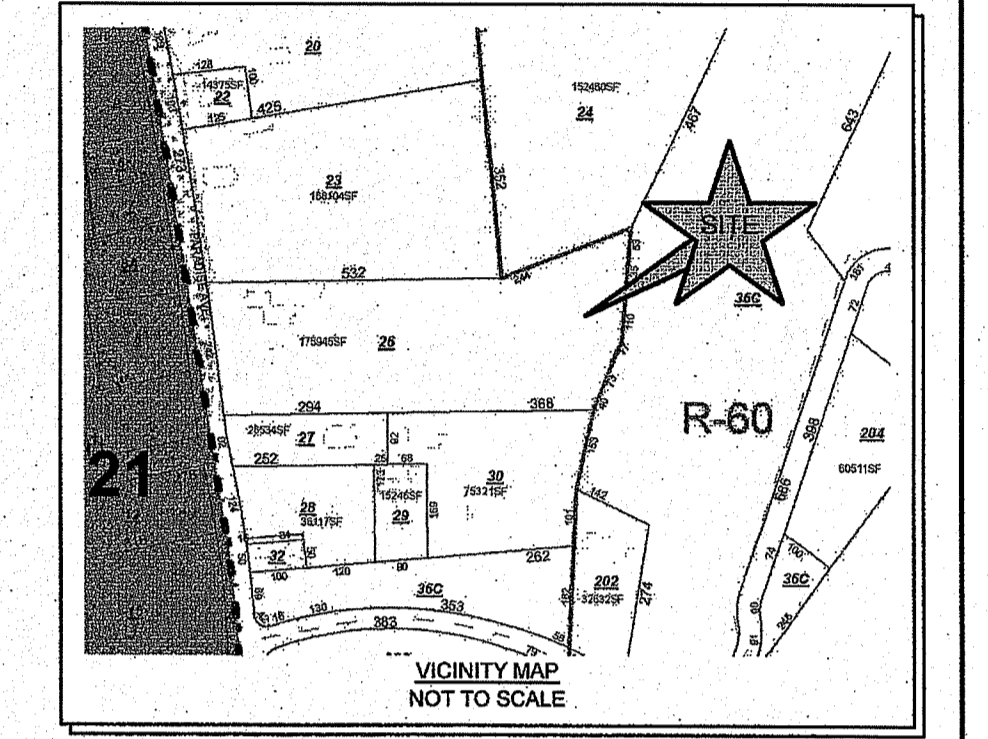


SITE/CIVIL
LAND PLANNING
WATERFRONT
SURVEYING
GEOTECHNICAL
ENVIRONMENTAL
TRANSPORTATION
STRUCTURAL
MATERIALS TESTING

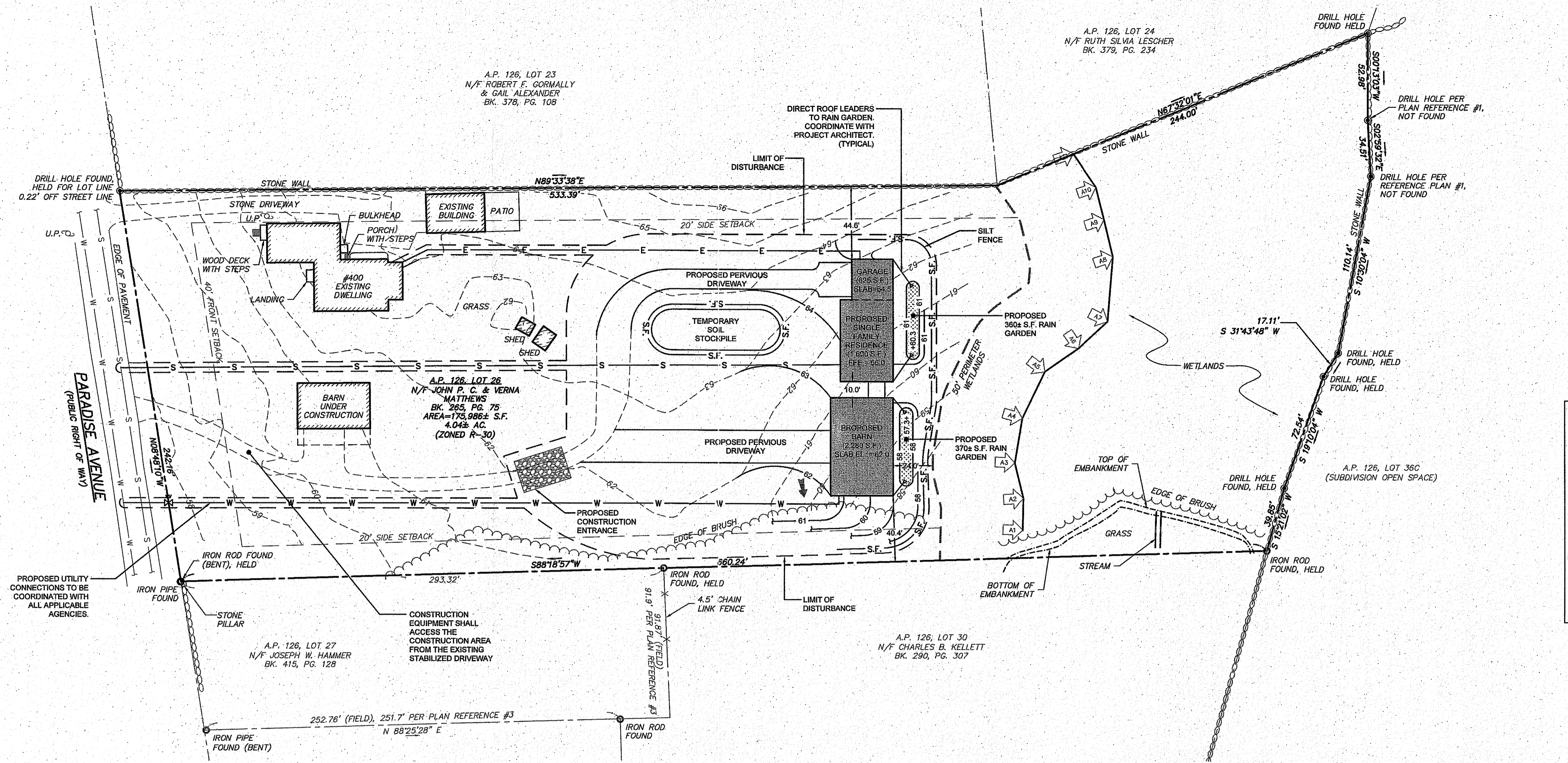
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55 JOHN CLARKE ROAD MIDDLETOWN RHODE ISLAND 02842
PHONE (401) 849-0810 FAX (401) 846-4169
WWW.NORTHEASTENGINEERS.COM



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO.: 20-0073
DATED MAR 12 2020
SEE LETTER OF SAME DATE.

Nancy L. Freeman



LEGEND:

---	PROPERTY LINE
---	ADJUTER'S PROPERTY LINE
---	BUILDING SETBACK
---	EXISTING CONTOUR
---	STONE WALL
---	EDGE OF BRUSH
---	EXISTING WATER MAIN
---	EXISTING SEWER MAIN
---	PROPOSED CONTOUR
---	PROPOSED SPOT ELEVATION
---	PROPOSED ELECTRIC SERVICE
---	PROPOSED WATER SERVICE
---	PROPOSED SEWER LINE
---	SILT FENCE
---	LIMIT OF DISTURBANCE
---	PROPOSED DRAINAGE FLOW
---	UTILITY POLE
---	DRILL HOLE
---	IRON PIPE/IRON ROD
---	WETLAND FLAG

GENERAL NOTES:

- THE INTENTION OF THIS PLAN IS TO MINIMIZE AND CONTROL THE EROSION AND RUNOFF DURING CONSTRUCTION OF THE RESIDENCE, BARN, AND DRIVEWAY. IF SITE CONDITIONS WARRANT, THE MIDDLETOWN D.P.W. MAY REQUIRE OTHER MEASURES.
- EXISTING DRAINAGE PATTERNS HAVE BEEN MINIMALLY ALTERED TO THE EXTENT POSSIBLE.
- IF WORK IS COMPLETED IN ACCORDANCE WITH THIS PLAN, THERE SHOULD BE NO ADVERSE IMPACTS TO NEIGHBORING PROPERTIES.
- SOIL CHARACTERISTICS OF THE SITE ARE CATEGORIES P₁ma' and P₁mb', PITTSWON SILT LOAM, 'Ss', STIBSING SILT LOAM, AND 'Rt', ROCK OUTCROP-CANTON COMPLEX AS SHOWN ON THE NATURAL RESOURCE CONSERVATION SERVICE SOILS MAP. THESE ARE HYDROLOGIC GROUP 'C' AND 'D' SOILS, RESPECTIVELY.
- EXISTING CONDITIONS ARE THE RESULT OF FIELD SURVEYS BY NORTHEAST ENGINEERS & CONSULTANTS, INC. IN OCTOBER AND DECEMBER 2018. PROPERTY LINES TAKEN FROM PLAN ENTITLED "A.P. 126 LOT 26 400 PARADISE AVENUE, MIDDLETOWN, RHODE ISLAND, LIMITED CONTENT BOUNDARY SURVEY, A CLASS I PLAN OF LAND PREPARED BY NORTHEAST ENGINEERS & CONSULTANTS, INC. (NE&C), LAST REVISED 08JAN19.
- NORTH REFERENCES GRID NORTH (RISP NAD83) BY RTK GPS.
- WETLAND EDGE DELINEATED BY NATURAL RESOURCE SERVICES, INC. ON OCTOBER 16, 2018.
- PROPOSED UTILITY CONNECTIONS TO BE COORDINATED WITH ALL APPLICABLE AGENCIES.
- ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING PLANS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM ALL AVAILABLE INFORMATION. (PLEASE CONTACT DISSAFE PRIOR TO CONSTRUCTION AT 1-888-344-7233, AND/OR ALL LOCAL UTILITY COMPANIES).

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. CONSTRUCTION SEQUENCE

- DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED. CONTRACTOR/OWNER SHALL NOTIFY MIDDLETOWN D.P.W. IN ADVANCE OF HIS INTENT TO BEGIN CONSTRUCTION.
- CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE VIA THE EXISTING GRAVEL ENTRANCE AS SHOWN.
- INSTALL SILT FENCES AND/OR STRAW BALES AS INDICATED ON THE DRAWINGS TO CONTROL EROSION AND PREVENT SEDIMENT CONTAMINATION OF DOWNSTREAM AREAS PRIOR TO ANY EARTH MOVING ACTIVITIES. EROSION CONTROLS SHALL BE IN PLACE BEFORE ANY OTHER SITE WORK IS UNDERTAKEN.
- EXCAVATE AREA OF RESIDENCE AND BARN IN ACCORDANCE WITH THE PLANS AND NOTES. GRADE DEVELOPMENT AREA AND DRIVEWAY.
- INSTALL UTILITY CONNECTIONS AND PROPOSED RAIN GARDENS.
- COMPLETE STRUCTURES.
- ESTABLISH A VEGETATIVE GROWTH THAT MEETS THE APPROVAL OF THE TOWN ENGINEER. COMPLETE AREAS OF LANDSCAPING.
- UPON COMPLETION OF CONSTRUCTION AND PRIOR TO REMOVAL OF EROSION & SEDIMENT CONTROLS, CONTRACTOR SHALL CONTACT MIDDLETOWN D.P.W. FOR A FINAL INSPECTION.

3. VEGETATIVE PRACTICE NOTES:

PERMANENT MEASURES:

- EROSION CONTROL BLANKET SHALL BE INSTALLED ON ANY SLOPES STEEPER THAN 3:1.
- A MINIMUM OF 4" OF LOAM SHALL BE INSTALLED. THE LOAM SHALL BE GRADED TO A SMOOTH CONDITION AND STONES AND OTHER OBJECTS LARGER THAN 2" SHALL BE REMOVED.
- THE FOLLOWING SEEDING MIXTURE SHALL BE APPLIED AT THE INDICATED RATE UNLESS OTHERWISE APPROVED BY THE MIDDLETOWN D.P.W.

RED FESCUE:	40 LBS/ACRE
KENTUCKY BLUEGRASS:	40 LBS/ACRE
PERENNIAL RYEGRASS:	20 LBS/ACRE
- HAY MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS/ACRE

TEMPORARY MEASURES (FOR TEMPORARY PROTECTION OF DISTURBED AREAS)

- LIMESTONE AND FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE:

LIMESTONE:	3 TONS/ACRE
FERTILIZER:	(10-10-10): 600 LBS/ACRE
- SEED SHALL BE APPLIED AT THE FOLLOWING RATE:

WINTER RYE:	100 LBS/ACRE
-------------	--------------
- HAY MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS/ACRE.

5. DRAINAGE NOTES:

- ALL DRAIN PIPES ARE TO BE SCH 40 PVC PIPE OR ADS N-12 TYPE IB (SOILTIGHT) UNLESS OTHERWISE SPECIFIED.
- ROOF OVERHANGS SHALL BE GUTTERED WITH DOWNSPOUTS CONVEYED TO RAIN GARDENS. CONNECTIONS SHALL BE COORDINATED WITH PROJECT ARCHITECT.
- RAIN GARDENS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAIL PROVIDED.
- AREA OF RAIN GARDENS SHALL NOT BE USED FOR STOCKPILING OF MATERIAL OR EQUIPMENT DURING CONSTRUCTION.
- MAINTENANCE OF THE RAIN GARDENS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR. ONCE CONSTRUCTION OF THE SITE IS COMPLETE, MAINTENANCE OF THE SYSTEMS SHALL BE THE RESPONSIBILITY OF THE OWNER.

WATER QUALITY CALCULATIONS

PROPOSED IMPERVIOUS (SQUARE FEET)		PER TABLE 8 OF THE STORMWATER MANAGEMENT GUIDANCE DOCUMENT FOR A SINGLE FAMILY RESIDENTIAL DEVELOPMENT, AN 8" DEEP RAIN GARDEN IN SILT LOAM AND LOAM WOULD REQUIRE AN AREA OF 721 SQUARE FEET TO PROVIDE SUFFICIENT TREATMENT.
RESIDENCE & GARAGE	2,225	
BARN	2,280	
TOTAL	4,505	
PROPOSED NEW IMPERVIOUS = 4,505 SF		
WATER QUALITY REQ. FOR NEW IMPERVIOUS = 4,505 SF / 12 = 376 CF		

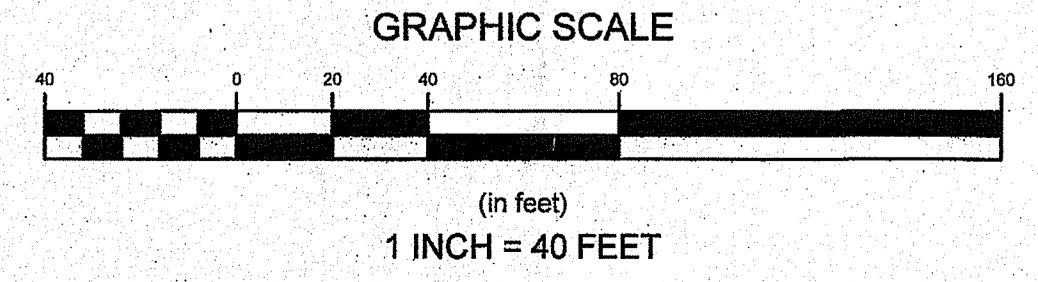
4. SHORT-TERM MAINTENANCE

DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED, THE EROSION CONTROL MEASURES SHALL BE INSPECTED.

- SILT FENCES SHALL BE INSPECTED AS INDICATED IN THE PLAN DETAILS. AT A MINIMUM THE SILT FENCING SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND/OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 8" AND REGRADED ON THE SITE.
- ANY EROSION CONTROL BLANKETS SHALL BE INSPECTED ON A WEEKLY BASIS.
- STONE ENTRANCE SHALL BE INSPECTED MONTHLY FOR EXCESSIVE ACCUMULATION OF SEDIMENT. IT MAY BE NECESSARY TO REMOVE STONES, EXCAVATE SEDIMENT, AND REPLACE STONES.
- THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE REMOVED PRIOR TO FINAL SURFACING. DURING CONSTRUCTION THE ENTRANCE SHALL BE INSPECTED WEEKLY, AND RE-ESTABLISHED AS NECESSARY.
- SEEDING AREAS SHALL BE FERTILIZED AND RESEEDING AS NECESSARY TO INSURE ESTABLISHMENT OF A VEGETATIVE GROWTH THAT MEETS THE APPROVAL OF REVIEWING ENTITIES.
- MAINTENANCE OF THE RAIN GARDENS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR. ONCE CONSTRUCTION OF THE SITE IS COMPLETE, MAINTENANCE OF THE SYSTEMS SHALL BE THE RESPONSIBILITY OF THE OWNER.

ZONING INFORMATION: R-30

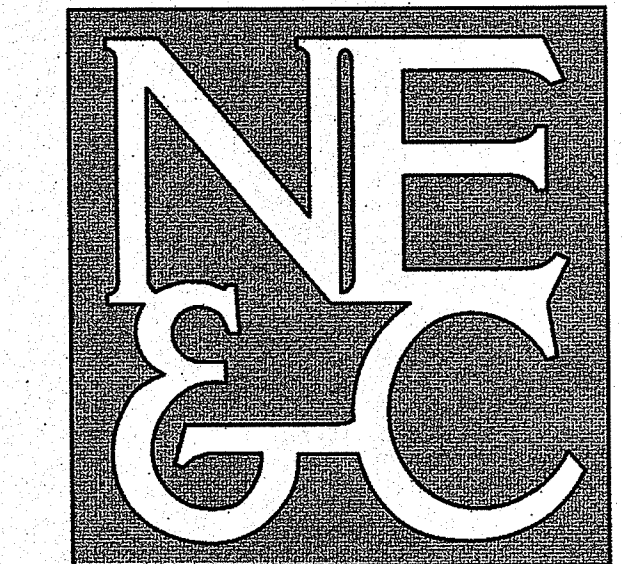
MINIMUM AREA:	30,000 SF
LOT FRONTAGE:	130 FT
BUILDING SETBACKS:	
FRONT	40 FT
SIDE	20 FT
REAR	60 FT
ACCESSORY SIDE	20 FT
ACCESSORY REAR	15 FT
MAXIMUM HEIGHT:	35 FT
ACCESSORY MAX HEIGHT:	20 FT



PROPOSED SITE PLAN

Drawing Number: **PR-1**
Sheet 1 of 2
Project Number: 18166.0
Survey Index: 13 - 126 - 26

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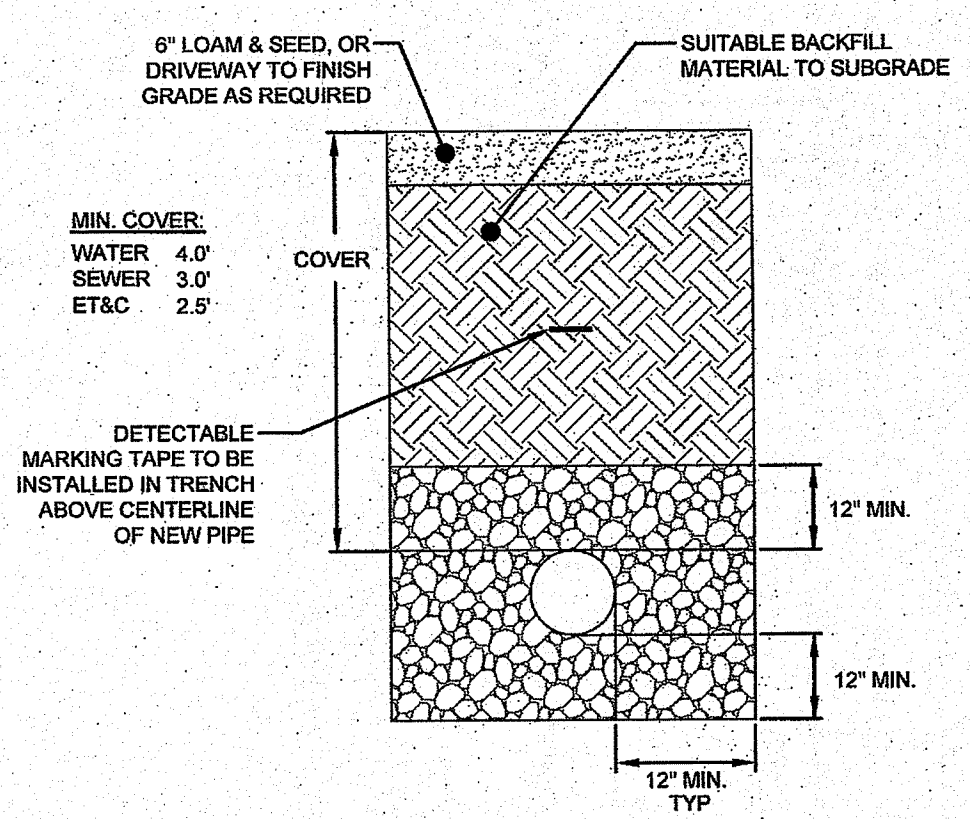


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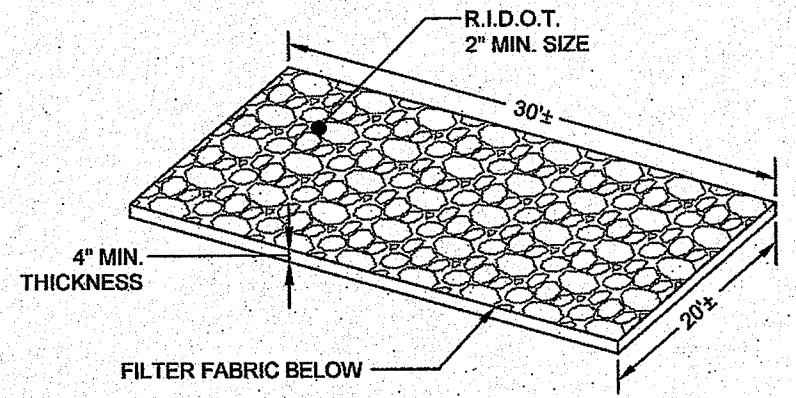
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TRENCH NOTES:

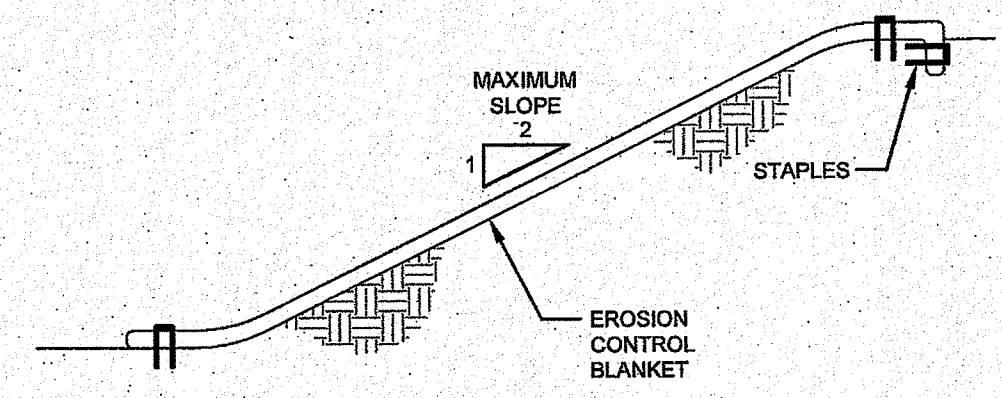
1. UNSUITABLE MATERIAL SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 12-INCHES BELOW THE DESIGN INVERT ELEVATION.
2. TRENCH PROTECTION SHALL BE REQUIRED IN ACCORDANCE WITH OSHA REGULATIONS, AND AS OTHERWISE REQUIRED TO PROTECT UTILITIES, ROADWAYS, AND ADJACENT STRUCTURES.
3. SEWER AND DRAIN PIPES SHALL BE LAID BEGINNING AT THE DOWNSTREAM END OF THE PIPE LINE.
4. ALL PVC SEWER PIPES SHALL BE IPEX RING-TITE SDR 35, OR SIMILAR APPROVED. 8" DIA SERVICE.
5. ALL SEWER PIPE AND GASKETS SHALL CONFORM TO ASTM 3034 AND ASTM F679.
6. BACKFILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED 12" IN HEIGHT WHEN INSTALLED UNDER LANDSCAPED AREAS ONLY. INSTALLATIONS UNDER PAVEMENT REQUIRE BACKFILL MATERIAL TO BE PLACED IN LAYERS NOT TO EXCEED 6" IN HEIGHT. THESE LAYERS SHALL BE COMPACTED TO 85% MAXIMUM DENSITY (AASHTO T199). SUITABLE BACKFILL SHALL BE FREE OF LOAM, CLAY, ORGANIC MATTER AND PARTICLES LARGER THAN 2 INCHES IN DIAMETER.
7. SEWER AND DRAINAGE PIPE TRENCHES SHALL BE BEDDED WITH CRUSHED STONE OR SCREENED GRAVEL. THESE MATERIALS MUST CONFORM TO R.D.O.T. STANDARD M.01.09 TYPE II MATERIAL.
8. WATER PIPE TRENCHES MUST BE BEDDED WITH SAND CONTAINING NO PARTICLES LARGER THAN 3/8". THIS MATERIAL MUST CONFORM TO AASHTO M6 REQUIREMENTS.
9. UTILITY INSTALLATIONS SHALL CONFORM TO ALL REQUIREMENTS OF THE TOWN OF MIDDLETOWN PUBLIC WORKS DEPARTMENT RULES AND REGULATIONS.



UTILITY TRENCH DETAIL
SCALE: NOT TO SCALE



CONSTRUCTION ENTRANCE
SCALE: NOT TO SCALE



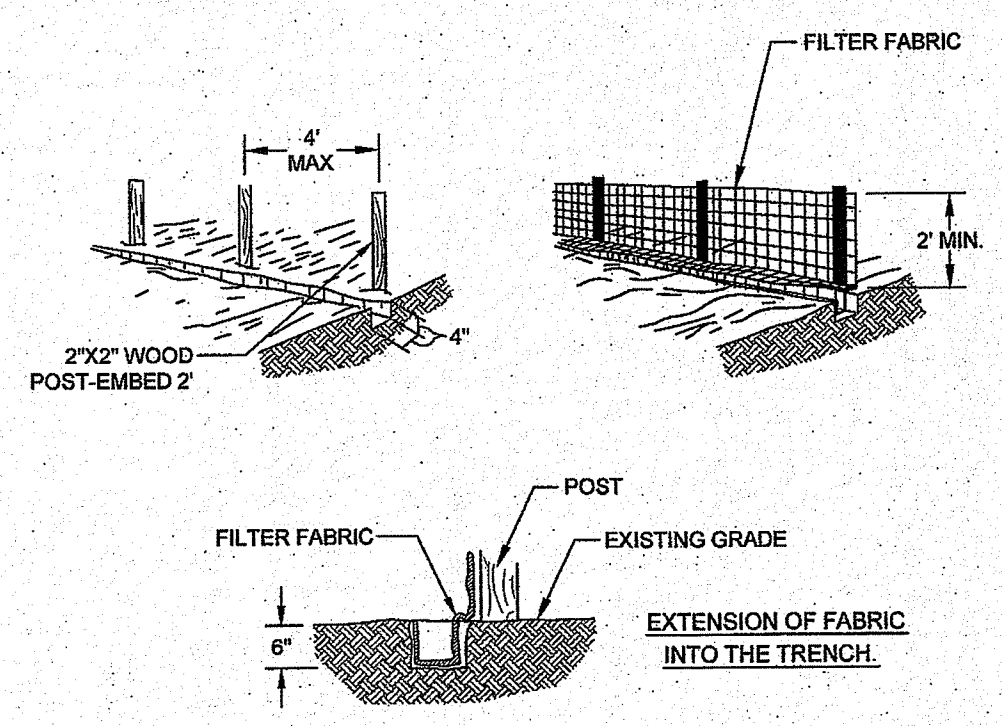
NOTES:

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

EROSION CONTROL BLANKET
SCALE: NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO.: 20-0023
DATED MAR 12 2020
SEE LETTER OF SAME DATE.

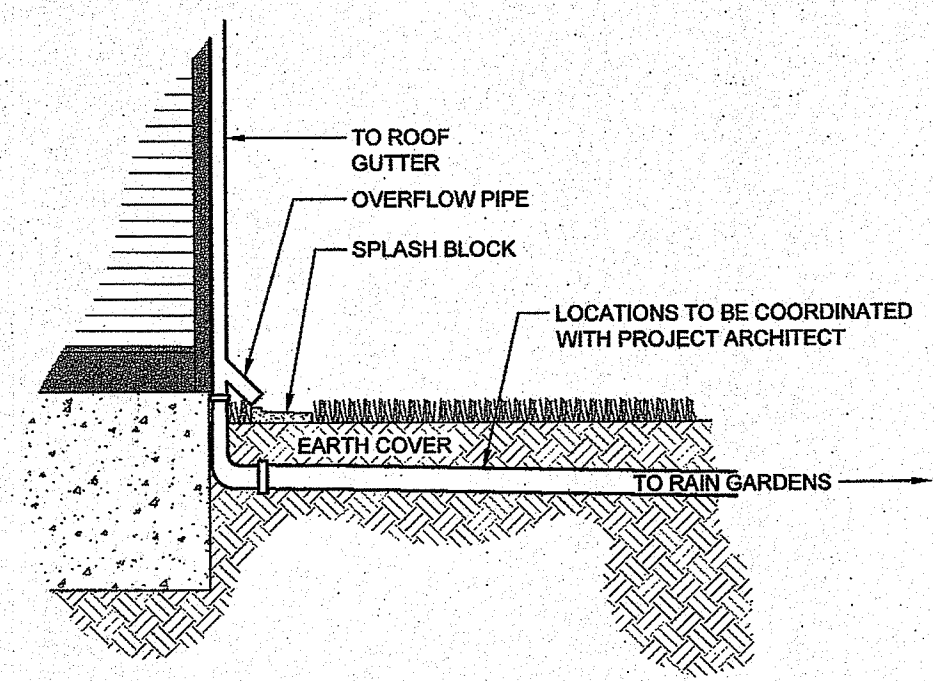
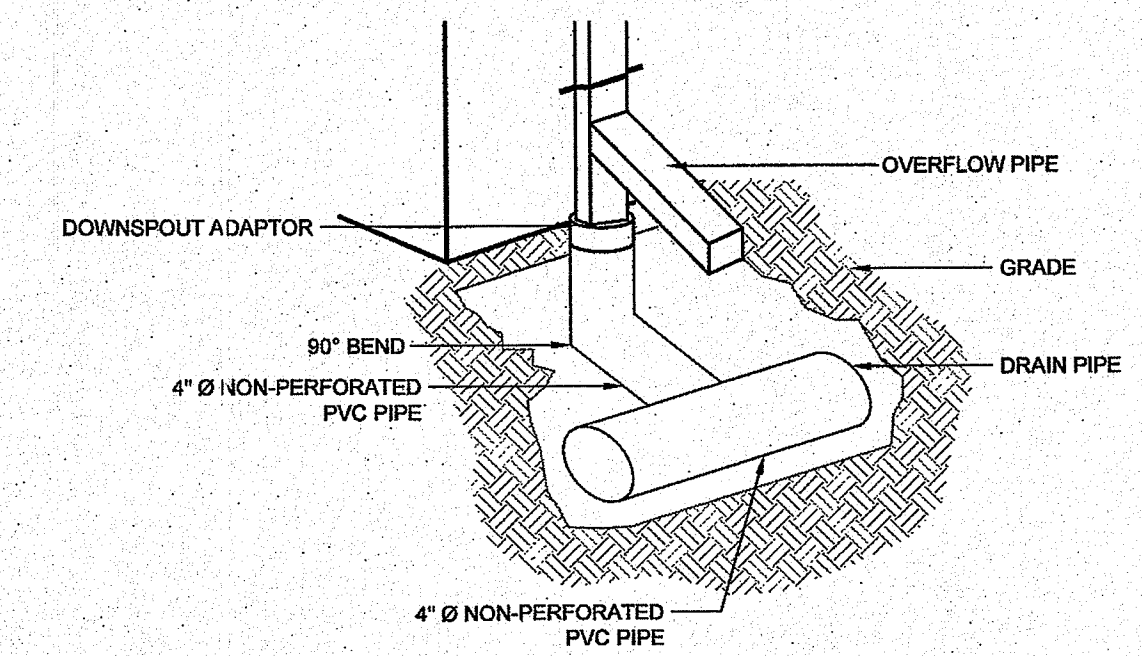
Nancy L. Freeman



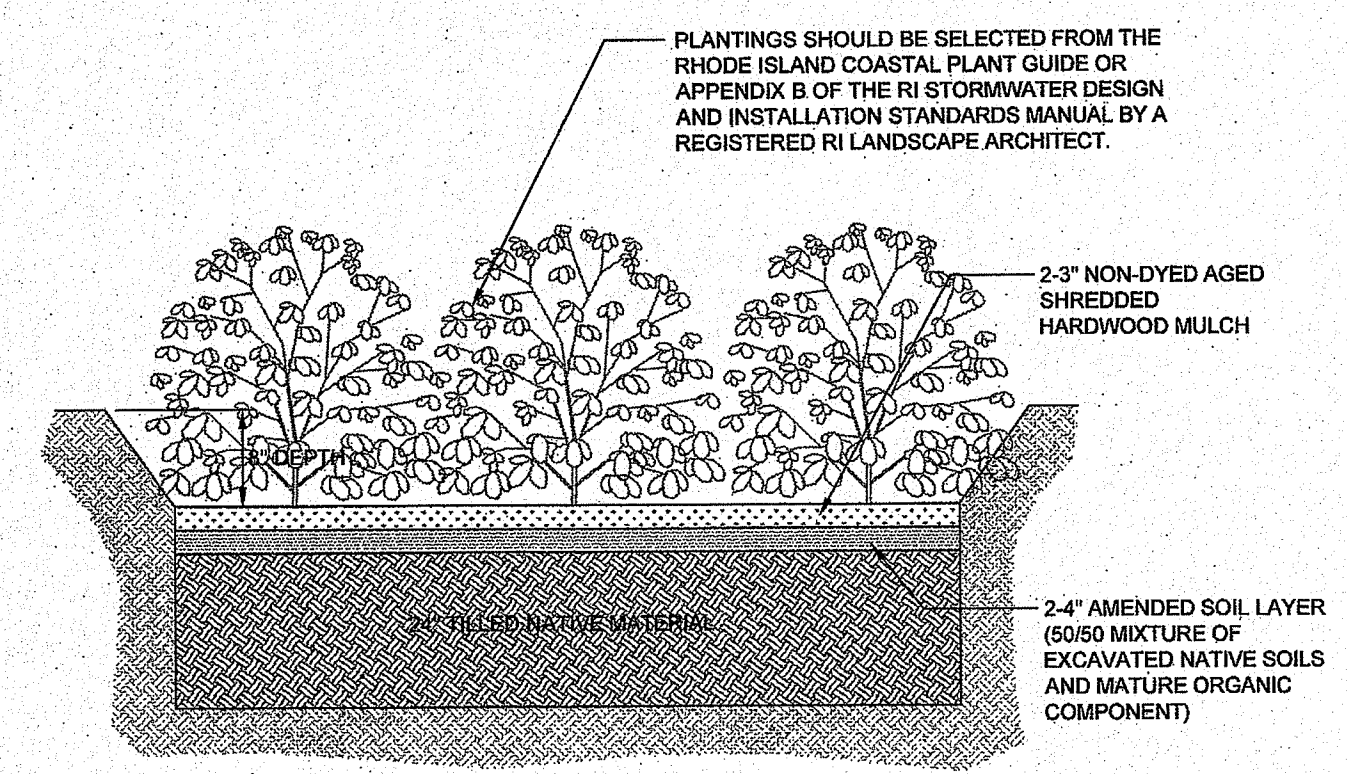
NOTES:

1. SET POSTS AND EXCAVATE A 6" X 6" TRENCH UPSLOPE ALONG THE LINE OF POSTS.
2. STAPLE FILTER FABRIC TO THE POSTS AND EXTEND INTO TRENCH.
3. BACK FILL AND COMPACT THE EXCAVATED SOIL INTO THE TRENCH.

SILT FENCE
SCALE: NOT TO SCALE



ROOF DOWNSPOUT DETAIL
SCALE: NOT TO SCALE



NOTES:

1. A CRUSHED STONE ENTRANCE SHALL BE INSTALLED AT INFLOW TO PREVENT CHANNELING.
2. DOWNHILL SIDE OF GARDEN SHALL BE BERMED TO PROVIDE THE NECESSARY DEPTH.

TYPICAL RAIN GARDEN CROSS SECTION
SCALE: NOT TO SCALE

No.	Revision	Date	App.
Designed By:	GES	Drawn by:	DJW
Checked by:			
Scale:	AS SHOWN	Date:	08JAN20
Project Title:			
A.P. 126, LOT 26 400 PARADISE AVENUE MIDDLETOWN, RHODE ISLAND			
Client/Owner:			
JILL & CHRIS MATTHEWS 400 PARADISE AVE. MIDDLETOWN, RI 02842			
Issued for:			
RIDEM WETLANDS			
Drawing Title:			
DETAILS			
Drawing Number:		D-1	
Sheet		2 of 2	
Project Number:		18166.0	
Survey Index:		13 - 126 - 26	
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