TOWN OF MAMARONECK - VILLAGE OF LARCHMONT
COASTAL ZONE MANAGEMENT COMMISSION
Monday, January 27, 2020
7:30 PM, Mamaroneck Town Center, 1st Floor - Conference Room D, 740 W. Boston Post Road, Mamaroneck, NY 10543

Approval of Minutes

1. Approval of Minutes - October 28, 2019

Agenda Items

1. Nautilus Diner, 1240 Boston Post Road, Site Plan Approval/ Special Use Permit
2. 1 Spanish Cove, Site Plan Approval
3. 14 Wildwood Circle, Wetlands and Watercourses Permit / Site Plan Approval
4. 220 Hommocks Road, Wetlands and Watercourses Permit /Site Plan Approval

Old Business

New Business

Meeting Adjournment

Any physically handicapped person needing special assistance in order to attend the meeting should call the Town Administrator's office at 381-7810.

Town of Mamaroneck — Village of Larchmont

COASTAL ZONE MANAGEMENT COMMISSION

TOWN CENTER: 740 West Boston Post Road, Mamaroneck, NY 10543-3353
TEL: 914-381-7845 FAX: 914-381-8473 conservationdept@townofmamaroneck.org

CZMC Minutes - Draft
October 28, 2019

A meeting of the Coastal Zone Management Commission (CZMC) was held on Monday, October 28, 2019 in the Mamaroneck Town Center, Conference Room D, 1st Floor, 740 W. Boston Post Road, Mamaroneck, New York. The meeting was called to order at 7:35 p.m.

MEMBERS PRESENT:
C. Alan Mason, Chairman
Matthew Teitsch
Robert Fletcher
Kanan Sheth

OTHERS PRESENT:
Elizabeth Aitchison (Paul), Environmental Planner, Town of Mamaroneck
Peter Fanelli, Village Trustee, Liaison to CZMC
Laura Treadway, Potential CZMC member, Village of Larchmont
Michael Stein, Engineering Consultant, 44 Edgewood Avenue

1. **Approval of Minutes**
The minutes of the September 23, 2019 meeting were approved as amended.

2. **Referral – 44 Edgewood Avenue, Subdivision**
Michael Stein presented the proposal to subdivide the property at 44 Edgewood Avenue into two conforming lots. The existing single family house will be demolished and two single family houses will be constructed in the future. Because the proposal is only for the subdivision of the property at this point, complete plans were not yet prepared. The applicant will return with complete plans for both homes when they submit an application for Site Plan review to the planning board. CZMC will have the opportunity to comment on each site plan application at that time.

The plans that were presented included the footprints of the two residences, driveway locations and the proposed stormwater management systems. The engineer's investigations indicated that little rock was encountered on the site and the soil conditions provided good percolation rates for stormwater.

A landscape plan has not yet been prepared, however CZMC discussed the protection of trees on the property. The proposed sanitary sewer connection on Lot 2 would have to be relocated in order to preserve the tulip tree. In order to preserve the mature trees on Lot 1, CZMC recommends that the house on Lot 1 be constructed and completed first, using

the property of lot 2 for parking, staging and material storage. Then, after Lot 1 has been completed, work should begin on Lot 2. CZMC found the proposed subdivision to be consistent with the policies in the Local Waterfront Revitalization Program (LWRP) and looks forward to reviewing the proposals for Residential Site Plan Approval.

3. **Old Business**
No old business to discuss.

4. **New Business**
No new business to discuss.

The meeting was adjourned at 7:45 p.m.

Town of Mamaroneck - Village of Larchmont
Coastal Assessment Form (CAF)

Applicants, or the appropriate municipal agency, shall complete this Coastal Assessment Form (CAF) for proposed actions which are subject to Local Consistency Review (see Waterfront Revitalization Law §§234-1 through 234-5 in the Code of the Town of Mamaroneck and §§292-1 through 292-4 in the Code of the Village of Larchmont). This assessment is intended to supplement other information used by the Bi-Municipal Coastal Zone Management Commission in making a determination of consistency with the Town of Mamaroneck and Village of Larchmont Local Waterfront Revitalization Program.

Upon completion of this form, it should be submitted as part of a complete application package for review. If assistance or further information is required for Town of Mamaroneck matters, please contact the Town of Mamaroneck Environmental Planner at (914) 381-7845. For Village of Larchmont matters, please contact the Village of Larchmont Building Inspector at (914) 834-6210.

PLEASE PRINT OR TYPE ALL ANSWERS.

A. GENERAL INFORMATION

Will the proposed action be undertaken by a municipal agency? Yes [ ] No [X]

If yes, please list agency or agencies and contact person(s): _____

If no, please complete the applicant information:

Name of Applicant: Nautilus Equities, Inc

Street Address: 1240 Boston Post Road

City, State, Zip: Mamaroneck New York 10538

Phone: (917) 568-4677 Fax: 914 637-8730 Email: jeffmsesq@aol.com

Jeffrey M. Schwartz, Esq

Location and ownership of property for which action is proposed:

Section: 4 Block: 8 Lot: 110

Owner of Property: Nautilus Equities, Inc

Street Address: 1240 Boston Post Road

City, State, Zip: Mamaroneck NY 10538

Phone: 914 833-1328 Fax: _____ Email: _____

Size of property (square feet): _____ Is the property now developed? Yes [✓] No [ ]

Will project require a zoning variance? Yes [ ] No [✓]

If yes, briefly describe: _____

Describe any unique/unusual landforms on the project site (rock outcroppings, swales, etc.):
NONE

Percentage of site which contains slopes of 25% or greater: -0-

Are there streams, lakes, ponds or wetlands existing within or contiguous to the project area?
If so, describe (name, size, characteristics): NONE

Will the action require approval by a state or federal agency? Yes [ ] No [X]
If yes, specify which state or federal agency and attach a copy of pending application and any relevant information and/or documentation to this form:

B. DESCRIPTION OF SITE AND PROPOSED ACTION

Provide a written description of the nature and the extent of the proposed action. Attach plans or additional information as necessary and/or required by application procedures.
Obtain a Special USE PERMIT from the Town of Mamaroneck Planning Board

C. COASTAL ASSESSMENT

Check either "Yes" or "No" for each of the following questions:

1. Will the proposed action be located in, or contiguous to, or have a **potentially adverse effect** upon any of the following designated resource areas?

	Yes	No	Maybe
a. Significant fish or wildlife habitat or designated critical environmental area	[ ]	[X]	[ ]
b. Scenic resources of local significance	[ ]	[X]	[ ]
c. Natural protective features in an erosion hazard area	[ ]	[X]	[ ]

NOTE: If the answer to any of the above questions is "Yes", please explain in Section D any measures which will be undertaken to mitigate the adverse effects.

2. Will the proposed action have a **significant effect** upon:

	Yes	No	Maybe
a. Commercial or recreational use of fish and wildlife resources	[ ]	[X]	[ ]
b. Scenic quality of the coastal environment	[ ]	[X]	[ ]
c. Development of future, or existing water dependent uses	[ ]	[X]	[ ]
d. Land or water uses within a small harbor area	[ ]	[X]	[ ]
e. Stability of the shoreline	[ ]	[X]	[ ]
f. Surface or groundwater quality	[ ]	[X]	[ ]
g. Existing or potential public recreation opportunities	[ ]	[X]	[ ]
h. Structures, sites or districts of historic, archeological or cultural significance to the local area, state or nation	[ ]	[X]	[ ]

3. Will the proposed action **involve or result in** any of the following:

	Yes	No	Maybe
a. Physical alteration of land along the shoreline, land underwater or coastal waters	[ ]	[X]	[ ]
b. Expansion of existing public services or infrastructure in or near undeveloped or low density areas of the coastal area?	[ ]	[X]	[ ]
c. Filling, dredging, excavation or mining in coastal waters	[ ]	[X]	[ ]
d. Reduction of existing or potential public access to or along the shore	[ ]	[X]	[ ]
e. Development within a designated flood or erosion hazard area	[ ]	[X]	[ ]
f. Development of a natural feature that protects against flooding or erosion	[ ]	[X]	[ ]
g. Replacement of eroded sand or soil	[ ]	[X]	[ ]
h. Construction or reconstruction of erosion protective structures	[ ]	[X]	[ ]
i. Any change in surface or groundwater quality	[ ]	[X]	[ ]
j. Removal of trees from the site	[ ]	[X]	[ ]

4. Project details:

	Yes	No	Maybe
a. If the project is to be located adjacent to the shore:			
1. Does the project require a waterfront site in order to function	[ ]	[X]	[ ]
2. Will water-related recreation be provided	[ ]	[X]	[ ]
3. Will public access to shore or state owned underwater lands be provided	[ ]	[X]	[ ]
4. Will it replace a recreational or maritime use	[ ]	[X]	[ ]
5. Do essential public services and facilities presently exist at or near the site	[ ]	[X]	[ ]

6. Is the site located near a flood prone area	[ ]	[X]	[ ]
7. Is the site located in an area of high erosion	[ ]	[X]	[ ]
b. Is the site presently used by the community as an open space or recreation area	[ ]	[X]	[ ]
c. Does the project site offer or include scenic views/vistas known to be important to the community or the state	[ ]	[X]	[ ]
d. Will the surface area of any waterways or wetland areas be increased or decreased by the project	[ ]	[X]	[ ]
e. Will the project involve any waste discharges into coastal waters	[ ]	[X]	[ ]
f. Does the project involve discharge of toxins, hazardous substances or other pollutants into coastal waters	[ ]	[X]	[ ]
g. Will the project affect any area designated as a tidal or freshwater wetland	[ ]	[X]	[ ]
h. Will the project result in an alteration of drainage flow patterns or surface water runoff on or from the site	[ ]	[X]	[ ]
i. Will best management practices (BMPs) be utilized to control stormwater runoff	[ ]	[X]	[ ]
j. Will any aspect of the proposed project result in emissions which exceed federal or state air quality standards or generate significant amounts of nitrates or sulfates	[ ]	[X]	[ ]

Please explain any of the above answers that may need further clarification in Section D.

D. COMMENTS AND ADDITIONAL INFORMATION: (continue on back if necessary)

The subject property is being utilized as a diner and is leased to the tenant, Nautilus Diner of Mamaroneck Inc. The tenant employs the following companies:

- Removal of grease waste and cleaning of grease traps: Tenant uses the services of Fred A. Cook Jr., Inc
- Garbage Removal: There are 3 waste containers behind a fence located at the rear of the parking lot area for the removal plastics, cardboard/paper and general garbage. Tenant uses the services of Oak Ridge Hauling LLC.
- Maintenance in and around property including cleaning of storm drains: The cleaning of the property is performed twice daily by an employee of tenant and the storm drains are cleaned every month by Maffei Landscapping.
- Extermination services: Tenant uses the services of Ace Elimination LLC, who is licensed in the State of New York and performs its services on a bi-monthly basis.

I certify that I am the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.

Date: 1-13 2020

Signature of Applicant

Theodore Efstathiou, Vice-President

Prepared by: (if different than the applicant)

Name and Title: Jeffrey M. Schwartz, Attorney At Law

Agency/Company:

Street Address: 271 North Avenue, Suite 1011

City, State, Zip: New Rochelle NY 10801

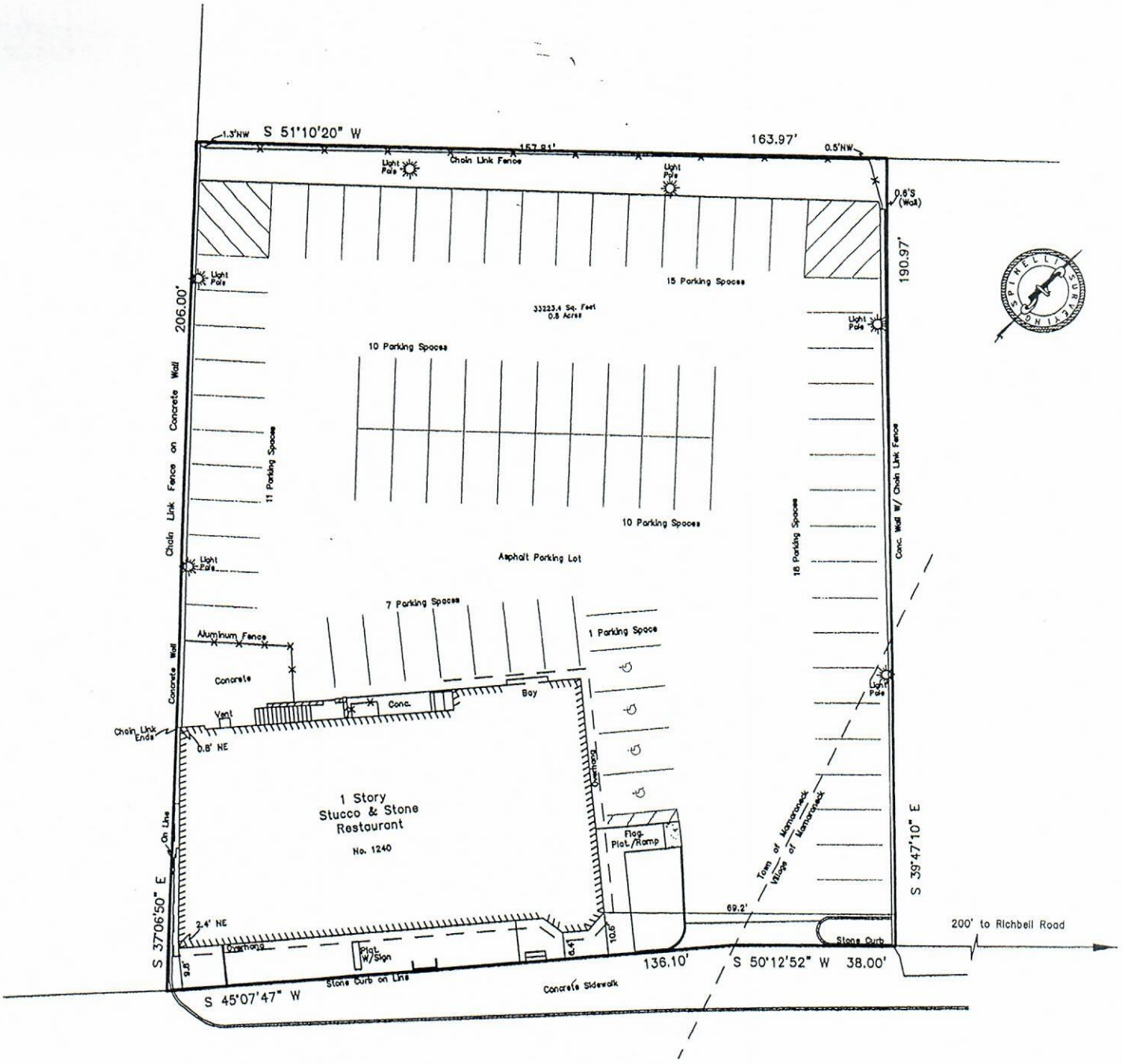
Phone: 917 568-4677 Fax: 914 637-8747 Email: jeffmsesq@aol.com

I certify that I prepared this Coastal Assessment Form for the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.

Date: 1-13 2020

Jeffrey M. Schwartz

Signature of Preparer



West Boston Post Road

Richard A. Spinelli
650 Halstead Avenue
Mamaroneck, N. Y. 10543
(914) 381-2357
N.Y.S. Lic. Land Surveyor
No. 49240

Survey of the a parcel of land on the norhtwesterly side of West Boston Post Road, Town of Mamaroneck, Westchester County, New York"

Scale 1"=20' January 31, 2019

E "BPROrien"

Town of Mamaroneck - Village of Larchmont
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PLEASE PRINT OR TYPE ALL ANSWERS.

A. GENERAL INFORMATION

Will the proposed action be undertaken by a municipal agency? Yes [ ] No [✓]

If yes, please list agency or agencies and contact person(s): _____

_____

_____

If no, please complete the applicant information:

Name of Applicant: Keller Eaton Architects

Street Address: 425 Mt. Pleasant Ave

City, State, Zip: Mamaroneck, NY 10543

Phone: (914) 835-0095 Fax: (914) 835-0193 Email: RK@RKdea.com

Location and ownership of property for which action is proposed:

Section: 7 Block: 13 Lot: 345

Owner of Property: David & Dana Carlos

Street Address: 1 Spanish Cove

City, State, Zip: Larchmont, NY 10538

Phone: (646) 522-6049 Fax: _____ Email: Danakcarlos@gmail.com
Davidcarlos@Savill.us

Size of property (square feet): 17,260 Is the property now developed? Yes [✓] No [ ]

Will project require a zoning variance? Yes [ ] No [✓]

If yes, briefly describe: _____

_____

Describe any unique/unusual landforms on the project site (rock outcroppings, swales, etc.):

None

Percentage of site which contains slopes of 25% or greater: None

Are there streams, lakes, ponds or wetlands existing within or contiguous to the project area?
If so, describe (name, size, characteristics): No

Will the action require approval by a state or federal agency? Yes [ ] No [✓]
If yes, specify which state or federal agency and attach a copy of pending application and any relevant information and/or documentation to this form:

B. DESCRIPTION OF SITE AND PROPOSED ACTION

Provide a written description of the nature and the extent of the proposed action. Attach plans or additional information as necessary and/or required by application procedures.

Demolition of existing single family house.
Construction of single family house.

C. COASTAL ASSESSMENT

Check either "Yes" or "No" for each of the following questions:

1. Will the proposed action be located in, or contiguous to, or have a **potentially adverse effect** upon any of the following designated resource areas?

	Yes	No	Maybe
a. Significant fish or wildlife habitat or designated critical environmental area	[ ]	[✓]	[ ]
b. Scenic resources of local significance	[ ]	[✓]	[ ]
c. Natural protective features in an erosion hazard area	[ ]	[✓]	[ ]

NOTE: If the answer to any of the above questions is "Yes", please explain in Section D any measures which will be undertaken to mitigate the adverse effects.

2. Will the proposed action have a **significant effect** upon:

	Yes	No	Maybe
a. Commercial or recreational use of fish and wildlife resources	[ ]	[✓]	[ ]
b. Scenic quality of the coastal environment	[ ]	[✓]	[ ]
c. Development of future, or existing water dependent uses	[ ]	[✓]	[ ]
d. Land or water uses within a small harbor area	[ ]	[✓]	[ ]
e. Stability of the shoreline	[ ]	[✓]	[ ]
f. Surface or groundwater quality	[ ]	[✓]	[ ]
g. Existing or potential public recreation opportunities	[ ]	[✓]	[ ]
h. Structures, sites or districts of historic, archeological or cultural significance to the local area, state or nation	[ ]	[✓]	[ ]

3. Will the proposed action **involve or result in** any of the following:

	Yes	No	Maybe
a. Physical alteration of land along the shoreline, land underwater or coastal waters	[ ]	[✓]	[ ]
b. Expansion of existing public services or infrastructure in or near undeveloped or low density areas of the coastal area?	[ ]	[✓]	[ ]
c. Filling, dredging, excavation or mining in coastal waters	[ ]	[✓]	[ ]
d. Reduction of existing or potential public access to or along the shore	[ ]	[✓]	[ ]
e. Development within a designated flood or erosion hazard area	[✓]	[ ]	[ ]
f. Development of a natural feature that protects against flooding or erosion	[ ]	[✓]	[ ]
g. Replacement of eroded sand or soil	[ ]	[✓]	[ ]
h. Construction or reconstruction of erosion protective structures	[ ]	[✓]	[ ]
i. Any change in surface or groundwater quality	[ ]	[✓]	[ ]
j. Removal of trees from the site	[✓]	[ ]	[ ]

4. Project details:

	Yes	No	Maybe
a. If the project is to be located adjacent to the shore:			
1. Does the project require a waterfront site in order to function	[ ]	[ ]	[ ]
2. Will water-related recreation be provided	[ ]	[ ]	[ ]
3. Will public access to shore or state owned underwater lands be provided	[ ]	[ ]	[ ]
4. Will it replace a recreational or maritime use	[ ]	[ ]	[ ]
5. Do essential public services and facilities presently exist at or near the site	[ ]	[ ]	[ ]

6. Is the site located near a flood prone area	[✓]	[ ]	[ ]
7. Is the site located in an area of high erosion	[ ]	[✓]	[ ]
b. Is the site presently used by the community as an open space or recreation area	[ ]	[✓]	[ ]
c. Does the project site offer or include scenic views/vistas known to be important to the community or the state	[ ]	[✓]	[ ]
d. Will the surface area of any waterways or wetland areas be increased or decreased by the project	[ ]	[✓]	[ ]
e. Will the project involve any waste discharges into coastal waters	[ ]	[✓]	[ ]
f. Does the project involve discharge of toxins, hazardous substances or other pollutants into coastal waters	[ ]	[✓]	[ ]
g. Will the project affect any area designated as a tidal or freshwater wetland	[ ]	[✓]	[ ]
h. Will the project result in an alteration of drainage flow patterns or surface water runoff on or from the site	[ ]	[✓]	[ ]
i. Will best management practices (BMPs) be utilized to control stormwater runoff	[ ]	[✓]	[ ]
j. Will any aspect of the proposed project result in emissions which exceed federal or state air quality standards or generate significant amounts of nitrates or sulfates	[ ]	[✓]	[ ]

Please explain any of the above answers that may need further clarification in Section D.

D. COMMENTS AND ADDITIONAL INFORMATION: (continue on back if necessary)

I certify that I am the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.

Date: 1/14 20 20 _____
Signature of Applicant

Prepared by: (if different than the applicant)

Name and Title: _____

Agency/Company: _____

Street Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____ Email: _____

I certify that I prepared this Coastal Assessment Form for the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.

Date: 1/14 20 20 _____
Signature of Preparer

ZONING ANALYSIS

VILLAGE OF LARCHMONT, WESTCHESTER NY

ZONE	R-15	BLOCK	13
SECTION	7	LOT	345
ITEM	REQUIRED	EXISTING	PROPOSED
LOT DATA			
MINIMUM LOT AREA	12,500	17,260 *	17,260 *
MINIMUM LOT WIDTH	100'	106'	106'
SETBACKS			
PRINCIPAL BUILDING			
FRONT YARD	30'	EXIST. NO CHANGE	45.3'
ONE SIDE YARD	15'	EXIST. NO CHANGE	19.2'
BOTH SIDES COMBINED	31'	EXIST. NO CHANGE	43.9'
REAR	30'	EXIST. NO CHANGE	30.1'
ACCESSORY BUILDING			
SIDE SETBACK	6'	EXIST. NO CHANGE	N/A
REAR SETBACK	6'	EXIST. NO CHANGE	N/A
BUILDING HEIGHT			
MAX. HEIGHT-STORIES	2 1/2	EXIST. NO CHANGE	2
MAX. HEIGHT- FEET	30'	EXIST. NO CHANGE	30'
WALL HEIGHT AT SETBACKS			
LEFT SIDE		EXIST. NO CHANGE	COMPLIES
REAR		EXIST. NO CHANGE	COMPLIES
RIGHT SIDE		EXIST. NO CHANGE	COMPLIES
LOT COVERAGE			
BUILDING		EXIST. NO CHANGE	3,045
DRIVEWAY		EXIST. NO CHANGE	2,066
FRONT WALK		EXIST. NO CHANGE	472
REAR DECK		EXIST. NO CHANGE	860
SIDE STEPS		EXIST. NO CHANGE	100
TOTAL	7,387	EXIST. NO CHANGE	6,543
FAR			
FIRST FLOOR		EXIST. NO CHANGE	3,010
SECOND FLOOR		EXIST. NO CHANGE	2,593
TOTAL	6,869	EXIST. NO CHANGE	5,603

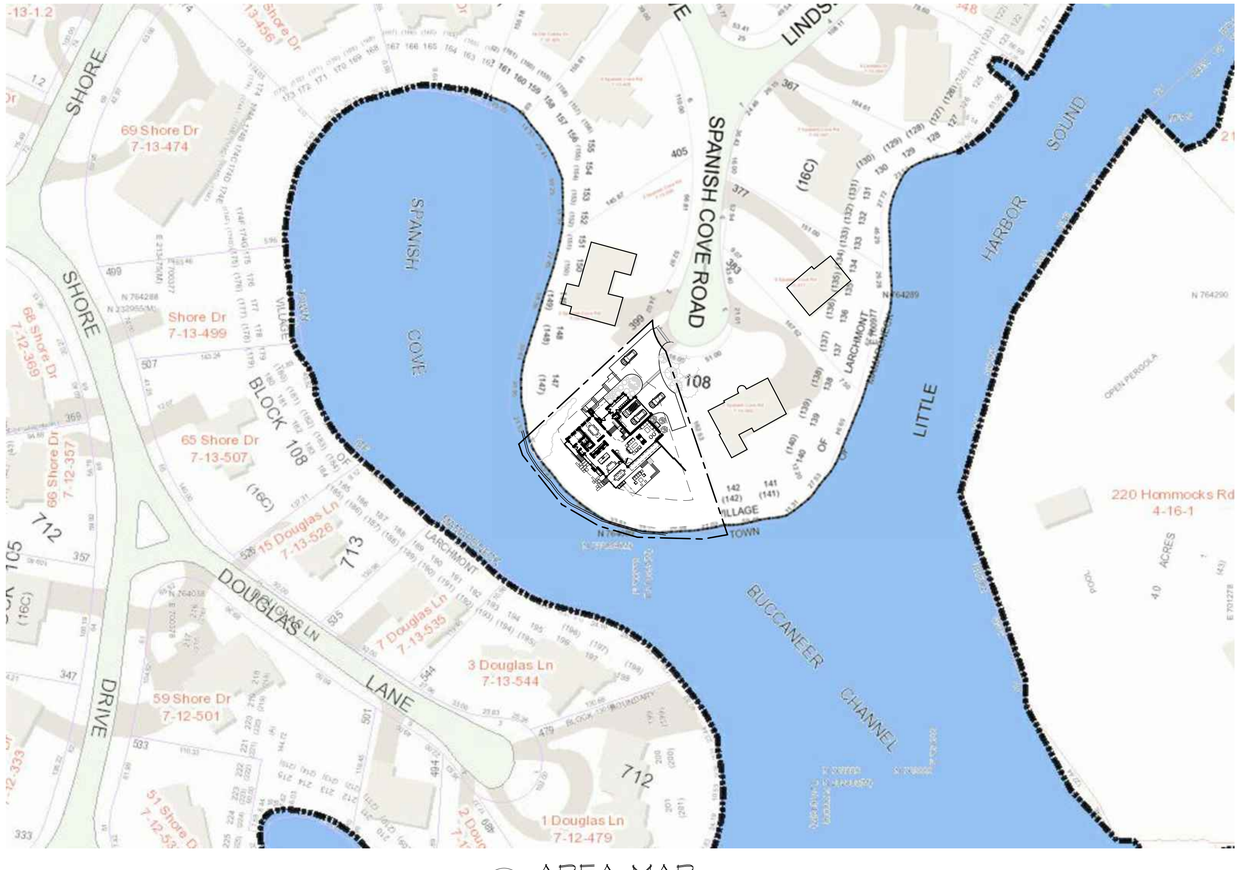
* NOT INCLUDING LAND UNDER WATER

ENERGY CODE COMPLIANCE

FROM TABLE R402.1.2, FROM THE 2015 INTERNATIONAL ENERGY CONSERVATION CODE
BASED ON 5,750 HEATING DEGREE DAYS IN CLIMATE ZONE 4

FENESTRATION U- FACTOR	0.35
SKYLIGHT U- FACTOR	0.55
GLAZED FENESTRATION SHGC	0.40
CEILING R-VALUE	49
WOOD FRAME WALL R-VALUE	20 OR 13+5
MASS WALL R-VALUE	8/13
FLOOR R-VALUE	19
BASEMENT WALL R-VALUE	10/13
SLAB R-VALUE & DEPTH	10/2 FT
CRAWL SPACE WALL R-VALUE	10/13

ENERGY NOTES:
1. KELLER/EATON ARCHITECTS, P.C. CERTIFY THAT THESE PLANS AND SPECIFICATIONS COMPLY WITH THE LATEST EDITION OF THE 2015 INTERNATIONAL ENERGY CONSERVATION CODE.
2. THE G.C. SHALL PROVIDE A PERMANENT CERTIFICATE POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL LISTING THE PREDOMINANT R-VALUES OF THE INSULATION INSTALLED PER SYSTEM THROUGH OUT THE RESIDENCE PER SECTION 401.3 OF THE 2015 INTERNATIONAL ENERGY CONSERVATION CODE.
3. CEILING INSULATION MAY BE REDUCED TO R-38 IN THE FOLLOWING SITUATIONS:
   A. PER SECTION R402.2.1 - CEILINGS WITH ATTIC SPACES: INSTALLING R-38 OVER 100 PERCENT OF THE CEILING AREA REQUIRING, INSULATION SHALL BE DEEMED TO SATISFY THE REQUIREMENTS FOR R-49 INSULATION WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-38 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES.
4. CEILING INSULATION MAY BE REDUCED TO R-30 IN THE FOLLOWING SITUATIONS:
   A. PER SECTION 402.2.2 - CEILINGS WITHOUT ATTIC SPACES: THE DESIGN OF THE ROOF/ CEILING ASSEMBLY DOES NOT ALLOW SUFFICIENT SPACE FOR THE REQUIRED INSULATION, THE MINIMUM REQUIRED INSULATION FOR THE ROOF/ CEILING ASSEMBLIES SHALL BE R-30. THE REDUCTION OF INSULATION FROM THE REQUIREMENTS OF SECTION R402.1.2 SHALL BE LIMITED TO 500 SQUARE FEET OR 20 PERCENT OF THE TOTAL INSULATED CEILING AREA, WHICHEVER IS LESS.
5. INSULATION VALUES SHOWN IN THE CHART ABOVE ARE MINIMUM VALUES REQUIRED BY CODE AND MAY NOT REFLECT THE INSULATION VALUES CALLED OUT IN THE CONSTRUCTION DOCUMENTS. WHEN TWO DIFFERENT INSULATION VALUES ARE CALLED OUT, CONTRACTORS ARE HEREBY DIRECTED TO INSTALL THE INSULATION WITH GREATER R-VALUE PER ASSEMBLY.



2 AREA MAP
SCALE: 1:60

CLIMATIC & GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND SPEED (MPH)	SEISMIC DESIGN CATEGY	SUBJECT TO DAMAGE FROM: WEATHERING	FROST LINE DEPTH	TERMITE	DECAY	WINTER DESIGN TEMP.	ICE SHIELD REQ'TS.	FLOOD HAZARD	AIR FREEZING INDEX
25 (PSF)	105	C	SEVERE	3'-6"	MODERATE TO HEAVY	SLIGHT TO MODERATE	7	YES	F.I.R.M. 9/28/07	YES

4 ZONE - 5750 HEATING DEGREE DAYS

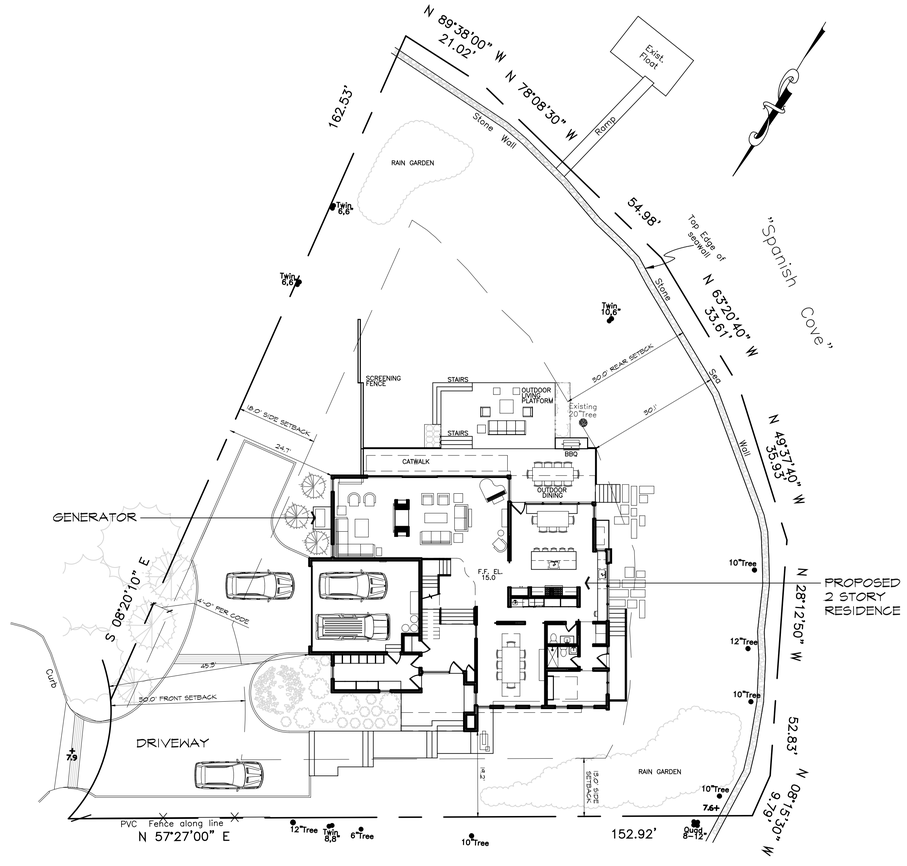
GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE AND SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS & EXISTING CONDITIONS PRIOR TO SUBMITTING A BID.
2. DO NOT SCALE THE DRAWINGS, USE WRITTEN DIMENSIONS ONLY.
3. THE CONTRACTORS SHALL BE RESPONSIBLE FOR FILING FOR ALL REQUIRED PERMITS INCLUDING BUT NOT LIMITED TO: ELECTRICAL, PLUMBING AND HVAC WORK UNDER SEPARATE PERMIT(S).
4. ALL CONSTRUCTION SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES.
5. THE CONTRACTOR SHALL PROVIDE FOR THE SAFETY OF THE WORKER, OWNERS AND THE PUBLIC AS REQUIRED BY THE STATE OF NEW YORK AND OSHA.
6. ALL BRACING AND SHORING SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE 2015 INTERNATIONAL RESIDENTIAL CODE AND ALL OTHER APPLICABLE NATIONAL, STATE AND LOCAL CODES.
7. ALL WORK SHALL COMPLY WITH THE HIGHEST INDUSTRY STANDARDS.
8. **DRIVEWAYS AND BLUESTONE WALKWAYS, N.I.C.**

NOTE:
THIS SITE PLAN WAS PREPARED WITH INFORMATION OBTAINED FROM A SURVEY PREPARED BY:
RICHARD A. SPINELLI, 650 HALSTEAD AVE.
MAMARONECK, N.Y. 10543 DATED OCT. 31, 2019

SURVEYOR NOTE:
CONTRACTOR TO COMPLETE FOUNDATION & SETBACK STAKE-OUT WITH SURVEYOR PRIOR TO START OF CONSTRUCTION.

NOTES:
- THIS PROPERTY IS LOCATED IN AN AE13 FLOOD ZONE. REFER TO GRADING PLAN SHEET L3.0 FOR FINISH FLOOR ELEVATIONS.
- REFER TO PLANTING PLAN SHEET L5.0 FOR SCREENING AROUND GENERATOR, RAIN GARDEN PLANTING, ETC.



1 SITE PLAN
SCALE: 1/16" = 1'-0"

PROJECT:

CARLOS RESIDENCE

1 SPANISH COVE
LARCHMONT, NY 10538

NO.	ISSUE/DESCRIPTION:	DATE:
1	FOR CLIENT REVIEW	11/06/19
2	FOR PRE-SUBMISION CONF.	11/15/19
3	FOR PLANNING BOARD	12/26/19
4	FOR COASTAL ZONE MGMT	01/15/20

DRAWING LIST

CS-1.0	SITE PLAN, ZONING & NOTES
CS-1.1	EXISTING AND PROPOSED OVERLAY SITE PLAN
L-1	EROSION & SURFACE WATER CONTROL PLAN
L2.0	SITE PLAN
L3.0	GRADING PLAN
L4.0	LAYOUT PLAN
L5.0	PLANTING PLAN
D-1.1	DEMOLITION PLAN
A-1.1	CONSTRUCTION PLAN- FIRST FLOOR
A-1.2	CONSTRUCTION PLAN- SECOND FLOOR
A-1.3	CONSTRUCTION PLAN- ROOF
A-2.0	EXTERIOR ELEVATION- FRONT
A-2.1	EXTERIOR ELEVATION- LEFT SIDE
A-2.2	EXTERIOR ELEVATION- REAR
A-2.3	EXTERIOR ELEVATION- RIGHT SIDE

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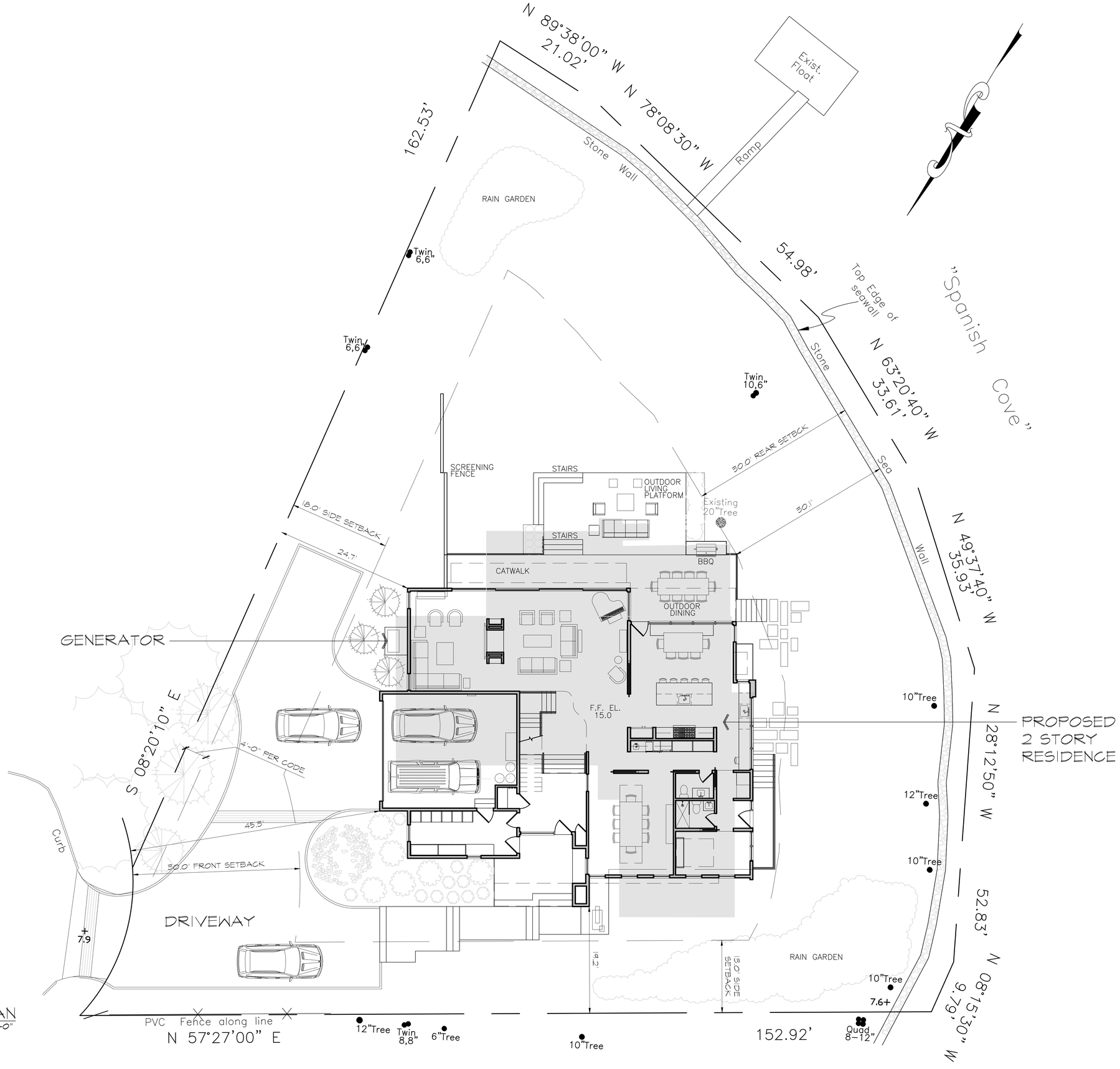
DRAWING TITLE:
SITE PLAN, ZONING CALCULATIONS
GENERAL NOTES
-
-
-
-
-

ARCHITECT'S PROJECT NUMBER: 1917

SCALE: AS NOTED

SEAL: DRAWING NUMBER:

CS-1.0



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

PROJECT:

CARLOS RESIDENCE

1 SPANISH COVE
LARCHMONT, NY 10538

NO.	ISSUE/DESCRIPTION:	DATE:
1	FOR CLIENT REVIEW	11/06/19
2	FOR PRE-SUBMISION CONF.	11/15/19
3	FOR PLANNING BOARD	12/26/19
4	FOR COASTAL ZONE MGMT	01/15/20

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DRAWING TITLE:
SITE PLAN
EXISTING AND PROPOSED OVERLAY
-
-
-
-
-

ARCHITECT'S PROJECT NUMBER: 1917

SCALE: AS NOTED

SEAL:

DRAWING NUMBER:

CS-1.1

PRE-CONSTRUCTION
SCALE: 1"=40'

Impervious Key

House/Garage	0 SF
Walks/Gen. Pad	0SF
Total	0 SF

Pervious Key

Open wood deck wood steps	0 SF
Pervious Asphalt	0 SF
Gravel Drive	0 SF
Total	0 SF

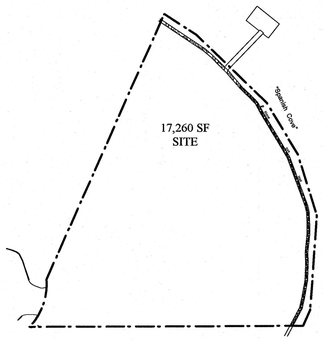
POST-CONSTRUCTION
SCALE: 1"=40'

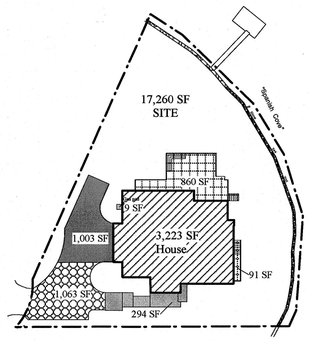
Impervious Key

House/Garage	3,223 SF
Walks/Gen. Pad	303SF
Total	3,526 SF

Pervious Key

Open wood deck wood steps	951 SF
Pervious Asphalt	1,003 SF
Gravel Drive	1,063 SF
Total	3,017 SF





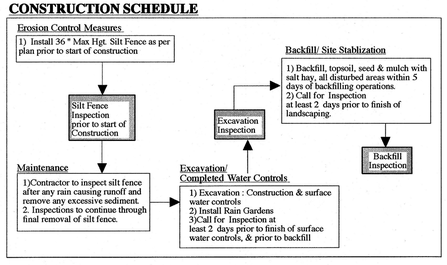
IMPERVIOUS SURFACES

SITE DATA

Site Area	17,260.00	SF
Total Proposed Impervious	3,990.00	SF
% Total Proposed Impervious	23.12	%

Coverages	Pre Construction Areas in SF	Post Construction Areas in SF	Added
Impervious			
House/Garage	0.00	3,223.00	3,223.00
Walks//Gener. Pad	0.00	303.00	303.00
Total Impervious	**0.00**	**3,526.00**	**3,526.00**
Pervious			
Open wood deck/steps	0.00	951.00	951.00
Pervious Asphalt	0.00	1,003.00	1,003.00
Gravel Drive	0.00	1,063.00	1,063.00
Total Pervious	**0.00**	**3,017.00**	**3,017.00**

CONSTRUCTION SCHEDULE



RAIN GARDEN CALCULATIONS

SITE DATA

Site Area	**17,260**	**SF**
Impervious Surfaces	**3,526**	**SF**
Surface Area each drywell	**300**	**SF**

Water Quality Required
WQv=Water Quality Volume
.25 x 3,526 = 882 Cu. Ft.

Rain garden Volume

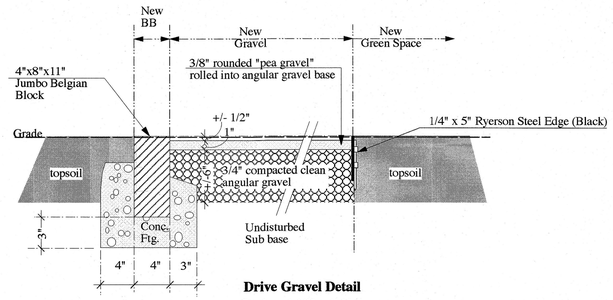
Surface Layer	225	Cu. Ft.
Soil Medium Layer	45	Cu. Ft.
Drainage Layer	39.6	Cu. Ft.
TOTAL	**309.6**	**Cu. Ft.**

Number 300 SF rain gardens
.25 x 3,526 = 882 Cu. Ft.
882 /310 = 2.85 Rain Gardens
USE 3: 300 SF RAIN GARDENS

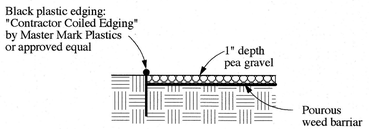
Rain Garden Surface Layer 300 SF
Dp=Depth of Ponding .75 Ft
Vp=Vol. surface area 225 Cu. Ft.

Soil Medium Layer 300 SF
Dms=Depth of soil medium .75 Ft
Vsm=volume of soil medium 225 Cu. Ft.
Nsm=porisity of soil medium .20
Storage volume of soil medium 45 Cu. Ft.

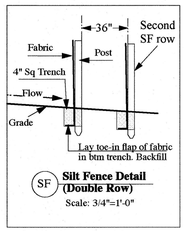
Drainage Layer 300 SF
Vdl=Depth of drainage layer .33 Ft
Ddl=volume of drainage layer 99 Cu. Ft.
Ndl=porisity of drainage layer .40
Storage volume of drainage 39.6 Cu. Ft.



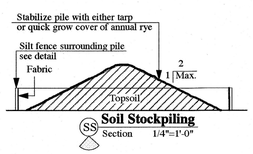
Drive Gravel Detail
Section 1 1/2" = 1'-0"



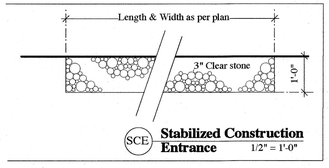
Under Deck Gravel detail
1 1/2" = 1'-0"



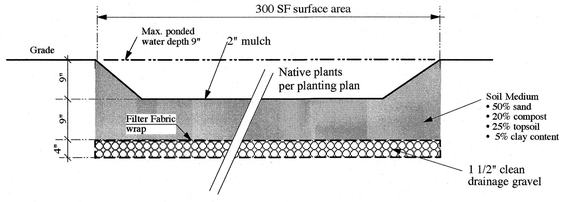
SF **Silt Fence Detail (Double Row)**
Scale: 3/4"=1'-0"



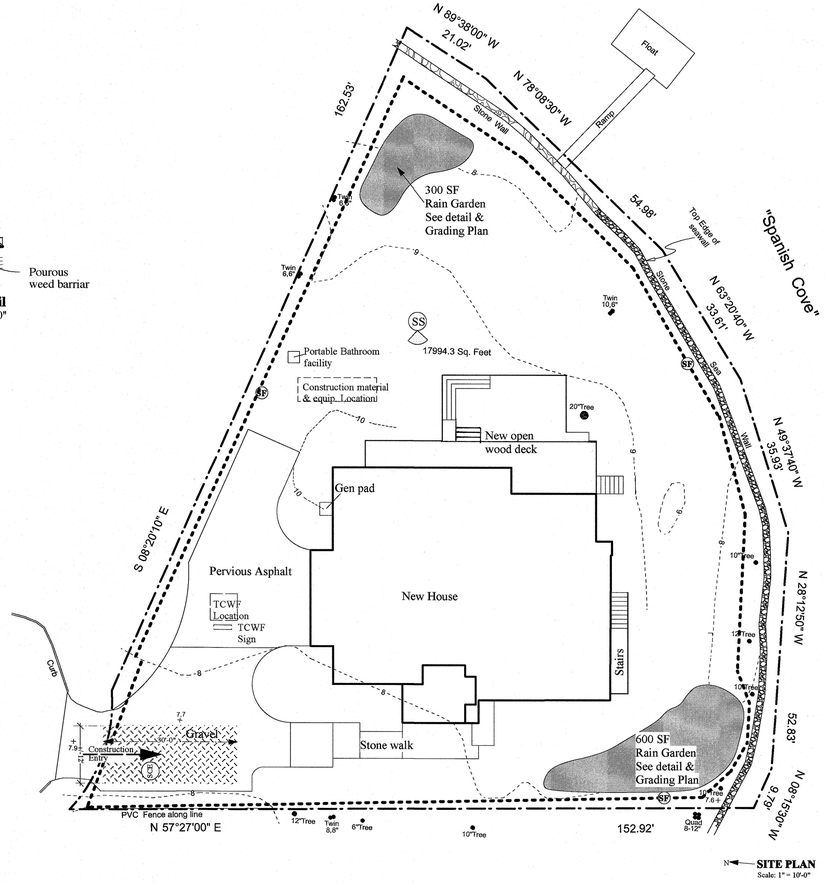
SS **Soil Stockpiling**
Section 1/4"=1'-0"



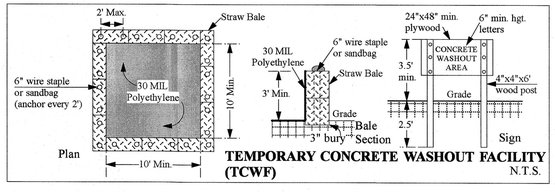
SCE **Stabilized Construction Entrance** 1/2" = 1'-0"



Rain Garden
Section 3/4"=1'-0"



N **SITE PLAN**
Scale: 1" = 10'-0"



TEMPORARY CONCRETE WASHOUT FACILITY (TCWF) N.T.S.

PROJECT:

Site Alterations:

CARLOS RESIDENCE

1 SPANISH COVE
VILLAGE of LARCHMONT, NY

NO.	ISSUE/DESCRIPTION:	DATE:
1	Revised	1.2.2020

NOTES

- Horizontal & vertical site plan data from a map prepared by Richard Spinelli NYSLLS dated 10.31.2019
- ADDED IMPERVIOUS SURFACES IS 3,526 SF. RAIN GARDENS HAVE BEEN SIZED TO CAPTURE A MIMIMUM of 3,526 SF.
- All inactive disturbed site areas shall receive temporary stabilization within 14 days.
- All imported soil material shall conform to soil constituent concentrations for Unrestricted Use as specified by the NYSDEC DER-10 and Part 375 standards.
- Construction Erosion and Sediment Controls shall be inspected by the Trained Contractor or other componet individual having received NYSDEC 4-hr. Erosion & Sediment Control training at a minimum of weekly and following all rain events greater than 0.5 inches.
- All installed Erosion and Sediment Control Devices shall conform with the 2016 NYSDEC New York Standards and Specifications for Erosion and Sediment Control.

SITE PROTECTION NOTES

1. All work shall conform to Village of Larchmont's Erosion and Sediment Control Law, and"Westchester County's Best Management Practices Manual for Construction Activities"
2. Contractor shall install all Soil Erosion and Sediment Controls, before any construction operations begin and shall keep protection measures in place for the duration of construction. NO CONSTRUCTION ACTIVITY SHALL TAKE PLACE DOWNSLOPE OF THE SILT FENCE LINE.
3. Contractor shall inspect all protection and controls daily, and maintain the silt fence. Accumulated sediment behind the silt fence shall be removed and disposed of in conformance with all applicable Codes.
4. Contractor shall not stockpile material or park vehicles within the spread of or within the drip line of existing trees.

JG Lotto
Landscape Architect
607 Quaker Ridge Rd • New Rochelle, NY
914-633-0815

DRAWING TITLE:

EROSION AND SURFACE WATER CONTROL PLAN

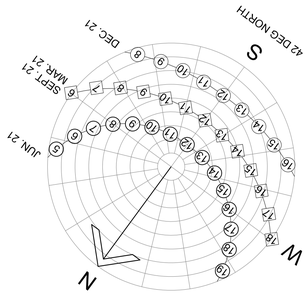
ARCHITECT'S PROJECT NUMBER:

SCALE: As Noted	DATE: 12/20/2019
DRAWN BY: JL	CHECKED BY: JL
SEAL:	DRAWING NUMBER:

STATE OF NEW YORK JAMES LOTTO 000909 LANDSCAPE ARCHITECT

L-1

CARLOS RESIDENCE



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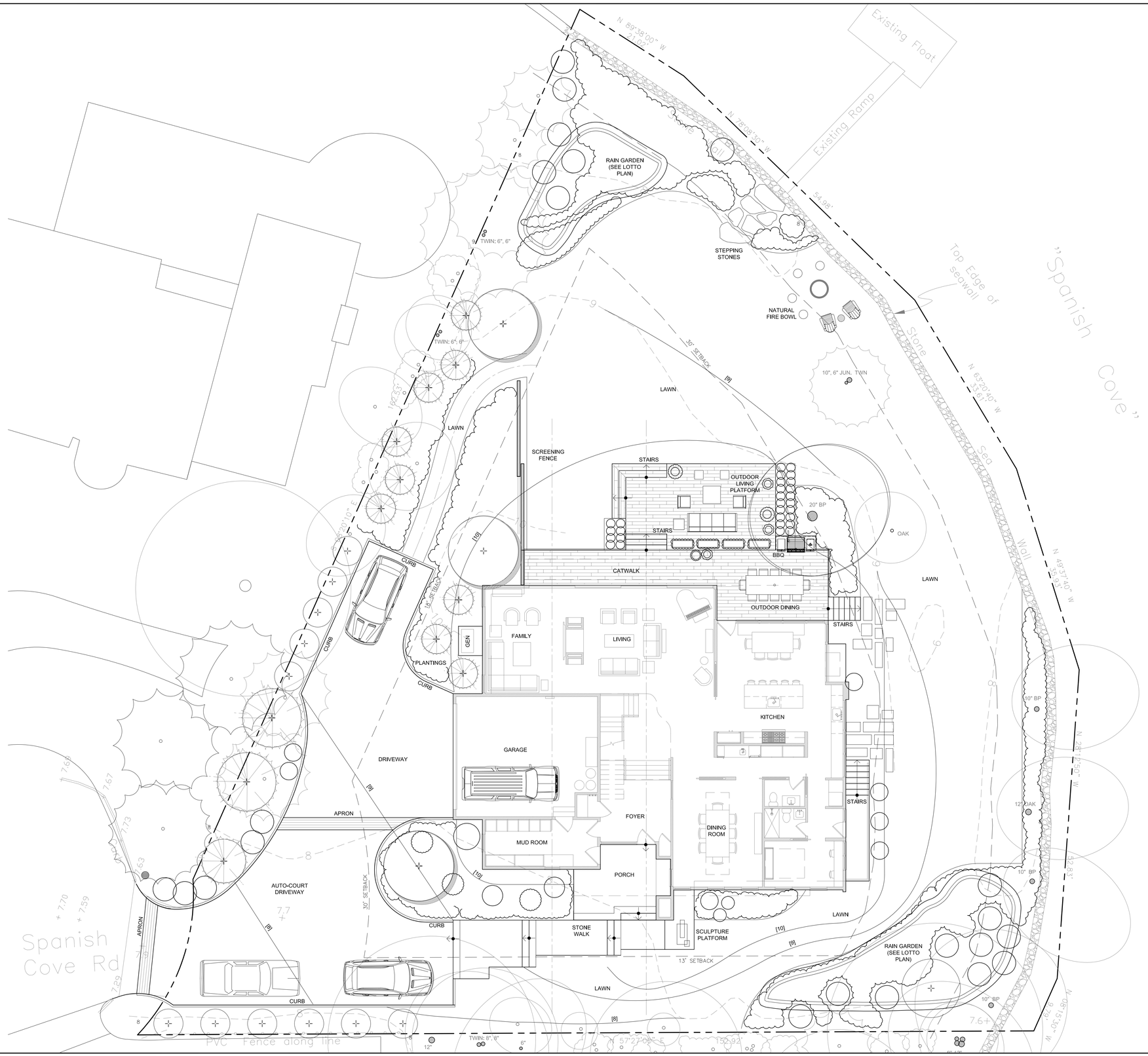
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SEE JG LOTTO PLAN, SHEET L-1, FOR ADDITIONAL SITE DEVELOPMENT ELEMENTS. CONTACT OWNER AND/ OR JPS SHOULD THEIR BE ANY DISCREPANCIES.

DRAWING KEY:

- EX. TREE TO REMAIN (14" AP)
- EXISTING SHRUBS, HEDGE, PERENNIALS & GROUNDCOVER (T, AZ)
- PROPERTY LINE
- EXISTING CONTOUR (133)
- EXISTING SPOT GRADE (x 120.6)
- EXISTING CURB
- EXISTING WALLS
- EXISTING FENCES
- PROPOSED CONTOUR - 1 FT ([10])
- SETBACK
- CENTERLINE
- DRAINAGE PIPE
- PROPOSED TREE (AZ)
- PROPOSED SHRUBS, PERENNIALS & GROUNDCOVER
- PROPOSED DRAIN
- PROPOSED RAILING OR FENCE
- OUTDOOR BENCHES & CHAIRS (BY OTHERS)
- CONTAINER PLANTERS

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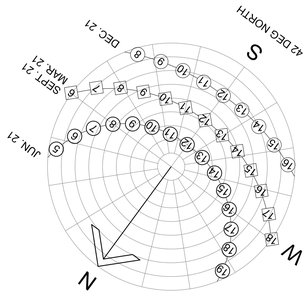
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203-321-5611
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CARLOS RESIDENCE
1 SPANISH COVE ROAD
LARCHMONT, NY
DATE:20/12/19,SCALE:1/8"=1'-0"

SITE PLAN

L2.0



BASED UPON:

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DRAWING KEY:

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- EXISTING CONTOUR (133)
- EXISTING SPOT GRADE (x 120.6)
- EXISTING CURB
- EXISTING WALLS
- EXISTING FENCES
- PROPOSED CONTOUR - 1 FT [10]
- SETBACK
- CENTERLINE
- DRAINAGE PIPE
- PROPOSED SPOT ELEVATION [110.21] +
- PROPOSED TREE
- PROPOSED SHRUBS, PERENNIALS & GROUNDCOVER (AZ)
- PROPOSED DRAIN
- PROPOSED RAILING OR FENCE
- OUTDOOR BENCHES & CHAIRS (BY OTHERS)
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CARLOS RESIDENCE

N 89°38'00" W 210.00'
N 73°35'10" W
Existing Float
Existing Ramp
54.95'
RAIN GARDEN (SEE LOTTO PLAN)
STEPPING STONES
NATURAL FIRE BOWL
Top Edge of seawall
Stone
"Spanish Cove"
Sea Wall
N 63°20'40" W 32.61'
N 49°37'40" W 35.37'
N 28°16'56" W 42.83'
10", 6" JUN. TWN
30' SETBACK
LAWN
TWIN: 6", 6"
SCREENING FENCE
3R@7.5" BS [10.2]
STAIRS
TS [12.1]
OUTDOOR LIVING PLATFORM
20" BP
OAK
3R@7.25" BS [12.1]
BBQ
CATWALK
[14.5]
R@6"
[15.0]
OUTDOOR DINING
7R@7.5" BS [10.13]
FAMILY
LIVING
GEN
PLANTINGS
CURB
[10.0]
FFE = [15.0]
KITCHEN
[10.25] ±
GFE = [10,0]
GARAGE
DRIVEWAY
[10.2] ±
FOYER
MUD ROOM
DINING ROOM
PORCH
[12.5]
[12.2]
R@4"
[15.0]
APRON
AUTO-COURT DRIVEWAY
30' SETBACK
[9.75 ±]
[10.0]
[9]
[8]
TS [12.0]
STONE WALK
BS [11.08] 2R@5.5"
TB [11.0]
SCULPTURE PLATFORM
BS [8.5]
TS [8.75]
BS [8.95] 2R@5.5"
TS [9.88]
BS [10.08] 2R@5.5"
[10.6]
[10.9]
13' SETBACK
RAIN GARDEN (SEE LOTTO PLAN)
10" BP
12" OAK
Spanish Cove Rd
PVC Fence along line
N 57°27'08" E 152.93'
N 08°15'50" W 42.83'
TWIN: 6", 6"
12"
6"
7.61
7.70
7.59
7.63
7.73
7.67
7.69
7.29
7.78

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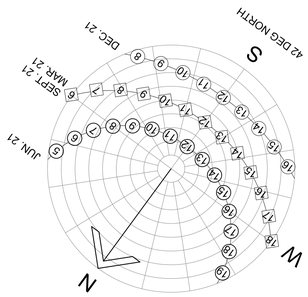
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CARLOS RESIDENCE
1 SPANISH COVE ROAD
LARCHMONT, NY
DATE:12/20/19,SCALE:1/8"=1'-0"

GRADING PLAN

L3.0



BASED UPON:

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DRAWING KEY:

- EX. TREE TO REMAIN (14" AP)
- EXISTING SHRUBS, HEDGE, PERENNIALS & GROUNDCOVER (T, AZ)
- PROPERTY LINE
- EXISTING CONTOUR (133)
- EXISTING WALLS
- EXISTING FENCES
- PROPOSED CONTOUR - 1 FT ([10])
- SETBACK
- CENTERLINE
- PROPOSED TREE (AZ)
- PROPOSED SHRUBS, PERENNIALS & GROUNDCOVER
- PROPOSED DRAIN
- PROPOSED RAILING OR FENCE
- CENTERLINE (℄)
- BASELINE (℄)

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CARLOS RESIDENCE

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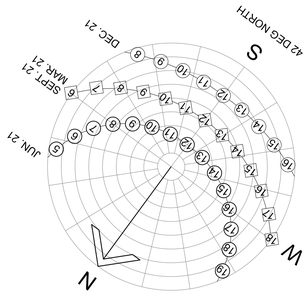
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CARLOS RESIDENCE
1 SPANISH COVE ROAD
LARCHMONT, NY
DATE:12/20/19,SCALE:1/8"=1'-0"

LAYOUT PLAN

L4.0



BASED UPON:

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DRAWING KEY:

- EX. TREE TO REMAIN (14" AP)
- EXISTING SHRUBS, HEDGE, PERENNIALS & GROUNDCOVER (T, AZ)
- PROPERTY LINE
- EXISTING CONTOUR (133)
- EXISTING WALLS
- EXISTING FENCES
- PROPOSED CONTOUR - 1 FT ([10])
- SETBACK
- CENTERLINE
- DRAINAGE PIPE
- TRANSPLANT VIF (T, AZ)
- PROPOSED TREE
- PROPOSED SHRUBS, PERENNIALS & GROUNDCOVER
- PROPOSED DRAIN
- PROPOSED RAILING OR FENCE
- OUTDOOR BENCHES & CHAIRS (BY OTHERS)
- CONTAINER PLANTERS

Carlos Residence @ 1 Spanish Cove, Larchmont, NY
Plant list
1/3/2020

KEY:	QTY:	NAME:	SIZE:	REMARKS:
		Rain garden and adjacent areas:		
Acan	1	Servicieberry (A. canadensis)	10-11'	
Ab	430	American Beach Grass (Ammophila breviligulata)	1QT	
Pv	11	Switch Grass (Panicum vrigatum)	2g	
Mp	6	Bayberry (Myrica pensylvanica)	7g	
		Inner site plantings:		
Bs 48"	1	Common Boxwood (Buxus sempervirens)	42-48"	H/Y; specimen
Bs 42"	1	Common Boxwood (Buxus sempervirens)	36-42"	H/Y; specimen
Bs 36"	2	Common Boxwood (Buxus sempervirens)	30-36"	H/Y
Bs 30"	2	Common Boxwood (Buxus sempervirens)	24-30"	H/Y
Gtfi 'S' 4.5"	2	Skyline Locust (Gleditsia triacanthos f. inermis 'Skyline')	4-4.5"	Specimen
Io 9'	4	American Holly (Ilex opaca)	8-9'	
Hm 'NB'	4	Nikko Blue Hydrangea (Hydrangea macryphylla 'Nikko Blue')	7g	
Cxa 'KF'	26	Karl Foerster Grass (Calamagrostis × acutiflora 'Karl Foerster')	2g	
Dc	18	Tufted Hair Grass (Deschampsia cespitosa)	3QT	
Palp	3	Fountain Grass (Pennisetum alopecuroides)	2g	
[TRANS]	8-10	Existing Horizontal Juniper	Small	Transplants to staging area; V/F
[TRANS]	4-5	Existing Dwarf Juniper	Small	Transplants to staging area; V/F
[TRANS]	3	Cedars	Med-Large	Transplants to staging area; V/F
[TRANS]	1	Japanese Maple	Large	Transplants to staging area; V/F
[TRANS]	7-10	Ornamental Grasses	Small	Transplants to staging area; V/F
[TRANS]	7-15	Miscelaneous items	Small-Med	Transplants to staging area; V/F
	V/F	SEED in SF		Contractor to Verify
	V/F	SOD in SF		Contractor to Verify
	V/F	MULCH in CY		Contractor to Verify
	V/F	TOPSOIL in CY		Contractor to Verify
	15	SANDY TOPSOIL in CY (For Amer. Beach Grass areas)		V/FContractor to Verify
	V/F	FILL in CY (Re-use on site if nec. No new anticipated)		Contractor to Verify

NOTE: **JPS** shall mean Joseph Pajonas Studio. **MTH** shall mean Move To Here; **Specimen** shall mean item to be approved by Joseph Pajonas Studio or Client; **B&B** unless otherwise specified, cal. indicates caliper; **V/F** shall mean Verify in Field; **TR** or **TRANS** shall mean Transplant & verify with JPS; **UP** shall mean upright; **RND** shall mean round or estate round; **PL/CHD** shall mean Preached; **HB** shall mean High Branched; **LB** shall mean Low Branched; **H/Y** shall mean Heavy grade material; **TRLIS** shall mean trellis; **STKD** shall mean staked; **SHRD** shall mean sheared

PLANTING PLAN NOTES:

A. ALL CONDITIONS SHOWN HEREON ARE SUBJECT TO MODIFICATIONS BASED ON AS-BUILT DRAINAGE AND SITE DEVELOPMENT ACTIVITIES AS WELL AS ANY FEEDBACK FROM TOWN AGENCIES.

B. SEE SITE PLANS BY ARCHITECT AND ENGINEER MENTIONED WITHIN THESE BASED UPON NOTES FOR ALL SITE DEVELOPMENT ELEMENTS / ACTIVITIES. THIS PLAN IS FOR PLANTING ONLY.

C. THIS PLAN SHALL BE USED TO DEPICT PROPOSED CONDITIONS WITHIN, OR IMMEDIATELY ADJACENT TO, THE RAIN GARDEN AREAS AND PERIMETER AREAS THAT MAY REQUIRE BUFFER SCREENING.

D. ALL PLANTINGS SUBJECT TO MODIFICATION BASED UPON ACTUAL OBSERVED SITE CONDITIONS AT TIME OF CONSTRUCTION AND PLANTING INSTALLATION. ANY SUBSTITUTIONS WILL BE MADE IN THE SAME SPIRIT OF THIS PLAN IN THE EVENT THAT THE PLANTINGS ARE APPROPRIATE BASED UPON SAID EXISTING CONDITIONS.

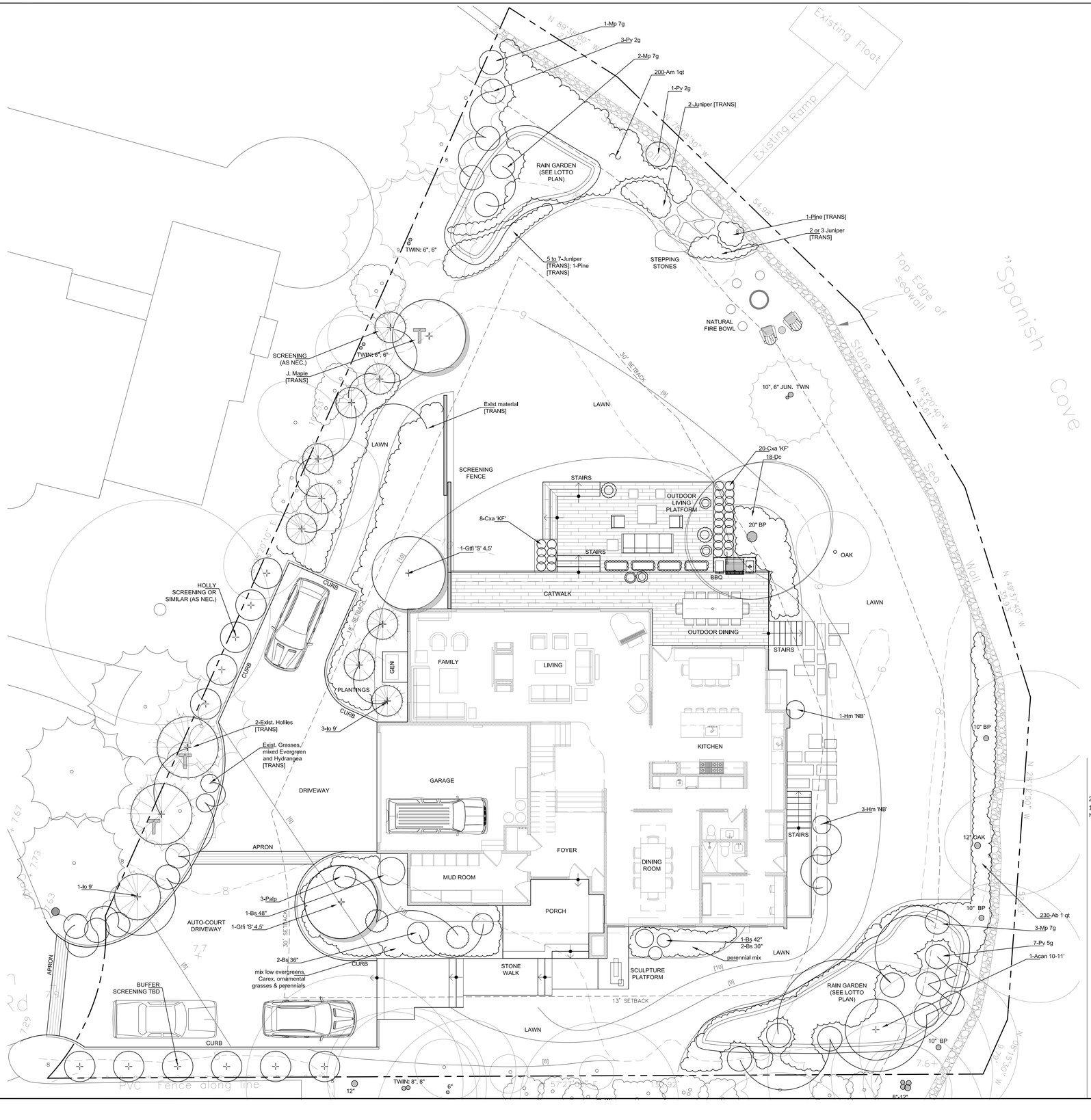
E. ANY AND ALL WORK SHALL COMPLY WITH ALL REGULATIONS AS SET AS SET FORTH BY THE VILLAGE OF LARCHMONT

F. ALL CONSTRUCTION / PLANTING ACTIVITIES WILL BE EXECUTED USING TYPICAL, BEST MANAGEMENT PRACTICES.

G. EXISTING TREE CANOPY SHOWN HERON LOCATED OUTSIDE THE PROPERTY LINE HAVE NOT BEEN SURVEYED AND OUR SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.

H. ALL VEGETATION SHOWN ON THIS PLAN SHALL BE MAINTAINED IN A HEALTHY AND VIGOROUS GROWING CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE OF THE SITE. ALL VEGETATION NOT SO MAINTAINED SHALL BE REPLACED WITH NEW COMPARABLE VEGETATION AT THE BEGINNING OF THE NEXT GROWING SEASON.

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PRELIMINARY
NOT FOR CONSTRUCTION

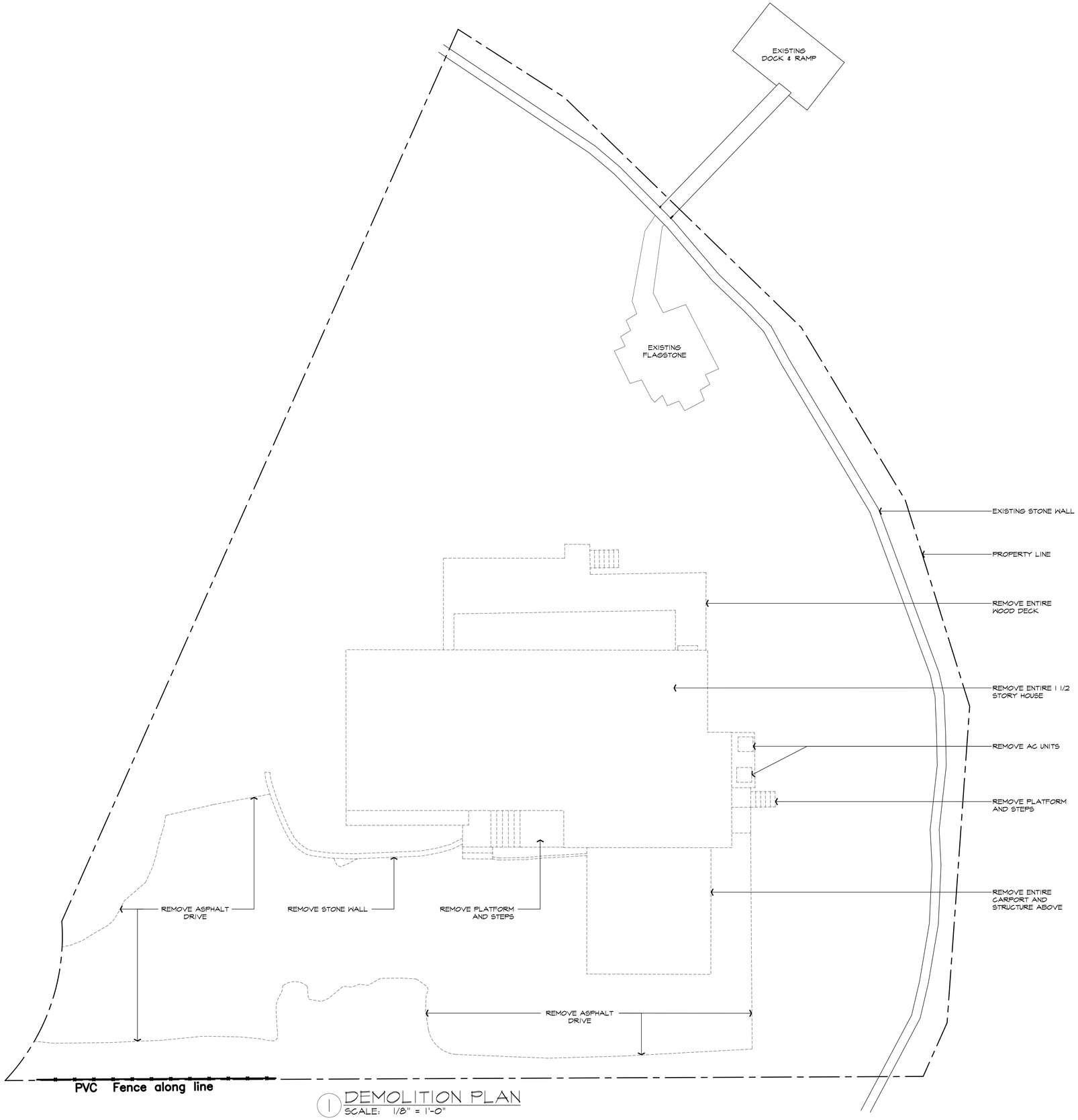
No.-	Revision(s)-	Date-
2	ISSUE: FOR FILING	01/03/20
1	ISSUE: TEAM REVIEW ONLY	12/20/19

JOSEPH PAJONAS STUDIO, LLC
6 OAK STREET WEST
GREENWICH, CT 06830
203-321-5611
WWW.JPSLA.COM

CARLOS RESIDENCE
1 SPANISH COVE ROAD
LARCHMONT, NY
DATE:12/20/19,SCALE:1/8"=1'-0"

PLANTING PLAN

L5.0



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

PROJECT:

CARLOS RESIDENCE

1 SPANISH COVE
LARCHMONT, NY 10538

NO.	ISSUE/DESCRIPTION:	DATE:
1	FOR CLIENT REVIEW	11/06/19
2	FOR PRE-SUBMISION CONF.	11/15/19
3	FOR PLANNING BOARD	12/26/19
4	FOR COASTAL ZONE MGMT	01/15/20

DEMO NOTES:

1. ALL BRACING AND SHORING SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE 2015 INTERNATIONAL RESIDENTIAL CODE AND ALL OTHER APPLICABLE NATIONAL, STATE AND LOCAL CODES.
2. CONTRACTOR TO COMPLY WITH THE RULES AND REGULATIONS IN THE 2010 EPA LEAD PAINT REMOVAL IN RESIDENTIAL RENOVATIONS.
3. SALVAGE ALL DOORS AND HARDWARE TO BE REUSED. VIF W/ ARCHITECT FOR LOCATIONS.
4. CONTRACTOR TO REMOVE ALL ABANDONED PIPING/WIRING THROUGHOUT.
5. CONTRACTOR TO REMOVE ALL EXISTING WINDOWS & EXTERIOR DOORS THROUGHOUT.
6. CONTRACTOR TO REMOVE EXISTING HVAC SYSTEM AND DUCTWORK THROUGHOUT.
7. CONTRACTOR TO REMOVE ALL EXISTING RADIATORS AND PIPING THROUGHOUT.
8. CONTRACTOR TO REMOVE EXISTING ASPHALT ROOFING AND GUTTERS AS REQUIRED.
9. CONTRACTOR TO REMOVE ALL MECHANICAL EQUIPMENT, PIPING, DUCTWORK, ELECTRICAL WIRING, CABLE, PHONE, ETC.
10. CONTRACTOR TO PROVIDE A ASBESTOS INSPECTION REPORT AND HIRE LICENSED ASBESTOS REMOVAL COMPANY TO REMOVE ANY ASBESTOS FOUND.
11. CONTRACTOR TO NOTIFY CON-EDISON AND ANY ADDITIONAL UTILITIES
12. THE CONTRACTORS SHALL BE RESPONSIBLE FOR FILING FOR ALL REQUIRED DEMOLITION PERMITS INCLUDING BUT NOT LIMITED TO: ELECTRICAL, PLUMBING AND HVAC WORK UNDER SEPARATE PERMIT(S).
13. THE CONTRACTOR SHALL PROVIDE FOR THE SAFETY OF THE WORKER, OWNERS AND THE PUBLIC AS REQUIRED BY THE STATE OF NEW YORK AND OSHA.

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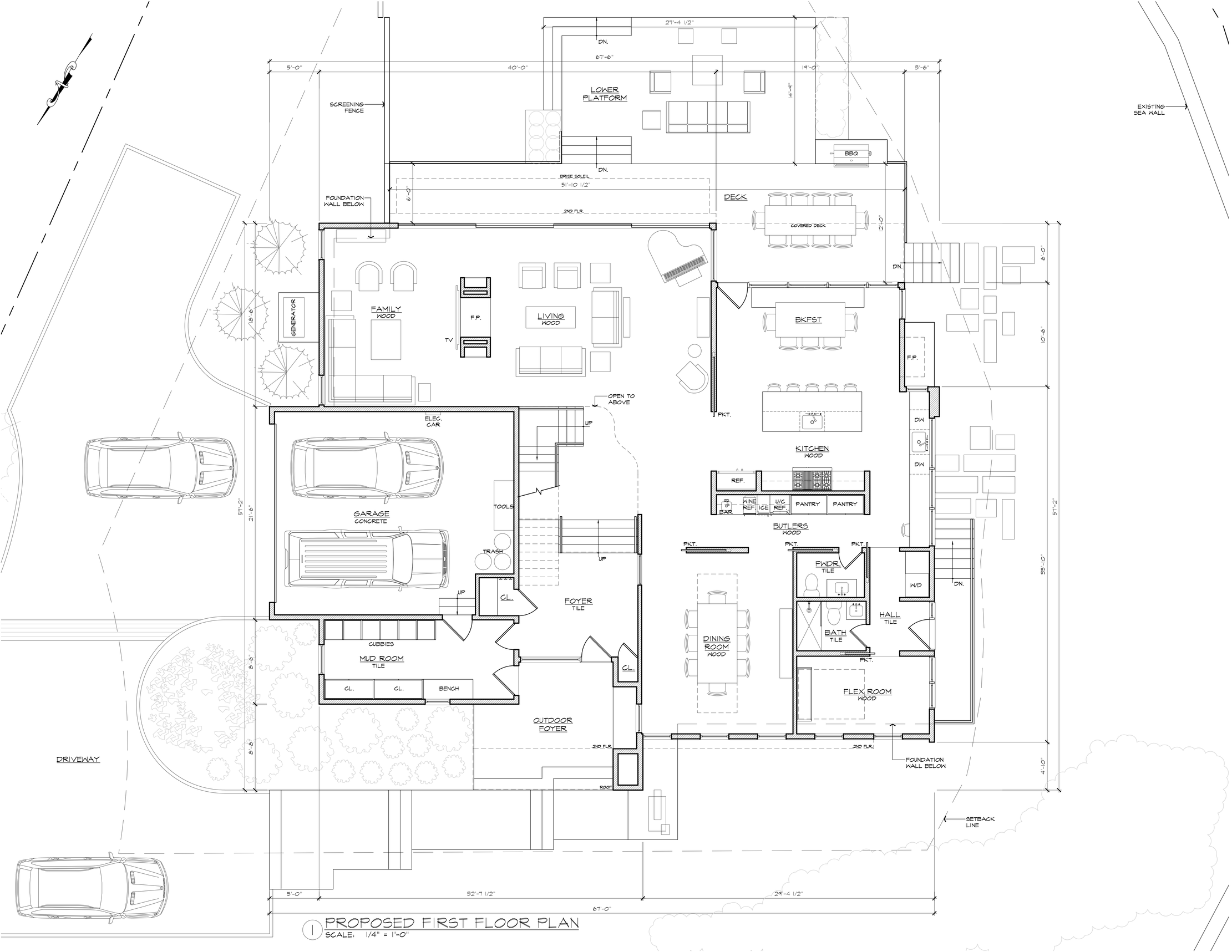
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DEMOLITION PLAN

ARCHITECT'S PROJECT NUMBER: 1917

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

SEAL:

DRAWING NUMBER:
D-1.1



1 PROPOSED FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

PROJECT:

CARLOS RESIDENCE

1 SPANISH COVE
LARCHMONT, NY 10538

NO.	ISSUE/DESCRIPTION:	DATE:
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DRAWING TITLE:
PROPOSED PLAN
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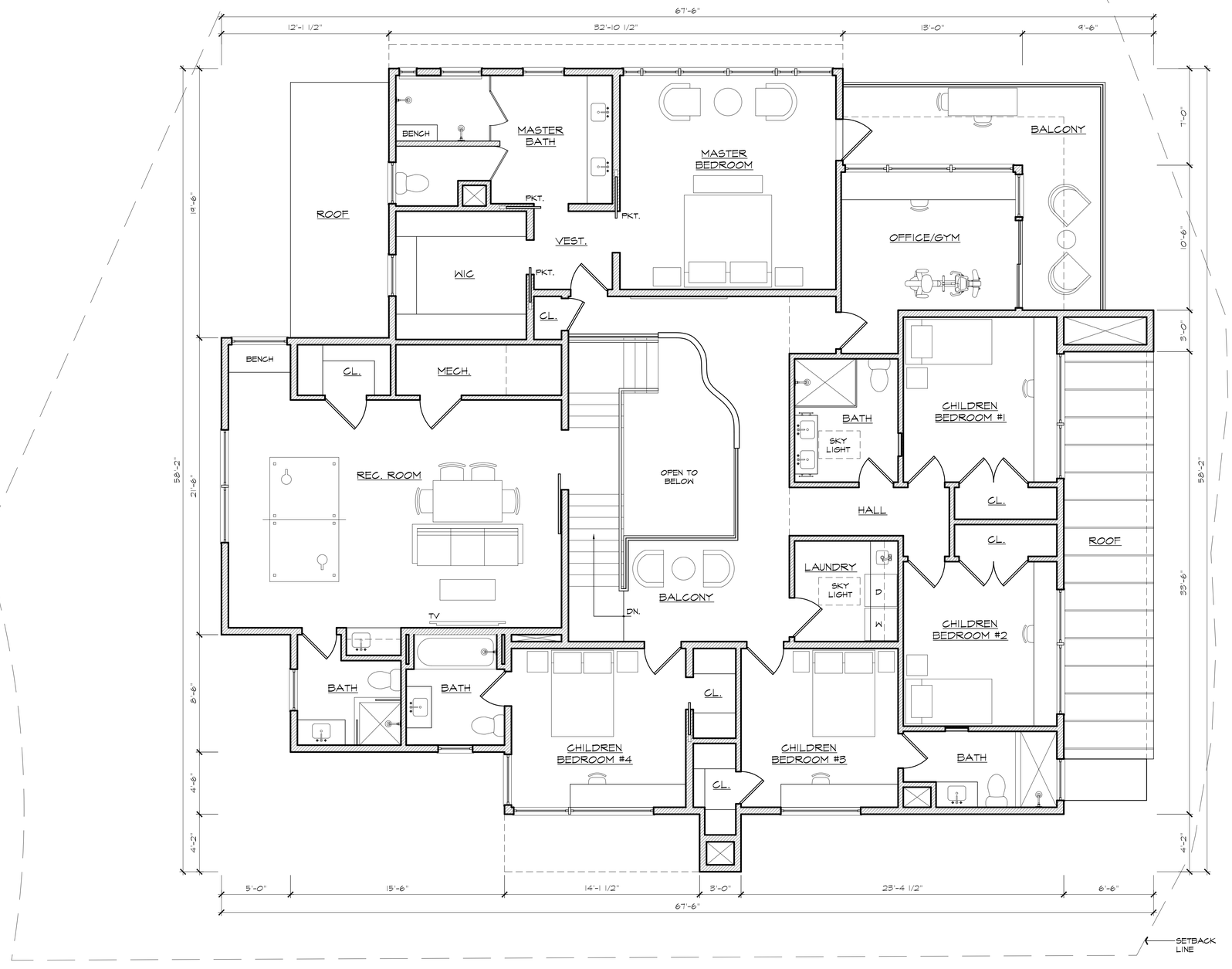
ARCHITECT'S PROJECT NUMBER: 1917

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

SEAL:

DRAWING NUMBER:

A-1.1



1 PROPOSED SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

PROJECT:

CARLOS RESIDENCE

1 SPANISH COVE
LARCHMONT, NY 10538

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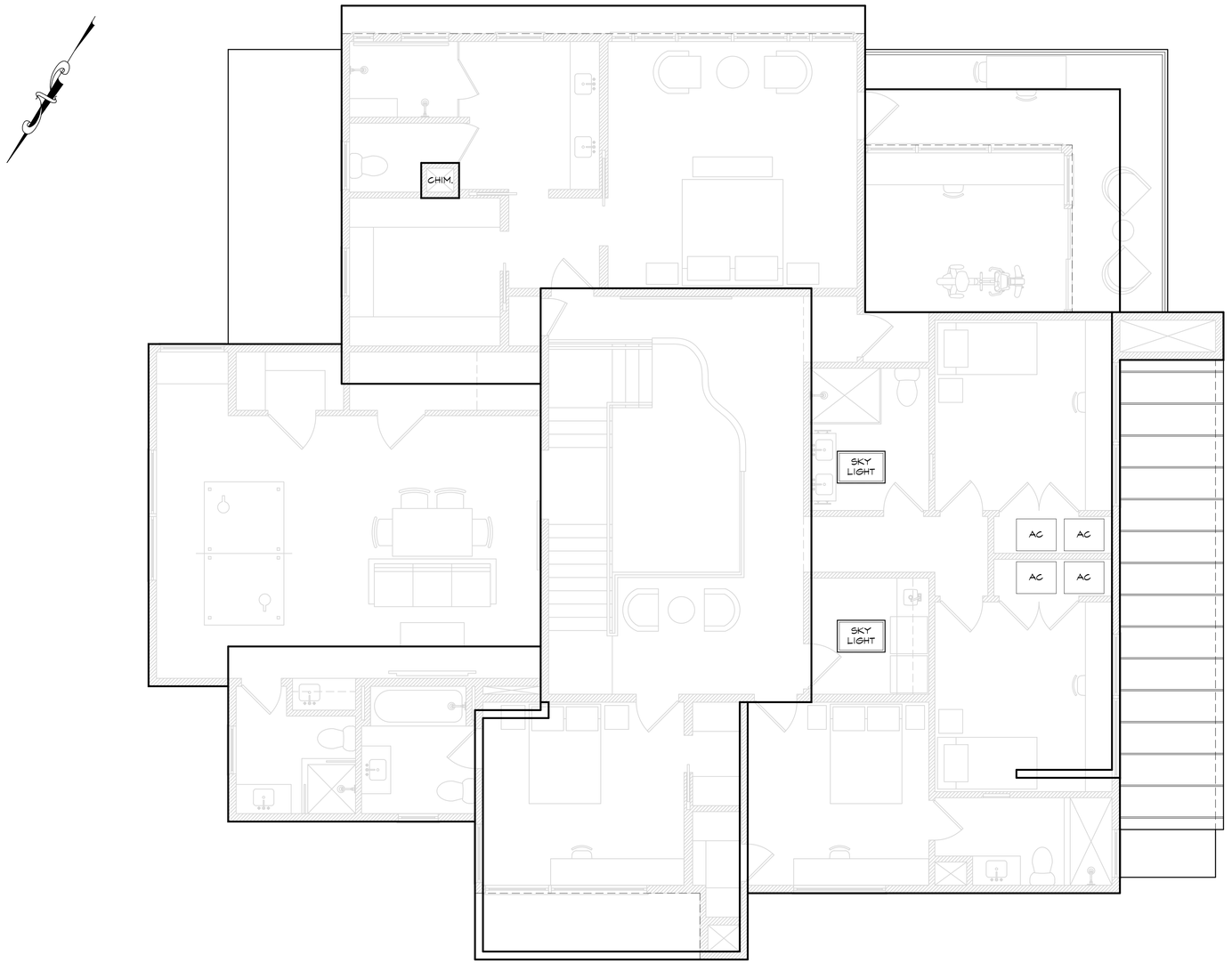
DRAWING TITLE:
PROPOSED PLAN

ARCHITECT'S PROJECT NUMBER: 1917

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

SEAL:

DRAWING NUMBER:
A-1.2



1 PROPOSED ROOF PLAN
SCALE: 1/4" = 1'-0"

PROJECT:

CARLOS RESIDENCE

1 SPANISH COVE
LARCHMONT, NY 10538

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DRAWING TITLE:
PROPOSED PLAN
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ARCHITECT'S PROJECT NUMBER: 1917

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

SEAL:

DRAWING NUMBER:
A-1.3



PROJECT:

CARLOS RESIDENCE

1 SPANISH COVE
LARCHMONT, NY 10538

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DRAWING TITLE:

PROPOSED ELEVATIONS

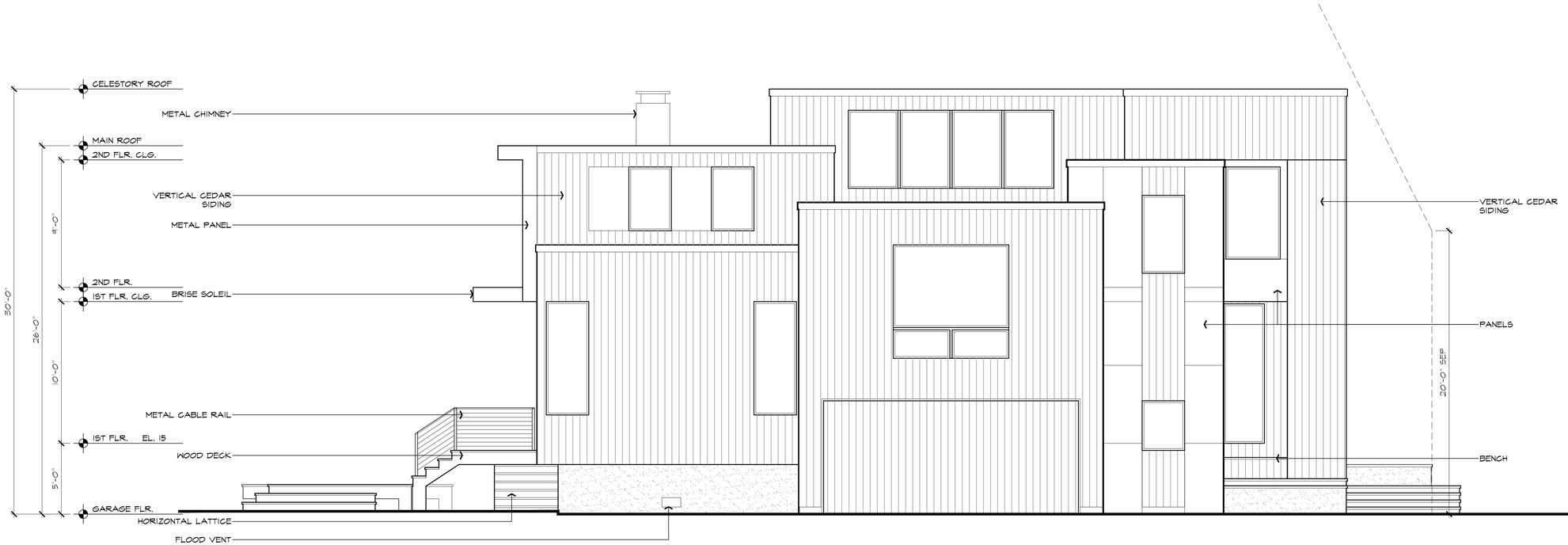
ARCHITECT'S PROJECT NUMBER: 1917

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

SEAL:

DRAWING NUMBER:

A-2.0



PROJECT:

CARLOS RESIDENCE

1 SPANISH COVE
LARCHMONT, NY 10538

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DRAWING TITLE:

PROPOSED ELEVATIONS

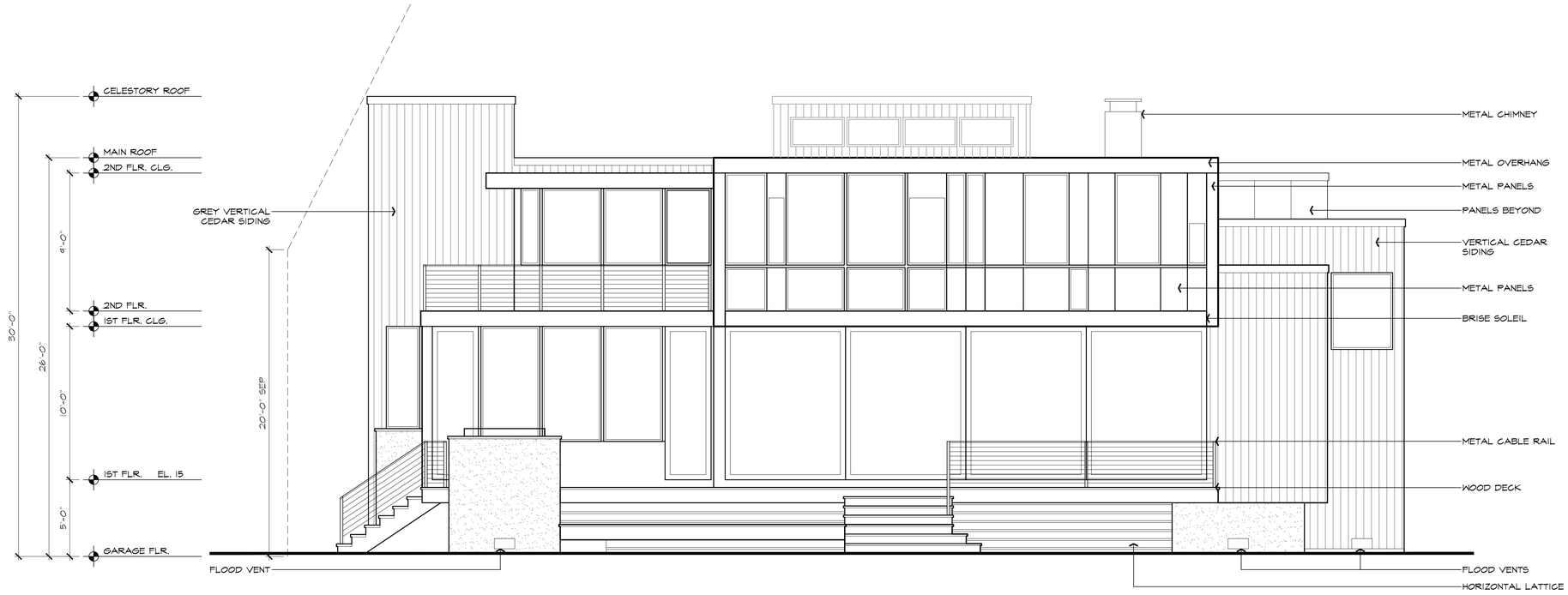
ARCHITECT'S PROJECT NUMBER: 1917

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

SEAL:

DRAWING NUMBER:

A-2.1



PROJECT:

CARLOS RESIDENCE

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LARCHMONT, NY 10538

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DRAWING TITLE:

PROPOSED ELEVATIONS

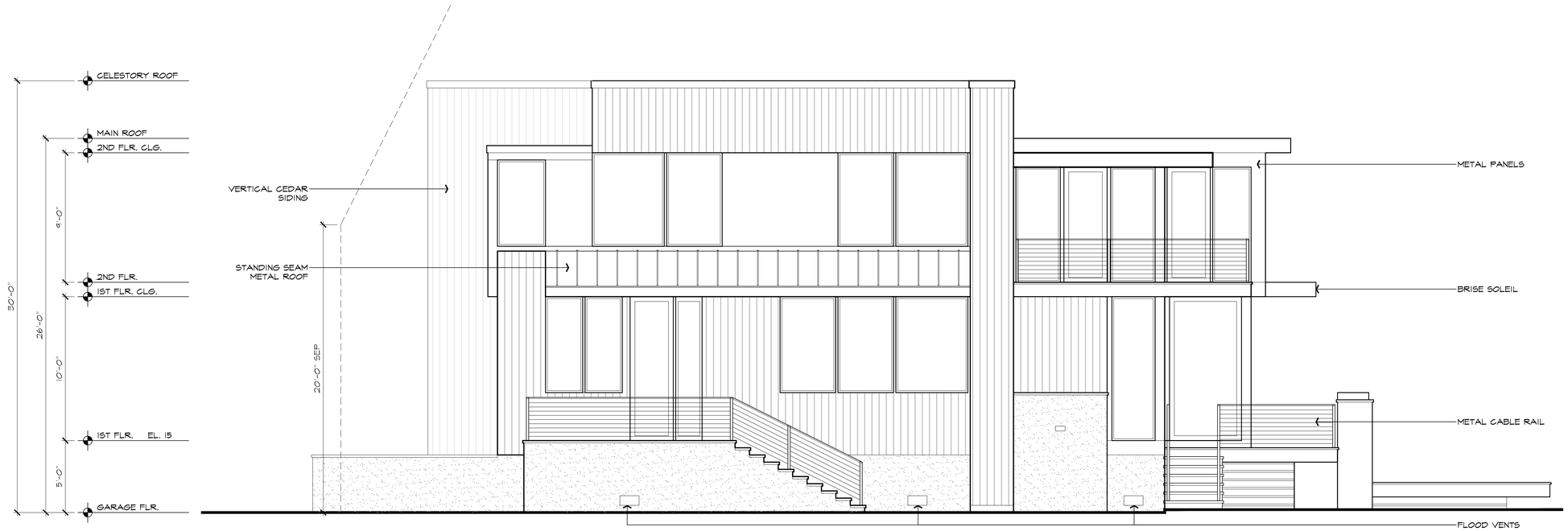
ARCHITECT'S PROJECT NUMBER: 1917

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

SEAL:

DRAWING NUMBER:

A-2.2



PROJECT:

CARLOS RESIDENCE

1 SPANISH COVE
LARCHMONT, NY 10538

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DRAWING TITLE:
PROPOSED ELEVATIONS

ARCHITECT'S PROJECT NUMBER: 1917

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

SEAL:

DRAWING NUMBER:
A-2.3

Town of Mamaroneck - Village of Larchmont
Coastal Assessment Form (CAF)

Applicants, or the appropriate municipal agency, shall complete this Coastal Assessment Form (CAF) for proposed actions which are subject to Local Consistency Review (see Waterfront Revitalization Law §§234-1 through 234-5 in the Code of the Town of Mamaroneck and §§292-1 through 292-4 in the Code of the Village of Larchmont). This assessment is intended to supplement other information used by the Bi-Municipal Coastal Zone Management Commission in making a determination of consistency with the Town of Mamaroneck and Village of Larchmont Local Waterfront Revitalization Program.

Upon completion of this form, it should be submitted as part of a complete application package for review. If assistance or further information is required for Town of Mamaroneck matters, please contact the Town of Mamaroneck Environmental Planner at (914) 381-7845. For Village of Larchmont matters, please contact the Village of Larchmont Building Inspector at (914) 834-6210.

PLEASE PRINT OR TYPE ALL ANSWERS.

A. GENERAL INFORMATION

Will the proposed action be undertaken by a municipal agency? Yes [ ] No [×]

If yes, please list agency or agencies and contact person(s): _____

If no, please complete the applicant information:

Name of Applicant: Suzanne Wahrhaftig

Street Address: 14 Wildwood Circle

City, State, Zip: Larchmont New York 10538

Phone: (917) 287-5064 Fax: _____ Email: sue.wahrhaftig@icloud.com

Location and ownership of property for which action is proposed:

Section: 5 Block: 7 Lot: 66

Owner of Property: Suzanne Wahrhaftig

Street Address: 14 Wildwood Circle

City, State, Zip: Larchmont, New York 10538

Phone: (917) 287-5064 Fax: _____ Email: sue.wahrhaftig@icloud.com

Size of property (square feet): 40,777 Is the property now developed? Yes [×] No [ ]

Will project require a zoning variance? Yes [ ] No [×]

If yes, briefly describe: _____

Describe any unique/unusual landforms on the project site (rock outcroppings, swales, etc.):

Percentage of site which contains slopes of 25% or greater: 0

Are there streams, lakes, ponds or wetlands existing within or contiguous to the project area?
If so, describe (name, size, characteristics): Yes. Premium River abuts the project site to the rear

Will the action require approval by a state or federal agency? Yes [ ] No [×]
If yes, specify which state or federal agency and attach a copy of pending application and any relevant information and/or documentation to this form:

B. DESCRIPTION OF SITE AND PROPOSED ACTION

Provide a written description of the nature and the extent of the proposed action. Attach plans or additional information as necessary and/or required by application procedures.

REPLACE EXISTING FAILED SEPTIC SYTEM WITH NEW SEPTIC SYSTEM, APPROVED BY THE WCDOH, REQUIRING IMPORTING FILL AND RE-GRADING OF THE REAR YARD.

C. COASTAL ASSESSMENT

Check either "Yes" or "No" for each of the following questions:

1. Will the proposed action be located in, or contiguous to, or have a **potentially adverse effect** upon any of the following designated resource areas?

		Yes	No	Maybe
a.	Significant fish or wildlife habitat or designated critical environmental area	[ ]	[×]	[ ]
b.	Scenic resources of local significance	[ ]	[×]	[ ]
c.	Natural protective features in an erosion hazard area	[ ]	[×]	[ ]

NOTE: If the answer to any of the above questions is "Yes", please explain in Section D any measures which will be undertaken to mitigate the adverse effects.

2. Will the proposed action have a **significant effect** upon:

		Yes	No	Maybe
a.	Commercial or recreational use of fish and wildlife resources	[ ]	[×]	[ ]
b.	Scenic quality of the coastal environment	[ ]	[×]	[ ]
c.	Development of future, or existing water dependent uses	[ ]	[×]	[ ]
d.	Land or water uses within a small harbor area	[ ]	[×]	[ ]
e.	Stability of the shoreline	[ ]	[×]	[ ]
f.	Surface or groundwater quality	[ ]	[×]	[ ]
g.	Existing or potential public recreation opportunities	[ ]	[×]	[ ]
h.	Structures, sites or districts of historic, archeological or cultural significance to the local area, state or nation	[ ]	[×]	[ ]

3. Will the proposed action **involve or result in** any of the following:

		Yes	No	Maybe
a.	Physical alteration of land along the shoreline, land underwater or coastal waters	[×]	[ ]	[ ]
b.	Expansion of existing public services or infrastructure in or near undeveloped or low density areas of the coastal area?	[ ]	[×]	[ ]
c.	Filling, dredging, excavation or mining in coastal waters	[ ]	[×]	[ ]
d.	Reduction of existing or potential public access to or along the shore	[ ]	[×]	[ ]
e.	Development within a designated flood or erosion hazard area	[ ]	[ ]	[×]
f.	Development of a natural feature that protects against flooding or erosion	[ ]	[×]	[ ]
g.	Replacement of eroded sand or soil	[ ]	[×]	[ ]
h.	Construction or reconstruction of erosion protective structures	[ ]	[×]	[ ]
i.	Any change in surface or groundwater quality	[ ]	[×]	[ ]
j.	Removal of trees from the site	[ ]	[×]	[ ]

4. Project details:

		Yes	No	Maybe
a.	If the project is to be located adjacent to the shore:			
	1. Does the project require a waterfront site in order to function	[ ]	[×]	[ ]
	2. Will water-related recreation be provided	[ ]	[×]	[ ]
	3. Will public access to shore or state owned underwater lands be provided	[ ]	[×]	[ ]
	4. Will it replace a recreational or maritime use	[ ]	[×]	[ ]
	5. Do essential public services and facilities presently exist at or near the site	[ ]	[×]	[ ]

6. Is the site located near a flood prone area	[×]	[ ]	[ ]
7. Is the site located in an area of high erosion	[ ]	[×]	[ ]
b. Is the site presently used by the community as an open space or recreation area	[ ]	[×]	[ ]
c. Does the project site offer or include scenic views/vistas known to be important to the community or the state	[×]	[ ]	[ ]
d. Will the surface area of any waterways or wetland areas be increased or decreased by the project	[ ]	[×]	[ ]
e. Will the project involve any waste discharges into coastal waters	[ ]	[×]	[ ]
f. Does the project involve discharge of toxins, hazardous substances or other pollutants into coastal waters	[ ]	[×]	[ ]
g. Will the project affect any area designated as a tidal or freshwater wetland	[ ]	[×]	[ ]
h. Will the project result in an alteration of drainage flow patterns or surface water runoff on or from the site	[ ]	[×]	[ ]
i. Will best management practices (BMPs) be utilized to control stormwater runoff	[×]	[ ]	[ ]
j. Will any aspect of the proposed project result in emissions which exceed federal or state air quality standards or generate significant amounts of nitrates or sulfates	[ ]	[×]	[ ]

Please explain any of the above answers that may need further clarification in Section D.

D. COMMENTS AND ADDITIONAL INFORMATION: (continue on back if necessary)

Due to the requirements established by the DOH for septic systems, particularly the vertical separation of septic fields from the water table, the only practical solution to install a new system to replace the failed sytem requires the importing of clean fill material. There are no public sewer sytems near the site that can accomodate a public wastewater connection.

D. COMMENTS AND ADDITIONAL INFORMATION: (continued)

I certify that I am the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.

Date: November 13 2019 Benedict A. Salanitro

Signature of Applicant

Prepared by: (if different than the applicant)

Name and Title: Benedict A. Salanitro, PE

Agency/Company: Benedict A. Salanitro, PE, P.C.

Street Address: 609 Brook Street

City, State, Zip: Mamaroneck, New York 10543

Phone: 914 760 5125 Fax: Email: bsalanitro@aol.com

I certify that I prepared this Coastal Assessment Form for the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.

Date: November 13 2019 Benedict A. Salanitro

Signature of Preparer

PROJECT NOTES:
1. OWNER & MAILING ADDRESS:
   SUZANNE WAHRHAFTIG
   14 WILDWOOD CIRCLE
   MAMARONECK, NY 10538

2. PROJECT SITE ADDRESS:
   14 WILDWOOD CIRCLE
   MAMARONECK, NY 10538

3. SURVEY BOUNDARY & TOPOGRAPHY INFORMATION FROM MAP PREPARED BY:
   ARISTOTLE BOURNAZOS- 20 CEDAR STREET, NEW ROCHELLE, NY.

4. TAX MAP INFORMATION:
   SHEET 5 BLOCK 7 LOT 66
   TOTAL AREA OF PARCEL = 0.9361 ACRES

5. WATERSHED BASIN:
   COASTAL LONG ISLAND SOUND BASIN

6. USDA SOIL TYPES IN OWTS AREA:
   UiC - URBAN LAND - CHARLTON CHATFIELD COMPLEX, ROLLING, VERY ROCKY

7. LIMIT OF DISTURBANCE = 20,000 SF

8. ESTIMATED START DATE: 11/01/2019
   ESTIMATED FINISH DATE: 05/01/2019

OWTS CONSTRUCTION NOTES:
1. PROPOSED 6 BEDROOM OWTS REMEDIATION.
2. PROPOSED 2000 GALLON PRE CAST CONCRETE SEPTIC TANK. PROVIDE WHITE KNIGHT WK-40 MIG UNIT WITHIN TANK
3. PROPOSED 2000 GALLON PRE CAST CONCRETE PUMP CHAMBER. DOSE = 290 GALLONS DRAW = 6.75"
4. PROPOSED 288 LF ELGEN GSF ABSORPTION TRENCHES 8 TRENCHES OF 9 UNITS EACH, INSTALLED 8.0' O.C. SYSTEM TO BE SPLIT EQUALLY INTO FOUR, 2 ROWS OF 9 UNITS EACH (18 UNITS), WITH JUNCTION BOXES.
5. PROPOSED 2.5'-3.5' R.O.B. FILL OVER ENTIRE OWTS AREA
6. DESIGN RATE = N/A
7. WCDOH CODE DESIGN FLOW = 1200 GPD
9. SLOPE OF PROPOSED SSTS REMEDIATION = 2%

WHITE KNIGHT WK-40 MIG NOTES:
1. THE WK-40 UNIT PROPOSED ON THE PLANS HERON MUST BE INSTALLED AND MAINTAINED WITHIN THE MANUFACTURERS GUIDELINES.
2. AN EXCECUTED MAINENANCE AGREEMENT MUST BE COMPLETED AND PRESENTED TO THE WCODH PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF CONSTRUCTION COMPLIANCE.

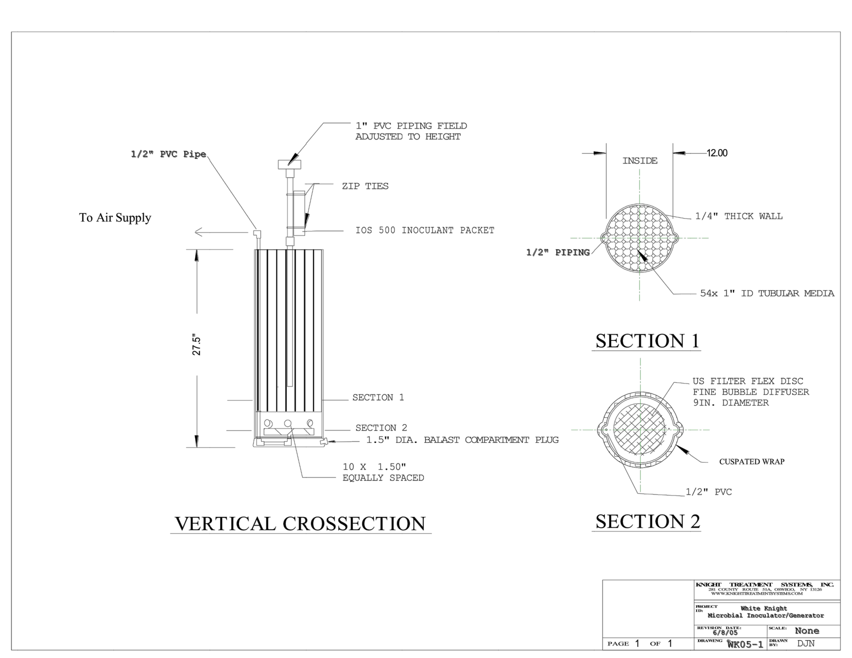
DESIGN NOTES:
1. NO PERCOLATION DESIGN RATE WAS OBTAINED WITHIN THE SEPTIC SYSTEM AREA BECAUSE OF HIGH GROUND WATER. THE DESIGN OF THE OWTS REMEDIATION IS A "BEST FIT" AND NOT REPRESENTED TO HAVE AN APPLICATION/ABSORPTION RATE.

OWTS GENERAL NOTES:
1. THERE SHALL BE NO TREES WITHIN 10 FEET OF THE OWTS.
2. THERE ARE NO WELLS WITHIN 200' OF THE OWTS UNLESS SHOWN ON THE PLAN.
3. THE PROPOSED OWTS REMEDIATION AREA SHALL BE ISOLATED AND PROTECTED AGAINST DAMAGE BY EROSION, STORAGE OF EARTH OR MATERIALS, DISPLACEMENT, COMPACTION OR OTHER ADVERSE PHYSICAL CHANGE IN THE CHARACTERISTICS OF THE SOIL OR IN THE DRAINAGE OF THE AREA.
4. IF FOR ANY REASON THE APPROVED CONSTRUCTION PLAN CAN NOT BE FOLLOWED, A REVISED PLAN MUST BE PREPARED, SUBMITTED, AND APPROVED BY WCDOH.
5. THE DESIGN PROFESSIONAL SHALL SUPERVISE THE CONSTRUCTION OF THE OWTS AND MAKE AN OPEN WORKS INSPECTION.
6. WITHIN 24-HOURS OF THE COMPLETION OF THE OWTS, THE DESIGN PROFESSIONAL MUST NOTIFY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH (WCDOH) THAT THE OWTS IS READY FOR INSPECTION BY SUBMITTING A COMPLETED REQUEST FOR AN OPEN WORKS INSPECTION ON THE APPROPRIATE FORM TO WCDOH.
7. NO BACKFILLING OF A COMPLETED OWTS CAN OCCUR UNTIL AFTER IT HAS BEEN INSPECTED AND ACCEPTED BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH.
8. AFTER BACKFILLING THE OWTS, THE AREA SHALL BE COVERED WITH A MINIMUM OF 4 INCHES OF CLEAN TOPSOIL, SEEDED AND MULCHED.
9. ALL PIPES CONNECTING TO TANK AND BOXES SHALL BE CUT FLUSH WITH THE INSIDE WALL OF TANK OR BOX.
10. THE PROPOSED OWTS REMEDIATION WORK SHALL BE INSTALLED BY A WESTCHESTER COUNTY LICENSED SEPTIC CONTRACTOR.
11. PRIOR TO ANY EXCAVATION ALL UNDERGROUND UTILITIES MUST BE LOCATED. CALL 1-800-962-7962
12. THE WESTCHESTER COUNTY HEALTH DEPARTMENT APPROVAL EXPIRES ONE YEAR FROM THE DATE ON THE APPROVAL STAMP AND IS REQUIRED TO BE RENEWED ON OR BEFORE THE EXPIRATION DATE. THE APPROVAL IS REVOCABLE FOR CAUSE OR MAY BE AMENDED OR MODIFIED WHEN CONSIDERED NECESSARY BY THE DEPARTMENT.

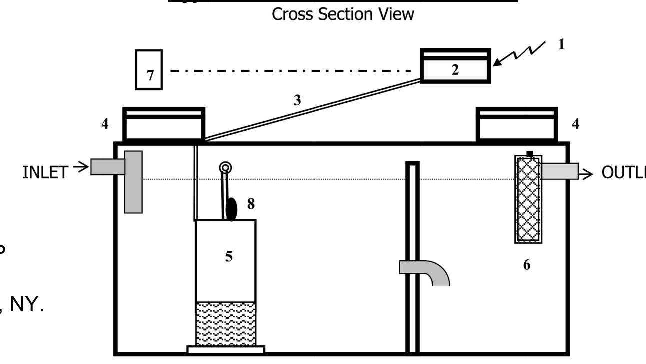
UL Listed Alarm/Control Minimum Specifications:

Model #	Voltage	Amps Max	Failure sensing	Alarm Type	Overload protection (amps)	Switching
WK-40	110 / 120	8	Pressure drop +/or float	Visual and Audible	8	Normal/ Silence only
WK-78	110 / 120	8	Pressure drop +/or float	Visual and Audible	8	Normal/ Silence only

White Knight MIG Column Drawing

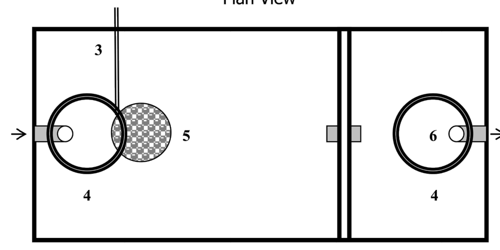


Typical In Tank Installation WK-40
Cross Section View

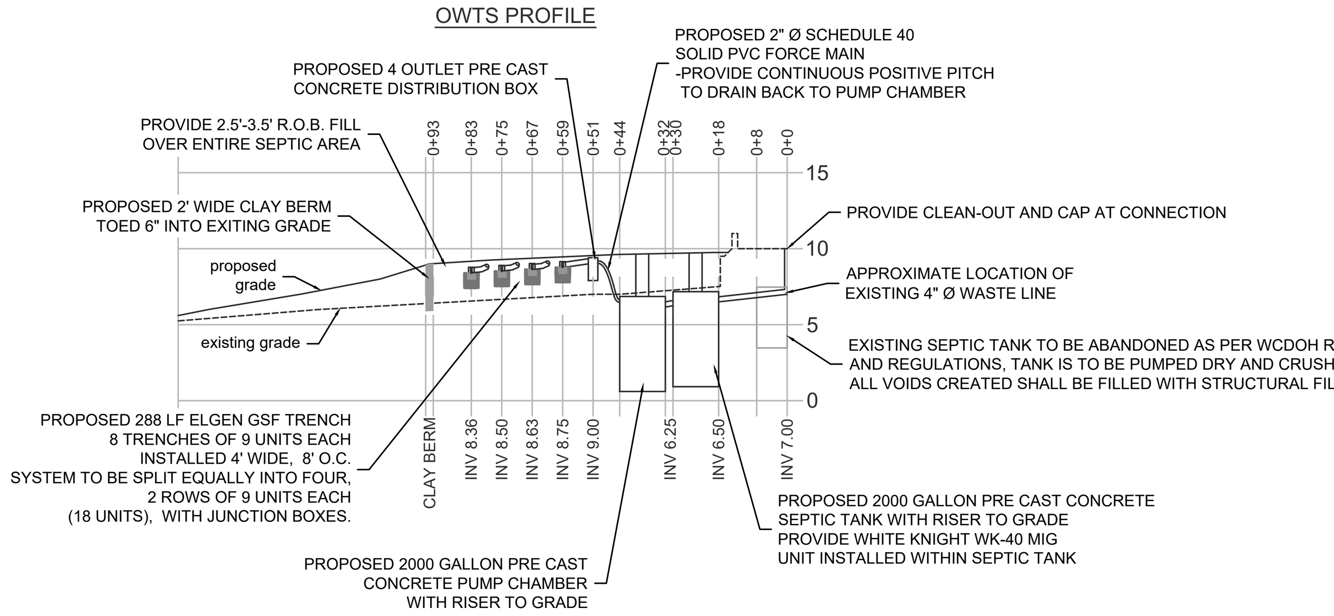


1. 120 volt electrical supply through Alarm/Control Panel to Air Pump
2. Air pump installed in weather tight basin, outdoor location
3. ½" ID plastic air supply line from pump location
4. Service risers for monitoring and maintenance
5. White Knight Microbial Inoculator Generator™ Column in 1st compartment of 2 compartment tank.
6. Outlet equipped with Effluent Filter
7. System Alarm Panel
8. IOS-500™ Inoculant Packet

Typical In Tank Installation WK-40
Plan View

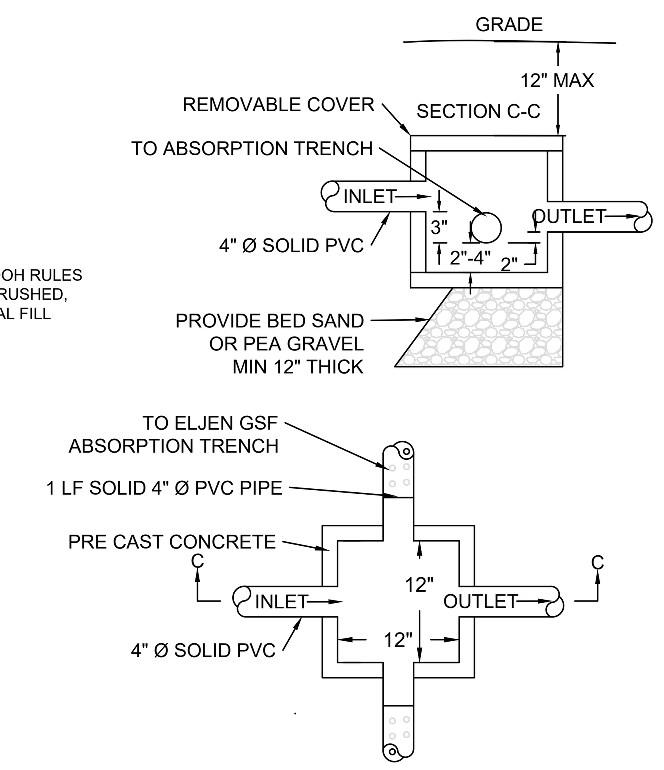


OWTS PROFILE



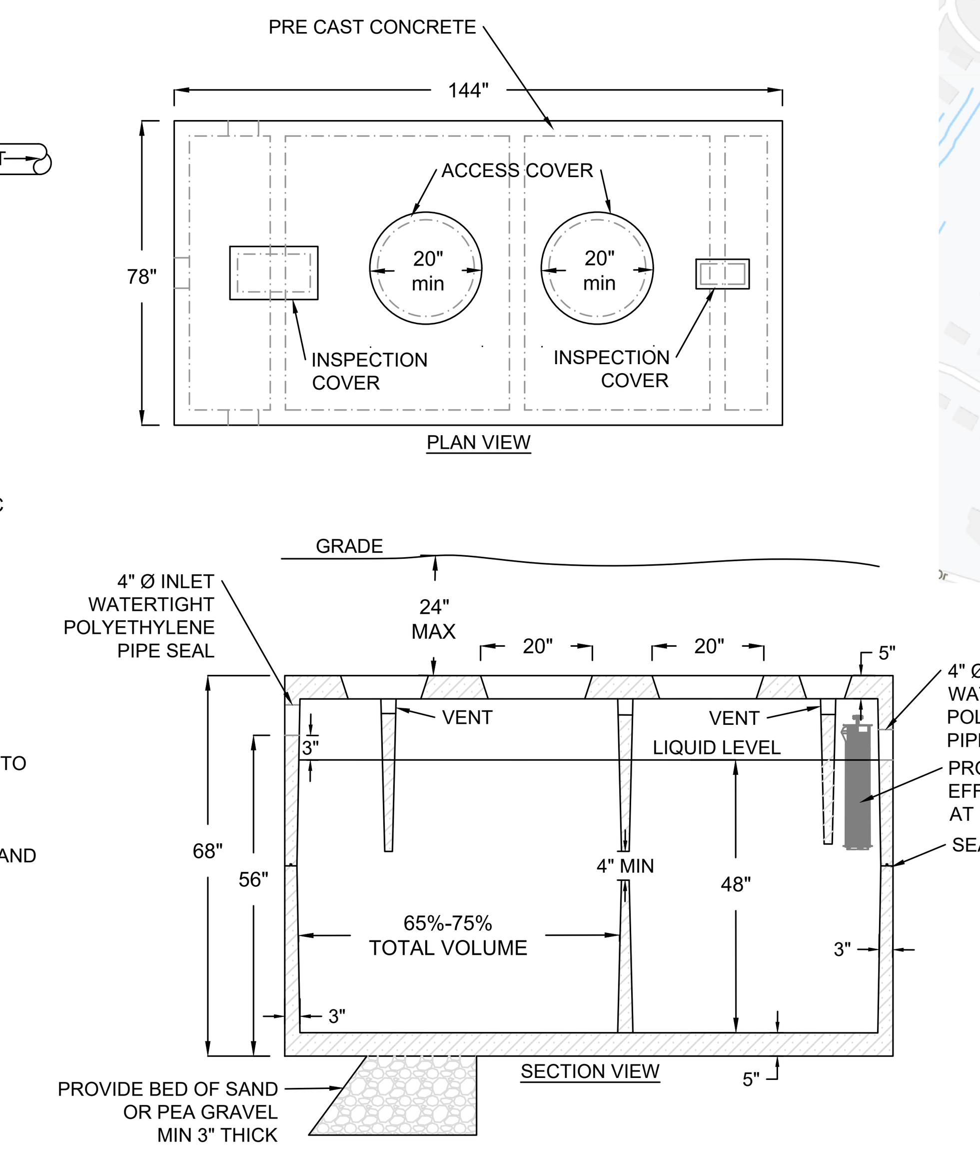
SCALE
HORIZONTAL 1"=40'
VERTICAL 1"=10'

JUNCTION BOX N.T.S.



1. BOTTOM OF BOX MUST BE LEVEL AND FIRMLY SUPPORTED TO BELOW FROST LINE. FOOTING TO EXTEND TO 36" BELOW GROUND LEVEL.
2. PLACED ON SINGLE BRANCH DISTRIBUTORS.
3. WATERPROOF MASONRY CONSTRUCTION.
4. TIGHT JOINT PIPE FROM SEPTIC TANK TO BOX AND BETWEEN ALL BOXES.

2000 GALLON SEPTIC TANK N.T.S.

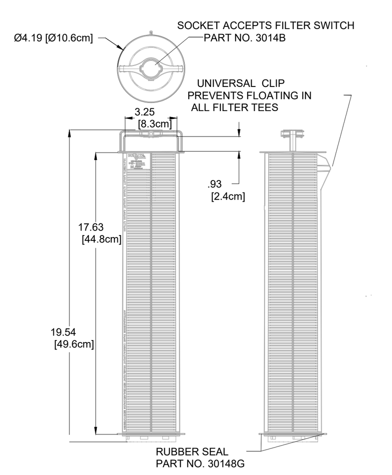


- SEPTIC TANK MUST BE WATERTIGHT, CONSTRUCTED OF DURABLE MATERIAL AND NOT SUBJECT TO EXCESSIVE CORROSION, DECAY, FROST DAMAGE OR CRACKING.
- MINIMUM TOP DESIGN LOADING 300 PSF.
- IF DEPTH FROM TANK TO GRADE IS GREATER THAN 24" A RISER TO GRADE SHALL BE PROVIDED

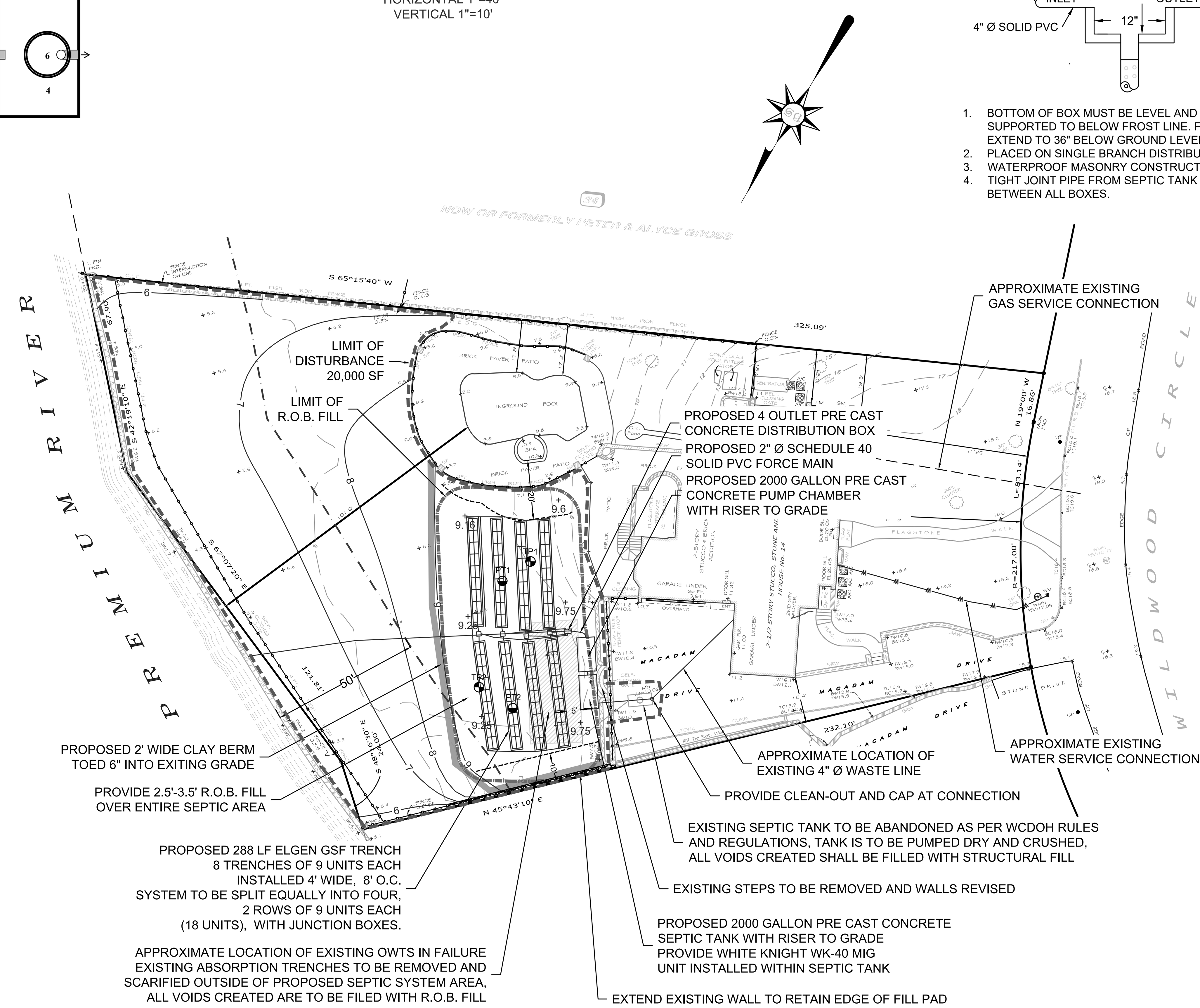


LOCATION MAP
NOT TO SCALE

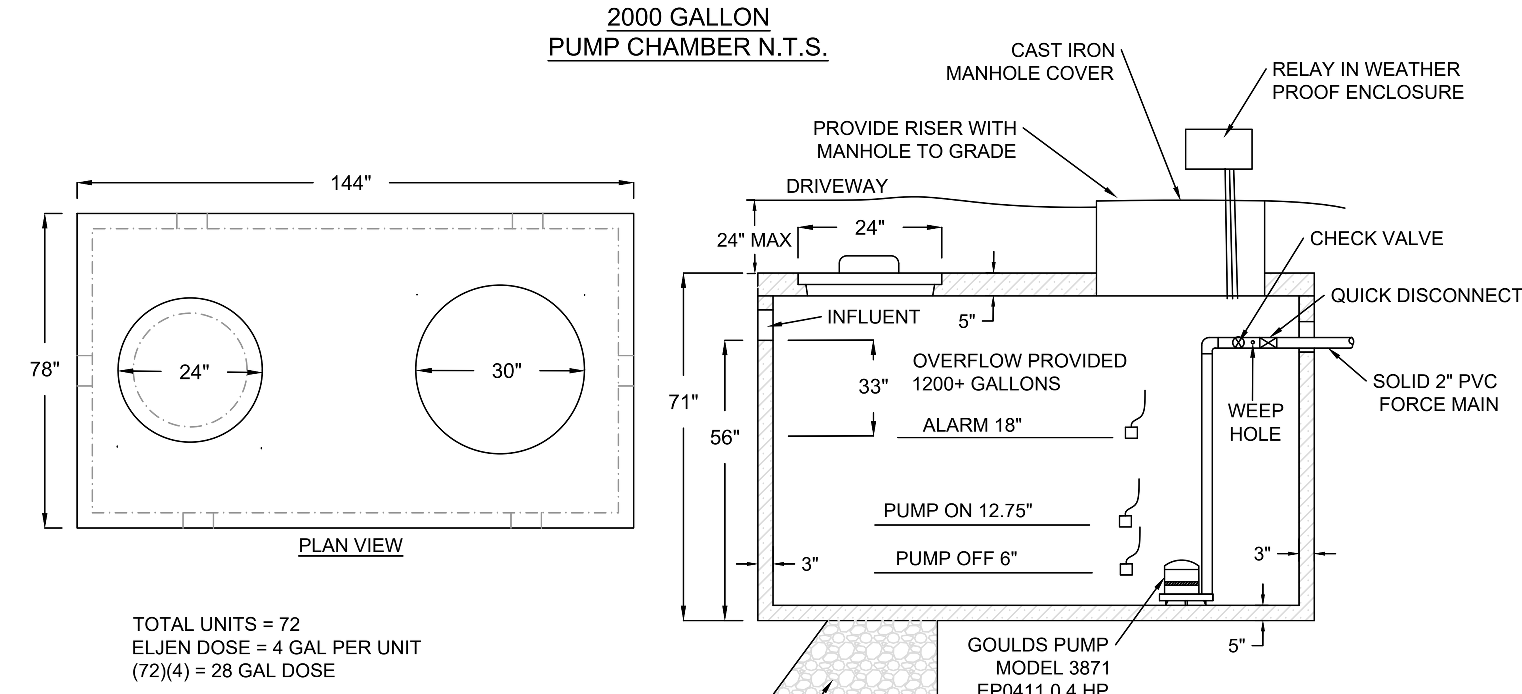
EFFLUENT FILTER



POLYLOK - ZABEL
A1801-4X18 FILTER CARTRIDGE
FILTER SIZE - 80 FT. OF 1/16" SLOT
FILTER AREA - 175 SQ.IN.



2000 GALLON PUMP CHAMBER N.T.S.

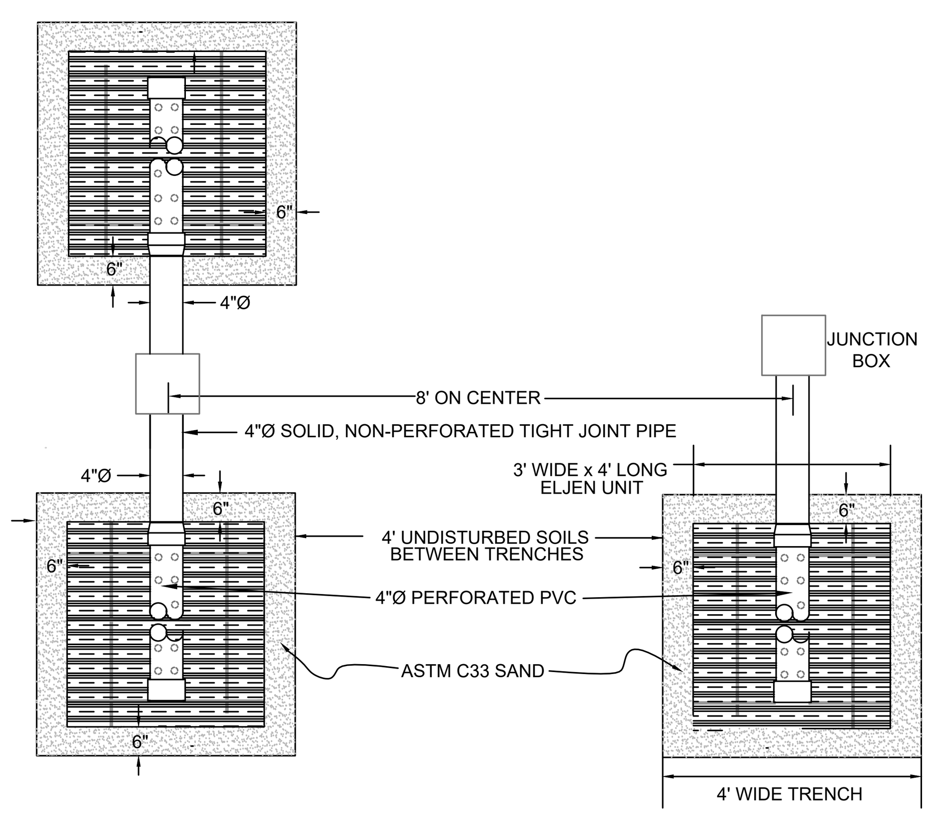


TOTAL UNITS = 72
ELJEN DOSE = 4 GAL PER UNIT
(72)(4) = 28 GAL DOSE

PUMP CHAMBER I.D. 6' X 11.5'
(6)(11.5)(7.48) = 516 GAL PER FOOT
288/516 = 0.56' OR 6.70"

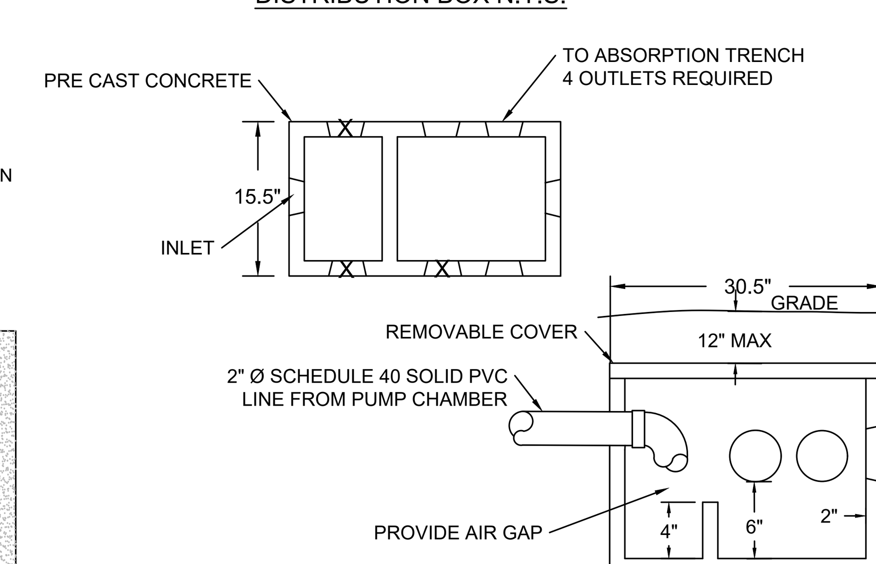
NOTE
REQUIRED DRAW = 6.70" USE 6.75"
DOSE = 290 GALLONS

- GOULDS MODEL 3871, EP0411 0.4 HP PUMP
- PROVIDE AUDIBLE / VISUAL ALARM IN DWELLING
- A RISER TO GRADE SHALL BE PROVIDED



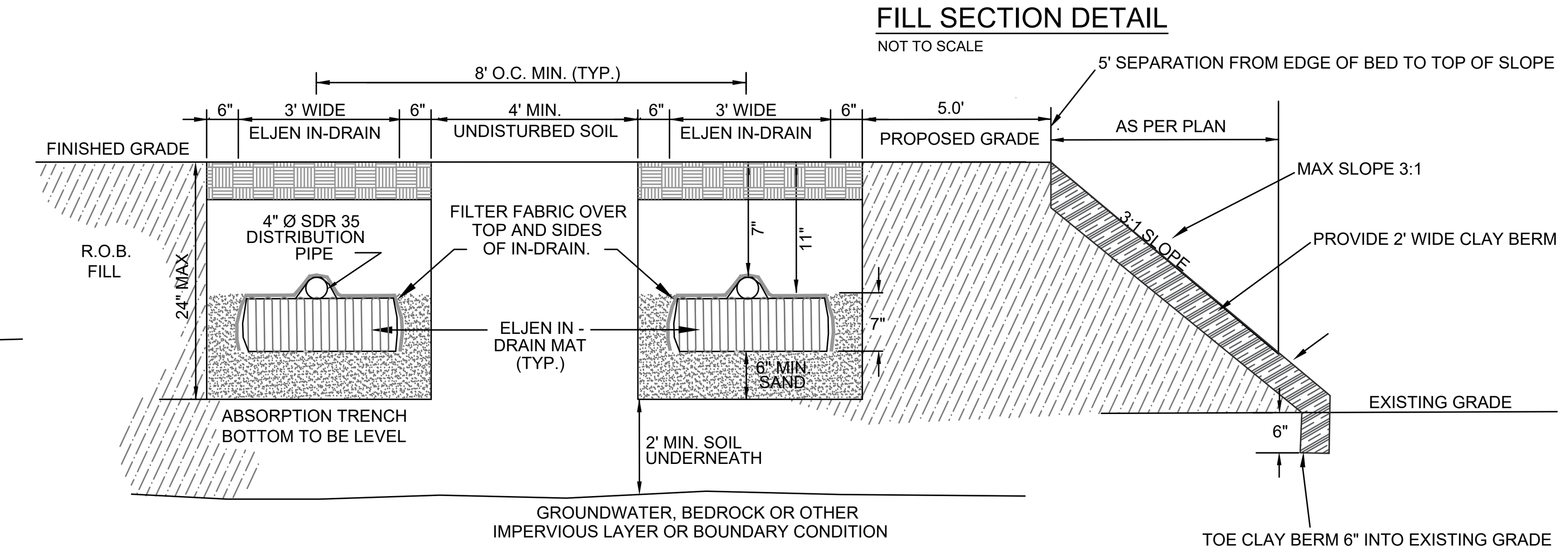
PLAN VIEW
ABSORPTION TRENCH SECTION ELJEN IN-DRAIN SYSTEM
NOT TO SCALE

DISTRIBUTION BOX N.T.S.



1. BOTTOM OF BOX MUST BE LEVEL AND FIRMLY SUPPORTED TO BELOW FROST LINE. FOOTING TO EXTEND TO 36" BELOW GROUND LEVEL.
2. WATERPROOF MASONRY CONSTRUCTION.
3. TIGHT JOINT PIPE FROM SEPTIC TANK TO BOX AND BETWEEN ALL BOXES.

FILL SECTION DETAIL
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:
1. TRENCH BOTTOMS SHALL BE LEVEL. TRENCHES SHALL BE PARALLEL TO GROUND CONTOURS.
2. ON SLOPED SITES, A DIVERSION SWALE SHALL BE CONSTRUCTEED UPHILL OF THE SEPTIC FIELD TO PREVENT SURFACE WATER RUNOFF ONTO THE SEPTIC FIELD.
3. CONCRETE SAND SHALL ADHERE TO THE ASTM C33 STANDARDS.
4. SEE SEPTIC SYSTEM NOTES FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.
5. SEE ELJEN IN-DRAIN DESIGN AND INSTALLATION MANUAL FOR ADDITIONAL DETAILS.

TYPICAL ELJEN TYPE TRENCH CROSS SECTION
NOT TO SCALE

OWTS REMEDIATION PLAN WAHRHAFTIG RESIDENCE

14 WILDWOOD ROAD
VILLAGE OF MAMRONECK
WESTCHESTER COUNTY, NY

487 E MAIN STREET
SUITE # 230
MOUNT KISCO, NY 10549
P/F: 1-800-786-1909
WWW.RAIN-CONCEPTS.COM
INFO@RAIN-CONCEPTS.COM

JOHN PETROCCIONE P.E. LICENSE NO 078516 DATE

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED LAND SURVEYOR'S OR PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

JOHN PETROCCIONE P.E.
LICENSE NO. 078516
2 LAKE STREET, SUITE #203
MONROE, NEW YORK 10950

REVISIONS:

8/15/19	INITIAL PREPARATION
SCALE 1"=30'	SHEET 1 OF 1

GENERAL NOTES:

1. *ALL WORK MATERIALS, SPECIFICATIONS, REGULATIONS, RULES, PERMITS, ETC. OF ALL STATE, COUNTY AND THE TOWN OF MAMARONECK SHALL BE FOLLOWED BY THE CONTRACTOR.*
2. *ALL MANUFACTURED ITEMS SHALL BE INSTALLED OR APPLIED AS DIRECTED BY THE MANUFACTURES RECOMMENDATIONS.*
3. *CONTRACTORS AND HIS SUBCONTRACTORS SHALL MAINTAIN WORKMEN'S COMPENSATION INSURANCE AS WELL AS ADEQUATE LIABILITY INSURANCE DURING THE ENTIRE LENGTH OF THE JOB. CONTRACTOR SHALL SUPPLY THE REQUIRED INSURANCES AS SPECIFIED BY THE TOWN OF MAMARONECK.*
4. *CONTRACTOR SHALL FURNISH ALL PERMITS, LICENSES AND APPROVALS NECESSARY TO COMPLETE THE WORK.*
5. *CONTRACTOR TO INCLUDE ALL MATERIALS, LABOR, INCIDENTALS AND SERVICES FOR SATISFACTORY COMPLETION OF ALL WORK.*
6. *JOB SITE SHALL BE KEPT CLEAN AT ALL TIMES, TRASH TO BE REMOVED FROM THE SITE DAILY.*
7. *NOTIFY THE ENGINEER OF ANY UNSUITABLE SUB-SOIL CONDITIONS IF ENCOUNTERED DURING EXCAVATION.*
8. *CARE SHALL BE TAKEN TO PROTECT THE TREES TO REMAIN FROM THE METHODS OF CONSTRUCTION, TRAFFICKING AND STORAGE OF MATERIALS. RETURN THOSE AREAS DAMAGED BY SUCH TO THEIR ORIGINAL CONDITION.*
9. *DURING CONSTRUCTION, PROVISIONS FOR SAFE PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES.*

INSTALLATION & MAINTENANCE OF EROSION CONTROL

CONSTRUCTION SCHEDULE
NOTIFY APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 2 DAYS PRIOR TO START

EROSION CONTROL MEASURES
Install all erosion control measures prior to start of construction. Call for inspection from the appropriate Municipal Agency having jurisdiction at least 2 days prior to installation.
INSPECTION BY MUNICIPALITY

MAINTENANCE (TO BE PERFORMED DURING ALL PHASES OF CONSTRUCTION)
After any rain causing runoff Contractor to inspect haybales, etc. and remove any excessive sediment, and inspect stockpiles and correct any problems with seed establishment. Inspections shall be documented in writing and submitted to the appropriate Municipal Agency having jurisdiction.

STOCK PILING OF EXCAVATED MATERIAL
Strip Topsoil and Stockpile. Stockpile Excavation Subgrade. Seed piles with 1 lb. total annual rye or remove from site within 2 days.
INSPECTION BY MUNICIPALITY

FINAL GRADING
Remove unneeded subgrade from site. Call for inspection from the appropriate Municipal Agency having jurisdiction at at least 2 days prior to finish.
INSPECTION BY MUNICIPALITY

LANDSCAPING
Spread topsoil evenly over areas to be seeded. Hand rake level. Broadcast 1:25 lb. Bag of Jonathan Green "Fastgrow" mix or equal over areas to be seeded. Apply straw mulch and water within 2 days of completion of topsoiling. Call for inspection from the appropriate Municipal Agency having jurisdiction at least 2 days prior to finish.
INSPECTION BY MUNICIPALITY

FINAL LANDSCAPING
Grass established. Call for inspection from the appropriate Municipal Agency having jurisdiction at least 2 days prior to finish.
INSPECTION BY MUNICIPALITY

FINAL INSPECTION
All erosion control measures removed and grass established.
Call for inspection from the appropriate Municipal Agency having jurisdiction at least 2 days prior to finish.

CODE 753 :

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE ALL BURIED UTILITIES AND INSURE THAT INTERFERENCES WITH THE PROPOSED STORMWATER SYSTEM DO NOT EXIST.

811 *Know what's below. Call before you dig.*

PROJECT NOTES:

1. OWNER & MAILING ADDRESS:
   SUZANNE WAHRHAFTIG
   14 WILDWOOD CIRCLE
   MAMARONECK, NY 10538

2. PROJECT SITE ADDRESS:
   14 WILDWOOD CIRCLE
   MAMARONECK, NY 10538

3. SURVEY BOUNDARY & TOPOGRAPHY INFORMATION FROM MAP PREPARED BY:
   ARISTOTLE BOURNAZOS- 20 CEDAR STREET, NEW ROCHELLE, NY.

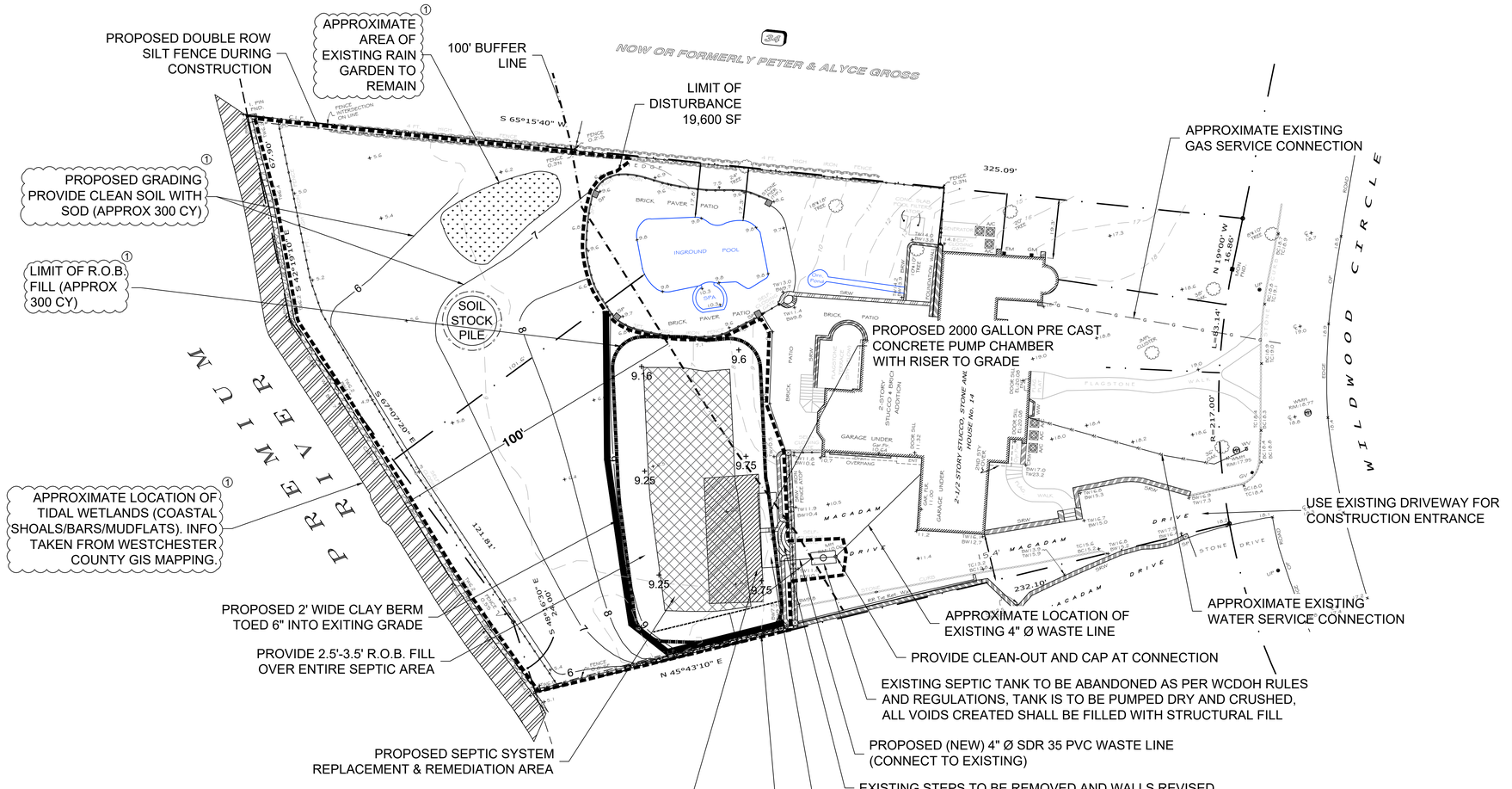
4. TAX MAP INFORMATION:
   SHEET 5 BLOCK 7 LOT 66
   TOTAL AREA OF PARCEL = 0.9361 ACRES

5. WATERSHED BASIN:
   COASTAL LONG ISLAND SOUND BASIN

6. USDA SOIL TYPES IN OWTS AREA:
   UiC - URBAN LAND - CHARLTON CHATFIELD COMPLEX, ROLLING, VERY ROCKY

7. LIMIT OF DISTURBANCE = 20,000 SF

8. ESTIMATED START DATE: 12/01/2019
   ESTIMATED FINISH DATE: 05/01/2019



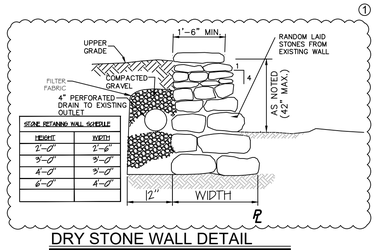
PROPOSED SITE PLAN
SCALE: 1" =30'

LEGEND

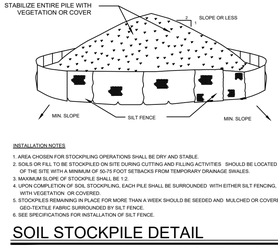
- EXISTING PROPERTY LINE
- EXISTING 10' CONTOUR LINE
- EXISTING 2' CONTOUR LINE
- PROPOSED CONTOUR LINE
- ZONING SETBACK LINE
- LIMIT OF DISTURBANCE
- WETLAND WATERCOURSE SETBACK
- GAS SERVICE CONNECTION
- WATER SERVICE CONNECTION
- PROPOSED SILT FENCE

ZONING TABLE R-2A DISTRICT			
LOT	**MINIMUM**	**EXISTING**	**PROPOSED**
AREA	**10,000 SF**	**40,777 SF**	**NO CHANGE**
FRONTAGE	**85'**	**100'**	**NO CHANGE**
WIDTH	**85'**	**135'**	**NO CHANGE**
DEPTH	**100'**	**278.6'**	**NO CHANGE**
YARDS			
FRONT	**30'**	**55.1'**	**NO CHANGE**
SIDE	**10'**	**15.4'**	**NO CHANGE**
SIDE	**10'**	**18.6'**	**NO CHANGE**
TWO SIDES	**25'**	**34'**	**NO CHANGE**
REAR	**25'**	**124'**	**NO CHANGE**

R-10 DISTRICT - TOTAL LOT AREA = 0.9361 ACRES / 40,777 SF			
COVERAGE	**MAXIMUM**	**EXISTING**	**PROPOSED**
LOT COVERAGE	**14,272 SF**	**+/- 13,500 SF**	**NO CHANGE**
LOT COVERAGE	**35%**	**33.1%**	**NO CHANGE**

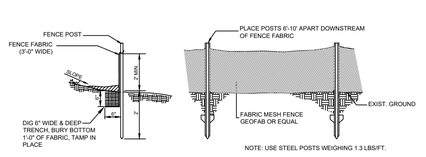


DRY STONE WALL DETAIL
SCALE : NOT TO SCALE



INSTALLATION NOTES
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. SOILS OR FILL TO BE STOCKPILED ON SITE DURING CUTTING AND FILLING ACTIVITIES SHOULD BE LOCATED ON LEVEL PORTIONS OF THE SITE WITH A MINIMUM OF 50-75 FOOT SETBACKS FROM TEMPORARY DRAINAGE SWALES.
3. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
4. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
5. STOCKPILES REMAINING IN PLACE FOR MORE THAN A WEEK SHOULD BE SEEDED AND MULCHED OR COVERED WITH GEO-TEXTILE FABRIC SURROUNDED BY SILT FENCE.
6. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.

SOIL STOCKPILE DETAIL
SCALE : NOT TO SCALE

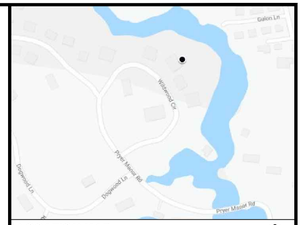


NOTE:
AT THE COMPLETION OF THE PROJECT AND AFTER SOIL STABILIZATION AND VEGETATIVE GROWTH HAVE BEEN ASSURED, THE SILT FENCE MUST BE COMPLETELY REMOVED AND THE EMBEDMENT TRENCH RESTORED TO A NATURAL CONDITION.

SILT FENCE DETAIL
SCALE : NOT TO SCALE

"APPROVED BY RESOLUTION OF THE PLANNING BOARD DATED _____"

APPROVED BY TOWN ENGINEER _____ DATE _____



LOCATION MAP NORTH

DO NOT SCALE DRAWINGS

No.	DESCRIPTION	DATE
1	PLNG. BD./STAFF COMMENTS	12-19-2019

- REVISIONS -

EROSION CONTROL AND GRADING PLAN FOR THE NEW SEPTIC SYSTEM

WAHRHAFTIG RESIDENCE

14 WILDWOOD CIRCLE
LARCHMONT
NEW YORK 10538

SHEET: 5
BLOCK: 7
LOT: 66

Benedict A. Salanitro,P.E., PC
CIVIL ENGINEER
609 BROOK STREET
Mamaroneck, New York 10543

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IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER ANY ITEM ON THIS DRAWING AND/OR RELATED SPECIFICATION. ALL ALTERATIONS MUST BE MADE IN COMPLIANCE WITH THE NEW YORK STATE EDUCATION LAW. THE PROFESSIONAL ENGINEER WHOSE SEAL APPEARS HEREON ASSUMES NO RESPONSIBILITY FOR ANY SUCH ALTERATION OR RE-USE WITHOUT HIS CONSENT.

PROJECT No : 111219
DATE : 11/12/19
SCALE : AS.NOTED
DRAWN BY : V. S.
CHECKED BY : B. S.

SHEET No
ER-1

617.20
Appendix B
Short Environmental Assessment Form

Instructions for Completing

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

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

Part 1 - Project and Sponsor Information
14 Wildwood Circle

Name of Action or Project:
14 Wildwood Circle- Septic Sytem upgrades

Project Location (describe, and attach a location map):
14 Wildwood Circle

Brief Description of Proposed Action:
Replace existing septic system with new sytem at higher elevation. Import fill material and re-grading work.

Name of Applicant or Sponsor:	Telephone: (917) 287-5064
Suzanne Wahrhaftig	E-Mail: sue.wahrhaftig@icloud.com

Address:
14 Wildwood Circle

City/PO:	State:	Zip Code:
Larchmont New York 10538	NY	10538

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

3.a. Total acreage of the site of the proposed action? 0.9361 acres
b. Total acreage to be physically disturbed? 0.40 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.9361 acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
☐ Forest ☐ Agriculture ☑ Aquatic ☐ Other (specify): _____
☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	☐	☑	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?	NO	YES	
If Yes, identify: Premium River	☐	☑	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	☑	☐	
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☑	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☑	☐	
9. Does the proposed action meet or exceed the state energy code requirements?	NO	YES	
If the proposed action will exceed requirements, describe design features and technologies:	☐	☑	
10. Will the proposed action connect to an existing public/private water supply?	NO	YES	
If No, describe method for providing potable water:	☑	☐	
11. Will the proposed action connect to existing wastewater utilities?	NO	YES	
If No, describe method for providing wastewater treatment:	☑	☐	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
	☑	☐	
b. Is the proposed action located in an archeological sensitive area?	☐	☐	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
	☐	☑	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐	
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres:			

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

☑ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional
☑ Wetland ☐ Urban ☑ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☑	☐
16. Is the project site located in the 100 year flood plain?	☐	☑
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☑	☐
If Yes, a. Will storm water discharges flow to adjacent properties? ☑ NO ☐ YES		
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? ☐ NO ☑ YES		
If Yes, briefly describe: overland flows into Premium River		

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

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

Applicant/sponsor name: Benedict Salanitro Date: 12/16/19

Signature: _____

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

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

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☐	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☐	☐

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

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

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

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

PRINT

Benedict A. Salanitro, P.E., P.C.

Civil Engineer
609 Brook Street
Mamaroneck, New York 10543

bsalanitro@aol.com **Telephone (914) 760-5125**

19 December 2019

Mr. Anthony Oliveri, P.E.
Dolph Rotfeld Engineering; Division of AI Engineers, Inc., P.C.
570 Taxter Road, Suite 300
Elmsford, NY 10523

Re: **14 Wildwood Circle- FEMA review**

I have reviewed flood storage displacement and capacity concerns as it relates to the proposed fill required for the proposed new septic system which is located adjacent to Premium River. The area of the proposed work is located in a FEMA designated AE Zone with Base Flood Elevation (BFE) of +12' referenced to NAVD 88 vertical datum based on Flood Insurance Rate Map (FIRM) panel 36119C0342F dated September 28, 2007.

Flood storage displacement and capacity issues are typically of concern for FEMA designated floodways where fill and encroachment in limited boundaries can cause an increase in water-surface elevations on adjacent properties. Regulatory floodways are typically not delineated in coastal areas ("Guidance for Flood Risk Analysis and Mapping", FEMA, November 2016, pg. 1) and the site is not designated in or near a regulatory floodway based on the above referenced FIRM map.

It is my professional opinion that flood storage capacity is not an issue in coastal flood zones. Since the property location is in the coastal flood zone (Premium River drains to the Long Island Sound), no appreciable effect on flood elevation is anticipated from the proposed fill and site improvements. The entire harbor and Long Island Sound are components of the coastal flood zone and the volume displaced within the septic fill and re-grading area will be accommodated in open water areas of Long Island Sound, which covers 1300 square miles and is estimated to be 18 trillion gallons of water.

My opinion and experience are further based on the "I-95 New Haven Harbor Crossing, Quinnipiac River Bridge, Environmental Impact Statement, Vol. 2", 1999, pg. 4-127. Impacts to flood storage capacity by filling adjacent to Long Island Sound as it relates to improvements to the Interstate 95 highway corridor were studied extensively and determined to be negligible as further detailed in that document.

Based on the above, I concludes that flood storage capacity and increase in water surface elevation as it relates to fill in the flood zone is not a concern for coastal areas in general, and specifically not for this site as it is not in a regulatory floodway and it is not anticipated to increase the water surface elevation of the base flood by more than 1 foot.

Please do not hesitate to contact the undersigned with any questions or comments.

Very truly yours,

Benedict Salanitro

Benedict A. Salanitro, P.E., P.C.
Civil Engineer

Benedict A. Salanitro, P.E., P.C.

Civil Engineer
609 Brook Street
Mamaroneck, New York 10543

Telephone (914) 760-5125

18 December 2019

Town of Mamaroneck
Chairman and Members of the Planning Board
Town Hall
Mamaroneck, New York 10543

RE: Wetlands & Watercourse Permit
14 Wildwood Circle

As the Planning Board is aware, the owners of 14 Wildwood Circle have applied for a Wetlands and Watercourses Permit in connection with installation of a new septic system, requiring grade changes with the 100-foot wetland buffer of the Premium River. The project primarily deals with land disturbing activities to raise a portion of the rear yard to accommodate the new septic system and requirements for its' installation and separation from existing groundwater for the existing single-family residential dwelling within the wetland buffer. The rear of the property is within the 100-year flood plain and the buffer since the Premium River is located to the rear of the property.

Section 114-7 subsection D of the Wetlands and Watercourses legislation speaks to the standards to be considered by the Planning Board in their consideration of a permit application. The following information is intended to address the standards to be considered:

1. Reports from other Commissions and Agencies:
   The Town's Coastal Zone Management Commission will review this project and is anticipated will issue the Planning Board a letter of consistency with the policies of the Local Waterfront Revitalization Program.

   A permit will be required for soil erosion and sediment control and drainage improvements, since the project involves land disturbance activities. The engineering plans reflecting the improvements has been provided to the Town Officials for their review and approval once the Planning Board makes a determination on the application before it.

2. Environmental Impact of the Project/Alternatives to the Project/ Impact upon Wetland Function:

   The project is consistent with the policies of the LWRP and there are no wetland vegetation on the property or Natural River banks to preserve. The project proposes to install a new septic system to replace an existing failed septic system.
   There are no alternatives to the proposed action that would provide the needed improvements as proposed by this project.

Wetland function will not be impaired since no natural or other wetland vegetation exists on the property. There are no downstream impacts since the property will continue to drain, overland, to the Premium River, with no changes in the amount of impervious cover.

3. Availability of Preferable Alternate Locations on the Subject Parcel:
   Since this project is specific to the construction of a septic system replacement this standard does not apply since there is no alternate location to meet the objectives. There are no feasible public sewers nearby.

4. Availability of Further Technical Improvements or Safeguards for the Action:
   The purpose of this project is to provide improvements to an existing single family dwelling by removing the failed septic system and install a new septic system that will serve the current home. None of the proposed activities of this project will have a negative impact upon the watershed (Premium River) therefore permanent protective safeguards are not necessary, outside of the proposed improvements to grading, which are permanent and will make a positive impact. During actual construction of the project temporary safeguards will be in place to prevent erosion of sediment onto the surrounding areas and water bodies and to protect the areas outside of the disturbed areas.

5. Further Avoidance of Reduction of Wetland or Watercourse's Natural Capacity to Support Biological Life, Prevent Flooding and Control Sedimentation, and Provide Recreation and Open Space:

   None of the impacts discussed in this section of the legislation will occur as a result of this project. Wetland function will not be impacted, since there is no wetland vegetation being impacted, erosion controls will be in place, and the proposed improvements will be beneficial to the overall water quality and quantity being generated by the single family dwelling.

6. Extent of Public or Private Benefit Derived from the Project:

   The benefits of the project have been described at length. There will be no degradation of wetlands, rather there is proposed improvements to the water quality with the improved septic system on the project site. There will also be no impairment or endangerment to the public health, safety or welfare.



Benedict A. Salanitro, P.E., P.C.
Civil Engineer

January 16, 2020

Town of Mamaroneck Town Hall
740 West Boston Post Road
Mamaroneck, NY 10543

Attention: Ms. Elizabeth Aitchison
Environmental Planner
epaul@townofmamaroneck.org

Reference: Beaumere, LLC
Premises: 220 Hommocks Road, Town of Mamaroneck
Tax Identification: Section 4, Block 16, Lot 1
LWRP Consistency Determination

Dear Ms. Aitchison:

On behalf of Beaumere, LLC, the following documents are submitted for review by the Coastal Zone Management Commission for a consistency determination with the New York State approved Local Waterfront Revitalization Program of the Town of Mamaroneck and the Village of Larchmont:

1. Completed and signed Coastal Assessment Form and Attached Narrative
2. Site Plan (Drawing ER-1) prepared by Benedict Salanitro, PE, PC, dated 12-19-2019;
3. Landscape Architecture Drawings (Drawings L-001, L-002, L-100, L-400, L-401, and L-900) prepared by SCAPE dated 12-18-2019;
4. Flood Zone Compliance Review Letter prepared by RACE Coastal Engineers dated 12-20-2019.

This package is also submitted electronically. It is anticipated that this information is acceptable. Thank you in advance for your attention and we look forward to the CZMC Meeting on January 27, 2020.

Very truly yours,



Tim DeBartolomeo, PE

Town of Mamaroneck - Village of Larchmont
Coastal Assessment Form (CAF)

Applicants, or the appropriate municipal agency, shall complete this Coastal Assessment Form (CAF) for proposed actions which are subject to Local Consistency Review (see Waterfront Revitalization Law §§234-1 through 234-5 in the Code of the Town of Mamaroneck and §§292-1 through 292-4 in the Code of the Village of Larchmont). This assessment is intended to supplement other information used by the Bi-Municipal Coastal Zone Management Commission in making a determination of consistency with the Town of Mamaroneck and Village of Larchmont Local Waterfront Revitalization Program.

Upon completion of this form, it should be submitted as part of a complete application package for review. If assistance or further information is required for Town of Mamaroneck matters, please contact the Town of Mamaroneck Environmental Planner at (914) 381-7845. For Village of Larchmont matters, please contact the Village of Larchmont Building Inspector at (914) 834-6210.

PLEASE PRINT OR TYPE ALL ANSWERS.

A. GENERAL INFORMATION

Will the proposed action be undertaken by a municipal agency? Yes [ ] No [X]

If yes, please list agency or agencies and contact person(s): _____

If no, please complete the applicant information:

Name of Applicant: Beaumere, LLC

Street Address: 22 Walnut Avenue

City, State, Zip: Larchmont, NY 10538

Phone: 212-478-0926 Fax: _____ Email: bryan.martin@deshaw.com

Location and ownership of property for which action is proposed:

Section: 4 Block: 16 Lot: 1

Owner of Property: Beaumere, LLC

Street Address: 22 Walnut Avenue

City, State, Zip: Larchmont, NY 10538

Phone: 212-478-0926 Fax: _____ Email: bryan.martin@deshaw.com

Size of property (square feet): 175,460 Is the property now developed? Yes [x] No [ ]

Will project require a zoning variance? Yes [ ] No [x]

If yes, briefly describe: _____

Describe any unique/unusual landforms on the project site (rock outcroppings, swales, etc.):
See Attachment A

Percentage of site which contains slopes of 25% or greater: _____

Are there streams, lakes, ponds or wetlands existing within or contiguous to the project area?
If so, describe (name, size, characteristics): See Attachment A

Will the action require approval by a state or federal agency? Yes [X] No [ ]
If yes, specify which state or federal agency and attach a copy of pending application and any relevant information and/or documentation to this form: NYS DEC, NYS DOS, NYS OGS & USACE

B. DESCRIPTION OF SITE AND PROPOSED ACTION

Provide a written description of the nature and the extent of the proposed action. Attach plans or additional information as necessary and/or required by application procedures.

See Attachment A

C. COASTAL ASSESSMENT

Check either "Yes" or "No" for each of the following questions:

1. Will the proposed action be located in, or contiguous to, or have a **potentially adverse effect** upon any of the following designated resource areas?

		Yes	No	Maybe
a.	Significant fish or wildlife habitat or designated critical environmental area	[ ]	[x]	[ ]
b.	Scenic resources of local significance	[ ]	[x]	[ ]
c.	Natural protective features in an erosion hazard area	[ ]	[x]	[ ]

NOTE: If the answer to any of the above questions is "Yes", please explain in Section D any measures which will be undertaken to mitigate the adverse effects.

2. Will the proposed action have a **significant effect** upon:

		Yes	No	Maybe
a.	Commercial or recreational use of fish and wildlife resources	[ ]	[x]	[ ]
b.	Scenic quality of the coastal environment	[x]	[ ]	[ ]
c.	Development of future, or existing water dependent uses	[ ]	[x]	[ ]
d.	Land or water uses within a small harbor area	[ ]	[x]	[ ]
e.	Stability of the shoreline	[x]	[ ]	[ ]
f.	Surface or groundwater quality	[x]	[ ]	[ ]
g.	Existing or potential public recreation opportunities	[ ]	[x]	[ ]
h.	Structures, sites or districts of historic, archeological or cultural significance to the local area, state or nation	[ ]	[x]	[ ]

3. Will the proposed action **involve or result in** any of the following:

		Yes	No	Maybe
a.	Physical alteration of land along the shoreline, land underwater or coastal waters	[x]	[ ]	[ ]
b.	Expansion of existing public services or infrastructure in or near undeveloped or low density areas of the coastal area?	[ ]	[x]	[ ]
c.	Filling, dredging, excavation or mining in coastal waters	[ ]	[x]	[ ]
d.	Reduction of existing or potential public access to or along the shore	[ ]	[x]	[ ]
e.	Development within a designated flood or erosion hazard area	[ ]	[x]	[ ]
f.	Development of a natural feature that protects against flooding or erosion	[ ]	[x]	[ ]
g.	Replacement of eroded sand or soil	[ ]	[x]	[ ]
h.	Construction or reconstruction of erosion protective structures	[x]	[ ]	[ ]
i.	Any change in surface or groundwater quality	[x]	[ ]	[ ]
j.	Removal of trees from the site	[x]	[ ]	[ ]

4. Project details:

		Yes	No	Maybe
a.	If the project is to be located adjacent to the shore:			
	1. Does the project require a waterfront site in order to function N/A	[ ]	[ ]	[ ]
	2. Will water-related recreation be provided	[ ]	[x]	[ ]
	3. Will public access to shore or state owned underwater lands be provided	[ ]	[x]	[ ]
	4. Will it replace a recreational or maritime use	[ ]	[x]	[ ]
	5. Do essential public services and facilities presently exist at or near the site	[ ]	[x]	[ ]

6. Is the site located near a flood prone area	[x]	[ ]	[ ]
7. Is the site located in an area of high erosion	[x]	[ ]	[ ]
b. Is the site presently used by the community as an open space or recreation area	[ ]	[x]	[ ]
c. Does the project site offer or include scenic views/vistas known to be important to the community or the state	[x]	[ ]	[ ]
d. Will the surface area of any waterways or wetland areas be increased or decreased by the project	[x]	[ ]	[ ]
e. Will the project involve any waste discharges into coastal waters	[ ]	[x]	[ ]
f. Does the project involve discharge of toxins, hazardous substances or other pollutants into coastal waters	[ ]	[x]	[ ]
g. Will the project affect any area designated as a tidal or freshwater wetland	[ ]	[x]	[ ]
h. Will the project result in an alteration of drainage flow patterns or surface water runoff on or from the site	[ ]	[x]	[ ]
i. Will best management practices (BMPs) be utilized to control stormwater runoff	[x]	[ ]	[ ]
j. Will any aspect of the proposed project result in emissions which exceed federal or state air quality standards or generate significant amounts of nitrates or sulfates	[ ]	[x]	[ ]

Please explain any of the above answers that may need further clarification in Section D.

D. COMMENTS AND ADDITIONAL INFORMATION: (continue on back if necessary)

See Attachment A

D. COMMENTS AND ADDITIONAL INFORMATION: (continued)

I certify that I am the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.

Date: January 16 20 20 _____

Signature of Applicant

Prepared by: (if different than the applicant)

Name and Title: Tim DeBartolomeo, Owner's Representative

Agency/Company: _____

Street Address: 403 Nonopoge Road

City, State, Zip: Fairfield, CT 06825

Phone: 203-556-6136 Fax: _____ Email: timd0423@gmail.com

I certify that I prepared this Coastal Assessment Form for the above described applicant and that the information contained on this form and on the attached survey/site plan(s) is(are) accurate to the best of my knowledge.

Date: January 16 20 20 _____

Signature of Preparer

Attachment A
Coastal Assessment Form

For: 220 Hommocks Road
Town of Mamaroneck, Village of Larchmont

A. GENERAL INFORMATION

Describe any unique / unusual landforms on the project site (rock outcroppings, swales, etc.):

The site was developed in the early 1900's as a residential use property. Over time this development included construction of seawalls and a dock, a single-family dwelling, detached garage, swimming pool and poolhouse, and other ancillary structures on the property.

Existing conditions indicate rock outcroppings on the southern half of the approximately 4 acre parcel. These outcroppings are visible along the southern shoreline and extend close to the dwelling which is located where grade reaches approximately elevation +24 feet (NAVD-1988).

Exploratory excavations performed as part of the Pre-Design effort revealed buried weathered rock outcrops along the western shoreline at lower elevations (between mean high water and elevation +10 feet). It is believed that these rock outcrops were exposed along the pre-developed shoreline and buried as the property was developed.

The pre-developed land mass that makes up approximately half of the property meets the textbook definition of a hommock (variation of hummock): *an elevated tract of land rising above the general level of a marshy region.* A primary objective of the Applicant is to restore the natural character of the property while maintaining its current use as a residential property that provides access to the waters of Larchmont Harbor and also maintaining protection from coastal flooding.

The restoration of its natural character includes lowering and removing some of the seawalls, exposing the natural rock that once was the shoreline, and restoring tidal marsh that was once part of the property. Maintaining the current use and protection from coastal flooding includes activities such as repairing the existing dwelling and garage, relocating the swimming pool, restoring the tennis court, filling the lowest areas of the property.

B. DESCRIPTION OF SITE AND PROPOSED ACTION

The project has been planned and designed to enhance the natural function of the site, expand habitat for plants and wildlife, improve coastal resiliency, account for storm and sea level impacts, and restore the scenic view of the site in Larchmont Harbor.

The Applicant recently purchased the property in July of 2019. With the purchase, the Applicant set a project goal to create a restoration and rehabilitation plan for the site that is a model for resilient design. The project features include reduction of vertical seawalls, creation of new tidal wetlands, improved access and connectivity to the water.

Upland work consists of making improvements to the existing single-family dwelling and detached garage, relocating the swimming pool and pool house, replacing the septic system, replacing the another accessory building, installing a new tennis court, and filling low lying areas of the site to reduce nuisance flooding.

Seawalls, which have been documented on site since at least 1925 through aerial photography and reported to 1916 based on a historic post card image, that are to remain will be restored and rehabilitated to improve their stability and resiliency during storms, without increasing the height or waterward encroachment. The rehabilitation will extend the design life for at least 30 years, with maintenance, in accordance with State requirements for flood and erosion control structures. Key resiliency components include:

Tidal Marsh Creation: The existing seawall along the north end of the property will be removed and replaced with a tidal terrace. This area abuts the Little Harbor Sound (aka East Creek) and the Hommocks Salt Marsh Complex, including intertidal marsh to the immediate north neighboring property. Approximately 3,057 square feet of intertidal and high marsh will be created with the planting of wetland grass (spartina alterniflora and spartina patens) along with the creation of 972 square feet of mudflat. These new tidal wetlands will be created from a loss of the existing useable upland lawn from the Applicant. With this, the habitat is expanded in a contiguous fashion for plants, birds, fish, and other wildlife. It is important to note that the Applicant will be giving up existing useable upland lawn in order to expand the existing habitat onto his property in a contiguous fashion for plants, birds, fish, and other wildlife.

Site Drainage & Hydrodynamic Energy Dissipation Improvements: Site drainage will be improved both during typical and flooding conditions, as a more natural inundation and outflow will occur across the site. This will be accomplished by selective lowering and removal of the existing seawalls. The existing seawall encloses the lawn along the property. The seawall includes an approximately 3-foot-high parapet above the lawn elevation which deflects incoming flood water but retains flood water on the lawn when over topped. The tidal terrace will prevent retention of flood water on the lawn and allow a more natural flow patterns during extreme flood events.

The seawall will be removed and a cove will be constructed along the southwest area of the site, in the area of temporary stabilization work of approved by DEC emergency authorization Permit ID #3-5532-00419/00001/00002&/0000. This cove will replace the seawall with a section of riprap revetment, stone blocks, and regraded slope. As with the tidal terrace, the cove is designed for stability and resilience against storm events. The cove is designed to minimize wave runup and wave impacts by improved dissipation of hydrodynamic (wave) energies. The cove is incorporated into the site design and provides a more natural area for drainage patterns and flooding, including during extreme flood events. The cove also enhances the site character and removes barriers to the waterfront.

In addition to the resiliency components noted above, the Applicant will also restore the existing fixed pier, floating dock, and historic gazebo for access to water-dependent activities. These features have been considered to allow recreational boating for multiple users (as the site includes existing apartments in the detached garage onsite). The pier and gazebo are designed for resiliency and compatible with being located in the flood zone. The layout of the pier and gazebo has been designed to avoid waterward encroachment from the existing structure and historic footprint of the fixed pier. Views of the gazebo are considered from both onsite and offsite. The gazebo was a historic landmark on the site, dating back reportedly to at least 1916, and its restoration is consistent with the character and history of the neighborhood and Larchmont Harbor. The Applicant is coordinating with the Town and neighbors on the proposed work to arrive at a project that is beneficial to all parties.

Combined these features will provide for a site that is more resilient, improves flooding and drainage conditions, is more amenable to nature and habitat creation, and is more connected to the waterfront.

D. COMMENTS AND ADDITIONAL INFORMATION:

The following comments are provided for those items in Section C that require additional information:

2.b. The proposed activities will enhance the scenic quality of the coastal environment by restoring the tidal marsh and rocky shoreline. Restoration of the historic gazebo also is part of the scenic character of Larchmont Harbor.

2.e. The existing seawalls are in a condition of disrepair and require reconstruction for continued stability of the shoreline. Lowering the existing seawalls provides for improved stability and removing portions of the seawall for tidal wetland creation offers long-term stability of the shoreline in these locations.

2.f. Best management practices for stormwater runoff will be utilized thus improving the surface and groundwater quality.

3.a. Physical alteration of the shoreline that includes lowering and removing of seawalls and creation of tidal wetland will provide a beneficial environmental effect by reducing wave reflection and increasing fish and wildlife habitat. Filling the lowest areas of the site in a manner that does not increase the Base Flood Elevation will allow for reconstruction of the onsite structures to be flood zone compliant.

3.h. Reconstruction of seawalls will extend the service life of these structures that offer protection from erosion.

3.i. Best management practices for stormwater runoff will be utilized thus improving the surface and groundwater quality.

3.j. Selective tree removal is proposed utilizing recommendations of the Applicant's Arborist.

4.a.1. There is no change in the use of the property and therefore this question is not applicable.

4.a.6. The site is located in the Special Flood Hazard Area (SFHA) as designated by FEMA. All work proposed will be done in compliance with FEMA guidelines for construction within the SFHA.

4.a.7. Because the site has a high exposure to wave action along its southern face, it is considered in an area of high erosion. However, it is not considered a natural source of sand such as found in a coastal bluff. The existing seawalls will be restored along this area to protect against erosion.

4.c. The proposed activities will enhance the scenic quality of the coastal environment by restoring the tidal marsh and rocky shoreline. Restoration of the historic gazebo also is part of the scenic character of Larchmont Harbor.

4.d. The surface area of the adjacent waterway will be increased by creation of the cove and tidal wetland areas.

December 20, 2019

Chairman Ralph Engel and Members of the Planning Board
Town of Mamaroneck Town Hall
740 West Boston Post Road
Mamaroneck, NY 10543

Attention: Chairman Engle

Reference: Flood Zone Compliance Review
220 Hommocks Road
RACE Project No. 2019053

Dear Chairman Engel and Members of the Planning Board:

RACE Coastal Engineering ("RACE"), upon your request, has reviewed flood storage displacement and capacity concerns as it relates to the proposed fill at 220 Hommocks Road, Larchmont, NY. This letter expands upon our review of the Town of Mamaroneck Code, section 110-17,C and follows our previously submitted letter dated November 26, 2019 regarding Flood Zone Compliance Review.

The proposed work includes fill within the lower lawn of the property, as indicated by the proposed grading plans submitted for approval. Areas of excavation are also proposed at the north and south of the property for the tidal terrace and the cove area. A replacement pool and pool house, dock, and tennis court are proposed.

The site, as well as the adjacent properties, are located in the Special Flood Hazard Area (SFHA) on FEMA Flood Insurance Rate Map (FIRM) No. 36119C0361F effective September 28, 2007. The flood zone designations on the existing site and adjacent properties include a Zone VE with a base flood elevation (BFE) of +17 feet, and +15 feet (NAVD 88), a Zone AE with a BFE of +13 feet and +12 feet (NAVD 88) and a shaded Zone X. The Zone VE designation represents a Coastal High Hazard Area.

Among other requirements for work within the floodplain, The Town of Mamaroneck Code Section 110-17 Encroachments applies to this proposed project. Section 110-17, A. states:

> *Within Zones A1-A30 and AE, on streams without a regulatory floodway, no new construction, substantial improvements or other development (including fill) shall be permitted unless:*
>
> *(1)*
>
> *The applicant demonstrates that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any location; or*
>
> *(2)*
>
> *The Town of Mamaroneck agrees to apply to the Federal Emergency Management Agency (FEMA) for a conditional FIRM revision, FEMA approval is received and the applicant provides all necessary*

> *data, analyses and mapping and reimburses the Town of Mamaroneck for all fees and other costs in relation to the application. The applicant must also provide all data, analyses and mapping and reimburse the Town of Mamaroneck for all costs related to the final map revision*

Section 110-17, B applies to streams with a regulatory floodway shown on the Flood Insurance Rate Maps and does not apply to this site as there are no floodways along the proposed work area. Section 110-17, C states:

> *Whenever any portion of a floodplain is authorized for development, volume of space occupied by the authorized fill structure below the base flood elevation shall be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the base flood elevation at or adjacent to the development site. All such excavations shall be constructed to drain freely to the watercourse. No area below the waterline of a pond or other body of water can be credited as a compensating excavation.*

In accordance with this requirement, RACE has reviewed the existing flood risk as mapped by FEMA. RACE has performed calculations of wave runup and wave heights under the proposed conditions.

Flood storage displacement and capacity issues are typically of concern for FEMA designated floodways and non-tidal floodplain areas where fill and encroachment in limited boundaries can cause an increase in water-surface elevations on adjacent properties. Regulatory floodways are typically not delineated in coastal areas ("Guidance for Flood Risk Analysis and Mapping", FEMA, November 2016, pg. 1) and the site is not designated in or near a regulatory floodway based on the above referenced FIRM map.

In regards to Section 110-17, A; the project includes Zones AE 12 and AE 13 along Little Harbor Sound, also known as East Creek on some U.S. Geological Survey maps. However, the creek or stream in the area is tidal and directly influenced by Long Island Sound. Furthermore, our analysis indicates that the water level of the base flood elevation will not be increased by more than one foot.

In regards to Section 110-17, C; the analysis indicates that flooding will not increase due to the proposed structural changes or net fill. The flooding in the area is predominantly influenced by tidal surge and wave height. Wave height is over 3 feet in the VE zones by the FEMA mapping standards. But waves in the AE zone may also occur at heights under 3 feet. Our analysis indicates that the wave heights are actually reduced and as a result there is no increase in flooding. Therefore, the proposed conditions balance both the excavation and fill to be hydraulically equivalent in our opinion.

It is our professional opinion, based on more than 20 years of professional floodplain mapping and management experience, that flood storage capacity is not an issue in coastal flood zones. Since the 220 Hommocks location is in the coastal flood zone, no appreciable effect on flood elevation is anticipated from the proposed fill and site improvements. The entire harbor and Long Island Sound are components of the coastal flood zone and the volume potentially displaced by fill will be accommodated in open water areas of Long Island Sound, which covers 1300 square miles and is estimated to be 18 trillion gallons of water.

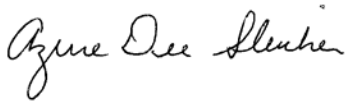
Our professional opinion and experience are further based on the "I-95 New Haven Harbor Crossing, Quinnipiac River Bridge, Environmental Impact Statement, Vol. 2", 1999, pg. 4-127. Impacts to flood storage capacity by filling adjacent to Long Island Sound as it relates to improvements to the Interstate 95 highway corridor were studied extensively and determined to be negligible as further detailed in that document.

Based on the above, **RACE** concludes that flood storage capacity and increase in water surface elevation as it relates to fill in the flood zone is not a concern for coastal areas in general, and specifically not for the 220 Hommocks Road site.

Please do not hesitate to contact the undersigned with any questions or comments.

Very truly yours,

RACE COASTAL ENGINEERING



Azure Dee Sleicher, PE
Vice President - Coastal Engineering

Stormwater Sizing (Water Quality) 220 Hommocks Road

Description	SF	Ft/Acre	Acres
Disturbance(Impervious)	12,055.00	43,560	0.28

Predevelopment

Description	SF	Ft/Acre	Acres	CN
Total Area	12,055.00	43,560	0.28	
House	0.00	43,560	0.00	98
driveway	0.00	43,560	0.00	98
steps/walks	0.00	43,560	0.00	98
	0.00	43,560	0.00	0
Grass	12,055.00	43,560	0.28	72
		Weghted CN		*72*
TOTAL IMPERVIOUS AREAS		***0.00***		

Post Development

Description	SF	Ft/Acre	Acres	CN
Total Area	12,055.00	43,560	0.28	
Tennis Ct /House	7,522.00	43,560	0.17	98
Pool / Spa	2,119.00	43,560	0.05	98
patio / walks	2,414.00	43,560	0.06	98
		43,560	0.00	98
Grass	0.00	43,560	0.00	72
			Weighted CN	*98*
TOTAL IMPERVIOUS AREAS	***12,055.00***			

EXISTING IMPERVIOUS AREAS: **0,000.00 SF**
NET INCREASE IN IMPERVIOUS AREA: **12055.00 SF**

Water Quality Volume (as per Chapter 4 of the NYSDEC SWDM)

$WQ_v = [(P)(R_v)(A)]/12$

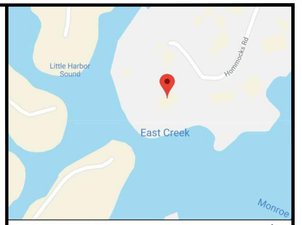
P = 1.50 Inches
R_v = 0.05+0.009(I)
R_v = 0.95
I = 100.00 %
A = 12,055.00

WQ_v = [(1.30) (0.95) (0.28)] /12
= [(1.30) (0.95) (0.28)] /12
= 0.03 Acre-ft
= 1,240.66 CF

Proposed Rain Gardens = 17,564 sf (13,173 CF)

*DATUM = NAVD88

ZONE X
ZONE AE +12
ZONE AE +13
ZONE VE +15
ZONE VE +17
TREES TO BE REMOVED (TYP.) SEE LANDSCAPE PLAN.
100' BUFFER LINE
EXPOSED ROCK FACE
STABILIZED CONSTRUCTION ENTRANCE . CONTRACTOR SHALL SWEEP AREA DAILY DURING CONSTRUCTION.
INTEGRATED STONE STEPS
EXISTING STONE OUTCROP
STONE LEDGE
TEMP. CONCRETE WASHOUT AREA
FLAG POLE
GEOTHERMAL WELLS
APPROXIMATE LIMIT OF RUBBLE
APPROX. 10' OFFSET
REINFORCED SILT FENCE WITH STRAW BALE AND FIBER ROLL
16' X 50' DOCK
UNDERDRAIN (SEE DETAIL)
PIER REMNANTS
4"ø SCHEDULE 40 DRAIN
RECONSTRUCTED GAZEBO
PROPOSED RAINGARDEN (BY OTHERS)
EXISTING 2-STORY GARAGE
DECIDUOUS TREE W/ TRUNK DIA. (TYP.)
A/C (TYP.)
STONE PATIO
EXISTING 2-STORY RESIDENCE
TENNIS COURT
APPROX. EX. SEPTIC (TBR)
HOT TUB
MASONRY & EXISTING INTEGRATED STONE STEPS
EXISTING STONE OUTCROP
EXPOSED ROCK FACE
EXISTING STONE OUTCROP. AREA OF EXISTING SUBSURFACE ROCK LEDGE TO BE EXPOSED.
REINFORCED SILT FENCE WITH STRAW BALE AND FIBER ROLL
STONE PATIO
100' BUFFER LINE
ANTI TRACKING PAD
APPROX. LOCATION OF PROPOSED NEW SEPTIC SYSTEM (DESIGNED BY OTHERS)
SEMI-INTENSIVE GREENROOF
EXISTING ACCESSWAY
COIR LOG (FIBER ROLL/FILTER SOCK AS NEEDED
TEMPORARY SOIL STOCKPILE
MATERIAL,EQUIPMENT AND PARKING STAGING AREA
30' X 65' POOL
ARMORED SLOPE
TIDAL TERRACES
TEMPORARY SANITARY FACILITY
COVE
RIP-RAP REVETMENT
RIPRAP REVETMENT
RECONSTRUCTED MASONRY SEAWALL
1-STORY POOL HOUSE
AREA OF POTENTIAL ROCK REMOVAL
STONE STEPS
PROPOSED RAINGARDEN (BY OTHERS)
EXISTING POOL AND SURROUND TO BE REMOVED.
LANDSCAPE BOULDERS, TYP.
STONE POOL TERRACE
RECONSTRUCTED MASONRY SEAWALL
4"ø SCHEDULE 40 DRAIN
UNDERDRAIN (SEE DETAIL)
BENCHMARK AT TW 9.00
"LITTLE HARBOR SOUND"



LOCATION MAP

DO NOT SCALE DRAWINGS

No.	DESCRIPTION	DATE
1	PLNG. BD./STAFF COMMENTS	12-19-2019

- REVISIONS -

RESIDENTIAL SITE PLAN AND EROSION CONTROL PLAN

BEAUMERE, LLC

220 HOMMOCKS ROAD
LARCHMONT
NEW YORK 10538

SHEET: 4
BLOCK: 16
LOT: 1

Benedict A. Salanitro,P.E., PC
CIVIL ENGINEER
609 BROOK STREET
Mamaroneck, New York 10543

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IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER ANY ITEM ON THIS DRAWING AND/OR RELATED SPECIFICATION. ALL ALTERATIONS MUST BE MADE IN COMPLIANCE WITH THE NEW YORK STATE EDUCATION LAW. THE PROFESSIONAL ENGINEER WHOSE SEAL APPEARS HEREON ASSUMES NO RESPONSIBILITY FOR ANY SUCH ALTERATION OR RE-USE WITHOUT HIS CONSENT.

PROJECT No : 110719
DATE : 11/07/19
SCALE : AS.NOTED
DRAWN BY : V.S.
CHECKED BY : B.S.

SHEET No
ER-1

811
Know what's below.
Call before you dig.

CODE 753 : *PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE ALL BURIED UTILITIES AND INSURE THAT INTERFERENCES WITH THE PROPOSED STORMWATER SYSTEM DO NOT EXIST.*

NOTE:
TOWN OF MAMARONECK STREET OPENING PERMIT SHALL BE OBTAINED FOR ALL WORK WITHIN THE R.O.W.

NOTE:
GRADE CHANGES PROPOSED AS SHOWN

— — — 9 — — — EXISTING
——— 9 ——— PROPOSED

Site Improvements

Existing		Proposed	
Existing House	4,216 SF	Existing House	4,216 SF (No Change)
Pool	4,247 SF	Pool	6,366 SF (Hot Tub Included)
Driveway	6,794 SF	Driveway	6,794 SF (No Change)
Tennis Court	0 SF	Tennis Court/House	6,908 SF + 614 SF = 7522 SF
Patio/Walks	2,048 SF	Patio/Walks	4,462 SF
Garage	2,481 SF	Garage	2,481 SF (No Change)
Walls	1,624 LF	Walls	1,734 LF (650 LF Repaired/Replaced)
Rain Garden	0 SF	Rain Garden	17,564 SF (13,173 CF)
Tidal Planting	0 SF	Tidal Planting	3,093 SF

Net new impervious = 12,055 SF

SITE PLAN:
1"=30'

CODE AND BUILDING DATA

TOWN OF MAMARONECK
ZONING DISTRICT: R-50

	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA - SQUARE FEET	50,000	175,438	175,438
MINIMUM LOT WIDTH	150'	287'/458'	287'/458'
MINIMUM LOT DEPTH	150'	390'	390'
MINIMUM YARD DIMENSIONS PRINCIPAL BUILDING			
FRONT YARD	50'	76'	76'
ONE SIDE YARD	35'	110'	110'
BOTH SIDE YARDS	70'	456'	456'
REAR YARD	50'	177'	177'
ACCESSORY BUILDINGS			
1. TENNIS COURT/ BLDG.	5'	N/A	10'
2. POOL/ POOL HOUSE	5'	56'	27'
3. GARAGE	5'	68'	N.C.
MAXIMUM PERCENTAGE OF LOT COVERAGE (35% MAXIMUM)	61,400SF	21,944SF	32,961 SF (18.8%)
IMPERVIOUS SURFACES		21,944SF	32,961 SF (18.8%)

Rock Removal:
Rock encountered during excavation that is required to be removed for the new Work, shall be removed by blasting unless it is incidental to the excavation work. Blasting shall be performed by a licensed blasting contractor. Prior to blasting, a pre-blast review of existing structures within a radius of 200 feet shall be performed and documented. Upon completion of blasting, a post-blast review of the existing structures within a radius of 200 feet shall be performed. Any damage noted shall be repaired such that the structure is at or better than its pre-blast condition. The estimated quantity of rock removal is 100 CY

"APPROVED BY RESOLUTION OF THE PLANNING BOARD DATED _____"

APPROVED BY TOWN ENGINEER _____ DATE _____

NOTES/ DEED/ OWNERSHIP INFORMATION

220 Hommocks Road Residence

Larchmont, New York

LANDSCAPE ARCHITECT:

SCAPE LANDSCAPE ARCHITECTURE DPC

277 BROADWAY, 9th Floor
NEW YORK, NY 10007
T. 212 462 2628

CIVIL ENGINEER:

BENEDICT A. SALANITRO

609 Brook Street
Mamaroneck, New York 10543
T. 914.760.5125

COASTAL ENGINEER

RACE
COASTAL ENGINEERING

611 ACCESS ROAD
STRATFORD, CT 06615
T. 203.377.0663



2 CONTEXT MAP
SCALE: 1" = 80'-0"

0 40' 80' 160' 240'



1 CONTEXT MAP
SCALE: 1" = 400'-0"

0 200' 400' 800' 1200'

NO.	ISSUE/DESCRIPTION:	DATE:
1	SITE PLAN REVIEW	11/26/2019

PREPARED BY: SEAL:

SCAPE LANDSCAPE ARCHITECTURE DPC

277 BROADWAY, SUITE 1606
NEW YORK, NY 10007
T. 212 462 2628

PROJECT NAME:

220 HOMMOCKS ROAD RESIDENCE
LARCHMONT
NEW YORK

PROJECT NO:	1908
DATE:	11/26/19
SCALE:	AS NOTED
DRAWN BY:	SCAPE
CHECKED BY:	SCAPE

DRAWING TITLE: GENERAL

DRAWING NO. L-001

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220 Hommocks Road Residence

Larchmont, New York

LEGEND

- EXISTING CONTOUR
- EXISTING TREES
- INVASIVE TREES, TO BE REMOVED
- EXISTING STONE OUTCROP
- EXISTING WALL



1 EXISTING CONDITIONS

SCALE: 1" = 30'-0"

0 15' 30' 60' 90'

LANDSCAPE ARCHITECT:

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NO.	ISSUE/DESCRIPTION:	DATE:
1.	SITE PLAN REVIEW	11/26/2019

PREPARED BY: SEAL:

SCAPE LANDSCAPE ARCHITECTURE DPC

277 BROADWAY, SUITE 1606
NEW YORK, NY 10007
T. 212 462 2628

PROJECT NAME:

220 HOMMOCKS ROAD RESIDENCE
LARCHMONT
NEW YORK

PROJECT NO.:	1908
DATE:	11/26/19
SCALE:	AS NOTED
DRAWN BY:	SCAPE
CHECKED BY:	SCAPE

DRAWING TITLE: EXISTING CONDITIONS

DRAWING NO.: L-002

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220 Hommocks Road Residence

Larchmont, New York

LEGEND

- PROPOSED CONTOUR
- PROPOSED WALL
- CHIPSEAL PAVEMENT
- STONE PAVEMENT
- BEACH
- RIP-RAP
- STONE BOULDERS
- COIR LOG



1 SITE PLAN

SCALE: 1" = 30'-0"

0 15' 30' 60' 90'

LANDSCAPE ARCHITECT:

SCAPE LANDSCAPE ARCHITECTURE DPC

277 BROADWAY, 9th Floor
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NO.	ISSUE/DESCRIPTION:	DATE:
1	SITE PLAN REVIEW	11/26/2019

PREPARED BY: SEAL:

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277 BROADWAY, SUITE 1606
NEW YORK, NY 10007
T. 212 462 2628

PROJECT NAME:

220 HOMMOCKS ROAD RESIDENCE
LARCHMONT
NEW YORK

PROJECT NO.: 1908
DRAWING TITLE: LANDSCAPE PLAN
DATE: 11/26/19
SCALE: AS NOTED
DRAWN BY: SCAPE
DRAWING NO.: L-100
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LEGEND

- EXISTING CONTOUR
- EXISTING TREES
- INVASIVE TREES, TO BE REMOVED
- EXISTING STONE OUTCROP
- EXISTING WALL

LEGEND

- PROPOSED CONTOUR
- PROPOSED WALL
- CHIPSEAL PAVEMENT
- STONE PAVEMENT
- BEACH
- RIP-RAP
- STONE BOULDERS
- COIR LOG

1A L900	1B L900
2A L900	2B L900

LANDSCAPE PLAN

- HUMMOCK GARDEN
- COASTAL UPLAND
- MARITIME MEADOW
- RAIN GARDEN
- TIDAL TERRACE - HIGH TIDE
- TIDAL TERRACE - HIGH TIDE
- TURF LAWN



1 LANDSCAPE PLAN
SCALE: 1" = 30'-0"

0 15' 30' 60' 90'

220 Hommocks Road Residence

Larchmont, New York

LANDSCAPE ARCHITECT:
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NO.	ISSUE/DESCRIPTION:	DATE:
1	SITE PLAN REVIEW	11/26/2019

PREPARED BY: SEAL:
SCAPE LANDSCAPE ARCHITECTURE DPC
277 BROADWAY, SUITE 1606
NEW YORK, NY 10007
T. 212 462 2628

PROJECT NAME:
220 HOMMOCKS ROAD RESIDENCE
LARCHMONT
NEW YORK

PROJECT NO.: 1908
DRAWING TITLE: PLANTING PLAN
DATE: 11/26/19
SCALE: AS NOTED
DRAWN BY: SCAPE
DRAWING NO.: L-400
CHECKED BY: SCAPE

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LARCHMONT RESIDENCE - 220 HOMMOCKS ROAD

TREES						
SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
AR	ACER RUBRUM	RED MAPLE	3" CAL.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
BP	BETULA POPULIFOLIA	GRAY BIRCH	8-12" HT.	B&B	AS SHOWN	MULTI-STEM
CC	CARPINUS CARONLINIANA	AMERICAN HORNBEAM	8-12' HT.	B&B	AS SHOWN	MULTI-STEM
CO	CARYA OVATA	SHAGBARK HICKORY	2" CAL.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
CF	CORNUS FLORIDA	DOGWOOD	14' HT.	B&B	AS SHOWN	MULTI-STEM
NS	NYSSA SYLVATICA	WATER TUPELO	2" CAL.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
IO	ILEX OPACA	AMERICAN HOLLY	8' HT.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	14' HT.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
LS	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	2" CAL.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
PR	PINUS RIDIGA	PITCH PINE	6'-8' HT.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
PM	PRUNUS MARITIMA	BEACH PLUM	8' HT.	B&B	AS SHOWN	MULTI-STEM
PS	PRUNUS SEROTINA	BLACK CHERRY	14' HT.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
QA	QUERCUS ALBA	WHITE OAK	4" CAL.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
QB	QUERCUS BICOLOR	SWAMP WHITE OAK	4" CAL.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
QP	QUERCUS PALUSTRIS	PIN OAK	4" CAL.	B&B	AS SHOWN	SINGLE STRAIGHT LEADER, FULL SYMMETRICAL CROWN
SA	SASSAFRASS ALBIDUM	SASSAFRASS	1-2" CAL.	CONTAINER OR B&B	AS SHOWN	

SHRUBS						
SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
Aa	AMELANCHIER ARBOREA	SERVICEBERRY	6'-8' HEIGHT	B&B	60" O.C.	FULL PLANTS
Ab	ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA'	RED CHOKECHERRY	3 GAL. 2'-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
Ap	AESCULUS PARVIFLORA	BOTTLEBRUSH BUCKEYE	6'-8' HEIGHT	B&B	60" O.C.	FULL PLANTS
Co	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	3 GAL. 2'-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
Ca	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	3 GAL. 15-18" HEIGHT	CONT.	36" O.C.	FULL PLANTS
Fm	FOTHERGILLA MAJOR 'MT. AIRY'	WITCH-ALDER	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
Hv	HAMAMELIS VIRGINIANA	WITCHHAZEL	6'-8' HEIGHT	B&B	60" O.C.	FULL PLANTS
Hp	HYDRANGEA 'LITTLE MR. LIME'	LITTLE MR. LIME HYDRANGEA	2-4' HEIGHT	CONT.	36" O.C.	FULL PLANTS
Hq	HYDRANGEA QUERCIFOLIA	OAK LEAF HYDRANGEA	6'-8' HEIGHT	B&B	60" O.C.	FULL PLANTS
Igs	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	DIOECIOUS FEMALE, PROVIDE POLLINATOR FULL PLANTS
Igp	ILEX GLABRA 'PRETTY BOY'	PRETTY BOY INKBERRY HOLLY	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	POLLINATOR FOR ILEX GLABRA, FULL PLANTS
Ivr	ILEX VERTICILLATA 'RED SPRITE'	WINTERBERRY HOLLY	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	DIOECIOUS FEMALE, PROVIDE POLLINATOR FULL PLANTS
Jc	JUNIPERUS CHIINENSIS 'HOLLYWOOD'	HOLLYWOOD JUNIPER	6'-8' HEIGHT.	B&B	AS SHOWN	FULL PLANTS
Ivw	ILEX VERTICILLATA 'WINTER RED'	WINTERBERRY HOLLY	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	POLLINATOR FOR ILEX VERTICILLATA, FULL PLANTS
Lg	LINDERA GLAUCA VAR. SALICIFOLIA	SPICEBUSH	6'-8' HEIGHT	B&B	60" O.C.	FULL PLANTS
Mp	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	POLLINATOR FOR ILEX GLABRA, FULL PLANTS
Sc	SAMBUCUS CANADENSIS	AMERICAN ELDERBERRY	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
Rgl	RHUS GRO-LOW	GROW LOW SUMAC	3 GAL. 2-3' HEIGHT	CONT.	36" O.C.	FULL PLANTS
Vc	VACCINIUM CORYNBOSUM	HIGH-BUSH BLUEBERRY	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
Vd	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
Vn	VIBURNUM NUDUM 'WINTERTHUR'	WINTERTHUR VIBURNUM	3 GAL. 2-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS

GROUNDCOVER						
SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
ar	ACTEA RACEMOSA	BLACK COHOSH	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ai	AESCLEPSIS INCARNATA	SWAMP MILKWEED	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
aa	AGERATINA ALTISSIMA	WHITE SNAKEROOT	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
af	ATHYRIUM FILIX-FEMINA	LADY FERN	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ac	ASTER CORDIFOLIOUS	BLUE WOOD ASTER	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
bg	BOUTELOUA GRACIALIS	BLUE SIDE OATS GRAMA	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ca	CAREX APPALACHIA	APPALACHIAN SEDGE	PLUGS	CONT.	6" O.C.	FULL PLANTS
ce	CAREX EBURNEA	BRISTLE LEAF SEDGE	PLUGS	CONT.	6" O.C.	FULL PLANTS
cf	CAREX FLACCOSPERMA	BLUE WOOD SEDGE	PLUGS	CONT.	6" O.C.	FULL PLANTS
cs	CAREX PLANTAGINEA	SEERSUCKER SEDGE	PLUGS	CONT.	6" O.C.	FULL PLANTS
cp	CAREX PENNSYLVANICA	OAK SEDGE	PLUGS	CONT.	12" O.C.	FULL PLANTS
dp	DENNSTAEDTIA PUNCTILOBA	HAY SCENTED FERN	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
de	DRYOPTERIS ERYTHROSORA 'BRILLIANCE'	AUTUMN FERN	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
dm	DRYPOTERIS MARGINALIS	WOOD FERN	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ea	EUPATORIUM ALBUM	WHITE THOROUGHWORT	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
eat	EUPATORIUM ALTISSIMUM	TALL THOROUGHWORT	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
eg	EUPATORIUM HYSSOPIFOLIUM	LATE BONESET	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
eg	EUTHAMIA GRAMINIFOLIA	FLAT-TOP GOLDENROD	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ho	HELLEBORUS ORIENTALIS	LENTEN ROSE	1 GAL. 12" HEIGHT	CONT.	12". O.C.	FULL PLANTS
ls	LIATRIS SPICATA	DENSE BLAZING STAR	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ms	MAINTHEMUM STELLATUM	STARRY LILY OF THE VALLEY	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
sh	SARCOCOCCA HOOKERIANA VAR. HUMILIS	SWEETBOX	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ssb	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ss	SOLIDAGO SEMPEVIRENS	SEASIDE GOLDENROD	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
sh	SPOROBULUS HETEROLEPSIS	PRAIRIE DROP-SEED	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
sn	SYMPHOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
tc	TIARELLA CORDIFOLIA	WHITE FOAMFLOWER	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS

RAIN GARDEN						
SHRUBS						
SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
S-BH	BACCHARIS HALMIFOLIA	GROUNDSEL BUSH	5 GAL. 2'-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
S-CA	CLETHERA ALNIFOLIA	SUMMERSWEET CLETHERA	5 GAL. 2'-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS, PLANTED IN DRIFTS
S-CO	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	5 GAL. 2'-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
S-IV	ILEX VERTICILLATA	WINTERBERRY	5 GAL. 2'-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
S-SC	SAMBUCUS CANADENSIS	AMERICAN ELDERBERRY	5 GAL. 2'-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
GROUNDCOVER						
SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
ai	AESCLEPSIS INCARNATA	SWAMP MILKWEED	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
cc	CAREX AMPHIBOLA	CREEK SEDGE	PLUGS	CONT.	6" O.C.	FULL PLANTS
ce	CAREX EBURNEA	BRISTLE LEAF SEDGE	PLUGS	CONT.	6" O.C.	FULL PLANTS
ct	CAREX STRICTA	TUSSOCK SEDGE	PLUGS	CONT.	6" O.C.	FULL PLANTS
cv	CAREX VULPINOIDEA	FOX SEDGE	PLUGS	CONT.	6" O.C.	FULL PLANTS
bg	BOUTELOUA GRACIALIS	BLUE SIDE OATS GRAMA	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
cl	CHASMANTHIUM LATIFOLIUM	NORTHERN SEA-OATS	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
eg	EUPATORIUM FISTULOSUM	PURPLE THOROUGHWORT	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
je	JUNCUS EFFUSUS	SOFT RUSH	PLUGS	CONT.	6" O.C.	FULL PLANTS
jt	JUNCUS TENUIS	PATH RUSH	PLUGS	CONT.	6" O.C.	FULL PLANTS
ls	LIMONIUM SPP.	SEA LAVENDAR	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ms	MATTEUCCIA STRUTHIOPTERIS	OSTRICH FERN	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
mf	MONARDAR FISTULOSA	WILD BERGAMOT	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
os	ONOCLEA SENSIBILIS	SENSITIVE FERN	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ssb	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
sn	SYMPHOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS

TIDAL TERRACE - HIGH TIDE						
SHRUBS						
SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
Bh	BACCHARIS HALMIFOLIA	GROUNDSEL BUSH	5 GAL. 2'-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
Hm	HIBUSCUS MOSCHEUTOS	ROSE MALLOW	3 GAL. 2'-3' HEIGHT	CONT.	36" O.C.	FULL PLANTS
GROUNDCOVER						
SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
at	ASTER TENUIFOLIUS	SALT MARSH ASTER	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ds	DISCTICHLIS SPICATA	SALT GRASS	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
ls	LIMONIUM SPP.	SEA LAVENDAR	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
sp	SPARTINA PATENS	SALTMEADOW HAY	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS

TIDAL TERRACE - LOW TIDE						
GROUNDCOVER						
SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
jr	JUNCUS ROEAMERIANUS	BLACK NEEDLERUSH	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
sa	SPARTINA ALTERNIFOLIA	SMOOTH CORDGRASS	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
sc	SPARTINA CYNOSUROIDES	BIG CORDGRASS	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
sr	SCIRPUS ROBUSTUS	SALTMARSH BULLRUSH	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS

LAWN						
SOD	37,814 SQ FT.					
SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
				SOD	N/A	

220 Hommocks Road Residence

Larchmont, New York

LANDSCAPE ARCHITECT:

SCAPE LANDSCAPE ARCHITECTURE DPC

277 BROADWAY, 9th Floor
NEW YORK, NY 10007
T. 212 462 2628

CIVIL ENGINEER:

BENEDICT A. SALANITRO

609 Brook Street
Mamaroneck, New York 10543
T. 914.760.5125

COASTAL ENGINEER

RACE
COASTAL ENGINEERING

611 ACCESS ROAD
STRATFORD, CT 06615
T. 203.377.0663

NO.	ISSUE/DESCRIPTION:	DATE:
1	SITE PLAN REVIEW	11/26/2019

PREPARED BY: SEAL:

SCAPE LANDSCAPE ARCHITECTURE DPC

277 BROADWAY, SUITE 1606
NEW YORK, NY 10007
T. 212 462 2628

PROJECT NAME:

220 HOMMOCKS ROAD RESIDENCE
LARCHMONT
NEW YORK

PROJECT NO.: 1908
DATE: 11/26/19
SCALE: AS NOTED
DRAWN BY: SCAPE
CHECKED BY: SCAPE

DRAWING TITLE: PLANT SCHEDULE

DRAWING NO.: L-401

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220 Hommocks Road Residence

Larchmont, New York

LANDSCAPE ARCHITECT:

SCAPE LANDSCAPE ARCHITECTURE DPC

277 BROADWAY, 9th Floor
NEW YORK, NY 10007
T. 212 462 2628

CIVIL ENGINEER:

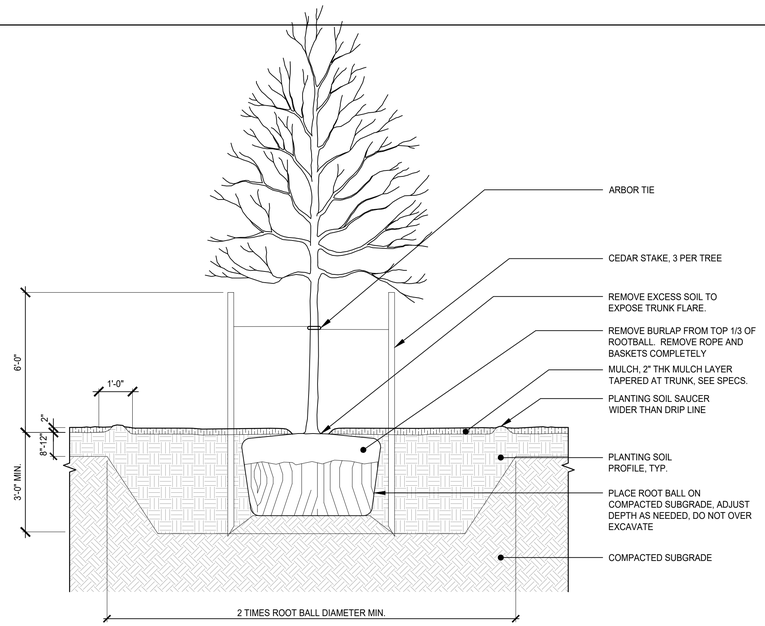
BENEDICT A. SALANITRO

609 Brook Street
Mamaroneck, New York 10543
T. 914.760.5125

COASTAL ENGINEER

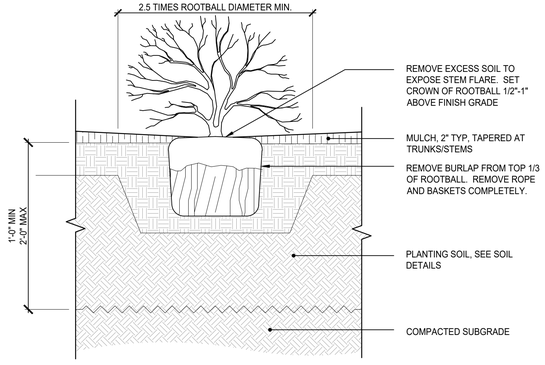
RACE
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T. 203.377.0663



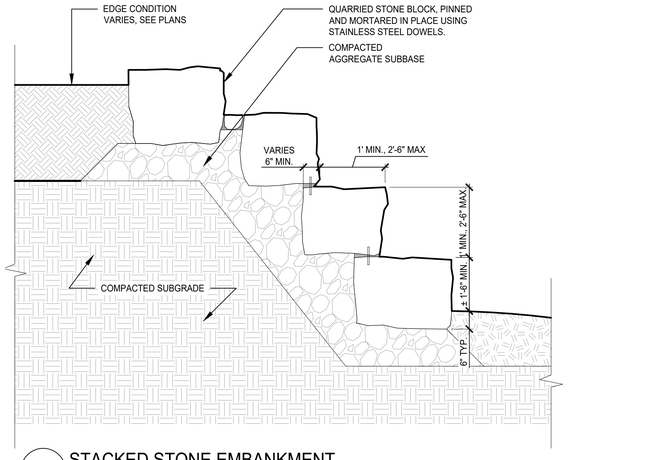
8 TREE PLANTING

SCALE: 1" = 1'-0"



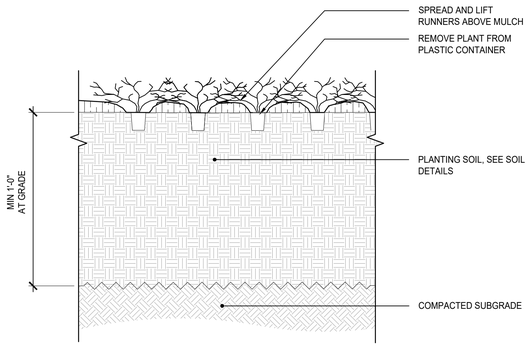
7 SHRUB PLANTING

SCALE: 1" = 1'-0"



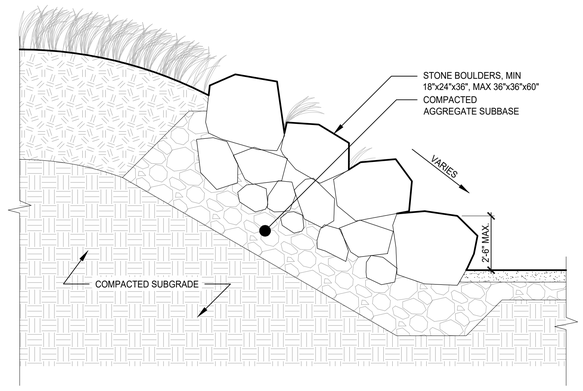
5 STACKED STONE EMBANKMENT

SCALE: 1/2" = 1'-0"



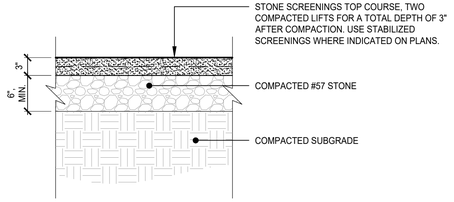
6 GROUNDCOVER PLANTING

SCALE: 1" = 1'-0"



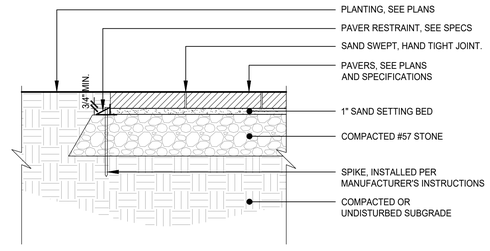
4 BOULDER EMBANKMENT

SCALE: 1/2" = 1'-0"



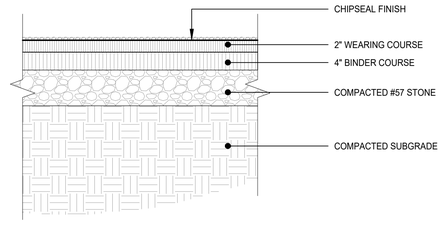
3 STONE DUST PAVEMENT

SCALE: 1" = 1'-0"



2 STONE PAVEMENT

SCALE: 1" = 1'-0"



1 CHIPSEAL PAVEMENT

SCALE: 1" = 1'-0"

NO.	ISSUE/DESCRIPTION:	DATE:
1	SITE PLAN REVIEW	11/26/2019

PREPARED BY: SEAL:

SCAPE LANDSCAPE ARCHITECTURE DPC

277 BROADWAY, SUITE 1606
NEW YORK, NY 10007
T. 212 462 2628

PROJECT NAME

220 HOMMOCKS ROAD RESIDENCE
LARCHMONT
NEW YORK

PROJECT NO.	1908
DATE:	11/26/19
SCALE:	AS NOTED
DRAWN BY:	SCAPE
CHECKED BY:	SCAPE

DRAWING TITLE: DETAILS

DRAWING NO.: L-900

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STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001
WWW.DOS.NY.GOV

ANDREW M. CUOMO
GOVERNOR

ROSSANA ROSADO
SECRETARY OF STATE

NYS DEPARTMENT OF STATE
DIVISION OF COASTAL RESOURCES

M E M O R A N D U M

To: Elizabeth Paul, Coastal Zone Management Commission, Town of Mamaroneck, NY
From: New York State DOS, Coastal Consistency Unit
Date: December 10, 2019
Re: 220 Hommocks Road, Larchmont; Clean up and repair stone steps and ancillary wall, restore octagon pier and gazebo, remove and restore stone masonry wall, replace concrete stone and masonry wall with cove, place a 38 ft by 4 ft gangway and a 50 ft x 16 ft floating dock.

* * * *

Enclosed is a copy of the application for the above-referenced project for your information and preliminary review. Please contact Rebecca Ferres, the DOS reviewer assigned to this project, at (518) 473-2470 or rebecca.ferres@dos.ny.gov to discuss applicable LWRP policies and concerns, and any additional information which may be necessary to assist you in reviewing this project. Any comments you may have will assist the Department in reaching a decision as to the consistency of the proposed action with the approved Town of Mamaroneck LWRP.

We would appreciate hearing from you on this proposed project within 30 days. If we do not hear from you by that date, we will presume that you have no objections to the proposed project.

NEW YORK STATE & US ARMY CORPS OF ENGINEERS

JOINT APPLICATION

APPLICABLE AGENCIES:

NYS Department of Environment Conservation
US Army Corps of Engineers
NYS Department of State

APPLICANT:

Beaumere, LLC
22 Walnut Ave.
Larchmont, NY 10538

Project Site:

220 Hommocks Road
Larchmont, NY 10538

Waterfront Improvements

December 2019

Prepared By:

RACE
COASTAL ENGINEERING
611 Access Road
Stratford, CT 06615
Tel: (203) 377-0663

Project No. 2019053

Table of Contents

Section ***Description***

1. New York State / US Army Corps of Engineers Joint Application for Permit NYSDEC Form 95-19-3
2. Location Maps
3. Project Plans
4. Photographs
5. Short Environmental Assessment Form for Unlisted Actions and EAF Mapper Summary Report
6. Permission to Inspect Property Statement
7. Federal Consistency Assessment Form
8. US Army Corps of Engineers Environmental Questionnaire
9. EFH Assessment
10. Additional Information

SECTION 1

New York State / US Army Corps of Engineers Joint Permit Application

NEW YORK STATE | Department of Environmental Conservation | Office of General Services | Department of State

US Army Corps of Engineers

JOINT APPLICATION FORM

For Permits for activities activities affecting streams, waterways, waterbodies, wetlands, coastal areas, sources of water, and endangered and threatened species.

You must separately apply for and obtain Permits from each involved agency before starting work. Please read all instructions.

1. **Applications To:**

>NYS Department of Environmental Conservation ☑ Check here to confirm you sent this form to NYSDEC.

Check all permits that apply:

- ☐ Stream Disturbance
- ☑ Excavation and Fill in Navigable Waters
- ☑ Docks, Moorings or Platforms
- ☐ Dams and Impoundment Structures
- ☑ 401 Water Quality Certification
- ☐ Freshwater Wetlands
- ☑ Tidal Wetlands
- ☐ Wild, Scenic and Recreational Rivers
- ☐ Coastal Erosion Management
- ☐ Water Withdrawal
- ☐ Long Island Well
- ☐ Incidental Take of Endangered / Threatened Species

>US Army Corps of Engineers ☐ Check here to confirm you sent this form to USACE.

Check all permits that apply: ☑ Section 404 Clean Water Act ☑ Section 10 Rivers and Harbors Act

Is the project Federally funded? ☐ Yes ☑ No

If yes, name of Federal Agency:

General Permit Type(s), if known:

Preconstruction Notification: ☐ Yes ☐ No

>NYS Office of General Services ☐ Check here to confirm you sent this form to NYSOGS.

Check all permits that apply:

- ☑ State Owned Lands Under Water
- ☐ Utility Easement (pipelines, conduits, cables, etc.)
- ☑ Docks, Moorings or Platforms

>NYS Department of State ☐ Check here to confirm you sent this form to NYSDOS.

Check if this applies: ☑ Coastal Consistency Concurrence

2. **Name of Applicant**: Beaumere, LLC

Taxpayer ID (if applicant is NOT an individual):

Mailing Address: 22 Walnut Avenue

Post Office / City: Larchmont

State: NY

Zip: 10538

Telephone:

Email: Bryan.Martin@deshaw.com

Applicant Must be (check all that apply): ☑ Owner ☐ Operator ☐ Lessee

3. **Name of Property Owner (if different than Applicant)**: Same as applicant

Mailing Address:

Post Office / City:

State:

Zip:

Telephone:

Email:

For Agency Use Only	Agency Application Number:

4. **Name of Contact / Agent**

Christopher Eggers, RACE Coastal Engineering

Mailing Address	Post Office / City	State	Zip
611 Access Road	Stratford	CT	06615

Telephone 203-377-0663 Email chris@racecoastal.com

5. **Project / Facility Name**

Waterfront Improvements 220 Hommocks Road

Property Tax Map Section / Block / Lot Number:

Project Street Address, if applicable	Post Office / City	State	Zip
220 Hommocks Road	Larchmont	NY	10538

Provide directions and distances to roads, intersections, bridges and bodies of water

The project site is located on Hommocks Road, Larchmont, NY at the end of a penninsula in Larchmont Harbor and along East Creek.

☑ Town ☐ Village ☐ City

County	Stream/Waterbody Name
Westchester	Larchmont Harbor, East Creek

Mamaroneck

Project Location Coordinates: Enter Latitude and Longitude in degrees, minutes, seconds:

Latitude: 40 ° 55 ' 42.13 " Longitude: -73 ° 44 ' 34.8 "

6. **Project Description:** Provide the following information about your project. Continue each response and provide any additional information on other pages. **Attach plans on separate pages.**

a. Purpose of the proposed project:

The purpose of the project is to selectively repair, rebuild, and remove existing seawalls that have deteriorated due to age to maintain the upland soils from erosion loss into the adjoining waterbody, provide improved access and interface with nature, increase the site's capacity for plant growth and natural features along the waterfront, and to provide water access for uses including kayaking, boating, and fishing. See attached.

b. Description of current site conditions:

The project site is residential with an existing dwelling, garage, lawns, seawalls and associated improvements. See attached for further description.

c. Proposed site changes:

The Applicant is proposing to repair, rebuild, and remove existing seawalls that have deteriorated, fill and replant the lawn, and rebuild the historic 35' gangway and 50'x16' floating dock. Additionally, See attached for further description.

d. Type of structures and fill materials to be installed, and quantity of materials to be used (e.g., square feet of coverage, cubic yards of fill material, structures below ordinary/mean high water, etc.):

The proposed work will be performed using stone, concrete and mortar. The Applicant is proposing to fill the property above MHW. Approximately 5,600 CY of fill will be placed above MHW. See attached for further description.

e. Area of excavation or dredging, volume of material to be removed, location of dredged material placement:

Along the north of the property, approximately 400 cubic yards of soil will be excavated along with removal of the existing seawall to create tidal terrace and plantings. Approximately 250 cubic yards will be excavated in the southwest area of the site (cove area shown on the plans). Approximately 2.5 cubic yards of ledge will be removed to create the integrated steps and viewing platform.

f. Is tree cutting or clearing proposed? ☑ Yes If Yes, explain below. ☐ No

Timing of the proposed cutting or clearing (month/year): 3/2020 (remove invasive Norway Maples)

Number of trees to be cut: 21 Acreage of trees to be cleared:

g. Work methods and type of equipment to be used:

The contractor will excavate and demolish the existing seawall from land. Stone will be sorted for reuse along with new supplemental stone as required. The contractor will stack and set the new stone walls from land. Work will utilize land based excavators, backhoes, bulldozers, vibratory rollers, dump trucks and similar earth moving equipment. The float will be floated into place, and the gangway will be set using a barge mounted crane.

h. Describe the planned sequence of activities:

It is anticipated that work will begin as soon as all permits have been obtained. The Contractor will set erosion and sediment controls and then begin excavation and demolition of the seawall in sections to avoid exposing large sections of the site. He will then rebuild sections of the wall prior to continuing demolition such that only limited areas of the site are open or exposed at any given time. See attachment.

i. Pollution control methods and other actions proposed to mitigate environmental impacts:

Measures including hay bales and silt fences will be utilized for sedimentation and erosion control for the upland area of the seawall throughout all of the site such that debris and sediment is contained. The contractor will install turbidity curtains if sedimentation is observed during excavation and work in tidal waters. The proposed plantings at the north Hommocks Conservation Area edge will be placed behind a coir log.

j. Erosion and silt control methods that will be used to prevent water quality impacts:

As discussed above, hay bales, silt fences, and coir logs will be installed as necessary to prevent sedimentation and erosion. Soil stockpiles will be on the upland area.

k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:

See attachment for discussion of alternatives. The proposed seawall work does not encroach into regulated areas, while the floating dock must by its use extend into the water. Impacts are minimized by reducing existing structures and increasing natural resources.

l. Proposed use: ☑ Private ☐ Public ☐ Commercial

m. Proposed Start Date: January 2020 Estimated Completion Date: June 2020

n. Has work begun on project? ☐ Yes If Yes, explain below. ☑ No

N/A

o. Will project occupy Federal, State, or Municipal Land? ☐ Yes If Yes, explain below. ☑ No

N/A

p. List any previous DEC, USACE, OGS or DOS Permit / Application numbers for activities at this location:

The collapsed areas and sloughed soil were stabilized in March 2019 under DEC emergency authorization Permit ID #3-5532-00419/00001/00002&/00003.

q. Will this project require additional Federal, State, or Local authorizations, including zoning changes?

☑ Yes If Yes, list below. ☐ No

The project will require Local authorizations from the Town of Mamaroneck.

7. **Signatures.**

Applicant and Owner (If different) must sign the application.
Append additional pages of this Signature section if there are multiple Applicants, Owners or Contact/Agents.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief.

Permission to Inspect - I hereby consent to Agency inspection of the project site and adjacent property areas. Agency staff may enter the property without notice between 7:00 am and 7:00 pm, Monday - Friday. Inspection may occur without the owner, applicant or agent present. If the property is posted with "keep out" signs or fenced with an unlocked gate, Agency staff may still enter the property. Agency staff may take measurements, analyze site physical characteristics, take soil and vegetation samples, sketch and photograph the site. I understand that failure to give this consent may result in denial of the permit(s) sought by this application.

False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the NYS Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than $10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Signature of Applicant Bryan Martin — Date: Nov 20 2019

Applicant Must be (check all that apply): [X] Owner [ ] Operator [ ] Lessee

Printed Name: Bryan Martin — Title: Manager Bouvere LLC.

Signature of Owner (if different than Applicant) — Date:

Printed Name: — Title:

Signature of Contact / Agent Christopher Eggers — Date: 12-5-2019

Printed Name: Christopher Eggers — Title: Project Manager, RACE Coastal

For Agency Use Only **DETERMINATION OF NO PERMIT REQUIRED**

Agency Application Number:

(Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative:

Printed Name: — Title:

Signature: — Date:

Attachment to Joint Application Form

6. *Project Description*: Provide the following information about your project. Continue each response and provide any additional information on other pages. *Attach plans on separate pages.*

a. Purpose of the proposed Project

The Applicant recently purchased the property and seeks to restore the site and enhance the coastal and natural features to improve natural function and habitat, storm and coastal resiliency with concern and consideration for sea level rise, and the scenic character of the site from Larchmont Harbor. The seawalls have been on the site since at least 1916 and with due time of their age require maintenance and restoration. As such, the seawalls, pier, gazebo, and dock are due for repair, restoration, and rehabilitation. The proposed project is to selectively repair, rehabilitate, and remove existing seawalls in order to maintain the upland soils from erosion loss into the adjoining waterbody, and provide enhanced structural stability of the restored walls to better retain the upland soil and resist hydrostatic and hydrodynamic forces (including accounting for sea level rise). However, the project goals are much more overarching than simple restoration and improvements to walls. The project goals and purpose are to provide improved access and interface with nature, increase the site's capacity for plant growth and natural features along the waterfront, and to provide water access for uses including kayaking, boating, and fishing.

b. Description of current site conditions:

The project site is residential with an existing dwelling, garage, lawns, seawalls and associated improvements. 220 Hommocks Road is located at the end of a peninsula on the shore of Larchmont Harbor of Long Island Sound, with Buccaneer Channel along the west and with Little Harbor Sound along the northwest of the property and (as mapped by Westchester County GIS). By comparison the U.S. Geological survey shows the local water ways referred to as East Creek which meets Larchmont Harbor (https://viewer.nationalmap.gov/advanced-viewer/). As such, local nomenclature may vary. Regardless of name, the water bodies surrounding the property are tidal. In addition, tidal vegetation exists directly adjacent to the north of the site, and very localized grow areas around the south edges of the site, as shown on the plans.

Parts of the site are mapped within the flood zone on the Federal Emergency Management (FEMA) Flood Insurance Rate Map (FIRM), per map panel 36119C0361F, effective 09/88/2007, see attached FIRMette.

Mean Low water (MLW) is El. -4.0' NAVD88. Mean High Water (MHW) is El. +3.4' NAVD88. Water levels will vary from the mean and may be significantly higher at times. Refer to the FEMA Flood Map and other documentation for possible water levels during flood events.

The property is a 4.028-acre residential parcel and zoned as "Single Family Residential District (R-50)." The property includes two apartments located above the detached garage. The Applicant plans to submit an application to the Town of Mamaroneck to perform modifications to the existing structures on the property. These activities include repairs to the dwelling and detached garage, relocation of the swimming pool and pool house, and other upland site improvements. Included with these proposed improvements is the intent to make use of the two existing apartments and in doing so, provide shared waterfront access to its tenants.

A note on reference elevations and datums; multiple benchmark datums exist in past plans, past reports, surveys, and permit drawings, regulations, and Federal Flood Insurance Rate Maps which may reference various datum(s) such as the National Geodetic Vertical Datum of 1929 (NGVD29), the North American

Vertical Datum of 1988 (NAVD88), Mean Low Water, or other. For reference, El. 0' NGVD29 equals approximately El. -1.1' NAVD88 (NOAA Vdatum).

Observed Conditions & Assessment

The site consists of a hommock extending from the southern waterfront to the ridge at the main dwelling and driveway circle. From this high ground the site slopes down towards the Hommocks Conservation Area. The north end of the site consists of flat lawn at lower elevations behind the seawall. Site photographs are included with the application.

There are varying types of seawall construction present on the site which are described in the following paragraphs. All walls are generally constructed of stone and mortar. The walls vary by height, condition, foundation with some being on ledge and appear to be founded on the sand along the creek, and by type of stone used for construction. The walls appear to exist on the 1925 aerial image. The octagon pier exists on the 1925 aerial imagery. Additionally, a post card of the site shows the seawalls, pier, gazebo, and floats which is reportedly from 1916 through the date has not been independently verified. See attached for sample aerial imagery. Any possible re-construction and maintenance over the years is not fully known.

The wall and waterfront are described below. The waterfront was divided into reaches by type of existing construction. Upland features (such as the house and garage) are not elaborated on. These are shown below:

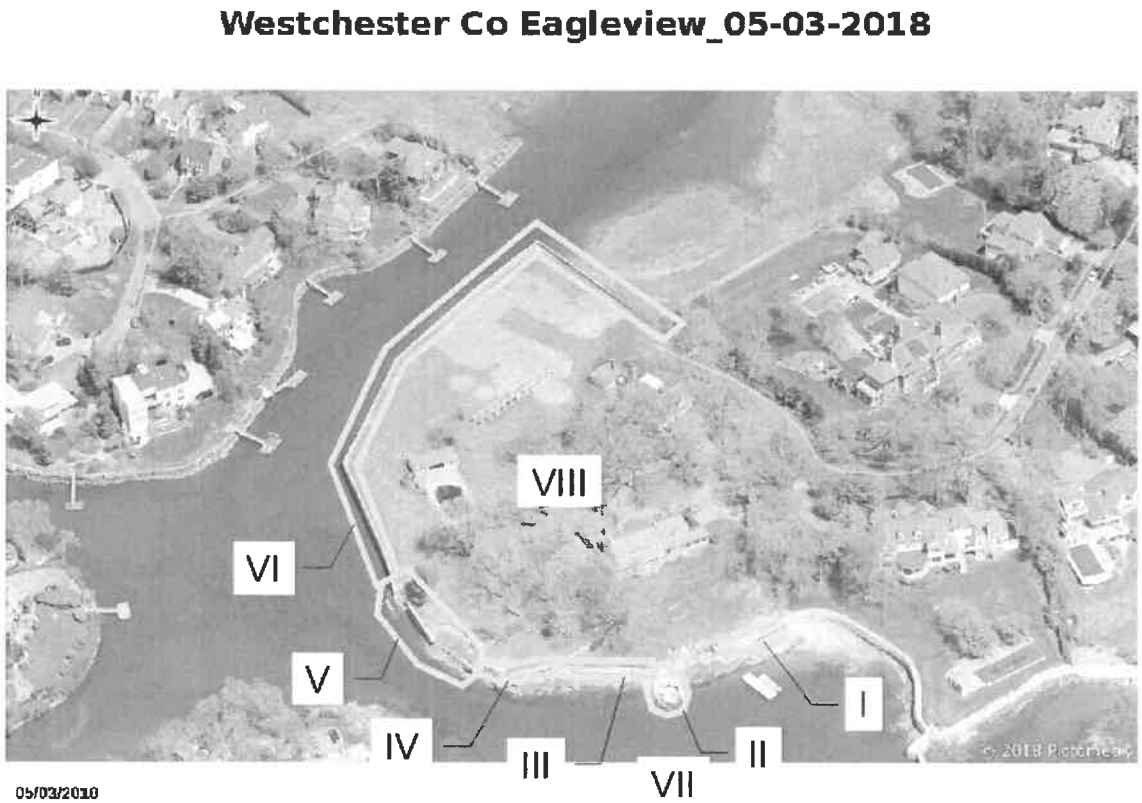


Figure 1: Areas of Seawall and Waterfront described Below, Base image from Westchester County GIS, Pictometry.

I. Stone Steps and Ancillary Wall

Bedrock ledge outcrop is prominent at the southern end of the site, along Larchmont Harbor. The seawalls in this south area are mostly founded on the ledge. On the east end of the property stone remains of stone steps over the ledge to the shore exists. The stone steps are damaged and deteriorated with lower portions completely collapsed and displaced. The steps are unusable.

II. Octagon Pier and Gazebo

On the south of the property, an octagon shaped pier extends from the ledge outcrop into Larchmont Harbor. At the southernmost end of the octagon pier, the foundation material is unknown. This structure has a gazebo on historic aerial imagery, and gangway to floating docks for water and boat access. The structure was built with stone and masonry as a fixed pier type facility. The pier and gazebo are in need of restoration. Historic and contemporary pictures, attached, show the current and original condition.

Based on a review of aerial photographs, the pier, gangway and dock were connected to the octagon pier until at least 2014, indicating that the octagon pier was still usable at least two years after Sandy. Approximately 61% of the pier's deck remains in service. Approximately 321 sq. ft of the pier deck is in place within its historical footprint of 521 sq. ft.

III. Stone Masonry Wall

One of multiple stone walls on the site, this particular stretch of wall extends form the octagon patio/pier to the highest point of ledge outcrop at the west. This reach of the seawall is about 92 feet long ±. The base stones were founded on ledge. The lower stones showed signs of becoming loose, joint mortar was missing, and displacement of stones at the joints was visible. The soil behind the wall was eroded for a distance of 5 to 6 feet back from the wall.

In addition to seaward exposure from tidal waters of Larchmont Harbor, the upland of the site drains down towards this wall. Upland runoff from rain or snow melt will continue to erode the exposed soil behind the wall.

IV. Stone Masonry Wall

The stone wall continues on ledge. The stone size, type and placement are slightly different than the stone noted for the reach in part C above. This wall is also slightly higher on ledge and therefore less exposed to tidal water. The western most end was observed to be missing stone from the base. The remainder of the wall was generally in place, mortar was between the stones, and the wall appeared stable.

The wall is about 73 feet long on the waterfront. The wall returns and continues along the upland lawn, serving as a retaining wall to facilitate a grade change of the lawn. This Application focuses on the waterfront seawall portion.

V. Concrete and Stone Masonry Wall

The wall continues along the west end of the property. The wall construction consists of concrete over stone block base for about 155 linear feet. This section of wall includes two areas (approximately 40 linear feet and 50 linear feet) that have collapsed with the remainder of the wall partially collapsed. The retained soil had

eroded in these areas. The collapsed areas and sloughed soil were stabilized in March 2019 under DEC emergency authorization Permit ID #3-5532-00419/00001/00002&/00003. The associated soil and wall remnants are now stockpiled on the site lawn areas. The portion of the wall that remains standing exhibits severe deterioration of the concrete, reinforcing bar is exposed and corroding, and the wall is coming apart. This portion of the wall is in poor condition.

VI. Stone Masonry Wall

This section of wall is constructed with stone block with mortared joints. While the exterior of the wall is stone, some stones observed were not the full width of the wall. The wall retains the lawn and includes a parapet that extends about 3 to 3.5 feet above the landside grade. Concrete is observed through the joints behind the stone in areas. Based on exterior observations of the wall, it is not clear if the concrete was part of the original wall construction or if it was part of repairs, or a combination of both.

Some areas behind the wall showed sinkholes. Areas of the upper wall parapet show signs of rotation waterward. The concrete cap is mostly intact.

Most of this wall is in fair condition, with the noted mortar issues and occasionally displaced stone. However, sections of this wall require maintenance repairs.

VII. Docks

One floating dock is stored on the waterfront of the property. The dock is in good condition. Review of historical aerials indicates that the floating docks were typically accessed from the octagon pier.

VIII. Lawn and Ancillary Upland Work

Upland of the site consists of a main dwelling, two story garage, pool, pool house, and tennis court.

c. Proposed site changes

The proposed waterfront work is described below. The proposed improvements will be designed to withstand forces associated with the 1% annual chance (100-yr) plus 2-ft of sea level rise. 2-ft approximates the high end of the central range (middle 67%) of values from model-based probabilities (16 global climate models by 3 GHG emissions scenarios)by 2080 and the high end of sea level rise with rapid ice-melt scenario by 2050 as outlined in Table 1 in the *New York State Sea Level Rise Task Force – Report to the Legislature* (Dec 2010).

I. Clean up and Repair Stone Steps and Ancillary Wall

The Applicant is proposing to clear and remove rubble along this section of shoreline described in the existing conditions section. This includes 130 SF of existing concrete and stone masonry, thereby exposing the existing rock ledge and removing debris. The approximate 28 LF of stone masonry wall around the flagpole will remain. The approximately 18 LF of existing stone masonry wall adjoining the pier will be retained and maintained with repairs and rehabilitation.

The Applicant is also proposing to create integrated stone steps by cutting approximately 1 CY of existing ledge. In addition, the Applicant is proposing to create a viewing area and steps on the exposed ledge by grinding an additional 1.5 CY± of the rock ledge to create a flat area with steps above the spring high tide line.

II. Restore Octagon Pier and Gazebo (Section G-G on Plans)

The Applicant is proposing to restore and rehabilitate the gazebo and fixed pier (538 SF) in its original location. The fixed pier is an existing but damaged structure and will be restored in the same footprint. The work will be performed using an excavator and normal hand tools as tides permit. A new gangway used to access the floating dock will be attached to the pier to access the floating dock described below.

The gazebo is a structure integrated on top of the octagon-shaped pier. The pier is concrete, stone masonry and solid fill while the gazebo was timber construction above the pier. The gazebo does not increase the size of the pier which is also needed for access to the gangway and floating dock. The gangway and floating dock extend from the pier with gazebo to access the water. Both the pier and gazebo were damaged during superstorm Sandy (2012). The pier was intact and in use up to 2014 per aerial photographs. The concrete and stone pier remain in place but with significant damage. Remains of the gazebo are not currently on site. The pier, gazebo, and floating dock are present on aerial imagery as early as 1925 and in a 1916 postcard.

As shown on past photographs, the gazebo is a complementary part of the pier. The pier provides the foundation and floor of the gazebo. The gazebo provides railing and roof for the pier. The railings are necessary for safety to protect against falls. The roof is beneficial to provide shelter from the sun and elements. The gazebo is practical to stage guests for boarding the boat and equipment handling onto and off of the boat. The gazebo is also ideal for passive scenic and wildlife viewing. Additionally, the Applicant is proposing to retain and maintain 18 LF of seawall adjacent to the gazebo. Approximately 321 sq. ft of the pier deck are useable, and this will be restored to its original geometry of about 521 sq. ft.

While the Pier will be restored to its original condition, the Gazebo will be constructed to be consistent with current flood zone guidelines to the greatest extent practicable in its historic location. Specifically, new construction will be adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood. Flood loads associated with the 100-yr (1% annual chance of occurrence) have determined.

Each column (6-inch wide) of the gazebo will be required to withstand a lateral load of up to 350 pounds from hydrostatic and hydrodynamic forces for flood events up to the 100-year event. The new work will be designed and constructed with adequate anchoring to prevent floatation, collapse or lateral movement of the structure and will be constructed with materials and utility equipment resistant to flood damage. Flood resistant materials include, steel, concrete, fiber reinforced polymer (FPR), and ipe tropical hardwood. The bottom or the roof eave of the gazebo will be four feet above the Base Flood Elevation. Therefore, the roof structure and horizontal members will not be exposed to hydrostatic and hydrodynamic loading during the base flood. This roof eave elevation exceeds the minimum design flood elevation prescribed by the building code by two feet, which will protect the structure from sea level rise and future storms.

Repair of the existing pier will be done with the use of high-strength concrete and meet or exceed current requirements for cast-in-place concrete in the marine environment. Reinforcing steel will be hot dipped galvanized to offer double corrosion protection. Other connection hardware subject to inundation will be stainless steel.

Use of state-of-the-practice materials and implementation of flood zone compliance into the design will ensure that the restored structure will be resilient and remain intact and functional for a design life of no less than fifty years based on the environmental loading that it will be designed for.

The owner is coordinating with the Town locally and neighbors to restore the gazebo in a manner that mutually benefits the neighborhood, harbor views, and local community by re-establishing the historic character of Larchmont Harbor. It is the Applicant's intent to re-create the aesthetics of the historic structure while making improvements to its resiliency and ability to meet current codes and standards.

III. Remove and Restore Stone Masonry Wall (Section F-F)

The Applicant is proposing to repair and rehabilitate this 92 LF ± reach of seawall in this area. The lawn that was scoured out behind this wall will be backfilled and the lawn will be reseeded. The existing stone will be reused to construct a wall in kind within the waterward limits of the existing wall, additional stone will be imported to the site to repair gaps and supplement the existing material. Crushed stone will be placed behind the wall for drainage and weepholes will be installed in the wall. Test pits in this area revealed that ledge elevation varies.

IV. Restore Stone Masonry Wall

The Applicant is proposing to restore and rehabilitate the 110 ft ± reach of seawall in-kind, in place. Missing stone in the wall will be replaced and loose mortar joints will be chipped to sound material and replaced with fresh mortar.

V. Replace Concrete Stone and Masonry Wall with Cove (Section D-D and E-E)

The Applicant is proposing to repair and rehabilitate the 155 ft ± section of wall along the creek with limited exposure to fetch and waves. The limited exposure to fetch and waves results in less hydrostatic and hydrodynamic loading during storms than the more exposed areas of the site. The Applicant is also proposing to replace a portion of the collapsed wall section with a 100 foot ± cove consisting of riprap revetment, stone blocks, and regraded slope. Approximately 270 CY of stone will be used to construct the cove. The cove will be covered with sand and gravel cover (approximately 125 CY). A Marine mattress is proposed under the cover to add additional stability to the cove. Technical information and manufacturer's brochure are attached as additional information. The cove will have a footprint of 4400 SF. The remaining portion of the wall will be rehabilitated, in place. The eroded areas behind the wall will be backfilled and the lawn will be reseeded.

Flood loads associated with the 100-yr (1% annual chance of occurrence) will be determined, and the revetment, wall and other items in the proposed cove designed for stability during the FEMA Base Flood. The cove is also designed to minimize wave runup and wave impacts. The cove is located in an area of exposed fetch to Larchmont Harbor. Due to this exposure and water being reflected from the adjacent natural ledge outcrop, this location on the site is one of the most vulnerable to damage. This vulnerability has been quantified and accounted for in the revetment design. The proposed cove will better attenuate wave energy, runup, and reflection around the ledge outcrop. Additionally, backflowing and water retention behind the seawall during storms will be alleviated by allowing water to flow from the proposed cove.

VI. Restore and Rehabilitate Stone Masonry Wall (Section C-C, B-B, and A-A)

The Applicant is proposing to repair and rehabilitate the remaining 1040 feet ± of existing seawall within the limits shown on the plans. This repair and rehabilitation will consist of restacking existing stone walls within the existing waterward limits, and partially removing the seawall by demolition of the northernmost corner of the wall. The seawall in this northern area will be replaced with terraced walls and plantings. Approximately 462 LF of seawall will be repaired and rehabilitated, landward of the existing seawall or property line. The top of the wall will vary in elevation from EL. +7.25 feet to El. +9.5 feet per the project plans. The wall will continue along the tidal terrace as described below for an additional 102 LF, for a total length of 564 LF. Flood

loads associated with the 100-yr (1% annual chance of occurrence) will be determined, and the wall will be designed to withstand these loads. Drainage, including weepholes, will be added to the existing wall to prevent hydrostatic forces from building up on the back side of the wall and allow water behind the wall to drain.

In the north corner of the site, the wall will be removed and replaced with the tidal terrace, which will consist of three levels and associated walls and plantings. The landward wall will be approximately 102 LF and meet the upper lawn, with top of wall EL. +7.25 feet. The intermediate wall will be 160 LF and vary in elevation from El. +5.0 feet to El. +7.25 feet. The third and most waterward wall will be made with a stone revetment to act as a sill for the plantings and will be 173 LF and vary in elevation from El. +3 feet to El. +4.5 feet. Overall the 1040-foot seawall will be replaced with 897 feet of new wall and revetment sill. The removal of the seawall for the tidal terrace is anticipated to create 972± square feet of mudflat and 3,057± square feet of new tidal wetland vegetation. Salt Marsh Grass (Spartina Alterniflora) and Salt Meadow Cordgrass (Spartina Patens) will be planted. See planting table attached.

VII. Dock and Gangway (Section G-G)

The Applicant is proposing to place the 38-foot x 4-foot gangway and 50-foot x 16-foot floating dock. Historically (since at least 1925 based on a review of aerial photos), the float has been accessed off the fixed pier. In recent years, the gangway and float has been relocated to the east due to the condition of the pier, however the historic location offers increased water depth such that the Applicant can berth their boats. The Applicant is proposing to return the float to its historic location. It is anticipated that the Applicant will berth a 40-foot and 21-foot-long boat on the dock. It is anticipated that these boats will be berthed seasonally from spring to fall. The floating dock will remain in place year-round. The float length is required to berth the boats. The property includes two apartments located above the detached garage in addition to the main dwelling. As such, the second boat and float size allow accommodation of future tenants and guests for multiple use access.

The site is relatively exposed to Long Island Sound particularly from the east, southeasterly, and southernly directions. As a result, waves with wave height in excess of 1.5 feet with a 3 second period occur at the site during the typical boating season, with larger waves occurring during more severe storms. The wave length associated with these conditions is in excess of 30 feet based on the dispersion relationship presented below:

$$\frac{2\pi}{T} = g\frac{2\pi}{l}\tanh\left(\frac{2\pi}{l} * d\right)$$ Dean and Dalrymple 1991

Where:
T = wave period
g = acceleration due to gravity (32.2 ft/s^2)
l = wave length
d = water depth

The proposed float's orientation and dimensions are designed to allow the Applicant and his guests a safe means to access the sound. Generally, to assure maximum stability of a float, the float length at the water-line should be at least as long as the typical wavelength at the site. This will minimize pitching of the deck of the float and thus maximize boater safety while accessing or leaving the float. Since a 30-foot-wide float is not practical or feasible, the Applicant is proposing a 16-foot-wide float (approximately ½ the wave length) to strike a balance between his private rights of access and the public's rights to use and enjoy the trust waters. This proposed float length will have a benefit throughout the boating season, and this is not just limited to more severe storms. Wave heights in excess of 1.5 feet are predicted to occur multiple times annually.

The float length is also required to accommodate the two proposed vessels. The dock length will allow secure tie up of the longer vessel, at 40-feet length.

There will be approximately 3 feet of water depth at mean low water at the shallow end of the float. There will be approximately2.8feet of water depth below mean lower low water.

VIII. Lawn and Ancillary Upland Work

The Applicant is proposing to add fill in the lawn areas, relocate and rebuild the pool and pool house, and to replace and relocate the existing tennis court. This work is currently upland of the existing seawalls and outside of the State and Federal Jurisdiction. Upland work may occur before, simultaneously, or after to the seawall and waterfront work. Approximately 5,600 CY of fill will be used to regrade the lawn. The tennis court will be approximately 7000 square feet. The pool will be approximately 1,800 square feet in area with approximately 3,700 square feet of adjoining deck, and approximately 1,200 square foot pool house. The tennis court will be constructed of concrete with acrylic sealing surface.

g. Type of structures and fill materials to be installed, and quantity of materials to be used (e.g., square feet of coverage, cubic yards of fill material, structures below ordinary/mean high water, etc.):

The proposed work will be performed using stone, concrete and mortar. Overall, the Applicant is proposing to remove approximately 327 LF of seawall. Approximately 245 CY of revetment stone will be used to create the proposed revetment structure and cove area. Additionally, the Applicant is proposing filling the property above MHW. Approximately 5,600 CY of fill will be placed above MHW. In the northwest corner of the site, the replacement terrace walls are anticipated to support 972± square feet of mudflat and 3,057± square feet of new tidal wetland vegetation. Geotextile fabrics will be used behind the seawall and below the cove.

h. Describe the planned sequences of activities

It is anticipated that work will begin as soon as all permits have been obtained. The Contractor will set erosion and sediment controls and then begin excavation and demolition of the seawall in sections to avoid exposing large sections of the site. He will then rebuild sections of the wall prior to continuing demolition of the next section of wall such that only limited areas of the site are open or exposed at any given time. As shown on the plans, the seawalls will be rebuilt in kind with stone, except where removed in the north to create a tidal terrace and removed in the southwest to create a cove open to the waterfront.

Concurrent with the seawall work, the pier will be restored along with the gazebo. Once the work to the pier is complete, the Contractor will attach the gangway and float the floating dock into place.

Areas of existing tidal wetland vegetation existing along the site. This existing vegetation will be protected during the work. The work will take place outside of the limits of the existing tidal vegetation. The tidal vegetation will be demarcated and fenced to prevent the contractor for entering.

Upland work to fill the lawn areas, relocate and rebuild the pool and pool house, and to replace and relocate the existing tennis court will take place either before, after or concurrently with the seawall and pier work.

k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:

The project has been designed to restore historic character and flood and erosion control structures on site while also enhancing natural improvements where feasible and practical based on use.

The Alternatives considered include:

1. No Action – The no action alternative would allow for continued deterioration and failure of the wall which will lead to erosion of the shoreline and sedimentation into the Long Island Sound. As such, this alternative was rejected.

2. Repair and rebuild the existing seawalls to the existing waterward limits – This alternative would result in the site being surrounded by seawalls. Since these walls pre-date NYSDEC tidal wetlands and coastal erosion hazard area jurisdiction/designation of August 20, 1977, the walls appear to be lawfully existing and therefore, eligible for retention and maintenance within their existing waterward limits. The Applicant wishes to restore the site to a natural condition where feasible, as such this alternative was rejected.

3. Revetment throughout in place of seawalls – Under this alternative, seawalls would be removed and the shoreline installed with revetment in place of the seawall. The revetment would extend from the waterward limits of the seawall into the lawn and upland. Removal of all the seawalls which have protected this property for more than 95 years is not practical and would significantly alter the configuration, character, and function of the site, with a significant loss of useable land to the Applicant. The existing seawalls have lined the shoreline of this property since at least the 1920's when the property was first improved with the existing house and accessory structures that still remain today. Since these walls pre-date NYSDEC tidal wetlands and coastal erosion hazard area jurisdiction/designation of August 20, 1977, the walls appear to be lawfully existing and therefore, eligible for retention and maintenance and as such do not need to be removed. The preferred and proposed site plan does call for some walls to be removed as practical to stimulate habitat growth at the site.

   Revetment was proposed in existing Area C in place of the seawall. However, subsequent test pits to find the top of ledge behind the existing seawall lead to the current proposal to keep a seawall in place. The existing seawall is founded on exposed ledge along the waterfront. The test pits behind the wall show that depth to ledge varies with distinct drops and a small subterranean valley along the length of the existing wall in Area C. The depth and shape of the ledge made the revetment less favorable due to change in the foundation conditions. The lower depth of ledge than previously anticipated limits the viability of the revetment to meet and taper into the ledge.
4. Removal of Seawalls /Living Shoreline– This alternative would demolish the existing seawalls from the site. The upland behind the seawalls would be sloped back and planted. The disadvantages are a significant loss of useable land for the Applicant. Additionally, the existing walls break waves, protecting the site. Since the seawalls predate August 20, 1977, the Applicant is not required to remove the walls. Plantings and removal of wall are included where practical.

5. Fixed Pier – This alternative would involve installing a fixed pier in place of the proposed gangway. This alternative was rejected as it would have greater impacts than the preferred and proposed alternative. Furthermore, the fixed pier would not be seasonally removable and would require more maintenance than the floating dock.

6. Construction of the existing pier as an open pile supported structure. This option would consist of reconstructing the historic solid pier in the same octagon shape but with a pile or column foundation supporting a deck with the gazebo above. The piles or columns would be fixed to ledge. The area below the deck would be open between the piles/columns. The environmental benefits of having this deck on an open foundation would be limited, as; the overall area for the pier is limited, and the existing pier currently covers this area. This would expose the underside of the deck to wave loads and uplift forces. Due to this exposure this concept was rejected.

7. No Dock – This alternative would not include a floating dock or gangway on the site. This would not allow the Applicant to enjoy water dependent uses such as boating, swimming, and fishing as such this alternative was rejected.

8. No restoration of the gazebo – This alternative would involve not restoring the gazebo. The gazebo is a structure integrated into the octagon shaped pier. The pier is concrete and stone masonry, while the gazebo was timber construction above the pier. The concrete and stone pier remain in place but with significant damage. Remains of the gazebo are not currently on site. The pier, gazebo, and floating dock are present on aerial imagery as early as 1925 and depicted on the historic circa 1916 post card.

   The owner is coordinating with the Town locally and neighbors to restore the gazebo in a manner that mutually benefits the neighborhood, harbor views, and local community by re-establishing the historic character of Larchmont Harbor. It is the Applicant's intent to re-create the aesthetics of the historic structure while making improvements to its resiliency and ability to meet current codes and standards.

   The pier provides the foundation and floor of the gazebo. The gazebo provides railing and roof for the pier. The railings are necessary for safety to protect against falls. The roof is necessary to provide shelter from the sun and elements. The gazebo is necessary to stage guests for boarding the boat and equipment handling onto and off of the boat. The gazebo enhances the passive scenic and wildlife viewing in the Harbor and is an important part of the overall character and history of Larchmont Harbor. The view and scenic character of the gazebo provides benefits to the Applicant as well as other neighbors and members of the public in Larchmont Harbor, as such this alternative was rejected.

9. The preferred and proposed site plan – This is the alternative that is outlined in Section 6 of this application. It is the chosen alternative as it provides improved access and interface with nature, increase the site's capacity for plant growth and natural features along the waterfront, and to provide water access for uses including kayaking, boating, fishing, and restores the site to nature as practical. The preferred alternative also restores the historic and scenic character of the site and Larchmont Harbor by repair of the fixed pier and gazebo, without increasing the waterward footprint beyond that of the existing structures. The repairs and modifications to the site are being designed for stability under loads predicted of the FEMA Base Flood, thereby preventing collapse and loss of land during the Base Flood.

Impacts within the littoral zone waters, below Mean High Water/Spring High Tide, will be limited to construction. The proposed seawall work involves modification and restoration within the limit of the seawall and significant areas where the seawall is removed allowing the Spring High Tide Line to retreat landward with a sacrifice of existing legally useable upland. The fixed pier is existing and Mean High Water/Spring High Tide Line abuts the structure. There is no proposed increase in the footprint from the historically documented seawall and pier structures. In fact, removal of the existing debris that has accumulated beyond the historic limits of the fixed pier will be a benefit. The fixed pier is also needed for gangway and floating dock access. The gazebo atop the fixed pier restores the historic charm and functionality of the site, but does not require a

larger footprint or expansion of the fixed pier beyond what is existing within the limits of the pier base walls. As such, the selected alternative has minimal impacts on waters of the United States and regulated New York State resources.

LARCHMONT RESIDENCE - 220 HOMMOCKS ROAD - PLANTING PLAN

TIDAL TERRACE - HIGH TIDE

SHRUBS

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
	S-BH	BACCHARIS HALMIFOLIA	GROUNDSEL BUSH	5 GAL. 2'-3' HEIGHT	CONT.	60" O.C.	FULL PLANTS
	S-HM	HIBUSCUS MOSCHEUTOS	ROSE MALLOW	3 GAL. 2'-3' HEIGHT	CONT.	36" O.C.	FULL PLANTS

GROUNDCOVER

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
	G-AT	ASTER TENUIFOLIUS	SALT MARSH ASTER	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
	G-BC	DISCTICHLIS SPICATA	SALT GRASS	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
	G-LS	LIMONIUM SPP.	SEA LAVENDAR	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
	G-SP	SPARTINA PATENS	SALTMEADOW HAY	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS

TIDAL TERRACE - LOW TIDE

GROUNDCOVER

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	NOTES
	G-JR	JUNCUS ROEAMERIANUS	BLACK NEEDLERUSH	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
	G-SA	SPARTINA ALTERNIFOLIA	SMOOTH CORDGRASS	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
	G-SC	SPARTINA CYNOSUROIDES	BIG CORDGRASS	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS
	G-SR	SCIRPUS ROBUSTUS	SALTMARSH BULLRUSH	1 GAL. 12" HEIGHT	CONT.	12" O.C.	FULL PLANTS

SECTION 2

Location Maps

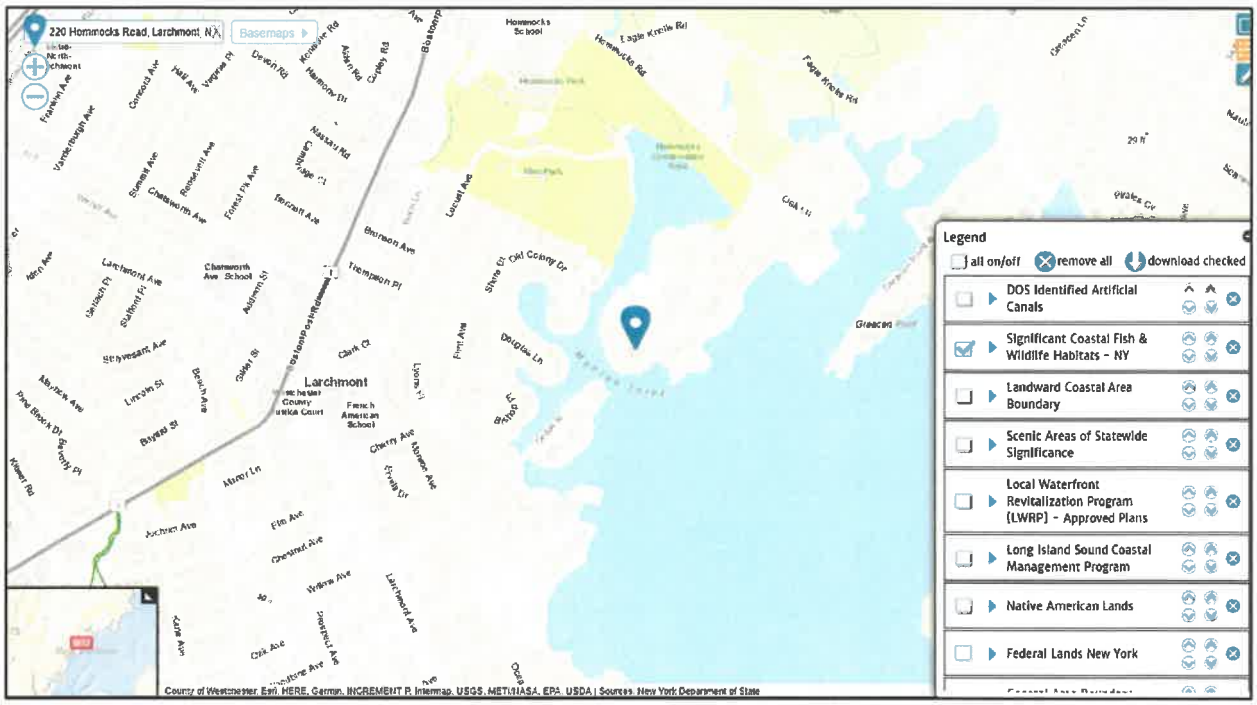


Figure 1: NYS Coastal Boundary Map



Figure 2: Google Aerial Image



Figure 3: NYS DEC EAF Mapper

SECTION 3

Project Plans



BEAUMERE, LLC
WATERFRONT RESILIENCY DESIGN

DRAWING LIST

DRAWING No.	DRAWING TITLE
1	TITLE SHEET & GENERAL NOTES
2	VICINITY MAP
3	EXISTING SITE PLAN
4	PROPOSED SITE PLAN
5	PROPOSED PARTIAL PLAN - 1 OF 4
6	PROPOSED PARTIAL PLAN - 2 OF 4
7	PROPOSED PARTIAL PLAN - 3 OF 4
8	PROPOSED PARTIAL PLAN - 4 OF 4
9	EXISTING & PROPOSED SECTION A-A
10	EXISTING & PROPOSED SECTION B-B
11	EXISTING & PROPOSED SECTION C-C
12	EXISTING & PROPOSED SECTION D-D
13	EXISTING & PROPOSED SECTION E-E
14	EXISTING & PROPOSED SECTION F-F
15	EXISTING & PROPOSED SECTION G-G
16	EXISTING & PROPOSED SECTION H-H
17	TYPICAL SILT FENCE & TURBIDITY CURTAIN DETAILS

GENERAL NOTES

1. THE PURPOSE OF THESE DRAWINGS ARE FOR REGULATORY REVIEW ONLY.
2. VICINITY MAP TAKEN FROM U.S.G.S. TOPOGRAPHIC MAP MAMARONECK QUADRANGLE, NEW YORK - CONNECTICUT, 7.5-MINUTE SERIES, MAMARONECK, NY-CT 2016.
3. ELEVATIONS REFERENCE NAVD 88, UNLESS NOTED OTHERWISE.
4. PROPERTY LINES, UPLAND STRUCTURES, AND BASE MAPPING HAS BEEN TAKEN FROM A DRAWING ENTITLED, "TOPOGRAPHIC SURVEY SECTION 4, BLOCK 16, LOT 1 TOWN OF MAMARONECK COUNTY OF WESTCHESTER, NEW YORK" PREPARED BY KENNON SURVEYING SERVICES INC., DATED 5-2-19.

PROJECT TIDAL ELEVATIONS:			
DATUM	NAVD 88 (FT)	NGVD 29 (FT)	MLW (FT)
SPRING HIGH TIDE LINE (SHTL)	+3.9	+5.0	+7.8
MEAN HIGH WATER (MHW)	+3.4	+4.5	+7.3
NAVD 88	0.0	+1.1	+3.9
NGVD 29	-1.1	0.0	+2.8
MEAN LOW WATER (MLW)	-3.9	-2.8	0.0

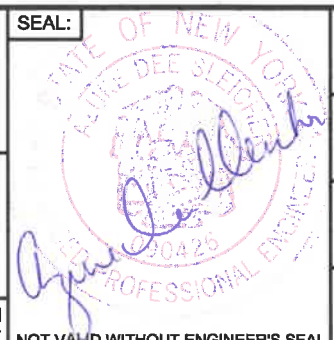
5. SUPPLEMENTARY INFORMATION OBTAINED BY RACE COASTAL ENGINEERING, P.C. ON JUNE 12 & JULY 1, 2019 AND ONLY REPRESENT THE SITE CONDITIONS AT THAT TIME.
6. TIDAL ELEVATION DATA HAS BEEN TAKEN FROM BENCH MARK SHEET FOR STATION: 8518091, RYE BEACH, AMUSEMENT PARK, NY FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION TIDES AND CURRENTS WEBSITE.

RACE COASTAL ENGINEERING
611 Access Road Stratford, CT 06615
Tel: 203-377-0663 racecoastal.com

Prepared For:
BEAUMERE, LLC
22 WALNUT AVENUE
LARCHMONT, N.Y. 10538

Project:
WATERFRONT RESILIENCY DESIGN
220 HOMMOCKS ROAD
MAMARONECK, N.Y. 10538

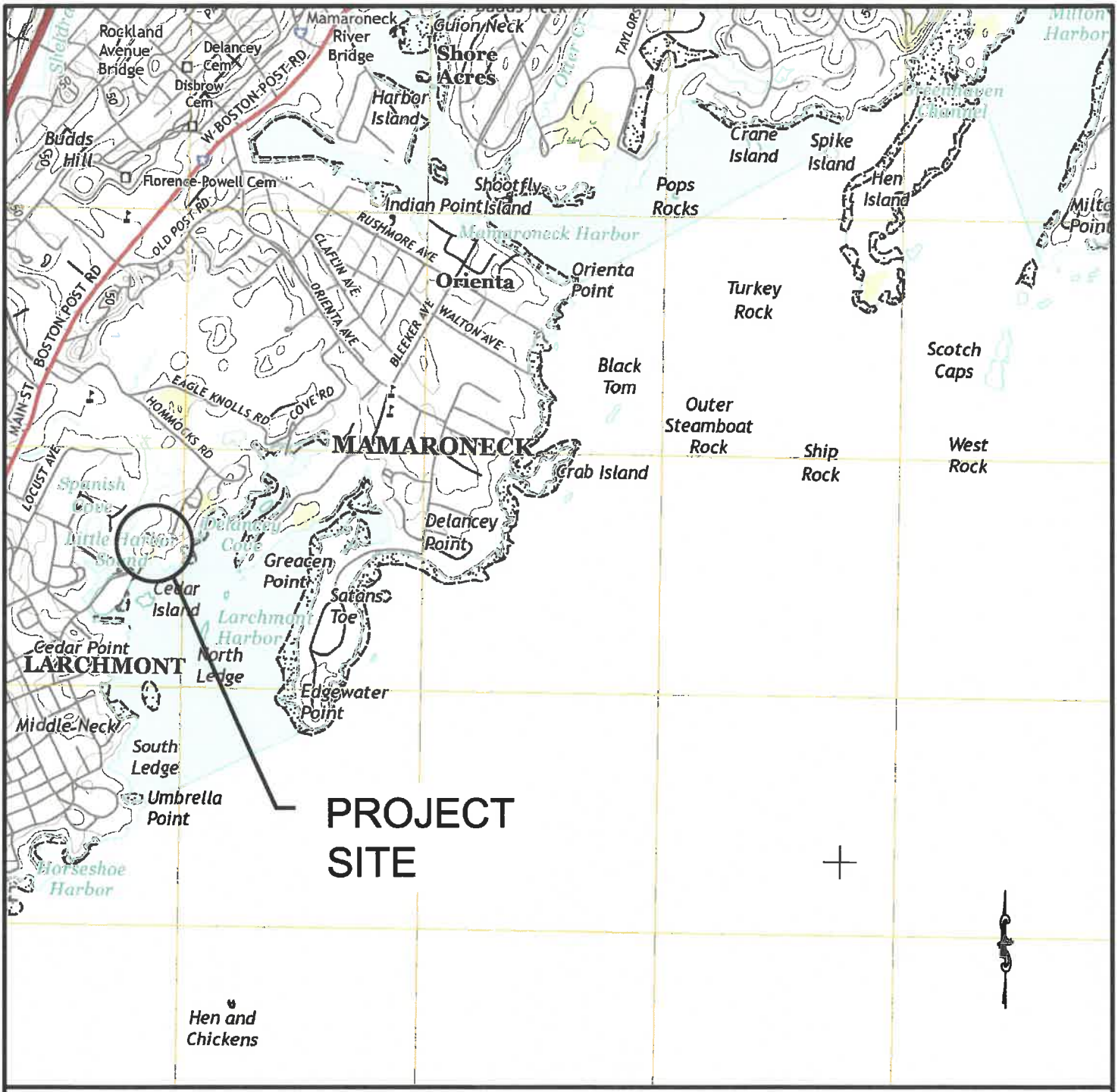
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NAVD88	None
Project No.:	Drawing No.:
2019053	1 of 17

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VICINITY MAP

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LARCHMONT, N.Y. 10538

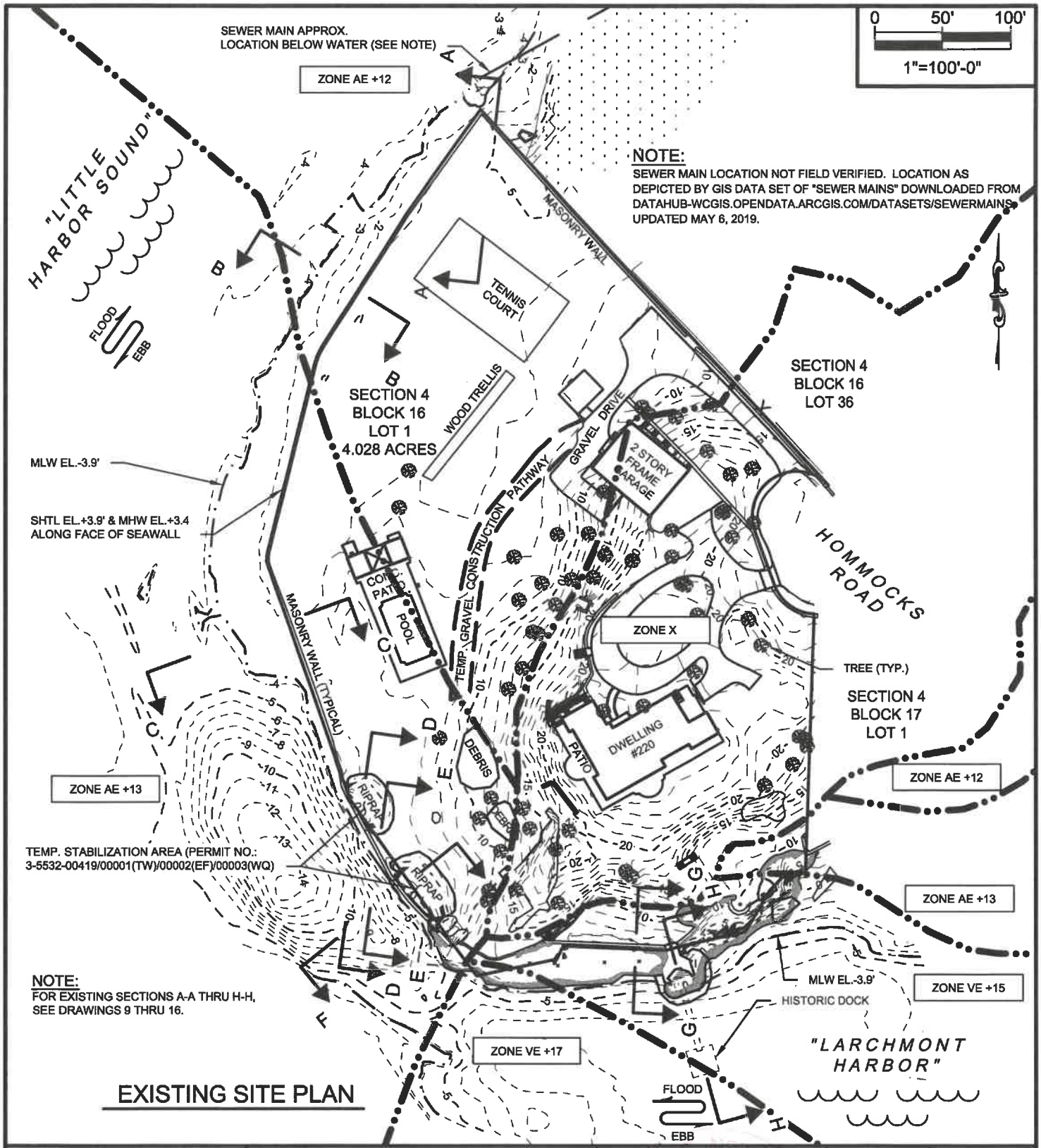
Project:
WATERFRONT RESILIENCY DESIGN
220 HOMMOCKS ROAD
MAMARONECK, N.Y. 10538

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NAVD88	~1"=2000'-0"
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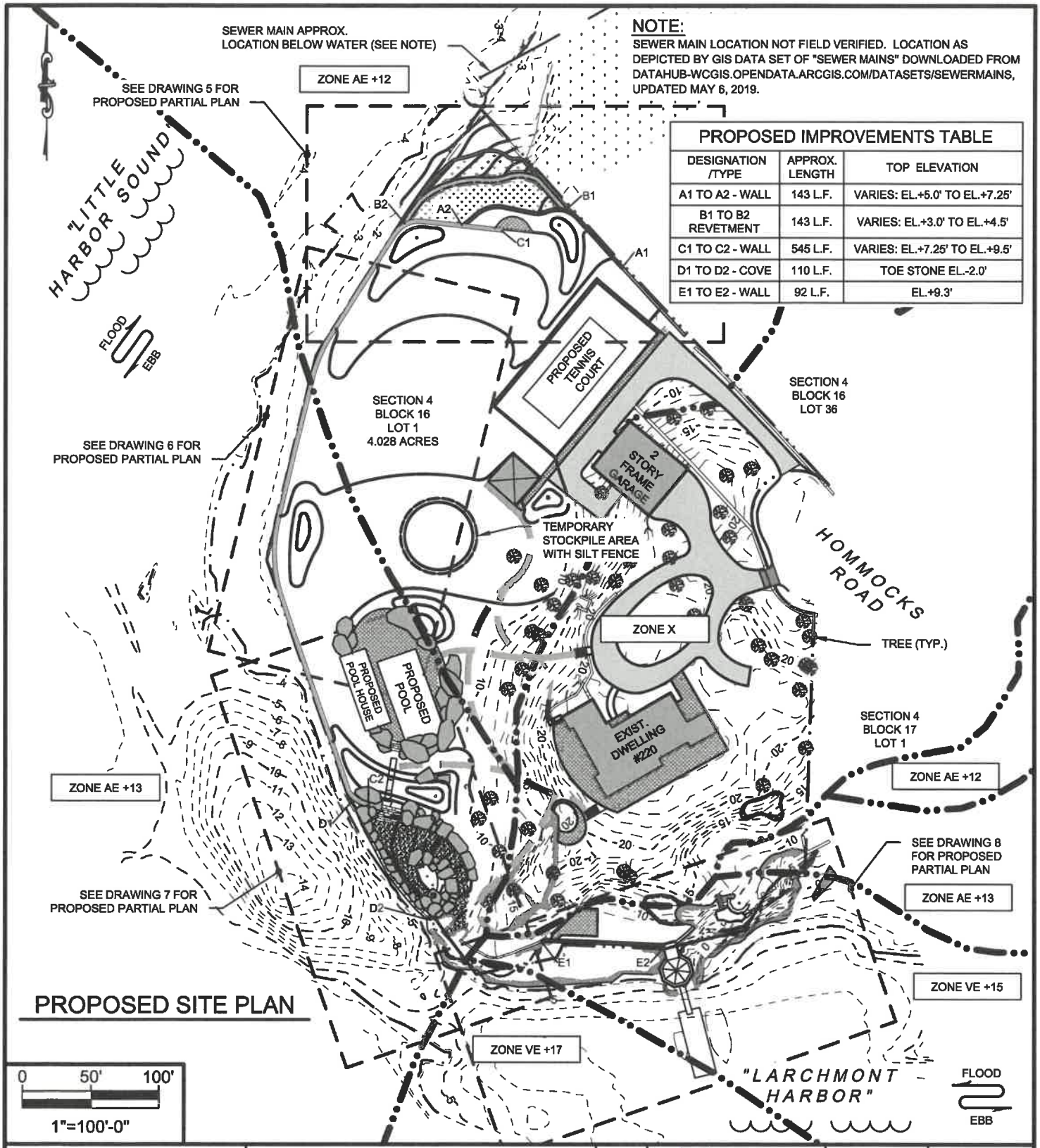
Prepared For:
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LARCHMONT, N.Y. 10538

Project:
WATERFRONT RESILIENCY DESIGN
220 HOMMOCKS ROAD
MAMARONECK, N.Y. 10538

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Date:	Rev.:
12-05-2019	
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Datum:	Scale:
NAVD88	1"=100'-0"
Project No.:	Drawing No.:
2019053	3 of 17

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NOTE:

SEWER MAIN LOCATION NOT FIELD VERIFIED. LOCATION AS DEPICTED BY GIS DATA SET OF "SEWER MAINS" DOWNLOADED FROM DATAHUB-WCGIS.OPENDATA.ARCGIS.COM/DATASETS/SEWERMAINS, UPDATED MAY 6, 2019.

PROPOSED IMPROVEMENTS TABLE

DESIGNATION /TYPE	APPROX. LENGTH	TOP ELEVATION
A1 TO A2 - WALL	143 L.F.	VARIES: EL.+5.0' TO EL.+7.25'
B1 TO B2 REVETMENT	143 L.F.	VARIES: EL.+3.0' TO EL.+4.5'
C1 TO C2 - WALL	545 L.F.	VARIES: EL.+7.25' TO EL.+9.5'
D1 TO D2 - COVE	110 L.F.	TOE STONE EL.-2.0'
E1 TO E2 - WALL	92 L.F.	EL.+9.3'

PROPOSED SITE PLAN

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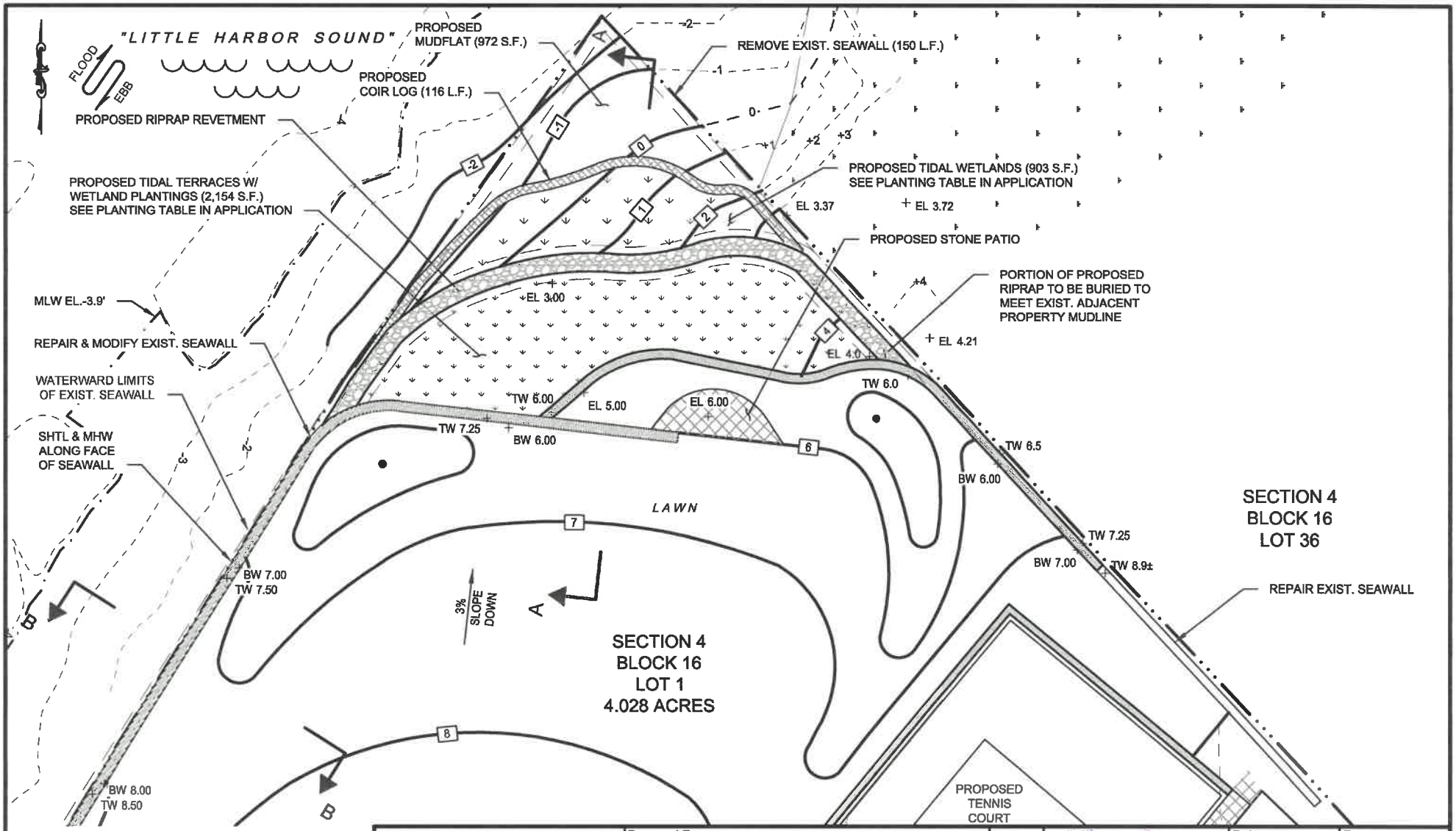
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STATE OF NEW YORK ALICE DEE SLEEPER LICENSED PROFESSIONAL ENGINEER 090425
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Project No.: 2019053	Drawing No.: 4 of 17

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PROPOSED
PARTIAL PLAN: 1 OF 4

NOTE:
DESIGN OF UPLAND FEATURES (POOL AND TENNIS COURT) ARE IN PROGRESS AND NOT FINAL.

0 15' 30'
1"=30'-0"

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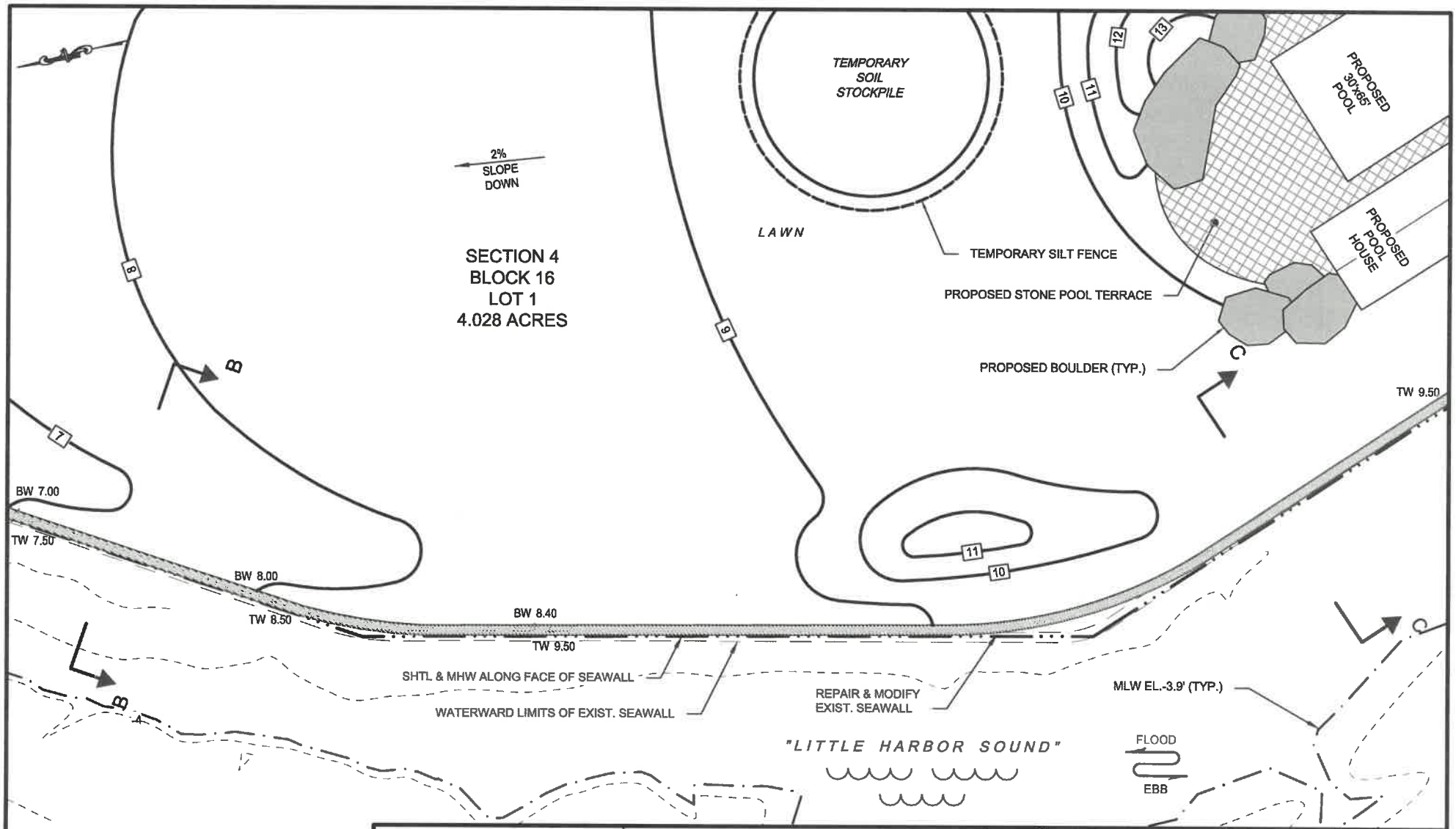
Project:
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SEAL:
STATE OF NEW YORK
AZURE DEE SEARS
LICENSED PROFESSIONAL ENGINEER
090426

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Project No.: 2019053	Drawing No.: 5 of 17

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PROPOSED
PARTIAL PLAN: 2 OF 4

NOTE:
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0 15' 30'
1"=30'-0"

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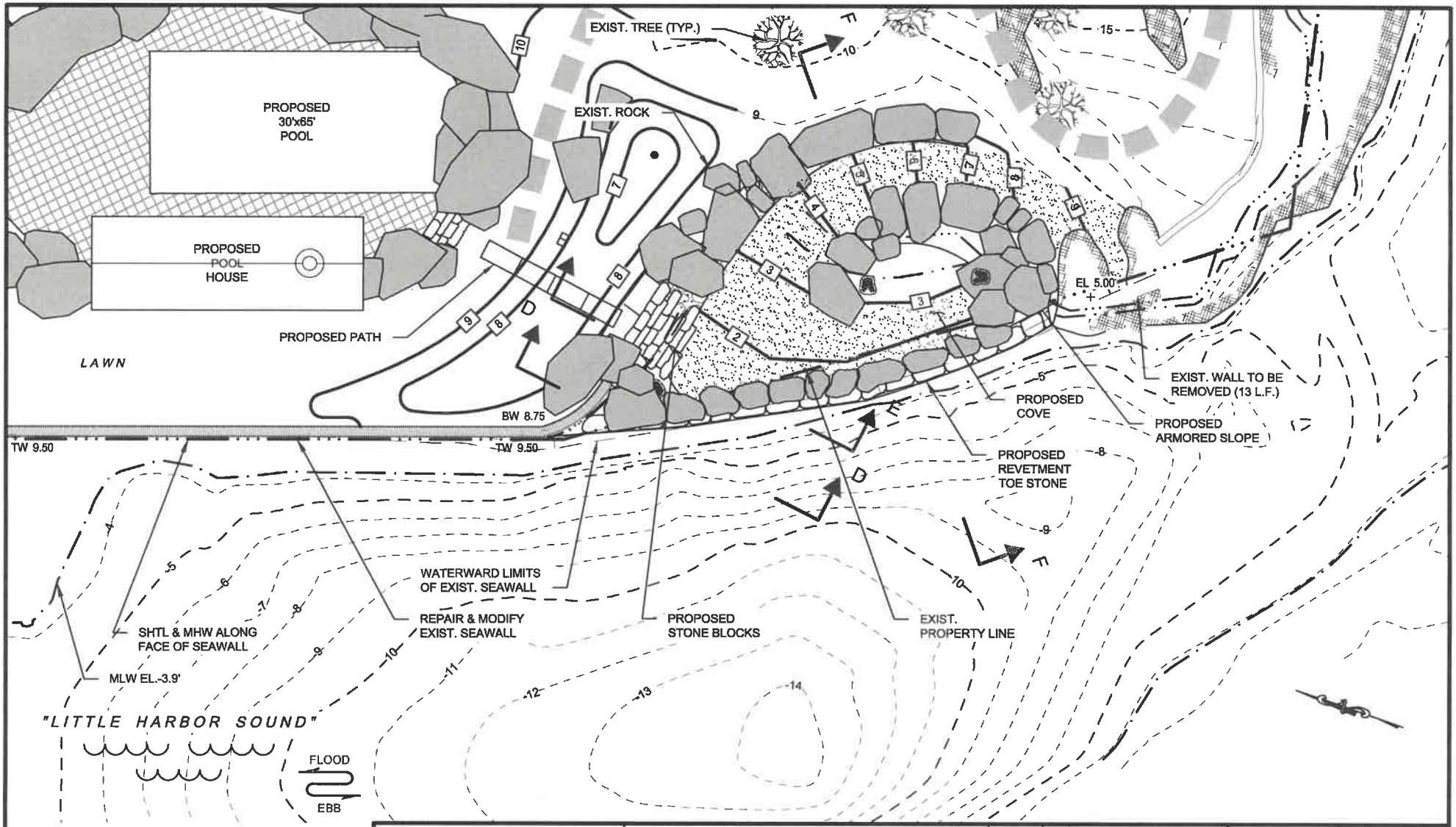
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Datum:	Scale:
NAVD88	1"=30'-0"
Project No.:	Drawing No.:
2019053	6 of 17



PROPOSED
PARTIAL PLAN: 3 OF 4

NOTE:
DESIGN OF UPLAND FEATURES (POOL AND TENNIS COURT) ARE IN PROGRESS AND NOT FINAL.

0 15' 30'
1"=30'-0"

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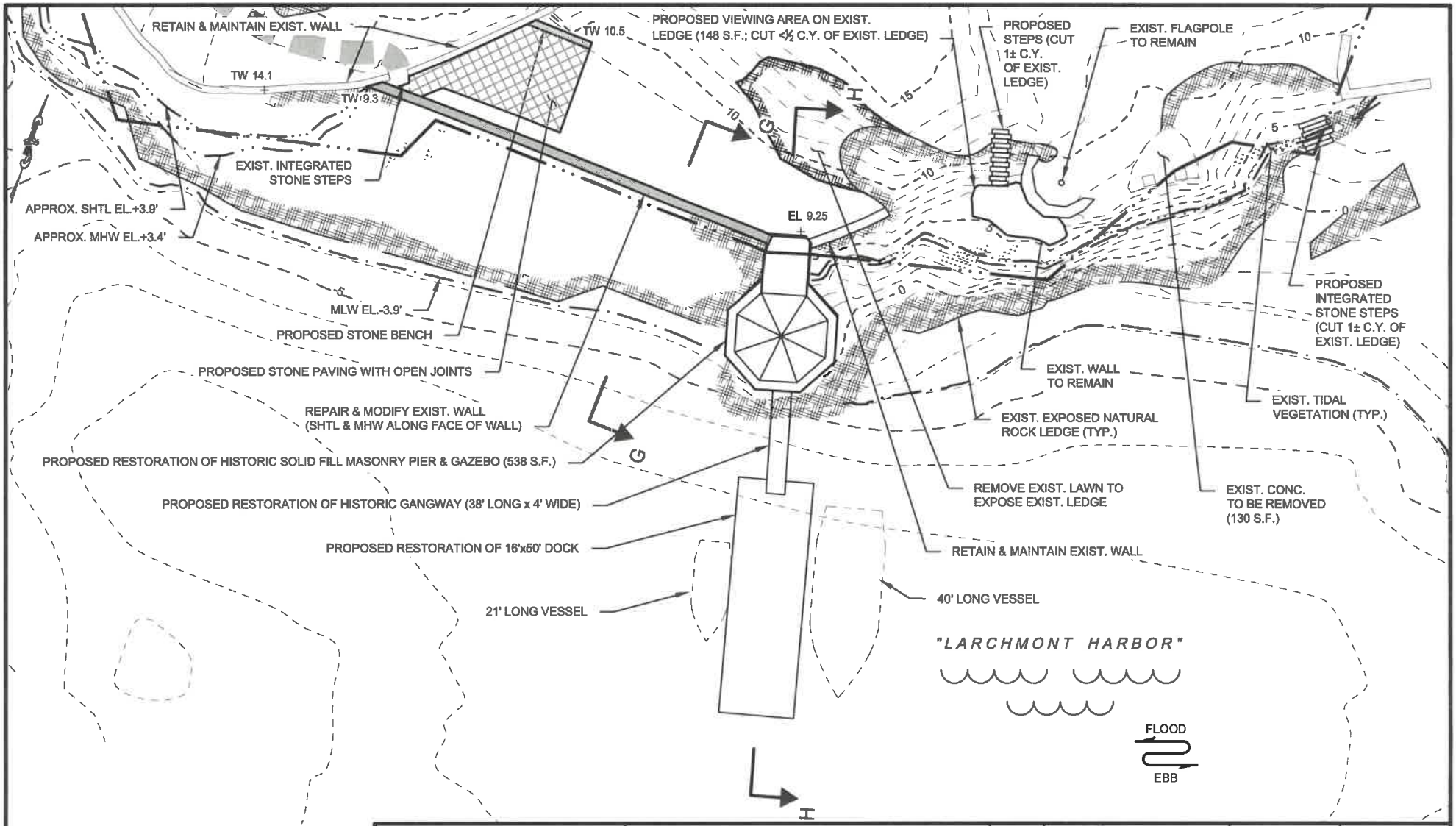
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CLW	CGE
Datum:	Scale:
NAVD88	1"=30'-0"
Project No.:	Drawing No.:
2019053	7 of 17

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PROPOSED
PARTIAL PLAN: 4 OF 4

0 15' 30'
1"=30'-0"

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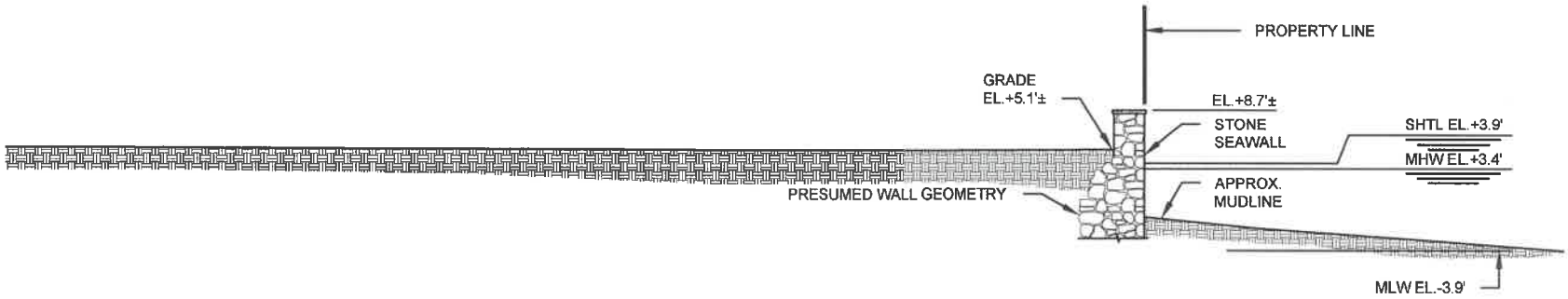
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Datum: NAVD88	Scale: 1"=30'-0"
Project No.: 2019053	Drawing No.: 8 of 17

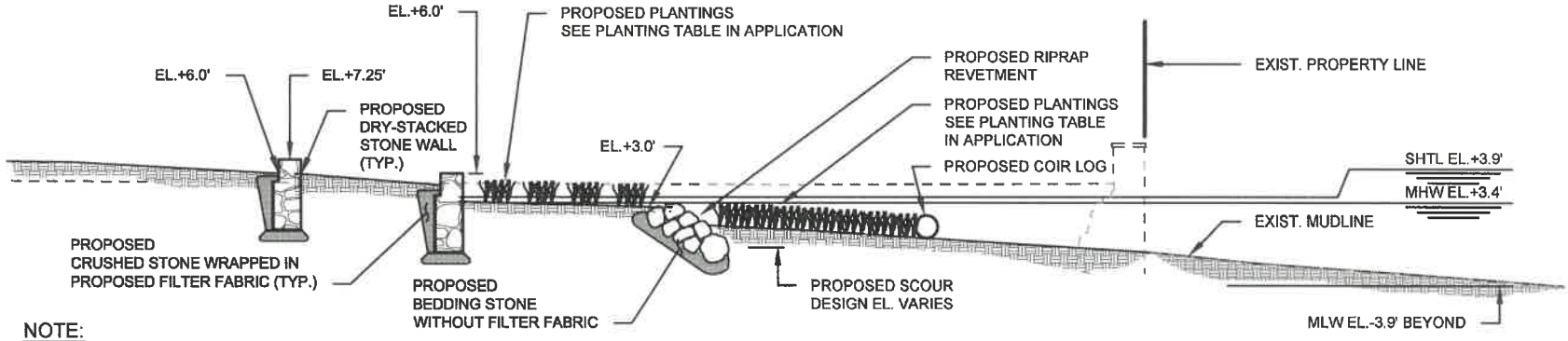
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EXISTING SECTION A-A



NOTE:

WHERE EXISTING LEDGE IS ENCOUNTERED, DOWEL PROPOSED STONE SEAWALL TO EXISTING LEDGE. IF LEDGE NOT ENCOUNTERED, SET PROPOSED STONE SEAWALL FOUNDATION FOUR FEET (4'-0") MINIMUM BELOW GRADE.

PROPOSED SECTION A-A

0 8' 16'

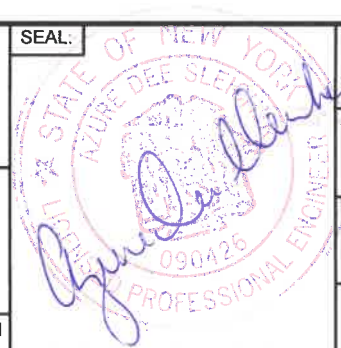
1/16"=1'-0"

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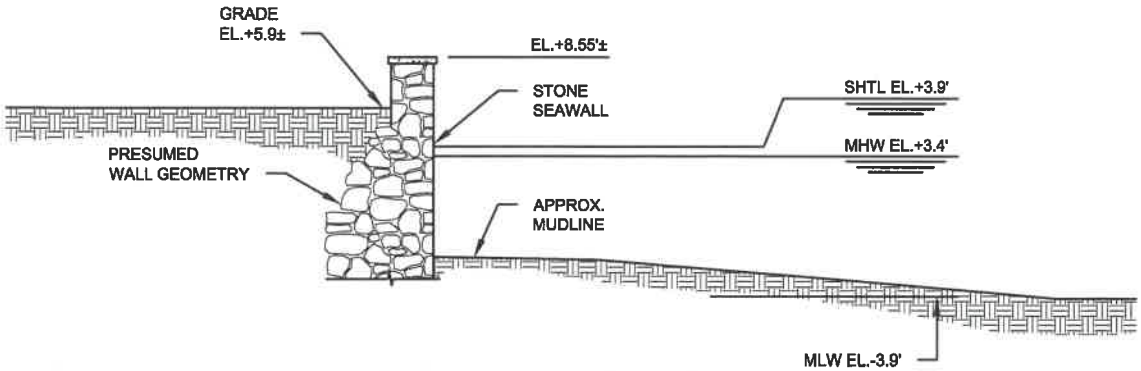
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12-05-2019	
Drawn By:	Checked By:
CLW	CGE
Datum:	Scale:
NAVD88	1/16"=1'-0"
Project No.:	Drawing No.:
2019053	9 of 17

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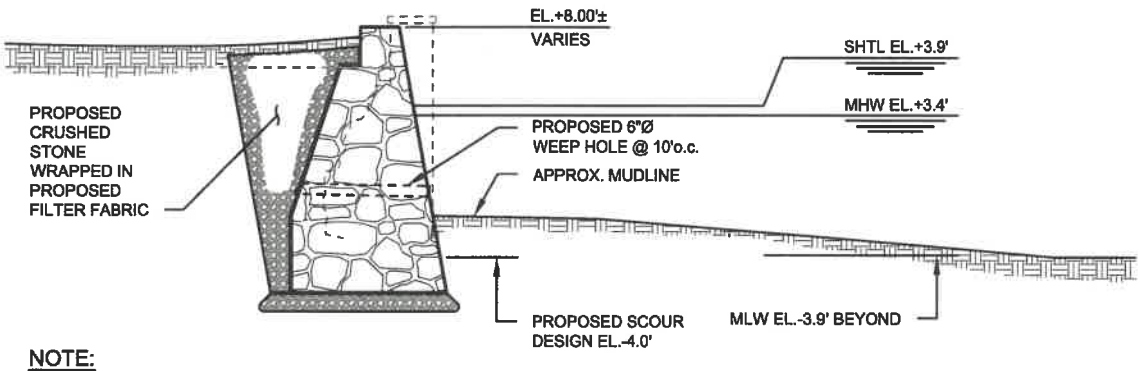
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0 5' 10'

1"=10'-0"



EXISTING SECTION B-B



NOTE:

WHERE EXISTING LEDGE IS ENCOUNTERED, DOWEL PROPOSED STONE SEAWALL TO EXISTING LEDGE. IF LEDGE NOT ENCOUNTERED, SET PROPOSED STONE SEAWALL FOUNDATION FOUR FEET (4'-0") MINIMUM BELOW GRADE.

PROPOSED SECTION B-B

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Project:
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220 HOMMOCKS ROAD
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SEAL:

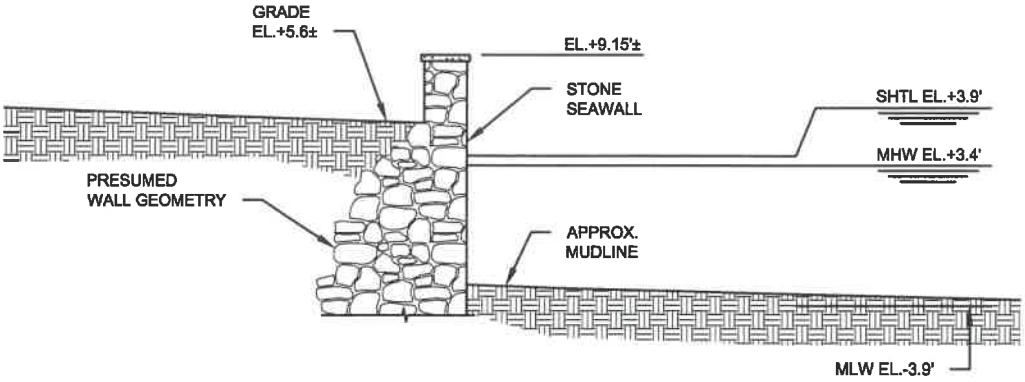
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Datum:	Scale:
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Project No.:	Drawing No.:
2019053	10 of 17

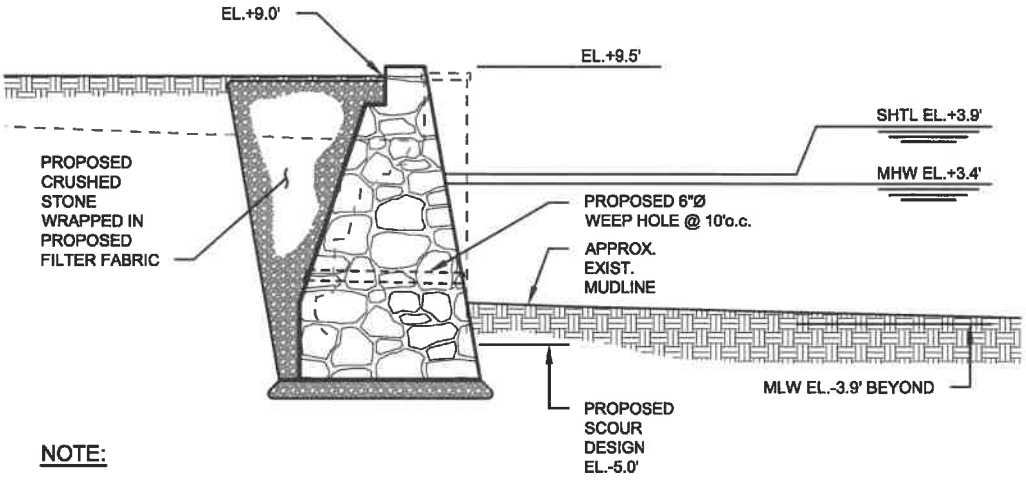
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0 5' 10'

1"=10'-0"



EXISTING SECTION C-C



NOTE:

WHERE EXISTING LEDGE IS ENCOUNTERED, DOWEL PROPOSED STONE SEAWALL TO EXISTING LEDGE. IF LEDGE NOT ENCOUNTERED, SET PROPOSED STONE SEAWALL FOUNDATION FOUR FEET (4'-0") MINIMUM BELOW GRADE.

PROPOSED SECTION C-C

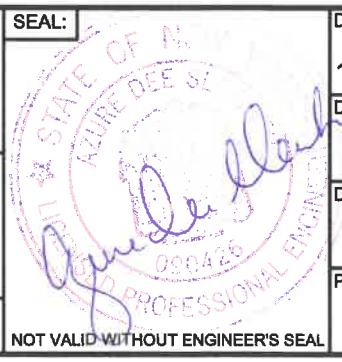
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Project:
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SEAL:

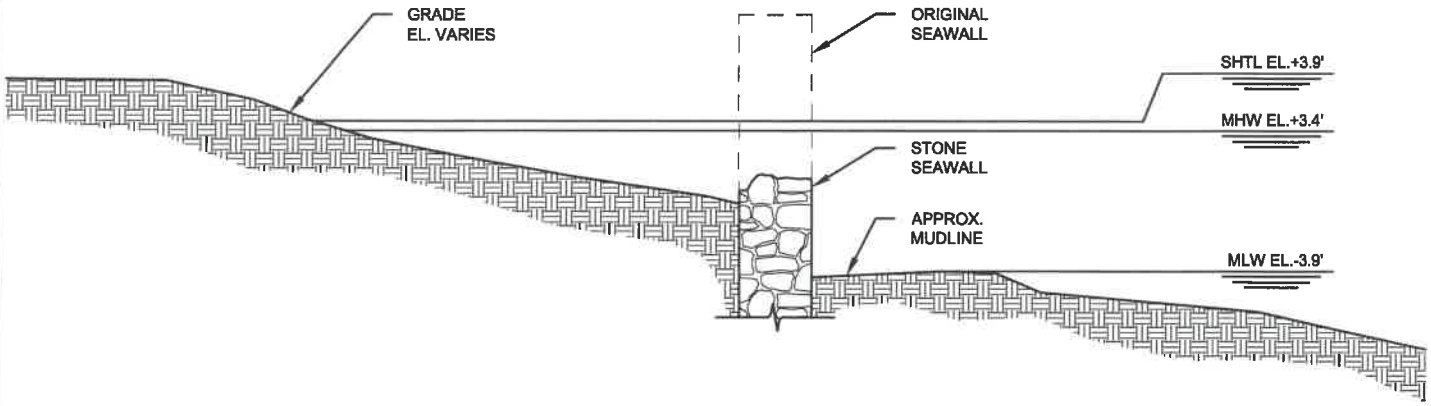


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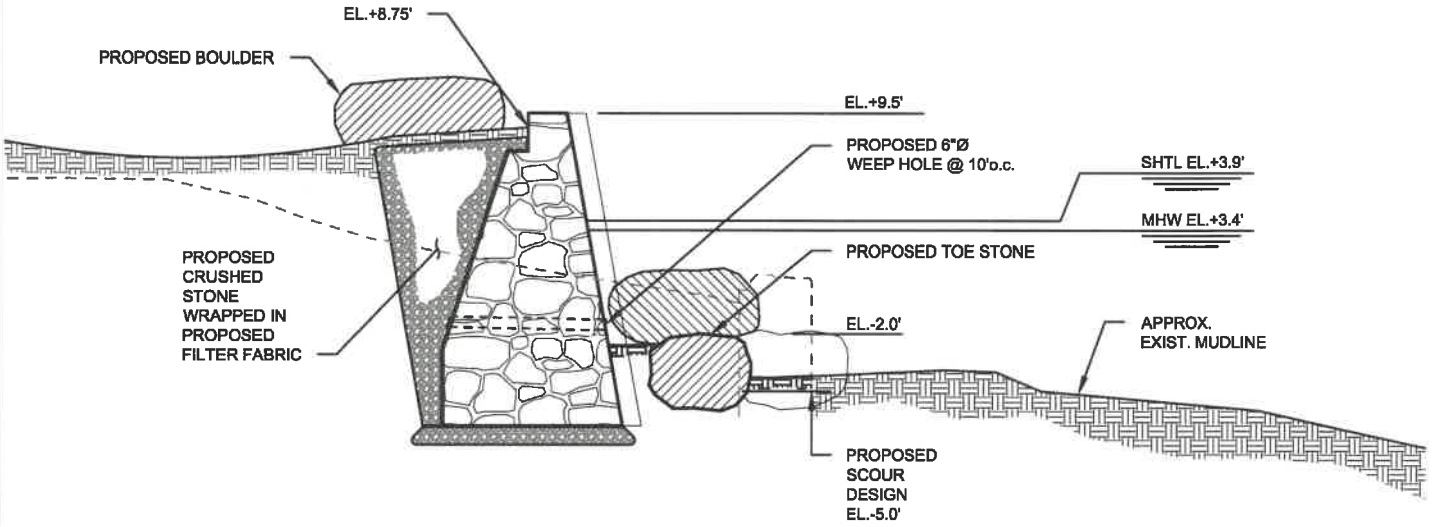
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Datum:	Scale:
NAVD88	1"=10'-0"
Project No.:	Drawing No.:
2019053	11 of 17

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EXISTING SECTION D-D



PROPOSED SECTION D-D

0 5' 10'

1"=10'-0"

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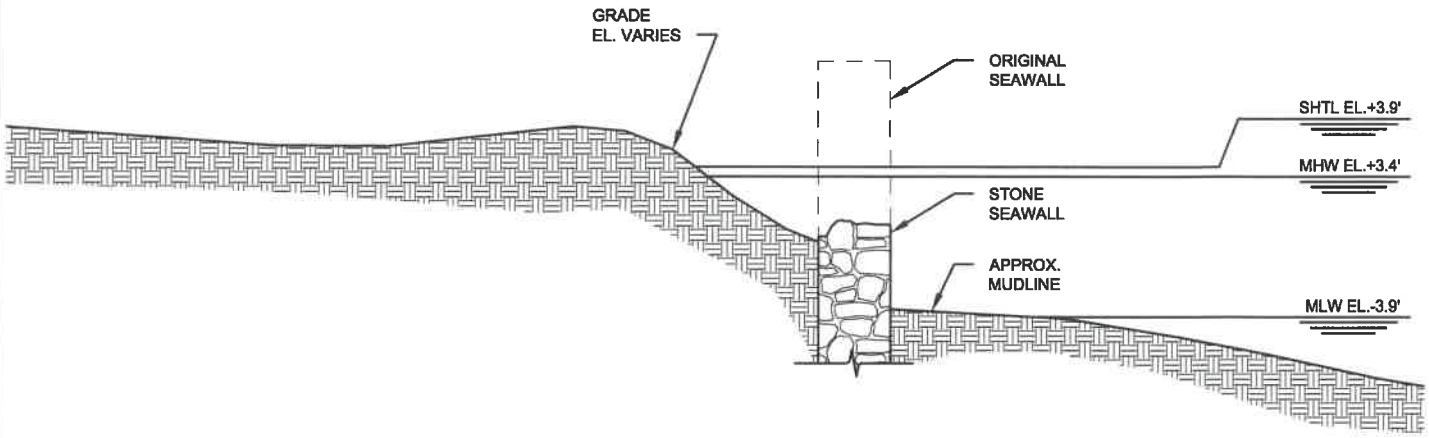
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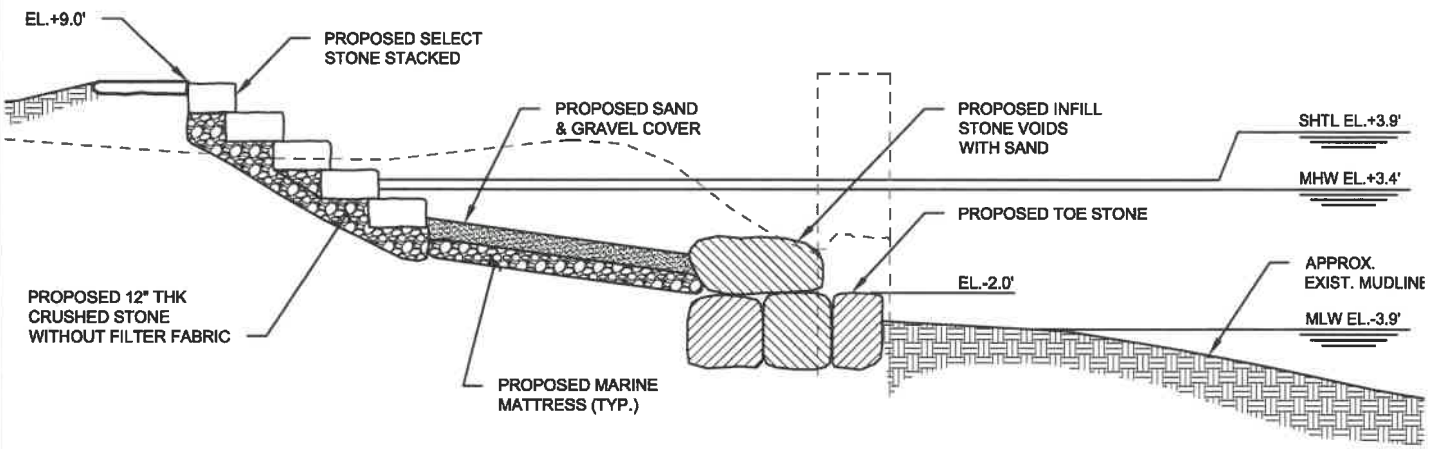
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Project No.:	Drawing No.:
2019053	12 of 17

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EXISTING SECTION E-E



0 5' 10'

1"=10'-0"

PROPOSED SECTION E-E

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LARCHMONT, N.Y. 10538

Project:
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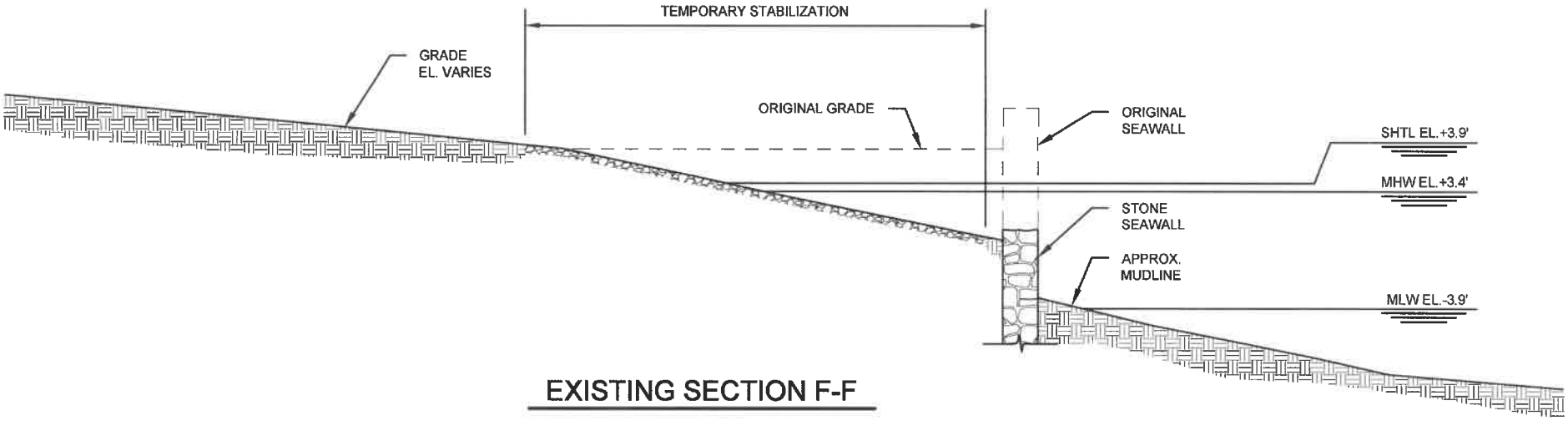
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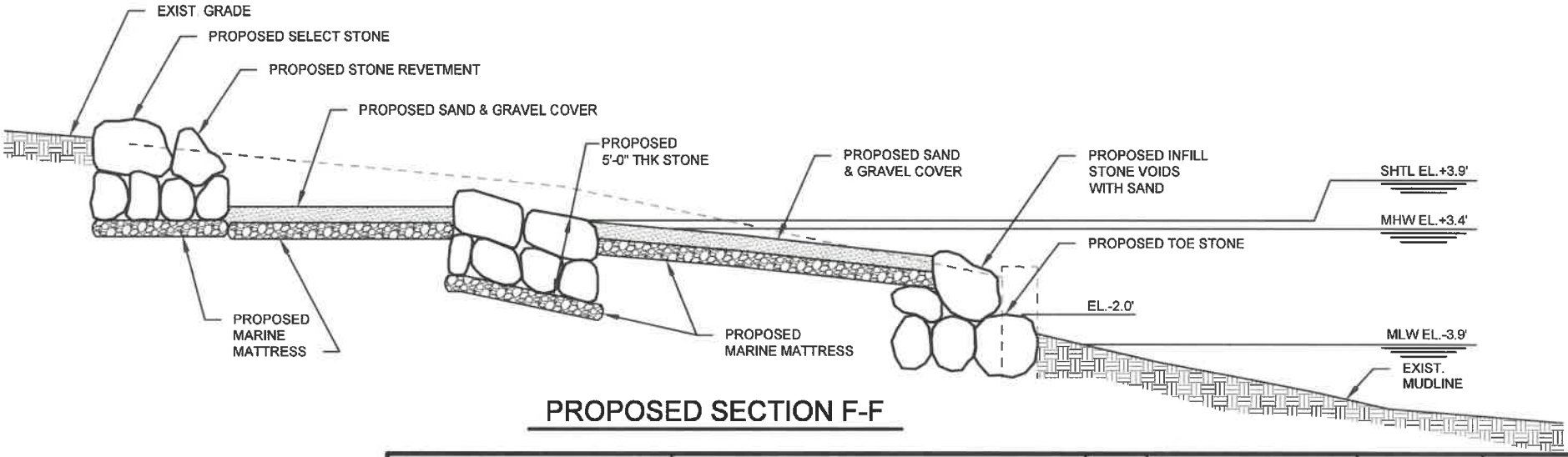
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Datum:	Scale:
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Project No.:	Drawing No.:
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EXISTING SECTION F-F



PROPOSED SECTION F-F

0 5' 10'

1"=10'-0"

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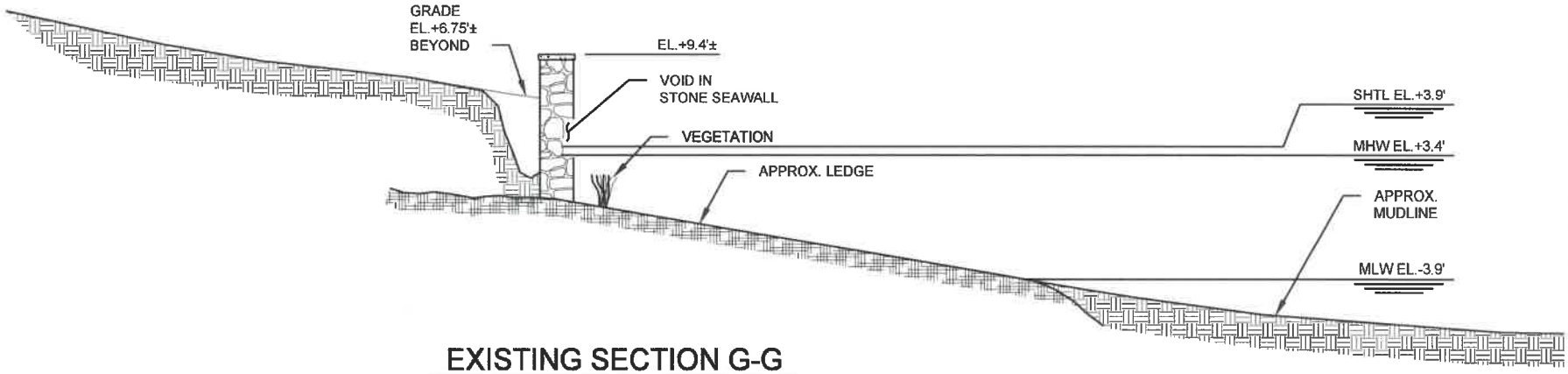
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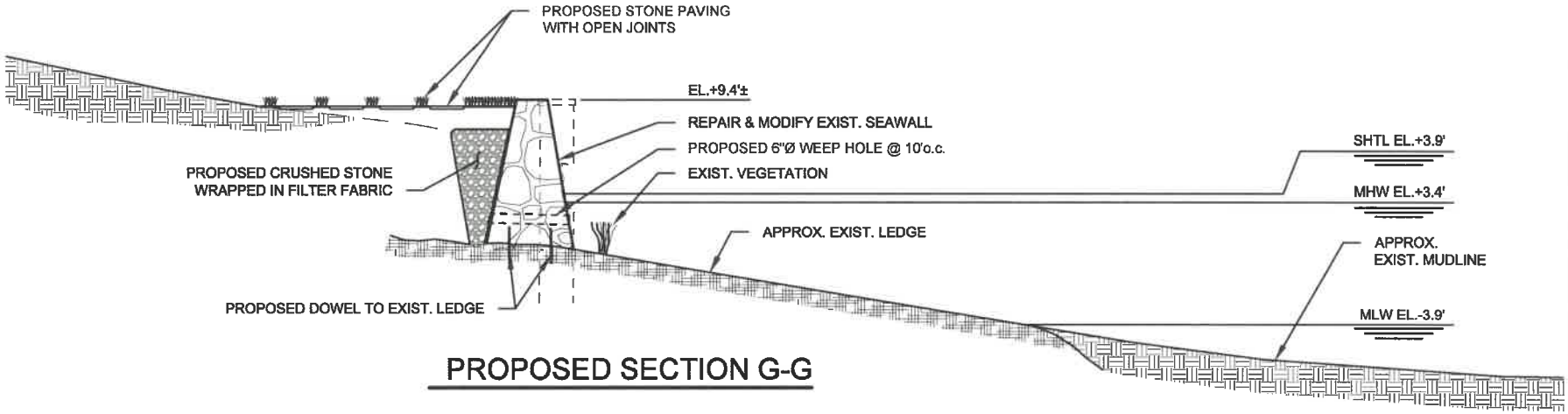
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EXISTING SECTION G-G



PROPOSED SECTION G-G

0 5' 10'

1"=10'-0"

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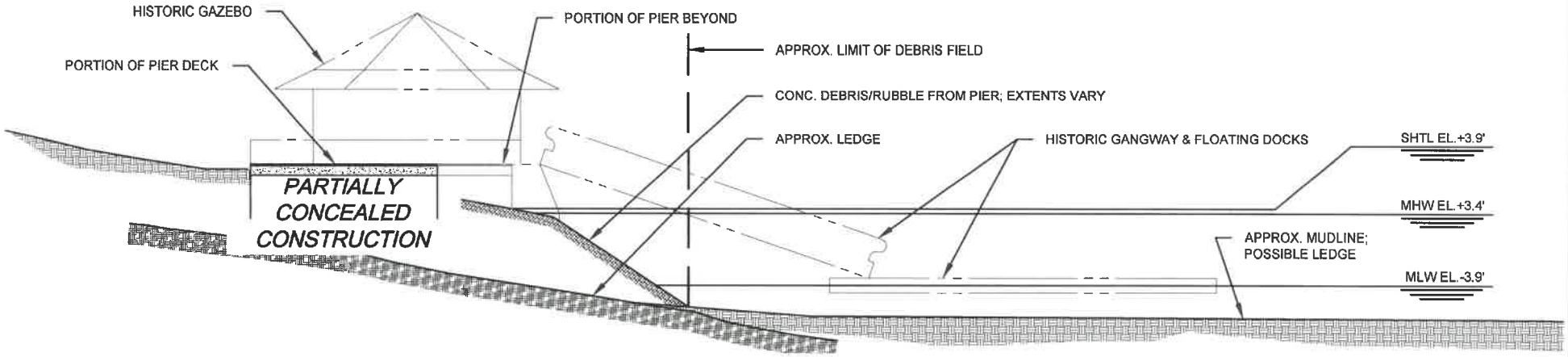
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AZURE DEE SMITH
090426
PROFESSIONAL ENGINEER

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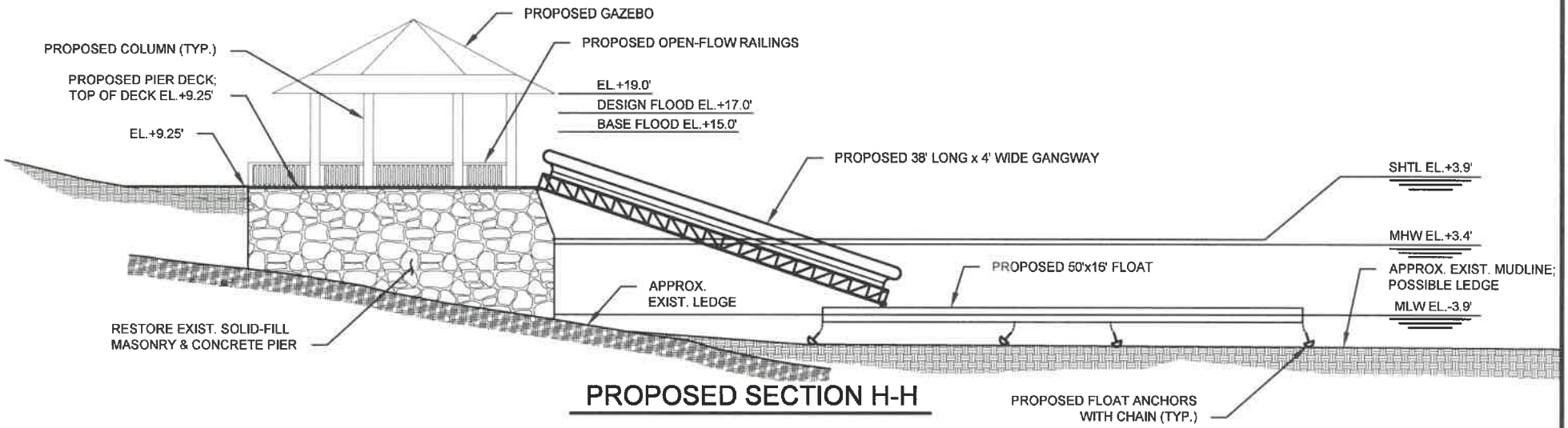
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EXISTING SECTION H-H



PROPOSED SECTION H-H

0 8' 16'

1/16"=1'-0"

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MAMARONECK, N.Y. 10538

SEAL:

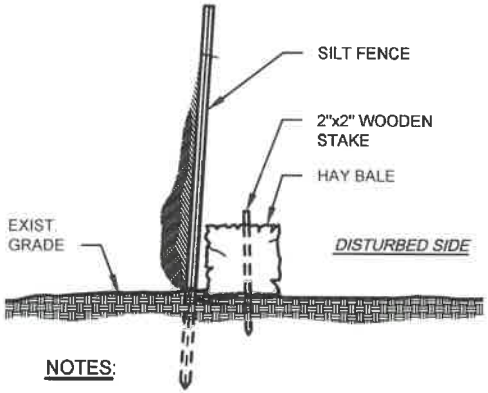
STATE OF NEW YORK
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PROFESSIONAL ENGINEER

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Date:	Rev.:
12-05-2019	
Drawn By:	Checked By:
CLW	CGE
Datum:	Scale:
NAVD88	1/16"=1'-0"
Project No.:	Drawing No.:
2019053	16 of 17

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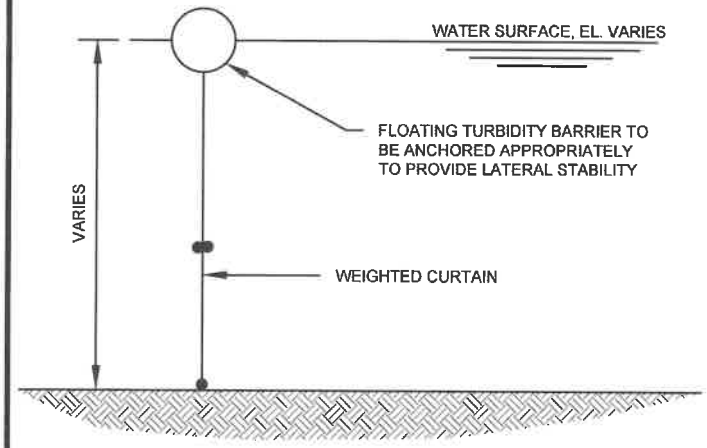
NOT FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY



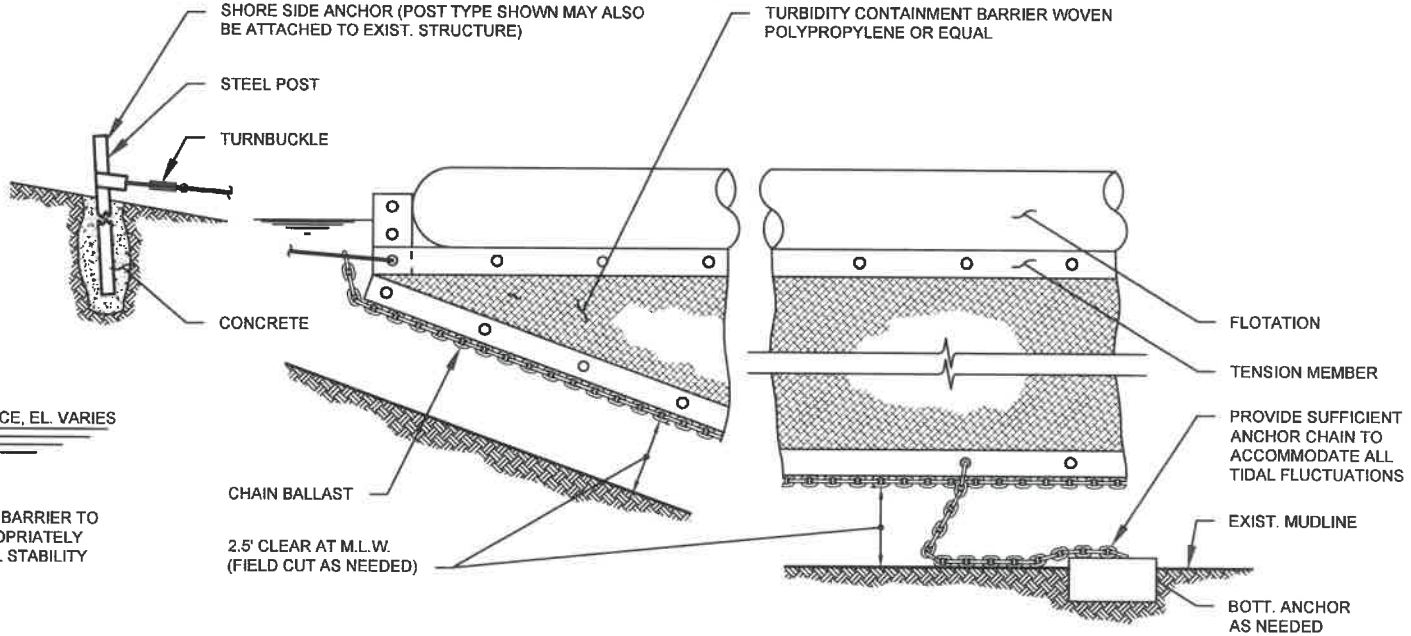
NOTES:

1. INSTALL SILT FENCE WITH HAY BALES ALONG ENTIRE LENGTH OF DISTURBED AREA.
2. MULCH AND SEED DISTURBED AREA.

SILT FENCE DETAIL



WEIGHTED TURBIDITY CURTAIN DETAIL



NOTE:
CURTAIN AND ANCHOR MUST RESIST EXPECTED WIND, WAVE AND CURRENT ENVIRONMENT AT SITE. CONTRACTOR TO SUBMIT WEIGHTED TURBIDITY CURTAIN SPECIFICATIONS FOR REVIEW.

WEIGHTED TURBIDITY CURTAIN DETAIL

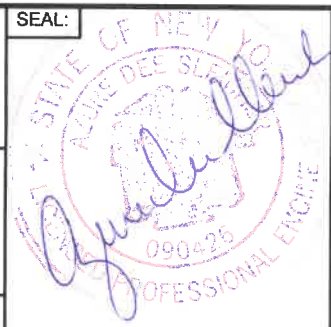
WEIGHTED TURBIDITY CURTAIN DETAIL

RACE COASTAL ENGINEERING
611 Access Road Stratford, CT 06615
Tel: 203-377-0663 racecoastal.com

Prepared For:
BEAUMERE, LLC
22 WALNUT AVENUE
LARCHMONT, N.Y. 10538

Project:
WATERFRONT RESILIENCY DESIGN
220 HOMMOCKS ROAD
MAMARONECK, N.Y. 10538

SEAL:



NOT VALID WITHOUT ENGINEER'S SEAL

Date:	Rev.:
12-05-2019	
Drawn By:	Checked By:
CLW	CGE
Datum:	Scale:
NAVD88	None
Project No.:	Drawing No.:
2019053	17 of 17

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SECTION 4

Photographs



Attachment A - Photographs
Photo 1: Site Area Image from Westchester County GIS, Pictometry.

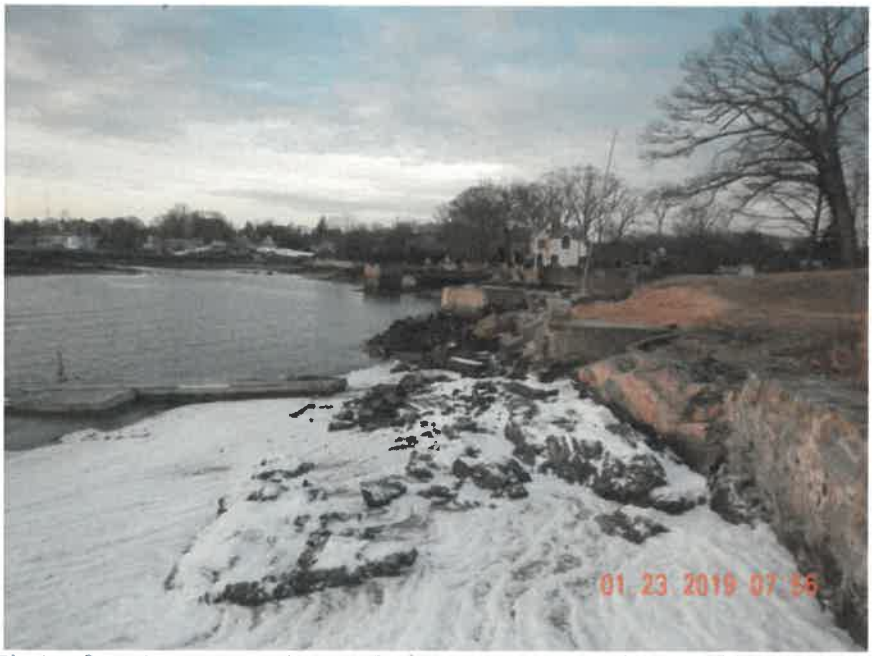


Photo 2: Concrete steps, ledge outcrop, and seawall (Area A)



Photo 3: Remains of concrete steps (Area A)

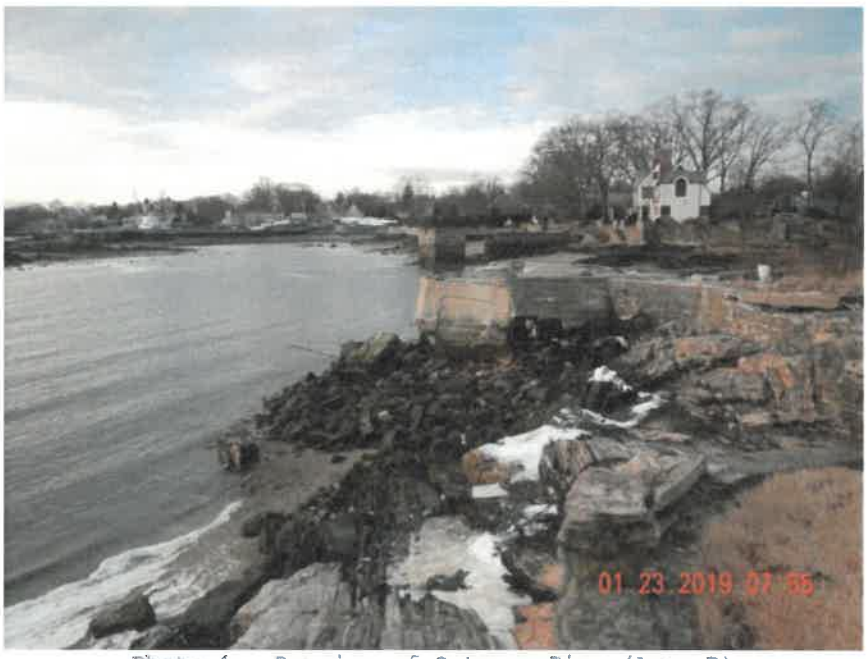


Photo 4: Remains of Octagon Pier (Area B)



Photo 5: Remains of Octagon Pier (Area B)



Photo 6: Seawall on ledge, note lower stone is displaced at joints and mortar has deteriorated and washed out (Area C)

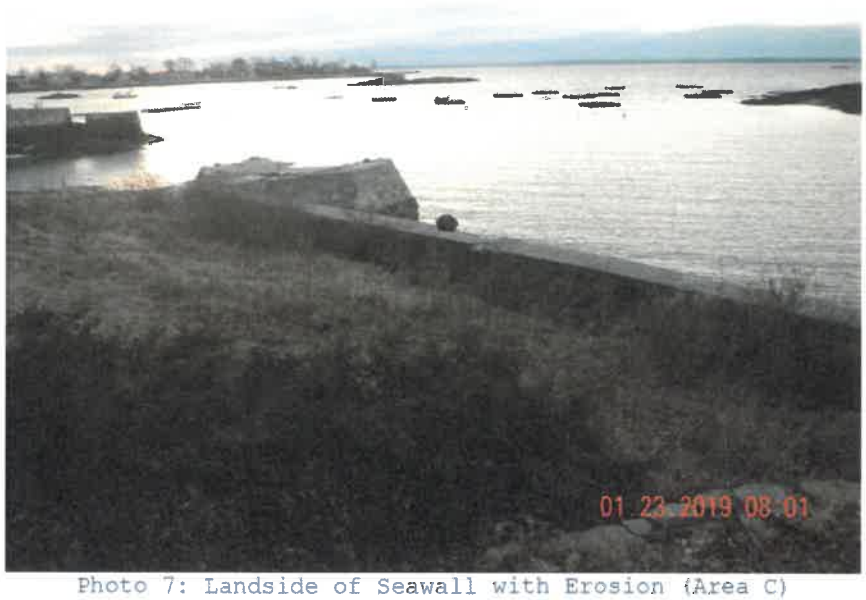


Photo 7: Landside of Seawall with Erosion (Area C)



Photo 8: Seawall on rock ledge (Area D)



Photo 9: Seawall on rock ledge, top of wall (Area D)



Photo 10: Seawall on rock ledge with void at base (Area D)



Photo 11: Collapsed Section of Wall (Area E)



Photo 12: Seawall Remnants (Area E)



Photo 13: Seawall Remnants (Area E)



Photo 14: Seawall Remnants viewed from Landside (Area E)



Photo 15: Seawall



Photo 16: Seawall with Void in Stone



Photo 17: Seawall



Photo 18: Seawall with Void in Stone



Photo 19: Seawall at Corner with Void and Displaced Stone



Photo 20: Seawall with Exterior Stone Displacing Waterward (Area F)



Photo 21: Seawall

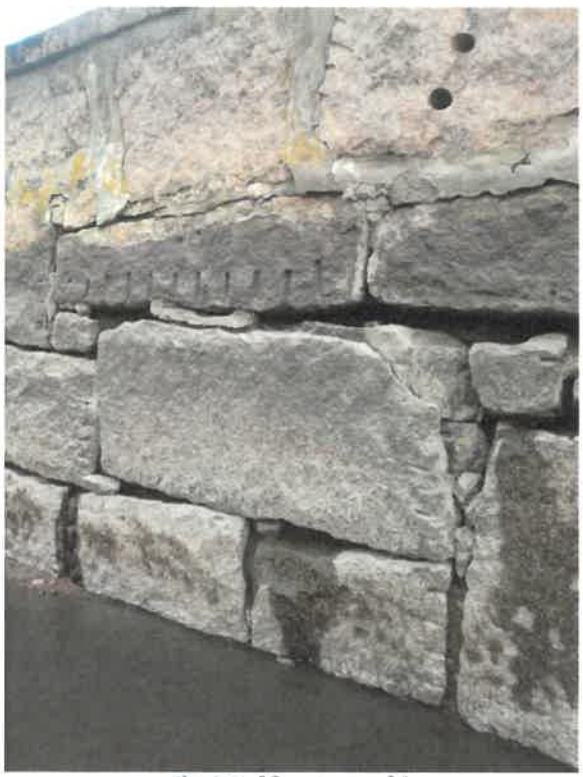


Photo 22: Seawall



Photo 23: Seawall at Corner with Void and Displaced Stone



Photo 24: Seawall



Photo 25: Seawall at Corner



Photo 26: Seawall



Photo 27: Seawall, Stone with Concrete Behind 7



Photo 28: Seawall



Photo 29: Seawall at Corner



Photo 30: Seawall



Photo 31: Seawall Returning Upland



Photo 32: Seawall Viewed from Landside



Photo 33: Seawall and Lawn Viewed from Landside



Photo 34: Floating Docks in Water (Temporary Storage Location)



Photo 35: Structure offsite to the northeast in the channel, tidal vegetation to north of site



Photo 36: Tennis Court - 2016

SECTION 5

Short Environmental Assessment Form for Unlisted Actions and EAF Mapper Summary Report

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

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

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

Part 1 – Project and Sponsor Information

Beaumere, LLC

Name of Action or Project:

Waterfront Improvements

Project Location (describe, and attach a location map):

220 Hommocks Road, Larchmont, NY (40.92837,-73.74300)

Brief Description of Proposed Action:

The proposed waterfront work includes the following:
1. Repair and Rebuild 897 feet ± of existing seawall.
2. Remove the northeast corner of the wall, replace with terraced walls and plantings.
3. Replace a portion of the collapsed wall section with a cove consisting of riprap revetment, stone blocks, and regraded slope.
4. Remove approximately 447 feet of wall to expose ledge, regrade and plant the upland slope. Supplement with revetment as required.
5. Rebuild the gazebo and fixed pier.
6. Rebuild the gangway and floating dock.
7. Clear and remove rubble and collapsed walls from the shoreline.
8. Creating a viewing area on the rock ledge by cutting a step into the ledge and smoothing and grinding select areas of ledge platform.
9. Fill and grade the along the existing lawn, provide new lawn seeding.

Name of Applicant or Sponsor:	Telephone: 212-478-0926
Beaumere, LLC	E-Mail:

Address:

22 Walnut Ave

City/PO:	State:	Zip Code:
Larchmont	NY	10538

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☐	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: Local permits from Planning and Zoning and Coastal Consistency Review, USACE, NY DEC, NY DOS	☐	☐

3. a. Total acreage of the site of the proposed action? 4.0 acres
   b. Total acreage to be physically disturbed? 2+/- acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 4.0 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

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

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☐

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify: Name:The Hammocks Salt Marsh Complex, Name:Long Island Sound, Reason:Important coastal fish & wildlife habitat, Reason:Exceptional or unique character, Agency:Mamaroneck, Town of, Agency:Westchester County, Date:8-31-...	☐	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☐	☐
b. Are public transportation services available at or near the site of the proposed action?	☐	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☐

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies: N/A	☐	☐

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water: Potable water is located on the existing site as the site is already established as a residential property with improvements.	☐	☐

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: Facilities are located on the existing site. An existing septic system serves the existing dwelling and site.	☐	☐

	NO	YES
12. a. 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?	☐	☐
b. 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?	☐	☐

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☐
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☐	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: The project is within Larchmont Harbor inlet of Long Island Sound. The project proposes to rebuild the approximate 451 square foot fixed pier and gazebo, 565 square foot floating dock, and 3' x 40' gangway. The fixed pier, floating dock, and gangway will extend about 98 feet from the existing seawall, see drawings. Seawalls abutting mean highwater line will be rebuilt or removed as shown on the drawings, but seawalls will not encroach water ward from the current locations.		

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

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

☑ Wetland ☐ Urban ☑ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? N/A	☐	☐
16. Is the project site located in the 100-year flood plan?	☐	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	☐	☐
a. Will storm water discharges flow to adjacent properties?	☐	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: N/A	☐	☐
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment: N/A	☐	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: N/A	☐	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: N/A	☐	☐

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

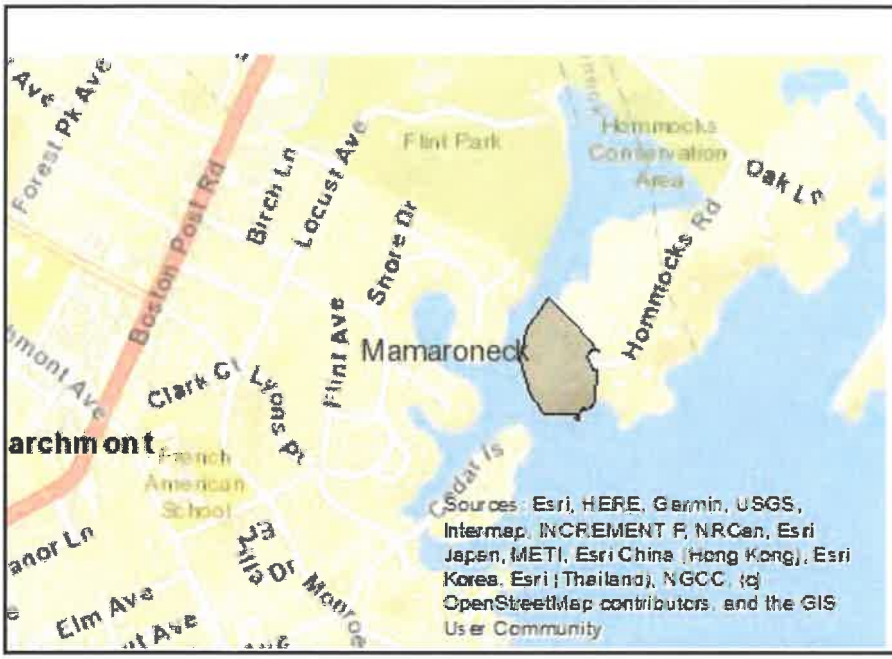
Applicant/sponsor/name: Bryan Martin Date: Nov 20 2019

Signature: Title: Manager Brawner LLC

PRINT FORM

EAF Mapper Summary Report

Friday, July 26, 2019 2:08 PM



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



Part 1 / Question 7 [Critical Environmental Area]	Yes
Part 1 / Question 7 [Critical Environmental Area - Identify]	Name:The Hammocks Salt Marsh Complex, Name:Long Island Sound, Reason:Important coastal fish & wildlife habitat, Reason:Exceptional or unique character, Agency:Mamaroneck, Town of, Agency:Westchester County, Date:8-31-89, Date:1-31-90
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	Yes
Part 1 / Question 20 [Remediation Site]	No

SECTION 6

Permission to Inspect Property Statement

NEW YORK STATE OF OPPORTUNITY. | **Department of Environmental Conservation**

PERMISSION TO INSPECT PROPERTY

By signing this permission form for submission with an application for a permit(s) to the Department of Environmental Conservation ("DEC"), the signer consents to inspection by DEC staff of the project site or facility for which a permit is sought and, to the extent necessary, areas adjacent to the project site or facility. This consent allows DEC staff to enter upon and pass through such property in order to inspect the project site or facility, without prior notice, between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. If DEC staff should wish to conduct an inspection at any other times, DEC staff will so notify the applicant and will obtain a separate consent for such an inspection.

Inspections may take place as part of the application review prior to a decision to grant or deny the permit(s) sought. By signing this consent form, the signer agrees that this consent remains in effect as long as the application is pending, and is effective regardless of whether the signer, applicant or an agent is present at the time of the inspection. In the event that the project site or facility is posted with any form of "posted" or "keep out" notices, or fenced in with an unlocked gate, this permission authorizes DEC staff to disregard such notices or unlocked gates at the time of inspection.

The signer further agrees that during an inspection, DEC staff may, among other things, take measurements, may analyze physical characteristics of the site including, but not limited to, soils and vegetation (taking samples for analysis), and may make drawings and take photographs.

Failure to grant consent for an inspection is grounds for, and may result in, denial of the permit(s) sought by the application.

Permission is granted for inspection of property located at the following address(es):

220 Hommocks Road, Larchmont, NY

*By signing this form, I affirm under penalty of perjury that I am authorized to give consent to entry by DEC staff as described above. I understand that false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.**

Bryan Mardin Manager Beaumont LLC		Nov 20 2019
Print Name and Title	Signature	Date

*The signer of this form must be an individual or authorized representative of a legal entity that:

- owns fee title and is in possession of the property identified above;
- maintains possessory interest in the property through a lease, rental agreement or other legally binding agreement; or
- is provided permission to act on behalf of an individual or legal entity possessing fee title or other possessory interest in the property for the purpose of consenting to inspection of such property.

SECTION 7

Federal Consistency Assessment Form

NEW YORK STATE DEPARTMENT OF STATE
COASTAL MANAGEMENT PROGRAM

Federal Consistency Assessment Form

An applicant, seeking a permit, license, waiver, certification or similar type of approval from a federal agency which is subject to the New York State Coastal Management Program (CMP), shall complete this assessment form for any proposed activity that will occur within and/or directly affect the State's Coastal Area. This form is intended to assist an applicant in certifying that the proposed activity is consistent with New York State's CMP as required by U.S. Department of Commerce regulations (15 CFR 930.57). It should be completed at the time when the federal application is prepared. The Department of State will use the completed form and accompanying information in its review of the applicant's certification of consistency.

A. **APPLICANT** (please print)

1. Name: Beaumere, LLC
2. Address: 22 Walnut Ave, Larchmont, NY 10538
3. Telephone: Area Code ( ) 212-478-0926

B. **PROPOSED ACTIVITY:**

1. Brief description of activity:

See Attachment

2. Purpose of activity:

See Attachment

3. Location of activity:

Westchester	Larchmont	220 Hommocks Road
County	City, Town, or Village	Street or Site Description

4. Type of federal permit/license required: USACE/NYSDEC

5. Federal application number, if known: _____

6. If a state permit/license was issued or is required for the proposed activity, identify the state agency and provide the application or permit number, if known:

New York State Department of Environmental Conservation Permit

C. **COASTAL ASSESSMENT** Check either "YES" or "NO" for each of these questions. The numbers following each question refer to the policies described in the CMP document (see footnote on page 2) which may be affected by the proposed activity.

1. Will the proposed activity result in any of the following:	YES	NO
a. Large physical change to a site within the coastal area which will require the preparation of an environmental impact statement? (11, 22, 25, 32, 37, 38, 41, 43)		✓
b. Physical alteration of more than two acres of land along the shoreline, land under water or coastal waters? (2, 11, 12, 20, 28, 35, 44)		✓
c. Revitalization/redevelopment of a deteriorated or underutilized waterfront site? (1)	✓	
d. Reduction of existing or potential public access to or along coastal waters? (19, 20)		✓
e. Adverse effect upon the commercial or recreational use of coastal fish resources? (9,10)		✓
f. Siting of a facility essential to the exploration, development and production of energy resources in coastal waters or on the Outer Continental Shelf? (29)		✓
g. Siting of a facility essential to the generation or transmission of energy? (27)		✓
h. Mining, excavation, or dredging activities, or the placement of dredged or fill material in coastal waters? (15, 35)		✓
i. Discharge of toxics, hazardous substances or other pollutants into coastal waters? (8, 15, 35)		✓
j. Draining of stormwater runoff or sewer overflows into coastal waters? (33)	✓	
k. Transport, storage, treatment, or disposal of solid wastes or hazardous materials? (36, 39)		✓
l. Adverse effect upon land or water uses within the State's small harbors? (4)		✓

2. Will the proposed activity affect or be located in, on, or adjacent to any of the following:	YES	NO
a. State designated freshwater or tidal wetland? (44)	✓	
b. Federally designated flood and/or state designated erosion hazard area? (11, 12, 17)	✓	
c. State designated significant fish and/or wildlife habitat? (7)	✓	
d. State designated significant scenic resource or area? (24)		✓
e. State designated important agricultural lands? (26)		✓
f. Beach, dune or Barrier Island? (12)		✓
g. Major ports of Albany, Buffalo, Ogdensburg, Oswego or New York? (3)		✓
h. State, county, or local park? (19, 20)		✓
i. Historic resource listed on the National or State Register of Historic Places? (23)		✓

3. Will the proposed activity require any of the following:	YES	NO
a. Waterfront site? (2, 21, 22)	✓	
b. Provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (5)		✓
c. Construction or reconstruction of a flood or erosion control structure? (13, 14, 16)	✓	
d. State water quality permit or certification? (30, 38, 40)	✓	
e. State air quality permit or certification? (41, 43)		✓

4. Will the proposed activity occur within and/or affect an area covered by a State-approved local waterfront revitalization program, or State-approved regional coastal management program? (see policies in program document*)	YES	NO
	✓	

D. **ADDITIONAL STEPS**

1. If all of the questions in Section C are answered "NO", then the applicant or agency shall complete Section E and submit the documentation required by Section F.

2. If any of the questions in Section C are answered "YES", then the applicant or agent is advised to consult the CMP, or where appropriate, the local waterfront revitalization program document*. The proposed activity must be analyzed in more detail with respect to the applicable state or local coastal policies. On a separate page(s), the applicant or agent shall: (a) identify, by their policy numbers, which coastal policies are affected by the activity, (b) briefly assess the effects of the activity upon the policy; and, (c) state how the activity is consistent with each policy. Following the completion of this written assessment, the applicant or agency shall complete Section E and submit the documentation required by Section F.

E. **CERTIFICATION**

The applicant or agent must certify that the proposed activity is consistent with the State's CMP or the approved local waterfront revitalization program, as appropriate. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program, or with the applicable approved local waterfront revitalization program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Christopher Eggers P.E.

Address: 611 Access Road, Stratford, CT 06615

Telephone: Area Code ( ) 203-337-0663

Applicant/Agent's Signature: Christopher Eggers Date: 12-5-2019

F. **SUBMISSION REQUIREMENTS**

1. The applicant or agent shall submit the following documents to the **New York State Department of State, Office of Planning and Development, Attn: Consistency Review Unit, One Commerce Plaza-Suite 1010, 99 Washington Avenue, Albany, New York 12231.**

a. Copy of original signed form.
b. Copy of the completed federal agency application.
c. Other available information which would support the certification of consistency.

2. The applicant or agent shall also submit a copy of this completed form along with his/her application to the federal agency.

3. If there are any questions regarding the submission of this form, contact the Department of State at (518) 474-6000.

*These state and local documents are available for inspection at the offices of many federal agencies, Department of environmental Conservation and Department of State regional offices, and the appropriate regional and county planning agencies. Local program documents are also available for inspection at the offices of the appropriate local government.

Attachment to NY State Department of State Coastal Management Program: Federal Consistent Assessment Form

Proposed Activity

1. Brief description of activity:

The proposed waterfront work is described below. The proposed improvements will be designed to withstand forces associated with the 1% annual chance (100-yr) plus 2-ft of sea level rise. 2-ft approximates the high end of the central range (middle 67%) of values from model-based probabilities (16 global climate models by 3 GHG emissions scenarios)by 2080 and the high end of sea level rise with rapid ice-melt scenario by 2050 as outlined in Table 1 in the *New York State Sea Level Rise Task Force – Report to the Legislature* (Dec 2010).

I. Clean up and Repair Stone Steps and Ancillary Wall

The Applicant is proposing to clear and remove rubble along this section of shoreline described in the existing conditions section. This includes 130 SF of existing concrete and stone masonry, thereby exposing the existing rock ledge and removing debris. The approximate 28 LF of stone masonry wall around the flagpole will remain. The approximately 18 LF of existing stone masonry wall adjoining the pier will be retained and maintained with repairs and rehabilitation.

The Applicant is also proposing to create integrated stone steps by cutting approximately 1 CY of existing ledge. In addition, the Applicant is proposing to create a viewing area and steps on the exposed ledge by grinding an additional 1.5 CY± of the rock ledge to create a flat area with steps above the spring high tide line.

II. Restore Octagon Pier and Gazebo (Section G-G on Plans)

The Applicant is proposing to restore and rehabilitate the gazebo and fixed pier (538 SF) in its original location. The fixed pier is an existing but damaged structure and will be restored in the same footprint. The work will be performed using an excavator and normal hand tools as tides permit. A new gangway used to access the floating dock will be attached to the pier to access the floating dock described below.

The gazebo is a structure integrated on top of the octagon-shaped pier. The pier is concrete, stone masonry and solid fill while the gazebo was timber construction above the pier. The gazebo does not increase the size of the pier which is also needed for access to the gangway and floating dock. The gangway and floating dock extend from the pier with gazebo to access the water. Both the pier and gazebo were damaged during superstorm Sandy (2012). The pier was intact and in use up to 2014 per aerial photographs. The concrete and stone pier remain in place but with significant damage. Remains of the gazebo are not currently on

site. The pier, gazebo, and floating dock are present on aerial imagery as early as 1925 and in a 1916 postcard.

As shown on past photographs, the gazebo is a complementary part of the pier. The pier provides the foundation and floor of the gazebo. The gazebo provides railing and roof for the pier. The railings are necessary for safety to protect against falls. The roof is beneficial to provide shelter from the sun and elements. The gazebo is practical to stage guests for boarding the boat and equipment handling onto and off of the boat. The gazebo is also ideal for passive scenic and wildlife viewing. Additionally, the Applicant is proposing to retain and maintain 18 LF of seawall adjacent to the gazebo. Approximately 321 sq. ft of the pier deck are useable, and this will be restored to its original geometry of about 521 sq. ft.

While the Pier will be restored to its original condition, the Gazebo will be constructed to be consistent with current flood zone guidelines to the greatest extent practicable in its historic location. Specifically, new construction will be adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood. Flood loads associated with the 100-yr (1% annual chance of occurrence) have determined.

Each column (6-inch wide) of the gazebo will be required to withstand a lateral load of up to 350 pounds from hydrostatic and hydrodynamic forces for flood events up to the 100-year event. The new work will be designed and constructed with adequate anchoring to prevent floatation, collapse or lateral movement of the structure and will be constructed with materials and utility equipment resistant to flood damage. Flood resistant materials include, steel, concrete, fiber reinforced polymer (FPR), and ipe tropical hardwood. The bottom or the roof eave of the gazebo will be four feet above the Base Flood Elevation. Therefore, the roof structure and horizontal members will not be exposed to hydrostatic and hydrodynamic loading during the base flood. This roof eave elevation exceeds the minimum design flood elevation prescribed by the building code by two feet, which will protect the structure from sea level rise and future storms.

Repair of the existing pier will be done with the use of high-strength concrete and meet or exceed current requirements for cast-in-place concrete in the marine environment. Reinforcing steel will be hot dipped galvanized to offer double corrosion protection. Other connection hardware subject to inundation will be stainless steel.

Use of state-of-the-practice materials and implementation of flood zone compliance into the design will ensure that the restored structure will be resilient and remain intact and functional for a design life of no less than fifty years based on the environmental loading that it will be designed for.

The owner is coordinating with the Town locally and neighbors to restore the gazebo in a manner that mutually benefits the neighborhood, harbor views, and local community by re-establishing the historic character of Larchmont Harbor. It is the Applicant's intent to re-create the aesthetics of the historic structure while making improvements to its resiliency and ability to meet current codes and standards.

III. Remove and Restore Stone Masonry Wall (Section F-F)

The Applicant is proposing to repair and rehabilitate this 92 LF ± reach of seawall in this area. The lawn that was scoured out behind this wall will be backfilled and the lawn will be reseeded. The existing stone will be reused to construct a wall in kind within the waterward limits of the existing wall, additional stone will be imported to the site to repair gaps and supplement the existing material. Crushed stone will be placed behind the wall for drainage and weepholes will be installed in the wall. Test pits in this area revealed that ledge elevation varies.

IV. Restore Stone Masonry Wall

The Applicant is proposing to restore and rehabilitate the 110 ft ± reach of seawall in-kind, in place. Missing stone in the wall will be replaced and loose mortar joints will be chipped to sound material and replaced with fresh mortar.

V. Replace Concrete Stone and Masonry Wall with Cove (Section D-D and E-E)

The Applicant is proposing to repair and rehabilitate the 155 ft ± section of wall along the creek with limited exposure to fetch and waves. The limited exposure to fetch and waves results in less hydrostatic and hydrodynamic loading during storms than the more exposed areas of the site. The Applicant is also proposing to replace a portion of the collapsed wall section with a 100 foot ± cove consisting of riprap revetment, stone blocks, and regraded slope. Approximately 270 CY of stone will be used to construct the cove. The cove will be covered with sand and gravel cover (approximately 125 CY). A Marine mattress is proposed under the cover to add additional stability to the cove. Technical information and manufacturer's brochure are attached as additional information. The cove will have a footprint of 4400 SF. The remaining portion of the wall will be rehabilitated, in place. The eroded areas behind the wall will be backfilled and the lawn will be reseeded.

Flood loads associated with the 100-yr (1% annual chance of occurrence) will be determined, and the revetment, wall and other items in the proposed cove designed for stability during the FEMA Base Flood. The cove is also designed to minimize wave runup and wave impacts. The cove is located in an area of exposed fetch to Larchmont Harbor. Due to this exposure and water being reflected from the adjacent natural ledge outcrop, this location on the site is one of the most vulnerable to damage. This vulnerability has been quantified and accounted for in the revetment design. The proposed cove will better attenuate wave energy, runup, and reflection around the ledge outcrop. Additionally, backflowing and water retention behind the seawall during storms will be alleviated by allowing water to flow from the proposed cove.

VI. Restore and Rehabilitate Stone Masonry Wall (Section C-C, B-B, and A-A)

The Applicant is proposing to repair and rehabilitate the remaining 1040 feet ± of existing seawall within the limits shown on the plans. This repair and rehabilitation will consist of restacking existing stone walls within the existing waterward limits, and partially removing the seawall by demolition of the northernmost corner of the wall. The seawall in this northern area will be replaced with terraced walls and plantings. Approximately 462 LF of seawall will be repaired and rehabilitated, landward of the existing seawall or property line. The top of the wall will vary in elevation from EL. +7.25 feet to El. +9.5 feet per the project plans. The wall will continue along the tidal terrace as described below for an additional 102 LF, for a total length of 564 LF. Flood loads associated with the 100-yr (1% annual chance of occurrence) will be determined, and the wall will be designed to withstand these loads. Drainage, including weepholes, will be added to the existing wall to prevent hydrostatic forces from building up on the back side of the wall and allow water behind the wall to drain.

In the north corner of the site, the wall will be removed and replaced with the tidal terrace, which will consist of three levels and associated walls and plantings. The landward wall will be approximately 102 LF and meet the upper lawn, with top of wall EL. +7.25 feet. The intermediate wall will be 160 LF and vary in elevation from El. +5.0 feet to El. +7.25 feet. The third and most waterward wall will be made with a stone revetment to act as a sill for the plantings and will be 173 LF and vary in elevation from El. +3 feet to El. +4.5 feet. Overall the 1040-foot seawall will be replaced with 897 feet of new wall and revetment

sill. The removal of the seawall for the tidal terrace is anticipated to create 972± square feet of mudflat and 3,057± square feet of new tidal wetland vegetation. Salt Marsh Grass (Spartina Alterniflora) and Salt Meadow Cordgrass (Spartina Patens) will be planted.

VII. Dock and Gangway (Section G-G)

The Applicant is proposing to place the 38-foot x 4-foot gangway and 50-foot x 16-foot floating dock. Historically (since at least 1925 based on a review of aerial photos), the float has been accessed off the fixed pier. In recent years, the gangway and float has been relocated to the east due to the condition of the pier, however the historic location offers increased water depth such that the Applicant can berth their boats. The Applicant is proposing to return the float to its historic location. It is anticipated that the Applicant will berth a 40-foot and 21-foot-long boat on the dock. It is anticipated that these boats will be berthed seasonally from spring to fall. The floating dock will remain in place year-round. The float length is required to berth the boats. The property includes two apartments located above the detached garage in addition to the main dwelling. As such, the second boat and float size allow accommodation of future tenants and guests for multiple use access.

The site is relatively exposed to Long Island Sound particularly from the east, southeasterly, and southernly directions. As a result, waves with wave height in excess of 1.5 feet with a 3 second period occur at the site during the typical boating season, with larger waves occurring during more severe storms. The wave length associated with these conditions is in excess of 30 feet based on the dispersion relationship presented below:

$$\frac{2\pi}{T} = g\frac{2\pi}{l}\tanh\left(\frac{2\pi}{l} * d\right)$$ Dean and Dalrymple 1991

Where:
T = wave period
g = acceleration due to gravity (32.2 ft/s^2)
l = wave length
d = water depth

The proposed float's orientation and dimensions are designed to allow the Applicant and his guests a safe means to access the sound. Generally, to assure maximum stability of a float, the float length at the water-line should be at least as long as the typical wavelength at the site. This will minimize pitching of the deck of the float and thus maximize boater safety while accessing or leaving the float. Since a 30-foot-wide float is not practical or feasible, the Applicant is proposing a 16-foot-wide float (approximately ½ the wave length) to strike a balance between his private rights of access and the public's rights to use and enjoy the trust waters. This proposed float length will have a benefit throughout the boating season, and this is not just limited to more severe storms. Wave heights in excess of 1.5 feet are predicted to occur multiple times annually.

The float length is also required to accommodate the two proposed vessels. The dock length will allow secure tie up of the longer vessel, at 40-feet length.

There will be approximately 3 feet of water depth at mean low water at the shallow end of the float. There will be approximately2.8feet of water depth below mean lower low water.

VIII. Lawn and Ancillary Upland Work

The Applicant is proposing to add fill in the lawn areas, relocate and rebuild the pool and pool house, and to replace and relocate the existing tennis court. This work is currently upland of the existing seawalls and outside of the State and Federal Jurisdiction. Upland work may occur before, simultaneously, or after to the seawall and waterfront work. Approximately 5,600 CY of fill will be used to regrade the lawn. The tennis court will be approximately 7000 square feet. The pool will be approximately 1,800 square feet in area with approximately 3,700 square feet of adjoining deck, and approximately 1,200 square foot pool house. The tennis court will be constructed of concrete with acrylic sealing surface.

2. Purpose of activity:

The Applicant recently purchased the property and seeks to restore the site and enhance the coastal and natural features to improve natural function and habitat, storm and coastal resiliency with concern and consideration for sea level rise, and the scenic character of the site from Larchmont Harbor. The seawalls have been on the site since at least 1916 and with due time of their age require maintenance and restoration. As such, the seawalls, pier, gazebo, and dock are due for repair, restoration, and rehabilitation. The proposed project is to selectively repair, rehabilitate, and remove existing seawalls in order to maintain the upland soils from erosion loss into the adjoining waterbody, and provide enhanced structural stability of the restored walls to better retain the upland soil and resist hydrostatic and hydrodynamic forces (including accounting for sea level rise). However, the project goals are much more overarching than simple restoration and improvements to walls. The project goals and purpose are to provide improved access and interface with nature, increase the site's capacity for plant growth and natural features along the waterfront, and to provide water access for uses including kayaking, boating, and fishing.

Coastal Assessment

- Reference is made to the policies described within *Town of Mamaroneck and Village of Larchmont Local Waterfront Revitalization Program (LWRP)*. Based upon questions in the COASTAL ASSESSMENT section, Policies potentially affected by the proposed work include:

    - Policy 1
    - Policy 2
    - Policy 7
    - Policy 11
    - Policy 12
    - Policy 13
    - Policy 14
    - Policy 16
    - Policy 17
    - Policy 21
    - Policy 22
    - Policy 24
    - Policy 30
    - Policy 38
    - Policy 40
    - Policy 44

Policy 1: The State policy regarding the restoration, revitalization, and redevelopment of deteriorated and underutilized waterfront areas for commercial and industrial, cultural, recreational and other compatible uses is not applicable to the Town of Mamaroneck and Village of Larchmont.

While the State policy to restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational and other compatible uses is not adopted in the Local Waterfront Revitalization Plan, the project and proposed work will restore and rehabilitate the waterfront as discussed in the attached application. The Applicant seeks to restore the character of the site while enhancing coastal resiliency and natural features of the site. The owner is coordinating with the Town locally and neighbors to restore the gazebo in a manner that mutually benefits the neighborhood, harbor views, and local community by re-establishing the historic character of Larchmont Harbor. It is the Applicant's intent to re-create the aesthetics of the historic structure while making improvements to its resiliency and ability to meet current codes and standards.

Policy 2: Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.

This site is a residential facility with several water-dependent uses in place onsite and proposed. The *LWRP* states that "Existing residential development with associated recreational facilities along the local waterfront is cohesive and of high quality." As such, the residential use of these water dependent activities is evaluated below and considered consistent with Policy 2.

Water dependent uses outlined in the *LWRP* and applicable as part of this project include:

- Recreational activities which depend on access to coastal waters (for example: swimming, fishing, boating, wildlife viewing, scenic and nature walks);
    - The recreational use of the site does include boating, swimming, fishing, wildlife viewing, and nature walks along the waterfront. These passive activities are enhanced by the proposed work, including removal of 130± square feet of existing seawall, lowering the top of wall elevation in areas. Birds, coyotes, and other wildlife visit the site currently, but the seawall removal facilitates improved habitat integration into the neighboring marsh. Removal of the seawall creates 972± square feet of mudflat and 3,057± square feet of new tidal wetland vegetation. This habitat increase will improve the wildlife viewing and scenic and nature walks on the site.

Boating is water dependent, and the proposed work includes rehabilitation and improvement to the pier and floating dock. This will allow berthing of the Applicant's boat at the site.

Along with rebuilding the pier, the gazebo atop the pier will be rebuilt. This local landmark was destroyed sometime after in Superstorm Sandy (2012) and its restoration will improve boating and wildlife viewing by serving as an outlook location. Additionally, the scenic aspects of the property will be improved for the Applicant and all those in the Larchmont Harbor.

- Flood and erosion protection structures (for example: breakwaters, bulkheads);
  - The existing seawall is a flood and erosion structure which will be repaired and modified. The seawall predates August 20, 1977, with aerial imagery to at least 1947 showing the wall. Where the wall is proposed to be removed to enhance habitat and the site views, the removed areas are designed to be stable and incorporate vegetation plantings to stabilize the soil.
- Non-commercial facilities needed to store and service boats;
  - The pier and floating dock are to be repaired and modified to service the non-commercial recreational boat docking at the site. The gazebo will be used to stage guests for boarding the boat and equipment handling onto and off of the boat. The gazebo offers significant benefits to the quality of the residential area. The gazebo was a landmark and focal point of Larchmont Harbor, not only for the Applicant, but for neighbors and public utilizing Larchmont Harbor and its waterfront. The owner is coordinating with the Town locally and neighbors to restore the gazebo in a manner that mutually benefits the neighborhood, harbor views, and local community by re-establishing the historic character of Larchmont Harbor. It is the Applicant's intent to re-create the aesthetics of the historic structure while making improvements to its resiliency and ability to meet current codes and standards.
- Support facilities which, are necessary for the successful functioning of permitted water-dependent uses.
  - Water and electrical utilities will be brought to the waterfront as needed to service the facilities.

Policy 5: Encourage the location of development in areas where public services and facilities essential to such development are adequate, except when such development has special functional requirements or other characteristics which necessitate its location in other coastal areas.

The proposed project is located within an existing developed residential neighborhood. The main dwelling and site features already exist and have been serviced adequately with a combination of public services and onsite septic. If public sewer is brought to



the street, the Applicant will then connect to public sewer in the future. The re-habitation of the house and site modifications will not result in an increase in urban sprawl or increased demand on the public services. To the contrary, the proposed waterfront work is designed to increase the natural functioning of site storm drainage.

Policy 6: Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

The site has been partly vacant and for several years prior to the Applicant's recent purchase of the property in July of 2019. The previous site owner performed cleanup of collapsed areas of seawall under a NYSDEC emergency authorization. Action is needed for the remainder of the required site improvements and restoration. The Applicant and design team have proactively meet with the Town of Mamaroneck, NYSDEC, and NYSDOS officials to coordinate the proposed work and permitting process. The Applicant has also discussed the proposed work and the need for rehabilitation of the site with neighbors.

Policy 7: Significant coastal fish and wildlife habitats, as identified on the Coastal Area Map, shall be protected, preserved, and, where practical, restored so as to maintain the viability as habitats.

The proposed project will result in preservation and restoration of habitats. The project has been designed to avoid waterward encroachment of walls to be rebuilt and modified. Removal of the seawall creates 972± square feet of mudflat and 3,057± square feet of new tidal wetland vegetation. As such, the proposed project is consistent with this policy. The mudflat and tidal vegetation creation are significantly more than the Applicant is required to make and do, in fact, result in a loss of existing usable upland lawn in favor of new habitat. The Applicant's intention and overall objective is to be more than mitigation by restoring the site to nature as much as practical.

Policy 7A: The following locally important habitats designated as critical environmental areas:
(1) the Hommocks Saltmarsh Complex including the East Creek area;
(2) the Larchmont reservoir-sheldrake-Leatherstocking Freshwater Wetland Complex;
(3) the Premium Salt Marsh complex
Shall be protected, preserved, and, where practicable, restored, so as to maintain their viably as habitats.

The project site adjoins the Hommocks Saltmarsh Complex and East Creek as shown on the map titled, *The Hommocks Salt Marsh Complex Critical Environmental Area (CEA)* dated Sept. 16, 1989. As noted for other policy statements, the project will create 972± square feet of mudflat and 3,057± of tidal wetland vegetation plantings. The project will restore habitat and will continue to preserve the Hommocks Saltmarsh Complex. The proposed terraces are adjoining existing mudflats and tidal marshes.

The proposed work will create contiguous tidal wetlands and mudflats to the existing habitat adjacent to the property. This creation of new tidal wetland contiguous to existing marsh is consistent with Applicant's goal of enhancing the natural features and expanding habitat for plants and wildlife along the property.

Policy 8: Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bioaccumulate in the food chain or which cause significant sublethal or lethal effect on those resources.

The proposed project will not introduce hazardous wastes or pollution into the environment. No new point discharge sources are proposed to the Larchmont Harbor.

Policy 9: Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks and developing new resources. Such efforts shall be made in a manner which ensures the protection of renewable fish and wildlife resources and considers other activities dependent on them.

The proposed project increases habitat for fish and wildlife resources. The proposed project allows improved and increased access to the waterfront and to the fish and wildlife thereon.

Policy 10: The state coastal policy to further develop commercial finfish, shellfish and crustacean resources in the coastal area is not applicable to the Town of Mamaroneck and Village of Larchmont.

Policy 10 is not applicable to this site per the *LWRP*.

Policy 10A: Improve water quality in Long Island Sound waters to permit the taking of shellfish for human consumption.

The proposed project will not reduce water quality and the site will be a potential shellfish habitat if taking is permitted in the future.

Policy 11: Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Improvements to the walls, octagon pier, pool house, gazebo, and revetment will be designed to industry standards (New York State Building Code, ASCE 7-10 Minimum Design Loads for Buildings and Other Structures, ASCE 24-14 Flood Resistant Design and Construction) to minimize damage to property and endangering human lives caused by flooding. The proposed improvements will be designed to withstand forces associated with the 1% annual chance (100-yr) plus 2-ft of sea level rise. Two feet of sea level rise approximates the high end of the central range (middle 67%) of values from model-based probabilities (16 global climate models by 3 GHG emissions

scenarios)by 2080 and the high end of sea level rise with rapid ice-melt scenario by 2050 as outlined in Table 1 in the *New York State Sea Level Rise Task Force – Report to the Legislature* (Dec 2010) and see also section 6 CRR-NY 460.4 of the Compilation of Codes, Rules, and Regulations of the State of New York.

The Gazebo will be constructed to be consistent with current flood zone guidelines to the greatest extent practicable. Specifically, new construction will be adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood. Additionally, the new construction will be designed and adequately anchored to prevent floatation, collapse or lateral movement of the structure and will be constructed with materials and utility equipment resistant to flood damage. The bottom or the roof eave of the gazebo will be four feet above the Base Flood Elevation.

Repair of the existing pier will be done with the use of high-strength concrete and meet or exceed current requirements for cast-in-place concrete in the marine environment. Reinforcing steel will be hot dipped galvanized to offer double corrosion protection. Other connection hardware subject to inundation will be stainless steel.

Use of state-of-the-art materials and implementation of flood zone compliance into the design will ensure that the restored structure will be resilient and remain intact and functional for a design life of no less than fifty years based on the environmental loading that it will be designed for.

Improvements to the seawalls, octagon pier, and revetment will be designed to industry standards (New York State Building Code) to minimize damage to property and endangering human lives caused by flooding and erosion. The floating dock will be removed seasonally and maintained after storm events. As such, the proposed project is consistent with this policy.

Policy 12: Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs. Primary dunes will be protected from all encroachments that could impair their natural protective capacity.

Portions of the existing vertical seawalls will be removed to bring the site back to a more natural state. Seawalls that will be removed have been strategically chosen to minimize flooding and erosion. As such, the proposed project is consistent with this policy.

Policy 13: The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/ or assured maintenance or replacement programs.

The existing seawalls have been located at the site for at least 94-103 years based on a review of aerial photographs. Based on the age and exposure to Larchmont Harbor, the existing seawalls are in need of repair, restoration, and rehabilitation. The seawall repair will include repair and rehabilitation of a dry stack stone wall. Repairs will consist of removal of damaged portions of seawall and resetting stone masonry as required for structural stability. Portions of the existing vertical seawalls will be removed to bring the site back to a more natural state. Seawalls that will be removed have been strategically chosen to minimize flooding and erosion. The repaired seawall and proposed revetments in place of existing wall sections will be designed and constructed for stability under prescribed load cases including the base flood. Removing the remaining walls is not feasible while maintaining the Applicant's property. As such, the proposed project is consistent with this policy.

Policy 14: Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

The proposed work has been designed to ensure that there will not be an increase in Base Flood Elevation (BFE) due to wave ramping, runup or reflection. Additionally, the proposed improvements will be designed to withstand forces associated with the 1% annual chance (100-yr) plus 2-ft of sea level rise. 2-ft approximates the high end of the central range (middle 67%) of values from model-based probabilities (16 global climate models by 3 GHG emissions scenarios)by 2080 and the high end of sea level rise with rapid ice-melt scenario by 2050 as outlined in Table 1 in the New York State Sea Level Rise Task Force – Report to the Legislature (Dec 2010). The design life of the walls will be 30-years with maintenance. As such, the proposed project is consistent with this policy.

Policy 16: Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.

Not applicable – the Project will be privately funded.

Policy 17: Whenever possible, use non-structural measures to minimize damage to natural resources and property from flooding and erosion. Such measures shall include: (1) The setback of buildings and structures: (2) The planting of vegetation and the installation of sand fencing and drainage systems; (3) The reshaping of bluffs; (4) The floodproofing of buildings or their elevation above base flood level.

The existing seawall has been present at the site for at least 94 years based on a review of aerial photographs and use of non-structural measures are not possible in order to

maintain the wall and property limits which may be retained per 6 CRR-NY 661.10. As such, the proposed project is consistent with this policy.

Policy 21: Water-dependent and water-enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the coast, provided it is consistent with the preservation and enhancement of other coastal resources and takes into account demand for such facilities. In facilitating such activities, priority shall be given to areas where access is the recreation opportunities of the coast can be provided by new or existing public transportation services and to those areas where the use of the shore is severely restricted by existing development.

The proposed project will not adversely impact water-dependent uses on other sites. As such, the proposed project is consistent with this policy. The proposed work does not result in the loss of existing recreational water-dependent facilities.

Policy 22: Development, when located adjacent to the shore, shall provide for water related recreation, as a multiple use, whenever such recreational use is appropriate in light of reasonably anticipated demand for such activities and the primary purpose of the development.

The site is consistent with historic and neighboring residential use. Additional residences are not proposed on site. The water-front work and dock will provide recreational access to the existing main dwelling and existing two apartment units in the garage. The proposed project will not adversely impact water-dependent uses on other sites. As such, the proposed project is consistent with this policy.

Policy 23: Protect and restore structures, districts, areas or sites that are of significance in the history, architecture, archeology or culture of the state, its communities or the nation.

The proposed project will restore the historic gazebo and pier which have been a landmark of the site since the 1920s. The gazebo restoration will improve boating and wildlife viewing by serving as an outlook location. As such, the proposed project is consistent with this policy.

Policy 24: Not Applicable

Policy 30: Municipal, industrial, commercial and residential discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to state and national water quality standards.

Not Applicable - Toxic and hazardous substances will not be discharged.

Policy 38: The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitutes the primary or sole source of water supply.

The proposed work will not adversely affect or harm the groundwater or surface water supplies.

Policy 40: The state policy regarding effluent discharged from major steam electric generating and industrial facilities into coastal waters does not apply to the Town of Mamaroneck and Village of Larchmont.

The project site is a residential site therefore no discharge associated with generating electric steam from industrial facilities is expected to occur at the site. As such, the proposed project is consistent with this policy.

Policy 44: Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

There are no long-term adverse impacts to the tidal wetlands associated with the proposed work. Existing tidal wetlands will be preserved. The proposed work will involve the removal of sections of seawall which will be replaced with the tidal terrace, which will consist of three levels and associated walls and plantings. The removal of the seawall for the tidal terrace is anticipated to create 972± square feet of mudflat and 3,057± square feet of new tidal wetland vegetation. Salt Marsh Grass (Spartina Alterniflora) and Slat Meadow Cordgrass (Spartina Patens) will be planted. As such, the proposed project is consistent with this policy.

Policy 44a: Restore tidal and freshwater wetlands already damaged by erosion, siltation, and pollution.

The removal of the seawall for the tidal terrace is anticipated to create 972± square feet of mudflat and 3,057± square feet of new tidal wetland vegetation. Salt Marsh Grass (Spartina Alterniflora) and Slat Meadow Cordgrass (Spartina Patens) will be planted. This new tidal marsh and tidal grass area will be adjacent to existing tidal marsh and expand upon the buffer for the existing open space and habitat. As such, the proposed project is consistent with this policy.

SECTION 8

US Army Corps of Engineers Environmental Questionnaire



US Army Corps of Engineers
Environmental Questionnaire

GENERAL-APPLICABLE TO ALL PROJECTS

1. Explain the need for, and purpose of, the proposed work.

The purpose of the project is to selectively repair, rebuild, and remove existing seawalls that have deteriorated due to age in order to maintain the upland soils from erosion loss into the adjoining waterbody, provide improved access and interface with nature, increase the site's capacity for plant growth and natural features along the waterfront, and to provide water access for uses including kayaking, boating, and fishing. The project site has deferred maintenance throughout due to lack of investment by previous owners while estate court issues were outstanding. As such with the site recently having been purchased by the Applicant the seawalls, pier, gazebo, and dock are due for repair and modification.

2. Provide the names and addresses of property owners adjacent to your work site

OWNERNAME	ADDRESS	CITY	State	ZIPCODE
Beaumere, LLC	220 Hommocks Rd	Larchmont	NY	10538
ADJACENT OWNERS	**ADDRESS**	**CITY**	**State**	**ZIPCODE**
Richard Grodin	214 Hommocks Rd	Larchmont	NY	10538
Fran Rosenfeld	217 Hommocks Rd	Larchmont	NY	10538

5. Provide a thorough discussion of alternatives to your proposal. This discussion should include, but not necessarily limited to, the "no action" alternative and alternative(s) resulting in less disturbance to water of the United States.

The project has been designed to restore historic character and flood and erosion control structures on site while also enhancing natural improvements where feasible and practical based on use.

The Alternatives considered include:

1. No Action – The no action alternative would allow for continued deterioration and failure of the wall which will lead to erosion of the shoreline and sedimentation into the Long Island Sound. As such, this alternative was rejected.

2. Repair and rebuild the existing seawalls to the existing waterward limits – This alternative would result in the site being surrounded by seawalls. Since these walls pre-date NYSDEC tidal wetlands and coastal erosion hazard area jurisdiction/designation of August 20, 1977, the walls appear to be lawfully existing and therefore, eligible for retention and maintenance within their existing waterward limits. The Applicant wishes to restore the site to a natural condition where feasible, as such this alternative was rejected.

3. Revetment throughout in place of seawalls – Under this alternative, seawalls would be removed and the shoreline installed with revetment in place of the seawall. The revetment would extend from the waterward limits of the seawall into the lawn and upland. Removal of all the seawalls which have protected this property for more than 95 years is not practical and would significantly alter the configuration, character, and function of the site, with a significant loss of useable land to the Applicant. The existing seawalls have lined the shoreline of this property since at least the 1920's when the property was first improved with the existing house and accessory structures that still remain today. Since these walls pre-date NYSDEC tidal wetlands and coastal erosion hazard area jurisdiction/designation of August 20, 1977, the walls appear to be lawfully existing and therefore, eligible for retention and maintenance and as such do not need to be removed. The preferred and proposed site plan does call for some walls to be removed as practical to stimulate habitat growth at the site.

   Revetment was proposed in existing Area C in place of the seawall. However, subsequent test pits to find the top of ledge behind the existing seawall lead to the current proposal to keep a seawall in place. The existing seawall is founded on exposed ledge along the waterfront. The test pits behind the wall show that depth to ledge varies with distinct drops and a small subterranean valley along the length of the existing wall in Area C. The depth and shape of the ledge made the revetment less favorable due to change in the foundation conditions. The lower depth of ledge than previously anticipated limits the viability of the revetment to meet and taper into the ledge.
4. Removal of Seawalls /Living Shoreline– This alternative would demolish the existing seawalls from the site. The upland behind the seawalls would be sloped back and planted. The disadvantages are a significant loss of useable land for the Applicant. Additionally, the existing walls break waves, protecting the site. Since the seawalls predate August 20, 1977, the Applicant is not required to remove the walls. Plantings and removal of wall are included where practical.

5. Fixed Pier – This alternative would involve installing a fixed pier in place of the proposed gangway. This alternative was rejected as it would have greater impacts than the preferred and proposed alternative. Furthermore, the fixed pier would not be seasonally removable and would require more maintenance than the floating dock.

6. Construction of the existing pier as an open pile supported structure. This option would consist of reconstructing the historic solid pier in the same octagon shape but with a pile or column foundation supporting a deck with the gazebo above. The piles or columns would be fixed to ledge. The area below the deck would be open between the piles/columns. The environmental benefits of having this deck on an open foundation would be limited, as; the overall area for the pier is limited, and the existing pier currently covers this area. This would expose the underside of the deck to wave loads and uplift forces. Due to this exposure this concept was rejected.

7. No Dock – This alternative would not include a floating dock or gangway on the site. This would not allow the Applicant to enjoy water dependent uses such as boating, swimming, and fishing as such this alternative was rejected.

8. No restoration of the gazebo – This alternative would involve not restoring the gazebo. The gazebo is a structure integrated into the octagon shaped pier. The pier is concrete and stone masonry, while the gazebo was timber construction above the pier. The concrete and stone pier remain in place

but with significant damage. Remains of the gazebo are not currently on site. The pier, gazebo, and floating dock are present on aerial imagery as early as 1925 and depicted on the historic circa 1916 post card.

The owner is coordinating with the Town locally and neighbors to restore the gazebo in a manner that mutually benefits the neighborhood, harbor views, and local community by re-establishing the historic character of Larchmont Harbor. It is the Applicant's intent to re-create the aesthetics of the historic structure while making improvements to its resiliency and ability to meet current codes and standards.

The pier provides the foundation and floor of the gazebo. The gazebo provides railing and roof for the pier. The railings are necessary for safety to protect against falls. The roof is necessary to provide shelter from the sun and elements. The gazebo is necessary to stage guests for boarding the boat and equipment handling onto and off of the boat. The gazebo enhances the passive scenic and wildlife viewing in the Harbor and is an important part of the overall character and history of Larchmont Harbor. The view and scenic character of the gazebo provides benefits to the Applicant as well as other neighbors and members of the public in Larchmont Harbor, as such this alternative was rejected.

9. The preferred and proposed site plan – This is the alternative that is outlined in Section 6 of this application. It is the chosen alternative as it provides improved access and interface with nature, increase the site's capacity for plant growth and natural features along the waterfront, and to provide water access for uses including kayaking, boating, fishing, and restores the site to nature as practical. The preferred alternative also restores the historic and scenic character of the site and Larchmont Harbor by repair of the fixed pier and gazebo, without increasing the waterward footprint beyond that of the existing structures. The repairs and modifications to the site are being designed for stability under loads predicted of the FEMA Base Flood, thereby preventing collapse and loss of land during the Base Flood.

Impacts within the littoral zone waters, below Mean High Water/Spring High Tide, will be limited to construction. The proposed seawall work involves modification and restoration within the limit of the seawall and significant areas where the seawall is removed allowing the Spring High Tide Line to retreat landward with a sacrifice of existing legally useable upland. The fixed pier is existing and Mean High Water/Spring High Tide Line abuts the structure. There is no proposed increase in the footprint from the historically documented seawall and pier structures. In fact, removal of the existing debris that has accumulated beyond the historic limits of the fixed pier will be a benefit. The fixed pier is also needed for gangway and floating dock access. The gazebo atop the fixed pier restores the historic charm and functionality of the site, but does not require a larger footprint or expansion of the fixed pier beyond what is existing within the limits of the pier base walls. As such, the selected alternative has minimal impacts on waters of the United States and regulated New York State resources.

MOORING FACILITIES

Answer the following if your project includes the construction or rehabilitation of recreational mooring facilities.

1. It is generally recommended that any fixed piers and walk ramps be limited to four feet in width, and that floats be limited to eight feet in width and rest at least two feet above the waterway bottom at mean low water. Terminal floats at private, noncommercial facilities should be limited to 20 feet in length. If you do not believe your proposal can meet with these recommendations, please provide the reason(s).

The Applicant is proposing to rebuild the 38-foot x 4-foot gangway and 50-foot x16-foot (800 sq. ft) floating dock. Historically (since at least 1925 based on a review of aerial photos), the float has been accessed off the fixed pier. In recent years, the gangway and float has been relocated to the east due to the condition of the pier. The Applicant is proposing to return the float to its historic location. It is anticipated that the Applicant will berth a 40-foot and 21-foot-long boat. The float length is required to berth the boats. The property includes two legal apartments within the garage area, in addition to the main dwelling. As such, the second boat and float size allow accommodation of future tenants and guests for multiple use access.

There is sufficient water depth at the site such that the float will not rest on the mud at low water. The minimum water depth at the floating dock is anticipated to be at least 2.5 feet above at MLW in accordance with the NYS DEC *Tidal Wetlands Guidance Document – Residential Catwalks and Docks*.

2. Using your plan view, show to scale the location(s), position(s) and size(s)

(including length, beam and draft) of vessel(s) to be moored at the proposed facility, including those of transient vessel(s) if known.

The proposed 40-foot and 21-foot long boats are depicted on the drawings attached to this application.

3. For commercial mooring sites such as marinas, indicate the capacity of the facility and indicate on the plan view the location(s) of any proposed fueling and/or sewage pump out facilities. If pump out facilities are not planned, please discuss the rationale below and indicate the distance to the nearest available pump out station.

N/A

4. Indicate on your plan view the distance to adjacent marine structures, if any are approximate and show the locations and dimensions of such structures.

N/A

5. Discuss the need for wave protection at the proposed facility. Please be advised that if a permit is issued, you would be required to recognize that the mooring facility may be subject to wave action from wakes of passing vessels, whose operations would not be

required to be modified. Issuance of a permit would not relieve you of ensuring the integrity of the authorized structure(s) and the United States would not be held responsible for damages to the structure(s) and vessel(s) moored thereto from wakes from passing vessels.

The proposed floating dock and anchors are expected to be subjected to wave activity during storm events as well as vessel traffic from the Sound. The proposed concrete pier attached for the gangway and anchors for the floating dock have been designed to withstand wave loading.

BULKHEAD/BANK STABILIZATION/FILLING ACTIVITIES

1. Indicate the total volume of fill (including backfill behind a structure such as a bulkhead) as well as the volume of fill to be placed into waters of the United States. The amount of fill in waters of the United States can be determined by calculating the amount of fill to be placed below the plane of spring high tide in tidal areas and below ordinary high water in non-tidal areas.

Overall, the Applicant is proposing to remove approximately 447 LF of seawall. Approximately 245 CY of revetment stone will be used to create the proposed revetment structure and cove area. Additionally, the Applicant is proposing filling the property above MHW and SHTL. Approximately 5,600 CY of fill will be placed above MHW landward of the seawall. Additionally, in the northwest corner of the site, the replacement terrace walls are anticipated to support 972± square feet of mudflat and 3,057± square feet of new tidal wetland vegetation.

2. Indicate the source(s) and type(s) of fill material.

Fill soils shall be granular soils such as those classified as SP, SM, and SG according to ASTM standard D-2487, classification of soils for engineering purposes. Fill shall be free of organics, frozen soil, wood, roots, and other deleterious substances. Additionally, the fill shall be homogeneous and isotropic.

3. Indicate the method of fill placement (i.e. by hand, bulldozer, crane, etc.). Would any temporary fills be required in waterways or wetlands to provide access for construction equipment? If so, please indicate the area of such waters and/or wetlands to be filled, and show on the plan and sectional views.

Contractor shall place fill in maximum 1 ft lifts and compact with appropriate equipment to at least 95 percent of standard laboratory maximum dry density (standard proctor).

SECTION 9

EFH Assessment

NOAA FISHERIES
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
Essential Fish Habitat (EFH) Consultation Guidance
EFH ASSESSMENT WORKSHEET

Introduction:

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) mandates that federal agencies conduct an essential fish habitat (EFH) consultation with NOAA Fisheries regarding any of their actions authorized, funded, or undertaken that may adversely affect EFH. An adverse effect means any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

This worksheet has been designed to assist in determining whether a consultation is necessary and in preparing EFH assessments. This worksheet should be used as your EFH assessment or as a guideline for the development of your EFH assessment. At a minimum, all the information required to complete this worksheet should be included in your EFH assessment. If the answers in the worksheet do not fully evaluate the adverse effects to EFH, we may request additional information in order to complete the consultation.

An expanded EFH assessment may be required for more complex projects in order to fully characterize the effects of the project and the avoidance and minimization of impacts to EFH. While the EFH worksheet may be used for larger projects, the format may not be sufficient to incorporate the extent of detail required, and a separate EFH assessment may be developed. However, regardless of format, the analysis outlined in this worksheet should be included for an expanded EFH assessment, along with additional information that may be necessary. This additional information includes:

- the results of on-site inspections to evaluate the habitat and site-specific effects
- the views of recognized experts on the habitat or the species that may be affected
- a review of pertinent literature and related information
- an analysis of alternatives to the action that could avoid or minimize the adverse effects on EFH.

Your analysis of adverse effects to EFH under the MSA should focus on impacts to the habitat for all life stages of species with designated EFH, rather than individual responses of fish species. Fish habitat includes the substrate and benthic resources (e.g., submerged aquatic vegetation, shellfish beds, salt marsh wetlands), as well as the water column and prey species.

Consultation with us may also be necessary if a proposed action results in adverse impacts to other NOAA-trust resources. Part 6 of the worksheet is designed to help assess the effects of the action on other NOAA-trust resources. This helps maintain efficiency in our interagency coordination process. In addition, further consultation may be required if a proposed action impacts marine mammals or threatened and endangered species for which we are responsible. Staff from our Greater Atlantic Regional Fisheries Office, Protected Resources Division should be contacted regarding potential impacts to marine mammals or threatened and endangered species.

Instructions for Use:

Federal agencies must submit an EFH assessment to NOAA Fisheries as part of the EFH consultation. Your EFH assessment must include:

1) A description of the proposed action.
2) An analysis of the potential adverse effects of the action on EFH, and the managed species.
3) The federal agency's conclusions regarding the effects of the action on EFH.
4) Proposed mitigation if applicable.

In order for this worksheet to be considered as your EFH assessment, you must answer the questions in this worksheet fully and with as much detail as available. Give brief explanations for each answer.

Federal action agencies or the non-federal designated lead agency should submit the completed worksheet to NOAA Fisheries Greater Atlantic Regional Fisheries Office, Habitat Conservation Division (HCD) with the public notice or project application. Include project plans showing existing and proposed conditions, all waters of the U.S. on the project site, with mean low water (MLW), mean high water (MHW), high tide line (HTL), and water depths clearly marked and sensitive habitats mapped, including special aquatic sites (submerged aquatic vegetation, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), hard bottom habitat areas and shellfish beds, as well as any available site photographs.

For most consultations, NOAA Fisheries has 30 days to provide EFH conservation recommendations once we receive a complete EFH assessment. Submitting all necessary information at once minimizes delays in review and keeps review timelines consistent. Delays in providing a complete EFH assessment can result in our consultation review period extending beyond the public comment period for a particular project.

The information contained in the HCD Consultation website and NOAA's EFH Mapper will assist you in completing this worksheet. All the information you need to determine which species and life stages are designated in your project location is accessible in the Mapper. When you first open the Mapper, choose the Greater Atlantic Region, then zoom into the area of interest and use the Location Query Tab to generate a table showing all the designated species and life stages at any given location. The tables can be printed. Just remember that EFH designations consist of a map and a text description: you need to check the text descriptions to make sure that the actual habitat conditions (e.g., depth, type of substrate) at the mapped location match the description. There are links to the text descriptions in the tables that pop up when you do a Location Query. You can also use the Mapper to display an entire EFH map for any species and life stage throughout the region and to display maps of Habitat Areas of Particular Concern (HAPCs), which are areas of particularly important EFH that receive extra scrutiny when a consultation is conducted. Spatial EFH data for your use in GIS can be downloaded by going to the Data Inventory.

Please note that there is no map for summer flounder HAPC - it exists anywhere there is submerged aquatic vegetation (SAV) - and that the map and descriptions for Atlantic salmon EFH and HAPC are reached using a link in the Warning box that opens up when you first bring up the regional map. If you have any questions, please check with the appropriate HCD staff member for your area.

EFH ASSESSMENT WORKSHEET FOR FEDERAL AGENCIES (modified 3/2016)

PROJECT NAME: 220 Hommocks Road - Waterfront Improvements

DATE: 08/12/2019

PROJECT NO.: N/A

LOCATION (Water body, county, physical address):

Long Island Sound, Westchester County
220 Hommocks Road, Larchmont, NY

PREPARER: Jill Pietropaolo (RACE Coastal Engineering)

Step 1: Use NOAA's EFH Mapper to generate the list of designated EFH for federally-managed species and life stages for the geographic area of interest. Use this list as part of the initial screening process to determine if EFH for those species occurs in the vicinity of the proposed action. The list can be included as an attachment to the worksheet. Make a preliminary determination on the need to conduct an EFH consultation.

1. INITIAL CONSIDERATIONS

EFH Designations	Yes	No
Is the action located in or adjacent to EFH designated for eggs? **List the species:** Winter Flounder, Red Hake, Windowpane Flounder, Scup, Longfin Inshore Squid, Atlantic Mackerel, Atlantic Butterfish	✓	
Is the action located in or adjacent to EFH designated for larvae? **List the species:** Winter Flounder, Red Hake, Windowpane Flounder, Scup, Atlantic Mackerel, Atlantic Butterfish	✓	
Is the action located in or adjacent to EFH designated for juveniles? **List the species:** Winter Flounder, Little Skate, Atlantic Herring, Pollock, Red Hake, Windowpane Flounder, Winter Skate, Sand Tiger Shark, Scup, Longfin Inshore Squid, Atlantic Mackerel, Bluefish, Atlantic Butterfish, Summer Flounder, Black Sea Bass	✓	

Is the action located in or adjacent to EFH designated for adults or spawning adults? List the species: Winter Flounder, Little Skate, Atlantic Herring, Pollock, Red Hake, Windowpane Flounder, Winter Skate, Scup, Longfin Inshore Squid, Atlantic Mackerel, Bluefish, Atlantic Butterfish, Summer Flounder	✓	
If you answered 'no' to all questions above, then an EFH consultation is not required - go to Section 5. **If you answered 'yes' to any of the above questions, proceed to Section 2 and complete the remainder of the worksheet.**		

Step 2: In order to assess impacts, it is critical to know the habitat characteristics of the site before the activity is undertaken. Use existing information, to the extent possible, in answering these questions. Identify the sources of the information provided and provide as much description as available. These should not be yes or no answers. Please note that there may be circumstances in which new information must be collected to appropriately characterize the site and assess impacts. Project plans that show the location and extent of sensitive habitats, as well as water depths, the HTL, MHW and MLW should be provided.

2. SITE CHARACTERISTICS

Site Characteristics	Description
Is the site intertidal, sub-tidal, or water column?	The project is located in the intertidal and subtidal area of Larchmont Harbor
What are the sediment characteristics?	The site consists of a small pocket sandy beach, rock ledge, and seawalls.
Is there submerged aquatic vegetation (SAV) at or adjacent to project site? If so describe the SAV species and spatial extent.	There is no SAV at or adjacent to the project site.
Are there wetlands present on or adjacent to the site? If so, describe the spatial extent and vegetation types.	There are wetlands (spartina alterniflora) adjacent to the project site. Please see the attached project plans for spatial extents.

Is there shellfish present at or adjacent to the project site? If so, please describe the spatial extent and species present.	No
Are there mudflats present at or adjacent to the project site? If so please describe the spatial extent.	No
Is there rocky or cobble bottom habitat present at or adjacent to the project site? If so, please describe the spatial extent.	The site consists of areas of rock ledge as well as areas of stone revetment. The rock ledge and revetment are shown on the attached plans.
Is Habitat Area of Particular Concern (HAPC) designated at or near the site? If so for which species, what type habitat type, size, characteristics?	No
What is the typical salinity, depth and water temperature regime/range?	Salinity: 23 ppt Temperatuer Range: 37-69 degrees Fahrenheit Water depth Range: Dry to 3 feet at MLW (Comprehensive Conservation and Management Plan for Long Island Sound, 1994)
What is the normal frequency of site disturbance, both natural and man-made?	N/A
What is the area of proposed impact (work footprint & far afield)?	The proposed work will take place in the footprint of the existing and historic structures.

Step 3: This section is used to describe the anticipated impacts from the proposed action on the physical/chemical/biological environment at the project site and areas adjacent to the site that may be affected.

3. DESCRIPTION OF IMPACTS

Impacts	Y	N	Description
Nature and duration of activity(s). Clearly describe the activities proposed and the duration of any disturbances.			
Will the benthic community be disturbed? If no, why not? If yes, describe in detail how the benthos will be impacted.	✓		It is anticipated that impacts to the benthic community will be temporary and limited to the duration of construction. The proposed work will take place in the footprint of the existing and historic structures. The floating dock will not rest on the bottom and is expected to have no significant impact. Anchors for the floating dock will occupy a discrete area of the bottom and will be limited in affect to the anchor location.
Will SAV be impacted? If no, why not? If yes, describe in detail how the SAV will be impacted. Consider both direct and indirect impacts. Provide details of any SAV survey conducted at the site.		✓	N/A
Will salt marsh habitat be impacted? If no, why not? If yes, describe in detail how wetlands will be impacted. What is the aerial extent of the impacts? Are the effects temporary or permanent?		✓	N/A

Will mudflat habitat be impacted? If no, why not? If yes, describe in detail how mudflats will be impacted. What is the aerial extent of the impacts? Are the effects temporary or permanent?	☐	☑	N/A
Will shellfish habitat be impacted? If so, provide in detail how the shellfish habitat will be impacted. What is the aerial extent of the impact? Provide details of any shellfish survey conducted at the site.	☐	☑	N/A
Will hard bottom (rocky, cobble, gravel) habitat be impacted at the site? If so, provide in detail how the hard bottom will be impacted. What is the aerial extent of the impact?	☑	☐	A portion of the rock ledge above the STL will be be ground to create a viewing platform. As this is above STL and the underlying rock will remain, there is no loss of benthic habitat.
Will sediments be altered and/or sedimentation rates change? If no, why not? If yes, describe how.	☑	☐	Sedimentation increases will be temporary and limited to the duration of the construction. The installation of the revetment and seawall may disturb bottom sediments and may cause a temporary increase in suspended sediment in the action area.
Will turbidity increase? If no, why not? If yes, describe the causes, the extent of the effects, and the duration.	☑	☐	Turbidity increases will be temporary and limited to the duration of the construction. The installation of the revetment and seawalls will disturb bottom sediments and may cause a temporary increase in suspended sediment in the action area. This increase is anticipated to be temporary and limited to the duration of the construction.

Will water depth change? What are the current and proposed depths?		✓	
Will contaminants be released into sediments or water column? If yes, describe the nature of the contaminants and the extent of the effects.		✓	
Will tidal flow, currents, or wave patterns be altered? If no, why not? If yes, describe in detail how.		✓	It is not anticipated that the proposed project will impact tidal flows, currents, or wave patterns. The proposed work has been designed to minimize flooding impacts and has been reviewed to show that there will be no increase in the base flood elevation as a result of the proposed work.
Will water quality be altered? If no, why not? If yes, describe in detail how. If the effects are temporary, describe the duration of the impact.		✓	The proposed project has been designed with best management practices, as such, it is not anticipated that water quality will be altered as a result of the proposed project.
Will ambient noise levels change? If no, why not? If yes, describe in detail how. If the effects are temporary, describe the duration and degree of impact.	✓		Impacts to ambient noise levels will be temporary and limited to the duration of the construction. There are also no critical habitats within the project area, as such, it is anticipated that the effects of temporary noise levels will be insignificant.
Does the action have the potential to impact prey species of federally managed fish with EFH designations?	✓		It is anticipated that most species will be mobile enough to avoid impact during construction activities, although eggs and larvae present immediately adjacent to the existing wall n the water column may be impacted.

Step 4: This section is used to evaluate the consequences of the proposed action on the functions and values of EFH as well as the vulnerability of the EFH species and their life stages. Identify which species (from the list generated in Step 1) will be adversely impacted from the action. Assessment of EFH impacts should be based upon the site characteristics identified in Step 2 and the nature of the impacts described within Step 3. NOAA's EFH Mapper should be used during this assessment to determine the ecological parameters/ preferences associated with each species listed and the potential impact to those parameters.

4. EFH ASSESSMENT

Functions and Values	Y	N	Describe habitat type, species and life stages to be adversely impacted
Will functions and values of EFH be impacted for:			
Spawning **If yes, describe in detail how, and for which species. Describe how adverse effects will be avoided and minimized.**	✓		The proposed construction activities may cause a localized and temporary increase in suspended sediment concentration. Egg and larval stages of individuals present at the site would be directly and indirectly impacted by the suspended sediments and burial of food sources. It should be noted however, that turbidity generated at the shoreline is not expected to drift far from the work site or remain in the water column for long periods of time. As such, impacts will be temporary and limited to the duration of the construction. Life stages of fish that are not motile enough to avoid construction activities may be crushed and/or abraded from contact with the proposed revetment or seawall work. Usually juvenile and adult life stages of aquatic species are sufficiently motile to avoid impacts associated with the work. Work will be limited to the location of existing structures and turbidity curtains and sequencing of work to 20'-50' long sections at a time will limit the area of affect.
Nursery **If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized.**	✓		The proposed construction activities may cause a localized and temporary increase in suspended sediment concentration. Egg and larval stages of individuals present at the site would be directly and indirectly impacted by the suspended sediments and burial of food sources. It should be noted however, that turbidity generated at the shoreline is not expected to drift far from the work site or remain in the water column for long periods of time. As such, impacts will be temporary and limited to the duration of the construction. Life stages of fish that are not motile enough to avoid construction activities may be crushed and/or abraded from contact with the proposed revetment or seawall work. Usually juvenile and adult life stages of aquatic species are sufficiently motile to avoid impacts associated with the work. Work will be limited to the location of existing structures and turbidity curtains and sequencing of work to 20'-50' long sections at a time will limit the area of affect.
Forage **If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized.**	✓		Localized and temporary increase in suspended sediment concentration may result in a burial of food sources. It should be noted however, that turbidity generated at the shoreline is not expected to drift far from the work site or remain in the water column for long periods of time. As such, impacts will be temporary and limited to the duration of the construction. Work will be limited to the location of existing structures and turbidity curtains and sequencing of work to 20'-50' long sections at a time will limit the area of affect.
Shelter **If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized.**		✓	Impacts to shelter are not anticipated. Usually juvenile and adult life stages of aquatic species are sufficiently motile to avoid impacts associated with the work.

Will impacts be temporary or permanent? Please indicate in description box and describe the duration of the impacts.			Impacts will be temporary and limited to the duration of the construction.
Will compensatory mitigation be used? If no, why not? Describe plans for mitigation and how this will offset impacts to EFH. Include a conceptual compensatory mitigation plan, if applicable.		✓	Compensatory mitigation will not be used as impacts will be temporary and limited to the duration of the construction.

Step 5: **This section provides the federal agency's determination on the degree of impact to EFH from the proposed action. The EFH determination also dictates the type of EFH consultation that will be required with NOAA Fisheries.**

Please note: if information provided in the worksheet is insufficient to allow NOAA Fisheries to complete the EFH consultation additional information will be requested.

5. DETERMINATION OF IMPACT

Federal Agency's EFH Determination		
Overall degree of adverse effects on EFH (not including compensatory mitigation) will be: **(check the appropriate statement)**		**There is no adverse effect on EFH or no EFH is designated at the project site.** **EFH Consultation is not required.**
		The adverse effect on EFH is not substantial. This means that the adverse effects are either no more than minimal, temporary, or that they can be alleviated with minor project modifications or conservation recommendations. **This is a request for an abbreviated EFH consultation.**
		The adverse effect on EFH is substantial. **This is a request for an expanded EFH consultation.**

Step 6: Consultation with NOAA Fisheries may also be required if the proposed action results in adverse impacts to other NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats as part of the Fish and Wildlife Coordination Act Some examples of other NOAA-trust resources are listed below. Inquiries regarding potential impacts to marine mammals or threatened/endangered species should be directed to NOAA Fisheries' Protected Resources Division.

6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT	
Species known to occur at site (list others that may apply)	**Describe habitat impact type (i.e., physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery and/or adult feeding or migration habitat). Please note, impacts to federally listed species of fish, sea turtles, and marine mammals must be coordinated with the GARFO Protected Resources Division.**
alewife	N/A - Species not anticipated present in the area of proposed action.
American eel	N/A - Species not anticipated present in the area of proposed action.
American shad	N/A - Species not anticipated present in the area of proposed action.
Atlantic menhaden	N/A - Species not anticipated present in the area of proposed action.
blue crab	N/A - Species not anticipated present in the area of proposed action.
blue mussel	N/A - Species not anticipated present in the area of proposed action.
blueback herring	N/A - Species not anticipated present in the area of proposed action.

Eastern oyster	N/A - Species not anticipated present in the area of proposed action.
horseshoe crab	N/A - Species not anticipated present in the area of proposed action.
quahog	N/A - Species not anticipated present in the area of proposed action.
soft-shell clams	N/A - Species not anticipated present in the area of proposed action.
striped bass	N/A - Species not anticipated present in the area of proposed action.
other species:	N/A

Useful Links

National Wetland Inventory Maps

EPA's National Estuaries Program

Northeast Regional Ocean Council (NROC) Data

Mid-Atlantic Regional Council on the Ocean (MARCO) Data

Resources by State:

Maine
Eelgrass maps

Maine Office of GIS Data Catalog

Casco Bay Estuary Partnership

Maine GIS Stream Habitat Viewer

New Hampshire
New Hampshire's Statewide GIS Clearinghouse, NH GRANIT

New Hampshire Coastal Viewer

Massachusetts
Eelgrass maps

MADMF Recommended Time of Year Restrictions Document

Massachusetts Bays National Estuary Program

Buzzards Bay National Estuary Program

Massachusetts Division of Marine Fisheries

Massachusetts Office of Coastal Zone Management

Rhode Island
Eelgrass maps

Narraganset Bay Estuary Program

Rhode Island Division of Marine Fisheries

Rhode Island Coastal Resources Management Council

Connecticut

Eelgrass Maps

Long Island Sound Study

CT GIS Resources

CT DEEP Office of Long Island Sound Programs and Fisheries

CT Bureau of Aquaculture Shellfish

Maps CT River Watershed Council

New York

Eelgrass report

Peconic Estuary Program

NY/NJ Harbor Estuary

New Jersey

Submerged Aquatic Vegetation mapping

Barnegat Bay Partnership

Delaware

Partnership for the Delaware Estuary

Center for Delaware Inland Bays

Maryland

Submerged Aquatic Vegetation mapping

MERLIN

Maryland Coastal Bays Program

Virginia

Submerged Aquatic Vegetation mapping

EFH Data Notice: Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional Fishery Management Councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

Greater Atlantic Regional Office
Atlantic Highly Migratory Species Management Division

Query Results

Degrees, Minutes, Seconds: Latitude = 40°55'36" N, Longitude = 74°15'43" W
Decimal Degrees: Latitude = 40.93, Longitude = -73.74

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

*** W A R N I N G ***

Please note under "Life Stage(s) Found at Location" the category "ALL" indicates that all life stages of that species share the same map and are designated at the queried location.

EFH

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Winter Flounder	Eggs Juvenile Larvae/Adult	New England	Amendment 14 to the Northeast Multispecies FMP
			Little Skate	Juvenile Adult	New England	Amendment 2 to the Northeast Skate Complex FMP
			Atlantic Herring	Juvenile Adult	New England	Amendment 3 to the Atlantic Herring FMP
			Pollock	Adult Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
			Red Hake	Adult Eggs/Larvae/Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Windowpane Flounder	Adult Larvae Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
			Winter Skate	Adult Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
			Sand Tiger Shark	Neonate/Juvenile	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH
			Scup	Larvae Eggs Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
			Longfin Inshore Squid	Juvenile Adult Eggs	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
			Atlantic Mackerel	Eggs Larvae Juvenile Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
			Bluefish	Adult Juvenile	Mid-Atlantic	Bluefish
			Atlantic Butterfish	Eggs Larvae Adult Juvenile	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
			Summer Flounder	Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
			Black Sea Bass	Juvenile	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data. **For links to all EFH text descriptions see the complete data inventory: open data inventory -->
Mid-Atlantic Council HAPCs, No spatial data for summer flounder SAV HAPC.

SECTION 10

Additional Information

- Historic Aerial Photographs
- The Hommocks Salt Mars Complex Critical Environmental Area (CEA) Map
- FIRM No. 36119C0361F
- SHPO Review
- Marine Mattress Information

Historic Photographs:

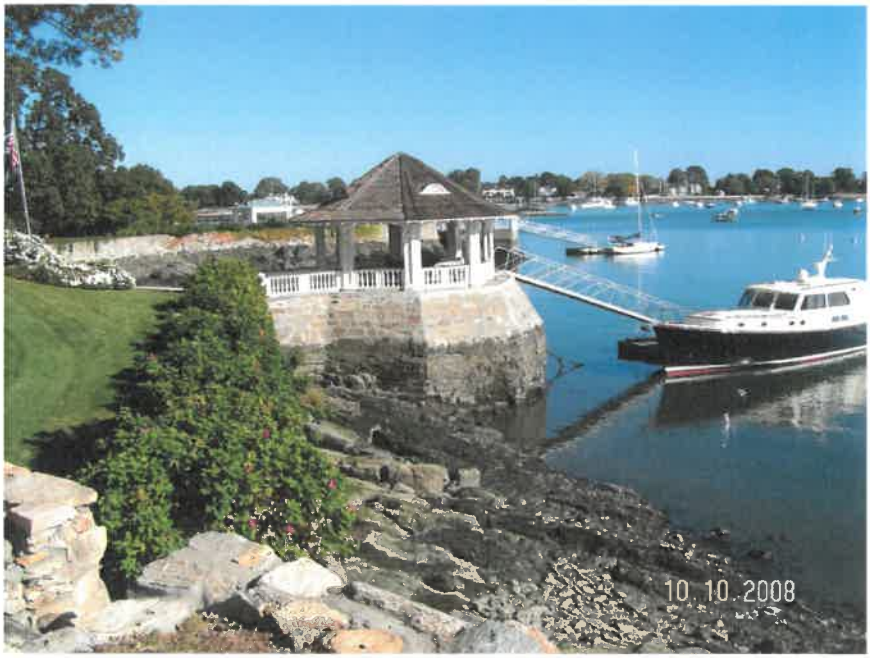


Photo 1: Historic (2008) Photograph of Octagon Pier and Gazebo



Photo 2: Dwelling 1935

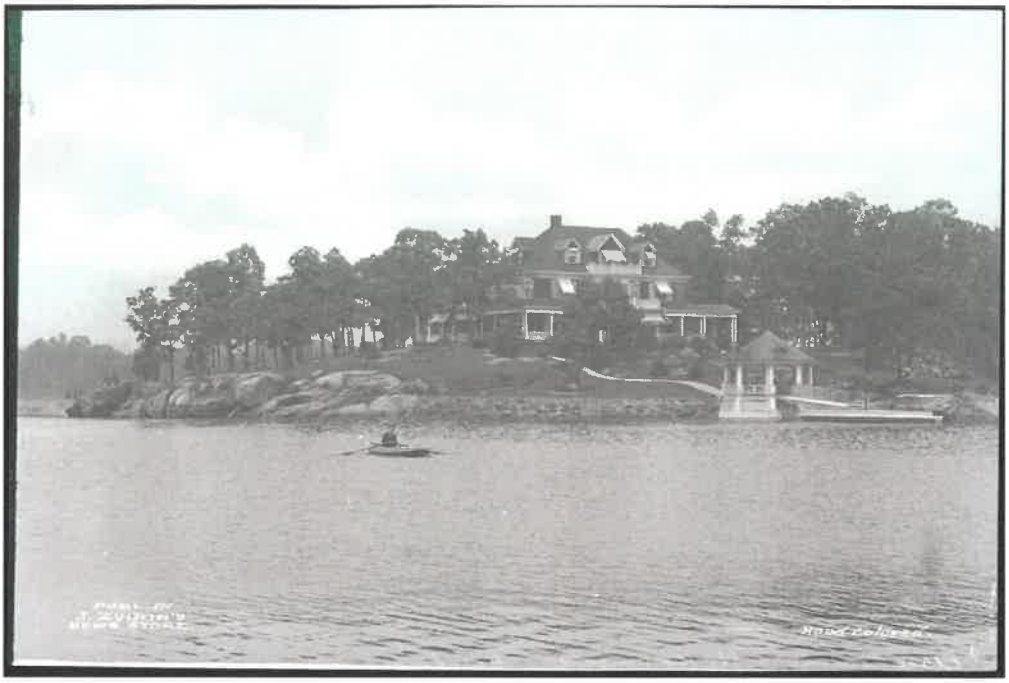


Photo 3: Dwelling, Gazebo, Floating Dock, Gangway and Seawall



Photo 4: Albee Residence, "The Hommocks" Larchmont



Photo 5: Albee Gazebo 1930s



Photo 6: House and Garage

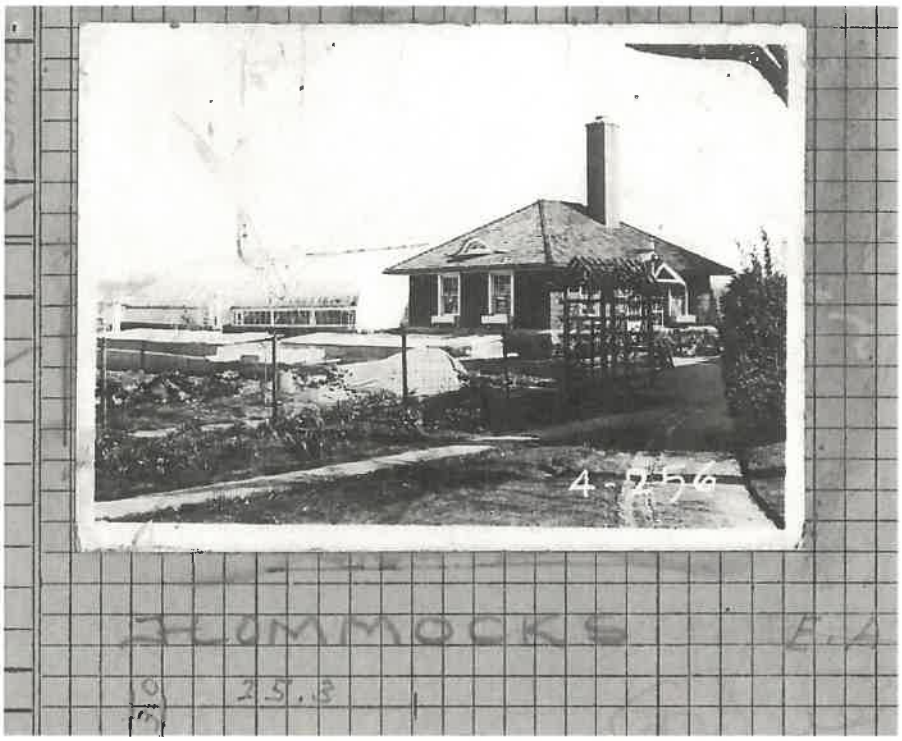


Photo 7: Albee Greenhouse

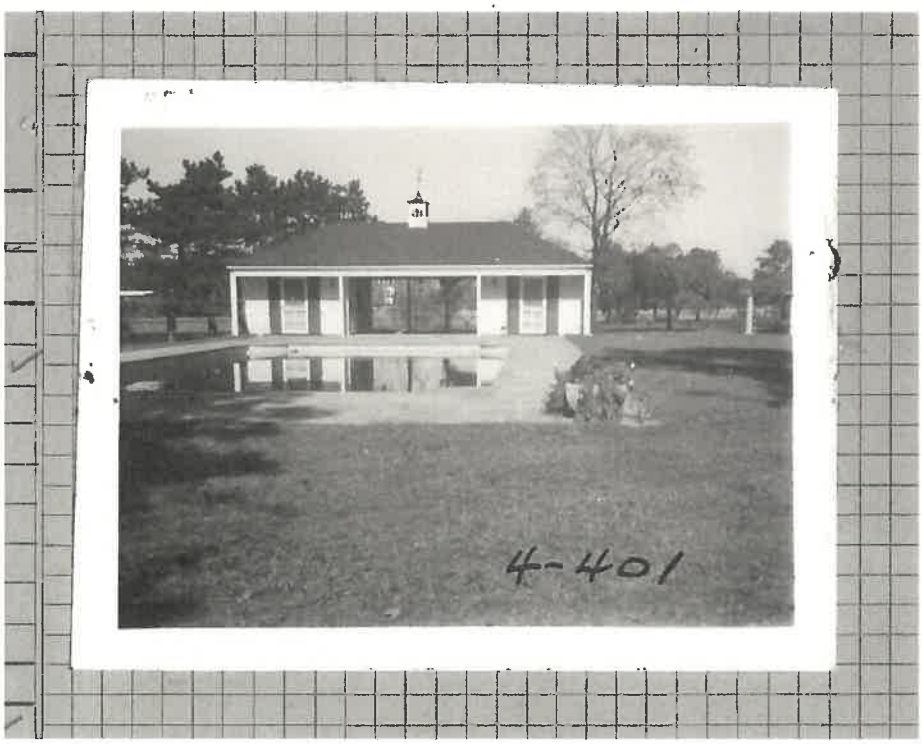


Photo 8: Albee Pool House

Aerial Photographs:



Photo 9: 1925

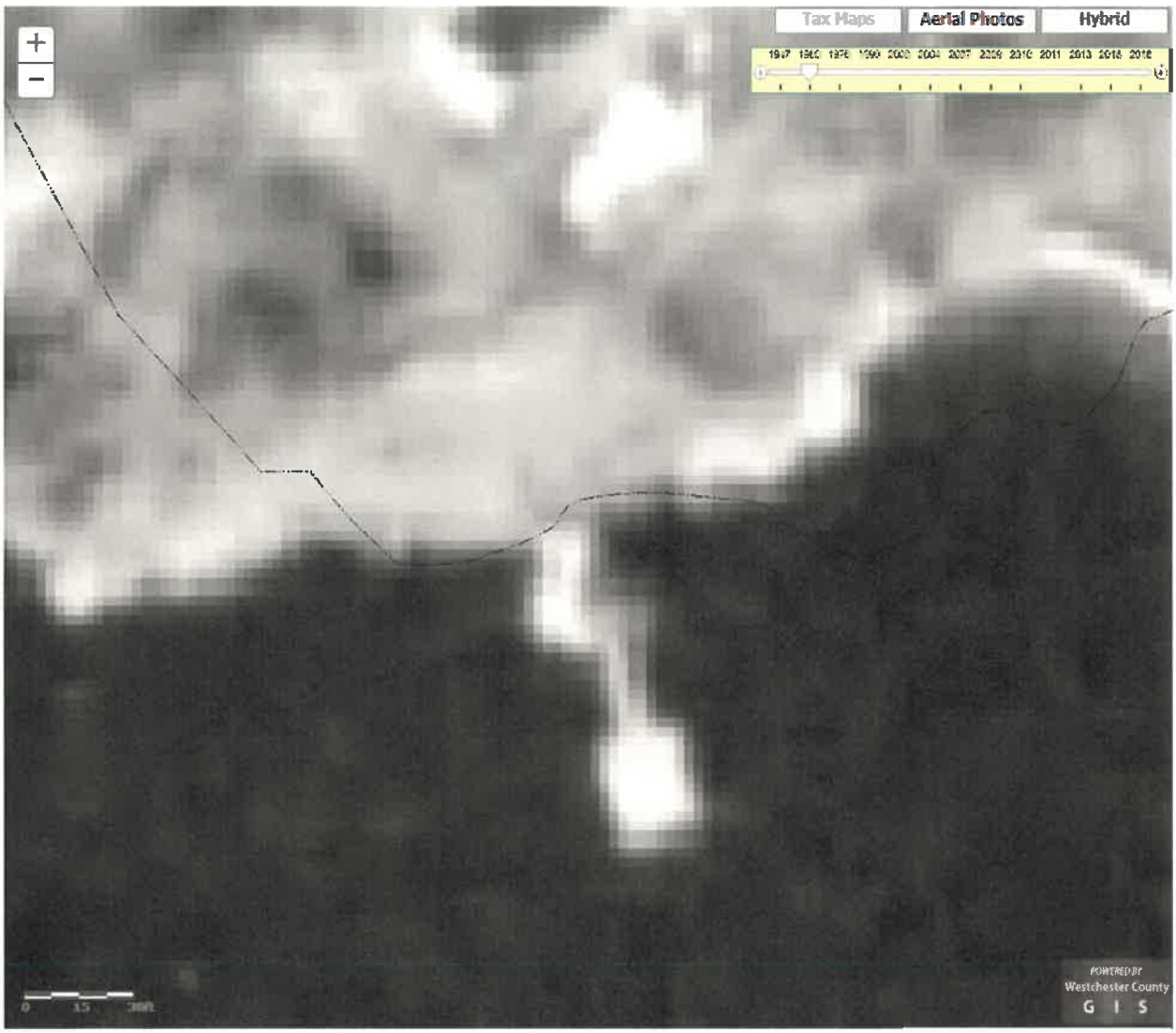


Photo 10: 1960

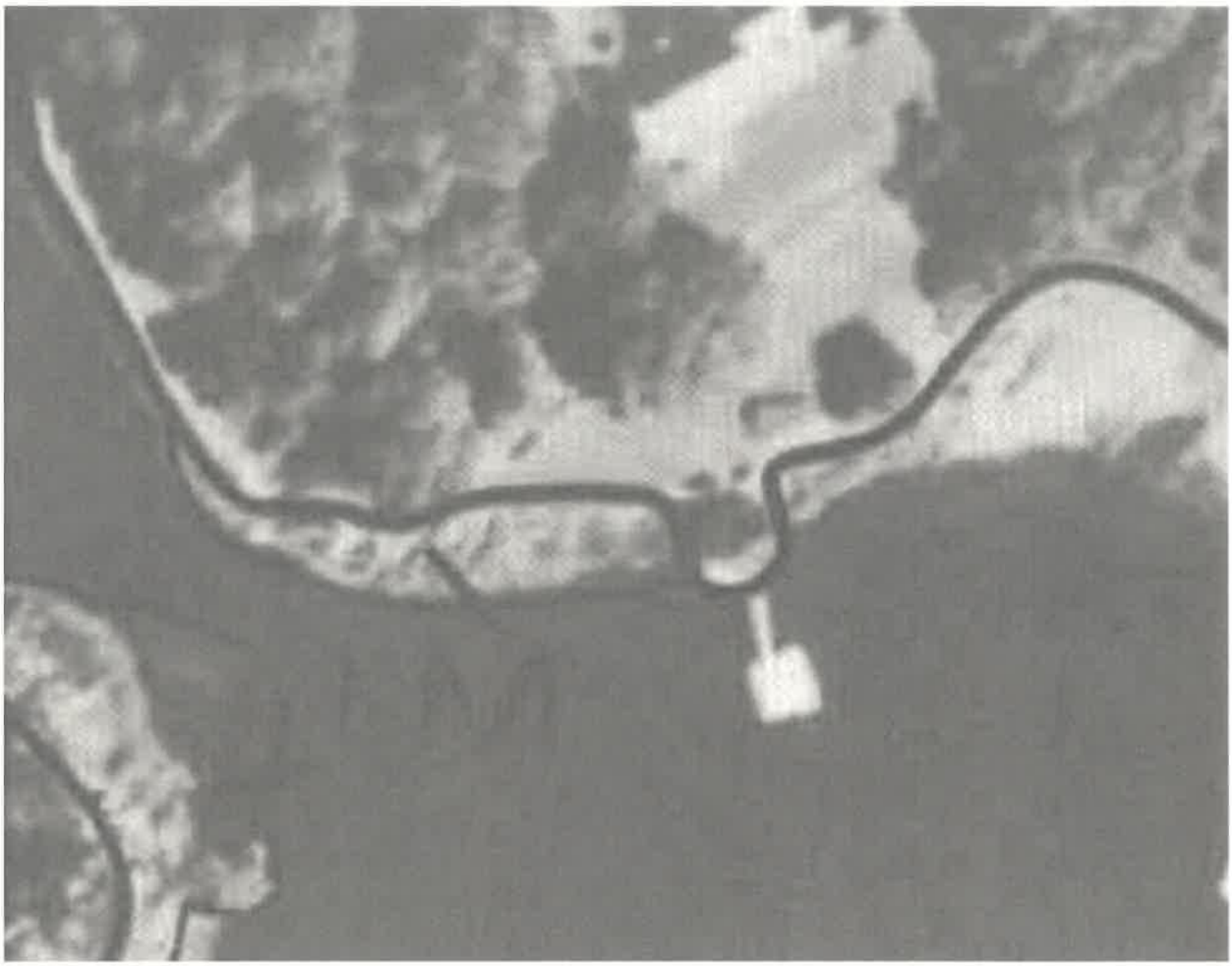


Photo 11: 1974

(NYSDEC Tidal Wetlands Map)

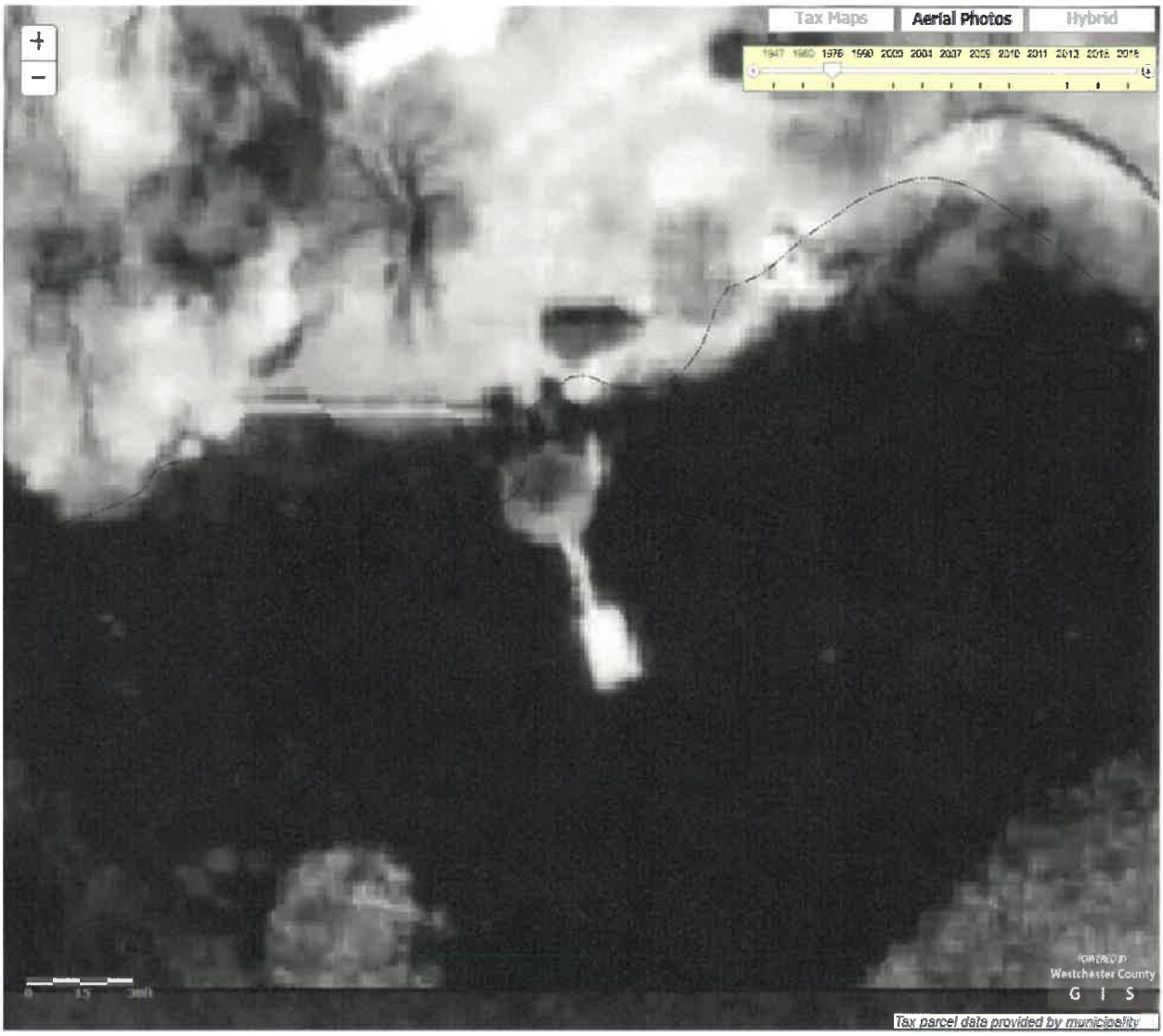


Photo 12: 1976



Photo 13: 2000

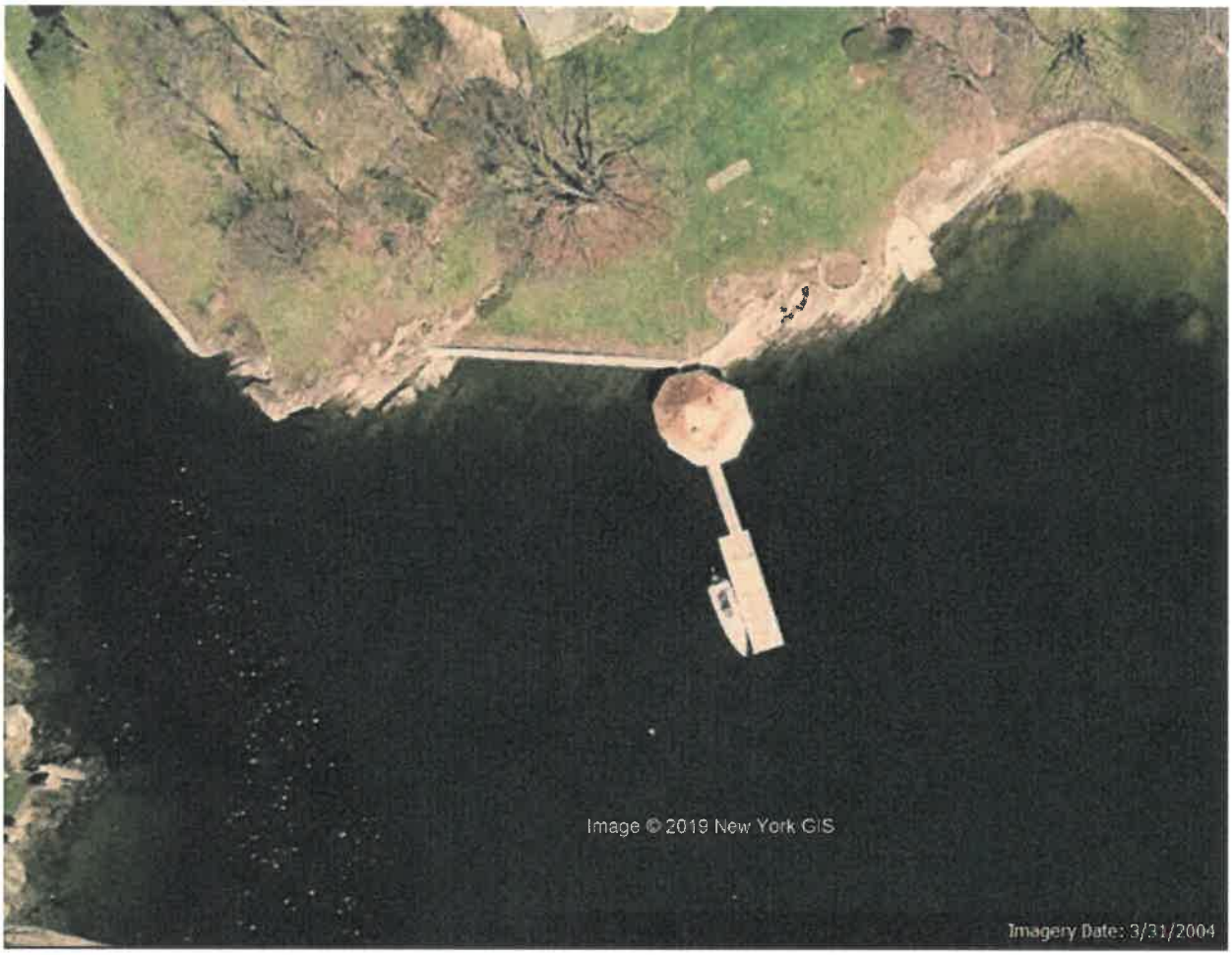


Photo 14: 2004

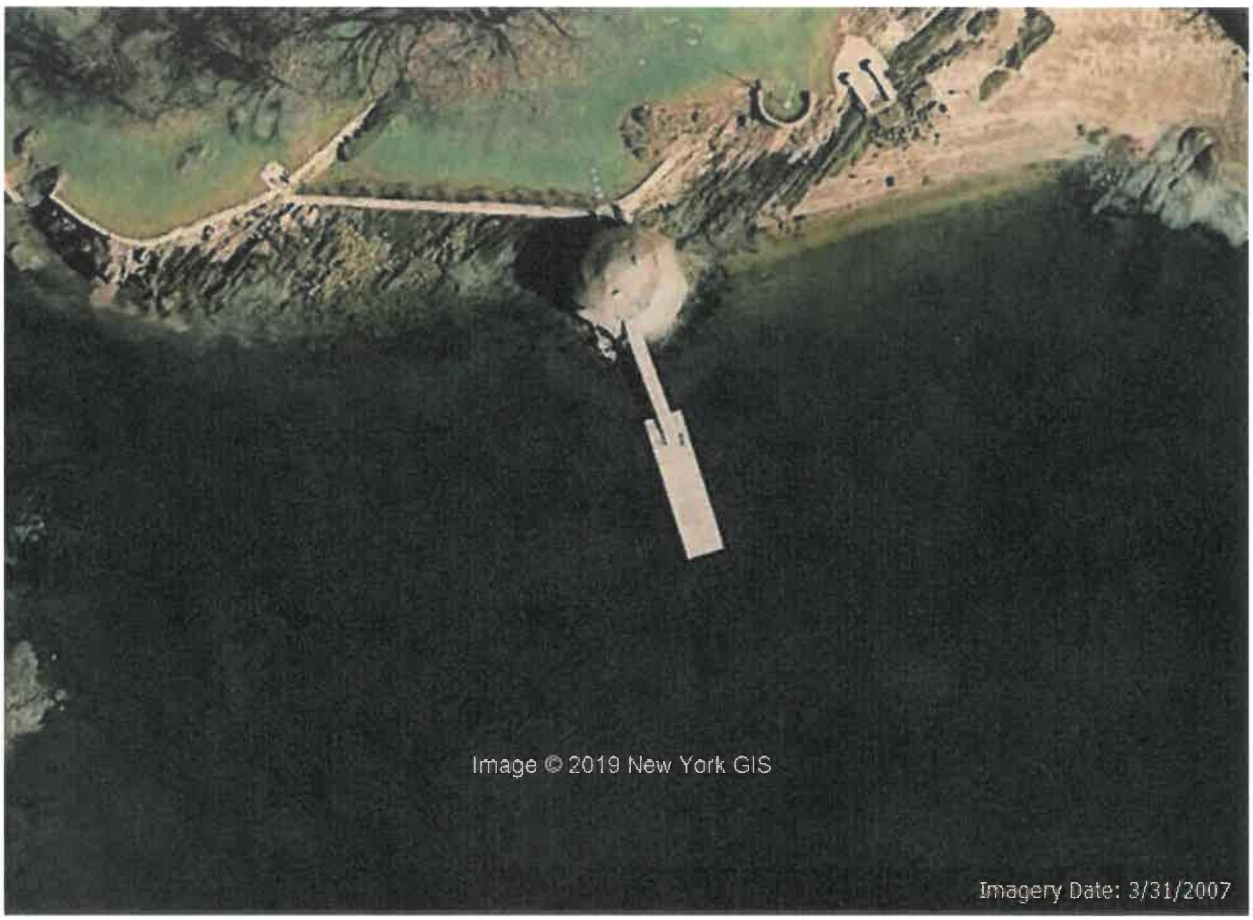


Photo 15: 2007



Photo 16: 2010



Photo 17: 2012

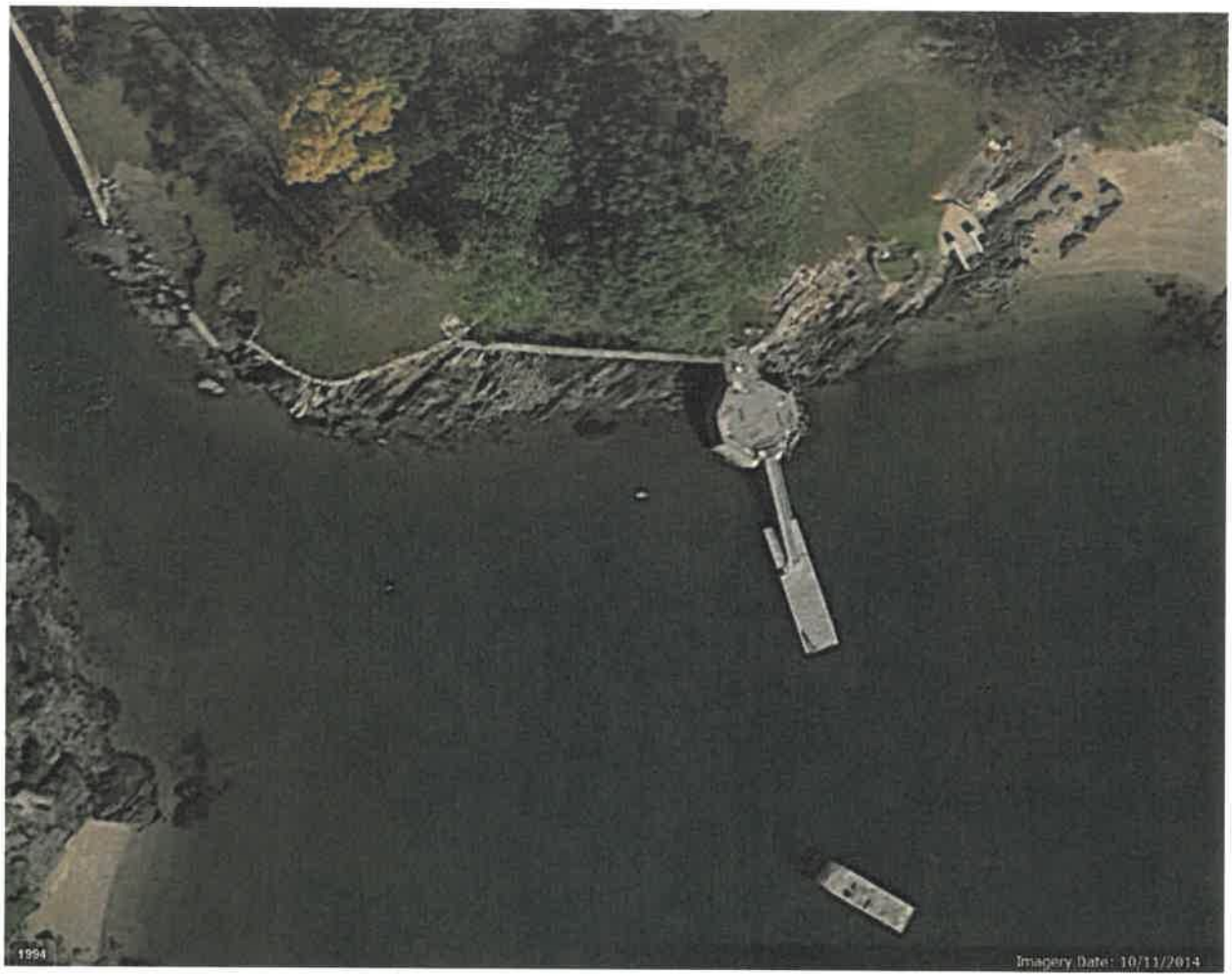


Photo 18: 2014

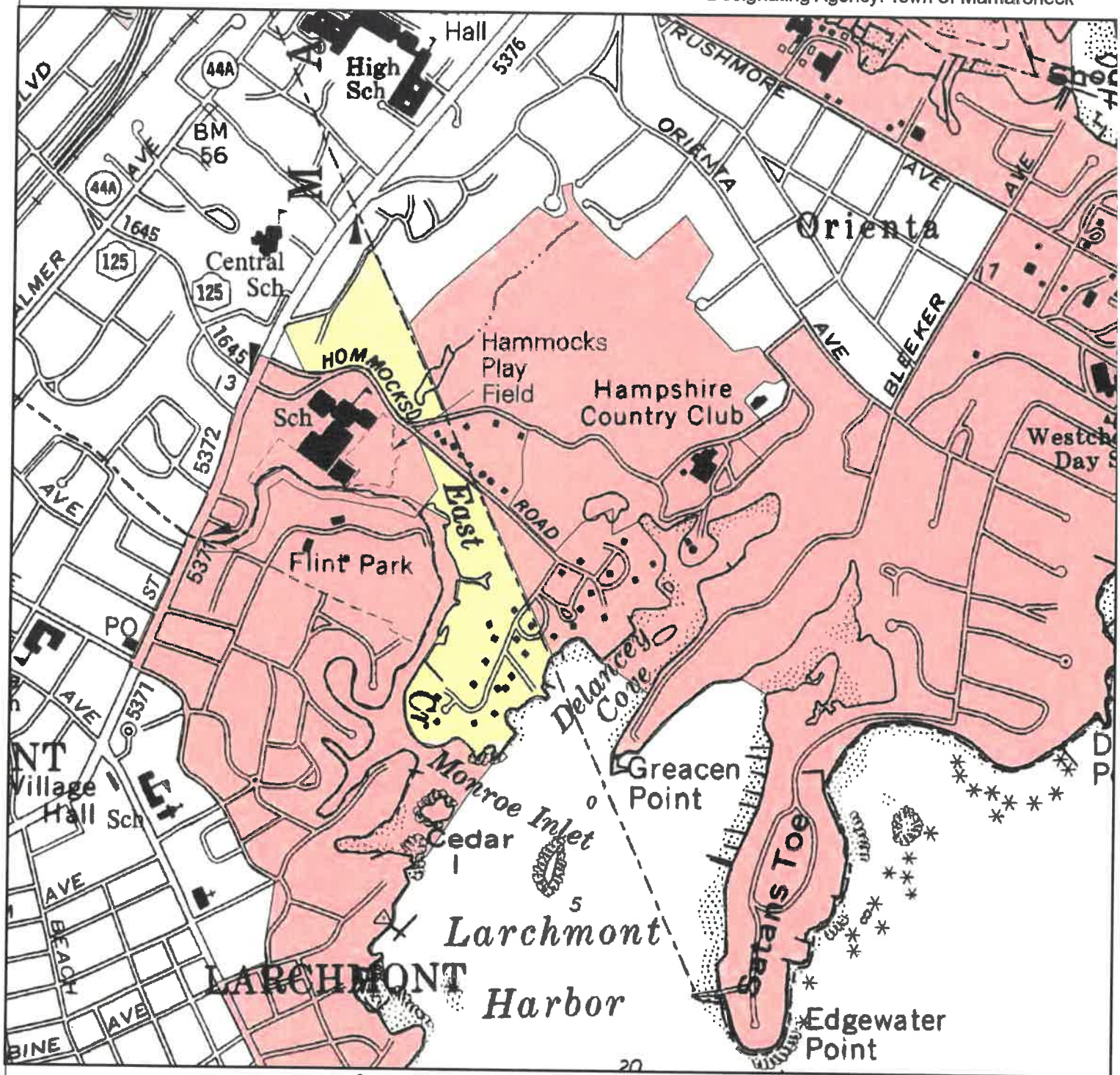


Photo 19: 2017

The Hommocks Salt Marsh Complex Critical Environmental Area (CEA)

Effective Date of Designation: 9-16-1989

Designating Agency: Town of Mamaroneck



0 0.125 0.25 0.5 Miles

1 inch equals 0.2 miles

Legend

- The Hommocks Salt Marsh Complex CEA
- Adjacent CEA

Base Map: DOT 1:24,000 Planemetric Images

For Adjacent CEAs see map:
Hommonck's Conservation Area CEA
Long Island Sound CEA
Hampsire Country Club CEA

Disclaimer: This map was prepared by the New York State Department of Environmental Conservation using the most current data available. It is deemed accurate but is not guaranteed. NYS DEC is not responsible for any inaccuracies in the data. Please contact the designating authority for additional information regarding legal boundary descriptions.

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile *Zone*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/26/2019 at 4:32:00 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

November 14, 2019

Ms. Jill Pietropaolo
Senior Coastal Engineer
RACE Coastal
611 Access Road
Stratford, CT 06615

Re: USACE
Seawall Repair and Gazebo Reconstruction
220 Hommocks Rd., Mamaroneck, Westchester County, NY 10538
19PR07510
3-5532-00419/00004-6

Dear Ms. Pietropaolo:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

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

Sincerely,

Roger Daniel Mackay

R. Daniel Mackay

Deputy State Historic Preservation Officer
Division for Historic Preservation

TRITON®
COASTAL AND WATERWAY SYSTEMS

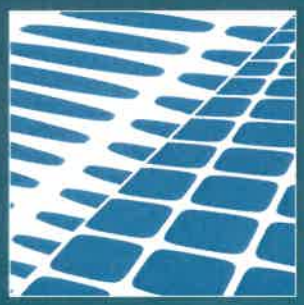
TRITON®
MARINE MATTRESS

INSTALLATION GUIDE



Tensar®

The Triton® Systems can substantially reduce overall project cost when compared to conventional solutions, such as riprap.



TENSAR® GEOGRIDS

The Triton Systems owe their strength and durability to **Tensar® Uniaxial (UX)** and **Biaxial (BX) Geogrids**, Tensar's reinforcement and stabilization geogrids. Due to their stiff interlocking capabilities, these geogrids stand the test of time, performing better than other commercially available geosynthetics. For more information, visit **www.tensarcorp.com.**

Introduction

Construction in coastal areas has never been easier with the development of the Triton® Coastal & Waterway Systems from Tensar International Corporation (Tensar). Because they provide durable, cost-effective solutions for applications in and around the water, Triton Systems are typically used for:

- Erosion control projects
- Foundations or cores for breakwaters, groins, etc.
- High-strength fills built in submerged conditions or with weak fill materials
- Channel linings and bridge scour protection
- Causeways, levees, dikes and bridge approach projects
- Protective cover for subaqueous utilities/pipelines

Assembled with advanced geogrid and geotextile materials, they can be integrated with readily available, natural fill material or vegetation to create highly resilient, flexible cells. That flexibility allows the Triton Systems to conform to land contours and irregular subgrade conditions far better than conventional solutions. And, by utilizing some unique deployment techniques, the Triton Systems can substantially reduce overall project cost when compared to conventional solutions, such as riprap.

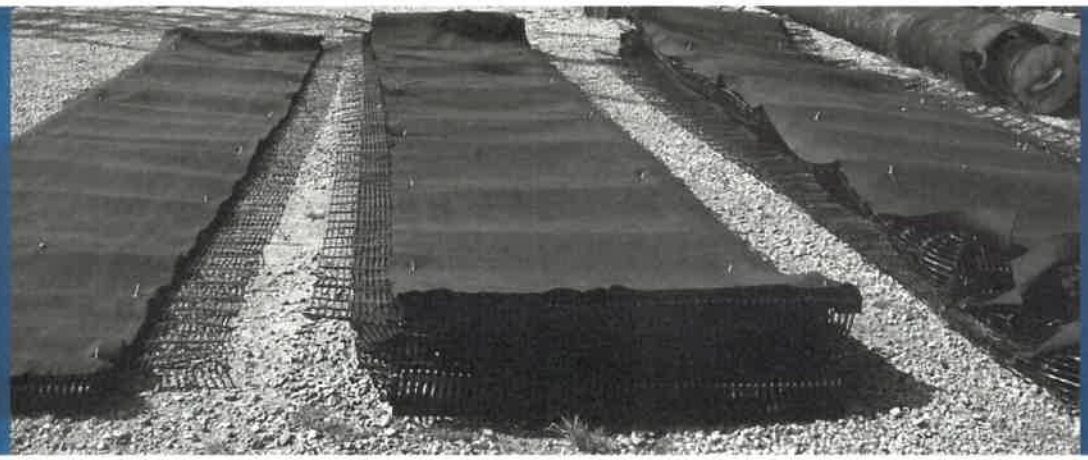
Tools Required

MARINE MATTRESS		
	Provided by Tensar	**Provided by Contractor**
Prefabricated Units	X	
Braid (For remaining seams)	X	
Additional Grid (For anchoring)	X*	
HDPE Bars (For splicing)	X	
Stone Fill		X
Filling Frames		X***
Geotextile Fabric		X**
Plastic Cable Ties (For temporarily securing grid or bodkins)		X
Shovels (To aid filling)		X
1.5 in. – 2 in. Bars (For rodding stone fill)		X
Metal Snips or Shears (For cutting grid)		X
Handmade Wire Tool (To help thread braid through grid [optional])		X
Rotary Drill with ½ in. Spade Bit (For making holes in the HDPE bars)		X
Front End Loader (For moving stone and filling the units)		X
Crane or Large Backhoe (For lifting units)		X
Steel Lifting Bar (6-8 ft long, 4 in. or larger diameter, schedule 80) (For placing in the lifting hoop to lift units)		X***
Spreader Bar or I Beam (If lifting unit by both ends) **with Lifting Eyes** (Spreader bar/beam should typically be about the same length as the filled unit being lifted)		X***
Choker Cables, Lifting Cables, Shackles and Other General Rigging		X***

**Additional grid for anchoring provided as indicated in project plans and specifications.*

***Geotextile fabric, per project plans and specifications, is available from Tensar. The contractor may choose to procure fabric from an alternate source.*

****Mechanical filling frame, spreader bar, lifting bars and cables are available for rental from Tensar.*



Prefabricated Triton Marine Mattress Units.

Marine Mattress System

The Triton® Marine Mattress System is designed for the demanding conditions associated with erosion control armoring and submerged foundation projects. For a complete application description, please refer to the Triton Systems Overview Brochure. The following procedures are intended for the filling and installation of typical Triton Marine Mattresses with a nominal thickness of 12-, 18- and 24-in.*

***NOTE:** The use of other procedures is contingent upon approval by the engineer. Unless otherwise directed by the engineer, use materials and configurations conforming to the approved shop drawings.*



Example of a hydraulic filling frame.

SPECIAL CONSIDERATIONS

Temperature – Operations involving handling of the polymer materials or mattress units should be avoided when the ambient temperature is lower than 23° F (-5° C). The polymer materials should be stored at temperatures above -20° F (-29° C).

Damaged Materials – If the unit is damaged, contact your Tensar Representative to obtain the *Suggested Repair Guidelines for Triton Marine Mattress* supplement and consult with the representative ***prior*** to filling, lifting or placing the unit.

Stockpiling of Materials – The fabricator should check the mattress materials upon receipt to verify that the proper material has been received and that the materials are free of flaws or damage occurring during manufacturing, shipping or handling.

The contractor should store and protect the materials as follows:

- Prevent excessive mud, wet concrete, epoxy or other deleterious materials from coming in contact with and affixing to mattress materials
- Store mattress units neatly stacked to prevent unnecessary distortion, folds, etc.
- Handle the mattress units in a manner to avoid loss of bodkin rods. (Avoid dragging mattress units on hard surfaces such as asphalt and concrete.)
- Lay rolled materials flat or stand on end
- In colder temperatures, it is helpful to stage prefabricated mattresses indoors for 24 hours prior to filling if possible. This helps the grid to maintain pliability and minimizes some difficulties in preparing and filling the mats.

Triton® Coastal and Waterway Systems are a durable, non-corrosive solution to many coastal and inland waterway erosion issues.

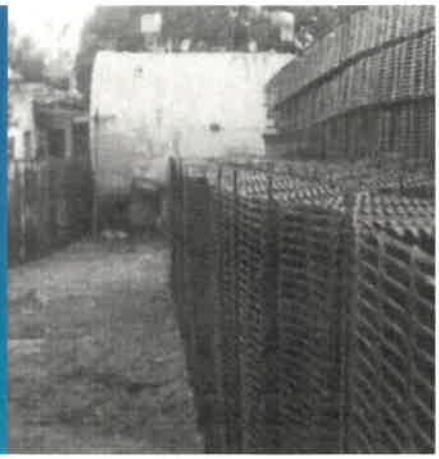


IMAGE 2: *Stacked units are ready to fill. The third seam is complete.*

FILLING PREPARATION

When preparing to fill, it may be necessary to stitch the third long side seam of the mattress. It will also be necessary to stitch the short seams on each end (which form the corners) together to form a long box with one side remaining open to fill. Generally speaking, it is not important which of the two long seams is selected to be the third or which is selected to be the fourth.

Work Area – This seaming is typically accomplished in an open area adjacent to the filling operation. The units may be leaned against light support to prop them up on edge. This allows laborers to stand and walk along one side of the unit to perform the seaming at close to shoulder height.

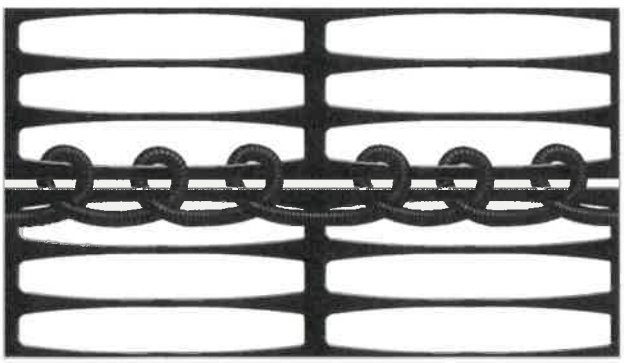


FIGURE 1: *Typical lock-stitch braiding configuration for mattress fabrication.*



IMAGE 1: *Knots should be tied in a manner to prevent slipping and cinching.*

Seaming – Using the seaming techniques and procedures as shown in Figure 1 and Image 1, complete the third seam if necessary and the short seam on each end of it. Units may be stacked. (See Image 2 and Figure 2). After seaming, the unit is ready for filling.

Production Rates* – As a rule of thumb for the third seam, two laborers can complete approximately 90-120 linear ft of seaming per hour. For 30 ft long mattresses, this equates to 3-4 units per hour.

****NOTE:*** *Production rates herein are provided for general estimating purposes only, based on previously completed projects. This does not assure that the contractor will meet these production rates.*

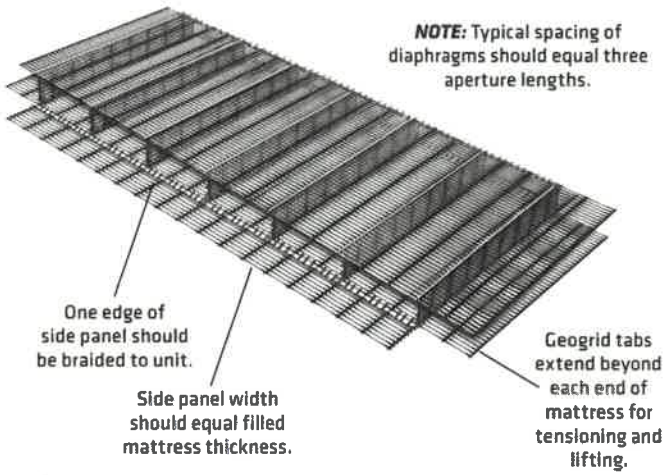


FIGURE 2: *A typical configuration of a prefabricated mattress.*



For UX Marine Mattresses, the average stone fill diameter should be 4 in.

FILLING AND CLOSING

Mattress Prep – Prior to filling the marine mattress, the contractor must close the vertical seams at the ends of the side panel that is closed in pre-fabrication (see Figure 3 on page 6).

Work Area – One or more frames are typically used to accommodate the on-edge filling procedure. Vibration equipment is not considered a required feature of the filling setup; rodding by hand is generally required and more effective. The basic functions of the filling support are to:

- Hold the unit safely during filling and closing, in an upright, on-edge position so that its open side faces upward
- Help guide the stone into the compartments of the unit
- Provide laborer access for rodding the stone fill and braiding the remaining seams
- Facilitate lowering the filled unit in a controlled manner to a horizontal position from which it can be lifted

Alternate support setups have been used successfully for filling (see Image 3). Contingent on approval by the engineer, the contractor may utilize an alternate support setup, which facilitates safe and complete filling and lowering of the units without causing unacceptable damage. Side support is required. When placing a mattress unit in tension during filling and lowering, avoid damage to the lifting tabs by using connections similar to those used for lifting.

The separation between the sides of the filling setup should be slightly greater than the nominal thickness of the mattress. For example, when filling a 12 in. thick mattress, the clearance between sides should be 13–14 in. Typically the filling setup should include sufficient area for the equipment to load stone from one side of the unit, while laborers work from the opposite side.

Size of Stone Fill – Unless otherwise directed by the engineer, the gradation of the stone fill shall conform to the project plans and specifications. The following comments are provided as suggestions to facilitate and expedite proper filling:

- The average stone size should not be greater than 4 in.
- The maximum stone size should not be greater than 6 in. If large, individual stones are hanging up in the compartments, blocking complete filling or causing excessive distortion or damage to the units, these stones should be selectively discarded prior to placement in the mattress unit.
- The minimum stone size is generally 1.5–2 in. Little or no amount of stone should fall out of a mattress unit as it is lifted and placed.



Example of filling frame available from Tensar.



***IMAGE 3:** This wooden filling frame was constructed for a marine mattress project in Kauai, Hawaii.*



Plywood spacers help hold the two main layers of grid apart, helping to fully open the mattress for filling.

Filling the Compartments – The diaphragms of the mattress may tend to draw the unfilled compartments closed. It is often helpful to first use elastic straps or spacers to hold the main two layers of grid apart, helping to fully open the compartments for filling (refer to image above). Using a loader bucket (or similar) positioned slightly above the unit, drop stone fill into each compartment. (See Image 4.) The filling should be staged to facilitate complete filling while avoiding excessive shoving or bowing of the diaphragms. A typical sequence is to:

- Fill to half-height
- Remove spacers
- Rod each compartment
- Fill to full-height
- Rod each compartment again
- Top off with additional stone, slightly heaped (+2 in.) above the edge



***IMAGE 4:** Overfill so that stone is heaped slightly above the top of the unit.*

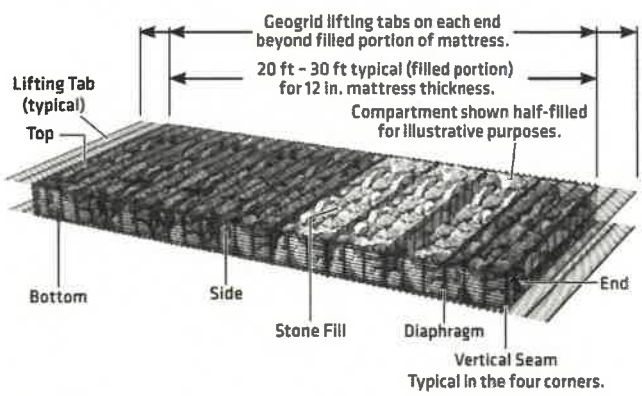


Rodding helps pack the stone fill so that shifting does not occur during lifting or placement of the mattress unit.

Typically, the rodding is intended to eliminate voids in the stone fill and to cause complete filling evidenced by consistent bulging of each compartment. Tight filling is important to performance in some conditions and applications, by resisting shifting of the stone fill. Generally, incomplete filling of a unit is apparent during lifting shown by unfilled air space near the edge of one or more compartments.

Closing – With the filled unit still supported in its upright, on-edge position, complete the fourth seam and the short seam on each end of it. Use the seaming techniques and procedures as shown in (Figure 1).

Production Rates – As a rule of thumb for the filling and closing stage, a crew of three laborers, plus a loader and operator, can fill a 30 ft long unit in about 45 minutes.



NOTES:

- Ends, top, bottom, sides and any extra length used for lifting or anchoring purposes shall be composed of Tensar® UXTriton200 Geogrid or UXTriton300 Geogrid.
- Internal diaphragms shall be composed of Tensar UXTriton100 Geogrid.
- Nominal width of units: 5 ft (filled), 4.4 ft (unfilled)
- Typical thickness (filled): 12 in. (also available in 18- and 24-in. thicknesses).
- Plastic cable ties may be used to secure bodkin connectors in position prior to tensioning or filling of mattress unit.

***FIGURE 3:** Typical configuration of filled mattress units.*



TRANSPORTING A FILLED MATTRESS UNIT

Lowering to a Horizontal Position – In order to be lifted, each filled unit must be rotated from the on edge position – standing on its side, down to a flat position – lying on its bottom panel. This can be accomplished by using a stable frame with a stout, hinged side, and rotating the unit by slowly lowering the side of the frame with equipment.

Forming Lifting Hoops – Use a bodkin connection as shown in (Image 5) to form the lifting hoop. Use cable ties (or similar) to prevent the connector piece from sliding out when tension is not applied. The hoop may be configured in either of two ways (see Figures 5 and 6):

- On each end of the unit, connect the pair of lifting tabs directly to each other; or
- On each end of the unit, use a separate piece of the same type of grid to form a longer hoop. Connect each end of the separate piece of grid to one of the lifting tabs. (This type of hoop may be more advantageous for some conditions.)

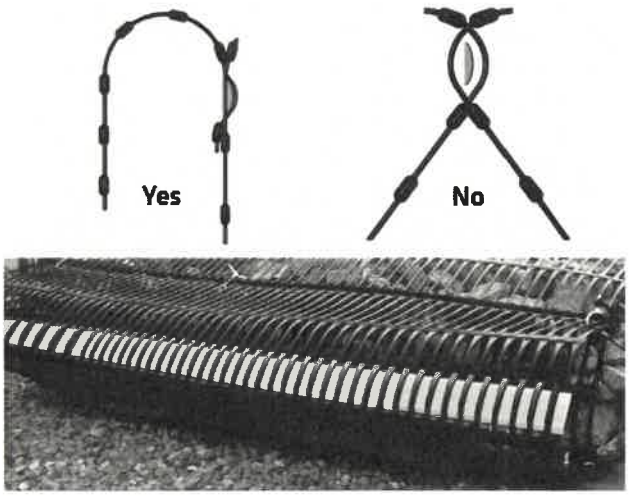


FIGURE 4: Use a bodkin connection to form a lifting hoop.

Production Rates – As a rule of thumb for moving the filled unit, a crew of three laborers, plus a large backhoe or small crane, and operator can move a filled unit and place another unfilled unit in the filling setup in about 10 minutes. If a filling frame is not used, an additional five to 10 minutes may be required to set up each unit for filling.

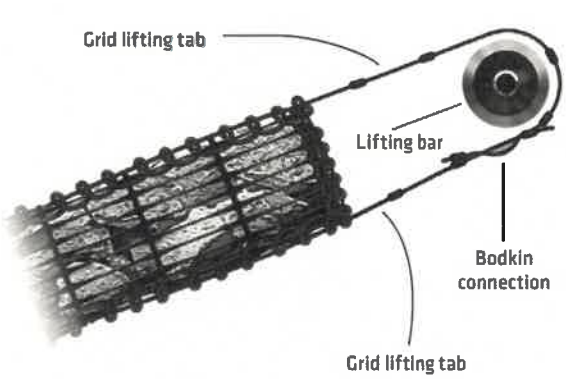


FIGURE 5: Lifting hoop formed by connecting lifting tabs directly.

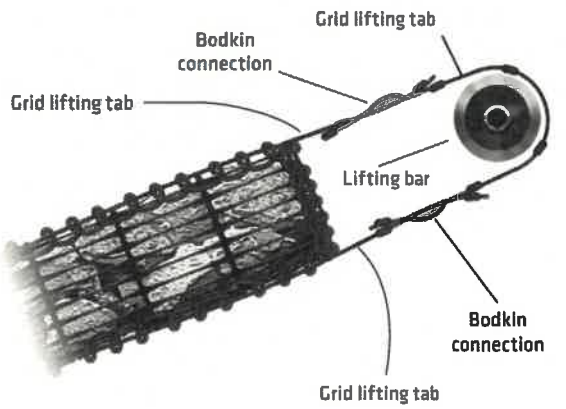
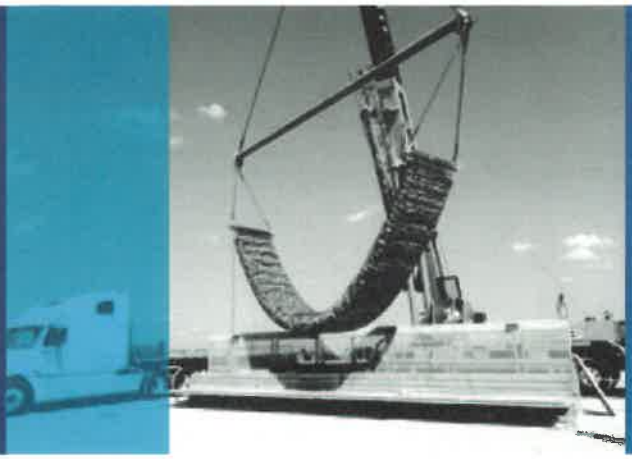


FIGURE 6: Lifting hoop formed by connecting lifting tabs to a lifting tail.



Notice the importance of the pivot point for free swinging of the lifting bars, whether lifting by one end or both ends of the mattress.

LIFTING A FILLED MATTRESS UNIT

The contractor is responsible for checking that the geogrid is not damaged, providing adequate rigging and equipment, and using safe procedures in the lifting, handling and placement of the filled mats.

Uniform Loading – The geogrid must be loaded uniformly across its width during lifting. This requires:

- The mattress ends, lifting hoops and lifting bars hang in a level position during lifting
- Each lifting bar is adequate enough to provide a safe hookup and to safely carry the load without bending, sagging or damaging the grid
- Each lifting bar is rigged to pivot freely with the mattress
- The rigging, equipment and procedures are adequate enough to prevent excessive swinging, jerking or bouncing of the mattresses

Safe Distance – Personnel must maintain a safe distance from the mattress, rigging and equipment at all times during lifting. Tag lines (or similar) should be used as necessary to avoid personnel being in the area beneath a filled mattress or the rigging during lifting.

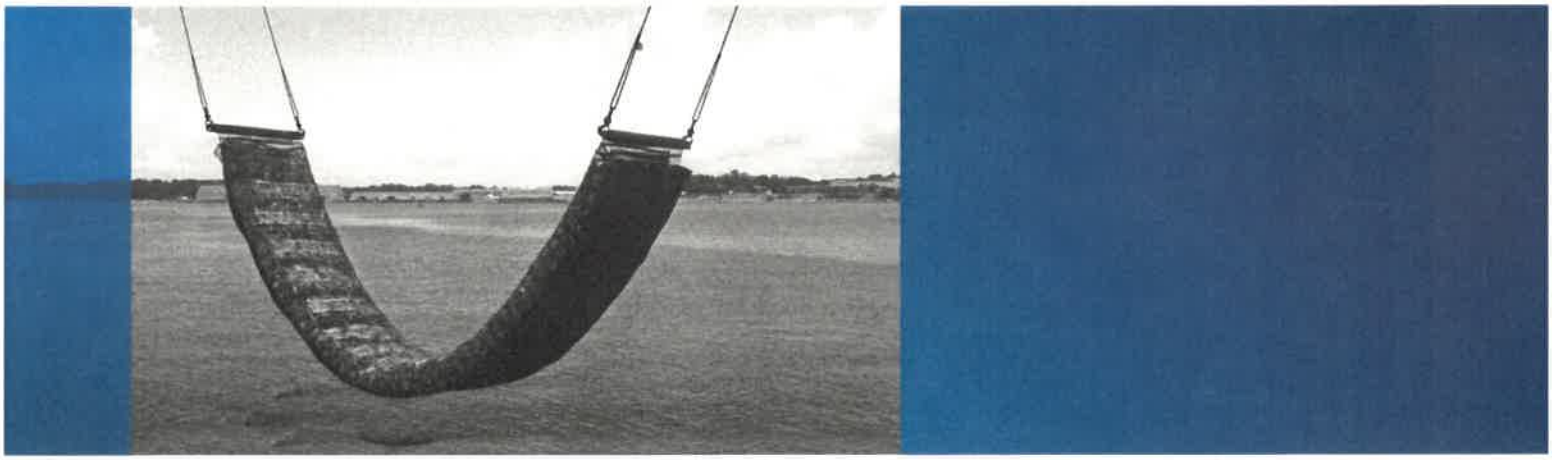
Duration of Lift – No mattress should be left lifted and hanging for an extended period of time. A typical time frame for lifting, handling and placement is five to 15 minutes.

Reuse of Lifting Tails – The lifting tails, or the extra length of grid sometimes used to form lifting hoops, may only be reused if they are not damaged. They should not be used for more than four lifts each (visual inspection of the bodkin is required to determine if it can be reused.).

End-to-End Splicing – When mattresses are spliced together for lifting, both the top and bottom layers of the grid from the mattress should be joined by a bodkin connection as shown in (Figure 4). The overall mattress length when units are joined for lifting should not exceed the typical range as shown in (Figure 3).



In Buffalo, New York, this filled mattress was lifted by one end.



STACKING FOR STOCKPILING OR SHIPMENT

When stacking filled units for stockpiling or shipping, the stockpile should be limited to a stable height and should not exceed five feet – or the safe stacking height as determined by the contractor. For shipping, loads must be secured to prevent tipping or sliding of the stack or the individual units.



Mattress units were stacked in groups while awaiting deployment over a pipeline in Bay County, Florida.



MATTRESS PLACEMENT (INSTALLATION)

General – Place the filled units (typically on a prepared subgrade and geotextile filter) as called for in the contract documents or as directed by the engineer. (See Images 5 and 6). With appropriate detailing, geotextile may be pre-attached to the filled units prior to placement.

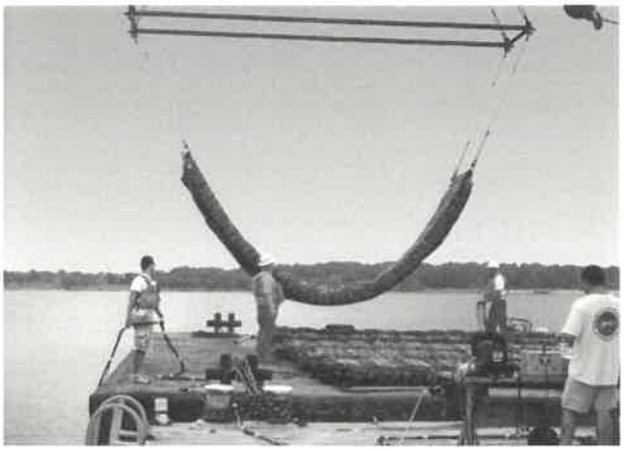
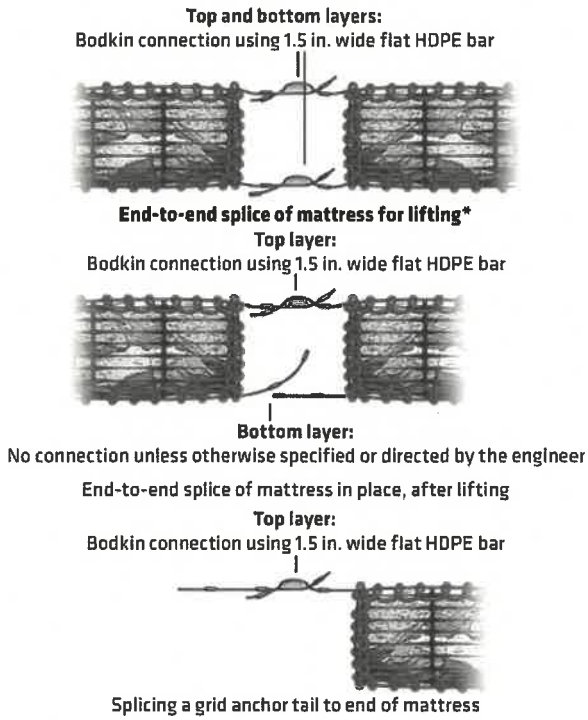


IMAGE 5: A Triton® Marine Mattress is lowered over an underwater pipeline for protection.



IMAGE 6: Completed installation for riverbank protection.

Joining Adjacent Units – For most revetment applications "free articulation" of horizontally adjacent Triton® Marine Mattresses is preferred. Side-to-side seaming of these mattresses is not typically required. If site conditions and project specifications call for side-to-side seaming of adjacent mattresses it can be accomplished using special braid material provided by Tensar® for Marine Mattress seaming. For steep slopes, end-to-end splicing of the vertically adjacent mattresses can be accomplished by using the HDPE bar to form a bodkin connection. See (Figure 7) for details on the end-to-end connection. Any gap between vertically adjacent mattresses should be filled with aggregate prior to connecting the mattress ends.



***NOTE:** The overall mattress length when units are joined for lifting should not exceed the typical range as shown in Figure 3.*

FIGURE 7: End-to-end splicing of adjacent mattress units.



Suggestions for "Wedge-shaped" Gaps – In some cases, placing marine mattresses around a curve in a channel may leave a wedge-shaped gap between the ends of the marine mattresses. In this situation, a simple procedure can be used to "field fabricate" an appropriate fix. (Figure 8.)

1. Prior to placing the first mattress lay a piece of BX150060 geogrid on the subgrade.
2. Lay both of the mattresses leaving as little gap as possible.
3. Cut a 12 in. piece of grid to tie vertically to connect the ends and sides of the mats. This should create a wedge shaped cell between the ends of the mats and the vertical piece of grid.
4. Fill the cell with gravel and cover with UXTriton200 geogrid. Tie all seams using the same stitch configuration used in closing the mattresses.
5. Cut and place UXTriton200 geogrid over filled area.
6. Secure the geogrid using the same braid and stitch pattern used for closure of the mats.

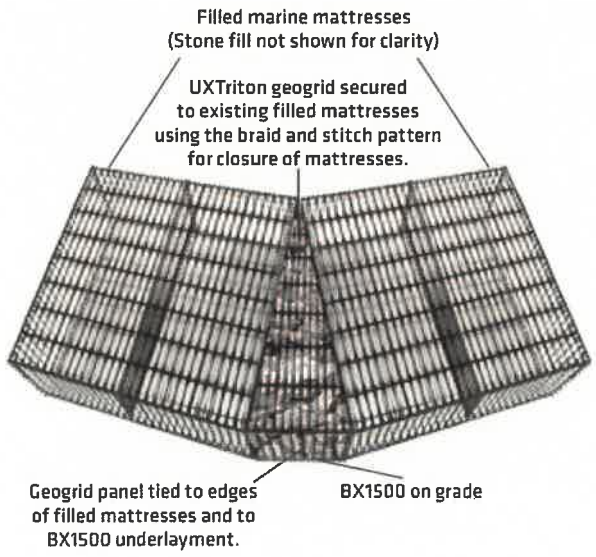


FIGURE 8: Marine mattresses can accomodate wedge-shaped gaps.

Anchoring Units – For steep, sloping installations anchoring of the units may be required. If an extra length of grid is to be used as an anchor tail, it should be spliced to the lifting tab of the mattress unit using the HDPE bar to form a bodkin connection once the mattress unit is in place. (See Figure 9.) If soil anchors are used to anchor the end of the grid, then special detailing is required to distribute the load from the anchor to the grid. Contact a Tensar Representative for suggested details.



FIGURE 9: An HDPE bar forms a bodkin connection.

Finishing Treatments – Special finishing treatments, such as top-dressing with soil and seeding, grouting or pouring a concrete surface on top of the mats should be considered ahead of time. Contact a Tensar Representative for suggested details.

For more information on Triton Systems, call **800-TENSAR-1,** visit **www.tensarcorp.com** or send an email to **info@tensarcorp.com**. We are happy to supply you with additional information, system specifications, design details, conception designs, preliminary cost estimates, and much more.

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Product Specification - Structural Geogrid UX TRITON 300

Tensar International Corporation reserves the right to change its product specifications at any time. It is the responsibility of the specifier and purchaser to ensure that product specifications used for design and procurement purposes are current and consistent with the products used in each instance. Please contact Tensar International Corporation at 800-836-7271 for assistance.

The structural geogrid shall be an integrally formed grid structure manufactured of a stress resistant copolymer polypropylene material with molecular weight and molecular characteristics which impart: (a) high resistance to loss of load capacity or structural integrity when the geogrid is subjected to mechanical stress in installation; (b) high resistance to deformation when the geogrid is subjected to applied force in use; and (c) high resistance to loss of load capacity or structural integrity when the geogrid is subjected to long-term environmental stress.

The structural geogrid shall accept applied force in use by positive mechanical interlock (i.e. by direct mechanical keying) with: (a) compacted soil or construction fill materials; (b) contiguous sections of itself when overlapped and embedded in compacted soil or construction fill materials; and (c) rigid mechanical connectors such as bodkins, pins or hooks. The structural geogrid shall possess sufficient cross sectional profile to present a substantial abutment interface to compacted soil or particulate construction fill materials and to resist movement relative to such materials when subject to applied force. The structural geogrid shall possess sufficient true initial modulus to cause applied force to be transferred to the geogrid at low strain levels without material deformation of the reinforced structure. The structural geogrid shall possess complete continuity of all properties throughout its structure and shall be suitable for reinforcement of compacted soil or particulate construction fill materials to improve their long term stability in structural load bearing applications such as earth retention systems. The structural geogrid shall otherwise have the following characteristics:

Product Type: **Integrally Formed Structural Geogrid**
Load Transfer Mechanism: **Positive Mechanical Interlock**

Product Properties

Load Capacity	**Units**	**MD Values[1]**
▪ True 1% Tensile Modulus in Use[2]	kN/m(lb/ft)	2,100 (143,930)
Structural Integrity		
▪ Junction Strength[3]	kN/m(lb/ft)	125.0 (8,570)
▪ Flexural Stiffness[4]	X1000 mg-cm	9,500
Durability		
▪ Resistance to Long Term Degradation[5]	%	100
▪ Ultraviolet Stability (Retained Strength at 500 hours)[6]	%	98
Dimensions		
▪ Aperture Size (MD/XMD) – Nominal	mm (in.)	142 (5.6) / 15 (0.6)
▪ Percent Open Area – Nominal	%	60
▪ Minimum Thickness (any dimension) – Nominal	mm (in.)	2.10 (0.080)

Delivery

The structural geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 1.33 meters (4.36 feet) in width and 61.0 meters (200.0 feet) in length. A typical truckload quantity is 96 rolls.

Notes

1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759. Brief descriptions of test procedures are given in the following notes. Complete descriptions of test procedures are available on request from Tensar International Corporation
2. True resistance to elongation when initially subjected to a load measured via ASTM D6637 without deforming test materials under load before measuring such resistance or employing "secant" or "offset" tangent methods of measurement so as to overstate tensile properties.
3. Load transfer capability measured via ASTM D7737-11.
4. Resistance to bending force measured via ASTM D7748-12, using one meter (minimum) long specimens.
5. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments measured via EPA 9090 immersion testing.
6. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.

This product specification supersedes all prior specifications for the product described above and is not applicable to any products shipped prior to February 1, 2013.