TOWN OF CARMEL
ENVIRONMENTAL CONSERVATION BOARD

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

ENVIRONMENTAL CONSERVATION BOARD AGENDA

JUNE 18, 2015 – 7:30 P.M.

SUBMISSION OF AN APPLICATION OR LETTER OF PERMISSION

APPLICANT	ADDRESS	TAX MAP #	COMMENTS
1. Sheppard Estates, Inc. c/o Lou Panny	17 Pleasant Road	53.15-1-24	Construct 1 Family Home
2. Roa, Efraim & Aida	41 Averill Drive	64.16-1-33	Renovation of Existing Residence

MISCELLANEOUS

3. Minutes – 04/09/15 & 05/07/15

JOHN KARELL, JR., P.E.
121 CUSHMAN ROAD
PATTERSON, NEW YORK, 12563
845-878-7894 FAX 845 878 4939
jack4911@yahoo.com

STORMWATER POLLUTION PREVENTION PLAN
EROSION AND SEDIMENT CONTROL
RAIN GARDEN DESIGN

LOUIS PANNY
PLEASANT ROAD
CARMEL (T)

March 24, 2015, **revised June 8, 2015**

I. INTRODUCTION

1.1. Project background

The project site is vacant land located on Pleasant Road in the Town of Carmel, Putnam County, New York. The property is identified as tax map # 53.15-1-24. The site presently contains a small cottage.

Site Description

The site is 0.8 acres in size. The proposed house construction will result in an increase in impervious area of 3,300 square feet and 0.7 acres of total disturbance.

1.2. SWPPP Overview

It is proposed to construct a single family house will be 1,350 square feet in size, An existing drilled well and new onsite subsurface sewage treatment system (SSTS) will provide water and sewer service to the proposed house. The purpose of this report is to address Storm Water Pollution Prevention and Management for the proposed improvements.

In accordance with Chapter 103 of the Code of the Town of Carmel entitled Stormwater Management and NYSDEC SPDES General Permit for Storm water Discharges from Construction Activities, General Permit GP-0-1 5-002 ,because the proposed disturbance for the project exceeds 5,000 square feet, coverage under the General Permit is required, a Notice of Intent (NOI) must be filed and a stormwater pollution prevention plan is required for this project. No SWPPP approval is required by the NYCDEP as the proposed project does not exceed the thresholds for requiring preparation of a SWPPP, nor proposes a regulated impervious surface within the limiting distance of a NYCDEP regulated watercourse or wetland.

Construction will begin immediately after receiving approval from the Town of Carmel Building Department of a SWPPP in accordance with the provisions of the Town Code.

II. EXISTING SITE CONDITIONS

2.0 General

The existing property contains a cottage which will be removed from the site. The property consists of lots 18 & 19 on a subdivision entitled, "Mahopac Falls Park, Section 4", approved August 12, 1939. The lot is located on the north side of the Pleasant Road.

Generally the topography on the site flows from north to south. The subject property is located in the Amawalk Reservoir Drainage Basin which is located in the NYC EOH Watershed.

2.1 Surface Water

No lake, pond or other surface water exists on this property, except for a small wetland in the southeast corner of the property near the road and associated 100 foot buffer area.

2.2 Soils

2.1.1. Hydrologic Soils/NRCS Web Soils Survey

Soils on the property are classified by the United States Department of Agriculture Soil Conservation Service as Charlton Chatfield Complex, Hydrologic soil group B from the Web Soil Survey. Soil boundaries are shown on the Site Plan.

The pre developed site consists of woods and lawn in good condition.

2.1.2. Site Geotechnical Evaluation

The deep test holes indicated a rock and groundwater at depths greater than 8 feet. Soil percolation tests indicated a percolation rate of 11-15 minutes per inch.

2.3. Groundwater

Groundwater was not encountered to a depth of 8 feet.

2.4. Natural Resources

Natural resources contained on the site is the woodland area. Some woodland will be removed however the extent of removal will be minimized.

2.5. New York State Register of Historic Places Assessment

There are no Historic places on this property. See letter from SHPO.

2.6. Critical Habitat

There are no critical habitats on this property.

2.7. Offsite Drainage

No changes in drainage patterns are proposed.

2.8 Pre-construction Drainage Areas

Most of the property drains to the area along Pleasant Road. No changes to pre construction runoff patterns will result from the construction of this project.

2.9 Potential sources of pollution

Potential sources of pollution which may be reasonably expected to affect the quality of stormwater discharges.

- Sediment – all disturbed areas will be stabilized

III. Stormwater Management, Treatment and Conveyance

A. Storm water treatment is not required. Management of stormwater from this property will be discharging driveway drainage to adjacent lawn areas and collection of roof drainage for discharge into rain gardens.

B. Stormwater conveyance for this project consists of sheet flow onto adjacent lawn areas and piping to stormwater stuctures and rain gardens.

IV. Stormwater Management

Treatment of stormwater is not required, however to mitigate disturbance in the 100 foot wetland setback, rain gardens will be provided to treat roof drainage.

V. Erosion and Sediment Control

A. Temporary Erosion and Sediment Control Measures

1. Temporary erosion and sediment control measures in the design of this project are silt fence. The driveway will be provided with a stabilized construction entrance. The contractor will be responsible for daily sediment cleanup on the driveway, if any. Silt fence are proposed to be installed along the downslope of all areas of disturbance as shown on the site plan, or as determined to be necessary during construction.

2. Runoff will be controlled within the project area. Bare soil areas, disturbed areas, will be seeded and mulched to control possible erosion and slow the velocity of runoff. Such activities shall be initiated by the end of the next business day and completed within 7 days from the date the current soil disturbance activity ceased.

3. Initial grading shall take place to install the sediment control measures. Soil stockpiles shall be stabilized away from any drainage structures or natural drainage paths. Once final grading has been achieved in any area that area shall be seeded and mulched and not redisturbed again.

4. Soil stockpiles must be protected with seeding and/or mulching as soon as possible but no longer than 7 days after ceasing activity. (see item # 2 above)

5. Measures must be in place prior to disturbance of a particular area in order to prevent

sediment from traveling off site. This is accomplished on this site by the proper installation of silt fence.

6. Dust shall be controlled to keep the amount of particles/sediment generation by construction activity to a minimum. This will be accomplished by seeding and mulching of disturbed areas and wetting areas prone to airborne dust.

7. All temporary and permanent sediment and erosion control measures must be checked on a weekly basis for functionality and stability. This includes the silt fencing and the stabilized construction entrance. Any bare spots in areas previously seeded will be reseeded and remulched as soon as necessary. In areas where soil erosion and sedimentation is found to be a problem and measures are not in place, appropriate measures must be installed as required by the supervising engineer.

8. Final grading shall match approximately the cut and fill lines as shown on the plans. This must be accomplished within 7 days of the end of the construction activity unless otherwise specified under the Town or DEC permits. (see item # 2 above)

9. Temporary measures shall not be removed until all disturbed areas protected by such measures are fully and properly stabilized.

10. Permanent non structural measures to remain in place are re-established areas of grass and landscaping within the non impervious areas.

11. Pollution prevention measures that will be utilized to prevent construction debris from becoming a pollutant source include:
...Litter control – refuse containers will be provided on the site for the deposition of any debris. The contractor shall police the site at the end of each day, collect litter and deposit litter in the refuse containers.
...Construction chemicals – all construction chemicals including but not limited to equipment fuels and oils and cleaning solvents shall be stored in appropriate containers and within a locked facility overnight.

Any spills of construction chemicals will be immediately cleaned up in accordance with appropriate procedures.

Any significant spill will be immediately reported to the NYSDEC pursuant to State Regulations, procedures and requirements.
...Construction debris will be collected and placed in roll off containers and disposed off site in at an appropriate disposal facility. (Part III.B.1.j)

B. Permanent Erosion Control Measures

1. Permanent erosion control measures employed in the design of the project include stabilization of all disturbed areas with grass, pvc pipe, settling practices and rain gardens.

VI. Inspection & Maintenance of Stormwater and Erosion Control Measures

A. Inspection and Reporting Requirements

All erosion control measures are to be inspected weekly. In the case of a rain event, measures must be checked immediately after. Inspections shall be made by a qualified professional and reports will be kept on site in a dedicated mailbox labeled, "Storm water Documents".

B. Responsibilities

The project contractor and/or subcontactors shall be responsible to install, construct, repair, replace, inspect and maintain the temporary erosion and sediment control practices included in the SWPPP. The project contractor/subcontractor shall be responsible for constructing the post construction storm water management practices included in the SWPPP. Such measures will be maintained by the project contractor/subcontractor during the entire construction period.

Permanent measures will be maintained by the owner of the property.
(Part III.A.6) (Part IV)

Developer:

Louis Panny
P.O. Box 658
Mahopac, New York, 10541

Owner/ Applicant
Same as developer

The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

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

"I hereby certify that I understand and agree to comply with the terms and

conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for storm water discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings. "

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed.

The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the construction site. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

C. Temporary Measures

1. Construction Entrance(s)

The construction entrances shall be maintained in a condition which will prevent tracking or flowing of sediment onto the public right of way. This will require, sweeping and washing the driveway surfaces, periodic top dressing with addition stone or additional length as conditions demand based on daily inspections and repair and/or clean out of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights of way must be immediately removed.

2. Silt Fence

Silt fence is proposed down gradient from all disturbed areas proposed on the site. Silt fence is used to collect the transported sediment load due to runoff and to slow said runoff, in an effort to prevent erosion. The silt fence is a temporary barrier of geotextile fabric supported by fence posts at a 10 foot maximum interval.

Sediments shall be removed from behind the fence when it becomes 0.5 feet deep at the fence. It should also be inspected regularly, at least once a week and repaired as needed to maintain a barrier.

D. Permanent Measures

1. Permanent vegetation

All grassed areas shall be maintained to provide a vegetative cover to hold soils in place.

2. HDPE Pipe

Maintenance need is fairly low for HDPE pipe. Inspection shall be carried out after major storm events or once every year. If pipe is clogged or damage, repair must be made immediately.

3. Rain Gardens

Invasive species shall be removed from the rain gardens as necessary but at least once per year in the early summer.

4. Pretreatment Units

The pretreatment unit shall be inspected once per year for accumulated solids. Accumulated solids shall be removed when the inspection indicates one half of the tank volume has been reached.

VII. General Requirements for Owners or Operators with Permit Coverage

A. The *owner or operator* shall maintain a copy of the General Permit (GP-0-15-002), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form and inspection reports at the construction site until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department.

The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection. (Part II.B.C.2)

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

stormwater management practice. (Part II.C.5)

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

D. In accordance with the requirements of the Town of Carmel Town Code, within 10 days after the installation of all erosion control plan measures, the applicant shall submit to the Building Inspector a letter from the qualified professional who designed the plan for George Sica stating that all erosion control measures have been constructed and installed in compliance with the approved plans.

E. Various certifications are required to be completed as follows:

1. SWPPP Modification Summary Sheet
2. SWPPP Preparer Certification
3. Contractor and Sub-contractor Certification

These documents are appended to this SWPPP.

VIII. Conclusions

In conclusion, the proposed project shall not result in any negative impact to existing hydrologic condition at the vicinity of the property and proposed storm water management practices conforms to NYSDEC Storm water Management Design Manual and GP-0-15-002. In addition, the design of all storm water management practices meets the requirements of the Town of Carmel.

LOU PANNY STORMWATER POLLUTION PREVENTION PLAN
SEQUENCE OF CONSTRUCTION

The following are sequence and methods of construction for the construction of a house on property owned by Lou Panny, Pleasant Road, Carmel (T), Putnam County, New York. Erosion and sediment control measures are incorporated into the construction program. Construction of this project will be in one phase.

Proposed erosion and sediment control methods are found on the Site Plan. The erosion controls are designed in accordance with the State of New York, "Guidelines for Urban Erosion and Sediment Control". The project is expected to start in the Summer of 2015 and continue over a 6 month period.

A. General Construction Notes

1. The site shall be disturbed only when and where necessary. Only the smallest practical area of land shall be exposed at any one time during development. When land is exposed, the exposure shall be kept to the shortest practical period of time by immediate stabilization per the stabilization notes, unless specified otherwise. All disturbed areas that are seeded with appropriate seed mixture and procedure are considered stabilized when 80% of the vegetation is achieved.
2. Where ever feasible, natural vegetation shall be retained and protected.
3. The contractor shall inspect all erosion and sediment control devices during all storm events, prior to weekends and prior to all forecasted storm events.
4. The Contractor shall grade and provide stabilization of newly graded and disturbed areas per item 11 of this sequence.

B. Construction Sequence

1. Install all erosion control measures.
2. Perform site grading for the house, septic system and driveway.
3. Begin house construction.
4. Install proposed utilities including rain gardens and associated structures, septic system, water lines and underground utilities.
5. Topsoil, seed and mulch all disturbed areas in accordance with the stabilization notes.
6. Remove all temporary erosion control measures. Restore/backfill to final grade and provide stabilization is necessary.
7. Contractor to perform final site clean up and dispose of all debris properly.
8.STABILIZATION NOTES

- **A. Grade to finished slopes**
- **B. Soils shall be scarified.**
- **C. Topsoil with not less than four inches of suitable topsoil material**
- **D. Seed as follows:**

Spring/Fall Planting:	**Tall fescue**	**100**
	Kobe Gespedza	**10**
	Bahi Grass	**25**
	Rye Grass	**40**
Temporary Summer Planting		
	German Millet	**40**

All above units in lbs/sc

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121 CUSHMAN ROAD
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845-878-7894 FAX 845 878 4939
jack4911@yahoo.com

DRAINAGE STUDY

June 8, 2015

Louis Panny, Pleasant Road, Hamlet of Mahopac, Carmel (T)

DESIGN PARAMETERS

Proposed Impervious area roof = 1,350 square feet
Design Storm = 1.2 inches
Soils CrC Charlton Chatfield

WATER QUALITY VOLUME

WQV = (P)(RV)(A)/12
P=1.2 RV= 0.95 A=1,350 SF
WQV = 1.2(0.95)(1,350)/12
= 128.25 cf

Pretreatment Volume = 25% (WQV) = .25 (128) = 32 CF

Use a concrete structure 4 ft x 3.5 ft x 4.5 ft, 63 cubic feet, gross capacity. Capacity 12 inches below top is 49 CF

PROPOSED RAIN GARDEN DESIGN

It is proposed to treat the storm water from all impervious surfaces in two (2) rain gardens. The design of the rain gardens are as follows:

Total Impervious area = 1,350 sf. Use 2 rain gardens each designed at 700 sf

Treatment area; 1,350 square feet at 100% impervious
Rain garden section: 12" soil (0.2 porosity), 6" drainage layer (0.4 porosity, 8" ponding depth 6"

Design storm: 1.2" of rainfall
Proposed Rain Garden Area : 98 square feet
RV = 0.95

WQV = (Rainfall in inches)(0.05 + (0.009)(% impervious))(treatment area)/12
WQV = (1.2)(0.95)(700)/12
WQV = 66.5 cf

Soil Volume = (98 sq ft)(1 ft)(0.20) = 19.6 cf
Drainage Layer Volume = (98 sq ft)(0.5 ft)(0.40) = 19.6 cf
Ponding volume = (98 sq ft)(0.5 ft) = 49 cf

Total Treatment Volume = 19.6 + 19.6 + 49 = 88 cf > 66.5 cf

Two (2) rain gardens at 14 x 7 ft (98 sf) will be provided to treat the roof impervious areas. A settling basin, catch basin, will be provided before the rain gardens. The flow outleting the catch basin will be split in two in a distribution box, half to each rain garden. All underground piping will be 6" pvc.

4364234792

NOTICE OF INTENT

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

NYR _____ (for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-10-001

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

-IMPORTANT-

RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

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

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
PANNY

Owner/Operator Contact Person First Name
LOUIS

Owner/Operator Mailing Address
PO BOX 658

City
MAHOPAC

State
NY

Zip
10541-____

Phone (Owner/Operator)
014-490-4410

Fax (Owner/Operator)
___-___-____

Email (Owner/Operator)

FED TAX ID
__-_____ (not required for individuals)

Project Site Information

Project/Site Name
PANNY HOUSE CONSTRUCTION

Street Address (NOT P.O. BOX)
17 PLEASANT ROAD

Side of Street
○ North ○ South ○ East ○ West

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

State: NY
Zip: 10512-
County: PUTNAM
DEC Region: 3

Name of Nearest Cross Street
HILLSIDE ROAD

Distance to Nearest Cross Street (Feet)
500

Project In Relation to Cross Street
○ North ○ South ● East ○ West

Tax Map Numbers
Section-Block-Parcel
53.15-1-24

Tax Map Numbers

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you must go to the NYSDEC Stormwater Interactive Map on the DEC website at:

www.dec.ny.gov/imsmaps/stormwater/viewer.htm

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting): 604767

Y Coordinates (Northing): 4584792

2. What is the nature of this construction project?

○ New Construction

● Redevelopment with increase in impervious area

○ Redevelopment with no increase in impervious area

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

Pre-Development Existing Land Use

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

Post-Development Future Land Use

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

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

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

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area
0.8	0.7	0.1	0.1

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

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

A	B	C	D
0 %	100 %	0 %	0 %

7. Is this a phased project? ○ Yes ● No

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

Start Date	End Date
07/01/2105	01/01/2016

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

Name

Town wetland

9a. Type of waterbody identified in Question 9?

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

Town wetland

9b. How was the wetland identified?

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

Town consultant

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

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-10-001? ● Yes ○ No

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

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

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

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

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

TOWN OF CARMEL

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

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

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

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

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

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

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

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

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

SWPPP Preparer

JOHN KARELL

Contact Name (Last, Space, First)

KARELL, JOHN

Mailing Address

1211 CUSHMAN ROAD

City

PATTERSON

State NY Zip 12563-

Phone 845-721-0455 Fax --

Email

JACK4911@YAHOO.COM

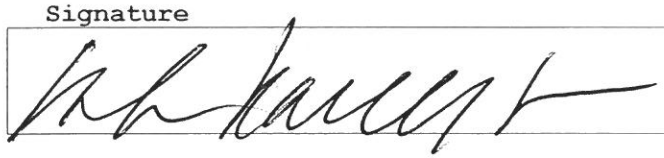
SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-10-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name JOHN **MI**

Last Name KARELL

Signature



Date 06/08/2015

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

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

Temporary Structural

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

Biotechnical

- ○ Brush Matting
- ○ Wattling

Vegetative Measures

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

Permanent Structural

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

Other

rain gardens

Post-construction Stormwater Management Practice (SMP) Requirements

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

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

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

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

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

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

Total WQv Required

			.				**acre-feet**

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

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

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

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

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

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

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

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

Name

Manufacturer

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

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

Total RRv provided

. acre-feet

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

○ Yes ○ No

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

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

Minimum RRv Required

. acre-feet

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

○ Yes ○ No

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

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

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

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

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

WQv Provided

[ ][ ][ ].[ ][ ][ ] **acre-feet**

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

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

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

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

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

CPv Required

[ ][ ][ ].[ ][ ][ ] **acre-feet**

CPv Provided

[ ][ ][ ].[ ][ ][ ] **acre-feet**

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

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

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

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

Total Overbank Flood Control Criteria (Qp)

Pre-Development

[ ][ ][ ].[ ][ ][ ] CFS

Post-development

[ ][ ][ ].[ ][ ][ ] CFS

Total Extreme Flood Control Criteria (Qf)

Pre-Development

[ ][ ][ ].[ ][ ][ ] CFS

Post-development

[ ][ ][ ].[ ][ ][ ] CFS

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

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

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

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

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

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

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

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

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

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

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

Owner/Operator Certification

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

Print First Name: LOUIS

MI:

Print Last Name: PANNY

Owner/Operator Signature:

Date: 06/08/2015

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

Name of Action or Project:
Pleasant Road House

Project Location (describe, and attach a location map):
Pleasant Road, Mahopac Hamlet of Carmel New York

Brief Description of Proposed Action:
Demolition of existing single family house and construction of a new single family house, driveway and septic system.

Name of Applicant or Sponsor:	Telephone: 914 490 4411sdf
Louis Panny	E-Mail:

Address:
P.O. Box 658

City/PO:	State:	Zip Code:
Mahopac	New York	10541

	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? 0.8 acres
b. Total acreage to be physically disturbed? 0.6 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.8 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?	☐	☑	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify:	☑	☐	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐	
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? 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? If No, describe method for providing potable water: existing drilled well	☑	☐	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: new septic system	☑	☐	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	☑	☐	
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?	☑	☐	
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: stormwater patternes will continue as existing, that is overland sheet flow to existing nature drainage courses		

	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: Louis Panny Date: October 22, 2014

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?	☑	☐

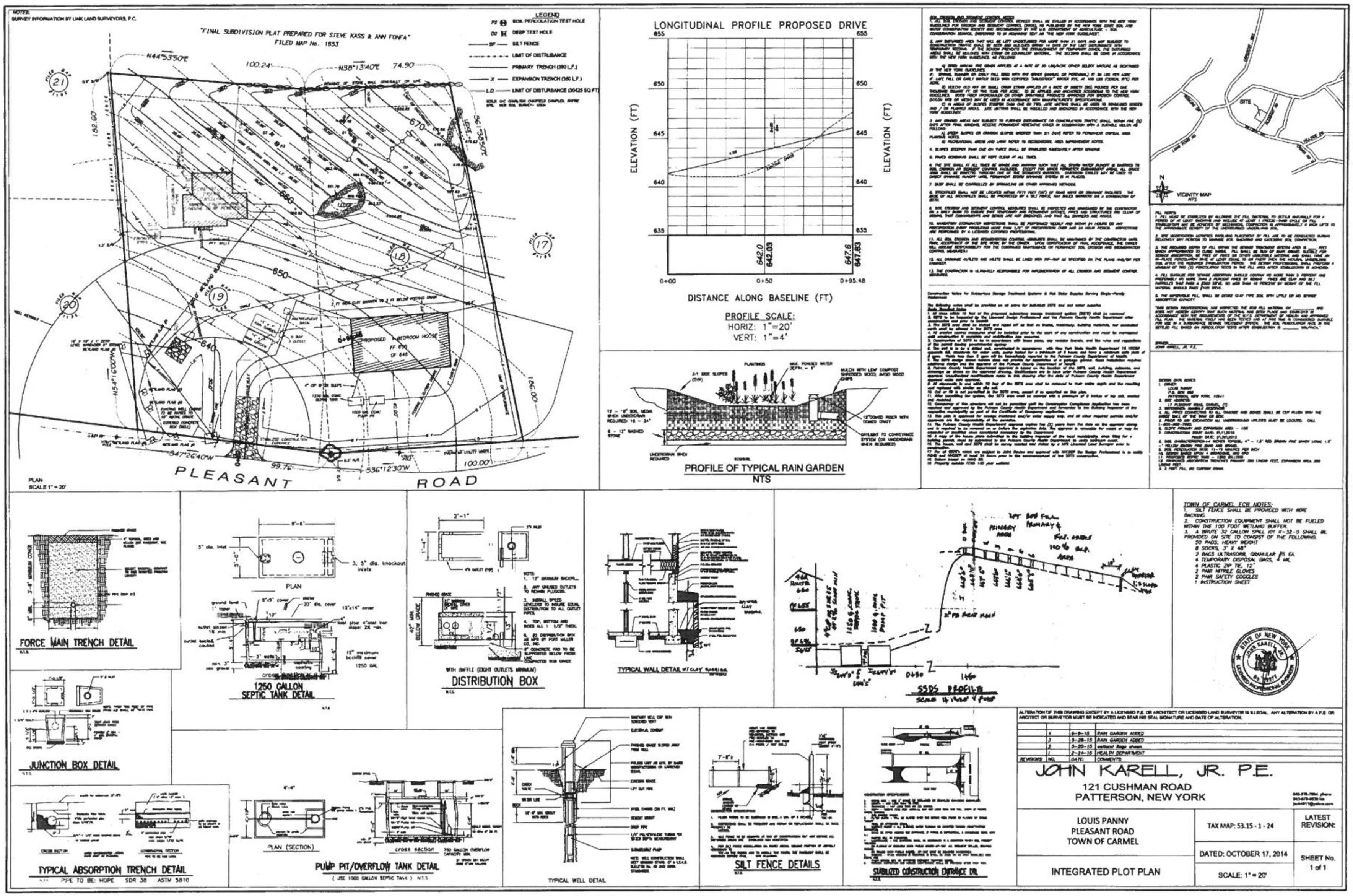
Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant 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.

	October 22, 2014
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


NOTES:
SURVEY INFORMATION BY LINK LAND SURVEYORS, P.C.
"FINAL SUBDIVISION PLAT PREPARED FOR STEVE KASS & ANN FONFA"
FILED MAP No. 1653
LEGEND
SOIL PERCOLATION TEST HOLE
DEEP TEST HOLE
SILT FENCE
LIMIT OF DISTRUBANCE
PRIMARY TRENCH (380 L.F.)
EXPANSION TRENCH (380 L.F.)
LIMIT OF DISTURBANCE (36425 SQ FT)
N44°53'50"E
100.24'
N38°13'40"E
74.90
182.60
N54°16'00"W
S47°26'40"W
99.76'
S36°12'30"W
100.00'
186.00'
PROPOSED 4 BEDROOM HOUSE
PLEASANT ROAD
PLAN
SCALE 1" = 20'
LONGITUDINAL PROFILE PROPOSED DRIVE
ELEVATION (FT)
DISTANCE ALONG BASELINE (FT)
PROFILE SCALE:
HORIZ: 1"=20'
VERT: 1"=4'
642.0
642.03
647.6
647.63
0+00
0+50
0+95.48
PROFILE OF TYPICAL RAIN GARDEN
NTS
VICINITY MAP
NTS
SITE
FORCE MAIN TRENCH DETAIL
1250 GALLON SEPTIC TANK DETAIL
PLAN
DISTRIBUTION BOX
WITH BAFFLE (EIGHT OUTLETS MINIMUM)
TYPICAL WALL DETAIL
SSDS PROFILE
JUNCTION BOX DETAIL
TYPICAL ABSORPTION TRENCH DETAIL
PIPE TO BE: HDPE SDR 38 ASTM 3810
PUMP PIT/OVERFLOW TANK DETAIL
(USE 1000 GALLON SEPTIC TANK) N.T.S.
PLAN (SECTION)
cross section
TYPICAL WELL DETAIL
SILT FENCE DETAILS
STABILIZED CONSTRUCTION ENTRANCE DTL
TOWN OF CARMEL ECB NOTES:
1. SILT FENCE SHALL BE PROVIDED WITH WIRE BACKING.
2. CONSTRUCTION EQUIPMENT SHALL NOT BE FUELED WITHIN THE 100 FOOT WETLAND BUFFER.
3. A BRUTE 32 GALLON SPILL KIT K-32-O SHALL BE PROVIDED ON SITE TO CONSIST OF THE FOLLOWING:
50 PADS, HEAVY WEIGHT
8 SOCKS, 3" X 48"
2 BAGS ULTRASORB, GRANULAR 25 EA.
4 TEMPORARY DISPOSAL BAGS, 4 ML
4 PLASTIC ZIP TIE, 12"
2 PAIR NITRILE GLOVES
2 PAIR SAFETY GOGGLES
1 INSTRUCTION SHEET
ALTERATION OF THIS DRAWING EXCEPT BY A LICENSED P.E. OR ARCHITECT OR LICENSED LAND SURVEYOR IS ILLEGAL. ANY ALTERATION BY A P.E. OR ARCHITECT OR SURVEYOR MUST BE INDICATED AND BEAR HIS SEAL SIGNATURE AND DATE OF ALTERATION.
4 | 6-9-15 | RAIN GARDEN ADDED
3 | 5-28-15 | RAIN GARDEN ADDED
2 | 5-20-15 | wetland flags shown
1 | 2-24-15 | HEALTH DEPARTMENT
REVISIONS | NO. | DATE | COMMENTS
JOHN KARELL, JR. P.E.
121 CUSHMAN ROAD
PATTERSON, NEW YORK
LOUIS PANNY
PLEASANT ROAD
TOWN OF CARMEL
TAX MAP: 53.15 - 1 - 24
LATEST REVISION:
DATED: OCTOBER 17, 2014
SHEET No. 1 of 1
INTEGRATED PLOT PLAN
SCALE: 1" = 20'
STATE OF NEW YORK
JOHN KARELL JR.
LICENSED PROFESSIONAL ENGINEER

NATHANIEL J. HOLT, PE

dan@holtengineering.net

June 11, 2015

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

Attn: Robert Laga, Chairman

RE: Roa Residence
41 Averill Drive

Dear Chairman Laga and Members of the Environmental Conservation Board:

Subsequent to the last meeting of your Board, the Roa's have reconsidered their plans for the home on Averill Drive which resulted in substantial changes; all of which have reduced the scope of the project while reducing the amount of disturbance within the regulated area. As you will note, the in-ground pool and patio has been eliminated from the plan. Another significant change in the plans had to do with a decrease in the building footprint; specifically the garage width has been reduced by approximately two feet.

From a stormwater mitigation stand point, these changes also reduced the impervious surfaces, which enabled us to replace the proposed infiltration system with a rain garden. Essentially, the only disturbance within the regulated area is the rain garden and the pipes leading to it.

During the meeting the Board also cited several items that it wanted addressed with the next submission.

- Construction access to the rear of the house has now been improved through the reduction in the width of the garage. The plan now reflects the construction access (with a stabilized entrance) along the northerly side of the house. The phasing of the work will be such that the steps leading from the driveway to the back of the home will be completed after the need to access the rear of the residence with heavy equipment has been eliminated.

- Again, due to the referenced changes, the extent of earthwork has also been greatly reduced. Any demolition material associated with the residence will be placed in a roll-off bin located in the front of the house. It is estimated that the bulk excavation (24 cubic yards) associated with the house will be for the construction of footings and foundations. similarly, the excavation associated with the rain garden is estimated to be 6 cubic yards.

  Approximately 12 cubic yards will be backfilled against the foundation, leaving approximately 18 cubic yards of soil to be hauled away. Due to site limitations, under no circumstance is it expected that the excess fill will be kept on site for a

592 Route 22 •Pawling, NY 12564 •PHONE: (914) 760-1800
540 N.W. University Boulevard, Suite 105 •Port Saint Lucie, FL 34986 •PHONE: (772) 204-9550 •FAX: (772) 204-9553

period in excess of one week.

The only place where the stripping of topsoil is anticipated is the area of the rain garden and along the route of the drainage pipes leading to it. This topsoil will be stored on site and re-spread as part of the stabilization of disturbed areas. As the volume of stripped topsoil is expected to be small (5 cubic yards) it is not anticipated that any of this material will be trucked off-site.

A soil stock pile has been indicated on the plans for those times when the material will be stored until hauled away or re-used.

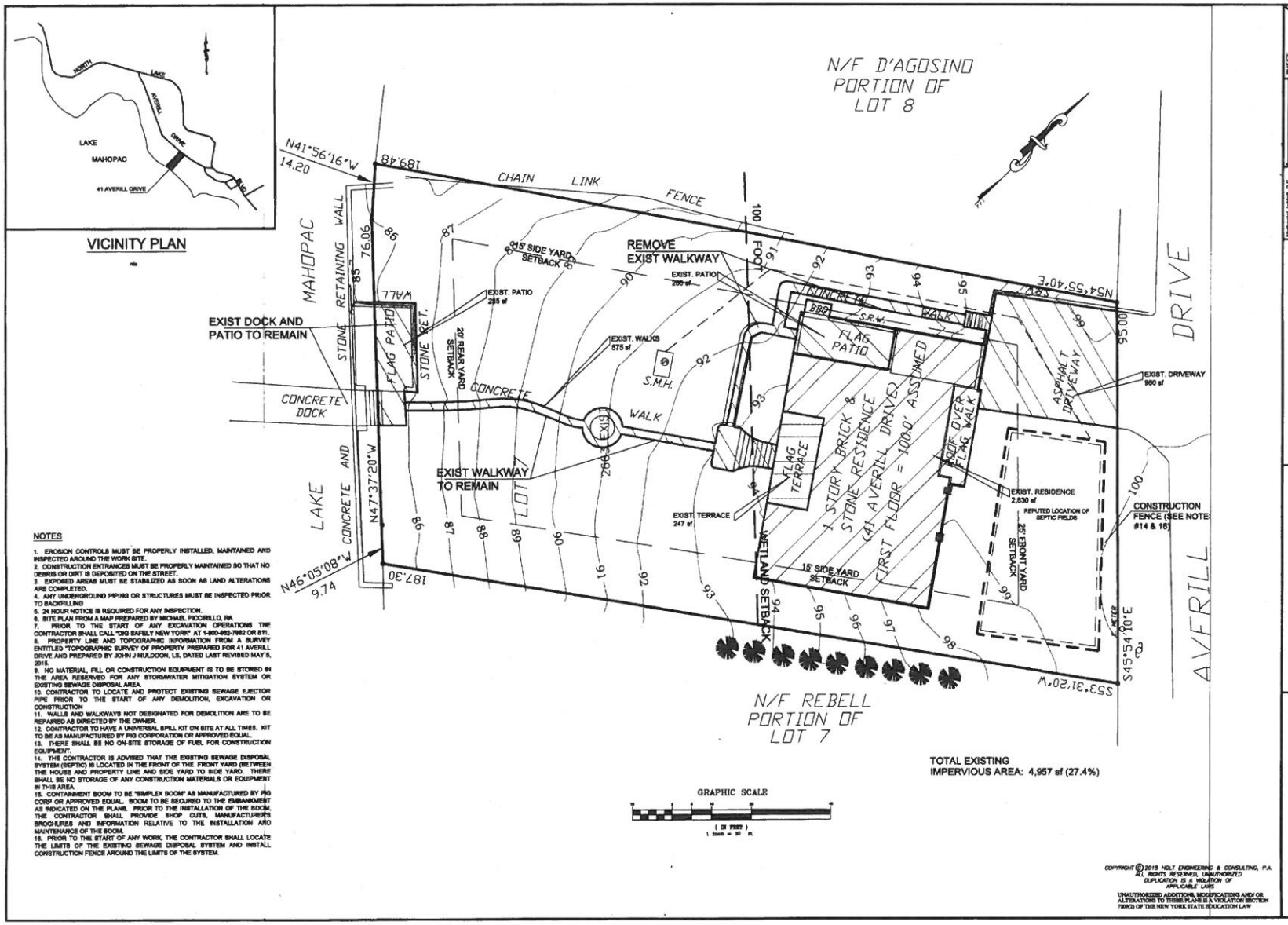
- As-built information for septic systems is generally limited to the location of the absorption fields and septic tank. In situations such as this one, the contractor is required to make investigative excavations (by hand) to locate the limits of the system and take the necessary steps to protect it. The plans have been so noted to explain these requirements to the contractor. It is important to note that while under construction the house will be vacant and therefore the septic system will be dormant,

Attached, please find a copy of the revised Site Plans for your consideration.

Very truly yours

Nathaniel J. Holt, PE
Holt Engineering & Consulting, PA

encl
cc: Michael Piccirillo



NOTES

1. EROSION CONTROLS MUST BE PROPERLY INSTALLED, MAINTAINED AND INSPECTED AROUND THE WORK SITE.
2. CONSTRUCTION ENTRANCES MUST BE PROPERLY MAINTAINED SO THAT NO DEBRIS OR DIRT IS DEPOSITED ON THE STREET.
3. EXPOSED AREAS MUST BE STABILIZED AS SOON AS LAND ALTERATIONS ARE COMPLETED.
4. ANY UNDERGROUND PIPING OR STRUCTURES MUST BE INSPECTED PRIOR TO BACKFILLING
5. 24 HOUR NOTICE IS REQUIRED FOR ANY INSPECTION.
6. SITE PLAN FROM A MAP PREPARED BY MICHAEL PICCIRILLO, PA.
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TOTAL EXISTING
IMPERVIOUS AREA: 4,957 sf (27.4%)

SHEET: 1 of 6

NATHANIEL J. HOLT, P.E.
592 ROUTE 22
PAWLING, NEW YORK 12564
(914) 760-1600

EXISTING CONDITIONS and COVERAGE PLAN

ROA RESIDENCE RENOVATIONS
41 AVERILL ROAD MAHOPAC, N.Y. 10541

NOTES

1. EROSION CONTROLS MUST BE PROPERLY INSTALLED, MAINTAINED AND INSPECTED AROUND THE WORK SITE.
2. CONSTRUCTION ENTRANCES MUST BE PROPERLY MAINTAINED SO THAT NO DEBRIS OR DIRT IS DEPOSITED ON THE STREET.
3. EXPOSED AREAS MUST BE STABILIZED AS SOON AS LAND ALTERATIONS ARE COMPLETED.
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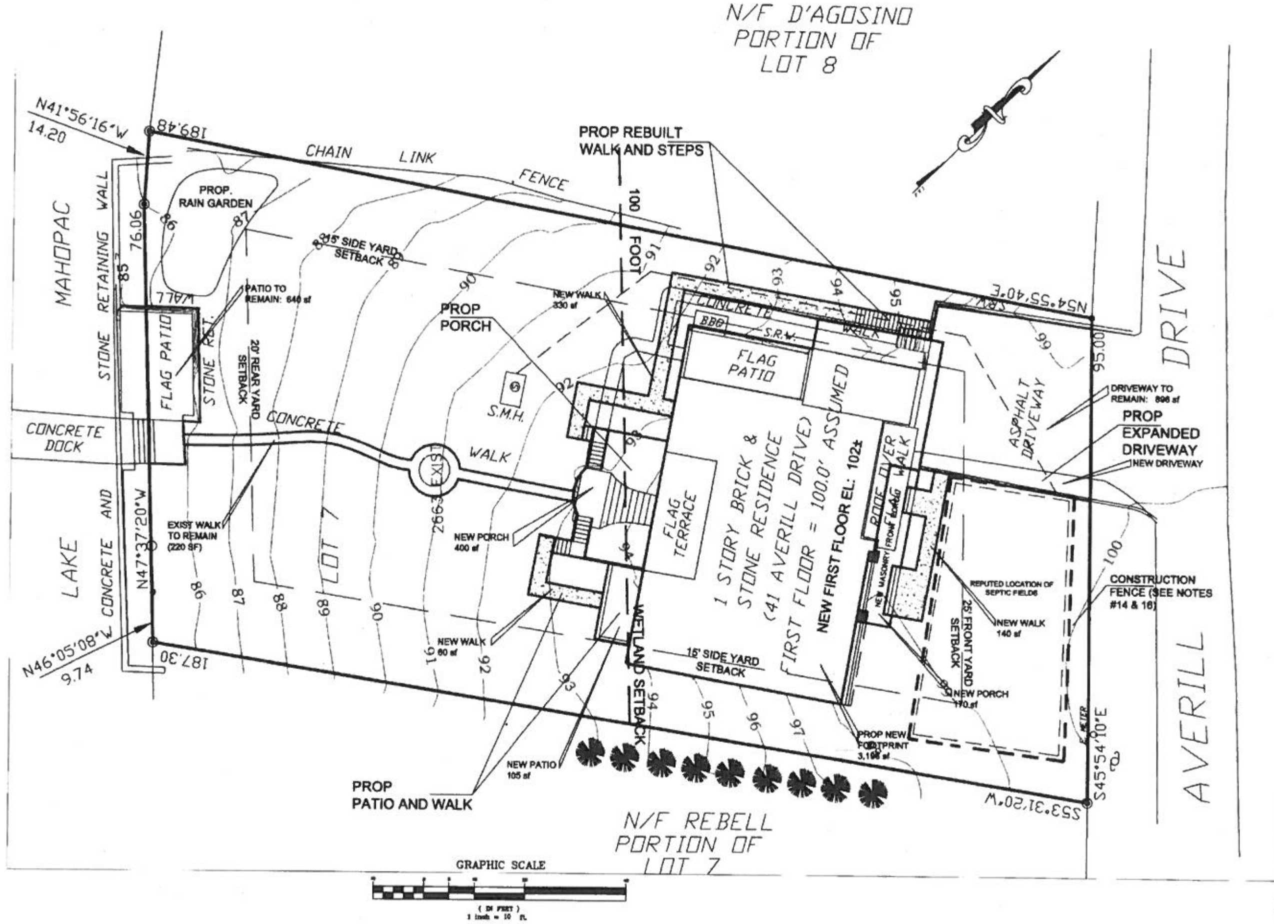

N/F D'AGOSINO
PORTION OF
LOT 8
LAKE
MAHOPAC
CONCRETE AND
STONE RETAINING WALL
CONCRETE DOCK
FLAG PATIO
STONE RET. WALL
PROP. RAIN GARDEN
PATIO TO REMAIN: 640 sf
20' REAR YARD SETBACK
EXIST WALK TO REMAIN (220 SF)
CONCRETE
WALK
CHAIN LINK FENCE
15' SIDE YARD SETBACK
PROP PORCH
S.M.H.
NEW WALK 330 sf
PROP REBUILT WALK AND STEPS
100 FOOT WETLAND SETBACK
LOT 7
2663 EXIST
NEW PORCH 400 sf
NEW WALK 80 sf
NEW PATIO 105 sf
PROP PATIO AND WALK
FLAG TERRACE
FLAG PATIO
1 STORY BRICK &
STONE RESIDENCE
(41 AVERILL DRIVE)
FIRST FLOOR = 100.0' ASSUMED
NEW FIRST FLOOR EL: 102±
ROOF OVER WALK
NEW MASONRY FRONT STOOP
PROP NEW FOOTPRINT 3,196 sf
25' FRONT YARD SETBACK
NEW PORCH 110 sf
NEW WALK 140 sf
REPUTED LOCATION OF SEPTIC FIELDS
ASPHALT DRIVEWAY
DRIVEWAY TO REMAIN: 896 sf
PROP EXPANDED DRIVEWAY
NEW DRIVEWAY
CONSTRUCTION FENCE (SEE NOTES #14 & 16)
AVERILL DRIVE
N/F REBELL
PORTION OF
LOT 7
N41°56'16"W 14.20
N46°05'08"W 9.74
N47°37'20"W
S53°31'20"W
S45°54'10"E
N54°55'40"E
189.48
187.30
76.06
95.00
GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

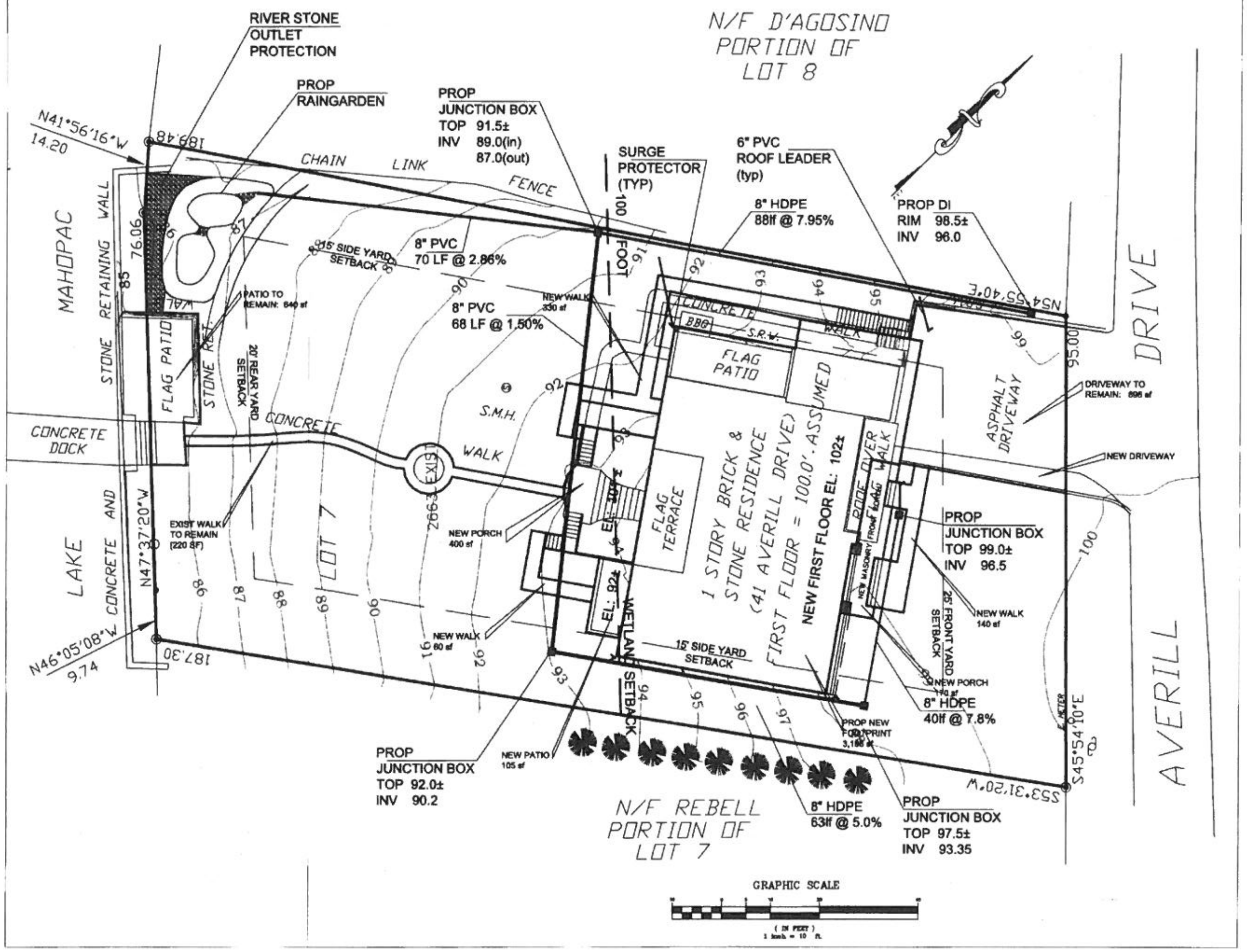
ROA RESIDENCE RENOVATIONS
41 AVERILL ROAD MAHOPAC, N.Y 10561

SITE PLAN

NATHANIEL J. HOLT, P.E.
592 ROUTE 22
PAWLING, NEW YORK 12564
(914) 760-1800

Original Date: MAY 15, 2015
PROJECT: PIC-ROA

SHEET: 2 of 6


LAKE
MAHOPAC
CONCRETE DOCK
CONCRETE AND STONE RETAINING WALL
N46°05'08"W 9.74
N41°56'16"W 14.20
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76.06
85
187.30
189.48
RIVER STONE OUTLET PROTECTION
PROP RAINGARDEN
FLAG PATIO
STONE RET.
PATIO TO REMAIN: 640 sf
20' REAR YARD SETBACK
EXIST WALK TO REMAIN (220 SF)
CONCRETE WALK
2663 EXIST
S.M.H.
LOT 7
15' SIDE YARD SETBACK
CHAIN LINK FENCE
PROP JUNCTION BOX TOP 91.5± INV 89.0(in) 87.0(out)
8" PVC 70 LF @ 2.86%
8" PVC 68 LF @ 1.50%
NEW WALK 330 sf
SURGE PROTECTOR (TYP)
100 FOOT WETLAND SETBACK
6" PVC ROOF LEADER (typ)
8" HDPE 88lf @ 7.95%
PROP DI RIM 98.5± INV 96.0
N/F D'AGOSINO PORTION OF LOT 8
N54°55'40"E
95.00
BBQ
CONCRETE WALK
S.R.W.
FLAG PATIO
FLAG TERRACE
1 STORY BRICK & STONE RESIDENCE (41 AVERILL DRIVE)
FIRST FLOOR = 100.0'. ASSUMED
NEW FIRST FLOOR EL: 102±
EL: 92±
ROOF OVER FLAG WALK
NEW MASONRY FRONT PORCH
NEW PORCH 400 sf
NEW WALK 60 sf
NEW PATIO 105 sf
PROP JUNCTION BOX TOP 92.0± INV 90.2
PROP NEW FOOTPRINT 3,186 sf
8" HDPE 63lf @ 5.0%
PROP JUNCTION BOX TOP 97.5± INV 93.35
N/F REBELL PORTION OF LOT 7
S53°31'20"W
S45°54'10"E
PROP JUNCTION BOX TOP 99.0± INV 96.5
25' FRONT YARD SETBACK
NEW WALK 140 sf
NEW PORCH
8" HDPE 40lf @ 7.8%
ASPHALT DRIVEWAY
DRIVEWAY TO REMAIN: 896 sf
NEW DRIVEWAY
AVERILL DRIVE
GRAPHIC SCALE
(IN FEET)
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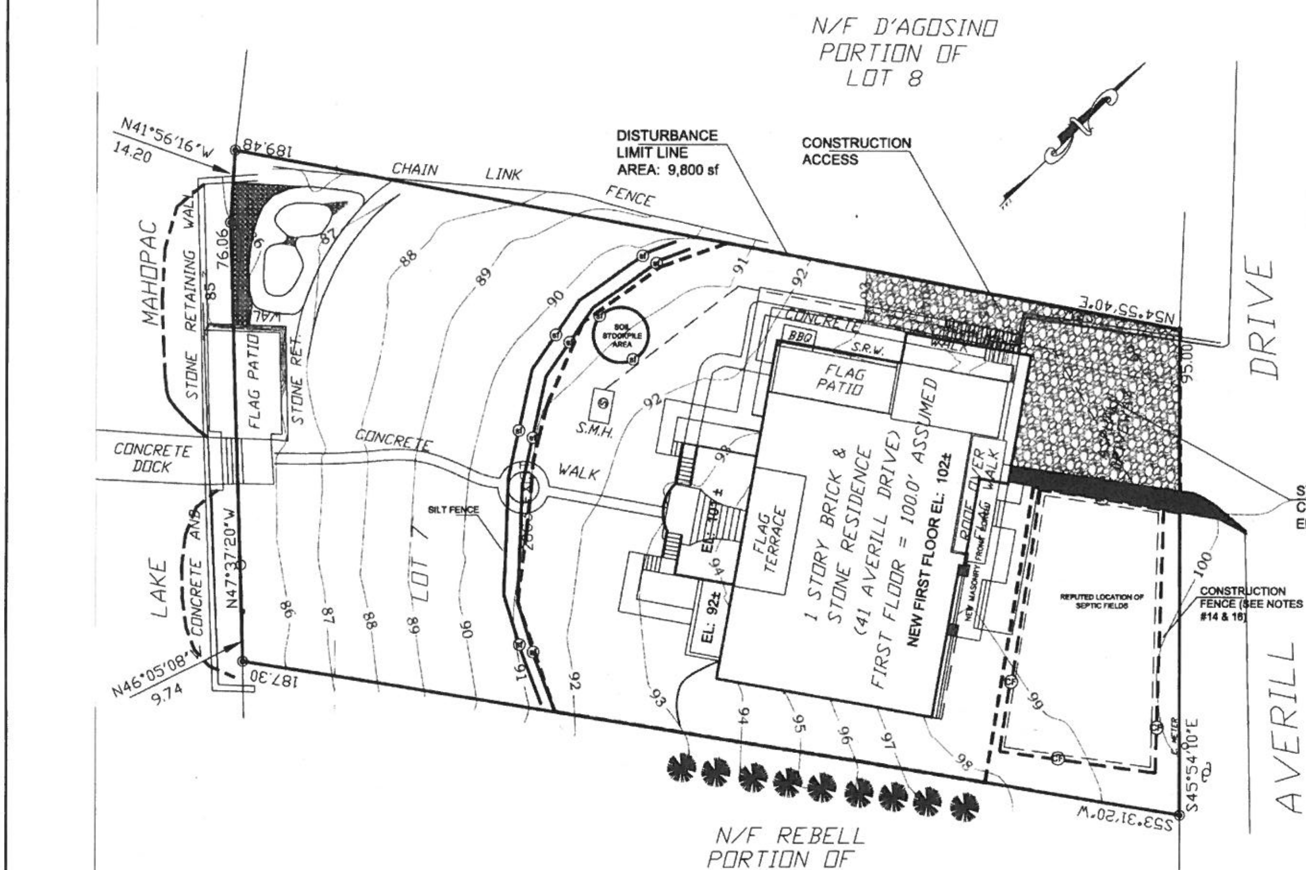
ROA RESIDENCE RENOVATIONS
41 AVERILL ROAD MAHOPAC, N.Y 10561

HYDROLOGY (FUTURE) PLAN

NATHANIEL J. HOLT, P.E.
592 ROUTE 22
PAWLING, NEW YORK 12564
(914) 760-1800

JUNE 7, 2015 SCB Comments
MAY 28, 2015 FCB Comments
Original Date: MAY 10, 2015
PROJECT: PIC-ROA

SHEET: 3 of 4



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STORMWATER ANALYSIS

REQUIRED: CAPTURE 25 YR STORM EVENT OVER INCREASE IN IMPERVIOUS AREA

EXISTING CONDITIONS

AREA: 18,109.87 SF = 0.416 ac
SOIL TYPE: C

IMPERVIOUS AREAS: RCN: 98 — 4,957 sf = 0.114 ac; 27%
OPEN SPACE LAWN ("C") RCN: 74 — 13,152.87 sf = 0.302; ac, 73%
TOTAL — 18,109.87 sf = 0.416 ac; 100%

0.114 x 98 = 11.17
0.302 x 74 = 22.36
0.416 33.62 = 80.58

RUNOFF DEPTH (RCN: 80.58) = 3.57"

FUTURE CONDITIONS

IMPERVIOUS AREA: RCN: 98 — 6,157 sf = 0.141 ac; 34.0%
OPEN SPACE LAWN ("C") RCN 74 — 11,952.87 sf = 0.275 ac; 66.0%
TOTAL — 18,109.87 sf = 0.416 ac; 100%

0.141 x 98 = 13.82
0.275 x 74 = 20.35
0.416 34.17 = 82.14

RUNOFF DEPTH (RCN: 82.14) = 3.73"

INCREASE IN RUNOFF VOLUME

$\frac{(3.73" - 3.57")}{12"/ft} \times 18{,}109.87\ sf = 241.5\ cf$

MITIGATION

A CULTEC MODEL #330XLHD HAS AN INSTALLED CAPACITY OF 11.32 cf/ft, THEREFORE:

$241.5\ cf \times \frac{1}{11.32\ cf/ft} = 21.3\ ft$

THE INSTALLED LENGTH OF A MODEL #330HDXL EQUALS 6.5 ft, THEREFORE 4 UNITS ARE REQUIRED TO MITIGATE THE INCREASE IN RUNOFF DURING A 25 YEAR STORM EVENT

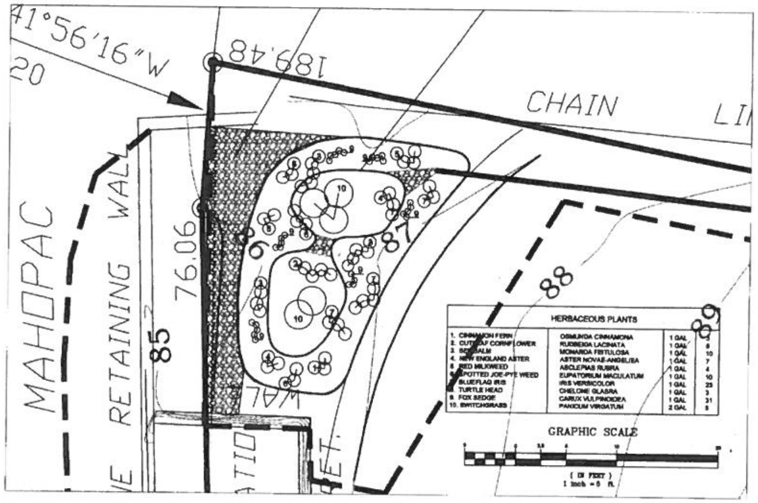
GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

ROA RESIDENCE RENOVATIONS
41 AVERILL ROAD MAHOPAC, N.Y 10561

STORMWATER MITIGATION PLAN

NATHANIEL J. HOLT, P.E.
592 ROUTE 22
PAWLING, NEW YORK 12564
(914) 760-1800

Original Date: MAY 10, 2015
PROJECT: PIC-ROA



HERBACEOUS PLANTS			
1. CINNAMON FERN	OSMUNDA CINNAMONA	1 GAL	3
2. CUTLEAF CORNFLOWER	RUDBEKIA LACINATA	1 GAL	8
3. BEEBALM	MONARDA FISTULOSA	1 GAL	10
4. NEW ENGLAND ASTER	ASTER NOVAE-ANGELISA	1 GAL	7
5. RED MILKWEED	ASCLEPIAS RUBRA	1 GAL	4
6. SPOTTED JOE-PYE WEED	EUPATORIUM MACULATUM	1 GAL	10
7. BLUEFLAG IRIS	IRIS VERSICOLOR	1 GAL	23
8. TURTLE HEAD	CHELONE GLABRA	1 GAL	3
9. FOX SEDGE	CARUX VULPINOIDEA	1 GAL	31
10. SWITCHGRASS	PANICUM VIRGATUM	2 GAL	5

GRAPHIC SCALE

(IN FEET)
1 inch = 5 ft.

STORMWATER ANALYSIS

REQUIRED: CAPTURE 25 YR STORM EVENT OVER INCREASE IN IMPERVIOUS AREA

EXISTING CONDITIONS

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RUNOFF DEPTH (RCN: 82.14) = 3.73"

INCREASE IN RUNOFF VOLUME

(3.73" - 3.57") / 12"/ft x 18,109.87 sf = 241.5 cf

RAINGARDEN CALCULATIONS

PROPOSED MITIGATION: RAIN GARDEN, SIZED TO ACCOMMODATE THE VOLUME OF STORMWATER RUNOFF ASSOCIATED WITH THE INCREASE IN IMPERVIOUS AREA ASSOCIATED WITH THE NEW RENOVATIONS

VOLUME FROM ABOVE = 241.F CF

DRAINAGE LAYER AND SOIL MEDIA STORAGE VOLUME

Vsm = Arg x Dsm x Psm
Vdl = Arg x Ddl x Pdl

WHERE:

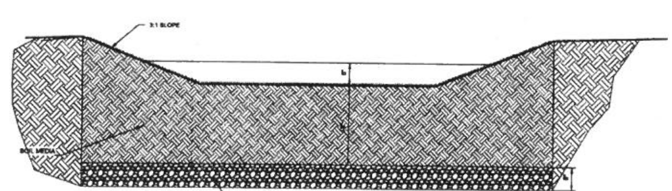
Arg = 363 sf
Dsm = 1ft
Ddl = 0.5ft
Psm = 0.20
Pdl = 0.40

Vsm = 363 sf x 1 ft x 0.20 = 73 cf
Vdl = 363 sf x 0.5 ft x 0.40 = 73 cf
Dp = 0.25 ft

Vsm = 230 sf x 1.0 ft x 0.20 = 73 cf
Vdl = 230 sf x 0.50 ft x 0.40 = 73 cf
Vt = 73 cf + 73 cf + (0.30ft x 363 sf) = 255 cf >241 cf; ok

RAIN GARDEN

NTS

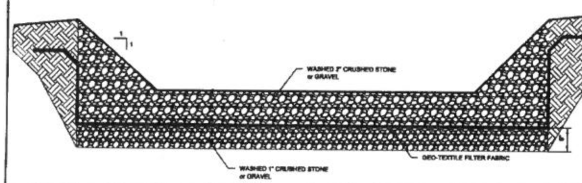


SOIL MEDIA

50-70% SAND
50-30% TOPSOIL (CONTAINING 5% COMPOST OR PEAT AND FREE OF STONES, ROOTS, WOODY DEBRIS AND ANIMAL WASTE

RAIN GARDEN AS A TEMPORARY SEDIMENT TRAP

NTS



NOTES

1. CONTRACTOR TO REMOVE ACCUMULATED SILTS AND DEBRIS WHEN EXCAVATED VOLUME IS REDUCE BY ONE HALF
2. WHEN CONVERTING THE SEDIMENT TRAP TO A RAIN GARDEN, THE CONTRACTOR SHALL REMOVE ALL SILTS AND DEBRIS, THE 2" STONE LAYER AND FILTER FABRIC.
3. ALLMATERIAL REMOVED FROM THE TRAP SHALL BE TRUCKED OFF SITE AND PROPERTLY DISPOSED OF.

RAIN GARDEN MAINTENANCE PROGRAM

GENERAL

THE MAINTENANCE PROGRAM PROVIDED BELOW IS TAKEN IN PART FROM THE NEW YORK STATE STORM WATER MANAGEMENT DESIGN MANUAL. THE OWNER MAY WISH TO CONSULT THIS DOCUMENT WHEN QUESTIONS ARISE ABOUT OTHER ASPECTS OF STORMWATER AND ITS AFFECT ON THE ENVIRONMENT.

MAINTENANCE

RAIN GARDENS ARE INTENDED TO BE RELATIVELY LOW MAINTENANCE. HOWEVER, THESE PRACTICES MAY BE SUBJECT TO SEDIMENTATION AND INVASIVE PLANT SPECIES WHICH COULD CREATE MAINTENANCE PROBLEMS. IF THE RECHARGE ABILITY IS LOST BY AN ACCUMULATION OF FINE SEDIMENTS, MOSQUITO BREEDING MAY OCCUR.

RAIN GARDENS SHOULD BE TREATED AS A COMPONENT OF THE LANDSCAPING, WITH ROUTINE MAINTENANCE. PLACING THE RAIN GARDEN MAINTENANCE ON THE SAME SCHEDULE AS THE REGULAR LANDSCAPE PRACTICE IS RECOMMENDED.

ROUTINE MAINTENANCE SHOULD INCLUDE THE OCCASIONAL REPLACEMENT OF PLANT MATERIAL, MULCHING, AND THINNING OF VEGETATION TO MAINTAIN THE DESIRED APPEARANCE. WEEDING AND WATERING ARE ESSENTIAL DURING THE FIRST YEAR, AND CAN BE MINIMIZED WITH THE USE OF A WEED FREE MULCH LAYER.

THE PLANT MATERIALS SPECIFIED WITHIN THESE PLANS ARE THOSE WHICH HAVE BEEN FOUND TO BE ABLE TO THRIVE WITHIN A RAIN GARDEN. HOWEVER, IF OVER TIME, ALTERNATE PLANT MATERIALS ARE CONSIDERED, THEY SHOULD BE LOWER GROWING SPECIES THAT STAY UPRIGHT.

NORMAL PRUNING WOULD BE SUCH THAT THE PLANTS ARE KEPT FROM BECOMING "LEGGY" AND FLOPPY (TOP HEAVY).

CUT OFF FLOWER HEADS AFTER THE PLANT IS DONE BLOOMING.

KEEP THE RAIN GARDEN WEEDED, ESPECIALLY DURING THE FIRST COUPLE OF YEARS WHILE THE NATIVE PLANTS ARE ESTABLISHING THEIR ROOT SYSTEMS.

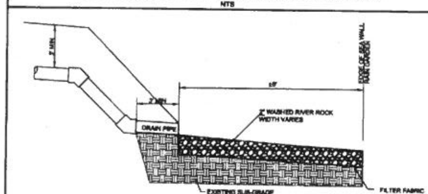
ONCE THE RAIN GARDEN HAS BECOME ESTABLISHED, THE AREA SHOULD BE FREE OF BARE SPOTS EXCEPT WHERE STEPPING STONES OR VELOCITY REDUCTION MEASURES ARE IMPLEMENTED.

INSPECT THE RAIN GARDEN FOR SEDIMENT ACCUMULATIONS OR HEAVY ORGANIC MATTER ESPECIALLY WHERE RUNOFF ENTERS THE RAIN GARDEN. REMOVE SUCH ACCUMULATIONS ON A REGULAR BASIS.

WHEN IT IS FOUND THAT WATER ACCUMULATES ON THE SURFACE OF THE RAIN GARDEN FOR A PERIOD OF MORE THAN 48 HOURS. THE UPPER LAYER OF SOIL SHOULD BE REMOVED AND REPLACED

DRAIN LINE DISCHARGE AT RAIN GARDEN

NTS



ROA RESIDENCE RENOVATIONS
41 AVERILL ROAD MAHOPAC, N.Y 10561

STORMWATER MITIGATION PLAN

NATHANIEL J. HOLT, P.E.
592 ROUTE 22
PAWLING, NEW YORK 12564
(914) 760-1800

Original Date: MAY 19, 2015
PROJECT: PIC-ROA