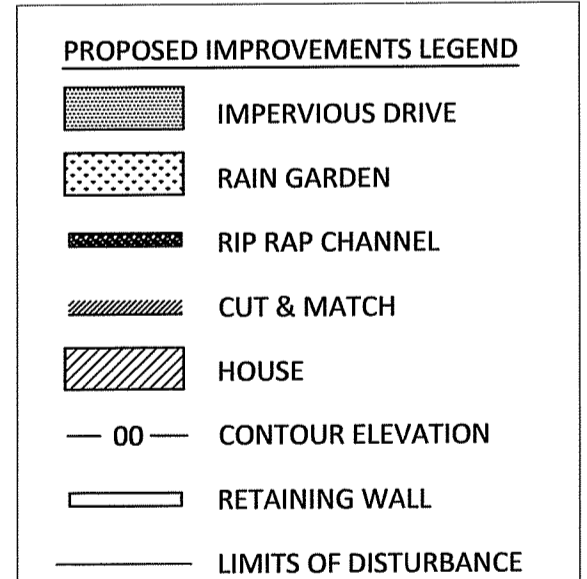
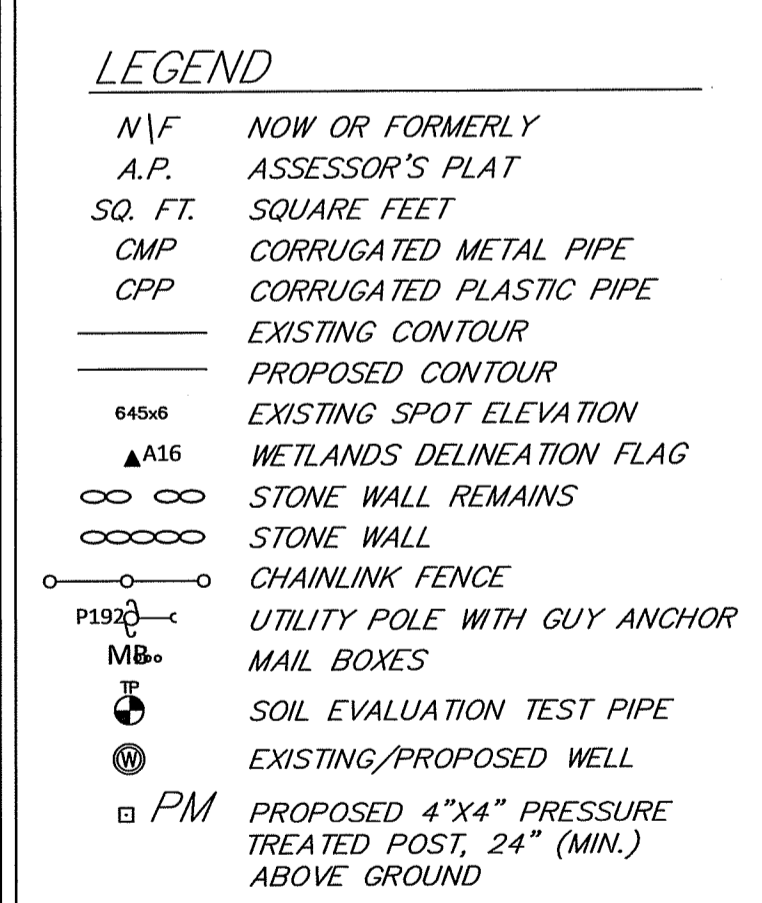


- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO PROVIDE AN OVERALL DEPICTION OF THE PROPOSED RESIDENTIAL SITE DEVELOPMENT OF ASSESSOR'S PLAT 35 LOT 48. PLEASE SEE SHEETS 2 THRU 6 FOR DESIGN DETAILS.
 - THE TOPOGRAPHY, ALL THE WETLANDS DELINEATION FLAGS, AND THE FEATURES ASSOCIATED WITH THE ROAD FRONTAGE OF THE SITE WERE LOCATED IN THE FIELD BY SCITUATE SURVEYS, INC. USING CONVENTIONAL (TOTAL STATION) SURVEY METHODS IN OCTOBER 2020. WITH THE EXCEPTION OF THE 45'± BETWEEN THE EXISTING CONCRETE HEADWALL AND WETLAND FLAG 433 THE LOCATION OF THE EXISTING INTERMITTENT STREAMS ARE APPROXIMATE AND WERE DERIVED DIGITALLY FROM GIS SOURCES.
 - THE HORIZONTAL DATUM IS ASSUMED. THE VERTICAL DATUM IS NAVD 88 AND WAS DERIVED FROM NATIONAL GEODETIC DISK D-25 LOCATED AT THE JUNCTION OF DANIELSON PIKE AND CHOPMIST HILL ROAD (ROUTE 102). THE REPORTED ELEVATION IS 654.8261.
 - EXISTING UTILITY LOCATIONS ARE APPROXIMATE ONLY. UTILITY INFORMATION IS NOT ACCURATE OR COMPLETE, AND IS SUBJECT TO SUCH REVISIONS AND CHANGES AS ADDITIONAL DATA MAY DISCLOSE. ANY PLANNED EXCAVATION MUST BE PRECEDED BY CONTACTING "DIG-SAFE" FOR ACCURATE LAYOUT OF EXISTING UTILITIES.
 - THE SITE LIES WITHIN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN). REFERENCE F.I.R.M. MAP NUMBER 44007C0260G DATED MARCH 2, 2009.
 - THE WETLANDS DELINEATION WAS CONDUCTED IN OCTOBER 2019 BY NATURAL RESOURCE SERVICES, INC. A COPY OF THIS REPORT IS INCLUDED WITH THIS APPLICATION.
 - THERE ARE NO EXISTING OR PROPOSED PUBLIC WATER SUPPLY SOURCES WITHIN 500' OF THE LOT OTHER THAN THOSE SHOWN ON PLAN.
 - THERE ARE NO EXISTING OR PROPOSED INDIVIDUAL WATER SUPPLIES WITHIN 200' OF THE PROPOSED ON-SITE WASTEWATER TREATMENT SYSTEM OTHER THAN THOSE SHOWN ON PLAN.
 - STRAW BALE EROSION CHECK (RI, STANDARD 9.1.0) SILT FENCE AND/OR SILT SOCK SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES AND SHALL BE MAINTAINED UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS.
 - ALL DISTURBED AREAS SHALL BE STABILIZED WITH 4" LOAM AND SEED OR SOD, PROPOSED SLOPES SHALL BE 3:1 (MAXIMUM).
 - ALL WORK SHALL BE PERFORMED IN STRICT CONFORMANCE WITH THE REQUIREMENTS OF THE R.I.D.E.M. WETLANDS PERMIT, O.W.T.S. PERMIT, AND IN COMPLIANCE WITH ALL TOWN REGULATIONS.
 - ALL IMPROVEMENTS SHALL BE ACCURATELY LOCATED AND STAKED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - ALL STAGES OF CONSTRUCTION OF THE ON-SITE WASTEWATER TREATMENT SYSTEM MUST BE SUPERVISED BY THE SYSTEM DESIGNER.
 - THE SITE IS WITHIN THE SCITUATE RESERVOIR WATERSHED CRITICAL RESOURCE AREA.
 - EXCEPT WHERE SHOWN THE ENTIRETY OF THE SITE IS WOODED.
 - NO WORK IS ALLOWED WITHIN STATE REGULATED WETLANDS EXCEPT AS SPECIFICALLY SHOWN.
 - REFER TO SOIL EVALUATION APPLICATION #0130-1524 & 1525 DATED JULY 19, 2001 FOR WATER TABLE DATA. AN AFFIDAVIT OF CONTINUING VALIDITY HAS BEEN SUBMITTED WITH THIS APPLICATION.
 - PRIOR TO COMMENCEMENT OF ANY SITE ALTERATIONS, PERMANENT BUFFER ZONE MARKERS MUST BE INSTALLED ALONG THE LIMIT OF DISTURBANCE AT THE LOCATIONS INDICATED AS "PM" ON THE APPROVED SITE PLANS, IN ORDER TO PROVIDE PERMANENT REFERENCE POINTS ON SITE THAT ARE CLEAR TO PRESENT AND FUTURE PROPERTY OWNERS. A PERMANENT-TYPE TAG OR SIGN LABELED "TRIDEM BUFFER ZONE" MUST BE PLACED ON EACH MARKER. NO ALTERATIONS OF ANY KIND ARE PERMITTED BEYOND THESE MARKERS WITHOUT FIRST OBTAINING THE NECESSARY PERMIT FROM R.I.D.E.M.
 - THERE ARE NO EXISTING OR PROPOSED SEWAGE DISPOSAL SYSTEMS WITHIN 25' OF THE PROPOSED WATER SUPPLY LINE OTHER THAN THOSE SHOWN ON PLAN.
 - A DIMENSIONAL VARIANCE PROVIDING FOR A 20' FRONT BUILDING SETBACK WAS GRANTED BY THE TOWN OF SCITUATE ZONING BOARD OF REVIEW. REFERENCE ZONING BOARD MEMORANDUM OF DECISION CASE #1294 DATED 5/5/21 AND RECORDED IN THE LAND EVIDENCE RECORDS IN BOOK 801 AT PAGE 241.



- RIDOT PHYSICAL ALTERATION PERMIT (PAP) NOTES:**
- ALL UTILITY WORK MUST BE APPLIED FOR UNDER A SEPARATE UTILITY PERMIT FROM RIDOT.
 - THE RIDOT PAP IS NOT A SUBSTITUTE FOR THE RIDOT UTILITY PERMIT.
 - ALL WORK WITHIN THE STATE'S RIGHT-OF-WAY WILL CONFORM TO RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION AMENDED MARCH 2018, WITH ALL REVISIONS AND RI STANDARD DETAILS, 1998 EDITION AMENDED JUNE 2019 WITH ALL REVISIONS.
 - ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009, INCLUDING ALL REVISIONS.

OWTS DESIGNER & STORMWATER ENGINEER

WEL Walker Engineering, Ltd.

31 Vale Court
West Greenwich, RI 02817
Phone / Fax (401) 397-8745
Email: wel31.pw@gmail.com

PATRICIA K. WALKER

No. 5331

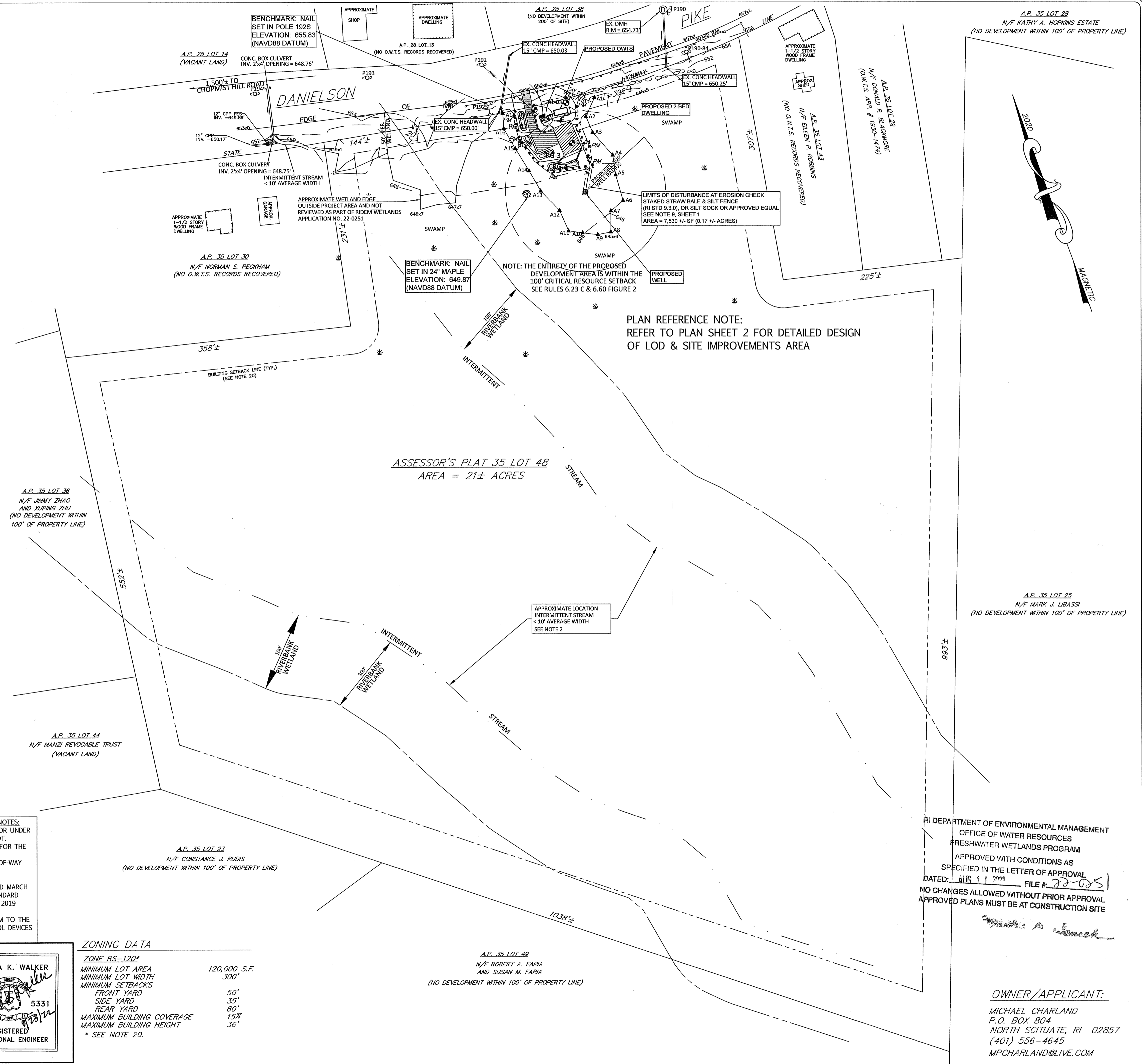
REGISTERED PROFESSIONAL ENGINEER

ZONING DATA

ZONE RS-120*

MINIMUM LOT AREA	120,000 S.F.
MINIMUM LOT WIDTH	300'
MINIMUM SETBACKS	
FRONT YARD	50'
SIDE YARD	35'
REAR YARD	60'
MAXIMUM BUILDING COVERAGE	15%
MAXIMUM BUILDING HEIGHT	36'

* SEE NOTE 20.



PLAN REFERENCE NOTE:
REFER TO PLAN SHEET 2 FOR DETAILED DESIGN OF LOD & SITE IMPROVEMENTS AREA

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL

DATE: AUG 11 2022 FILE #: 72-051

NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

OWNER/APPLICANT:

MICHAEL CHARLAND
P.O. BOX 804
NORTH SCITUATE, RI 02857
(401) 556-4645
MPCHARLAND@LIVE.COM

SCITUATE SURVEYS, INC.

410 TILOQUE AVENUE
COVENTRY, RHODE ISLAND 02816
401-821-8101

LAND SURVEYING/MAPPING/SITE PLANNING

SCALE IN FEET: 0 30 60 90 120

PROFESSIONAL SURVEYOR

ANGEO M. RAHONDI
No. 1762

PROFESSIONAL LAND SURVEYOR

STATE OF RHODE ISLAND

PLAN SHOWING PROPOSED IMPROVEMENTS TO AND ON-SITE WASTEWATER TREATMENT SYSTEM ON LAND OF

MICHAEL CHARLAND
ASSESSOR'S PLAT 35 LOT 48

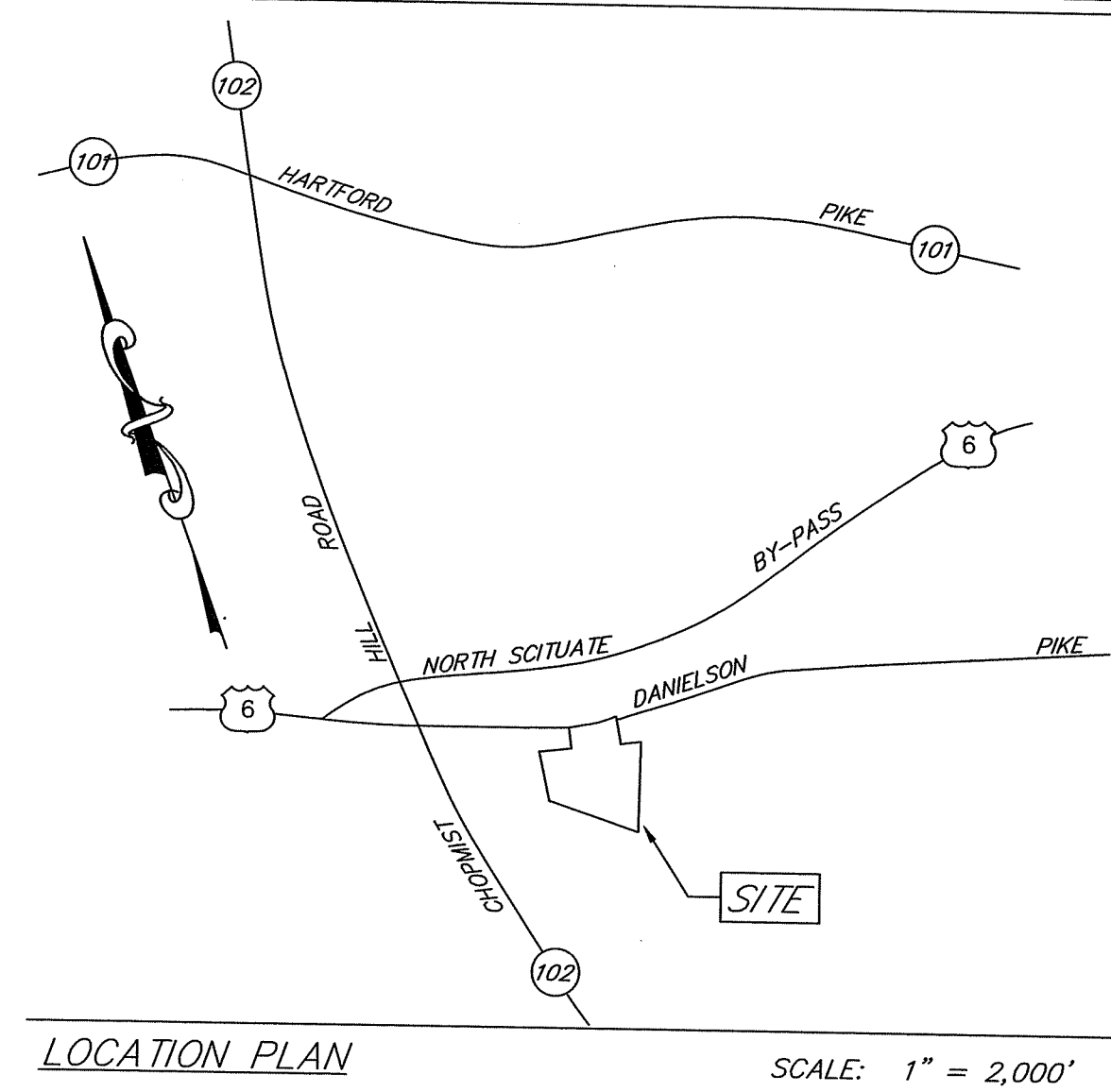
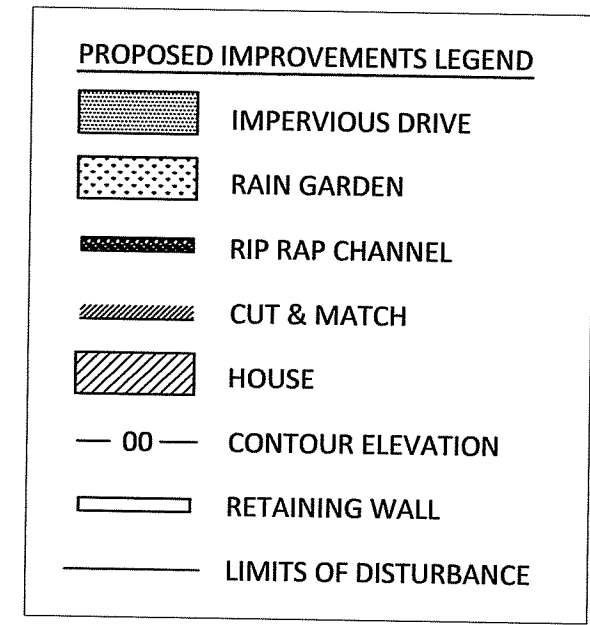
DANIELSON PIKE
SCITUATE, RHODE ISLAND

DATE: JANUARY 11, 2022 REVISION: SEPT 23, 2022

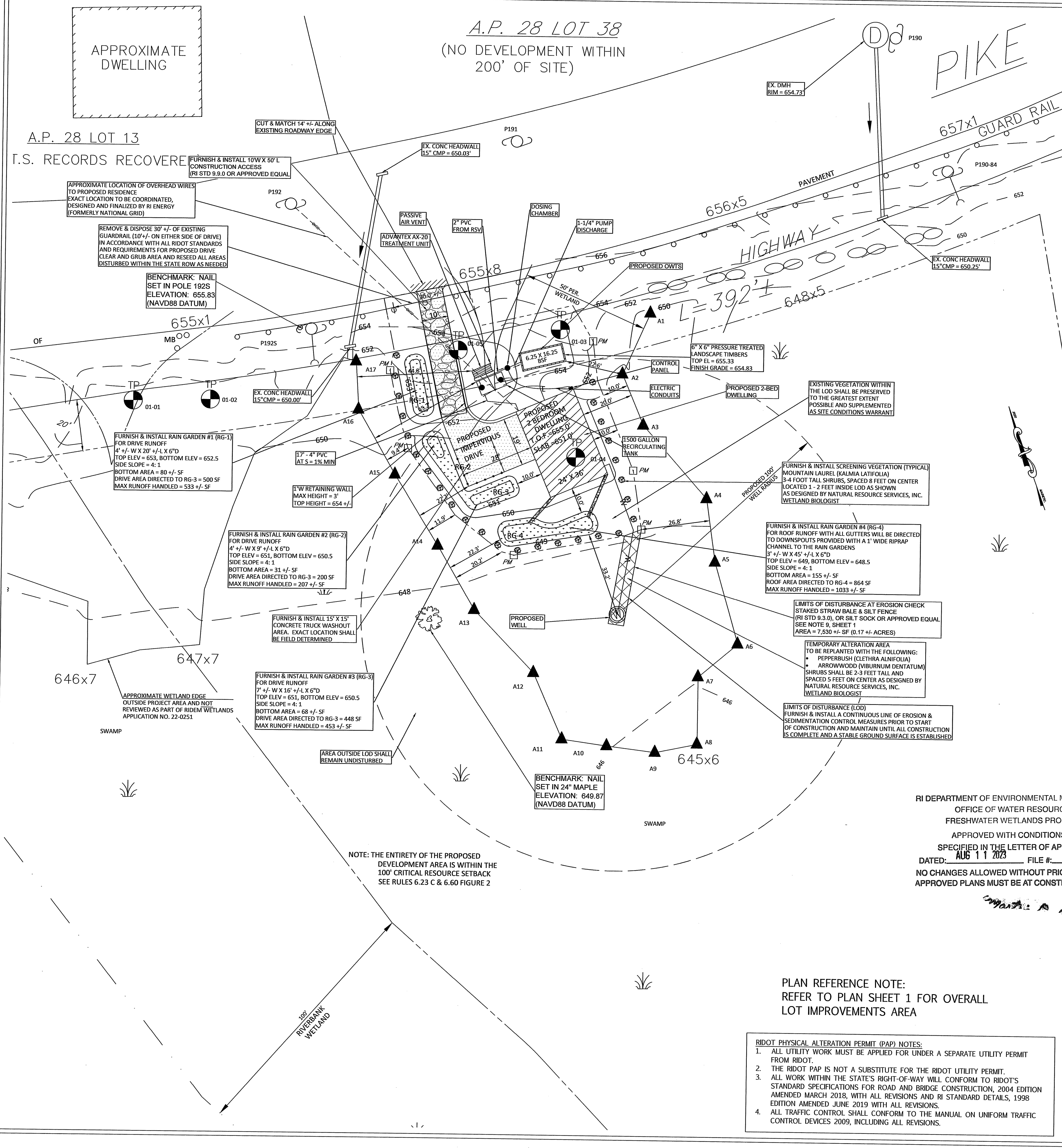
SCALE: 1"=60'

PROJECT NO.: SS1763.01 SHEET 1 OF 6
DRAWING NO.: SS4912-1

A.P. 28 LOT 38
(NO DEVELOPMENT WITHIN
200' OF SITE)



SCITUATE SURVEYS, INC.
410 TIOGUE AVENUE
COVENTRY, RHODE ISLAND 02816
401-821-8101
LAND SURVEYING/MAPPING/SITE PLANNING

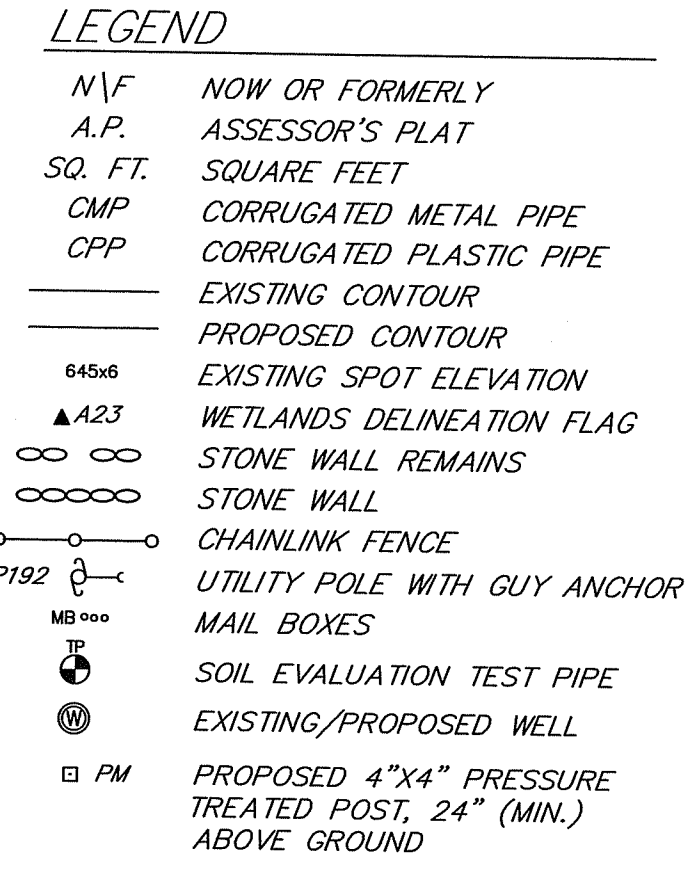


DESIGN AND CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT RULES AND REGULATIONS, AS AMENDED.
2. THE TOP OF FOUNDATION ELEVATION SHOWN HAS BEEN DESIGNED FOR O.W.T.S. PURPOSES ONLY. THE OWNER AND/OR CONTRACTOR IS ADVISED TO DETERMINE WHETHER THE BASEMENT FLOOR OF THE PROPOSED DWELLING IS AT OR BELOW THE GROUND WATER TABLE AND, IF SO, RAISE THE FOUNDATION ACCORDINGLY.
3. THE CONTRACTOR SHALL NOTIFY THE DESIGNER OF ANY PROPOSED DEVIATIONS FROM THIS SITE PLAN. THE DESIGNER MUST PERFORM ALL NECESSARY INSPECTIONS, BOTH DURING AND AFTER INSTALLATION, BEFORE ANY COMPONENT OF THE SYSTEM IS COVERED.
4. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN COMPILED FROM MAPS, DEEDS, AND OTHER SOURCES OF INFORMATION, AND ARE SUBJECT TO SUCH MODIFICATIONS AS AN ACTUAL BOUNDARY SURVEY MAY DISCLOSE. TO THE EXTENT THAT SUCH BOUNDARIES ARE CRITICAL TO THE O.W.T.S. LOCATION, THEY MUST BE ESTABLISHED PRIOR TO CONSTRUCTION.
5. A MINIMUM BUFFER OF 10' SHOULD BE MAINTAINED BETWEEN THE BOTTOMLESS SAND FILTER AND NEIGHBORING TREES AND SHRUBS. IF THE BUFFER CANNOT BE MAINTAINED THEN A ROOT BARRIER FABRIC SHALL BE PLACED BETWEEN THE TREES/SHRUBS AND THE SAND FILTER.
6. THE EXCAVATION SHALL BE LEVEL AND SCARIFIED.
7. ALL TOPSOIL AND SUBSOIL WITHIN A 5' PERIMETER OF THE SYSTEM SHALL BE STRIPPED AND BACKFILLED WITH FILTER SAND. EXCAVATION INTO IMPERVIOUS MATERIAL IS PROHIBITED UNLESS OTHERWISE APPROVED BY THE DIRECTOR.
8. MAINTAIN TRENCH INVERT ELEVATION FOR 5' BEYOND THE PERIMETER OF THE LEACHING FIELD. THE ADJACENT SIDE SLOPE SHALL NOT BE STEEPER THAN 3:1 FOR A 25' MIN. DISTANCE FROM THE EDGE OF LEACH FIELD. MAINTAIN 5' TO PROPERTY LINE FROM TOE OF 3:1 SIDE SLOPE.
9. INSTALL CAST IRON PIPE OR EQUIVALENT FROM THE FOUNDATION TO THE SEPTIC TANK. ALL OTHER PIPES MUST BE SDR 35 P.V.C. OR EQUIVALENT. ALL PIPING SHALL BE INSTALLED AT CONTINUOUS SLOPE WITH NO SACS OR HIGH POINTS. ALL MANHOLES TO GRADE SHALL HAVE GASKETED WATER-TIGHT COVERS AND THE SURFACE SHALL BE GRADED TO DRAIN AWAY FROM THE MANHOLES.
10. SUBSURFACE DRAINS AND WATER SUPPLY LINE TO BE INSTALLED IN CONFORMANCE WITH DISTANCES SPECIFIED IN TABLE 6.23 (B).
11. ALL KNOWN EXISTING AND PROPOSED PUBLIC WATER SUPPLY WELLS WITHIN 200' OF THE SYSTEM ARE SHOWN; ALL KNOWN EXISTING AND PROPOSED PRIVATE WELLS WITHIN 200' OF THE SYSTEM ARE SHOWN; ALL KNOWN SYSTEMS WITHIN 100' OF THE WELL ARE SHOWN.
12. ALL WORK MUST CONFORM TO THE REQUIREMENTS OF OTHER EXISTING PERMITS, IF ANY.
13. WITH RESPECT TO MUNICIPAL ZONING REQUIREMENTS, THE DESIGNER HAS MADE A REASONABLE EFFORT TO ASCERTAIN THE APPLICABLE DIMENSIONAL SETBACKS AND OTHER CONSTRAINTS TO DEVELOPMENT. DUE, HOWEVER, TO THE POSSIBILITY OF UNRECORDED VARIANCES, NON-COMFORMING USES, AND OTHER RELEVANT DOCUMENTS, IT REMAINS THE RESPONSIBILITY OF THE OWNER TO VERIFY THAT THIS DESIGN SATISFIES LOCAL CODES.
14. ALL STAGES OF CONSTRUCTION MUST BE SUPERVISED BY THE DESIGNER OF RECORD. UNLESS WAIVED BY THE DESIGNER, ALL IMPROVEMENTS MUST BE STAKED BY THE DESIGNER OR HIS AGENTS PRIOR TO CONSTRUCTION. THESE INCLUDE THE G.W.T.S., FOUNDATION, WELL, EROSION CONTROLS, CLEARING LIMITS AND ANY OTHER FEATURES DEEMED CRITICAL TO THE DESIGN.

GROUND WATER & LEDGE DEPTH TABLE

TEST PIT	GROUNDWATER DEPTH	EXISTING GROUND	GROUNDWATER ELEVATION	LEDGE DEPTH	LEDGE ELEVATION
01-01	1.5'	650.8'	649.3'	10.0'	640.8'
01-02	1.5'	650.4'	648.9'	10.0'	640.4'
01-03	1.5'	653.0'	651.5'	10.0'	643.0'
01-04	1.5'	649.2'	647.7'	10.0'	639.2'
01-05	1.5'	653.0'	651.5'	10.0'	643.0'



ZONING DATA

ZONE RS-120*

MINIMUM LOT AREA	120,000 S.F.
MINIMUM LOT WIDTH	300'
MINIMUM SETBACKS	
FRONT YARD	50'
SIDE YARD	35'
REAR YARD	60'
MAXIMUM BUILDING COVERAGE	15%
MAXIMUM BUILDING HEIGHT	36'

* SEE NOTE 20 SHEET 1

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: **AUG 11 2023** FILE #: **22-005**

NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PLAN REFERENCE NOTE:
REFER TO PLAN SHEET 1 FOR OVERALL LOT IMPROVEMENTS AREA

RIDOT PHYSICAL ALTERATION PERMIT (PAP) NOTES:

1. ALL UTILITY WORK MUST BE APPLIED FOR UNDER A SEPARATE UTILITY PERMIT FROM RIDOT.
2. THE RIDOT PAP IS NOT A SUBSTITUTE FOR THE RIDOT UTILITY PERMIT.
3. ALL WORK WITHIN THE STATE'S RIGHT-OF-WAY WILL CONFORM TO RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION AMENDED MARCH 2019, WITH ALL REVISIONS AND RI STANDARD DETAILS, 1998 EDITION AMENDED JUNE 2019 WITH ALL REVISIONS.
4. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009, INCLUDING ALL REVISIONS.

OWTS DESIGNER & STORMWATER ENGINEER

WEL Walker Engineering, Ltd.

31 Vale Court West Greenwich, RI 02817 Phone / Fax (401) 397-8745 Email: wel31.pw@gmail.com

PATRICIA K. WALKER

No. 5331

REGISTERED PROFESSIONAL ENGINEER

ANGELO M. RAIMONDI
PROFESSIONAL LAND SURVEYOR
No. 1762

SCITUATE SURVEYS, INC. HAS THE HONOR OF BEING A MEMBER OF THE R.I. SOCIETY OF PROFESSIONAL LAND SURVEYORS SINCE 1985. THE SOCIETY OF PROFESSIONAL LAND SURVEYORS IS A MEMBER OF THE NATIONAL SOCIETY OF PROFESSIONAL LAND SURVEYORS SINCE 1995.

ANGELO M. RAIMONDI
PROFESSIONAL LAND SURVEYOR
No. 1762

DETAILED PLAN SHOWING PROPOSED IMPROVEMENTS TO LAND-ON-SITE WASTEWATER TREATMENT SYSTEM

ON LAND OF
MICHAEL CHARLAND
ASSESSOR'S PLAT 35 LOT 48
DANIELSON PIKE
SCITUATE, RHODE ISLAND

RI Environmental Management
JAN 11 2023
Office of Water Resources

OWNER/APPLICANT
MICHAEL CHARLAND
P.O. BOX 804
NORTH SCITUATE, R.I. 02857
401-556-4645
MPCHARLAND@LIVE.COM

ORDER OF PROCEDURE

- 1. PRIOR TO COMMENCING OPERATIONS, THE APPROVED LIMITS OF DISTURBANCE (VEGETATIVE CLEARING AND SOIL DISTURBANCE) SHALL BE LOCATED AND FLAGGED IN THE FIELD BY THE PROJECT SURVEYOR. SAID FLAGGING SHALL BE TEMPORARY, HIGH-VISIBILITY MARKINGS.
2. PRIOR TO COMMENCING OPERATIONS, EROSION CONTROLS SHALL BE PLACED SO AS TO PREVENT SEDIMENT FROM ENTERING EXISTING AND PROPOSED DRAINAGE SYSTEMS AND WETLAND AREAS.
3. ALL SEDIMENTATION BARRIERS SHALL BE PROPERLY INSTALLED, AS APPLICABLE AND AS SHOWN ON THE PLANS AND AS MAY BE REQUIRED IN THE FIELD.
4. A CONTINUOUS SEDIMENTATION BARRIER SHALL BE INSTALLED WITHIN THE APPROVED LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS PRIOR TO ANY SITE GRADING OR SOIL DISTURBANCE ACTIVITIES.
5. PRIOR TO GENERAL BUILDING CONSTRUCTION, TEMPORARY SEDIMENTATION BASINS SHALL BE CONSTRUCTED AS MAY BE REQUIRED TO RECEIVE AND CONTAIN CONSTRUCTION STORMWATER RUNOFF. SAID SEDIMENTATION BASINS SHALL BE CONSTRUCTED OUTSIDE OF ANY WETLAND OR ASSOCIATED PERIMETERS AS SITE CONDITIONS WARRANT.
6. ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE PERIODICALLY MAINTAINED AS PER THE RESPECTIVE PROGRAMS DURING THE CONSTRUCTION.
7. DURING CONSTRUCTION PHASE, SITE STABILIZATION ACTIVITIES INCLUDING SEEDING AND EROSION & SEDIMENTATION CONTROL REPLACEMENT SHALL BE INITIATED ON SEPTEMBER 1 OF THE YEAR IN PREPARATION FOR SITE OVER WINTER PERIOD.
8. IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROLS.
9. ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE PERIODICALLY MAINTAINED AS PER THE RESPECTIVE PROGRAMS DURING THE CONSTRUCTION.
10. TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND SANDBAGS ALONG AND AT THE ENDS OF THE ROADWAY MAY ALSO BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.
11. TEMPORARY EROSION AND SEDIMENTATION CONTROLS AT THE DRAINAGE STRUCTURES MUST REMAIN UNTIL SUCH TIME THAT A DESIRABLE STAND OF GRASS OR GROUND COVER HAS BEEN ESTABLISHED AND THE PROJECT RECEIVES A FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER.

PHASING AND GENERAL CONSTRUCTION SEQUENCE

IN ORDER TO FURTHER MINIMIZE SEDIMENT LOSS ON THE SITE, A GENERAL CONSTRUCTION SEQUENCE PLAN HAS BEEN DEVELOPED.

- 1. PRIOR TO CONDUCTING WORK ASSOCIATED WITH THIS PROJECT, THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL COPIES OF PERMIT APPLICATIONS AND APPROVALS THAT OUTLINE CONDITIONS GOVERNING THE PROPOSED WORK. THE CONTRACTOR WILL ALSO REVIEW THE DRAWINGS PREPARED FOR THE PROJECT.
2. THE CONTRACTOR WILL PLACE ALL EROSION AND SEDIMENTATION CONTROL SYSTEMS IN ACCORDANCE WITH THE DRAWINGS, OR AS MAY BE DICTATED BY SITE CONDITIONS, IN ORDER TO MAINTAIN THE INTENT OF THE SPECIFICATIONS AND PERMITS. DEFICIENCIES OR CHANGES ON THE DRAWINGS SHALL BE CORRECTED OR IMPLEMENTED AS SITE CONDITIONS CHANGE. CHANGES DURING CONSTRUCTION SHALL BE NOTED AND POSTED ON THE DRAWINGS (SITE PLANS).
3. THE INTENT IS TO DIRECT ALL WATER FROM DISTURBED AREAS THROUGH A SEDIMENTATION CONTROL PRIOR TO DISCHARGING TO RECEIVING DRAINAGE AREAS OR TO OFF-SITE WETLANDS. THERE SHALL BE NO DISCHARGE OF UNTREATED CONSTRUCTION RUNOFF FROM THIS SITE. THE CONTRACTOR SHALL CREATE SUFFICIENT HOLDING CAPACITY WITHIN THE TEMPORARY SEDIMENTATION BASINS TO HOLD ALL UNTREATED SITE RUNOFF.
4. THE CONTRACTOR SHALL MAINTAIN TEMPORARY EROSION AND SEDIMENTATION CONTROL SYSTEMS AS DICTATED BY SITE CONDITIONS, INDICATED IN THE CONSTRUCTION DOCUMENTS, OR AS DIRECTED BY GOVERNING AUTHORITIES OR OWNER TO CONTROL SEDIMENT UNTIL FINAL STABILIZATION.
5. THE CONTRACTOR SHALL RESPOND TO ANY MAINTENANCE OR ADDITIONAL WORK ORDERED BY OWNER OR GOVERNING AUTHORITIES IMMEDIATELY IF REQUIRED, AND ALWAYS WITHIN 7 DAYS.
6. THE CONTRACTOR SHALL INCORPORATE PERMANENT EROSION CONTROL FEATURES, PERMANENT SLOPE STABILIZATION, AND VEGETATION INTO THE PROJECT PLANS AT THE EARLIEST PRACTICAL TIME TO MINIMIZE THE NEED FOR TEMPORARY CONTROLS.
7. THE CONTRACTOR SHALL STABILIZE ALL DISTURBED AREAS WITHIN 7 CALENDAR DAYS. IN THE EVENT THAT IT IS NOT PRACTICAL TO SEED AREAS, SLOPES MUST BE STABILIZED WITH GEOTEXTILE FABRIC OR OTHER MEANS TO REDUCE THE EROSION POTENTIAL OF THE AREA.

TREATMENT OF EXISTING CONDITIONS

- 1. EXISTING VEGETATION SHALL BE PRESERVED TO THE GREATEST EXTENT POSSIBLE ALONG THE PERIMETER OF THE PROPERTY AND WITHIN THE LIMITS OF DISTURBANCE
2. VEGETATION SHALL BE SUPPLEMENTED WHERE SITE CONDITIONS WARRANT BY PROPOSED LANDSCAPING TO ENSURE ADEQUATE SCREENING BUFFERS ARE PROVIDED IN ACCORDANCE WITH STATE AND TOWN REQUIREMENTS.
3. AS DESIGNED BY NATURAL RESOURCE SERVICES, INC. WETLAND BIOLOGIST, SCREENING VEGETATION CONSISTING OF MOUNTAIN LAUREL (KALMIA LATIFOLIA), 3-4 FOOT TALL SHRUBS, SPACED 8 FEET ON CENTER SHALL BE INSTALLED AND LOCATED 1 - 2 FEET INSIDE LOD AS SHOWN
4. AS DESIGNED BY NATURAL RESOURCE SERVICES, INC. WETLAND BIOLOGIST, THE TEMPORARY ALTERATION AREA WHERE THE WELL AND A PORTION OF THE WATER SERVICE IS INSTALLED SHALL BE REPLANTED WITH THE FOLLOWING: PEPPERBUSH (CLETHRA ALNIFOLIA) AND ARROWWOOD (VIBURNUM DENTATUM). THESE SHRUBS SHALL BE 2-3 FEET TALL AND SPACED 5 FEET ON CENTER
5. LANDSCAPING EVALUATIONS SHALL BE PERFORMED DURING CONSTRUCTION TO ENSURE THE TOWN'S LANDSCAPING REQUIREMENTS HAVE BEEN MET.

GENERAL WELL AND WATER NOTES

- 1. IT SHALL BE THE CONTRACTOR'S AND/OR OWNER'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND AND TOWN OF HOPKINTON PRIOR TO COMMENCING ANY WORK.
2. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES.
3. ALL WORK, MATERIALS, ETC. WILL BE IN ACCORDANCE WITH AWWA AND RI DEPARTMENT OF HEALTH (RIDOH) RULES, REGULATIONS, SPECIFICATIONS, AND DETAILS.
4. WATER PIPE SHALL BE IN ACCORDANCE WITH AWWA & RIDOH STANDARDS.
5. ALL INSTALLATION, JOINTS, CONSTRUCTION METHODS, AND MATERIALS SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS, AWWA STANDARDS, AND STATE AND GOVERNMENTAL REQUIREMENTS.
6. CONSTRUCTION SHALL INCLUDE ALL PIPE, JOINTS, BENDS, TEES, FITTINGS, THRUST RESTRAINTS, GATE VALVES, GATE BOXES, SERVICE CONNECTIONS AND ALL MISCELLANEOUS ITEMS REQUIRED TO CONSTRUCT THE PROPOSED SYSTEM.
7. LEAKAGE TESTS AND DISINFECTING PIPES SHALL BE PERFORMED BY THE CONTRACTOR IN CONFORMANCE TO RIDOH REQUIREMENTS, AWWA RECOMMENDATIONS, RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM) REQUIREMENTS AND GOVERNMENTAL AGENCIES HAVING JURISDICTION.
8. ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS GATE VALVE, PIPE, THRUST RESTRAINTS, FITTINGS, CASTINGS, ETC. SHALL BE AWWA, RIDOH, AND RIDEM APPROVED MATERIALS AND METHODS (AT THE TIME OF CONSTRUCTION).
9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND VALIDATIONS OF STANDARDS AND SPECIFICATIONS AS REQUIRED BY TOWN AND STATE AGENCIES.
10. METHODS OF TRENCHING, BEDDING, INSTALLATION, BACKFILLING, TESTING AND CHLORINATING OF WATER FACILITIES SHALL CONFORM TO RIDOH, AWWA, RIDEM, STATE AND LOCAL REQUIREMENTS.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING AS-BUILT PLANS DETAILING LOCATION OF CONNECTIONS, TEES, AND VALVES AS REQUIRED BY AND IN CONFORMANCE WITH STATE AND TOWN REQUIREMENTS.
12. CHLORINATION OF WATER SYSTEM SHALL CONFORM TO RIDOH AND RIDEM REQUIREMENTS AND REGULATIONS AND SHALL NOT RESULT IN THE DISCHARGE OF CHLORINATED WATER TO ON-SITE WETLANDS AND WATERCOURSES.
13. AS DESIGNED BY NATURAL RESOURCE SERVICES, INC. WETLAND BIOLOGIST, THE TEMPORARY ALTERATION AREA WHERE THE WELL AND A PORTION OF THE WATER SERVICE IS INSTALLED SHALL BE REPLANTED WITH THE FOLLOWING: PEPPERBUSH (CLETHRA ALNIFOLIA) AND ARROWWOOD (VIBURNUM DENTATUM). THESE SHRUBS SHALL BE 2-3 FEET TALL AND SPACED 5 FEET ON CENTER

LAYOUT NOTES

- 1. LAYOUT FOR THE CHARLAND RESIDENCE PROJECT IS BASED ON INFORMATION AND LAYOUT DESIGN PROVIDED BY SCITUATE SURVEYS, INC.
2. PROPOSED OWTS LAYOUT SHOWN IS PRELIMINARY AND SHALL BE FINALIZED DURING FINAL OWTS DESIGN.
3. GRADING AROUND THE OWTS WILL BE REVISED AS REQUIRED DURING FINAL DESIGN. NO CHANGES TO THE GRADING AROUND THE HOUSE, DRIVE AND DRAINAGE SYSTEMS WILL BE MADE AS PART OF ANY REQUIRED GRADING MODIFICATIONS RESULTING FROM THE OWTS FINAL DESIGN.

GENERAL NOTES

- 1. IT SHALL BE THE CONTRACTOR'S AND/OR OWNER'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND AND TOWN OF SCITUATE PRIOR TO COMMENCING ANY WORK.
2. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE TOWN PUBLIC WORKS AND ENGINEERING DEPARTMENTS.
3. IN ALL EXCAVATION AND PLACEMENT OF FILL, THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE RI STANDARD SPECIFICATIONS.
4. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY AND ALL UNDERGROUND UTILITIES BEFORE EXCAVATION BEGINS BY CONTACTING "DIG SAFE" AND THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY TOWN, STATE, OR FEDERAL AGENCY THAT MAY BE APPLICABLE. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
5. THE CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS WITH THE APPROPRIATE UTILITY COMPANIES. ALL WORK, MATERIALS, AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY.
6. ALL WORK, MATERIALS, ETC. WILL BE IN ACCORDANCE WITH THE STATE OF RHODE ISLAND AND TOWN OF HOPKINTON RULES, REGULATIONS, SPECIFICATIONS AND DETAILS.
7. ALL DISTURBED AREAS ARE TO BE PROTECTED AGAINST EROSION AND/OR SEDIMENTATION.
8. PRIVATE ROADWAYS SHALL GENERALLY CONFORM TO TOWN OF HOPKINTON REQUIREMENTS. REFER TO DETAILS PROVIDED ON PLAN SHEET ND -1. PRIVATE ROADWAYS AND DRIVEWAYS SHALL BE A PVIOUS SURFACE PER THE APPROVED MASTER PLAN CONDITIONS.
9. PERIMETER CONDITIONS AND DRAINAGE PATTERNS SHALL REMAIN UNCHANGED.
10. EMBANKMENT SLOPES ARE NOT TO EXCEED 3:1 AND SHALL BE FULLY COMPACTED TO PROVIDE A STABLE PRODUCT.
11. ALL EARTH FILL USED FOR EMBANKMENT CONSTRUCTION SHALL BE FREE OF DETRIMENTAL AMOUNTS OF SODS, ROOTS, FROZEN SOILS, STONES, AND OTHER QUESTIONABLE MATERIAL.
12. EROSION AND SEDIMENTATION CONTROLS SHALL BE PLACED ALONG THE LIMITS OF DISTURBANCE AND WHERE SHOWN AND AS REQUIRED.
13. NO BOULDERS OR STUMPS SHALL BE BURIED ON SITE.
14. EXISTING BOULDERS MAY BE USED FOR LANDSCAPING PURPOSES AS SITE CONDITIONS WARRANT. NO BOULDER RETAINING WALL SHALL EXCEED A 3-FOOT MAXIMUM HEIGHT.

LIMITS OF DISTURBANCE NOTES:

- 1. PROPOSED LIMITS OF DISTURBANCE (LOD) SHOWN ILLUSTRATES AREA OF IMPACT OF CONSTRUCTION.
2. THE CONTINUOUS LINE OF EROSION CONTROLS (HAYBALES & SILT FENCE, RI STD. 9.3.0 OR STRAW WATTLES OR APPROVED EQUAL) SHALL BE LOCATED WITHIN THE LOD AS SITE CONDITIONS WARRANT AND AS SHOWN ON THE PLANS ON THE DOWNHILL SIDE OF THE LOD. ADDITIONAL EROSION CONTROLS SHALL BE INSTALLED AS SITE CONDITIONS WARRANT.
3. EXISTING VEGETATION WITHIN THE LOD SHALL BE MAINTAINED AND PROTECTED TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION.
4. AREAS DISTURBED DURING CONSTRUCTION, EXCLUDING THE DRIVES, STRUCTURES, AND DRAINAGE BASINS SHALL BE LANDSCAPED PER OWNER'S DIRECTIONS AND AT A MINIMUM BE LOAM & SEED.
5. ALL EROSION CONTROLS SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED UNTIL STABLE GROUND COVER IS ESTABLISHED
6. NO BOULDERS OR STUMPS SHALL BE BURIED ON SITE. EXISTING BOULDERS MAY BE UTILIZED FOR LANDSCAPING PURPOSES AS SITE CONDITIONS WARRANT.
7. LOD AREAS SHALL BE MARKED IN THE FIELD WITH PERMANENT POSTS AT LOCATIONS SHOWN ON PLANS
8. AS DESIGNED BY NATURAL RESOURCE SERVICES, INC. WETLAND BIOLOGIST, SCREENING VEGETATION CONSISTING OF MOUNTAIN LAUREL (KALMIA LATIFOLIA), 3-4 FOOT TALL SHRUBS, SPACED 8 FEET ON CENTER SHALL BE INSTALLED AND LOCATED 1 - 2 FEET INSIDE LOD AS SHOWN
9. AS DESIGNED BY NATURAL RESOURCE SERVICES, INC. WETLAND BIOLOGIST, THE TEMPORARY ALTERATION AREA WHERE THE WELL AND A PORTION OF THE WATER SERVICE IS INSTALLED SHALL BE REPLANTED WITH THE FOLLOWING: PEPPERBUSH (CLETHRA ALNIFOLIA) AND ARROWWOOD (VIBURNUM DENTATUM). THESE SHRUBS SHALL BE 2-3 FEET TALL AND SPACED 5 FEET ON CENTER

LANDSCAPE NOTES

- 1. THE CONTRACTOR SHALL LAY OUT ALL WORK. THE CONTRACTOR SHALL STAKE OUT ALL LOCATIONS OF ALL ROADWAYS, DRIVEWAYS, WALKS, DRAINAGE MEASURES, HOUSES, AND RELATED SITE IMPROVEMENTS FOR APPROVAL BY THE ENGINEER OR SITE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO THE ALIGNMENT, GRADE, ETC. AS DIRECTED IN THE FIELD AS WARRANTED.
2. ALL WORK SHALL BE BASED UPON THE USE OF SPECIFIC MATERIALS AS INDICATED ON THE PLANS OR AS MAY BE REQUIRED BY LOCAL AND STATE PLANTING MEASURES. NO SUBSTITUTION SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND/OR DEVELOPER.
3. ALL PLANT MATERIAL AND LANDSCAPE IMPROVEMENTS SHALL CARRY A ONE (1) YEAR GUARANTEE. ALL PLANT MATERIAL SHALL MEET AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AS TO GRADING AND QUALITY.
4. AS DESIGNED BY NATURAL RESOURCE SERVICES, INC. WETLAND BIOLOGIST, SCREENING VEGETATION CONSISTING OF MOUNTAIN LAUREL (KALMIA LATIFOLIA), 3-4 FOOT TALL SHRUBS, SPACED 8 FEET ON CENTER SHALL BE INSTALLED AND LOCATED 1 - 2 FEET INSIDE LOD AS SHOWN
5. AS DESIGNED BY NATURAL RESOURCE SERVICES, INC. WETLAND BIOLOGIST, THE TEMPORARY ALTERATION AREA WHERE THE WELL AND A PORTION OF THE WATER SERVICE IS INSTALLED SHALL BE REPLANTED WITH THE FOLLOWING: PEPPERBUSH (CLETHRA ALNIFOLIA) AND ARROWWOOD (VIBURNUM DENTATUM). THESE SHRUBS SHALL BE 2-3 FEET TALL AND SPACED 5 FEET ON CENTER
6. MULCH ALL PLANTINGS (EXCLUDING GROUND COVER AND PERENNIAL BEDS) WITH 3" DARK BROWN, FINE SHREDDED PINE BARK MULCH. GROUND COVER AND PERENNIAL BEDS SHALL BE PREPARED TO A DEPTH OF 12" MINIMUM WITH A LOAM/COMPOST MIX.
7. EXISTING BOULDERS MAY BE USED FOR LANDSCAPING PURPOSES AS SITE CONDITIONS WARRANT. NO BOULDER RETAINING WALL SHALL EXCEED A 4-FOOT MAXIMUM HEIGHT.
8. ALL LAWN AREAS SHALL BE PREPARED TO A DEPTH OF 6" (MIN.) WITH SCREENED LOAM.
9. ALL WORK SHALL BE EXECUTED IN A THOROUGH AND WORKMANLIKE MANNER IN ACCORDANCE TO STATE AND LOCAL CODES TO THE SATISFACTION OF THE OWNER.
10. SEEDING SHALL BE DONE IN ACCORDANCE WITH SECTION L02.03 OF THE RI STANDARD SPECIFICATIONS AND ONLY DURING THE FOLLOWING DATES:
MARCH 15 - MAY 31
AUGUST 15 - OCTOBER 15
11. RESTORATION SEED MIXES:

UPLAND: PERIMETER/RIVERBANK WETLAND AND OTHER UPLAND AREAS

- 30% HARD FESCUE (FESTUCA PRATENSIS)
• 30% ORCHARD GRASS (DACTYLIS GLOMERATA)
• 15% TIMOTHY (PHLEUM PRATENSE)
• 10% LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM)
• 10% RED TOP (AGROSTIS ALBA)
• 5% WHITE CLOVER (TRIFOLIUM REPENS)
• APPLY AT A RATE OF 35 LBS./ACRE

WETLAND: BASIN BOTTOM AREAS

- 30% SWITCHGRASS (PANICUM VIRGATUM)
• 20% LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM)
• 20% BIG BLUESTEM (ANDROPOGON GERARDII)
• 15% WOOD REEDGRASS (CINNA ARUNDINACEA)
• 15% BLUEJOINT GRASS (CALAMAGROSTIS CANADENSIS)
• 8% FOX SEDGE (CAREX FLUPHOIDEA)
• 2% SOFT RUSH (JUNCUS EFFUSUS)
• APPLY AT A RATE OF 25 LBS./ACRE

- SUBSTITUTION TO SPECIES SELECTIONS AND AMOUNTS MAY OCCUR ONLY AFTER APPROVAL OF THE OWNER / DEVELOPER AND THEIR REPRESENTATIVES. STATE-LISTED RARE SPECIES SHALL NOT BE INCLUDED IN ANY OF THE SUBSTITUTED RESTORATION SEED MIXTURES

10. RESTORATION SEED MIX SOURCES:

ERNST CONSERVATION SEEDS
9006 MERCER PIKE
MEADVILLE, PA 16335
800-873-3321

NEW ENGLAND WETLAND PLANTS
800 MAIN STREET
AMHERST, MA 01002
413-256-1752

QUANSETT NURSERIES
794 HORSENECK ROAD
SOUTH DARTMOUTH, MA 02748

11. LAWN SEED MIX:

- LESCO PARK ATHLETIC MIX OR EQUAL:
• 32.89% SHAMROCK KENTUCKY BLUEGRASS
• 32.65% CREEPING RED FESCUE
• 32.38% LAREDO PERENNIAL RYEGRASS
• APPLY AT A RATE OF 200 LBS./ACRE

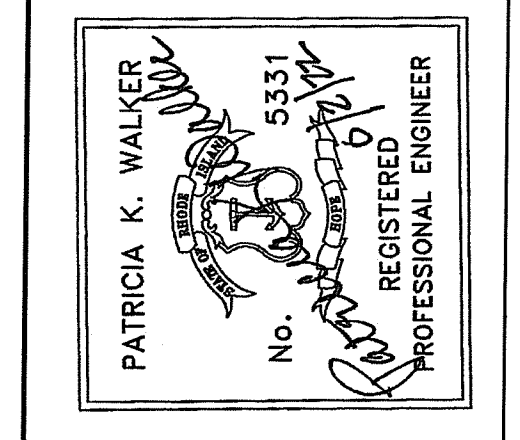
NOT TO SCALE

RIDOT PHYSICAL ALTERATION PERMIT (PAP) NOTES:
1. ALL UTILITY WORK MUST BE APPLIED FOR UNDER A SEPARATE UTILITY PERMIT FROM RIDOT.
2. THE RIDOT PAP IS NOT A SUBSTITUTE FOR THE RIDOT UTILITY PERMIT.
3. ALL WORK WITHIN THE STATE'S RIGHT-OF-WAY WILL CONFORM TO RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION AMENDED MARCH 2018, WITH ALL REVISIONS AND RI STANDARD DETAILS, 1998 EDITION AMENDED JUNE 2019 WITH ALL REVISIONS.
4. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009, INCLUDING ALL REVISIONS.

PROPERTY OWNER / APPLICANT
MICHAEL CHARLAND
PO BOX 804
NORTH SCITUATE, RI 02857

CONTACT PERSON:
MICHAEL CHARLAND
MPC@CHARLAND@LIVE.COM
PHONE 401-556-4645

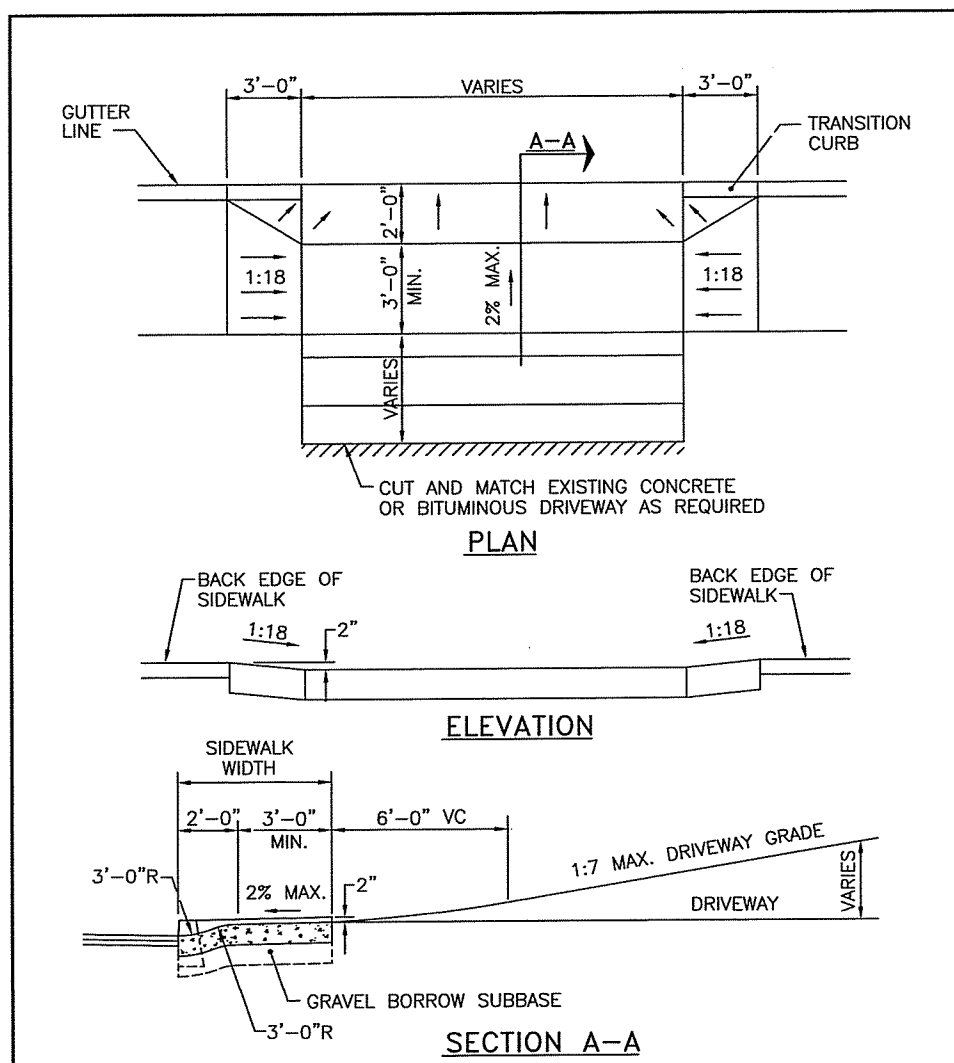
Table with 2 columns: REVISIONS, DESCRIPTION. Row 1: DATE: JUNE 2022, DESCRIPTION: RIDEM WETLANDS APPLICATION TO ALTER



WE Walker Engineering, Ltd.
31 Vale Court
West Greenwich, RI 02817
Phone / Fax (401) 397-6745
Email: wei31.pw@gmail.com

NOTES & DETAILS NO. 1
CHARLAND RESIDENCE
DANIELSON PIKE (AP 35 / LOT 48)
SCITUATE VALLEY, RHODE ISLAND
Office of Water Resources
Environmental Management
JAN 11 2023

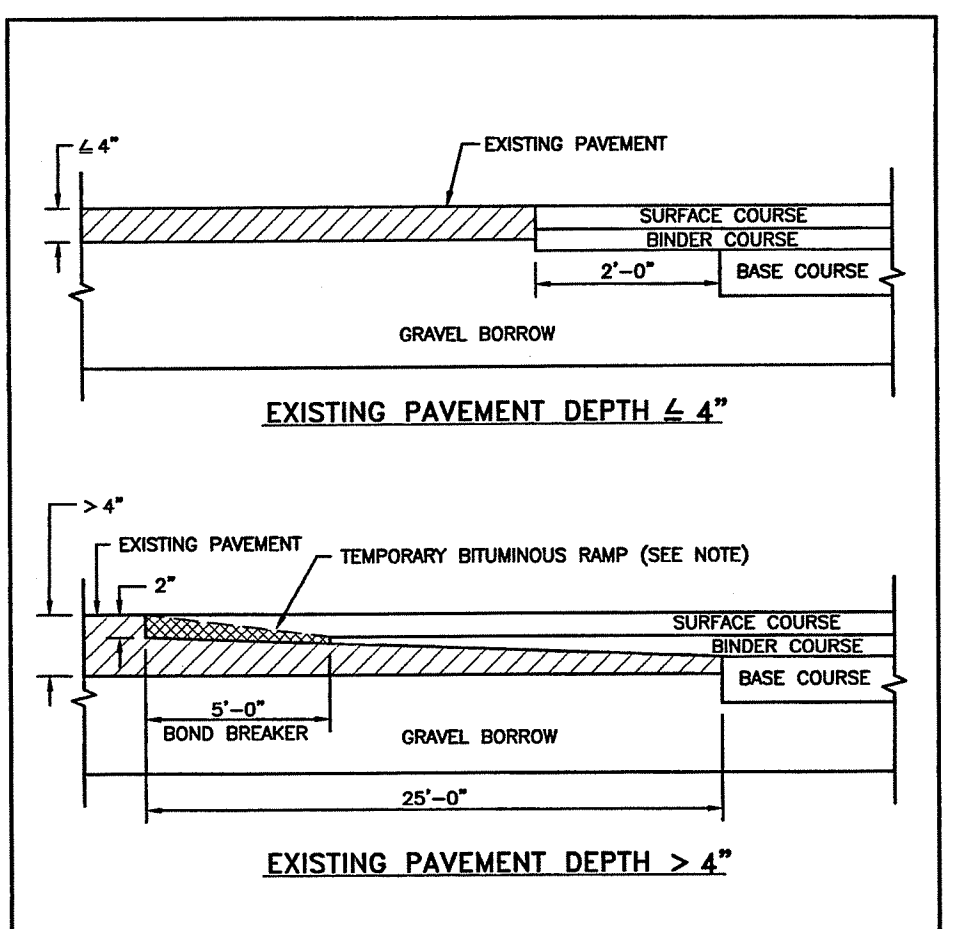
DATE: JANUARY 2022
REVISED JUNE 2022
SHEET: ND-1
SHEET 4 OF 6



NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
 2. WHEN DRIVEWAY IS BELOW BACK EDGE OF SIDEWALK PROFILE, STD. 43.4.1 MUST BE USED.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
DRIVEWAY DEVELOPMENT FOR 3'-0" TRANSITION CURB		
NO.	BY	DATE
1	M.P.	12/07/05
2	M.P.	12/27/08
3	M.P.	10/17/10

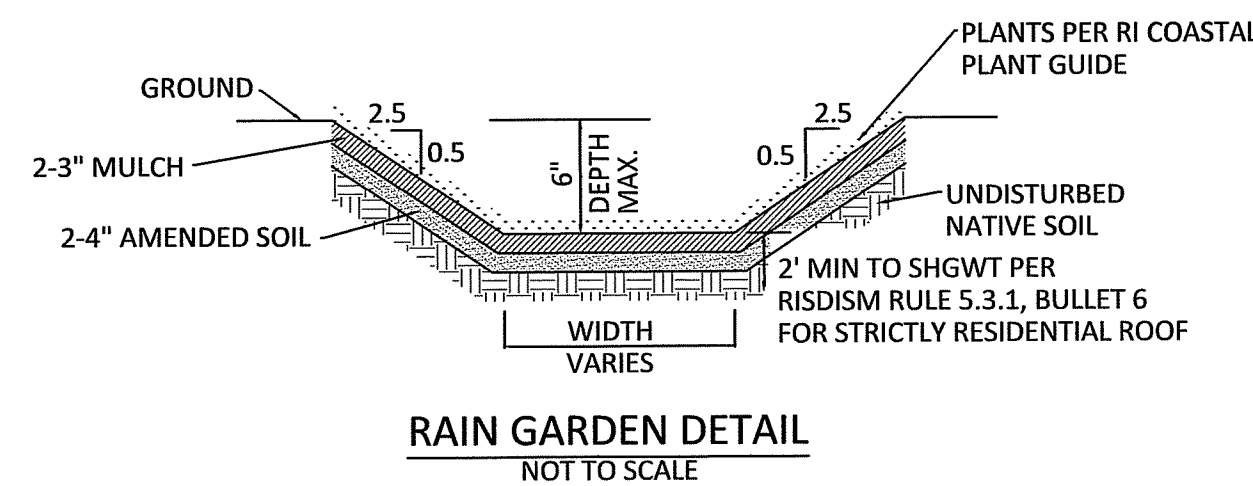
JUNE 15, 1998
 R.I. STANDARD 43.4.0



NOTE:
 A BOND BREAKER (TAPERED OR EQUIVALENT) WILL BE PLACED 5'-0" FROM THE JOINT AND COVERED WITH THE BINDER COURSE. PRIOR TO PLACING THE SURFACE COURSE, THE BINDER COURSE AND BOND BREAKER WILL BE REMOVED.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
TRANSVERSE PAVEMENT CUT AND MATCH		
NO.	BY	DATE
1	M.P.	12/07/05
2	M.P.	12/27/08
3	M.P.	10/17/10

JUNE 15, 1998
 R.I. STANDARD 47.1.1

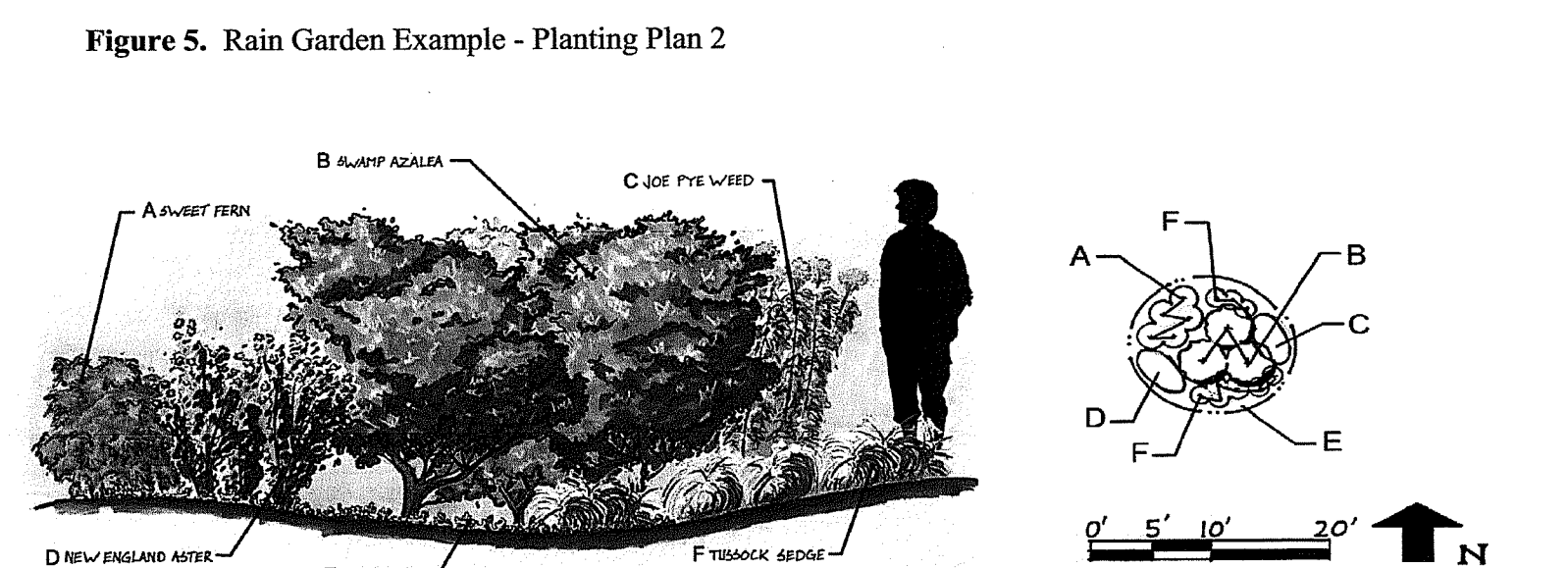
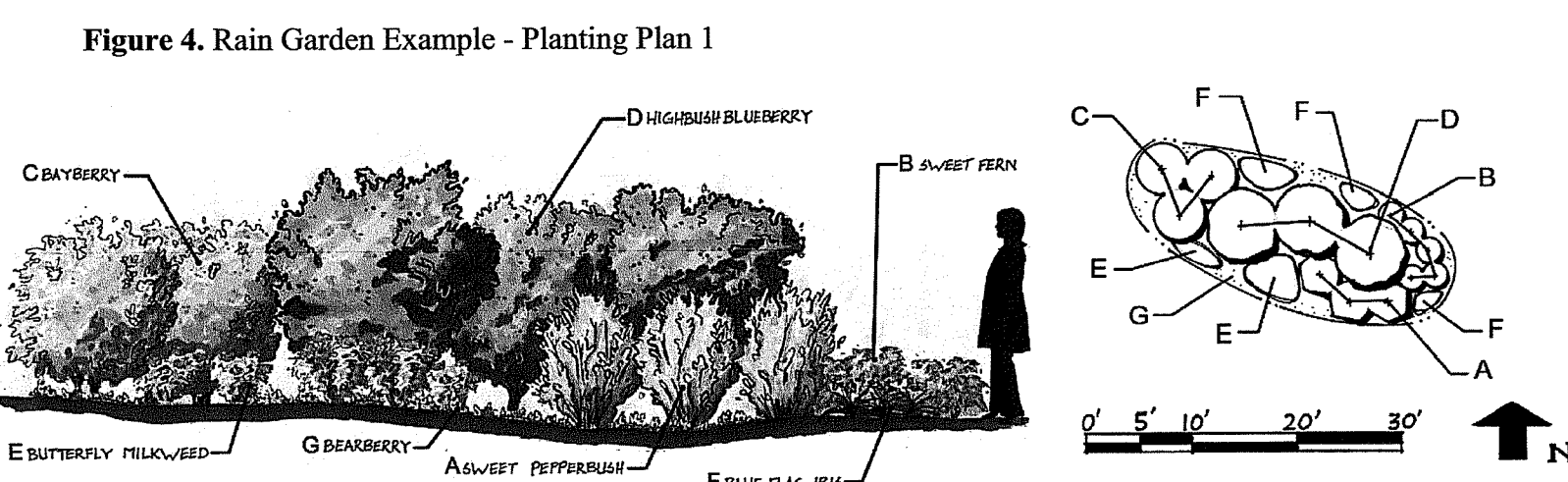


RAIN GARDEN NOTES

1. THE RAIN GARDENS ARE DESIGNED TO ACCEPT ROOF RUNOFF FROM THE HOUSE AND DRIVE RUNOFF
2. THE RAIN GARDENS SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE FOUNDATION, 2 FEET FROM THE DRIVEWAY EDGE, 15 FEET FROM ANY OWTS COMPONENT, AND 25' FROM THE PRIVATE WELL.
3. THE MAXIMUM DEPTH OF ALL RAIN GARDENS SHALL BE 6 INCHES
4. THE DEPTH AND SIZE OF THE RAIN GARDENS ARE SHOWN ON PLAN SHEET 2 OF 6
5. THE BOTTOM WIDTH OF THE RAIN GARDEN VARIES
6. THE RAIN GARDENS SHALL HAVE A SIDE SLOPE OF 5:1 (2.5 FEET IN 6 INCHES)
7. THE RAIN GARDENS SHALL CONTAIN A 2 TO 4 INCH AMENDED SOIL LAYER AND A 2 TO 3 INCH MULCH LAYER
8. THE AMENDED SOIL LAYER OF THE RAIN GARDEN SHOULD BE A 50/50 MIXTURE OF THE EXCAVATED NATIVE SOILS AND MATURE ORGANIC COMPOST
9. PLANTS SHALL TOLERATE WET CONDITIONS BUT ALSO VERY DRY CONDITIONS. USE THE RI COASTAL PLANT GUIDE AT WWW.URLEDUJ/CELS/CEOC/COASTALPLANTS/COASTALPLANTGUIDE.HTM TO SELECT APPROPRIATE SPECIES (FILTER SELECTION FOR RAIN GARDEN). REFER TO TWO EXAMPLE PLANTING PLANS FOR RESIDENTIAL RAIN GARDENS. PLANTINGS SHALL INCLUDE A MINIMUM OF THREE DIFFERENT PLANT SPECIES, INCLUDING SHRUBS AS WELL AS HERBACEOUS SPECIES.

RAIN GARDEN MAINTENANCE NOTES

1. RAIN GARDENS SHALL BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY.
2. RAIN GARDEN SHALL BE MONITORED AND MAINTAINED TO ASSURE PROPER FUNCTIONING, PLANT GROWTH AND SURVIVAL
3. PLANTS SHALL BE REPLACED ON AN AS-NEEDED BASIS DURING THE GROWING SEASON
4. SILT / SEDIMENT 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
5. PRUNING OR REPLACEMENT OF WOODY VEGETATION SHALL OCCUR WHEN DEAD OR DYING VEGETATION IS OBSERVED
6. SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR
7. FERTILIZER OR PESTICIDES SHALL NOT BE APPLIED TO PLANTS WITHIN RAIN GARDEN
8. PERENNIAL PLANTS AND GROUND COVER SHALL BE REPLACED AS NECESSARY TO MAINTAIN AN ADEQUATE VEGETATED GROUND COVER. ANNUAL PLANTS MAY ALSO BE USED TO MAINTAIN GROUND COVER.



PLANTING PLAN SAMPLES FOR RAIN GARDEN

SOURCE: STATE OF RHODE ISLAND STORMWATER MANAGEMENT GUIDANCE FOR INDIVIDUAL SINGLE-FAMILY RESIDENTIAL DEVELOPMENT REQUIREMENTS.

STORMWATER NOTES DURING CONSTRUCTION

1. ANY DRAINAGE STRUCTURES SHALL BE CLEANED AND FLUSHED AS REQUIRED.
2. STORMWATER MEASURES DESIGNED FOR THE CHANGED CONDITIONS OF THE PROPOSED SITE IMPROVEMENTS PER STATE OF RHODE ISLAND STORMWATER MANAGEMENT GUIDANCE FOR INDIVIDUAL SINGLE-FAMILY RESIDENTIAL DEVELOPMENT REQUIREMENTS.
3. THE CONTRACTOR AND/OR OWNER SHALL BE RESPONSIBLE FOR MAINTAINING THE DRAINAGE SYSTEMS IN ACCORDANCE WITH THE RI STORMWATER MANUAL AND TOWN OF SCITUATE REQUIREMENTS.
4. THE DRAINAGE SYSTEMS SHALL BE PROPERLY MAINTAINED AT ALL TIMES.
5. ALL DRAINAGE SYSTEM AREAS SHALL BE KEPT CLEAR OF DEBRIS AT ALL TIMES.
6. NO FOREIGN SUBSTANCES SHALL BE DUMPED INTO THE DRAINAGE SYSTEM AT ANY TIME.
7. ANY AREAS EXPERIENCING EROSION TENDENCIES SHALL BE REPAIRED AND RESEDED IMMEDIATELY.
8. NO DRAINAGE MEASURES SHALL BE LOCATED WITHIN 15 FEET OF ANY COMPONENTS OF THE PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM (OWTS).
9. AS CONDITIONS WARRANT, RIPRAP SHALL BE PLACED BETWEEN THE ROADWAY AREAS AND THE DRAINAGE BASINS TO PROTECT EMBANKMENTS FROM EROSION TENDENCIES.
10. THE DRAINAGE STRUCTURES SHALL BE CLEANED ON AN ANNUAL BASIS AND AS CONDITIONS MAY WARRANT.
11. MAINTENANCE OF THE SYSTEM SHALL BE PERFORMED ON AN ANNUAL BASIS UNDER NORMAL FUNCTIONING OF THE SYSTEM AT A MINIMUM. ANY OBSERVED BLOCKAGE, OVERFLOW OF ANY DRAINAGE SYSTEM COMPONENT OR OTHER OBSERVED ISSUES IN THE FIELD SHALL WARRANT AN INSPECTION AND CLEANOUT AS MAY BE REQUIRED OF ANY PORTION OF THE SYSTEM. MAINTENANCE OF THE SYSTEM SHALL BE THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTED TO A PROFESSIONAL SERVICER AS CONDITIONS WARRANT.
12. ANY AREAS EXPERIENCING EROSION TENDENCIES SHALL BE REPAIRED AND RESEDED IMMEDIATELY.

GENERAL STORMWATER MANAGEMENT SYSTEM OPERATION & MAINTENANCE PLAN

THE STORMWATER MANAGEMENT SYSTEM OPERATION & MAINTENANCE PLAN DESCRIBED HEREIN IS FOR THE PROPOSED SINGLE FAMILY RESIDENCE LOCATED ON AP 35, LOT 48

RESPONSIBLE PARTY FOR MAINTENANCE

- THE OWNER / CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE ASSOCIATED WITH THE STORMWATER SYSTEM UNTIL THEY ARE COMPLETELY CONSTRUCTED.
- ONCE CONSTRUCTION IS COMPLETE, THE PROPERTY OWNER SHALL ASSUME ALL RESPONSIBILITY FOR MAINTENANCE ON THEIR INDIVIDUAL LOT.

DURING CONSTRUCTION

- PRIOR TO THE START OF ANY CONSTRUCTION, THE EROSION CONTROLS SHALL BE INSTALLED AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION UNTIL A STABLE GROUND COVER IS ESTABLISHED.
- DURING CONSTRUCTION, THE SOIL EROSION AND SEDIMENTATION PROGRAMS FOUND ON THE SITE PLANS PREPARED SHALL BE FOLLOWED AND BE THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR AS APPLICABLE.
- PREPARATION OF THE AREA FOR THE RAIN GARDENS SHALL CONFORM TO THE PROCEDURES DESCRIBED AS PART OF THIS PLAN SET PREPARED.
- CONSTRUCTION VEHICLES SHALL NOT BE ALLOWED TO DRIVE OVER THE RAIN GARDEN AREAS DURING CONSTRUCTION. IF THE AREA BECOMES COMPACTED, SOIL MUST BE SUITABLY AMENDED, TILLED, AND REVEGETATED ONCE CONSTRUCTION IS COMPLETE TO RESTORE INFILTRATION CAPACITY.

DESCRIPTION OF ANNUAL MAINTENANCE TASKS

- THE YARD / LAWN AREA ON LOT
- THE YARD AREA (LAWN AREA) SHALL BE CREATED AROUND THE PROPOSED RESIDENCE AND ITS ASSOCIATED AMENITIES.
- THE RAIN GARDENS SHALL BE MAINTAINED THROUGHOUT THE YEAR. SAID MAINTENANCE IS PROVIDED AS PART OF THE DESIGN. ALL PLANT MATERIALS SHALL BE MAINTAINED TO ENSURE PROPER GROWTH AND LIFE, SHOULD ANY OF THESE MATERIALS BECOME DISEASED OR DIE, THEY SHALL BE REPLACED IN KIND AND LOCATION. ALL MAINTENANCE PERFORMED SHALL BE DONE IN A MANNER TO MAINTAIN THE INFILTRATION CAPACITY OF THE VEGETATED SWALES.
- ANY AREA SUBJECT TO EROSION TENDENCIES SHALL BE REPLACED IN KIND TO ENSURE THAT A STABLE GROUND COVER IS MAINTAINED AT ALL TIMES.
- MOWING AND OTHER RELATED MAINTENANCE SHALL BE PERFORMED AS SITE CONDITIONS WARRANT THROUGHOUT THE YEAR.

DESCRIPTION OF APPLICABLE EASEMENTS

NO EASEMENTS ARE REQUIRED TO PERFORM ANNUAL MAINTENANCE.

DESCRIPTION OF FUNDING SOURCES

THE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND OPERATION OF THE STORMWATER SYSTEMS. AS SUCH, THE OWNER'S FUNDS SHALL BE USED AS REQUIRED.

MINIMUM VEGETATIVE COVER REQUIREMENTS

- THE VEGETATIVE COVER REQUIREMENTS ARE PROVIDED AS PART OF THE LANDSCAPE AND DRAINAGE DESIGN PROVIDED ON THE PLANS.
- ALL VEGETATION PROPOSED SHALL BE MAINTAINED AT ALL TIMES AND BE REPLACED IN KIND SHOULD IT BECOME DISEASED OR DIE.
- AS DESIGNED BY NATURAL RESOURCE SERVICES, INC. WETLAND BIOLOGIST, SCREENING VEGETATION CONSISTING OF MOUNTAIN LAUREL (KALMIA LATIFOLIA), 3-4 FOOT TALL SHRUBS, SPACED 8 FEET ON CENTER SHALL BE INSTALLED AND LOCATED 1 - 2 FEET INSIDE LOD AS SHOWN
- AS DESIGNED BY NATURAL RESOURCE SERVICES, INC. WETLAND BIOLOGIST, THE TEMPORARY ALTERATION AREA WHERE THE WELL AND A PORTION OF THE WATER SERVICE IS INSTALLED SHALL BE REPLANTED WITH THE FOLLOWING: PEPPERBUSH (CLETHRA ALNIFOLIA) AND ARROWWOOD (VIBURNUM DENTATUM). THESE SHRUBS SHALL BE 2-3 FEET TALL AND SPACED 5 FEET ON CENTER

ACCESS & SAFETY ISSUES

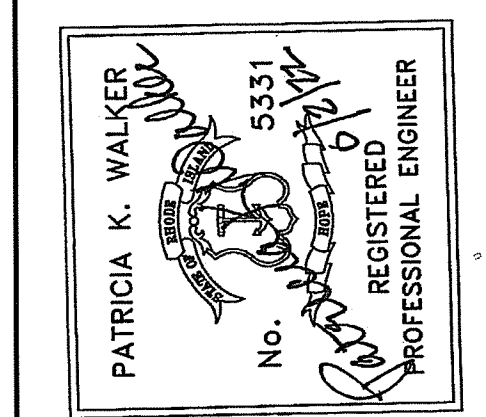
- THERE ARE NO SAFETY ISSUES RELATED TO THE MAINTENANCE AND OPERATION OF THE STORMWATER SYSTEM.

POLLUTION PREVENTION MEASURES

- ANY SEDIMENTATION THAT MAY ENTER THE STORMWATER SYSTEMS SHALL BE REMOVED OF PROMPTLY.
- NO PESTICIDES OR FERTILIZERS SHALL BE USED IN THE RAIN GARDENS.

NOT TO SCALE

REVISIONS		DESCRIPTION
DATE	JUNE 2022	RIDEM WETLANDS APPLICATION TO ALTER



Walker Engineering, Ltd.
 31 Vale Court
 West Greenwich, RI 02817
 Phone / Fax (401) 397-8745
 Email: web31.pw@gmail.com

NOTES & DETAILS NO. 2

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED: AUG 11 2022 FILE #: 22-008
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

CHARLAND RESIDENCE
 DANIELSON PIKE (AP 35 / LOT 48)
 SCITUATE VALLEY, RHODE ISLAND

JAN 11 2023
 Office of Water Resources

DATE: JANUARY 2022
 REVISED JUNE 2022

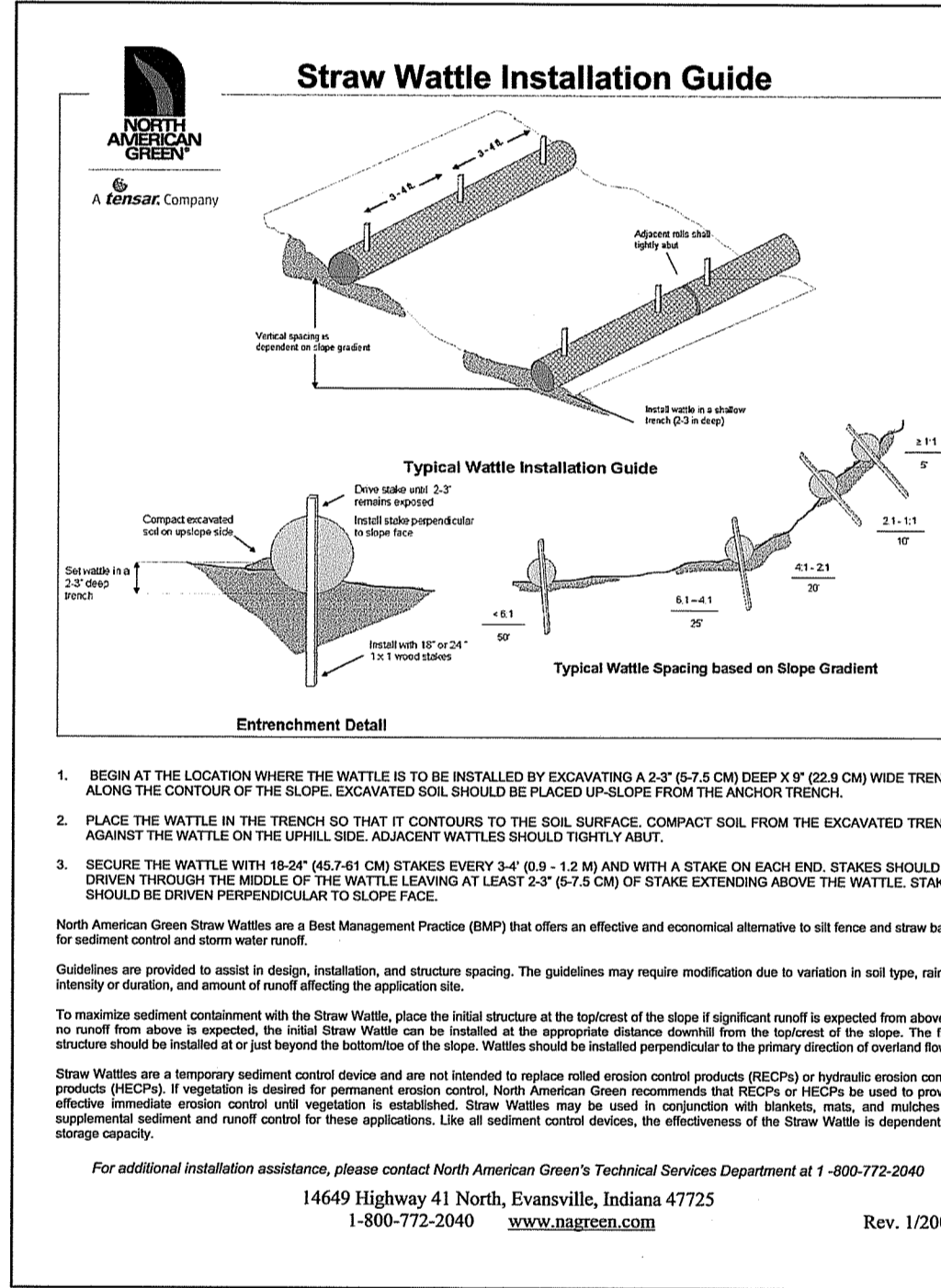
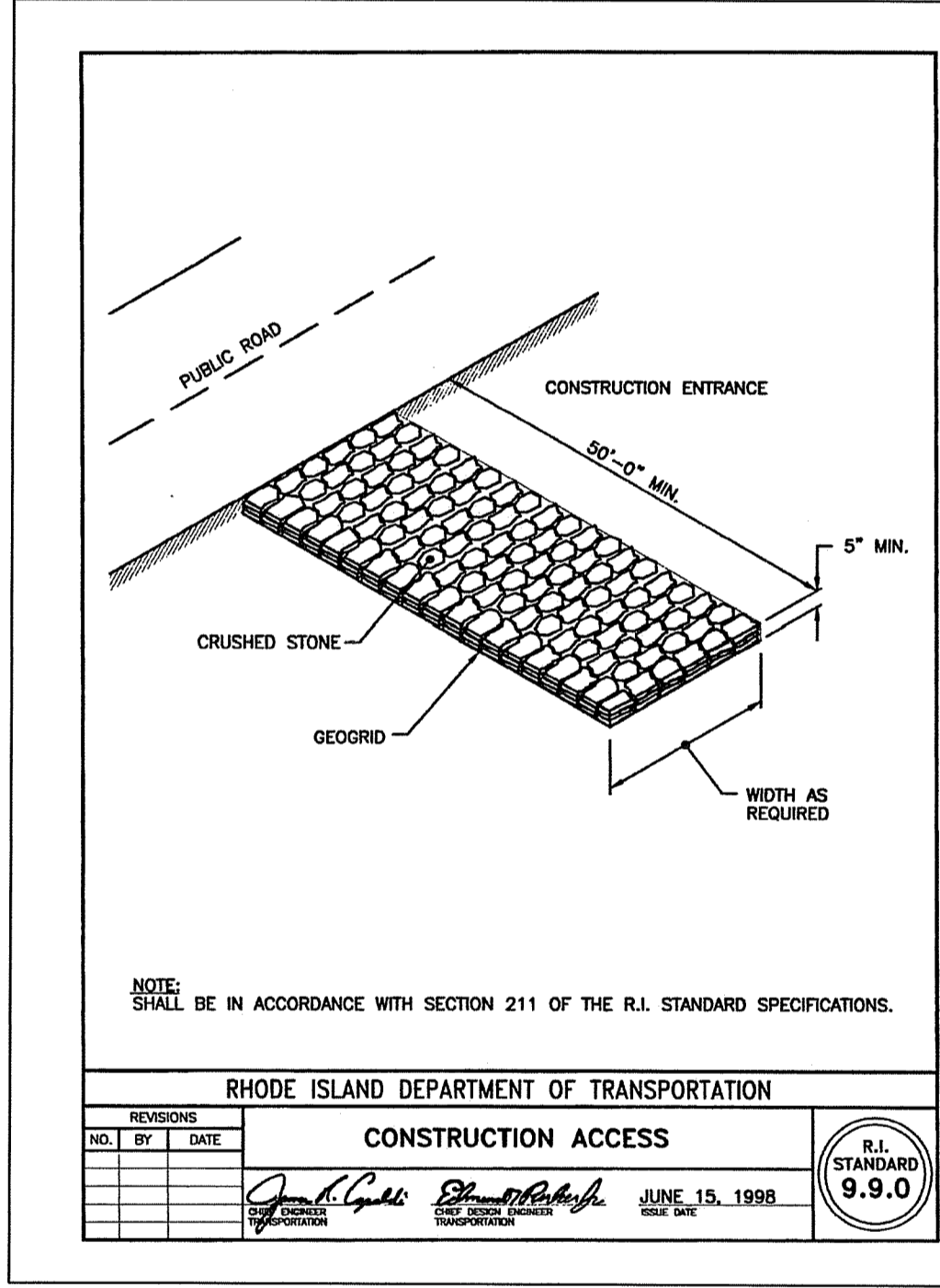
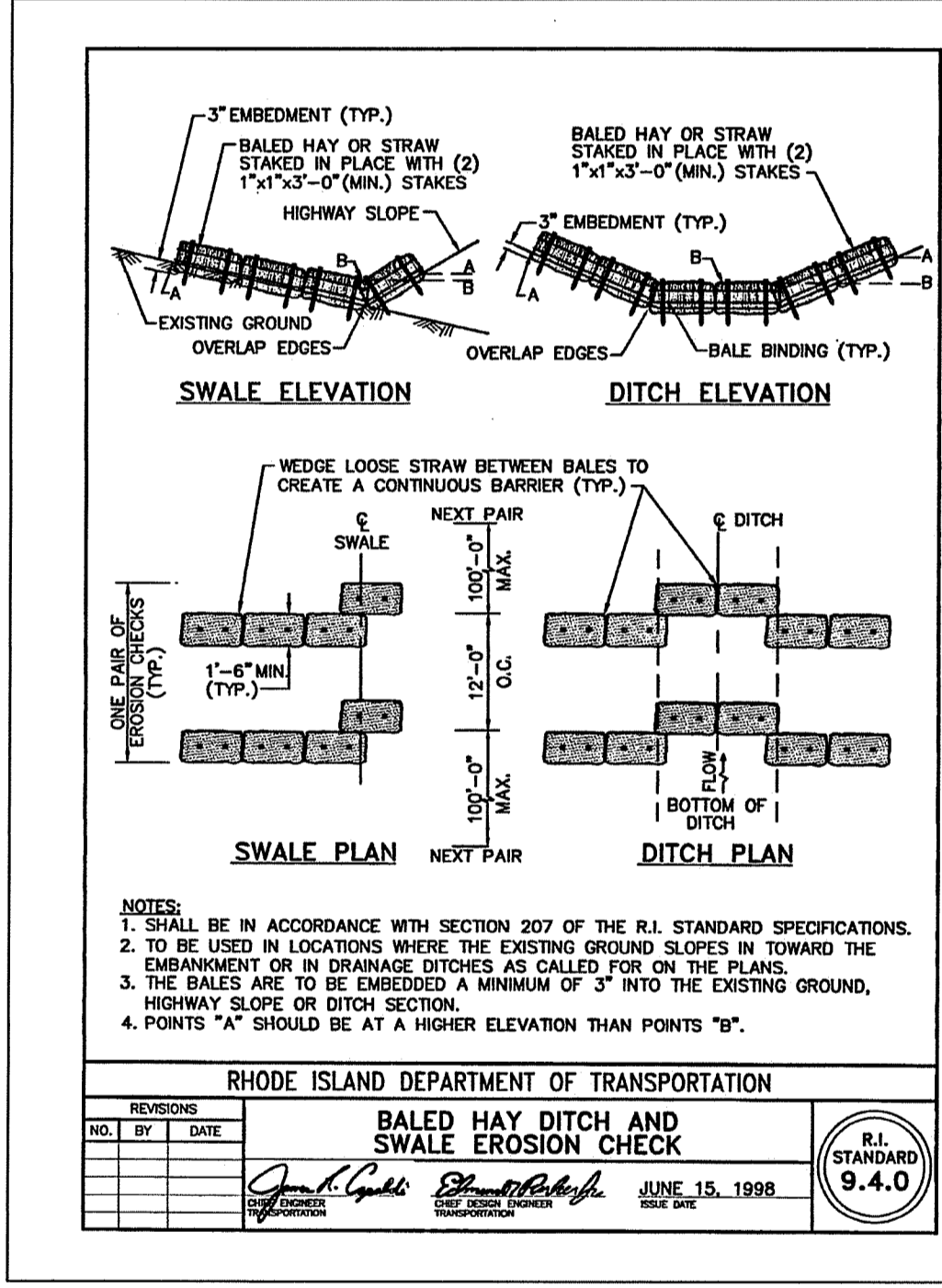
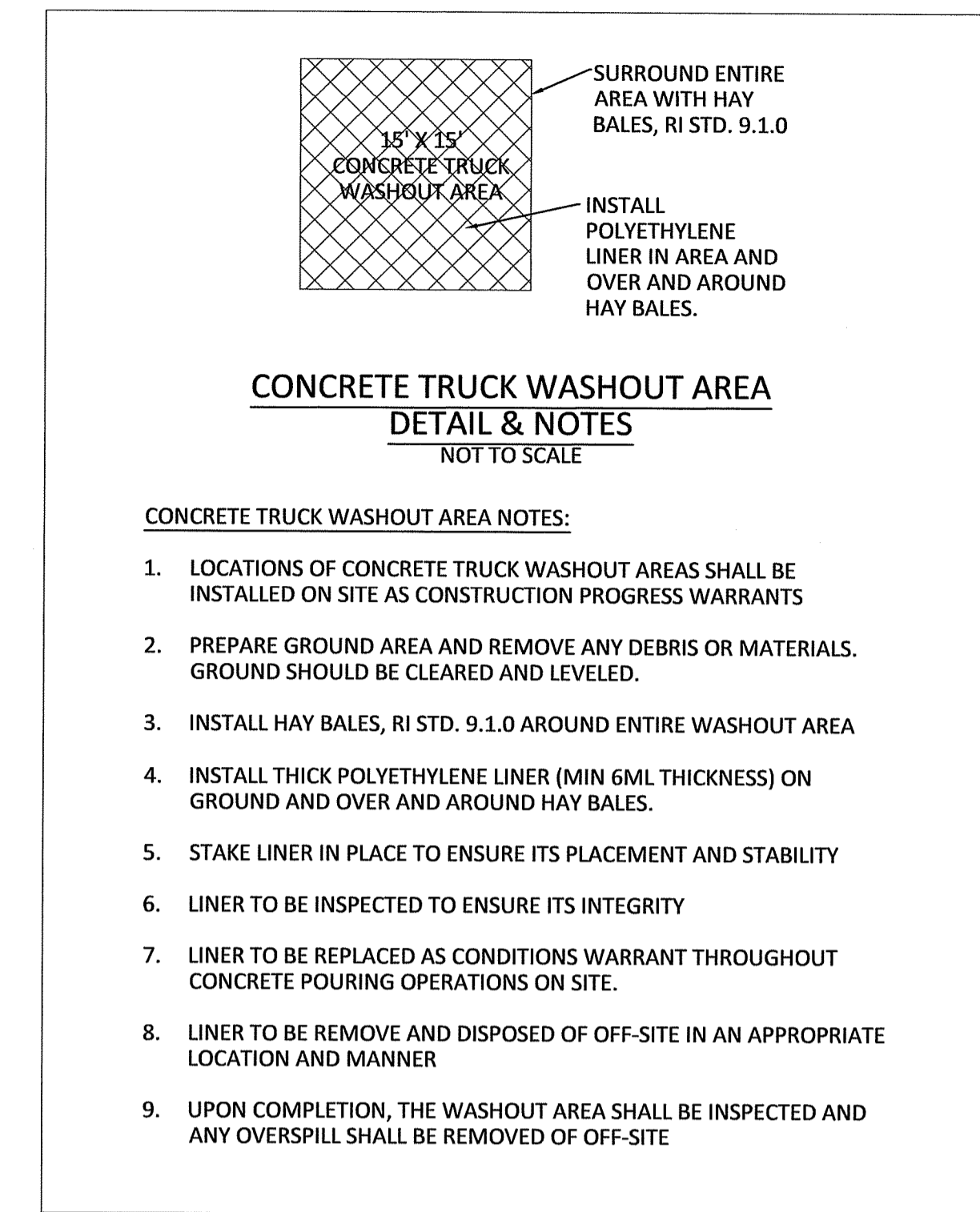
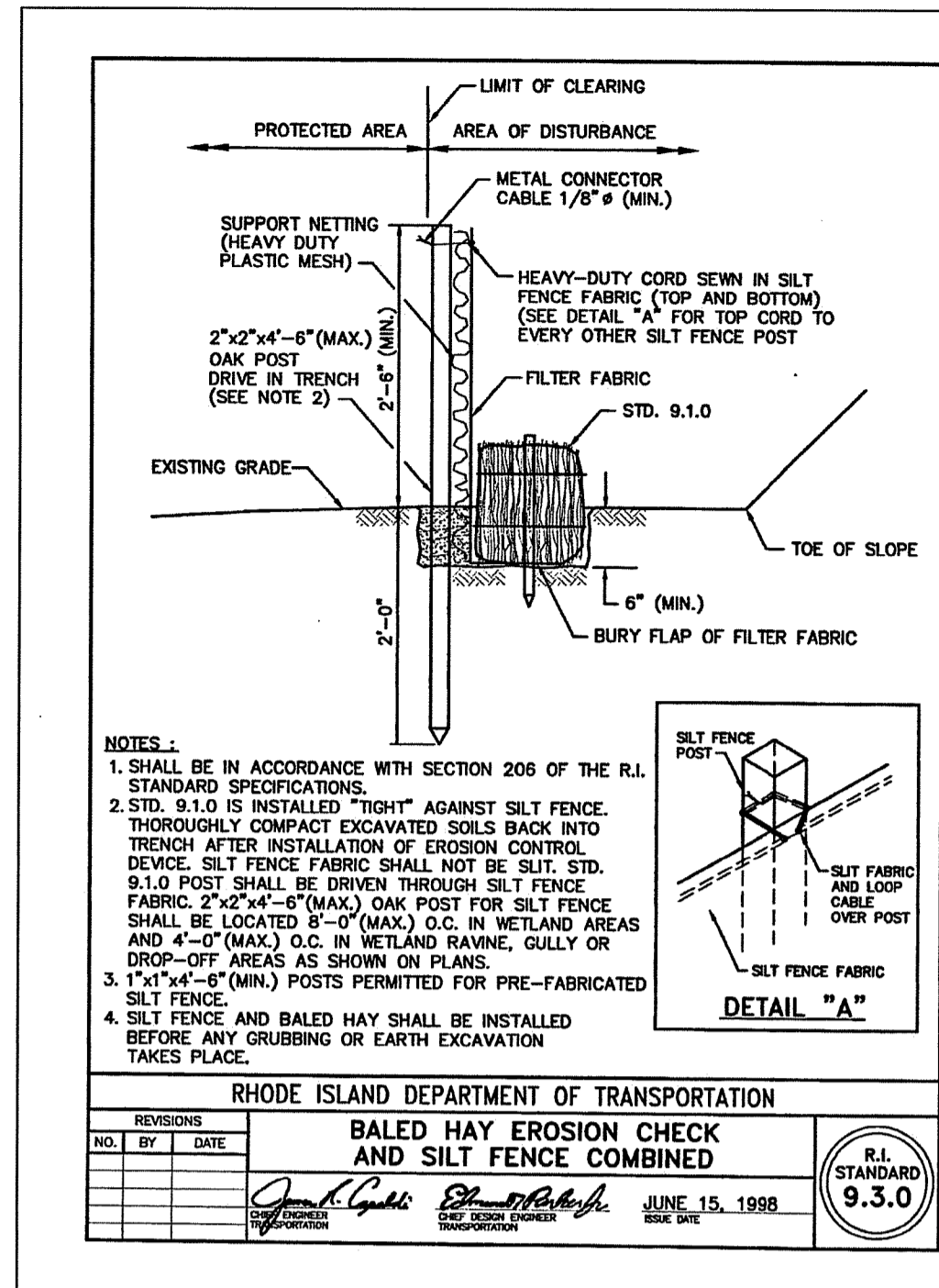
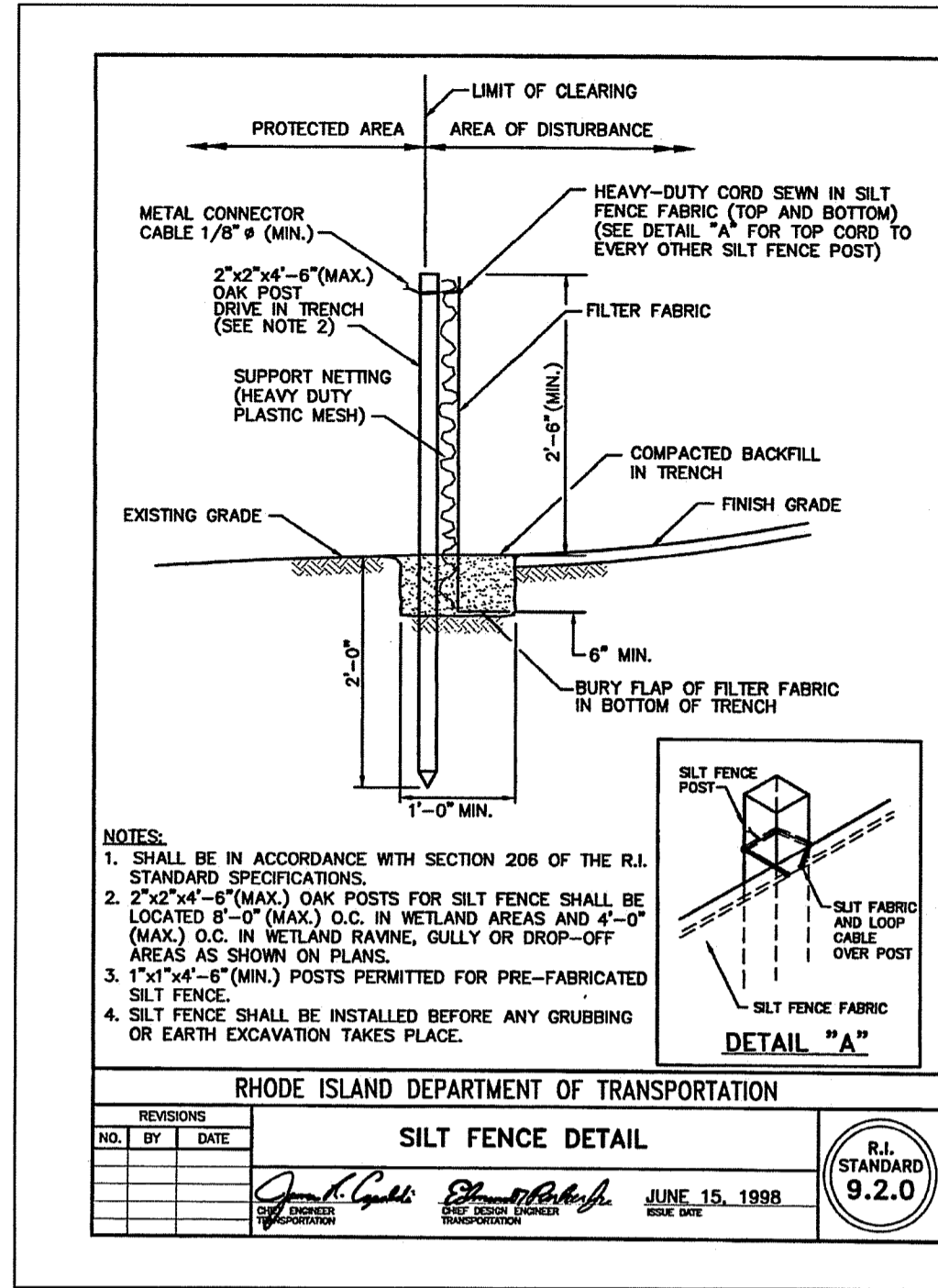
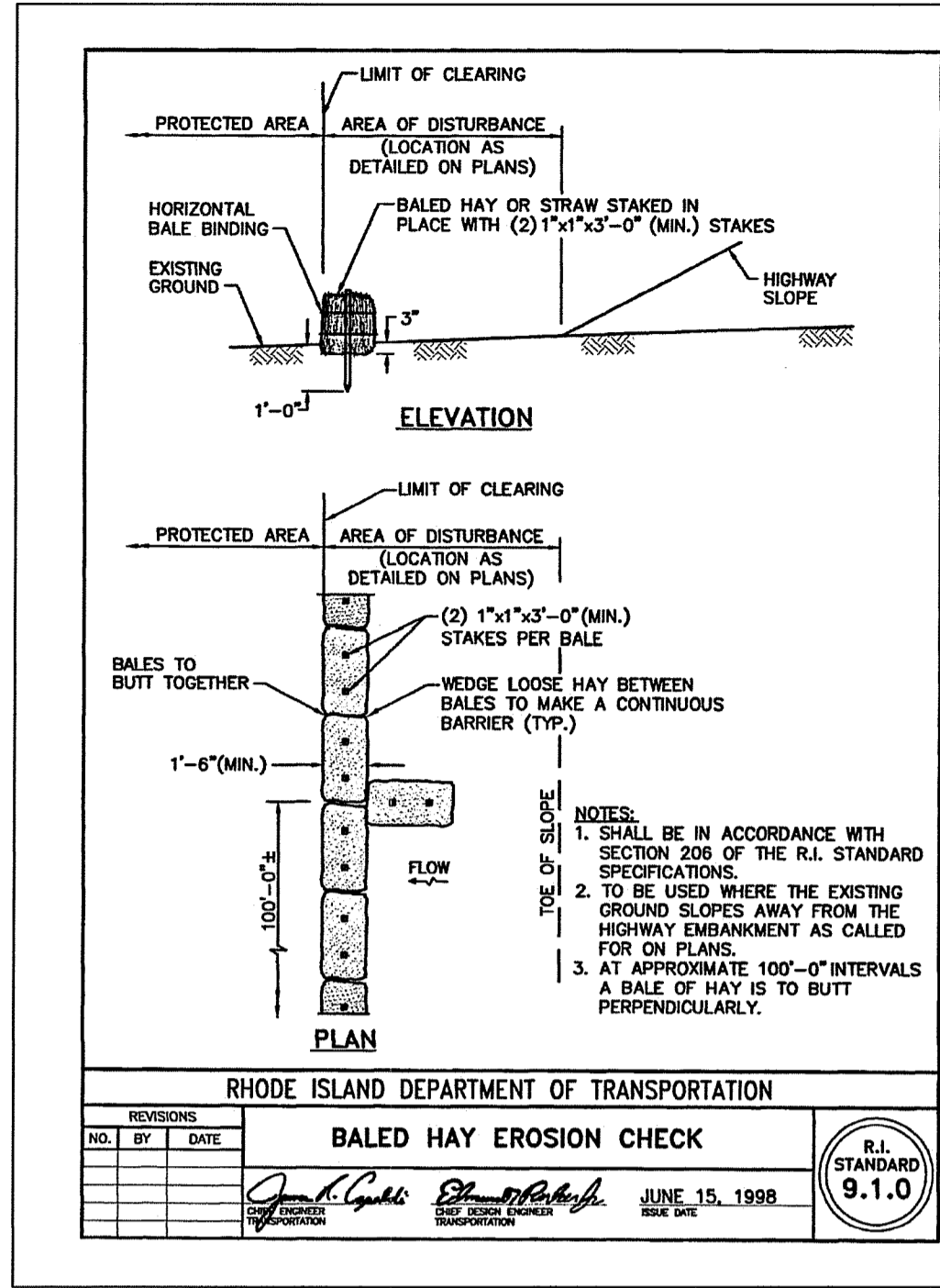
SHEET: ND-2
 SHEET 5 OF 6

PROPERTY OWNER / APPLICANT
 MICHAEL CHARLAND
 PO BOX 804
 NORTH SCITUATE, RI 02857

CONTACT PERSON:
 MICHAEL CHARLAND
 MCHARLAND@LIVE.COM
 PHONE 401-556-4645

RIDOT PHYSICAL ALTERATION PERMIT (PAP) NOTES:

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2. THE RIDOT PAP IS NOT A SUBSTITUTE FOR THE RIDOT UTILITY PERMIT.
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4. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009, INCLUDING ALL REVISIONS.



- EROSION CONTROL PLAN**
- ALL WORK PROPOSED SHALL COMPLY WITH THE CONDITIONS SET FORTH IN THE "GENERAL PERMIT - RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY, EFFECTIVE DATE: SEPTEMBER 26, 2013 AND SHALL BE IN ACCORDANCE WITH THE "RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, AMENDED MARCH 2015.
 - EROSION AND SEDIMENT CONTROL METHODS FOR THE SITE INCLUDE STRUCTURAL AND STABILIZATION PRACTICES. STABILIZATION PRACTICES WILL BE IMPLEMENTED TO COVER EXPOSED SOIL SO THAT DISCHARGE OF SEDIMENT INTO WETLAND AREAS IS MINIMIZED. STABILIZATION PRACTICES REDUCE THE TIME SOIL IS EXPOSED TO THE ELEMENTS THEREFORE REDUCING THE POSSIBILITY OF EROSION. AN ADEQUATE STOCKPILE OF EROSION CONTROL MATERIALS WILL BE MAINTAINED AT THE CONSTRUCTION SITE IN THE EVENT OF EMERGENCY OR ROUTINE REPAIRS.
 - STRUCTURAL PRACTICES INVOLVE THE CONSTRUCTION OF DEVICES TO DIVERT AND LIMIT RUNOFF. THESE PRACTICES LIMIT THE AMOUNT OF STORMWATER ENTERING A DISTURBED AREA OR TRAP SEDIMENT PRIOR TO STORMWATER LEAVING A SITE. THE FOLLOWING ARE THE PROCEDURES TO BE FOLLOWED:
 - THE SITE CONSTRUCTION FOREMAN SHALL BE DESIGNATED AS THE ON-SITE INDIVIDUAL WHO WILL BE RESPONSIBLE FOR THE DAILY MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROLS, AND SHALL IMPLEMENT ALL MEASURES NECESSARY TO CONTROL EROSION AND TO PREVENT SEDIMENT FROM LEAVING THE SITE.
 - PRIOR TO ANY SITE GRADING OR SITE WORK, THE CONTRACTOR SHALL INSTALL ALL SPECIFIED SEDIMENT AND EROSION CONTROLS JUST INSIDE THE LIMITS OF DISTURBANCE. THE SEDIMENT CONTROLS WILL BE A CONTINUOUS LINE OF HAYBALES AND SILT FENCE OR STRAW WATTLES.
 - A 50-FOOT LONG CONSTRUCTION ACCESS, RI STD 9.9.0 SHALL BE INSTALLED TO SHED DIRT FROM CONSTRUCTION VEHICLE TIRES PRIOR TO ENTERING THE ROADWAY. THE CRUSHED STONE PAD WILL BE REPLACED/CLEANED AS NEEDED TO MAINTAIN ITS EFFECTIVENESS.
 - INFILTRATION BASIN(S) AND SEDIMENT FOREBAY(S) IF NECESSARY, SHALL BE USED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION. SEDIMENT SHALL BE REMOVED FROM THE BASINS ON AN AS NEEDED BASIS OR WHEN THE SEDIMENT REACHES A DEPTH OF MORE THAN 3".
 - CONSTRUCTION DEBRIS AND SEDIMENT SHALL BE KEPT ON SITE AND SHALL NOT BE PERMITTED TO MIGRATE BEYOND THE PROJECT BOUNDARIES OR TO ANY WETLAND AREA.
 - ONCE THE SITE HAS BEEN LOADED AND SEEDED AND THE SITE IS STABLE, THE SEDIMENT AND EROSION CONTROLS MAY BE REMOVED.

- OTHER CONTROLS**
- THE FOLLOWING ADDITIONAL CONTROLS SHALL BE IMPLEMENTED DURING CONSTRUCTION IN ORDER TO MINIMIZE EROSION AND RUNOFF FROM THE PROJECT LOCATION:
- NO CHEMICALS (CEMENT, MORTAR, ETC.) SHALL BE MIXED OR Poured WITHIN ANY WETLANDS.
 - SOLID WASTE WILL BE COLLECTED AND STORED IN A SECURE DUMPSTER. THE DUMPSTER SHALL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS.
 - CONSTRUCTION DEBRIS WILL INCLUDE ALL WOOD, STONE AND OTHER DEBRIS AND SITE MATERIALS REQUIRING REMOVAL. THESE MATERIALS WILL BE DISPOSED OF ACCORDING TO STATE AND FEDERAL LAW AND WILL NOT BE DISPOSED OF ON-SITE.
 - THE LIMITS OF ALL GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE SHALL REMAIN UNDISTURBED.
 - CONTINUOUS LINES OF EROSION CONTROLS SHALL BE INSTALLED PRIOR TO START OF CONSTRUCTION AND SHALL BE MAINTAINED UNTIL WORK IS COMPLETE AND A STABLE GROUND SURFACE IS ESTABLISHED.
 - ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED OR REPLACED AS REQUIRED TO ASSURE PROPER FUNCTION.
 - ALL BREACHES OR FAILURES IN SEDIMENT CONTROLS SHALL BE IMMEDIATELY REPAIRED OR REPLACED.
 - DEBRIS AND LITTER, WHICH ACCUMULATES ALONG THE CONSTRUCTION AREA, SHALL BE REMOVED DAILY AND DISPOSED OF OFF-SITE.
 - SEDIMENT BUILD-UP BEHIND ANY SILT FENCES OR EROSION CONTROL BARRIERS WILL BE MONITORED AND REMOVED WHENEVER SEDIMENT HAS ACCUMULATED TO 6-INCHES IN DEPTH.

- ORDER OF PROCEDURE**
- PRIOR TO ANY CONSTRUCTION OR EXCAVATION, EROSION & SEDIMENTATION (E&S) CONTROL MEASURES (HAYBALES AND SILT FENCE, STRAW WATTLES OR OTHER APPROVED MEASURES) SHALL BE INSTALLED AT THE PROPERTY LINE OR LIMIT OF DISTURBANCE. E&S CONTROL MEASURES SHALL BE INSTALLED AT THE LIMIT OF WORK ACTIVITY IF CONSTRUCTION IS TO BE DONE IN PHASES.
 - PRIOR TO COMMENCING OPERATIONS, E&S CONTROL MEASURES SHALL BE PLACED SO AS TO PREVENT SEDIMENT FROM ENTERING EXISTING AND PROPOSED DRAINAGE SYSTEMS OR WETLANDS.
 - ALL E&S CONTROL STRUCTURES SHALL BE PERIODICALLY MAINTAINED AS PER THE RESPECTIVE PROGRAMS DURING THE CONSTRUCTION.
 - IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROLS.
 - TEMPORARY HAYBALES AND SANDBAGS ALONG AND AT THE ENDS OF THE ROADWAY MAY ALSO BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.
 - E&S CONTROL MEASURES AT THE DRAINAGE STRUCTURES MUST REMAIN UNTIL SUCH TIME THAT A DESIRABLE STAND OF GRASS OR GROUND COVER HAS BEEN ESTABLISHED AND THE PROJECT RECEIVES A FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER.
- SEDIMENTATION CONTROL PROGRAM**
- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEMS, STATE HIGHWAY, TOWN ROADWAY, WETLANDS OR ADJOINING PROPERTIES.
 - ALL DISTURBED AREAS SUBJECT TO EROSION TENDENCIES WHETHER THEY BE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SLOPE PROTECTION.
 - BANKS OR SLOPES OVER 5 PERCENT SHALL BE SEEDED AS SOON AS POSSIBLE AND SHALL BE PROTECTED WITH A HAY, STRAW OR FIBER MULCH.
 - DURING CONSTRUCTION, THE CONTRACTOR AND/OR OWNER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
 - SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
 - CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATER COURSES OR WETLANDS OR THOSE AREAS SUBJECT TO STORM WATER FLOW.
 - ADDITIONAL HAY BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
 - ALL SEDIMENTS SHALL BE REMOVED FROM THE DRAINAGE FACILITIES WHEN DIRECTED BY THE ENGINEER OR THE LOCAL DEPARTMENT OF PUBLIC WORKS.
 - REFERENCE THE "RI EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY RIDEM AND THE US DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, AND THE TOWN OF CHARLESTOWN SOILS AND EROSION CONTROL ORDINANCES AS GUIDES.
 - ALL EARTH FILL USED FOR EMBANKMENT CONSTRUCTION SHALL BE FREE OF DETRIMENTAL AMOUNTS OF SODS, ROOTS, FROZEN SOILS, STONES, AND OTHER QUESTIONABLE MATERIAL.
 - A CONTINUOUS LINE OF STAKED HAY BALES AND SILT FENCES, RI STANDARDS OR TOWN APPROVED EQUALS, OR STRAW WATTLES SHALL BE PLACED ALONG AND INSIDE THE LIMITS OF DISTURBANCE AND WHERE SHOWN AND AS REQUIRED.

- EROSION CONTROL AND SOIL STABILIZATION PROGRAM**
- DENUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME.
 - STAKED HAY BALES AND SILT FENCES OR STRAW WATTLES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, MAINTAINED ON A REGULAR BASIS, AND SHALL BE PLACED TO PREVENT SEDIMENTATION ONTO ADJACENT PROPERTY OR INTO DRAINAGE SYSTEMS OR WETLANDS.
 - DURING CONSTRUCTION, THE CONTRACTOR AND/OR OWNER SHALL BE RESPONSIBLE FOR ALL EROSION CONTROLS MAINTENANCE AND SHALL INSPECT AND/OR REPLACE AS NEEDED.
 - DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW.
 - ADDITIONAL HAY BALES AND SILT FENCES OR STRAW WATTLES WILL BE INSTALLED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
 - ALL EROSION CONTROL MEASURES (HAY BALES AND SILT FENCE OR STRAW WATTLES) WILL REMAIN IN PLACE UNTIL AN ACCEPTABLE GROUND COVER DEVELOPS AND POTENTIAL SEDIMENTATION SOURCES ARE REMOVED.
 - NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1 TO OCTOBER 15. REFER TO LANDSCAPE PLANTING PLAN, DETAILS AND NOTES FOR ADDITIONAL INFORMATION.
 - ALL SEDIMENTS SHALL BE REMOVED FROM THE DRAINAGE FACILITIES WHEN DIRECTED BY THE ENGINEER, LOCAL DEPARTMENT OF PUBLIC WORKS, RIDOT OR RIDEM.
 - ALL AREAS SUBJECT TO EROSION FORCES SHALL RECEIVE PROTECTION.
 - HAY, STRAW, OR LINING APPLICATIONS SHALL BE USED AS REQUIRED ON EXPOSED SURFACES TO PREVENT EROSION. ALL METHODS SHALL BE APPROVED BY THE ENGINEER.
 - ALL VEGETATION WHICH DOES NOT SURVIVE AND DEVELOP WITHIN THE PERIOD OF ONE (1) YEAR SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE.
 - STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.
 - THE DRAINAGE SYSTEM SHALL BE CLEANED PRIOR TO ACCEPTANCE OF THE OVERALL PROJECT BY THE OWNER. SEDIMENTS SHALL BE DISPOSED OF IN A PROPER MANNER.
 - AS REQUIRED AND WARRANTED, SEDIMENTATION TRAPS WILL BE PROVIDED AT ALL DRAINAGE OUTLET STRUCTURES UNTIL PERMANENT STABILIZATION HAS OCCURRED.
 - NO SLOPES TO EXCEED 3:1.
 - STOCKPILES EXPOSED FOR EXCESSIVE PERIODS SHALL RECEIVE TEMPORARY TREATMENT CONSISTING OF HAY, STRAW, OR FIBER MATTING.
 - STOCKPILES SHALL NOT BE LOCATED NEAR WATERWAYS AND SHALL HAVE NO SLOPE STEEPER THAN 3:1 AND SHALL BE SURROUNDED BY STAKED HAY BALES AND SEEDED AND/OR STABILIZED.
 - FINAL TREATMENT FOR DISTURBED AREAS SHALL BE 4" PLANTABLE SOIL AND EROSION CONTROL SEED MIX, UNLESS OTHERWISE SHOWN ON LANDSCAPING PLANS.
 - LANDSCAPING SHALL BE LOCATED AT LOCATIONS AS SHOWN ON THE PLANS AND/OR SHALL BE LOCATED AT THE DISCRETION AND PREFERENCE OF THE OWNER.
 - THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH RI STANDARD SPECIFICATIONS.
 - THE SEED MIX SHALL BE INOCULATED 24 HOURS BEFORE MIXING AND PLANTING WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
 - HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3000 TO 4000 LBS PER ACRE.
 - ON BOTH STEEP AND LONG SLOPES CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.
 - ALL DISTURBED SLOPES, EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15 SHALL BE SEEDED AND PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION YEAR.
 - REFER TO THE LANDSCAPE DESIGN FOR PERMANENT SEEDING TREATMENT AND MIXTURES.
 - TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS) AND SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER OR LANDSCAPE ARCHITECT.
 - ALL HAYBALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. A TEMPORARY SEEDING GUIDE MUST BE INCLUDED AS A REFERENCE. THE FOLLOWING SPECIES ARE RECOMMENDED.
- | SPECIES | LBS/1000 SF | LBS/ACRE | SEEDING |
|--------------------|-------------|----------|--------------------|
| ANNUAL RYEGRASS | 1.0 - 1.5 | 40 - 60 | MARCH 1 - JUNE 1 |
| PERENNIAL RYEGRASS | 1.0 - 1.5 | 40 - 60 | MARCH 1 - JUNE 1 |
| SUDAN GRASS | 0.7 - 1.0 | 30 - 40 | MAY 15 - AUGUST 15 |
| MILLET | 0.7 - 1.0 | 30 - 40 | MAY 15 - JUNE 15 |
| WINTER RYE | 3.0 | 120 | APRIL 15 - JUNE 15 |
- ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE RIDPW STD SPECIFICATIONS SECTION 202.
 - REFERENCE THE SEDIMENTATION CONTROL PROGRAM AND ORDER OF PROCEDURE FOR PROPER COORDINATION.

NOTES & DETAILS NO. 3

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
EROSION WATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: AUG 11 2023 FILE #: 22-0051
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PROPERTY OWNER / APPLICANT
MICHAEL CHARLAND
PO BOX 804
NORTH SCITUATE, RI 02857

CONTACT PERSON:
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MCHARLAND@LIVE.COM
PHONE 401-556-4645

DATE: JANUARY 2022

SHEET: ND-3

SHEET 6 OF 6