

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
OWTS & FRESHWATER WETLANDS
JOINT PERMIT APPROVAL

OWTS# 2022-1083 FWW# 20-0193

APPROVED BY: [Signature] DATE: 11/14/20

No Changes Allowed Without RIDEM Approval
Approved Plans/Permit Must Be kept at Construction Site

RA-ZONE

BLDG. SETBACKS:
FRONT = 50'
SIDES = 50'
REAR = 50'

HEIGHT = 35' (FROM AVG. GRADE)

PRINCIPAL MAX. COVERAGE : 3% (3,655 S.F.)
ALL STRUCTURES MAX. COVERAGE : 4% (4,073 S.F.)

GENERAL NOTES:

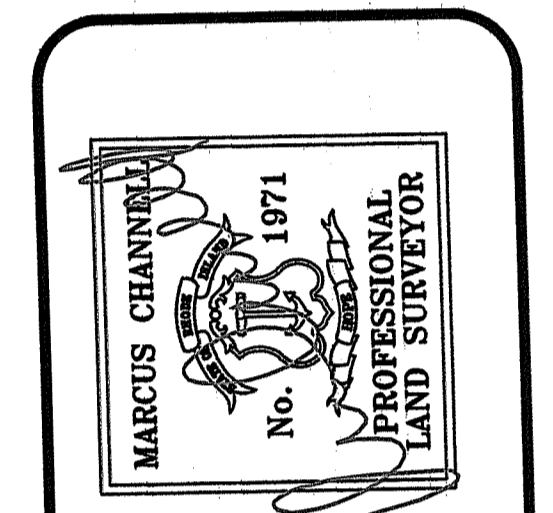
- THE PROPERTY "IS NOT" SUBJECT TO RHODE ISLAND COASTAL RESOURCES MANAGEMENT COUNCIL REVIEW.
- ALL PRIVATE AND PUBLIC DRINKING WATER LINES WITHIN 50 FEET OF THE PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) ARE SHOWN, UNLESS OTHERWISE NOTED ON SITE PLAN.
- THERE ARE NO PUBLIC SEWERS AVAILABLE TO THE PROPERTY WITHIN 200 FEET UNLESS NOTED ON SITE PLAN.
- ALL EXISTING AND PROPOSED PRIVATE DRINKING WATER WELLS, &/OR THERE RADII, ARE SHOWN WITHIN 200' OF THE PROPOSED OWTS COMPONENTS SHOWN ON THIS PLAN.
- ALL EXISTING AND PROPOSED WELLS SERVING NON-POTABLE USES WITHIN 100 FEET OF THE OWTS ARE SHOWN, UNLESS OTHERWISE NOTED ON THE SITE PLAN.
- ALL EXISTING AND PROPOSED PUBLIC DRINKING WATER WELLS WITHIN 500 FEET OF THE PROPOSED OWTS ARE SHOWN, UNLESS OTHERWISE NOTED ON THE SITE PLAN. THE CONSTRUCTION DETERMINATION OF SAID WELLS IS IDENTIFIED ON THE SITE PLAN, UNLESS OTHERWISE NOTED.
- ALL WATERCOURSES, WETLANDS, AND DRAINS WITHIN 200 FEET OF THE PROPOSED OWTS ARE SHOWN, UNLESS OTHERWISE NOTED ON SITE PLAN.
- ALL STORM AND SUBSURFACE DRAINS WITHIN 200 FEET OF THE PROPOSED OWTS ARE SHOWN, UNLESS OTHERWISE NOTED ON SITE PLAN. THE ULTIMATE DISCHARGE OF SAID DRAINS ARE IDENTIFIED ON THE SITE PLANS.
- THE OWTS "IS NOT" LOCATED WITHIN THE WATERSHED OF A PUBLIC WATER SUPPLY OR OTHER CRITICAL RESOURCE AREA.
- ALL EXISTING OWTS ON ADJACENT PROPERTIES WITHIN 200 FEET OF A PROPOSED WELL TO SERVICED THE SUBJECT PROPERTY ARE IDENTIFIED ON THE SITE PLAN, UNLESS OTHERWISE NOTED.
- THE SUBJECT PROPERTY IS NOT LOCATED WITHIN AN IDENTIFIED FLOOD ZONE.
- IF A PROPOSED WELL IS REQUIRED TO SERVICED THE WATER REQUIREMENTS FOR THE SUBJECT PROPERTY, SAID WELL "DOES NOT" REQUIRE A VARIANCE FROM RIDEM'S "RULES AND REGULATIONS GOVERNING THE ENFORCEMENT OF CHAPTER 46-13.2 RELATING TO THE DRILLING OF DRINKING WATER WELLS".
- OWTS DESIGN DATA:
 - 6 BEDROOM DESIGN - 115 GALLONS PER BEDROOM - TOTAL DESIGN FLOW = 690 GPD
 - BASED ON THE SOIL EVALUATION, THE MOST RESTRICTIVE SOIL DESIGN CATEGORY IS 7.
 - THE SOIL APPLICATION RATE = 2.1 GAL/50 FT/DAY
 - TOTAL REQUIRED LEACHING AREA = 328.57 SQUARE FEET
 - TOTAL PROVIDED LEACHING AREA = 351.00 SQUARE FEET
 - LEACHFIELD: 4 ROWS OF GEOMAT 3900 @ 27' LONG.
- OWTS GENERAL CONSTRUCTION NOTES:
 - ALL PIPING SHALL BE 4" PVC SCH 40 OR EQUIVALENT, UNLESS OTHERWISE NOTED
 - ALL PIPE SLOPES SHALL BE A MINIMUM OF 1% AND A MAXIMUM OF 5%, REFER TO THE PROFILE
 - THE SEPTIC TANK SHALL BE A CONCRETE TANK WITH THE CAPACITY AS STATED ON THE SITE PLAN
 - THE SEPTIC TANK INLET SHALL EXTEND 1' BELOW THE FLOW LINE AND THE OUTLET TEE SHALL EXTEND 1/3 THE DEPTH BELOW THE FLOW LINE.
 - THE SEPTIC TANK SHALL BE FITTED WITH TWO ACCESS MANHOLE RISERS NOT LESS THAN 20"
 - THE D-BOX, IF REQUIRED, SHALL HAVE A MINIMUM OF 3 SQUARE FEET OF BOTTOM AREA AND BE CAPABLE OF CARRYING A MINIMUM 300 PSF LOAD WITH MINIMAL SIDEWALL DEFLECTION.
 - LEACHFIELD STONE, IF USED, SHALL BE 3/4" TO 2" DOUBLE WASHED STONE, FREE OF ALL DEBRIS.
 - FEET DISTANCE FROM THE LEACHFIELD SHALL NOT BE LOWER THAN ELEVATION 100.92'. AT THE 10 SURFACE GRADES WITHIN 5 FEET OF THE LEACHFIELD SHALL BE A MINIMUM OF 3H:1V TO MATCH TO EXISTING GRADES.
 - THE LEACHFIELD AND THE AREA WITHIN 10 FEET FOR THE LEACHFIELD SHALL BE STRIPPED OF ALL TREES, BUSH, STUMPS AND BOLLERS. THE SIDES AND BOTTOM OF THE EXCAVATION SHALL NOT BE COMPACTED OR SHARED AND REFER TO THE SITE PLAN FOR LEACHFIELD STRIP REQUIREMENTS.
 - THE FINISH GRADE OVER THE SEPTIC TANK SHALL BE GRADED TO DIVERT SURFACE WATER RUNOFF AWAY FROM THE TANK.
 - IF A DRIVEWAY OR PAVEMENT IS TO BE LOCATED NEAR THE PROPOSED OWTS, A FENCE OR CURBING SHALL BE INSTALLED AROUND THE SYSTEM IN THE AREA OF THE PAVEMENT TO PREVENT VEHICULAR TRAFFIC FROM DRIVING ONTO THE SYSTEM.
 - CONTRACTOR TO OBSERVE & CONFIRM ALL EXISTING PLUMBING INSIDE THE DWELLING WILL BE TIED INTO THE PROPOSED SEPTIC TANK SHOWN ON THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY WHERE ALL EXISTING PLUMBING EXISTS THE BUILDING(S), SHOWN ON THIS PLAN, PRIOR TO INSTALLING ANY OWTS COMPONENTS. ALL EXISTING PLUMBING INSIDE THE BUILDING(S) SHOWN ON THIS PLAN, MAY BE REQUIRED AS PART OF THIS OWTS INSTALLATION.
- THIS PLAN CONFORMS TO A CLASS "III" PROPERTY LINE & A CLASS "III" TOPOGRAPHY AS ADOPTED BY THE RI BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS SURVEY IS NOT VALID FOR ANY OTHER PURPOSE, OTHER THAN SHOWN ON THIS PLAN, WITHOUT WRITTEN CONSENT.
- GENERAL OWNER NOTES:
 - FOOD/GARBAGE GRINDERS INSIDE DWELLING AND DISPOSAL OF GREASES, OILS, AND OR FATS ARE PROHIBITED.
 - VEHICLE PARKING OR TRAFFIC OVER THE OWTS COMPONENTS IS PROHIBITED.
 - BACKWASH WATER FROM A WATER TREATMENT SYSTEM WAS NOT TAKEN INTO CONSIDERATION WITH THE DESIGN OF THIS OWTS. WATER TREATMENT SYSTEM DISCHARGE TO THIS OWTS IS PROHIBITED.
 - THE SEPTIC TANK SHALL BE PUMPED WHEN DEEMED NECESSARY BY OPERATIONS & MAINTENANCE PERSONNEL OR LICENSED SEPTIC INSPECTOR.
- INSTALLER TO PROVIDE DESIGNER W/ ALL COPIES OF MATERIALS PURCHASED & USED ON INSTALLING THIS OWTS PRIOR TO ISSUANCE OF CERTIFICATE OF CONSTRUCTION.
- THERE ARE NO EXISTING OR PROPOSED SUBSURFACE DRAINS WITHIN 25' OF THE PROPOSED OWTS COMPONENTS SHOWN ON THIS PLAN.
- REFERENCE RIDEM SUBDIVISION APP.# 522-25 FOR MORE INFO.
- REFERENCE RIDEM WETLANDS P.D. APP.# 13-0200 FOR WETLAND LOG VERIFICATION. PER CONVERSATION W/ RIDEM WETLANDS DIVISION, VERIFIED EDGE HAS BEEN ELECTRONICALLY INSERTED INTO THIS DRAWING FROM REFERENCE #21.
- REFERENCE PLAN ENTITLED "FLEXIBLE DESIGN MASTER PLAN, THE PLAINS, LOT 59 ASSESSOR PLAT 9, NEW SHOREHAM, RI, OWNED BY WILLIAM MERKLER & SHANNON HADLON, 6/25/12, REVISED 11/12/13, 1"=80', HILBERN LAND SURVEYING."

ONSITE WASTEWATER TREATMENT SYSTEM NEW DESIGN

A.P. 9, LOT 58-2
PAYNE ROAD
NEW SHOREHAM, RHODE ISLAND

Prepared For:
ROD MITCHELL

OCT 27 2020



ATLAS LAND SURVEYING, LLC
PROPERTY & CONSTRUCTION SURVEYING & MAPPING

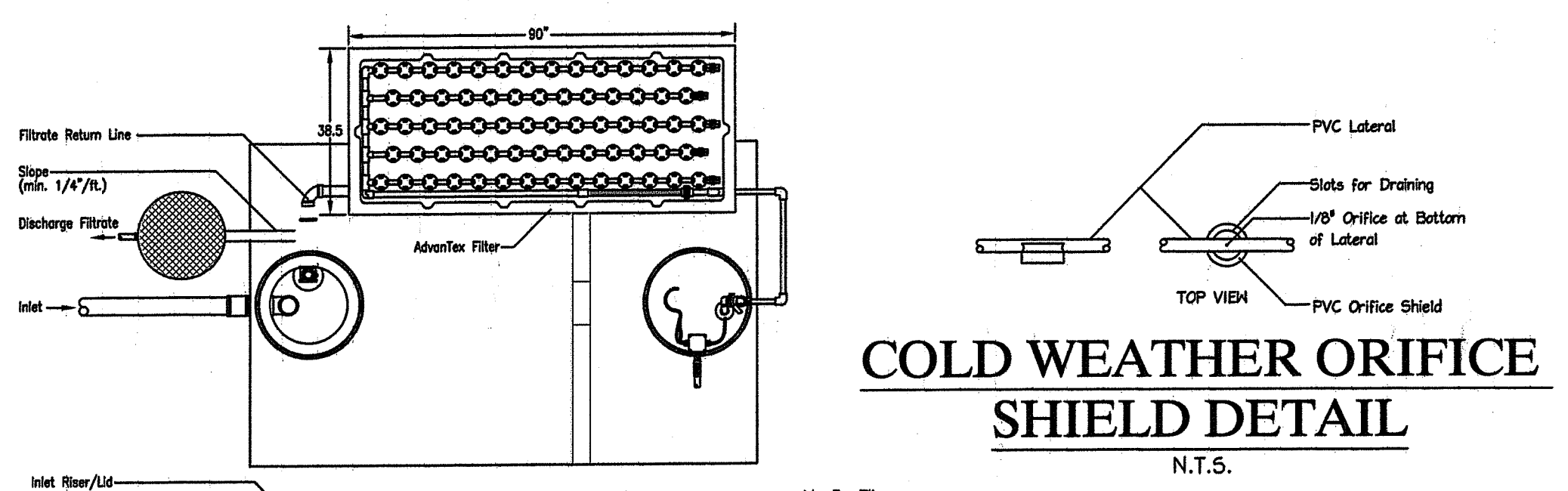
91 Parkway Drive ~ Warwick, RI 02886
401-737-4407
WWW.ATLASLANDSURVEYING.COM

REVISION: SEPT. 2020
OCT. 2020

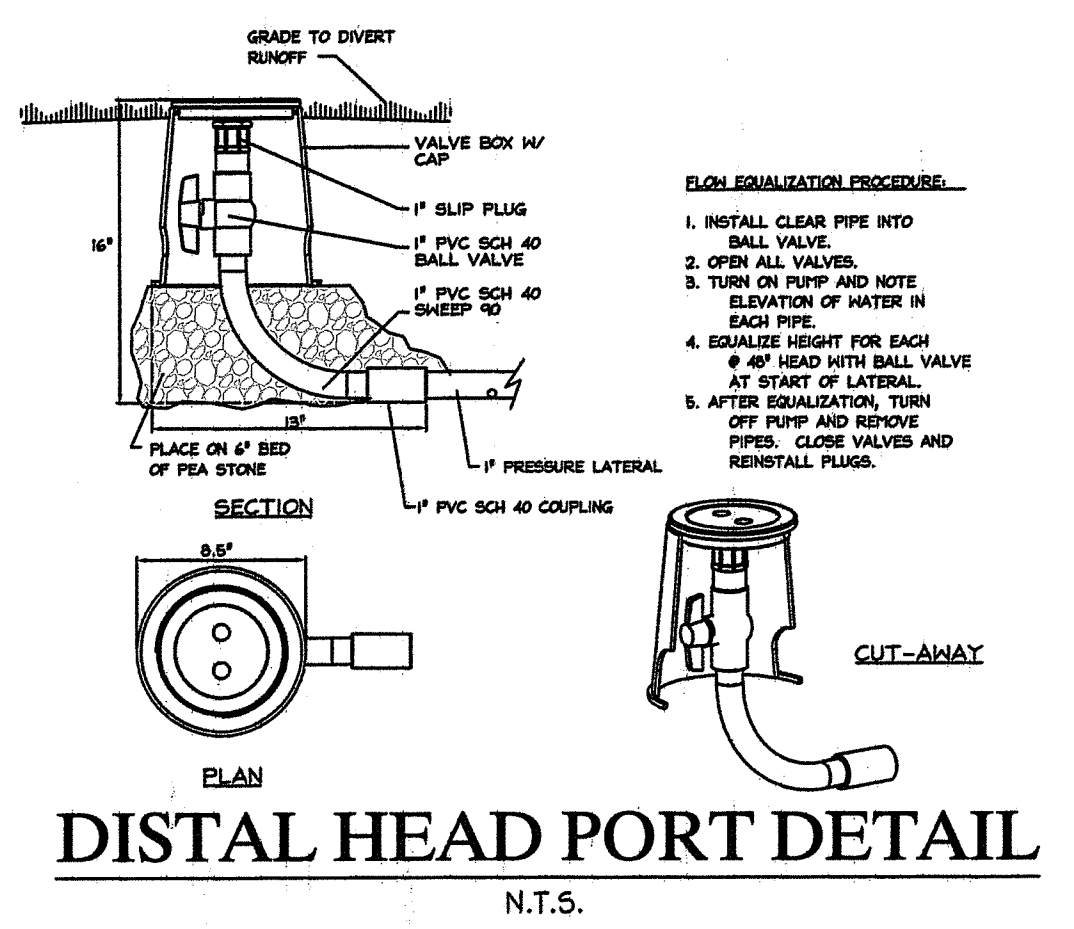
DATE: AUG. 2020
DRAWN BY: KRC
SCALE: 1" = 30'

SHEET
1
OF 1 SHEETS 2

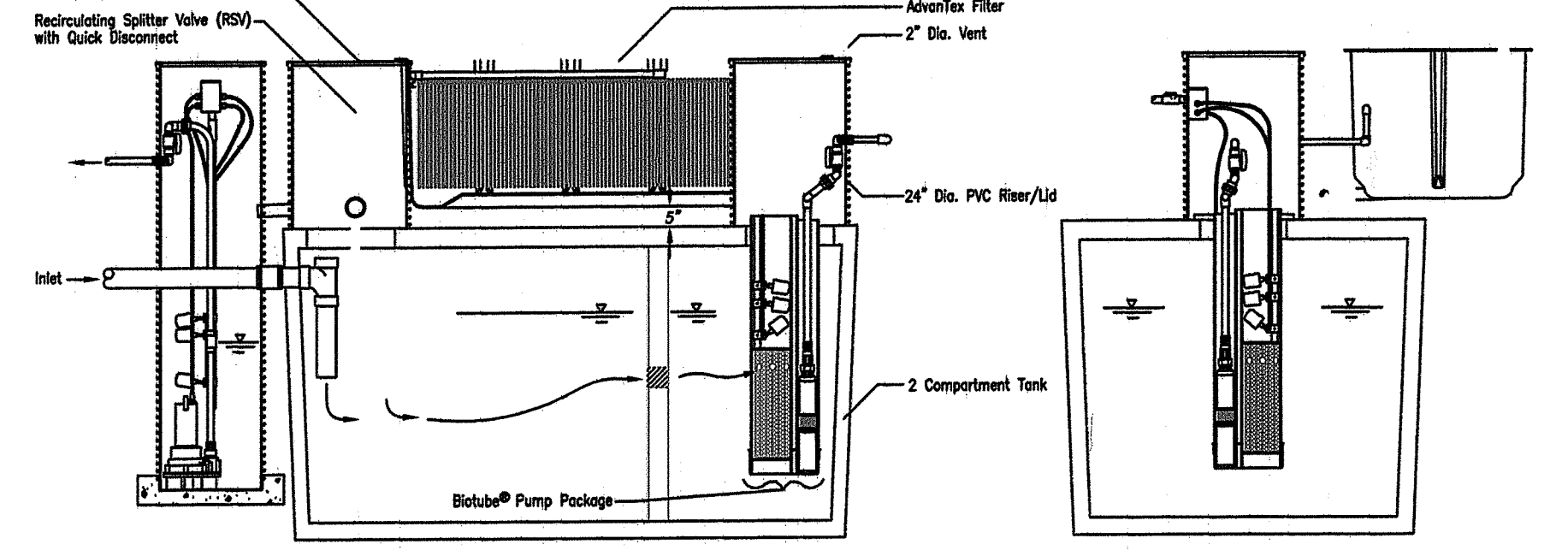
JOB NO. MITCHELL
DWG. NO. MITCHELL-OWTS



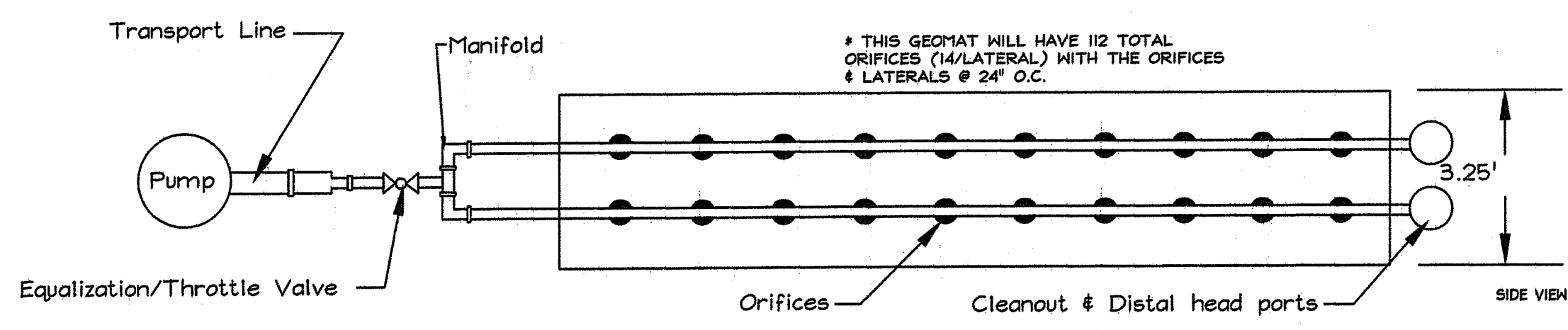
COLD WEATHER ORIFICE SHIELD DETAIL
N.T.S.



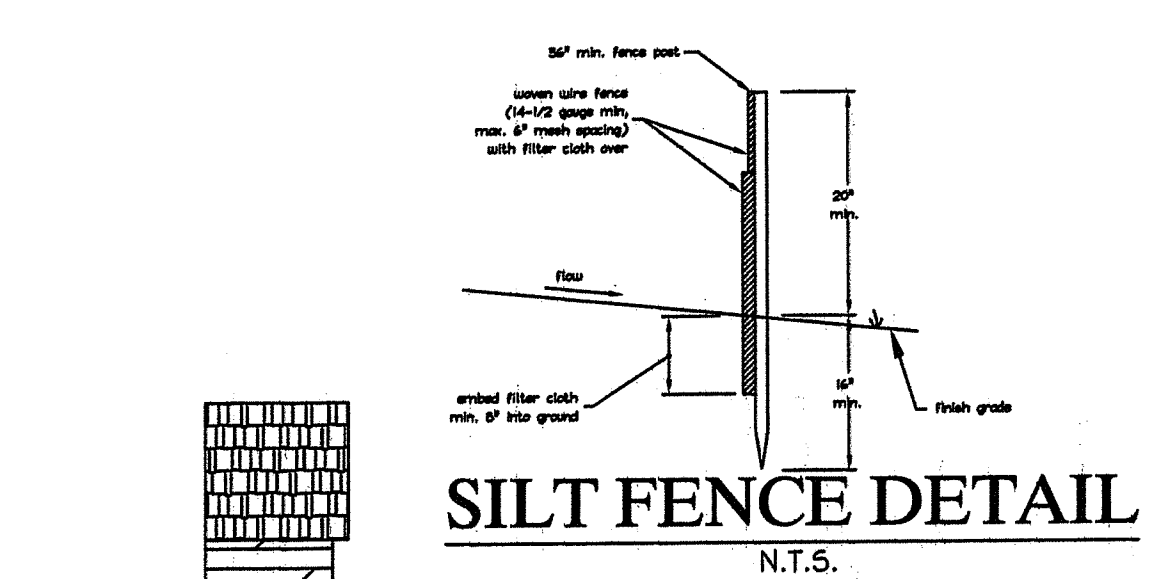
DISTAL HEAD PORT DETAIL
N.T.S.



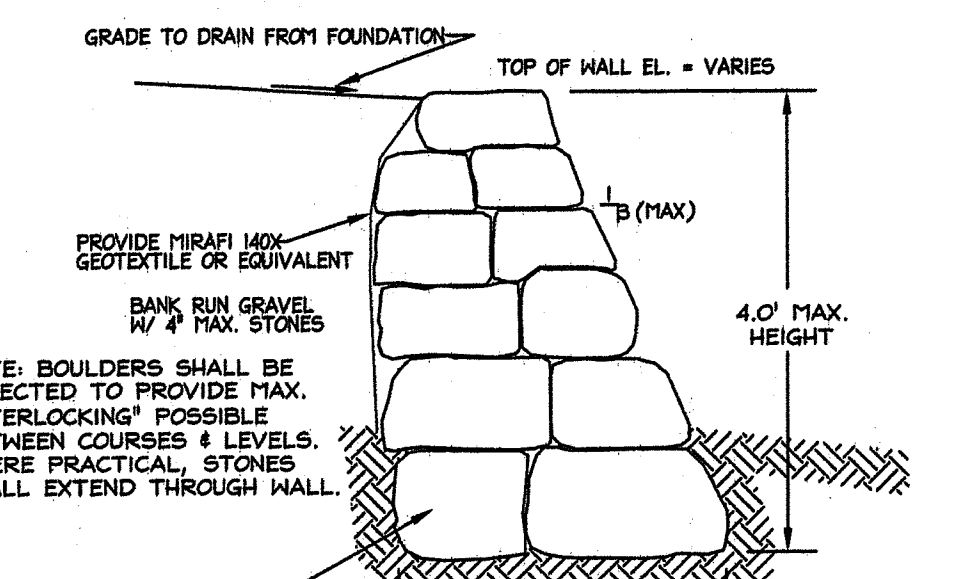
GEOMAT 3900 LEACHING SYSTEM CENTER FEED DESIGN DETAIL
N.T.S.



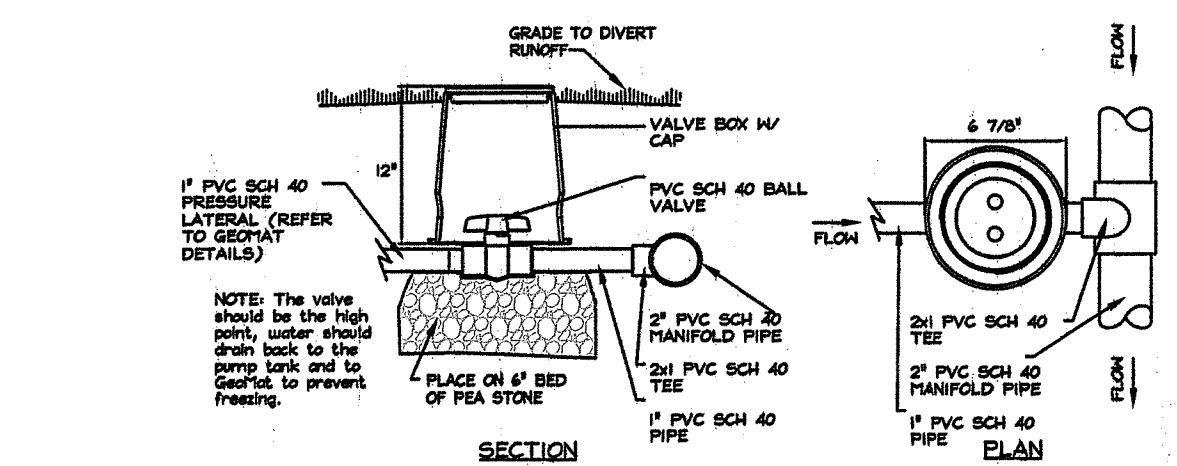
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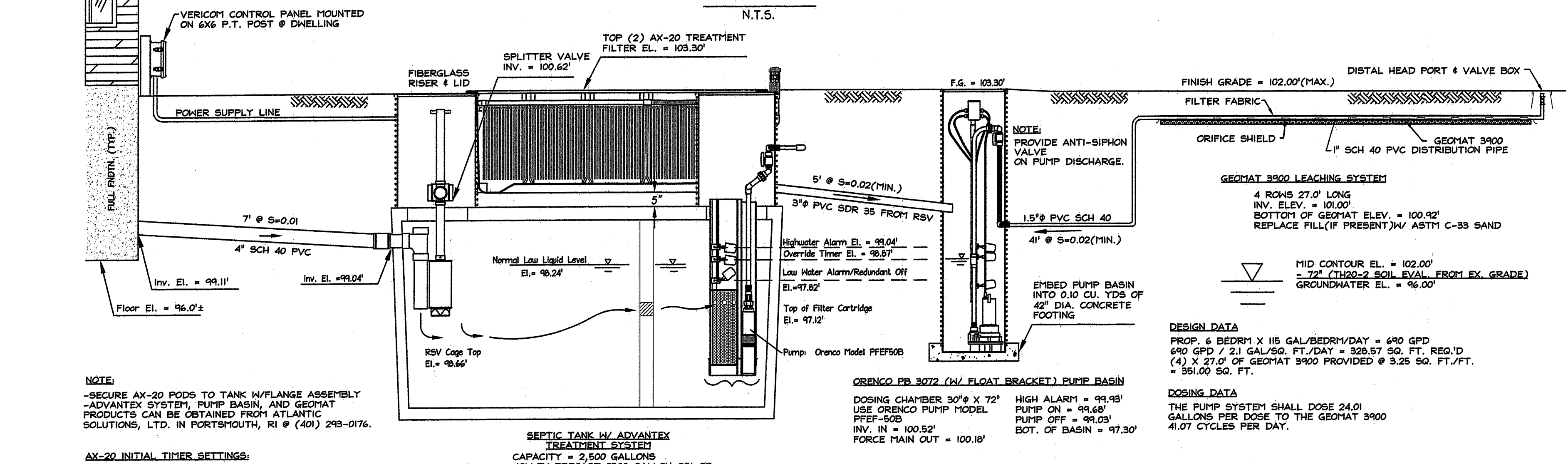
SILT FENCE DETAIL
N.T.S.



TYPICAL BOULDER WALL DETAIL
N.T.S.



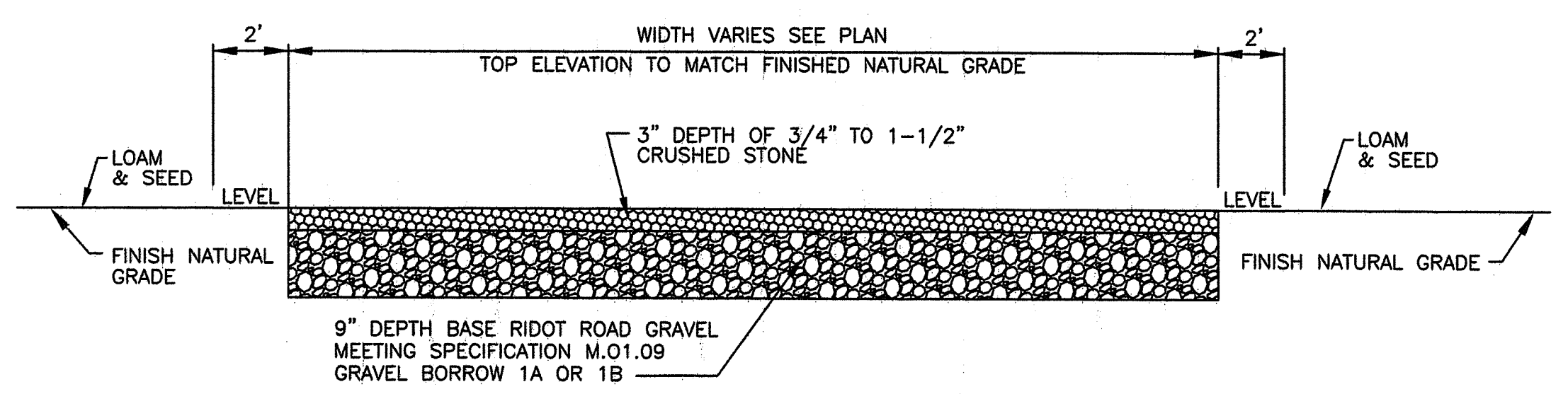
FLOW EQUALIZATION VALVE DETAIL
N.T.S.



TYPICAL PROFILE OF SYSTEM
N.T.S.

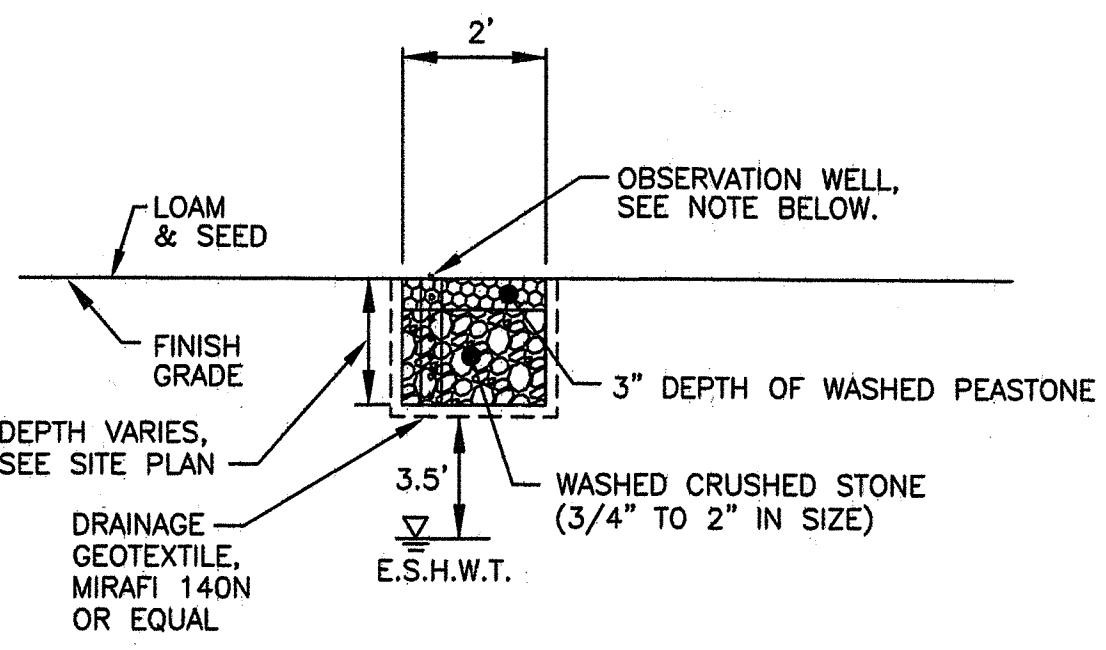
STORMWATER DESIGN & DETAILS BY:

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RHODE ISLAND 02908
401-273-6600



- NOTES:**
- ALL LOAM, SUBSOIL, FILL, TREE ROOTS ETC. BENEATH PROPOSED DRIVEWAY SHALL BE REMOVED & DISPOSED AND REPLACED WITH RIDOT ROAD GRAVEL.
 - ALL MATERIALS SHALL BE COMPACTED TO 95% MAXIMUM DENSITY.
 - EXISTING PAVEMENT EDGES SHALL BE SAW CUT (IF APPLICABLE).
 - THE SURFACE COARSE SIZE OF STONE CAN VARY TO CUSTOMER PREFERENCE, BUT THE SURFACE SHALL REMAIN HIGHLY PERVIOUS AND ALL STONE SHALL BE CRUSHED, WASHED AND VERY ANGULAR. STONE SHALL BE OF VARYING SIZES SO STONE DOES NOT 'ROLL'. STONE POROSITY SHALL BE 33% OR GREATER.

TYPICAL PERVIOUS DRIVEWAY SECTION
NOT TO SCALE



- NOTES:**
- AN OBSERVATION WELL SHALL BE INSTALLED IN EACH TRENCH, CONSISTING OF AN ANCHORED 4 INCH DIAMETER PERFORATED PVC PIPE WITH A SCREW TOP CAP INSTALLED FLUSH WITH FINISH GRADE.
 - BOTTOM OF TRENCH SHALL BE LOCATED IN ORIGINAL UNDISTURBED SOIL.
 - CARE MUST BE TAKEN TO PREVENT THE INFILTRATION AREA FROM COMPACTION BY MARKING OFF THE LOCATION BEFORE THE START OF CONSTRUCTION AT THE SITE AND CONSTRUCTING THE INFILTRATION TRENCH LAST.
 - BOTTOM OF TRENCHES SHALL BE LEVEL.

INFILTRATION TRENCH DETAIL
NOT TO SCALE

STORMWATER BMP MAINTENANCE NOTES:

- THE STORMWATER BMPs SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
- GENERAL:**
- PROPERTY OWNER SHALL MAINTAIN BMPs IN ACCORDANCE WITH THE 'STATE OF RHODE ISLAND STORMWATER MANAGEMENT GUIDANCE FOR INDIVIDUAL SINGLE FAMILY RESIDENTIAL LOT DEVELOPMENT GUIDELINES'.
 - VEHICLES OR OTHER HEAVY EQUIPMENT SHALL NOT BE PARKED ON TOP OF THE STORMWATER BMPs SINCE THIS WILL COMPACT THE SOILS AND REDUCE THE INFILTRATION CAPACITY OF THE SOILS.
- PERVIOUS DRIVEWAY:**
- CRUSHED STONE SHALL BE REPLACED OR RE-GRADING PERFORMED AS NECESSARY IN CRUSHED STONE DRIVEWAYS TO MAINTAIN A DESIGN DEPTHS AND A LEVEL SURFACE.
- INFILTRATION TRENCHES:**
- INFILTRATION TRENCHES SHALL BE INSPECTED ANNUALLY AND REPAIRED IF NECESSARY TO ENSURE PROPER DRAINAGE.
 - ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE SURFACE OF THE INFILTRATION TRENCH ANNUALLY.

STORMWATER BMP GENERAL NOTES:

- SPECIFICATIONS, DETAILS, INSTALLATION AND MAINTENANCE REQUIREMENTS TO GOVERN THIS PROJECT FOR STORMWATER BEST MANAGEMENT PRACTICES (BMPs) ARE THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, AS REVISED. THE MANUAL IS AVAILABLE FOR DOWNLOAD AT THE CRMC AND RIEM WEBSITES.
- ALL BMP AREAS SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES SO SOILS DON'T BECOME COMPACTED.
- ALL AREAS COMPACTED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO PROMOTE INFILTRATION BY TILLING THE TOP 12 INCHES OF SOIL PRIOR TO FINAL STABILIZATION.

ONSITE WASTEWATER TREATMENT SYSTEM NEW DESIGN
A.P. 9, LOT 58-2
PAYNE ROAD
NEW SHOREHAM, RHODE ISLAND 02886
Prepared For:
ROD MITCHELL

MARCUS CHANNING
No. 1971
PROFESSIONAL LAND SURVEYOR

ATLAS LAND SURVEYING, LLC
PROPERTY & CONSTRUCTION SURVEYING & MAPPING
91 Parkway Drive ~ Warwick, RI 02886
401-737-4407
WWW.ATLASLANDSURVEYING.COM

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SHEET
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OF 2 SHEETS 2

JOB NO. MITCHELL
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