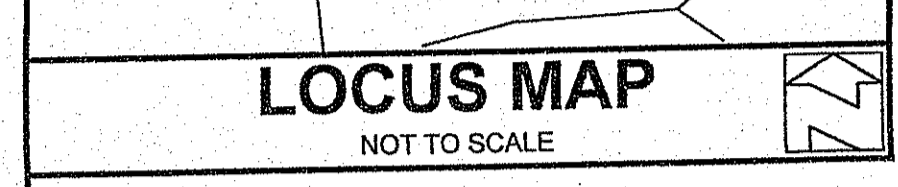
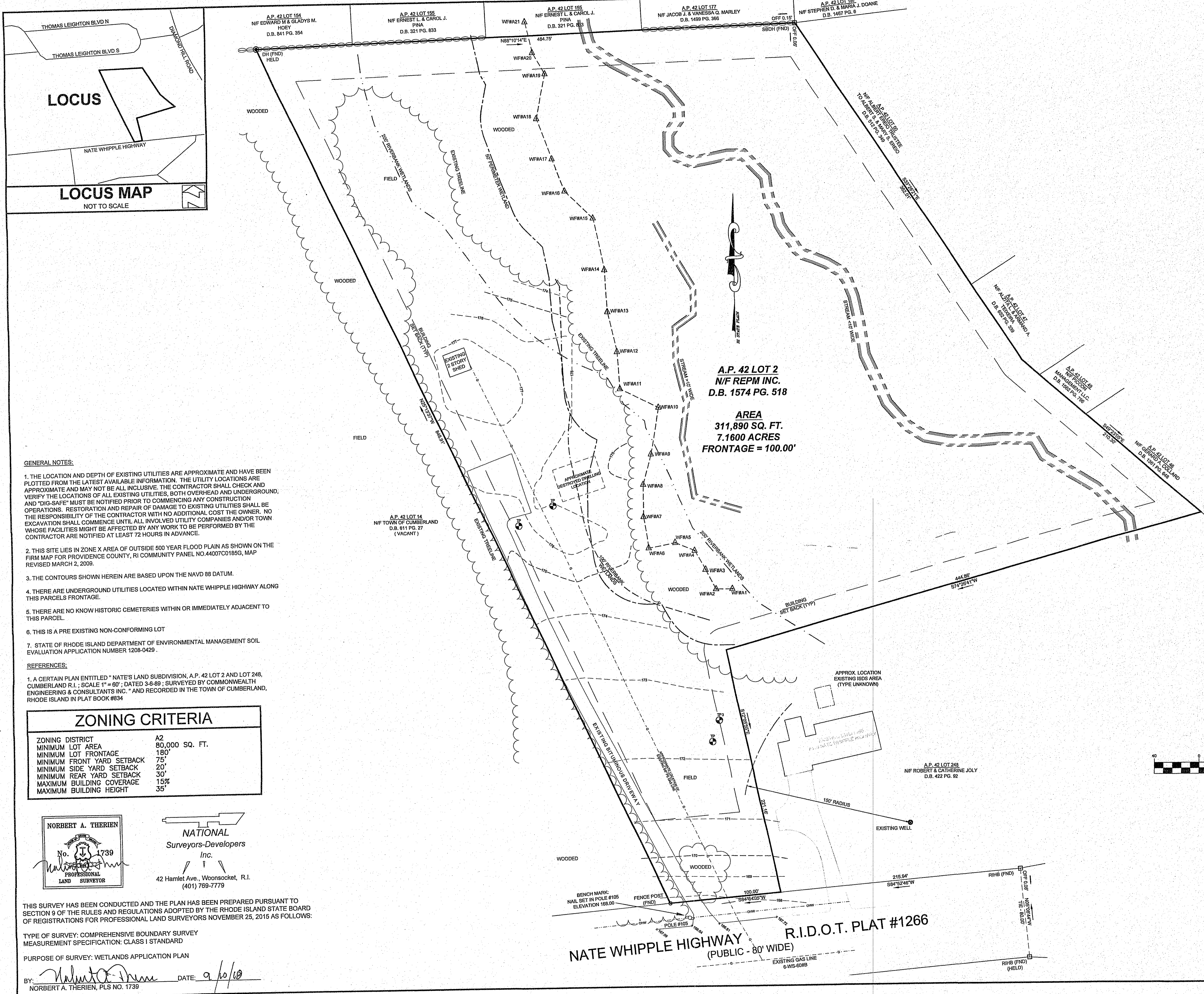


NO.	DATE	DESCRIPTION	BY



LEGEND
NOT TO SCALE

- BOUNDARY
- ABUTTER
- MAJOR CONTOUR
- MINOR CONTOUR
- STONEWALL
- TREELINE
- BUILDING ENVELOPE
- G — GAS LINE
- W — WATER LINE
- OHW — ELECTRIC LINE
- — SOIL EVALUATION HOLE
- — IRON PIN
- — BOUND
- — DRILL HOLE
- — WELL
- — UTILITY POLE
- — WATER VALVE
- — GAS VALVE
- LOD — LIMITS OF DISTURBANCE
- Erosion CONTROL

Office of Water Resources
 SEP 26 2018
 Environmental Management

GENERAL NOTES:

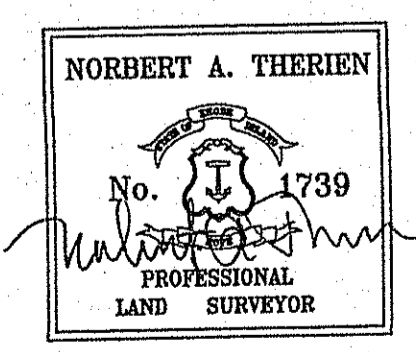
1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
2. THIS SITE LIES IN ZONE X AREA OF OUTSIDE 500 YEAR FLOOD PLAIN AS SHOWN ON THE FIRM MAP FOR PROVIDENCE COUNTY, RI COMMUNITY PANEL NO. 44007C0185G, MAP REVISED MARCH 2, 2009.
3. THE CONTOURS SHOWN HEREIN ARE BASED UPON THE NAVD 88 DATUM.
4. THERE ARE UNDERGROUND UTILITIES LOCATED WITHIN NATE WHIPPLE HIGHWAY ALONG THIS PARCELS FRONTAGE.
5. THERE ARE NO KNOWN HISTORIC CEMETERIES WITHIN OR IMMEDIATELY ADJACENT TO THIS PARCEL.
6. THIS IS A PRE EXISTING NON-CONFORMING LOT
7. STATE OF RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT SOIL EVALUATION APPLICATION NUMBER 1208-0429.

REFERENCES:

1. A CERTAIN PLAN ENTITLED "NATE'S LAND SUBDIVISION, A.P. 42 LOT 2 AND LOT 248, CUMBERLAND R.I.; SCALE 1" = 60'; DATED 3-5-89; SURVEYED BY COMMONWEALTH ENGINEERING & CONSULTANTS INC." AND RECORDED IN THE TOWN OF CUMBERLAND, RHODE ISLAND IN PLAT BOOK #834

ZONING CRITERIA

ZONING DISTRICT	A2
MINIMUM LOT AREA	80,000 SQ. FT.
MINIMUM LOT FRONTAGE	180'
MINIMUM FRONT YARD SETBACK	75'
MINIMUM SIDE YARD SETBACK	20'
MINIMUM REAR YARD SETBACK	30'
MAXIMUM BUILDING COVERAGE	15%
MAXIMUM BUILDING HEIGHT	35'



NATIONAL
Surveyors-Developers
Inc.
42 Hamlet Ave., Woonsocket, R.I.
(401) 769-7779

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:

TYPE OF SURVEY: COMPREHENSIVE BOUNDARY SURVEY
MEASUREMENT SPECIFICATION: CLASS I STANDARD

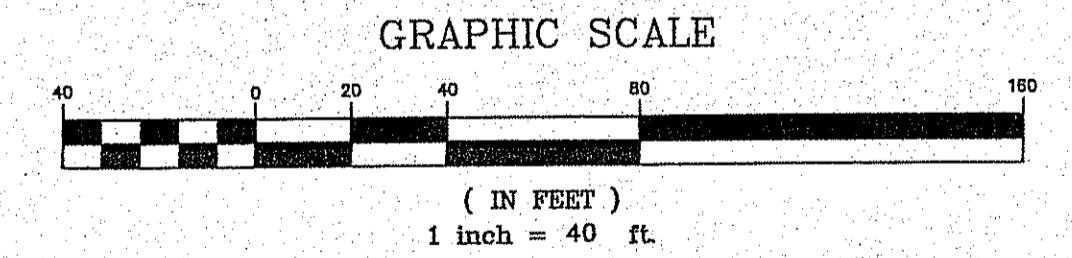
PURPOSE OF SURVEY: WETLANDS APPLICATION PLAN

BY: *Norbert A. Therien* DATE: 9/10/18
NORBERT A. THERIEN, PLS NO. 1739

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

OWTS# 1208-0429 DW# 18-0260
APPROVED: *[Signature]* DATE 12/4/18
No Changes Allowed Without RIDEM Approval
Approved Plans/Permit Must Be Kept at Construction Site

APPLICANT'S MAILING ADDRESS:
JOHN BOUCHER
600 CASS AVENUE WOONSOCKET R.I. 02859



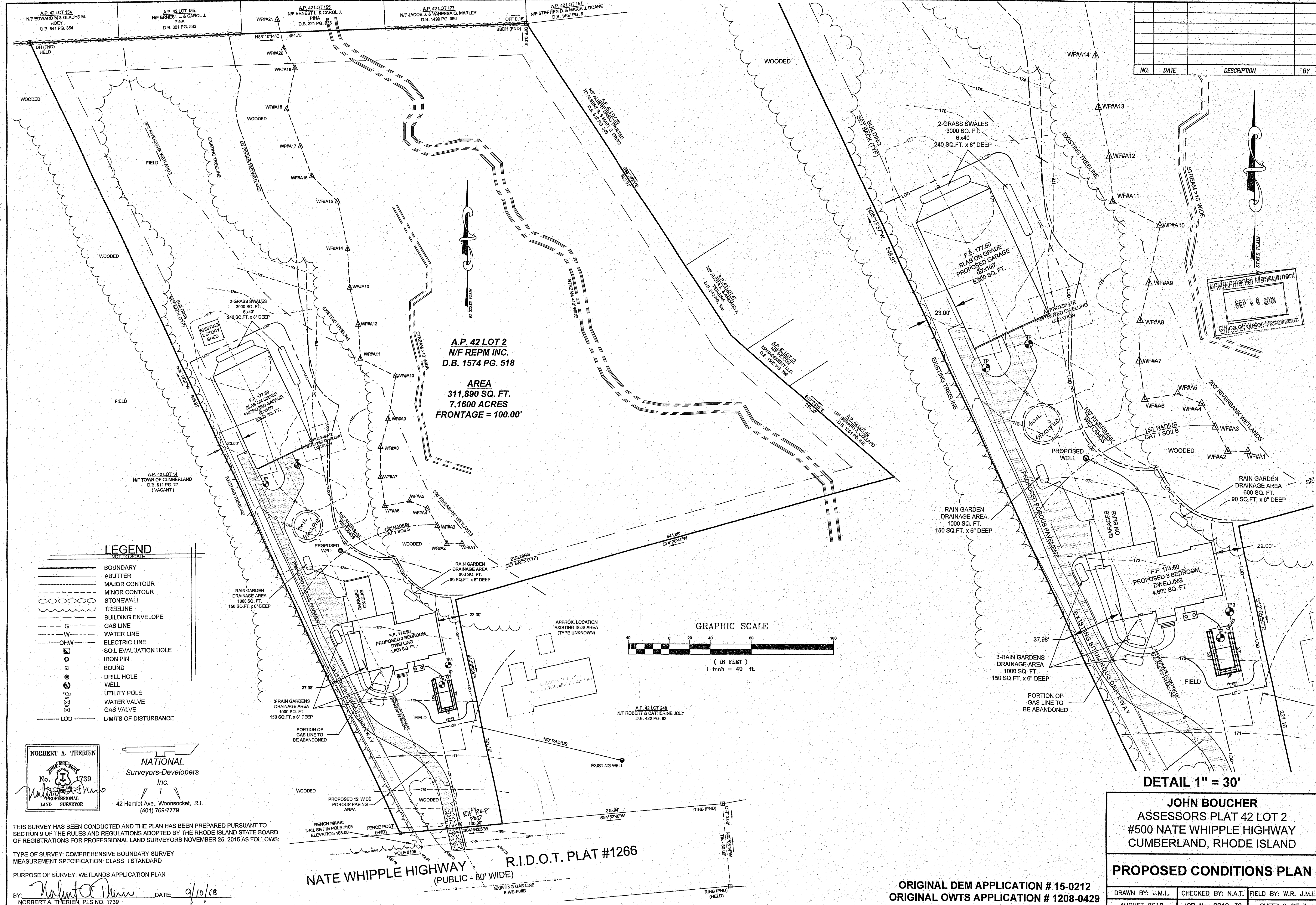
ORIGINAL DEM APPLICATION # 15-0212
ORIGINAL OWTS APPLICATION # 1208-0429

JOHN BOUCHER
ASSESSORS PLAT 42 LOT 2
#500 NATE WHIPPLE HIGHWAY
CUMBERLAND, RHODE ISLAND

EXISTING CONDITIONS PLAN

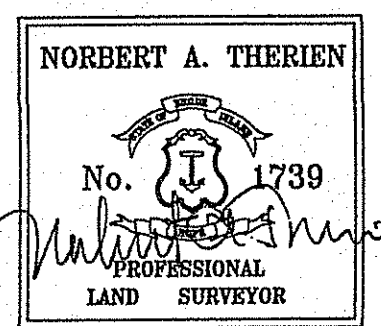
DRAWN BY: J.M.L.	CHECKED BY: N.A.T.	FIELD BY: W.R. J.M.L.
AUGUST 2012	JOB No. 2012-39	SHEET 1 OF 3

NO.	DATE	DESCRIPTION	BY



LEGEND
NOT TO SCALE

- BOUNDARY
- - - ABUTTER
- - - MAJOR CONTOUR
- - - MINOR CONTOUR
- STONEWALL
- TREELINE
- BUILDING ENVELOPE
- - - G GAS LINE
- - - W WATER LINE
- - - OHW ELECTRIC LINE
- SOIL EVALUATION HOLE
- IRON PIN
- BOUND
- DRILL HOLE
- WELL
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- LOD LIMITS OF DISTURBANCE



NATIONAL
Surveyors-Developers
Inc.
42 Hamlet Ave., Woonsocket, R.I.
(401) 769-7779

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2016 AS FOLLOWS:

TYPE OF SURVEY: COMPREHENSIVE BOUNDARY SURVEY
MEASUREMENT SPECIFICATION: CLASS 1 STANDARD

PURPOSE OF SURVEY: WETLANDS APPLICATION PLAN

BY: *Norbert A. Therien* DATE: 9/10/18
NORBERT A. THERIEN, PLS NO. 1739

NATE WHIPPLE HIGHWAY
(PUBLIC - 80' WIDE)
R.I.D.O.T. PLAT #1266

DETAIL 1" = 30'

JOHN BOUCHER
ASSESSORS PLAT 42 LOT 2
#500 NATE WHIPPLE HIGHWAY
CUMBERLAND, RHODE ISLAND

PROPOSED CONDITIONS PLAN

DRAWN BY: J.M.L.	CHECKED BY: N.A.T.	FIELD BY: W.R. J.M.L.
AUGUST 2012	JOB No. 2012-39	SHEET 2 OF 3

ORIGINAL DEM APPLICATION # 15-0212
ORIGINAL OWTS APPLICATION # 1208-0429

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

THE HAYBALE AND SILT FENCE LINE ILLUSTRATED ON THESE PLANS SHALL SERVE AS THE STRICT LIMIT OF DISTURBANCE FOR THE PROJECT WITHIN OR ADJACENT TO REGULATED FRESHWATER WETLAND AREAS.

THE LIMITS OF CLEARING, GRADING, AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THESE LIMITS, AS DEPICTED ON THE PLAN SHALL BE TOTALLY UNDISTURBED, TO REMAIN IN NATURAL CONDITION.

ALL CATCH BASINS SHALL BE PROTECTED WITH STAKED HAYBALES (R.I. STD. 9.8.0) DURING CONSTRUCTION ACTIVITIES. ALL PROPOSED STORMWATER DISCHARGE AREAS SHALL BE LINED WITH A RIPRAP SPLASH PAD AND PROTECTED WITH STAKED HAYBALE OUTLET PROTECTION (R.I. STD. 9.1.0), OR STAKED HAYBALE WITH SILT FENCE (R.I. STD. 9.3.0) SHALL ALSO BE INSTALLED AT ALL EXISTING STORMWATER DISCHARGE LOCATIONS WHERE DISTRIBUTING PIPES, CATCH BASINS, AND MANHOLES ARE TO BE CLEANED AND FLUSHED.

ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEEDED, PROTECTED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL REGULARLY CHECK ALL SEEDED AREAS TO ENSURE THAT A GOOD STAND OF VEGETATION IS MAINTAINED.

ALL HAYBALES, TEMPORARY TREATMENT (HAY, STRAW, ETC.) AND TEMPORARY EROSION PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.

STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS OR WETLAND EDGES. THEY SHALL HAVE SIDE SLOPES OF NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEEDED AND/OR STABILIZED PER CONTRACT SPECIFICATIONS.

THE HAYBALES SHALL BE CHECKED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH STORM FOR UNDERMINING OR DETERIORATION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY HAYBALES AS NEEDED. THE CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED WITH SEDIMENTS.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SOIL EROSION AND SEDIMENT CONTROLS ON THE PROJECT SITE FOR THE ENTIRE DURATION OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL FOLLOW THE DIRECTION OF THE RESIDENT ENGINEER WITH REGARD TO INSTALLATION, MAINTENANCE, AND REPAIR OF ALL SOIL EROSION AND SEDIMENTATION CONTROLS ON THE PROJECT SITE. TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROLS (HAYBALES, SILT FENCE, ETC.) SHALL BE MAINTAINED UNTIL ALL EXPOSED SOILS ARE SATISFACTORILY STABILIZED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND/OR RESEEDING ALL AREAS THAT DO NOT DEVELOP WITHIN ONE YEAR FROM THE COMPLETION OF CONSTRUCTION.

ALL REFERENCED SOIL EROSION AND SEDIMENTATION CONTROLS INCLUDING MATERIALS USED, APPLICATION RATES AND THE INSTALLATION PROCEDURES SHALL BE PERFORMED PER THE "RHODE ISLAND EROSION AND SEDIMENTATION HANDBOOK", DATED 1993.

BMP MAINTENANCE SCHEDULE:

ALL MAINTENANCE (INCLUDING CLEANING) REQUIRED DURING THE CONSTRUCTION PHASE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL INCLUDE:

INSPECTION OF ALL SLOPES, BERMS, AND OTHER CONTROL STRUCTURES (INCLUDING ROADWAY SIDE SLOPES, FOR STRUCTURAL INTEGRITY/STABILITY AND EVIDENCE OF SOIL EROSION PROCESSES, AND MAINTENANCE OF THESE STRUCTURES IF NECESSARY. INSPECTIONS SHALL BE PERFORMED FOLLOWING ALL RAIN EVENTS OF 1/4 INCH RAINFALL OR MORE IN A 24-HOUR PERIOD, OR BI-MONTHLY IF NO RAINFALL EVENT OCCURS.

REPLANTING, REGRADING, OR OTHER REPAIRS NEEDED AS A RESULT OF SOIL EROSION AND SEDIMENTATION PROCESSES SHALL BE DONE PROMPTLY.

SITE PLAN NOTES:

DETAILED ENGINEERING REVIEW FOR PROPOSED UTILITIES COVERED UNDER SEPARATE SUBMISSION, TO GOVERNING AGENCIES. THE DETAILED ENGINEERING PLANS FOR UTILITIES INSTALLATION AND CONNECTION HAVE NOT BEEN PROVIDED UNDER THIS SUBMISSION.

THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING POLICE PROTECTION. ALL TEMPORARY AND VEHICULAR SIGNS, BARRICADES AND LANE CLOSURES SHALL BE IN CONFORMANCE WITH THE LATEST REVISIONS OF MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.)

TEMPORARY CONSTRUCTION SIGNS AND ALL APPLICABLE TRAFFIC CONTROL DIVIDES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC.

THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS WILL NOT BE PARKED IN THE STATE RIGHT-OF-WAY.

ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS CHANNELING DEVICES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. 1988 EDITION, INCLUDING REVISION 3, SEPTEMBER 3, 1993 AND SUBSEQUENT ADDENDA.

SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE R.I.D.O.T. SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.

ESTABLISHMENT OF VEGETATIVE COVER:

ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE R.I. STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 202.

SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.

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 TO RHODE ISLAND STANDARD SPECIFICATION M.20.

THE SEED MIX TO BE USED ON SLOPE APPROACHING WETLAND SHALL BE THE NEW ENGLAND CONSERVATION/WILDLIFE MIX FROM NEW ENGLAND WETLAND PLANTS, INC. OR APPROVED EQUAL APPLIED AT A RATE OF 25 LBS. PER ACRE AND MULCHED WITH STRAW.

EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED. LIME AND FERTILIZE AS REQUIRED BY SOIL TESTING TO COMPLIMENT OR UPGRADE EXISTING CONDITIONS.

Tables 7 and 8. Rain Garden Sizing Guidance

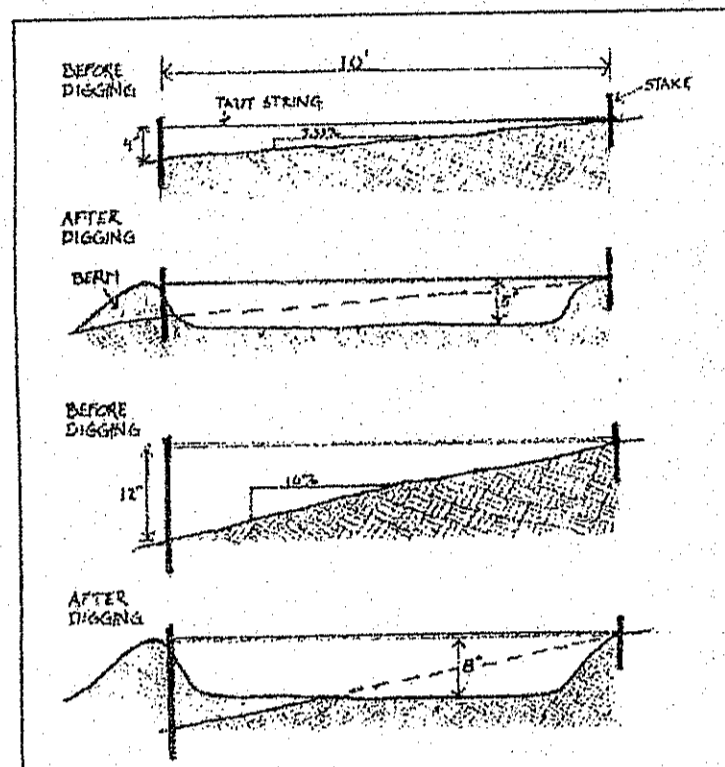
Rain Garden Surface Area in Sandy Soils (Sands, Loamy Sands and Sandy Loams) (square feet)

Drainage Area (Square feet)	for 4 inch deep garden	for 6 inch deep garden	for 8 inch deep garden
100	19	15	8
200	38	30	16
300	57	45	24
400	76	60	32
500	95	75	40
600	114	90	48
700	133	105	56
800	152	120	64
900	171	135	72
1000	190	150	80

Rain Garden Installation

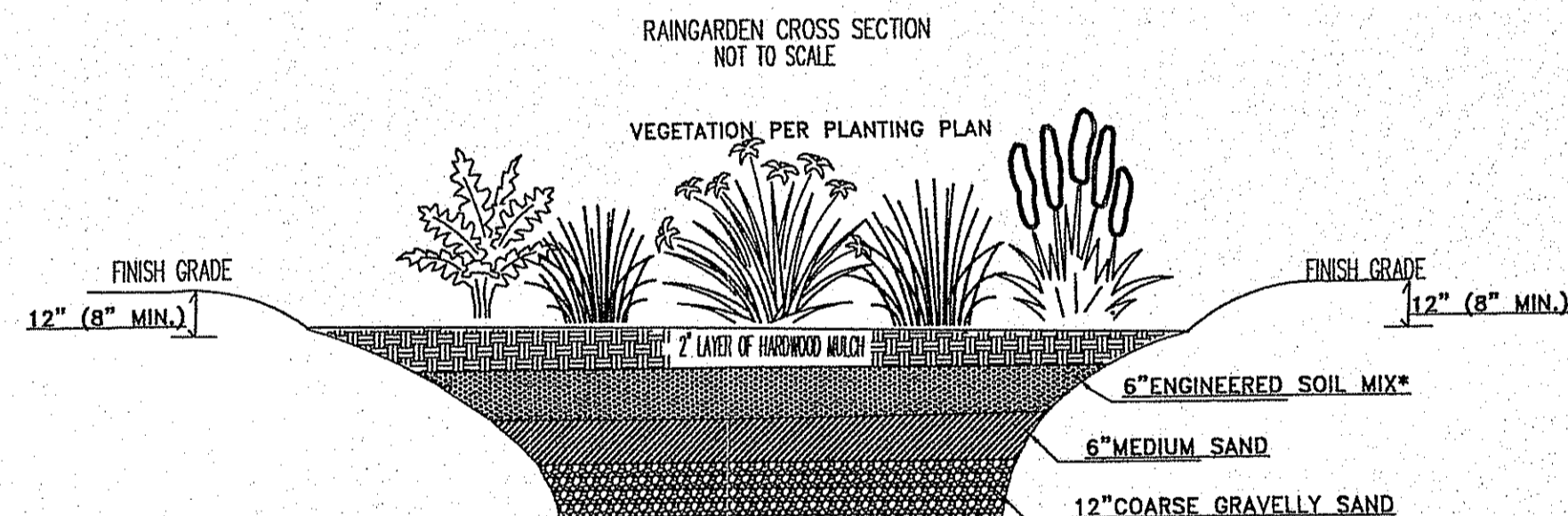
The best time to install a rain garden is in the spring, when digging will be easier and plants will be more likely to thrive. Be sure that the bottom of the rain garden is level and at the appropriate depth, and that you create a berm on the downhill side to retain stormwater (see Figure 3, below).

Figure 3. Digging the Rain Garden and Creating a Berm



Rain Garden Plant Selection

Plants that tend to do well in rain gardens are those that tolerate wet conditions, but also very dry conditions. Use the Rhode Island Coastal Plant Guide (www.uri.edu/cees/coec/CoastalPlants/CoastalPlantGuide.htm) to select appropriate species (filter your selection for "Rain Garden") then create a planting plan to lay out where each plant will go. Below are two example planting plans for residential rain gardens, but feel free to create your own.

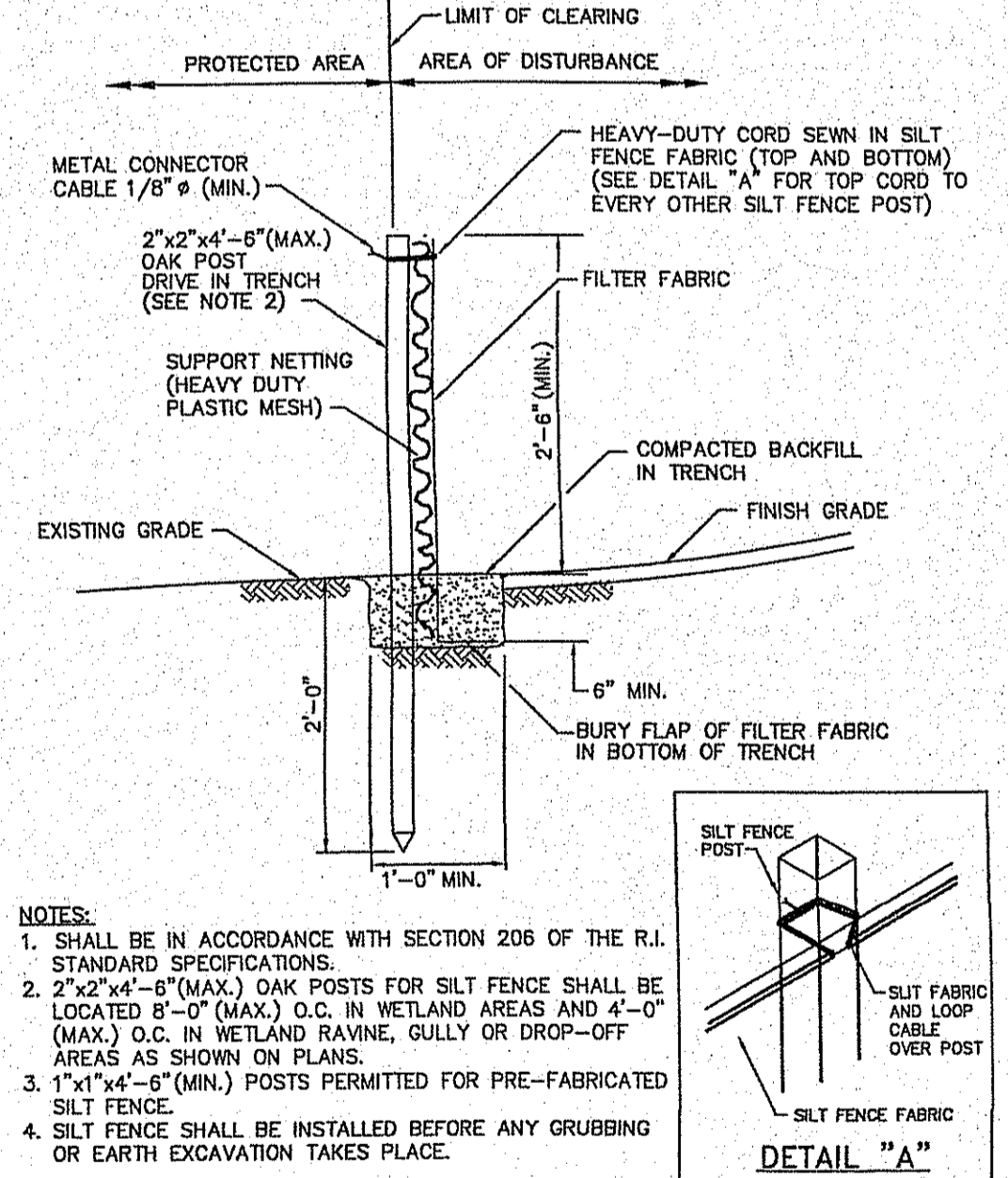
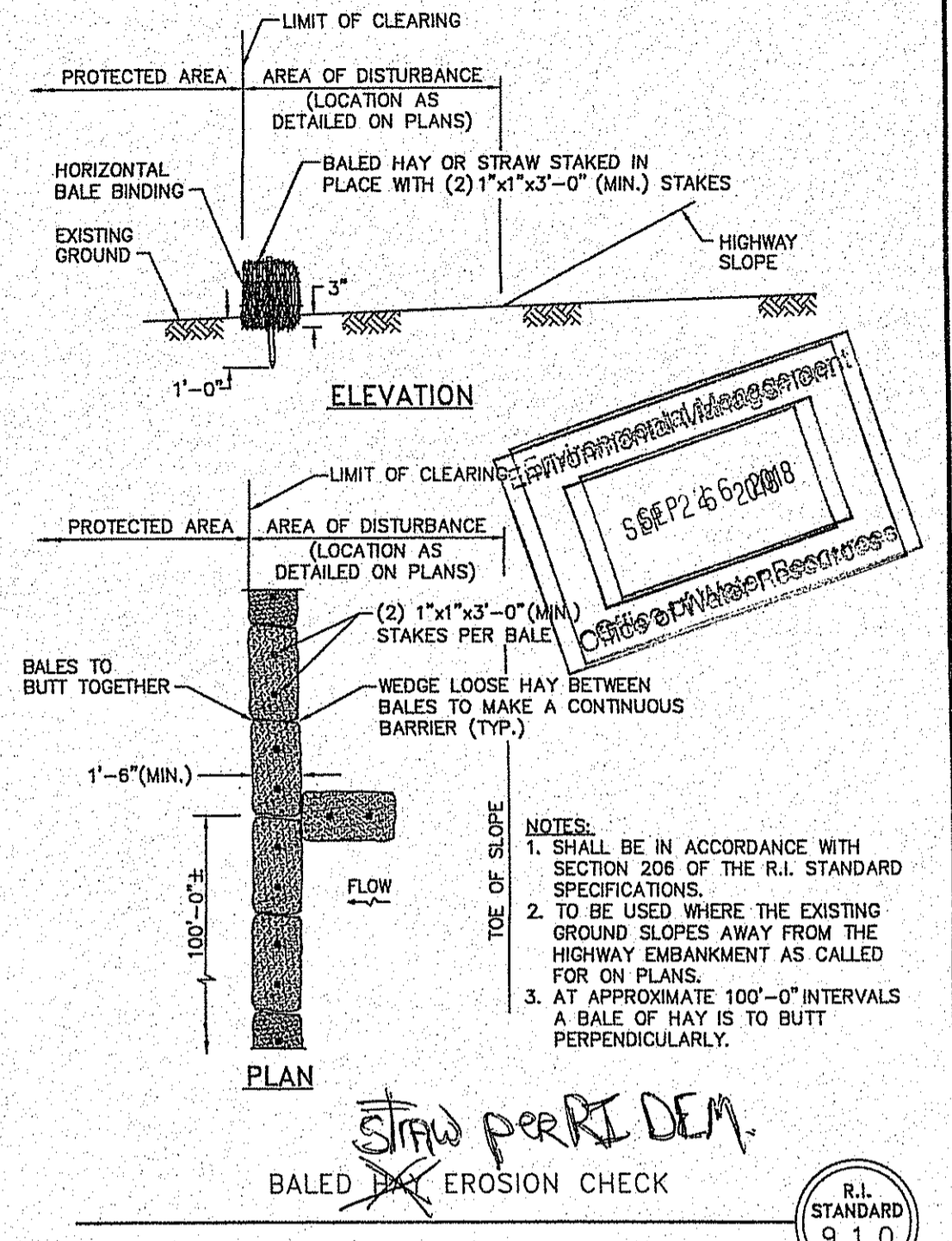
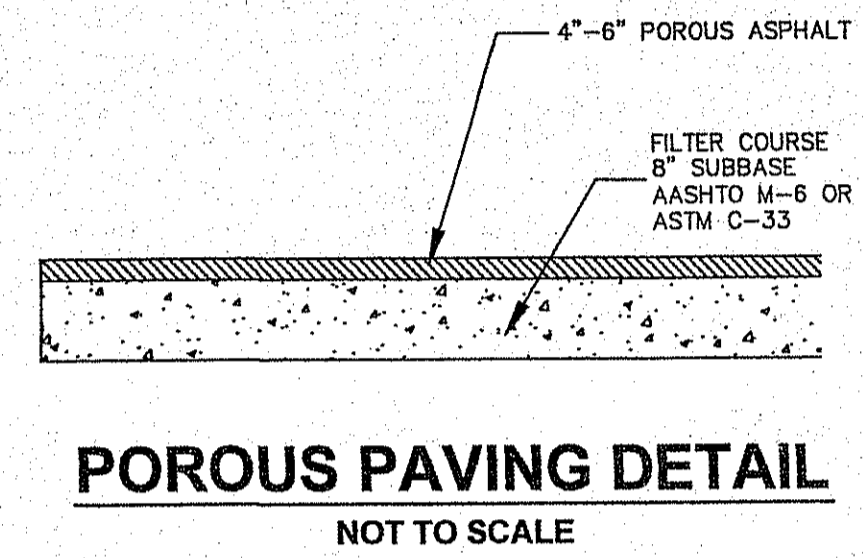
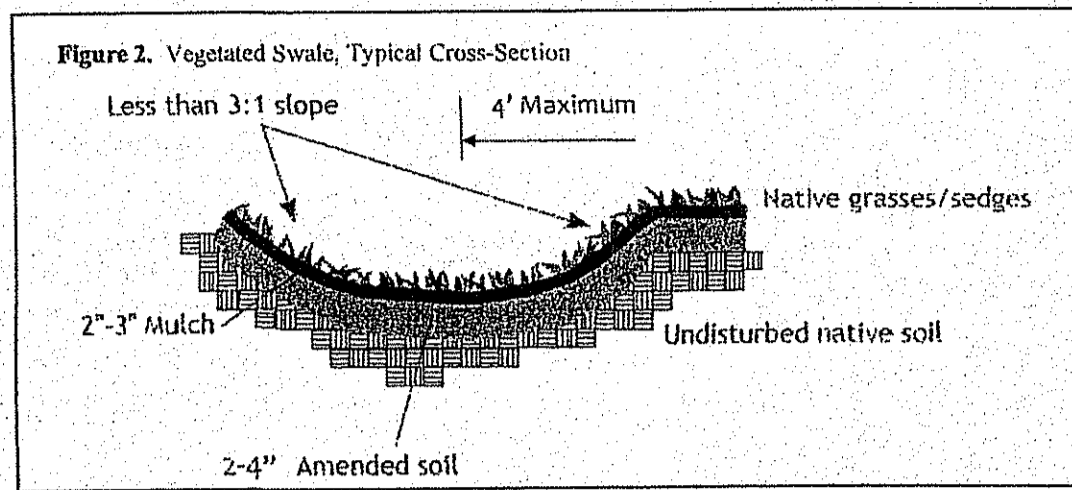


PLANT SCHEDULE

SYMBOL	SPECIES NAME	COMMON NAME
AD	ASTER DIVARICATUS	WHITE WOOD ASTER
CC	CAREX CRINITA	FRINGED SEDGE
CS	CAREX STRICTA	TUSSOCK SEDGE
IV	IRIS VERSICOLOR	BLUE FLAG IRIS
LC	LOBELIA CARDINALIS	CARDINAL FLOWER
MS	MATTEUCCIA STRUTHOPTERIS	OSTRICH FERN
OC	OSMUNDA CINNAMOMEA	CINNAMON FERN
PC	PONTEDERIA CORDATA	PICKEREL PLANT

RAIN GARDEN REQUIRED MAINTENANCE:

- MONTHLY:**
INSPECT AND REMOVE ANY TRASH
REMOVE AND INVASIVE SPECIES PLANTS
- ANNUALLY:**
MULCH-SPRING, AS NEEDED
REPLACE ANY DEAD VEGETATION-SPRING
REMOVE DEAD VEGETATION-FALL OR SPRING
PRUNE-SPRING
- AS NEEDED:**
REPLACE SOIL MEDIA AND PLANTS WHEN PONDING DOES NOT SUBSIDE WITHIN 72 HOURS
(CAREFUL MAINTENANCE SHOULD PROLONG THIS REQUIREMENT)
- * ALL PLANT MATERIAL SHALL BE WATERED AND MAINTAINED BY THE OWNER TO ASSURE THAT SUITABLE GROWTH HAS BEEN ESTABLISHED.



- NOTES:**
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 - 2"x2"x4'-6" (MAX.) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAX.) O.C. IN WETLAND AREAS AND 4'-0" (MAX.) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
 - 1"x1"x4'-6" (MIN.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
 - SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.

NORBERT A. THERIEN
No. 1739
PROFESSIONAL LAND SURVEYOR
NATIONAL Surveyors-Developers Inc.
42 Hamlet Ave., Woonsocket, R.I. (401) 769-7779

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:
TYPE OF SURVEY: COMPREHENSIVE BOUNDARY SURVEY
MEASUREMENT SPECIFICATION: CLASS 1 STANDARD
PURPOSE OF SURVEY: WETLANDS APPLICATION PLAN
BY: *Norbert A. Therien* DATE: 9/10/18
NORBERT A. THERIEN, PLS NO. 1739

ORIGINAL DEM APPLICATION # 15-0212
ORIGINAL OWTS APPLICATION # 1208-0429

JOHN BOUCHER
ASSESSORS PLAT 42 LOT 2
#500 NATE WHIPPLE HIGHWAY
CUMBERLAND, RHODE ISLAND

MISCELLANEOUS DETAILS

DRAWN BY: J.M.L.	CHECKED BY: N.A.T.	FIELD BY: W.R. J.M.L.
AUGUST 2012	JOB No. 2012-39	SHEET 3 OF 3