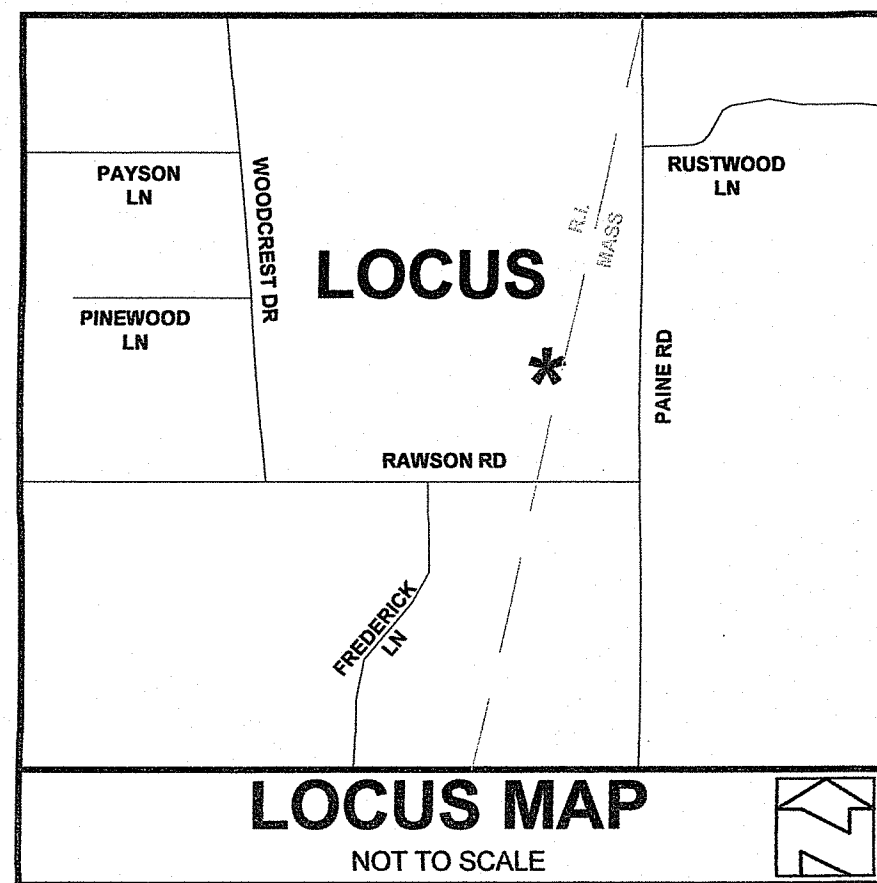


6	01/27/2020	REVISED ISDS LOCATION & GRADING	WCR
5	11/22/2019	PER TOWNS COMMENTS	WCR
4	10/04/2019	CHANGE OF OWNERS	WCR
3	06/05/2019	FINAL PLAN SUBMISSION	SMG
2	04/19/2019	ADDED UTILITY EASEMENT/NOTES	WCR
1	03/25/2019	PROPOSED WATER LINE	RAW
NO.	DATE	DESCRIPTION	BY



**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. WETLANDS SHOWN HEREIN WERE DELINEATED BY MASON & ASSOCIATES, INC. 771 PLAINFIELD PIKE, NORTH SCITUATE, RI.
3. SOIL EVALUATION APPLICATION NUMBER 1808-1343.
4. AREA IS WITHIN ZONE X AS PER FLOOD INSURANCE RATE MAP PROVIDENCE COUNTY RHODE ISLAND PANEL 185 OF 451 MAP NUMBER 44007/C0185G DATED MARCH 2 2009.
5. AREA IS WITHIN CRITICAL RESOURCE AREA ON RHODE ISLAND SIDE.

**REFERENCES:**

1. A PLAN ENTITLED "PINWOOD ESTATES, A SUBDIVISION IN CUMBERLAND R.I. FOR JAMES & JOSEPH FORTE. SCALE 1"=40' APRIL 23, 1973 FRANK O. WATERMAN R.L.S." WHICH IS LOCATED AT THE CUMBERLAND LAND EVIDENCE RECORDS ON PLAT CARD 443.
2. A PLAN ENTITLED "PLAN OF LAND BELONGING TO WILLIAM J. LYNCH NO. ATTLEBORO, MASS. SCALE 1"=200' ZIOCHOUSKI-SZPILA ENGINEERS, MAY 1992" WHICH IS LOCATED AT THE BRISTOL COUNTY REGISTRY OF DEEDS IN BOOK 54 PAGE 69.
3. A PLAN ENTITLED "SUBDIVISION PLAN OF LAND IN NORTH ATTLEBORO MASSACHUSETTS, OWNED BY ANTHONY LAWRENCE, SCALE 40 FEET TO AN INCH, MARCH 1972, JAMES A. FREEMAN ENGINEERING INC." WHICH IS LOCATED AT THE BRISTOL COUNTY REGISTRY OF DEEDS IN BOOK 130 PAGE 73.



**NORTH ATTLEBORO, MASS. ZONING CRITERIA**

ZONING DISTRICT	R40
MINIMUM LOT AREA	40,000 SQ. FT.
MINIMUM LOT FRONTAGE	150'
MINIMUM FRONT YARD SETBACK	40'
MINIMUM SIDE YARD SETBACK	20'
MINIMUM REAR YARD SETBACK	40'
MAXIMUM BUILDING COVERAGE	-
MAXIMUM BUILDING HEIGHT	-

**CUMBERLAND, R.I. ZONING CRITERIA**

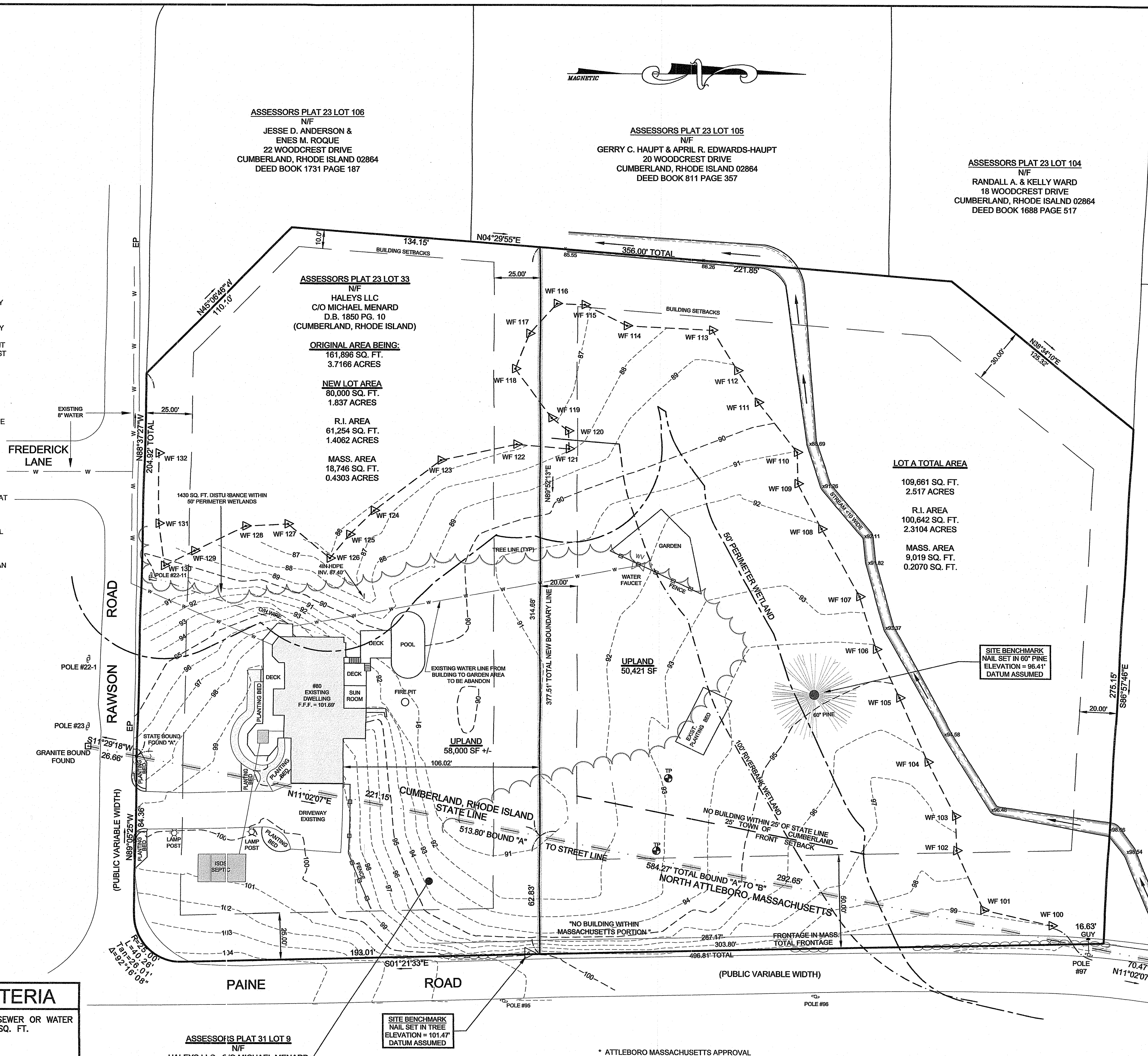
ZONING DISTRICT	R1 NO SEWER WITH WATER	R1 NO SEWER OR WATER
MINIMUM LOT AREA	40,000 SQ. FT.	80,000 SQ. FT.
MINIMUM LOT FRONTAGE	100'	180'
MINIMUM FRONT YARD SETBACK	25'	50'
MINIMUM SIDE YARD SETBACK	10'	20'
MINIMUM REAR YARD SETBACK	25'	30'
MAXIMUM BUILDING COVERAGE	20%	20%
MAXIMUM BUILDING HEIGHT	35'	35'

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: PRE-APPLICATION MINOR SUB-DIVISION PLAN  
MEASUREMENT SPECIFICATION: CLASS 1 - STANDARD

PURPOSE OF SURVEY: JOINT APPLICATION

BY: *Norbert A. Therien* DATE: 1/27/20  
NORBERT A. THERIEN, PLS NO. 1739



**LEGEND** NOT TO SCALE

- BOUNDARY
- - - BOUNDARY PROPOSED
- - - BUTTER
- - - MAJOR CONTOUR
- - - MINOR CONTOUR
- ○ ○ ○ STONEWALL
- TREELINE
- WETLANDS EDGE
- - - 50' PERIMETER WETLAND
- - - 100' RIVERBANK WETLAND
- - - LIMIT OF DISTURBANCE
- - - EROSION CONTROL
- - - STREAM
- - - BUILDING ENVELOPE
- - - W WATER LINE
- - - OHW ELECTRIC LINE
- BOUND
- UTILITY POLE
- WATER VALVE

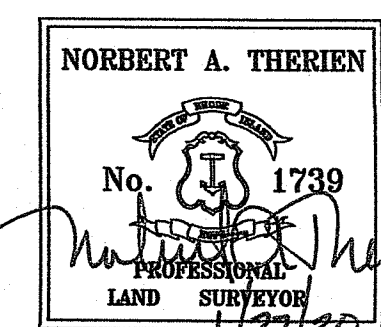
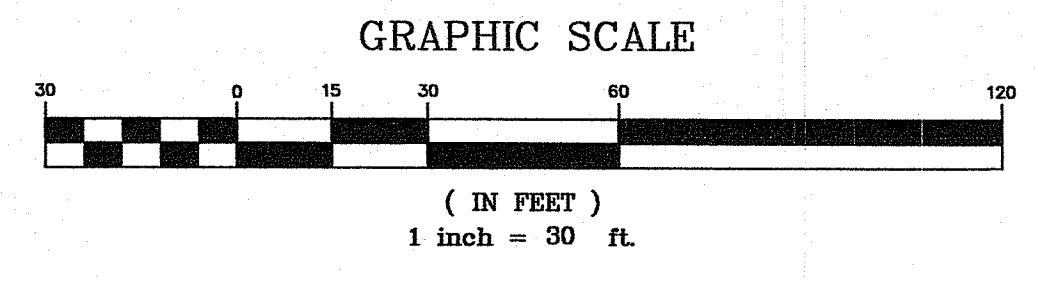
APPLICANT / OWNER:  
HALEYS LLC  
C/O MICHAEL MENARD  
44 AUSTIN DRIVE  
CUMBERLAND, RHODE ISLAND 02864  
1-401-374-8613

**JOINT APPLICATION**

**HALEYS LLC C/O MICHAEL MENARD**  
ASSESSORS PLAT 23 LOT 33  
80 RAWSON ROAD  
CUMBERLAND, RHODE ISLAND  
ASSESSORS PLAT 31 LOT 9  
NORTH ATTLEBORO, MASSACHUSETTS

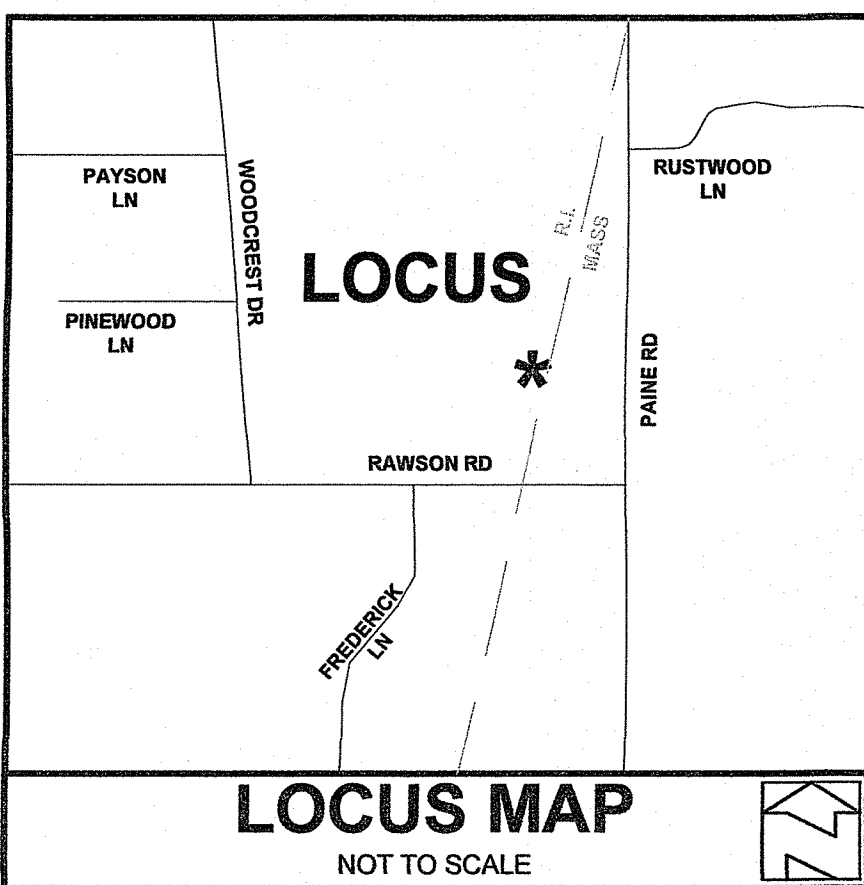
**FINAL EXISTING CONDITIONS PLAN**

DRAWN BY: R.A.W.	CHECKED BY: N.A.T.	FIELD BY: J.S./R.W.
OCTOBER, 2019	JOB No. 2019-170	SHEET 1 OF 4



**NATIONAL**  
Surveyors-Developers  
Inc.  
42 Hamlet Ave., Woonsocket, R.I.  
(401) 768-7779

6	01/27/2020	REVISED ISDS LOCATION & GRADING	WCR
5	11/22/2019	PER TOWNS COMMENTS	WCR
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NO.	DATE	DESCRIPTION	BY



**GENERAL NOTES:**

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MAXIMUM BUILDING HEIGHT	-

**CUMBERLAND, R.I. ZONING CRITERIA**

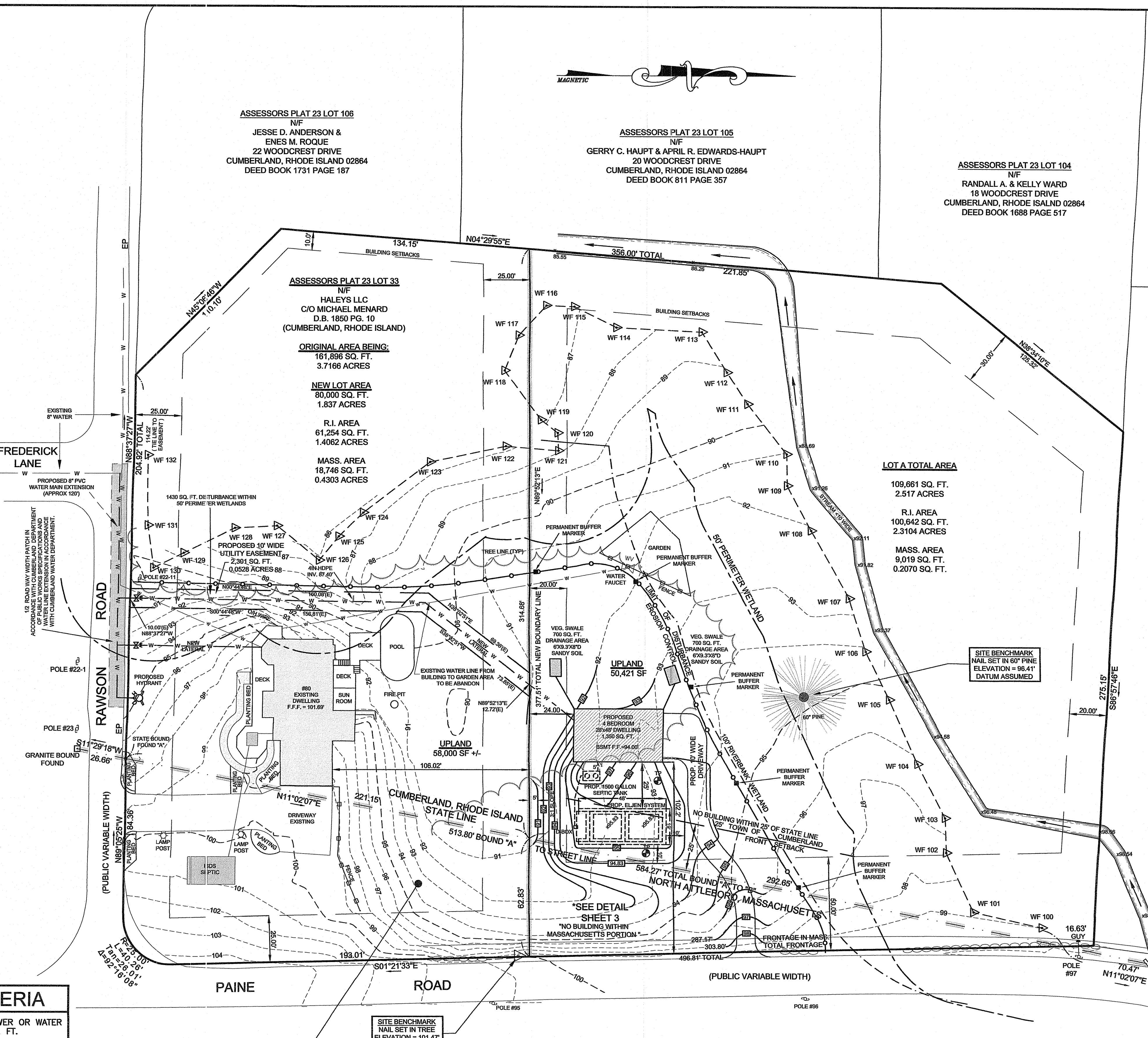
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MEASUREMENT SPECIFICATION: CLASS 1 SURVEY STANDARD

PURPOSE OF SURVEY: JOINT APPLICATION

BY: *Norbert A. Therien* DATE: 1/27/20  
NORBERT A. THERIEN, PLS NO. 1739



**LEGEND**  
NOT TO SCALE

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- STREAM
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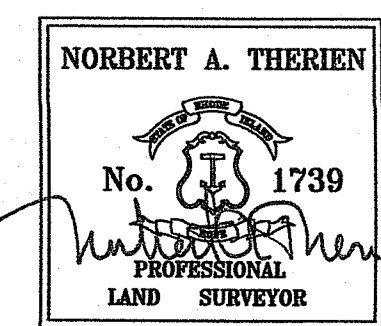
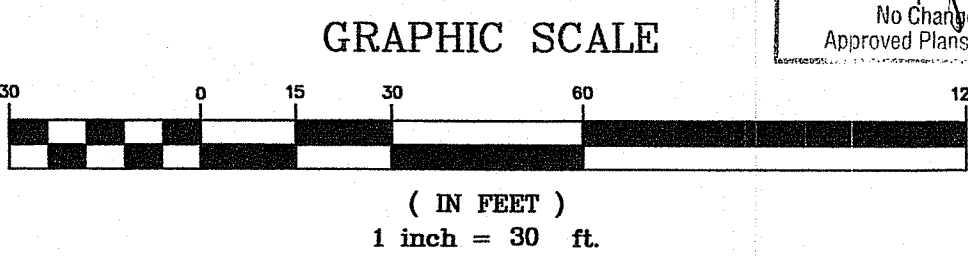
**APPLICANT / OWNER:**  
HALEYS LLC  
C/O MICHAEL MENARD  
44 AUSTIN DRIVE  
CUMBERLAND, RHODE ISLAND 02864  
1-401-374-8813

**ASSESSORS PLAT 31 LOT 9**  
N/F  
HALEYS LLC C/O MICHAEL MENARD  
(NORTH ATTLEBORO, MASSACHUSETTS)  
AREA BEING  
27,765 SQ. FT.  
0.6374 ACRES

\* ATTLEBORO MASSACHUSETTS APPROVAL  
ACCESS ACROSS STATE LINE REVIEWED AND  
APPROVED BY ATTLEBORO MASSACHUSETTS  
PLANNING BOARD ON FEBRUARY 7, 2019

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

OWTS# 1808-1343 PWW# 19-0299  
APPROVED: *Norbert A. Therien* DATE: 2/17/20  
No Changes Allowed Without RIDEM Approval  
Approved Plans/Permit Must Be Kept at Construction Site



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

**JOINT APPLICATION**  
**HALEYS LLC C/O MICHAEL MENARD**  
**ASSESSORS PLAT 23 LOT 33**  
**80 RAWSON ROAD**  
**CUMBERLAND, RHODE ISLAND**  
**ASSESSORS PLAT 31 LOT 9**  
**NORTH ATTLEBORO, MASSACHUSETTS**

**FINAL**  
**PROPOSED CONDITIONS PLAN**

DRAWN BY: R.A.W. CHECKED BY: N.A.T. FIELD BY: J.S./R.W.  
OCTOBER, 2019 JOB No. 2019-170 SHEET 2 OF 4

6	01/27/2020	REVISED ISDS LOCATION & GRADING	WCR
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**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 1/2 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 SEPERATE 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.

**VEGETATED COVER PLANTING:**

1. THE NORMAL ACCEPTABLE SEASONABLE SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.

2. TOP SOIL FOR PERMANENT OR LONG TERM TEMPORARY SEEDING SHOULD HAVE A SANDY LOAM TEXTURE, RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS. TOP SOIL SHALL CONFORM WITH RHODE ISLAND SPECIFICATIONS M18.01.

3. THE DESIGN SEED MIX UTILIZED IN ALL DISTURBED AREAS TO BE SEEDED SHALL BE COMPRISED OF THE FOLLOWING:

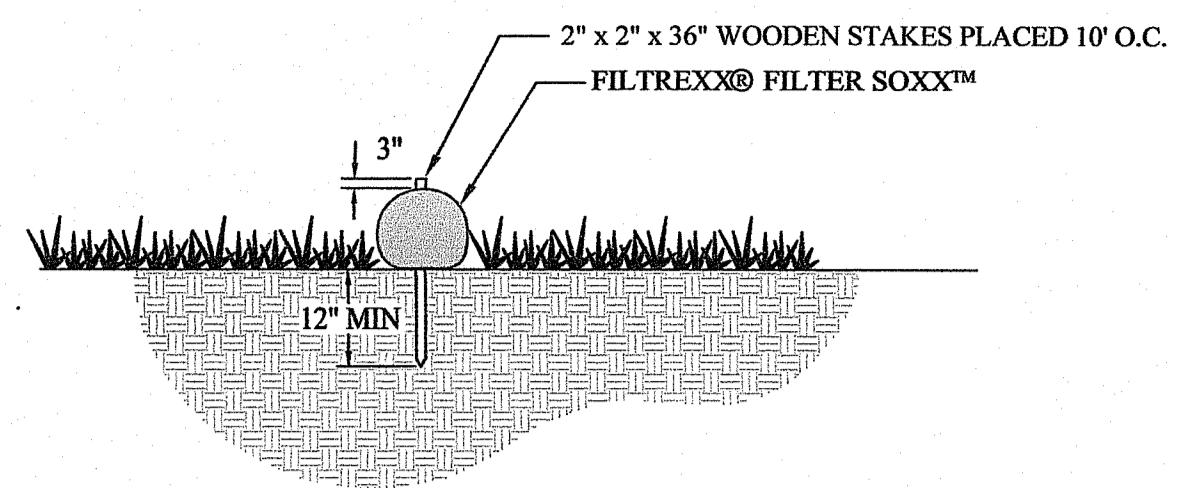
TYPE	% BY WEIGHT	SEEDING DATE
CREeping RED FESCUE	70	
ASTORIA BENTGRASS	5	APRIL 1 - JUNE 15
BIRDFOOT TREFOLI	15	AUG. - OCT 15
PERENNIAL RYE GRASS	10	

APPLICATION RATE - 100 LBS PER ACRE

SEED MIX SHALL BE INOCULATED WITHIN 24 - HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULATION FOR EACH SEED VARIETY. ALTERNATE SEED TYPES DUE TO SITE SPECIFIC CONDITIONS AND SOILS ARE ACCEPTABLE WITH THE ENGINEERS APPROVAL.

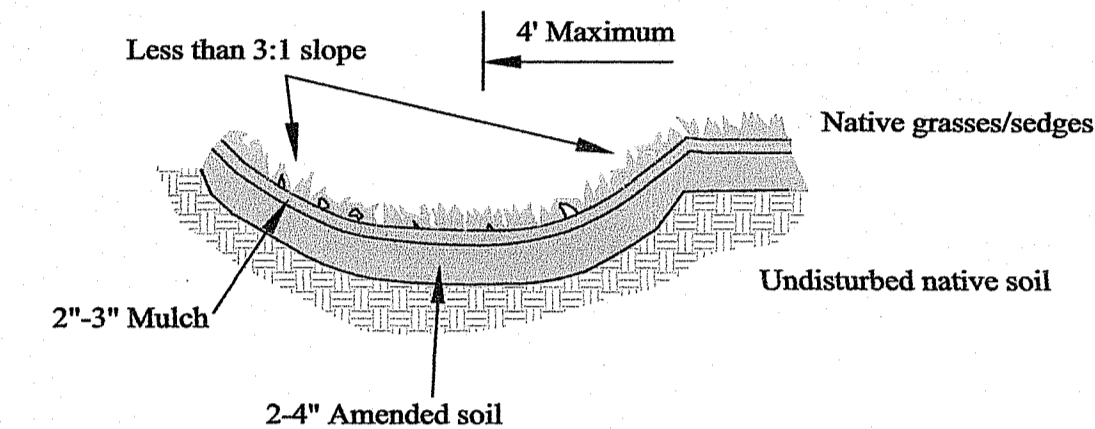
4. IN TOPSOIL SEEDING AREAS, THE CONTRACTOR WILL LIME AND FERTILIZE AS REQUIRED TO COMPLIMENT OR UPGRADE SOIL CONDITIONS.

5. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY PERMANENT VEGETATIVE COVER AREAS THAT DO NOT DEVELOP OR WHICH ERODE WITHIN A ONE (1) YEAR PERIOD.



**SILT SOCK**

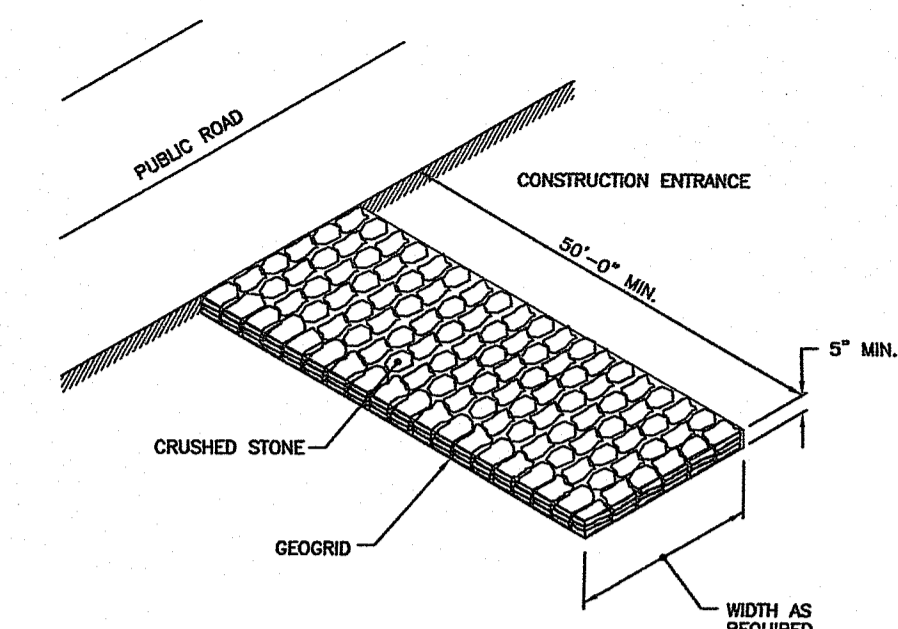
**Table 2. Vegetated Swale, Typical Cross-Section**



**Table 5. Vegetated Swale Sizing Guidance**

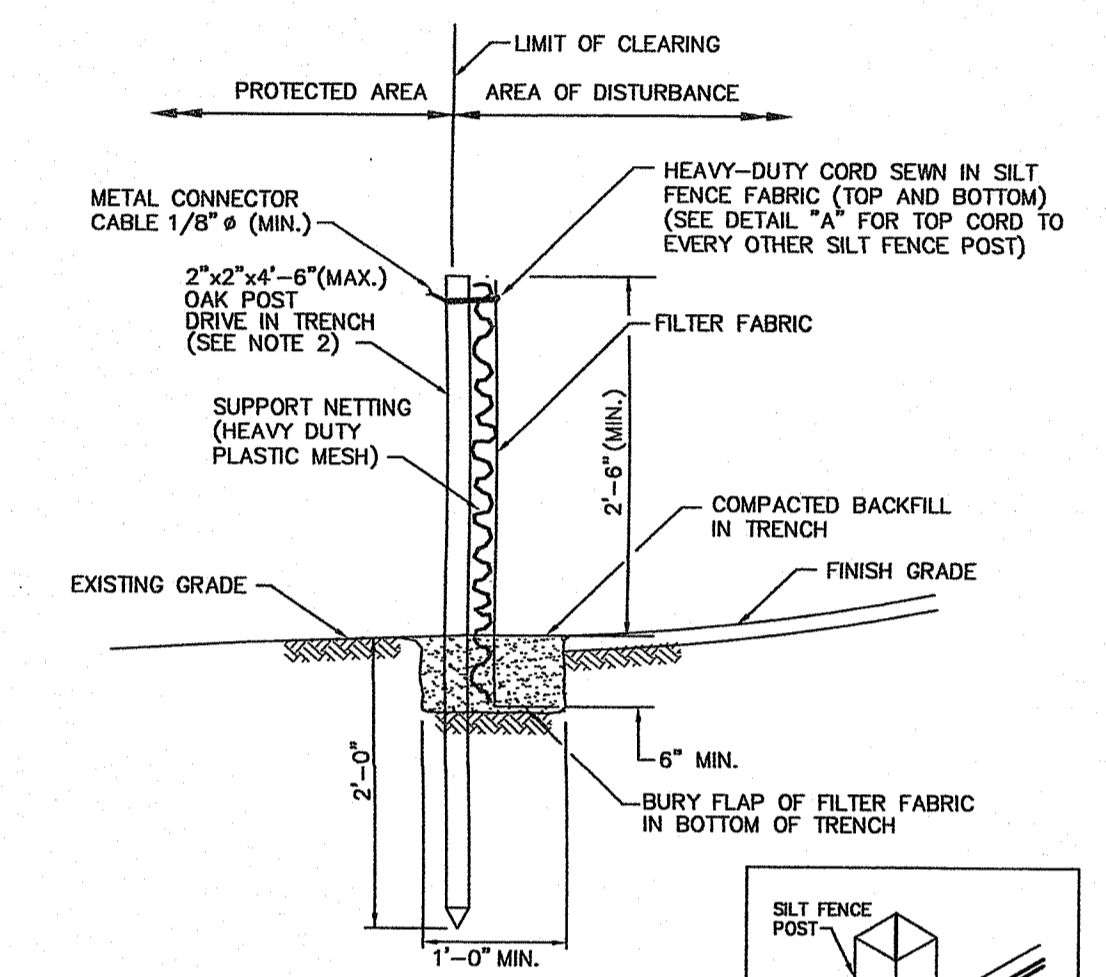
Drainage Area (in square feet)	Bottom surface Area (in square feet) for an 8 in. deep swale	
	Sandy Soils*	Silty Soils*
200	16	32
400	32	64
600	48	96
800	64	128
1000	80	160

**VEGETATIVE SWALE DETAIL**

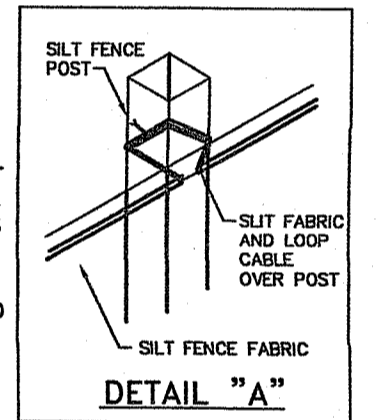


NOTE: SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

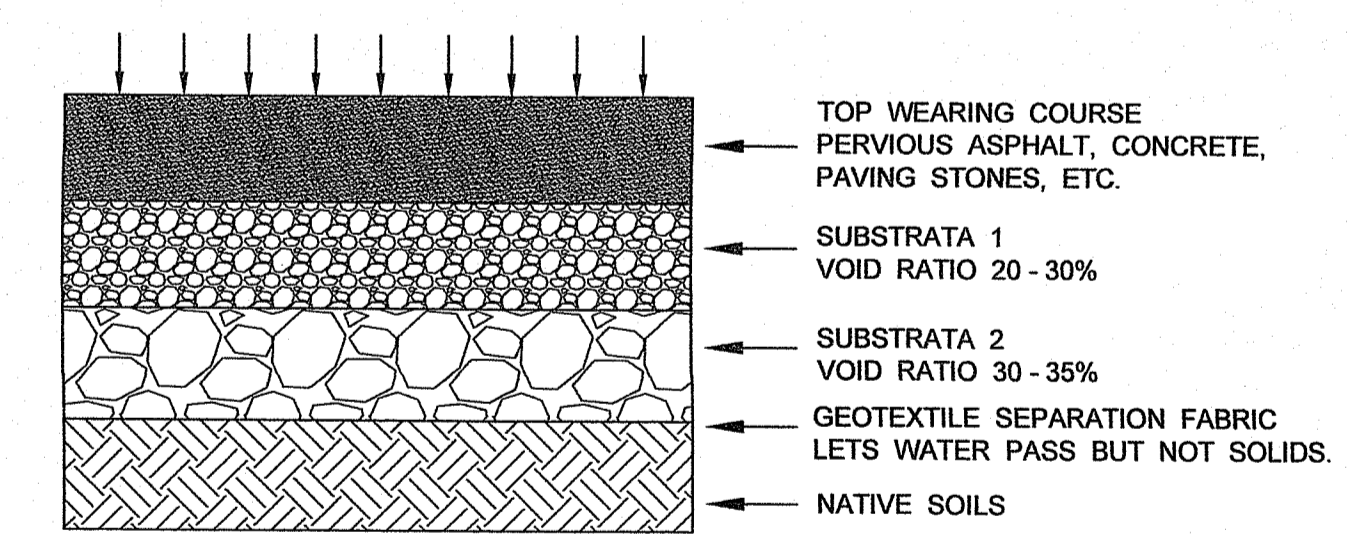
**CONSTRUCTION ACCESS**  
R.I. STANDARD 9.9.0



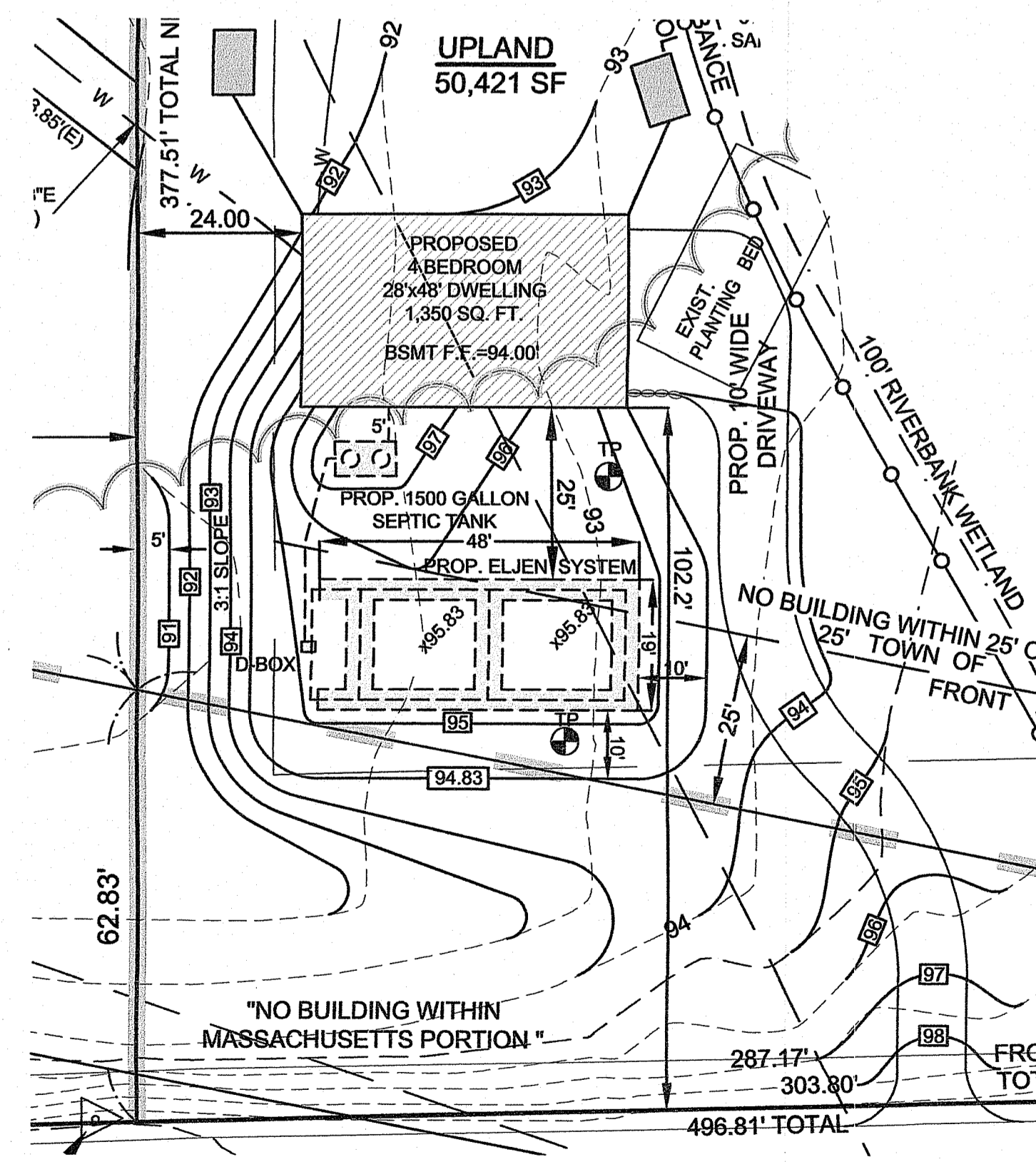
- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
  - 2"x2"x4"-6" (MAX.) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAX.) O.C. IN WETLAND AREAS AND 4'-0" (MAX.) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
  - 1"x1/4"-6" (MIN.) POSTS PERMITTED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



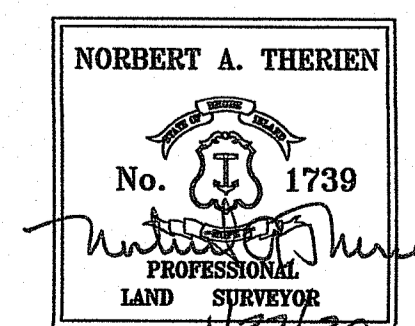
**SILT FENCE DETAIL**  
R.I. STANDARD 9.2.0



**PERVIOUS DRIVEWAY DETAIL**  
NOT TO SCALE



**DETAIL**  
SCALE: 1"=20'



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

**JOINT APPLICATION**  
HALEYS LLC C/O MICHAEL MENARD  
ASSESSORS PLAT 23 LOT 33  
80 RAWSON ROAD  
CUMBERLAND, RHODE ISLAND  
ASSESSORS PLAT 31 LOT 9  
NORTH ATTLEBORO, MASSACHUSETTS

**FINAL**  
**DETAIL PLAN**

DRAWN BY: R.A.W.	CHECKED BY: N.A.T.	FIELD BY: J.S./R.W.
OCTOBER, 2019	JOB No. 2019-170	SHEET 3 OF 4

JAN 29 2020

NO.	DATE	DESCRIPTION	BY
3	06/5/2019	FINAL PLAN SUBMISSION	SMG
2	04/19/2019	ADDED UTILITY EASEMENT/NOTES	WCR
1	03/25/2019	PROPOSED WATER LINE	RAW

**TEST HOLE RESULTS**

TEST HOLE # 1  
 DATE OF TEST 9-5-18  
 W.T. CARD # 1808-1343

SEE SITE INSPECTION REPORT  
 SOIL DESCRIPTION BY STRATA

WATER TABLE 35  
 LEDGE AT > 112" d

TEST HOLE # 2  
 DATE OF TEST 9-8-18  
 W.T. CARD # 1808-1343

SEE SITE INSPECTION REPORT  
 SOIL DESCRIPTION BY STRATA

WATER TABLE 33"  
 LEDGE AT > 118" d

**PERCOLATION TEST**

SOIL CATEGORY 4.4 PRESENT IN TESTHOLES  
 SOIL CATEGORY 4.1 MPI  
 SOIL CATEGORY 4 = 0.61 MPI  
 SOIL CATEGORY 7 = 0.52 MPI  
 DESIGN RATE = 0.52 MPI = 22.1 SF/BR/DAY

**DESIGN DATA**  
4 BEDROOM DWELLING  
115 GAL/BR/DAY = 460 GAL/DAY /  
0.52 GAL/SF/DAY = 884 SF REQUIRED  
 ELJEN UNIT = 28 SF/UNIT  
33 ELJEN UNITS PROVIDED = 924 SF  
 TOTAL AREA OF SYSTEM = 924 SF > 884 SF REQUIRED

**SYSTEM ELEVATIONS**

INV. OUT FOUNDATION	96.06
INV. IN SEPTIC TANK	95.96
INV. OUT SEPTIC TANK	95.71
INV. IN DISTRIBUTION BOX	95.17
INV. OUT DISTRIBUTION BOX	95.00
10' FILL PERIMETER UTILIZED	94.83
INV. ELJEN LEACHFIELD	94.83
BOTTOM UNIT - TOP SAND	94.25
SOIL - SAND	93.75
WATER TABLE	90.25
MAX LEDGE ELEV. WITHIN 25 FT	88.36 + 5 88.36

**JOINT APPLICATION**

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 ASSESSORS PLAT 23 LOT 33  
 80 RAWSON ROAD  
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 NORTH ATTLEBORO, MASSACHUSETTS

**FINAL OWTS DETAIL PLAN**

DRAWN BY: R.A.W. CHECKED BY: N.A.T. FIELD BY: J.S./R.W.  
 OCTOBER, 2019 JOB No. 2019-170 SHEET 4 OF 4

**O.W.T.S. NOTES**

THIS DESIGN IS SUBMITTED TO RIDEM TO BE REVIEWED IN CONFORMANCE WITH ALL APPLICABLE REGULATIONS. CONSTRUCTION OF THIS SYSTEM WILL REQUIRE THE "DESIGNER'S CERTIFICATE OF CONSTRUCTION FOR ISDS".

ALL PIPES EXCEPT IN THE LEACHING FIELD SHALL BE SOLID 4 INCH DIAMETER SCHEDULE 40 WITH WATERTIGHT JOINTS OR EQUIVALENT.

SEPTIC TANK AND DISTRIBUTION BOX SHALL BE SET ON A LEVEL STABLE BASE THAT WILL NOT SETTLE.

DISTRIBUTION PIPES FOR A MINIMUM OF 2 FEET FROM DISTRIBUTION BOX TO THE FIRST SECTION IN THE FIELD SHALL BE OFF LEVEL.

NO PROPOSED OR EXISTING KNOWN SYSTEMS WITHIN 100 FEET OF PROPOSED WELL.

NO KNOWN SUBSURFACE DRAINS WITHIN 25 FEET OF PROPOSED SYSTEM, INCLUDING FOUNDATION DRAINS.

ALL PIPES WITHIN LEACHING FIELD SHALL BE SET LEVEL. THERE SHALL BE A 2 INCH DROP FROM THE DISTRIBUTION BOX TO THE LEACHFIELD.

THE PROPOSED DISTRIBUTION BOX SHALL HAVE A BOTTOM AREA OF 3 SF OR GREATER.

THE LEACHING AREA AND AREA EXTENDING 10 FEET ON ALL SIDES MUST BE STRIPPED OF TREES AND BRUSH.

THE LEACHING AREA AND AREA EXTENDING 5 FEET ON ALL SIDES MUST BE STRIPPED OF TOP SOIL, SUBSOIL AND ANY UNDESIRABLE MATERIAL AND THE EXCAVATION SACRIFICED.

ANY GRAVEL BASE MATERIAL USED UNDER THE SAND LAYER SHALL CONSIST OF CLEAN, COARSE SAND, OR BANK RUN GRAVEL CONTAINING LITTLE OR NO FINES, OR ORGANIC MATERIAL AND CONTAINING LITTLE TO NO LARGE FRAGMENTS WITH NO STONE GREATER THAN 3 INCHES IN DIAMETER. NOT MORE THAN 10% OF THE GRAVEL CAN BE MADE UP OF STONES BETWEEN 3/4 INCHES AND 3 INCHES IN DIAMETER.

THE GRAVEL BASE MATERIAL SHALL BE PLACED IN SHALLOW LIFTS AND COMPACTED. THE GRAVEL BASE AFTER PLACEMENT AND COMPACTION SHALL HAVE A PERCOLATION RATE EQUAL TO OR BETTER THAN 5 MINUTES PER INCH. WHENEVER A SEWAGE LEACHING FIELD WILL BE LOCATED IN FINE TEXTURED SOILS CONTAINING FINE SANDS, SILTS OR CLAYS, A MINIMUM SIX (6) INCH DEPTH GRAVEL BASE MUST BE PLACED BENEATH THE ENTIRE LEACHING FIELD.

NO PROPOSED OR EXISTING KNOWN PUBLIC WELLS WITHIN 500 FEET OF PROPOSED SYSTEM EXCEPT AS SHOWN.

NO DRIVING, PARKING OR PAVING OVER ANY PORTION OF THE LEACH FIELD.

GRAVEL BACKFILL MUST BE BROUGHT UP AROUND THE TRENCH TO AT LEAST 2 INCHES ABOVE THE TOP OF THE DISTRIBUTION LINES IN THE LEACH FIELD.

BACKFILL PLACED OVER A LEACHING SYSTEM SHALL BE FREE OF LARGE STONES, FROZEN CLUMPS OF EARTH, RUBBISH, STUMPS, WASTE CONSTRUCTION MATERIALS OR ANY OTHER CONTAMINATES.

THE SURFACE AREA OVER THE LEACH FIELD SHALL BE GRASSED.

THE FINISH GRADE EXTENDING 10' AROUND EACH FIELD SHALL BE NO LOWER THAN ELEVATION 94.83 UNLESS OTHERWISE SPECIFIED, THE SYSTEM HAS NOT BEEN DESIGNED WITH THE PROVISIONS FOR GARBAGE GRINDERS.

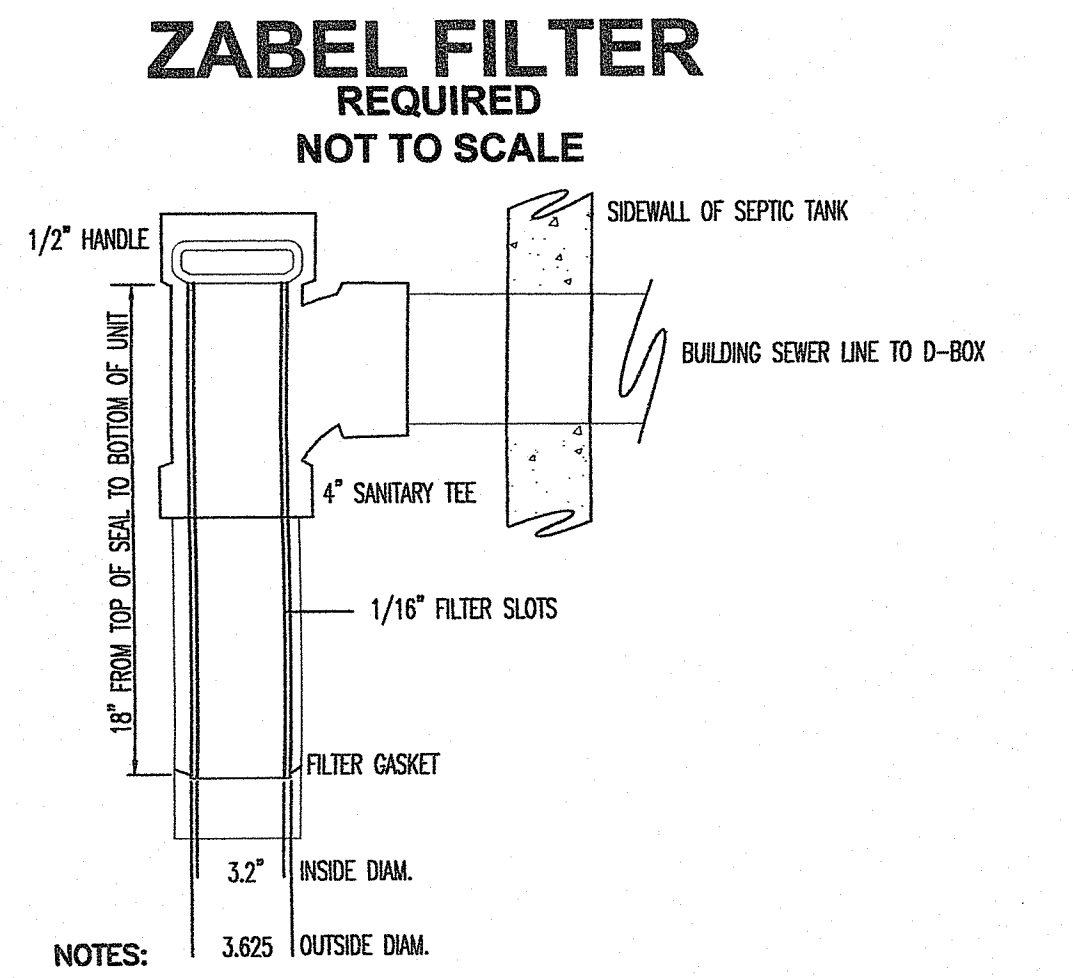
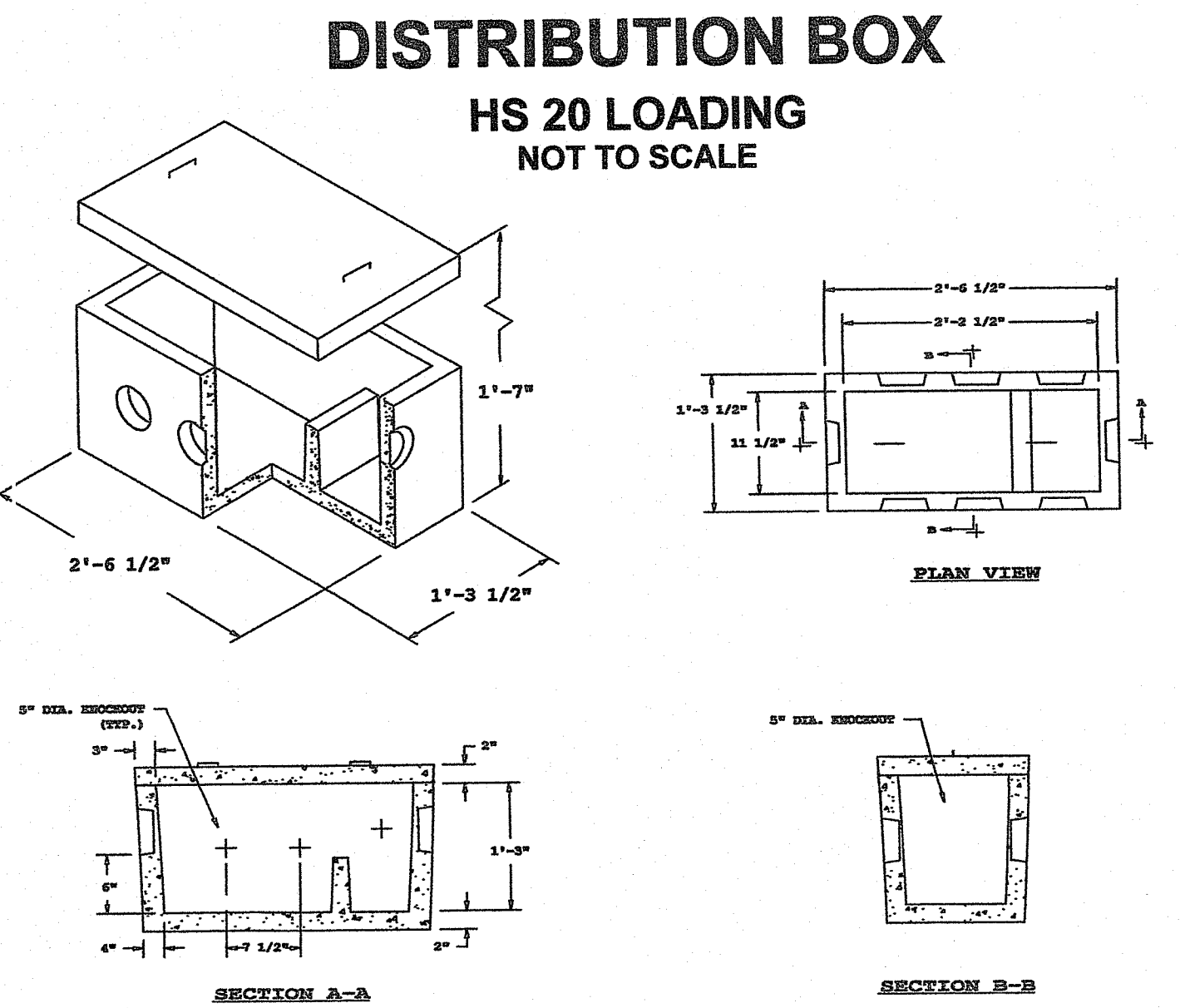
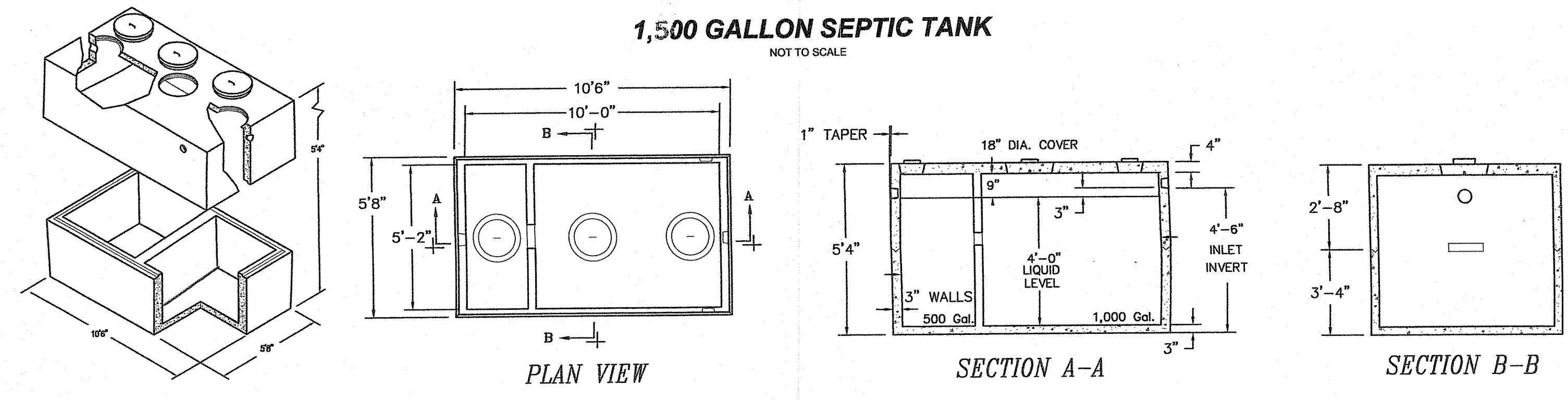
THIS SEWERAGE DISPOSAL SYSTEM SHALL CONFORM TO ALL THE REGULATIONS UNDER SECTIONS 42-17.1-2(1), (M) (R) AND (S) AND SECTION 23-19.5-4 AND CHAPTER 42-35 OF THE GENERAL LAWS OF RHODE ISLAND.

NO PROPOSED OR EXISTING KNOWN PRIVATE WELLS WITHIN 200 FEET OF THE PROPOSED SYSTEM EXCEPT AS SHOWN.

THE 6 INCH SAND LAYER UNDERLYING THE ELJEN UNITS SHALL BE ASTM C33 OR EQUAL.

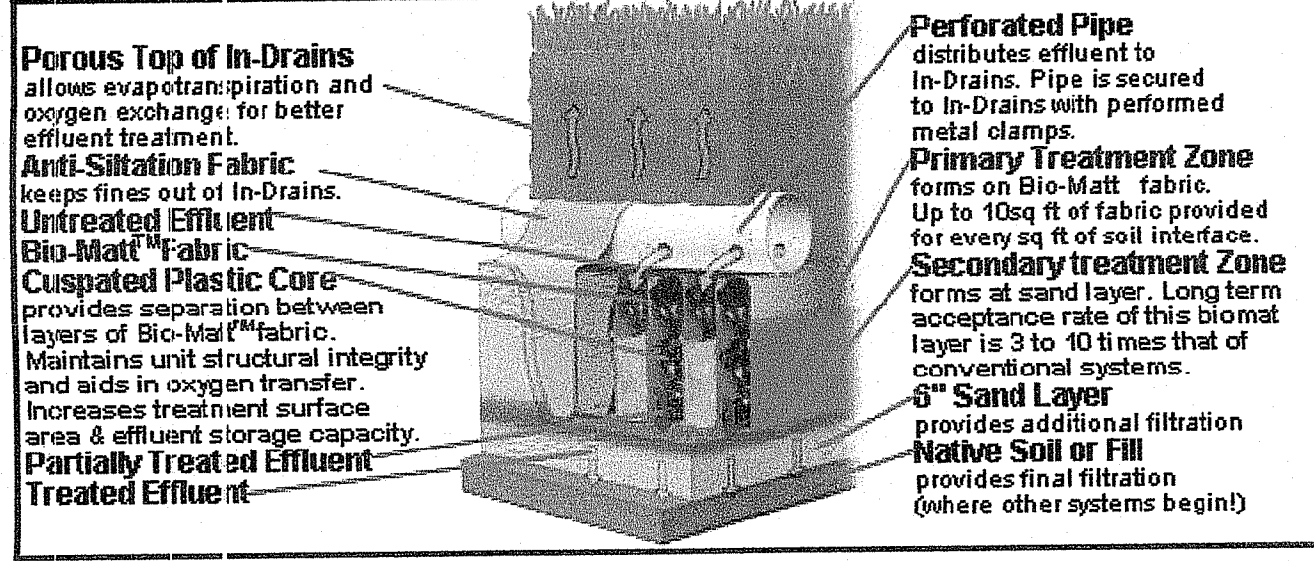
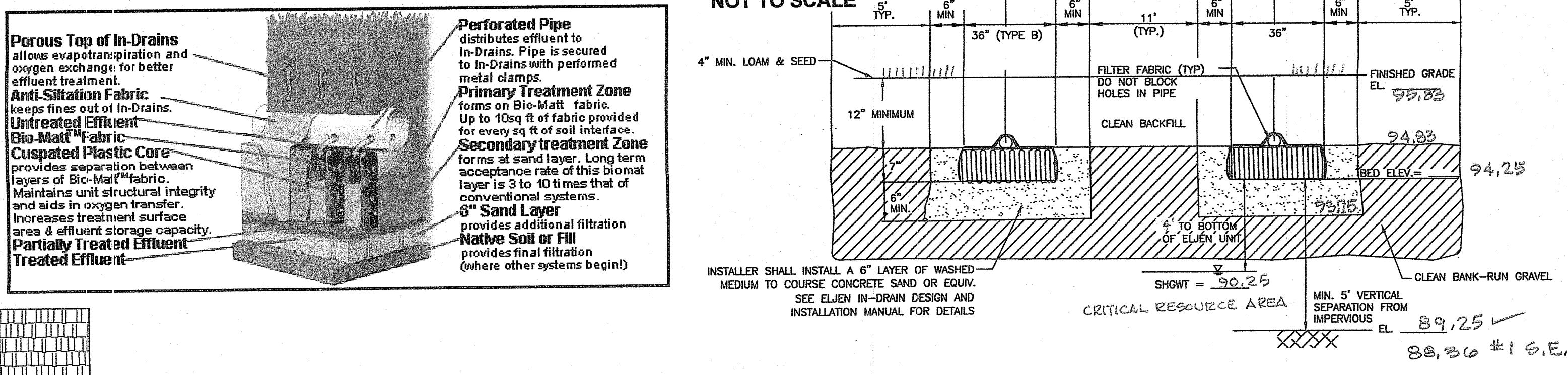
A COC FOR THE SYSTEM CANNOT BE PROVIDED UNTIL THE CONTRACTOR PROVIDE RECEIPTS FOR ALL COMPONENTS OF THE ISDS.

INSPECTIONS OR AS-BUILT PLANS ARE REQUIRED, DESIGNER MUST BE NOTIFIED 48 HOURS IN ADVANCE AND COMPONENTS OF SYSTEM MUST BE LEFT EXPOSED.

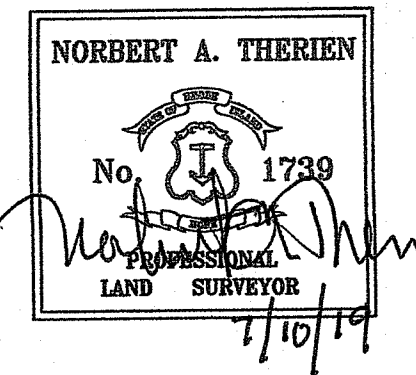
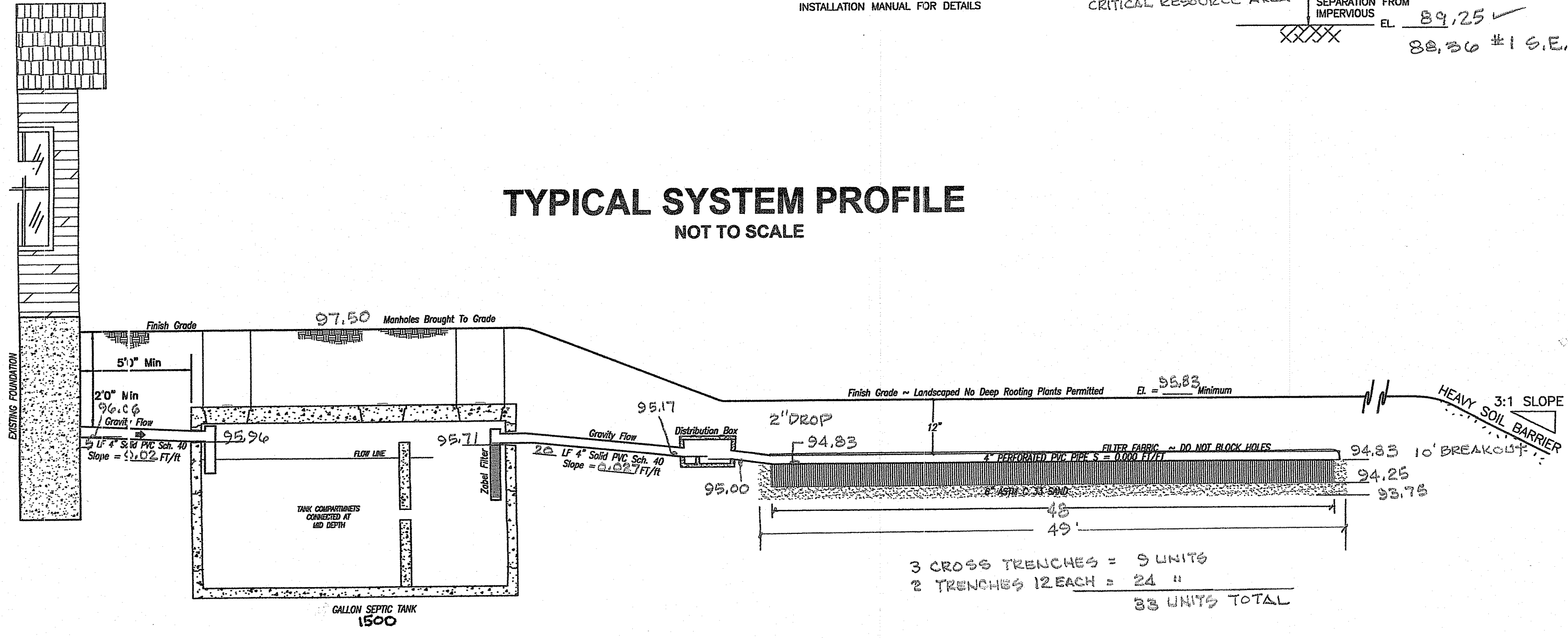


NOTES:  
 APPLICATION: SINGLE FAMILY HOME  
 FLOW RATE: 800 GPD OR LESS  
 INSTALLATION: A1800 FILTER CARTRIDGE WILL FIT INSIDE 4" SANITARY TEE USED AS SEPTIC TANK OUTLET BAFFLE. EXTEND SEWER PIPE MINIMUM 1-INCH BELOW FILTER GASKET.  
 SERVICE: GRASP HANDLE AND REMOVE FROM SANITARY TEE. LIGHTLY HOSE OFF AND PROPERLY DISPOSE OF SOLIDS. CLEAN THE FILTER A MINIMUM OF ONCE ANNUALLY.

**CROSS-SECTION NOT TO SCALE**



**TYPICAL SYSTEM PROFILE NOT TO SCALE**



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JAN 29 2020  
 www.national-surveyors.com