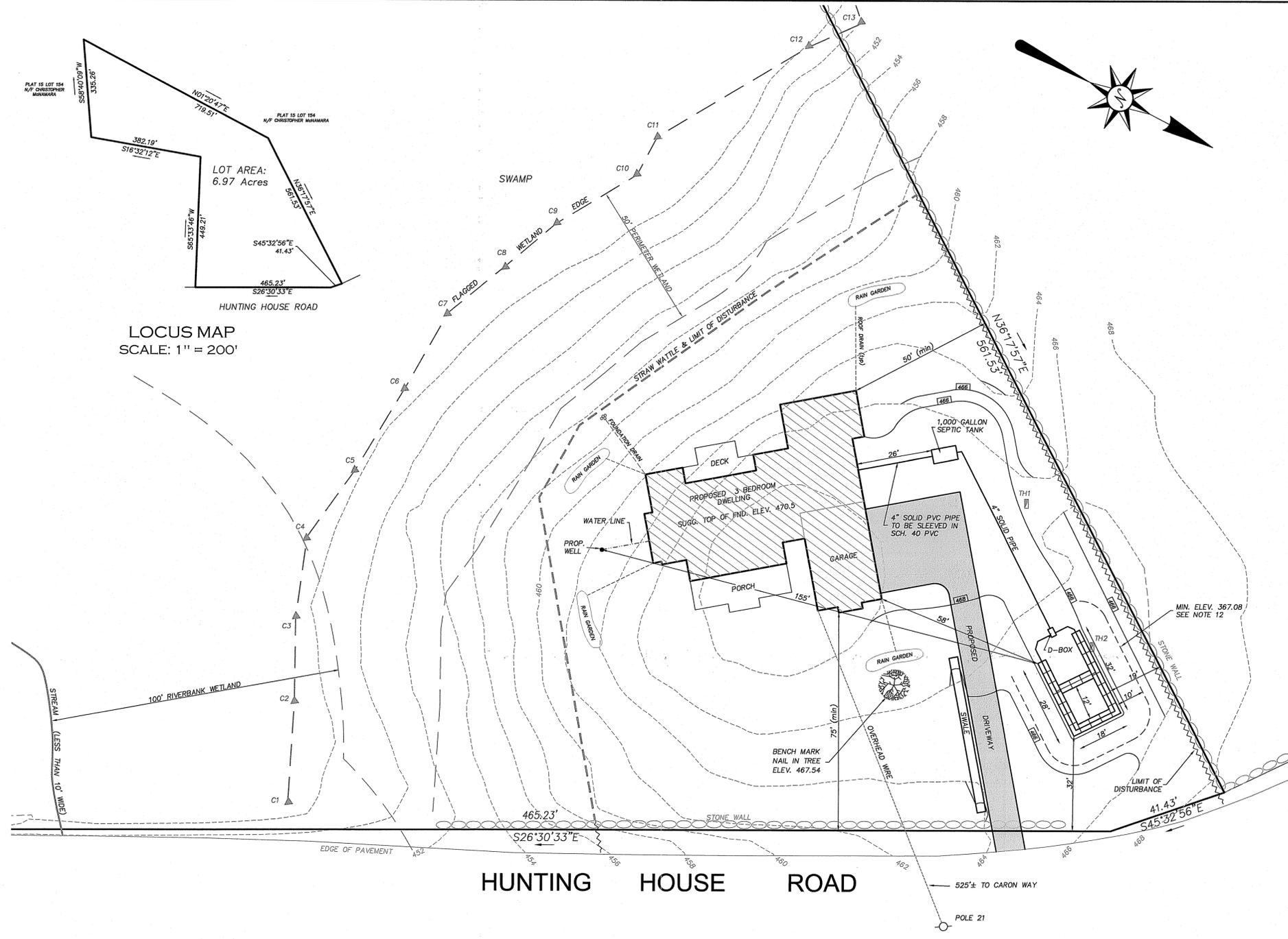
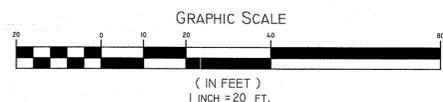


LOCUS MAP
SCALE: 1" = 200'

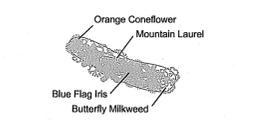


HUNTING HOUSE ROAD

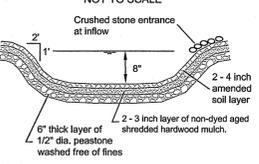


RAIN GARDEN PLANTING DETAIL
NOT TO SCALE

ROOF AREA: 4,000 SF
FOUR RAIN GARDENS - 80 SF - 25 PLANTS EACH



RAIN GARDEN CROSS-SECTION
NOT TO SCALE



RAIN GARDEN TREATMENT

Rain garden to be 8" deep with a 2-4 inch amended soil layer (50/50 mixture of the excavated native soils and mature organic compost) and a 2-3 inch layer of non-dyed aged shredded hardwood mulch.

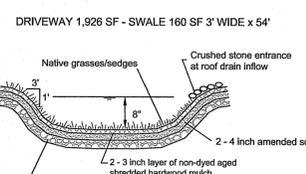
CONSTRUCTION

1. A crushed stone entrance should be installed at the inflow to prevent channeling. Thereafter, the rain garden shall be monitored and maintained to assure proper functioning, plant growth and survival. Plants shall be replaced on an as-needed basis during the growing season.
2. Silt/bedrock shall be removed from the rain garden when the accumulation exceeds one inch, or when water ponds on the surface of the rain garden for more than 48 hours. The top few inches of material shall be removed and shall be replaced with fresh soil mixture and mulch.
3. Pruning or replacement of woody vegetation shall occur when dead or dying vegetation is observed.
4. Soil erosion gullies shall be repaired when they occur.
5. Fertilizer or pesticides shall not be applied to plants within rain gardens.
6. Perennial plants and ground covers shall be replaced as necessary to maintain an adequate vegetated ground cover. Annual plants may also be used to maintain ground cover.

MAINTENANCE

1. The rain garden shall be inspected following at least the first two precipitation events of at least 1.0 inch to ensure that the system is functioning properly. Thereafter, the rain garden shall be monitored and maintained to assure proper functioning, plant growth and survival. Plants shall be replaced on an as-needed basis during the growing season.
2. Silt/bedrock shall be removed from the rain garden when the accumulation exceeds one inch, or when water ponds on the surface of the rain garden for more than 48 hours. The top few inches of material shall be removed and shall be replaced with fresh soil mixture and mulch.
3. Pruning or replacement of woody vegetation shall occur when dead or dying vegetation is observed.
4. Soil erosion gullies shall be repaired when they occur.
5. Fertilizer or pesticides shall not be applied to plants within rain gardens.
6. Perennial plants and ground covers shall be replaced as necessary to maintain an adequate vegetated ground cover. Annual plants may also be used to maintain ground cover.

VEGETATED SWALE
NOT TO SCALE

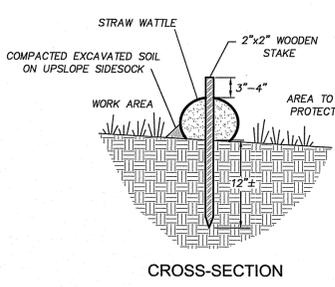


NOTE: VEGETATED SWALE SHALL BE INSPECTED ANNUALLY AND SHOULD BE INSPECTED AFTER LARGE STORM EVENTS.

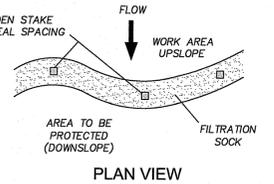
VEGETATIVE SWALE MAINTENANCE

1. The vegetated swale shall be inspected annually and after large storm events.
2. Eroded side slopes and channel bottom shall be stabilized as necessary.
3. If the surface of the dry swale becomes clogged to the point that standing water is observed on the surface 48 hours after precipitation events, the bottom shall be rero-filled or cultivated to break up any hard-packed sediment, and then reseeded.
4. Vegetation in dry swales shall be mowed as required to maintain minimum grass heights in the 4-6 inch range.
5. Every five years, the channel bottom of dry swales should be scraped to remove sediment and to restore original cross section and infiltration rate, and should be seeded to restore ground cover, where necessary.

STRAW WATTLE DETAIL
NOT TO SCALE



CROSS-SECTION



LEGEND

- 100 --- 100 EXISTING CONTOUR
- 1700 --- PROPOSED CONTOUR
- TH TEST HOLE
- WETLAND FLAG
- LIMIT OF DISTURBANCE

ZONE: A-4

SETBACKS: FRONT: 75'
REAR: 100'
SIDE: 50'

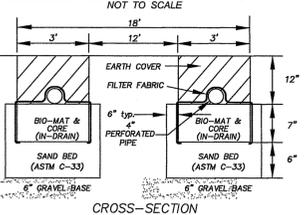
TEST HOLE DATA

- DATE: 5/18/09
- TH1
0"-10" Ap, SL, 10YR 3/6
10"-28" Bw, LS, 10YR 5/6
28"-108" C, CB, G, LS, 2.5YR 5/2
LEDGE AT 108"
ESHW: 36"
- TH2
0"-10" Ap, SL, 10YR 3/6
10"-30" Bw, LS, 10YR 5/6
30"-108" C, CB, G, LS, 2.5YR 5/2
LEDGE AT 108"
ESHW: 36"

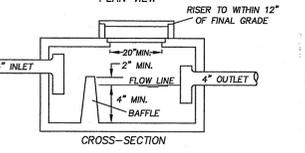
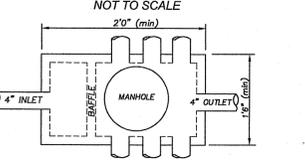
DESIGN CALCULATIONS

3 BEDROOMS = 115 GPD PER BEDROOM = 345 GPD
SOIL CATEGORY: G
DESIGN LOADING RATE: 0.61
345/0.61 = 566 SF
FIELD SIZE - ELJENS
TWO LINES = 21 UNITS TOTAL = 588 SF

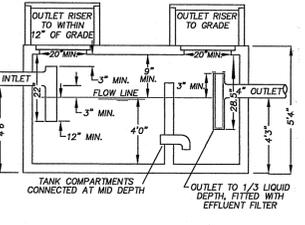
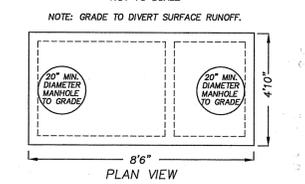
LEACHING SYSTEM CROSS-SECTION
NOT TO SCALE



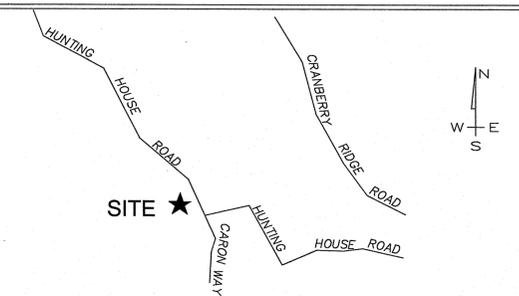
DISTRIBUTION BOX (D-BOX)
NOT TO SCALE



1,000 GALLON TWO COMPARTMENT SEPTIC TANK
NOT TO SCALE



LOCATION MAP (NOT TO SCALE)



NOTES & SPECIFICATIONS:

1. LEACHING TRENCHES TO BE EXCAVATED IN ACCORDANCE WITH RIDEM REGULATION 6.33(J). TREES, BRUSH AND STUMPS WITHIN AND EXTENDING 10 FEET BEYOND LEACHFIELD TO BE REMOVED. 5' STRIP APPLIES.
2. USE SDR #35 PVC PIPING OR EQUIVALENT THROUGHOUT SYSTEM.
3. NO WELL EXISTS WITHIN 100' OF THE PROPOSED LEACHING SYSTEM.
4. ZABEL EFFLUENT FILTER TO BE INSTALLED AT SEPTIC TANK OUTLET.
5. NO WELLS, EXISTING OR PROPOSED, ARE WITHIN 200' FEET OF OWTS. NO PUBLIC WELLS, EXISTING OR PROPOSED, ARE WITHIN 500' OF THE OWTS UNLESS SHOWN.
6. BRING SEPTIC TANK MANHOLE TO GRADE AND D-BOX MANHOLE TO WITHIN 12" OF GRADE.
7. SEPTIC TANK TO BE A MINIMUM OF 75' FROM ALL WELLS.
8. ENDS OF LINES IN TRENCH TO BE INTERCONNECTED.
9. D-BOX TO HAVE A MINIMUM BOTTOM AREA OF 3 SQUARE FEET AND MEET H-20 WHEEL LOADS WITH MARKER SET TO GRADE.
10. SANITARY TEES TO BE INSTALLED IN SEPTIC TANK.
11. NO DRAINS OF ANY KIND SHALL BE WITHIN 25' UP OR SIDE GRADIENT OR 50' DOWN GRADIENT OF THE LEACHING SYSTEM.
12. 10' FROM LEACHING AREA NOT TO BE LOWER THAN ELEV.: 467.08.
13. COVER OVER SEPTIC TANK TO BE GRADED TO DIVERT SURFACE RUNOFF.
14. SYSTEM INSTALLATION TO BE SUPERVISED BY THE DESIGNER.
15. D-BOX TO HAVE TEES OR BAFFLE.
16. WASHING MACHINE LINT FILTER IS STRONGLY RECOMMENDED TO PREVENT PREMATURE FAILURE OF ELJEN SYSTEM.
17. PIPE FROM HOUSE TO SEPTIC TANK TO BE SLEEVED IN SCHEDULE 40 PVC SOLID PIPE.
18. SITE IS LOCATED WITHIN THE SCITUATE DRINKING WATER SUPPLY WATERSHED.
19. WETLAND DELINEATION BY: NATURAL RESOURCE SERVICES, INC.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

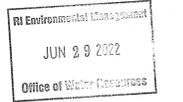
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

REVIEWED SITE PLAN APPLICATION #: 22-0293

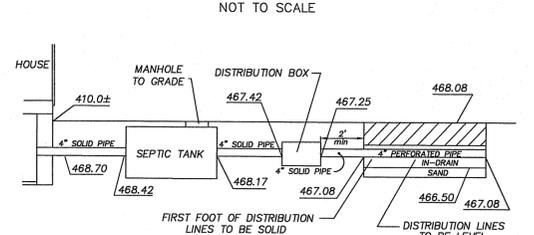
DATED: AUG 23 2022

SEE LETTER OF SAME DATE

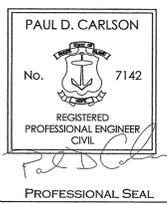
Nancy L. Freeman



SYSTEM PROFILE
NOT TO SCALE



ONSITE WASTEWATER TREATMENT SYSTEM DESIGN WETLANDS PLAN



A.P. 15 LOT 154 PARCEL A
HUNTING HOUSE ROAD, GLOCESTER, RI

PREPARED FOR: JEFFREY & KATHY HOWMAN
2 BROOK STREET, SMITHFIELD, RHODE ISLAND 02917

JOB # 20-073

SCALE: 1" = 20'

DRAWN BY: LMB

DATE: JUNE, 2022

REVISED:



501 Great Road, Unit 104
North Smithfield, Rhode Island
Phone: (401) 762-2870 Fax: (401) 762-2871
Web Address: InsiteEngineers.com

SHEET 1 OF 1