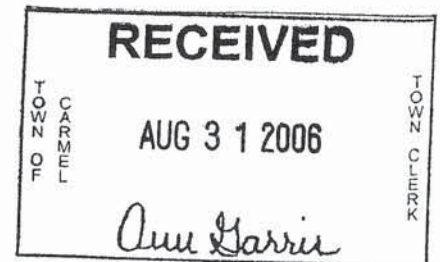
Planning Board Chair

Date: Aug. 31, 2006

Harold Gary

Address of Lead Agency

60 McAlpin Avenue
Mahopac, New York 10541



**SEQRA Evaluation Form
for
Gateway Summit Individual Site Plans**

Project Name: _____ **Date:** _____
Applicant: _____
Parcel No(s). _____ **Total Acreage:** _____
Proposed Use: _____
Peak Hour Traffic Generation: AM ____; **PM** ____; **Saturday** ____

The Findings Statement for the Gateway Summit subdivision was adopted following the preparation and review of a Generic Environmental Impact Statement (GEIS). That GEIS evaluated the potential impacts of a generic design for a Mixed Use Development that included a variety of potential land uses allowed by zoning on the subject site. The GEIS also evaluated a Modified Road Configuration Alternative, that does not cross a New York City DEP regulated watercourse (the base subdivision plan's road does cross that watercourse).

The GEIS established minimum thresholds and criteria for the future review of individual site plans when they are submitted to the Town of Carmel Planning Board for approval. The purpose of this form, which is an appendix to the Findings Statement adopted for this project by the Planning Board, is to provide a basis for determining if the submitted site plans fall within the thresholds that the Planning Board has determined would mitigate adverse effects to the maximum extent practicable. Site plan elements such as location and design of buildings, and location and design of interior roads for both the commercial and residential uses may change from the concept development plan in the FGEIS without any additional environmental review, provided they substantially meet the development thresholds established in the GEIS process and specifically set forth in the Findings Statement.

If the proposed plans and any supplemental documentation submitted demonstrate that potential effects of the proposed use, design, size, and location of future development projects site plan fall substantially within the established thresholds as determined through use of this form, the Planning Board may complete site plan review as provided in 6 NYCRR 617.10 without any additional environmental review under the SEQRA regulations.

If the established thresholds are not met, further SEQRA review will be required including the issuance of a determination of significance. It is noted that the applicant may amend a proposal site plan or submit a new plan. If such revised or new site plan submission does not substantially exceed the established thresholds, no additional environmental review will be required.

The established threshold evaluation follows:

1. Landscape Plans. All future development of the Gateway Summit parcels must provide landscaping plans that comply with Town of Carmel regulations and the GEIS Findings as they apply to setbacks and landscaped buffers to adjacent properties.

During the site plan review process, individual site plans must include landscaping plans designed to enhance the visual qualities of the use. Further, stormwater treatment basins must be planted with aesthetic and functional wetland and transitional plantings

to provide water quality treatment, wildlife habitat and visual enhancement and generally comply with Section 63-27C(4) and (5) of the Town Code.

Does the submitted site plan meet these requirements?

Yes No

If not, can the plan meet this requirement if minor revisions are made?

Yes No

2. Site Disturbance. The conceptual development plans analyzed in the GEIS indicate that approximately 55 acres of the Gateway Summit site would be graded to accommodate the proposed development, and of that amount, approximately 25 acres would be on slopes exceeding fifteen percent. Further, no significant grading would take place in areas outside of those shown in the Overall Development Plans for the project, and that Erosion and Sediment Control Plans must accompany any site plan application. In addition to complying with the Findings Statement, these plans must be prepared in conformance with applicable New York State Department of Environmental Conservation (NYSDEC) and New York City Department of Environmental Protection (NYCDEP) design guidelines, with special consideration given to erosion control on any land to be disturbed on slopes greater than 15 percent.

Do the submitted Site Plans reflect overall site disturbance and disturbance of steep slopes, for the construction of roads, buildings and other components of the proposed project that are generally within the areas of potential disturbance shown on the Grading Plans (GEIS Figures 3.1-8 and 3.1-10)?

Yes No

If not, can the plan meet this requirement if minor revisions are made?

Yes No

Has a detailed Erosion and Sediment Control Plan been submitted in conformance with the project specific SWPPP, and NYSDEC and NYCDEP design guidelines?

Yes No

If not, can the erosion control plan be revised to meet this requirement?

Yes No

3. Stormwater Management. All individual site plan applications are to include Stormwater Management Plans developed in general accordance with the project specific Stormwater Pollution Prevention Plan (SWPPP) prepared for Gateway Summit, and that comply with the New York State General Permit for Stormwater Discharge, and the New York City Watershed Rules and Regulations. Adherence to these criteria will be a condition of site plan approval.

Does the application package include the project specific SWPPP?

Yes No

4. Traffic. Note: *In the event that the Modified Road Configuration Alternative is proposed, skip to 4A, Traffic Alternative, below.*

A work permit application for any work in the state right-of-way of US Route 6 shall be submitted and approved by NYS DOT, as may be applicable. A concept plan for access improvements shall be provided to NYS DOT as well as to the Town of Carmel Planning Board for the Board's review for compliance with the Findings Statement and input to the NYSDOT.

Mitigation measures were proposed in the GEIS for the eastern access road to mitigate impacts to traffic flow on US Route 6 due to the combined Gateway Summit and The Fairways projects. Thresholds have been established relative to the generation of site traffic and timing of mitigation measures as noted below. It is noted that construction of development gaining access from the westerly access road (secondary access road, in this case) can proceed at any time, and Certificates of Occupancy may be issued, without any road improvements or other traffic mitigation.

Note: If mitigation measures are installed in connection with prior applications, these thresholds may be moot.

Site development plans and construction activities that do not exceed the thresholds noted below may proceed without further review other than NYSDOT work permits as may be required for any work in the State Right of Way. Additionally, site development plans and construction not exceeding such thresholds may be constructed and receive certificates of occupancy without any additional traffic mitigation.

What is the projected peak hour trip generation for pending or approved uses to date at the eastern access road? _____ entering trips; _____ exiting trips

Left Turn Lane Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of more than 60 peak hour entering vehicles at the eastern access road?

____ Yes ____ No

If so, has the Applicant applied to the NYS DOT for a left turn lane on US Route 6 into the eastern access road to mitigate potential traffic impacts?

____ Yes ____ No

Certificates of occupancy for the additional site development plans and construction projected to generate more than another 60 peak hour entering trips at the eastern access road shall be issued when either; i) NYS DOT approves a permit for the left lane and it is installed; or ii) the NYS DOT finds that such improvement is not required.

Traffic Signal Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of 100 or more peak hour exiting vehicles at the eastern access road from the Gateway Summit and The Fairways projects?

Yes No

If so, has the Applicant applied to NYSDOT to construct a traffic light at the eastern site access intersection with US Route 6?

Yes No

Certificates of occupancy shall be issued for additional site development plans and construction projected to generate more than 100 peak hour exiting vehicles, at the eastern access road when either; i) NYS DOT approves a permit for the traffic light and it is installed; or ii) the NYS DOT finds that such traffic light is not required.

Any signal design and installation shall have the potential to accommodate a left turn lane if determined necessary and approved by NYSDOT.

4A. Modified Access Alternative. In the likely event that this access alternative is pursued the following thresholds shall apply.

A work permit application for any work in the state right-of-way of US Route 6 shall be submitted and approved by NYS DOT, as may be applicable. The developer of the site will need to provide a concept plan for access improvements to NYS DOT as well as to the Town of Carmel Planning Board for the Board's review for compliance with the Findings Statement and input to the NYSDOT. The applicant will need to provide designs for the betterment project to widen the railtrail crossing structure of US Route 6 to permit a left turn lane into the site.

Mitigation measures were proposed in the GEIS for the westerly access road to mitigate impacts to traffic flow on US Route 6 due to the combined Gateway Summit and The Fairways projects. Thresholds have been established relative to the generation of site traffic and timing of mitigation measures as noted below for the Modified Access Alternative. It is noted that construction for development gaining access from the easterly access road (secondary access road in this case) can proceed at any time, and Certificates of Occupancy can be issued without any road improvements or other traffic mitigation.

Note: If mitigation measures are installed in connection with prior applications, these thresholds may be moot.

Site development plans and construction activities that do not exceed the thresholds noted below may proceed without further review other than NYSDOT work permits as may be required for any work in the State Right of Way. Additionally, development not exceeding such thresholds may be constructed and receive certificates of occupancy without any additional traffic mitigation.

What is the projected peak hour trip generation for pending or approved uses to date at the western access road? _____ entering trips; _____ exiting trips.

Traffic Signal Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate more than 60 entering and 90 peak hour exiting vehicles at the western access road from the Gateway Summit and The Fairways projects?
 Yes No (both thresholds must be met).

If so, has the Applicant applied to NYSDOT to construct a traffic light at the western site access intersection with US Route 6?
 Yes No

Note: As per the Findings, Certificates of occupancy shall be issued for development projected to generate more than 60 peak hour entering and 90 peak hour exiting vehicles, at the western access road when either; i) NYS DOT approves a permit for the traffic light and it is installed; or ii) the NYS DOT finds that such traffic light is not required.

Any signal design and installation shall have the potential to accommodate a left turn lane if determined necessary and approved by NYSDOT.

Left Turn Lane Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of more than 70 additional peak hour entering trips, for a cumulative total of more than 130 entering trips at the western road access?
 Yes No

If so, the Applicants shall apply to the NYS DOT for a left turn lane at that location. Certificates of Occupancy for the additional development projected to generate more than another 70 additional peak hour entering trips (130 cumulative peak hour trips) at the western access road shall be granted if: i) NYS DOT approves a permit for the left hand turn land and it is installed, or ii) the NYS DOT finds such improvement is not required.

5. Community Services. The mitigation requirements for community services relative to the water supply system require two separate distribution systems, "high" and "low".

The high-pressure water system will be designed and constructed to include a new pump station and the extension of the high pressure distribution system to service the existing homes on Kelly Ridge Road, Everett Drive and Bard Road above elevation 660 (approximately 3,500 linear feet of new water main pipe will be installed to service existing homes on those roads). This system will be on line prior to the first Certificate of Occupancy (CO), being issued for the Gateway Summit Senior Housing Project.

The system will include a new pump station and a new 135,000 gallon water storage tank (average daily project design flow) next to the existing tank at the end of Everett Drive. This new tank would be located south of the existing tank on the Carmel Water District #2 parcel. This tank will be online prior to the first Certificate of Occupancy being

issued for the Gateway Senior Housing Project or The Fairways Senior Housing Project. All new water mains, pump station, tank, and appurtenances internal to the site would be installed at no cost to the water district. It is noted that the other lots within the Gateway Summit may be developed, and Certificates of Occupancy issued, before the above described improvements to the water district are made relative to the senior housing developments in Gateway Summit, as well as The Fairways.

All project buildings will be protected by an automatic fire sprinkler system so as not to increase the Carmel Water District #2 fire protection needs. Each building system will be operational prior to the issuance of the C.O. for each building.

The project's deeds will include a restrictive covenant prohibiting the use of the municipal water system for irrigation purposes. A restrictive covenant establishing such restriction will be filed with the County at the time the subdivision plat is filed.

A Water Supply Easement is proposed to be granted to the District over an approximately 50-acre area located in the area to the north and east of the proposed YMCA on the Gateway Summit and The Fairways sites. This easement will allow the CWD #2 the right to develop, construct and maintain a groundwater supply if ever desired. This easement will also define a specific area where the Town could potentially locate a booster station. The Water Supply easement will run through the Gateway Summit senior housing lot and The Fairways, and will provide access through proposed Lot 6 (the "YMCA" lot). This easement will be as shown on the subdivision plat and an easement filed with the County at the time the subdivision plat is filed.

**Does the submitted Site Plan address the construction phasing of the
aforementioned mitigation measures?**

Yes No

If not, can the plan be adjusted to meet this requirement?

Yes No

6. Blasting. The GEIS concludes that development of some of the parcels at the Gateway Summit may require blasting. Any blasting which is required will be done in full conformance with the New York State Code. A blasting protocol is summarized in the GEIS, which includes pre-blasting inspections, test blasting, seismographic monitoring and daily logs of seismographic data, explosive use and field conditions.

Can the proposed site plan be implemented without the need for blasting?

Yes No

If not, has a blasting plan been prepared?

Yes No

**SEQRA Evaluation Form
for
The Fairways Site Plan**

Project Name: _____ **Date:** _____
Applicant: _____
Parcel No(s). _____ **Total Acreage:** _____
Proposed Use: _____
Peak Hour Traffic Generation: AM ____; PM ____; Saturday ____

The conceptual development plan for The Fairways was approved following the preparation and review of a Generic Environmental Impact Statement (GEIS). That GEIS evaluated the potential impacts of a Senior Housing development, which may be constructed and operated on the site and established minimum thresholds and criteria for the future review of individual site plans when they are submitted to the Town of Carmel Planning Board for approval. The reviewed concept plan included 150 senior units including a mix of multi-family, town-home and single family cottage style units.

The GEIS established minimum thresholds and criteria for the future review of individual site plans when they are submitted to the Town of Carmel Planning Board for approval. The purpose of this form, which is an attachment to the Findings Statement adopted for this project by the Planning Board, is to provide a basis for determining if the submitted site plans fall within the thresholds that the Planning Board has determined would mitigate adverse environmental effects to the maximum extent practicable. Site plan elements such as location and design of buildings, and location and design of interior roads for both the commercial and residential uses may change from the concept development plans in the FGEIS without any additional environmental review, provided they substantially meet the specific development threshold established in the GEIS process and specifically set forth in the Findings Statement.

If the proposed plans and any supplemental documentation submitted demonstrate that potential effects of the proposed use, design, size, and location of future development projects site plan fall substantially within the established thresholds as determined through use of this form, the Planning Board may complete site plan review as provided in 6 NYCRR 617.10 without any additional environmental review under the SEQRA regulations.

If the established thresholds are not met, further SEQRA review will be required including the issuance of a determination of significance. It is noted that the applicant may amend a proposed site plan or submit a new plan. If such revised or new site plan submission does not substantially exceed the established thresholds, no additional environmental review will be required.

The established thresholds consider the following:

1. Landscape Plans. Future application for development of The Fairways must provide landscaping plans that comply with Town of Carmel regulations and the GEIS Findings as they apply to setbacks and landscaped buffers to adjacent properties.

During the site plan review process, individual site plans must include landscaping plans designed to enhance the visual qualities of the use. Further, stormwater treatment basins must be planted with aesthetic and functional wetland and transitional plantings to provide water quality treatment, wildlife habitat and visual enhancement, and generally comply with Section 63-27C(4) and (5) of the Town Code.

Does the submitted site plan meet these requirements? _____

If not, can the plan meet this requirement if minor revisions are made? _____

2. **Site Disturbance.** The conceptual development plan for The Fairways analyzed in the GEIS indicates that approximately 25 acres of The Fairways site would be graded to accommodate proposed development, and of that, approximately 15 acres would be on slopes that exceed 15 percent. Significant grading activities should occur substantially within the areas of disturbance established in the concept development plans in the final GEIS. Further, the GEIS indicates that no significant grading or other land disturbance activities are expected in areas outside of those shown in the Overall Development Plan for The Fairways project and that Erosion and Sediment Control Plans must accompany site plan applications. In addition to complying with the Finding Statement, these plans must be prepared in conformance with New York State Department of Environmental Conservation (NYSDEC) and New York City Department of Environmental Protection (NYCDEP) design guidelines, with special consideration given to erosion control on any land to be disturbed on slopes greater than 15 percent.

Do the submitted Site Plans reflect overall site disturbance and disturbance of steep slopes for the construction of roads, buildings and other components of the proposed project that are generally within the areas of potential disturbance shown on the Grading Plans included in the GEIS and that do not significantly exceed the disturbance estimates in described in the GEIS?

If not, can the plan meet this requirement if minor revisions are made?

Yes **No**

Has a detailed Erosion and Sediment Control Plan been submitted in conformance with NYSDEC and NYCDEP design guidelines?

Yes **No**

If not, can the Erosion and Sediment Control Plan be revised to comply with these standards?

Yes **No**

3. **Stormwater Management.** The individual site plan application is to include Management Plan that generally conforms to the Stormwater Pollution Prevention Plan (SWPPP) prepared for The Fairways generally and that complies with the New York State General Permit for Stormwater Discharge (GP-02-01) and the New York City Watershed Rules and Regulations. Adherence to these rules will be a condition of site plan approval.

Does the application include site plan specific SWPPP?

Yes **No**

4. **Traffic.** Note: In the event that the Modified Road Configuration Alternative is proposed, skip to 4A, Traffic Alternative, below.

A work permit application for any work in the state right-of-way of US Route 6 shall be submitted and approved by NYS DOT, as may be applicable. A concept plan for access improvements shall be provided to NYS DOT as well as to the Town of Carmel Planning Board for the Board's review for compliance with the findings statement and input to NYS DOT.

Mitigation measures were proposed in the GEIS for the eastern access road to mitigate impacts to traffic flow on US Route 6 due to the combined Gateway Summit and The Fairways projects. Thresholds have been established relative to the generation of site traffic and timing of mitigation measures as noted below. It is noted that construction of development gaining access from the westerly access road (secondary access road in this case) can proceed at any time, and certificates of occupancy issued, without any road improvements or other traffic mitigation.

Note: If mitigation measures are installed in connection with prior applications, these thresholds may be moot.

Site development plans and construction activities that do not exceed the thresholds noted below may proceed with out further review other than NYSDOT work permits as may be required for any work in the State Right of Way. Additionally, site development plans and construction activities not exceeding such thresholds may be constructed and receive certificates of occupancy without any additional traffic mitigation.

What is the projected peak hour trip generation for pending or approved uses to date at the eastern access road? _____ entering trips; _____ exiting trips

Left Turn Lane Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of more than 60 peak hour entering vehicles at the eastern access road?

Yes No

If so, has the Applicant applied to the NYS DOT for a left turn lane on US Route 6 into the eastern access road to mitigate potential traffic impacts?

Yes No

Certificates of occupancy for the additional site development plans and construction activities projected to generate more than another 60 peak hour entering trips at the eastern access road shall be issued when either; i) NYS DOT approves a permit for the left lane and it is installed; or ii) the NYS DOT finds that such improvement is not required.

Traffic Signal Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of 100 or more peak hour exiting vehicles at the eastern access road from the Gateway Summit and The Fairways projects?

Yes No

If so, has the Applicant applied to NYSDOT to construct a traffic light at the eastern site access intersection with US Route 6?

Yes No

Certificates of occupancy shall be issued for additional site development plans and construction activities projected to generate more than 100 peak hour exiting vehicles, at

the eastern access road when either; i) NYS DOT approves a permit for the traffic light and it is installed; or ii) the NYS DOT finds that such traffic light is not required.

Any signal design and installation shall have the potential to accommodate a left turn lane if determined necessary and approved by NYSDOT.

4A. Modified Access Alternative. In the likely event that this access alternative is pursued the following thresholds shall apply.

A work permit application for any work in the state right-of-way of US Route 6 shall be submitted and approved by NYS DOT, as may be applicable. The developer of the site will need to provide a concept plan for access improvements to NYS DOT as well as to the Town of Carmel Planning Board for the Board's review for compliance with the findings statement and input to NYS DOT. The applicant will need to provide designs for the betterment project to widen the railtrail crossing structure of US Route 6 to permit a left turn lane into the site.

Mitigation measures were proposed in the GEIS for the western access road to mitigate impacts to traffic flow on US Route 6 due to the combined Gateway Summit and The Fairways projects. Thresholds have been established relative to the generation of site traffic and timing of mitigation measures as noted below for the Modified Access Alternative. It is noted that construction of development gaining access from the eastern access road (secondary access road in this case) can proceed at any time, and certificates of occupancy issued, without and good improvement, or other traffic mitigation.

Note: If mitigation measures are installed in connection with prior applications, these thresholds may be moot.

Site development plans and construction activities that do not exceed the thresholds noted below may proceed with out further review, other than NYSDOT work permits as may be required for any work in the State Right of Way. Additionally, development not exceeding such thresholds may be constructed and receive certificates of occupancy without any additional traffic mitigation.

What is the projected peak hour trip generation for pending or approved uses to date at the western site access drive? _____ entering trips; _____ exiting trips.

Traffic Signal Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate more than 60 peak hour entering and 90 peak hour exiting vehicles at the western site access road from the Gateway Summit and The Fairways projects?

___ Yes ___ No (both thresholds must be met).

If so, has the Applicant applied to NYSDOT to construct a traffic light at the western site access intersection with US Route 6?

___ Yes ___ No

Note: As per the Findings, Certificates of occupancy shall be issued for development projected to generate more than 60 entering and 90 exiting at the western access road during peak hours when either; i) NYS DOT approves a permit for the traffic light and it is installed; or ii) the NYS DOT finds that such traffic light is not required.

Any signal design and installation shall have the potential to accommodate a left turn lane if determined necessary and approved by NYSDOT.

Left Turn Lane Threshold

Does the proposed use in combination with the aforementioned pending or approved uses generate a total of more than 70 additional peak hour entering trips, for a cumulative total of more than 130 peak hour entering trips at the western access road?

___ Yes ___ No

If so, the Applicants shall apply to the NYS DOT for a left turn lane at that location. Certificates of occupancy for the additional development projected to generate more than another 70 additional entering trips (130 cumulative trips) at the western access road shall be granted if: i) NYS DOT approves a permit for the left hand access road and it is installed, or ii) the NYS DOT finds such improvement is not required.

5. Open Space Preservation. The conceptual development plan analyzed in the GEIS includes provisions for preserving approximately 60 acres of the Fairways site to be within conservation easement areas. These are intended to permanently protect and preserve wetlands, wetland buffers and open space. This preserved area will include trails for hiking and access to the lake and may include water well installation.

Does the submitted Site Plan include provisions for long term preservation of open space in a manner consistent with this mitigation measure?

___ Yes ___ No

8/18/06, 4:15 pm

6. Community Services. The mitigation requirements for community services relative to the water supply system require two separate distribution systems, "high" and "low".

The high-pressure water system will be designed and constructed to include a new pump station and the extension of the high pressure distribution system to service the existing homes on Kelly Ridge Road, Everett Drive and Bard Road above elevation 660 (approximately 3,500 linear feet of new water main pipe will be installed to service existing homes on those roads). This system will be on line prior to the first Certificate of Occupancy (C.O), being issued for the Project.

The system will include a new pump station and a new 135,000 gallon water storage tank (average daily project design flow) next to the existing tank at the end of Everett Drive. This new tank would be located south of the existing tank on the Carmel Water District #2 parcel. This tank will be online prior to the first C.O. being issued for the Gateway Senior Housing Project or The Fairways Senior Housing Project. All new water mains, pump station, tank, and appurtenances internal to the site would be installed at no cost to the water district.

All project buildings will be protected by an automatic fire sprinkler system so as not to increase the Carmel Water District #2 fire protection needs. Each building system will be operational prior to the issuance of the C.O. for each building.

The project's deeds will include a restrictive covenant prohibiting the use of the municipal water system for irrigation purposes. A restrictive covenant establishing such restriction will be filed with the County at the time the subdivision plat is filed.

A Water Supply Easement is proposed to be granted to the District over an approximately 50-acre area located in the area to the east of the proposed YMCA on the Gateway Summit and The Fairways sites. This easement will allow the CWD #2 the right to develop, construct and maintain a groundwater supply if ever desired. This easement will also define a specific area where the Town could potentially locate a booster station. The Water Supply easement will run through the Gateway Summit senior housing lot and The Fairways, and will provide access through lot 6 (the "YMCA" lot). This easement will be as shown on the subdivision plat and an easement filed with the County at the time the subdivision plat is filed.

**Does the submitted Site Plan address the construction phasing of the
aforementioned mitigation measures? ___ Yes ___ No**

If not, can the plan be adjusted to meet this requirement? _____

7. **Blasting.** The GEIS concludes that development of The Fairways may require blasting. Any blasting which is required will be done in full conformance with the New York State Code. A blasting protocol is summarized in the GEIS, which includes pre-blasting inspections, test blasting, seismographic monitoring and daily logs of seismographic data, explosive use and field conditions.

**Can the proposed site plan be implemented without the need for blasting? ____
Yes ____ No**

If not, has a blasting plan been prepared? ____ Yes ____ No

8. **Recreation Facilities.** The site plan analyzed for the GEIS provides recreation facilities that will be available for use by the future residents of the Fairways. . These facilities include a main clubhouse with two stories and a footprint that can be as large as 15,000 square feet, an indoor pool within the main clubhouse, a sport court, an approximately 1,500 square feet greenhouse, an outdoor pool and terrace, and access to the existing lake for recreation use. The specific recreation components may be altered without additional environmental review provided they meet the recreational needs of the senior housing and do not substantially exceed the areas of disturbance and create new significant adverse environmental impacts.

Does the submitted Site Plan include provision for recreation facilities in a manner consistent with the above? ____ Yes ____ No

**If not, can the plan meet this requirement if minor revisions are made?
____ Yes ____ No**

Conclusion:

Does this site plan application substantially conform with the thresholds outlined above as established by the GEIS and the Findings Statement for the Gateway Summit and Gateway Summit and The Fairways projects? (It is noted that the applicant may modify the site plan so that it is substantially conforms to the thresholds.) ____ Yes ____ No

If yes, as proposed or modified, no further SEQRA review is required.

If no, the Planning Board will conduct additional SEQRA review, specifically limited to the potentially significant adverse environmental impacts arising from the site plan exceeding the above described specific thresholds.

Accepted by resolution of the Town of Carmel Planning Board:

Planning Board Chairman Date

ATTACHMENT B

Carmel CSD and Brewster CSD
Information

School Age Children

Carmel Central School District Student Enrollment

Town of Carmel, Putnam County, New York

Prepared for:

Kearney Realty & Development Group

57 Route 6, Suite 207

Baldwin Place, NY 10505

Prepared by:

Tim Miller Associates, Inc.

10 North Street

Cold Spring, NY 10516

Submitted:

July 14, 2021

School Age Children in Carmel

Table of Contents

1.0 Town of Carmel Zoning History	3
2.0 Demographic Analysis	3
3.0 School District Enrollments	6
4.0 Proposed Projects	9
5.0 Cumulative Impacts	10

1.0 TOWN OF CARMEL ZONING HISTORY

In 2002 the Town of Carmel amended the Zoning for the Town based upon concerns related to over-development including increased traffic, higher cost of Town services, and the sustained growth of the school districts' continuing increase in enrollments. At that time the Town replaced 1-acre and 1.5-acre zoning with a single option for 3-acre single family development as the Town's only residential zone. It was anticipated that up-zoning would solve development pressure, by increasing house prices, by slowing home building and theoretically spurring business growth. Part of the motivation to restrict development was in consideration of protection to the New York Watershed lands which provide New York City's water supply. However, the 3-acre zoning was applied to all residential lands, whether there was municipal water and sewer service available or not.

Having only one residential zone in the entire Town, which requires a minimum of 3 acres for the development of a residential dwelling unit, leaves those with a limited income or more diverse needs unable to find housing within the Town. The Town of Carmel is composed of a diverse population of varying ages and income levels. There is an unmet need to provide housing for entry level homebuyers, millennials just out of college, empty nesters who are preparing for retirement and senior citizens who may prefer to live in a general population community. There are no options for any housing in the Town other than the type of house that belongs on a 3-acre lot. Large lot 3-acre zoning promotes sprawl, requires more infrastructure, and creates isolated neighborhoods that rely solely on automobiles. This is not the most effective measure for providing environmental protection to NY City watershed lands, nor does it meet the needs of the existing population. This type of zoning makes the Town vulnerable to a federal fair housing lawsuit.

2.0 DEMOGRAPHIC ANALYSIS

Table 1 provides a summary of the population and housing statistics for the Town of Carmel. The Table provides a comparison to historic values from 2000 and 2010, compared to current 2020 data and provides a projection to 2025.

As can be seen, although the population had been increasing, the rate of growth which was approximately 7.4 % over the ten years from 2000 to 2010 has slowed to approximately 2.1% over the following decade and is projected to continue to decline. The period between 2010 and 2020 actually show a decrease in overall population. During the same time periods the median age has steadily increased from 37.1 in 2000 to 41.2 in 2010 to 43.7 in 2020 and is projected to continue to increase to 43.8 in 2025. This indicates an aging population. Population aging is influenced by a number of factors. The Town has placed an emphasis on providing housing for its Seniors. Existing homeowners are remaining in their homes. There has been no influx of younger entry level residents. There has been a decline in the ability to own a housing unit based upon the steady increase in housing prices. The housing market in Putnam and northern Westchester has continued to appreciate in value, putting home ownership out of reach for many entry level homebuyers. The percentage of renter occupied units has grown from 14.8 percent to 17.3 percent for residents of the

Town. There has also been a significant migration of young persons out of the Town to other areas in search of rental dwelling units within their budget.

Table 1				
Town of Carmel - Demographic Analysis				
Year	2000	2010	2020	2025
Total Population	32,997	34,305	34,113	33,570
Median Age	37.1	41.2	43.7	43.8
Number of Households	10,838	11,672	11,753	11,613
% Householder 55+	38.2%	42.1%	53.6%	55.9%
Owner Occupied Housing Units	9,160	9,668	9,715	9,603
Renter Occupied Housing Units	1,678	2,004	2,038	2,010
% Renter Occupied	14.8%	17.2%	17.3%	17.3%
Median Home Value	--	\$389,200	\$409,404	\$459,448
Average Home Value	--	\$425,500	\$471,076	\$531,128
Median Household Income	\$77,406	\$99,560	\$106,984	\$112,997
Source: US Census Data, ESRI Demographic Forecasts June 18, 2021				

Table 2 provides a detailed breakdown of the Town’s youngest and older population by age category for the years 2010, 2020 and a projection to 2025.

As Table 2 shows there has been a steady decrease of the school age population and a continued aging of the population. The numbers and percentages of the 0 to 19-year-old population is consistently decreasing, approaching 20% of the total population.

Table 2			
Population Trends			
	2010	2020	2025
Total Population	34,305	34,113	33,570
Population 0-19	9,424	7,836	7,039
% Population 0-19	27.5%	23.0%	21.0%
Population 55+	8602	11,517	12,152
% Population 55+	25.0%	33.8%	36.2%
Source: US Census Data, ESRI Demographic Forecasts June 18, 2021			

During this same time period the over 55 population grew to increasing percentages of the overall population. The 55 and older population rose from 2010 to 2020 and is expected to continue to increase through 2025 representing more than 12,000 persons and 36.2% of the total population.

This trend is directly related to the emphasis the Town has placed on Senior housing and the lack of entry level housing that would attract families starting out. The current Carmel residential 3- acre zoning exacerbates these demographic trends by failing to provide balanced housing opportunities, especially for young people.

Without an influx of young families, the family-oriented nature of the Town of Carmel and Putnam County will inevitably change. Community priority will shift. Recreation facilities will need to cater to an older population not a family-oriented community. Section 3.0 below discusses the impacts this type of shift is having on the Carmel Central School District enrollment.

3.0 SCHOOL DISTRICT ENROLLMENTS

Areas within the Town of Carmel being considered for Multifamily Development are located primarily in the Carmel Central School District. This study assesses the enrollment trends in the Carmel District based upon historical information and a projection of anticipated demographics.

Student enrollments have been steadily declining in the Carmel CSD for more than a decade. Peak enrollment for the Carmel CSD occurred in 2002/2003 when enrollment was 4,956 students. As shown in Table 3 below, student enrollment has declined every year for the past 18 years. Table 3 illustrates that there hasn't been a single school year since 2002/03 in which the current enrollment wasn't less than the previous school year. Table 3 shows the official New York State Department of Education BEDS¹ count by school year and indicates the decline in the number of students compared to the prior school year.

Enrollments have declined by 16 to 149 students per year each year, with the biggest drop occurring during the most recent school year. This most recent drop could be related to the COVID Pandemic, however there have been four other occurrences where the decline in student enrollment has been 90 students or more. Current 2020/2021 enrollment is 3,830 a reduction of 1,126 students or almost a 23 percent decline compared to peak District enrollments. In 2018 Western Suffolk BOCES prepared a study of enrollment trends in the Carmel Central School District. This study was based upon an analysis of historical enrollment information, following the various student populations through the cohort of grades; in combination with data about new births and new housing starts within the Carmel Central School District. The BOCES Study indicates the reduction in students is expected to continue to 2025 and beyond, with the 2025/2026 enrollment estimated at 3,521 students which represents a 29.4 % decline from the peak enrollment.

The Superintendent for Business in Carmel indicated, that although enrollments have been declining, there has been no discussion for contraction of facilities at this time². The 2021/2022 Carmel School District budget was defeated by residents of the school district in both May of 2021 and again on June 15, of 2021. As a result, the District was compelled to adopt their contingency budget which excludes any Capital purchases from being made in the upcoming school year. Thus, no capital improvements are currently scheduled. It also forces the district to consider elimination of positions that become vacant due to attrition or retirement.

¹ BEDS is an acronym which stands for Basic Education Data System used by the NYS Department of Education.

² Phone call with Carmel Central School District, Superintendent for Business, June 21, 2021.

Table 3 Carmel Central School District Enrollments			
Notes	School Year	Student Enrollment	Change from the Previous Year
	1993	4,956	--
	98/99	4693	--
	99/00	4778	+85
	00/01	4856	+78
	01/02	4931	+75
Peak Year	02/03	4956	+25
	03/04	4857	-99
	04/05	4841	-16
	05/06	4805	-36
	06/07	4783	-22
	07/08	4693	-90
	08/09	4646	-47
	09/10	4630	-16
	10/11	4581	-49
	11/12	4483	-98
	12/13	4423	-60
	13/14	4341	-82
	14/15	4233	-108
	15/16	4192	-41
	16/17	4173	-19
	17/18	4115	-58
	18/19	4040	-75
	19/20	3979	-61
	20/21	3830	-149
Enrollment Decline compared to Peak Year			-1,126
	21/22	3802	-28
	22/23	3705	-97
	23/24	3662	-43
	24/25	3582	-80
	25/26	3521	-61
Projected Additional Decline from Current Enrollment			-309
Source; NYS Department of Education BEDS Data Base			

Table 4 Carmel Central School District SCHOOL CAPACITY							
School	Grades Served	02/03 Peak Enrollment	17/18 Enrollment	20/21 Current Enrollment	25/26 Projected Enrollment	Building Capacity	2025 Available Capacity
Carmel High School	9 to 12	1,541	1,448	1,410	1,191	1,450	259
George Fischer Middle School	5 to 8	1,601	1,326	1,194	1,090	1,450	360
Matthew Paterson Elementary	K to 4	686	496	476	447	600	153
Kent Elementary	K to 4	594	450	372	418	500	82
Kent Primary	K to 4	534	395	378	375	500	125
Total District Enrollment		4,956	4,115	3,830	3,521	4,500	979
Source: NYS Dept BEDS							

Table 4 shows the utilization of the school districts buildings for select school years. Enrollments for the 2002/2003 peak enrollment year represent the maximum capacity for which the buildings have been used. However, this peak utilization could have involved measures which were atypical to accommodate the 4,956 peak student population. The 2017/2018 school year has been reviewed as a representative year where the enrollment totals 4,115. As shown in Table 4 Building Capacity lies between these two enrollments and is estimated to be 4,500 students for the district. The projected enrollments for the 2025/2026 school year are 3,521 students indicating available capacity of almost 1,000 additional students.

A review of budget data and school enrollment projections for the next 5 to 10 years indicate continuing declines for the Carmel Central School District. This trend has the potential to result in excess infrastructure, where the number of students is significantly lower than the enrollment capacity. Thus, the school district could be forced to consolidate facilities and staff, resulting in school closures along with potential teacher firings. An increase in residential development will result in an increase in the assessed valuation of the District, which translates into additional revenues for the School District. Since the infrastructure and staff resources are already in place, the incremental costs for new students associated with new residential housing would be minimal.

4.0 PROPOSED PROJECTS

There are currently two multifamily housing developments proposed before the Town of Carmel. The first is Hamlet at Carmel a Multifamily Development which includes a total of 150 units. Half of these units are to be market rate rentals and the other half are to be affordable to households whose income ranges from 60% to 90% of the Putnam County Median Income as published by HUD³ on an annual basis.

The second residential development is known as the Fairways and is located off US Route 6. This development is also for 150 units. These units are all market rate rentals and are anticipated to be primarily 2-BR units.

Hamlet at Carmel Multifamily Development

Demographic multipliers published by the Rutgers University Center for Urban Policy Research (CUPR) were used to project the future population of the Hamlet at Carmel development. As shown in Table 5, Demographic multipliers of 1.67 persons were used to project the population for the 1-BR units. A multiplier of 2.31 persons were used to project the population for the 2-BR units. A multiplier of 3.81 persons were used to project the population for the 3-BR units. Demographic multipliers of 0.30, 0.23, and 1.0 students were used to project the school age population of the 1-BR, 2-BR and 3-BR units respectively. The same multipliers were used for both Market Rate and Affordable units based upon the anticipated rental value of the units.

Table 5 Population Projections					
Unit Type	Number of Units	Population Multiplier	Population	School Age Children Multiplier	School Age Population
Multifamily Units					
1 Bedroom	38	1.67	63	0.30	11
2 Bedroom	79	2.31	183	0.23	19
3 Bedroom	33	3.81	126	1.00	34
TOTAL	150		372		64
Source: Rutgers University Center for Urban Policy Research.					

Based upon the residential multipliers, approximately 372 persons are projected to reside in the proposed housing on Stoneleigh Avenue including approximately 64 school age children.

³ The Federal Office of Housing and Urban Development (HUD) publishes a median income by county each year for the purposed of defining Affordable income limits.

Fairways Multifamily Development

Demographic multipliers published by the Rutgers University Center for Urban Policy Research (CUPR) were also used to project the future population of the Fairways Multifamily development. As shown in Table 6, Demographic multipliers of 2.31 persons were used to project the population for the 2-BR units. A Demographic multiplier of 0.23 students was used to project the school age population.

Table 5					
Population Projections					
Unit Type	Number of Units	Population Multiplier	Population	School Age Children Multiplier	School Age Population
Market Rate Multifamily Units					
2 Bedroom	150	2.31	347	0.23	35
TOTAL	150		347		35
Source: Rutgers University Center for Urban Policy Research.					

Based upon the residential multipliers, approximately 347 persons are projected to reside in the proposed housing at Fairways including approximately 35 school age children.

5.0 CUMULATIVE IMPACT

As discussed in Section 3.0, the Carmel Central School District has seen declining enrollments over more than the past decade. The District is not currently anticipating any reduction in its current facilities. As shown on Table 4, there is available capacity in the district's facilities for approximately 1,000 students.

When combined, the two anticipated multifamily residential developments, are projected to result in less than 100 new students. The available capacity would indicate the Carmel Central School District could handle this type of increase, spread out over the district's schools, without substantial negative impacts.

The most recent School Budget was voted down by residents of the School District. An increase in residential development will result in an increase in the assessed valuation of the District, which translates into additional revenues for the School District. Since the infrastructure and staff resources are already in place, the incremental costs for new students associated with new residential housing would be minimal, thus these proposed developments could result in a positive impact to the School District.



Demographic Study Update

for the

Brewster Central School District

October 2020

Prepared By:

Richard S. Grip, Ed.D.

Table of Contents

	Page
Executive Summary	3
Introduction	8
Enrollment Projections from November 2019 Report	8
Demographic Characteristics of the Geographical Area Served by the Brewster Central School District.....	10
District Overview	13
Explanation of the Cohort-Survival Ratio Method	13
Historical Enrollment Trends	15
Non-Public School Enrollments	19
Kindergarten Replacement	22
Birth Data	24
New Housing in the Brewster Central School District Attendance Area	28
Estimate of School-Age Children from New Housing	29
Enrollment Projections	31
Projected Enrollments by School	33

Executive Summary

Statistical Forecasting LLC (“Statistical Forecasting”) completed a demographic study update for the Brewster Central School District (“Brewster School District”), projecting grade-by-grade enrollments from 2021-22 through 2025-26, a five-year period. The previous study was completed for the district in November 2019. In addition, the following tasks were completed:

- analyzed school district attendance area demographic characteristics,
- examined historical enrollment trends, both districtwide and by grade configuration (K-5, 6-8, and 9-12),
- investigated enrollment trends of resident students from the Brewster School District who are attending non-public schools,
- analyzed school district attendance area birth counts, and
- tabulated new housing starts and the impact on the school district.

Overview of Brewster Central School District Attendance Area

The Brewster School District is comprised of the Village of Brewster (“Brewster”) and sections of the Town of Southeast (“Southeast”), the Town of Patterson (“Patterson”), and the Town of Carmel (“Carmel”). In the 2014-2018 American Community Survey (“ACS”) published by the United States Census Bureau, there were 21,836 residents in the Brewster School District attendance area, which is a decline of approximately 300 persons from the 2010 Census.

While Whites are the largest race in the Brewster School District attendance area, their population has declined. In the 2014-2018 ACS, the White population was 73.0% as compared to 77.4% in 2010, which is a loss of 4.4 percentage points. Hispanics were the second-largest race at 19.7% in the 2014-2018 ACS while Asians were the third-largest race, consisting of 3.1% of the population.

With respect to nativity, 15.1% of residents are foreign-born, which is slightly higher than that of Putnam County (14.1%). Guatemala and China are the largest sources, accounting for 37.9% and 6.2% respectively of the foreign-born population.

Historical Enrollment Trends

Historical enrollments (K-12) were analyzed from 2011-12 through 2020-21, a ten-year period. Enrollments have declined, in general, over the past decade. In 2020-21, enrollment is 2,984, which is a loss of 351 students (-10.5%) from the 2011-12 enrollment of 3,335.

For grades K-5, enrollments were fairly stable from 2011-12 to 2017-18 before trending lower in the last three years. In 2020-21, enrollment is 1,233, which is a loss of 81 students from the 2011-12 enrollment of 1,314.

For grades 6-8 at Henry H. Wells Middle School, enrollments declined through 2017-18 before reversing trend. Enrollments have increased in each of the last three years. Enrollment is 755 in 2020-21, which is a loss of 57 students from the 2011-12 enrollment of 812.

Finally, at Brewster High School, which contains grades 9-12, enrollments have been generally declining since 2013-14. In 2020-21, enrollment is 996, which is a loss of 213 students from the 2011-12 enrollment of 1,209.

Non-Public School Enrollments

The number of resident students from the Brewster School District attendance area (“Brewster resident students”) who attended non-public schools was tabulated from 2015-16 through 2019-20, a five-year period. The total number of non-public students (K-12) has been fairly stable, ranging from 89-99 students per year. In 2019-20, the number of Brewster resident students attending non-public schools (90) represented 2.9% of the total Brewster resident student population, which is a very small percentage. In the last five years, the percentage of Brewster resident students attending public school has ranged from 97.0%-97.2% with no apparent increasing or declining trend.

In 2019-20, 37.8% of the Brewster non-public school population attended John F. Kennedy Catholic High School (9-12) in Somers while an additional 23.3% attended St. James the Apostle School (PK-8) in Carmel.

Kindergarten Replacements

Kindergarten replacements were analyzed to determine whether there was any relationship between overall enrollment change and kindergarten replacement, which is the numerical difference between the number of graduating 12th graders and the number of entering kindergarten students. The district has experienced negative kindergarten replacement in each of the last nine years. Negative kindergarten replacement occurs when the number of graduating 12th grade students is larger than the number of kindergarten students replacing them in the next year. In the last four years, the district has lost an average of 62 students per year due to kindergarten replacement.

In eight of the last nine years, the district’s losses due to negative kindergarten replacement were partially offset (or totally, resulting in an enrollment increase) by a net inward migration of students in the other grades (K to 1, 1 to 2, 2 to 3, etc.). The exception occurred in 2020-21 when the negative kindergarten replacement was compounded by outward migration, which is likely related to the coronavirus pandemic.

Birth Counts

The number of births in the Brewster School District attendance area was used to project kindergarten enrollments five years later. After peaking at 253 births in 2007, the number of births declined to 192 in 2012. However, the declining birth trend reversed and the number of births slowly increased through 2015 before reversing trend once again. In 2017, there were 181 births in the Brewster School District attendance area, which is the lowest value over this time period.

The fertility rate in the Brewster School District attendance area is similar to those of both Putnam County and the State of New York. The fertility rate of women aged 15 to 50 in the Brewster School District attendance area was 46 births per 1000 women, which is identical to the fertility rate in Putnam County. The fertility rate of women in New York State was slightly higher at 47 births per 1,000 women.

Age Distributions

The 2010 Census and the 2014-2018 ACS age-sex diagrams were created for the Brewster School District attendance area to show the percentage of males and females in each age class. In 2010, the largest number of individuals was aged 50-54 for males and 45-49 for females. As these individuals advance in age, the largest cohort in the 2014-2018 ACS was aged 50-54 for females yet remained 50-54 for males. Over this time period, the greatest declines occurred in the 40-44 age group for males and the 35-39 age group for females. The greatest gains occurred in the 65-69 age group for both males and females.

Potential New Housing

Municipal representatives from Brewster, Southeast, Carmel, and Patterson were contacted regarding potential new housing units in the Brewster School District attendance area. There are no residential developments under construction, nor are there development applications before the planning board, in the sections of Patterson and Carmel that send to the Brewster School District. However, there are developments planned in Brewster and Southeast. A total of 302 housing units are planned in the Brewster School District attendance area, where 180 units are apartments and 122 units are detached single-family homes.

In total, 152 school-age children are projected to be generated from the new housing developments. As this represents school-age children, the number of public school children is likely to be slightly lower. Using the five-year average (97.1%) of Brewster resident students attending public school, a total of 148 public school children in grades K-12 are projected from new housing developments.

Since the buildout of Fortune Ridge, which would have the greatest impact on the school district, is occurring at a very slow rate, the baseline enrollment projections were not adjusted for the additional children anticipated from the new housing developments. It is unlikely that Fortune Ridge will be completed and occupied within the enrollment projection timeframe of five years. In addition, one development has not been approved (Baker Farm) while two others

(Barrett Hill and Farm to Market LLC) have been under consideration for the past four or more years and have not commenced construction. For these reasons, the baseline enrollment projections were not adjusted for the additional children anticipated from the new housing developments.

Enrollment Projections

Due to the changes in the district's enrollment trends in 2020-21 (in particular, much lower elementary enrollments than expected), which were likely related to the coronavirus pandemic, three separate projections were computed from 2021-22 through 2025-26, a five-year period. As it is unclear when the pandemic will end and how this will affect enrollments in the near term, three different scenarios were modeled.

In Scenario 1, total enrollment is projected to be 2,841 in 2025-26, which would be a loss of 143 students from the 2020-21 enrollment of 2,984. In Scenario 2, enrollment is projected to be 2,951 in 2025-26, which would be a loss of 33 students from the 2020-21 enrollment. Finally, enrollment is projected to be 3,055 in 2025-26 in Scenario 3, which would be a gain of 71 students from the 2020-21 enrollment.

Final Thoughts

In our previous report completed in November 2019, total enrollments (K-12) were projected to be fairly stable throughout the projection period. Instead, enrollments declined by 81 students in 2020-21, which may be COVID-related, as some parents may be reluctant to send their child to school or may seek private schools that have full in-person learning rather than hybrid or remote instruction. Most of the impact of the pandemic has occurred at the elementary level in the Brewster School District. In 2020-21, six of 13 cohort survival ratios were the lowest value in the last decade, four of which occurred at the elementary level (K-5). The decline in the ratios is likely due to the coronavirus pandemic, as parents are seeking alternative educational experiences for their children.

In closing, it is difficult to measure the impact of the coronavirus on the school district's enrollments moving forward. In the short-term, the coronavirus may have a negative impact on the local economy, new home construction, and rentals, which could lead to outward migration of families with children. If there are a significant number of evictions from rental units, this could have a negative impact on the district's enrollment. In a recent New York Times article¹, families with financial means are leaving large metropolitan areas to reside in their second homes in rural COVID-free areas or are purchasing an existing home in these new locations. These individuals can typically work remotely and are seeking to escape the pandemic. It is not clear whether these households will permanently reside in these locations or return to urban centers once an effective vaccine is found and widely implemented. Enrollment in some districts is affected by whether they are currently having in-person or remote instruction. Some parents are pulling their children out of existing districts and seeking schools for their children that provide in-person instruction in favor of those offering hybrid or solely online instruction². In

¹ (<https://www.nytimes.com/2020/09/26/us/coronavirus-vermont-transplants.html>)

² <https://www.npr.org/2020/10/09/920316481/enrollment-is-dropping-in-public-schools-around-the-country>

particular, parents are seeking schools that have in-person learning for children in both pre-kindergarten and kindergarten³. While the duration of the pandemic is unknown and available data is limited, we are continuing to monitor data as it becomes available to assess its future impact on enrollments both short- and long-term.

³ *ibid.*

Introduction

Statistical Forecasting LLC (“Statistical Forecasting”) completed a demographic study update for the Brewster Central School District (“Brewster School District”), projecting grade-by-grade enrollments from 2021-22 through 2025-26, a five-year period. The previous study was completed for the district in November 2019. In addition, the following tasks were completed:

- analyzed school district attendance area demographic characteristics,
- examined historical enrollment trends, both districtwide and by grade configuration (K-5, 6-8, and 9-12),
- investigated enrollment trends of resident students from the Brewster School District who are attending non-public schools,
- analyzed school district attendance area birth counts, and
- tabulated new housing starts and the impact on the school district.

Enrollment Projections from November 2019 Report

In our previous demographic study, enrollments were projected from 2020-21 through 2024-25, a five-year projection period. Table 1 compares the actual and projected enrollments in 2020-21 for the entire district (K-12), as well as for each school in the district. Since two projections were computed in the previous study, the table shows the numerical differences and percent errors by year for each of the projections. Positive error rates indicate over-projections while negative error rates indicate under-projections.

Table 1
Comparison of Projected to Actual Enrollments
from November 2019 Report

Year	Actual Enrollment 2020-21	Projected CSR 4-YR 2020-21			Projected CSR 5-YR 2020-21		
		Count	Diff.	% Error	Count	Diff.	% Error
Total (K-12)	2,984	3,091	+107	+3.6%	3,094	+110	+3.7%
John F. Kennedy E.S. (K-2)	608	662	+54	+8.9%	660	+52	+8.6%
C. V. Starr I.S. (3-5)	625	657	+32	+5.1%	660	+35	+5.6%
Henry H. Wells M.S. (6-8)	755	766	+11	+1.5%	770	+15	+2.0%
Brewster H. S. (9-12)	996	1,006	+10	+1.0%	1,004	+8	+0.8%

In our previous study, total enrollments (K-12) were projected to be fairly stable throughout the projection period. Instead, enrollments declined by 81 students in 2020-21,

which may be COVID-related, as some parents may be reluctant to send their child to school or may seek private schools that have full in-person learning rather than hybrid or remote instruction. As the table shows, total enrollment was over-projected by 107 students (+3.6%) in the first projection and by 110 students (+3.7%) in the second projection.

In a survey by Schellenberg and Stephens of educational planners who complete enrollment projections, two-thirds believe that an error rate of 1% per year for the total enrollment is acceptable⁴. For a five-year projection, this would mean that a 5% error rate in the fifth year would be acceptable. In each instance, the projections were above the recommended threshold of 1% in the first projection year.

At John F. Kennedy Elementary School (“JFK”), enrollments were overestimated in each projection, as error rates were 8.9% in the first projection and 8.6% in the second projection. Expressed in numbers, the projections differed from actual enrollments by 54 students in the first projection and 52 students in the second projection. Upon further inspection, the largest error was in over-projecting kindergarten (+23 in the first projection). Of the four schools in the district, the percent errors in the elementary grades were the greatest.

At C.V. Starr Intermediate School (“Starr”), enrollments were overestimated by 5.1% in the first projection and 5.6% in the second projection. The projections differed from actual enrollments by 32 students in the first projection and by 35 students in the second projection. Each grade was slightly over-projected.

Enrollments in Henry H. Wells Middle School (“Wells”) were over-projected by 11 students (+1.5%) in the first projection and by 15 students (+2.0%) in the second projection. Of the four schools in the district, the percent errors in the middle school were the second-lowest.

Finally, at Brewster High School, enrollments were over-projected by ten (10) students (+1.0%) in the first projection and by eight (8) students (+0.8%) in the second projection, which are the lowest error rates of the four schools.

At the school level, half of the survey respondents in the Schellenberg and Stephens survey believed an error rate of 3-5% in the first projection year was acceptable⁵. While Wells and Brewster High School are within the range of what educational planners deem acceptable, JFK and Starr were outside of the acceptable range.

The accuracy of the projections is contingent on the most recent historical trends continuing into the future. If there is a departure from these trends caused by, for example, migration or withdrawal of students due to the coronavirus pandemic, numerous new housing starts (or planned housing starts that do not occur), changes in school district policy, changes to immigration laws, an economic downturn, a change in the housing resale market, etc., the enrollment projections presented are less likely to be accurate in future years, as this analysis does not forecast future trends. Therefore, the projections need to be revised annually to detect

⁴ Schellenberg, S. J., & Stephens, C. E. (1987). Enrollment projection: variations on a theme. Paper presented at the Annual Meeting of the American Educational Research Association, Washington D.C., (ERIC Document Reproduction Service No. ED 283 879)

⁵ *ibid.*

potential reversals in enrollment trends. Changes in enrollment are dependent on several factors such as birth counts, migration of students into or out of the school district, the presence of alternative schools such as charter schools, private schools, or parochial schools, and school district policy changes.

Demographic Characteristics of the Geographical Area Served by the Brewster Central School District

The National Center for Education Statistics (“NCES”) compiles Census data by school district geographical boundaries, since many school district boundaries are often not contiguous with municipal boundaries. As such, the Village of Brewster (“Brewster”) and sections of the Town of Patterson (“Patterson”), the Town of Southeast (“Southeast”), and the Town of Carmel (“Carmel”), which comprise the Brewster School District, do not share identical boundaries with the school district. In Table 2, selected demographic characteristics of the geographical area served by the Brewster School District (subsequently referred to as the Brewster School District attendance area) are compared from the 2010 Census and the 2006-2010 and 2014-2018 American Community Surveys (“ACS”), also published by the United States Census Bureau. The information reflects the entire population served by the school district and is not restricted to schoolchildren. The ACS replaced the long form of the Census, last administered in 2000 to approximately 16% of the population in the United States. For small geographic areas such as the one served by the school district, ACS data represent a sample collected over a five-year time period, where the estimates represent the average characteristics between January 2014 and December 2018, for example. This information does not represent a single point in time like the long form of earlier Censuses. The five-year ACS contains 1% annual samples from all households and persons from 2014 to 2018, resulting in a 5% sample of the population. Due to the small sample size, the sampling error is quite large, which increases the degree of uncertainty of the estimated values. Therefore, the forthcoming ACS data should be interpreted with caution.

Located in Putnam County, the Brewster School District attendance area contains a land area of approximately 40.91 square miles, with an additional 3.53 square miles of water area. Regarding its population, there were 21,836 residents according to the 2014-2018 ACS, which is a decline of approximately 300 persons from the 2010 Census.

With respect to race, while Whites are the largest race in the Brewster School District attendance area, their population has declined. In the 2014-2018 ACS, the White population was 73.0% as compared to 77.4% in 2010, which is a loss of 4.4 percentage points. Hispanics were the second-largest race at 19.7% in the 2014-2018 ACS, which is a gain of 3.1 percentage points from the 2010 percentage (16.6%). Asians were the third-largest race, consisting of 3.1% of the population in the 2014-2018 ACS.

The median age in the Brewster School District attendance area has increased slightly from 41.4 years in 2010 to 43.4 years in the 2014-2018 ACS, which is similar to the median age in Putnam County (44.1 years). During the same time period, the percentage of people under the age of 18 years, which predominantly corresponds to school-age children, declined from 23.1% to 21.3%.

Table 2
Demographic Characteristics of the Geographical Area Served
by the Brewster Central School District

	2006-2010 ACS 2010 Census	2014-2018 ACS
Total Population	22,139	21,836
Race Origin¹		
White	17,142 (77.4%)	15,946 (73.0%)
Black or African American	486 (2.2%)	538 (2.5%)
Hispanic or Latino	3,669 (16.6%)	4,301 (19.7%)
American Indian and Alaska Native	28 (0.1%)	0 (0.0%)
Asian	521 (2.4%)	686 (3.1%)
Native Hawaiian and Other Pacific Islander	2 (0.0%)	5 (0.0%)
Other Race	27 (0.1%)	97 (0.4%)
Two or more Races	264 (1.2%)	263 (1.2%)
Total	100.0%	100.0%
Place of Birth		
Foreign-Born	11.8%	15.1%
Age		
Under 18	23.1%	21.3%
18-64	64.2%	63.6%
65 and over	12.7%	15.1%
Median Age	41.4 years	43.4 years
Educational Attainment		
Bachelor's degree or higher	37.4%	36.4%
Graduate or professional degree	13.9%	16.3%
Income		
Median family income	\$95,745	\$118,875
Percentage of Persons in Poverty aged 5-17	4.7%	1.1%
Housing Units		
Total number	8,714 ²	8,773
Occupied units	8,116 (93.1%)	7,988 (91.1%)
Vacant units	598 (6.9%)	785 (8.9%)
Owner-occupied units	6,268 (77.2%)	6,071 (76.0%)
Renter-occupied units	1,848 (22.8%)	1,917 (24.0%)
Median value of an owner-occupied unit	\$371,700	\$327,100
Avg. household size of owner-occupied unit	2.78	2.73
Avg. household size of renter-occupied unit	2.32	2.55
Housing Type¹		
Total number	8,704 ²	8,773
1-unit, attached or detached	6,413 (73.7%)	6,999 (79.8%)
Two units	606 (7.0%)	460 (5.2%)
Three or four units	444 (5.1%)	421 (4.8%)
Five to nine units	657 (7.5%)	355 (4.0%)
10 to 19 units	107 (1.2%)	137 (1.6%)
20 or more units	431 (5.0%)	329 (3.8%)
Mobile home, boat, RV, van, etc.	46 (0.5%)	72 (0.8%)

Source: National Center for Education Statistics

Note: ¹Data may not sum to 100.0% due to rounding.

²Total number differs as Housing Units are from the 2010 Census while Housing Type data are from the 2006-2010 ACS.

With respect to nativity, 15.1% of residents were foreign-born in the 2014-2018 ACS as compared to 11.8% in the 2006-2010 ACS, a gain of 3.3 percentage points. As a point of comparison, Putnam County's foreign-born percentage in the 2019 ACS was 14.1%, which is slightly lower than that of the Brewster School District attendance area. While not shown in the table, place of birth, which serves as a proxy for country of origin, indicates that Guatemala and Italy were the largest sources of immigrants in the 2006-2010 ACS, accounting for 25.6% and 7.7% respectively of the foreign-born population. In the 2014-2018 ACS, Guatemala continues to be the largest source, but accounts for a much larger share (37.9%) of the foreign-born population. China is now the second-largest source, accounting for 6.2% of the foreign-born population.

Regarding educational attainment for adults aged 25 and over, 36.4% of the population had a bachelor's degree or higher in the 2014-2018 ACS as compared to 37.4% in the 2006-2010 ACS, a loss of 1.0 percentage points. Putnam County had a slightly higher percentage of persons having a bachelor's degree or higher (38.1%). Persons with graduate or professional degrees increased from 13.9% to 16.3% in the Brewster School District attendance area during this time period.

Median family income increased from \$95,745 in the 2006-2010 ACS to \$118,875 in the 2014-2018 ACS, a gain of 24.2%. By comparison, median family income in Putnam County is \$121,505, which is slightly higher than that of the Brewster School District attendance area. During this time period, the percentage of school-age children (5-17) that are in poverty declined from 4.7% to 1.1%.

Regarding housing, there were 8,773 housing units in the Brewster School District attendance area in the 2014-2018 ACS, which is a gain of 59 housing units (+0.7%) from 2010. Over this time period, the occupancy rate declined from 93.1% to 91.1%. Regarding occupied units, 24.0% of the occupied units consisted of renters in the 2014-2018 ACS, which is a 1.2 percentage-point increase from the 2010 Census (22.8%). While the average household size for renter-occupied units increased from 2.32 to 2.55 persons over this time period, it declined from 2.78 to 2.73 persons for owner-occupied units. The median home price of an owner-occupied unit in the 2014-2018 ACS was \$327,100, which is a 12.0% decline from the value reported in the 2006-2010 ACS (\$371,700).

With respect to housing type, 79.8% of the homes in the 2014-2018 ACS were one-unit, either attached or detached, which is a 6.1 percentage-point increase from the 2006-2010 ACS percentage (73.7%). One-unit homes also had the largest percentage-point change over this time period of the various home types. Housing with two units (duplexes) was the second-largest home type and consisted of 5.2% of the housing stock in the 2014-2018 ACS. Homes with 5-9 units, which typically consist of renters, had been the second-largest housing type in the 2006-2010 ACS.

District Overview

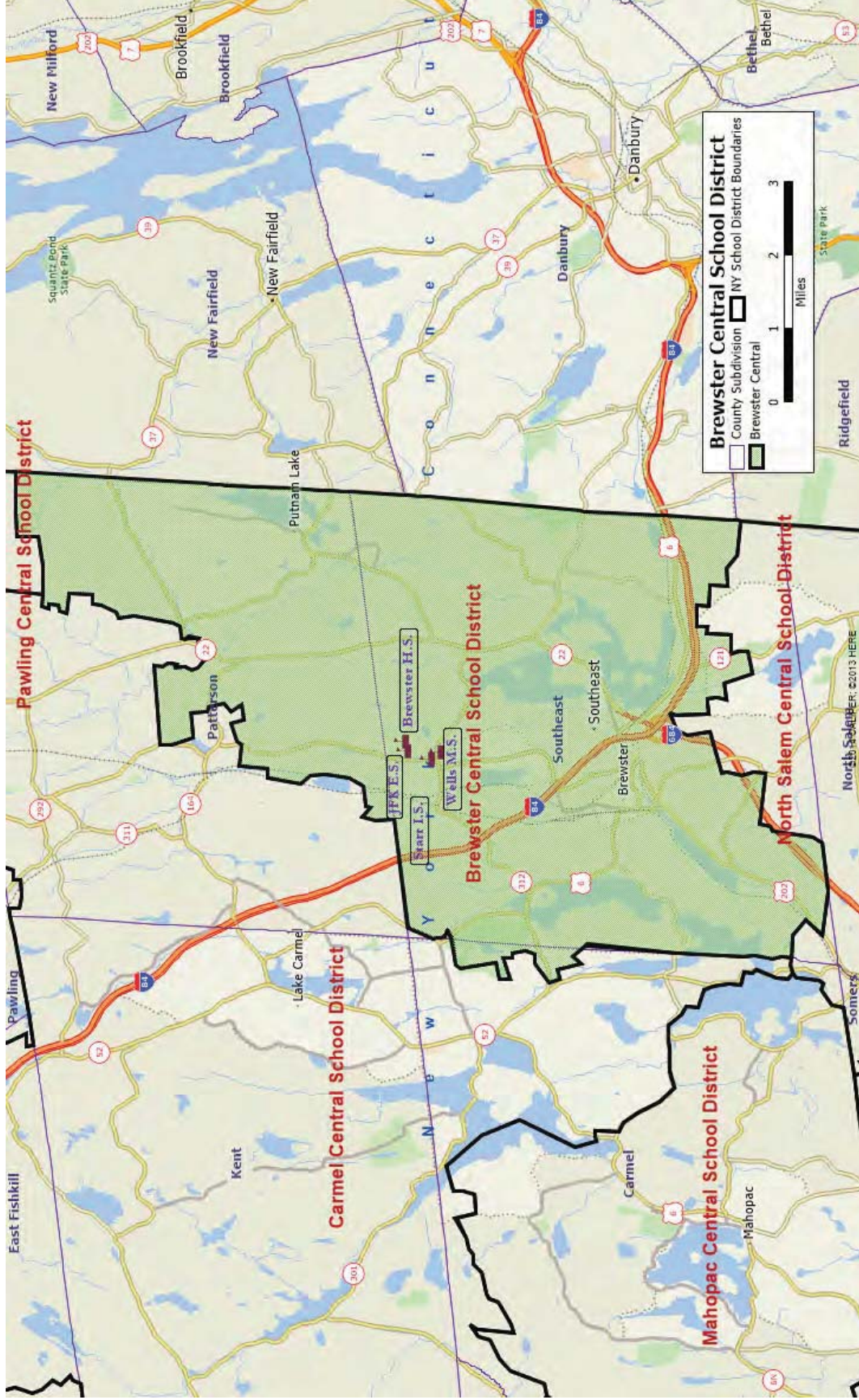
The Brewster School District has a total of four schools that serve children in grades kindergarten through twelve. The district receives children from Brewster and sections of Southeast, Patterson, and Carmel. Children attend JFK for grades K-2, Starr for grades 3-5, Wells for grades 6-8, and Brewster High School for grades 9-12. Locations of the schools with respect to the school district and municipal boundaries are shown in Figure 1.

Explanation of the Cohort-Survival Ratio Method

In 1930, Dublin and Lodka provided an explicit age breakdown, which enabled analysts to follow each cohort through its life stages and apply appropriate birth and death rates for each generation. A descendant of this process is the Cohort-Survival Ratio (“CSR”) method. In this method, a survival ratio is computed for each grade progression, which essentially compares the number of students in a particular grade to the number of students in the previous grade during the previous year. The survival ratio indicates whether the enrollment is stable, increasing, or decreasing. A survival ratio of 1.00 indicates stable enrollment, less than 1.00 indicates declining enrollment, while greater than 1.00 indicates increasing enrollment. If, for example, a school district had 100 fourth graders and the next year only had 95 fifth graders, the survival ratio would be 0.95.

The CSR method assumes that what happened in the past will also happen in the future. In essence, this method provides a linear projection of the population. The CSR method is most applicable for districts that have relatively stable increasing or decreasing trends without any major unpredictable fluctuations from year to year. In school districts encountering rapid growth not experienced historically (a change in the historical trend), the CSR method must be modified and supplemented with additional information. In this study, survival ratios were calculated using historical data for birth to kindergarten, kindergarten to first grade, first grade to second grade, etc. Due to the fluctuation in survival ratios from year to year, it is appropriate to calculate an average survival ratio, which is then used to calculate grade-level enrollments five years into the future.

Figure 1
School Locations –Brewster Central School District



Historical Enrollment Trends

Historical enrollments (grades K-12) for the Brewster School District from 2011-12 through 2020-21, a ten-year period, are shown in Figure 2 and Table 3. Enrollments have declined, in general, over the past decade. In 2020-21, enrollment is 2,984, which is a loss of 351 (-10.5%) students from the 2011-12 enrollment of 3,335.

Figure 2
Brewster Central Historical Enrollments (K-12)
2011-12 to 2020-21

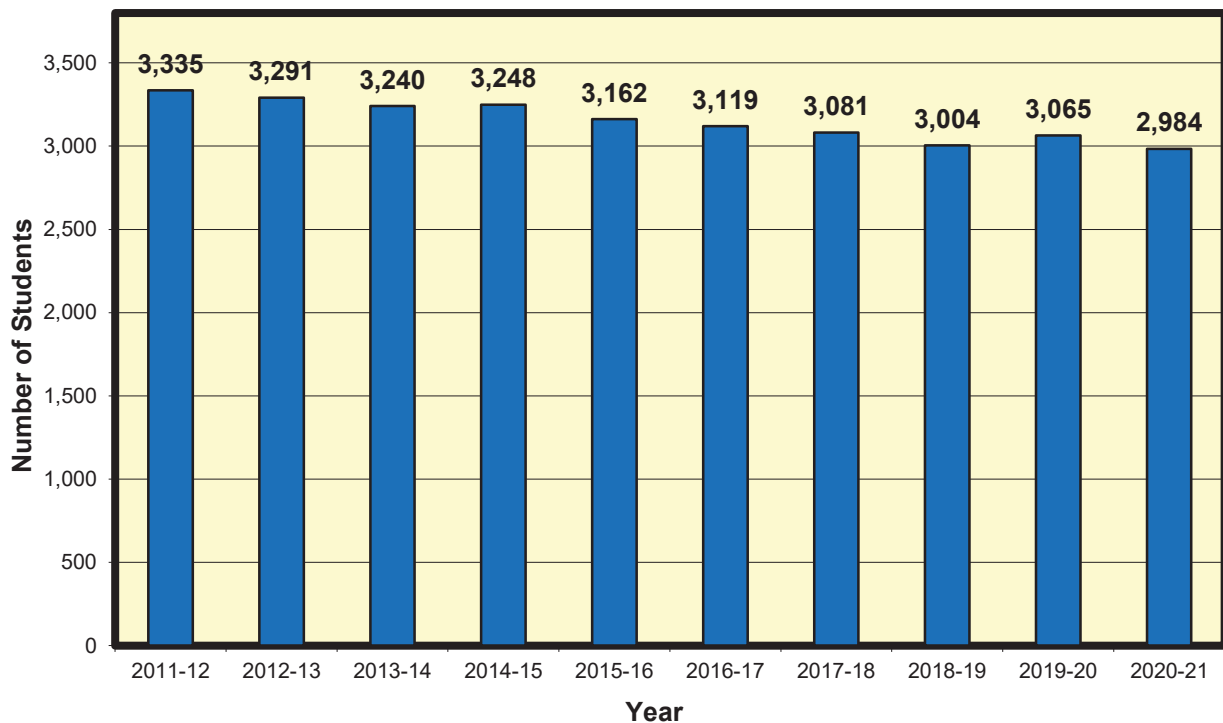


Table 4 shows computed grade-by-grade survival ratios from 2011-12 to 2020-21. In addition, the average, minimum, and maximum survival ratios are shown for the past ten years along with the five-year averages, which were used to project enrollments. The average survival ratios also indicate the net migration by grade, where values over 1.000 reflect net inward migration and values below 1.000 reflect net outward migration. In 2020-21, six of 13 cohort survival ratios were the lowest value in the last decade, four of which occurred at the elementary level (K-5). The decline in the ratios is likely due to the coronavirus pandemic, as parents are seeking alternative educational experiences for their children. As such, two five-year average ratios were computed in Table 4. The first considers the 2020-21 enrollment while the second does not, as the 2020-21 enrollment data might be considered an outlier once the pandemic is over. Nine of the thirteen average survival ratios (the five-year trend using 2020-21 enrollment data) were above 1.000, indicating a net inward migration of students. In comparing the five-year averages with the ten-year averages, the differences were very small, demonstrating the long-term stability of the survival ratios over the last decade.

Table 3
Brewster Central School District Historical Enrollments (K-12)
2011-12 to 2020-21

Year ¹	K	1	2	3	4	5	SE ²	K-5 Total	6	7	8	SE ³	6-8 Total	9	10	11	12	SE ⁴	9-12 Total	K-12 Total
2011-12	186	199	218	240	237	231	3	1,314	261	253	292	6	812	317	270	313	292	17	1,209	3,335
2012-13	213	198	202	215	246	241	5	1,320	226	267	257	9	759	305	312	268	313	14	1,212	3,291
2013-14	195	245	196	213	227	247	5	1,328	243	228	271	9	751	257	305	313	270	16	1,161	3,240
2014-15	214	213	250	193	217	229	4	1,320	259	245	231	10	745	294	265	303	306	15	1,183	3,248
2015-16	198	213	223	251	192	215	3	1,295	225	263	252	9	749	241	291	272	292	22	1,118	3,162
2016-17	192	206	215	230	255	209	5	1,312	225	234	271	6	736	257	254	275	265	20	1,071	3,119
2017-18	192	203	213	222	226	262	5	1,323	210	222	237	9	678	271	267	245	280	17	1,080	3,081
2018-19	194	190	203	214	216	230	5	1,252	259	219	227	10	715	237	279	258	239	24	1,037	3,004
2019-20	209	215	204	213	223	223	3	1,290	242	278	222	0	742	246	238	276	256	17	1,033	3,065
2020-21	196	205	207	200	200	223	2	1,233	232	242	281	0	755	230	246	241	265	14	996	2,984

Notes: ¹Data were provided by the New York State Department of Education BEDS reports and the Brewster Central School District.

²Ungraded special education enrollment at the elementary school level

³Ungraded special education enrollment at the middle school level

⁴Ungraded special education enrollment at the high school level

Table 4
Brewster Central School District Historical Survival Ratios
2011-12 to 2020-21

Progression Years	B-K	K-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12
2011-12 to 2012-13	0.8419	1.0645	1.0151	0.9862	1.0250	1.0169	0.9784	1.0230	1.0158	1.0445	0.9842	0.9926	1.0000
2012-13 to 2013-14	0.8405	1.1502	0.9899	1.0545	1.0558	1.0041	1.0083	1.0088	1.0150	1.0000	1.0000	1.0032	1.0075
2013-14 to 2014-15	1.0000	1.0923	1.0204	0.9847	1.0188	1.0088	1.0486	1.0082	1.0132	1.0849	1.0311	0.9934	0.9776
2014-15 to 2015-16	0.9706	0.9953	1.0469	1.0040	0.9948	0.9908	0.9825	1.0154	1.0286	1.0433	0.9898	1.0264	0.9637
2015-16 to 2016-17	0.9275	1.0404	1.0094	1.0314	1.0159	1.0885	1.0465	1.0400	1.0304	1.0198	1.0539	0.9450	0.9743
2016-17 to 2017-18	1.0000	1.0573	1.0340	1.0326	0.9826	1.0275	1.0048	0.9867	1.0128	1.0000	1.0389	0.9646	1.0182
2017-18 to 2018-19	0.9463	0.9896	1.0000	1.0047	0.9730	1.0177	0.9885	1.0429	1.0225	1.0000	1.0295	0.9663	0.9755
2018-19 to 2019-20	0.9543	1.1082	1.0737	1.0493	1.0421	1.0324	1.0522	1.0734	1.0137	1.0837	1.0042	0.9892	0.9922
2019-20 to 2020-21	0.8559	0.9809	0.9628	0.9804	0.9390	1.0000	1.0404	1.0000	1.0108	1.0360	1.0000	1.0126	0.9601
Maximum Ratio	1.0000	1.1502	1.0737	1.0545	1.0558	1.0885	1.0522	1.0734	1.0304	1.0849	1.0539	1.0264	1.0182
Minimum Ratio¹	0.8405	0.9809	0.9628	0.9804	0.9390	0.9908	0.9784	0.9867	1.0108	1.0000	0.9842	0.9450	0.9601
Avg. 5-Year Ratios	0.9368	1.0340	1.0176	1.0167	0.9842	1.0194	1.0215	1.0257	1.0150	1.0299	1.0182	0.9832	0.9865
Avg. 5-Year Ratios (not using 2020-21 enrollments)	0.9598	1.0489	1.0293	1.0295	1.0034	1.0415	1.0230	1.0357	1.0199	1.0259	1.0316	0.9663	0.9901
Avg. 10-Year Ratios	0.9263	1.0532	1.0169	1.0142	1.0052	1.0207	1.0167	1.0220	1.0181	1.0347	1.0146	0.9882	0.9855
Diff. Between 5-Year and 10-Year Ratios	+0.0105	-0.0192	+0.0007	+0.0025	-0.0211	-0.0013	+0.0048	+0.0037	-0.0031	-0.0048	+0.0035	-0.0050	+0.0011

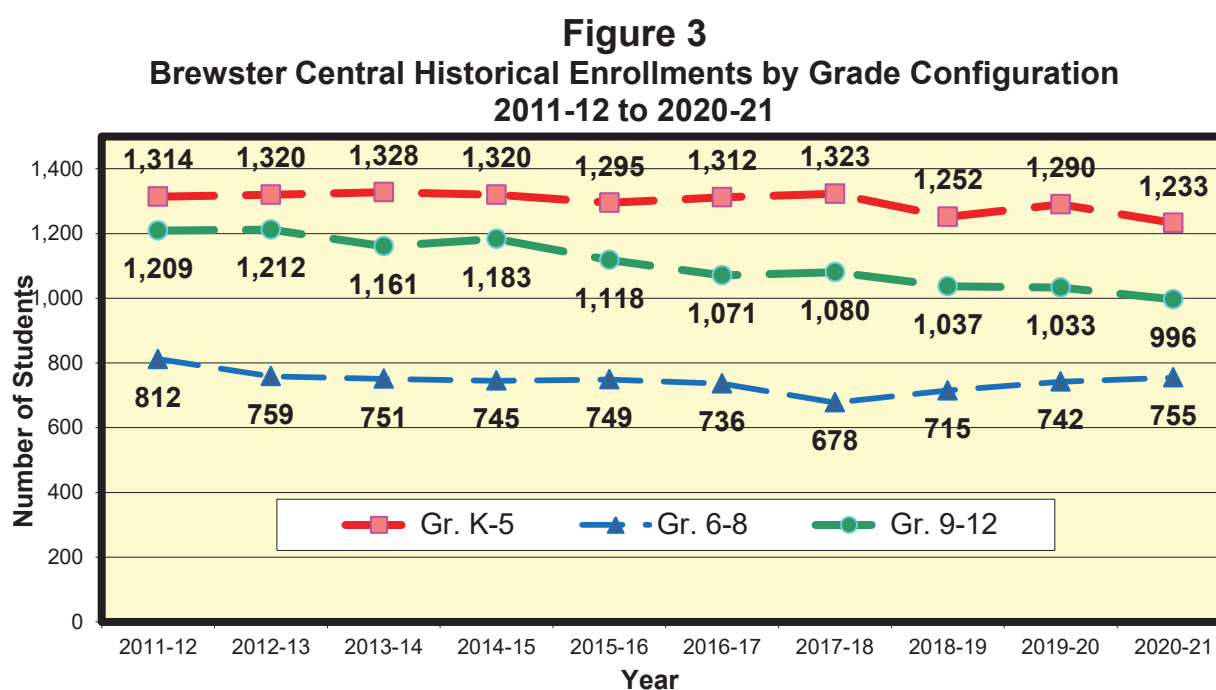
Note: ¹Bolded values reflect survival ratios from 2019-20 to 2020-21.

Factors related to inward migration include families with school-age children purchasing an existing home or new housing unit. The reasons for families moving into a community vary. For instance, a family could move into the Brewster School District for economic reasons and proximity to employment, or the presence of affordable housing. Another plausible reason for inward migration is the reputation of the school district, as the appeal of a school district draws families into a community, resulting in the transfer of students into the district. On the flip side, outward migration is caused by families with children moving out of the community, perhaps due to difficulty in finding employment or affordable housing. Outward migration in the school district can also be caused by parents choosing to withdraw their children from public school to attend private, parochial, or charter schools, or to attend a different public school district. In the case of the Brewster School District, the reasons for migration are not explicitly known (such as for economic reasons or the appeal of the school district), as exit and entrance interviews would need to be conducted for all children leaving or entering the district.

Historical enrollments are also shown in Table 3 and Figure 3 by grade configuration (K-5, 6-8, and 9-12). Self-contained special education/ungraded students were incorporated into the totals by grade configuration. For grades K-5, enrollments were fairly stable from 2011-12 to 2017-18 before trending lower in the last three years. In 2020-21, enrollment is 1,233, which is a loss of 81 students from the 2011-12 enrollment of 1,314.

For grades 6-8 at Wells, enrollments declined through 2017-18 before reversing trend. Enrollments have increased in each of the last three years. Enrollment is 755 in 2020-21, which is a loss of 57 students from the 2011-12 enrollment of 812.

Finally, at Brewster High School, which contains grades 9-12, enrollments have been generally declining since 2013-14. In 2020-21, enrollment is 996, which is a loss of 213 students from the 2011-12 enrollment of 1,209.

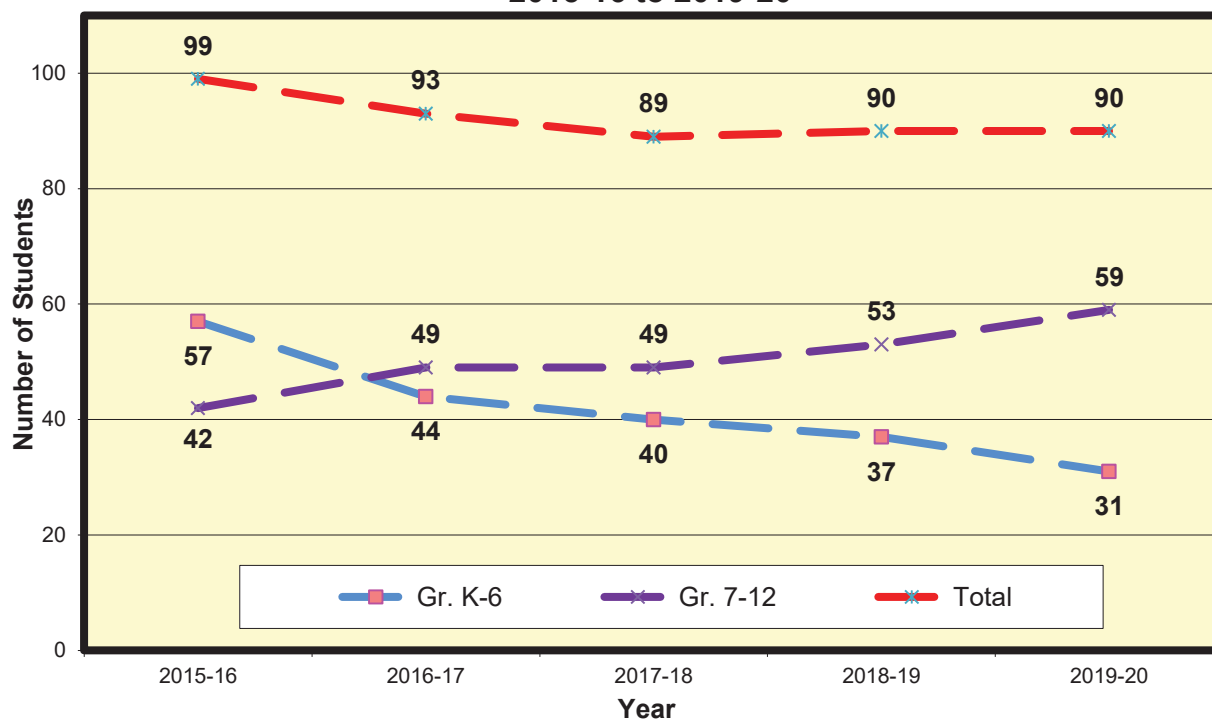


Non-Public School Enrollments

In Figure 4, the number of resident students from the Brewster School District attendance area (“Brewster resident students”) who attended non-public schools is shown from 2015-16 through 2019-20, a five-year period. Data for the 2020-21 school year were unavailable. Counts are shown for elementary (K-6), secondary (7-12), and total (K-12). Pre-kindergarten students were excluded. In addition, Table 5 provides a detailed list of non-public schools and the number of Brewster resident students attending each school for this five-year period. In 2019-20, 37.8% of the Brewster non-public school population attended John F. Kennedy Catholic High School (9-12) in Somers while an additional 23.3% attended St. James the Apostle School (PK-8) in Carmel.

The total number of non-public students (K-12) has been fairly stable, ranging from 89-99 students per year. In 2019-20, the number of Brewster resident students attending non-public schools (90) represented 2.9%⁶ of the total Brewster resident student population, which is a very small percentage. At the elementary level, the number of Brewster resident students attending non-public schools declined from 57 in 2015-16 to 31 in 2019-20. Conversely, the number of Brewster resident students attending non-public schools at the secondary level increased from 42 in 2015-16 to 59 in 2019-20.

Figure 4
Non-Public School Enrollments of
Brewster Central Resident Students
2015-16 to 2019-20



⁶ This does not include children who are homeschooled or who are not attending school.

Table 5
Non-Public School Enrollments of Brewster Central School District Resident Students

School	2015-16			2016-17			2017-18			2018-19			2019-20		
	K-6	7-12	Total	K-6	7-12	Total	K-6	7-12	Total	K-6	7-12	Total	K-6	7-12	Total
Chapel School (The)	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Collegiate School	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
Corpus Christi-Holy Rosary School	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
Duane Lake Academy	0	0	0	0	0	0	1	0	1	1	1	2	1	1	2
Dutchess Day School (The)	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Emma Willard School	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Faith Christian Academy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fordham Preparatory School	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0
Green Meadow Waldorf School	0	0	0	0	2	2	0	1	1	0	1	1	0	0	0
Harvey School (The)	0	4	4	0	2	2	0	1	1	0	2	2	1	2	3
Hudson Valley Christian Academy	5	0	5	3	0	3	2	0	2	1	0	1	0	0	0
Hudson Valley Sudbury School	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
Iona Prep School	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
John Cardinal O'Connor School	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
John F. Kennedy Catholic High School	0	23	23	0	26	26	0	28	28	0	31	31	0	34	34
Longview School	2	2	4	1	2	3	1	4	5	1	3	4	0	2	2
Maria Regina High School	0	0	0	0	1	1	0	1	1	0	1	1	0	1	1
Millbrook School	0	1	1	0	1	1	0	1	1	0	2	2	0	1	1
Mission Church Academy And Preschool	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mizzentop Day School	5	0	5	6	1	7	6	1	7	2	0	2	2	2	4
Nichols School	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Country School	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Our Lady Of Sorrows School	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Our Montessori School	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Poughkeepsie Day School	0	2	2	0	2	2	0	1	1	0	1	1	0	1	1
Rippowam Cisquea School (The)	2	0	2	2	0	2	1	1	2	1	1	2	1	0	1
Sacred Heart School	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
St. Columbanus School	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
St. James the Apostle School	36	5	41	22	6	28	20	4	24	18	3	21	17	4	21
St. Patrick School	4	0	4	4	1	5	6	1	7	7	1	8	7	3	10
St. Patrick School	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Thornnton Donovan School	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Transfiguration School	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
Trinity Pawling School	0	3	3	0	4	4	0	4	4	0	3	3	0	4	4
Windward School (the)	1	0	1	1	0	1	2	0	2	2	0	2	0	1	1
Total	57	42	99	44	49	93	40	49	89	37	53	90	31	59	90

Source: New York State Department of Education BEDS Report

Table 6 replicates the public school enrollment (K-12) of the Brewster School District from Table 3 as well as the total number of resident students from the Brewster School District who are attending non-public schools as shown in Figure 4. The total number of private and public school students, which does not include children not enrolled in school or children who are home-schooled, declined from 2015-16 through 2018-19 before reversing trend in 2019-20. Table 6 also shows the percentage of Brewster students attending public and private schools in the last five years. As the table shows, the percentage of students attending public school has been very stable, ranging from 97.0%-97.2% with no apparent increasing or declining trend.

Table 6
Public and Private School Enrollment (K-12)
of Brewster Central School District Resident Students
2015-16 to 2019-20

School Type	2015-16	2016-17	2017-18	2018-19	2019-20
Public	3,162	3,119	3,081	3,004	3,065
Private	99	93	89	90	90
Total	3,261	3,212	3,170	3,094	3,155
Public %	97.0%	97.1%	97.2%	97.1%	97.1%
Private %	3.0%	2.9%	2.8%	2.9%	2.9%

Source: New York State Department of Education BEDS Report

Kindergarten Replacement

Kindergarten replacements were analyzed to determine whether there was any relationship between overall enrollment change and kindergarten replacement, which is the numerical difference between the number of graduating 12th graders and the number of entering kindergarten students. The district has experienced negative kindergarten replacement in each of the last nine years. Negative kindergarten replacement occurs when the number of graduating 12th grade students is larger than the number of kindergarten students replacing them in the next year. Positive kindergarten replacement occurs when the number of graduating 12th grade students is less than the number of kindergarten students entering the district in the next year. As shown in Figure 5, negative kindergarten replacement has ranged from 30-118 students per year. In 2020-21, there was a loss of 60 students due to kindergarten replacement, as 256 twelfth graders graduated in 2019-20 and were replaced by 196 kindergarten students in 2020-21. In the last four years, the district has lost an average of 62 students per year due to kindergarten replacement.

Figure 5
Brewster Central School District
Historical Kindergarten Replacement

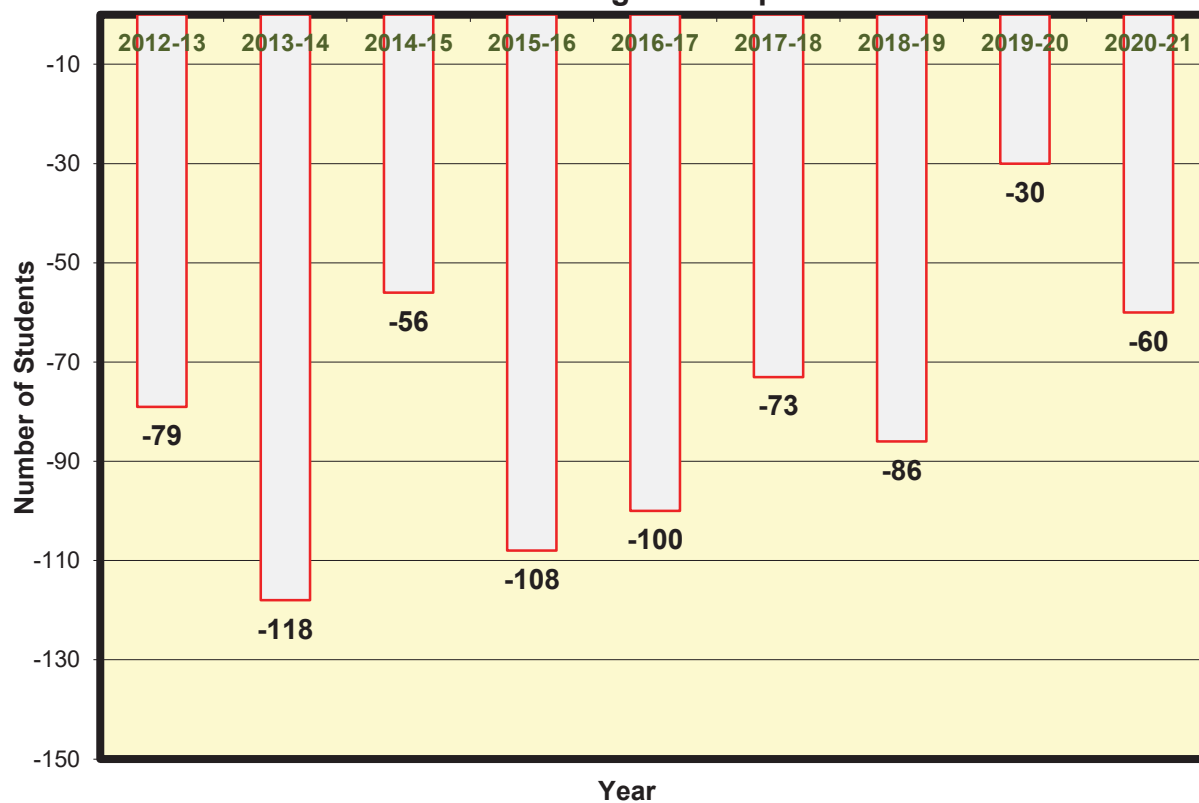
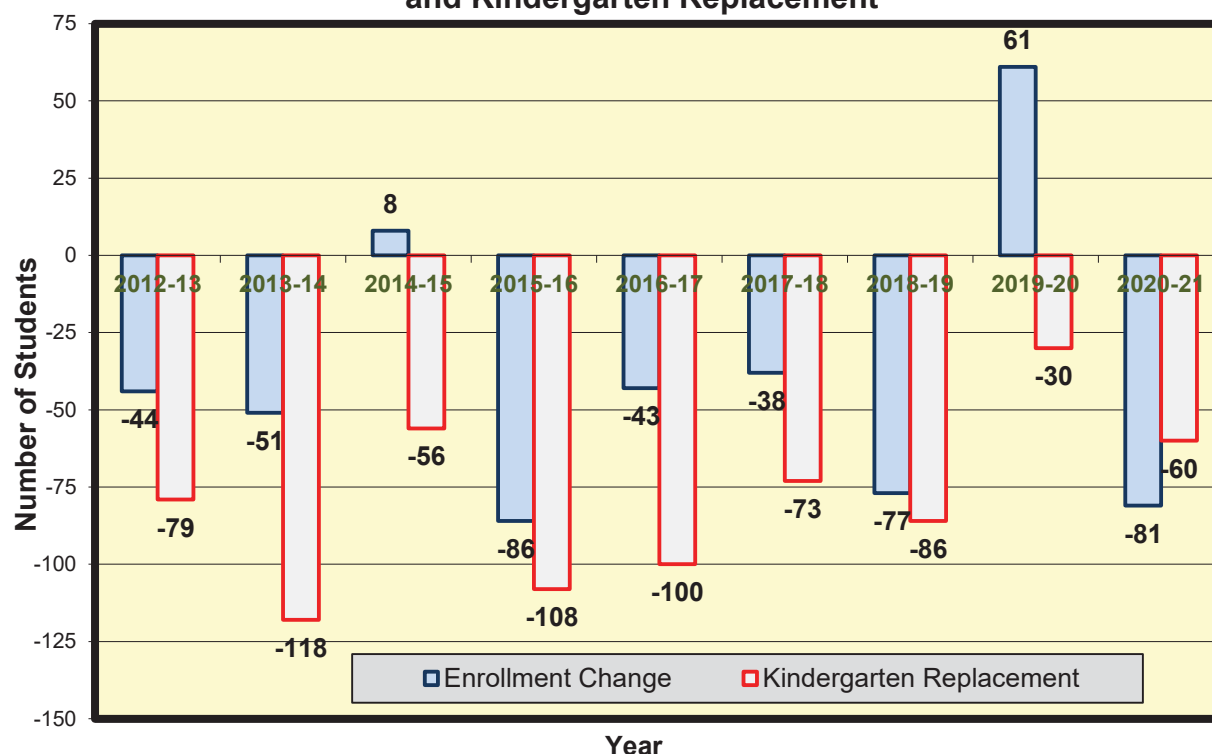


Figure 6 shows the annual change in total enrollment compared to kindergarten replacement. As the figure demonstrates, there appears to be a strong relationship, statistically speaking, between the overall change in enrollment and kindergarten replacement. Although this data represents a small sample, the correlation coefficient between the two variables was 0.703. Correlation coefficients measure the relationship or association between two variables; this does not imply that there is cause and effect between the two variables. Other variables, known as lurking variables, may have an effect on the true relationship between kindergarten replacement and total enrollment change. Negative correlation coefficients indicate that as one variable is increasing (decreasing), the other variable is decreasing (increasing). Positive correlation coefficients indicate that as one of the variables increases (decreases), the other variable increases (decreases) as well. The computed linear correlation coefficient is always between -1 and +1. Values near -1 or +1 indicate a strong linear relationship between the variables while values near zero indicate a weak linear relationship. Based on the correlation of 0.703, there appears to be a strong relationship between enrollment change and kindergarten replacement in the school district in the last nine years.

In eight of the last nine years, the district's losses due to negative kindergarten replacement were partially offset (or totally, resulting in an enrollment increase) by a net inward migration of students in the other grades (K to 1, 1 to 2, 2 to 3, etc.). This was confirmed previously as nine of the thirteen average survival ratios in the five-year trend were above 1.000. The exception occurred in 2020-21 when the negative kindergarten replacement was compounded by outward migration, which is likely related to the coronavirus pandemic.

Figure 6
Comparison of K-12 Enrollment Change
and Kindergarten Replacement



Birth Data

Birth data were needed to compute kindergarten enrollments, which were calculated as follows. Birth data, lagged five years behind their respective kindergarten classes, were used to calculate the survival ratio for each birth-to-kindergarten cohort. For instance, in 2015, there were 229 births in the Brewster School District attendance area. Five years later (the 2020-21 school year), 196 children enrolled in kindergarten, which is equal to a survival ratio of 0.856 from birth-to-kindergarten. Birth counts and birth-to-kindergarten survival ratios are displayed in Table 7. Values greater than 1.000 indicate that some children are born outside of a community's boundaries and are attending kindergarten in the school district five years later, i.e. an inward migration of children. This type of inward migration is typical in school districts with excellent reputations, because the appeal of a good school district draws families into the community. Inward migration is also seen in communities where there are a large number of new housing starts (or home resales), with families moving into the community having children of age to attend kindergarten. Birth-to-kindergarten survival ratios that are below 1.000 indicate that a number of children born within a community are not attending kindergarten in the school district five years later. This is common in communities where a high proportion of children attend private, parochial, or out-of-district special education facilities, or where there is a net migration of families moving out of the community. It is also common in school districts that have a half-day kindergarten program where parents choose to send their child to a private full-day kindergarten for the first year.

Table 7
Birth Counts and Historical Birth-to-Kindergarten Survival Ratios
in the Brewster Central School District

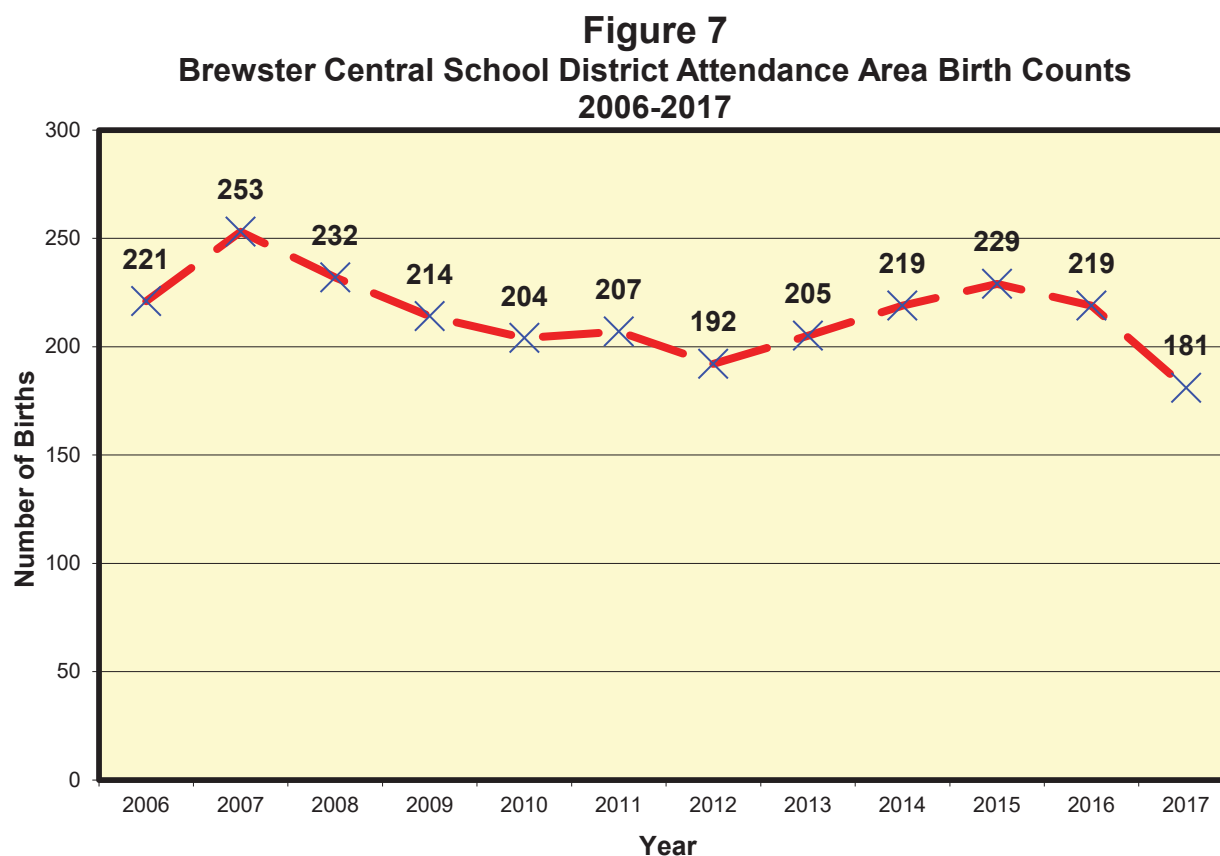
Birth Year¹	Births in School District Attendance Area	Kindergarten Students Five Years Later	Birth-to-Kindergarten Survival Ratio
2006	221	186	0.842
2007	253	213	0.842
2008	232	195	0.841
2009	214	214	1.000
2010	204	198	0.971
2011	207	192	0.928
2012	192	192	1.000
2013	205	194	0.946
2014	219	209	0.954
2015	229	196	0.856
2016	219	N/A	N/A
2017	181	N/A	N/A

Note: ¹Birth data were provided by the New York State Department of Health from 2006-2017.

Birth-to-kindergarten survival ratios have been below 1.000 in eight of the last ten years. Birth-to-kindergarten survival ratios were slightly higher in the last five years, ranging from 0.856-1.000 (average = 0.937), as compared to the five years prior where they ranged from 0.841-1.000 (average = 0.899). This may reflect that a greater number of families with children under the age of 5 are moving into the sending areas to enroll their children in kindergarten, or that fewer families are moving out of the Brewster School District attendance area. As shown previously, it does not appear that more parents are choosing to enroll their child in public school rather than private or parochial school as the percentage of students attending public school has been fairly consistent. As the birth-to-kindergarten survival ratios have been typically below 1.000, this indicates that some children who were born in the school district's attendance area are enrolling in other schools besides the Brewster School District.

Births by the school district's attendance area were provided by the New York State Department of Health from 2006-2017. Birth counts for 2018-2020 were not yet available. Births were estimated using a three-year rolling average for 2018-2020 as these cohorts will become the kindergarten classes of 2023-2025.

Figure 7 shows the number of births in the Brewster School District attendance area from 2006-2017. After peaking at 253 births in 2007, the number of births declined to 192 in 2012. However, the declining birth trend reversed and the number of births slowly increased through 2015 before reversing trend once again. In 2017, there were 181 births in the Brewster School District attendance area, which is the lowest value over this time period.



Regarding fertility rates, the fertility rate in the Brewster School District attendance area is similar to those of both Putnam County and the State of New York. According to the 2014-2018 ACS, the fertility rate of women aged 15 to 50 in the Brewster School District attendance area was 46 births per 1000 women, which is identical to the 2018 fertility rate in Putnam County. The fertility rate of women in New York State was slightly higher at 47 births per 1,000 women. However, it should be noted that while the school district attendance area, county, and state data are all based on a sample, the school district attendance area data has a margin of error that is much higher than the county and state data and may not reflect the “true” fertility rate in the communities.

Figures 8 and 9 show the age pyramids of males and females in the Brewster School District attendance area from both the 2010 Census and the 2014-2018 ACS. In 2010, the largest number of individuals was aged 50-54 for males and 45-49 for females. As these individuals advance in age, the largest cohort in the 2014-2018 ACS was aged 50-54 for females yet remained 50-54 for males. As shown in Table 8, the greatest declines (shaded red) over this time period, both in number and percentage points, occurred in the 40-44 age group for males and the 35-39 age group for females. The greatest gains (shaded blue), both in number and percentage points, occurred in the 65-69 age group for both males and females.

Figure 8
Population Pyramid of
Brewster Central School District Attendance Area
2010 Census

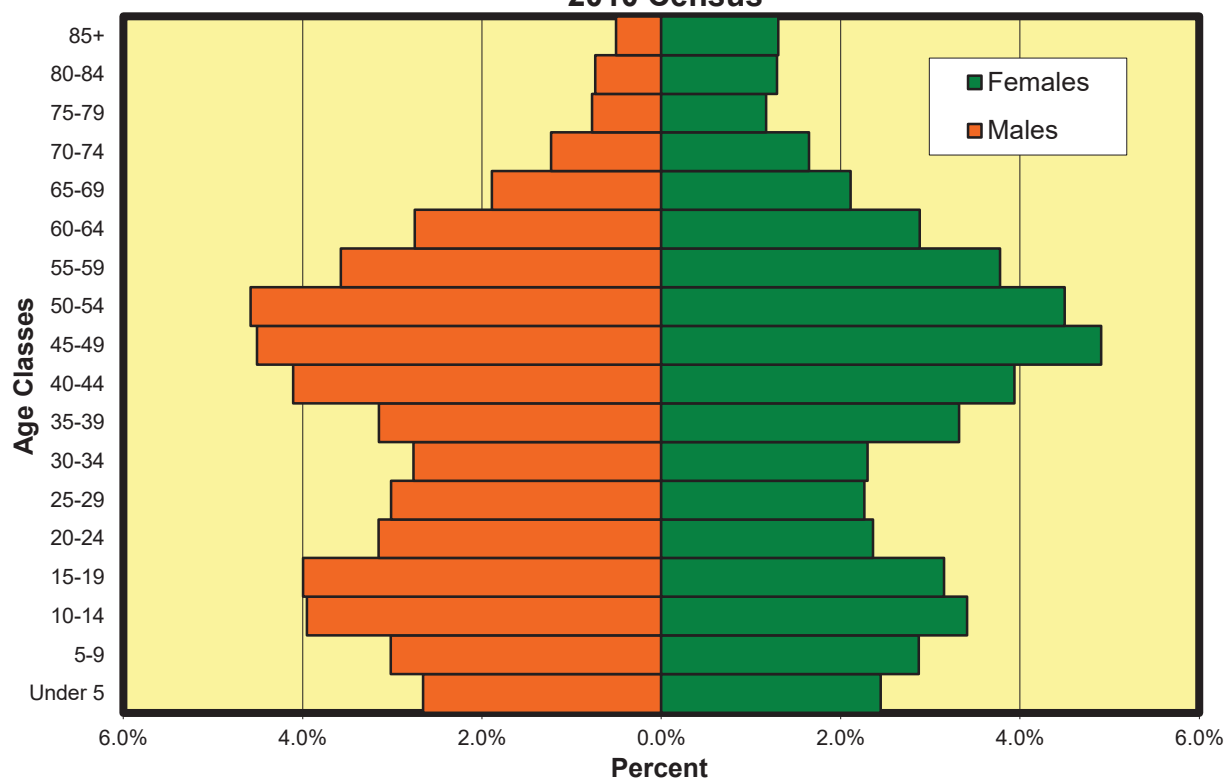


Figure 9
Population Pyramid of
Brewster Central School District Attendance Area
2014-2018 ACS

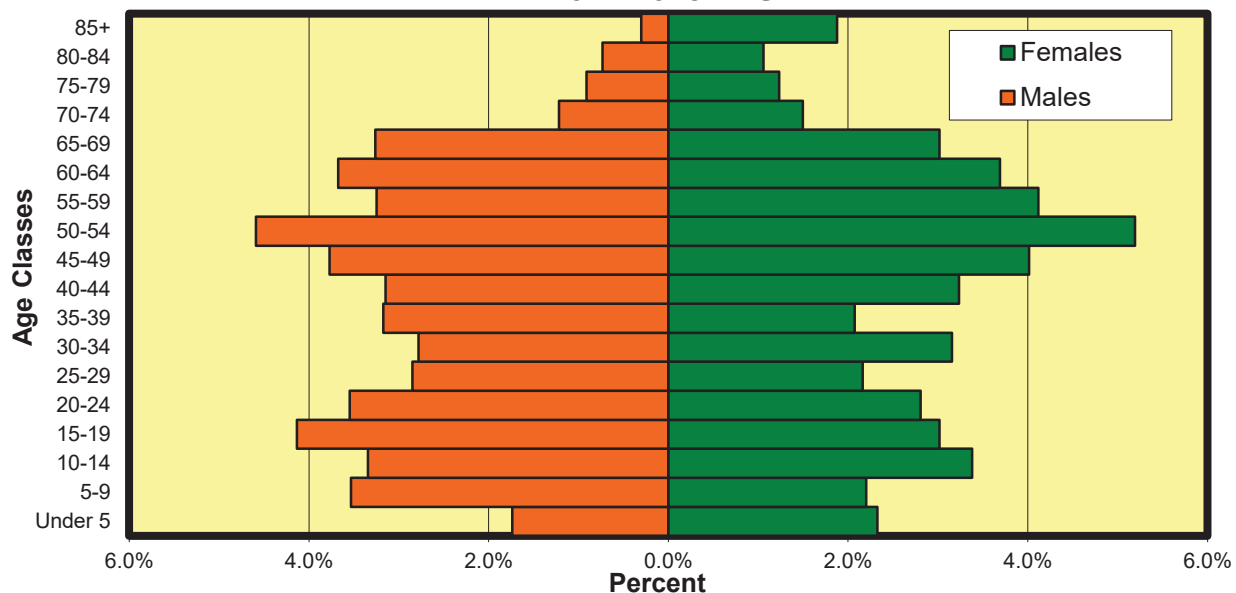


Table 8
Numerical and Percentage Point Changes of Males and Females
in the Brewster Central School District Attendance Area
2010 Census to 2014-2018 ACS

Age Group	Males		Females	
	Numerical Change	Percentage Point Change	Numerical Change	Percentage Point Change
Under 5	-209	-0.9	-34	-0.1
5-9	+103	+0.5	-155	-0.7
10-14	-145	-0.6	-17	0.0
15-19	+19	+0.1	-39	-0.1
20-24	+76	+0.4	+90	+0.4
25-29	-45	-0.2	-29	-0.1
30-34	-5	0.0	+180	+0.9
35-39	-4	0.0	-282	-1.2
40-44	-222	-1.0	-166	-0.7
45-49	-175	-0.7	-209	-0.9
50-54	-12	0.0	+138	+0.7
55-59	-82	-0.3	+63	+0.3
60-64	+193	+0.9	+168	+0.8
65-69	+294	+1.4	+192	+0.9
70-74	-6	0.0	-38	-0.2
75-79	+28	+0.1	+10	+0.1
80-84	-3	0.0	-55	-0.2
85+	-46	-0.2	+121	+0.6

Notes: Cells shaded blue reflect the greatest gains over the ten-year period. Cells shaded red reflect the greatest losses over the ten-year period.

New Housing in the Brewster Central School District Attendance Area

Municipal representatives from Brewster, Southeast, Carmel, and Patterson were contacted regarding potential new housing units in the Brewster School District attendance area. Table 9 shows the location, number, and type of housing units in each development, as well as its status. A total of 302 housing units are planned in the Brewster School District attendance area, where 180 units are apartments and 122 units are detached single-family homes. Changes in the status of the developments since the November 2019 demographic study have been bolded. No residential projects have been added to the table since the last report.

Table 9
Approved and Proposed Housing in the
Brewster Central School District Attendance Area

Subdivision/ Developer	Town	Number of Units	Housing Type	Status/Notes
530 North Main Street	Brewster	12	Apartments	Two-bedroom apartments to be located at corner of North Main Street and Wells Street. Likely to be completed in spring 2021. Approved (Under construction)
Farm to Market LLC	Southeast	10	Detached Single-Family	Two parcels were approved to be subdivided into 10 lots in 2015. Developer has asked for extensions. No construction has commenced. Approved (not under construction)
Ross Nursery Subdivision	Southeast	5	Detached Single-Family	One parcel to be subdivided into five lots. Approved (not under construction)
Barrett Hill	Southeast	168	Apartments	64 1-BR, 104 2-BR Seventeen (17) units will be set aside for Low-Moderate Income households. Approved August 2020 (not under construction)
Fortune Ridge at Southeast	Southeast	103	Detached Single-Family	Approximately 20 units have already been constructed and occupied. 83 units to be constructed. May take up to 6-8 years to complete. Under Construction
Baker Farm	Southeast	4	Detached Single-Family	Under Review (no approval to date)
Total	122 Detached Single-Family Homes 180 Apartment Units			

Sources: Village of Brewster and Town of Southeast

Note: Bolded text reflects a change in status from the November 2019 demographic study.

There are no residential developments under construction, nor are there development applications before the planning board, in the sections of Patterson and Carmel that send to the Brewster School District.

In Brewster, construction of twelve (12) two-bedroom apartment units on the corner of North Main Street and Wells Street was temporarily paused due to the coronavirus pandemic. Completion of the project is likely to occur in spring 2021. In addition, there are plans to redevelop the Brewster Urban Renewal Area, which is generally located on both sides of Main

Street. The Urban Renewal Plan⁷, which was developed in 2016, is a ten-year project to redevelop deteriorating and underutilized properties with residential, retail, commercial, parking, and open space. Brewster Village is to determine the number and type of residential housing units, including whether they will be owned or rented, be market-rate or affordable, or consist of a number of age-restricted units. Due to the project's proximity to the Brewster Train Station, it is considered to be a Transit Oriented Development ("TOD"). Historically, TODs have fewer students than housing developments not located near mass transit. To date, no site plans have been submitted, nor has a developer been selected. However, it is expected that some aspects of the redevelopment project will begin in the near future. Due to the lack of details and timeline concerning the redevelopment and the number of new housing units that will be created, the project was not included in Table 9.

In Southeast, there is the potential for 290 housing units in five separate developments. In general, there has been little change in the status of each development over the past year. The largest development, Barrett Hill, which was recently approved in August 2020, will consist of 168 one- and two-bedroom apartment units with seventeen (17) units set aside for low and moderate income households. Priority will be given to public employees such as first responders and schoolteachers. The second-largest development, Fortune Ridge at Southeast ("Fortune Ridge"), which has been under construction for several years, has 20 units constructed and occupied of the 103 homes that are planned. In the last year, only two homes were built in this development. In a phone conversation with the Fortune Ridge sales manager, construction is likely to accelerate with full buildout occurring in the next 6-8 years.

Estimate of School-Age Children from New Housing

In the process of determining how many children will come from the new housing units, statewide multipliers published by Econsult Solutions Inc. ("ESI")⁸ were utilized. The resource provides housing multipliers (student yields) based on housing type, number of bedrooms, and housing tenure (ownership versus rental). The multipliers used in this report project the number of school-age children based on information collected from a sample of households in New York from the 2011-2015 American Community Survey Public Use Microdata Series ("PUMS"). Student multipliers are greatest for detached single-family homes and smallest for apartments, townhouses, and condominiums. While the multipliers are for school-age children and not those attending public school, the estimate will provide the school district with an approximation of the number of new school children.

To project the number of school-age children from the new housing units, several assumptions were made:

1. The student yield multipliers used from ESI would be from a sample of New York households and these multipliers would be representative of the families moving into Southeast or Brewster.

⁷ VHB Engineering, Surveying, and Landscape Architecture P.C. *Urban Renewal Plan for the Brewster Urban Renewal Area*. 2016, http://www.brewstervillage-ny.gov/images/edocman/urban-renewal-plan/Urban_Renewal_Plan_Adopted_5-18-2016.pdf.

⁸ Retrieved from <https://econsultsolutions.com/wp-content/uploads/2018/04/NY.pdf> on November 21, 2019.

2. The estimated number of students reflects units yet to be completed (e.g., 83 units in Fortune Ridge at Southeast have yet to be constructed).
3. All detached single-family homes were assumed to have four bedrooms and have the following student yield multiplier: 0.924.
4. All apartment units were assumed to have the following student yield multiplier: 0.334.

In total, 152 school-age children are projected to be generated from the new housing developments. The number of children in grades K-12 anticipated from each development is as follows:

- 530 North Main Street – 4
- Farm to Market – 9
- Ross Nursery Subdivision – 5
- Barrett Hill – 56
- Fortune Ridge at Southeast – 74
- Baker Farm – 4

As this represents school-age children, the number of public school children is likely to be slightly lower. Using data from Table 6, an average of 97.1% of Brewster School District resident students attended public school in the last five years. Using this percentage, 148 public school children in grades K-12 are projected from the new housing developments.

Since the buildout of Fortune Ridge, which would have the greatest impact on the school district, is occurring at a very slow rate, the baseline enrollment projections were not adjusted for the additional children anticipated from the new housing developments. It is unlikely that Fortune Ridge will be completed and occupied within the enrollment projection timeframe of five years. In addition, one development has not been approved (Baker Farm) while two others (Barrett Hill and Farm to Market LLC) have been under consideration for the past four or more years and have not started construction. For these reasons, the baseline enrollment projections were not adjusted for the additional children anticipated from the new housing developments.

Enrollment Projections

Due to the changes in the district’s enrollment trends in 2020-21 (in particular, much lower elementary enrollments than expected), which were likely related to the coronavirus pandemic, three separate projections were computed from 2021-22 through 2025-26, a five-year period. As it is unclear when the pandemic will end and how this will affect enrollments in the near term, three different scenarios were modeled:

1. The five-year average survival ratios were computed including enrollments from 2020-21. In addition, the 2020-21 enrollments were used as a base to project future enrollments.
2. The computed elementary average survival ratios excluded the 2020-21 enrollments, since the elementary grades appear to be the most affected by the pandemic. The five-year average survival ratios used to compute the middle and high school grades did utilize 2020-21 enrollments in computing the average scenarios. In addition, the 2020-21 enrollments from all grades were used as a base to project future enrollments.
3. The five-year average survival ratios were computed excluding the 2020-21 enrollments. In addition the 2020-21 enrollments were *projected* for the purpose of providing a “higher base” for projecting future enrollments. This may simulate future enrollments if the pandemic ends within the next year.

Enrollments for the self-contained special education/ungraded classes were computed by calculating the historical proportion of self-contained special education/ungraded students with respect to the regular education subtotals at each grade configuration level (elementary, middle, and high) and multiplying that value by the future regular education subtotals.

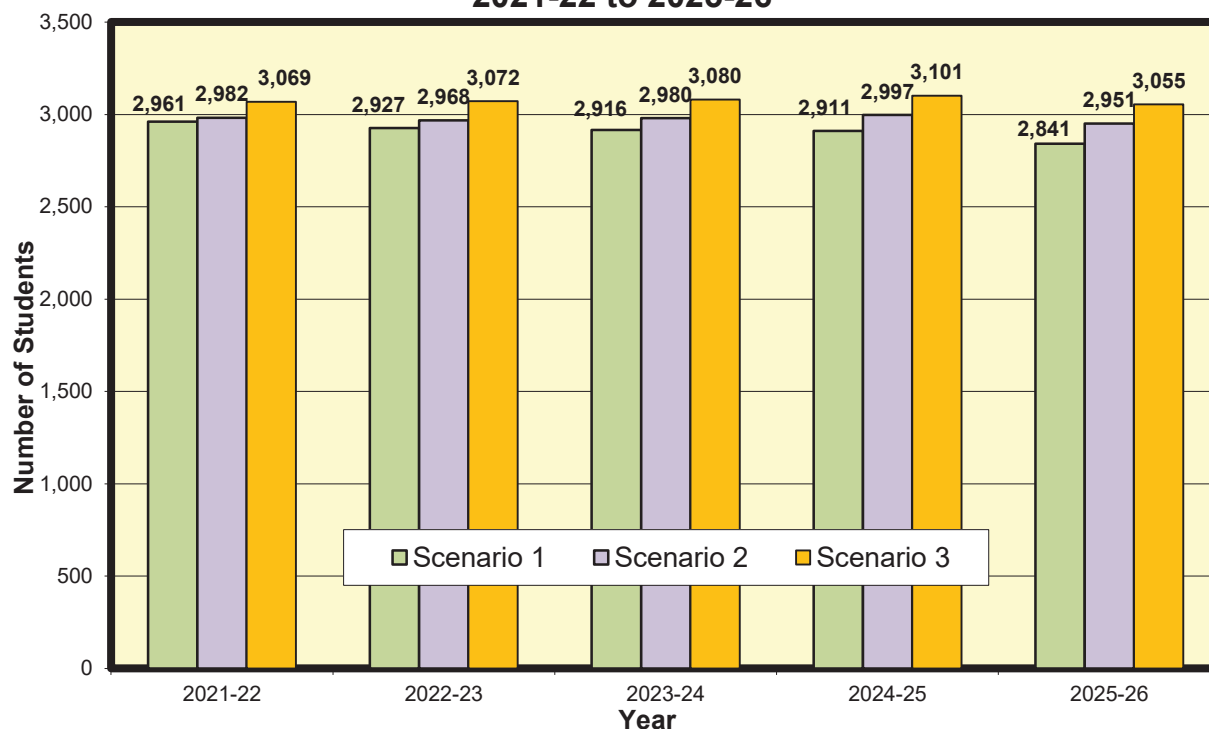
Projected K-12 enrollments for Scenario 1 follow in Table 10 and Figure 10. Total enrollments are projected to slowly decline throughout the projection period. Enrollment is projected to be 2,841 in 2025-26, which would be a loss of 143 students from the 2020-21 enrollment of 2,984.

Table 10
Brewster Central School District Projected Enrollments (K-12)
Scenario 1

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	SE ¹	K-12 Total
2021-22	205	203	209	210	197	204	228	238	246	289	234	242	238	18	2,961
2022-23	170	212	207	212	207	201	208	234	242	253	294	230	239	18	2,927
2023-24	197	176	216	210	209	211	205	213	238	249	258	289	227	18	2,916
2024-25	190	204	179	220	207	213	216	210	216	245	254	254	285	18	2,911
2025-26	185	196	208	182	217	211	218	222	213	222	249	250	251	17	2,841

Note: ¹Ungraded special education enrollment for the entire district

Figure 10
Brewster Central School District Enrollment Projections
2021-22 to 2025-26



Projected K-12 enrollments for Scenario 2 follow in Table 11 and Figure 10. Total enrollments are projected to be fairly stable for the next four years before declining in the last years of the projection period. Enrollment is projected to be 2,951 in 2025-26, which would be a loss of 33 students from the 2020-21 enrollment.

Table 11
Brewster Central School District Projected Enrollments (K-12)
Scenario 2

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	SE ¹	K-12 Total
2021-22	210	206	211	213	201	208	228	238	246	289	234	242	238	18	2,982
2022-23	174	220	212	217	214	209	212	234	242	253	294	230	239	18	2,968
2023-24	202	183	226	218	218	223	213	217	238	249	258	289	227	19	2,980
2024-25	195	212	188	233	219	227	228	218	220	245	254	254	285	19	2,997
2025-26	190	205	218	194	234	228	232	234	221	227	249	250	251	18	2,951

Note: ¹Ungraded special education enrollment for the entire district

In Scenario 3, projected enrollments (K-12) are shown in Table 12 and Figure 10. Total enrollments are projected to slowly increase in the next four years before reversing trend. Enrollment is projected to be 3,055 in 2025-26, which would be a gain of 71 students from the 2020-21 enrollment.

Table 12
Brewster Central School District Projected Enrollments (K-12)
Scenario 3

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	SE ¹	K-12 Total
2021-22	208	228	225	228	211	223	237	236	256	291	235	245	228	18	3,069
2022-23	172	218	235	232	229	220	228	245	241	263	300	227	243	19	3,072
2023-24	199	180	224	242	233	239	225	236	250	247	271	290	225	19	3,080
2024-25	193	209	185	231	243	243	244	233	241	256	255	262	287	19	3,101
2025-26	188	202	215	190	232	253	249	253	238	247	264	246	259	19	3,055

Note: ¹Ungraded special education enrollment for the entire district

Projected Enrollments by School

In Table 13, projected enrollments are shown by school. Ungraded special education students were reassigned into each of the schools. At JFK, containing grades K-2, enrollments are projected to be fairly stable throughout the projection period. In Scenario 1, enrollments are projected to range from 573-617. In 2025-26, enrollment is projected to be 589, which would represent a loss of 19 students from the 2020-21 enrollment of 608. In Scenario 2, enrollments are projected to range from 595-627. Enrollment is projected to be 613 in 2025-26, which would be a gain of five (5) students from the 2020-21 enrollment. In Scenario 3, enrollments are projected to range from 587-661. In 2025-26, enrollment is projected to be 605, which would represent a loss of three (3) students from the 2020-21 enrollment.

At Starr, containing grades 3-5, enrollments are projected to increase for the next four years before reversing trend. In Scenario 1, enrollment is projected to be 612 in 2025-26, which would be a loss of 13 students from the 2020-21 enrollment of 625. In Scenario 2, enrollment is projected to be 659 in 2025-26, which would represent a gain of 34 students from the 2020-21 enrollment. Finally, enrollment is projected to be 678 in 2025-26 in Scenario 3, which would be a gain of 53 students from the 2020-21 enrollment.

At Wells, containing grades 6-8, enrollments are projected to decline for the next four years before reversing trend. In Scenario 1, enrollment is projected to be 653 in 2025-26, which would be a loss of 102 students from the 2020-21 enrollment of 755. In Scenario 2, enrollment is projected to be 687 in 2025-26, which would represent a loss of 68 students from the 2020-21 enrollment. For Scenario 3, enrollment is projected to be 740 in 2025-26, which would be a loss of 15 students from the 2020-21 enrollment.

For Brewster High School, containing grades 9-12, enrollments are projected to increase for the next four years before reversing trend. In Scenario 1, enrollment is projected to be 987 in 2025-26, which would be a loss of nine (9) students from the 2020-21 enrollment of 996. In Scenario 2, enrollment is projected to be 992 in 2025-26, which would represent a loss of four (4) students from the 2020-21 enrollment. Finally, enrollment is projected to be 1,032 in 2025-26 in Scenario 3, which would be a gain of 36 students from the 2020-21 enrollment.

Table 13
Projected Enrollments by School
2021-22 to 2025-26

Historical	K-2 (JFK)			3-5 (Starr)			6-8 (Wells)			9-12 (Brewster H.S.)		
2020-21	608			625			755			996		
Projected	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
2021-22	617	627	661	613	624	665	712	712	729	1,019	1,019	1,014
2022-23	589	606	625	622	642	684	684	688	714	1,032	1,032	1,049
2023-24	589	611	603	632	662	717	656	668	711	1,039	1,039	1,049
2024-25	573	595	587	642	682	720	642	666	718	1,054	1,054	1,076
2025-26	589	613	605	612	659	678	653	687	740	987	992	1,032
5-yr. Change	-19	+5	-3	-13	+34	+53	-102	-68	-15	-9	-4	+36

ATTACHMENT C

Traffic - Trips Generation Tables

Table 1 Residential Portion (FGEIS 1-11-2006 Table 3.6-2) Project Site Trip Generation Summary									
Land Uses and Size (Potential Uses)	Trips								
	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour		
	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)
Gateway Summit									
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
The Fairways									
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
Total Residential FGEIS	36	44	80	56	36	92	46	46	92

Trip Generation, Institute of Transportation Engineers, 7th edition, Washington D.C., 2003.

Table 2 Residential Portion FGEIS Project Site Trip Generation Update Summary						
Land Uses and Size (Potential Uses)	Trip Rates (Trips per dwelling unit)					
	A.M. Peak Hour		P.M. Peak Hour		Saturday Peak Hour	
	IN	OUT	IN	OUT	IN	OUT
Gateway Summit and the fairways						
Senior Detached Residences, 54 dwelling units	0.156	0.318	.0336	0.215	0.110	0.120
Senior attached Residences, 246 dwelling units	0.070	0.129	0.137	0.112	0.213	0.130

Trip Generation, Institute of Transportation Engineers, 10th edition, Washington D.C., 2017.

Table 3 Residential Portion FGEIS Project Site Trip Generation Update Summary									
Land Uses and Size (Potential Uses)	Trips								
	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour		
	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)
Gateway Summit and the fairways									
Senior Detached Residences, 54 dwelling units	8	17	25	18	12	30	6	6	12
Senior attached Residences, 246 dwelling units	17	32	49	34	28	62	52	32	84
Total	25	49	74	52	40	92	58	38	96
See Table 2 for rates									

Table 4 Residential Portion FGEIS (1-11-2006) Project Site Trip Generation Summary						
Land Uses and Size (Potential Uses)	Trip Rates (Trips per dwelling unit)					
	A.M. Peak Hour		P.M. Peak Hour		Saturday Peak Hour	
	IN	OUT	IN	OUT	IN	OUT
Gateway Summit and Fairways						
Senior Detached Residences, 68 dwelling units	0.148	0.300	0.319	0.204	0.110	0.120
Senior attached Residences, 46 dwelling units	0.069	0.127	0.159	0.130	0.195	0.119
Multi-family Low-rise Residential 84 dwelling units	0.111	0.370	0.379	0.223	0.335	0.349
Multi-family mid-rise Residential 84 dwelling units	0.089	0.253	0.270	0.173	0.238	0.248
Trip Generation, Institute of Transportation Engineers, 10th edition, Washington D.C., 2017.						

Table 5 Residential Portion FGEIS (1-11-2006) Project Site Trip Generation Summary									
Land Uses and Size (Potential Uses)	Trips								
	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour		
	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)
Gateway Summit and Fairways									
Senior Detached Residences, 68 dwelling units	10	20	30	22	14	36	7	8	15
Senior attached Residences, 46 dwelling units	3	6	9	7	6	13	9	5	14
Multi-family Low-rise Residential 84 dwelling units	9	31	40	32	19	51	28	29	57
Multi-family mid-rise Residential 102 dwelling units	9	26	35	28	18	46	24	25	49
Total Residential	31	83	114	89	57	146	68	67	135
See Table 4 for trip generations rates.									

Table 6 Residential Portion Project Site Trip Generation Comparison									
Land Uses and Size (Potential Uses)	Trips								
	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour		
	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)
Gateway Summit and The Fairways									
Total Residential FGEIS 300 residential Dwelling units (Table 1)	36	44	80	56	36	92	46	46	92
Proposed Revised mixed 300 residential dwelling units (Table 5)	31	83	114	89	57	146	68	67	135
Change	-5	+39	+34	+33	+21	+54	+22	+21	+43
Source see above tables as noted.									

ATTACHMENT D

Correspondence

**TIM
MILLER
ASSOCIATES, INC**

10 North Street, Cold Spring, New York 10516

(845) 265-4400 Fax: (845) 265-4418

January 12, 2022

Eleana Nash-Graham – School Business Administrator
Brewster Central School District
40 Farm Market Road
Brewster, NY 10509

Re: Gateway Summit and the Fairways Residential Development
Town of Carmel, Putnam County NY

Dear Ms. Nash-Graham,

Tim Miller Associates is preparing an Expanded Environmental Assessment Form (EAF) for a proposed residential development in the Town of Carmel. I have enclosed a site location map, an aerial photo of the site, and a preliminary site plan, which shows the approximate School District boundaries, for your reference.

The Gateway Summit and the Fairways development proposes two multi-family residential communities on a total of 145 acres located on the north side of Route 6 in the Town of Carmel, Putnam County, New York. The two communities are referred to as “Gateway Summit” and “The Fairways”.

The Gateway Summit and The Fairways developments were previously the subject of a thorough coordinated review under SEQRA by the Town of Carmel Planning Board (the lead agency) for Subdivision Approval, Special Use Permits, and Site Plan approvals, and to the Town of Carmel Environmental Conservation Board for a Wetland Permit during the period 2003 through 2007. The current proposed action involves an amended Site Plan, Subdivision and Special Use permits and setback variances from the Town Zoning Board of Appeals for the residential portion of the Gateway Summit and The Fairways overall development. The project site is connected to existing municipal water and sewer service. The proposed action will provide needed senior and non-age restricted housing in the Town of Carmel.

The Gateway Summit development would include a mix of 150 units of active adult single family homes, active adult townhomes and non-age restricted townhomes. The Fairways development would consist of 150 units of non-age restricted townhomes with varied designs.

We have projected a total future population of approximately 759 people, including 93 school age children. Based upon the current location of the tax parcels which comprise the project site, we estimate that, of the 93 school age children expected to reside in the proposed development, 68 would be located in the Brewster School District and 25 would be located in the Carmel School District. As shown on the attached map of the school district boundaries, a greater portion of the project site is located within the Carmel School District, however, the Gateway Summit development is all Senior housing, which does not house any school age children. Based upon our research of enrollment trends, both school districts appear to have sufficient capacity to accommodate the entire projected student population and the anticipated tax revenue from this development is expected to cover the educational costs, resulting in net positive tax revenue. I can provide support for this conclusion should you wish to review our data. Coordination between the two districts is likely to be necessary to determine how to best provide educational services and transportation to this proposed development.

As part of the environmental review process, we wish to include any concerns your office may have relative to this proposed project. We would appreciate your written response regarding the effect of the increased population on the Brewster Central School District’s facilities, and the ability of the School District to provide educational services to the children who will be associated with this property.

Please include any school district publications you feel might provide useful information on the school district. Please indicate which Elementary and High School/Middle School students at this location would attend. Please include any available information on the routing of school buses, and the location of bus stops in this area.

Your input is important. Should you not be able to provide written correspondence, I can be reached at acutignola@timmillerassociates.com, or by telephone at the number shown above during the weekdays.

Thank you for your assistance in this matter. Please do not hesitate to call me should you have any questions or need additional information. I look forward to hearing from you.

Sincerely,



Ann Cutignola, AICP
Senior Planner
TIM MILLER ASSOCIATES, INC.

C. Ms. Laurie Bandlow – Superintendent of Schools

From: [Karlsson, Victor](#)
To: acutignola@timmillerassociates.com
Cc: [Laurie Bandlow](#); [Elena Nash-Graham](#)
Subject: Brewster CSD Acknowledgement of Gateway Summit & Fairways
Date: Tuesday, January 25, 2022 11:45:25 AM

Good morning,

Please accept this email as acknowledgement of Tim Miller Associates' assessment of residential development projects which would impact the Brewster Central School District within the Town of Carmel. The District has no further comment with respect to this project.

Warm regards,

Victor Karlsson, CPA
Assistant Superintendent for Finance & Operations
Brewster Central School District
(845) 279 - 8000 ext 6117

**TIM
MILLER
ASSOCIATES, INC**

10 North Street, Cold Spring, New York 10516

(845) 265-4400 Fax: (845) 265-4418

January 12, 2022

Ms. Mary Margaret Zehr – Superintendent
Carmel Central School District
81 South Street
P.O. Box 296
Patterson, NY 12563

Re: Gateway Summit and the Fairways Residential Development
Town of Carmel, Putnam County NY

Dear Ms. Zehr,

Tim Miller Associates is preparing an Expanded Environmental Assessment Form (EAF) for a proposed residential development in the Town of Carmel. I have enclosed a site location map, an aerial photo of the site, and a preliminary site plan, which shows the approximate School District boundaries, for your reference.

The Gateway Summit and the Fairways development proposes two multi-family residential communities on a total of 145 acres located on the north side of Route 6 in the Town of Carmel, Putnam County, New York. The two communities are referred to as “Gateway Summit” and “The Fairways”.

The Gateway Summit and The Fairways developments were previously the subject of a thorough coordinated review under SEQRA by the Town of Carmel Planning Board (the lead agency) for Subdivision Approval, Special Use Permits, and Site Plan approvals, and to the Town of Carmel Environmental Conservation Board for a Wetland Permit during the period 2003 through 2007. The current proposed action involves an amended Site Plan, Subdivision and Special Use permits and setback variances from the Town Zoning Board of Appeals for the residential portion of the Gateway Summit and The Fairways overall development. The project site is connected to existing municipal water and sewer service. The proposed action will provide needed senior and non-age restricted housing in the Town of Carmel.

The Gateway Summit development would include a mix of 150 units of active adult single family homes, active adult townhomes and non-age restricted townhomes. The Fairways development would consist of 150 units of non-age restricted townhomes with varied designs.

We have projected a total future population of approximately 759 people, including 93 school age children. Based upon the current location of the tax parcels which comprise the project site, we estimate that, of the 93 school age children expected to reside in the proposed development, 68 would be located in the Brewster School District and 25 would be located in the Carmel School District. As shown on the attached map of the school district boundaries, a greater portion of the project site is located within the Carmel School District, however, the Gateway Summit development is all Senior housing, which does not house any school age children. Based upon our research of enrollment trends, both school districts appear to have sufficient capacity to accommodate the entire projected student population and the anticipated tax revenue from this development is expected to cover the educational costs, resulting in net positive tax revenue. I can provide support for this conclusion should you wish to review our data. Coordination between the two districts is likely to be necessary to determine how to best provide educational services and transportation to this proposed development.

As part of the environmental review process, we wish to include any concerns your office may have relative to this proposed project. We would appreciate your written response regarding the effect of the increased population on the Carmel Central School District’s facilities, and the ability of the School District to provide educational services to the children who will be associated with this property.

Please include any school district publications you feel might provide useful information on the school district. Please indicate which Elementary and High School/Middle School students at this location would attend. Please include any available information on the routing of school buses, and the location of bus stops in this area.

Your input is important. Should you not be able to provide written correspondence, I can be reached at acutignola@timmillerassociates.com, or by telephone at the number shown above during the weekdays.

Thank you for your assistance in this matter. Please do not hesitate to call me should you have any questions or need additional information. I look forward to hearing from you.

Sincerely,



Ann Cutignola, AICP
Senior Planner
TIM MILLER ASSOCIATES, INC.

C. Mr. Joseph Simoni – Assistant Superintendent of Student Services



CARMEL CENTRAL SCHOOL DISTRICT

MARY-MARGARET ZEHR
Superintendent of Schools

January 25, 2022

Planning Board of the Town of Carmel
c/o Rose Trombetta, Secretary to the Planning Board
60 McAlpin Avenue
Mahopac, NY 10541

**Re: Gateway Summit & The Fairways Residential Development
Response to Request for Input from Tim Miller Associates, Inc.**

Dear Chairperson and Members of the Town of Carmel Planning Board:

On behalf of the Carmel Central School District ("District"), we submit this letter in response to a request received from Tim Miller Associates, Inc. seeking input from the District on The Gateway Summit and The Fairways proposed residential development. We ask that this letter be included as part of the record before the Planning Board for review of the proposed development.

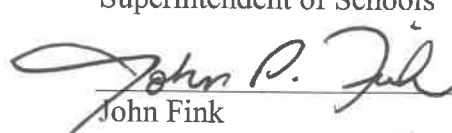
After reviewing the information sent to us from Tim Miller Associates, the District is able to offer the following preliminary comments:

- We are concerned with the number of age and non-age restricted units that will be constructed in our school district compared to the number of age and non-age restricted units that will be constructed in the Brewster Central School District. Our district would prefer to have non-age restricted units.
- We would like clarity over the school district boundaries and the number of units that will be bisected by the boundary lines. We believe that this issue should be clarified prior to approval of the project.

We thank the Planning Board for its consideration.

Sincerely,

 1/25/22
Mary-Margaret Zehr
Superintendent of Schools

 1/25/22
John Fink
Interim Assistant Superintendent for
Business

cc: Board of Education

Tim Miller Associates, Inc.

Cultivating Opportunities



**TIM
MILLER
ASSOCIATES, INC.**

10 North Street, Cold Spring, New York 10516

(845) 265-4400 Fax: (845) 265-4418

January 12, 2022

Anthony Hoffman - Chief
Town of Carmel Police Department
60 McAlpin Avenue
Mahopac, NY 10541

Re: Gateway Summit and the Fairways Residential Development, Town of Carmel, Putnam County, NY

Dear Chief Hoffmann,

Tim Miller Associates is preparing an Expanded Environmental Assessment Form (EAF) for a proposed residential development in the Town of Carmel. I have enclosed a site location map, an aerial photo of the site, and a preliminary site plan, for your reference.

The Gateway Summit and the Fairways development proposes two multi-family residential communities on a total of 145 acres located on the north side of Route 6 in the Town of Carmel, Putnam County, New York. The two communities are referred to as "Gateway Summit" and "The Fairways".

The Gateway Summit and The Fairways developments were previously the subject of a thorough coordinated review under SEQRA by the Town of Carmel Planning Board (the lead agency) for Subdivision Approval, Special Use Permits, and Site Plan approvals, and to the Town of Carmel Environmental Conservation Board for a Wetland Permit during the period 2003 through 2007. The current proposed action involves an amended Site Plan, Subdivision and Special Use permits and setback variances from the Town Zoning Board of Appeals for the residential portion of the Gateway Summit and The Fairways overall development. The project site is connected to existing municipal water and sewer service. The proposed action will provide needed senior and non-age restricted housing in the Town of Carmel.

The Gateway Summit development would include a mix of 150 units of active adult single family homes, active adult townhomes and non-age restricted townhomes. The Fairways development would consist of 150 units of non-age restricted townhomes with varied designs. We have projected a total future population of approximately 759 people, including 93 school age children.

As part of the environmental review process, we wish to include any concerns your office may have relative to this proposed project. We would appreciate your written response on the ability of the Police Department to provide police protection services to this property. Information which would be useful in that regard would include:

- the number of police calls per year
- the number of police officers
- your typical response time to a site in this location
- any anticipated staff or facility expansion or equipment procurement plans

Your input is important. Should you not be able to provide written correspondence, I can be reached at acutignola@timmillerassociates.com, or by telephone at the number shown above during the weekdays.

Thank you for your assistance in this matter. Please do not hesitate to call me should you have any questions or need additional information. I look forward to hearing from you.

Sincerely,



Ann Cutignola, AICP
Senior Planner
TIM MILLER ASSOCIATES, INC.



TOWN OF CARMEL POLICE DEPARTMENT

60 MCALPIN AVENUE, MAHOPAC, NY 10541
TEL (845)628-1300 FAX (845)628-2597
POLICE@CI.CARMEL.NY.US

ANTHONY HOFFMANN
CHIEF OF POLICE

January 24, 2022

Ann Cutignola, AICP
Senior Planner
Tim Miller Associates, Inc.
10 North Street
Cold Spring, NY 10516

Re: Gateway Summit and the Fairways Residential Development

Dear Ms. Cutignola,

Thank you for your letter of January 12th regarding the Gateway Summit and Fairways Residential Development project. Our staff has reviewed the information you presented and we offer the following feedback as you have requested.

The Town of Carmel Police Department has averaged approximately 35,000 calls for service annually for the past three years. With a reported population of 33,576 from the 2020 Census, that works out to a little over one call for service per resident per year. CPD currently has an authorized strength of thirty-five sworn officers, with twenty-two of these being patrol officers that primarily respond to these calls for service. This means that on average each of our patrol officers handles 1,600 calls for service per year.

The area of your proposed development is part of our "Sector A", which encompasses the Carmel Hamlet area of the Town of Carmel. There is a steady sector patrol car assigned to this area 24/7/365. The response time for this sector matches the US Department of Justice average police response time of ten minutes. This is a bit of a misnomer though as each call is assessed on its exigency and higher priority calls (ex. crimes in progress, serious medical calls, fires, etc.) will see a quicker response from the sector and back up units, and lesser priority calls such as parking complaints or other administrative assignments may be handled with slightly longer response times.

Based upon your estimates of 759 additional residents in the development, and factoring in our call for service and personnel numbers above, we would anticipate adding one additional officer, as the figures show a possible workload increase that would necessitate .5 of a patrol officer. This decision would ultimately fall on the Town Board as the total cost for an additional officer including salary and benefits would be approximately \$112,000 per year to start.

For equipment procurement plans, with the increase in workload and vehicle miles in response to additional calls to the area we would look to expand our vehicle fleet by one additional patrol car, as well as the addition of a fixed license plate reader at the intersection of Route 6 and your proposed development. Again this would be a decision to be made by the Town Board as this equipment would cost approximately \$75,000 total.

Continued

These personnel and equipment needs would have to be taken into consideration by all involved stakeholders in order to effectively maintain the level of service the Town of Carmel Police Department already provides to our residents and visitors to the town.

We look forward to discussing these issues further with you in addition to any other physical security, traffic safety, and community policing concerns you may have as the project goes forward. If there is any other additional information you may need in the meantime, please do not hesitate to let me know.

Thank you for the opportunity to provide our input on this project.

Sincerely,

A handwritten signature in black ink, appearing to read 'Anthony Hoffmann', with a stylized flourish at the end.

Anthony Hoffmann
Chief of Police

TIM MILLER ASSOCIATES, INC.

10 North Street, Cold Spring, New York 10516

(845) 265-4400 Fax: (845) 265-4418

January 12, 2022

Scott Efferen – First Assistant Chief
Carmel Fire Department
94 Gleneida Avenue
Carmel Hamlet, NY 10512

Re: Gateway Summit and the Fairways Residential Development
Town of Carmel, Putnam County NY

Dear Chief Efferen,

Tim Miller Associates is preparing an Expanded Environmental Assessment Form (EAF) for a proposed residential development in the Town of Carmel. I have enclosed a site location map, an aerial photo of the site, and a preliminary site plan, for your reference.

The Gateway Summit and the Fairways development proposes two multi-family residential communities on a total of 145 acres located on the north side of Route 6 in the Town of Carmel, Putnam County, New York. The two communities are referred to as “Gateway Summit” and “The Fairways”.

The Gateway Summit and The Fairways developments were previously the subject of a thorough coordinated review under SEQRA by the Town of Carmel Planning Board (the lead agency) for Subdivision Approval, Special Use Permits, and Site Plan approvals, and to the Town of Carmel Environmental Conservation Board for a Wetland Permit during the period 2003 through 2007. The current proposed action involves an amended Site Plan, Subdivision and Special Use permits and setback variances from the Town Zoning Board of Appeals for the residential portion of the Gateway Summit and The Fairways overall development. The project site is connected to existing municipal water and sewer service. The proposed action will provide needed senior and non-age restricted housing in the Town of Carmel.

The Gateway Summit development would include a mix of 150 units of active adult single family homes, active adult townhomes and non-age restricted townhomes. The Fairways development would consist of 150 units of non-age restricted townhomes with varied designs. We have projected a total future population of approximately 759 people, including 93 school age children.

As part of the environmental review process, we wish to include any concerns your office may have relative to this proposed project. We would appreciate your written response on the ability of the Fire Department to provide fire protection services to this property. Information which would be useful in that regard would include:

- your current service area/population served
- the number of emergency calls per year
- your current manpower and equipment levels
- your typical response time to a site in this location
- the location of fire station(s) near the site
- any overlap in jurisdiction with other fire departments or backup service provided by neighboring communities

Your input is important. Should you not be able to provide written correspondence, I can be reached at acutignola@timmillerassociates.com, or by telephone at the number shown above during the weekdays. Thank you for your assistance in this matter. I look forward to hearing from you.

Sincerely,
Ann Cutignola, AICP

A handwritten signature in black ink that reads "Ann Cutignola". The signature is written in a cursive style with a large initial "A" and a long, sweeping underline.

Senior Planner
TIM MILLER ASSOCIATES, INC.

Parking Requirements:

1.5 spaces per unit x 115 units senior multi-family	= 173 spaces
2.0 spaces per unit x 18 units multi-family	= 36 spaces
1 space per 200 sf of a 6,800 sf (community building)	= 34 spaces
Total spaces required	= 277 spaces

Parking Provided	Indoor parking spaces	Outdoor parking spaces
Senior cottage & townhome units **	230	115
3 story townhome and units **	32	16
3 story townhome interior units **	19	19
Clubhouse spaces	-	22
Visitor spaces	-	12
Subtotal	281	184
Total spaces provided	465	

** 2 parking spaces in garage and 1 in driveway of each unit
 ** 1 parking space in garage and 1 in driveway of each unit

GATEWAY SUMMIT MULTI-FAMILY RECREATION TABLE

Total Recreation Area: 300 ± (Lot 2) 300 ± (Lot 3) 150 units = 45,000 ± of Recreation.

Recreation	Area
Provided	23,000 ± ft.
Clubhouse/Pool Area	25,000 ± ft.
Central Green	25,000 ± ft.
Total Recreation Provided	45,000 ± ft.

§156-28 MULTI-FAMILY DWELLINGS ZONING REQUIREMENTS:

Requirement/Permitted	Drawings
Min. Lot Area	438,600 SF (10.0 AC) 1,536,441 SF (35.3 AC)
Min. Density (Units/Acre)	5.0 4.25
Min. Dwelling Units	100 150 ***
Min. Building Coverage	30% 18.6%
Min. Particular Property Line Setback	100' 40' **
Min. Building Height / Stories	35' Less than 35'
Distance Between Buildings	30' 20' **
Min. Building Length	200' 190'
Min. Recreation Space	300 SF / unit 300 SF / unit
Min. Landscape Buffer	10' Greater than 10'

* Vertical clearance. Does not include internal property lines.
 ** Variance granted.
 *** Combined total of all units on site.

§156-39 SENIOR CITIZEN MULTI-FAMILY DWELLING REQUIREMENTS:

Requirement	Drawings
Min. Lot Area	217,800 SF (5.0 AC) 1,536,441 SF (35.3 AC)
Min. Road Frontage	125'
Min. Density (Units/Acre)	8 4.25
Min. Dwelling Units	150 150 ***
Min. Building Coverage	35% 18.6%
Min. Property Line Setback	40' 40'
Min. Building Height	40' / 2 Stories Less than 40' / 2 Stories
Min. Recreation Space (SF/Unit)	300 SF / unit 300 SF / unit

*** Combined total of all units on site.

NOTE: The NYSDC Freshwater Wetland Boundary (as shown on this drawing) and validation date (shown below) is as shown on drawing "NYSDC Wetland Validation Map", prepared by Insite Engineering, Surveying & Landscape Architecture, P.C., dated December 08, 2016.

NYSDC FRESHWATER WETLAND BOUNDARY VALIDATION

The freshwater wetland boundary as represented on these plans accurately depicts the limits of Freshwater Wetlands (LC-200 & LC-22) as delineated by the NYSDC. James A. Stone, Engineer, on April 20, 2017.

DATE: 4/20/17
 EXP. DATE: 4/20/18

Wetland boundary delineations as indicated by the New York State Department of Environmental Conservation remain valid for the (3) years unless existing wetlands, new wetlands or land use practices change (e.g., agricultural reversion), after the (3) year the boundary must be revalidated by DEC staff. Revalidation may include a new delineation and survey of the wetland boundary.

Within boundary delineations as indicated by the New York State Department of Environmental Conservation remain valid for the (3) years unless existing wetlands, new wetlands or land use practices change (e.g., agricultural reversion), after the (3) year the boundary must be revalidated by DEC staff. Revalidation may include a new delineation and survey of the wetland boundary.

Certificate of Occupancy Sections

C.O. SECTION 1	85 Units & Recreation Area A
C.O. SECTION 2	7 Units
C.O. SECTION 3	11 Units Provide temporary turnaround at road termini.
C.O. SECTION 4	16 Units
C.O. SECTION 5	21 Units & Recreation Area B

In order for a certificate of occupancy to be issued by the Town of Carmel for a dwelling in a particular C.O. section, the C.O. section is which each dwelling is located on must be in full compliance with all applicable provisions of the applicable zoning ordinance of the Town of Carmel. A section shall not be deemed substantially complete unless, in a minimum, all utility including water, sanitary and storm sewers, and all road related work (except for 50% of pavement) are substantially complete as determined by the town engineer.

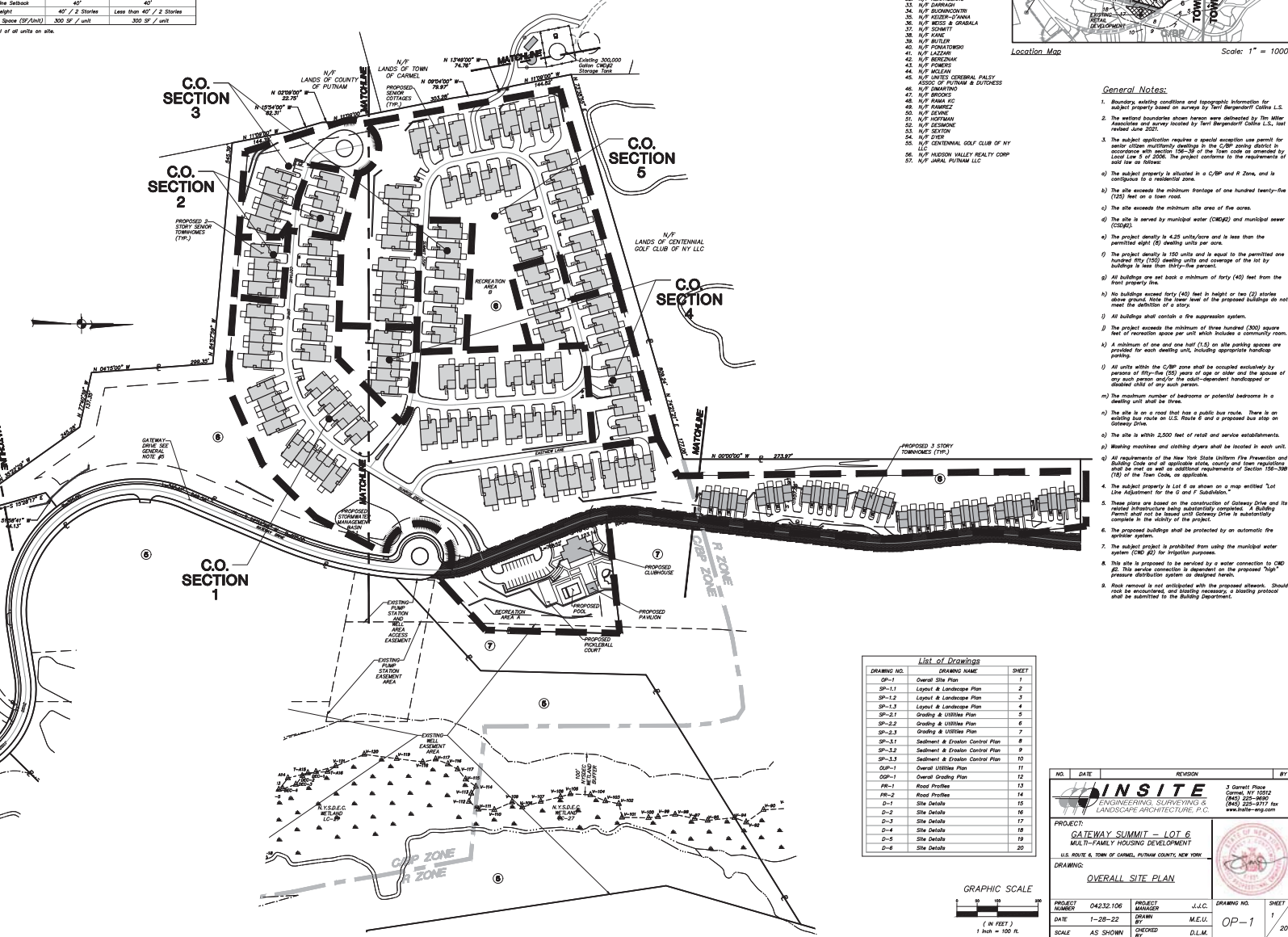
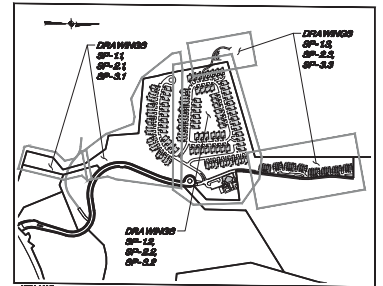
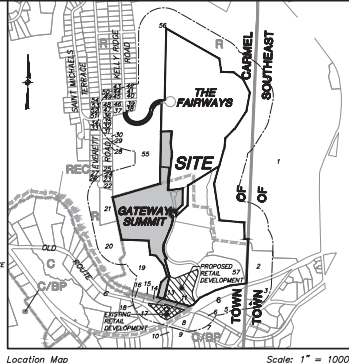
Record Owner/Applicant:

Gateway Summit
 1999 Route 6, Suite 1
 Carmel, NY 12512

Site Data:
 Total Area: 35.3 AC ± (Existing)
 Tax Map No.: 55-2-247
 CUB (Commercial/Business Park)
 Zoning District: R (Residential)

500' ADJACENTS:

- TOWN OF CAMEL:**
 1. N/F CENTINIAL GOLF CLUB OF NY LLC
 2. N/F COUNTY OF PUTNAM
 3. N/F LUTHERAN CHURCH
 4. N/F TOWN OF CAMEL
- TOWN OF CARMEL:**
 5. N/F BLANDS
 6. N/F COUNTY OF PUTNAM
 7. N/F CAMEL SPORTS, LLC
 8. N/F MCKEAN ASSOCIATES
 9. N/F HUNTS HILL
 10. N/F RD 60 ROUTE 6 LLC
 11. N/F COUNTY OF PUTNAM
 12. N/F DURHAM WATER REALTY LLC
 13. N/F DURHAM
 14. N/F DURHAM
 15. N/F DURHAM
 16. N/F DURHAM
 17. N/F RD 60 ROUTE 6 LLC
 18. N/F RD 60 ROUTE 6 LLC
 19. N/F COUNTY OF PUTNAM
 20. N/F COUNTY OF PUTNAM
 21. N/F TOWN OF CAMEL
 22. N/F PUTNAM
 23. N/F CONELLO
 24. N/F TOWN OF CAMEL
 25. N/F TOSMAD
 26. N/F MORGAN
 27. N/F MORGAN
 28. N/F ORTICO CREATIVITY & GROWTH
 29. N/F KRISTELLER & TANDREN
 30. N/F WALKER & GALETTA
 31. N/F CONSTANCE
 32. N/F MORGAN
 33. N/F DAMRADO
 34. N/F BARNHARTMAN
 35. N/F KEESER-PANZA
 36. N/F SCES & GRANOLA
 37. N/F PUTNAM
 38. N/F KANE
 39. N/F PUTNAM
 40. N/F PONTACCHIO
 41. N/F LAZAR
 42. N/F MCLAN
 43. N/F POWERS
 44. N/F UNITED GENERAL PASTRY ASSOC. OF PUTNAM & OUTREACH
 45. N/F BROOKS
 46. N/F BROOKS
 47. N/F RANKS LLC
 48. N/F RANKS LLC
 49. N/F RANKS LLC
 50. N/F DENNE
 51. N/F DENNE
 52. N/F DENNE
 53. N/F DENNE
 54. N/F DYER
 55. N/F CENTINIAL GOLF CLUB OF NY LLC
 56. N/F HUDSON VALLEY REALTY CORP
 57. N/F JAHAL PUTNAM LLC



List of Drawings

DRAWING NO.	DRAWING NAME	SHEET
GP-1	Overall Site Plan	1
SP-1.1	Layout & Landscape Plan	2
SP-1.2	Layout & Landscape Plan	3
SP-1.3	Layout & Landscape Plan	4
SP-2.1	Grading & Utilities Plan	5
SP-2.2	Grading & Utilities Plan	6
SP-2.3	Grading & Utilities Plan	7
SP-3.1	Sediment & Erosion Control Plan	8
SP-3.2	Sediment & Erosion Control Plan	9
SP-3.3	Sediment & Erosion Control Plan	10
GP-1	Overall Grading Plan	11
GP-1	Overall Grading Plan	12
PR-1	Road Profiles	13
PR-2	Road Profiles	14
D-1	Site Details	15
D-2	Site Details	16
D-3	Site Details	17
D-4	Site Details	18
D-5	Site Details	19
D-6	Site Details	20

NO. DATE REVISION BY

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

PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT

DRAWING: OVERALL SITE PLAN

PROJECT NUMBER: 04232-106 PROJECT MANAGER: J.L.C. DRAWING NO.: OP-1 SHEET: 1

DATE: 1-28-22 BY: M.E.U.

SCALE: AS SHOWN CHECKED BY: D.L.M.

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.

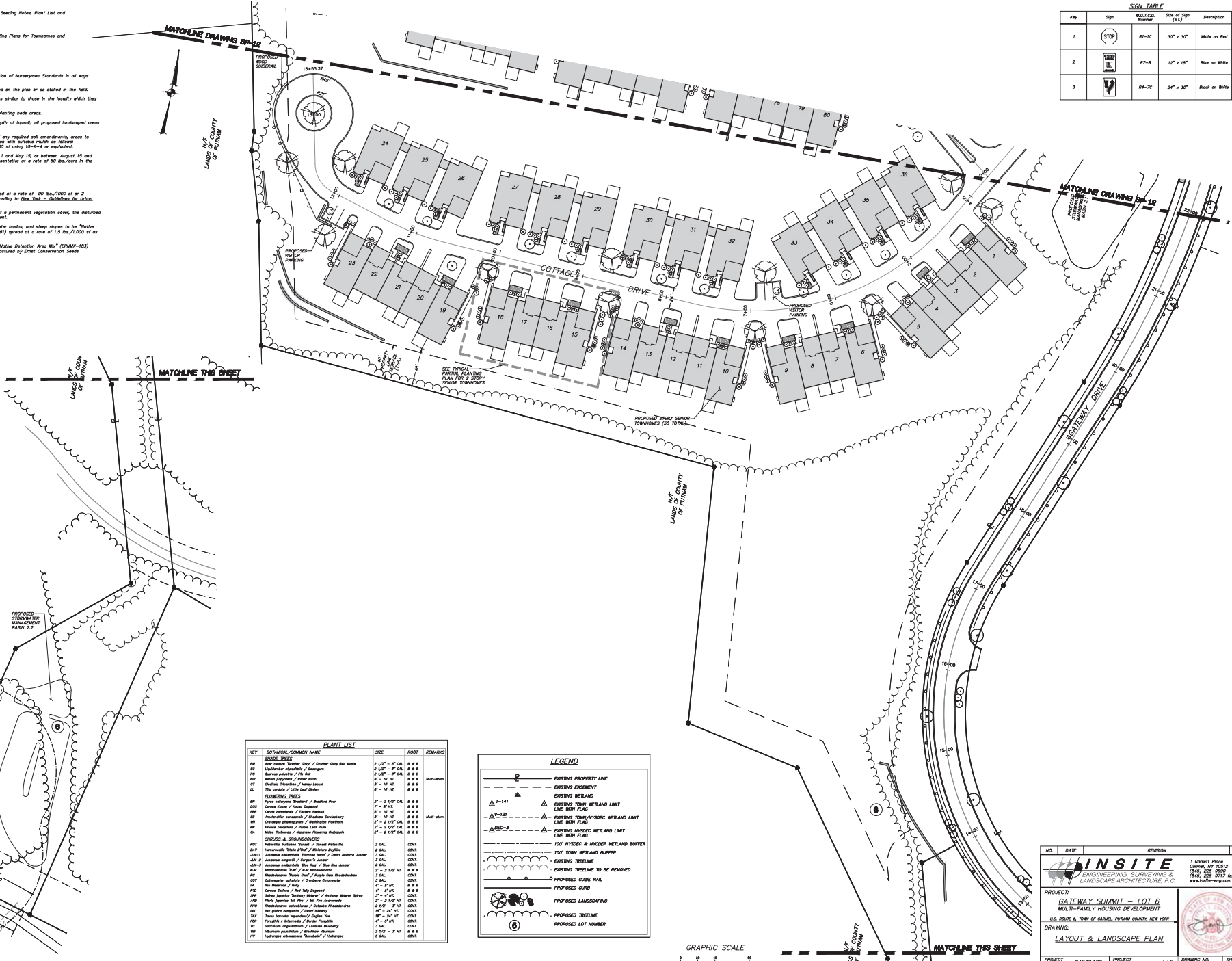
NOTES:

- Refer to Drawing SP-1.1 for Legend, Planting & Seeding Notes, Plant List and Sign Table.
- Refer to Drawing GP-1 for General Notes.
- Refer to Drawing SP-1.1 for Typical Partial Planting Plans for Townhomes and create Specific Monitoring and Control Program.

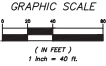
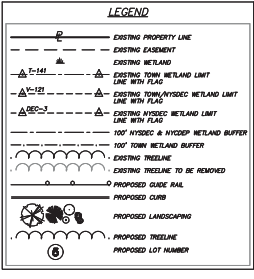
Planting & Seeding Notes:

- All plant materials to be nursery grown.
- Plants shall conform with the American Association of Nurserymen Standards in all ways including dimensions.
- Plants shall be planted in all locations designated on the plan or as stated in the field.
- All plants shall be hardy under climate conditions similar to those in the locality which they are to be planted.
- 3" of Fine Bark Mulch shall be spread over all planting beds areas.
- All proposed seeded areas to receive 4" min. depth of topsoil; all proposed landscaped areas to receive 12" min. depth of topsoil.
 - Topsoil that grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in consultation with suitable mulch as follows:
 - For turf applied at the rate of 14 lbs./1,000 of using 10-6-4 or equivalent.
 - Seed mixture: to be planted between April 1 and May 15, or between August 15 and October 15 or as directed by Project Representative at a rate of 50 lbs./acre in the following quantities:
 - 100% Kentucky Bluegrass
 - 100% Perennial Ryegrass
 - 100% Annual Ryegrass
 - Mulch: Soft Hay or Small Grain Straw applied at a rate of 90 lbs./1,000 of or 2 tons/acre, to be applied and anchored according to *Site Plan - Guidelines for Urban Grading & Landscaping Control Erection*.
 - If the season prevents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent.
 - Seed mix for lawn of berm, outside of stormwater basins, and steep slopes to be "Native Step Slope Mix w/ Annual Ryegrass (EMM6-183)" spread at a rate of 1.5 lbs./1,000 of as manufactured by Ernst Conservation Seeds.
 - Seed mix for stormwater basin bottoms to be "Native Detention Area Mix" (EMM6-183) spread at a rate of 0.5 lbs./1,000 of as manufactured by Ernst Conservation Seeds.

SIGN TABLE				
Key	Sign	M.U.T.C.D. #	Size of Sign (ft.)	Description
1		R1-1C	30' x 30'	White on Red
2		R7-8	12' x 18"	Blue on White
3		R4-7C	24' x 30"	Black on White



KEY	BOTANICAL/COMMON NAME	PLANT LIST	SIZE	ROOT	REMARKS
KEY	SHADE TREES				
01	American Sycamore Tree / Oakley Red Maple		2 1/2" - 3" DB	B & B	
02	Loblolly shortleaf / Sweetgum		2 1/2" - 3" DB	B & B	
03	Swamp cypress / Live Oak		2 1/2" - 3" DB	B & B	
04	White pine / Paper Birch		2" - 3" DB	B & B	MAX-45m
05	White Pine / Paper Birch		2" - 3" DB	B & B	
06	Red Spruce / Little Leaf Linden		2" - 3" DB	B & B	
LANDSCAPING TREES					
07	Pine white pine / Broadleaf Pine		2" - 3 1/2" DB	B & B	
08	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
09	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
10	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
11	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
12	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
13	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
14	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
15	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
16	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
17	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
18	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
19	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
20	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
21	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
22	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
23	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
24	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
25	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
26	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
27	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
28	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
29	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
30	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
31	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
32	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
33	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
34	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
35	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
36	Pinus strobus / White Pine		2" - 3 1/2" DB	B & B	
SHRUBS & ORNAMENTALS					
001	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
002	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
003	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
004	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
005	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
006	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
007	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
008	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
009	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
010	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
011	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
012	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
013	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
014	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
015	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
016	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
017	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
018	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
019	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
020	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
021	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
022	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
023	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
024	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
025	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
026	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
027	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
028	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
029	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
030	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
031	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
032	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
033	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
034	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
035	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
036	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
037	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
038	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
039	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
040	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
041	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
042	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
043	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
044	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
045	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
046	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
047	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
048	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
049	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
050	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
051	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
052	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
053	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
054	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
055	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
056	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
057	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
058	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
059	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
060	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
061	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
062	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
063	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
064	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
065	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
066	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
067	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
068	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
069	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
070	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
071	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
072	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
073	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
074	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
075	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
076	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
077	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
078	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
079	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
080	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
081	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
082	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
083	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
084	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
085	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
086	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
087	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
088	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
089	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
090	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
091	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
092	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
093	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
094	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
095	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
096	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
097	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
098	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
099	Prunella latifolia / Sweet Shrub		2 DBL	CONC	
100	Prunella latifolia / Sweet Shrub		2 DBL	CONC	



ALLOCATION OF THIS DOCUMENT, MADE UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2209 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY

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

3 Corbett Place
 Comm. Bldg. 10012
 (914) 235-8959
 (914) 235-8977 fax
 www.insite-arg.com

PROJECT:
GATEWAY SUMMIT - LOT 6
 MULTI-FAMILY HOUSING DEVELOPMENT

115 ROAD 6, TOWN OF GOSHEN, PUTNAM COUNTY, NEW YORK

DRAWING:
LAYOUT & LANDSCAPE PLAN

PROJECT NUMBER: 04232.106 PROJECT MANAGER: J.L.C. DRAWING NO.: SP-1.1 SHEET: 2
 DATE: 1-28-22 DRAWN BY: M.E.U.
 SCALE: 1" = 40' CHECKED BY: D.L.M.

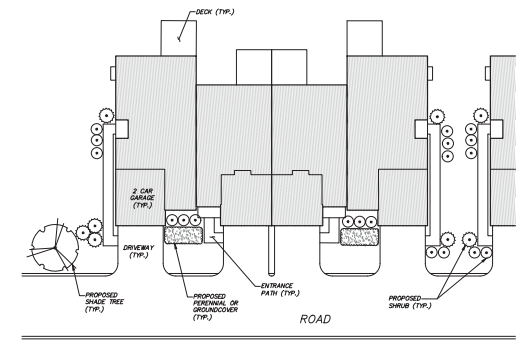
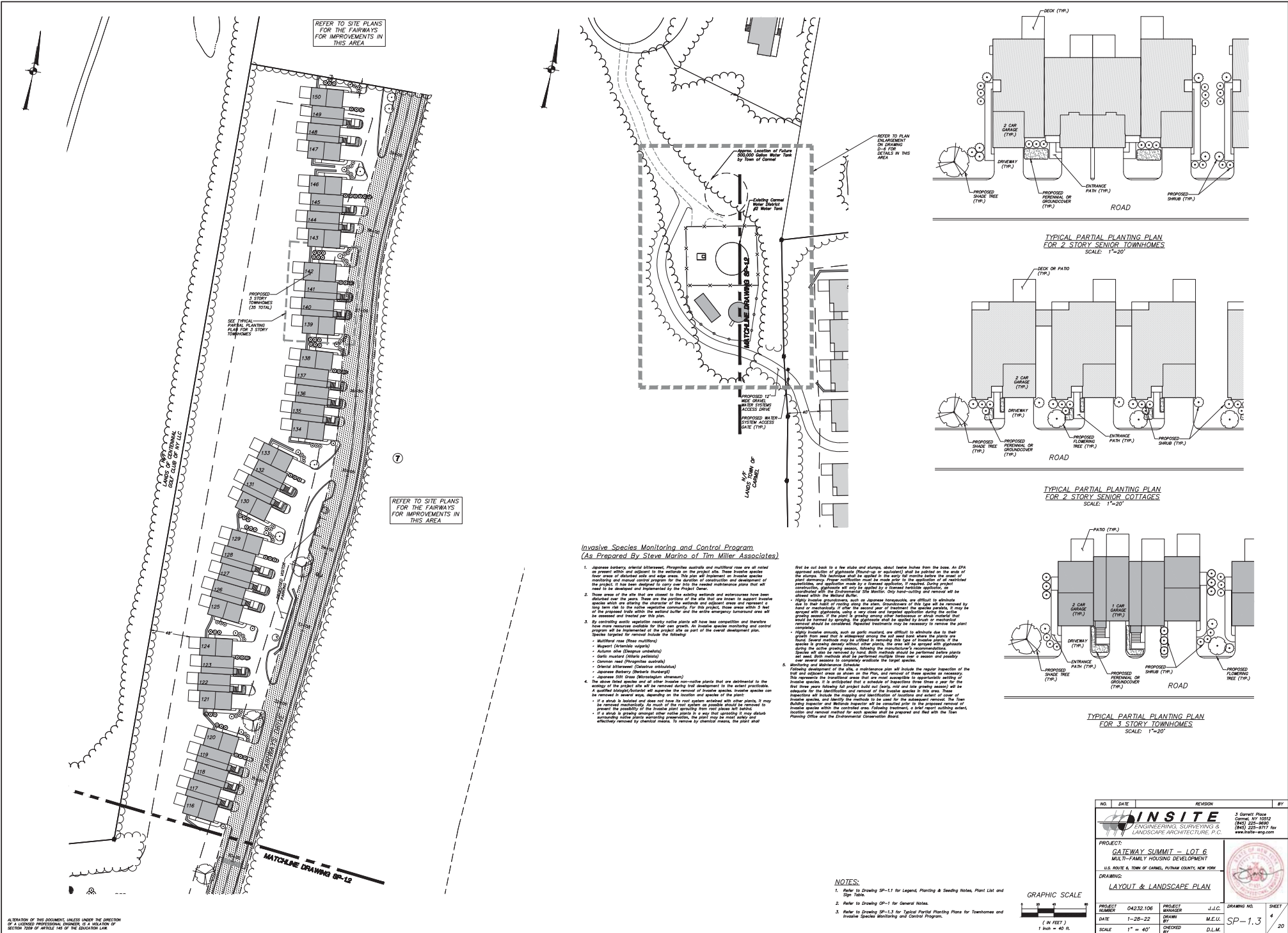


- NOTES:
1. Refer to Drawing SP-11 for Proposed Parking & Stacking, Main, North Lot and
 2. Refer to Drawing SP-12 for General Notes
 3. Refer to Drawing SP-13 for Proposed Parking Plans for Townhomes and
 4. Review General Notes and General Program.

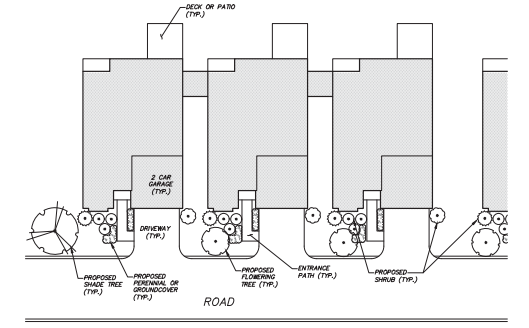


NO.	DATE	REVISION

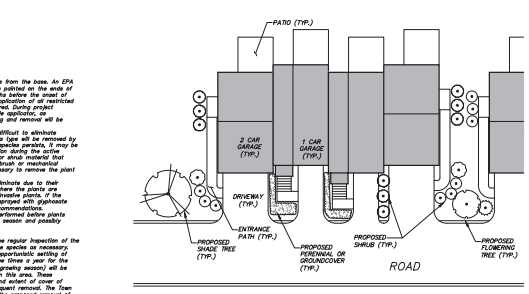
INSITE LANDSCAPE ARCHITECTURE P.C. 100 EAST 42ND STREET NEW YORK, NY 10017 TEL: 212-692-2200 FAX: 212-692-2201 WWW.INSITE-PA.COM		PROJECT: GATEWAY SUMMIT - LOT 6 DATE: 11-28-22 SCALE: 1" = 40' SHEET: 3 OF: 20	
PROJECT: GATEWAY SUMMIT - LOT 6 CLIENT: DELTA PARK PROPOSED DEVELOPMENT ARCHITECT: LANDSCAPE ARCHITECTURE P.C. PROJECT NO.: 2022-001 DATE: 11-28-22 SCALE: 1" = 40' SHEET: 3 OF 20			



TYPICAL PARTIAL PLANTING PLAN FOR 2 STORY SENIOR TOWNHOMES SCALE: 1"=20'



TYPICAL PARTIAL PLANTING PLAN FOR 2 STORY SENIOR COTTAGES SCALE: 1"=20'

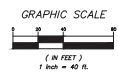


TYPICAL PARTIAL PLANTING PLAN FOR 3 STORY TOWNHOMES SCALE: 1"=20'

Invasive Species Monitoring and Control Program
(As Prepared By Steve Marino of Tim Miller Associates)

- Japanese barberry, oriental bittersweet, Prunella sp. and multiflora rose are all listed as general site and adjacent to the site. These invasive species are all listed as general site and adjacent to the site. These invasive species are all listed as general site and adjacent to the site. These invasive species are all listed as general site and adjacent to the site.
- Those areas of the site that are closest to the existing wetlands and watercourses have been identified as high risk areas. These are the portions of the site that are most at risk of being invaded by invasive species which are entering the site from the adjacent wetlands and watercourses. For this project, those areas within 5 feet of the proposed site within the wetlands and the entire driveway network will be assessed and treated per this plan.
- By controlling exotic vegetation nearby native plants will have less competition and therefore have more resources available for their own growth. An invasive species monitoring and control program will be implemented as part of the overall development plan. Species targeted for removal include the following:
 - Multiflora rose (Rosa multiflora)
 - Japanese barberry (Berberis thunbergii)
 - Oriental bittersweet (Amelanchier alnifolia)
 - Common reed (Phragmites australis)
 - Japanese Knotweed (Fallopia japonica)
 - Japanese Stilt Grass (Microstegium chinensis)
- The above listed species and all other invasive non-native plants that are detrimental to the entry of the project will be removed during and development to the extent practicable. A qualified landscape architect will supervise the removal of invasive species. Invasive species can be removed in several ways, depending on the location and species of the plant. It may be removed by hand, by using a root system extractant with other plants. It may be removed by herbicide application. In most cases, the most effective method is to remove the plant's ability to reproduce by cutting the plant close to the ground. If it is a grass or graminaceous plant, it may be removed by cutting the plant close to the ground. If it is a shrub or tree, it may be removed by cutting the plant close to the ground. If it is a tree, it may be removed by cutting the plant close to the ground. If it is a tree, it may be removed by cutting the plant close to the ground. If it is a tree, it may be removed by cutting the plant close to the ground.

NOTES:
1. Refer to Drawing SP-1.1 for Legend, Planting & Seeding Notes, Plant List and Plant Lists.
2. Refer to Drawing SP-1 for General Notes.
3. Refer to Drawing SP-1.3 for Typical Partial Planting Plans for Townhomes and Invasive Species Monitoring and Control Program.



ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.

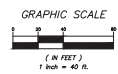
NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT			
DRAWING: LAYOUT & LANDSCAPE PLAN			
PROJECT NUMBER	04232.106	PROJECT MANAGER	J.J.C.
DRAWN	1-28-22	DRAWN	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
DRAWING NO.			SHEET
SP-1.3			4
			20



LEGEND

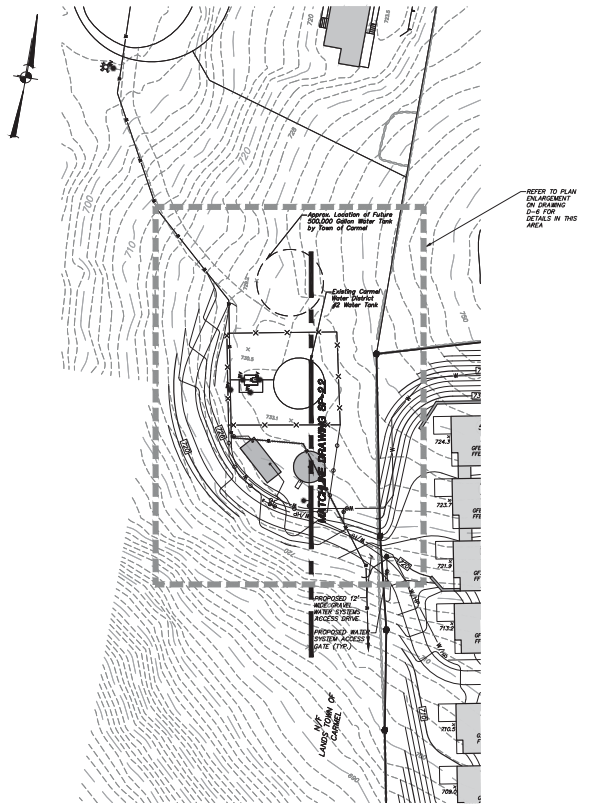
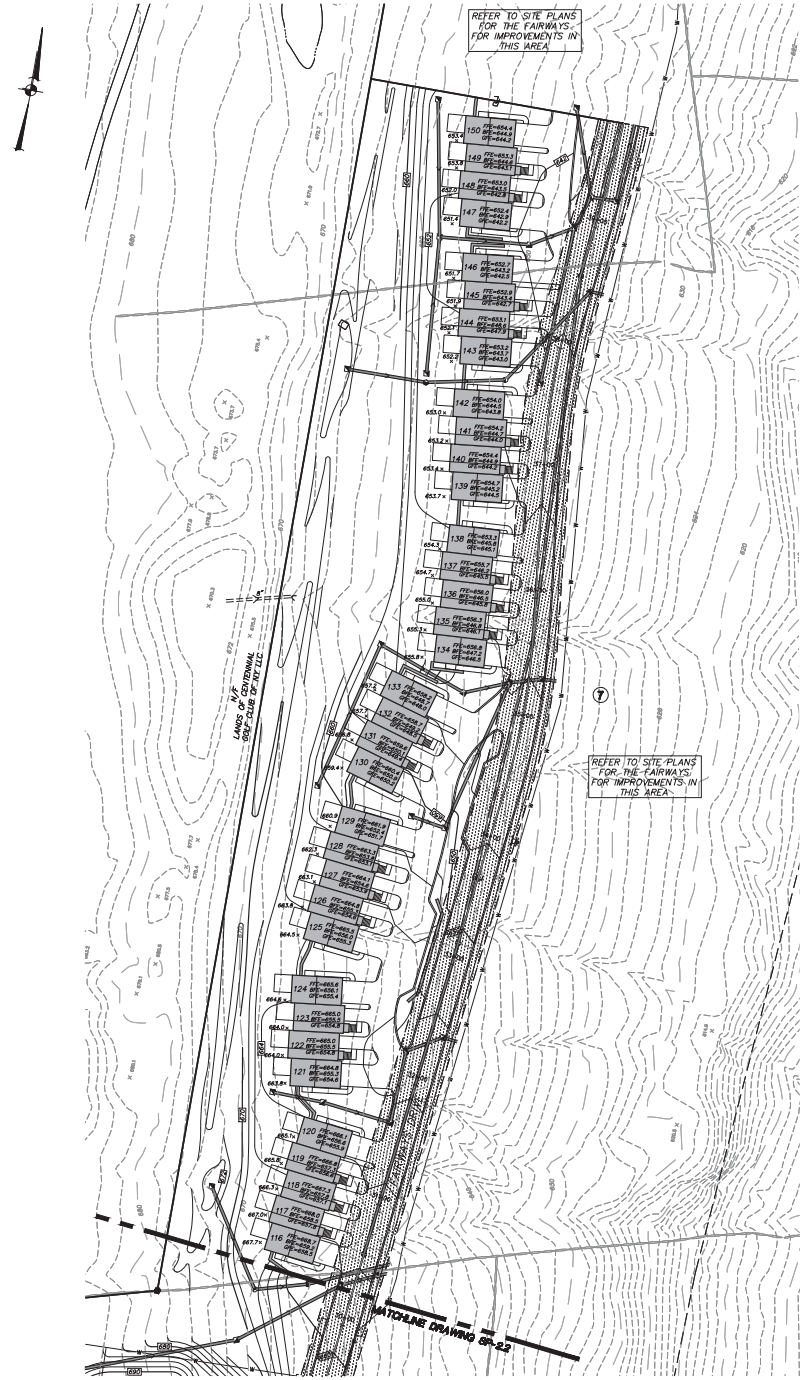
	EXISTING PROPERTY LINE		EXISTING 2' CONTOUR
	EXISTING EASEMENT		PROPOSED CURB
	EXISTING WETLAND		PROPOSED 10' CONTOUR
	EXISTING TOWN/METLAND LIMIT LINE WITH FLAG		PROPOSED SEWER MANHOLE
	EXISTING TOWN/METLAND LIMIT LINE WITH FLAG		PROPOSED DRAINAGE MANHOLE
	EXISTING WETLAND LIMIT LINE WITH FLAG		PROPOSED CATCH BASIN
	EXISTING WETLAND LIMIT LINE WITH FLAG		PROPOSED OUTLET STRUCTURE
	100' HYDRIC WETLAND BUFFER		PROPOSED END SECTION WITH FLAP APRON
	100' TOWN WETLAND BUFFER		PROPOSED WATER GATE
	EXISTING UTILITY POLE WITH OVERHEAD WIRES		PROPOSED WATER GATE VALVE - 60" TO MATCH MAN (UNLESS OTHERWISE NOTED)
	EXISTING DRAINAGE STRUCTURES		PROPOSED FIRE HYDRANT
	EXISTING SEWER MANHOLE		PROPOSED DRAINAGE PIPE (12" UNLESS OTHERWISE NOTED)
	EXISTING SEWER MAIN		PROPOSED 8" PIPE TO SEWER MAN (UNLESS OTHERWISE NOTED)
	EXISTING WATER MAIN		PROPOSED STANDARD PRESSURE WATER MAIN
	EXISTING DRAINAGE PIPE		PROPOSED HIGH PRESSURE SYSTEM WATER MAIN
	EXISTING 10' CONTOUR		PROPOSED GRASS SWALE
			PROPOSED LOT NUMBER

NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT			
DRAWING: GRADING & UTILITIES PLAN			
PROJECT NUMBER: 04232.106	PROJECT MANAGER: J.J.C.	DRAWING NO.: 6	SHEET: 6
DATE: 1-28-22	DRAWN BY: M.E.U.	CHECKED BY: D.L.M.	
SCALE: 1" = 40'			

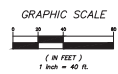


ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7009 OF ARTICLE 146 OF THE SANGHVI LAW.

Note:
 Refer to Drawing SP-2.1 for Submittal and Erosion Control Notes, Overall Construction Sequence, and Construction Sequence Notes.



ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



NO.	DATE	REVISION	BY

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

3 Corbett Place
 Corvallis, NY 13012
 (845) 225-8997
 (845) 225-8997 fax
 www.insite-arg.com

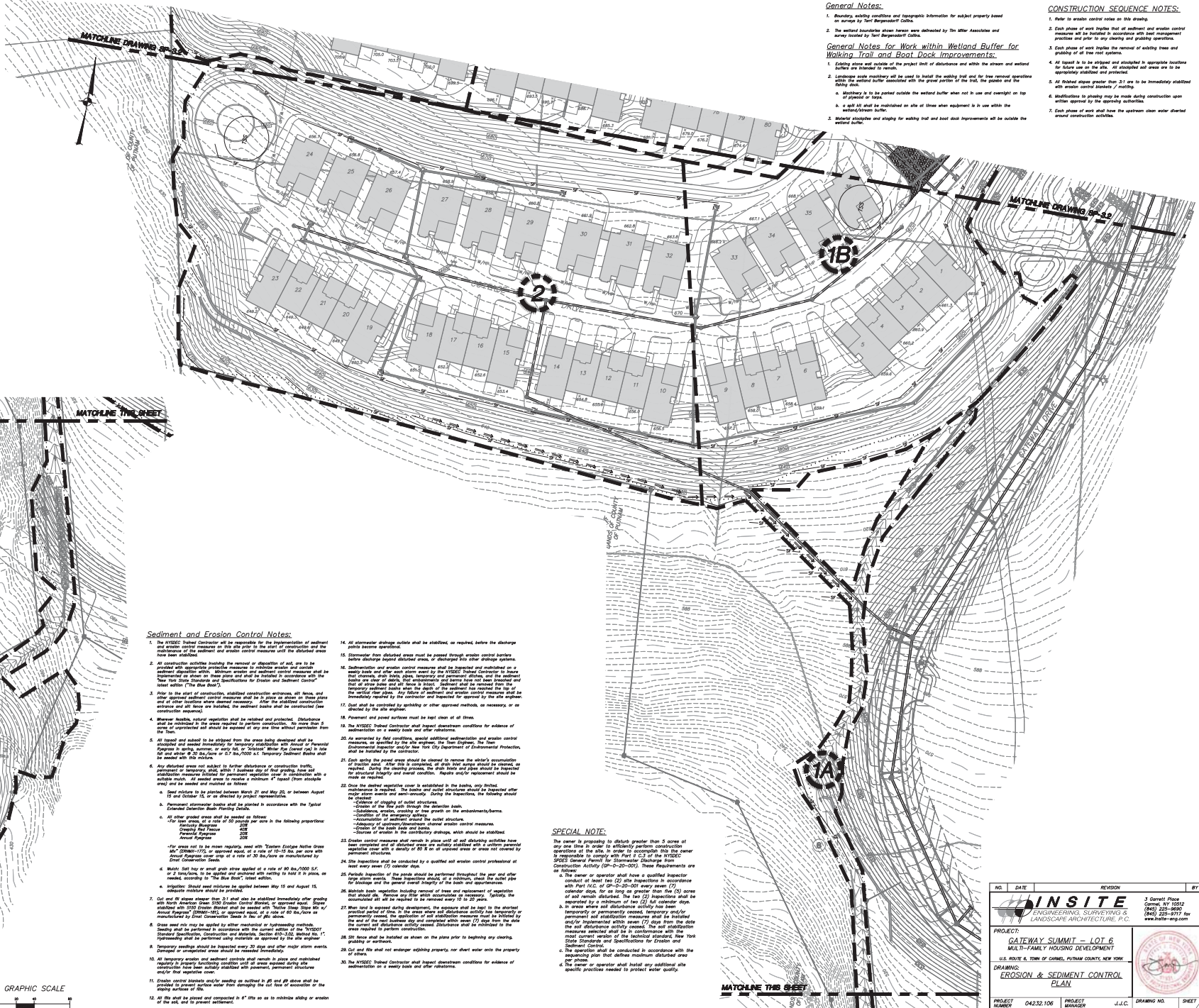
PROJECT:
GATEWAY SUMMIT - LOT 6
 MULTI-FAMILY HOUSING DEVELOPMENT
 U.S. ROAD & TOWN OF CORNELL, PUTNAM COUNTY, NEW YORK

DRAWING:
GRADING & UTILITIES PLAN

PROJECT NUMBER: 04232.106 PROJECT MANAGER: J.J.C.
 DATE: 1-28-22 DRAWN BY: M.E.U.
 SCALE: 1" = 40' CHECKED BY: D.L.M.

DRAWING NO. SHEET
 SP-2.3 7
 20

LEGEND	
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING WETLAND
	EXISTING TOWN WETLAND LIMIT LINE WITH FLAG
	EXISTING TOWN/MSDC WETLAND LIMIT LINE WITH FLAG
	EXISTING MSDC WETLAND LIMIT LINE WITH FLAG
	100' MSDC & MSDC WETLAND BUFFER
	100' TOWN WETLAND BUFFER
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	PROPOSED CURB
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	PROPOSED SEWER MANHOLE
	PROPOSED DRAINAGE MANHOLE
	PROPOSED OUTLET STRUCTURE
	PROPOSED END SECTION WITH 90' R/W APJON
	PROPOSED TEMPORARY DIVERSION SWALE
	PROPOSED DRAINAGE STRUCTURE W/ INLET PROTECTION
	PROPOSED STONE CHECK DAM
	PROPOSED SILT FENCE
	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED TEMPORARY SOIL STOCKPILE
	PROPOSED STABILIZED CONSTRUCTION SITE ENTRANCE
	PROPOSED PHASING LINE
	PROPOSED PHASING NUMBER



- General Notes:**
- Boundary, utility conditions and topographic information for subject property based on surveys by T&E Reagent/CFE.
 - The wetland boundaries shown herein were delineated by Tim Miller Associates and survey received by T&E Reagent/CFE.
- General Notes for Work within Wetland Buffer for Walking Trail and Boat Dock Improvements:**
- Existing stone wall outside of the project limit of disturbance and within the stream and wetland buffer are to remain.
 - Landscaping stone masonry will be used to install the walking trail and for tree removal operations within the wetland buffer established with the ground portion of the trail, the grade and the living bank.
 - Masonry to be placed outside the wetland buffer when not in use and overlaid on top of plastic or tarp.
 - A wall to be established on site at three when equipment is in use within the wetland/wetland buffer.
 - Wetland disturbance and staking for walking trail and boat dock improvements will be outside the wetland buffer.
- CONSTRUCTION SEQUENCE NOTES:**
- Refer to erosion control notes on this drawing.
 - Each phase of work includes that all sediment and erosion control measures will be installed in accordance with best management practices and prior to top clearing and grading activities.
 - Each phase of work includes the removal of existing trees and grading of all tree root systems.
 - All earth to be retained and disturbed in accordance to appropriate practices for future use on the site. All stockpiled soil areas are to be appropriately stabilized and protected.
 - All ditched slopes greater than 3:1 are to be immediately stabilized with erosion control blankets / matting.
 - Disturbances to existing trees to be made during construction upon written approval by the approving authority.
 - Each phase of work shall have the upstream clean water directed around construction activities.

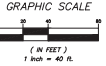
Sediment and Erosion Control Notes:

1. The contractor shall be responsible for the proper installation and the maintenance of the wetland and erosion control measures and the disturbed areas have been indicated.
2. All construction activities including the removal or degradation of soil, are to be performed with appropriate protective measures to minimize erosion and control sedimentation within the wetland buffer and wetland control measures shall be implemented as shown on these plans and shall be installed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control notes (see notes 17-20).
3. Prior to the start of construction, stabilized construction entrances, all banks, and other approved sediment control measures shall be in place at all times during construction and all areas not included, the wetland banks shall be constructed (see notes 17-20).
4. Wetland banks, natural vegetation shall be retained and protected. Disturbance and/or removal in the areas required to perform construction, to more than 5 feet of construction shall be required at all times during construction.
5. All roads and subsoils to be stabilized from the areas being developed shall be constructed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control notes (see notes 17-20).
6. Any disturbance shall include the erosion disturbance or construction bank, permanent or temporary, shall within 1 business day of the grading, flow and stabilization measures designed for permanent vegetation shall be established with a suitable species. All seeded areas to be a minimum 4" deep from topsoil and be seeded and mulched as follows:
 - 1/4" seed mixture to be planted between March 21 and May 31, or between August 15 and October 15, or as directed by project representative.
7. Permanent stormwater basins shall be installed in accordance with the Typical Construction Storm Water Pollution Details.
 - All other graded areas shall be seeded as follows:
 - For law areas, of a rate of 50 lbs/1000 sq. ft.
 - For other areas, of a rate of 100 lbs/1000 sq. ft.
8. All other graded areas shall be seeded as follows:
 - For law areas, of a rate of 50 lbs/1000 sq. ft.
 - For other areas, of a rate of 100 lbs/1000 sq. ft.
9. In addition, 30 lbs/1000 sq. ft. of seed mixture shall be applied between May 15 and August 15.
10. Cut and fill slopes steeper than 3:1 shall also be stabilized immediately after grading and shall be seeded and mulched as follows:
 - For law areas, of a rate of 50 lbs/1000 sq. ft.
 - For other areas, of a rate of 100 lbs/1000 sq. ft.
11. Temporary seedings shall be required every 21 days and other water control events damaged or unpermitted areas shall be reseeded immediately.
12. Erosion control measures and/or seeding on mulched in 60' x 60' ft. shall be in place to prevent surface water from damaging the soil face of excavation or the slope surface of fill.
13. The site shall, at all times, be graded and mulched such that all stormwater runoff is directed to wet areas and approved control facilities.
14. All stormwater discharge outlets shall be stabilized as required before the discharge point become operational.
15. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas, or discharged into other drainage systems.
16. Sedimentation and erosion control measures shall be inspected and maintained on a weekly basis and other areas shown on the MSDC Erosion Control Plan shall be inspected and maintained on a weekly basis. All sedimentation and erosion control measures shall be inspected and maintained on a weekly basis. All sedimentation and erosion control measures shall be inspected and maintained on a weekly basis.
17. Disturbance shall be limited to the minimum area required for the construction activity. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
18. Disturbance shall be limited to the minimum area required for the construction activity. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
19. Disturbance shall be limited to the minimum area required for the construction activity. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
20. Disturbance shall be limited to the minimum area required for the construction activity. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
21. Erosion control measures shall remain in place until all soil disturbing activities have been completed and all disturbed areas are fully stabilized with an approved permanent vegetative cover with a density of 50% or as improved areas or areas not covered by permanent vegetation (see notes 17-20).
22. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
23. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
24. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
25. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
26. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
27. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
28. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
29. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
30. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
31. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
32. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
33. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
34. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.
35. The contractor shall be responsible for the maintenance of the wetland buffer and wetland control measures and the disturbed areas have been indicated.

SPECIAL NOTE:

The owner is proposing to disturb greater than 5 acres of any one type of soil or wetland or perform construction operations of the site, in order to accommodate this the owner is responsible in compliance with Part 612 of the MSDC (612.01) General Permit for Stormwater Discharge from Construction Activity (612.01-01). These Requirements are as follows:

- The owner or operator shall have a qualified inspector conduct a soil test (ST) and inspection in accordance with Part 612.01 of 612.01-01 every seven (7) days of all disturbed areas (DA) and (2) all construction sites in areas where soil disturbance activity has been temporarily or permanently ceased. Temporary or permanent soil stabilization measures shall be initiated and/or implemented within seven (7) days from the date the soil disturbance activity ceases. The soil stabilization measures implemented shall be in accordance with the most current version of the New York State Standards and Specifications for Erosion and Sediment Control.
- The owner or operator shall conduct a soil test (ST) and inspection in accordance with the requirements of Part 612.01 of 612.01-01 every seven (7) days of all disturbed areas (DA) and (2) all construction sites in areas where soil disturbance activity has been temporarily or permanently ceased. Temporary or permanent soil stabilization measures shall be initiated and/or implemented within seven (7) days from the date the soil disturbance activity ceases. The soil stabilization measures implemented shall be in accordance with the most current version of the New York State Standards and Specifications for Erosion and Sediment Control.
- The owner or operator shall conduct a soil test (ST) and inspection in accordance with the requirements of Part 612.01 of 612.01-01 every seven (7) days of all disturbed areas (DA) and (2) all construction sites in areas where soil disturbance activity has been temporarily or permanently ceased. Temporary or permanent soil stabilization measures shall be initiated and/or implemented within seven (7) days from the date the soil disturbance activity ceases. The soil stabilization measures implemented shall be in accordance with the most current version of the New York State Standards and Specifications for Erosion and Sediment Control.
- The owner or operator shall conduct a soil test (ST) and inspection in accordance with the requirements of Part 612.01 of 612.01-01 every seven (7) days of all disturbed areas (DA) and (2) all construction sites in areas where soil disturbance activity has been temporarily or permanently ceased. Temporary or permanent soil stabilization measures shall be initiated and/or implemented within seven (7) days from the date the soil disturbance activity ceases. The soil stabilization measures implemented shall be in accordance with the most current version of the New York State Standards and Specifications for Erosion and Sediment Control.



ALTOUGH OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
1			

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

3 Corvett Place
Cortez, NY 13051
(845) 225-8992
(845) 225-8997
www.insite-arg.com

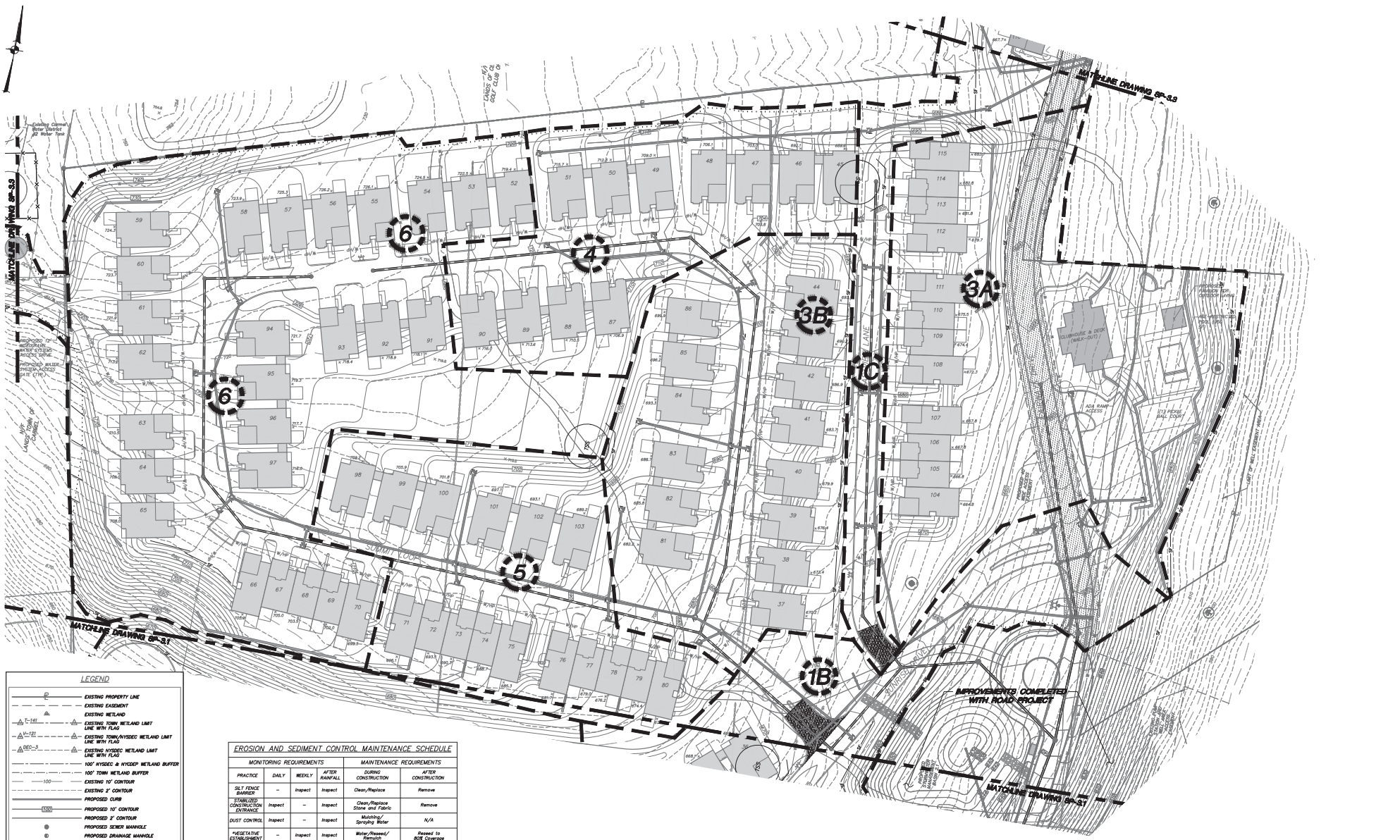
PROJECT: GATEWAY SUMMIT - LOT 6
MULTI-FAMILY HOUSING DEVELOPMENT
U.S. ROAD 6, TOWN OF CORNELIUS, PUTNAM COUNTY, NEW YORK

DRAWING: EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER: 04232.106 PROJECT MANAGER: J.L.C. DRAWING NO.: SP-3.1 SHEET: 8

DATE: 1-28-22 BY: M.E.U. CHECKED BY: D.L.M.

SCALE: 1" = 40'



LEGEND

- EXISTING PROPERTY LINE
- ▲— EXISTING EASEMENT
- ▲— EXISTING WETLAND
- ▲-141— EXISTING TOWN WETLAND LIMIT LINE WITH FLAG
- ▲-142— EXISTING TOWN WETLAND LIMIT LINE WITH FLAG
- ▲-143— EXISTING HYDRO WETLAND LIMIT LINE WITH FLAG
- ▲-144— EXISTING HYDRO WETLAND LIMIT LINE WITH FLAG
- 100' HYDRO & HYDRO WETLAND BUFFER
- 100' TOWN WETLAND BUFFER
- 100' EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- PROPOSED CURB
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- PROPOSED DRAINAGE MANHOLE
- PROPOSED OUTLET STRUCTURE
- PROPOSED END SECTION WITH 90° BAY ANGLE
- PROPOSED TEMPORARY DIVERSION SILE
- PROPOSED GRASS SILE
- PROPOSED DRAINAGE STRUCTURE W/ INLET PROTECTION
- PROPOSED STONE CHECK DAM
- PROPOSED SILT FENCE
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED TEMPORARY SOIL STOOPPLE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED PHASING NUMBER

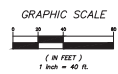
EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

PRACTICE	MONITORING REQUIREMENTS		MAINTENANCE REQUIREMENTS	
	DAILY	WEEKLY	BEFORE RAINFALL	AFTER CONSTRUCTION
SELF FENCE BARRIER	—	Inspect	Inspect	Clear/Replace
STABILIZED CONSTRUCTION ENTRANCE	Inspect	—	Inspect	Clear/Replace Stone and Fabric
DUST CONTROL	Inspect	—	Inspect	Washing/Spraying Water
VEGETATIVE CONTROLS	—	Inspect	Inspect	Water/Reseed/Reseed to meet SDC Change
INLET PROTECTION	—	Inspect	Inspect	Clear/Repair/Replace
SOIL STOOPPLES	—	Inspect	Inspect	Remove/5ft Fabric Repair
SILLS	—	Inspect	Inspect	Clear/Maint./Repair/Replace
CHECK DAMS	—	Inspect	Inspect	Clear/Repair/Replace
CONCRETE DRAINAGE STRUCTURES	—	Inspect	Inspect	Clear/Repair/Replace
DRAINAGE STRUCTURES	—	Inspect	Inspect	Clear/Repair/Replace
ROAD & PAVEMENT	—	Inspect	Inspect	Clear
STORMWATER POND/CRACK	—	Inspect	Inspect	Clear/Maint./Repair/Replace

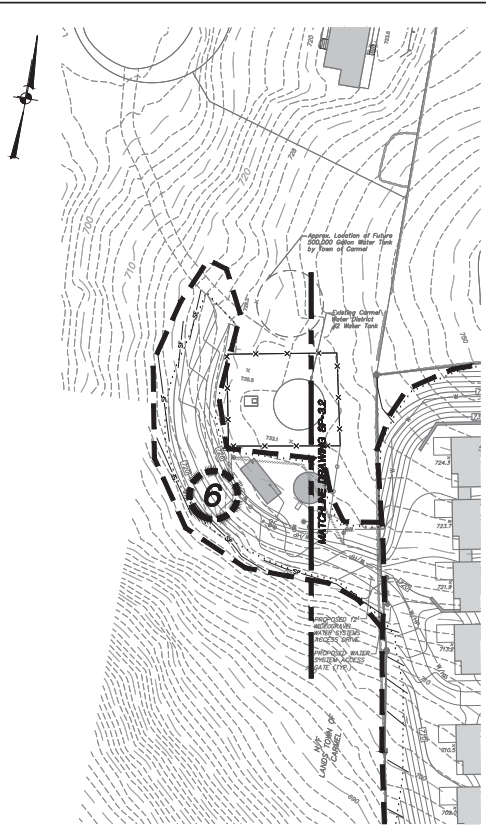
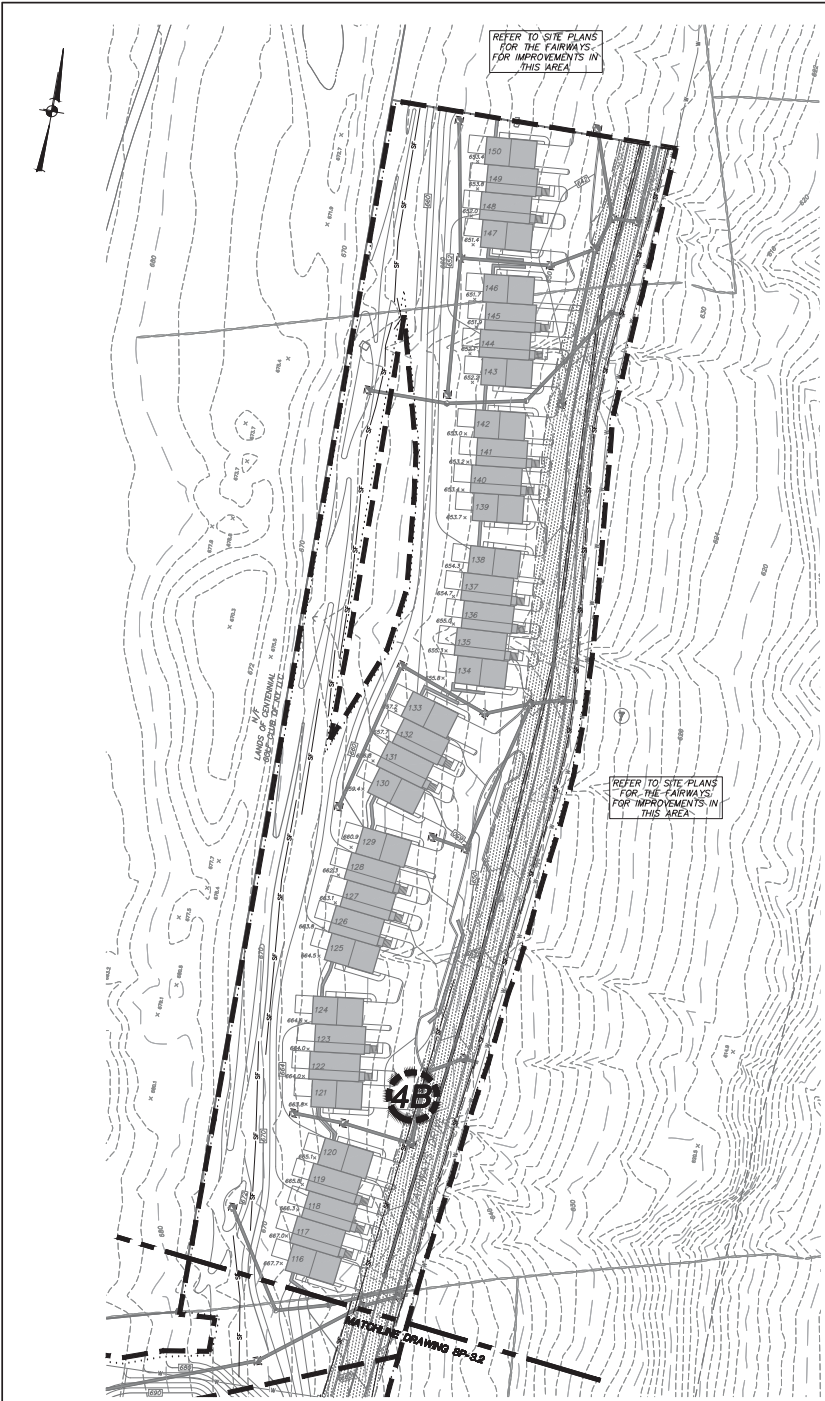
* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized. Note: the party responsible for implementation of the disturbance schedule during and after construction is: Hudson Valley Realty 1699 Route 6, Suite 1 Corning, NY 13612 and/or the current owner(s) of the subject property.

ALLIANCE OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.

IMPROVEMENTS COMPLETED WITH ROAD PROJECT



NO.	DATE	REVISION	BY
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROAD & TOWN OF CORNELIUS, PUTNAM COUNTY, NEW YORK			
DRAWING: EROSION & SEDIMENT CONTROL PLAN			
PROJECT NUMBER	04232.106	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
DRAWING NO.	SP-3.2	SHEET	9
			20



PHASE 4A SHALL INCLUDE CONSTRUCTION OF STORMWATER BASINS 4.1P, 4.2P & 4.4P AS SHOWN ON DRAWING SP-S2 AS PART OF THE FARWAYS - LOT 7

REQUIRED EROSION CONTROL SWPPP CONTENTS:

- Pursuant to the NYSDC "2005 General Permit for Stormwater Discharges from Construction Activity" (GP-0-20-001), all Stormwater Pollution Prevention Plan's (SWPPP) shall include erosion and sediment control practices designed in conformance with the most current version of the technical standards, "New York Standards and Specifications for Erosion and Sediment Control". Where erosion and sediment control practices are not designed in conformance with the technical standards, the owner/operator must demonstrate equivalence to the technical standard. The following list of required SWPPP components is provided in accordance with Part 61.01(a) of General Permit GP-0-20-001:
- Background information: The subject project consists of the construction of 150 multifamily residential units with associated access roads, utilities, and stormwater management.
 - Site map / construction drawing: These plans serve to satisfy this SWPPP requirement.
 - Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Charlton complex (CGL, CCL, Chertford-Halls (CIC, CUL), Woodbridge Loam (WAL, Sun Loam (SL), Lohrman Loam (LL, LCL), Charlton Loam (CL, CUL, CL), Plaster Fine Sandy Loam (PFL, PCL), Halls Rock Outcrop (HRL), Halseybury Clay (HBL) and Eldertons (EL, EL) as identified on the Soil Conservation Service Web Soil Survey. These soil types belong to the Hydrologic Soil Group "C".
 - Construction phasing plan / sequence of operations: The Construction Sequence and phasing based on these plans provide the required phasing. A Construction Sequence and Erosion and Sediment Control Maintenance Schedule has been provided. The Erosion and Sediment Control Notes contained hereby outline a general sequence of operations for the proposed project, to govern all erosion and sediment control activities. All activities shall be initiated prior to commencement with land disturbing activities, and areas of disturbance shall be limited to the shortest period of time as practicable.
 - Description of erosion and sediment control practices: This plan and details / notes shown herein serve to satisfy this SWPPP requirement.
 - Temporary and permanent soil stabilization plan: The Sedimentation and Erosion Control Notes and Details provided herein specify temporary and permanent stabilization measures to be employed with respect to specific elements of the project, and of the various slopes of development.
 - Site map / construction drawing: This plan serves to satisfy this SWPPP requirement.
 - The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The details, Erosion and Sediment Control Notes, and Erosion and Sediment Control Maintenance Schedule serve to satisfy this SWPPP requirement.
 - An inspection schedule: Inspections are to be performed twice weekly and by a qualified individual as required by the General Permit GP-0-20-001. In addition the NYSDC Trained Contractor shall perform additional inspections as cited in the Sedimentation and Erosion Control Notes.
 - A description of pollution prevention measures that will be used to control silt, construction materials and construction debris: In general, all construction silt / debris shall be collected and removed from the site. The general contractor shall supply either waste barrels or dumpster for proper waste disposal. Any construction materials utilized during construction shall either be removed from site daily by the contractor or stored in a structurally sound and weather-tight facility. No hazardous waste shall be disposed of onsite, and shall ultimately be disposed of in accordance with all federal, state and local regulations. Material Safety Data Sheets (MSDS), material inventories, and emergency contact numbers shall be maintained by the general contractor for all construction chemicals utilized onsite. Finally, temporary sanitary facilities (portable toilets) shall be provided onsite during the entire length of construction, and inspected weekly for evidence of leaking holding tanks.
 - A description and location of any stormwater discharges associated with industrial activity other than construction of the site: There are no known potential stormwater discharges present or proposed at the site.
 - Identification of any elements of the design that are not in conformance with the technical standard, "New York Standards and Specifications for Erosion and Sediment Control": All proposed elements of this SWPPP have been designed in accordance with the "New York Standards and Specifications for Erosion and Sediment Control."

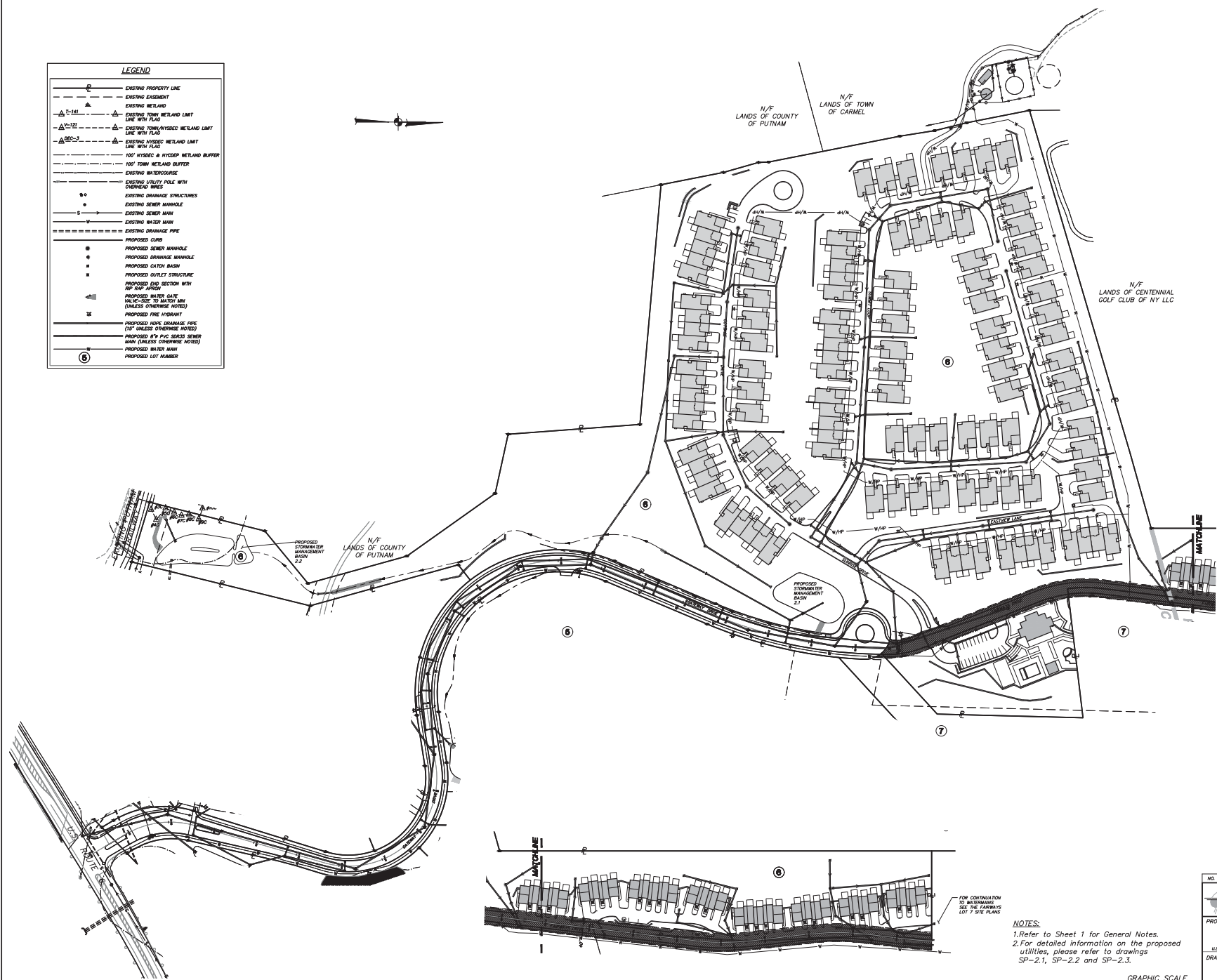
Note:
Refer to Drawing SP-S1 for Sediment and Erosion Control Notes, Overall Construction Sequence, and Construction Sequence Notes.

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

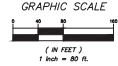
NO.	DATE	REVISION	BY
1			

		3 Carroll Place Carle Place, NY 11514 (914) 225-8992 (914) 225-8997 fax www.insite-arg.com	
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT U.S. SOLE & TOWN OF CARLE, PUTNAM COUNTY, NEW YORK			
DRAWING: EROSION & SEDIMENT CONTROL PLAN			
PROJECT NUMBER	04232106	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
GRAPHIC SCALE 		DRAWING NO. SHEET SP-3.3 10 20	

LEGEND	
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING WETLAND
	EXISTING TOWN WETLAND LIMIT LINE WITH FLAG
	EXISTING TOWN HYDROEC WETLAND LIMIT LINE WITH FLAG
	EXISTING HYDROEC WETLAND LIMIT LINE WITH FLAG
	100' HYDROEC & HYDROEC WETLAND BUFFER
	100' TOWN WETLAND BUFFER
	EXISTING WATERCOURSE
	EXISTING UTILITY POLE WITH OVERHEAD WIRES
	EXISTING DRAINAGE STRUCTURES
	EXISTING SEWER MANHOLE
	EXISTING SEWER MAIN
	EXISTING WATER MAIN
	EXISTING DRAINAGE PIPE
	PROPOSED CURB
	PROPOSED SEWER MANHOLE
	PROPOSED DRAINAGE MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED OUTLET STRUCTURE
	PROPOSED END SECTION WITH RIP RAP APRON
	PROPOSED VALVES GATE VALVE-SIZE TO MATCH MIN (UNLESS OTHERWISE NOTED)
	PROPOSED FIRE HYDRANT
	PROPOSED HYDRO DRAINAGE PIPE (12" UNLESS OTHERWISE NOTED)
	PROPOSED 8" PVC SOLID SEWER MAIN (UNLESS OTHERWISE NOTED)
	PROPOSED WATER MAIN
	PROPOSED LOT NUMBER

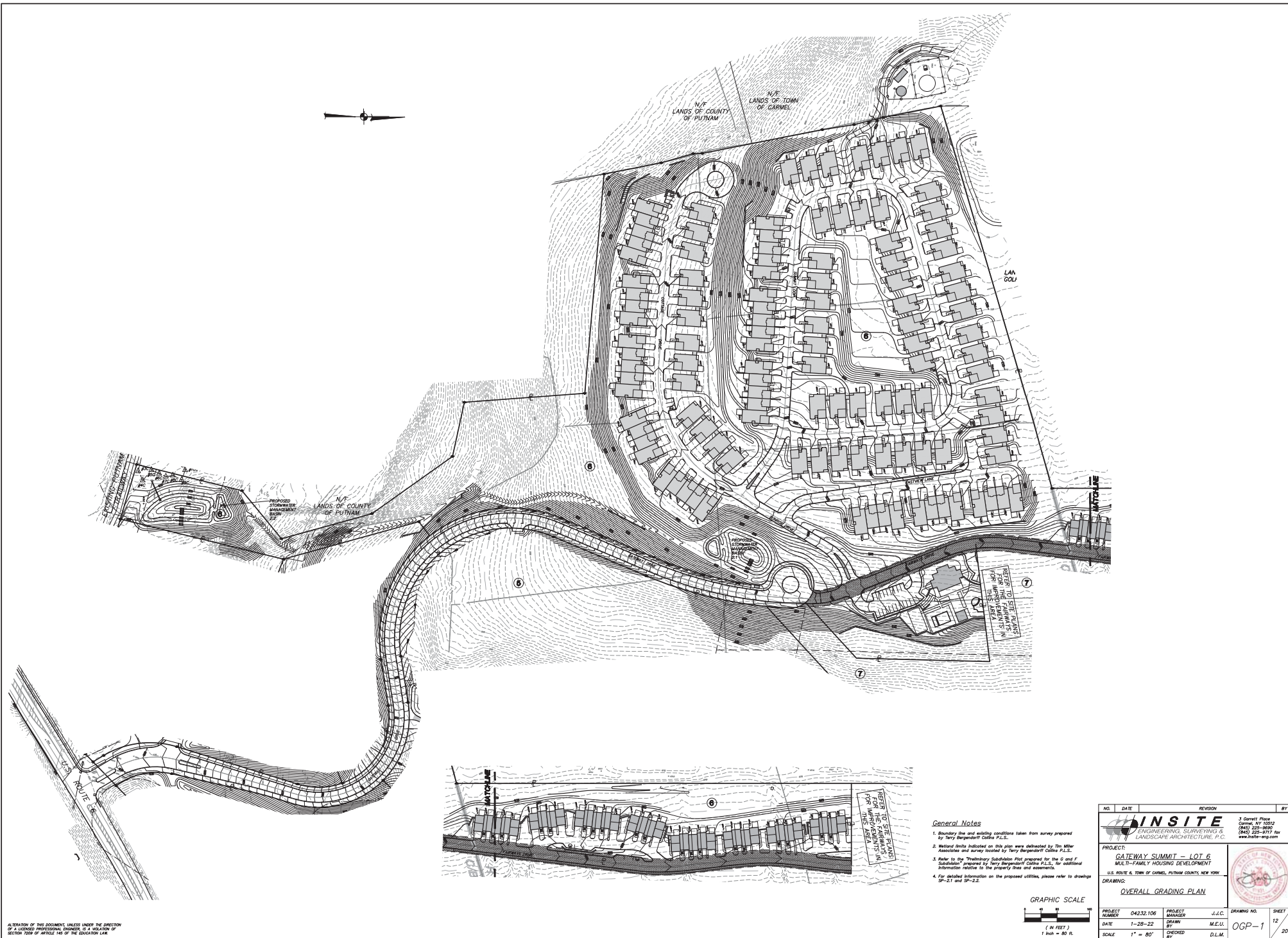


NOTES:
 1. Refer to Sheet 1 for General Notes.
 2. For detailed information on the proposed utilities, please refer to drawings SP-2.1, SP-2.2 and SP-2.3.

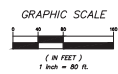


NO.	DATE	REVISION	BY
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROAD & TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK DRAWING: OVERALL UTILITES PLAN			
PROJECT NUMBER	04232.106	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 80'	CHECKED BY	D.L.M.
DRAWING NO.	OUP-1	SHEET	11
			20

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

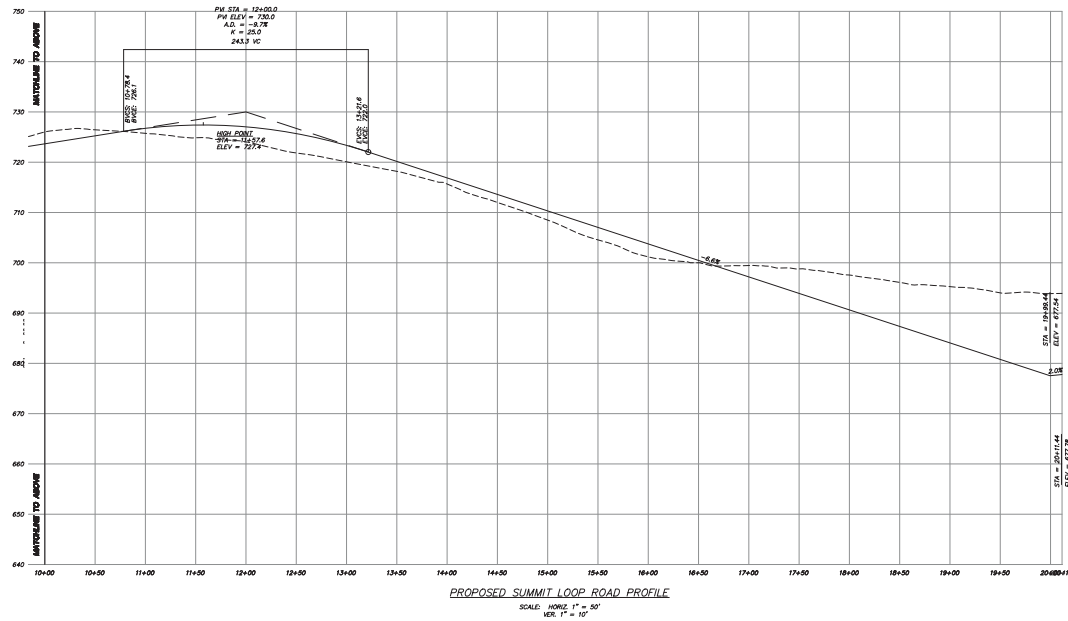
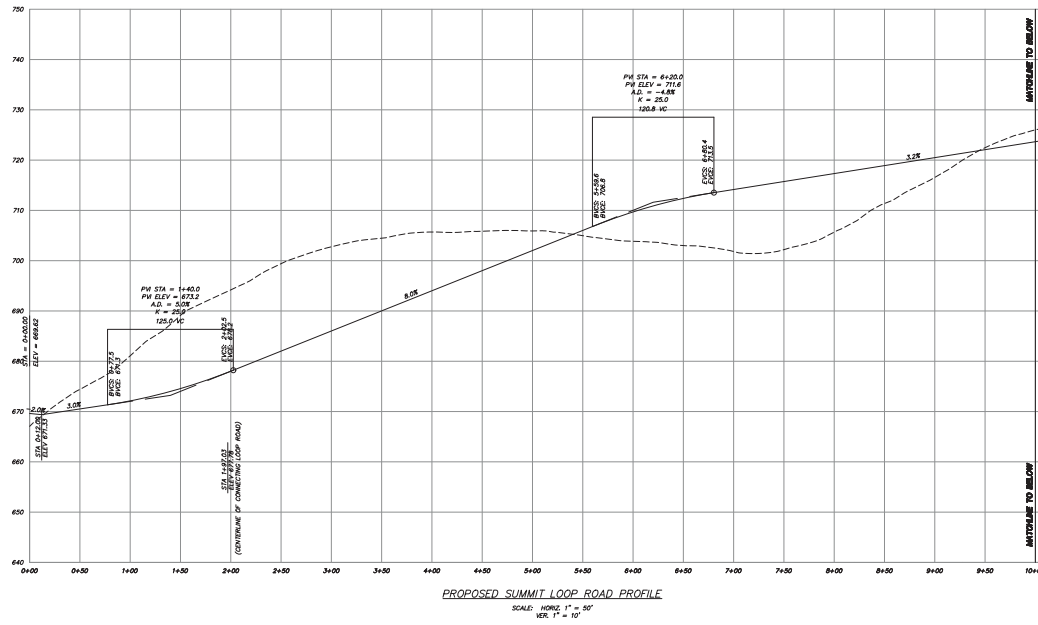


- General Notes**
- Boundary line and existing conditions taken from survey prepared by Terry Deegan/Deft Colles P.E.S.
 - Watered levels indicated on this plan were deducted by The Miller Associates and survey located by Terry Deegan/Deft Colles P.E.S.
 - Refer to the "Preliminary Subdivision Plat" prepared for the G and F Subdivisions prepared by Terry Deegan/Deft Colles P.E.S. for additional information relative to the property lines and easements.
 - For detailed information on the proposed utilities, please refer to drawings SP-11 and SP-22.



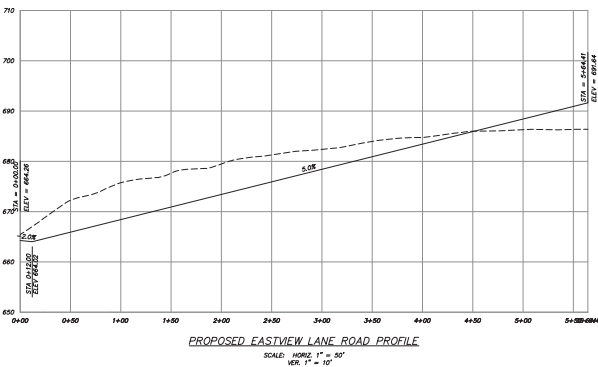
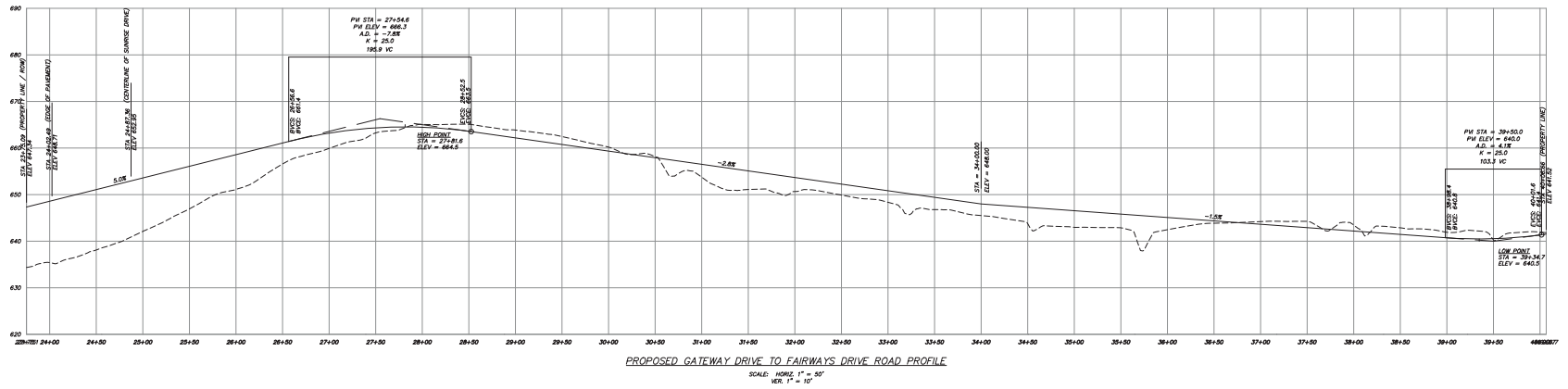
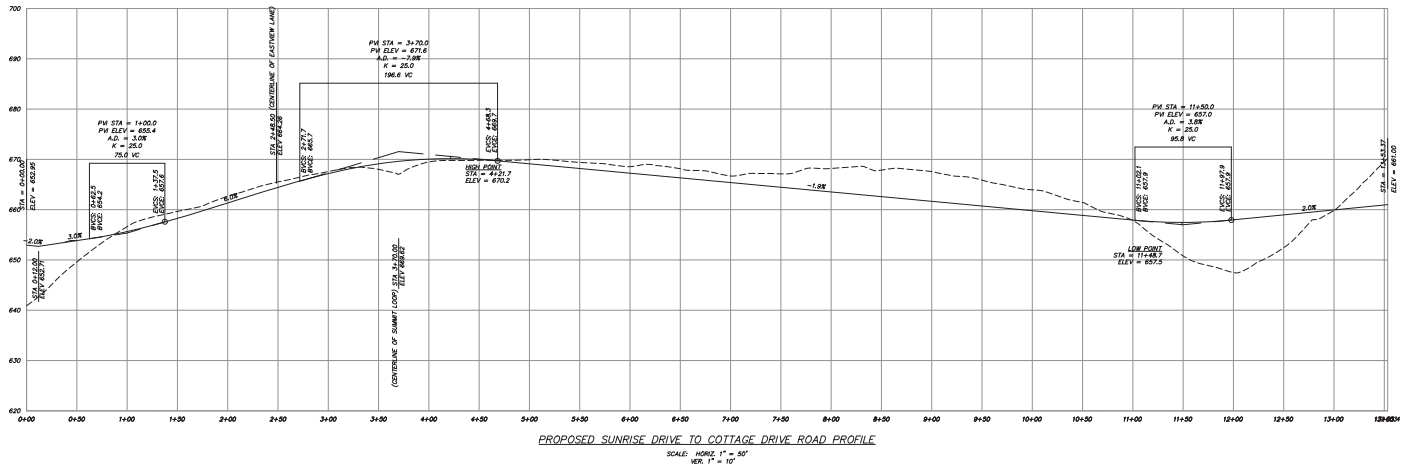
NO.	DATE	REVISION	BY
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT			
U.S. ROAD 6, TOWN OF CARVEL, PUTNAM COUNTY, NEW YORK			
OVERALL GRADING PLAN			
PROJECT NUMBER	04232106	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
			DRAWING NO. OGP-1 SHEET 12 OF 20

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2008 OF ARTICLE 146 OF THE EDUCATION LAW.



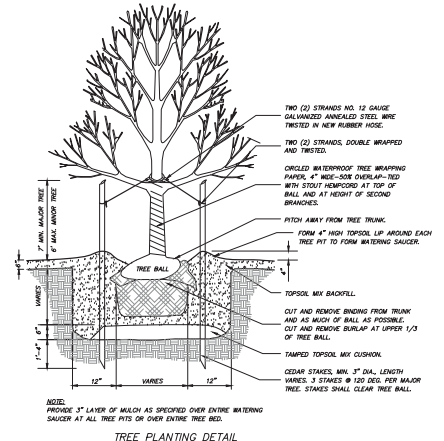
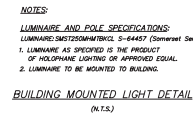
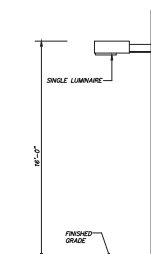
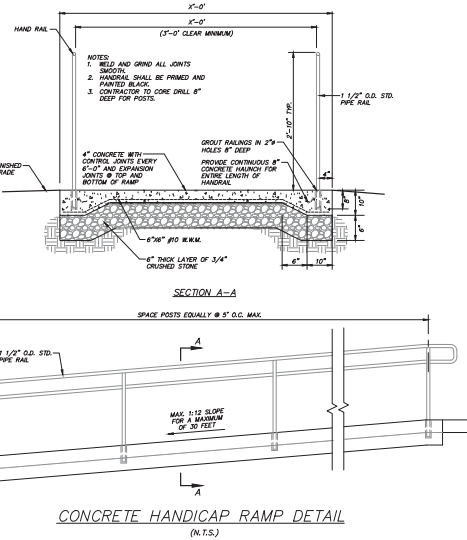
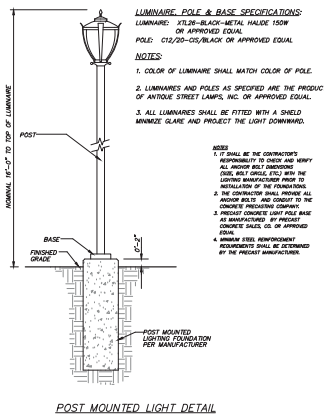
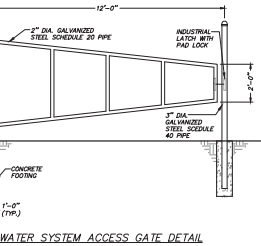
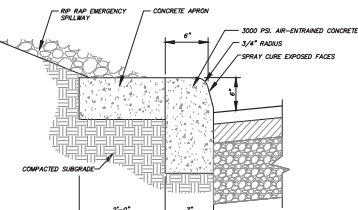
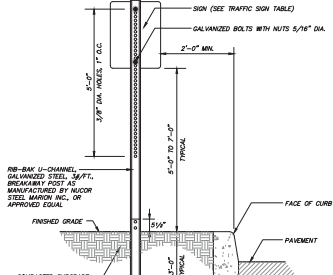
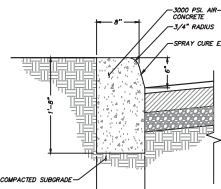
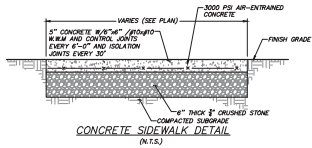
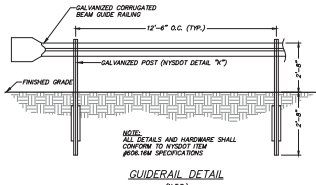
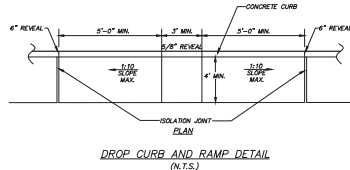
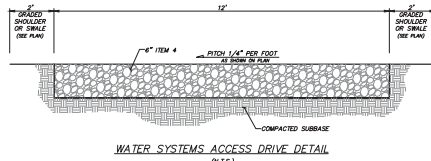
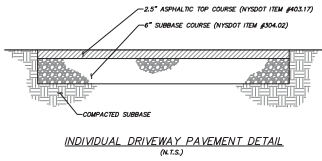
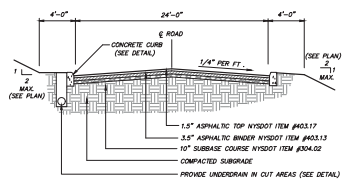
ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
INSITE <small>ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.</small>			
<small>3 Corvett Place Comm. by 10512 (914) 225-8997 (914) 225-8997 fax www.insite-arg.com</small>			
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT <small>U.S. ROAD & TOWN OF CAROL, PUTNAM COUNTY, NEW YORK</small>			
ROAD PROFILES			
PROJECT NUMBER	04232.106	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	D.L.M.
DRAWING NO.	PR-1	DRAWING NO.	13
SHEET		SHEET	13
		SHEET	20

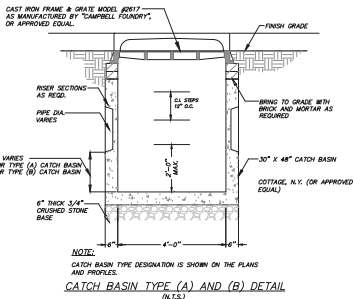


ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

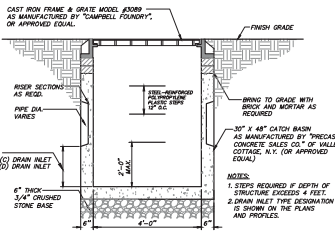
NO.	DATE	REVISION	BY
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROBE & TOWN OF CAROL, PUTNAM COUNTY, NEW YORK			
DRAWING: ROAD PROFILES			
PROJECT NUMBER	04232.106	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	D.L.M.
DRAWING NO.			SHEET
PR-2			14
			20



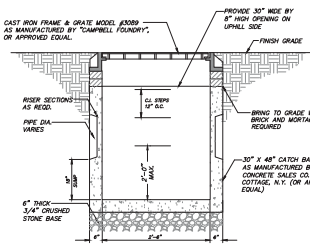
NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT			
DRAWING: SITE DETAILS			
PROJECT NUMBER	04232.106	J.J.C.	DRAWING NO. 15
DATE	1-28-22	M.E.U.	SHEET 15
SCALE	AS SHOWN	CHECKED BY	D.L.M.



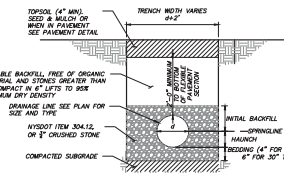
CATCH BASIN TYPE (A) AND (B) DETAIL



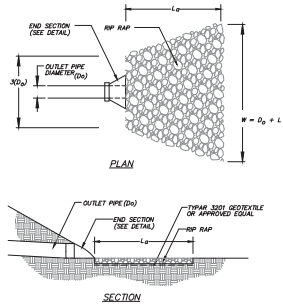
DRAIN INLET TYPE (C) AND (D) DETAIL



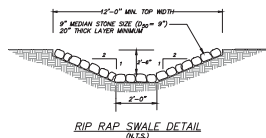
SIDE DRAIN INLET DETAIL



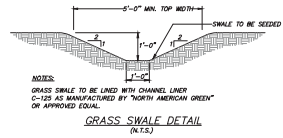
DRAINAGE LINE TRENCH DETAIL



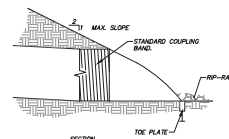
RIP RAP APRON DETAIL



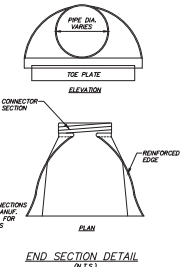
RIP RAP SWALE DETAIL



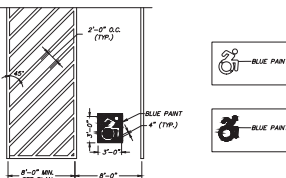
GRASS SWALE DETAIL



EXCAVATED DROP INLET PROTECTION DETAIL



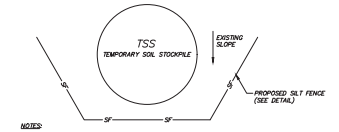
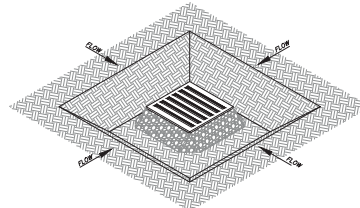
PAINTED NYS ACCESSIBLE PARKING DETAIL



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

SILT FENCE DETAIL

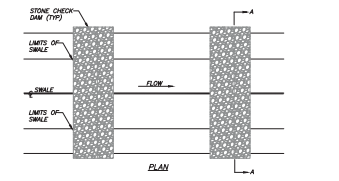
TEMPORARY SOIL STOCKPILE DETAIL



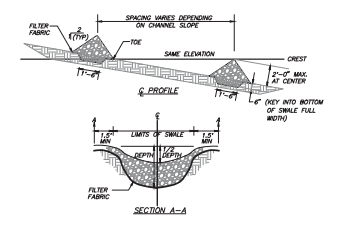
STONE CHECK DAM DETAIL



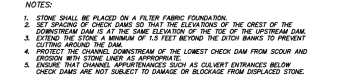
STABILIZED CONSTRUCTION ENTRANCE DETAIL



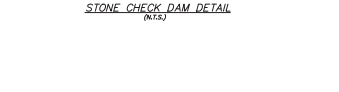
STONE CHECK DAM DETAIL



STONE CHECK DAM DETAIL



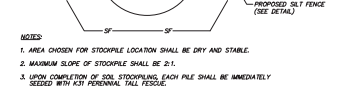
STONE CHECK DAM DETAIL



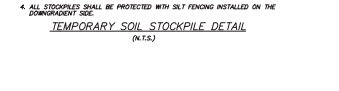
STONE CHECK DAM DETAIL



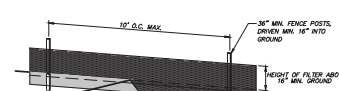
STONE CHECK DAM DETAIL



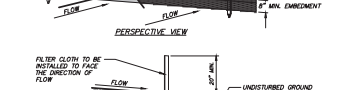
STONE CHECK DAM DETAIL



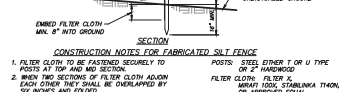
STONE CHECK DAM DETAIL



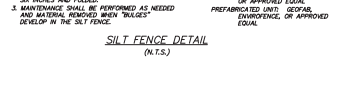
STONE CHECK DAM DETAIL



STONE CHECK DAM DETAIL



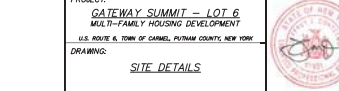
STONE CHECK DAM DETAIL



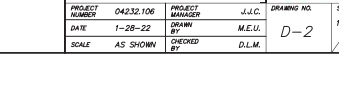
STONE CHECK DAM DETAIL



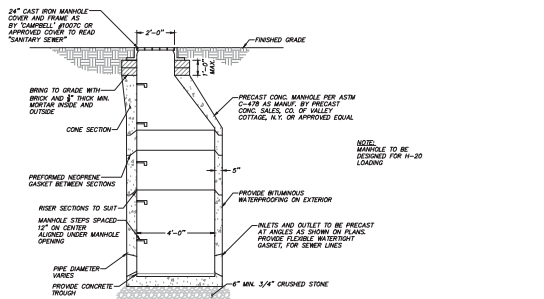
STONE CHECK DAM DETAIL



STONE CHECK DAM DETAIL



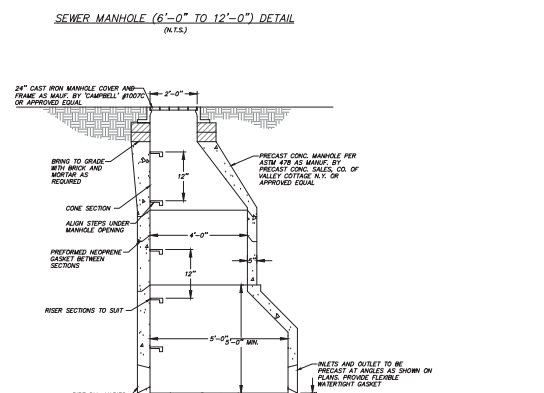
STONE CHECK DAM DETAIL



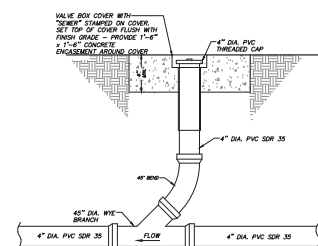
SEWER MAIN TRENCH DETAIL (N.T.S.)

SEWER MAIN NOTES

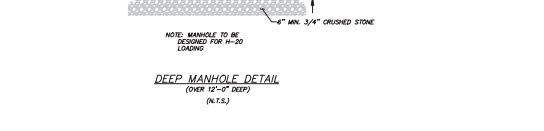
- All sewer main & sewer services shown on these plans shall be polyethylene (PE) SDR 35.
- Sewers shall be laid to a minimum of 10 feet horizontally from any existing or proposed water main. The distance shall be measured along the sewer main and shall be as close as possible to maintain a 10 foot horizontal separation, the Design Engineer and Putnam County Department of Health may allow deviation with prior approval on a case-by-case basis. If approved by utility from the Design Engineer prior to sewer installation, the horizontal separation also applies to service connections.
- Sewers crossing water mains shall be laid to provide a minimum vertical clearance of 18 inches between the outside of the water main and the sewer. The crossing shall be arranged so that the sewer sits on its end and not on its side. If possible from the water main joint, where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain the end grade. In cases where 1.8 ft. or greater vertical clearance is required, the sewer shall be supported with prior approval on a case-by-case basis. If approved by utility from the Design Engineer, the sewer shall be supported. The vertical separation also applies to service connections.
- Sanitary sewer services shall be installed in conjunction with the sewer main to the property line or easement line, and in accordance with the latest Putnam County Department of Health Rules & Regulations.
- Testing of the manholes with the pipe shall not be permitted. Manholes & sanitary sewers shall be tested independently of each other.
- The owner/contractor shall be responsible for providing maintenance of the construction of the sanitary sewer main system by a person or firm qualified to practice professional engineering in the State of New York.
- The owner/contractor shall be responsible for providing three (3) copies of as-built drawings signed and sealed by a licensed and registered New York State Professional Engineer to the Putnam County Department of Health at the completion of the construction.
- The Design Engineer, Putnam County Department of Health, and Town Engineering Department shall be notified forty eight (48) hours before construction is started.
- The sanitary sewer main shall not be placed into service until a certificate of construction compliance has been submitted to and accepted by the Putnam County Department of Health.
- The Putnam County Department of Health and the New York City Department of Environmental Protection must be notified forty eight (48) hours prior to pressure testing the sewer main improvement.
- Manhole frames & covers to be completed #307C for 24" opening or approved equal. M.H. covers to be matched "GENE". Use solid covers where necessary.
- The exterior of all manholes shall be covered with an approved asphalt surfacing.
- Concrete base slabs shall be reinforced concrete with a minimum depth strength of 3000 psi.
- The contractor shall submit shop drawings of the present manholes to the Design Engineer for review and acceptance.
- Present manholes shall have minimum reinforcement of 0.12 sq. in. per ft. for 48" diam. & be designed in accordance with A.S.T.M. C-476, and attached as per design drawings.
- Present base sections to have the required number of gaskets and openings as shown and specified.
- Present manhole sections shall employ a watertight gasket arrangement between each section approved by the Design Engineer.
- Openings for pipes shall be present or machine bored. Gaskets or collars for pipe connections to manholes shall be present and satisfactory and compatible with the type of pipe being used.
- The length of pipes entering or leaving any manhole shall be greater than 2'-0".
- Present manholes under 4'-0" deep shall have a "Flat Top" and shall be:
- Gaskets or collars for pipe connections to manhole shall provide a minimum of 0.1" gap across the manhole.
- The contractor shall notify the Design Engineer every day that sewer main installation shall occur.



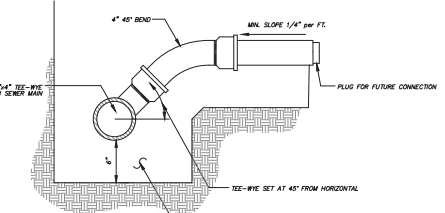
SEWER MANHOLE (6'-0" TO 12'-0") DETAIL (N.T.S.)



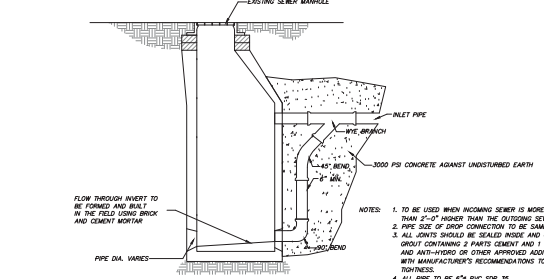
SEWER LINE CLEANOUT DETAIL (N.T.S.)



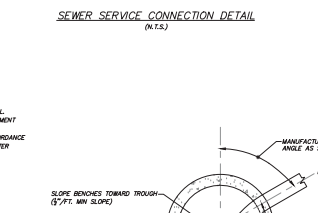
DEEP MANHOLE DETAIL (OVER 12'-0" DEEP) (N.T.S.)



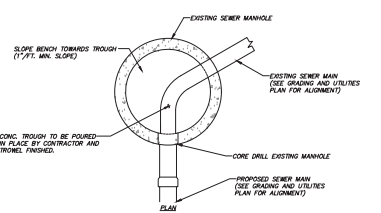
PROPOSED SEWER CONNECTION TO EXISTING SEWER MANHOLE DETAIL (N.T.S.)



EXTERNAL DROP CONNECTION TO EXISTING MANHOLE DETAIL (N.T.S.)



SEWER SERVICE CONNECTION DETAIL (N.T.S.)



MANHOLE TROUGH DETAIL (N.T.S.)

CONNECTION TO EXISTING SEWER MANHOLE CONSTRUCTION SEQUENCE

- Core off existing manhole.
- Install proposed sewer main and connect to existing sewer manhole.
- Perform required acceptance testing of the sewer main.
- Pour trough.

PROPOSED SEWER CONNECTION TO EXISTING SEWER MANHOLE DETAIL (N.T.S.)

SEWER TESTING PROCEDURES

TESTS FOR NON-PRESSURE PIPELINES FOR TRANSPORT OF SEWAGE

The leakage shall be determined by infiltration, infiltration or low pressure test.

Infiltration Testing

- Exfiltration tests shall be made by filling a section of pipe with water and measuring the quantity of leakage.
- The head of water in the topography of the test shall be at least 2 feet above the highest pipe within the section being tested.
- Should the requirement of 2 feet of water above the highest pipe be exceeded, the test shall be made at a head of water not less than 11.5 feet, under the same conditions of test as required.

Infiltration Testing

- Infiltration tests shall be allowed only when the water table cannot be determined by the test and it is not possible to raise the highest pipe of the section being tested.
- Infiltration tests shall be made by measuring the quantity of water leaking into a section of pipe.
- Measurement of the infiltration shall be by means of a calibrated test container at the outlet of the section being tested.

Allowable Leakage for Non-Pressure Pipelines

The allowable leakage (infiltration or exfiltration) for non-pressure pipelines shall not exceed the following in gallons per 24 hours per foot of diameter and length of pipe:

Diameter (in.)	Leakage (gallons per 24 hours per foot)
12	100
18	150
24	200
30	250
36	300
42	350
48	400
54	450
60	500

Low Pressure Air Testing

- All testing for acceptance shall not be performed until the building has been tested.
- Low pressure air tests shall conform to ASTM G 89 or ASTM F1417-16, Section 8.2.2, "Low-Pressure Dry Method for 0.5 psi air test, except as specified herein and shall be limited to 0.5 psi or less air test."
- All sections of pipelines shall be cleaned and flushed prior to testing.
- The test shall be based on the working pressure of 0.5 to 4.0 psi, except as otherwise specified for 0.5 psi air test. Pressure maintained in sections. Air shall be applied based on the size and length of the test section by the Engineer.
- When groundwater is present, the average test pressure of 0.5 psi shall be above the water pressure due to the groundwater head.
- The maximum pressure allowed under any condition in air testing shall be 0.5 psi. The maximum pressure shall be 0.5 psi above the top of the pipe.

Infiltration Testing

- The equipment required for air testing shall be furnished by the Contractor and shall include the necessary equipment, valves, gauges and pipe to allow for the monitoring of the pressure, release of pressure and if separate test pipe.
- The test pipe shall be closed to allow for the monitoring of the 0.5 psi air test allowed during the test period and shall be on a separate line to the test section.

Deflection Testing

- Deflection testing shall be performed 30 days after installation. The test shall be made by passing a ball or collar on steel track over the pipe diameter through the pipe. The test shall be performed without mechanical pulling.

Manhole Testing

- General
 - Each manhole shall be tested by either exfiltration, infiltration or vacuum testing.
 - A manhole will be acceptable if the leakage does not exceed an allowance of one gallon per vertical foot of depth for 24 hours. Regardless of the ultimate reason, any manhole which does not meet this requirement shall be permanently repaired.

Exfiltration Tests

- Exfiltration tests shall be performed after installation. The test shall be made by filling the manhole with water and observing the water for a minimum of 24 hours.
- Infiltration tests shall be performed after installation when the groundwater level is above the joint of the top section of a present manhole.
- Vacuum testing shall be performed after installation in accordance with the latest revision of ASTM D2444-1997 as shown.
- The test head shall be placed on top of the manhole in accordance with the manufacturer's recommendations.
- A vacuum of 10 in. Hg shall be drawn on the manhole, the valve on the vacuum line of the test head closed, and the vacuum pumps and shut. The time shall be measured for the vacuum to drop to 9 in. Hg.
- The manhole shall pass if the time for the vacuum to drop to 9 in. Hg is not less than 15 in. of mercury to 9 in. of mercury or exceeds the time indicated below.

Minimum Test Time for Various Manhole Diameters in Seconds

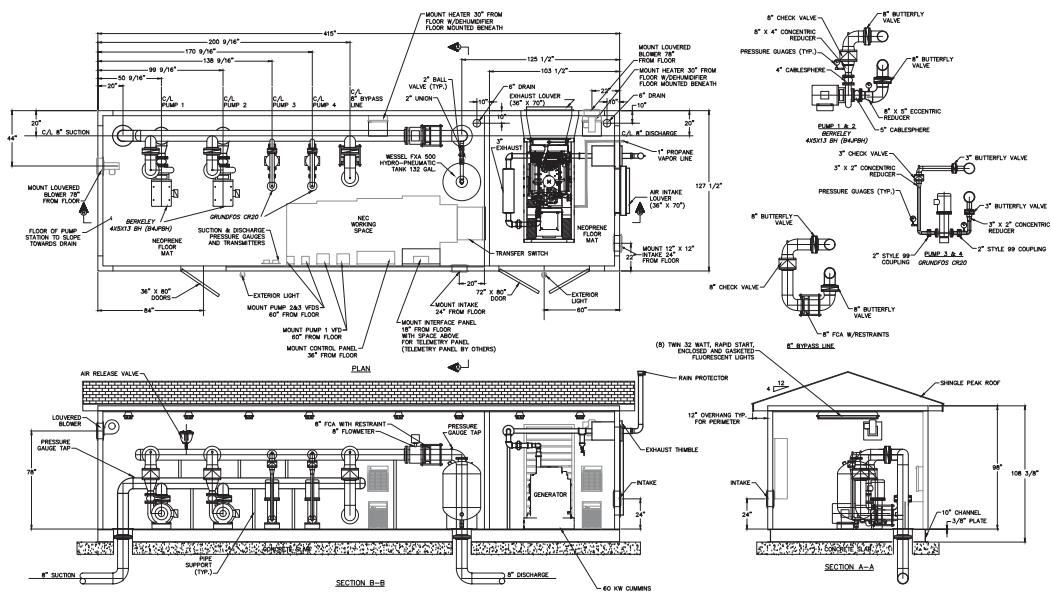
Depth (ft)	Diameter (Inches)	Min. Test Time (Seconds)
8 or less	20	24
10	25	24
12	30	24
14	35	48
16	40	52
18	45	52
20	50	65

Notes

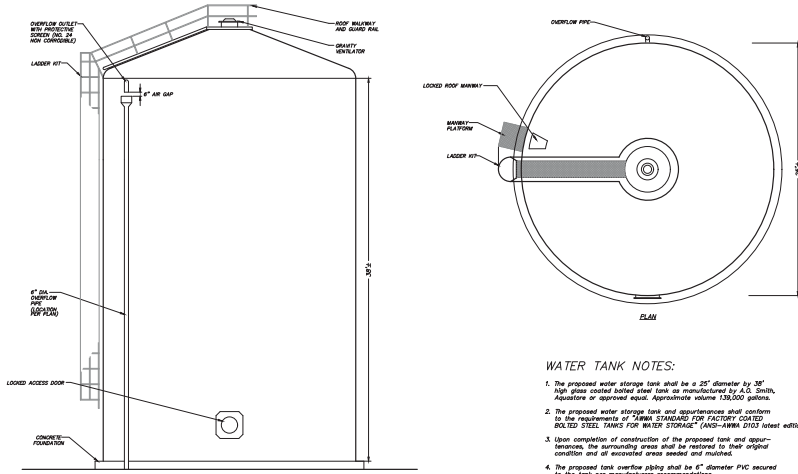
- If the manhole fails the initial test, necessary repairs shall be made by an approved method. The manhole shall then be retested until a satisfactory test is obtained.

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROUTE 6, TOWN OF COMEL, PUTNAM COUNTY, NEW YORK			
SITE DETAILS			
PROJECT NUMBER	04232-106	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	D.L.M.
			DRAWING NO. 18
			SHEET 18 OF 20

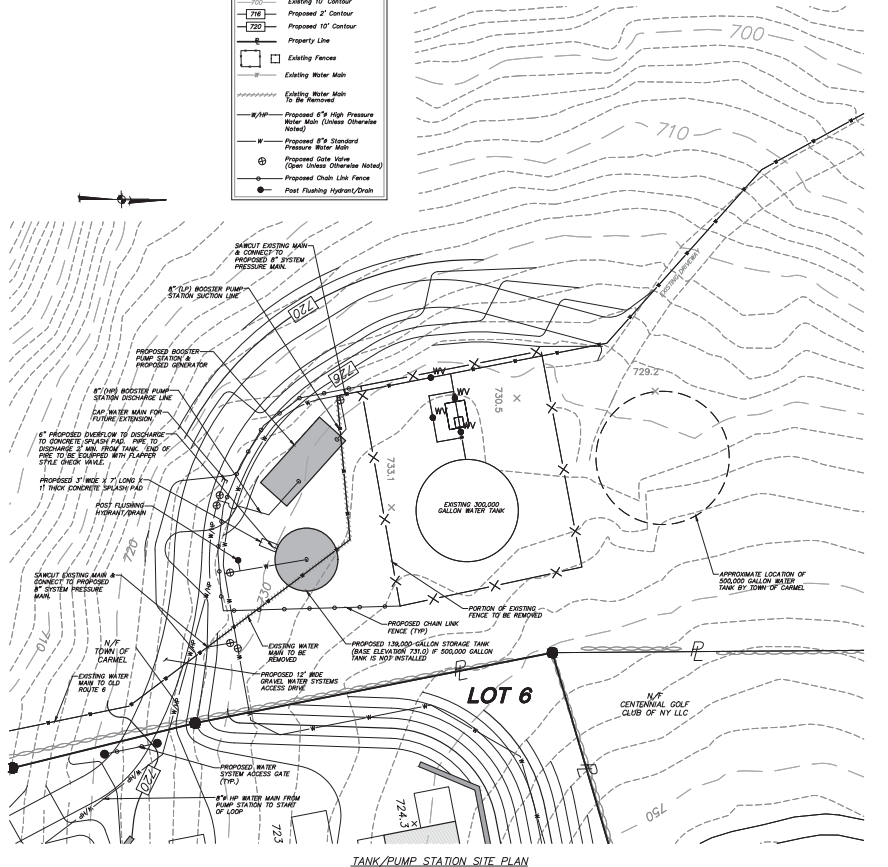
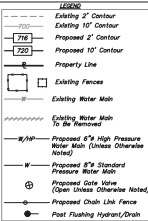


BOOSTER PUMP STATION DETAIL
(N.T.S.)

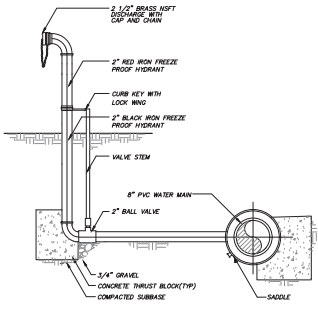
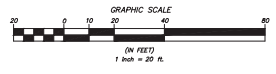


ELEVATION WATER STORAGE TANK
(N.T.S.)

- WATER TANK NOTES:**
- The proposed water storage tank shall be a 35" diameter by 35" high above outlet water level tank as manufactured by A.S. Smith. Approximate or approved equiv. Approximate volume 139,500 gallons.
 - The proposed water storage tank and appurtenances shall conform to the requirements of "AWWA STANDARDS FOR FACTORY CAST BUILT STEEL TANKS FOR WATER STORAGE" (AWWA-A2103 latest edition).
 - Upon completion of construction of the proposed tank and appurtenances, the surrounding area shall be restored to their original condition and/or excavated areas sealed and finished.
 - The proposed tank overflow piping shall be 6" diameter PVC secured to the tank per manufacturers recommendations.
 - The proposed water storage tank shall be distinguished in accordance with AWWA Specification 0852 latest edition prior to the tank being placed on site.



TANK/PUMP STATION SITE PLAN



POST FLUSHING HYDRANT/RAIN DETAIL
(N.T.S.)

NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: GATEWAY SUMMIT - LOT 6 MULTI-FAMILY HOUSING DEVELOPMENT			
DRAWING: SITE DETAILS			
PROJECT NUMBER 04232.106	PROJECT MANAGER J.J.C.	DRAWING NO. D-6	SHEET 20
DATE 1-28-22	DRAWN BY M.E.U.	CHECKED BY D.L.M.	20
SCALE AS SHOWN			

ALTERNATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.



January 28, 2022

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

RE: The Fairways Multi-Family Housing Lot 7
Gateway Drive
Tax Map No. 55.2-24.8-1 & 55.2-24.8-2

Dear Chairman Paepfer and Members of the Board:

Enclosed please find the following in support of

- Site Plan Set consisting of (20 sheets), dated January 28, 2022. (5 copies)
- Amended Stormwater Pollution Prevention Plan, dated January 28, 2022. (2 copies)
- Water Engineering Report for G&F Subdivision Lots 6 & 7, dated January 28, 2022. (2 copies)
- Wastewater Engineering Report for G&F Subdivision Lot 7, dated January 28, 2022. (2 copies)

With regards to comments received from the town consultants, we offer the following:

Memorandum from Michael G. Carnazza, Town of Carmel Code Enforcement, dated October 27, 2021:

1. The required area variances were granted by the ZBA and are noted on the enclosed plans.
2. Although ample parking is available at each unit, visitor parking areas have been added as suggested.

Memorandum from Patrick Cleary, AICP of Cleary Consulting, dated October 27, 2021:

SEQR:

1. SEQR comments are being addressed by Tim Miller Associates. A letter and attachments are submitted under separate cover.

Zoning Compliance:

2. As noted above required area variances were granted by the ZBA and are noted on the enclosed plans.

B. Plan Modifications Impacts:

3. Impacts are addressed in the SEQR response prepared by Tim Miller Associates.


Memorandum from Richard J. Franzetti, P.E., Town of Carmel Town Engineer, dated October 25, 2021:

1. Water and wastewater flows and related design info is included in the attached plans and report.
2. Stormwater management improvements are addressed in the attached Amended Stormwater Pollution Prevention Plan.
3. The SEQR documents submitted by Tim Miller Associates demonstrates the proposed project traffic is within thresholds established for the completed highway improvements.

We request this project be placed on the February 10th meeting for review of the enclosed information. Should you have any questions or comments regarding the above information, please feel free to contact me.

Very truly yours,

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

By: 

Jeffrey J. Contelmo, PE
Senior Principal Engineer

JJC/dlm/amk

Enclosure

cc: Paul Camarda, CRI

Insite File No. 05140.100



WASTEWATER ENGINEERING REPORT
For
G and F Subdivision Lot 7
Town of Carmel, New York

Revised for Re-Approval January 28, 2022

Prepared By
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

CONTENTS

	PAGE
1.0 INTRODUCTION	1
2.0 PROJECT DESIGN FLOWS.....	1
3.0 PROPOSED CONNECTIONS TO CARMEL SEWER DISTRICT #2.....	2
4.0 PROPOSED SYSTEM COMPONENTS	2
 APPENDICES	
Appendix A	Pump Curves

1.0 INTRODUCTION

The G and F Subdivision is an overall development plan totaling approximately 183 acres in the Town of Carmel. The site is located along the northern side of US Route 6 with frontage stretching from the intersection with Old Brewster Road east to the Southeast Town line. This report has been prepared to address the wastewater service for Lot 7 (also known as “The Fairways”), which is proposed to be developed as a multifamily community with 150 units and a clubhouse. The existing parcel for Lot 7 is tax map numbers 55.-2-24.8-2.

Domestic water for The Fairways will be supplied by Town of Carmel Water District #2 (CWD#2). Wastewater from the lot will be received by Town of Carmel Sewer District #2 (CSD#2).

2.0 PROJECT DESIGN FLOWS

The maximum daily design flows for Lot 7 are based on the hydraulic loading rates listed in the New York State Department of Environmental Conservation’s (NYSDEC) publication *Design Standards for Wastewater Treatment Works – 2014* (DSWTF). The following table lists the proposed uses, associated hydraulic loading rates, and the design flow rates (gallons per day or gpd) for Lot 7. Note that while no additional flow is expected for the clubhouse because it is proposed to serve residents and their guests, 400 gpd has been included for potential visitors.

Maximum Daily Design Flow

Proposed Use	Hydraulic Loading Rate	Maximum Daily Design Flow (gpd)
The Fairway 150 3-BR Multi Family Units Clubhouse (visitors)	3 x 110 gpd/BR 400 gpd	49,500 400
Maximum Daily Design Flow Total		49,900

The average daily flow for the project is expected to be significantly less than the maximum daily design flow. The maximum daily design flows represent conservative flows to ensure that the proposed sewer and water works are designed with an ample factor of safety.

The anticipated actual flows are based on anticipated occupancy rates and measured data for water use. Based on the project environmental review, the expected number of residents anticipated for the project is 435 persons in The Fairways. Data from the American Water Works Association (AWWA) shows that the average in home water use is 69 gpd per person. This number is reduced to 45 gpd per person when water saving fixtures are used, which is the case for this project. Based on a projected population of 435, the average daily flow is anticipated to be 19,575 gpd. The design flow of the WWTP is based on a 30-day average flow. Therefore, for the district WWTP, the average flow of 19,575 gpd should be referenced when assessing the district’s available flow capacity.

Average Daily Design Flow

Proposed Use	Hydraulic Loading Rate	Average Daily Design Flow (gpd)
435 Residents	45 gpd/resident	19,575

The maximum daily design flow will be used to calculate the peak hourly flow. The peak hourly flow for wastewater is calculated using a peaking factor that is based on the population of the

subject project. The publication *Recommended Standards for Wastewater Facilities - 2014*¹ (RSWF) was used to determine a peaking factor of four. The pump station will also receive a max day flow of 11,550 gpd from Lot 6. The max day flow reaching the sewer pump station is 61,450 gpd from Lot 6 and Lot 7.

Peak Hourly Flow

$$61,450 \text{ gpd} \div (24 \text{ hr/day}) \div (60 \text{ min/hr}) = 42.7 \text{ gallons per minute (gpm)}$$

$$\text{Peak Hourly Flow} = 42.7 \text{ gpm} \times 4 \approx \mathbf{170.8 \text{ gpm}}$$

3.0 PROPOSED CONNECTIONS TO CARMEL SEWER DISTRICT #2

An evaluation of the existing CSD#2 collection system and treatment plant capacity was performed as part of the Final Environmental Impact Statement (FEIS) for the Gateway Summit project. This evaluation may be found in the wastewater engineering report prepared for the FEIS. The study concluded that there is sufficient capacity in the collection system and the WWTP to serve the proposed G and F Subdivision (of which Lot 7 is a part) as well as other major proposed projects currently under review in the district.

The 49,900 gpd maximum daily design flow for Lot 6 is part of the previously approved flow for the G & F Subdivision. The approved allocation for Lots 2 through 7 of the G & F Subdivision is 113,630 gpd per a July 11, 2018 memo from Richard Franzetti, P.E. Town Engineer.

4.0 PROPOSED SYSTEM COMPONENTS

Flow from the units on Lot 7 (and a portion of lot 6) will be conveyed and collected by gravity sewer mains and conveyed to a pump station located to the east of units 78 to 82. Sewer service connections from the units to the mains will be 4" diameter PVC SDR 35. The collection system will be composed of approximately 4,500 feet of 8" PVC SDR 35 sewer main and 22 pre-cast concrete manholes. The proposed pump station will lift the flow to the existing 8" sewer main in Kelly Ridge Road via an approximately 2,300 foot long 4" diameter PVC sewer force main. The force main will be routed along the proposed emergency access road from the end of Lot 7 to Kelly Ridge Road. Sizing of the proposed pump station is provided below.

Pump Station Sizing

Flow in Forcemain: 180 gpm or 0.40 ft³/s

Force Main Sizing: 4" main = 0.0872 ft² area

$$(0.40 \text{ ft}^3/\text{s}) \div (0.0872 \text{ ft}^2) = 4.6 \text{ ft/s} > 2.0 \text{ ft/s OK}$$

Pump Sizing: Pumping Rate > Peak Hourly Flow = 180 gpm

Elevation Head = 119 ft

$$\text{Pipe Friction Loss} = \frac{(10.44) \cdot (2,760 \text{ ft}) \cdot (180 \text{ gpm})^{1.85}}{(120^{1.85}) \cdot (4 \text{ in})^{4.87}} = 71 \text{ ft}$$

(Length of forcemain includes 20% equivalent length for valves and fittings)

$$\text{Total Dynamic Head} = 119 \text{ ft} + 71 \text{ ft} = \mathbf{190 \text{ ft}}$$

The proposed pumps are two ITT FLYGT pumps model NP3171. As shown above each pump is capable of handling the peak hourly flow individually. For pump curves see Appendix A. The pumps will operate in an alternating lead/lag configuration. The proposed control system is specified below. The control system will include a level control probe. Two float sensors will serve

¹ Published by the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers

as redundant alarm sensors. The elevations are based on the design average flow and a filling time of less than 30 minutes as required by Recommended Standards for Wastewater Facilities.

	Level Control Probe Elevation	Level Float Sensors Elevation
High High Alarm	-----	582.0
High Level Alarm	581.8	-----
Start Lag Pump	581.3	-----
Start Lead Pump	580.8	-----
Stop Lag Pump	580.0	-----
Stop Lead Pump	579.1	-----
Low Low Alarm	-----	578.5

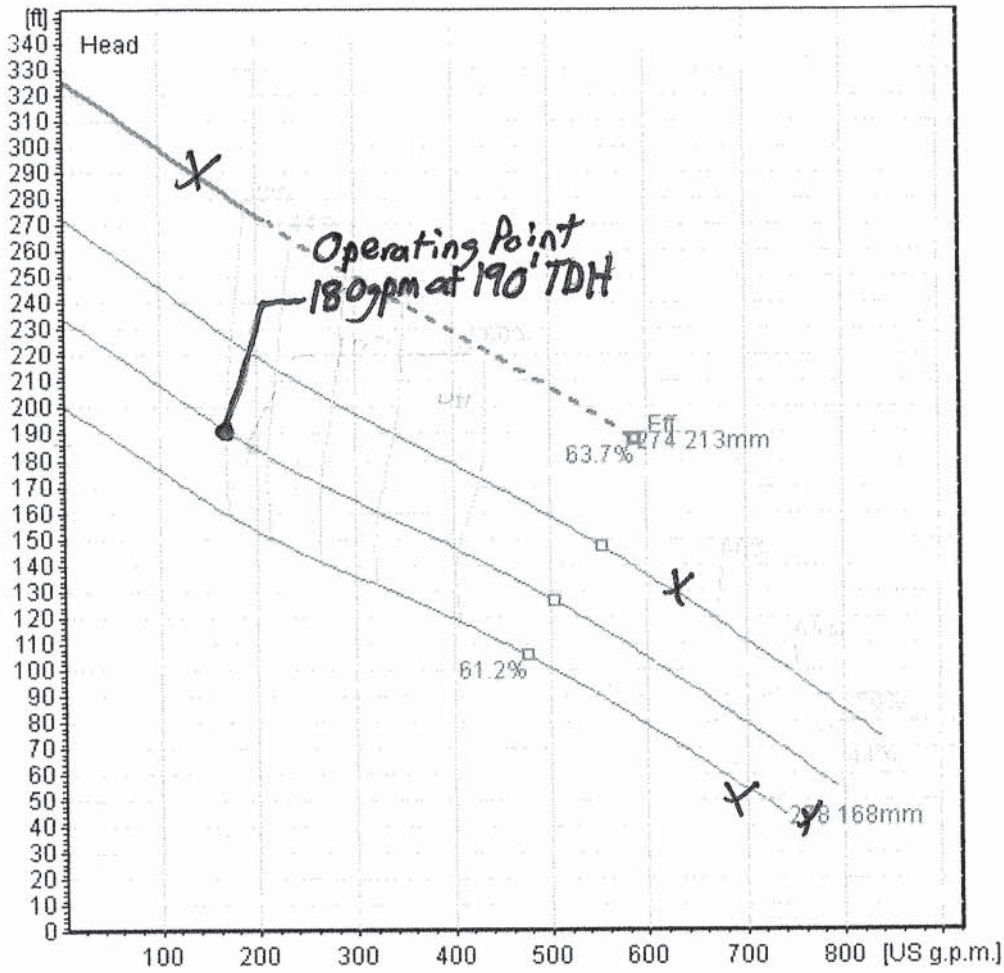
Base area of wet well (6.0 ft inside diameter) = 28.3 ft²
 Dose volume for 17 foot draw down (28.3 ft² * 1.7 ft * 7.48 gallons/ft³) = 360 gallons

Cycle time at Average Daily Flow
 Time to fill dose volume (360 gallons/ 15.9 gpm) = 22.6 min
 Rate of sewage leaving pump station (180 gpm –15.9 gpm) = 164.1 gpm
 Pump run time (360 gallons/164.1 gpm) = 2.2 min
 Pump cycle time (Fill time + Pump run time) = 22.6 min OK

Cycle time at Peak Hourly Flow
 Time to fill dose volume (360 gallons/ 171 gpm) = 2.1 min
 Rate of sewage leaving pump station (180 gpm –171 gpm) = 9.0 gpm
 Pump run time (360 gallons/9 gpm) = 40.4 min
 Pump cycle time (Fill time + Pump run time) = 42.5 min OK

The pump station will also include a valve pit. The valve pit will contain check valves to prevent back flow from the forcemain into the pump station and isolation valves so one pump can be taken out of service while the second continues to operate. The pump station will also include a backup generator. The backup generator is sized to allow continuous operation of the station in case a power interruption. The generator will have an automatic transfer switch. Backup generator sizing calculations will be provided in a future submission.

APPENDIX A
Pump Curves



N 3171 SH 3 phase 2 poles SmartRun 60hz US

SH

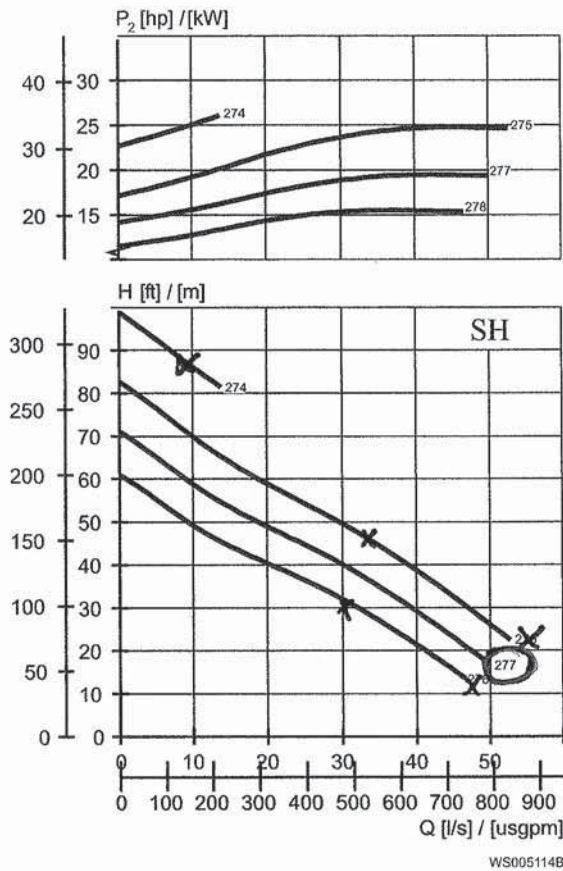


Table 16: 460 V, 60 Hz, 3-phase

Rated power, kW	Rated power, hp	Curve/ Impeller No	Revolutions per minute, rpm	Rated current, A	Starting current, A	Power factor, cos φ	Installation
26	35	274	3520	39	273	0.92	P,S,T,Z
26	35	275	3520	39	273	0.92	P,S,T,Z
26	35	277	3520	39	273	0.92	P,S,T,Z
26	35	278	3520	39	273	0.92	P,S,T,Z



3.3 Motor rating and performance curves 3171.660/.670

These are examples of motor rating and curves. For more information, please contact your local sales and service representative.

Star-delta starting current is 1/3 of Direct on-line starting current.



WATER ENGINEERING REPORT

For

**G and F Subdivision Lots 6 and 7
Town of Carmel, New York**

January 28, 2022

Prepared By
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

CONTENTS

	PAGE
1.0 INTRODUCTION	1
2.0 DESIGN FLOW	1
3.0 PROPOSED STANDARD PRESSURE IMPROVEMENTS	2
3.1 Design Flow	2
3.2 Storage Tank	2
3.3 Distribution System	2
4.0 PROPOSED HIGH SYSTEM IMPROVEMENTS	3
4.1 Design Flow	3
4.2 Booster Pump Station	3
4.3 Distribution System	4

FIGURES

Figure 1 Location Map

APPENDICES

Appendix A EPANET 2.0 Model
Appendix B Pump and System Curves

1.0 INTRODUCTION

The G and F Subdivision is an overall development plan totaling approximately 183 acres in the Town of Carmel. The site is located along the northern side of US Route 6 with frontage stretching from the intersection with Old Brewster Road east to the Southeast Town line. This report is prepared for the water supply for Lot 6 and Lot 7 of the G&F Subdivision. The tax map numbers for Lot 6 and Lot 7 are 55.-2-24.6-1, 55.2-24.7-2, and 55.2-24.8-2.

Lot 6 is proposed to be developed with 115 units of senior housing and 35 units of multifamily housing and Lot 7 with 150 units of multifamily housing and a shared clubhouse. Water for the two parcels will be provided by a connection to the Carmel Water District #2. Lot 7 will use existing system pressure and Lot 6 will include a pump station to provide a high-pressure system.

2.0 DESIGN FLOW

The maximum daily design flows for Lots 6 and 7 are based on the hydraulic loading rates listed in the New York State Department of Environmental Conservation's (NYSDEC) publication *Design Standards for Wastewater Treatment Works – 2014* (DSWTF). The following table lists the proposed uses, associated hydraulic loading rates, and the design flow rates (gallons per day or gpd) for Lots 6 and 7. Note that while no additional flow is expected for the clubhouse because it is proposed to serve residents and their guests, 400 gpd has been included for potential visitors.

Proposed Use	Hydraulic Loading Rate	Maximum Daily Design Flow (gpd)
Gateway Summit 115 2-BR Senior Housing Units 35 3-BR Multifamily Units Clubhouse (Visitors)	2 x 110 gpd/BR 3 x 110 gpd/BR 400 gpd	25,300 11,550 400
The Fairway 150 3-BR Senior Housing Units Clubhouse (visitors)	3 x 110 gpd/BR 400 gpd	49,500 400
Maximum Daily Design Flow Total		87,150

The average daily flow for the project is expected to be significantly less than the maximum daily design flow. The maximum daily design flows represent conservative flows to ensure that the proposed sewer and water works are designed with an ample factor of safety.

The anticipated actual flows are based on anticipated occupancy rates and measured data for water use. The expected number of residents anticipated for the project is 323 persons in Gateway Summit and 435 persons in The Fairways for a total of 758 persons. Data from the American Water Works Association (AWWA) shows that the average in home water use is 69 gpd per person. This number is reduced to 45 gpd per person when water saving fixtures are used, which is the case for this project. Based on a projected population of 758, the average daily flow is anticipated to be 34,110 gpd. Therefore, the average flow of 34,110 gpd should be referenced when assessing the district's available flow capacity.

The 87,150 gpd maximum daily design flow for Lots 6 and 7 is part of the previously approved flow for the G & F Subdivision. The approved allocation for Lots 2 through 7 of the G & F Subdivision is 113,630 gpd per a July 11, 2018 memo from Richard Franzetti, P.E. Town Engineer.

3.0 PROPOSED STANDARD PRESSURE IMPROVEMENTS

3.1 Design Flow

CWD #2 currently includes three storage tanks, located at approximately the same elevation and are spread throughout the system. In order to determine the proposed distribution system improvements, the following assumptions were made: each tank provides $\frac{1}{3}$ of the flow, all flow comes from storage and none from the treatment plant, a 1.5 factor of safety is applied to the flow. The following calculations are the basis of the design of the proposed distribution system improvements as described in Section 3.3 and modeled in Appendix A.

*Estimated existing peak flow from existing tank = 600 gpm (1.5 factor of safety x 400 gpm)

*Proposed booster pump station design flow (Lot 6) = 71 gpm (see Section 3.1)

*Proposed G and F Subdivision (Lots 1 to 5) design flow = 51 gpm

*Proposed G and F Subdivision (Lot 6 and Lot 7) design flow = 172 gpm

*These flows are utilized in the EPANET 2.0 model in Appendix A.

3.2 Storage Tank

CWD #2 has recently completed a design for replacement of the 300,000-gallon Everett Road Tank with a 500,000-gallon tank. This project is scheduled for bidding and construction in 2022. This improvement is intended to address current and future storage demands for the district. The Gateway Summit project continues to propose a 139,000-gallon water storage tank to supplement the existing 300,000-gallon tank, if the district's plan for the new 500,000 gallon is delayed or aborted. Should the district complete the new 500,000-gallon tank as envisioned the 139,000-gallon tank will not be necessary and will be eliminated from the Gateway Summit project improvements.

If the 139,000-gallon tank is installed the proposed tank will operate in the same manner as the existing adjacent 300,000-gallon storage tank. It will have a single connection to the proposed main and its level will be controlled with an altitude valve. The settings for the operation of the valve will be the same as the existing adjacent tank.

3.3 Distribution System

The proposed standard pressure system distribution system improvements include approximately 5,700 l.f. of 8" diameter PVC watermain in proposed Lots 6 and 7 of the G and F Subdivision. Please note that the proposed watermain through Lot 6 is proposed to loop the standard pressure system through Lot 7 and that no services are proposed for the senior housing units from the Lot 6 portion of the main. The Lot 6 senior housing units will be supplied with water from the proposed high system (see Section 4.0).

The computer program EPANET 2.0 (see Appendix A) was used to model the proposed distribution system improvements. The EPANET 2.0 program was also used to assess the proposed domestic flow pressures in proposed Lot 7 as well as fire flow conditions. As seen in Appendix A the pressure in the proposed main in Lot 7 (for domestic flows) will be 35 psi or greater. During a fire flow of 600 gpm (based on proposed fire protection system requirements for Lots 6 and 7) the pressure in the proposed standard pressure distribution system will be maintained at 20 psi or greater.

4.0 PROPOSED HIGH SYSTEM IMPROVEMENTS

Kelley Ridge Pressure

CWD #2 recently completed a significant distribution system cleaning and pipe lining contract. This contract included the mains servicing the Kelley Ridge area and beyond. These improvements will

improve the pressure and flow characteristics in the system. The G&F project proposes multiple connections to the CWD #2 distribution system at Old Route 6, Kelley Ridge Road and Everett Road providing multiple looping of the water mains. This network arrangement will also provide for redundant and improved flow and pressure conditions.

The proposed high system improvements include a new booster pump station and approximately 5,000 l.f. of 6" and 8" diameter PVC watermain. The proposed booster pump station will provide water to the senior housing portion of proposed Lot 6.

4.1 Design Flow

Though the actual flows are anticipated to be lower, the maximum daily design flow is used for booster pump station and watermain sizing. The proposed booster pump station will supply water to the 115 senior housing units on lot 6.

	Hydraulic Loading Rate	Maximum Daily Design Flow (gpd)
Lot 6 115 2-BR senior housing units	2 x 110 gpd/bedroom	25,300
Total		25,300

As calculated above the maximum daily design flow for these units is 25,300 gpd. The Peak hourly flow for domestic use is calculated using a peaking factor that is based on the population of the subject project. The publication Recommend Standards for Wastewater Facilities (2014) was used to determine a peaking factor of 4.

Peak Domestic Flow

$$25,300\text{gpd} \div 24\text{hr/day} \div 60 \text{ min/hr} = 17.6 \text{ gpm}$$

$$\text{Peak Domestic Hourly flow} = 17.6 \text{ gpm} \times 4 = 70.4 \text{ (use 71)}$$

The pump will also be sized to provide a 600 gpm fire flow.

The booster pump station total design flow is as follows:

Domestic peak flow	=	71 gpm
Fire protection flow	=	600 gpm
Total design flow	=	671 gpm

4.2 Booster Pump Station

The booster pump station is designed to provide water to the senior housing units of Lot 6. The station is also designed to provide the required fire flow for Lot 6. Variable frequency drives will be utilized to maintain a constant discharge pressure from the pump station. An emergency generator is proposed to provide back up power. The design parameters for the system are provided below.

Static Head Loss

Elevation of Pump House	=	730 ft
Pressure Head to be maintained at pumphouse 40 psi (40 psi * 2.31 ft/psi)	=	92 ft
Elevation of Highest House	=	726 ft
Static Head at highest house	=	96 ft (42 psi)

Elevation of Lowest house	=	660 ft
Static Head at Lowest house	=	162 ft (70 psi)

Friction Head Loss

Head loss ft/100ft in		
8" PVC DR 14 at Peak Hourly Flow (71 gpm)	=	0.024 ft/100 ft
6" PVC DR 14 at Peak Hourly Flow (36 gpm (two directions))	=	0.025 ft/100 ft
8" PVC DR 14 at Fire Flow (671 gpm)	=	0.900 ft/100 ft
6" PVC DR 14 at Fire Flow (336 gpm (two directions))	=	0.644ft/100 ft
Length of 8" main to tee (Includes 20% for fittings)	=	300 ft
Max Length of 6" main to center of loop (Includes 20% for fittings)	=	1600 ft
Max headloss Peak Hourly Flow (0.024*300/100+0.098*1600/100)	=	2 ft/1psi
Max headloss Fire Flow (10.900*300/100+0.934*1600/100)	=	18 ft/8psi

The control system will be designed to maintain 40 psi at the pump station. With a Domestic Pressure loss of 1 psi the lowest system pressure under domestic slow will be 39 psi. With a loss of 8 psi under fire flows the minimum pressure would be 32 psi for fire flows. As shown above this allows the system to meet RSWW minimum pressure at service connection of 35 psi and the RSWW and AWWA M31 fire flow pressure requirement of 20 psi.

The original pump station was sized to provide 210 gpm domestic and 810 gpm total flow. As the flows have been reduced to 71 gpm domestic and 761 gpm total flow (reduced unit flow rates for modern plumbing fixtures and 35 units will be connected to the standard pressure system) the original pumps discussed below are now oversized for the system. The pump selections will be revisited in the future submissions.

The system will consist of four pumps. Two Grundfos CR20 pumps running in parallel will handle the domestic flow. These pumps will maintain 40 psi at the booster pump station and supply the peak domestic demand of 210 gpm. Two Berkeley 4 x 5 x 13 BH (B4JPBH) will provide the required fire flow. These pumps are each capable of providing the 810-gpm total design flow. With the redundant pump, all service will be maintained even with the best pump out of service. A small hydro-pneumatic tank is also included in the system to maintain proper pump cycling. See Appendix B for pump and system curves.

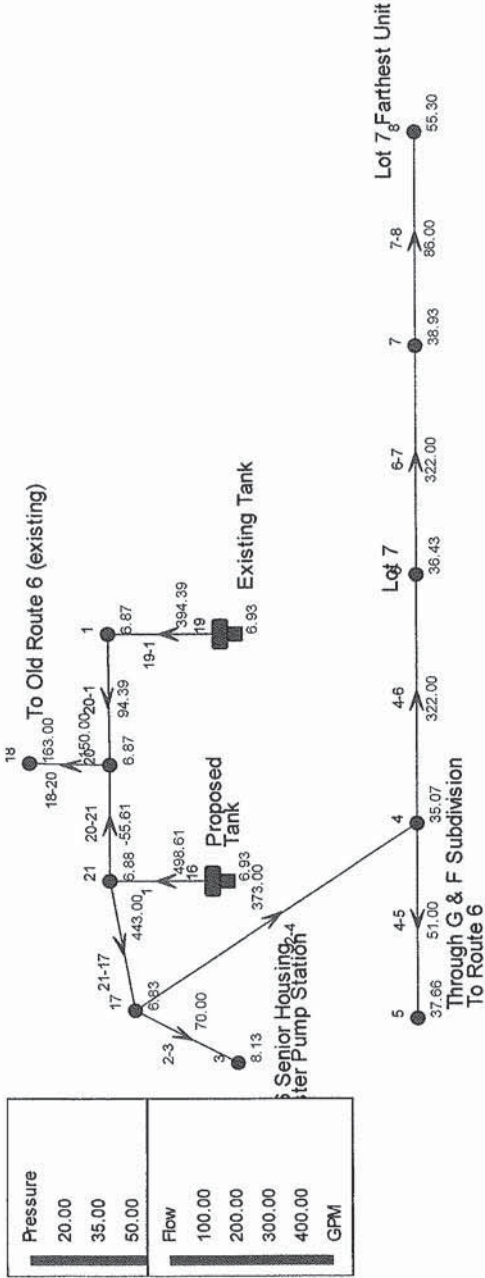
4.3 Distribution System

The proposed high system distribution system improvements include approximately 5,000 l.f. 6" and 8" diameter PVC watermain. Six fire hydrants are proposed for the high system. Two hydrants connected to the standard pressure system are proposed to supplement the booster pump system. These hydrants will be a different color to distinguish between the systems.

APPENDIX A
EPANET 2.0 Model

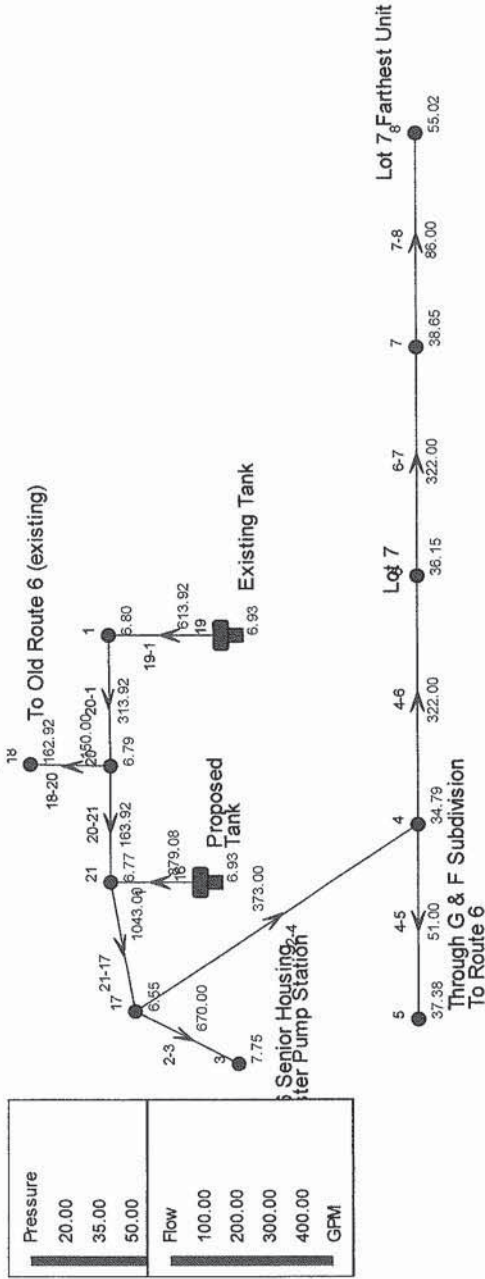
Junction Pressure and Pipe Flow (Lot 6 and Lot 7 Domestic Flow)

Day 1, 12:00



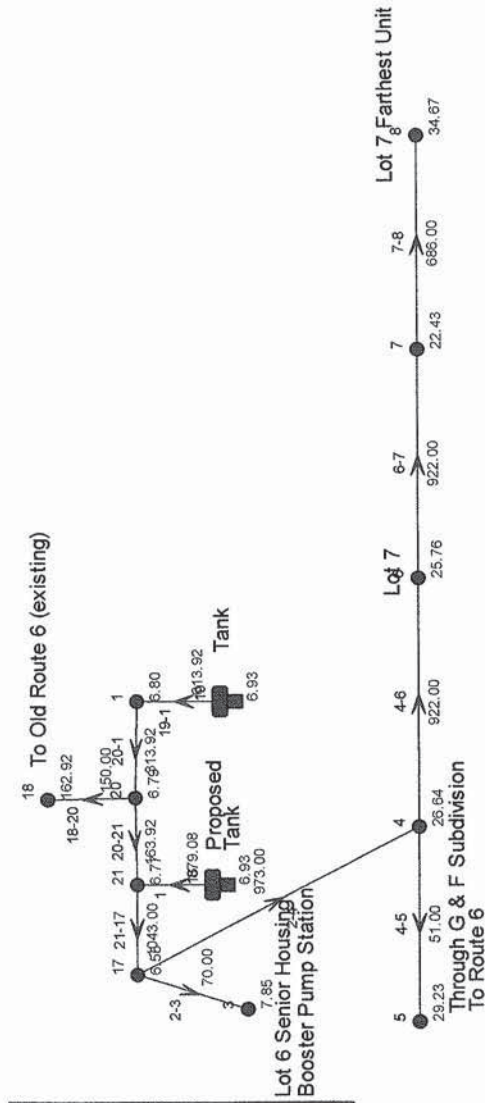
Junction Pressure and Pipe Flow (Lot 6 Fire Flow)

Day 1, 12:00



Junction Pressure and Pipe Flow (Lot 7 Fire Flow)

Day 1, 12:00

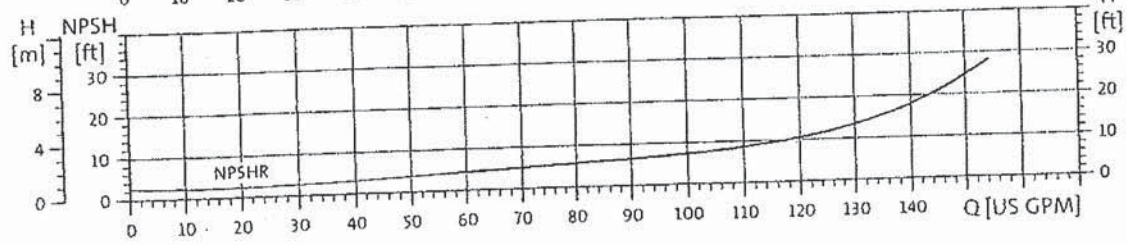
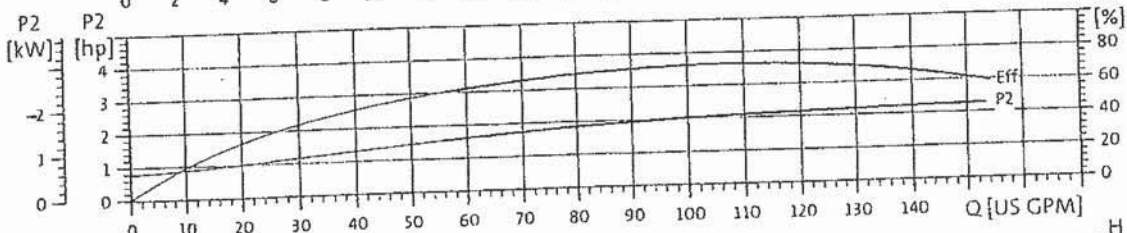
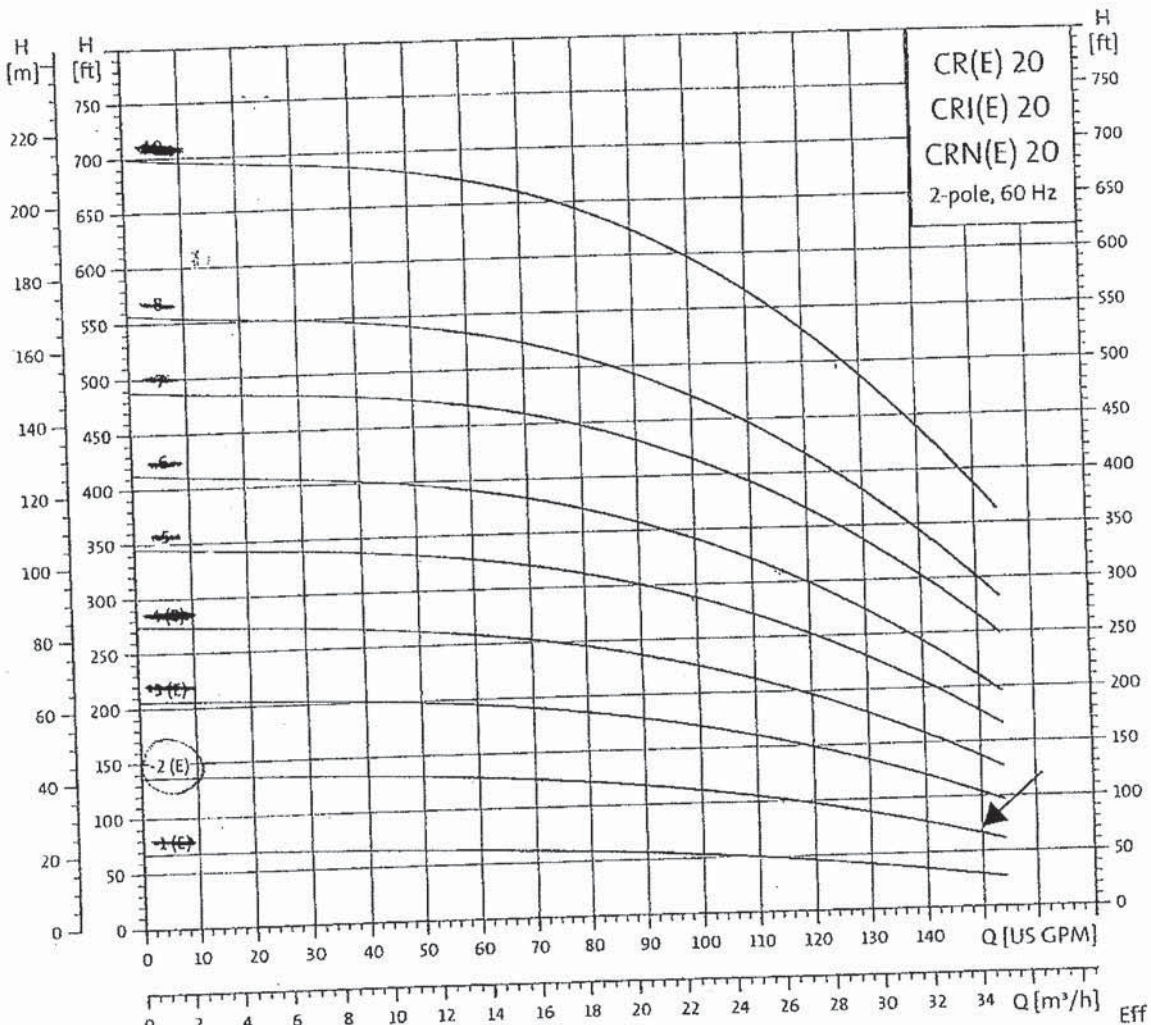


Lot 6 Fire Flow

APPENDIX B
Pump and System Curves

Performance curves

CR(E) 20
CRI(E) 20
CRN(E) 20
2-pole, 60 Hz



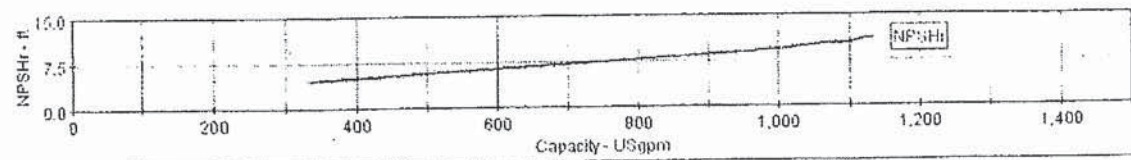
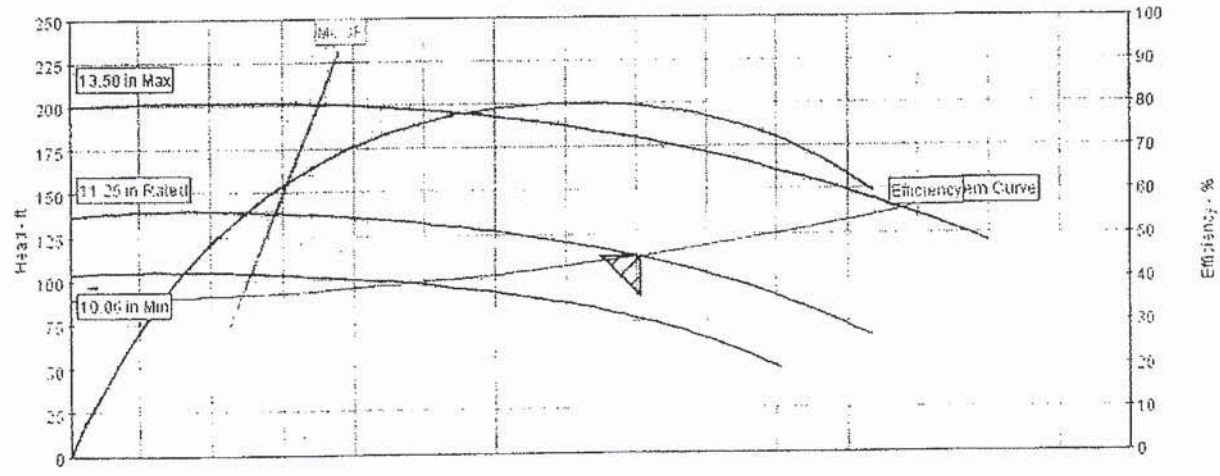
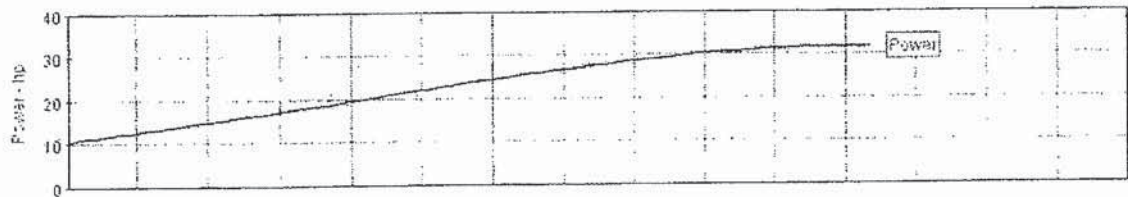
TM402 7223 2803

Pump Performance Datasheet

Customer	Quote number	
Customer reference	Pump size	4 x 5 x 13 BH (B4JPBH)
Item number	Stages	1
Service	Based on curve number	9013
Quantity of pumps : 1	Date last saved	11 Jun 2007

Operating Conditions		Liquid	
Flow, rated	: 805.0 USgpm	Liquid type	: --Water
Head, rated (requested)	: 112.0 ft	Additional liquid description	:
Head, rated (actual)	: 112.3 ft	Solids diameter, max	: 0.00 in
Suction pressure, rated / max	: 0.00 / 0.00 psi.g	Temperature, max	: 68.00 deg F
NPSH available, rated	: Ample	Fluid density, rated / max	: 0.998 / 0.998 SG
Frequency	: 60 Hz	Viscosity, rated	: 1.00 cP

Performance		Material	
Pump speed, rated	: 1,750 rpm	Material requested	: Not specified
Impeller diameter, rated	: 11.25 in	Material selected	: Not specified
Impeller diameter, maximum	: 13.50 in		
Impeller diameter, minimum	: 10.06 in	Pressure Data	
Efficiency	: 79.35 %	Maximum working pressure	: 60.36 psi.g
NPSH required / margin required	: 7.74 / 0.00 ft	Maximum allowable working pressure	: 165.0 psi.g
Specific speed / Suction specific speed	: 1,087 / 10,646 US units	Maximum allowable suction pressure	: N/A
MCSF	: 289.4 USgpm	Hydrostatic test pressure	: N/A
Head, maximum, rated diameter	: 139.5 ft	Driver & Power Data	
Head rise to shutoff	: 21.96 %	Driver sizing specification	: Rated power
Flow, best eff. point (BEP)	: 718.3 USgpm	Margin over specification	: 0.00 %
Flow ratio (rated / BEP)	: 112.08 %	Service factor	: 1.00 (used)
Diameter ratio (rated / max)	: 83.33 %	Power, hydraulic	: 22.73 hp
Head ratio (rated dia / max dia)	: 62.34 %	Power, rated	: 28.64 hp
Viscous coefficients (CQ / CH / CE)	: 1.00 / 1.00 / 1.00	Power, maximum, rated diameter	: 31.74 hp
Selection status	: Acceptable	Minimum recommended motor rating	: 30.00 hp / 22.37 kW



NOTE: The NYSDEC Freshwater Wetland Boundary (as shown on this drawing) and wetland block (shown below) is as shown on drawing MW-1, NYSDEC Wetland Application Map #1, prepared by InSite Engineering, Surveying & Landscape Architecture, P.C., dated December 08, 2018.

NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION

The Freshwater Wetland Boundary as represented on these plans accurately depicts the limits of Freshwater Wetland LC-226.6-1-C-22 as delineated by The Meter Associates & Dave Soudie on April 2002

DEC Date: 12/16/19
 Date Valid: 12/16/19, Expiration Date: 12/16/20

Wetland boundary delineations as validated by the New York State Department of Environmental Conservation remain valid for the (2) years unless existing activities, new landings or land use activities change (e.g., upland to wetland). After the (2) years the boundary must be revalidated by DEC staff. Revalidation may include a new delineation and survey of the wetland boundary.

Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the Freshwater Wetland or within 100 feet of the wetland boundary as depicted on this plan requires a Construction Law (CL) Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetland Act) prior to commencement of work.

\$156-28 MULTI-FAMILY DWELLINGS ZONING REQUIREMENTS:

	Required/Default:	Proposed:
Min. Lot Area	435,600 SF (10.0 AC)	3,604,859 SF (82.7 AC)
Min. Density (Units/Acre)	5.0	1.8
Max. Dwelling Units	150	150
Min. Building Coverage	30%	6.1%
Min. Pathway Property Line Setback	100'	40'
Min. Building Height/Storeys	30'	less than 30'
Min. Building Length	200'	142'
Min. Recreation Space	300 SF / unit	533 SF / unit
Min. Landscape Buffer	10'	Greater than 10'

THE FAIRWAYS MULTIFAMILY RECREATION TABLE

	Total Recreation Provided (300 s.f./unit) - 300 s.f. x 150 units = 45,000 s.f. at Required.
Pool/Courts Area	18,000 s.f.
Treils	60,000 s.f.
Ballfields and Deck	2,000 s.f.
Total Recreation Provided:	80,000 s.f.

Owner/Applicant:
 Fair Fair Realty Company, LLC
 1818 Route 6, Suite 1
 Carmel, NY 10512

Site Data:
 Total Area: 181.75 AC± (Existing)
 A2-28 AC± (Proposed)
 The Map No.: 22-28-24-2
 Zoning District: C-28 (Commercial Business Park)
 R (Residential)

Parking Requirements:

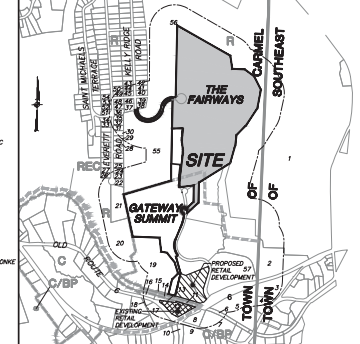
2.0 spaces per unit x 150 units multi-family	= 300 spaces
Total spaces required	= 300 spaces

Parking Provided	Indoor parking spaces	Outdoor parking spaces
3-story townhome units	164	82
3-story townhome and units	60	30
3-story townhome interior units	64	32
Motor spaces	—	10
Recreation area parking	—	34
Subtotal	262	198
Total spaces provided	460	

* 1 parking space in garage and 1 h driveway of each unit
 ** 2 parking spaces in garage and 1 h driveway of each unit

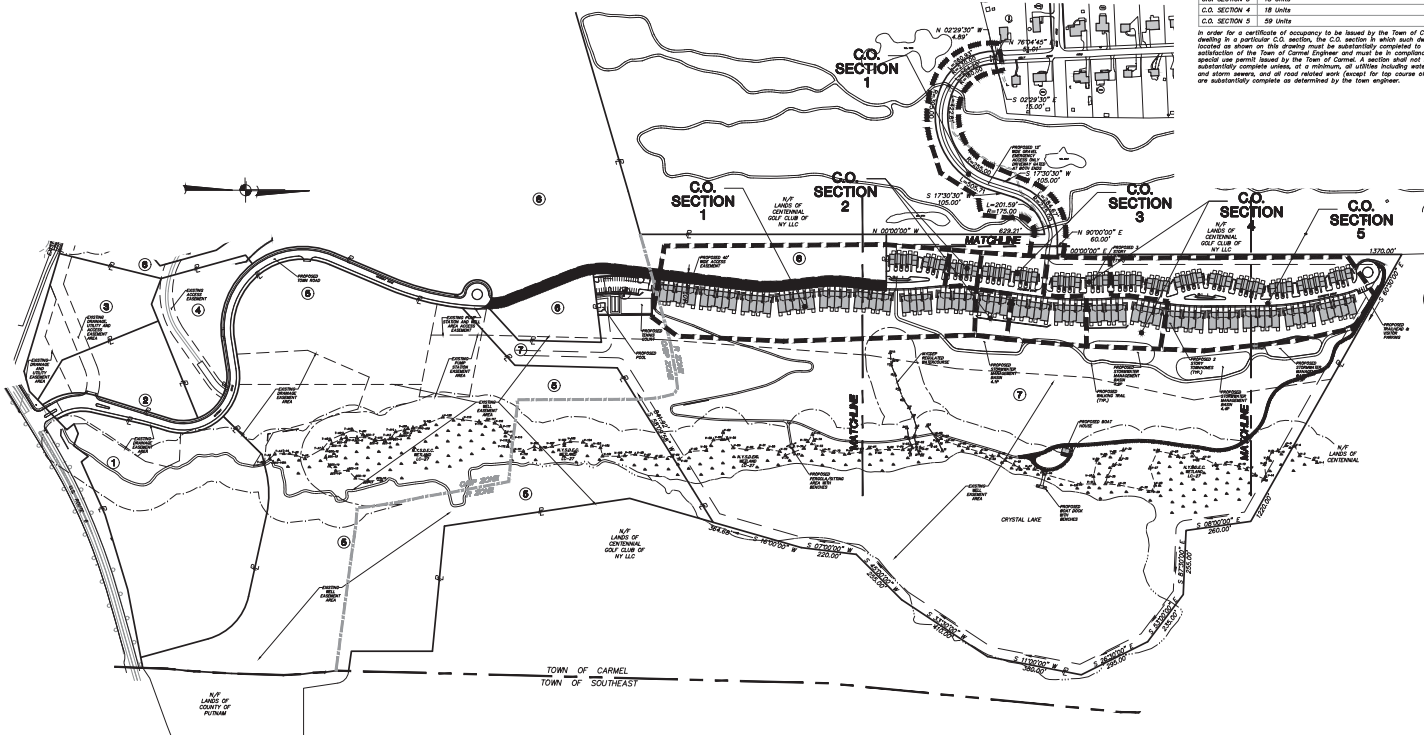
500' Adjacent:

- TOWN OF SOUTHCASTLE**
- 1. N/F CENTINALE GOLF CLUB OF NY LLC
 - 2. N/F COUNTY OF PUTNAM
 - 3. N/F HUNTY LEAK LUTHERAN CHURCH
 - 4. N/F TOWN OF
- TOWN OF CARMEL**
- 5. N/F BLANDS
 - 6. N/F COUNTY OF PUTNAM
 - 7. N/F CARMEL SPORTS, LLC
 - 8. N/F MCKEAN ASSOCIATES
 - 9. N/F MCKEAN, LLC
 - 10. N/F R2 OLD ROUTE 6 LLC
 - 11. N/F COUNTY OF PUTNAM
 - 12. N/F DURBIN WATER REALTY LLC
 - 13. N/F DURBIN
 - 14. N/F DURBIN
 - 15. N/F DURBIN
 - 16. N/F DURBIN
 - 17. N/F R2 OLD ROUTE 6 LLC
 - 18. N/F R2 OLD ROUTE 6 LLC
 - 19. N/F COUNTY OF PUTNAM
 - 20. N/F COUNTY OF PUTNAM
 - 21. N/F TOWN OF CARMEL
 - 22. N/F CARMEL
 - 23. N/F CORNELIO
 - 24. N/F CARMEL
 - 25. N/F TOSMACH
 - 26. N/F TOSMACH
 - 27. N/F MERCHANT
 - 28. N/F ORIOLO CREATIVITY & GROWTH
 - 29. N/F KRISTELLER & TANDREN
 - 30. N/F WALKER & GALETTA
 - 31. N/F CONSTANCE
 - 32. N/F MCKEAN
 - 33. N/F DARRIGO
 - 34. N/F BURNHAMWOODS
 - 35. N/F KEEPER-OWENS
 - 36. N/F RAYES & GRABALA
 - 37. N/F KANE
 - 38. N/F KANE
 - 39. N/F KANE
 - 40. N/F FOUNTAINHEAD
 - 41. N/F LEXAR
 - 42. N/F BEZEMAK
 - 43. N/F BEZEMAK
 - 44. N/F MCKEAN
 - 45. N/F JONES GENERAL PALSY ASSOC OF PUTNAM & OUTDOORS
 - 46. N/F AMERINDO
 - 47. N/F BROOKS
 - 48. N/F RAYES & GRABALA
 - 49. N/F AMERINDO
 - 50. N/F DENNE
 - 51. N/F DENNE
 - 52. N/F DENNE
 - 53. N/F DENNE
 - 54. N/F DYER
 - 55. N/F CENTINALE GOLF CLUB OF NY LLC
 - 56. N/F HUDSON VALLEY REALTY CORP
 - 57. N/F JARAL PUTNAM LLC



Location Map Scale: 1" = 1000'

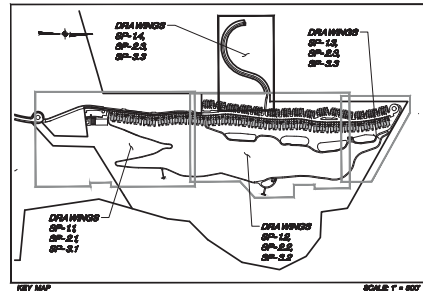
- General Notes:**
1. Boundary, existing conditions and topographic information for subject property based on surveys by Tert Bergmann Collins LLC.
 2. The wetland boundaries shown herein were delineated by The Meter Associates and survey located by Tert Bergmann Collins LLC.
 3. The subject property is Lot 7 as shown on a map entitled "Lot Line Adjustment for the G and F Subdivisions".
 4. These plans are based on the construction of Gateway Drive and its related infrastructure being substantially completed. A Building Permit shall not be issued until Gateway Drive is substantially complete in the vicinity of the project.
 5. The proposed subdivisions shall be protected by an automatic fire sprinkler system.
 6. The subject project is prohibited from using the municipal water system (CND #2) for irrigation purposes.
 7. This site is proposed to be serviced by a water connection to CND #2. This service connection is not dependent on the proposed 10psi pressure distribution system.
 8. Risk removal is not anticipated with the proposed site work. Should risk be encountered, and timing necessary, a clearing protocol shall be submitted to the building department.
 9. A separate application shall be submitted to the Putnam County Department of Health for review and approval of the proposed storming plan.



Certificate of Occupancy Sections

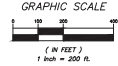
C.O. SECTION 1	48 Units, Recreation Area & Emergency Access
C.O. SECTION 2	9 Units
C.O. SECTION 3	18 Units
C.O. SECTION 4	18 Units
C.O. SECTION 5	59 Units

In order for a certificate of occupancy to be issued by the Town of Carmel for a dwelling in a particular C.O. section, the C.O. section it which such dwelling is located as shown on this drawing must be substantially completed. The substantial completion of the Town of Carmel Engineer and must be in compliance with the special use permit issued by the Town of Carmel. A section shall not be deemed substantially complete unless, at a minimum, all utilities including water, sanitary and storm sewers, and all road related work (except for the course of pavement), are substantially complete as determined by the town engineer.



List of Drawings

DRAWING NO.	DRAWING NAME	SHEET
SP-01	Overall Site Plan	1
SP-1.1	Layout & Landscape Plan	2
SP-1.2	Layout & Landscape Plan	3
SP-1.3	Layout & Landscape Plan	4
SP-1.4	Layout & Landscape Plan	5
SP-2.1	Grading & Utilities Plan	6
SP-2.2	Grading & Utilities Plan	7
SP-2.3	Grading & Utilities Plan	8
SP-3.1	Erosion & Sediment Control Plan	9
SP-3.2	Erosion & Sediment Control Plan	10
SP-3.3	Erosion & Sediment Control Plan	11
OSP-1	Overall Utility Plan	12
SP-1	House Profile	13
D-1	Site Details	14
D-2	Site Details	15
D-3	Site Details	16
D-4	Site Details	17
D-5	Site Details	18
D-6	Site Details	19
D-7	Sewer Pump Station Details	20



NO.	DATE	REVISION	BY

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
 3 Corvett Place
 Carmel, NY 10512
 (845) 225-8997
 (845) 225-8997 fax
 www.insite-arg.com

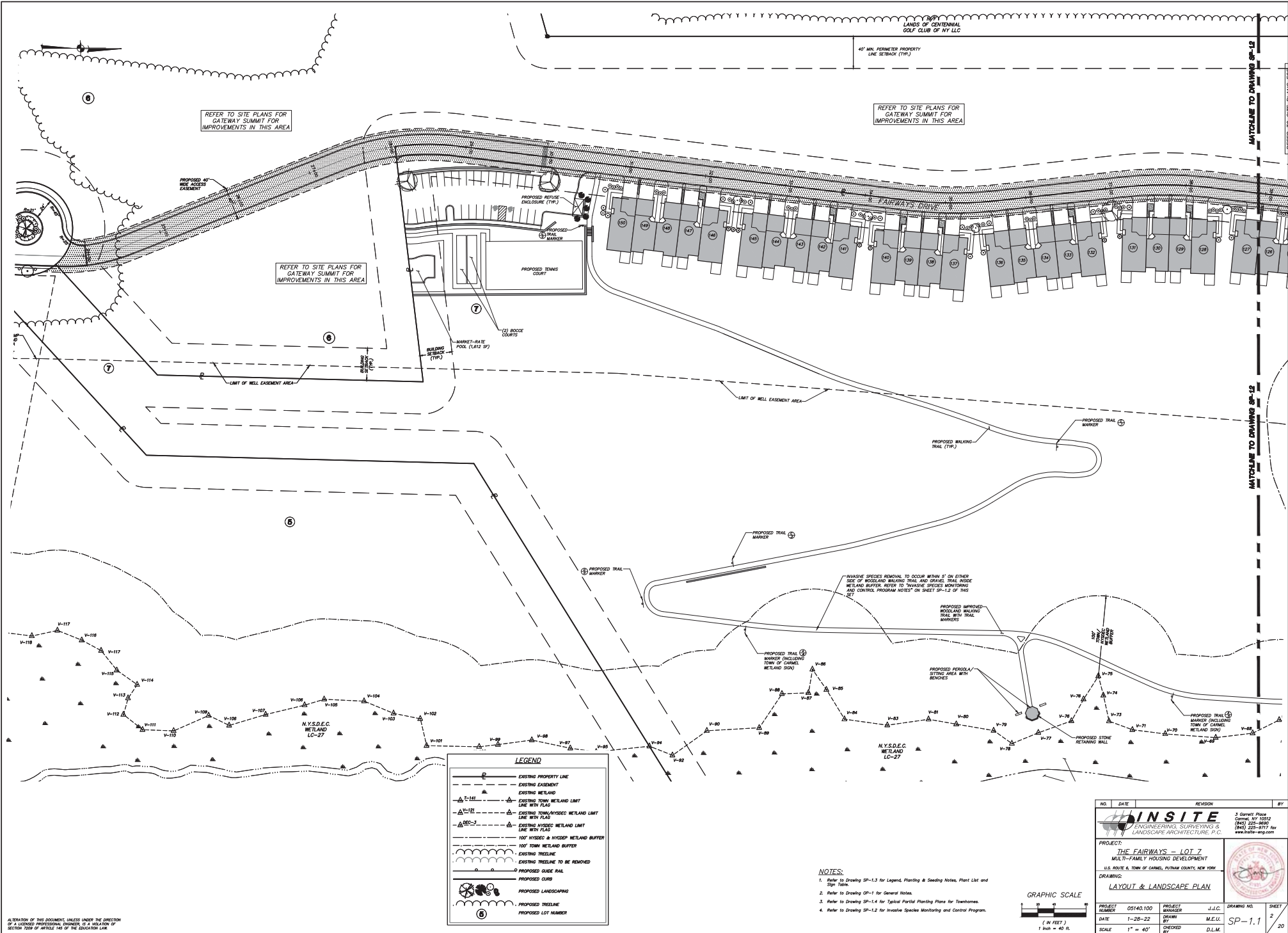
PROJECT: **THE FAIRWAYS - LOT 7**
 MULTI-FAMILY HOUSING DEVELOPMENT
 155 JONES & TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING: **OVERALL DEVELOPMENT PLAN**

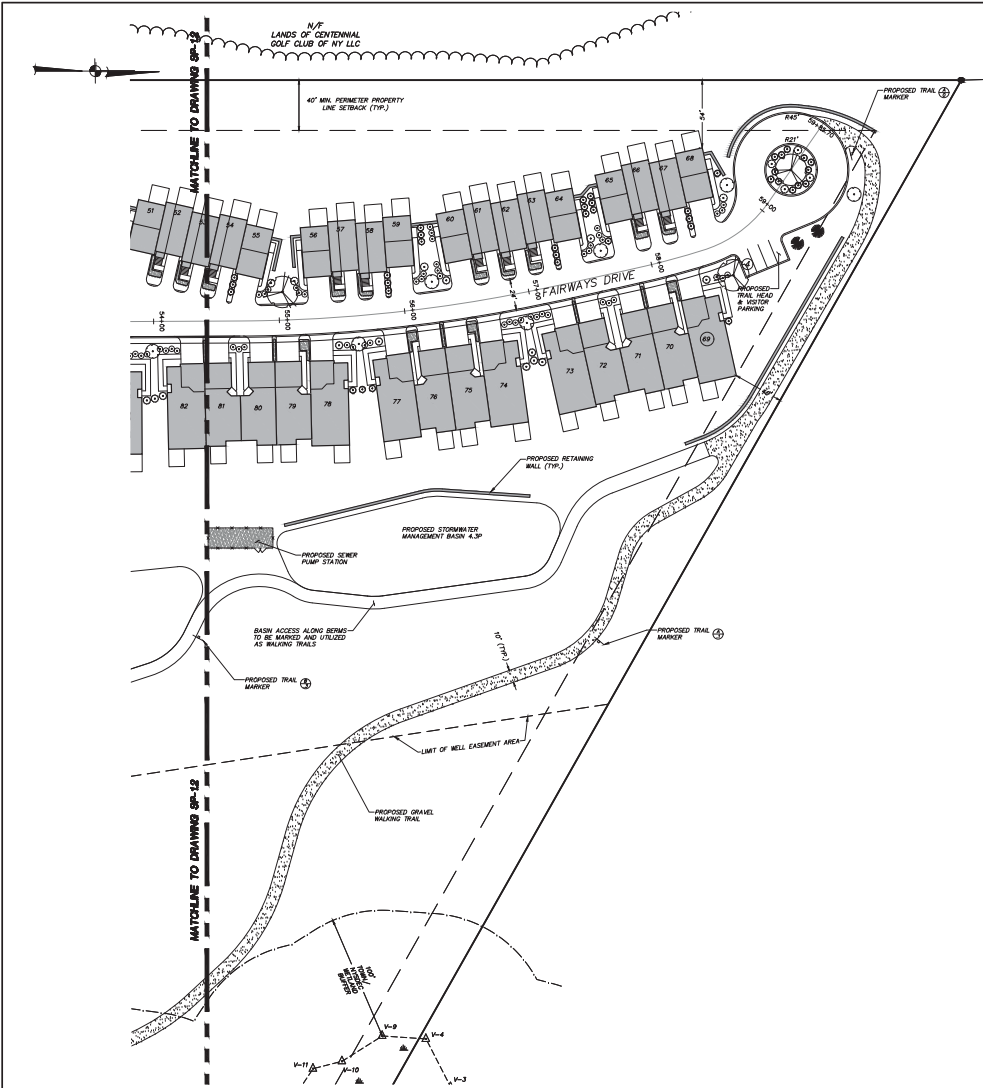
PROJECT NUMBER	DATE	SCALE	PROJECT MANAGER	DRAWN BY	CHECKED BY	J.L.C.	M.E.U.	D.L.M.
05140.100	1-28-22	AS SHOWN	J.L.C.	M.E.U.	D.L.M.			

DRAWING NO: **OP-1** SHEET: **1** OF **20**

ALLOCATION OF THIS DOCUMENT, UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2089 OF ARTICLE 146 OF THE EDUCATION LAW.

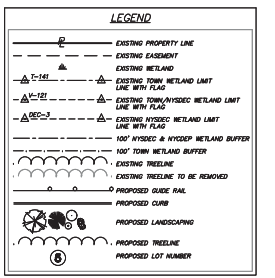


NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT 115 BOICE & TOWN OF GARDEL, PUTNAM COUNTY, NEW YORK			
DRAWING: LAYOUT & LANDSCAPE PLAN			
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
DRAWING NO. SP-1.1			SHEET 2 20



- Planting & Seeding Notes:**
- All plant materials to be nursery grown.
 - Plants shall conform with the American Association of Nurserymen Standards in all ways including dimensions.
 - Plants shall be planted in all locations designated on the plan or as staked in the field.
 - All plants shall be hardy under climate conditions similar to those in the locality which they are to be planted.
 - 3" of Fine Bark Mulch shall be spread over all planting beds areas.
 - All proposed seeded areas to receive 4" min. depth of topsoil of proposed landscaped areas to receive 12" min. depth of topsoil.
 - Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in combination with mulch shall be as follows:
 - For filter strips at the rate of 16 lbs./1,000 sq. ft. using 12-4-4 or equivalent.
 - Seed mixture to be planted between April 1 and May 15, or between August 15 and October 15 or as directed by Project Representative at a rate of 50 lbs./acre in the following proportions:
 - 40% Creeping Red Fescue
 - 20% Annual Ryegrass
 - 20% Annual Ryegrass
 - 20% Annual Ryegrass
 - Mulch: Soft Hay or Small Grain Straw applied at a rate of 90 lbs./1,000 sq. ft. or 2 tons/acre to be applied and anchored according to Item 304 - Soil Stabilization, Section 6.0, Standard Contract, Level 1 Edition.
 - If the season prevents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent.
 - Seed mix for tops of berms, outside of stormwater basins, and steep slopes to be "Native Seed" (See Note #7 Annual Ryegrass (ERMA-187) areas at a rate of 1.2 lbs./1,000 sq. ft. as manufactured by Ernst Conservation Seeds.
 - Seed mix for stormwater basin bottoms to be "Native Detention Area Mix" (ERMA-182) spread at a rate of 0.5 lbs./1,000 sq. ft. as manufactured by Ernst Conservation Seeds.
 - Seed mixture for situations associated with trail improvements in the wetland buffer to be planted between March 21 and May 25, or between August 15 and October 15 or as directed by project representative at a rate of 30 pounds per acre using (ERMA-132-1), Native 80%-100% Birch seed mix with Annual Ryegrass.

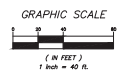
PLANT LIST				
KEY	BOTANICAL/COMMON NAME	SIZE	ROOT	REMARKS
SHADE TREES				
AW	Acer rubrum / October Glory / October Glory Red Maple	2 1/2" - 3" CAL.	B # # #	
SL	Liquidambar styraciflua / Sweetgum	2 1/2" - 3" CAL.	B # # #	
PO	Quercus palustris / Pin Oak	2 1/2" - 3" CAL.	B # # #	
BE	Betula papyrifera / Paper Birch	6" - 8" HT.	B # # #	Multi-stem
GT	Gleditsia triacanthos / Honey Locust	6" - 10" HT.	B # # #	
LL	Liriodendron tulipifera / Yellow Poplar	6" - 10" HT.	B # # #	
FLOWERING TREES				
BP	Pyrus calleryana 'Bradford' / Bradford Pear	2" - 2 1/2" CAL.	B # # #	
DOG	Cornus Kousa / Kousa Dogwood	2" - 8" HT.	B # # #	
DB	Cercis canadensis / Eastern Redbud	6" - 10" HT.	B # # #	
SS	Amanchler canadensis / Shadblow Serviceberry	6" - 10" HT.	B # # #	Multi-stem
WH	Crataegus phaenopyum / Washington Hawthorn	2" - 2 1/2" CAL.	B # # #	
PE	Prunus pennsylvanica / Purple Leaf Plum	2" - 2 1/2" CAL.	B # # #	
CA	Malus floribunda / Japanese Flowering Crabapple	2" - 2 1/2" CAL.	B # # #	
SHRUBS & GROUNDCOVERS				
POT	Potentilla fruticosa 'Queen' / Queen Potentilla	2 GAL.	CONT.	
DAY	Hemerocallis 'Stella D'Oro' / Miniature Daylilies	2 GAL.	CONT.	
JAN-1	Juniperus horizontalis 'Plumosa Nana' / Dwarf Androm Juniper	3 GAL.	CONT.	
JAN-2	Juniperus squarata / Square's Juniper	2 GAL.	CONT.	
JAN-3	Juniperus horizontalis 'Blue Rug' / Blue Rug Juniper	4" - 2 1/2" HT.	B # # #	
RAH	Rhododendron 'TAM' / TAM Rhododendron	3 GAL.	CONT.	
PC	Rhododendron 'Purple Gem' / Purple Gem Rhododendron	3 GAL.	CONT.	
COT	Cotoneaster salicifolia / Cranberry Cotoneaster	3 GAL.	CONT.	
ME	for Meadows / Holly	4" - 5" HT.	B # # #	
RD	Cornus Sericea / Red Tidy Dogwood	4" - 5" HT.	B # # #	
SPR	Spiraea japonica 'Anthony Waterer' / Anthony Waterer Spiraea	3" - 4" HT.	CONT.	
AND	Plant japonica 'M. Pink' / M. Pink Anemone	2" - 2 1/2" HT.	CONT.	
RHO	Rhododendron catawbiense / Catawba Rhododendron	2 1/2" - 3" HT.	CONT.	
NE	for glabra compacta / Dwarf Nannyberry	18" - 24" HT.	CONT.	
TAX	Taxus canadensis 'Pendula' / English Yew	18" - 24" HT.	CONT.	
FOR	Foraythia x starmadia / Border Foraythia	4" - 5" HT.	CONT.	
VC	Vaccinium angustifolium / Lowland Blueberry	3 GAL.	CONT.	
VB	Viburnum prunifolium / Blackhaw Viburnum	2 1/2" - 3" HT.	B # # #	
HY	Hydrangea arborescens 'Annabelle' / Hydrangea	5 GAL.	CONT.	



- NOTES:**
- Refer to Drawing SP-1.3 for Legend, Planting & Seeding Notes, Plant List and Sign Table.
 - Refer to Drawing GP-1 for General Notes.
 - Refer to Drawing SP-1.4 for Digital Pointed Planting Plans for Wetlands.
 - Refer to Drawing SP-1.2 for Invasive Species Monitoring and Control Program.

Key	Sign	Material Number	Size of Sign (x.H)	Description
1	STOP	R1-10	30" x 30"	White on Red
2	NO PARKING	R2-5	12" x 18"	Blue on White
3	NO STOPPING	R4-7C	24" x 30"	Black on White

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



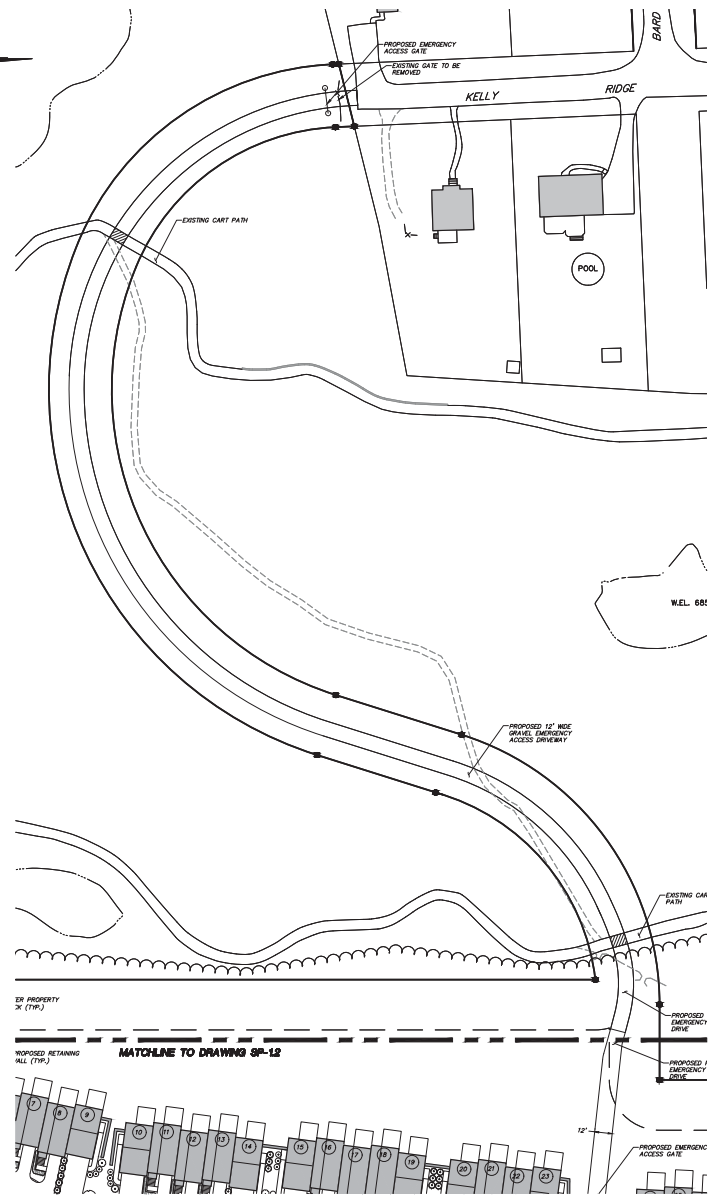
INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

3 Corbett Place
Carmel, NY 12512
(845) 225-8997
(845) 225-8997 fax
www.insite-arg.com

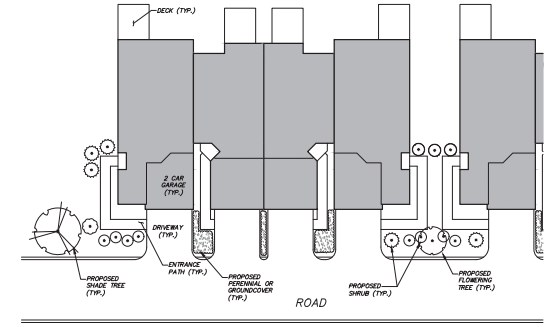
PROJECT:
THE FAIRWAYS - LOT 7
MULTI-FAMILY HOUSING DEVELOPMENT
1/5, 2/5 & 3/5 OF CORNELL, PUTNAM COUNTY, NEW YORK

DRAWING:
LAYOUT & LANDSCAPE PLAN

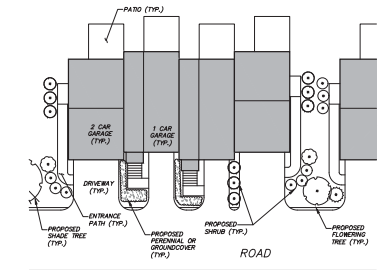
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	1-28-22	BY	M.E.U.	SP-1.3	4
SCALE	1" = 40'	CHECKED BY	D.L.M.		20



LEGEND	
—	EXISTING PROPERTY LINE
—	EXISTING EASEMENT
—	EXISTING WETLAND
—	EXISTING FORM WETLAND LIMIT LINE WITH FLAG
—	EXISTING FORM WETLAND LIMIT LINE WITH FLAG
—	EXISTING WETLAND LIMIT LINE WITH FLAG
—	EXISTING WETLAND LIMIT LINE WITH FLAG
—	100' WETLAND BUFFER
—	100' FORM WETLAND BUFFER
—	EXISTING TREELINE
—	EXISTING TREELINE TO BE REMOVED
—	PROPOSED GUIDE RAIL
—	PROPOSED CURB
—	PROPOSED LANDSCAPING
—	PROPOSED TREELINE
—	PROPOSED LOT NUMBER



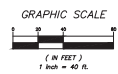
TYPICAL PARTIAL PLANTING PLAN FOR 2 STORY TOWNHOMES SCALE: 1"=20'



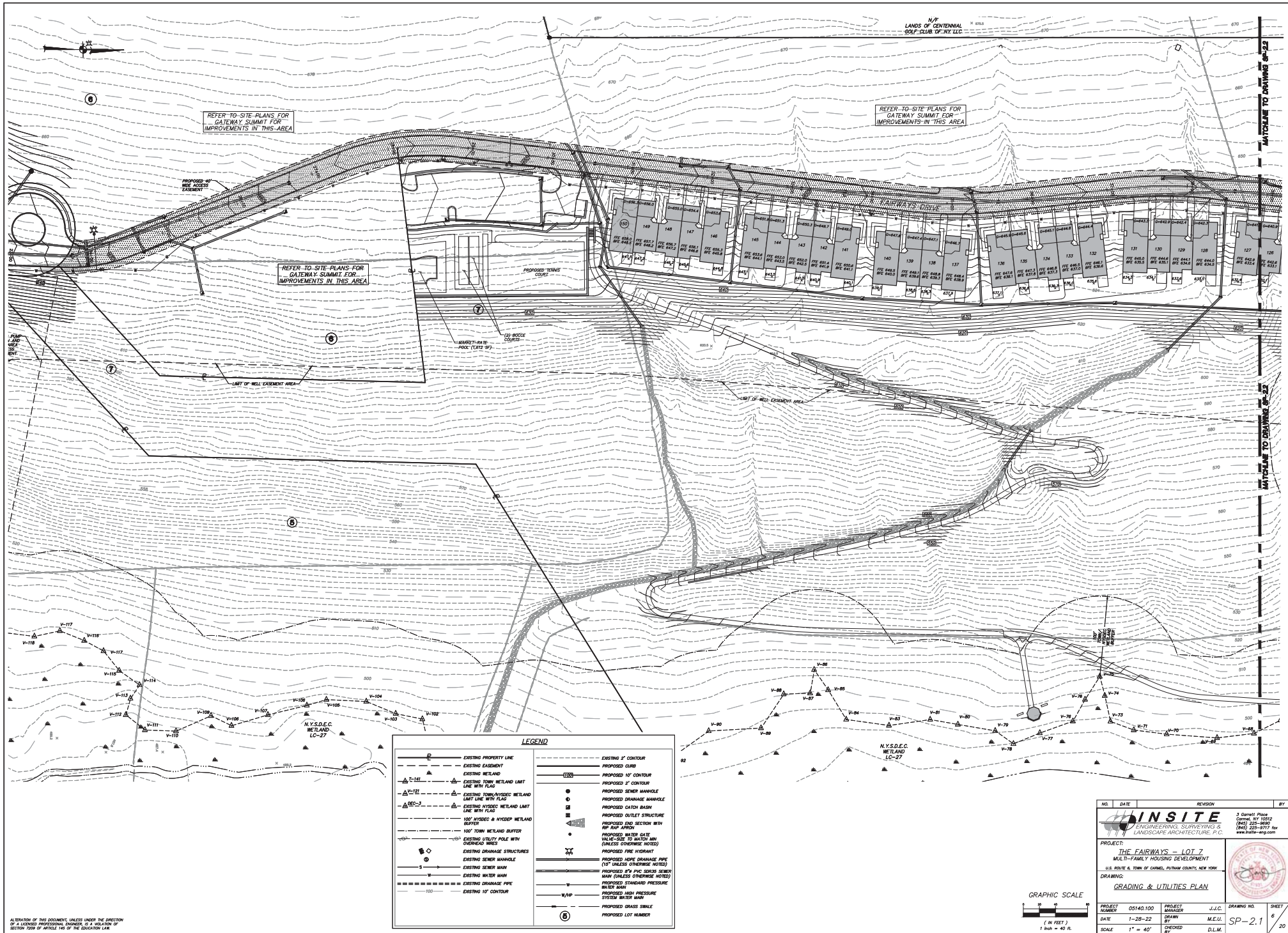
TYPICAL PARTIAL PLANTING PLAN FOR 3 STORY TOWNHOMES SCALE: 1"=20'

- NOTES:**
1. Refer to Drawing SP-1.3 for Legend, Planting & Seeding Notes, Plant List and Sign Table.
 2. Refer to Drawing SP-1.4 for General Notes.
 3. Refer to Drawing SP-1.4 for Typical Partial Planting Plans for Townhomes.
 4. Refer to Drawing SP-1.2 for Invasive Species Monitoring and Control Program.

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROAD 6, TOWN OF CAROL, PUTNAM COUNTY, NEW YORK			
DRAWING: LAYOUT & LANDSCAPE PLAN			
PROJECT NUMBER 05140.100	PROJECT MANAGER J.J.C.	DRAWING NO. SP-1.4	SHEET 5
DATE 1-28-22	DRAWN BY M.E.U.	CHECKED BY D.L.M.	20
SCALE 1" = 40'			



REFER TO SITE PLANS FOR GATEWAY SUMMIT FOR IMPROVEMENTS IN THIS AREA

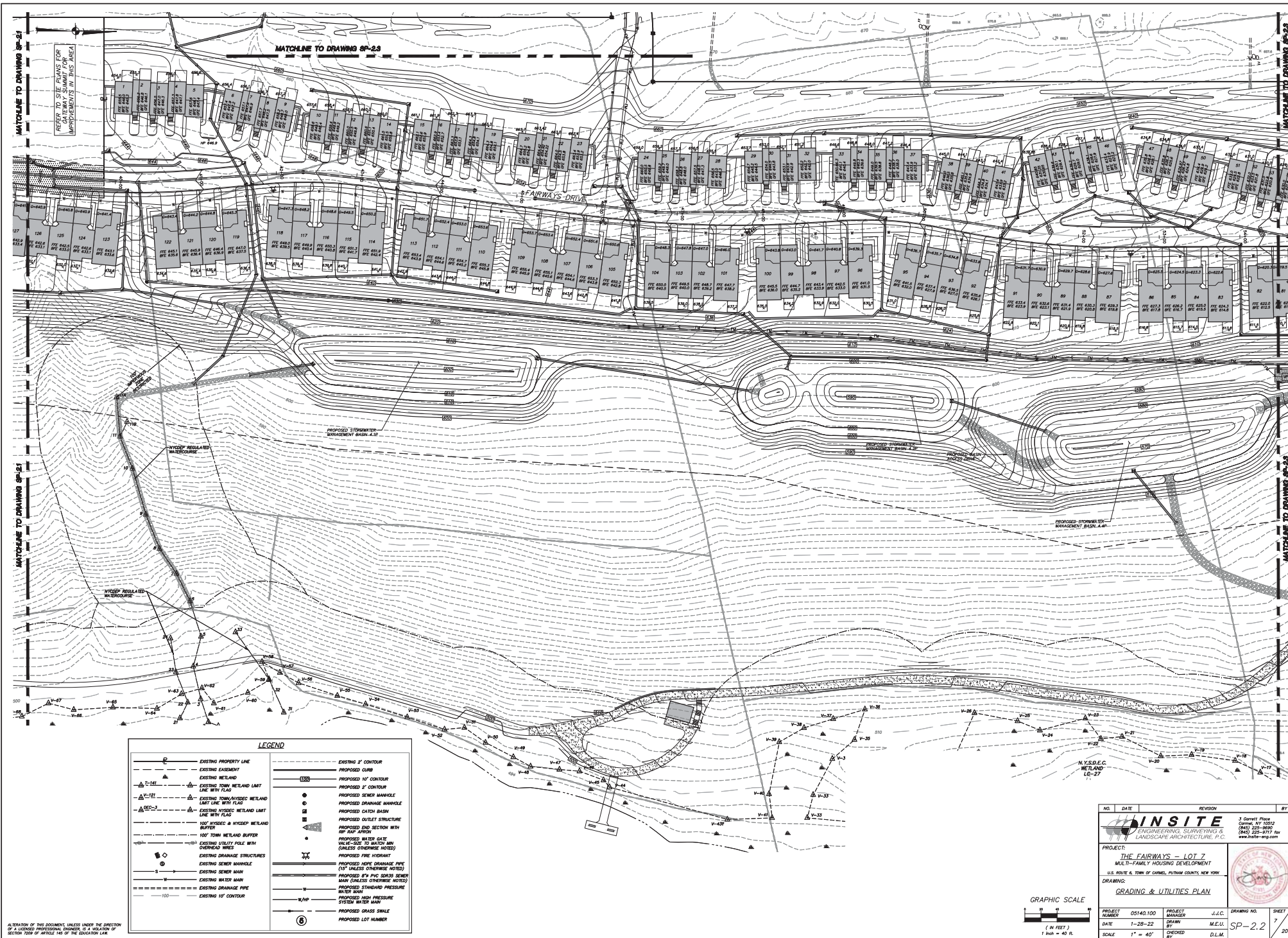
REFER TO SITE PLANS FOR GATEWAY SUMMIT FOR IMPROVEMENTS IN THIS AREA

REFER TO SITE PLANS FOR GATEWAY SUMMIT FOR IMPROVEMENTS IN THIS AREA

LEGEND	
—	EXISTING PROPERTY LINE
—	EXISTING EASEMENT
—	EXISTING METLAND
—	EXISTING TOWN METLAND LIMIT LINE WITH FLAG
—	EXISTING TOWN/NYSDEC METLAND LIMIT LINE WITH FLAG
—	EXISTING NYSDEC METLAND LIMIT LINE WITH FLAG
—	100' NYSDEC & NYSDEC METLAND BUFFER
—	100' TOWN METLAND BUFFER
—	EXISTING UTILITY POLE WITH OVERHEAD WIRES
—	EXISTING DRAINAGE STRUCTURES
—	EXISTING SEWER MANHOLE
—	EXISTING SEWER MAIN
—	EXISTING WATER MAIN
—	EXISTING DRAINAGE PIPE
—	EXISTING 10' CONTOUR
—	EXISTING 2' CONTOUR
—	EXISTING 10' CONTOUR
—	EXISTING 2' CONTOUR
—	PROPOSED SEWER MANHOLE
—	PROPOSED CATCH BASIN
—	PROPOSED OUTLET STRUCTURE
—	PROPOSED END SECTION WITH 90° TAP ARROW
—	PROPOSED WATER GATE VALVE - SIZE TO MATCH IN (UNLESS OTHERWISE NOTED)
—	PROPOSED FIRE HYDRANT
—	PROPOSED HOSE DRAINAGE PIPE (1" UNLESS OTHERWISE NOTED)
—	PROPOSED 8" PVC SEWER SEWER MAIN (UNLESS OTHERWISE NOTED)
—	PROPOSED STANDARD PRESSURE WATER MAIN
—	PROPOSED HIGH PRESSURE SYSTEM WATER MAIN
—	PROPOSED GRASS STRIP
—	PROPOSED LOT NUMBER

NO.	DATE	REVISION	BY
PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROAD 6, TOWN OF CORNELIUS, PUTNAM COUNTY, NEW YORK DRAWING: GRADING & UTILITIES PLAN			
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
PROJECT NUMBER: 05140.100 DATE: 1-28-22 SCALE: 1" = 40'		PROJECT MANAGER: J.J.C. DRAWN BY: M.E.U. CHECKED BY: D.L.M.	
PROJECT NUMBER: 05140.100 DATE: 1-28-22 SCALE: 1" = 40'		PROJECT MANAGER: J.J.C. DRAWN BY: M.E.U. CHECKED BY: D.L.M.	

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



REVISIONS TO BE MADE FOR
REVISIONS TO BE MADE FOR
IMPROVEMENTS IN THIS AREA.

MATCHLINE TO DRAWING SP-23

MATCHLINE TO DRAWING SP-21

MATCHLINE TO DRAWING SP-25

MATCHLINE TO DRAWING SP-21

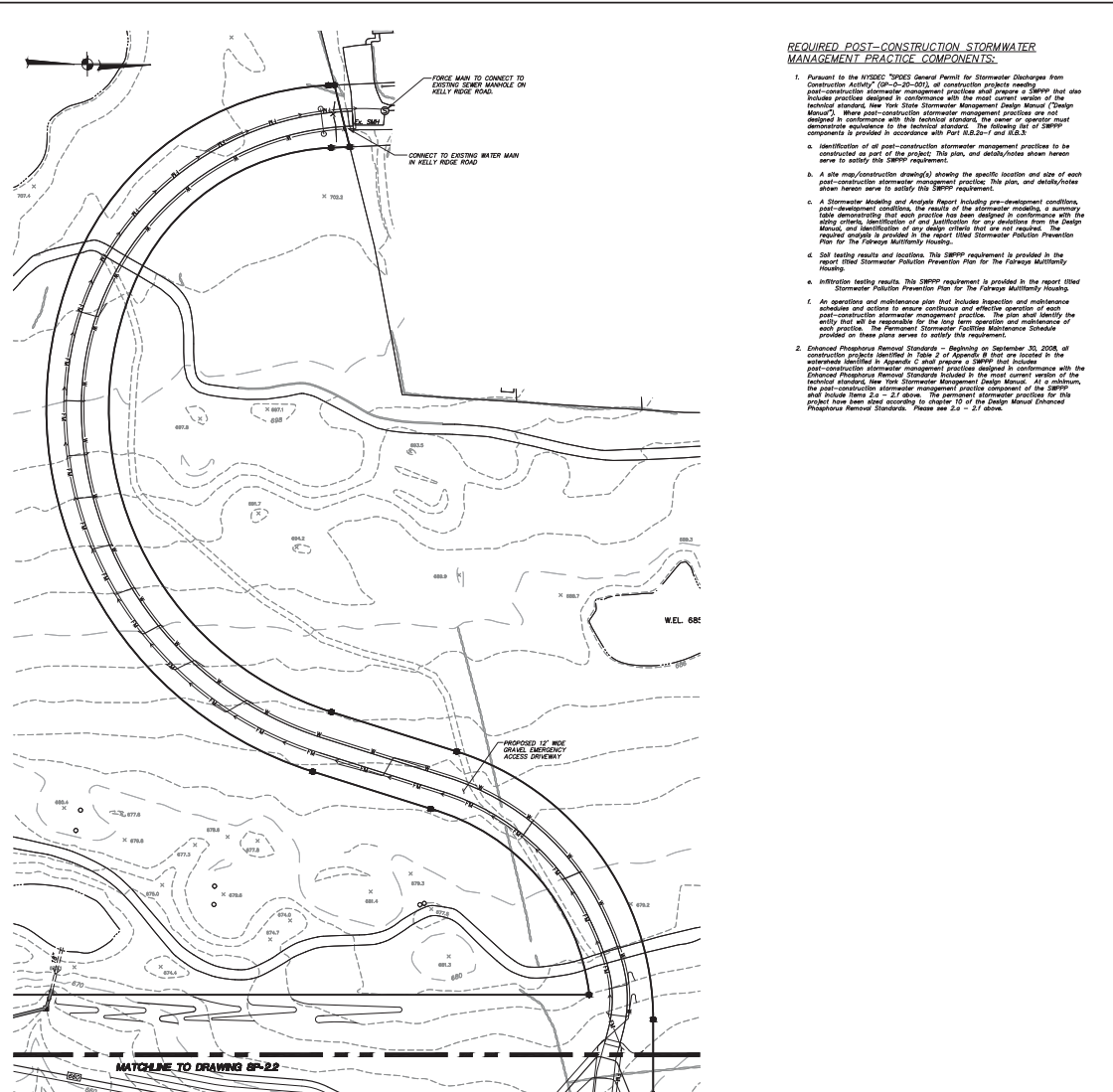
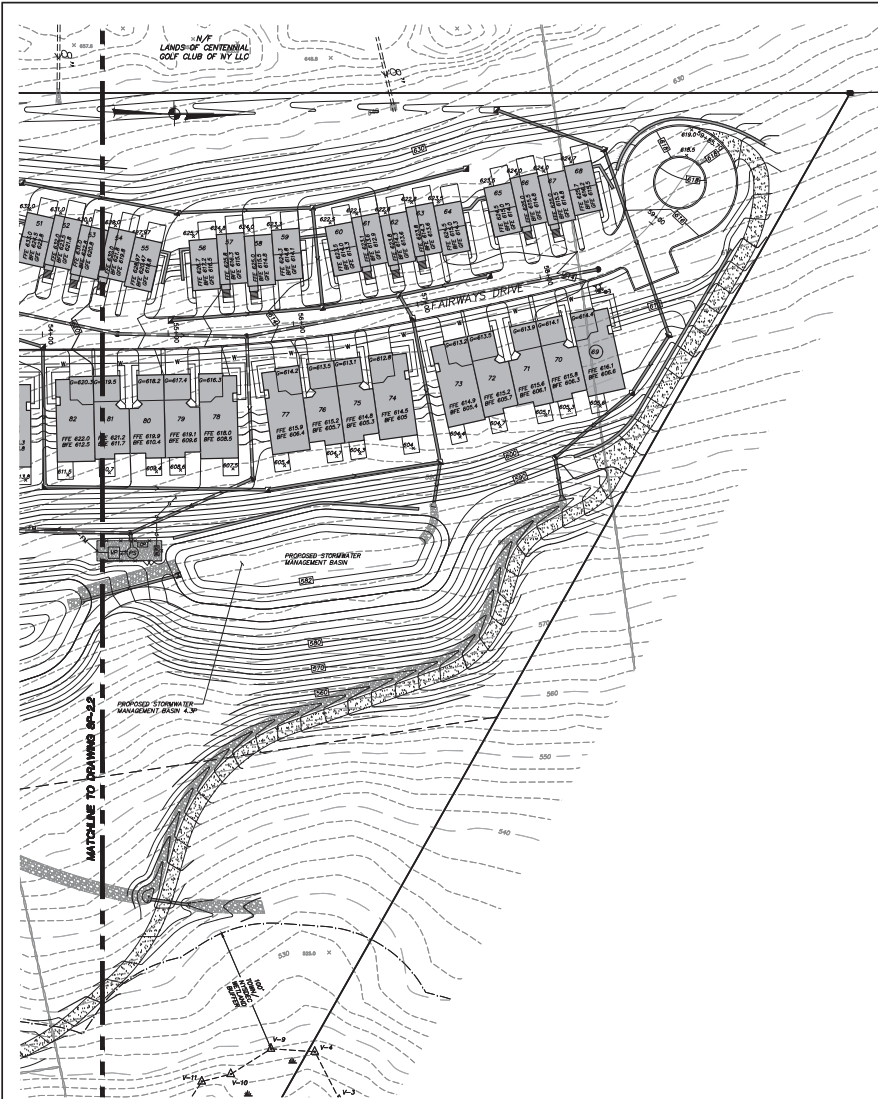
MATCHLINE TO DRAWING SP-25

LEGEND

—	EXISTING PROPERTY LINE	—	EXISTING 2' CONTOUR
—	EXISTING CASSEMENT	—	PROPOSED 2' CONTOUR
—	EXISTING METLAND	—	PROPOSED 10' CONTOUR
—	EXISTING TOWN METLAND LIMIT LINE WITH FLAG	—	PROPOSED 2" DRAINAGE
—	EXISTING TOWN/NYSDOT METLAND LIMIT LINE WITH FLAG	—	PROPOSED SEWER MANHOLE
—	EXISTING NYSDOT METLAND LIMIT LINE WITH FLAG	—	PROPOSED GATCH BASIN
—	100' NYSDOT & NYSDOT METLAND BUFFER	—	PROPOSED OUTLET STRUCTURE
—	100' TOWN METLAND BUFFER	—	PROPOSED 200 SECTION WITH 80' DIA. STAIN
—	EXISTING UTILITY POLE WITH OVERHEAD WIRING	—	PROPOSED WATER GATE (CALCULATED TO MATCH WITH UNLESS OTHERWISE NOTED)
—	EXISTING DRAINAGE STRUCTURES	—	PROPOSED FIRE HYDRANT
—	EXISTING SEWER MANHOLE	—	PROPOSED SEWER DRAINAGE PIPE (15' UNLESS OTHERWISE NOTED)
—	EXISTING SEWER MAIN	—	PROPOSED 8" PVC SOLAR SEWER MAIN (UNLESS OTHERWISE NOTED)
—	EXISTING WATER MAIN	—	PROPOSED STANDARD PRESSURE WATER MAIN
—	EXISTING DRAINAGE PIPE	—	PROPOSED HIGH PRESSURE SYSTEM WATER MAIN
—	EXISTING 10' CONTOUR	—	PROPOSED GRASS SWALE
—		—	PROPOSED LOT NUMBER

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE SANGHATI LAW.

NO.	DATE	REVISION	BY
PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT 155 BOULEVARD & TOWN OF CANTON, PUTNAM COUNTY, NEW YORK			
DRAWING: GRADING & UTILITIES PLAN			
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
GRAPHIC SCALE (IN FEET) 1 inch = 40 ft.		DRAWING NO. SP-2.2	SHEET 7 20



REQUIRED POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

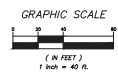
1. Pursuant to the NYSDOT "SPDES General Permit for Stormwater Discharges from Construction Activity" (SP-0-20-001), all construction projects needing post-construction stormwater management practices shall prepare a Stormwater Pollution Prevention Plan (SWPPP) designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual (Design Manual). Where post-construction stormwater management practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of SWPPP components is provided in accordance with Part 615.2(f) and 615.3.
 - a. Identification of all post-construction stormwater management practices to be constructed as part of the project. This plan, and details/notes shown herein serve to satisfy this SWPPP requirement.
 - b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice. This plan, and details/notes shown herein serve to satisfy this SWPPP requirement.
 - c. A Stormwater Modeling and Analysis Report including pre-development conditions, post-development conditions, the results of the stormwater modeling, a summary table demonstrating that each practice has been designed in conformance with the design criteria, identification of any limitations for any practices from the Design Manual, and identification of any design criteria that are not required. The results analysis is provided in the Report titled Stormwater Pollution Prevention Plan for the Fairways Multifamily Housing.
 - d. Soil testing results and locations. This SWPPP requirement is provided in the report titled Stormwater Pollution Prevention Plan for the Fairways Multifamily Housing.
 - e. Installation testing results. This SWPPP requirement is provided in the report titled Stormwater Pollution Prevention Plan for the Fairways Multifamily Housing.
 - f. An operation and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice. The Permanent Stormwater Facilities Maintenance Schedule provided on these plans serves to satisfy this requirement.
2. Enforced Phosphorus Removal Standards - Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watershed identified in Appendix C shall include in the most current version of the post-construction stormwater management practices designed in conformance with the (Enforced Phosphorus Removal Standards) included in the most current version of the technical standard, New York Stormwater Management Design Manual. At a minimum, the post-construction stormwater management practices component of the SWPPP must include items 2.1 - 2.3 above. The approved stormwater practices for this project have been sized according to section 10 of the Design Manual (Enforced Phosphorus Removal Standards). Please see 2.1 - 2.3 above.

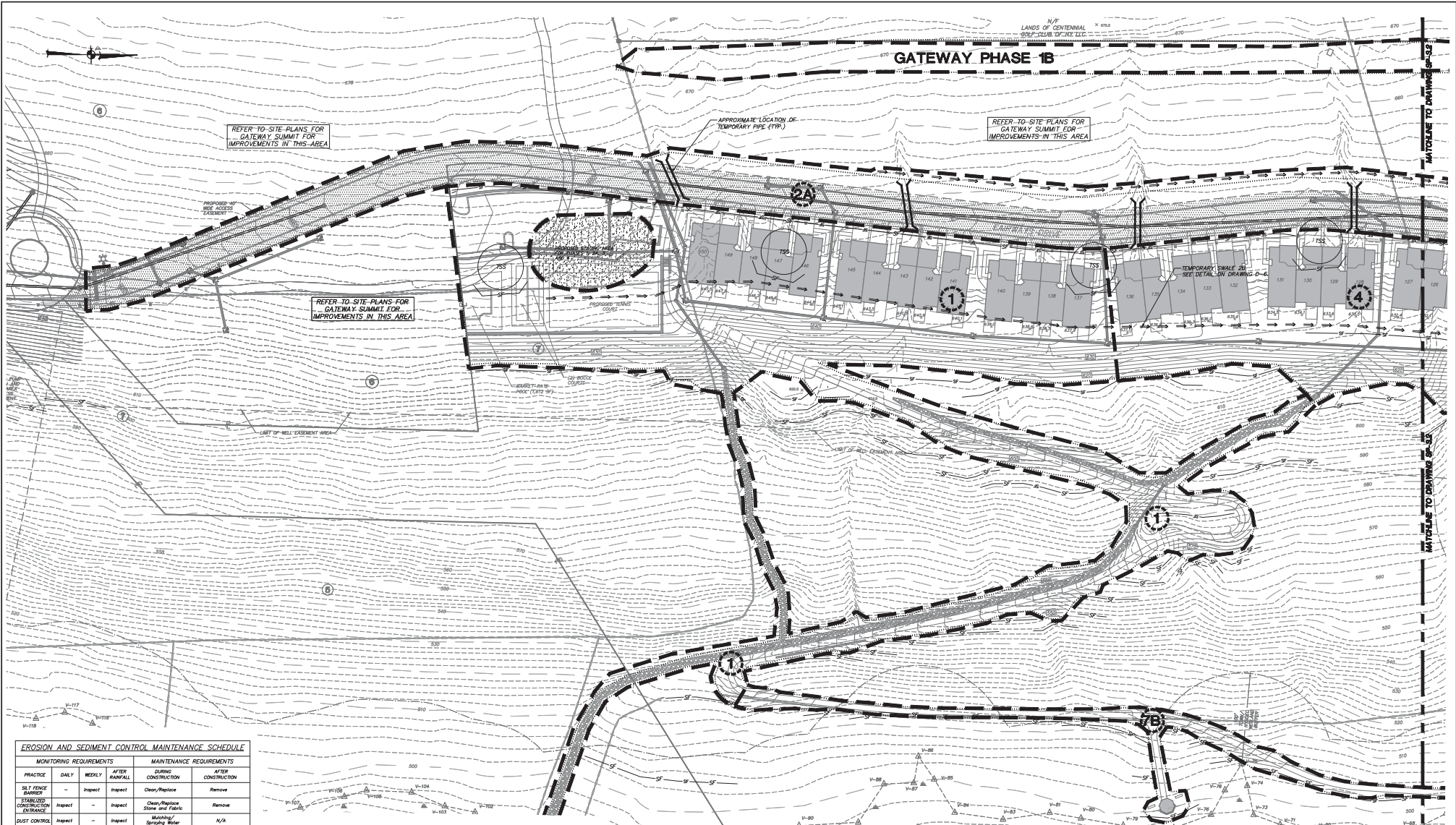
LEGEND

—●—	EXISTING PROPERTY LINE	—○—	EXISTING 2' CONTOUR
—▲—	EXISTING EASEMENT	—○—	PROPOSED 10' CONTOUR
—▲—	EXISTING TOWN METLAND LIMIT LINE WITH FLAG	—○—	PROPOSED 2' CONTOUR
—▲—	EXISTING TOWN/AYSDOC METLAND LIMIT LINE WITH FLAG	●	PROPOSED SEWER MANHOLE
—▲—	EXISTING AYSDOC METLAND LIMIT LINE WITH FLAG	●	PROPOSED DRAINAGE MANHOLE
—▲—	100' AYSDOC & NYSDOP METLAND BUFFER	■	PROPOSED CATCH BASIN
—▲—	EXISTING UTILITY POLE WITH OVERHEAD WIRES	■	PROPOSED OUTLET STRUCTURE
●	EXISTING DRAINAGE STRUCTURES	■	PROPOSED END SECTION WITH RFP R/W APPROX
●	EXISTING SEWER MANHOLE	●	PROPOSED FIRE HYDRANT
●	EXISTING SEWER MANHOLE	—○—	PROPOSED HOPE DRAINAGE PIPE (12" UNLESS OTHERWISE NOTED)
●	EXISTING WATER MAIN	—○—	PROPOSED 4" PVC SAGLESS SEWER MAIN (UNLESS OTHERWISE NOTED)
●	EXISTING DRAINAGE PIPE	—○—	PROPOSED STANDARD PRESSURE WATER MAIN
—○—	EXISTING 10' CONTOUR	—○—	PROPOSED HIGH PRESSURE SYSTEM WATER MAIN
		—○—	PROPOSED GRASS SWALE
		②	PROPOSED LOT NUMBER

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT 155 ROSE & TOWN OF COMEL, PUTNAM COUNTY, NEW YORK			
DRAWING: GRADING & UTILITIES PLAN			
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.L.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
			SHEET NO. 8 OF 20





EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

MONITORING REQUIREMENTS		MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL
SLT FENCE BARRIERS	-	Inspect	Inspect
STABILIZED CONSTRUCTION ENTRANCE	Inspect	-	Inspect
DUST CONTROL	Inspect	-	Inspect
VEGETATIVE ESTABLISHMENT	-	Inspect	Inspect
INLET PROTECTION	-	Inspect	Inspect
SOIL STOOPLES	-	Inspect	Inspect
SWALES	-	Inspect	Inspect
CHECK DAMS	-	Inspect	Inspect
CONCRETE DRAINAGE STRUCTURES	-	Inspect	Inspect
DRAINAGE PIPES	-	Inspect	Inspect
ROAD & PAVEMENT	-	Inspect	Inspect
VEGETATION	-	Inspect	Inspect

LEGEND

	EXISTING PROPERTY LINE		PROPOSED CURB
	EXISTING EASEMENT		PROPOSED 1' CONTOUR
	EXISTING WETLAND		PROPOSED 2' CONTOUR
	EXISTING 100' NYDEC WETLAND LIMIT LINE WITH FLAG		PROPOSED TEMPORARY DIVERSION SILT PILE
	EXISTING 100' NYDEC WETLAND LIMIT LINE WITH FLAG		PROPOSED DRAINAGE STRUCTURE WITH INLET PROTECTION
	EXISTING 100' NYDEC WETLAND LIMIT LINE WITH FLAG		PROPOSED STONE CHECK DAM
	100' TOWN WETLAND BUFFER		PROPOSED SILT FENCE
	EXISTING DRAINAGE STRUCTURES		PROPOSED LIMITS OF DISTURBANCE
	EXISTING STORM MANHOLE		PROPOSED TEMPORARY SOIL STOCKPILE
	EXISTING DRAINAGE PIPE		PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	EXISTING 1' CONTOUR		PROPOSED PHASING LINE
	EXISTING 2' CONTOUR		PROPOSED PHASING NUMBER
			PROPOSED PHASING NUMBER
			PROPOSED LOT NUMBER

SPECIAL NOTE:
 The owner is responsible to obtain greater than 5 acres of any one lot in order to efficiently perform construction operations of the site. In order to comply with the owner is responsible to comply with Part II C.3 of the NYDEC SPDES General Permit for Stormwater Discharge from Construction Activity (SP-0-20-001). These Requirements are as follows:
 a. The owner or operator shall have a qualified inspector conduct at least two (2) site inspections in accordance with Part 16.2 of SP-0-20-001 every seven (7) calendar days, for as long as greater than the (5) acres of soil remains disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
 b. In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and implemented within seven (7) days from the date soil disturbance activity ceases. The soil stabilization measures submitted and approved shall be in accordance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control.
 c. The operation shall be conducted in accordance with the plan showing areas that require minimum disturbance areas per phasing area that shall be maintained and the specific practices used to protect water quality.

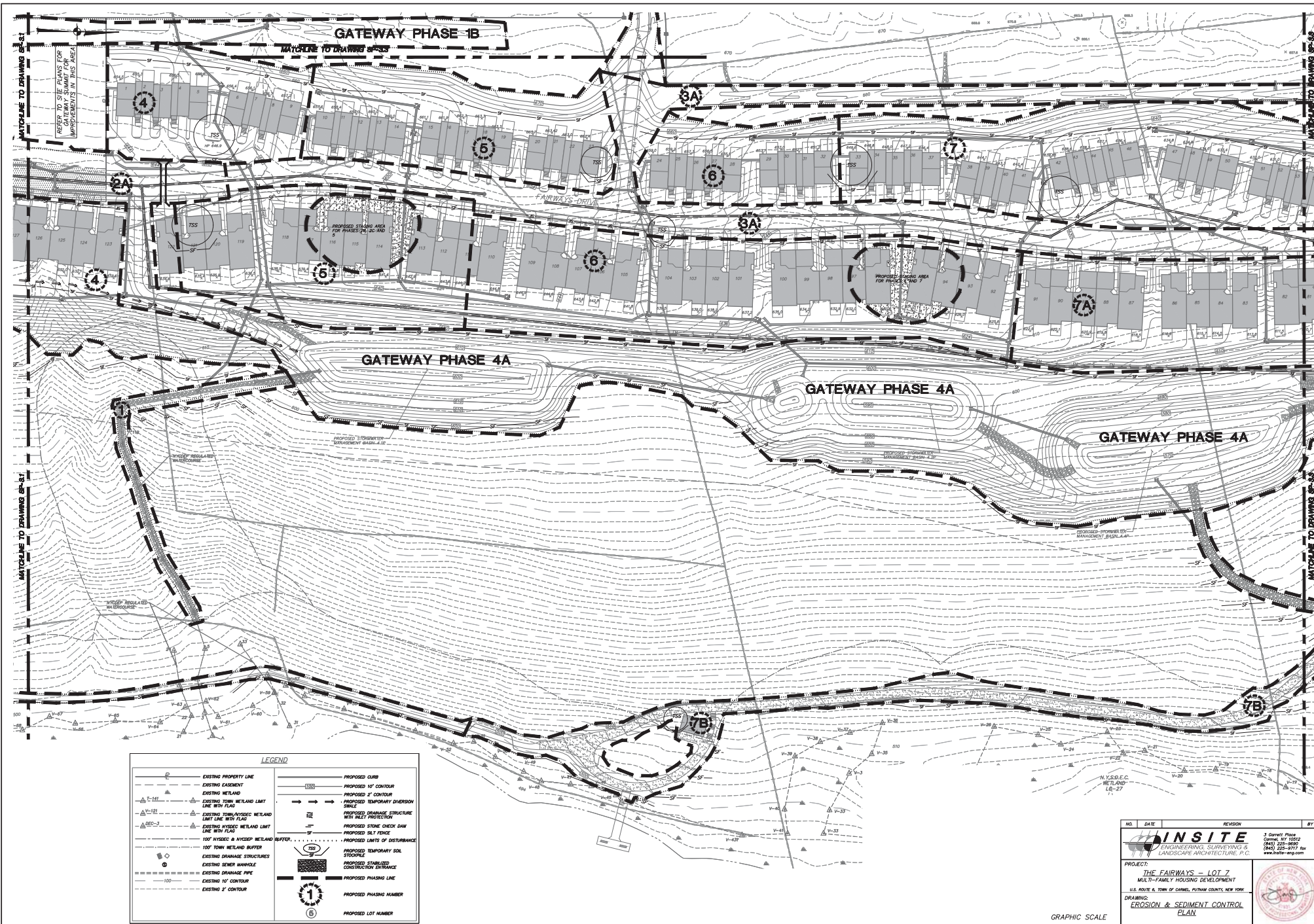
INSITE
 ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
 3 Corvett Place
 Oneonta, NY 13827
 (845) 225-8997
 (845) 225-8999 fax
 www.insite-arg.com

PROJECT: THE FAIRWAYS - LOT 7
 MULTI-FAMILY HOUSING DEVELOPMENT
 U.S. ROAD 6, TOWN OF CORNELIUS, PUTNAM COUNTY, NEW YORK

DRAWING: EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER: 05140.100 PROJECT MANAGER: J.J.C. DRAWING NO.: SHEET
 DATE: 1-28-22 DRAWN BY: M.E.U. SP-3.1 9
 SCALE: 1" = 40' CHECKED BY: D.L.M. 20

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



LEGEND	
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING WETLAND
	EXISTING 200' WETLAND LIMIT LINE WITH FLAG
	EXISTING 100' HYDRIC WETLAND LIMIT LINE WITH FLAG
	EXISTING 500' HYDRIC WETLAND LIMIT LINE WITH FLAG
	100' HYDRIC & HYDRIC WETLAND BUFFER
	100' NON-HYDRIC WETLAND BUFFER
	EXISTING DRAINAGE STRUCTURES
	EXISTING SEWER MANHOLE
	EXISTING DRAINAGE PIPE
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	PROPOSED CURB
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	PROPOSED TEMPORARY DIVERSION SILT
	PROPOSED DRAINAGE STRUCTURE WITH SILT PROTECTION
	PROPOSED STONE CHECK DAM
	PROPOSED SILT FENCE
	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED TEMPORARY SOIL STOCKPILE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED PHASING LINE
	PROPOSED PHASING NUMBER
	PROPOSED LOT NUMBER

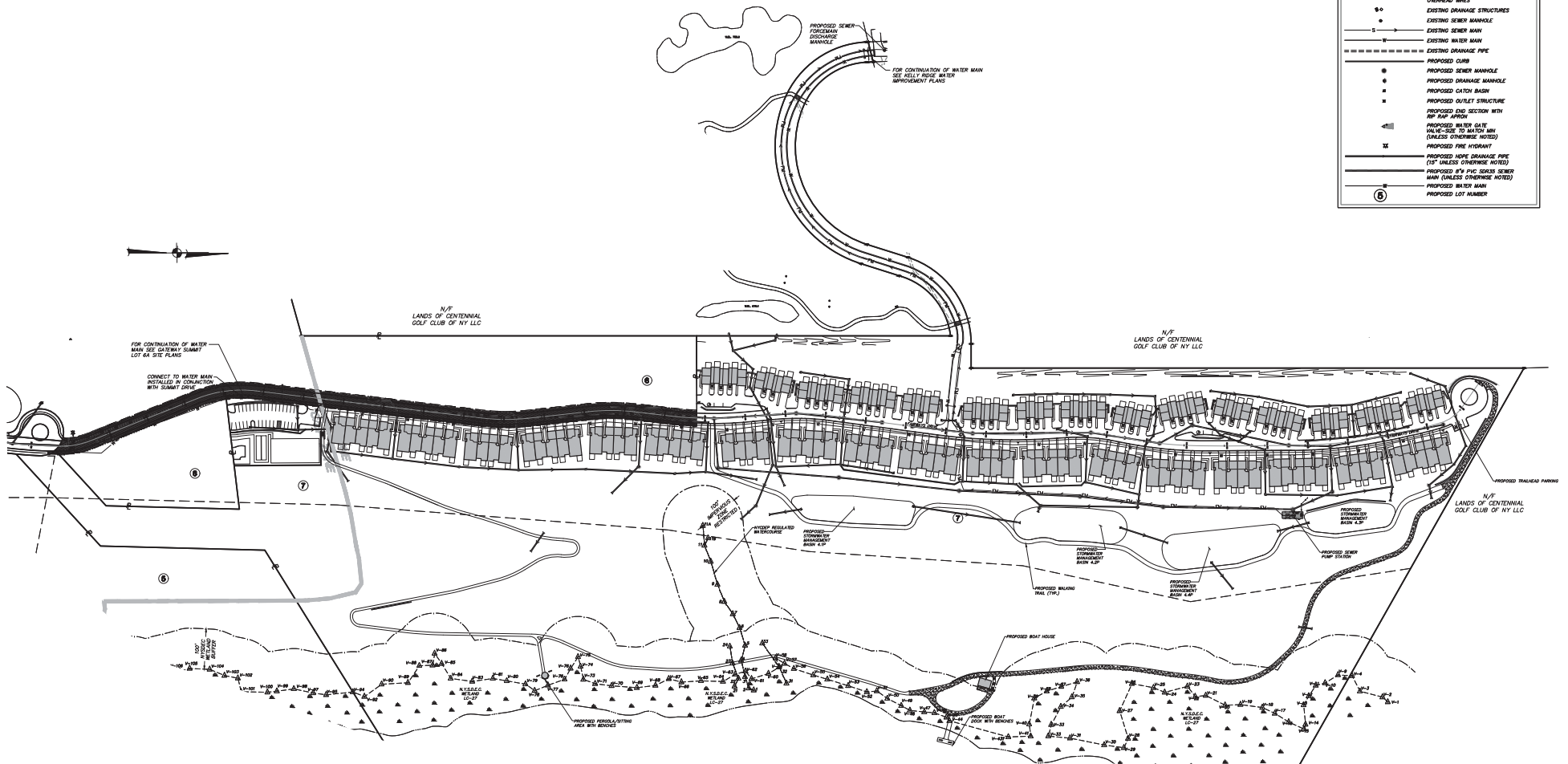
NO.	DATE	REVISION	BY
PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROAD & TOWN OF CARROLL, PUTNAM COUNTY, NEW YORK			
DRAWING: EROSION & SEDIMENT CONTROL PLAN			
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
GRAPHIC SCALE (IN FEET) 1 inch = 40 ft.		SHEET NO. 10 OF 20	

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

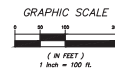
NOTES:

1. Refer to Sheet 1 for General Notes.
2. For detailed information on the proposed utilities, please refer to drawings SP-2.1, SP-2.2, and SP-2.3.

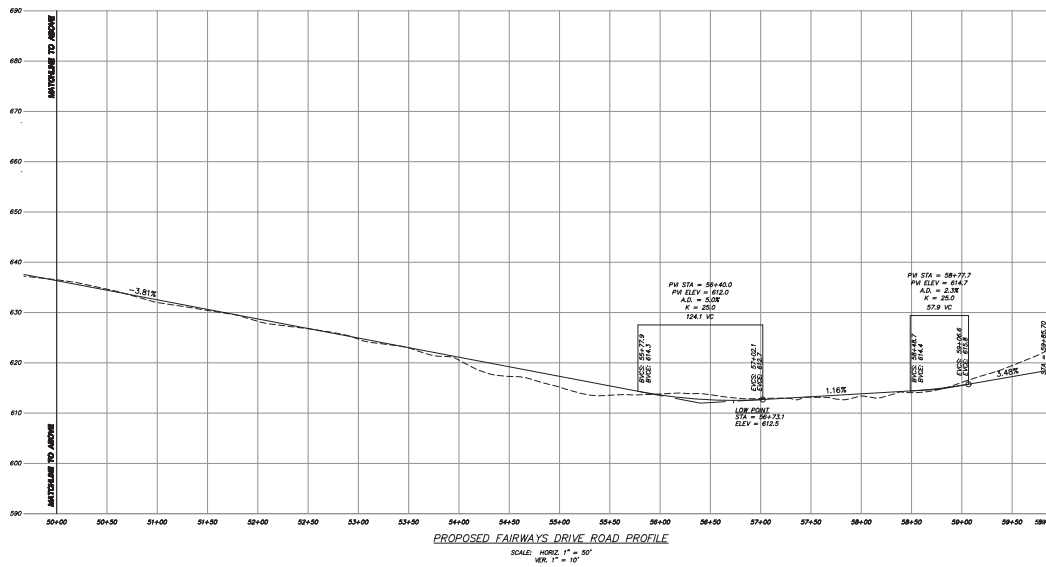
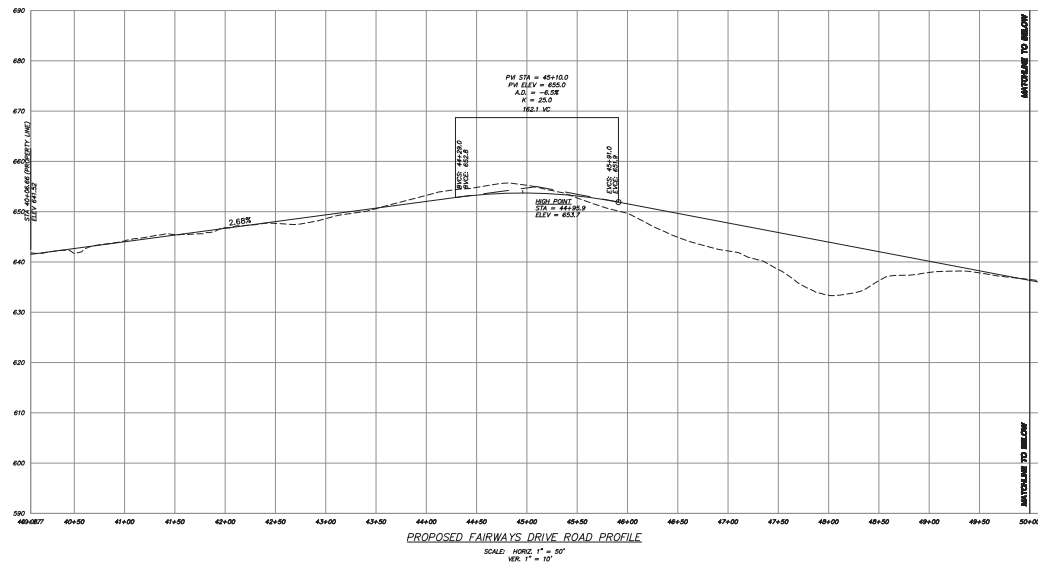
LEGEND	
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING WETLAND
	EXISTING TOWN WETLAND LIMIT LINE WITH FLAG
	EXISTING TOWN/NYSEC WETLAND LIMIT LINE WITH FLAG
	EXISTING NYSEC WETLAND LIMIT LINE WITH FLAG
	100' NYSEC & NYSECP WETLAND BUFFER
	100' TOWN WETLAND BUFFER
	EXISTING HYDROZONE
	EXISTING UTILITY POLE WITH OVERHEAD WIRES
	EXISTING DRAINAGE STRUCTURES
	EXISTING SEWER MANHOLE
	EXISTING WATER MAIN
	EXISTING DRAINAGE PIPE
	PROPOSED CURB
	PROPOSED SEWER MANHOLE
	PROPOSED DRAINAGE MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED SULLY STRUCTURE
	PROPOSED END SECTION WITH RIP RAP APRON
	PROPOSED WATER GATE VALVE-SIZE TO MATCH MIN (UNLESS OTHERWISE NOTED)
	PROPOSED FIRE HYDRANT
	PROPOSED 10" HDPE DRAINAGE PIPE (IF NOT OTHERWISE NOTED)
	PROPOSED 8" PVC ADSB SEWER MAIN (UNLESS OTHERWISE NOTED)
	PROPOSED WATER MAIN
	PROPOSED LOT NUMBER



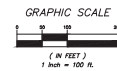
ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROAD 6, TOWN OF CAROL, PUTNAM COUNTY, NEW YORK			
DRAWING: OVERALL UTILITIES PLAN			
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.L.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	1" = 100'	CHECKED BY	D.L.M.
DRAWING NO.	OUP-1		SHEET 12
			20

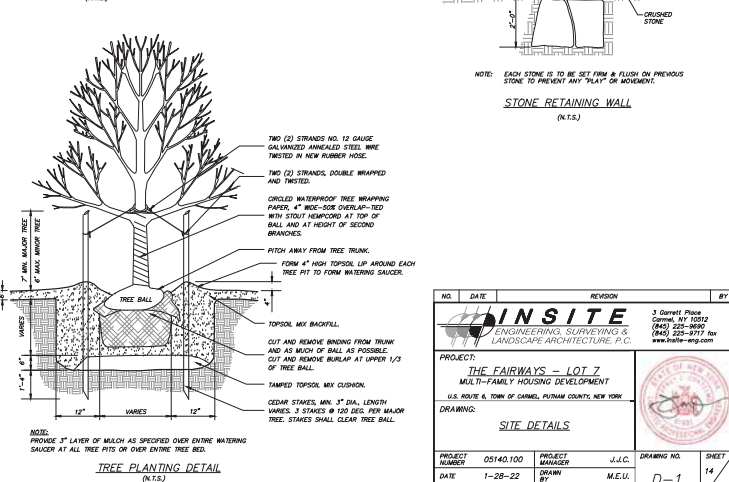
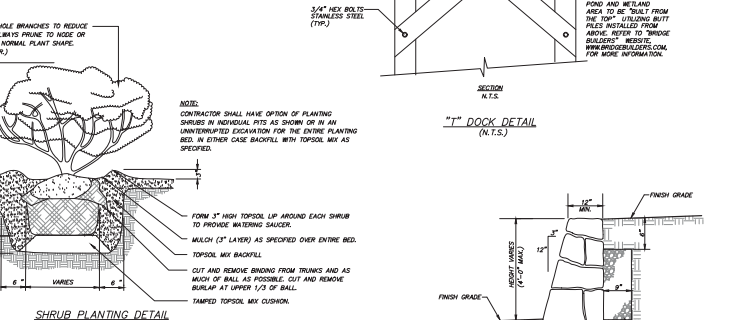
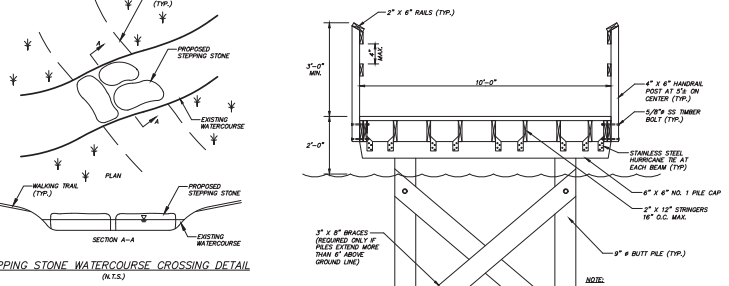
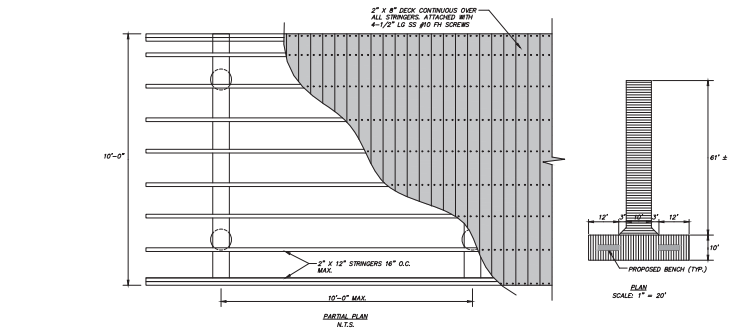
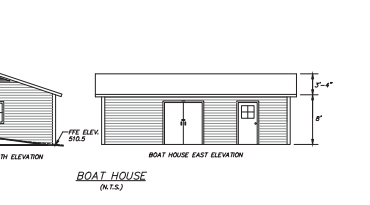
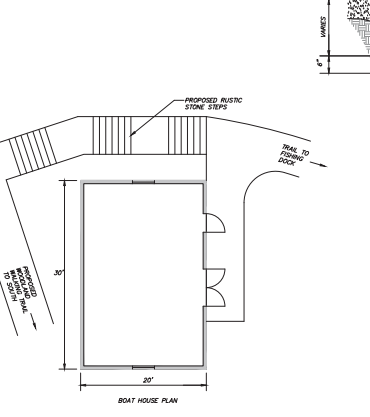
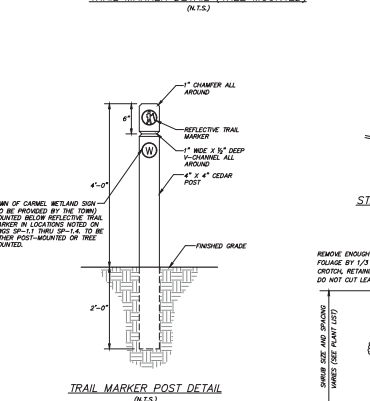
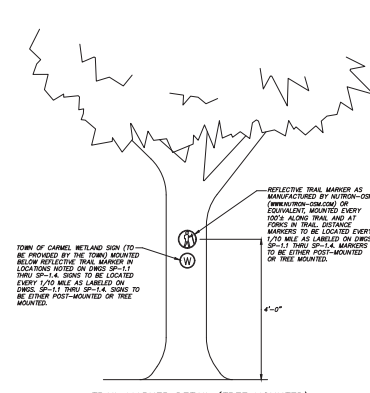
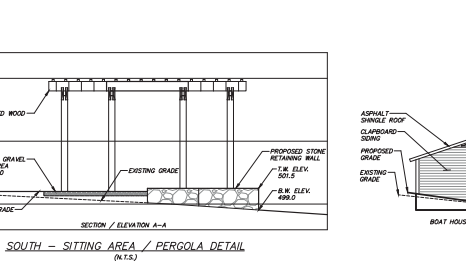
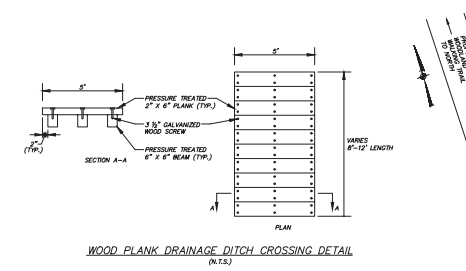
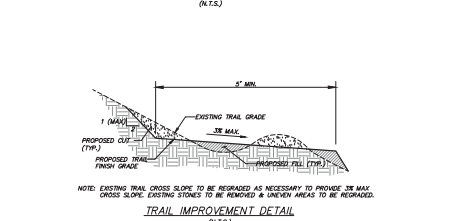
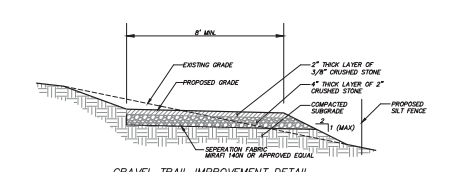
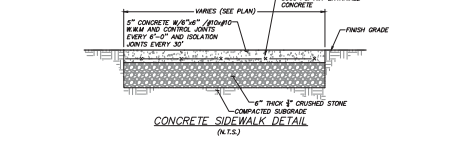
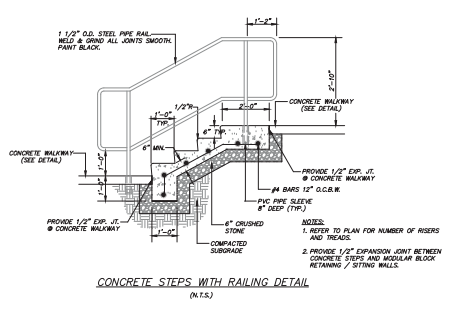
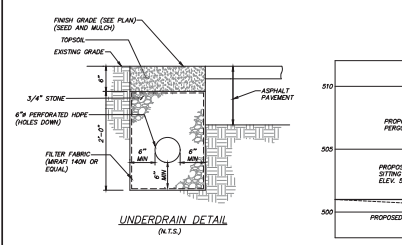
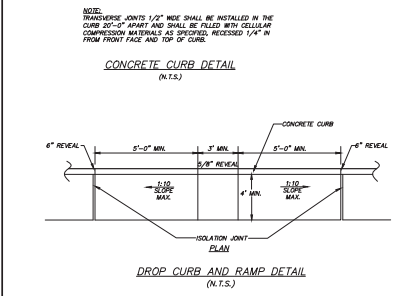
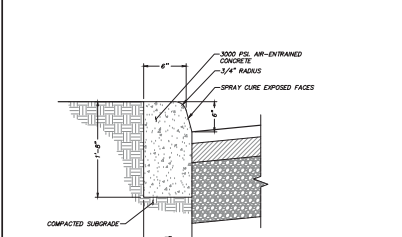
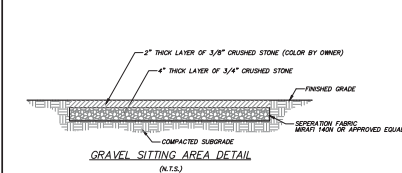
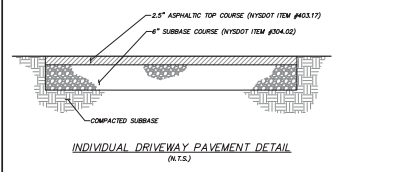
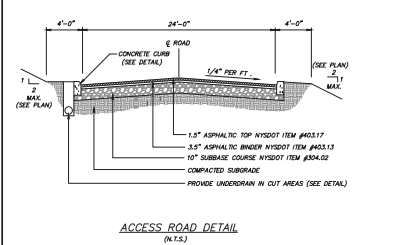


ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



NO.	DATE	REVISION	BY
 INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROAD & TOWN OF CAROL, PUTNAM COUNTY, NEW YORK			
DRAWING: ROAD PROFILES			
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	D.L.M.
DRAWING NO.	PR-1	SHEET	13
			20

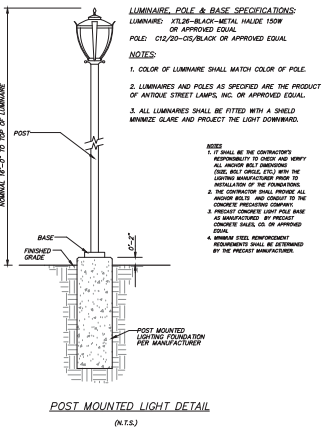




ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
<p style="text-align: center;">INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.</p>			
<p>PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROAD 6, TOWN OF COMEL, PUTNAM COUNTY, NEW YORK</p>			
<p style="text-align: center;">SITE DETAILS</p>			
PROJECT NUMBER	05140.100	J.L.C.	DRAWING NO.
DATE	1-28-22	M.E.U.	CHECKED BY
SCALE	AS SHOWN	D.L.M.	SHEET

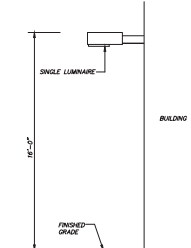
14
20



LUMINAIRE, POLE & BASE SPECIFICATIONS:
LUMINAIRE: VTLR-BLACK-METAL HALIDE 100W OR APPROVED EQUAL.
POLE: C12/20-05/BLACK OR APPROVED EQUAL.

- NOTES:**
1. COLOR OF LUMINAIRE SHALL MATCH COLOR OF POLE.
 2. LUMINAIRE AND POLES AS SPECIFIED ARE THE PRODUCT OF AVIANCE STREET LAMPS, INC. OR APPROVED EQUAL.
 3. ALL LUMINAIRE SHALL BE FITTED WITH A SHIELD MINIMIZE GLARE AND PROJECT THE LIGHT DOWNWARD.
- NOTES:**
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES PRIOR TO INSTALLATION OF THE FOUNDATION.
 2. THE CONTRACTOR SHALL PROVIDE ALL ANCHOR BOLTS AND CONCRETE TO THE UNDERLYING FOUNDATION.
 3. A REINFORCING CHAIR SHALL BE MANUFACTURED BY PRODUCT COMPANY'S SHALL USE OF APPROVED EQUAL.
 4. MINIMUM STEEL REINFORCEMENT REQUIREMENTS SHALL BE DETERMINED BY THE PRODUCT MANUFACTURER.

POST MOUNTED LIGHT DETAIL
(N.T.S.)

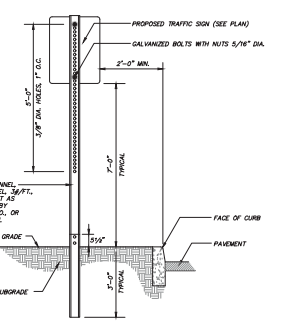


BUILDING MOUNTED LIGHT DETAIL
(N.T.S.)

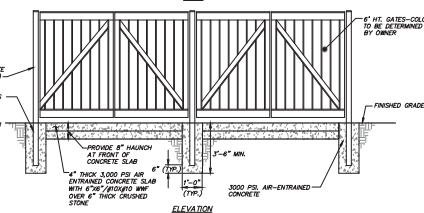
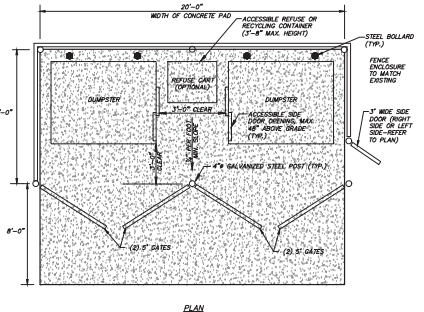
LUMINAIRE AND POLE SPECIFICATIONS:
LUMINAIRE: SMT2000W/100L 5-44457 (Equivalent Series)
POLE: C12/20-05/BLACK OR APPROVED EQUAL.

- NOTES:**
1. LUMINAIRE AS SPECIFIED IS THE PRODUCT OF AVIANCE STREET LAMPS, INC. OR APPROVED EQUAL.
 2. LUMINAIRE TO BE MOUNTED TO BUILDING.

BUILDING MOUNTED LIGHT DETAIL
(N.T.S.)

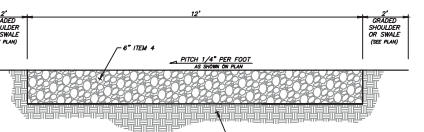


TRAFFIC SIGN DETAIL
(N.T.S.)

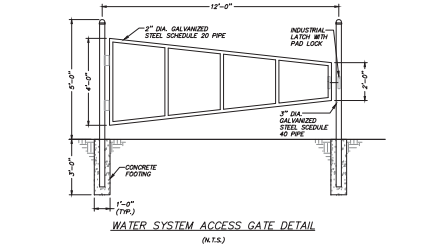


- GENERAL NOTES:**
1. CHECK WITH REFUSE HAULER PRIOR TO INSTALLATION OF REFUSE ENCLOSURE FOR FINAL DIMENSIONS.
- ACCESSIBILITY NOTES:**
1. VERTICAL CHANGE IN LEVEL BETWEEN GRADE OF CONCRETE PAD FOR DUMPSTER ENCLOSURE AND ADJACENT PAVEMENT AT GATE OPENINGS SHALL NOT EXCEED 1/4\"/>
 2. GATES DESIGNATED FOR ACCESSIBLE ENTRY INTO DUMPSTER ENCLOSURE SHALL BE MAINTAINED TO BE RELATIVELY FREE SHOWNING AND EASY TO OPEN AND CLOSE.
 3. SHOULD INDIVIDUAL GATE BE DESIGNATED FOR ACCESSIBLE ENTRY, IT SHALL BE LABELED AS SUCH.
 4. A 36\"/>
 5. ACCESSIBLE REFUSE CONTAINERS SHALL BE PROVIDED - TRASH CANS, REFUSE CARTS, AND/OR DUMPSTERS WITH ACCESSIBLE SIDE OPENINGS.
 6. GATE LATCH HARDWARE FOR ACCESSIBLE ENTRY GATES SHALL BE EASY TO OPERATE, U-SHAPED HANDLE OR LEVER-OPERATED MECHANISM (TYP).

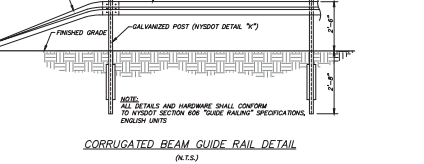
REFUSE ENCLOSURE DETAIL
(N.T.S.)



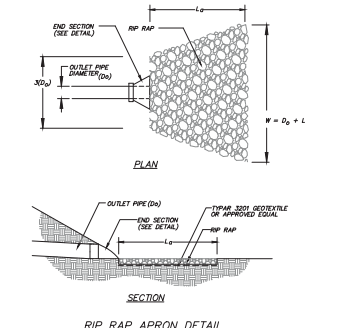
EMERGENCY ACCESS DRIVE DETAIL
(N.T.S.)



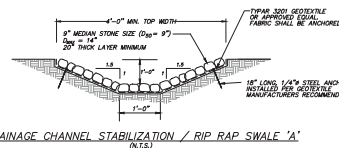
WATER SYSTEM ACCESS GATE DETAIL
(N.T.S.)



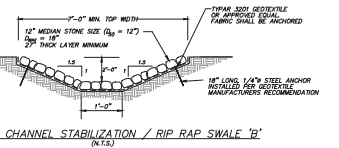
CORRUGATED BEAM GUIDE RAIL DETAIL
(N.T.S.)



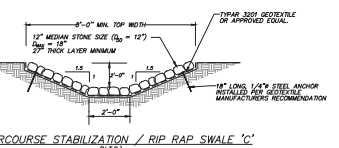
RIP RAP APRON DETAIL
(N.T.S.)



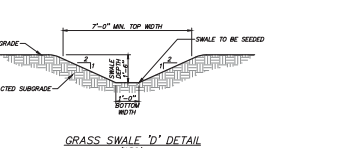
DRAINAGE CHANNEL STABILIZATION / RIP RAP SWALE 'A'
(N.T.S.)



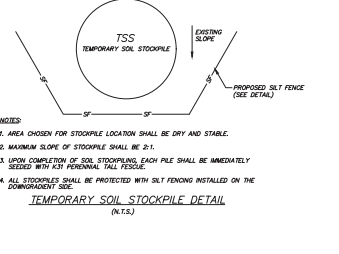
DRAINAGE CHANNEL STABILIZATION / RIP RAP SWALE 'B'
(N.T.S.)



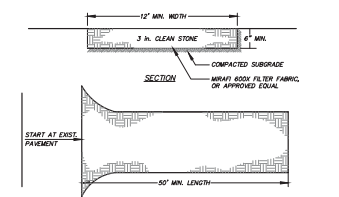
WATERCOURSE STABILIZATION / RIP RAP SWALE 'C'
(N.T.S.)



GRASS SWALE 'D' DETAIL
(N.T.S.)



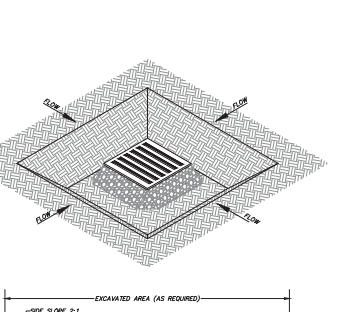
TEMPORARY SOIL STOCKPILE DETAIL
(N.T.S.)



INSTALLATION NOTES

1. STONE SIZE - USE 3\"/>
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT MORE A 30 FOOT MINIMUM LENGTH APPLY.)
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - 12 FOOT MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT POWER WARE HOUSE OR FOREST ROAD.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. CONSTRUCTION NOTES - ALL SURFACES BEING EXPOSED OR EXPOSED THROUGH CONSTRUCTION ENTRANCES SHALL BE PROTECTED AGAINST THE ENTRANCE IF BEING TO BE PROTECTED, A SCHEDULE WITH WITH 1/2\"/>
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PERMIT PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND RETAIN AND/OR CLEANING OF ANY WEEDS USED TO TRAP SEDIMENT. ALL SEDIMENT SHALL BE REMOVED IMMEDIATELY.
8. MAINTENANCE - WEEDS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO TOP DRESSING. ONLY FRESH, PESTICIDE FREE, WELL BROWN MANURE IS REQUIRED. IT SHALL BE PLACED ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. INSPECTOR INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH PAIR.

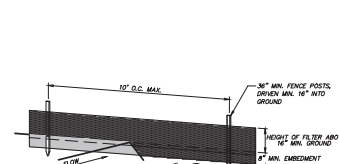
STABILIZED CONSTRUCTION ENTRANCE DETAIL
(N.T.S.)



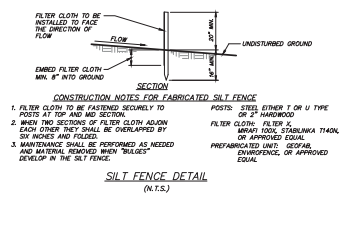
EXCAVATED DROP INLET PROTECTION DETAIL
(N.T.S.)

- GRAVEL SUPPORTED BY HARDWARE CLOTH TO ALLOW DRAINAGE AND RESTRICT SEDIMENT WITHNESS:**
1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
 2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
 3. WEED HILLS SHALL BE PROTECTED BY GRAVEL.
 4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEED HILLS WITH STONE AND WITH STONE SIZE TO TRAP GRAVEL, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
 5. MAXIMUM DRAINAGE AREA = 1 ACRE.

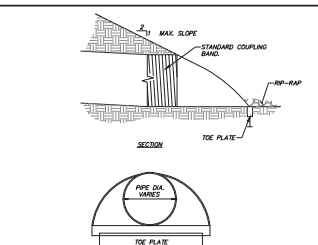
EXCAVATED DROP INLET PROTECTION DETAIL
(N.T.S.)



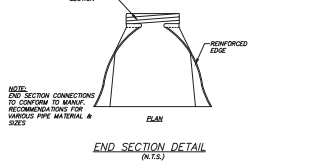
PAINTED NYS ACCESSIBLE PARKING DETAIL
(N.T.S.)



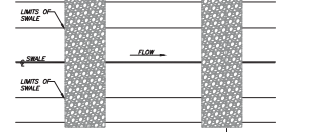
SILT FENCE DETAIL
(N.T.S.)



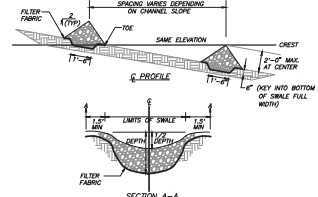
STONE CHECK DAM DETAIL
(N.T.S.)



END SECTION DETAIL
(N.T.S.)



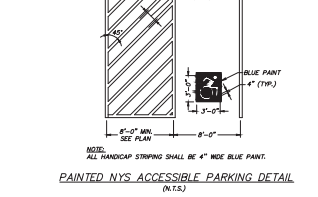
SECTION A-A



STONE CHECK DAM DETAIL
(N.T.S.)

- NOTES:**
1. STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION. STONE TO BE WELL-SHAPED 2\"/>
 2. SET SPACING OF STONE OVER THE ENTIRE LENGTH OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE UPSTREAM DAM.
 3. CUTTING AROUND THE DAM: A MINIMUM OF 12 FEET DETAIL TO THE DOWNSTREAM TO PREVENT CUTTING AROUND THE DAM.
 4. PROTECT THE CHANNEL CONSTRUCTION OF THE LOWEST CHECK DAM FROM SOIL AND EROSION WITH STONE SLIER AS APPROPRIATE.
 5. ENSURE THAT CHANNEL APPROPRIATELY DESIGN AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO CHANNEL COLLAPSE OR OVERFLOW FROM DISPLACED STONE.

STONE CHECK DAM DETAIL
(N.T.S.)



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

NO.	DATE	REVISION	BY
1			

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

3 Corbett Place
Roseton, NY 10912
(845) 225-8997
www.insite-arg.com

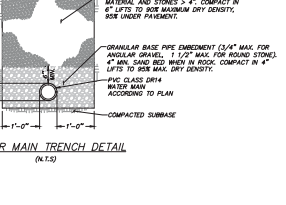
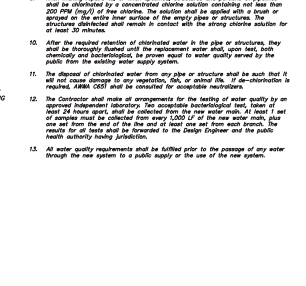
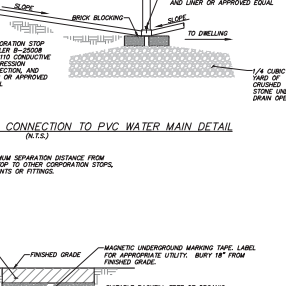
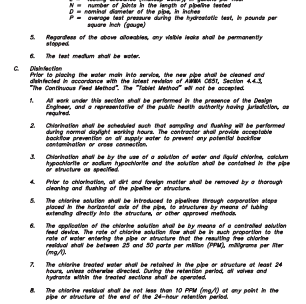
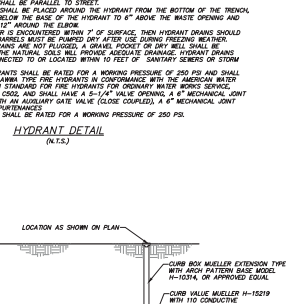
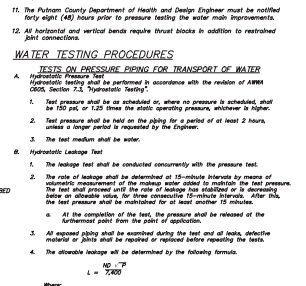
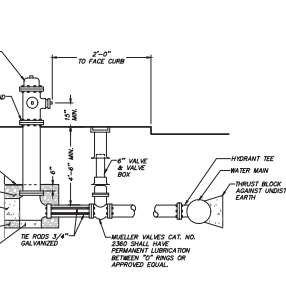
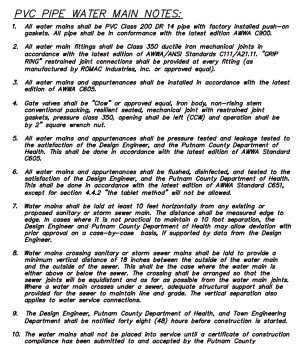
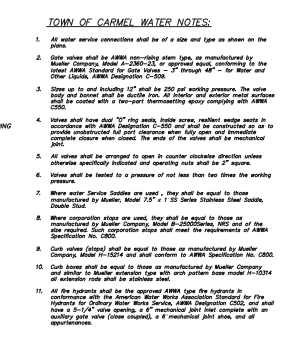
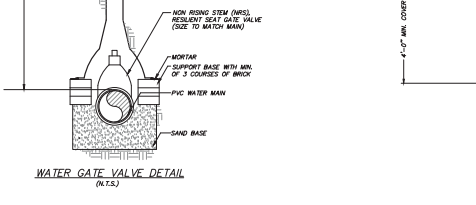
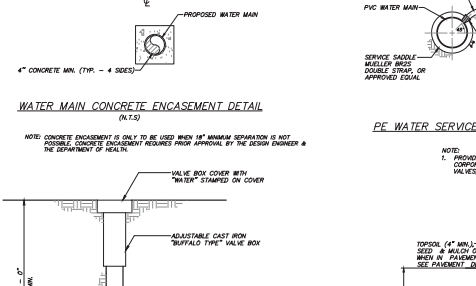
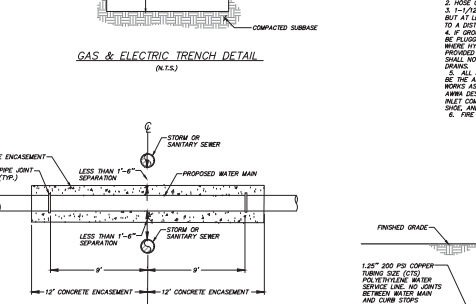
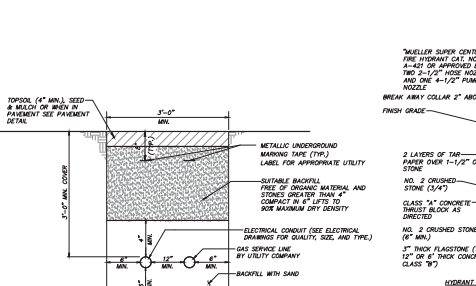
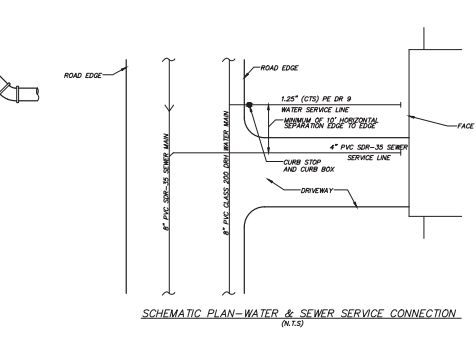
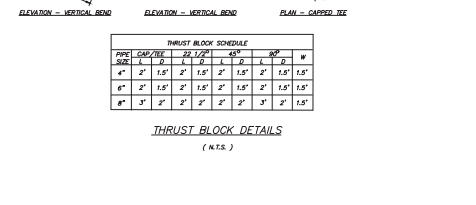
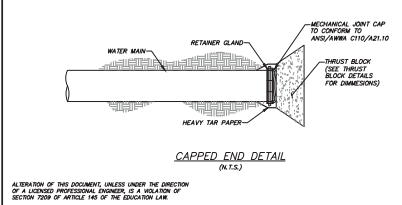
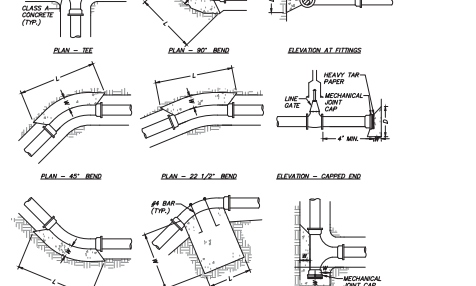
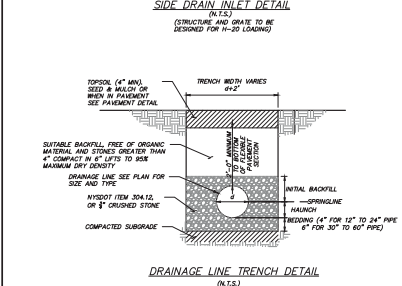
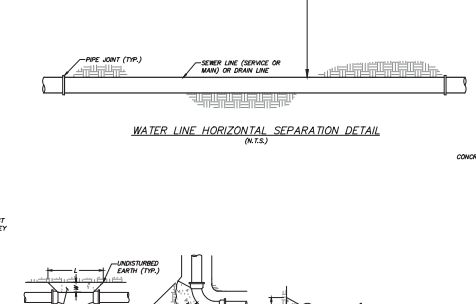
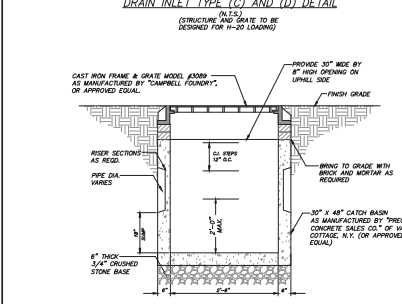
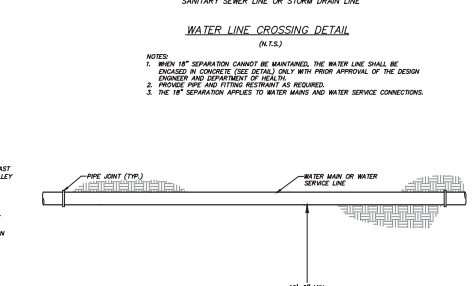
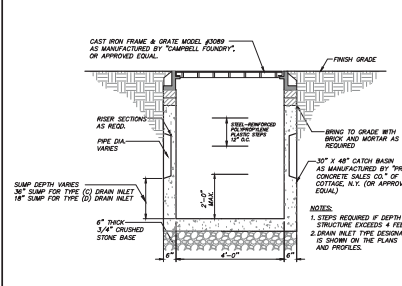
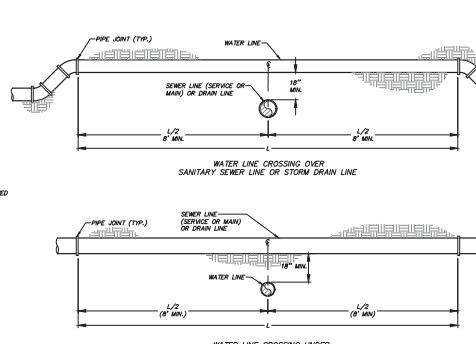
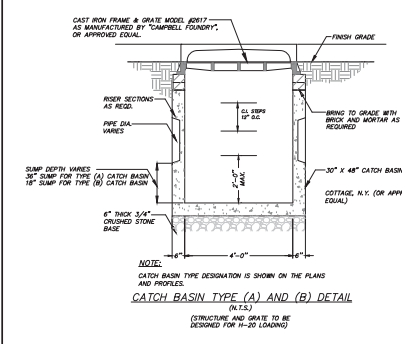
PROJECT: THE FAIRWAYS - LOT 7
MULTI-FAMILY HOUSING DEVELOPMENT
U.S. ROAD 6, TOWN OF COMUS, PUTNAM COUNTY, NEW YORK

DRAWING: SITE DETAILS

PROJECT NUMBER	DATE	SCALE	PROJECT MANAGER	J.L.C.	DRAWING NO.	SHEET
05140.100	1-28-22	AS SHOWN	M.E.U.		D-2	15

CHECKED BY: D.L.M.

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



NO.	DATE	REVISION	BY
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

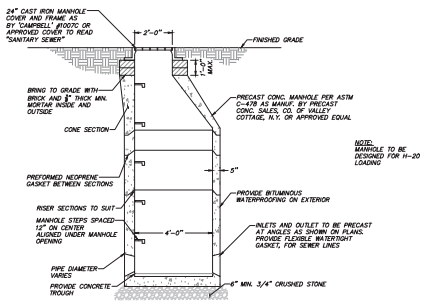
INSITE
ENGINEERING, SURVEYING &
LANDSCAPE ARCHITECTURE, P.C.

3 Carpent Place
PO Box 15512
(951) 225-8992
www.insite-arg.com

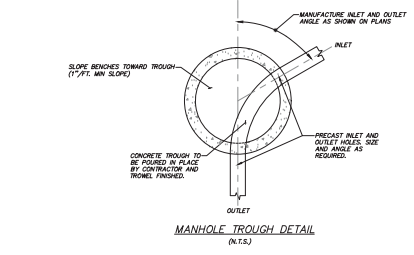
PROJECT: THE FAIRWAYS - LOT 7
MULTI-FAMILY HOUSING DEVELOPMENT
1550 S. 6th St. of Carmel, Pulmon County, New York

DRAWING: SITE DETAILS

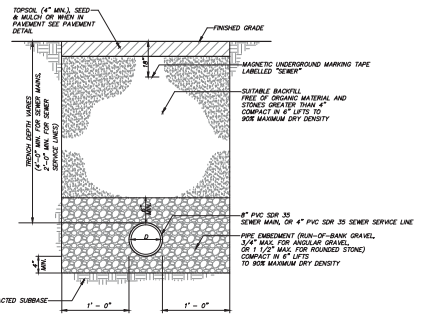
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.L.C.	DRAWING NO.	SHEET
DATE	1-28-22	DRAWN BY	M.E.U.		16
SCALE	AS SHOWN	CHECKED BY	D.L.M.		20



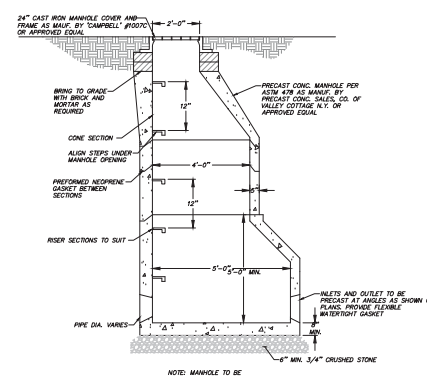
SEWER MANHOLE (6'-0" TO 12'-0") DETAIL (N.T.S.)



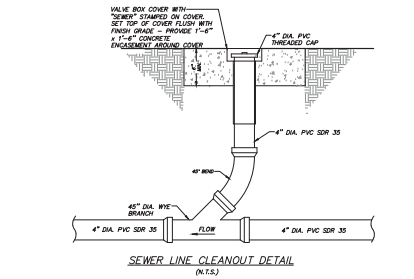
MANHOLE TROUGH DETAIL (N.T.S.)



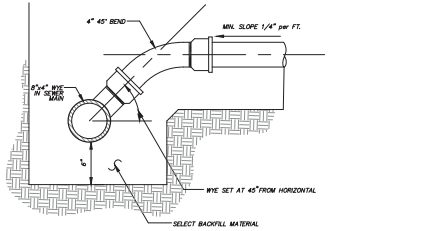
SEWER LINE TRENCH DETAIL (N.T.S.)



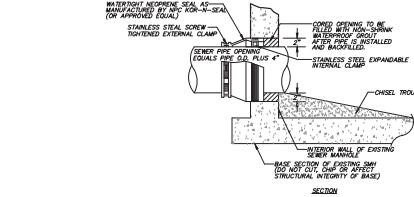
DEEP MANHOLE DETAIL (OVER 12'-0" DEEP) (N.T.S.)



SEWER LINE CLEANOUT DETAIL (N.T.S.)



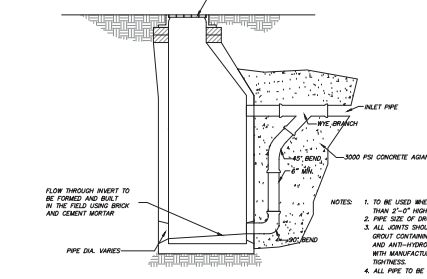
SANITARY SEWER SERVICE CONNECTION (N.T.S.)



CONNECTION TO EXISTING SEWER MANHOLE CONSTRUCTION SEQUENCE

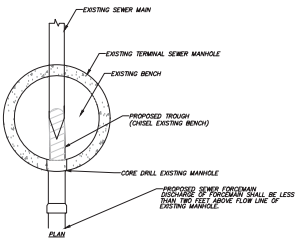
1. Core drill existing manhole and chisel proposed trough.
2. Install proposed sewer forcemain and connect to existing sewer manhole.
3. Perform required acceptance testing of the sewer forcemain.

PROPOSED SEWER FORCEMAIN CONNECTION TO EXISTING SEWER MANHOLE DETAIL (N.T.S.)



EXTERNAL DROP CONNECTION TO EXISTING MANHOLE DETAIL (N.T.S.)

1. TO BE USED WHEN INCOMING SEWER IS MORE THAN 2'-0" HIGHER THAN THE OUTGOING SEWER.
2. PIPE SIZE OF DROP CONNECTION TO BE SAME AS LATERAL.
3. ALL JOINTS SHOULD BE SEALED INSIDE AND OUT WITH CEMENT GROUT CONTAINING 2 PARTS CEMENT AND 1 PART SAND AND AUTHORIZED ON OTHER APPROVED ADHESIVE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO INSURE WATER TIGHTNESS.
4. ALL PIPE TO BE 6" PVC SDR 35.



SEWER FORCE MAIN TRENCH OR (N.T.S.)

SEWER MAIN NOTES

1. All sewer mains & sewer service shown on these plans shall be polyvinyl chloride (PVC) SDR 35.
2. Sewers shall be laid out at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured from the centerline of the sewer to the centerline of the water main.
3. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the sewer above or below the sewer. The crossing shall be protected as that the sewer joints will be covered by concrete. The sewer shall be supported by concrete blocks.
4. Sewer trenching shall be done in accordance with the sewer manhole to County Department of Health and the New York City Department of Environmental Protection and Planning.
5. Testing of the manholes with the sewer manhole shall be tested independently of each other.
6. The manufacturer shall be responsible for providing three (3) copies of an half-drawn design and sealed by a professional registered New York State Professional Engineer to the Putnam County Department of Health and the New York City Department of Environmental Protection, and from Engineering Department of Health of the Putnam County Department of Health.
7. The sanitary sewer mains shall not be placed into service until a certificate of construction compliance has been submitted to and accepted by the Putnam County Department of Health.
8. The sanitary sewer mains shall not be placed into service until a certificate of construction compliance has been submitted to and accepted by the Putnam County Department of Health.
9. The Putnam County Department of Health and the New York City Department of Environmental Protection shall be notified forty-eight (48) hours prior to pressure testing the sewer main improvements.
10. Manhole frames shall be covered by compacted material (600) for 24" opening or approved equal. M.A. covers to be marked "SEWER" and have an 1/2" hole in the cover.
11. The exterior of manholes shall be covered with an approved asphalt waterproofing.
12. Concrete base shall be an air-entrained concrete with a minimum design strength of 4,000 psi.
13. A manhole water stop shall be installed where the pipe enters into an existing manhole as approved by the Town Engineer.
14. The contractor shall submit shop drawings of the proposed manholes to the Design Engineer for review.
15. Precast manholes shall have minimum reinforcement of 0.12 sq. ft. per ft. for 48" bore. It be designed in accordance with A.S.T.M. C-478, without an H-20 design loading, as per A.S.T.M. C-478.
16. Precast manhole sections shall employ a watertight gasket arrangement between each section approved by the Design Engineer.
17. Opening for pipes shall be greater or smaller than concrete or collar for pipe connections to comply with the required size and composition with the pipe of the pipe.
18. The length of pipes entering or leaving any manhole shall be greater than 2'-0".
19. Precast manholes under 4'-0" deep shall have a "Tie Top" slab roof.
20. Colors or colors for pipe connections to manholes shall provide a minimum of 0.17' drop across the manhole.

SEWER FORCEMAIN TESTING PROCEDURES

- TESTS ON PRESSURE PIPING FOR TRANSPORT OF SEWAGE
1. Test pressure shall be as scheduled on no pressure in schedule, but not less than 100 psi.
 2. Test pressure shall be held on the piping for a period of at least 30 minutes, unless a longer period is requested by the Engineer.
 3. At the completion of the test, the pressure shall be released of the piping.
 4. All exposed piping shall be examined during the test and all defects, defective material or joints shall be repaired or replaced before resuming the tests.
 5. The discharge leakage for forceman pressure pipelines shall not exceed 5 gallons for 30-minute test period.
 6. Represses of the above observations, any visible leaks shall be permanently repaired.
 7. The test medium shall be water.

Pump Station Testing Procedures

- The pump system shall be tested after all other sewer components have been tested.
1. After the contractor has stated to the engineer that the installation is complete, a running test of the pump, control, alarm, and auxiliary power shall be performed in the presence of the Engineer to demonstrate proper operating condition.
 2. All equipment and controls will be re-inspected, adjusted and/or repaired, and re-tested as often as necessary to meet the specified requirements to the satisfaction of the Engineer.
 3. The Putnam County Department of Health and the New York City Department of Environmental Protection shall be notified forty-eight (48) hours prior to pump station testing.

SEWER FORCEMAIN NOTES

1. The sewer forcemain from the sewer pump station to the discharge manhole shall be a 4" diameter forcemain.
2. The forcemain pipe shall be 4" diameter PVC SDR 35 with bell and gasket joints and factory installed gaskets.
3. All fittings shall be Schedule 80 gull fittings. Thrust blocks shall be provided at all joints.
4. Provide positive slope on the forcemain from the pump station to the discharge manhole. Do not create any high points or low points along the entire forcemain run.
5. Provide transition fittings and transition gaskets as needed of the valve pit and forceman discharge manhole.
6. Provide metallic marking tape labeled "sewer" over the forcemain.

SEWER TESTING PROCEDURES

- TESTS FOR NON-PRESSURE PIPELINES FOR TRANSPORT OF SEWAGE
- The manhole shall be determined by infiltration, inflow or low pressure test.
- A. Infiltration Testing
 1. Infiltration tests shall be made by filling a section of pipe with water and measuring the quantity of leakage.
 2. The head of water shall be made by filling a section of pipe with water and the highest pipe with the section being tested.
 3. Quality measurements to prevent water from the section being tested, the head of water for the test shall be 2 feet above the 5/8" gasket present of the manhole.
 4. Should the requirement of 2 feet of water above the highest pipe is not met, the test shall be repeated with the test water to a differential head of greater than 11.5 feet, another method of testing shall be approved.
 - B. Infiltration Testing
 1. Infiltration tests will be allowed only when the water table gauges determine the groundwater level to be 2 feet or more above the highest pipe of the manhole.
 2. Infiltration test shall be made by measuring the quantity of water leaking into a section of pipe.
 3. Measurement of the infiltration shall be by means of a calibrated and constructed at the outlet of the section being tested.
 - C. Alternate Leakage for Non-Pressure Pipelines
 1. The alternate leakage (infiltration or infiltration) for non-pressure pipelines shall not exceed the quantity in gallons per 24 hours per inch of diameter per 100 feet of pipe.

Diameter (inches)	Leakage (gallons per 24 hours per inch of diameter per 100 feet of pipe)
1/2	100
3/4	150
1	200
1 1/4	300
1 1/2	400
2	600
 - D. Low Pressure Air Testing
 1. Air testing for acceptance shall not be performed until the backfilling has been completed.
 2. Low pressure air tests shall conform to ASTM C 828 or ASTM F1417-02 Section 8.2.2. The pressure drop method for 0.2 psi drop, minimum, shall be used to determine the leakage. The test shall be performed at the test section by the Engineer.
 3. All sections of pipelines shall be covered and flushed prior to testing.
 4. The air test shall be conducted on the manhole section of 4.5 to 4.5 feet long. The time allowed for the 0.2 psi drop in pressure, maximum is 30 minutes, but shall be constant based on the size and length of the test section by the Engineer.
 5. When penetration is present, the average test pressure of 7 psi shall be used as the test pressure. The test shall be repeated until the test pressure is constant for 10 psi. The maximum penetration rate for air testing is 1.5 feet per hour for 12 psi.
 6. The equipment required for air testing shall be furnished by the Contractor and shall be used for the monitoring of the pressure, release of pressure and a separate test pipe.
 7. The test shall be done to allow for the measuring of the 0.2 psi drop the manhole during the test period and shall be on a separate test pipe.
 - E. Deflection Testing
 1. Deflection testing shall be performed 30 days after backfilling. The test shall be made by passing a test or cylinder no less than 2" in diameter through the pipe. The test shall be performed at the test section by the Engineer.
 - F. Manhole Testing
 1. General
 - a. Each manhole shall be tested by either infiltration, inflow or low pressure testing.
 - b. A manhole will be acceptable if the leakage does not exceed an amount as specified in the table below. Represses of the above observations, any leaks detected shall be permanently repaired.
 2. Infiltration tests shall be performed after backfilling. The test shall be made by filling the manhole with water and observing the level for a minimum of eight hours.
 3. Infiltration tests shall be performed after backfilling when the groundwater level is above the joint of the top section of a precast manhole and the lower manhole of the manhole.
 4. Vacuum testing shall be performed after backfilling in accordance with the latest edition of ASTM C848-02 section 8.2.2.
 5. The test head shall be placed at the top of the manhole in accordance with the manufacturer's recommendations.
 6. A vacuum of 10 in. of mercury shall be drawn on the manhole, the manhole shall be held at this vacuum for 30 minutes and the manhole shall be held at this vacuum for 30 minutes.
 7. The manhole shall pass if the time for the vacuum reading to drop from 30 minutes to 15 minutes is 90 minutes or more.

SEWER FORCEMAIN TESTING PROCEDURES

TESTS ON PRESSURE PIPING FOR TRANSPORT OF SEWAGE

1. Test pressure shall be as scheduled on no pressure in schedule, but not less than 100 psi.
2. Test pressure shall be held on the piping for a period of at least 30 minutes, unless a longer period is requested by the Engineer.
3. At the completion of the test, the pressure shall be released of the piping.
4. All exposed piping shall be examined during the test and all defects, defective material or joints shall be repaired or replaced before resuming the tests.
5. The discharge leakage for forceman pressure pipelines shall not exceed 5 gallons for 30-minute test period.
6. Represses of the above observations, any visible leaks shall be permanently repaired.
7. The test medium shall be water.

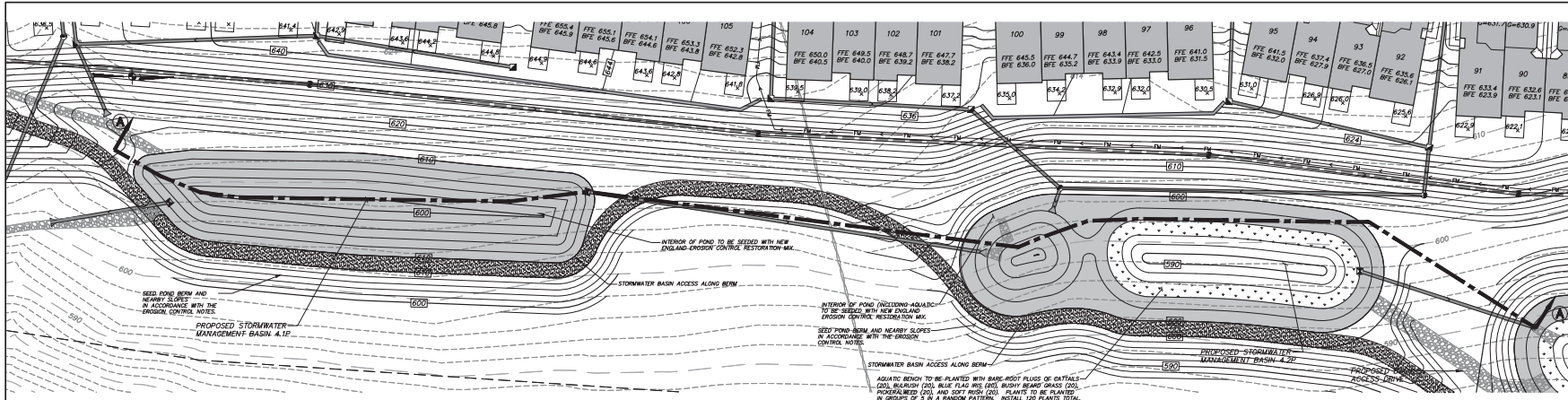
Minimum Test Times for Vertical Manhole Diameters in Seconds

Diameter (inches)	48	60
8 or less	20	26
10	26	33
12	33	39
14	39	46
16	46	53
18	53	59
20	59	65

4. If the manhole fails the initial test, necessary repairs shall be made by the contractor. The manhole shall be re-tested until a satisfactory test is obtained.

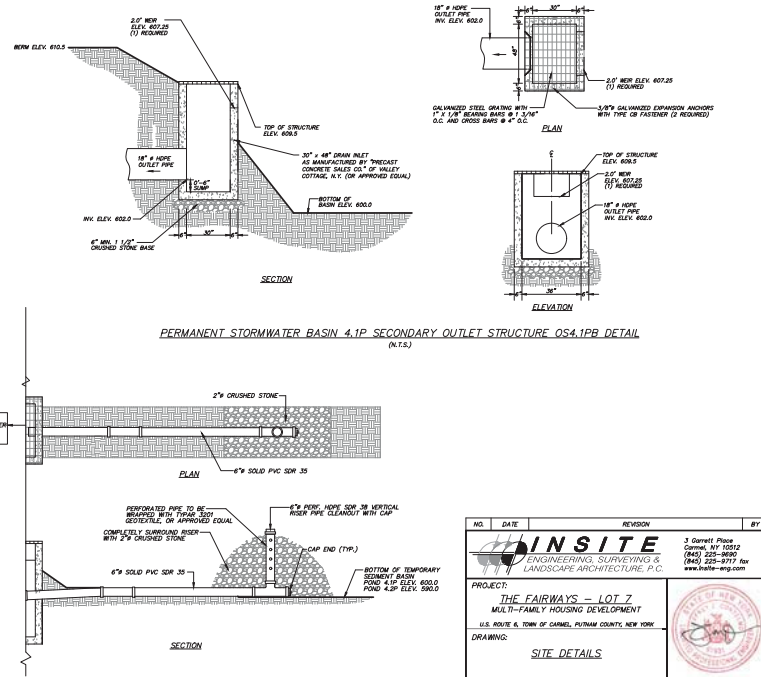
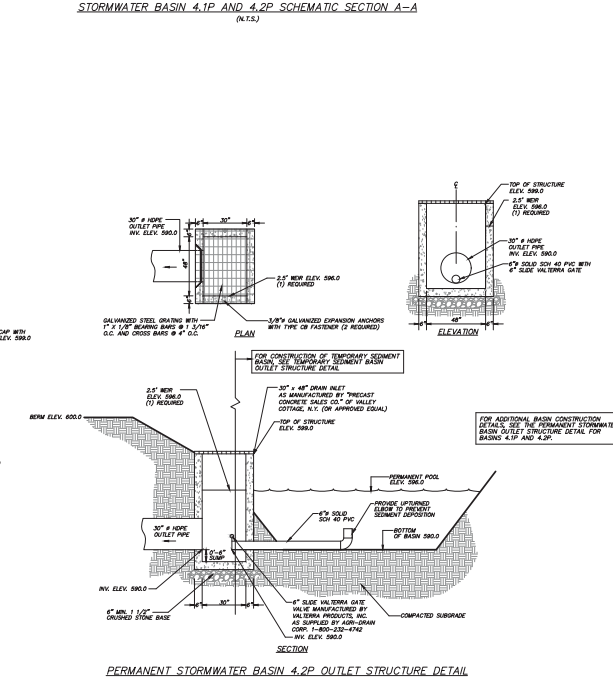
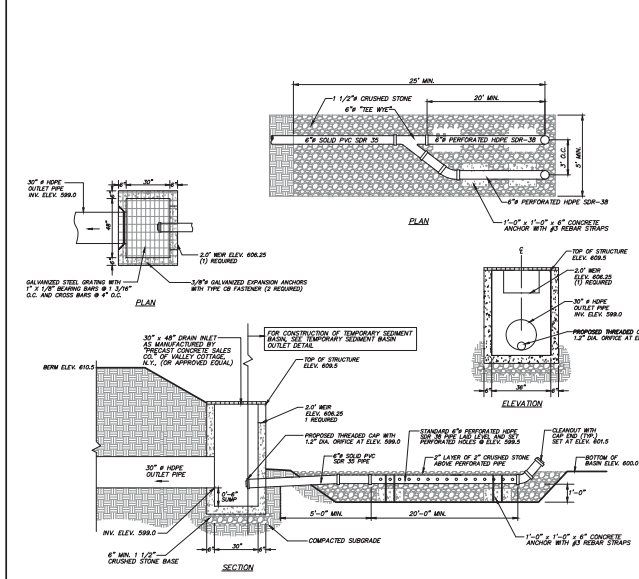
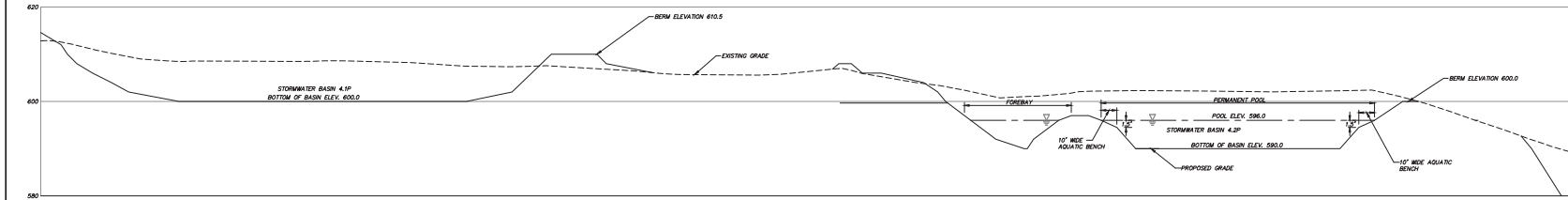
NO.	DATE	REVISION	BY
PROJECT:			3 Carroll Place NY 10512 (914) 232-8992 FAX: 232-8997 www.insite-arg.com
THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT U.S. 206 E. TOWN OF COMUS, PUTNAM COUNTY, NEW YORK			
SITE DETAILS			
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.L.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	D.L.M.
			DRAWING NO. 17
			SHEET 17
			20

ALTOUGH OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



- ### STORMWATER BASIN OUTLET NOTES
- THE PONDS ARE PROPOSED TO BE UTILIZED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION.
 - SHOULD ROCK BE ENCOUNTERED DURING THE CONSTRUCTION OF ANY OF THE STORMWATER BASIN / TEMPORARY SEDIMENT BASIN EXCAVATIONS, THE AREA OF ROCK SHALL BE OVER EXCAVATED A MINIMUM OF ONE FOOT BELOW FINISHED GRADE AND BACKFILLED WITH CLAY.
 - AFTER THE CONTIGUOUS AREAS TO THE PONDS HAVE BEEN PERMANENTLY STABILIZED, THE FOLLOWING SHALL BE ACCOMPLISHED:
 - CLEAN BASINS AND OUTLET STRUCTURES AND REMOVE 6" PERFORATED VERTICAL RISER PIPE, CRUSHED STONE AND FILTER FABRIC.
 - ADD THREADED CAP WITH ORNICE AT DISCHARGE END OF 6" SOLID PVC RISER PIPE FOR DETAIL.
 - REPLACE THE PERFORATED PIPE AND CRUSHED STONE.
 - DO NOT REGRADE FILTER FABRIC.
 - ESTABLISH THE FINAL VEGETATION IN THE POND IN ACCORDANCE WITH THE TYPICAL DRY STORMWATER BASIN PLANTING DETAILS.
 - FOR ANCHORPOOL EXTENDED DETENTION POND EXCAVATE BOTTOM OF TEMPORARY SEDIMENT BASIN TO PERMANENT STORMWATER POND BOTTOM.
 - THE 6" PERFORATED VERTICAL RISER SHALL BE CONSTRUCTED AS FOLLOWS:
 - WHEN INITIALLY USED AS THE TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION THE RISER SHALL BE WRAPPED WITH TRAP 300 GEOTEXTILE OR APPROVED EQUAL AND SURROUNDED WITH 2" OF STONE. THE TOP OF THE RISER SHALL BE SET AT THE SAME ELEVATION AS THE BERMS AS SHOWN IN THE STORMWATER BASIN OUTLET STRUCTURE DETAILS.
 - WHEN THE PERMANENT RISER FOR BASIN IS CONSTRUCTED THE RISER SHALL BE UNWRAPPED WITH THE TOP ELEVATION SET AT SPECIFIED ELEVATIONS.

- ### Planting Notes:
- All plant material to be nursery grown.
 - Plants shall conform with the American Association of Nurserymen Standards in all major growing dimensions.
 - Plants shall be planted in all locations designated on the plan or as stated in the list by the Landscape Architect.
 - All plants shall be hardy under climate conditions similar to those in the locality of the project.
 - All proposed seeded areas to receive 6" min. depth of topsoil.
 - Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in combination with suitable mulch or follow:
 - For areas to receive permanent vegetation cover (LESS THAN 1000 SQ. FT. (100 APPROXIMATE) SQUARE FEET OR EQUIVALENT): Seeded mixture described in Table 2002-2002, Seeding and Stabilization, 2002 Edition, New York State Department of Environmental Conservation, 2002.
 - Mulch: Set hay or small grain straw applied at a rate of 80 lbs./1000 S.F. or 2 tons/acre, to be applied and monitored according to Table 2002-2002, Seeding and Stabilization, 2002 Edition, New York State Department of Environmental Conservation, 2002.
 - If the owner prevents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent.
 - Erosion control seed mix to be the New England Erosion Control/Restoration Mix for Disturbed Areas and Moist Shaded Areas of 100% of 100% as manufactured by New England Wetland Plants, Inc.



ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
1			

INSITE
 ENGINEERING, SURVEYING &
 LANDSCAPE ARCHITECTURE, P.C.
 3 Corbett Place
 Commack, NY 11717
 (609) 225-8997
 Fax: (609) 225-8997
 www.insite-arg.com

PROJECT: THE FAIRWAYS - LOT 7
 MULTI-FAMILY HOUSING DEVELOPMENT
 U.S. ROAD 6, TOWN OF COMAL, PUTNAM COUNTY, NEW YORK

DRAWING: SITE DETAILS

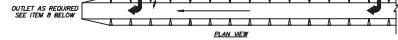
PROJECT NUMBER	DATE	PROJECT MANAGER	J.L.C.	DRAWING NO.	SHEET
05140.100	1-28-22	M.E.U.		D-5	18

CHECKED BY: D.L.M.
 SCALE: AS SHOWN

SCALE A (1" = 3'-0")	SCALE B (2" = 10'-0")
1" = 3'-0"	2" = 10'-0"
4" = 12'-0"	8" = 30'-0"



CROSS SECTION ON TOPOGRAPHY, 20% MAX.

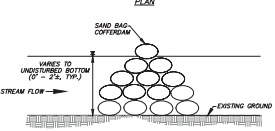
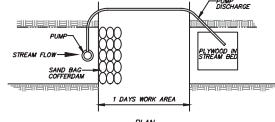


CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DESIGNATED AREA SHALL BE CONVEYED TO A SEGMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDESIGNED AREA SHALL OUTLET DIRECTLY INTO AN UNDESIGNED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STAMPS, OBSTRUCTIONS AND OTHER COLLECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE SECURED BY SHARDED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BRUSH PROJECTIONS OR OTHER OBSTRUCTIONS WHICH WILL IMPED NORMAL FLOW.
6. FILLS SHALL BE COMPLETED BY GRAVITY MOVING EQUIPMENT.
7. ALL LEAKS REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE REPAID SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.
9. STABILIZATION SHALL BE AS PER THE CHART BELOW.

TYPE OF TREATMENT	FLOW CHANNEL STABILIZATION	
	CHANNEL GRADE	# (15-15-AC)
1	0.5% SLOPE SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	1.1% SLOPE SEED AND STRAW MULCH	SEED USING JUTE OR EXCESSIVE SOD
3	5.1% SLOPE SEED WITH JUTE OR EXCESSIVE SOD	LINED SW-RAIP 4" x 8" REINFORCED CONCRETE EQUIVALENT
4	8.1% SLOPE LINED 4" x 8" RCP-RAIP	ENGINEERED DESIGN

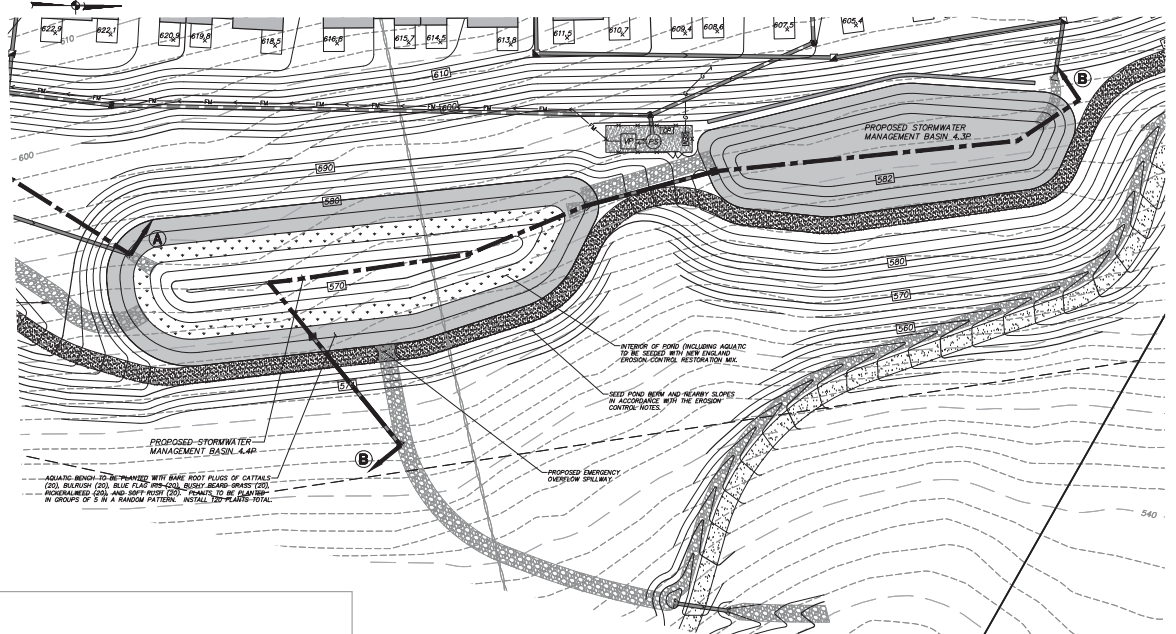
TEMPORARY SWALE DETAIL (N.T.S.)



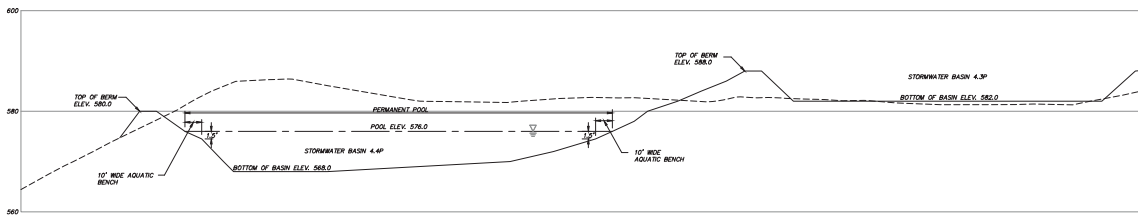
SAND BAG COFFERDAM DETAIL (N.T.S.)

Drainage Channel / Watercourse Stabilization Notes

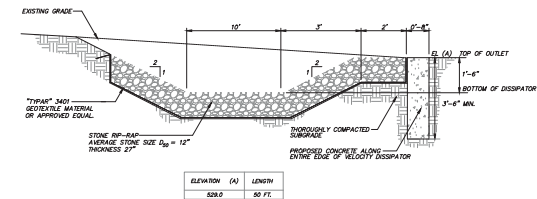
1. Install all fence downstream of proposed work area per the plan.
2. Min existing vegetation for access during construction. Do not remove any channels or root systems of any vegetation outside of the limits of proposed improvements.
3. The work as proposed shall be undertaken and completed during dry periods. If possible, the work shall be staged to complete each construction activity area in one disturbed period. Should any flow in the channels be encountered, install sand bag coffer dam and pump around the anticipated area of work in accordance with the detail.
4. Access to the drainage channel stabilization areas shall be via existing logging roads throughout the site. Additionally, the proposed access road shall be installed in Phase 1 prior to the drainage channel stabilization.
5. Extra care should be taken to keep the disturbance within the wetland and watercourse buffers.
6. Install rip rap in accordance with the channel details. Topsoil, seed and mulch adjacent areas.
7. Silt fence shall be removed upon stabilization of upgradient areas.



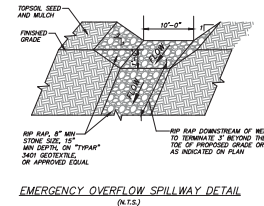
STORMWATER BASINS 4.3P AND 4.4P ENLARGED VIEW SCALE: 1" = 30'



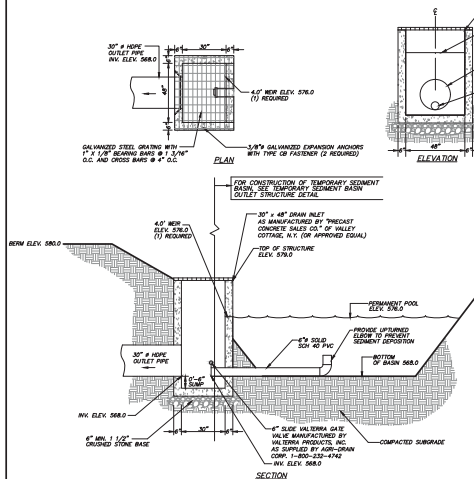
STORMWATER POND 4.3P AND 4.4P SCHEMATIC SECTION B-B (N.T.S.)



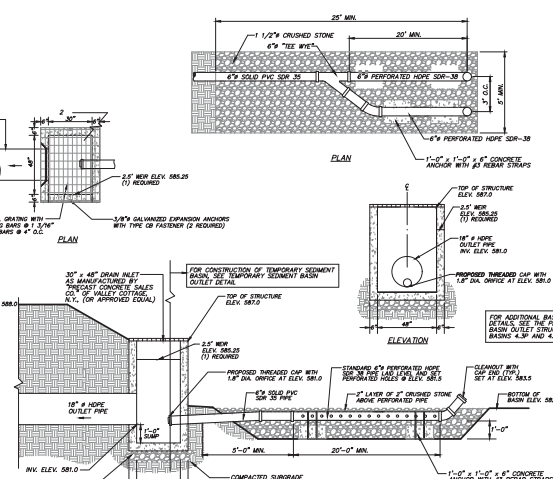
ENHANCED VELOCITY DISSIPATOR DETAIL (N.T.S.)



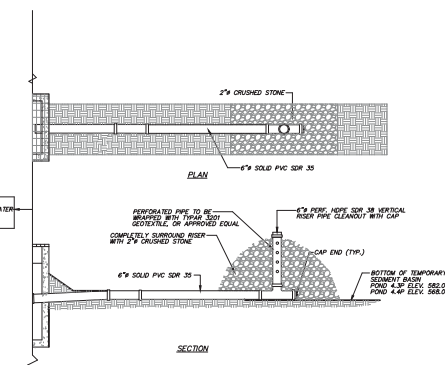
EMERGENCY OVERFLOW SPILLWAY DETAIL (N.T.S.)



PERMANENT STORMWATER BASINS 4.4P OUTLET STRUCTURE DETAIL (N.T.S.)



PERMANENT STORMWATER BASINS 4.3P OUTLET STRUCTURE DETAIL (N.T.S.)



TEMPORARY SEDIMENT BASINS 4.3P AND 4.4P OUTLET DETAIL (N.T.S.)

ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: THE FAIRWAYS - LOT 7 MULTI-FAMILY HOUSING DEVELOPMENT U.S. ROAD 6, TOWN OF COMER, PUTNAM COUNTY, NEW YORK			
SITE DETAILS			
PROJECT NUMBER	05140.100	PROJECT MANAGER	J.J.C.
DATE	1-28-22	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	D.L.M.
			DRAWING NO. D-6 SHEET 19 OF 20

SEWER PUMP STATION NOTES:

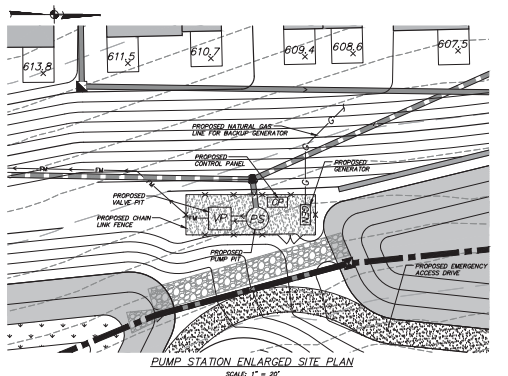
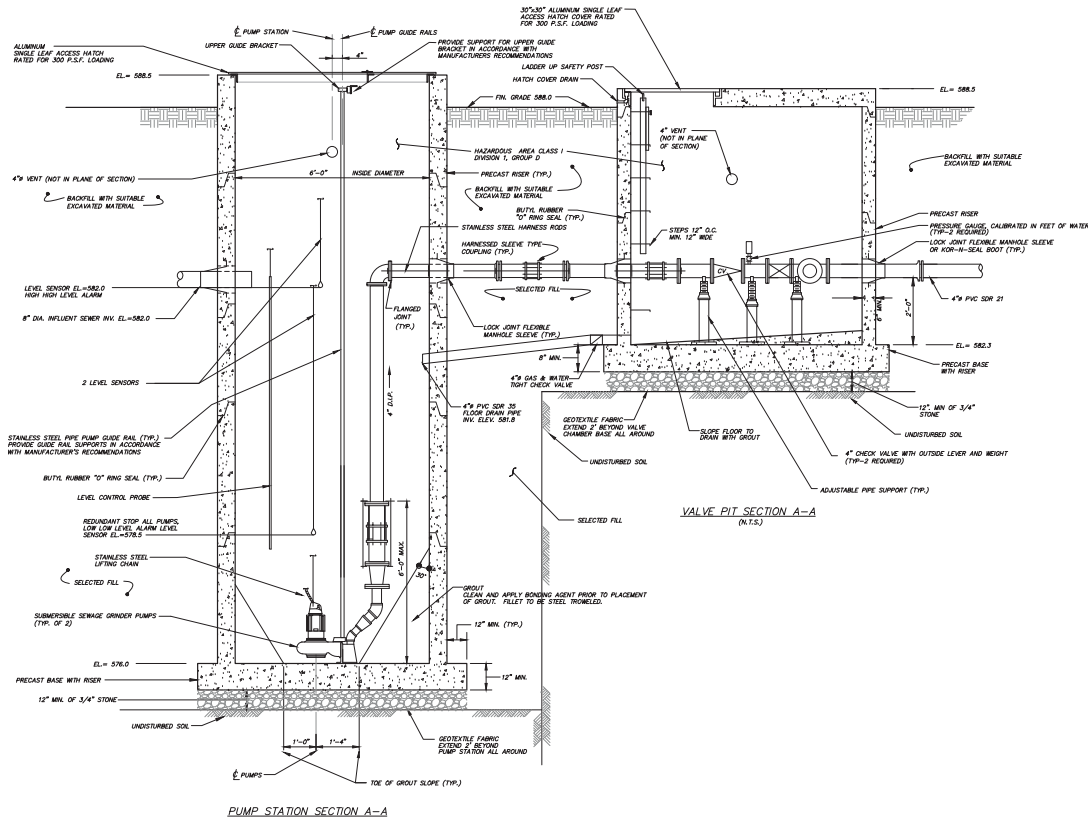
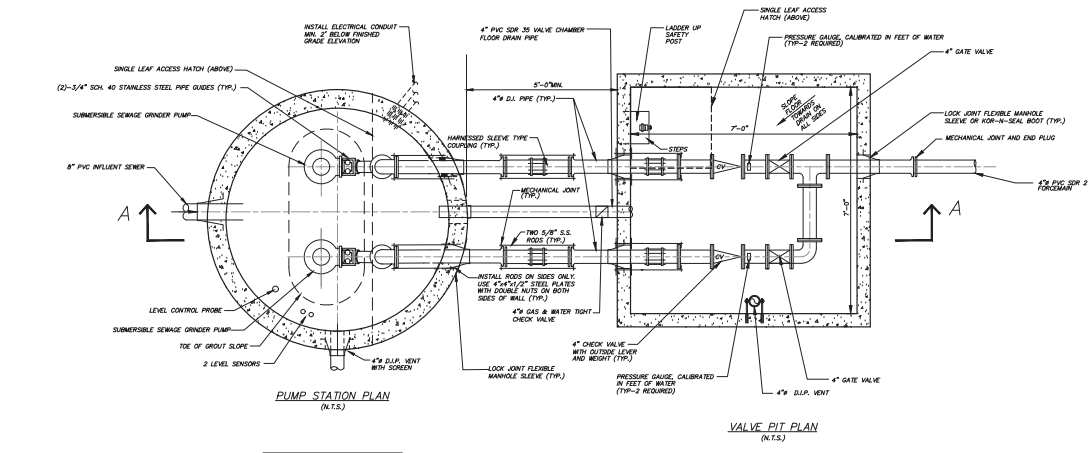
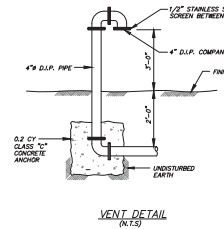
1. THE CONTRACTOR SHALL BACKFILL WITH SELECTED FILL (SELECTED FILL SHALL BE RUN OF BANK GRAVEL OR WOODSTOCKS) FROM THE BOTTOM OF THE EXCAVATION TO ELEVATION 588.8.
2. STRUCTURES SHALL BE REINFORCED IN ACCORDANCE WITH ASTM C-478 AND TO WITHSTAND 300 P.S.F. LOADING.
3. 4" D.I.P. VENTS SHALL BE INSTALLED UNDERGOING FROM PUMPING STATION AND VALVE CHAMBERS TO LOCATION AS INDICED BY DIMENSIONS.
4. THE PUMP STATION PRECAST BASE SECTION SHALL HAVE A MINIMUM INSIDE HEIGHT OF 6 FEET.
5. THE PUMP STATION CONTROL PANEL SHALL BE CONNECTED TO AN AUTOSHAHER WHICH SHALL NOTIFY THE SEWER SYSTEM OPERATOR OF ANY ALARM CONDITION, PUMP MALFUNCTION, PRIMARY POWER FAILURE, OR GENERATOR START UP.
6. THE PUMP STATION SHALL BE EQUIPPED WITH A PERMANENT 60 AMP EMERGENCY POWER SWITCH CAPABLE OF TRANSFERRING THE LOAD TO THE EMERGENCY GENERATOR WITHIN THE NORMAL POWER SUPPLY FAILURE. THE TRANSFER SWITCH SHALL HAVE A THREE SECOND DELAY FROM THE TIME OF PRIMARY POWER FAILURE TO EMERGENCY POWER GENERATOR START. THE EMERGENCY POWER GENERATOR SHALL START UP AUTOMATICALLY FROM BATTERY POWER.
7. THE EMERGENCY POWER GENERATOR SHALL BE CAPABLE OF PROVIDING FULL POWER TO THE PUMP STATION WITHIN 1 MINUTE OF PRIMARY POWER FAILURE TO PREVENT OVERFLOW OF THE NET WELL.
8. ALL ELECTRICAL WORK SHALL COMPLY WITH THE NEC (NATIONAL ELECTRICAL CODE).
9. THE PUMP ALARM SHALL BE CONNECTED TO SEPARATE CIRCUITS.

CONTROL ELEVATION SCHEDULE

	LEVEL CONTROL PROBE	LEVEL FLOAT SENSOR
HIGH HIGH ALARM	-	582.0
HIGH LEVEL ALARM	581.8	-
START LEAD PUMP	581.3	-
START LEAD PUMP	580.8	-
LEAD STOP	580.0	-
LEAD STOP	579.1	-
BOTTOM ELEVATION OF MULTITRODE	578.0	-
LOW LOW ALARM	-	578.5
BOTTOM FT	576.0	-

PUMP DATA

PUMP	FLYGT CORPORATION
MODEL	NP 3171
HORSEPOWER	35
POWER	230V / 60 Hz / 3 PH.
PERFORMANCE	180 GPM AT 110 FEET TDH
EXPLOSION PROOF, CLASS I, DIVISION 1, GROUP D	



ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
3			

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

PROJECT: **THE FAIRWAYS - LOT 7**
MULTI-FAMILY HOUSING DEVELOPMENT
115 ROAD 6, TOWN OF CANTON, PUTNAM COUNTY, NEW YORK

DRAWING: **SEWER PUMP STATION DETAILS**

PROJECT NUMBER	05140.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	20	SHEET	20
DATE	1-28-22	DRAWN BY	M.E.U.	CHECKED BY	D-7		
SCALE	AS SHOWN						



January 28, 2022

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

RE: G&F Subdivision Lots 5, 6, & 7
Gateway Drive

Dear Chairman Paeprrer and Members of the Board:

Please find enclosed the following plans and documents in support of an application for subdivision approval for the above referenced project:

- Subdivision Application, January 28, 2022. (11 copies)
- Site Plan Completeness Certification Form, January 28, 2022. (11 copies).
- Disclosure Addendum Statement, January 28, 2022. (2 copies)
- Fifteen (15) sheet Plan Set, dated January 26, 2022. (5 copies)
- List of Property Owners within 500' of the Site Boundary. (2 copies)
- Check in the amount of \$2,500.00 for the Amendment to Final Plat application fee.


The applicant seeks to amend the Final Plat with revisions to the lot lines for Lots 5, 6, & 7 of the G&F Subdivision. These changes are to coordinate with the amended site plans currently before your Board. The new lot configurations will also allow for the shortening of the Town road and right-of-way as shown on the enclosed plans.

Please place the project on the February 10, 2022 Planning Board agenda for a discussion of the project with the Board.

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

Very truly yours,

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

By: 

Jeffrey J. Contelmo, PE
Senior Principal Engineer

JJC/dlm/amk

Enclosures

cc: Paul Camarda / CRI

Insite File No. 04232.100

3 Garrett Place, Carmel, New York 10512 (845) 225-9690 Fax (845) 225-9717
www.insite-eng.com



TOWN OF CARMEL SUBDIVISION APPLICATION INSTRUCTIONS



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

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

Pre-Submission:

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

Submission Requirements:

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

All subdivisions shall be signed, sealed and folded with the title box legible. The application package shall include:

- 11 copies of the Subdivision Application Form signed and notarized.
- * 11 copies of the SEQR Environmental Assessment Form (use of short form or long form shall be determined at pre-submission conference).
- 5 full size sets of the Subdivision Plan
- 1 CD (in pdf. format) containing an electronic version of the Subdivision Plan
- 2 copies of the Disclosure Statement
- 11 copies of the Subdivision Completeness Certification Form
- All supplemental studies, reports, plans and renderings.
- 2 copies of the current deed.
- 2 copies of all easements, covenants and restrictions.
- The appropriate fee, determined from the attached fee schedule. Make checks payable to the *Town of Carmel*.

Rose Grubbs 2/1/22
Planning Board Secretary; Date

Richard J. [Signature] 2/1/2022
Town Engineer; Date



TOWN OF CARMEL SUBDIVISION APPLICATION



Per Town of Carmel Code – Section 131 – Subdivision of Land

SITE IDENTIFICATION INFORMATION		
Application Name: G&F Subdivision Lots 5, 6, & 7	Application # 22-0002	Date Submitted: 1/28/22
Site Address: No. _____ Street: Route 6 Hamlet: Carmel		
Property Location: (Identify landmarks, distance from intersections, etc.) North side of Route 6 in the Town of Carmel north of Putnam Trailway		
Town of Carmel Tax Map Designation: Section 55.-2 Block 24 Lot(s) 5, 6-1, 7-2, & 8-2	Zoning Designation of Site: R- Residential and C/BP Commercial Business	
Property Deed Recorded in County Clerk's Office Date _____ Liber _____ Page _____ <small>Deeds included in submission package</small>	Liens, Mortgages or other Encumbrances Yes _____ No _____	
Existing Easements Relating to the Site No <input checked="" type="radio"/> Yes Describe and attach copies: Per previous subdivision FM #3061 & 3061A	Are Easements Proposed? No _____ Yes <input checked="" type="radio"/> Describe and attach copies: To be determined	
Have Property Owners within a 500' Radius of the Site Been Identified? <input checked="" type="radio"/> Yes No _____ Attached List to this Application Form— <small>List provided on site plans</small>		
APPLICANT/OWNER INFORMATION		
Property Owner: Hudson Valley Realty Corp(Gateway)/Par Four (Fairways)	Phone #: 845-228-1400 Fax#:	Email: crillc@comcast.net
Owners Address: No. 1699 Street: Route 6, Suite 1 Town: Carmel State: NY Zip: 10512		
Applicant (If different than owner): Same as above	Phone #: Fax#:	Email:
Applicant Address (If different than owner): No. _____ Street: _____ Town: _____ State: _____ Zip: _____		
Individual/ Firm Responsible for Preparing Site Plan: Insite Engineering, Surveying and Landscape Architecture, PC	Phone #: 845-225-9690 Fax#: 845-225-9717	Email: jcontelmo@insite-eng.com
Address: No. 3 Street: Garrett Place Town: Carmel State: NY Zip: 10512		
Other Representatives:	Phone #: Fax#:	Email:
Owners Address: No. _____ Street: _____ Town: _____ State: _____ Zip: _____		
PROJECT DESCRIPTION		
Describe the project, proposed use and operation thereof: The project is the amendment of the lot lines for Lots 5, 6, & 7 and the road right-of-way for the G&F Subdivision.		

TOWN OF CARMEL SUBDIVISION APPLICATION

PROJECT INFORMATION						
Size of existing parcel to be subdivided: <div style="display: flex; justify-content: space-between;"> Acres: 144.65 Square Feet: </div>						
Major Subdivision <input checked="" type="checkbox"/>		Minor Subdivision <input type="checkbox"/>				
Number of proposed lots: 3	Size of proposed lots: See site plans for lot sizes					
Conventional Subdivision <input checked="" type="checkbox"/>		Cluster Subdivision <input type="checkbox"/>				
Will a 10% open space set aside be provided? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>		If no, will a payment in-lieu be provided? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>				
Will all new lots have frontage on a mapped street? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>		If not, how will this deficiency be addressed?				
Is the site served by the following public utility infrastructure:						
<ul style="list-style-type: none"> <input type="checkbox"/> Sanitary Sewer Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> 						
If Yes: <ul style="list-style-type: none"> ▶ Does approval exist to connect to sewer main? Yes: <input type="checkbox"/> No: <input type="checkbox"/> ▶ Is this an in-district connection? Yes: _____ Out-of district connection? _____ ▶ What is the total sewer capacity at time of application? See Report _____ ▶ What is your anticipated average and maximum daily flow See Report _____ 						
<i>For Town of Carmel Town Engineer</i> ▶ What is the sewer capacity <u>100 2/1/2022</u>						
<ul style="list-style-type: none"> <input type="checkbox"/> Water Supply Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> 						
If Yes: <ul style="list-style-type: none"> ▶ Does approval exist to connect to water main? Yes: <input type="checkbox"/> No: <input type="checkbox"/> ▶ What is the total water capacity at time of application? See Report _____ ▶ What is your anticipated average and maximum daily demand See Report _____ 						
<ul style="list-style-type: none"> <input type="checkbox"/> Storm Sewer Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> <input type="checkbox"/> Electric Service Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> <input type="checkbox"/> Gas Service Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> <input type="checkbox"/> Telephone/Cable Lines Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> 						
Will any common areas be created outside of individual lots (road rights-of-way, recreation areas, stormwater management areas, etc.)? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>						
Is a homeowners association proposed? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>						
What is the predominant soil type(s) on the site? Pn Paxton Loam		What is the approximate depth to water table? Greater than 6 feet				
Site slope categories: See FEIS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">15-25% _____ %</td> <td style="border: none;">25-35% _____ %</td> <td style="border: none;">>35% _____ %</td> </tr> </table>				15-25% _____ %	25-35% _____ %	>35% _____ %
15-25% _____ %	25-35% _____ %	>35% _____ %				
Estimated quantity of excavation: to be provided <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Cut (C.Y.) _____</td> <td style="border: none;">Fill (C.Y.) _____</td> </tr> </table>				Cut (C.Y.) _____	Fill (C.Y.) _____	
Cut (C.Y.) _____	Fill (C.Y.) _____					
Is Blasting Proposed Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> Unknown: <input type="checkbox"/>						
Is the site located ion a designated Critical Environmental Area? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>						
Does a curb cut exist on the site? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>		Are new curb cuts proposed? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>				
What is the sight distance? Approved by NYSDOT Left _____ Right _____						
Is the site located within 500' of:						
<ul style="list-style-type: none"> <input type="checkbox"/> The boundary of an adjoining city, town or village Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> <input type="checkbox"/> The boundary of a state or county park, recreation area or road right-of-way Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> <input type="checkbox"/> A county drainage channel line. Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> 						

TOWN OF CARMEL SUBDIVISION APPLICATION

The boundary of state or county owned land on which a building is located Yes: No:
100-112 Old Route 6, County of Putnam

Is the site listed on the State or Federal Register of Historic Place (or substantially (contiguous))
 Yes: No:

Is the site located in a designated floodplain?
 Yes: No:

Does the site contain freshwater wetlands?
 Yes: No:

Jurisdiction:
 NYSDEC: Town of Carmel: NYSDEC LC-27
If present, the wetlands must be delineated in the field by a Wetland Professional, and survey located on the Site Plan. Wetland limits on file with ECB

Are encroachments in regulated wetlands or wetland buffers proposed? Yes: No:

Does this application require a referral to the Environmental Conservation Board? Yes: *
* ECB Permit granted 10/7/2021

Does the site contain waterbodies, streams or watercourses? Yes: No:

Are any encroachments, crossings or alterations proposed? Yes: No:

Is the site located adjacent to New York City watershed lands? Yes: No:

Will municipal or private solid waste disposal be utilized?
 Public: Private:

Has this application been referred to the Fire Department? Yes: No:

What is the estimated time of construction for the project? June 2022- June 2023

ZONING COMPLIANCE INFORMATION

Zoning Provision	Required	Existing	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5
Lot Area	See site plans	for development	info				
Lot Coverage							
Lot Width							
Front Yard							
Side Yard (minimum of 1)							
Side Yard (total of both)							
Rear Yard							
Habitable Floor Area							
Height							

(if more than 5 lots are proposed, include additional zoning compliance information on a separate sheet)

Will variances be required? If yes, identify variances required for each lot:
 Yes: No:

APPLICANTS ACKNOWLEDGEMENT

I hereby depose and certify that all the above statements and information, and all statements and information contained in the supporting documents and drawings attached hereto are true and correct.

Par Four Realty & Hudson Valley Realty
 Paul Camarda
 Applicants Name


 Applicants Signature

Sworn before me this 27th day of January 2023


 Notary Public

Alicia Hansen
 Notary Public, State of New York
 Reg. # 01HA6086470

Qualified in Dutchess County
 Commission Expires January 21, 2023



TOWN OF CARMEL SUBDIVISION COMPLETENESS CERTIFICATION FORM



All Subdivisions submitted to the Planning Board for review shall include the following information and details, as set forth in Section 131-11-14 of the Town of Carmel Subdivision Regulations.

This form shall be included with the subdivision submission

	<i>Requirement Data</i>	<i>To Be Completed by the Applicant</i>	<i>Waived by the Town</i>
General Requirements			
1	Key map at a scale of one inch equals 800 feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Title block, including title of map; name of subdivision; name, address, seal and signature of professional engineer or land surveyor preparing the plat; written scale; date of original and all revisions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	A legend, including, names of all adjacent landowners and those within 500 feet of any property line; zoning district with the requirements of said zone; tax map, block and lot number; names and addresses of owner and subdivider; north point and graphic scale.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Location and identification of all zoning district boundaries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Identification of all maps filed in the County Clerk's office affecting properties within 500 feet of the lot to be subdivided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sketch Plan Requirements			
1	All General Requirements	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Proposed subdivision layout at a scale of not less than one inch equals 100 feet.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	All proposed lot lines, dimensions in feet and the areas of all lots in square feet and identifying numbers for each lot.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	The location of existing and proposed setback lines, streets within 200 feet of the subdivision, buildings, watercourses, railroads and bridges, culverts, drainpipes and any natural features, such as wooded areas and rock formations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Location and size of areas proposed to be reserved for recreation/open space.	<input checked="" type="checkbox"/>	<input type="checkbox"/>



TOWN OF CARMEL SUBDIVISION COMPLETENESS CERTIFICATION FORM



Requirement Data		To Be Completed by the Applicant	Waived by the Town
Preliminary Plat Requirements			
1	All General and Sketch Plan Requirements	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	The area included in the subdivision, by area of lots, roads, reservations if any, and total acreage.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	The existing and proposed contours (at an interval of not more than two feet), suitably designated to differentiate, with proposed first-floor elevations of the buildings.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Names of existing streets and proposed names of new streets.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Preliminary profiles of all proposed roads.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Location, type and size of curbs, sidewalks and bikeways.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	For subdivisions of five or more lots, front building elevation sketches and distribution of dissimilar building types on the site to avoid excessive similarity of exterior design.	<input type="checkbox"/> <i>See site plans</i>	<input type="checkbox"/>
8	Plans of proposed utility layouts and all facilities, unsized.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	The natural flow of surface drainage (indicated with arrows and the final disposal of surface waters); location of existing and proposed watercourses, culverts, bridges, drainpipes, lakes and ponds, detention or retention ponds; tentative location of storm drain inlets with the drainage areas tributary to each outlined and the area shown.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Existing or proposed covenants or deed restrictions applying to the site and a preliminary draft of homeowners' association documents, if applicable. <i>N/A</i>	<input checked="" type="checkbox"/> <i>per filed map</i>	<input type="checkbox"/>
11	A stormwater pollution prevention plan (SWPPP) consistent with the requirements of Article X of Chapter 156 of the Code of the Town of Carmel.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Final Plat Requirements			
1	All General, Sketch and Preliminary Plat Requirements. <i>As applicable</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

N/A



TOWN OF CARMEL SUBDIVISION COMPLETENESS CERTIFICATION FORM



	<i>Requirement Data</i>	<i>To Be Completed by the Applicant</i>	<i>Waived by the Town</i>
2	Dimensions exactly with reference to monuments, bearings, distances in feet, radii, points of curvature and tangency of property lines, lot widths and depths and square feet of each lot.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Location of all proposed setback lines on each lot, with corner and irregular-shaped lots identified as to front, side and rear yards.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Location of all existing and proposed monuments.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	All existing streets and streams within the subdivision and within 200 feet of the boundaries thereof, the width of the right-of-way of each street and existing public easements and municipal boundaries within 200 feet of the subdivision.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	All proposed public easements or rights-of-way and the purposes thereof and proposed streets, identifying right-of-way width and names.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	All parcels proposed for open space/recreation use, with a statement of the purpose of each.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Construction plat, which shall include, in addition to the above: final first-floor elevations of dwellings and outside grades at their corner; proposed curb elevations at all lot corners; all existing structures, including a note indicating those to be removed and yard dimensions of those to remain; plans and profiles and proposed improvements and utility layouts; paving widths and locations, section and profiles; sidewalk widths and locations and sections; road alignment, complete with stations, center line curve data and existing and finished contours of the road and all regraded areas; details of manholes, catch basins, headwalls and any other required structure; locations of all street trees, lights and signs; maximum anticipated extent of the areas of cuts and fills where grade	<input checked="" type="checkbox"/>	<input type="checkbox"/>



TOWN OF CARMEL

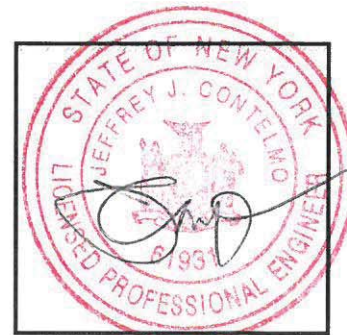
SUBDIVISION COMPLETENESS CERTIFICATION FORM



Requirement Data		To Be Completed by the Applicant	Waived by the Town
	changes are proposed; the natural flow of surface drainage and the final disposal of surface waters; slopes of banks of all watercourses, if defined, and boundaries of floodplains; specifications, locations, profiles and detailed cross sections of the proposed storm drains, including all inlets and size of the drainage area of the streets, including grades and all other improvements.		
9	Final copy of the homeowners' association documents, if applicable. <i>N/A</i>	<i>N/A</i> <input type="checkbox"/>	<input type="checkbox"/>
10	Deeds for land to be dedicated for road widening, recreation or other purposes. <i>on file with Town</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Erosion control standards.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	A stormwater pollution prevention plan (SWPPP) consistent with the requirements of Article X of Chapter 156 of the Code of the Town of Carmel and with the terms of preliminary plan approval.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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


I Jeffrey J. Contelmo, P.E. hereby certify that the site plan to which I have attached my seal and signature, meets all of the requirements of §156-61B of the Town of Carmel Zoning Ordinance:



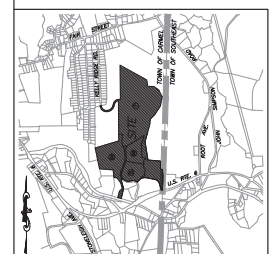
Professionals Seal


Signature - Applicant

_____ Date


Signature - Owner

_____ Date

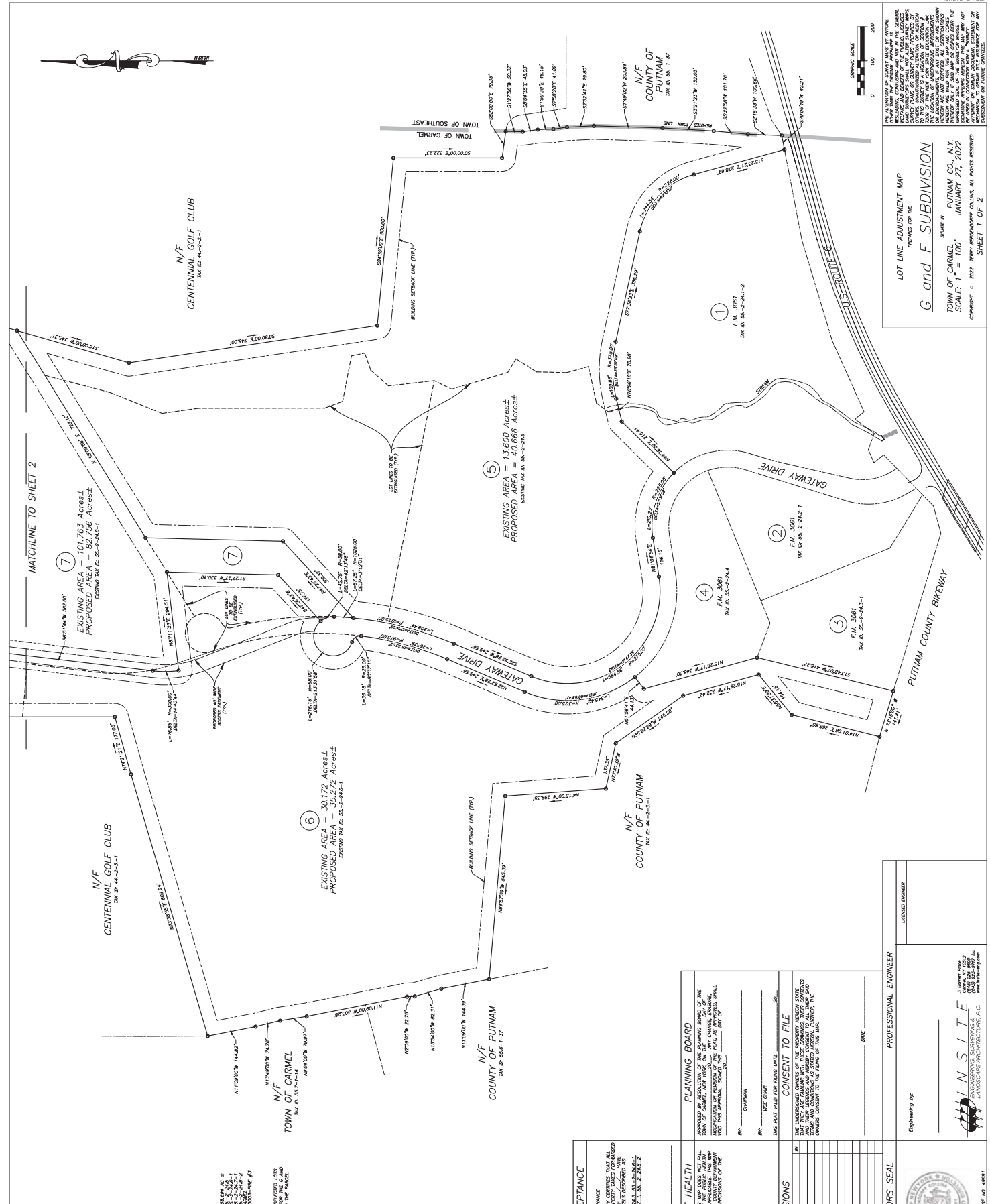


LOCATION MAP
SCALE: 1" = 2000'

OWNER/APPLICANT:
Hudson Valley Realty Corp.
1000 Valley Road
Carmel, NY 12165

SITE DATA:
ZONING: R-10
LOT AREA: 22.25 AC
TOTAL LOT AREA: 22.25 AC
TOTAL AREA: 22.25 AC
TOTAL ACRES: 22.25 AC

GENERAL NOTES:
1. THE SHOWN ON MAP BOUNDARIES AND DIMENSIONS ARE BASED ON THE RECORD PLATS AND SURVEY DATA ON FILE IN THE OFFICE OF THE COUNTY CLERK, PUTNAM COUNTY, NEW YORK.



LOT LINE ADJUSTMENT MAP
PREPARED FOR THE
G and F SUBDIVISION
STATE OF NY
PUTNAM CO., NY
JANUARY 27, 2022
SCALE: 1" = 100'
COPYRIGHT © 2022 TERRACON CONSULTING, ALL RIGHTS RESERVED
SUBJECT TO ANY FUTURE REVISIONS
SHEET 1 OF 2

PLANNING BOARD
PUTNAM COUNTY DEPARTMENT OF HEALTH
APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE TOWN OF CARMEL, NEW YORK, ON MAY 2, 2022, AND THE BOARD OF SUPERVISORS OF PUTNAM COUNTY, NEW YORK, ON MAY 2, 2022.

CONSENT TO FILE
I, THE UNDERSIGNED, ENGINEER, HEREBY CERTIFY THAT THE INFORMATION CONTAINED IN THIS MAP AND THE DATA THEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK.

Engineering by: _____
DATE: _____
PROFESSIONAL ENGINEER
L. N. SITE
LANDSCAPE ARCHITECTURE, P.C.
1000 Valley Road
Carmel, NY 12165
Tel: 518-392-9999
www.lnsite.com

SURVEYORS SEAL
SURVEYORS SEAL
STATE OF NEW YORK
DEPARTMENT OF STATE
DIVISION OF SURVEYS
No. 49891



LOCATION MAP
SCALE: 1" = 2000'

COUNTY OF PUTNAM FILING ACCEPTANCE

PUTNAM COUNTY COMMISSIONER OF FINANCE

PLEASE CERTIFY THAT THE PROPERTY DESCRIBED IN THIS MAP IS THE PROPERTY OF THE TOWN OF CARMEL, NEW YORK, AND IS NOT THE PROPERTY OF ANY OTHER PERSON OR ENTITY.

DATE: _____

DIRECTOR OF REAL PROPERTY TAXES

COMMISSIONER OF FINANCE

PUTNAM COUNTY DEPARTMENT OF HEALTH

THIS IS TO CERTIFY THAT THE DIVISION OF LAND AS REPRESENTED ON THIS MAP DOES NOT FALL WITHIN THE JURISDICTION OF THE DIVISION OF HEALTH AND IS THEREFORE NOT SUBJECT TO THE HEALTH DEPARTMENT'S REVIEW AND APPROVAL.

DATE: _____

PLANNING BOARD

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE TOWN OF CARMEL, NEW YORK, ON THIS _____ DAY OF _____, 2022.

DATE: _____

CONSENT TO FILE

THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON SHOWN HEREBY AGREE TO SUBMIT THIS MAP TO THE PUTNAM COUNTY COMMISSIONER OF FINANCE FOR FILING AND TO HOLD THEMSELF AND THEIR PROPERTY SUBJECT TO THE DECISIONS OF THE COMMISSIONER OF FINANCE.

DATE: _____

REVISIONS

NO.	DATE	DESCRIPTION

PROFESSIONAL ENGINEER

Engineering by _____

DATE: _____

SURVEYORS SEAL

PUTNAM COUNTY, NEW YORK

UNIVERSITY OF THE STATE OF NEW YORK

STATE OF NEW YORK

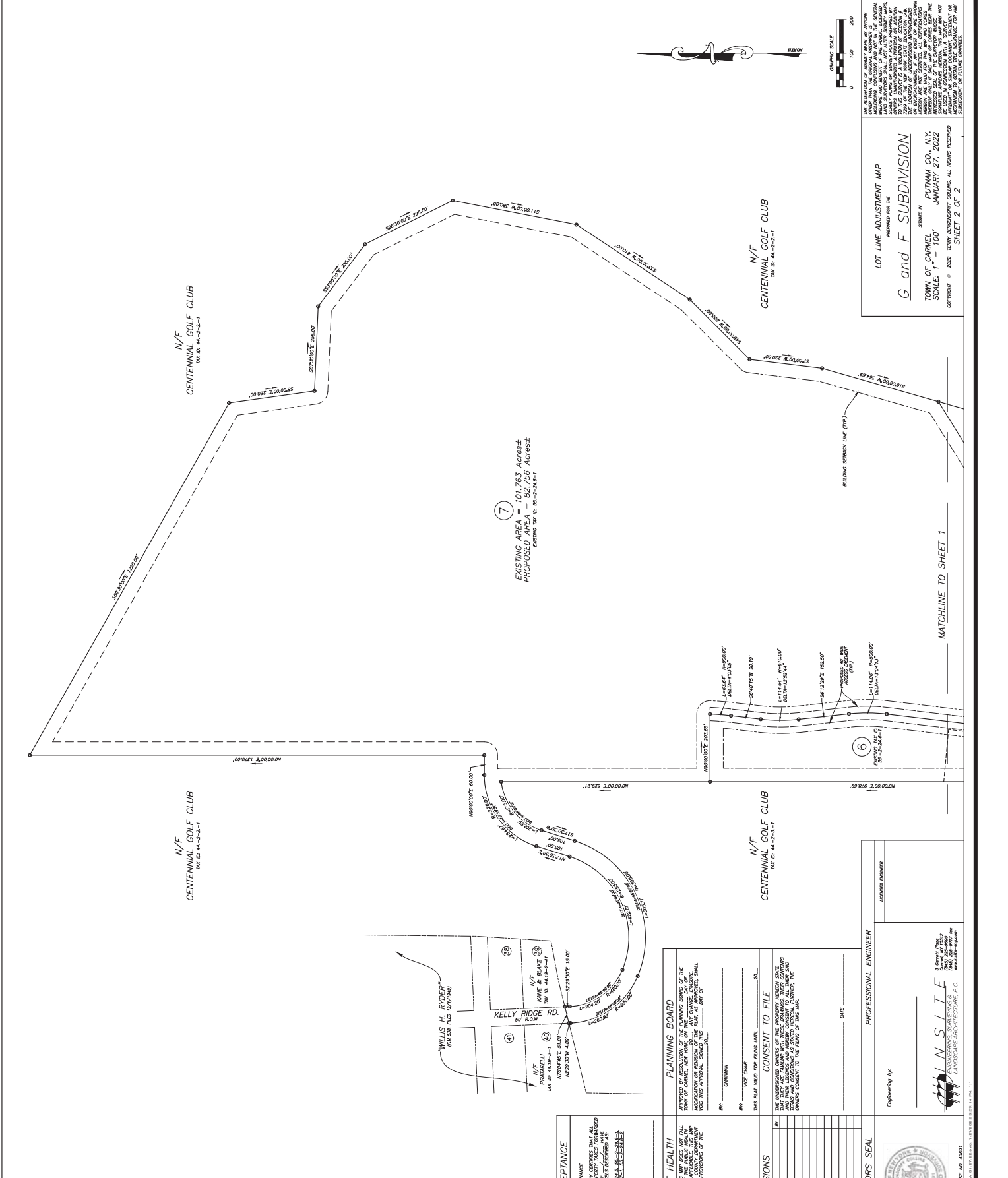
LANDSCAPE ARCHITECTURE, P.C.

UNIVERSITY OF THE STATE OF NEW YORK

LANDSCAPE ARCHITECTURE, P.C.

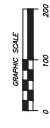
UNIVERSITY OF THE STATE OF NEW YORK

LANDSCAPE ARCHITECTURE, P.C.



EXISTING AREA = 101.763 Acres±
PROPOSED AREA = 82.756 Acres±
GAINING 19.007 Acres±

LOT LINE ADJUSTMENT MAP
PREPARED FOR THE
G and F SUBDIVISION
TOWN OF CARMEL, PUTNAM CO., NY
SCALE: 1" = 100'
JANUARY 27, 2022
COPYRIGHT © 2022 TERRACON CONSULTING. ALL RIGHTS RESERVED.
SUBJECT TO FUTURE CHANGES.



MATCHLINE TO SHEET 1

MATCHLINE TO SHEET 2



TOWN OF CARMEL
SUBDIVISION COMPLETENESS
CERTIFICATION FORM



Town Certification (to be completed by the Town)

I _____ hereby confirm that the site plan meets all of the requirements of §156-61B of the Town of Carmel Zoning Ordinance:

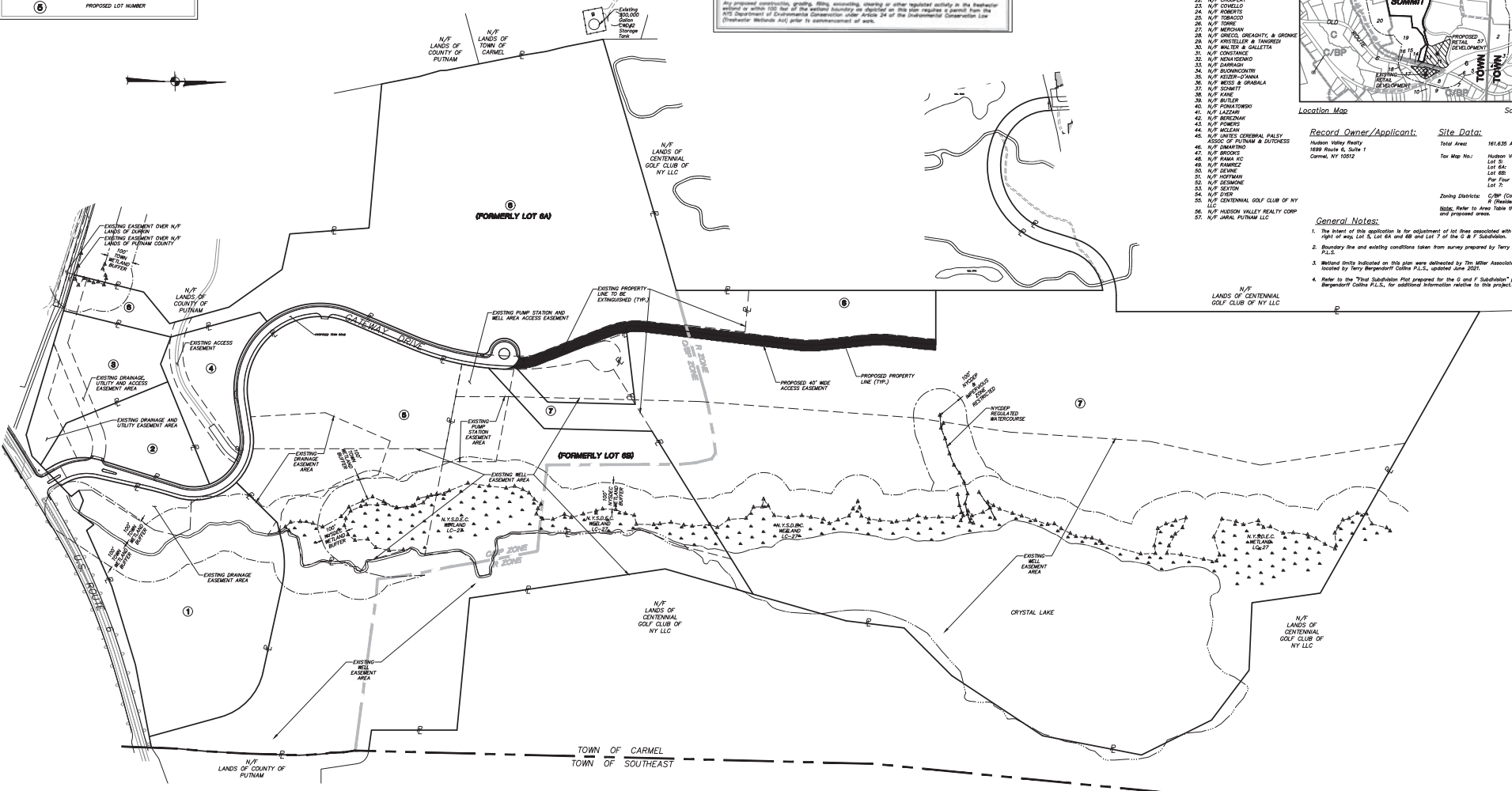
Rose Granbetta
 Signature - Planning Board Secretary

2/1/22
 Date

Richard J. [Signature]
 Signature - Town Engineer

2/1/2022
 Date

LEGEND	
	EXISTING PROPERTY LINE
	EXISTING PROPERTY LINE TO BE EXTENDED
	EXISTING EASEMENT
	EXISTING TOWN METLAND LIMIT LINE WITH FLAG
	EXISTING TOWN NYSDEC METLAND LIMIT LINE WITH FLAG
	EXISTING NYSDEC METLAND LIMIT LINE WITH FLAG
	100' NYSDEC METLAND BUFFER
	100' TOWN METLAND BUFFER
	EXISTING WATERCOURSE
	PROPOSED CURB
	PROPOSED LOT NUMBER



NOTE: The NYSDEC Freshwater Wetland Boundary (as shown on this drawing) and wetland block (shown below) is as shown on drawing 80-1, "NYSDEC Wetland Validation Map", prepared by InSite Engineering, Surveying & Landscape Architecture, P.C., dated December 05, 2018.

NYSDEC FRESHWATER METLAND BOUNDARY VALIDATION

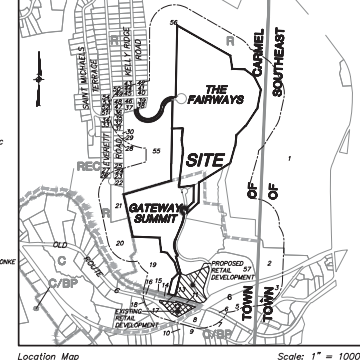
The freshwater wetland boundary as represented on these plans accurately depicts the limits of Freshwater Wetland LC-2B & LC-2C as delineated by Tim Miller, Assoc. & Doug Slocum on April 2021.

DEC Staff: *[Signature]* Date: 12/14/21 Surveyor/Engineer: *[Signature]* Date: 12/14/21

Wetland Boundary delineations as validated by the New York State Department of Environmental Conservation are valid for five (5) years unless subject to extension, new findings, or land use practices contrary to those delineated. After five (5) years the boundary must be revalidated by DEC staff. Permission may include a new delineation and survey of the wetland boundary.

Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the freshwater wetland within 100 feet of the wetland boundary as depicted on this plan requires a permit from the NYS Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetland Act) prior to commencement of work.

- 500' Adjoiners:**
1. N/F CENTENNIAL GOLF CLUB OF NY LLC
 2. N/F COUNTY OF PUTNAM
 3. N/F HUNTS LANE LUTHERAN CHURCH
 4. N/F TOWN OF CARMEL
 5. N/F BLANDS
 6. N/F COUNTY OF PUTNAM
 7. N/F CARMEL SPORTS LLC
 8. N/F MOHEGAN ASSOCIATES
 9. N/F 82 OLD ROUTE 6 LLC
 10. N/F COUNTY OF PUTNAM
 11. N/F DURON WATER REALTY LLC
 12. N/F DURON
 13. N/F DURON
 14. N/F DURON
 15. N/F DURON
 16. N/F DURON
 17. N/F 1825 ROUTE 6 LLC
 18. N/F 86 OLD ROUTE 34 LLC
 19. N/F COUNTY OF PUTNAM
 20. N/F COUNTY OF PUTNAM
 21. N/F COUNTY OF CARMEL
 22. N/F CHURCHVILLE
 23. N/F COVELLO
 24. N/F CROFT
 25. N/F TOBACCO
 26. N/F TONGUE
 27. N/F MEROHAN
 28. N/F OROCO CREECHTY & GROVE
 29. N/F KRISTELLER & TANDREN
 30. N/F WALKER & GALETTA
 31. N/F CONSTANCE
 32. N/F MERRIDOWNS
 33. N/F DARRAGH
 34. N/F BURNINGWOODS
 35. N/F KEEPER-PANZA
 36. N/F BURNS & GRANDELLA
 37. N/F SCHMITZ
 38. N/F KANE
 39. N/F BELIER
 40. N/F FOXTATWOOD
 41. N/F LARSEN
 42. N/F BEREZNAK
 43. N/F POWERS
 44. N/F MCLEAN
 45. N/F UNDES GENERAL PARSY ASSOC OF PUTNAM & OUTRUSH
 46. N/F DRAHOTA
 47. N/F BROOKS
 48. N/F RAMAK LLC
 49. N/F ARNEST
 50. N/F DENNE
 51. N/F HERRING
 52. N/F DESMARCHE
 53. N/F SEITON
 54. N/F DYER
 55. N/F CENTENNIAL GOLF CLUB OF NY LLC
 56. N/F HUDSON VALLEY REALTY CORP
 57. N/F JARAL PUTNAM LLC



Record Owner/Applicant: **Site Data:**

Hudson Valley Realty	Total Area:	161.635 AC.B (Existing)
1609 Route 6, Suite 1	Tax Map No.:	Huban Valley Realty
Carmel, NY 10512	Lot 6A:	55-2-24-6-1
	Lot 6B:	55-2-24-6-1
	Lot 6C:	55-2-24-7-2
		Per Four Realty Company LLC
		Lot 7: 55-2-24-8-2

Zoning Districts: C/BP (Commercial/Business Park) & Residential

General Notes:

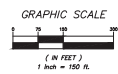
1. The intent of this application is for the adjustment of lot lines associated with the town road right of way Lot 6, Lot 6A and 6B and Lot 7 of the C & F Subdivision.
2. Boundary line and existing conditions taken from survey prepared by Terry Bergendorf Colles P.L.L.C.
3. Wetland limits indicated on this plan were delineated by Tim Miller Associates and survey located by Terry Bergendorf Colles P.L.L.C., updated June 2021.
4. Refer to the "Third Subdivision" that prepared for the C and F Subdivision" prepared by Terry Bergendorf Colles P.L.L.C. for additional information relative to this project.

AREA TABLE

Existing Lots	Acres ±	Proposed Lots	Acres ±
7	13.600	6	63.666
6A	16.172	6	35.272
6B	19.724	7	82.756
7	102.763	N/A	0.000
Total (as submitted)	161.635		161.635

List of Drawings

DRAWING NO.	DRAWING NAME	SHEET
SP-1	Overall Site Plan	1
SP-1.1	Layout & Landscape Plan	2
SP-1.2	Layout & Landscape Plan	3
SP-2.1	Grading & Utilities Plan	4
SP-2.2	Grading & Utilities Plan	5
SP-2.1	Erosion & Sediment Control Plan	6
SP-2.2	Erosion & Sediment Control Plan	7
OSP-1	Overall Utility Plan	8
PR-1	Road Profile	9
D-1	Site Details	10
D-2	Site Details	11
D-3	Site Details	12
D-4	Site Details	13
D-5	Site Details	14
D-6	Site Details	15



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

3 Carroll Place
Carmel, NY 10512
(845) 225-8997
(845) 225-8997 fax
www.insite-arg.com

PROJECT: **LOT LINE ADJUSTMENT & F SUBDIVISION**

U.S. ROUTE 6, TOWN OF CARMEL, PUTNAM COUNTY, NEW YORK

DRAWING: **OVERALL SITE PLAN**

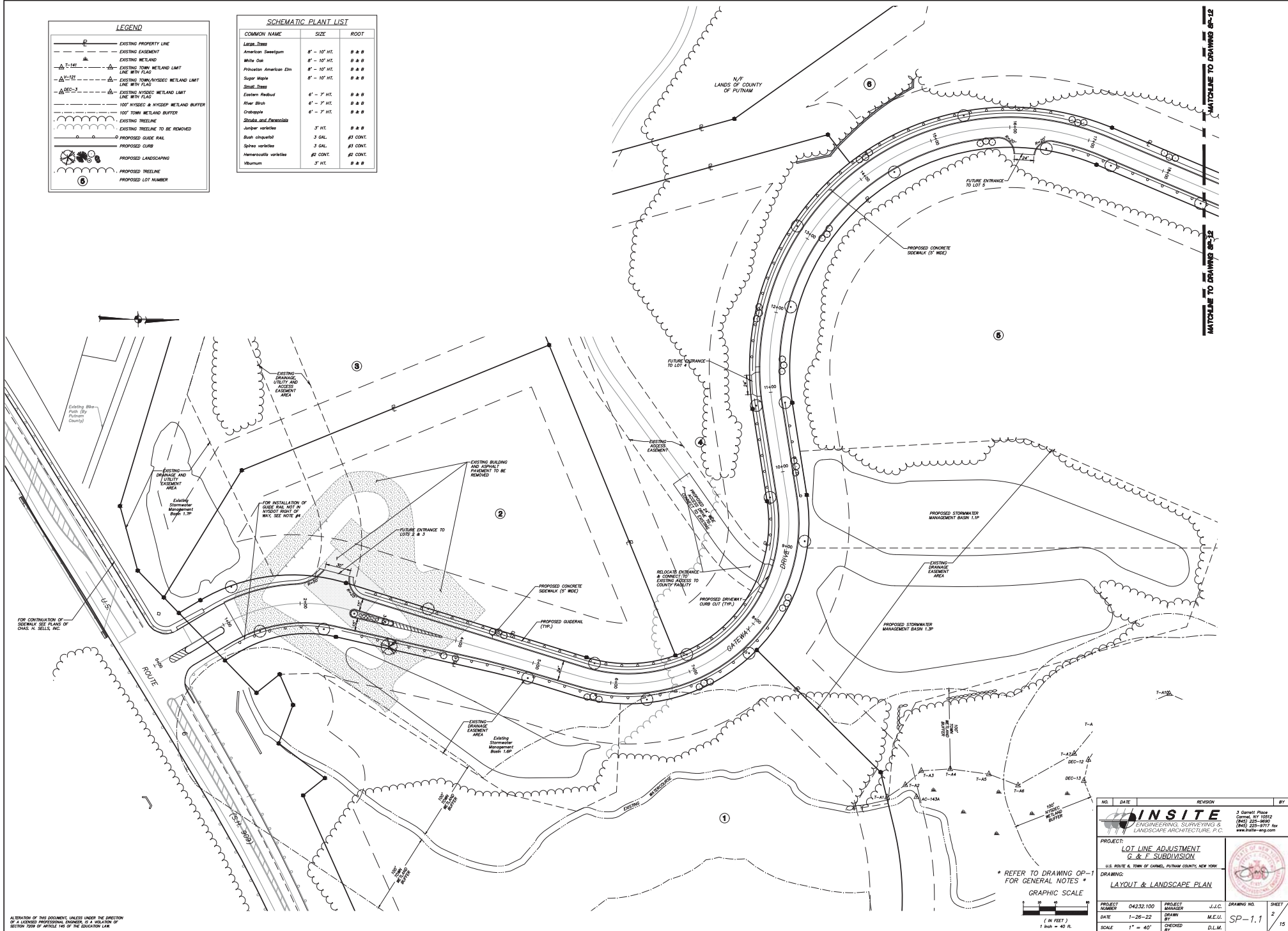
PROJECT NUMBER: 04232.100 PROJECT MANAGER: J.L.C. DRAWING NO.: OP-1 SHEET: 1 OF 15

DATE: 1-26-23 DRAWN BY: M.E.U. CHECKED BY: D.L.M.

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

LEGEND	
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING WETLAND
	EXISTING TOWN WETLAND LIMIT LINE WITH FLAG
	EXISTING TOWN/NYSDEC WETLAND LIMIT LINE WITH FLAG
	EXISTING NYSDEC WETLAND LIMIT LINE WITH FLAG
	100' TOWN WETLAND BUFFER
	100' NYSDEC WETLAND BUFFER
	EXISTING PRELINE
	EXISTING PRELINE TO BE REMOVED
	PROPOSED GRADE RAIL
	PROPOSED CURB
	PROPOSED LANDSCAPING
	PROPOSED PRELINE
	PROPOSED LOT NUMBER

SCHEMATIC PLANT LIST		
COMMON NAME	SIZE	ROOT
<i>Large Trees</i>		
American Sweetgum	8" - 10" HT.	B & B
White Oak	8" - 10" HT.	B & B
Princeton American Elm	8" - 10" HT.	B & B
Super Maple	8" - 10" HT.	B & B
<i>Small Trees</i>		
Eastern Redbud	6" - 7" HT.	B & B
River Birch	6" - 7" HT.	B & B
Crapehelle	6" - 7" HT.	B & B
<i>Shrubs and Perennials</i>		
Jumbo variegata	3" HT.	B & B
Bush chiquehale	3 GAL.	#3 CONT.
Spiraea variegata	3 GAL.	#3 CONT.
Hemerocallis variegata	#2 CONT.	#2 CONT.
Viburnum	3" HT.	B & B



NO.	DATE	REVISION	BY
 INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: LOT LINE ADJUSTMENT G & F SUBDIVISION			
U.S. ROUTE & TOWN OF CAROL, PUTNAM COUNTY, NEW YORK			
DRAWING: LAYOUT & LANDSCAPE PLAN			
PROJECT NUMBER	DATE	PROJECT MANAGER	J.L.C.
04232.100	1-26-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.

* REFER TO DRAWING OP-1 FOR GENERAL NOTES *

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

MATCHLINE TO DRAWING SP-12



N/F
LANDS OF CENTENNIAL
GOLF CLUB OF NY LLC

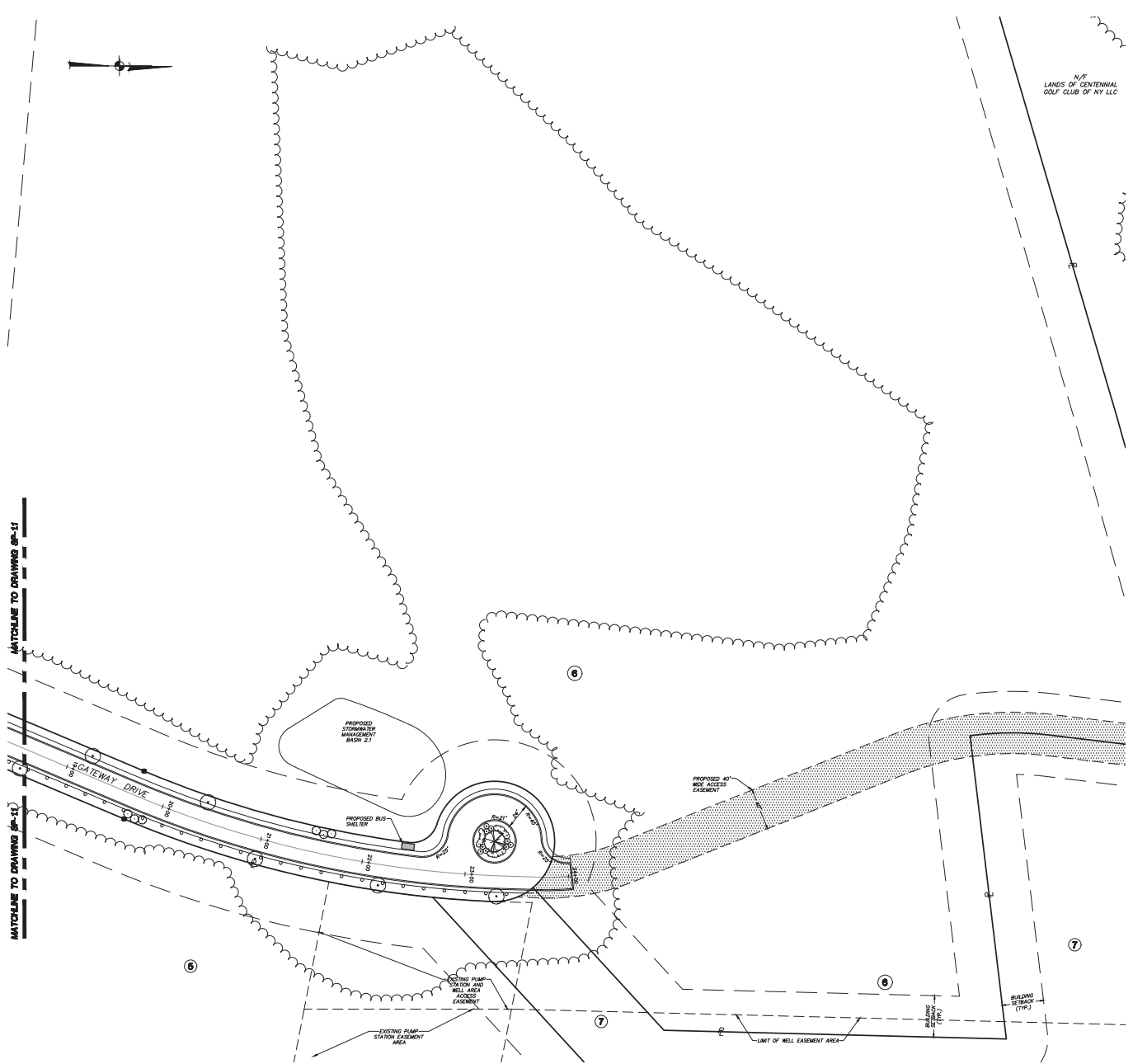
LEGEND

	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING WETLAND
	EXISTING TOWN WETLAND LIMIT LINE WITH FLAG
	EXISTING NYSDDEC WETLAND LIMIT LINE WITH FLAG
	EXISTING NYSDDEC & NYSDDP WETLAND LIMIT LINE WITH FLAG
	100' TOWN WETLAND BUFFER
	EXISTING TREE LINE
	EXISTING TREE LINE TO BE REMOVED
	PROPOSED GRADE RAIL
	PROPOSED CURB
	PROPOSED LANDSCAPING
	PROPOSED TREE LINE
	PROPOSED LOT NUMBER

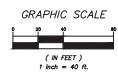
SCHEMATIC PLANT LIST

COMMON NAME	SIZE	ROOT
Large Trees		
American Sweetgum	8' - 10' HT.	0 0 0
White Oak	8' - 10' HT.	0 0 0
Princeton American Elm	8' - 10' HT.	0 0 0
Sugar Maple	8' - 10' HT.	0 0 0
Small Trees		
Eastern Redbud	6' - 7' HT.	0 0 0
River Birch	6' - 7' HT.	0 0 0
Cornus	6' - 7' HT.	0 0 0
Shrubs and Perennials		
Juniper varieties	3' HT.	0 0 0
Bush Shrublet	3 GAL.	#2 CONT.
Spiraea varieties	3 GAL.	#2 CONT.
Hemerocallis varieties	#2 CONT.	#2 CONT.
Verbena	3' HT.	0 0 0

MATCHLINE TO DRAWING SP-11



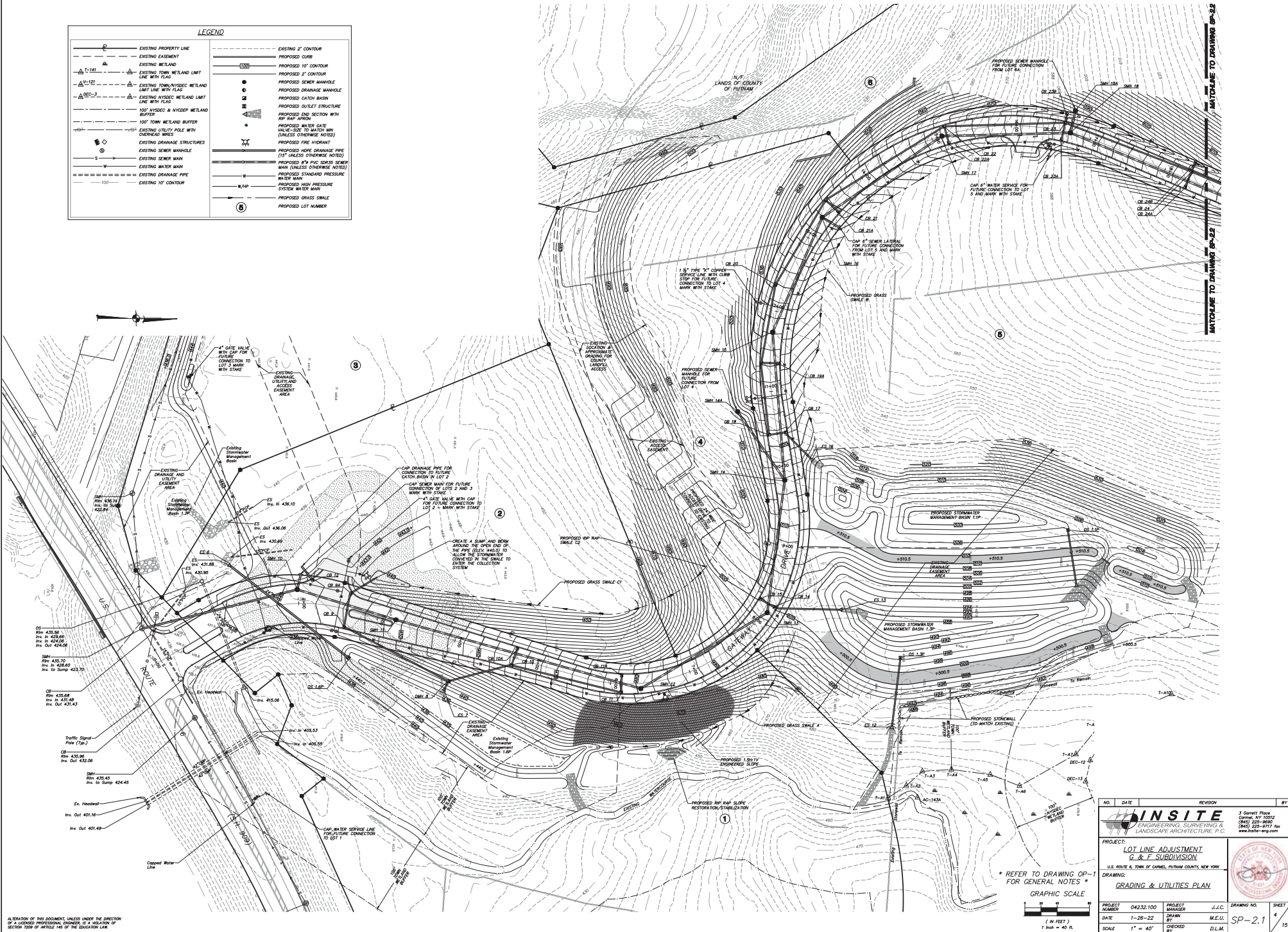
* REFER TO DRAWING SP-1
FOR GENERAL NOTES *



NO.	DATE	REVISION	BY
INSITE			
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: LOT LINE ADJUSTMENT & F SUBDIVISION			
U.S. ROUTE 6, TOWN OF CARROLL, PUTNAM COUNTY, NEW YORK			
DRAWING: LAYOUT & LANDSCAPE PLAN			
PROJECT NUMBER	04232.100	PROJECT MANAGER	J.J.C.
DATE	1-26-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
			DRAWING NO. SP-1.2
			SHEET 3
			15

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

LEGEND			
	EXISTING PROPERTY LINE		EXISTING 2' CONTOUR
	EXISTING EASEMENT		PROPOSED 5' CONTOUR
	EXISTING WETLAND		PROPOSED 10' CONTOUR
	EXISTING TOWN WETLAND LIMIT LINE WITH FLAG		PROPOSED 2' CONTOUR
	EXISTING TOWN/NYSEP WETLAND LIMIT LINE WITH FLAG		PROPOSED SEWER MANHOLE
	EXISTING NYSEP WETLAND LIMIT LINE WITH FLAG		PROPOSED DRAINAGE MANHOLE
	100' NYSEP & NYSEP WETLAND BUFFER		PROPOSED CATCH BASIN
	100' TOWN WETLAND BUFFER		PROPOSED OUTLET STRUCTURE
	EXISTING UTILITY POLE WITH OVERHEAD WIRES		PROPOSED END SECTION WITH 1/4" RAIN GUTTER
	EXISTING DRAINAGE STRUCTURES		PROPOSED WATER GATE VALVE-SIZE TO MATCH MFD (UNLESS OTHERWISE NOTED)
	EXISTING SEWER MANHOLE		PROPOSED FIRE HYDRANT
	EXISTING SEWER MAIN		PROPOSED 4" HDPE PIPE (IF VALUES OTHERWISE NOTED)
	EXISTING WATER MAIN		PROPOSED 8" PVC SOLIDS SEWER (IF VALUES OTHERWISE NOTED)
	EXISTING DRAINAGE PIPE		PROPOSED STANDARD PRESSURE WATER MAIN
	EXISTING 10' CONTOUR		PROPOSED HIGH PRESSURE WATER MAIN
			PROPOSED GRASS SWALE
			PROPOSED LOT NUMBER



ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.

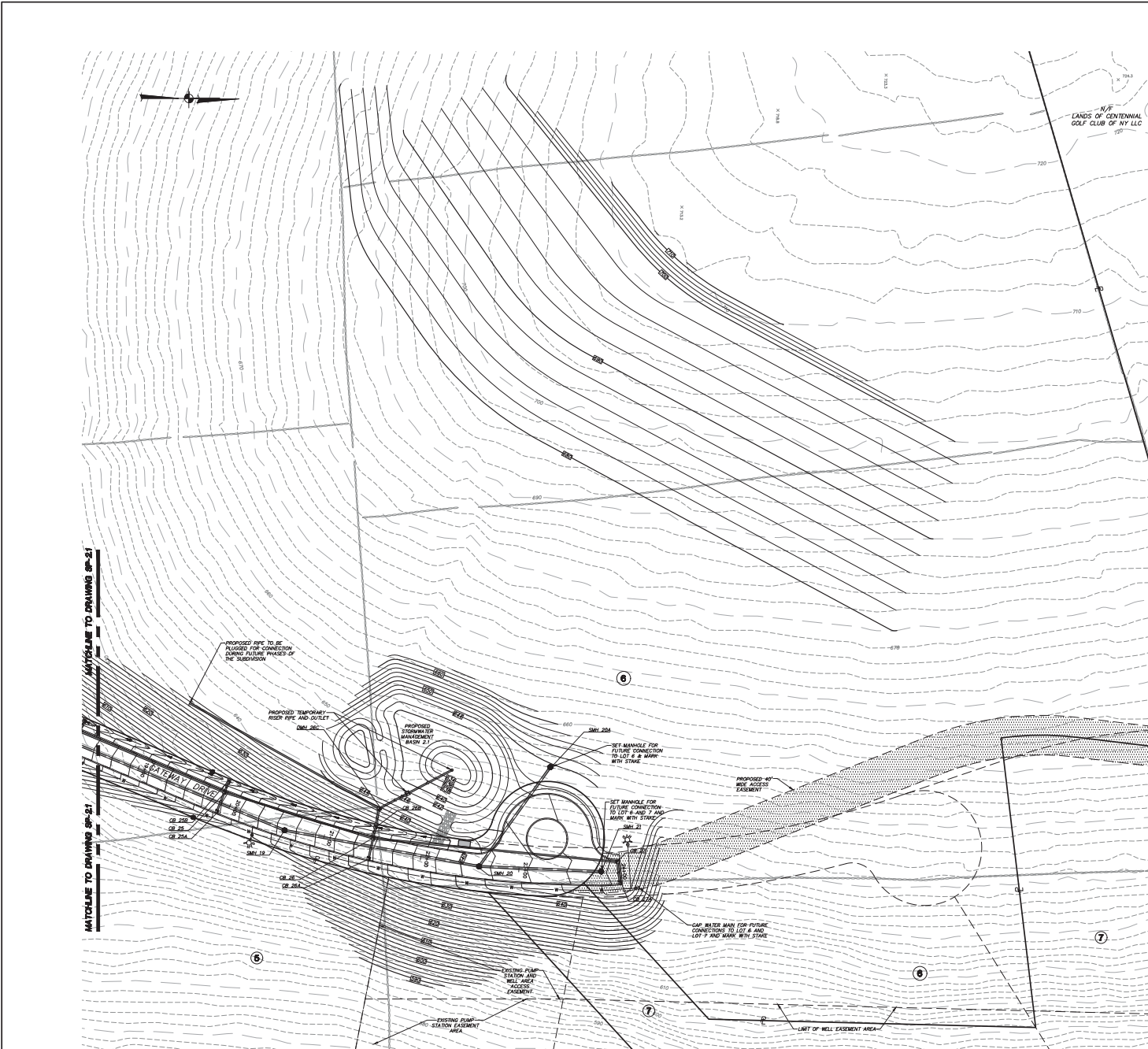
NO.	DATE	REVISION	BY
PROJECT: LOT LINE ADJUSTMENT & F SUBDIVISION U.S. ROUTE 6 & TOWN OF CORNELL, PUTNAM COUNTY, NEW YORK DRAWING: GRADING & UTILITIES PLAN			
PROJECT NUMBER	04232-100	PROJECT MANAGER	J.J.C.
DATE	1-26-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.

3 Cornell Place
 Cornell, NY 14851
 (845) 232-8997
 (845) 232-8997 fax
 www.insite-arg.com

REFER TO DRAWING OP-1 FOR GENERAL NOTES *

GRAPHIC SCALE
 1" = 40'

DRAWING NO. SHEET
 SP-2.1 4 15



LEGEND

	EXISTING PROPERTY LINE		EXISTING 2' CONTOUR
	EXISTING EASEMENT		PROPOSED CURB
	EXISTING WETLAND		PROPOSED 10' CONTOUR
	EXISTING TOWN WETLAND LIMIT LINE WITH FLAG		PROPOSED 2' CONTOUR
	EXISTING TOWN NYSD&C WETLAND LIMIT LINE WITH FLAG		PROPOSED SEWER MANHOLE
	EXISTING NYSD&C WETLAND LIMIT LINE WITH FLAG		PROPOSED DRAINAGE MANHOLE
	100' NYSD&C & NYSD&P WETLAND BUFFER		PROPOSED CATCH BASIN
	100' TOWN WETLAND BUFFER		PROPOSED OUTLET STRUCTURE
	EXISTING UTILITY POLE WITH OVERHEAD WIRES		PROPOSED END SECTION WITH 10' TOP FINISH
	EXISTING DRAINAGE STRUCTURES		PROPOSED WATER GATE VALVE-50' TO MATCH M.H. (UNLESS OTHERWISE NOTED)
	EXISTING SEWER MANHOLE		PROPOSED FIRE HYDRANT
	EXISTING SEWER MAIN		PROPOSED 10' DRAINAGE PIPE (1' UNLESS OTHERWISE NOTED)
	EXISTING WATER MAIN		PROPOSED 8" P.V.C. S&S SEWER MAIN (UNLESS OTHERWISE NOTED)
	EXISTING DRAINAGE PIPE		PROPOSED STANDARD PRESSURE WATER MAIN
	EXISTING 10' CONTOUR		PROPOSED HIGH PRESSURE WATER MAIN
			PROPOSED GRASS SWALE
			PROPOSED LOT NUMBER

MATCHLINE TO DRAWING SP-21

PROPOSED PIPE TO BE PLACED FOR CONNECTION DURING FUTURE PHASES OF THE SUBDIVISION

PROPOSED TEMPORARY RISER PIPE AND OUTLET

PROPOSED STOP/SMALLER MANAGEMENT WASH 21"

SET MANHOLE FOR FUTURE CONNECTION TO LOT 6 & MARK WITH STAKE

SET MANHOLE FOR FUTURE CONNECTION TO LOT 6 & MARK WITH STAKE

PROPOSED 40" WIDE ACCESS EASEMENT

CAP WATER MAIN FOR FUTURE CONNECTIONS TO LOT 6 AND LOT 7 AND MARK WITH STAKE

EXISTING PUMP STATION EASEMENT AREA

LIMIT OF WELL EXISTENCE AREA

5

6

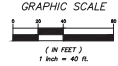
6

7

7

ALL INFORMATION ON THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EVIDENCE LAW.

* REFER TO DRAWING OP-1 FOR GENERAL NOTES *



NO.	DATE	REVISION	BY
INSITE			
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: LOT LINE ADJUSTMENT 6 & F SUBDIVISION			
U.S. ROUTE 6, TOWN OF CAROL, PUTNAM COUNTY, NEW YORK			
DRAWING: GRADING & UTILITIES PLAN			
PROJECT NUMBER	04232.100	PROJECT MANAGER	J.J.C.
DATE	1-26-22	DRAWN BY	M.E.U.
SCALE	1" = 40'	CHECKED BY	D.L.M.
DRAWING NO.	SP-2.2	SHEET	5
			15



CONSTRUCTION SEQUENCE NOTES:

1. Refer to erosion control notes on this drawing.
2. Each phase of work requires that all sediment and erosion control measures shall be installed in accordance with best management practices and prior to any clearing and grading activities.
3. Each phase of work requires the removal of existing trees and grubbing of all tree stumps.
4. All trees to be removed and stumps to be installed in suitable locations for future use on the site. All accepted soil areas are to be stabilized and revegetated.
5. All disturbed slopes greater than 2:1 are to be immediately stabilized with erosion control blankets or silt fencing.
6. Modifications to phasing may be made during construction upon written approval by the operating authority.
7. Each phase of work shall limit the upstream clean water diverted around construction activities.

SPECIAL NOTE:

- a. The owner is proposing to disturb greater than 5 acres of any one time in order to efficiently perform construction operations of the site. In order to accomplish this the owner is proposing to comply with Part 6 of the NYDEC's Construction Activity (6 NYCRR 603-1.1). These requirements are as follows:
 - i. The owner or operator shall have a qualified inspector conduct at least two (2) site inspections in accordance with Part 603 of 6 NYCRR every seven (7) calendar days for as long as greater than five (5) acres of soil remain disturbed. The first (1) inspection shall be completed by a minimum of two (2) full calendar days.
 - ii. In areas where disturbance has been temporarily or permanently ceased, temporary soil stabilization and stabilization measures shall be installed and maintained until the site is stabilized to the state of the soil disturbance activity ceases. The soil stabilization measures selected shall be in accordance with the most current version of the technical standard, New York State Conservation and Specifications for Erosion and Sediment Control.
 - iii. The operation shall be conducted in accordance with the sequencing plan that allows maximum disturbance over the phase or phases shall be installed any additional site specific practices needed to protect water quality.

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

PRACTICE	MONITORING REQUIREMENTS			MAINTENANCE REQUIREMENTS	
	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIERS	Inspect	Inspect	Inspect	Clear/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	Inspect	Inspect	Clear/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	Inspect	Inspect	Mulching/Spraying Water	N/A
VEGETATIVE ESTABLISHMENT	Inspect	Inspect	Inspect	Re-seed to 80% Coverage	Remove
PILE PROTECTION	Inspect	Inspect	Inspect	Clear/Repair/Remove	Remove
SOIL STOCKPILES	Inspect	Inspect	Inspect	Mulching/Straw Vapor	Remove
DRY DRAINS	Inspect	Inspect	Inspect	Clear/Maint/Repair	Clear/Repair/Remove/Re-plant
CHECK DAMS	Inspect	Inspect	Inspect	Clear/Repair/Remove/Re-plant	Clear/Repair/Remove/Re-plant
CONCRETE DRAINAGE STRUCTURES	Inspect	Inspect	Inspect	Clear/Repair/Remove/Re-plant	Clear/Repair/Remove/Re-plant
ROAD & PARKING	Inspect	Inspect	Inspect	Clear	Clear
STORMWATER TREATMENT	Inspect	Inspect	Inspect	Clear/Repair/Remove/Re-plant	Clear/Repair/Remove/Re-plant

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized. **NOTE:** The party responsible for implementation of the maintenance schedule during and after construction is the owner. **NOTE:** The party responsible for implementation of the maintenance schedule during and after construction is the owner. **NOTE:** The party responsible for implementation of the maintenance schedule during and after construction is the owner.

OVERALL CONSTRUCTION SEQUENCE:

1. Construct stabilized construction entrance at location shown. Install erosion control measures shown on the plan in accordance with the details. Utilize the erosion control measures to stabilize the disturbed areas and prevent erosion. Construct and stabilize proper stormwater runoff to 1.5' x 1.5' temporary sediment basin (TSB) with outlet structure, drainage pipes and temporary silt fence. Clear trees and grub within the limits of the phase. Construct and stabilize proper stormwater runoff to 1.5' x 1.5' temporary sediment basin (TSB) with outlet structure, drainage pipes and temporary silt fence. Clear trees and grub within the limits of the phase. Construct and stabilize proper stormwater runoff to 1.5' x 1.5' temporary sediment basin (TSB) with outlet structure, drainage pipes and temporary silt fence. Clear trees and grub within the limits of the phase.
2. Utilize the existing path as shown on the plan to gain access to the phase 2 borrow area. The existing path will be used as a haul road for construction activities associated with this phase and shall be stabilized with 10% clean crushed stone. Clear trees and grub within the limits of the phase. Construct and stabilize proper stormwater runoff to 1.5' x 1.5' temporary sediment basin (TSB) with outlet structure, drainage pipes and temporary silt fence. Clear trees and grub within the limits of the phase. Construct and stabilize proper stormwater runoff to 1.5' x 1.5' temporary sediment basin (TSB) with outlet structure, drainage pipes and temporary silt fence. Clear trees and grub within the limits of the phase.
3. Construct stabilized construction entrance at location as shown on the plan. Utilize the existing path as shown on the plan to gain access to the phase 3 borrow area. The existing path will be used as a haul road for construction activities associated with this phase and shall be stabilized with 10% clean crushed stone. Clear trees and grub within the limits of the phase. Construct and stabilize proper stormwater runoff to 1.5' x 1.5' temporary sediment basin (TSB) with outlet structure, drainage pipes and temporary silt fence. Clear trees and grub within the limits of the phase. Construct and stabilize proper stormwater runoff to 1.5' x 1.5' temporary sediment basin (TSB) with outlet structure, drainage pipes and temporary silt fence. Clear trees and grub within the limits of the phase.
4. Construct stabilized construction entrance at location as shown on the plan. Utilize the existing path as shown on the plan to gain access to the phase 4 borrow area. The existing path will be used as a haul road for construction activities associated with this phase and shall be stabilized with 10% clean crushed stone. Clear trees and grub within the limits of the phase. Construct and stabilize proper stormwater runoff to 1.5' x 1.5' temporary sediment basin (TSB) with outlet structure, drainage pipes and temporary silt fence. Clear trees and grub within the limits of the phase. Construct and stabilize proper stormwater runoff to 1.5' x 1.5' temporary sediment basin (TSB) with outlet structure, drainage pipes and temporary silt fence. Clear trees and grub within the limits of the phase.

LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING WETLAND
- EXISTING TOWN WETLAND LIMIT LINE WITH FLAG
- EXISTING TOWN/STATE WETLAND LIMIT LINE WITH FLAG
- EXISTING KYSEC WETLAND LIMIT LINE WITH FLAG
- 100' KYSEC & HYDRO WETLAND BUFFER
- 100' TOWN WETLAND BUFFER
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- PROPOSED SEWER MANHOLE
- PROPOSED DRAINAGE MANHOLE
- PROPOSED OULET STRUCTURE
- PROPOSED INLET SECTION WITH RIF RAP APPROX.
- PROPOSED TEMPORARY DIMENSION SWALE
- PROPOSED GRASS SWALE
- PROPOSED DRAINAGE STRUCTURE / INLET PROTECTION
- PROPOSED STONE CHECK DAM
- PROPOSED SILT FENCE
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED TEMPORARY SOIL STOCKPILE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED PHASING LINE
- PROPOSED PHASING NUMBER



General Notes for Work within Wetland Buffer for Walking Trail and Boat Dock Improvements:

1. Existing stone pile structures of the wetland buffer are to be removed and replaced with a new structure in the same location as shown on the plan.
2. Structure is to be placed outside the wetland buffer when not in use and mounted on top of pilewood or logs.
3. A sign shall be maintained on site to show the wetland buffer is in use within the wetland/Stream buffer.
4. Existing structures and nearby shall be outside the wetland buffer in suitable areas on the site plan.

PHASE	EARTHWORK		AREA OF DISTURBANCE
	CUT VOLUME (cubic yards)	FILL VOLUME (cubic yards)	
1A	-	-	COMPLETED
1B	11,000	11,000	3.62 ACRES
2	22,000	22,000	5.38 ACRES
3	49,000	49,000	6.24 ACRES
4	32,000	32,000	4.90 ACRES

A WARNING OF THIS DOCUMENT UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR A HOLDING OF SECTION 2088 OF ARTICLE 146 OF THE EDUCATION LAW

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

3 Corbett Place
Corbett, NY 15012
(845) 225-8997
www.insite-arg.com

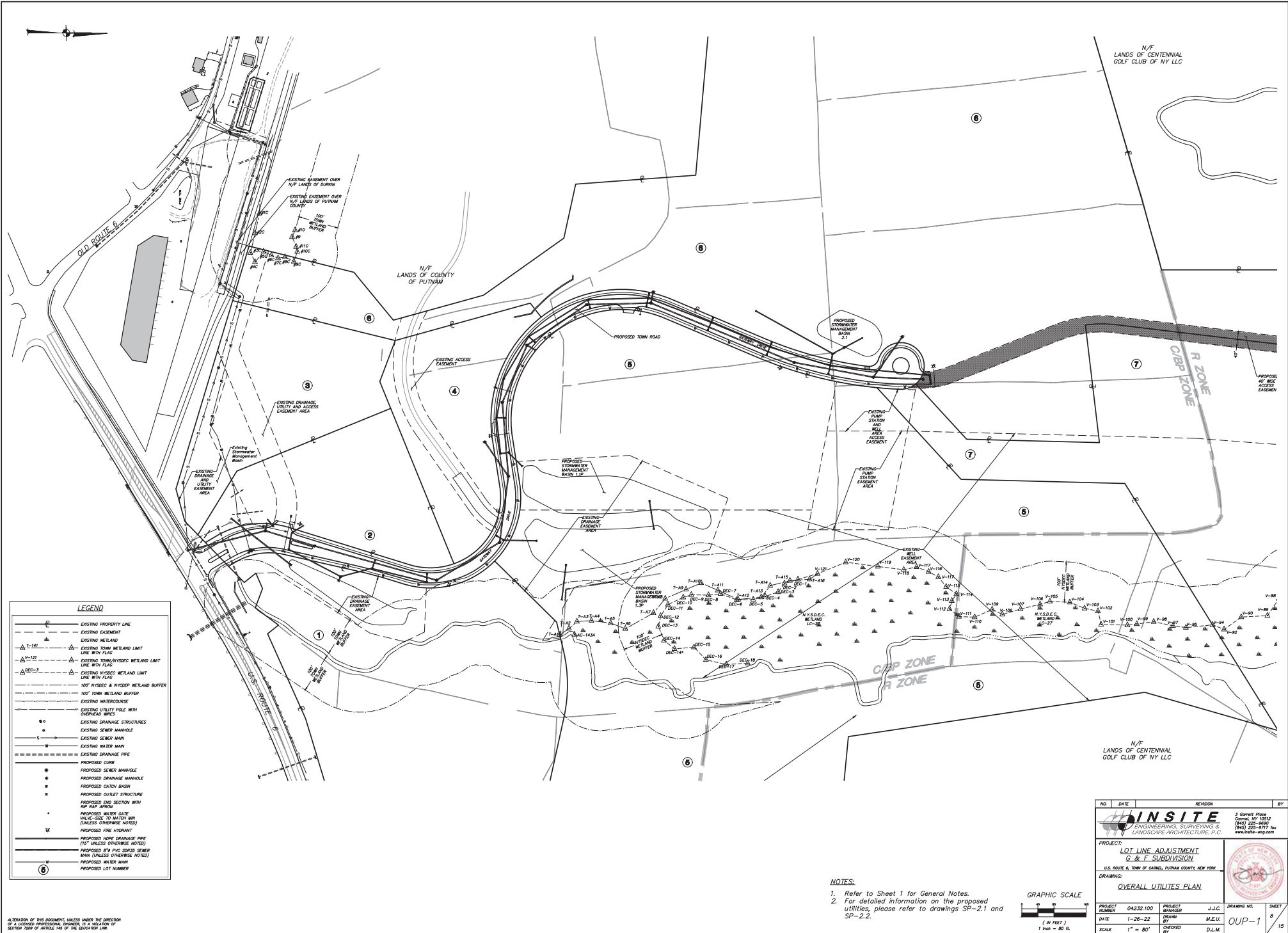
PROJECT: LOT LINE ADJUSTMENT & F SUBDIVISION
U.S. ROUTE 6 & TOWN OF CORABEL, PUTNAM COUNTY, NEW YORK

DRAWING: EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER: 04232-100
DATE: 1-26-22
SCALE: 1" = 40'

PROJECT MANAGER: J.J.C.
DRAWN BY: M.E.U.
CHECKED BY: D.L.M.

DRAWING NO: SP-3.1
SHEET: 6
15

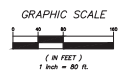


LEGEND

---	EXISTING PROPERTY LINE
---	EXISTING EASEMENT
---	EXISTING METLAND
△ T-121	EXISTING TOWN METLAND LIMIT LINE WITH FLAG
△ V-121	EXISTING TOWN/VISDED METLAND LIMIT LINE WITH FLAG
△ DEC-3	EXISTING HYDREC METLAND LIMIT LINE WITH FLAG
---	100' HYDREC & VISDED METLAND BUFFER
---	100' TOWN METLAND BUFFER
---	EXISTING WATERCOURSE
---	EXISTING UTILITY POLE WITH ORDNANCE WIRES
●	EXISTING DRAINAGE STRUCTURES
●	EXISTING SEWER MANHOLE
●	EXISTING SEWER MAIN
---	EXISTING WATER MAIN
---	EXISTING DRAINAGE PIPE
---	PROPOSED CURB
●	PROPOSED SEWER MANHOLE
●	PROPOSED DRAINAGE MANHOLE
●	PROPOSED CATCH BASIN
●	PROPOSED OUTLET STRUCTURE
●	PROPOSED END SECTION WITH 8" PUP APRON
●	PROPOSED WATER GATE VALVE TO MATCH W/M (UNLESS OTHERWISE NOTED)
●	PROPOSED FIRE HYDRANT
---	PROPOSED 8" PVC DRAINAGE PIPE (15' UNLESS OTHERWISE NOTED)
---	PROPOSED 8" PVC SEWER SEWER MAIN (UNLESS OTHERWISE NOTED)
---	PROPOSED WATER MAIN
---	PROPOSED LOT NUMBER

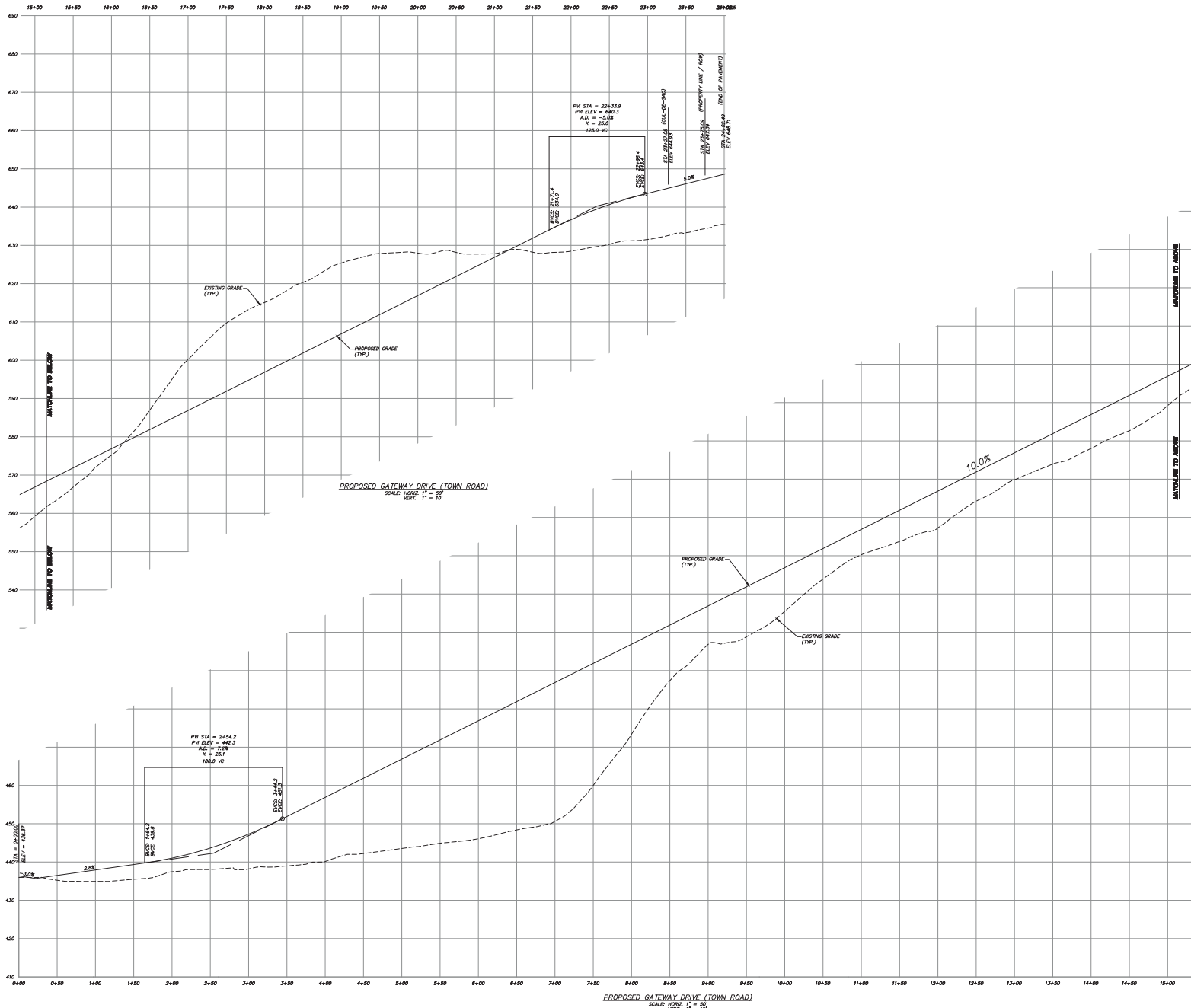
NOTES:

1. Refer to Sheet 1 for General Notes.
2. For detailed information on the proposed utilities, please refer to drawings SP-2.1 and SP-2.2.



NO.	DATE	REVISION	BY
PROJECT: LOT LINE ADJUSTMENT G & F SUBDIVISION U.S. ROUTE 6 & TOWN OF CAROL, PUTNAM COUNTY, NEW YORK DRAWING: OVERALL UTILITES PLAN			
PROJECT NUMBER	04232.100	PROJECT MANAGER	J.L.C.
DATE	1-26-22	DRAWN BY	M.E.U.
SCALE	1" = 80'	CHECKED BY	D.L.M.
DRAWING NO. OUP-1			SHEET 8 OF 15


ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.

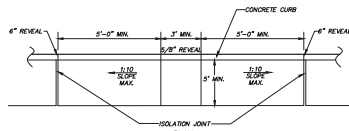


PV 572 = 22433.9
 PV ELEV = 442.3
 AD = -3.0E
 K = 25.0
 126.0 VC

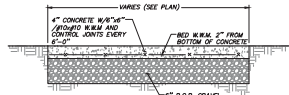
PV 572 = 21454.2
 PV ELEV = 442.3
 AD = -3.2E
 K = 25.1
 183.0 VC

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION
 OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF
 SECTION 2209 OF ARTICLE 146 OF THE EDUCATION LAW

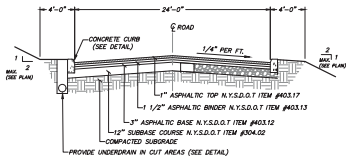
NO.	DATE	REVISION	BY
 INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: LOT LINE ADJUSTMENT G & F SUBDIVISION			
DRAWING: ROAD PROFILE			
PROJECT NUMBER	04232.100	PROJECT MANAGER	J.J.C.
DATE	1-26-22	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	D.L.M.
DRAWING NO. PR-1			SHEET 9 OF 15



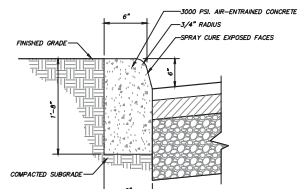
DROP CURB AND RAMP DETAIL (N.T.S.)



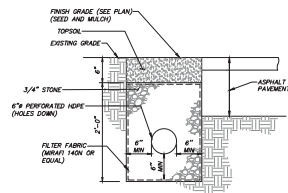
CONCRETE SIDEWALK DETAIL (N.T.S.)



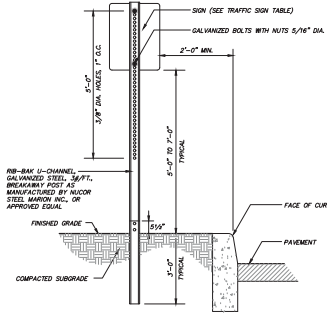
TOWN ROAD DETAIL (N.T.S.)



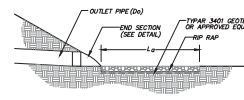
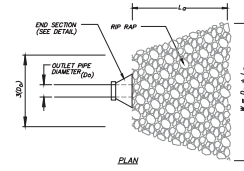
SITE CONCRETE CURB DETAIL (N.T.S.)



UNDERDRAIN DETAIL (N.T.S.)

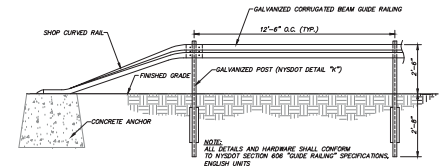


TRAFFIC SIGN DETAIL (N.T.S.)

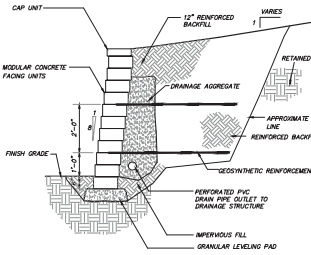


	OUTLET PIPE DIAMETER (D _o)	MAX. RIP RAP SIZE (D _r)	MIN. RIP RAP THICKNESS (LA (MIN.))
ES 1	24"	18"	27"
ES 1.5	24"	9"	14"

RIP RAP ENERGY DISSIPATER DETAIL (N.T.S.)

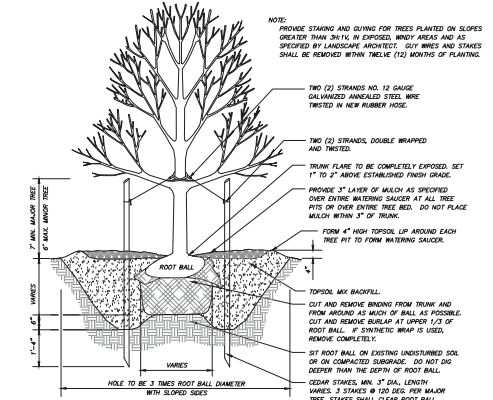


CORRUGATED BEAM GUIDE RAIL DETAIL (N.T.S.)

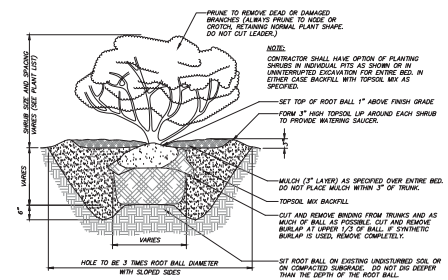


MODULAR BLOCK RETAINING WALL DETAIL (N.T.S.)

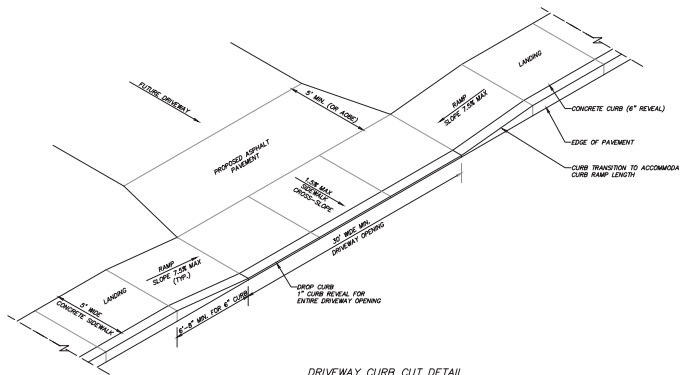
- NOTES:
1. STRIP VEGETATION AND ORGANIC SOIL FROM WALL AND GEOSYNTHETIC ALIGNMENT.
 2. REMOVE CUT ALL EXCAVATED SLOPES.
 3. DO NOT OVER EXCAVATE UNLESS DIRECTED BY ENGINEER TO REMOVE UNDESIRABLE TOPSOIL.
 4. CONTRACTOR SHALL VERIFY FOUNDATION SOILS AS BEING CONSISTENT WITH THE DESIGN STANDARDS AND PARAMETERS.
 5. LEVING PAD SHALL CONSIST OF COMPACTED COARSE SAND OR CRUSHED GRAVEL. MINIMUM THICKNESS TO BE DETERMINED.
 6. CONTRACTOR MAY OPT FOR A LEAN CONCRETE PAD.
 7. MINIMUM EMBEDEDMENT OF WALL BELOW FINISH GRADE TO BE DETERMINED.
 8. FOR UNITS TO BE EMBEDDED, COMPACT FILL IN FRONT OF UNITS AT THE SAME TIME FILL BEHIND UNITS IS COMPLETED.
 9. DRAINAGE AGGREGATE SHALL BE INSTALLED DIRECTLY BEHIND THE WALL WITHIN 12" OF THE TOP OF THE WALL. DRAINAGE AGGREGATE SHALL NOT EXTEND BELOW FINISH GRADE IN FRONT OF WALL.
 10. COMPACTION SHALL BE TO SOLE OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-1557).
 11. COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE SITE SOILS ENGINEER.
 12. COMPACTION WITHIN 5 FT. OF WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT.
 13. GEOSYNTHETIC SHALL BE PLACED WITH STRONGEST DIRECTION PERPENDICULAR TO WALL.
 14. WALL FILLING GEOSYNTHETIC MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
 15. CONTRACTOR SHALL DIRECT SURFACE RUNOFF TO AVOID DAMAGING WALL WHILE UNDER CONSTRUCTION.
 16. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE REINSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
 17. FOLLOW APPLICABLE PROVISIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
 18. RETAINING WALL MUST BE DESIGNED BY A NYS LICENSED PROFESSIONAL ENGINEER.



TREE PLANTING DETAIL (N.T.S.)

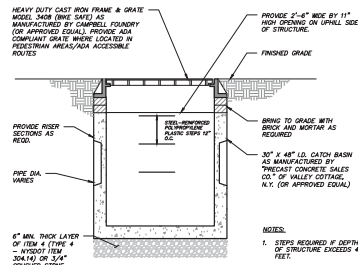


SHRUB PLANTING DETAIL (N.T.S.)

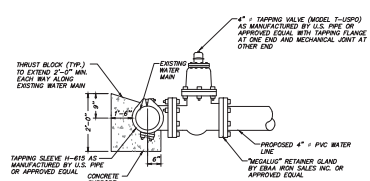


DRIVEWAY CURB CUT DETAIL (N.T.S.)

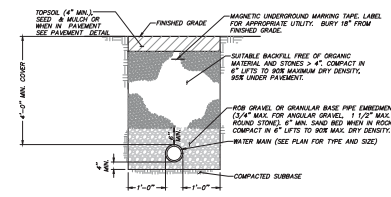
NO.	DATE	REVISION	BY
PROJECT: LOT LINE ADJUSTMENT & F. SUBDIVISION U.S. ROUTE 6, TOWN OF CARROLL, PUTNAM COUNTY, NEW YORK DRAWING: SITE DETAILS			
PROJECT NUMBER	04232-100	PROJECT MANAGER	J.J.C.
DATE	1-26-23	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	D.L.M.
3 Carroll Place Carroll, NY 13612 (845) 225-8997 (845) 225-8997 fax www.insite-arg.com			
DRAWING NO.	10	SHEET	15



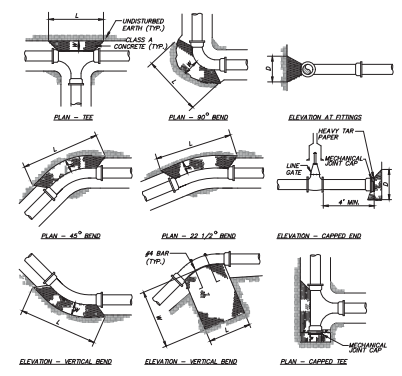
SIDE DRAIN INLET DETAIL
(N.T.S.)



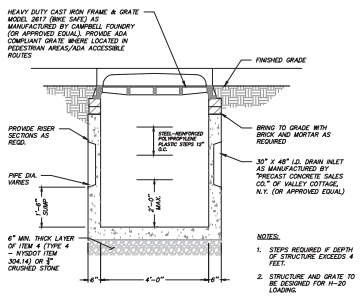
TAPPING SLEEVE, VALVE, AND THRUST BLOCK DETAIL
(N.T.S.)



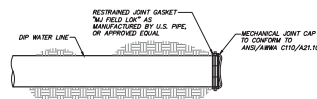
WATER MAIN TRENCH DETAIL
(N.T.S.)



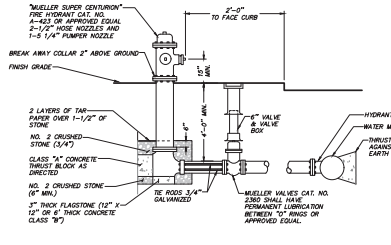
THRUST BLOCK SCHEDULE
(N.T.S.)



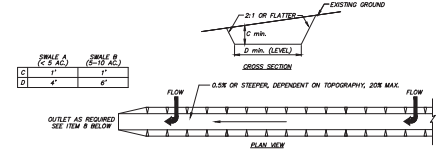
30" X 48" CATCH BASIN DETAIL
(N.T.S.)



CAPPED END FOR DIP WATERMAIN DETAIL
(N.T.S.)



HYDRANT DETAIL
(N.T.S.)



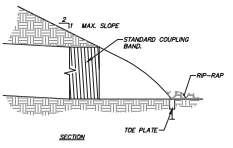
CROSS SECTION
(N.T.S.)

PLAN VIEW
(N.T.S.)

- CONSTRUCTION SPECIFICATIONS**
1. ALL TEMPORARY SCALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
 2. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
 3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
 4. ALL TRICES, BRUSH, STAMPS, OBSTRUCTIONS, AND OTHER OBSTRUCTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSAL OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SCALE.
 5. THE SCALE SHALL BE EQUALIZED OR SHAPED TO LINE GRADE AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPED NORMAL FLOW.
 6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
 7. ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SCALE.
 8. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.
 9. STABILIZATION SHALL BE AS PER THE CHART BELOW.

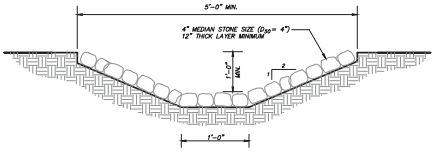
TYPE OF TRENCH	CHANNEL	A (2.5 AC. OR LESS)	B (2.5-10 AC.)
1	0.5'-3.0'	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1'-5.0'	SEED AND STRAW MULCH	SEED LONG JUTE OR GEOTEXTILE
3	5.1'-8.0'	SEED WITH JUTE OR GEOTEXTILE 300	LINED RIP-RAP 4'-8" RECYCLED CONCRETE EQUIVALENT
4	8.1'-20'	LINED 4'-8" RIP-RAP	ENGINEERED DESIGN

TEMPORARY SWALE DETAIL
(N.T.S.)

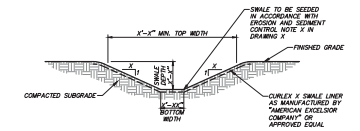


SECTION
(N.T.S.)

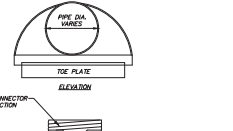
ELEVATION
(N.T.S.)



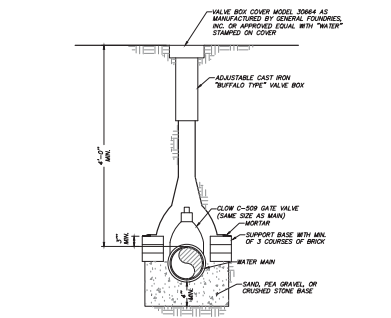
RIP RAP SWALE DETAIL
(N.T.S.)



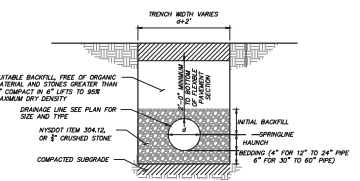
GRASS SWALE DETAIL
(N.T.S.)



END SECTION DETAIL
(N.T.S.)

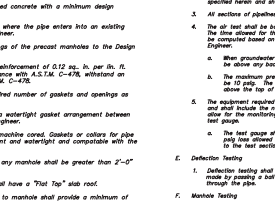
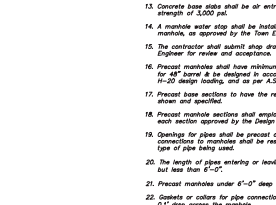
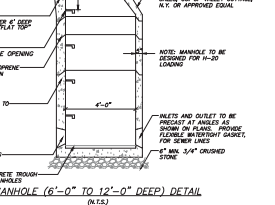
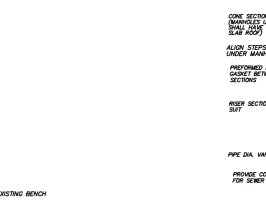
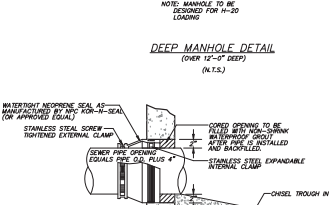
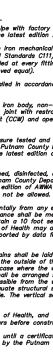
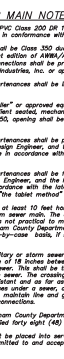
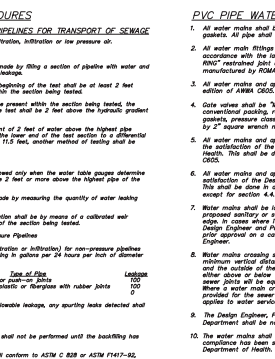
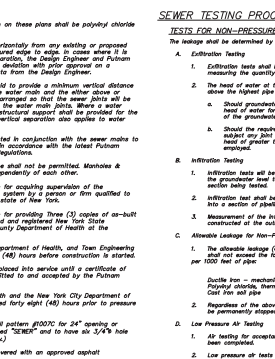
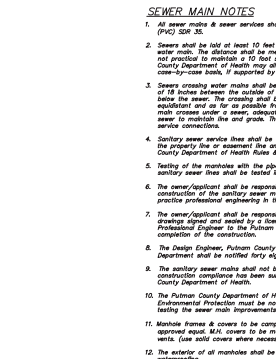
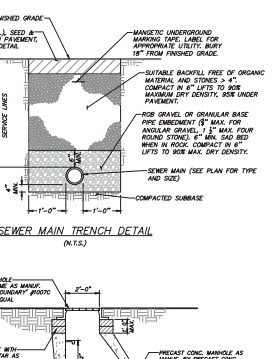
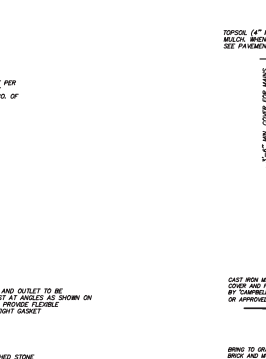
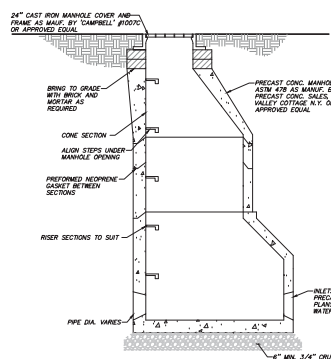


WATER MAIN GATE VALVE DETAIL
(N.T.S.)



DRAINAGE LINE TRENCH DETAIL
(N.T.S.)

NO.	DATE	REVISION	BY
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: LOT LINE ADJUSTMENT & F SUBDIVISION			
PROJECT NUMBER: 04232.100 PROJECT MANAGER: J.L.C. DRAWING NO. 11			
DATE: 1-26-23 DRAWN BY: M.E.U. SHEET 15			
SCALE: AS SHOWN CHECKED BY: D.L.M.			



SEWER MAIN NOTES

- All pipe, manhole & sewer services shown on these plans shall be polypropylene (PP) as per A.S.T.M. 4218.
- Sewers shall be laid out to meet 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge, in cases where it is not practical to maintain a 10 foot separation, the Design Engineer and Putnam County Department of Health may alter elevation with prior approval of the Design Engineer.
- Sewers crossing water mains shall be laid out to provide a minimum vertical clearance of 18 inches between the outside of the water main and the sewer above or below the sewer. The crossing shall be supported by a concrete or steel vaulted and shall be supported on or for the water main joints. Where a water main is not available, a concrete structural support shall be provided for the sewer connection. The vertical separation also applies to water connections.
- Sanitary sewer service shall be located in conjunction with the sewer main to the property or nearest the street in accordance with the latest Putnam County Department of Health Rules & Regulations.
- Testing of the manhole with the sanitary sewer shall be permitted. Manholes & sanitary sewer shall be tested independently of each other.
- The owner/applicant shall be responsible for securing approval of the construction of the sanitary sewer main system by a permit or form qualified to practice professional engineering in the state of New York.
- The sewer/main contractor shall be responsible for providing three (3) copies of in-built drawings signed and sealed by a licensed professional New York State Professional Engineer to the Putnam County Department of Health at the completion of the construction.
- The Design Engineer, Putnam County Department of Health, and Town Engineering Department shall be notified forty eight (48) hours before construction is started.
- The sanitary sewer main shall not be placed into service until a certificate of construction compliance has been submitted to and accepted by the Putnam County Department of Health.
- The Putnam County Department of Health and the New York City Department of Environmental Protection must be notified forty eight (48) hours prior to pressure testing the sewer main.
- Manhole frames & covers to be combined pattern 6000C for 24\"/>

SEWER TESTING PROCEDURES

- TESTS FOR NON-PRESSURE PIPES FOR TRANSPORT OF SEWAGE**
The leakage shall be determined by infiltration, inflation or pressure test.
- Infiltration Tests**
 - Exfiltration tests shall be performed by filling a section of pipe with water and measuring the quantity of leakage.
 - The test of each pipe shall be performed at a minimum of two (2) test points above the highest pipe within the section being tested.
 - The test of water for the test shall be at least the hydrostatic gradient of the groundwater.
 - Should the requirement of 2 feet of water above the highest pipe be impractical, the test shall be performed at the minimum of two (2) test points above the highest pipe, and the differential head of greater than 11.5 feet, neither method of testing shall be required.
 - Inflation Testing**
 - Infiltration tests shall be allowed only when the water table gauge determines the groundwater level to be 2 feet or more above the outside of the section being tested.
 - Inflation tests shall be performed by measuring the quantity of water leakage into a section of pipe.
 - Alternate Leakage for Non-Pressure Pipelines**
 - The alternate leakage (infiltration or exfiltration) for non-pressure pipelines shall not exceed the following in gallons per 24 hours per inch of diameter per 100 feet of pipe:

Diameter (in)	Leakage
6 to 12	100
12 to 18	100
18 to 24	100
24 to 30	100
30 to 36	100
36 to 42	100
42 to 48	100
 - Low Pressure Air Testing**
 - Air testing for acceptance shall not be performed until the bedding has been completed.
 - Low pressure air tests shall conform to ASTM C 828 or ASTM F147-82, Section 4.2.2, "Low-Pressure Dry Method for a 0.5 psi dry, except as specified herein and shall not be done in line or out of line.
 - All sections of pipelines shall be covered and flamed prior to testing.
 - A minimum test shall be performed on all pipe segments of 3.5 ft in length. The test shall be performed at the top of the pipe segment, and the test shall be performed at the top of the pipe segment.
 - When performing a test, the maximum test pressure of 1 psi shall be above any back pressure due to any conditions.
 - The maximum pressure allowed under any condition in air testing shall be 0.5 psi. The maximum pressure shall be no more than 1.5 psi above the back pressure.
 - Deflation Testing**
 - Infiltration tests shall be performed after bedding. The test shall be made by filling a section of pipe with water and measuring the volume of water lost during the test.
 - Manhole Testing**
 - General
 - Each manhole shall be tested by either infiltration, inflation or pressure test.
 - A manhole will be considered to be satisfactory if no water is seen to infiltrate or exfiltrate at the top of the manhole within the 15-minute test period. If water is seen to infiltrate or exfiltrate at the top of the manhole, the test pressure shall be maintained for a test period of 15 minutes.
 - At the completion of the test, the pressure shall be released at the furthest point from the point of application.
 - All exfiltration shall be watched during the test and no leaks, defective material or joints shall be repaired or replaced before releasing the tests.
 - The alternate leakage for pressure pipelines shall not exceed the following in gallons per 24 hours per inch of diameter per 100 feet of pipe:

Diameter (in)	Leakage
6 to 12	100
12 to 18	100
18 to 24	100
24 to 30	100
30 to 36	100
36 to 42	100
42 to 48	100
 - The test medium shall be water.

PVC PIPE WATER MAIN NOTES

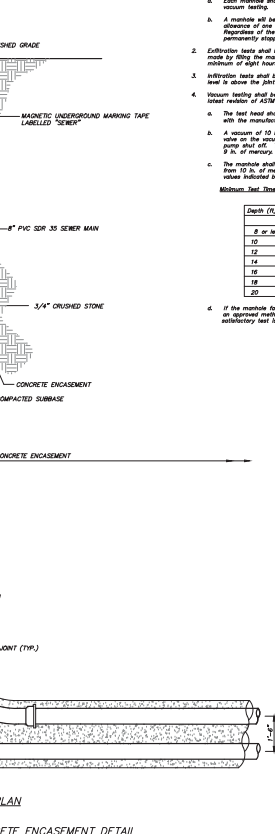
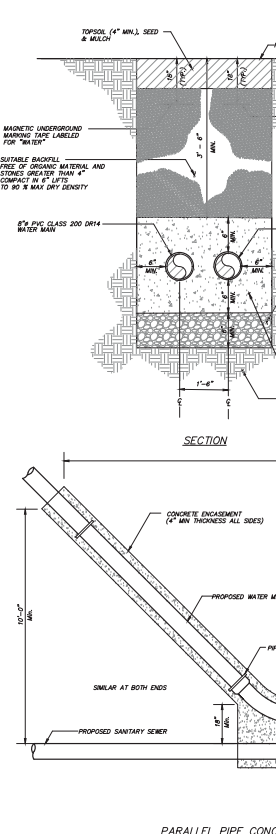
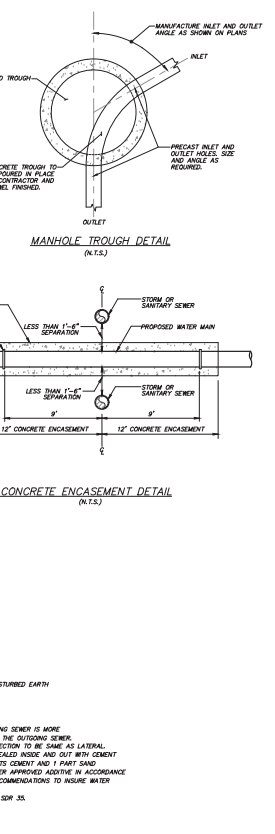
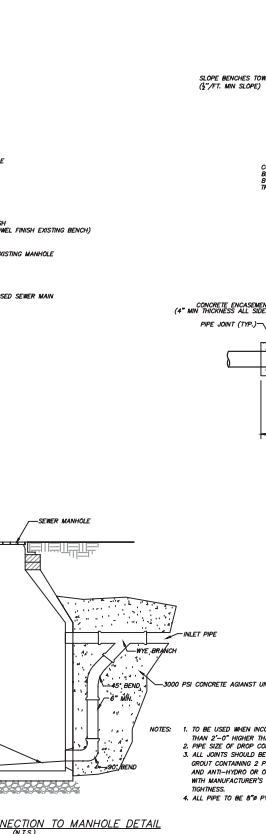
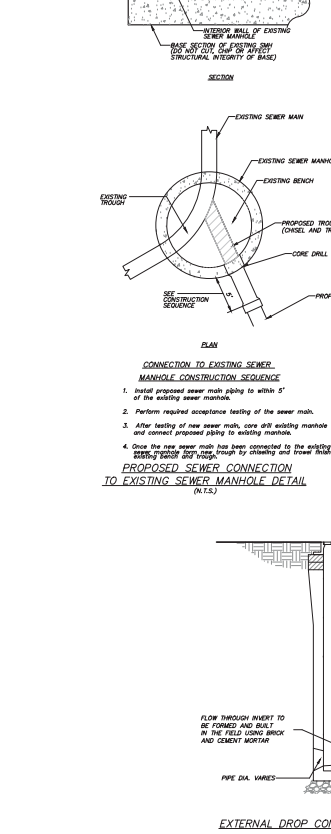
- All water mains shall be PVC Class 200 24 inch pipe with factory installed push-on couplings. All pipe shall be in accordance with the latest edition of AWWA C900.
- All water main fittings shall be Class 350 ductile iron mechanical joints in accordance with the latest edition of AWWA C900. All fittings shall be "Tee" or "Elbow" type. All fittings shall be installed in accordance with the latest edition of AWWA C900.
- All water main and appurtenances shall be installed in accordance with the latest edition of AWWA C900.
- Coupling valves shall be installed in accordance with the latest edition of AWWA C900. All valves shall be installed in accordance with the latest edition of AWWA C900.
- All water mains and appurtenances shall be pressure tested and leakage tested to the satisfaction of the Design Engineer and the Putnam County Department of Health. This shall be done in accordance with the latest edition of AWWA Standard C900.
- All water mains and appurtenances shall be backfilled, distributed, and tested to the satisfaction of the Design Engineer and the Putnam County Department of Health. This shall be done in accordance with the latest edition of AWWA Standard C900, Section 4.1.2. The latest edition shall not be altered.
- Water mains shall be laid out to meet 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge, in cases where it is not practical to maintain a 10 foot separation, the Design Engineer and Putnam County Department of Health may alter elevation with prior approval of the Design Engineer.
- Water mains crossing sanitary or storm sewer mains shall be laid to provide a minimum vertical clearance of 18 inches between the outside of the water main and the sewer above or below the sewer. The crossing shall be supported by a concrete or steel vaulted and shall be supported on or for the water main joints. Where a water main is not available, a concrete structural support shall be provided for the sewer connection. The vertical separation also applies to water service connections.
- The Design Engineer, Putnam County Department of Health, and Town Engineering Department shall be notified forty eight (48) hours before construction is started.
- The water main shall not be placed into service until a certificate of construction compliance has been submitted to and accepted by the Putnam County Department of Health.
- The Putnam County Department of Health and Design Engineer must be notified forty eight (48) hours prior to pressure testing the water main.
- All horizontal and vertical bends require thrust blocks in addition to restrained joint connections.

WATER TESTING PROCEDURES

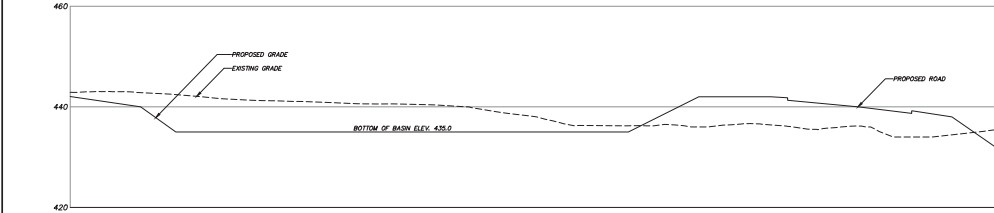
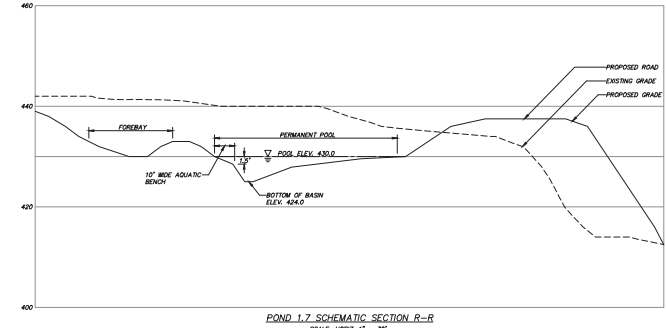
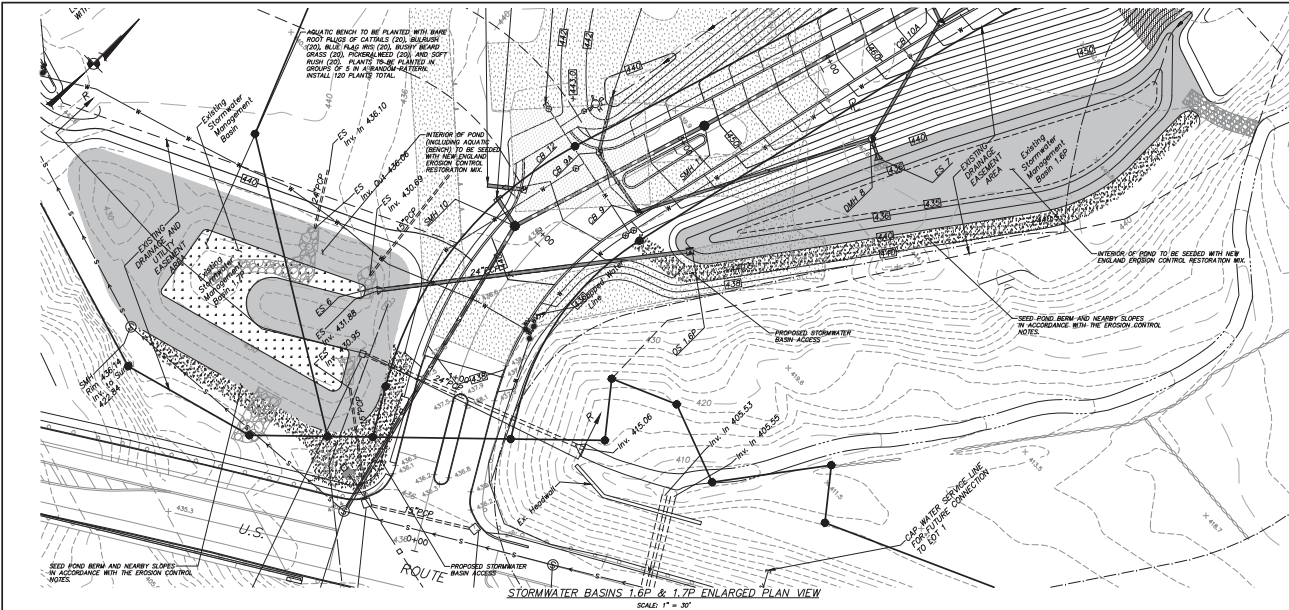
TESTS ON PRESSURE PIPING FOR TRANSPORT OF WATER

- Hydrostatic Pressure Test**
 - The pressure test shall be performed in accordance with the AWWA C900, Section 7.1, "Hydrostatic Test".
 - The test pressure shall be maintained, when no pressure is indicated, shall be 150 psi or 1.25 times the static operating pressure, whichever is higher.
 - The test medium shall be water.
- Hydrostatic Leakage Test**
 - The leakage test shall be conducted concurrently with the pressure test.
 - The rate of leakage shall be determined at 15-minute intervals by means of a measuring device. The test shall be performed at the rate of leakage rate indicated or in increasing increments of 0.5 gpd per 100 ft of pipe. If the leakage rate is greater than 0.5 gpd per 100 ft of pipe, the test pressure shall be maintained for a test period of 15 minutes.
 - At the completion of the test, the pressure shall be released at the furthest point from the point of application.
 - All exfiltration shall be watched during the test and no leaks, defective material or joints shall be repaired or replaced before releasing the tests.
 - The alternate leakage for pressure pipelines shall not exceed the following in gallons per 24 hours per inch of diameter per 100 feet of pipe:

Diameter (in)	Leakage
6 to 12	100
12 to 18	100
18 to 24	100
24 to 30	100
30 to 36	100
36 to 42	100
42 to 48	100
 - The test medium shall be water.



NO.	DATE	REVISION	BY
INSITE			
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.			
PROJECT: LOT LINE ADJUSTMENT			
G & F SUBDIVISION			
U.S. ROUTE 6, TOWN OF COMEL, PUTNAM COUNTY, NEW YORK			
DRAWING: SITE DETAILS			
PROJECT NUMBER	04232-100	PROJECT MANAGER	J.L.C.
DATE	1-26-22	DRAWN	M.E.U.
SCALE	AS SHOWN	CHECKED	D.L.M.
			D-3
			15



Planting Notes:

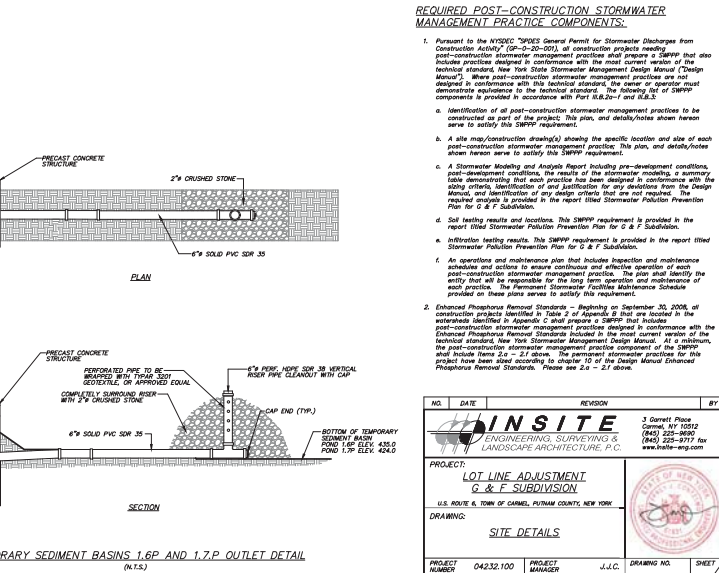
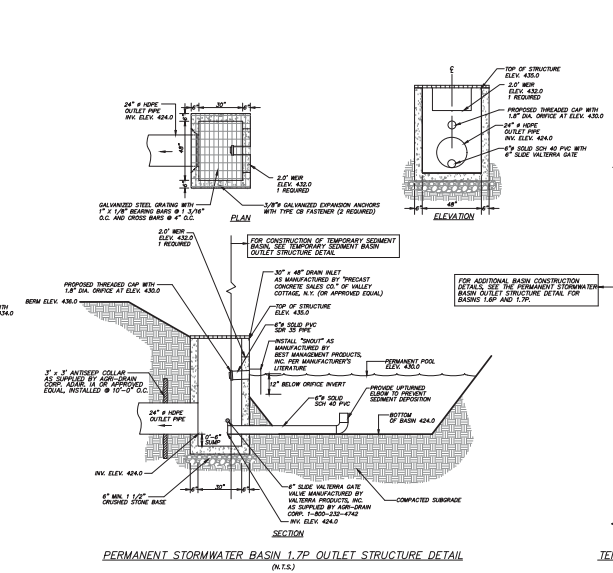
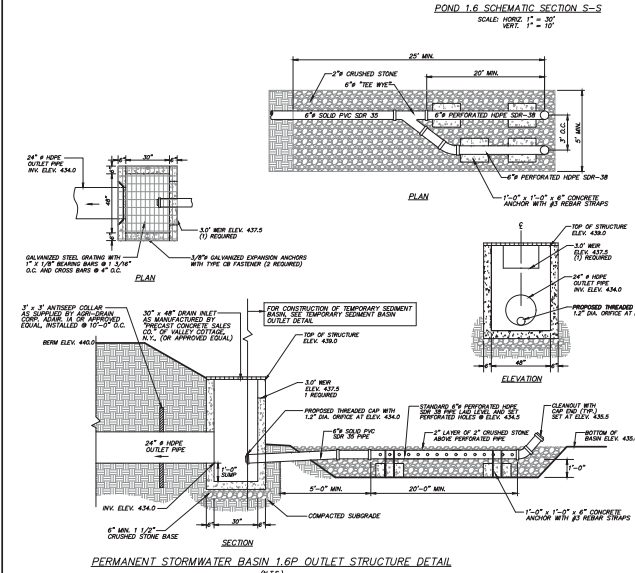
- All plant material to be nursery grown.
- The ponds are proposed to be utilized as temporary sediment basins during construction.
- Plants shall conform with the American Association of Nurserymen Standards in all ways including dimensions.
- Plants shall be planted in all locations designed on the plan or as stated in the field by the Landscape Architect.
- All plants shall be hardy under climate conditions similar to those in the locality of the project.
- All proposed seeded areas to receive 6" min. depth of topsoil.
- Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in conjunction with suitable mulch or fabric.
- Seeds to be applied at the manufacturer's recommended rate using LE50 18-C-18 (no phosphorus) fertilizer or equivalent. Seed mixture shall conform to the Seed Mix Standards and Specifications of Florida and Southern Coastal. August 2000.
- Mulch: Soft hay or small grain straw applied at a rate of 90 lbs./1000 s.f.
- 2" thickness to be applied and covered according to Table 2000.2000.
- If the season prevents the establishment of a permanent vegetation cover, the mulched areas will be mulched with straw or equivalent.
- Erosion control seed mix to be the New England Erosion Control/Restoration Mix for Denton Basin and Main Street spread at a rate of 16.7/1245 s.f. as manufactured by New England Erosion Control, Inc.

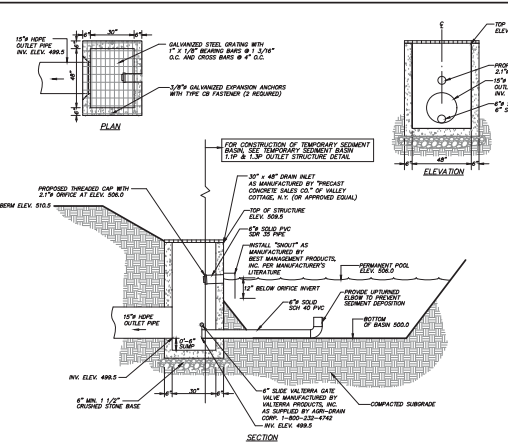
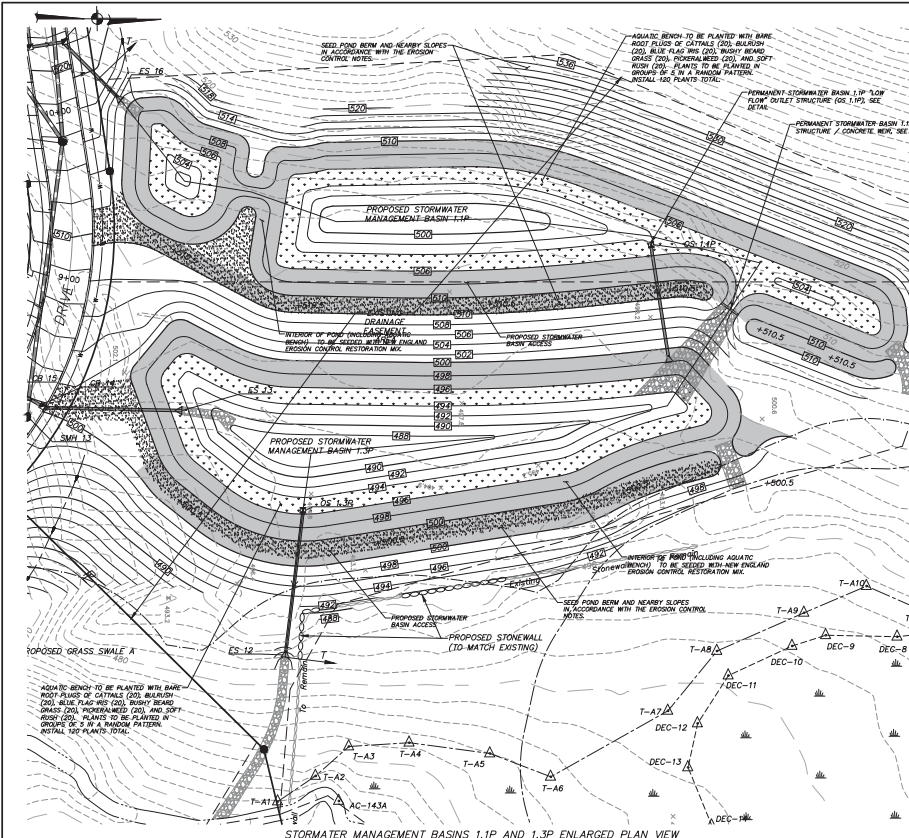
STORMWATER BASIN OUTLET NOTES

- THE PONDS ARE PROPOSED TO BE UTILIZED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION. THE FOLLOWING SHALL BE ACCOMPLISHED:
 - CLEAR BENCH AND OUTLET STRUCTURE AND REMOVE 6" PERFORATED METALLIC RISER PIPE, CRUSHED STONE AND FLEXIC. BENCH.
 - ADD THREADED CAP WITH ORIFICE AT DISCHARGE END OF 6" SOLID PVC SDR 35 RISER PER DETAIL.
 - REPLACE THE PERFORATED PIPE AND CRUSHED STONE.
 - ESTABLISH THE FINAL VEGETATION IN THE POND IN ACCORDANCE WITH THE TYPICAL DRY STORMWATER BASIN PLANNING DETAILS.
 - FOR IMPROVED EXTENDED DETENTION POND EQUAL TO BOTTOM OF TEMPORARY SEDIMENT BASIN PLANNING STORMWATER POND BOTTOM.
- THE 6" PERFORATED METALLIC RISER SHALL BE CONSTRUCTED AS FOLLOWS:
 - WHEN INITIALLY USED AS THE TEMPORARY SEDIMENT BASIN, THE RISER SHALL BE REINFORCED WITH TYPICAL 3001 GEOTEXTILE OR APPROVED EQUAL AND SURROUNDED WITH 2" STONE. THE TOP OF THE RISER SHALL BE SET AT THE SAME ELEVATION AS THE BENCH AS SHOWN IN THE STORMWATER BASIN OUTLET STRUCTURE DETAILS.
 - WHEN THE PERMANENT RISER FOR BASIN IS CONSTRUCTED THE RISER SHALL BE UNREINFORCED WITH THE TOP ELEVATION SET AT SPECIFIED DETAILS.

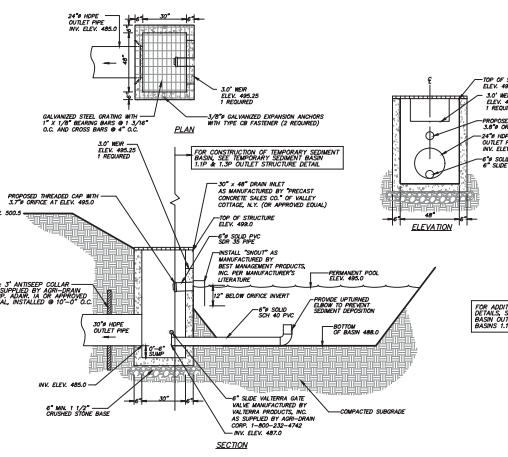
REQUIRED POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS.

- Pursuant to New York State General Permit for Stormwater Discharge from Construction Activity (GP-0-20-001), all construction projects needing stormwater discharge permits shall be required to submit a Stormwater Pollution Prevention Plan (SWPPP) and also include practices designed in accordance with the most current version of the technical standards New York State Stormwater Management Design Manual ("Design Manual"). Where post-construction stormwater management practices are not designed in accordance with this technical standard, the owner or contractor must demonstrate equivalence to the technical standard. The following list of SWPPP components is provided in accordance with Part 61.02(b) and 61.03.
- Identification of all post-construction stormwater management practices to be constructed as part of the project. This plan, and details/notes shown herein serve to satisfy this SWPPP requirement.
- A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice. This plan, and details/notes shown herein serve to satisfy this SWPPP requirement.
- A Stormwater Modeling and Analysis Report including new-development conditions, post-development conditions, the results of the stormwater modeling, a summary table demonstrating that best practices have been designed in accordance with the 100th criteria, identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required. This report shall be included in the report titled Stormwater Pollution Prevention Plan for 2" of 24 Subdivision.
- Soil testing results and location. This SWPPP requirement is provided in the report titled Stormwater Pollution Prevention Plan for 2" of 24 Subdivision.
- Inspection testing results. This SWPPP requirement is provided in the report titled Stormwater Pollution Prevention Plan for 2" of 24 Subdivision.
- An operations and maintenance plan that includes inspection and maintenance schedule and actions to ensure continuous and effective operation of the post-construction stormwater management practices. The plan shall identify the responsible party for the post-construction stormwater management practices for each practice. The Permanent Stormwater Facilities Maintenance Schedule shall be included in the report titled Stormwater Pollution Prevention Plan for 2" of 24 Subdivision.

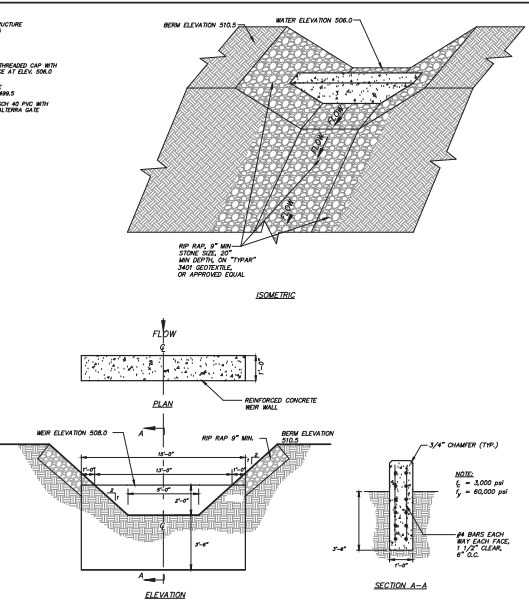




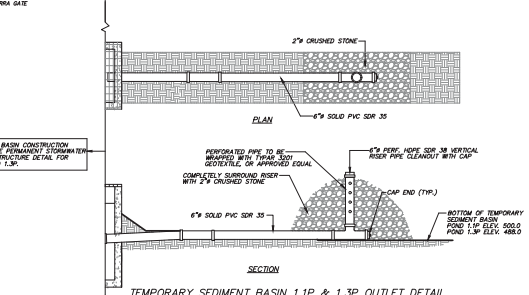
PERMANENT STORMWATER BASIN 1.1P "LOW FLOW" OUTLET STRUCTURE DETAIL (OS 1.1P)
(N.T.S.)



PERMANENT STORMWATER BASIN 1.3P OUTLET STRUCTURE DETAIL
(N.T.S.)



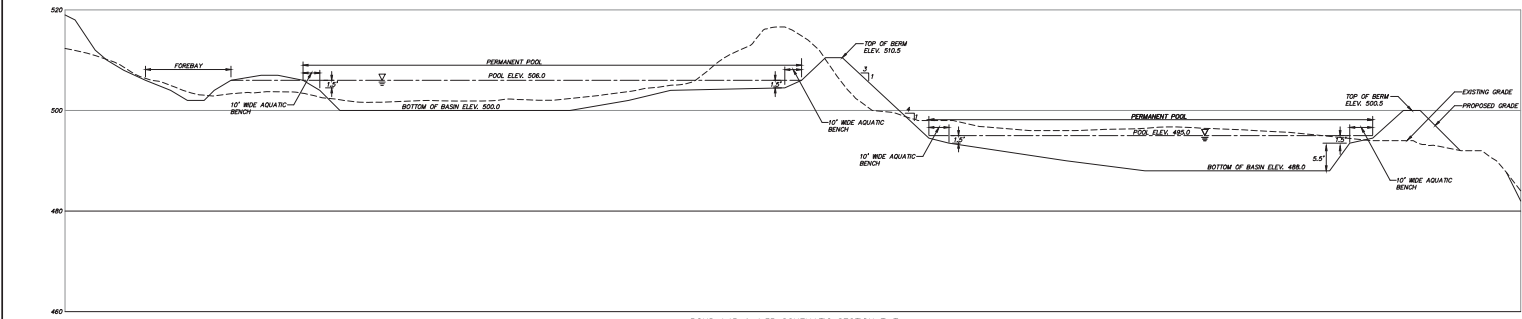
PERMANENT STORMWATER BASIN 1.1P OUTLET STRUCTURE / CONCRETE WEIR DETAIL
(N.T.S.)



TEMPORARY SEDIMENT BASIN 1.1P & 1.3P OUTLET DETAIL
(N.T.S.)

Planting Notes.

- All plant material to be nursery grown.
- Plants shall conform with the American Association of Nurserymen Standards in all major planting operations.
- Plants shall be planted in all locations designed on the plan or as staked in the field by the Landscape Architect.
- All plants shall be hardy under climate conditions similar to those in the locality of the project.
- All proposed seeded areas to receive 6" min. depth of topsoil.
- Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in combination with suitable mulch or fabric.
 - For further details of the manufacturer recommended rate apply 12000-15-20-18 (No phosphorus) fertilizer or equivalent. Select mixture described in New York State Standards and Specifications for Soils and Soil Amendments, August 2005.
 - Mulch: Sell hay or small grade straw applied at a rate of 90 lbs./1000 s.f. or 2 tons/acre, to be applied and anchored according to New York State Standards and Specifications for Soils and Soil Amendments, August 2005.
- Grass control seed mix to be the New England Erosion Control/Restoration Mix for Detention Basins and Storm Water Management Basins, as manufactured by New England Wetland Plants, Inc.
 - If the reason presents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent.



POND 1.1P & 1.3P SCHEMATIC SECTION T-T
SCALE: HORIZ. 1" = 30'

NO.	DATE	REVISION	BY
3	Current	Phone: 516-339-1512 Fax: 516-339-8997 www.insite-arg.com	

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

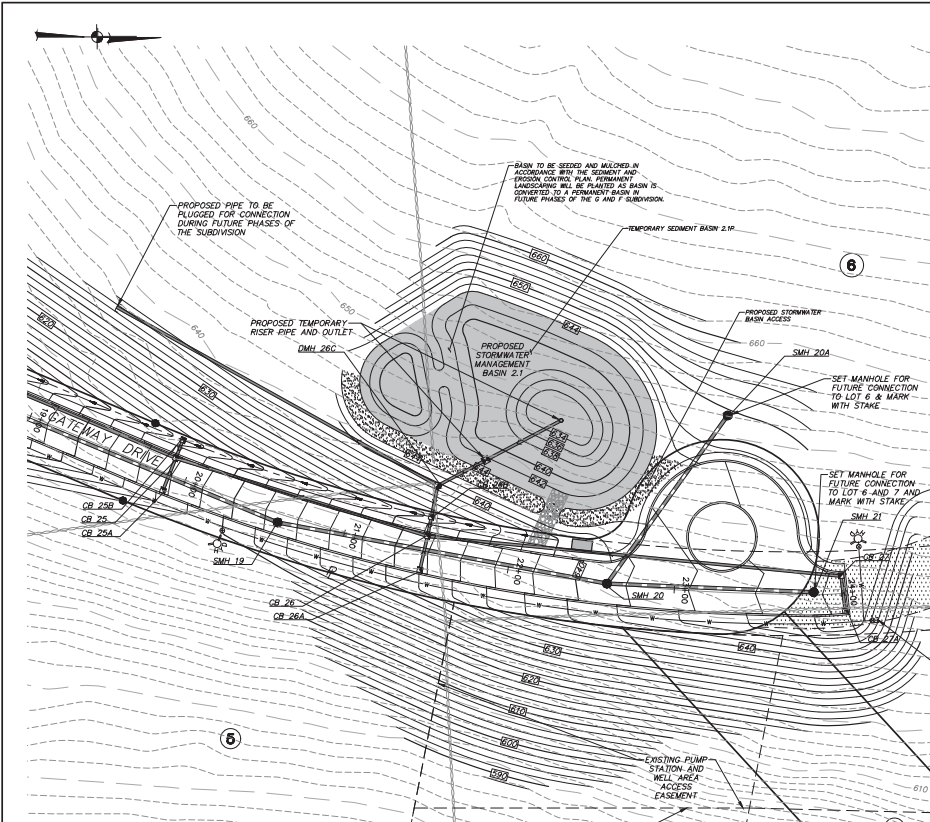
PROJECT:
**LOT LINE ADJUSTMENT
& F SUBDIVISION**

U.S. ROUTE 6, TOWN OF CARROLL, PUTNAM COUNTY, NEW YORK

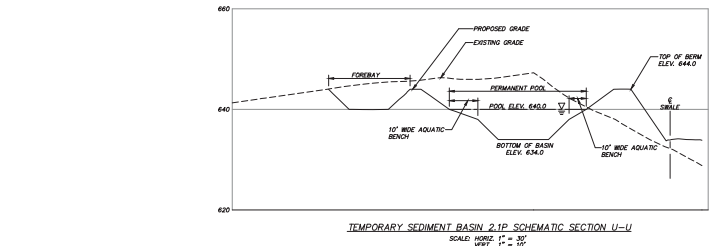
DRAWING:
SITE DETAILS

PROJECT NUMBER	PROJECT MANAGER	J.L.C.	DRAWING NO.	SHEET
04232.100				14
DATE	DRAWN BY	M.E.U.	CHECKED BY	SCALE
1-26-23				AS SHOWN

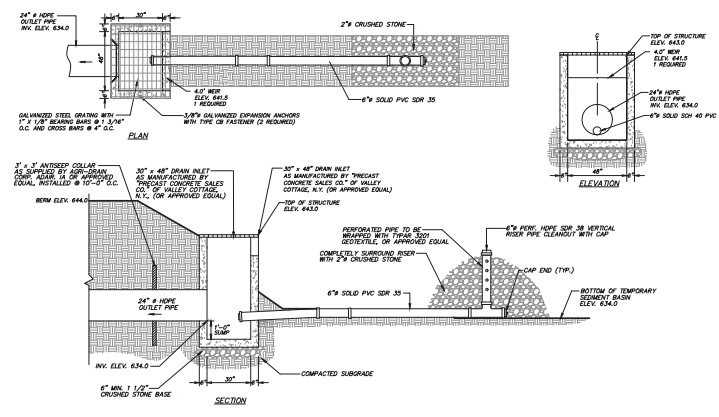
ALLOCATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2009 OF ARTICLE 146 OF THE EDUCATION LAW.



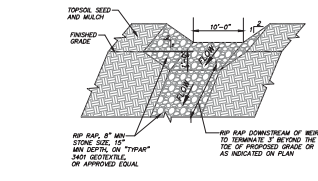
TEMPORARY SEDIMENT BASIN 2.1P ENLARGED PLAN VIEW
SCALE: 1" = 30'



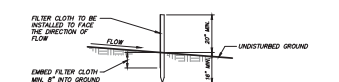
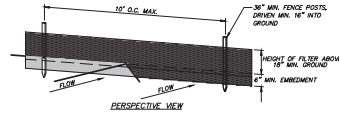
TEMPORARY SEDIMENT BASIN 2.1P SCHEMATIC SECTION U-U
SCALE: HORIZ. 1" = 30'
VERT. 1" = 10'



TEMPORARY SEDIMENT BASIN 2.1P OUTLET DETAIL
(N.T.S.)



EMERGENCY OVERTLOW SPILLWAY & STABILIZED ACCESS DETAIL
(N.T.S.)

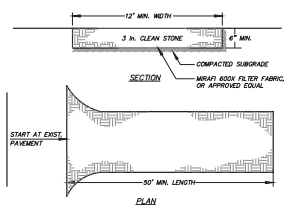


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

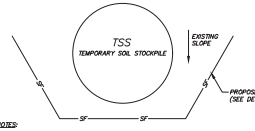
1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2\"/>

SILT FENCE DETAIL
(N.T.S.)

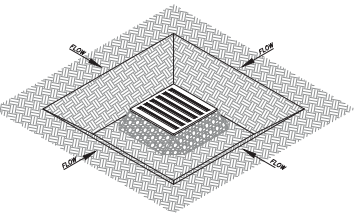


- INSTALLATION NOTES
1. STONE SIZE - USE 3\"/>



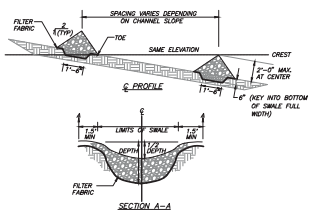
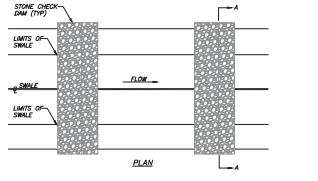
- NOTES
1. AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE.
 2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
 3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH P21 PERENNIAL TALL FESCUE.
 4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNWIND SIDE.

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



1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. KEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL KEEP HOLES FULL EXCAVATION WITH STONE, SO2 TO FINAL GRADE, CONTACT IT PROPERLY, AND STABILIZE WITH PERMANENT SEEDING.
5. MINIMUM DRAINAGE AREA = 1.0 ACRE.

EXCAVATED DROP INLET PROTECTION DETAIL
(N.T.S.)



- NOTES
1. STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION.
 2. SET SPACING OF CHECK DAM SO THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
 3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AND EROSION OF THE DITCH.
 4. PROTECT THE CHANNEL DOWNSTREAM BY THE LOWEST CHECK DAM FROM SEDIMENT AND EROSION WITH STONE LINER AS APPROPRIATE.
 5. ENSURE THAT DAMING APPROPRIATENESS SUCH AS COLLECT ENDRANGES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

STONE CHECK DAM DETAIL
(N.T.S.)

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 1009 OF ARTICLE 146 OF THE EDUCATION LAW.

NO.	DATE	REVISION	BY
PROJECT:		3 Carpent Place SUNNY VALLEY 10512 (914) 235-8997 (914) 235-8997 www.insite-arg.com	
DRAWING:			
<p>LOT LINE ADJUSTMENT G & F SUBDIVISION</p>			
<p>SITE DETAILS</p>			
PROJECT NUMBER	04232.100	PROJECT MANAGER	J.J.C.
DATE	1-26-23	DRAWN BY	M.E.U.
SCALE	AS SHOWN	CHECKED BY	D.L.M.
			SHEET 15 15



January 25, 2022

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

RE: Gateway Summit Senior Housing Lot 6
Gateway Drive
Tax Map No. 55.-2-24.6-1 & 55.-2-24.6-2

Dear Chairman Paepre and Members of the Board:

As the Board is aware, approval for the subject project was regranted effective February 8, 2021, which will expire on February 8, 2022. Since that time, there has been no substantial change in the condition of the site and/or its environs. The applicant requests a 1 year extension of the Site Plan approval. Please place this item on the Board's upcoming meeting agenda for consideration of an extension of approval.

A check is enclosed for the \$2,000.00 application fee.

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

Very truly yours,

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

By: 
Jeffrey J. Contelmo, PE
Senior Principal Engineer

JJC/dlm

cc: Paul Camarda, CRI

Insite File No. 04232.106



January 25, 2022

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

RE: The Fairways Senior Housing Lot 7
Gateway Drive
Tax Map No. 55.-2-24.8-1 & 55.-2-24.8-2

Dear Chairman Paepre and Members of the Board:

As the Board is aware, approval for the subject project was regranted effective February 8, 2021, which will expire on February 8, 2022. Since that time, there has been no substantial change in the condition of the site and/or its environs. The applicant requests a 1 year extension of the Site Plan approval. Please place this item on the Board's upcoming meeting agenda for consideration of an extension of approval.

A check is enclosed for the \$2,000.00 application fee.

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

Very truly yours,

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

By:


Jeffrey J. Contelmo, PE
Senior Principal Engineer

JJC/dlm

cc: Paul Camarda, CRI

Insite File No. 05140.100