

**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 THE TOWN OF TIVERTON BUILDING OFFICIAL IN ADVANCE OF HIS INTENT TO BEGIN CONSTRUCTION.
  - INSTALL FILTER SOCKS 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.
  - REMOVE TREES AND VEGETATION ONLY WHERE NECESSARY. ALL STUMPS TO BE GROUND OR DISPOSED OF OFF SITE.
  - ROUGH GRADE SITE AS SHOWN. ONLY THOSE AREAS UNDER CONSTRUCTION WILL BE DISTURBED BY EARTHWORK. THE REMAINDER OF THE LOT WILL NOT BE STRIPPED OR DISTURBED UNTIL CONSTRUCTION IS DONE WITH THE RESIDENCE CONSTRUCTION AND READY FOR THE FINAL LAWN / LANDSCAPING INSTALLATION.
  - ANY TEMPORARY SOIL STOCKPILES SHALL BE PROTECTED WITH ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY.
  - ROUGH GRADE AND EXCAVATE FOR FOUNDATION. BEGIN GARAGE AND ADDITION CONSTRUCTION.
  - ESTABLISH A VEGETATIVE GROWTH THAT MEETS THE APPROVAL OF THE TOWN BUILDING OFFICIAL. COMPLETE AREAS OF LANDSCAPING.
  - UPON COMPLETION OF CONSTRUCTION AND PRIOR TO REMOVAL OF EROSION & SEDIMENT CONTROLS, CONTRACTOR SHALL CONTACT THE BUILDING OFFICIAL FOR A FINAL INSPECTION.
  - MAINTAIN SITE IN ACCORDANCE WITH THE MAINTENANCE NOTES. EROSION CONTROLS MUST BE MAINTAINED AND REMAIN IN PLACE UNTIL THE LAWN HAS RECEIVED TWO (2) MOWINGS.

- 2. EARTHWORK NOTES:**
- DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
  - ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE STABILIZED WITHIN FOURTEEN DAYS IN ACCORDANCE WITH TEMPORARY MEASURES IN THE VEGETATIVE PRACTICE NOTES.
  - AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOP SOIL TO REMOVE VEGETATION, ROOTS, AND ANY OTHER OBJECTIONABLE MATERIAL.
  - ALL FILL SHALL BE COMPACTED TO 95% MAX. DENSITY TO REDUCE EROSION, SLIPPAGE, SETTLEMENT SUSIDENCE, OR OTHER RELATED PROBLEMS.
  - FILL INTENDED TO SUPPORT BUILDING STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL CODES AND SPECIFICATIONS.
  - ALL FILL SHALL BE PLACED IN LAYERS NOT TO EXCEED 12" IN THICKNESS FILLS.
  - FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
  - FROZEN, SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIAL SHALL NOT BE INCORPORATED INTO FILLS.
  - FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION SUBGRADE.
  - SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.
  - ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF FINISH GRADING IN ACCORDANCE WITH THE VEGETATIVE PRACTICE NOTES.
  - EXCESS QUANTITIES OF SOIL WILL BE REMOVED FROM SITE BY CONTRACTOR AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.

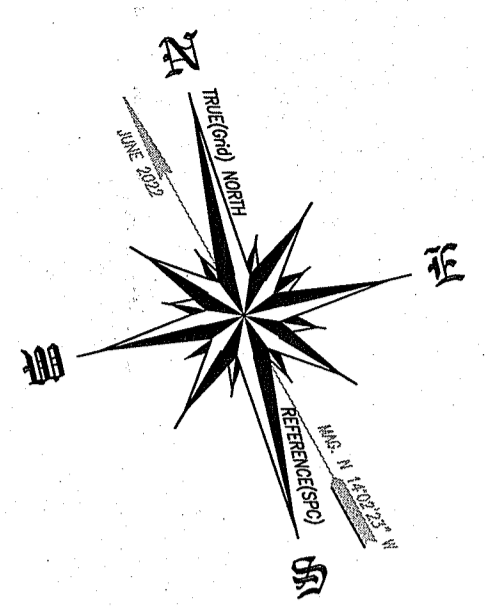
- 3. VEGETATIVE PRACTICE:**
- PERMANENT MEASURES:**
- EROSION CONTROL BLANKET SHALL BE INSTALLED ON ANY SLOPES STEEPER THAN 3:1 (SEE PLAN).
  - A MINIMUM OF 4" OF LOAM SHALL BE INSTALLED. THE LOAM SHALL BE GRADED TO A SMOOTH CONDITION AND STONES AND OTHER OBJECTS LARGER THAN 2" SHALL BE REMOVED.
  - THE FOLLOWING SEEDING MIXTURE SHALL BE APPLIED AT THE INDICATED RATE UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL.
 

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 LB/ACRE
-------------	-------------
  - HAY MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS/ACRE.

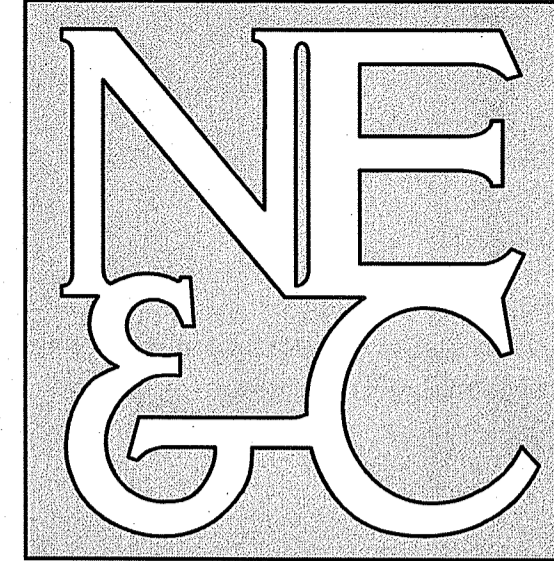
- 4. UTILITY NOTES:**
- THE LOCATION OF PROPOSED ELECTRICAL, TELEPHONE, AND CABLE CONNECTION IS PRELIMINARY. FINAL DESIGN AND LOCATION OF THE SERVICES ARE SUBJECT TO DESIGN REVIEW AND APPROVAL OF THE SERVICE PROVIDERS.
  - PROPOSED CONNECTION TO THE EXISTING WATER MAIN IS SUBJECT TO REVIEW BY AND PERMISSION FROM THE TOWN AND SERVICE PROVIDER.
  - SEWER CONNECTIONS TO EXISTING SEWER SERVICE AND/OR MUNICIPAL MAIN SUBJECT TO DESIGN REVIEW BY AND PERMISSION FROM THE TOWN AND SERVICE PROVIDER.
  - THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS, OR CONCLUSIONS HE/SHE MAY MAKE OR DERIVE FROM THE SUBSURFACE INFORMATION OR DATA FURNISHED ON THE PLANS. THE CONTRACTOR MUST SATISFY HIMSELF/HERSELF THROUGH HIS/HER OWN INVESTIGATIONS AS TO WHAT SUBSURFACE CONDITIONS ARE TO BE ENCOUNTERED.
  - IF THE CONTRACTOR ELECTS NOT TO EXPOSE AND VERIFY ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES AT CROSSINGS PRIOR TO PIPELINE EXCAVATION, HE/SHE FORFEITS HIS/HER RIGHTS FOR ANY CLAIMS FOR COMPENSATION CAUSED BY ANY CONFLICTS WITH EXISTING UTILITIES AND STRUCTURES.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL EFFLUENT ASSOCIATED WITH THE CONSTRUCTION ACTIVITY AND THE DISINFECTION AND HYDROTASTING OPERATIONS TO SAFEGUARD PUBLIC HEALTH AND SAFETY IN ACCORDANCE WITH APPLICABLE DEPARTMENT OF HEALTH REQUIREMENTS. ALL PERMITS AND LICENSES FOR CONSTRUCTION WATER DISPOSAL, INCLUDING ALL APPLICATIONS, CHARGES, FEES, AND TAXES, ARE THE RESPONSIBILITY OF THE CONTRACTOR.



**GENERAL NOTES:**

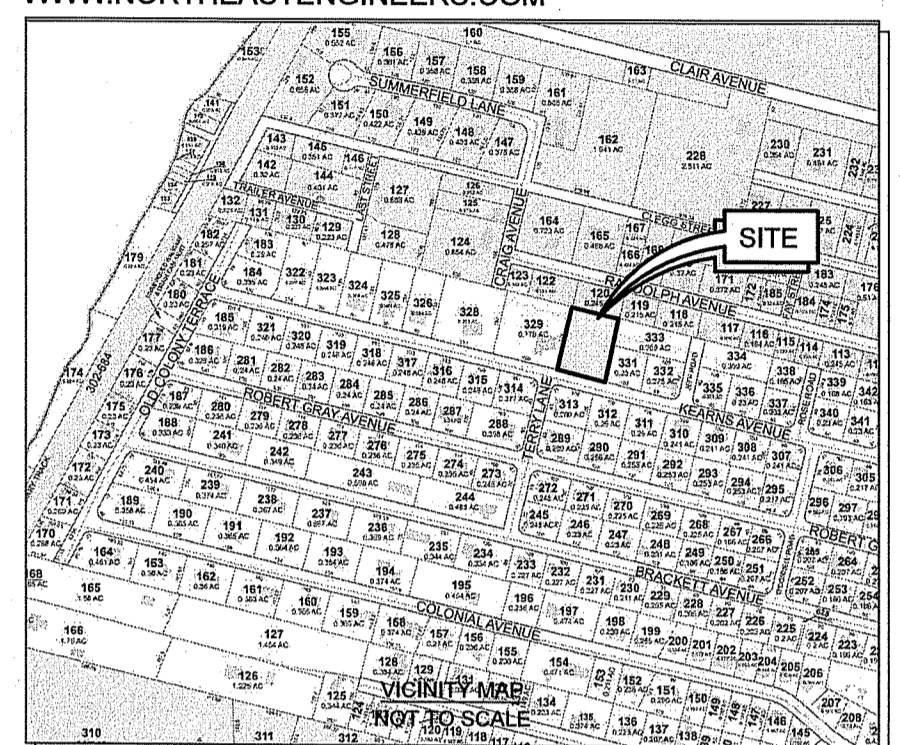
- EXISTING CONDITIONS ARE THE RESULT OF A FIELD SURVEY BY STEPHEN M. MURGO PLS # 1663.
- VERTICAL DATUM IS ASSUMED.
- NORTH ARROW AND BASIS OF BEARING BASED ON RTK/GNSS OBSERVATION.

**NORTHEAST ENGINEERS & CONSULTANTS, INC.**



SITE/CIVIL  
LAND PLANNING  
SURVEYING  
GEO TECHNICAL  
ENVIRONMENTAL  
TRANSPORTATION  
STRUCTURAL  
MATERIALS TESTING

A KNOWLEDGE CORPORATION®  
6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842  
PHONE (401) 849-0810 FAX (401) 846-4169  
WWW.NORTHEASTENGINEERS.COM

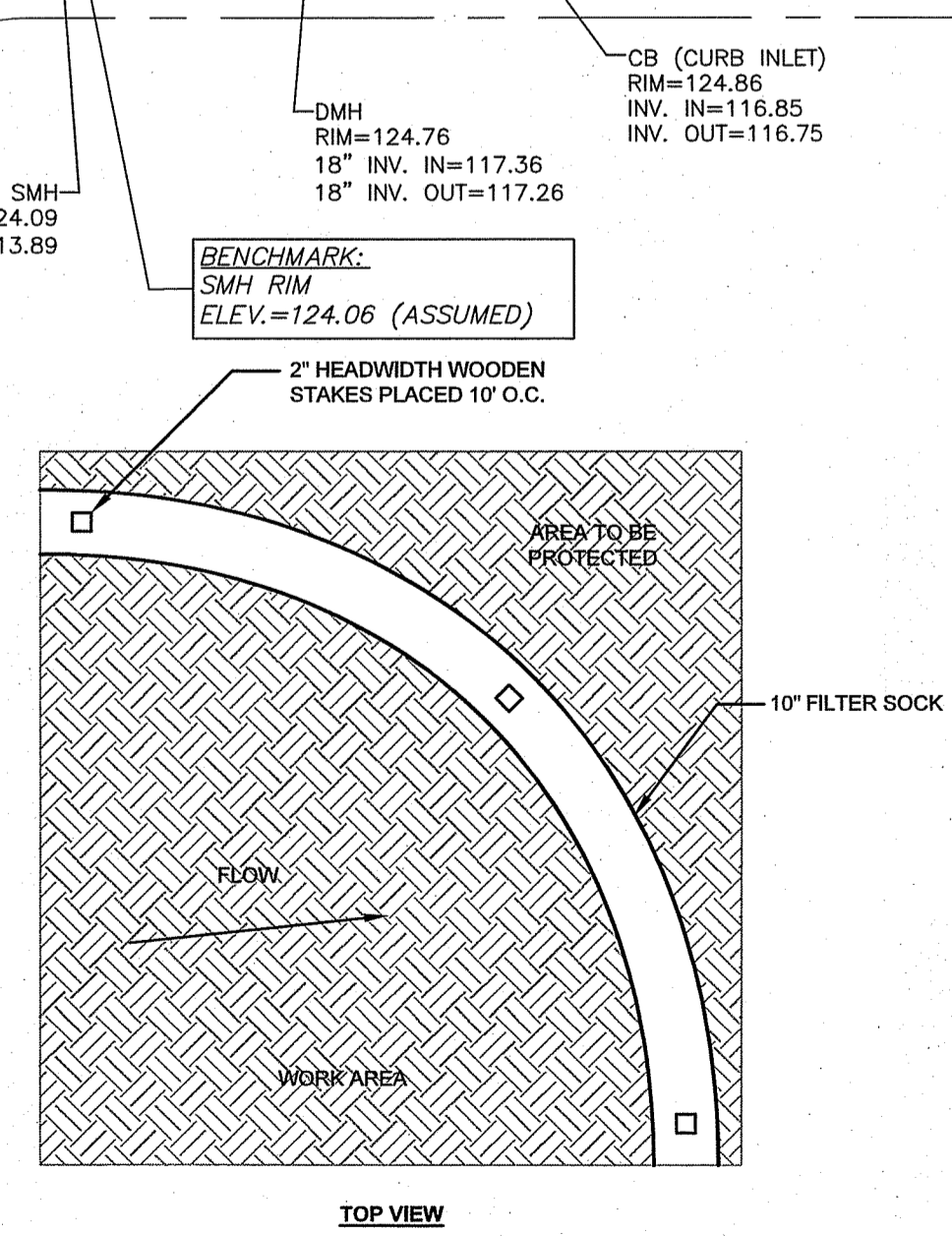
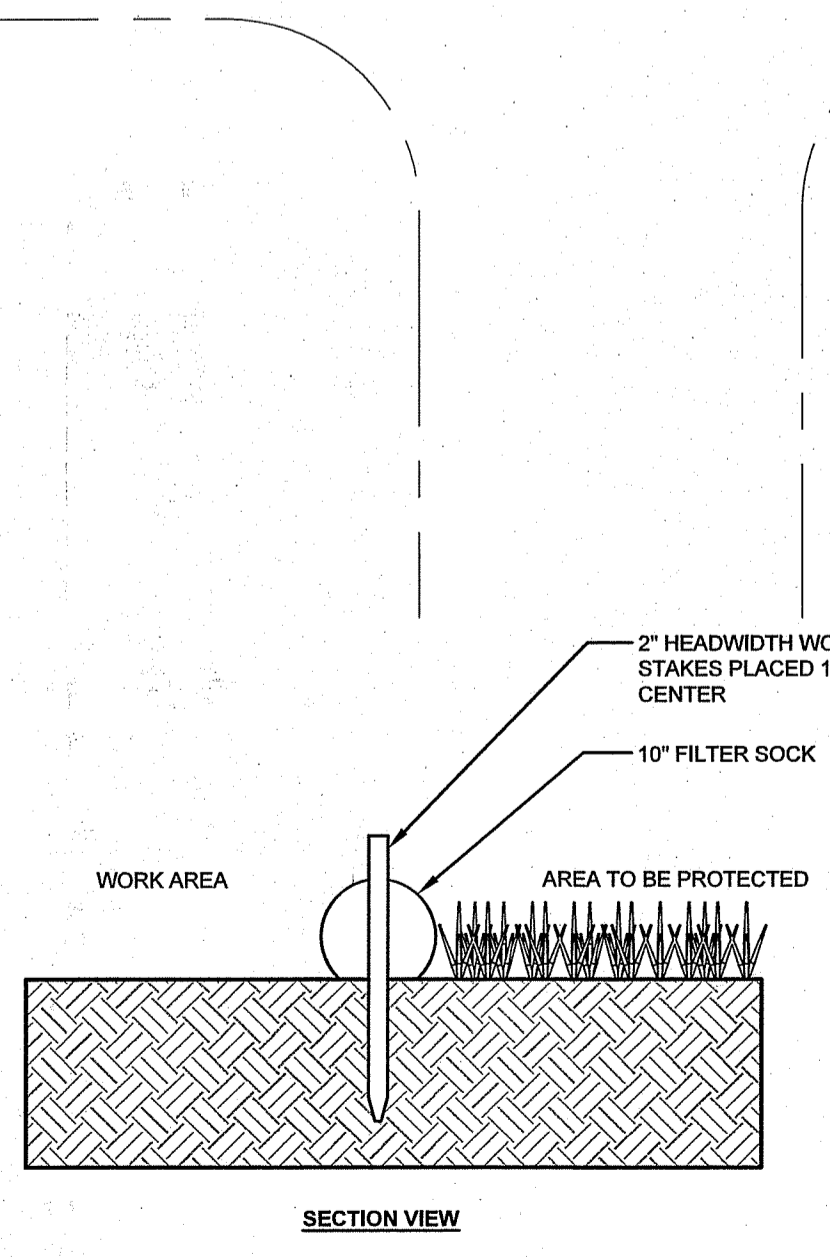
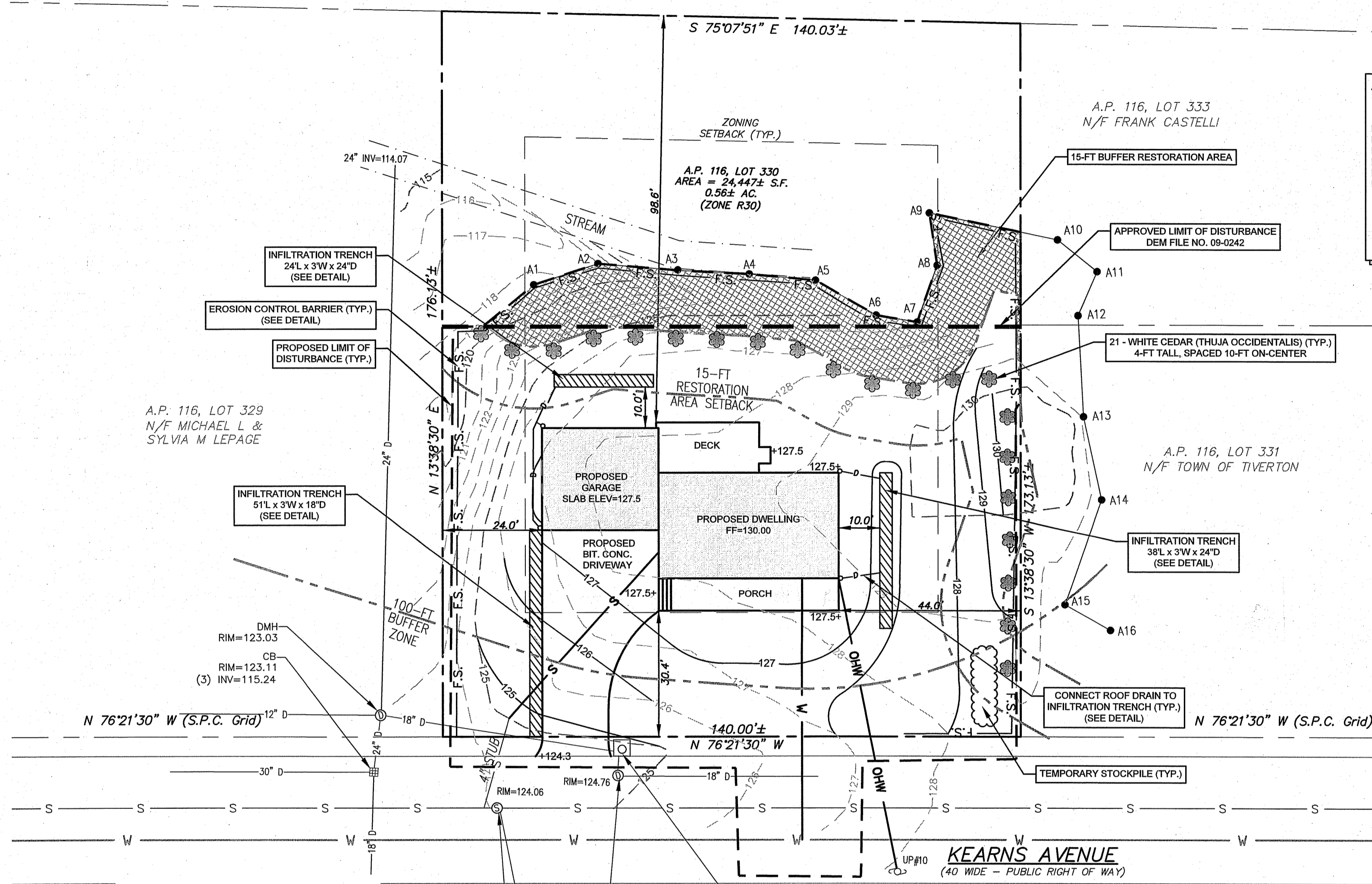


**ZONING DATA TABLE**

REQUIRED	EXISTING	
MINIMUM LOT AREA	30,000 SQ. FT.	24,447 ± SQ. FT.
MINIMUM LOT WIDTH/FRONTAGE	150 FT.	140.00 FT.
MAXIMUM BUILDING COVERAGE	15%	7.4 %
MAXIMUM HEIGHT OF PRINCIPAL BUILDING	35 FT.	28.6 FT.
MAXIMUM HEIGHT OF ACCESSORY BUILDING	20 FT.	20 FT.
MINIMUM YARD DIMENSIONS		
FRONT	30 FT.	30.4 FT.
SIDE	20 FT.	24.0 FT.
REAR	30 FT.	98.6 FT.
ACCESSORY BUILDINGS MINIMUM DISTANCE		
SIDE LOT LINES	5 FT.	N/A FT.
REAR LOT LINES	5 FT.	N/A FT.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: FEB 21 2023 FILE #: 22-0495  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Nancy L. Freeman*



**10' FILTER SOCK DETAIL**  
SCALE: NOT TO SCALE

**INFILTRATION TRENCH SIZING**

$$A_p = V / (n)(d_f) + (t_f)(1) / 12$$

WHERE:  $A_p$  = BOTTOM AREA OF TRENCH (ft<sup>2</sup>)  
 $V$  = DESIGN VOLUME (ft<sup>3</sup>)  
 $n$  = POROSITY OF FILL (ASSUME 0.33)  
 $d_f$  = TRENCH DEPTH (ft)  
 $t_f$  = DESIGN INFILTRATION RATE (in/hr)  
 $t$  = TIME TO FILL TRENCH (hours)

**DWELLING ROOF:**

$$V = 1120 \text{ sf} \times 1' / 12" = 93.3 \text{ ft}^3$$

$$d_f = 2.0 \text{ ft}$$

$$A_p = 93.3 / ((0.33)(2.0) + (1.02)(2) / 12) = 112 \text{ sf}$$

TRENCH LENGTH REQUIRED =  $A_p$  / TRENCH WIDTH = 112 / 3 = 37.33 ft

ROOF TRENCH DIMENSIONS (LxWxD) = 38'x3'x2'

**GARAGE ROOF:**

$$V = 697 \text{ sf} \times 1' / 12" = 58.1 \text{ ft}^3$$

$$d_f = 2.0 \text{ ft}$$

$$A_p = 58.1 / ((0.33)(2.0) + (1.02)(2) / 12) = 70 \text{ sf}$$

TRENCH LENGTH REQUIRED =  $A_p$  / TRENCH WIDTH = 70 / 3 = 23.3 ft

GARAGE TRENCH DIMENSIONS (LxWxD) = 24'x3'x2'

**DRIVEWAY:**

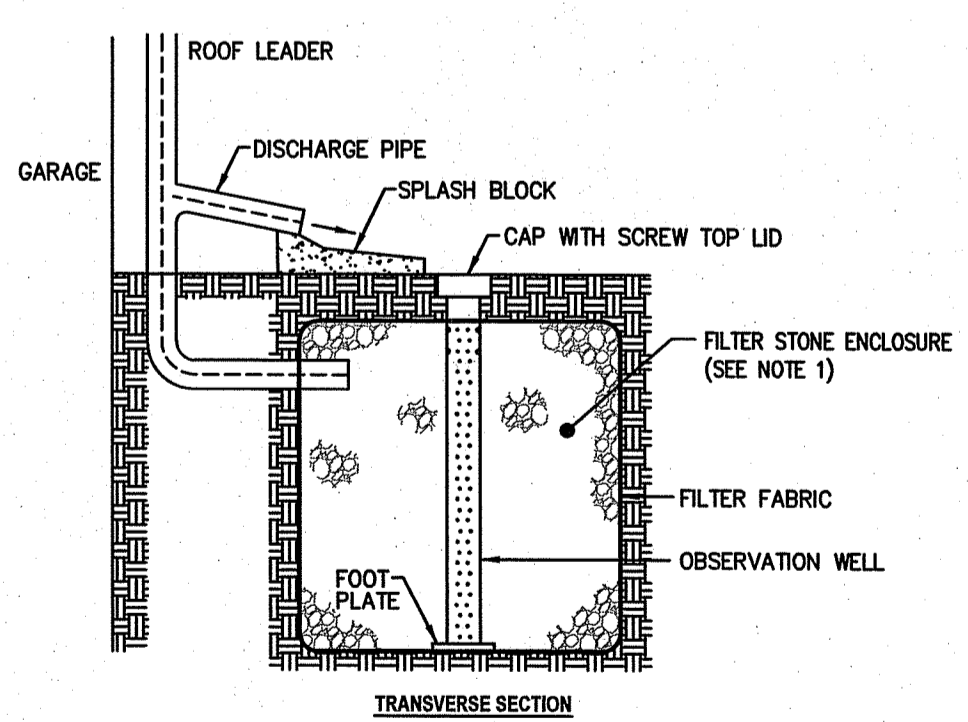
$$V = 1207 \text{ sf} \times 1' / 12" = 100.6 \text{ ft}^3$$

$$d_f = 1.5 \text{ ft}$$

$$A_p = 100.6 / ((0.33)(1.5) + (1.02)(2) / 12) = 151 \text{ sf}$$

TRENCH LENGTH REQUIRED =  $A_p$  / TRENCH WIDTH = 151 / 3 = 50.3 ft

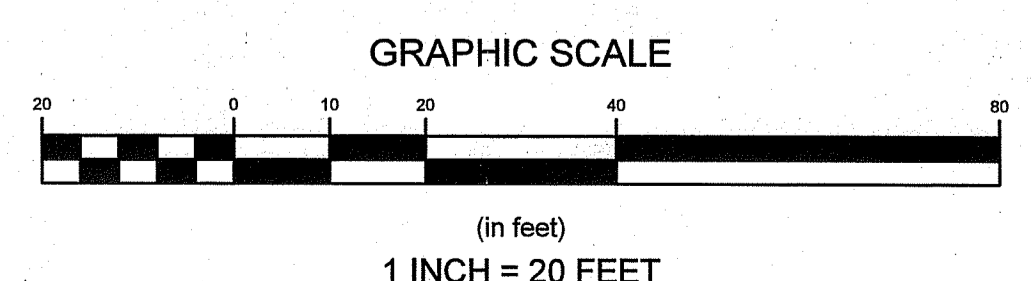
GARAGE TRENCH DIMENSIONS (LxWxD) = 51'x3'x1.5'



**NOTES:**

- FILTER STONE TO BE NATIONAL STONE ASSOCIATION MODIFIED NSA NO. FS-2 TO ROOT M10.0301.
- TRENCHES TO BE PROTECTED FROM SILTATION DURING CONSTRUCTION AND UNTIL VEGETATION IS FULLY ESTABLISHED. (ENGINEER TO DO FINAL INSPECTION)

**INFILTRATION TRENCH SECTION**  
SCALE: NOT TO SCALE



1	PER DEM REVIEW COMMENTS	1-13-23	GES
No.	Revision	Date	App.
Designed By:	JCC	Drawn by:	JCC
Checked by:	GES	Date:	10-05-22
Scale:	1"=20'	Date:	10-05-22
Project Title:			
<b>A.P. 116, LOT 330</b>			
<b>0 KEARNS AVENUE</b>			
<b>TIVERTON, RHODE ISLAND</b>			
Client/Owner:			
SARAH M. COOKSON 28 EVERETT AVENUE BRISTOL, RI 02809			
Issued for:			
PERMITTING			
Drawing Title:			
<b>SITE PLAN</b>			
Office of Water Resources			
Drawing Number:			
FEB 17 2023			
Sheet 1 of 1			
Project Number:			
22182.0			
Survey Index:			
<small>OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.</small>			