

**SITE DEVELOPMENT PLANS
FOR A PROPOSED 3,200 SQ. FT. COMMERCIAL BUILDING ADDITION**

GRAHAM DEVELOPMENT COMPANY, LLC.

**328 GEORGE WASHINGTON HIGHWAY
SMITHFIELD, RHODE ISLAND
AP 48, LOT 53**

ZONING DISTRICT: PLANNED CORPORATE (PC)

APPROVALS:

TOWN OF SMITHFIELD ZONING BOARD OF REVIEW - (CASE # 15-016)

FILINGS:

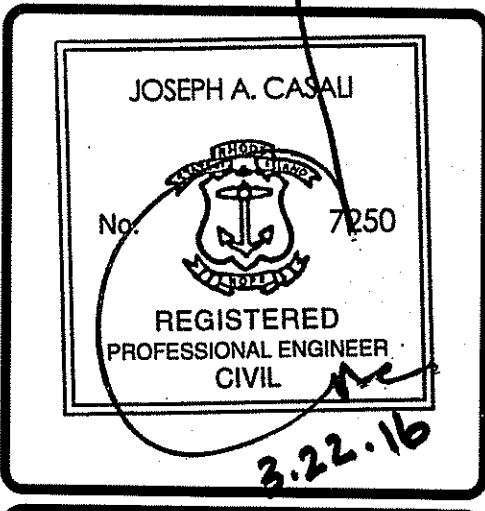
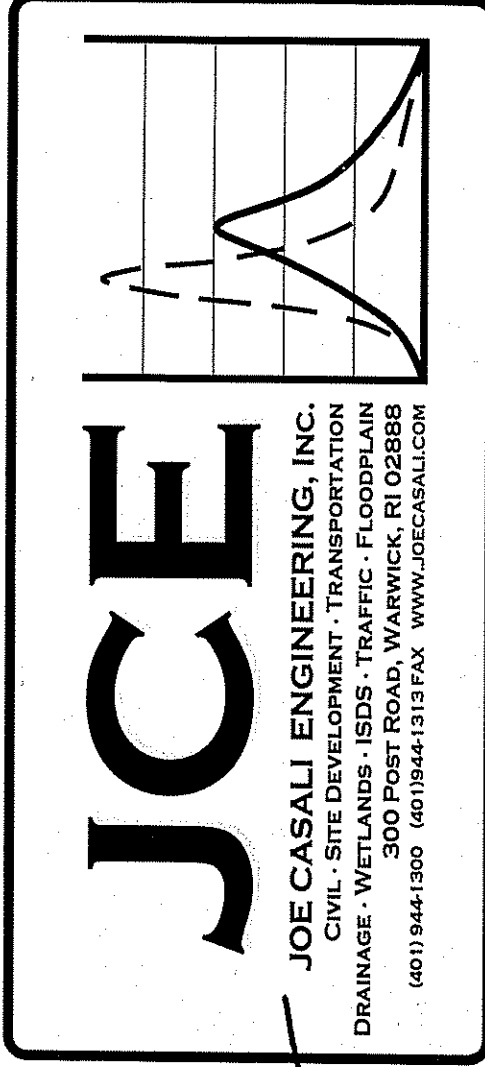
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT - DIVISION OF FRESHWATER WETLANDS - PRELIMINARY DETERMINATION (FILE # 15-0214)

RHODE ISLAND DEPARTMENT OF TRANSPORTATION - PHYSICAL ALTERATION PERMIT APPLICATION (FILE # 151005)

TOWN ENGINEER'S OFFICE - SOIL EROSION

SMITHFIELD WATER DEPARTMENT

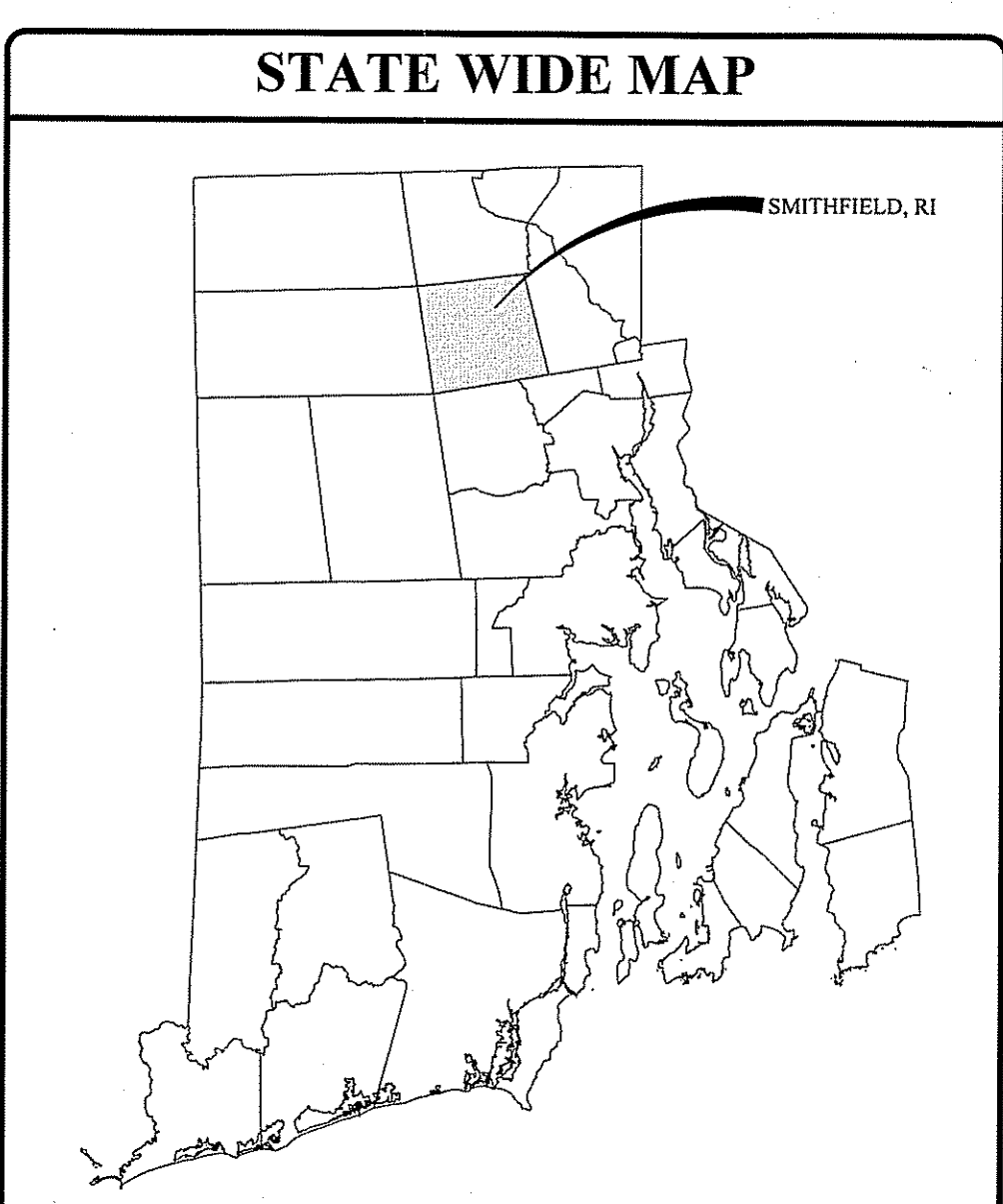
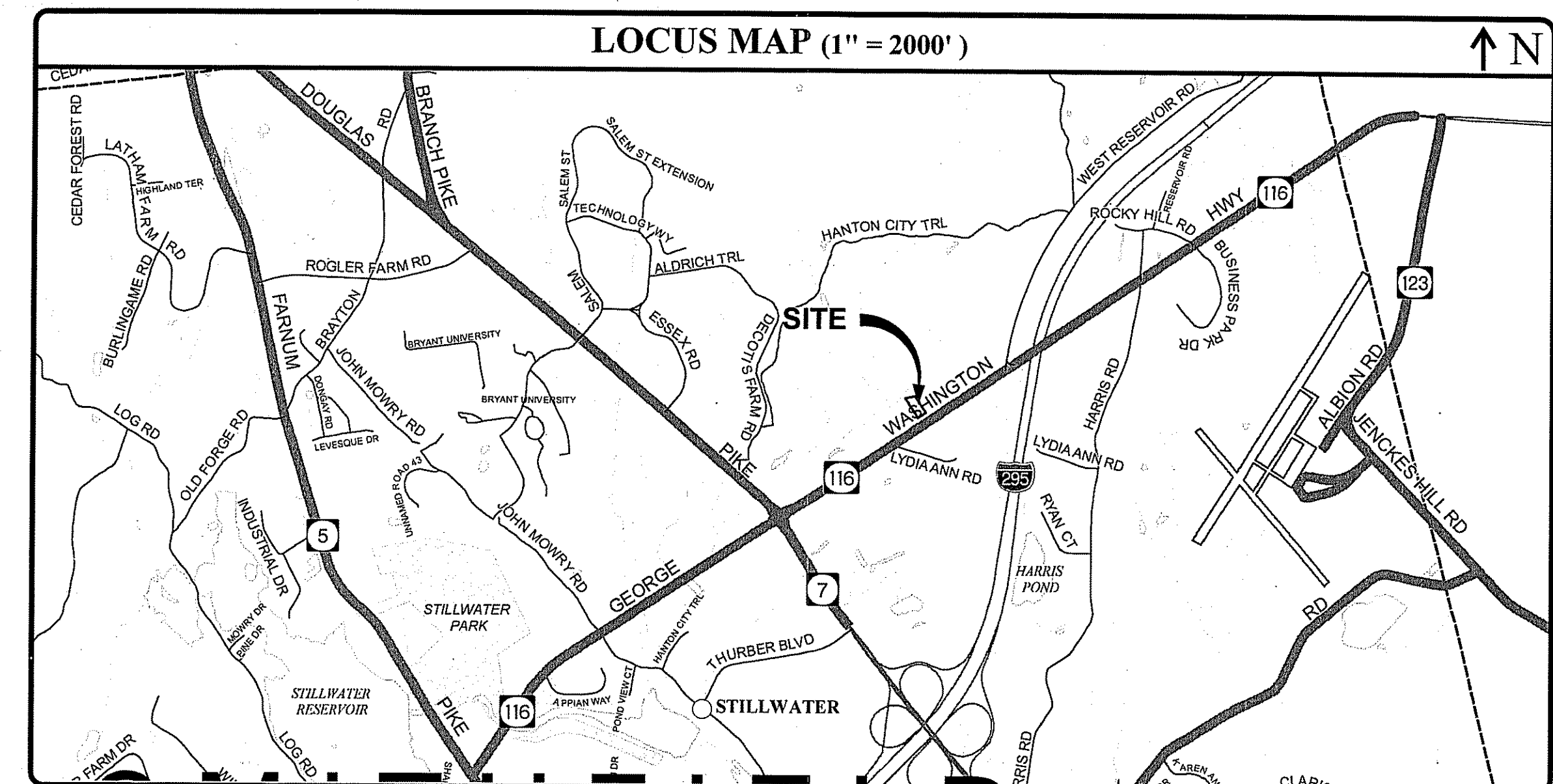
SMITHFIELD SEWER AUTHORITY



**GRAHAM DEVELOPMENT COMPANY, LLC.
328 GEORGE WASHINGTON HIGHWAY
SMITHFIELD, RHODE ISLAND
AP 48, LOT 53**

Q:\04-32 - David Graham\04-32d GHW_Smithfield\CADD\Graham_Planes\FW_Revision.dwg, Apr. 22, 2016 1:29pm

PROJECT TEAM	
OWNER / APPLICANT:	GRAHAM DEVELOPMENT COMPANY, LLC 341A GEORGE WASHINGTON HIGHWAY SMITHFIELD, RI 02917
CIVIL ENGINEER:	JOE CASALI ENGINEERING, INC. 300 POST ROAD WARWICK, RI 02888 PHONE: 401-944-1300 FAX: 401-944-1313 JOECASALI.COM
LAND SURVEYOR:	INTERNATIONAL MAPPING & SURVEYING CORP. 19 INDUSTRIAL DRIVE SMITHFIELD, RI 02917 PHONE: 401-232-2620
WETLAND BIOLOGIST:	NATURAL RESOURCE SERVICES, LLC 180 TINKHAM LANE HARRISVILLE, RI 02830 PHONE: 401-568-7390



INDEX OF DRAWINGS	
SHEET NO.	PLAN
1	COVER SHEET
2	GENERAL NOTES
3	EXISTING CONDITIONS & SITE PREPARATION PLAN
4	SITE & UTILITY PLAN
5	GRADING & DRAINAGE PLAN
6	RIDOT PAP PLAN
7	SITE DETAILS
8	SEWER PROFILE & DETAILS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 6 2016 FILE # 15-0214
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Harte

REVISIONS:		
NO.	DATE	DESCRIPTION
1	FEB. 2015	RIDEM COMMENTS TOWN SOIL EROSION RIDOT COMMENTS

DESIGNED BY:	JHW & JMM
DRAWN BY:	JHW & JMM
CHECKED BY:	JAC
DATE:	SEPT 2015
PROJECT NO:	04-32d

PRELIMINARY

COVER SHEET

SHEET 1 OF 8

GENERAL NOTES:

1. THESE PLANS ARE BASED ON CLASS I BOUNDARY AND CLASS III TOPOGRAPHIC SURVEY PERFORMED BY INTERNATIONAL MAPPING AND SURVEYING CORP. IN JULY 2013.
2. 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 CITY WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
3. THE SITE IS LOCATED ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR PROVIDENCE COUNTY, MAP NUMBER 44007C00167G. THE FIRM MAP HOW THE SUBJECT PARCEL IS LOCATED IN AN A ZONE AND CONSIDERED TO BE IN THE SPECIAL FLOOD HAZARD AREA.
4. SOILS ON THE SITE CONSIST OF CANTON-CHALRTON LAND COMPLEX (C&C) AND RIDGEBURY EXTREMELY STONY FINE SANDY LOAM (Rf), HYDROLOGIC GROUP B AND D, RESPECTFULLY.
5. WETLAND DELINEATION WAS PERFORMED BY NATURAL RESOURCE SERVICES, INC. IN JULY 2013. THE SITE IS LOCATED WITHIN THE GEORGIAVILLE RIVER WATERSHED (RIDEM INVENTORY NO. 010900030204).
6. THERE ARE NO KNOWN EASEMENTS ON THE SUBJECT PROPERTY. THERE ARE NO KNOWN EXISTING PUBLIC RECREATIONAL OR CULTURAL RESOURCES LOCATED WITHIN THE SUBJECT SITE.

SITE NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) OF ALL MATERIALS INDICATED ON THE PLANS.
2. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS, AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICAN WITH DISABILITIES ACT AND WITH ALL APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS, WHICHEVER IS MORE STRINGENT.
3. STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED ADJACENT TO DRAINAGE STRUCTURES.
4. ALL DISTURBED AREAS OUTSIDE OF THE PAVED AREAS WILL RECEIVE A MINIMUM OF 6" OF LOAM AND SEED.
5. THE LAYOUT SHOWN REPRESENTS A GRAPHICAL DESIGN, AND PRIOR TO THE CONSTRUCTION, THE CONTRACTOR SHALL ENGAGE A PROFESSIONAL LAND SURVEYOR (PLS) REGISTERED IN THE STATE OF RHODE ISLAND TO SET AND VERIFY ALL LINES AND GRADES. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS ARE TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY ITEMS FOUND WHICH DO NOT MATCH THE PLANS MUST BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO CONSTRUCTION FOR REVIEW. NO WORK SHALL PROCEED UNTIL AUTHORIZED BY THE ENGINEER.
6. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SURVEY LAYOUT SERVICES FOR THE WORK AND SHALL SUBMIT "AS-BUILT" DRAWINGS OF ALL WORK, WHICH SHALL BE STAMPED AND CERTIFIED BY A RHODE ISLAND REGISTERED PROFESSIONAL LAND SURVEYOR.
7. ANY ITEM OF WORK NOT SPECIFICALLY INDICATED ON THE PLANS BUT IS REQUIRED FOR THE COMPLETE CONSTRUCTION OF THE PROJECT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND INCLUDED IN THE CONTRACT BID PRICE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING SITE CONDITIONS.
8. WHERE NECESSARY TO REMOVE CURBS, CATCH BASINS OR DRAINS TO COMPLETE WORK, THE CONTRACTOR SHALL REPLACE SUCH ITEMS TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
9. ANY EXISTING PIPE OR UTILITY DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE OWNER OR THE TOWN OF SMITHFIELD.
10. THE CONTRACTOR SHALL RESTORE TO ITS ORIGINAL CONDITION OR REPLACE TREES, SHRUBS, FENCES, SIGNS, GUARDRAILS, DRIVEWAYS, SIDEWALKS AND ANY OTHER OBJECT AFFECTED BY THIS OPERATION, UNLESS OTHERWISE NOTED ON THE SITE PLANS.
11. THE TOPS OF ALL VALVE BOXES AND CURB BOXES SHALL BE FLUSH WITH GROUND OR PAVEMENT SURFACE LEVEL AND PLUMB, UNLESS OTHERWISE DIRECTED.
12. ROADWAYS SHALL BE LEFT PASSABLE AT ALL TIMES. CLOSURE OF ROADWAY IS NOT PERMITTED.
13. WATER SERVICE SHALL BE MAINTAINED AT ALL TIMES.
14. ALL LEDGE TO BE REMOVED BY MECHANICAL MEANS.
15. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN THE DRY. THE CONTRACTOR SHALL PROVIDE, OPERATE AND MAINTAIN ALL PUMPS, DRAINS, WET POINTS, SCREENS, OR OTHER FACILITIES NECESSARY TO CONTROL, COLLECT AND DISPOSE OF ALL SURFACE AND SUBSURFACE WATER ENCOUNTERED IN THE PERFORMANCE OF THE WORK.
16. ALL SITE WORK, INCLUDING BUT NOT LIMITED TO, BITUMINOUS PAVEMENT, ROADWAY CONSTRUCTION, AGGREGATE MATERIALS, DRAINAGE STRUCTURES, CURBING, SIDEWALK, LANDSCAPING, SAW CUTTING, ETC. SHALL CONFORM TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, AMENDED DECEMBER 2010 (WITH LATEST ADDENDA) AND THE RIDOT STANDARD DETAILS, 1998 EDITION (WITH LATEST ADDENDA).

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

1. 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 THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION.
2. 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.
3. THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED IN THE STATE OR TOWN RIGHT-OF-WAY.
4. ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS CHANNELING DEVICES, ETC., SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.
5. SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE RIDOT SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.

DRAINAGE SYSTEM NOTES:

1. THE PROPOSED DRAINAGE LINES SHALL BE ADS N-12 HDPE PIPE OR AN APPROVED EQUAL UNLESS OTHERWISE NOTED ON THE SITE PLANS.
 2. ALL RIM ELEVATIONS SHOWN ARE APPROXIMATE AND ARE TO BE SET FLUSH WITH FINAL GRADES.
- SOIL EROSION AND SEDIMENTATION CONTROL NOTES**
1. THE 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.
 2. 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.
 3. ALL CATCH BASINS AND CULVERTS SHALL BE PROTECTED WITH STAKED HAYBALES (R.I. STD. 9.8.0) DURING CONSTRUCTION ACTIVITIES. ALL PROPOSED STORM WATER 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) OUTLET PROTECTION (STAKED HAYBALE OR STAKED HAYBALE WITH SILT FENCE) SHALL ALSO BE INSTALLED AT ALL EXISTING STORMWATER DISCHARGE LOCATIONS WHERE DISTRIBUTING PIPES, CATCH BASINS, AND MANHOLES ARE TO BE CLEANED AND FLUSHED.
 4. 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 IS MAINTAINED.
 5. ALL SILT FENCE, 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.
 6. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES OF NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEEDED AND/OR STABILIZED PER CONTRACT SPECIFICATIONS.
 7. THE SILT FENCE 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 SILT FENCE AS NEEDED. THE CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE SILT FENCE BECOMES FILLED WITH SEDIMENTS.
 8. 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.
 9. 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 AMENDED 2014.

MISCELLANEOUS UTILITY NOTES:

1. PRIOR TO CONSTRUCTION ALL POTENTIAL UTILITY/DRAINAGE CONFLICTS MUST BE IDENTIFIED BY THE CONTRACTOR. ANY MODIFICATIONS TO THE PROPOSED UTILITIES TO AVOID CONFLICTS MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. OVERHEAD AND/OR UNDERGROUND ELECTRIC, GAS AND COMMUNICATIONS SERVICES ARE TO BE COORDINATED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY.
3. THE CONTRACTOR SHALL AT ALL TIMES PROVIDE A SUFFICIENT NUMBER OF WORKMEN AND GUARDS AS MAY BE NECESSARY TO PROPERLY SAFEGUARD THE PUBLIC FROM THEIR OPERATIONS.
4. THE CONTRACTOR SHALL TAKE PRECAUTIONS AGAINST DAMAGING OF PAVING, SIDEWALKS, UTILITIES, OR PRIVATE PROPERTIES AND SHALL PROMPTLY REPAIR AT HIS OWN EXPENSE ANY DAMAGE TO SUCH PAVING, SIDEWALKS, UTILITIES, OR PRIVATE PROPERTIES TO THE SATISFACTION OF THE OWNER AND/OR THE TOWN OF SMITHFIELD.
5. EXISTING UTILITY FRAMES AND COVERS FOR SANITARY SEWER, WATER, GAS, STORM DRAINAGE AND OTHER UTILITIES SHALL BE ADJUSTED TO GRADE AS REQUIRED IN NEW PAVING AND PAVEMENT OVERLAY AREAS.
6. ALL NEW SEWER PIPES AND MANHOLES SHALL BE CLEANED AND TESTED PRIOR TO ACCEPTANCE. GRAVITY SEWER PIPES SHALL BE REQUIRED TO PASS BOTH LOW PRESSURE AIR AND DEFLECTION (IE, MANDREL) TESTING. LOW PRESSURE SEWER PIPING SHALL BE REQUIRED TO PASS A LOW PRESSURE (IE., HYDROSTATIC) TEST.
7. A BACKFLOW PREVENTION DEVICE MUST BE INSTALLED AT EACH SEWER SERVICE BUILDING CONNECTION THAT IS BELOW THE RIM ELEVATION OF THE NEAREST SEWER MANHOLE, AS REQUIRED BY THE INTERNATIONAL PLUMBING CODE.
8. APPLICANT IS REQUIRED TO PROVIDE TWO SETS OF FINAL AS-BUILT PLANS UPON COMPLETION OF CONSTRUCTION, PRIOR TO FINAL ACCEPTANCE. AS-BUILT PLANS SHALL INCLUDE FIELD MEASUREMENTS OF ALL INSTALLED PIPE AND APPURTENANCES, INCLUDING LENGTH, SLOPE, MANHOLE RIMS AND INVERTS, AS WELL AS SWING TIES/MEASUREMENTS TO ALL MANHOLES, SEWER STUBS, AND/OR LATERAL SERVICE CONNECTIONS.
9. APPLICANT IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS FROM LOCAL, STATE, AND/OR FEDERAL AGENCIES WITH REGULATORY JURISDICTION OVER THE PROPOSED WORK. ALL SEWER CONSTRUCTION SHALL BE PERFORMED BY A DRAIN LAYER LICENSED IN THE STATE OF RHODE ISLAND AND THE TOWN OF SMITHFIELD.
10. NO FLOW WILL BE ACCEPTED UNTIL A COMPLETION CERTIFICATE IS ISSUED.
11. THE CONTRACTOR SHALL CONFINE HIS CONSTRUCTION OPERATIONS AND ACTIVITIES TO WITHIN THE STREET LINES, EASEMENT AND/OR RIGHT-OF-WAY, AS SHOWN ON THE DRAWINGS.
12. ALL CONSTRUCTION MATERIALS, AS WELL AS ALL MATERIAL SHOP DRAWINGS AND MANUFACTURERS DATA SHEETS SHALL BE REVIEWED AND APPROVED BY THE DESIGN ENGINEER, OR HIS/HER REPRESENTATIVE PRIOR TO FABRICATION AND INSTALLATION.

BMP MAINTENANCE SCHEDULE:

1. ALL MAINTENANCE (INCLUDING CLEANING) REQUIRED DURING THE CONSTRUCTION PHASE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL INCLUDE:
 - A. MEASURES NEEDED TO ENSURE THE PROPER OPERATION OF THE STORMWATER RUNOFF (DRAINAGE) AND WATER QUALITY CONTROL SYSTEMS TO INCLUDE INSPECTION, CLEANING AND REPAIRS ALL PIPES, INTAKE AND DISCHARGE STRUCTURES, CATCH BASIN SUMPS, AND MANHOLES.
 - B. INSPECTION OF ALL SLOPES, BERMS, AND OTHER CONTROL STRUCTURES 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.
2. UPON COMPLETION OF THE PROJECT CONSTRUCTION, AND PRIOR TO VACATING THE SITE, THE CONTRACTOR SHALL CONDUCT A FINAL INSPECTION AND CLEANING OF THE DRAINAGE SYSTEM AND ALL ASSOCIATED STRUCTURES.
3. ALL INSTALLATION, CLEANING, AND MAINTENANCE OF THE STORMWATER DRAINAGE SYSTEM SHALL FOLLOW AT LEAST THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION MINIMUM STANDARDS, SECTION 212 AND SECTION 708. WHERE APPROPRIATE, PROCEDURES REGARDING THE DRAINAGE INSTALLATION, CLEANING, INSPECTION, AND MAINTENANCE OF THE STORMWATER DRAINAGE SYSTEM SHALL BE FOLLOWED AS OUTLINED IN THE "RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL" (RIDEM/RICRMC, 2010).
4. AFTER CONSTRUCTION, STORMWATER BMPs SHALL BE INSPECTED AND MAINTAINED BY THE OWNER AS FOLLOWS:

ROOF DRAIN LEADERS

- PERFORM ROUTINE ROOF INSPECTIONS QUARTERLY.
- KEEP ROOFS CLEAN AND FREE OF DEBRIS.
- KEEP ROOF DRAINAGE SYSTEMS CLEAR.

SEDIMENT FOREBAY

- SEDIMENT FOREBAY SHALL BE CLEAN OUT ANNUALLY OR WHEN SEDIMENT DEPTH REACHES 15% OF STORAGE VOLUME
- SNOW STORAGE IS PROHIBITED WITH IN THE SEDIMENT FOREBAY.

PEA GRAVEL DIAPHRAGMS

- PEA GRAVEL DIAPHRAGMS SHALL BE INSPECTED BI-ANNUALLY FOR SEDIMENT BUILDUP AND SDEIMENT SHOULD BE REMOVED WHEN IT REACHES 25% OF TOTAL STORAGE VOLUME.
- PEA GRAVEL DIAPHRAGMS SHALL BE KEEP FREE FROM FLOATING DEBRIS.
- SNOW STORAGE IS PROHIBITED WITH IN PEA GRAVEL DIAPHRAGMS

SAND FILTER SYSTEM

- DURING THE SIX MONTHS IMMEDIATELY AFTER CONSTRUCTION, THE SAND FILTER SHALL BE INSPECTED AFTER THE FIRST TWO RAINFALL EVENTS OF AT LEAST 1.0 INCH TO ENSURE THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER INSPECTIONS SHALL BE CONDUCTED ON AN ANNUAL BASIS AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL TO 2 INCHES.
- SILT/SEDIMENT SHALL BE REMOVED FROM THE FILTER BED WHEN THE ACCUMULATION EXCEEDS ONE INCH. WHEN THE FILTERING CAPACITY OF THE SAND FILTER DIMINISHES SUBSTANTIALLY (I.E. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 48 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHALL BE DISPOSED IN AN ACCEPTANCE MANNER AT AN APPROVED AND PERMITTED LOCATION.

LOAMING & SEEDING

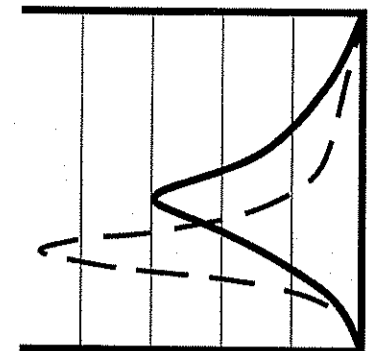
SEEDING ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH SECTION L.02 SEEDING OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, 2010 EDITION (WITH LATEST ADDENDA), AND SHALL ALSO CONFORM TO THE FOLLOWING:

1. AFTER ROUGH GRADING IS COMPLETED, ALL DISTURBED AREAS AND AREAS LABELED AS 'LOAM AND SEED' ARE TO BE BROUGHT TO AN ELEVATION OF 6" BELOW THE PROPOSED FINISHED GRADE. SCARIFY THE SUBGRADE TO A DEPTH OF 12" WITH THE TEETH OF A BACKHOE OR A POWER RAKE TO RESULT IN AN UNCOMPACTED SUBSOIL. 6" OF GOOD QUALITY TOPSOIL IS TO BE APPLIED AND RAKED TO FINISHED GRADE.
2. THE TOPSOIL IS TO BE GOOD QUALITY LOAM, FERTILE AND FREE OF WEEDS, STICKS AND STONES OVER 3/4" IN SIZE AND OTHERWISE COMPLYING WITH SECTION M.18.01 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, 2010 EDITION (WITH LATEST ADDENDA).
3. PRIOR TO SEEDING OR SODDING, FERTILIZER WITH 10-10-10 OR EQUIVALENT MIXTURE, AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE IN SLOW RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 1-2" OF THE PLANTING SOIL. APPLY AT A RATE OF 8 LBS. PER 1000 SQUARE FEET.
4. APPLY LIME AT A RATE OF ONE TON PER ACRE AND UNIFORMLY INCORPORATE INTO THE TOP 1-2" OF TOPSOIL.
5. **SEEDING**
AFTER THE SEED BED IS PREPARED, SEED IS TO BE BROADCAST EVENLY OVER THE SURFACE AND WORKED INTO THE TOP 1" OF SOIL. SEED SHALL BE APPROVED URI #2 OR APPROVED EQUAL. APPLY AT A RATE OF 4-5 LBS. PER 1000 SQUARE FEET OR AS OTHERWISE DIRECTED BY THE MANUFACTURER.

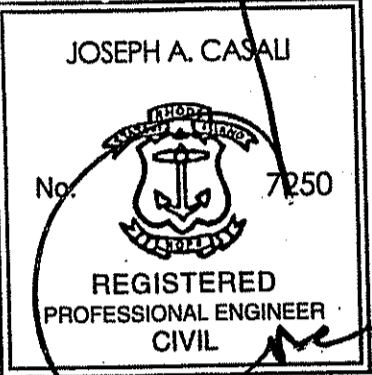
URI #2 IMPROVED SEED MIX, % BY WEIGHT:

- 40% CREEPING RED FESCUE
- 20% IMPROVED PERENNIAL RYEGRASS
- 20% IMPROVED KENTUCKY BLUEGRASS
- 20% KENTUCKY BLUEGRASS

RECOMMENDED SEEDING DATES ARE MARCH 15 TO JUNE 15 AND SEPTEMBER 15 TO NOVEMBER 15. AT THE CONTRACTORS DISCRETION, SEED MAY BE APPLIED BY HYDROSEEDING RATHER THAN THE METHOD DESCRIBED ABOVE.



JCE
 JOE CASALI ENGINEERING, INC.
 CIVIL, SITE DEVELOPMENT, TRANSPORTATION
 DRAINAGE, 11500 POST ROAD, WARWICK, RI 02886
 (401) 844-1300 (401) 944-1313 FAX WWW.JCECASA.COM



3.22.16

GRAHAM DEVELOPMENT COMPANY, LLC.
 328 GEORGE WASHINGTON HIGHWAY
 SMITHFIELD, RHODE ISLAND
 AP 48, LOT 53

NO.	DATE	DESCRIPTION
1	FEB. 2015	RIDEM COMMENTS TOWN SOIL EROSION RIDOT COMMENTS

DESIGNED BY: JHW & JMM
 DRAWN BY: JHW & JMM
 CHECKED BY: JAC
 DATE: SEPT 2015
 PROJECT NO: 04-32d

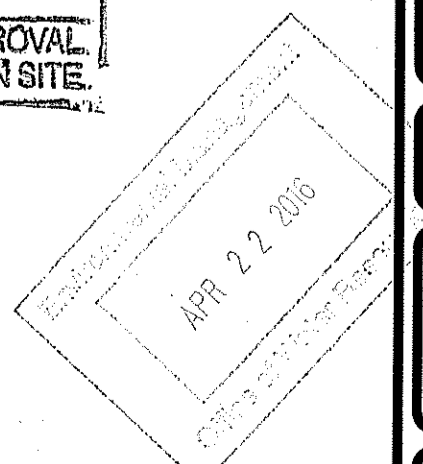
PRELIMINARY

GENERAL NOTES

SHEET 2 OF 8

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL.
 DATED MAY 6 2016 FILE # 15-0214
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

Charles A. Hallett



LEGEND:

- EXISTING PROPERTY LINE
- - - PROPOSED PROPERTY LINE
- - - BUTTING PROPERTY LINE
- - - BUILDING SETBACK LINE
- WF WETLAND FLAG
- 50 PERIMETER WETLAND
- 100 RIVERBANK WETLAND
- 200 RIVERBANK WETLAND
- EXISTING EASEMENT
- - - EXISTING CONTOUR
- 100 - - - PROPOSED CONTOUR
- - - EXISTING FENCE
- - - EXISTING CURB
- - - PROPOSED CURB
- - - GUARD RAIL
- - - EXISTING DRAIN LINE
- - - PROPOSED DRAIN LINE
- - - LOD
- - - LIMIT OF DISTURBANCE
- EXISTING DRAINAGE MANHOLE
- ⊕ PROPOSED DRAINAGE MANHOLE
- ⊕ EXISTING CATCH BASIN
- ⊕ PROPOSED CATCH BASIN
- - - EXISTING SEWER LINE
- - - PROPOSED SEWER LINE
- ⊕ EXISTING SEWER MANHOLE
- ⊕ PROPOSED SEWER MANHOLE
- - - EXISTING WATER LINE
- - - PROPOSED WATER LINE
- WG - - - EXISTING WATER GATE
- - - PROPOSED WATER GATE
- - - EXISTING GAS LINE
- - - PROPOSED GAS LINE
- ⊕ EXISTING UTILITY POLE
- ⊕ PROPOSED UTILITY POLE
- TH - - - EXISTING TEST HOLE
- ⊕ EXISTING TEST HOLE
- - - SILT FENCE
- LP - - - EXISTING LEDGE PROBES

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Environmental Management
Office of Water Resources
Onsite Wastewater Treatment System Program

Site Evaluation Form
Part A - Soil Profile Description Application Number

Property Owner: N/F B A S REALTY CORPORATION
Property Location: 328 George Washington Hwy - A.P. 48, Lot 53 Smithfield, RI
Date of Test Hole: 7/27/15
Soil Evaluator: Edward J. Azubala License Number: D4083
Weather: Cloudy - Light Rain - 80's

TH #	Horizon	Depth	Horizon Boundaries	Soil Colors	Moisture	Ab. S. Contr.	Texture	Structure	Consistence	Soil Category
TH 1	Ap	0-5	c s	10YR 3/2	-	-	LS	1gr	fr	3
	Bw	5-35	c s	10YR 5/4	-	-	LS	1mbk	fr	3
	C	35-60	c s	10YR 6/1	10YR 5/1 f(1) p	10YR 5/1 c(1) f	Boolders gs	Om	fr	3
	2Cdg	60-100	-	10YR 6/1	10YR 5/1 c(1) f	10YR 5/1 c(1) f	Stony S	Om	fr	3

TH 1 Soil Class: B/A Total Depth: 100" Impervious/Limiting Layer Depth: >100"(eg) GW Seepage Depth: >100" SHWT: 38"(eg)
TH 2 Soil Class: B/A Total Depth: 70" Impervious/Limiting Layer Depth: 70"(eg) GW Seepage Depth: 270" SHWT: 38"(eg)
Comments: Ledge outcrops nearby within 20' of TH2.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Environmental Management
Office of Water Resources
Onsite Wastewater Treatment System Program

Site Evaluation Form
Part A - Soil Profile Description Application Number

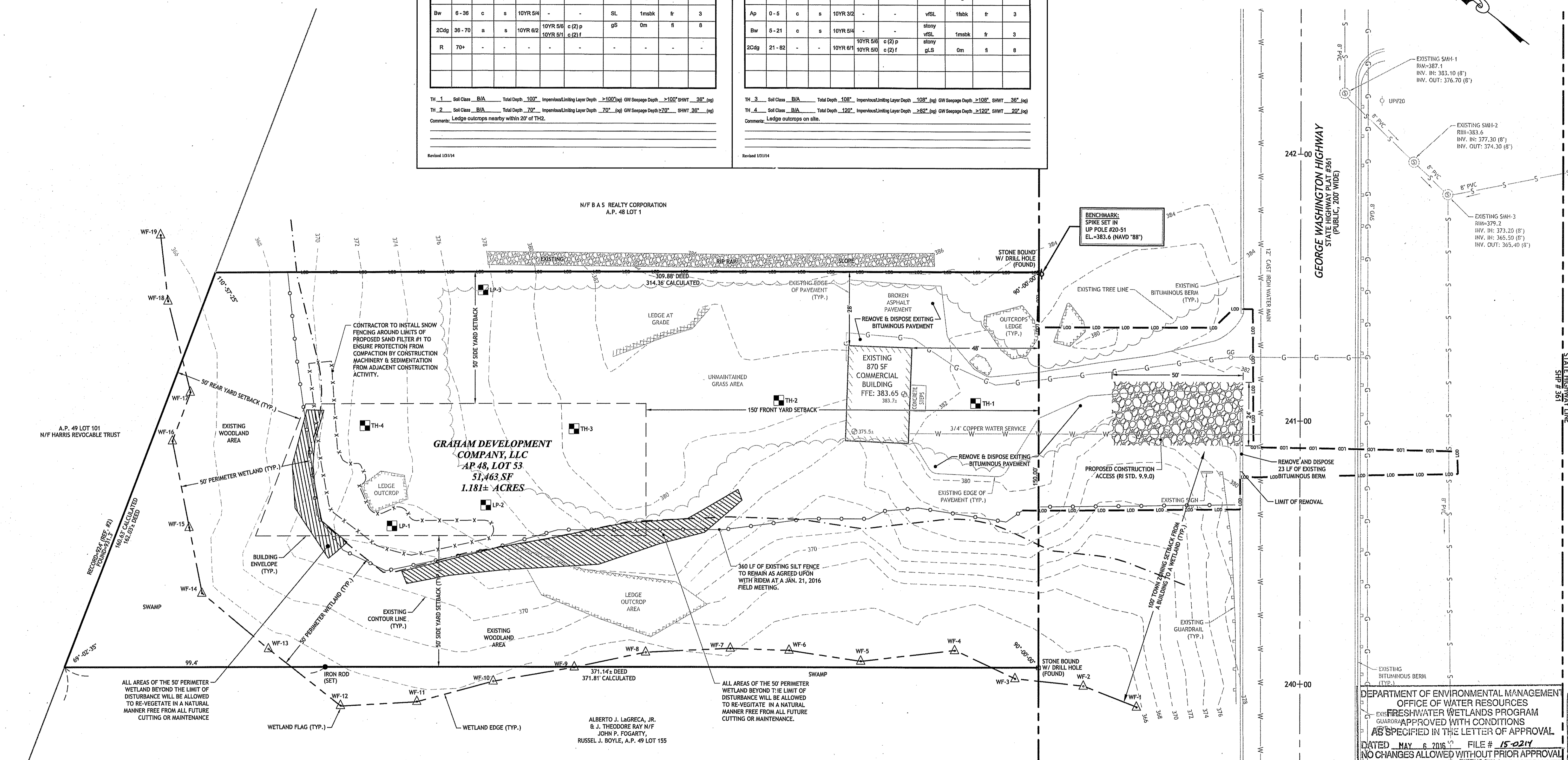
Property Owner: N/F B A S REALTY CORPORATION
Property Location: 328 George Washington Hwy - A.P. 48, Lot 53 Smithfield, RI
Date of Test Hole: 7/27/15
Soil Evaluator: Edward J. Azubala License Number: D4083
Weather: Cloudy - Light Rain - 80's

TH #	Horizon	Depth	Horizon Boundaries	Soil Colors	Moisture	Ab. S. Contr.	Texture	Structure	Consistence	Soil Category
TH 3	Ap	0-6	c s	10YR 3/2	-	-	SL	1gr	fr	3
	Bw	6-36	c s	10YR 5/4	-	-	SL	1mbk	fr	3
	2Cdg	36-108	a s	10YR 6/1	10YR 5/1 c(2) p	10YR 5/1 c(2) f	gLS	Om	fr	8
	R	108	-	-	-	-	-	-	-	-

TH 3 Soil Class: B/A Total Depth: 108" Impervious/Limiting Layer Depth: 108"(eg) GW Seepage Depth: >108" SHWT: 38"(eg)
TH 4 Soil Class: B/A Total Depth: 120" Impervious/Limiting Layer Depth: >120"(eg) GW Seepage Depth: >120" SHWT: 20"(eg)
Comments: Ledge outcrops on site.

ZONING CRITERIA	REQUIRED	EXISTING
MINIMUM LOT AREA	3 ACRES	1.18 ACRES*
MINIMUM LOT FRONTAGE & WIDTH	200 FT	150 FT*
MINIMUM FRONT YARD BUILDING SETBACK	150 FT	48 FT*
MINIMUM SIDE YARD BUILDING SETBACK	50 FT	24 FT*
MINIMUM REAR YARD BUILDING SETBACK	50 FT	244 FT
MAXIMUM BUILDING HEIGHT	48 FT	<48 FT
MAXIMUM LOT BUILDING COVERAGE	35%	<35%
MINIMUM WETLAND BUILDING SETBACK	100 FT	67 FT*
MAXIMUM FLOOR AREA RATIO	0.5	<0.5
MAXIMUM IMPERVIOUS SURFACE	65%	<65%

* PRE-EXISTING NON-CONFORMING CONDITION



INTERNATIONAL MAPPING & SURVEYING CORP.
LAND SURVEYING CIVIL ENGINEERING PHOTOGRAMMETRIC MAPPING
19 INDUSTRIAL DRIVE, SMITHFIELD, R.I. 02917 (401) 232-2620

ANTHONY E. MUSCATELLI
No. 1718
PROFESSIONAL LAND SURVEYOR

THIS PLAN CONFORMS TO CLASS I AND CLASS III STANDARDS AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: *Anthony E. Muscatelli* 7/15/2013
REGISTERED PROFESSIONAL LAND SURVEYOR DATE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 6 2015 FILE # 15-0214
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Hubert

JCE
JOE CASALI ENGINEERING, INC.
DRAINAGE - WETLANDS - EROSION - TRAFFIC - FLOODPLAIN
300 POST ROAD, WARWICK, RI 02888
(401) 944-1300 (401) 944-1313 FAX WWW.JCEASAL.COM

JOSEPH A. CASALI
No. 7250
REGISTERED PROFESSIONAL ENGINEER CIVIL
4.19.16

GRAHAM DEVELOPMENT COMPANY, LLC.
328 GEORGE WASHINGTON HIGHWAY
SMITHFIELD, RHODE ISLAND
AP 48, LOT 53

REVISIONS:

NO.	DATE	DESCRIPTION
1	FEB. 2015	RIDEM COMMENTS TOWN SOIL EROSION RIDOT COMMENTS
2	19APR2016	WETLAND FLAG/LOD UPDATE

DESIGNED BY: JHW & JMM
DRAWN BY: JHW & JMM
CHECKED BY: JAC
DATE: SEPT 2015
PROJECT NO: 04-324

PRELIMINARY

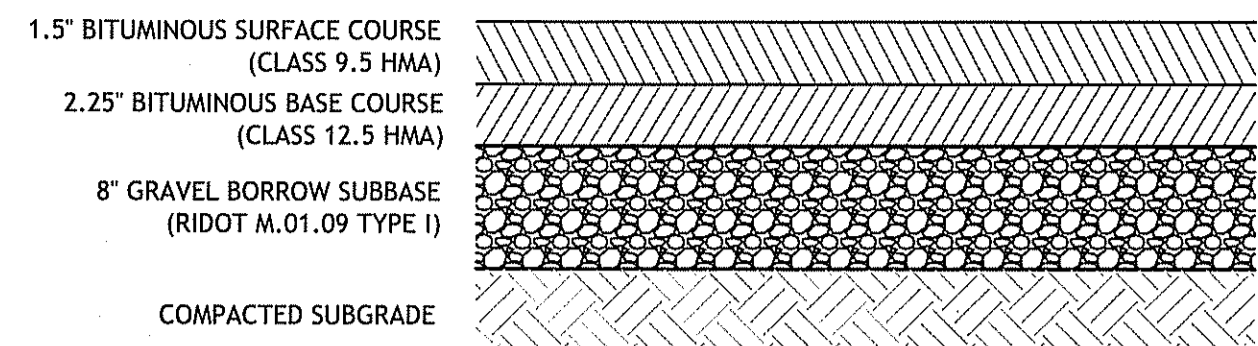
EXISTING CONDITIONS & SITE PREPARATION PLAN

SHEET 3 OF 8

Q:\04-32 - David Graham\04-324-328 cshw, smithfield\04-324\Graham [Plotset] P\W Revision.dwg Apr. 22, 2016 1:30pm

1-888-DIG-SAFE
PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

LOCATION OF EXISTING UTILITIES SHOWN, ARE FROM GATE LOCATION AND EXISTING DOCUMENTATION AND MAY NOT BE ACCURATE. EXACT LOCATION TO BE DONE BY THE APPROPRIATE UTILITY COMPANY OR MUNICIPALITY PRIOR TO ANY EXCAVATION CALL DIGSAFE AT: 1-888-DIG-SAFE 1-888-344-7233



NOTE:

1. IN AREAS OF EARTH EXCAVATION FOR BITUMINOUS CONCRETE PAVEMENT, THE CONTRACTOR SHALL REMOVE 12 INCHES OF EXISTING MATERIAL. IF UNSUITABLE MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER. THE DEPTH OF UNSUITABLE MATERIAL TO BE REMOVED WILL BE DETERMINED IN THE FIELD. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF THE UNSUITABLE MATERIALS AND REPLACE WITH SUITABLE MATERIAL APPROVED BY THE ENGINEER.

1 BITUMINOUS PAVEMENT DETAIL
NOT TO SCALE

SEC 7.4 OFF-STREET PARKING REQUIREMENTS

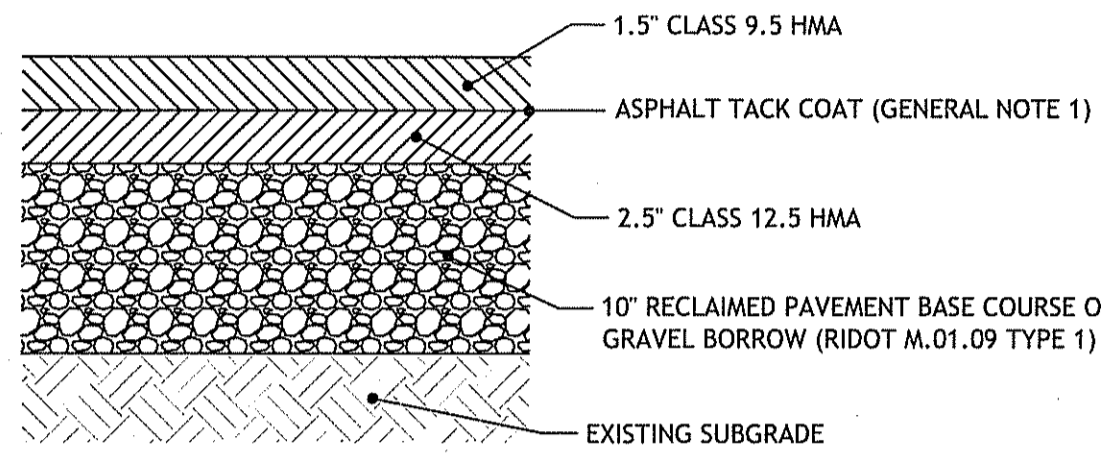
OFFICE USE - FOUR PARKING SPACES PER ONE THOUSAND (1,000) SQUARE FEET OF FLOOR AREA
 PROPOSED OFFICE SPACE: 1,870 SF
 1,870 SF / 1000 SF X 4 = 7.48 OR 8 SPACES

WAREHOUSE USE - ONE PARKING SPACE PER ONE THOUSAND (1,000) SQUARE FEET OF FLOOR AREA
 PROPOSED WAREHOUSE (STORAGE SPACE): 2,200 SF
 2,200 SF / 1000 X 1 = 2.2 OR 3 SPACES

REQUIRED PARKING SPACES: 11 PARKING SPACES
 PROPOSED PARKING SPACES: 11 PARKING SPACES

ZONING RELIEF RECEIVED

- ARTICLE 4, SECTION 4.3 (TABLE OF USES), SECTION I (SERVICE INDUSTRIES)
 SUBSECTION 2: TRADE ESTABLISHMENTS - SPECIAL USE PERMIT GRANTED
- ARTICLE 5, SECTION 5.4, TABLE 1 (MINIMUM FRONTAGE & LOT WIDTH)
 REQUIRED: 200 FT; EXISTING 150 FT; RELIEF RECEIVED: 50 FT
 (PRE-EXISTING, NON-CONFORMING CONDITION)
- ARTICLE 5, SECTION 5.4, TABLE 1 (MINIMUM FRONT YARD)
 REQUIRED: 150 FT; EXISTING 48 FT; RELIEF RECEIVED: 102 FT
 (PRE-EXISTING, NON-CONFORMING CONDITION)
- ARTICLE 5, SECTION 5.4, TABLE 1 (MINIMUM LOT AREA)
 REQUIRED: 3 ACRES; EXISTING 1.18 ACRES; RELIEF RECEIVED: 1.82 ACRES
 (PRE-EXISTING, NON-CONFORMING CONDITION)
- ARTICLE 5, SECTION 5.4, TABLE 1 (MINIMUM SIDE YARD)
 REQUIRED: 50 FT; EXISTING 28 FT; RELIEF RECEIVED: 22 FT
 (PRE-EXISTING, NON-CONFORMING CONDITION)



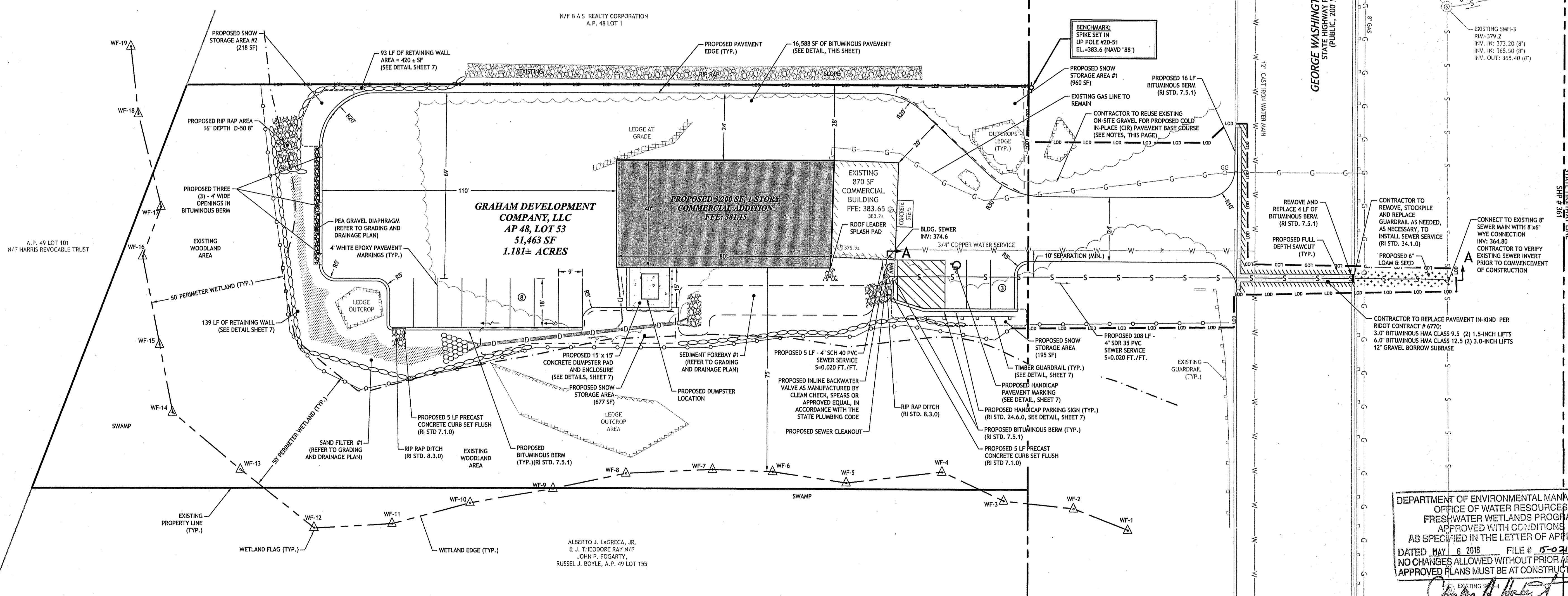
RECLAIMED PAVEMENT NOTES

- THE PRESENCE OF EXCESSIVE CLAY, SILT, ORGANIC MATTER, COBBLES, BOULDERS AND/OR OTHER DELETERIOUS MATERIALS WILL RESULT IN AN IMMEDIATE NEGATIVE RESPONSE TO THE POTENTIAL TO USE CIR AS BASE COURSE.
- CIR BASE COURSE SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

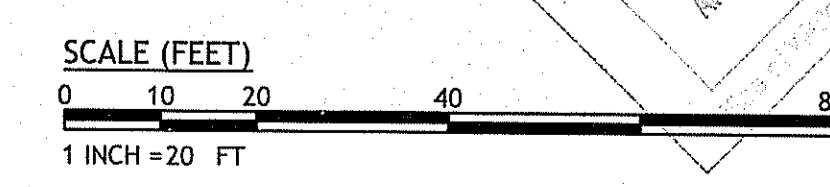
SIEVE	% PASSING BY WEIGHT
3"	95 - 100
NO. 200	2 - 15

CONTRACTOR SHALL PROVIDE CERTIFIED LABORATORY TESTING RESULTS INDICATING THE MATERIAL MEETS THESE GRADATION REQUIREMENTS.
- THE MAXIMUM DIMENSION OF ANY STONE, ROCK, BOUND ASPHALT OR COBBLE SHALL NOT BE LARGER THAN 3 INCHES.
- SHOULD ADDITIONAL MATERIAL BE REQUIRED, THE CONTRACTOR SHALL ADD MATERIAL FROM AN EXTERNAL SOURCE. THE ADDITIONAL MATERIAL SHALL BE MIXED, BLENDED AND THOROUGHLY WORKED TO MEET THE GRADATION REQUIREMENTS OF THE CIR BASE COURSE.

2 PAVEMENT RECLAMATION DETAIL
NOT TO SCALE



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JCE
 JOE CASALI ENGINEERING, INC.
 CIVIL, SITE DEVELOPMENT - TRANSPORTATION
 DRUMMOND - WILSON DEVELOPMENT, INC. 300 POST ROAD, WARWICK, RI 02888
 (401) 944-1300 (401) 944-1313 FAX WWW.JCEENGINEERING.COM

JOSEPH A. CASALI
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 4.19.16

GRAHAM DEVELOPMENT COMPANY, LLC.
328 GEORGE WASHINGTON HIGHWAY
SMITHFIELD, RHODE ISLAND
AP 48, LOT 53

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DESIGNED BY: JHW & JMM
 DRAWN BY: JHW & JMM
 CHECKED BY: JAC
 DATE: SEPT 2015
 PROJECT NO: 04-324

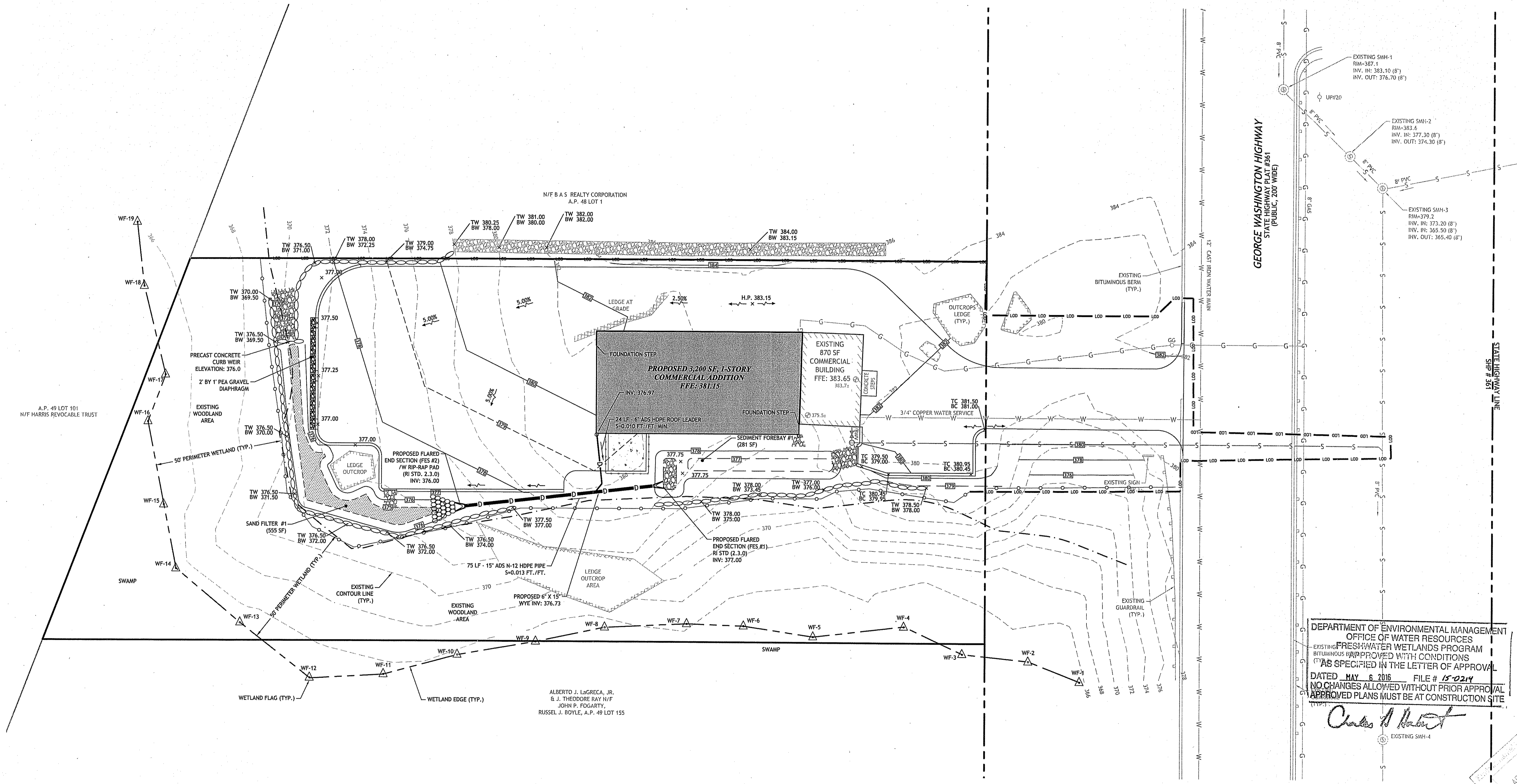
PRELIMINARY

SITE & UTILITY PLAN

SHEET 4 OF 8

C:\04-32 - David Graham\04-324 328 GHW, Smithfield\JAC\Graham\Planned\FWW Revision.dwg Apr. 22, 2016 1:30pm

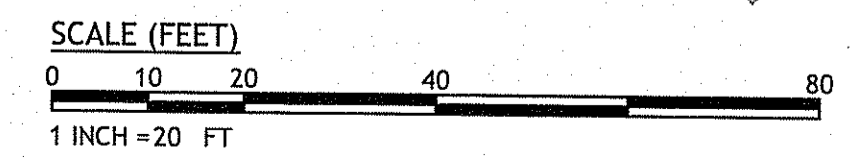
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ALBERTO J. LAGRECA, JR.
 & J. THEODORE RAY N/F
 JOHN P. FOGARTY
 RUSSEL J. BOYLE, A.P. 49 LOT 155

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 EXISTING FRESHWATER WETLANDS PROGRAM
 BITUMINOUS BERM APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
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Charles A. Hest
 EXISTING SMH-1



APR 22 2016

JOE CASALI ENGINEERING, INC.
 DRAINAGE - WETLANDS - ISSS - TRAFFIC - FLOODPLAIN
 300 POST ROAD, WARWICK, RI 02888
 (401)944-1300 (401)944-1313 FAX WWW.JOECASALI.COM

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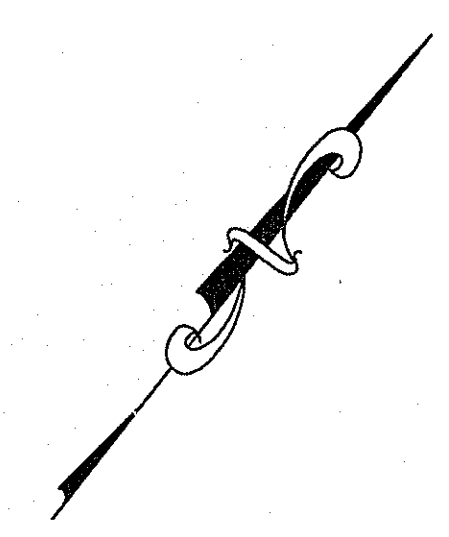
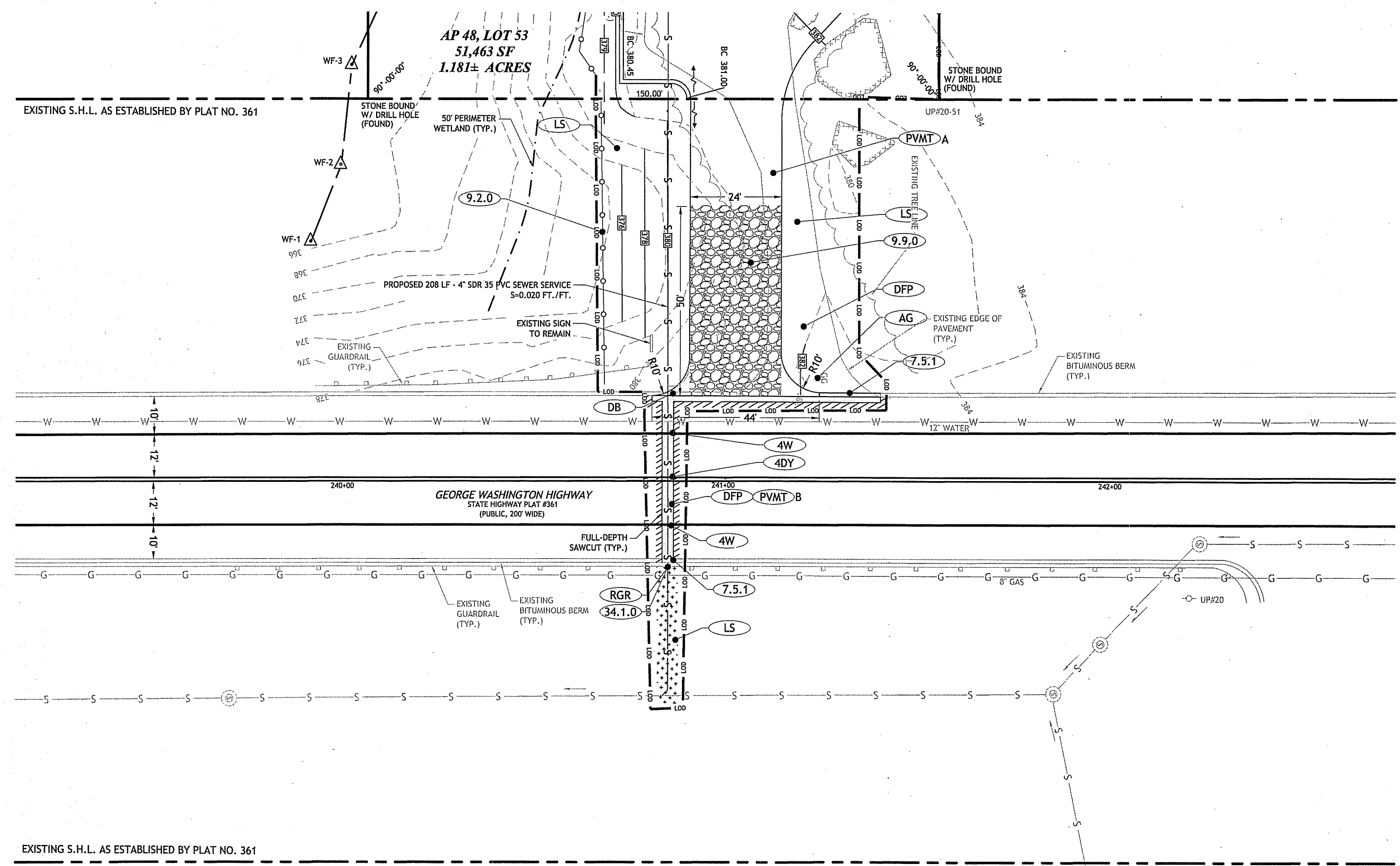
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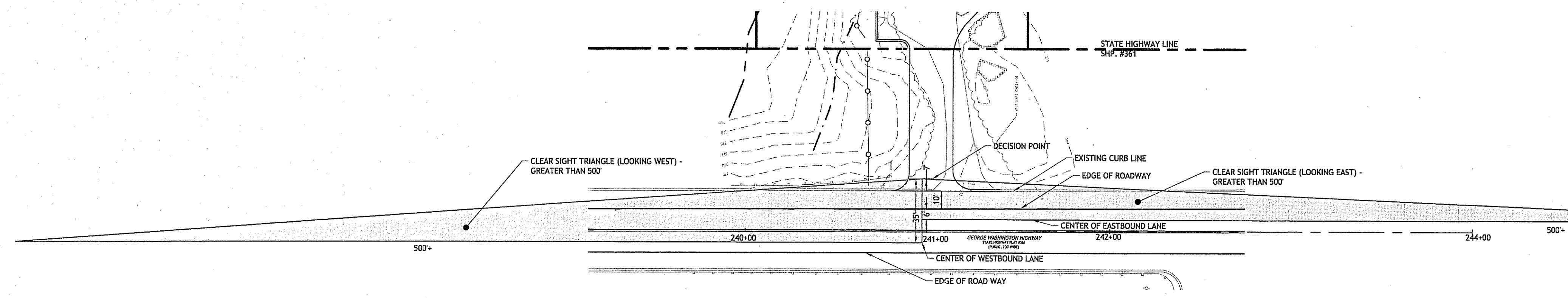
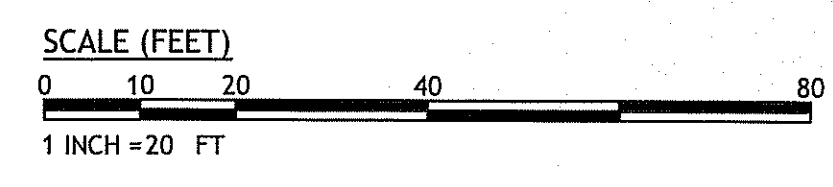
PRELIMINARY
GRADING & DRAINAGE PLAN

SHEET 5 OF 8



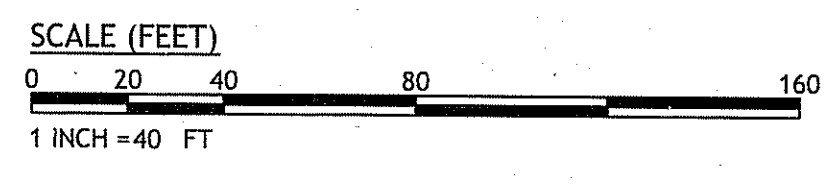
LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- ABUTTING PROPERTY LINE
- BUILDING SETBACK LINE
- WETLAND EDGE
- △ WF WETLAND FLAG
- 50' PERIMETER WETLAND
- 100' RIVERBANK WETLAND
- 200' RIVERBANK WETLAND
- EXISTING EASEMENT
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING FENCE
- EXISTING CURB
- PROPOSED CURB
- GUARD RAIL
- EXISTING DRAIN LINE
- PROPOSED DRAIN LINE
- ⊕ EXISTING DRAINAGE MANHOLE
- ⊕ PROPOSED DRAINAGE MANHOLE
- ⊕ EXISTING CATCH BASIN
- ⊕ PROPOSED CATCH BASIN
- EXISTING SEWER LINE
- PROPOSED SEWER LINE
- ⊕ EXISTING SEWER MANHOLE
- ⊕ PROPOSED SEWER MANHOLE
- EXISTING WATER LINE
- PROPOSED WATER LINE
- WG EXISTING WATER GATE
- WG PROPOSED WATER GATE
- GAS EXISTING GAS LINE
- GAS PROPOSED GAS LINE
- ⊕ EXISTING UTILITY POLE
- ⊕ PROPOSED UTILITY POLE
- TH1 EXISTING TEST HOLE
- SILT FENCE
- LOD LIMIT OF DISTURBANCE



SITE DISTANCE PLAN

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
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Charles A. Hester



RHODE ISLAND STANDARDS

- 7.5.1 BITUMINOUS BERM
- 9.2.0 SILT FENCE
- 9.9.0 CONSTRUCTION ACCESS
- 34.1.0 TYPICAL GUARDRAIL INSTALLATION
- AG ADJUST GATE TO GRADE
- DB REMOVE AND DISPOSE BITUMINOUS BERM
- RGR REMOVE AND DISPOSE GUARDRAIL
- DFP REMOVE AND DISPOSE FLEXIBLE PAVEMENT
- LS 6" LOAM & SEED
- PVMT A 1.5" BITUMINOUS SURFACE COURSE CLASS 9.5
2.5" BITUMINOUS BASE COURSE CLASS 12.5
8" GRAVEL BORROW SUBBASE COURSE
- PVMT B REPLACE PAVEMENT IN KIND AT MINIMUM:
3.0" BITUMINOUS SURFACE COURSE CLASS 9.5 (TWO - 1.5" COURSES)
6.0" BITUMINOUS BASE COURSE CLASS 12.5 (TWO - 3" COURSES)
12" GRAVEL BORROW SUBBASE COURSE
- 4W 4" WHITE EPOXY STRIPING
- 4DY 4" DOUBLE YELLOW EPOXY STRIPING

NOTES:

1. ALL WORK WITHIN THE STATE'S RIGHT-OF-WAY WILL CONFORM TO RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010 EDITION INCLUDING ALL REVISIONS AND RIDOT'S STANDARD DETAILS, JUNE 15, 1998, INCLUDING ALL REVISIONS.
2. UTILITY WORK SHOWN AS REFERENCE. THIS WORK NEEDS TO BE PERMITTED THROUGH A PHYSICAL UTILITY PERMIT (PUP) WITH RIDOT'S DIVISION OF MAINTENANCE.
3. 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 (MUTCD).

POSTED SPEED LIMIT ON GEORGE WASHINGTON HIGHWAY: 55 MPH
 AASHTO STOPPING SIGHT DISTANCE (SSD) REQUIREMENTS

SPEED	DISTANCE
25	155 FT.
30	200 FT.
35	250 FT.
50	425 FT.
55	495 FT.

SITE MEETS REQUIREMENTS FOR THE POSTED SPEED LIMIT ON GEORGE WASHINGTON HIGHWAY. IT SHOULD BE NOTED THAT SPEEDS WERE IN EXCESS OF THE POSTED SPEED LIMIT HOWEVER THE STOPPING SIGHT DISTANCE MEASURED ALLOW FOR SPEEDS UP TO 55 MPH.

JCE
 JOE CASALI ENGINEERING, INC.
 CIVIL - SITE DEVELOPMENT - TRANSPORTATION
 DRAINAGE - WETLANDS - ASBESTOS - REMEDIATION - PAVEMENT - ROADWORK
 300 POSEY RD., WARREN, RI 02886
 (401) 944-3800 (401) 944-1313 FAX WWW.JCEONLINE.COM

JOSEPH A. CASALI
 No. 7250
 REGISTERED PROFESSIONAL ENGINEER CIVIL
 3.22.16

GRAHAM DEVELOPMENT COMPANY, LLC.
 328 GEORGE WASHINGTON HIGHWAY
 SMITHFIELD, RHODE ISLAND
 AP 48, LOT 53

REVISIONS:

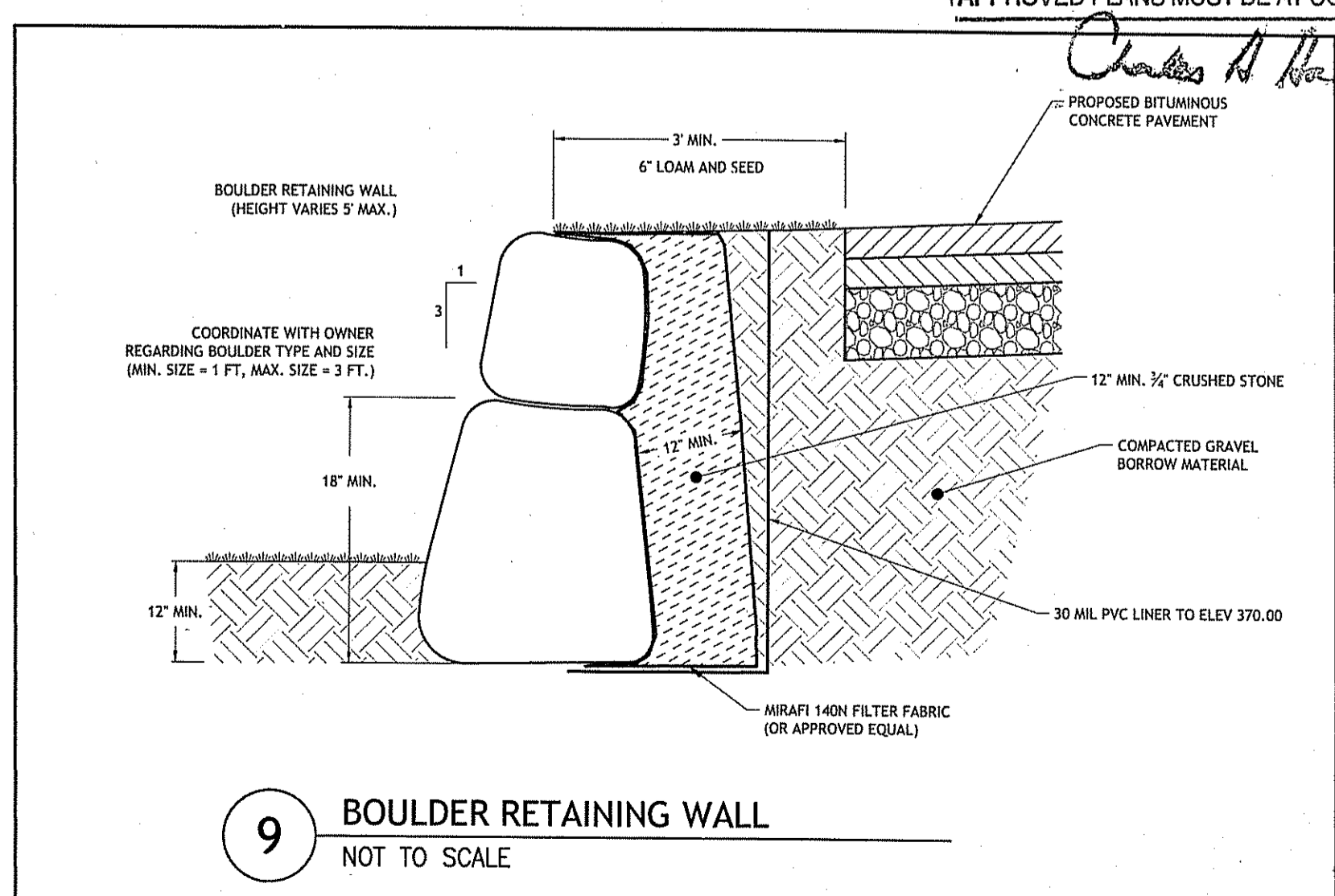
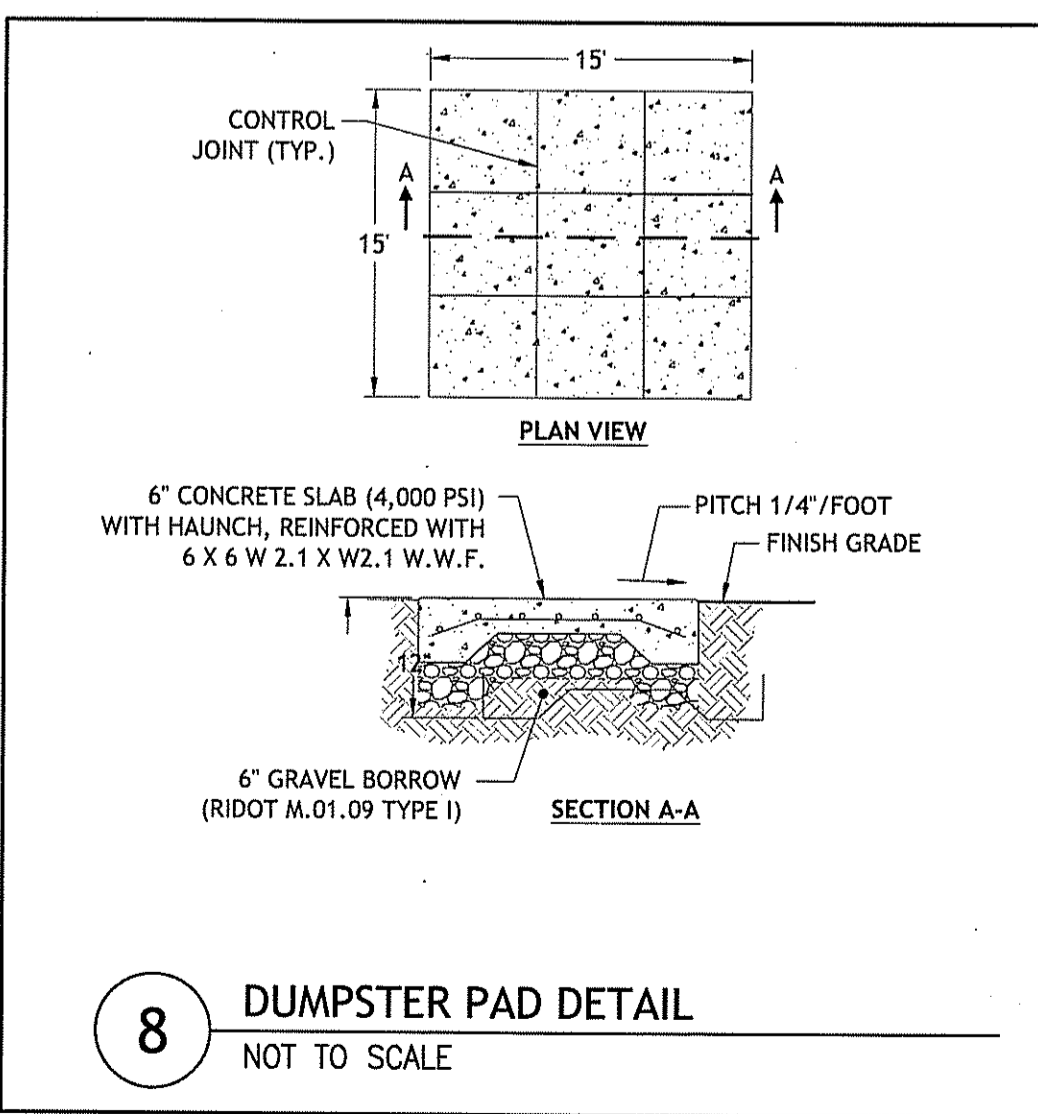
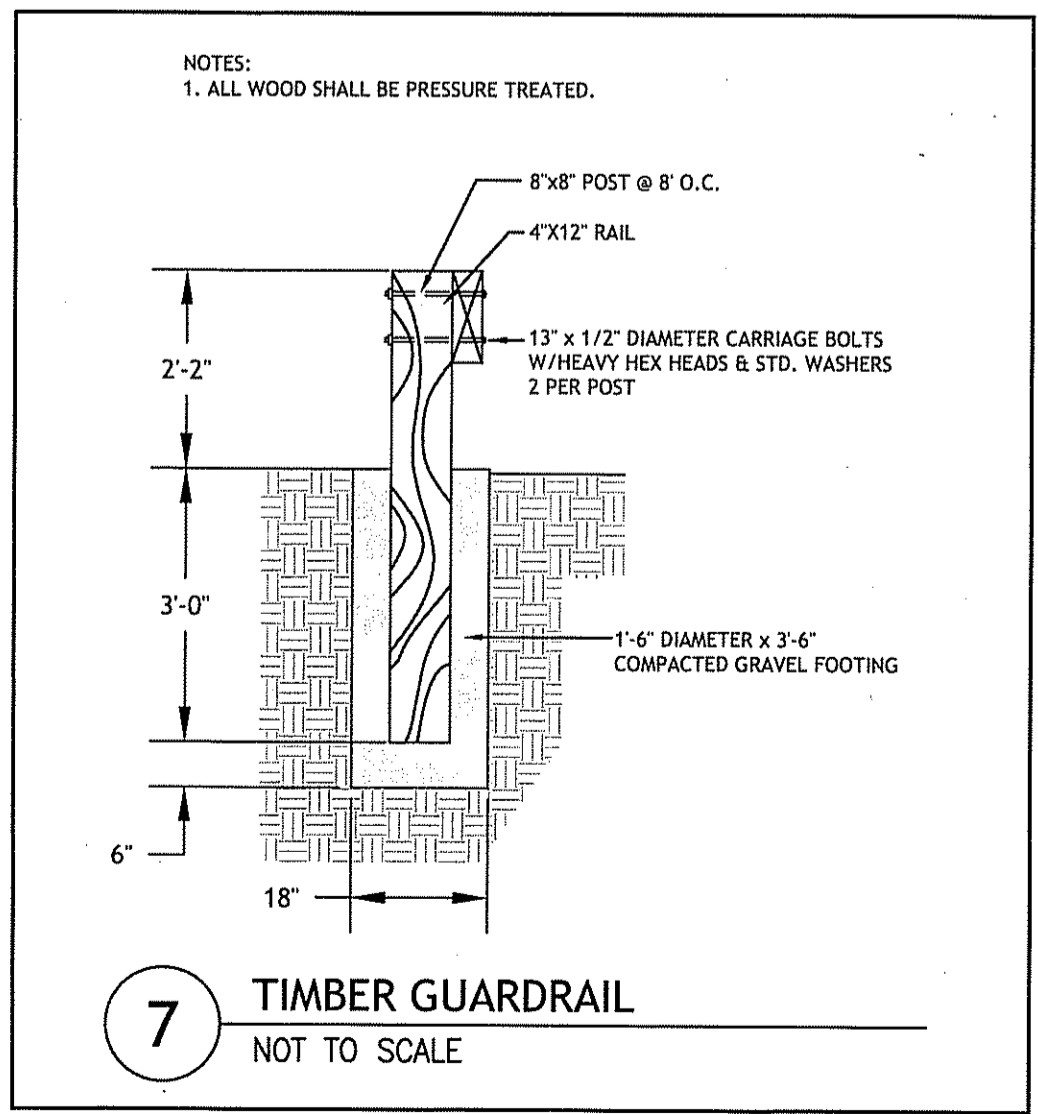
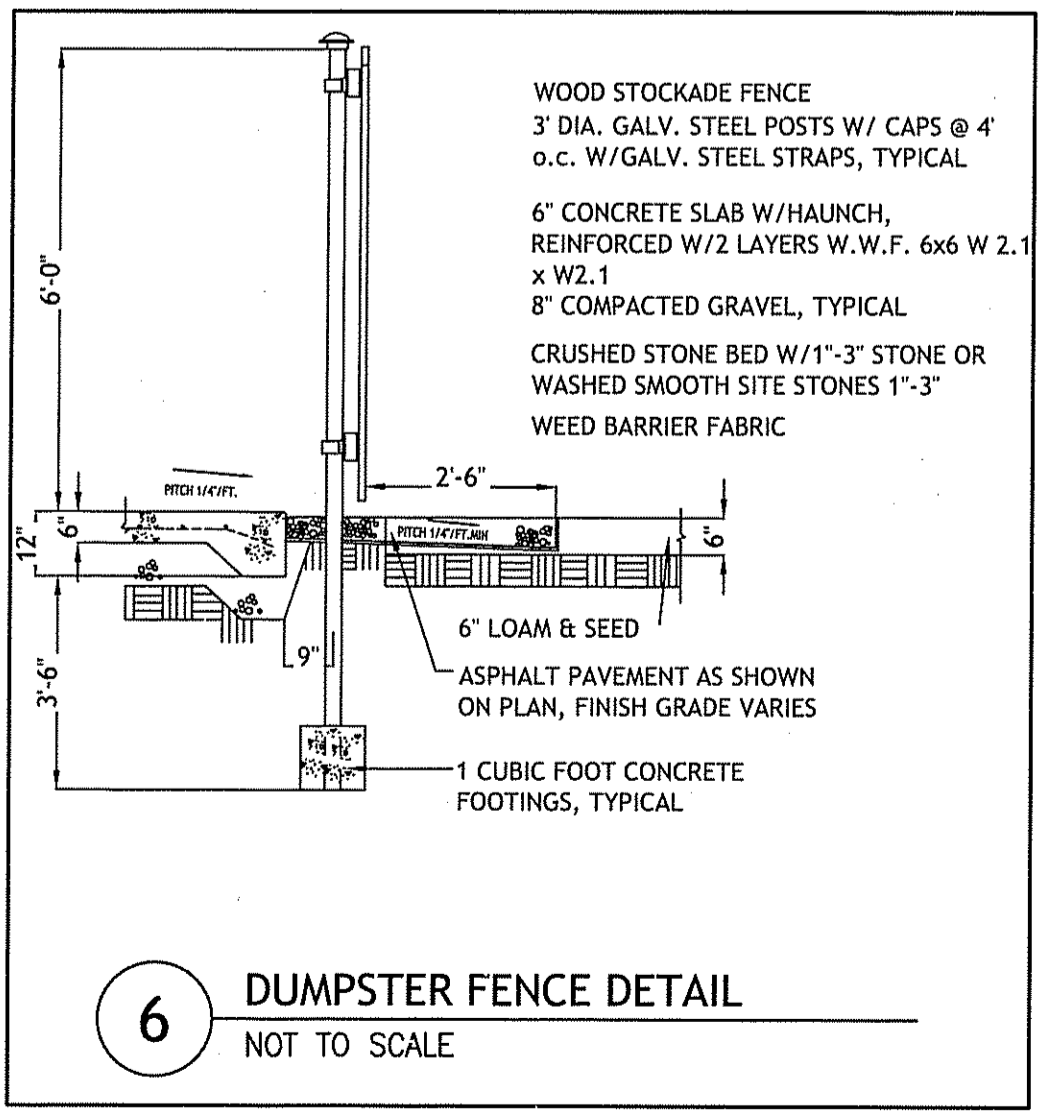
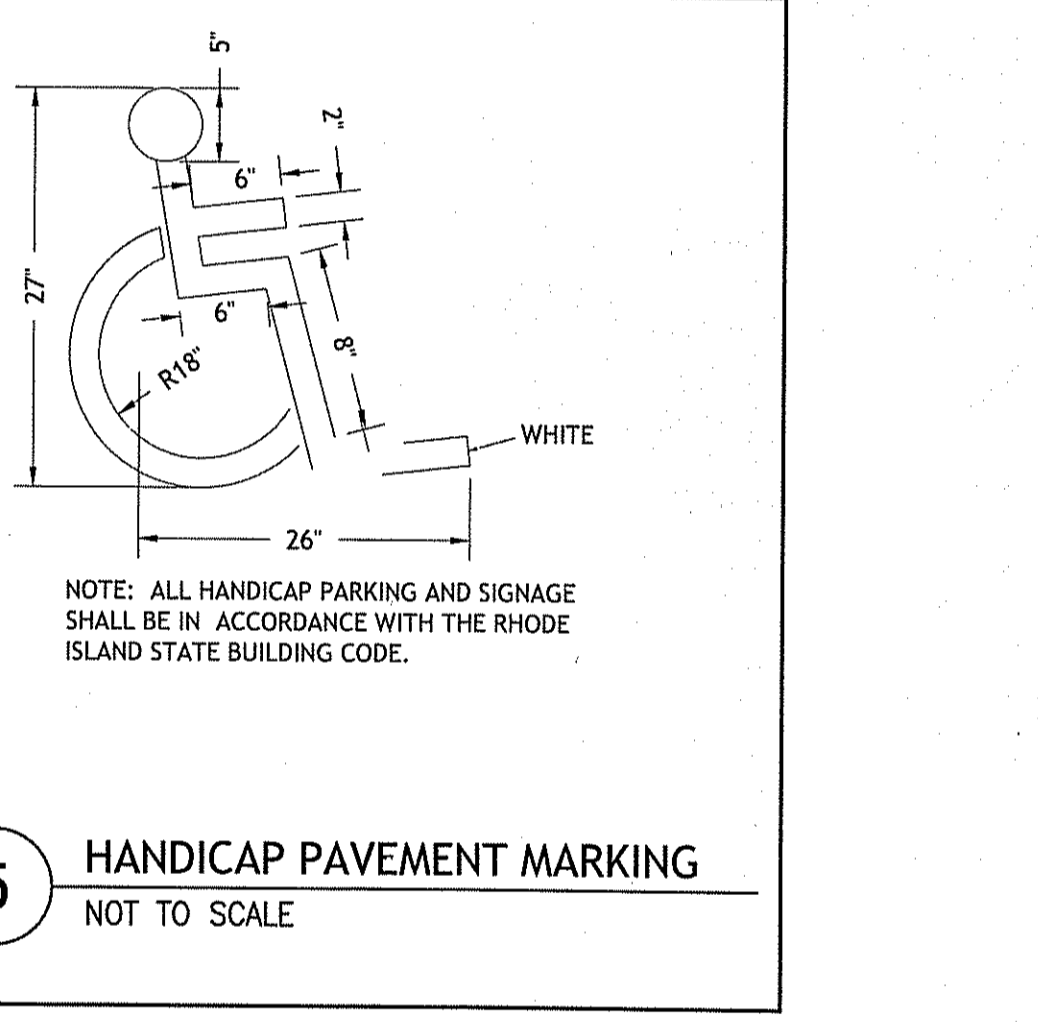
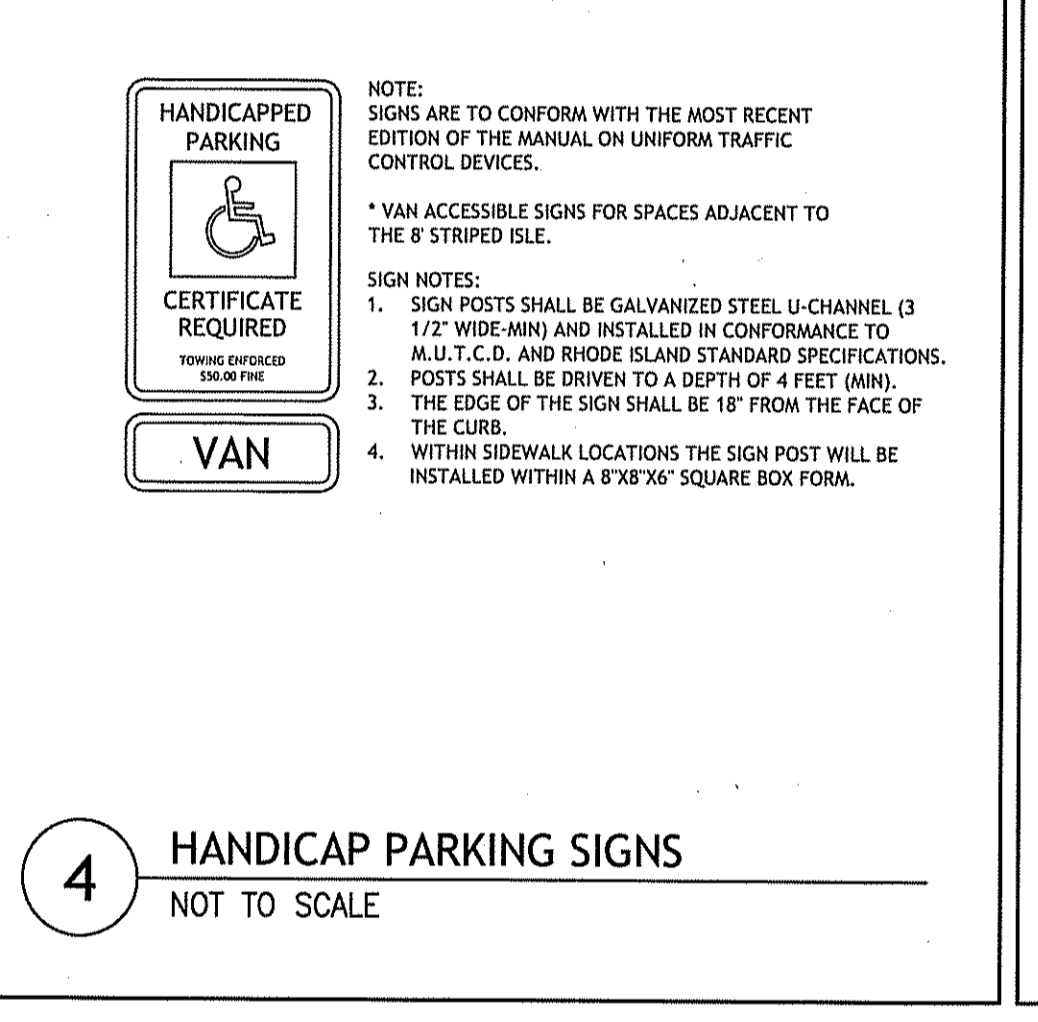
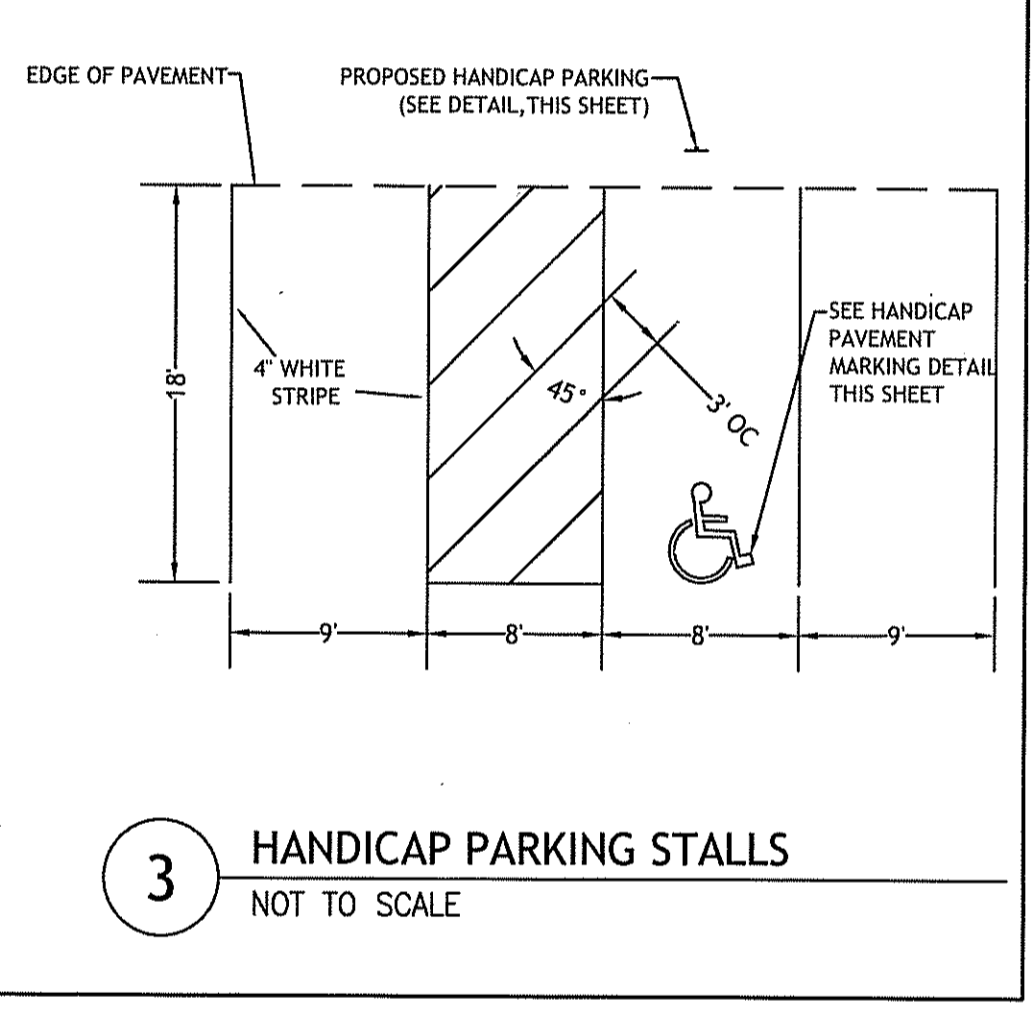
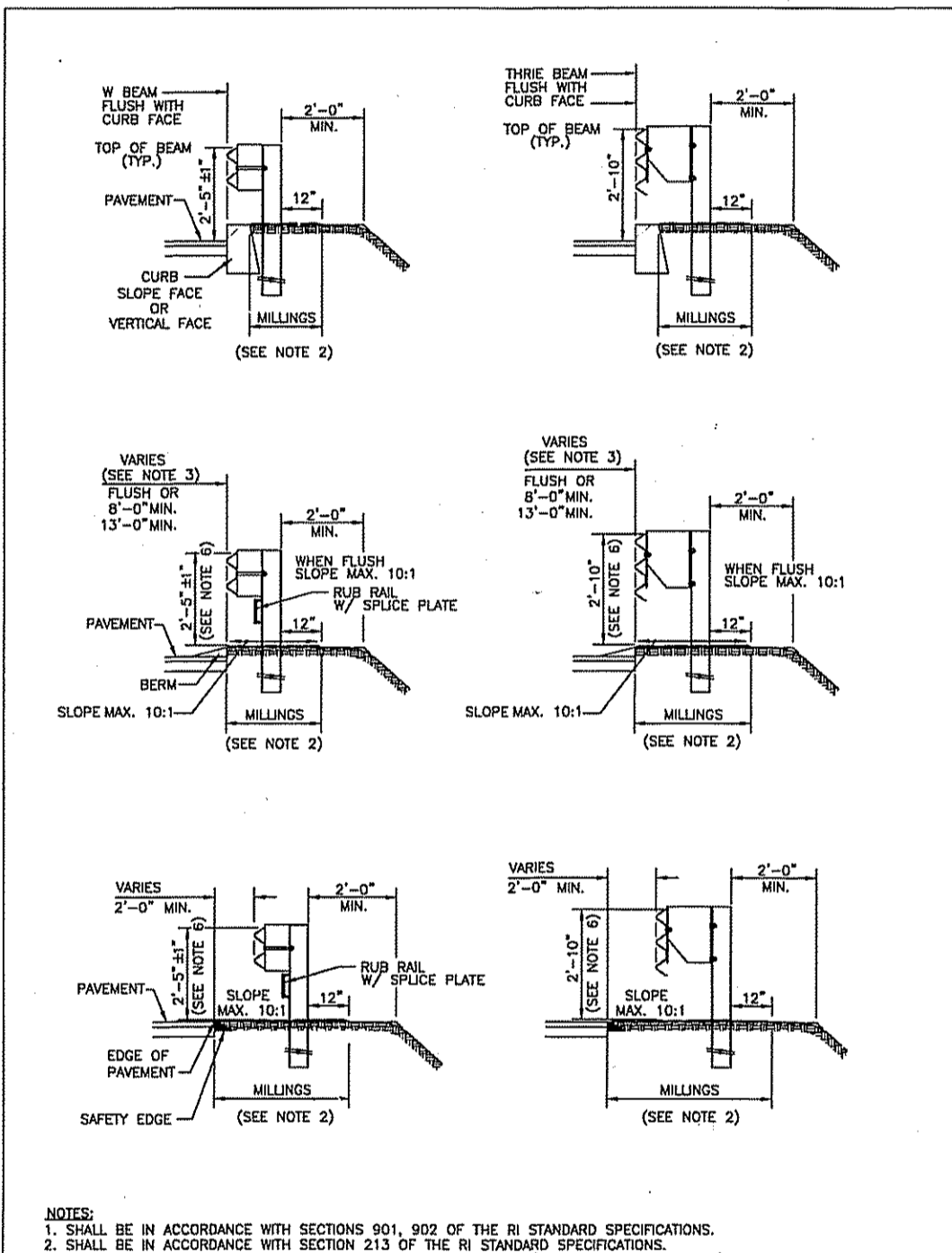
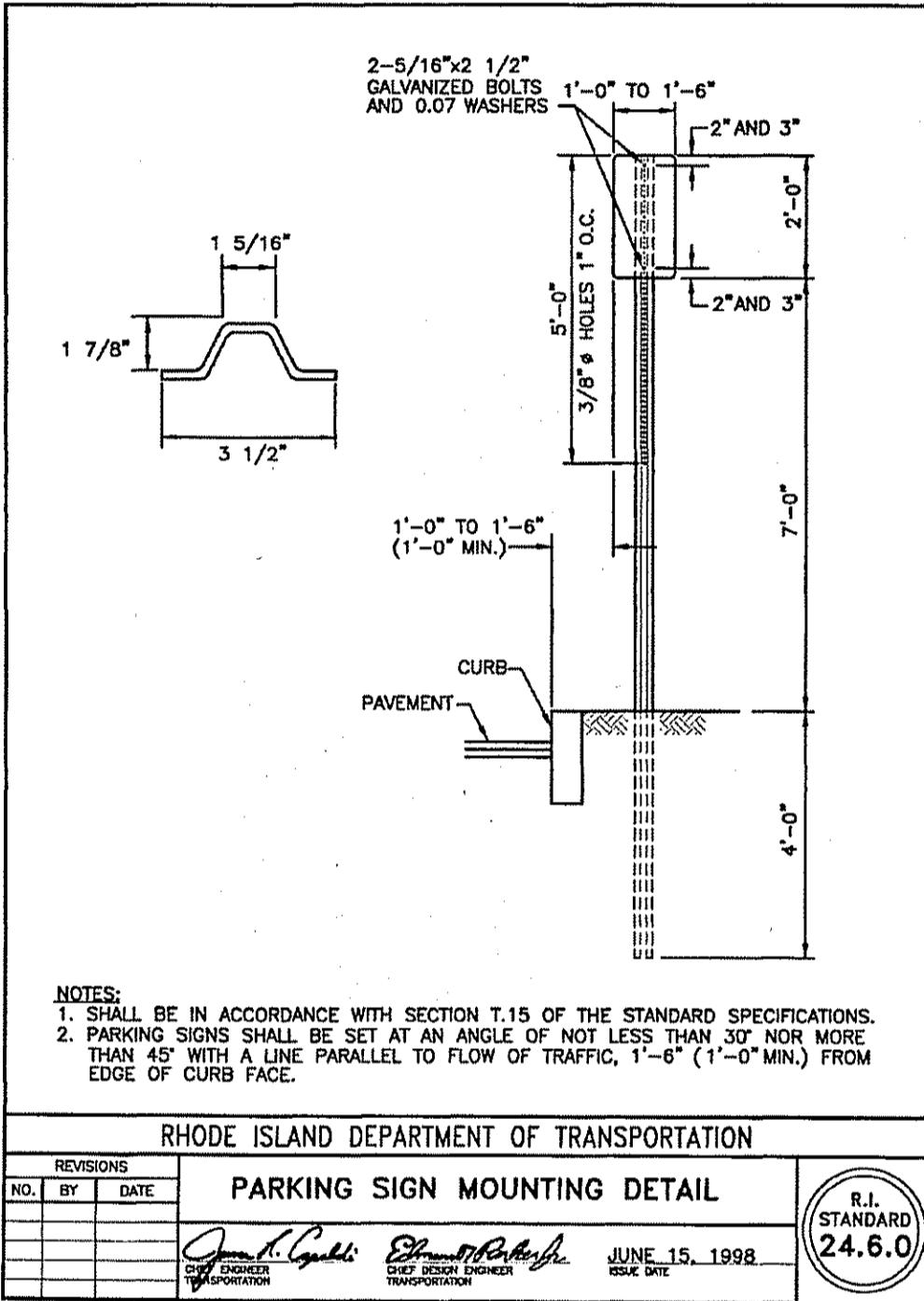
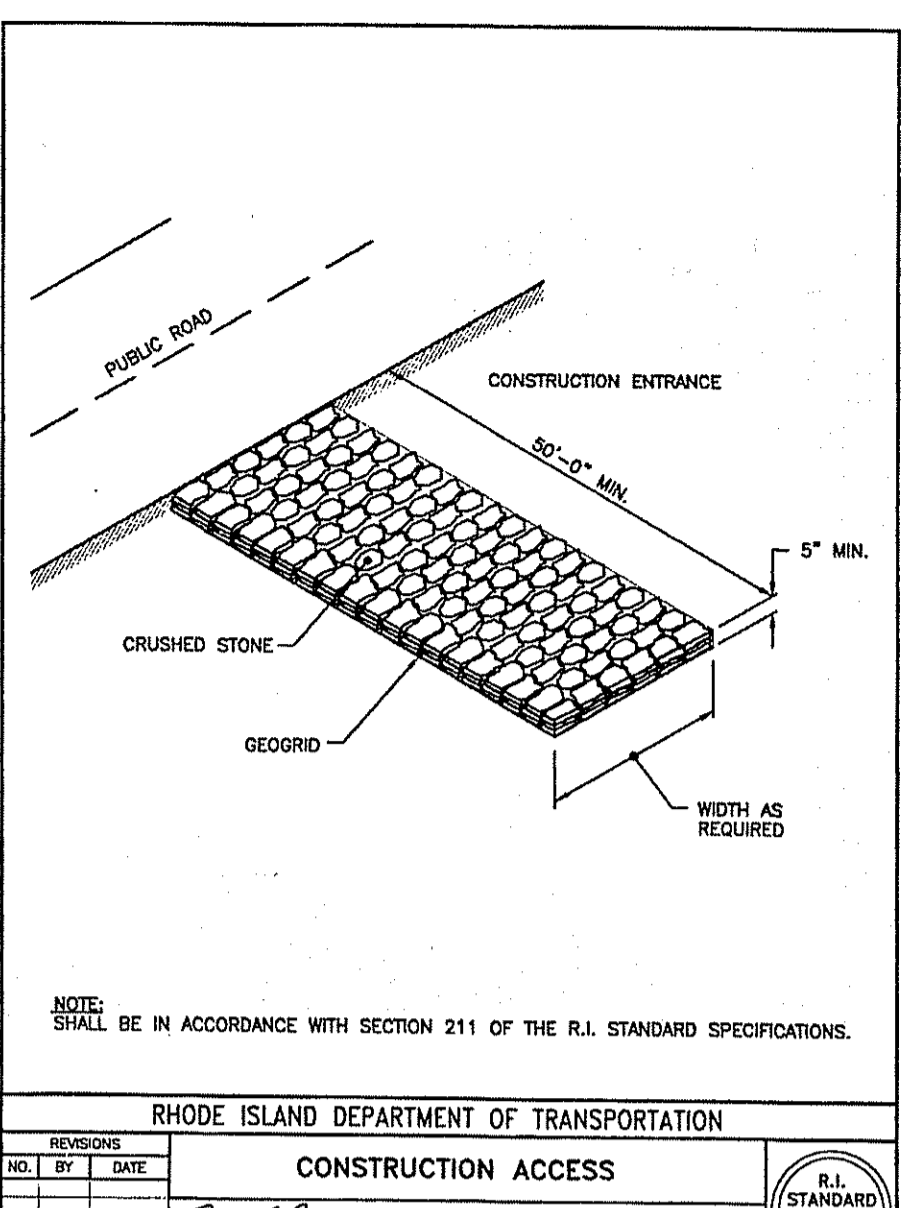
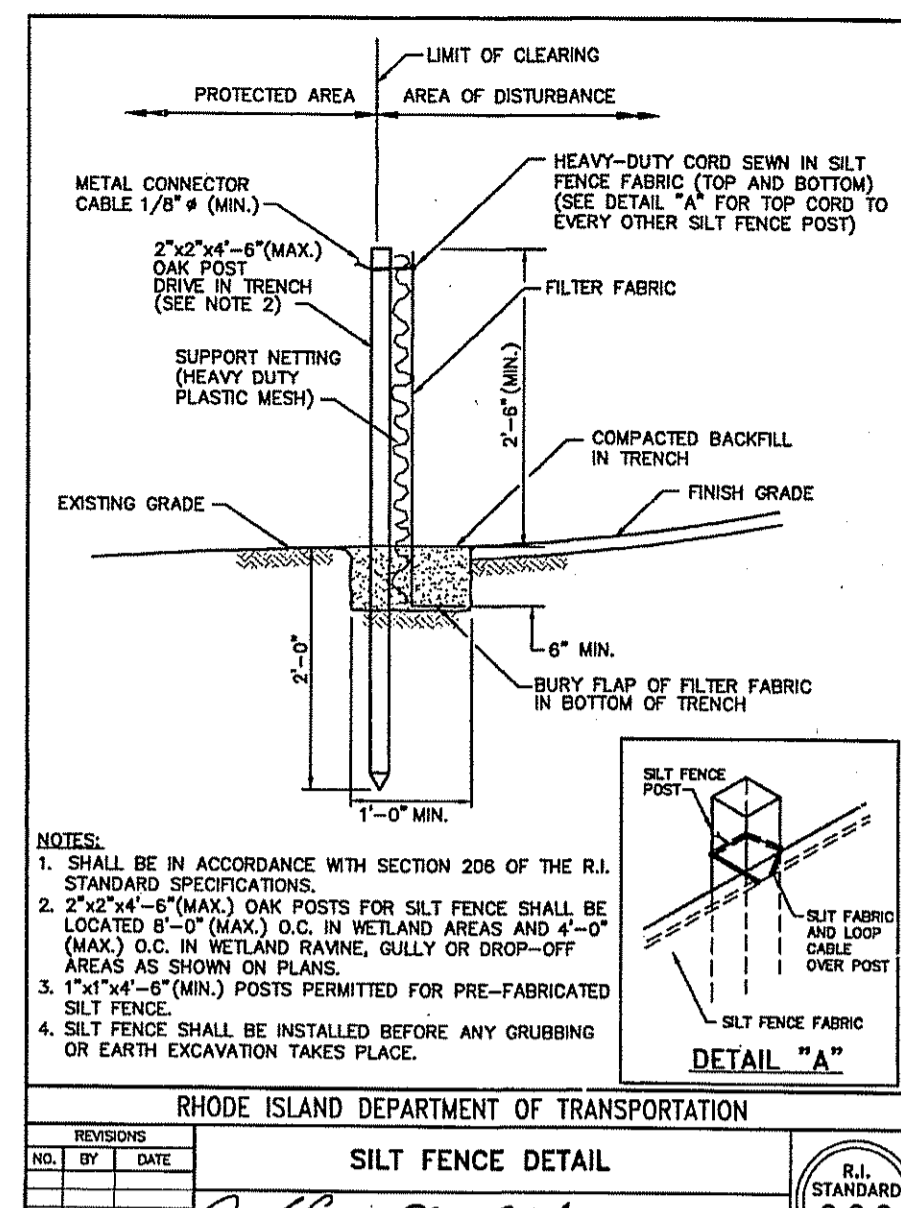
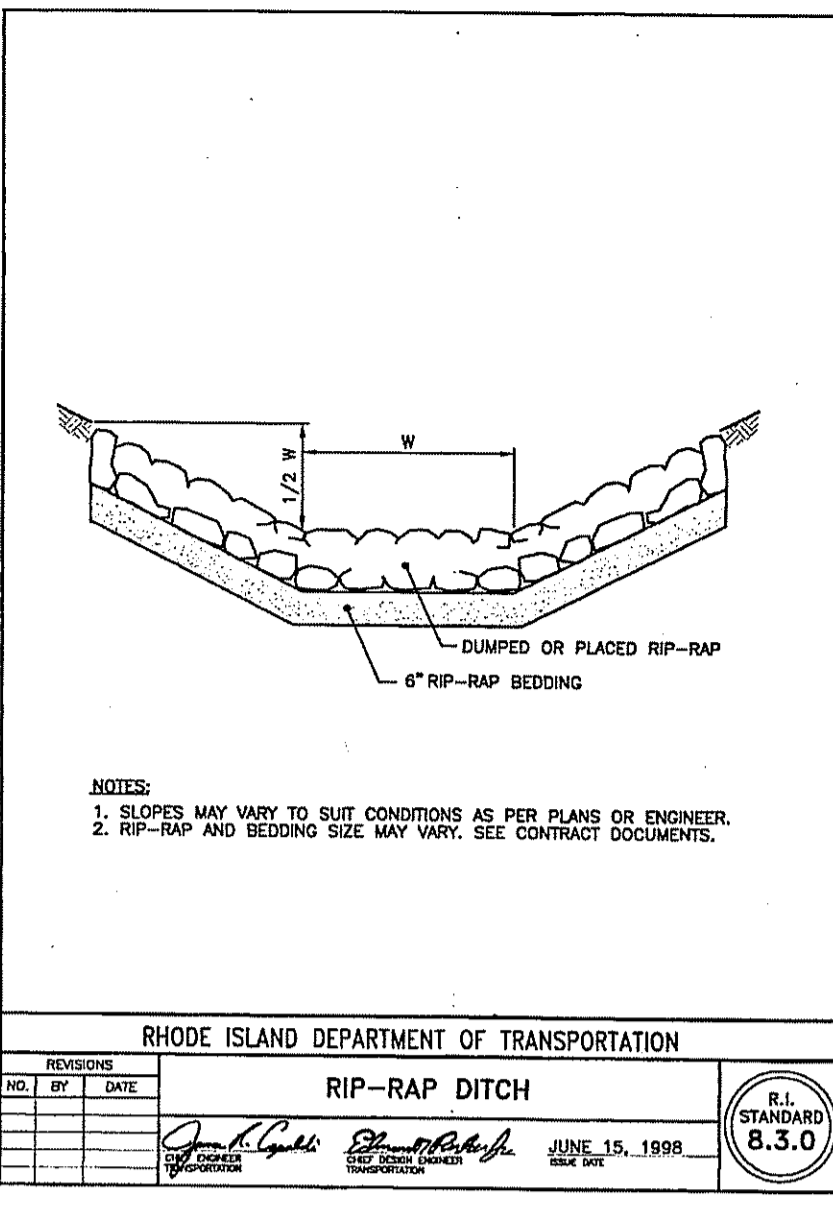
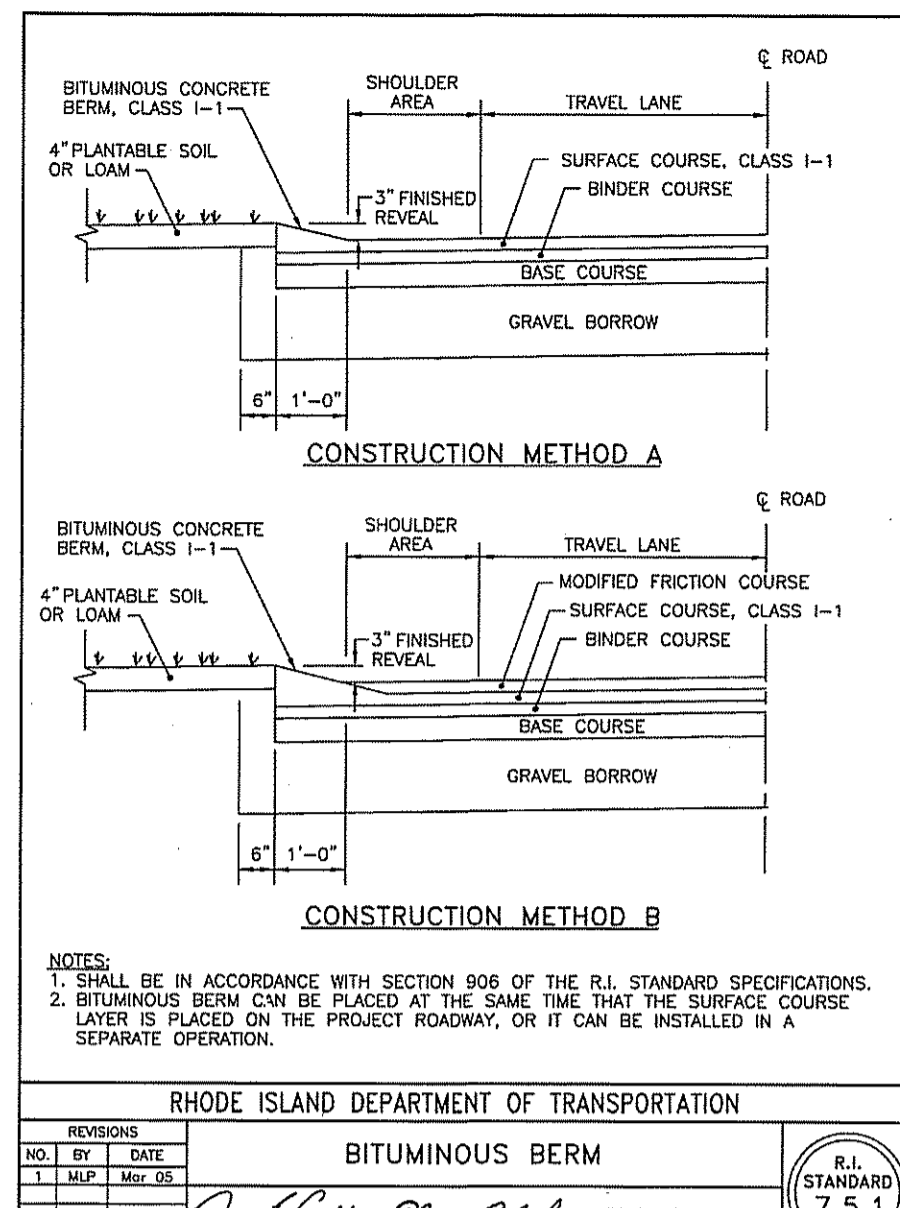
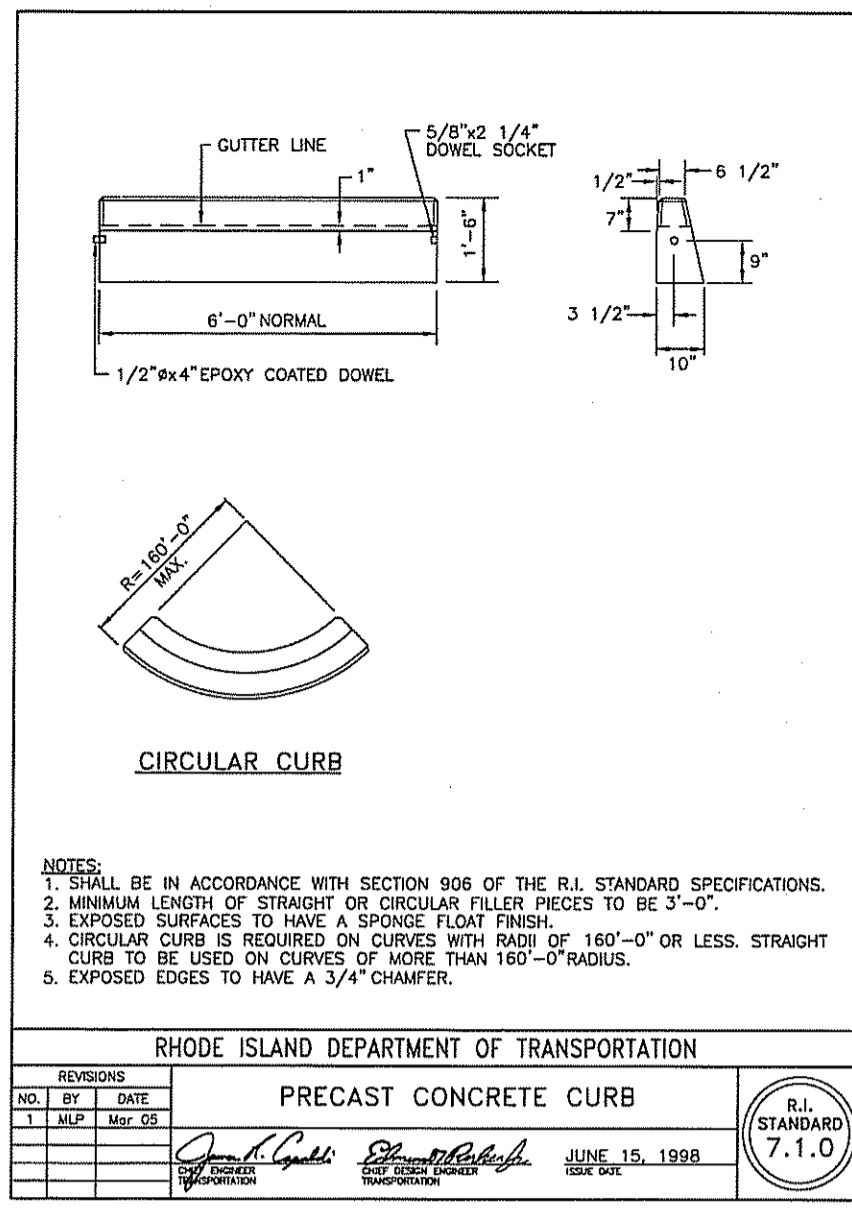
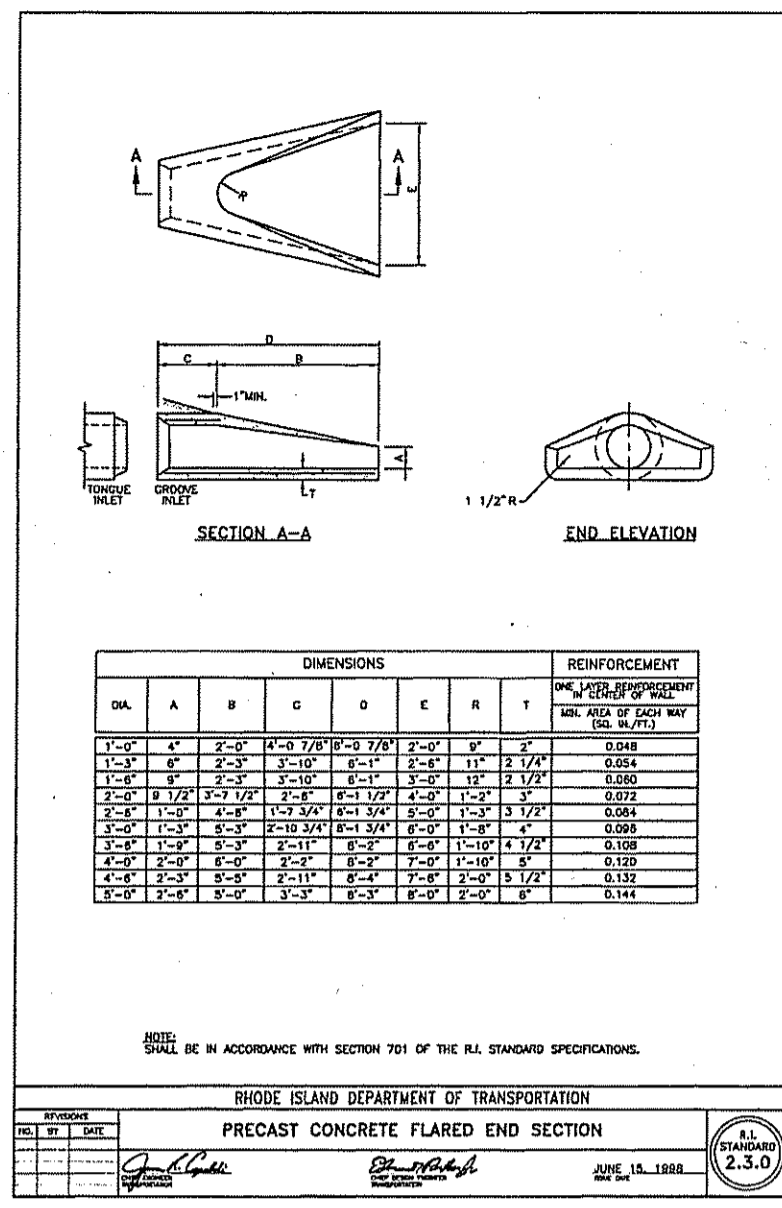
NO.	DATE	DESCRIPTION
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DESIGNED BY: JHW & JMM
 DRAWN BY: JHW & JMM
 CHECKED BY: JAC
 DATE: SEPT 2015
 PROJECT NO: 04-32d

PRELIMINARY

**RIDOT
 PAP
 PLAN**

**SHEET
 6 OF 8**



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
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CIVIL
3.22.16

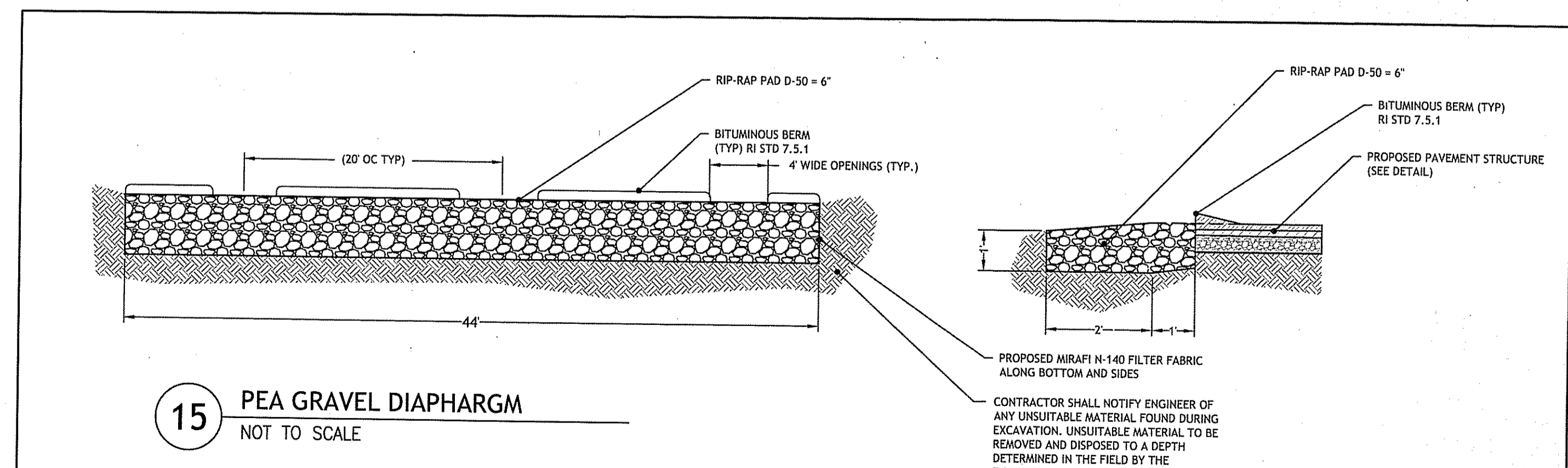
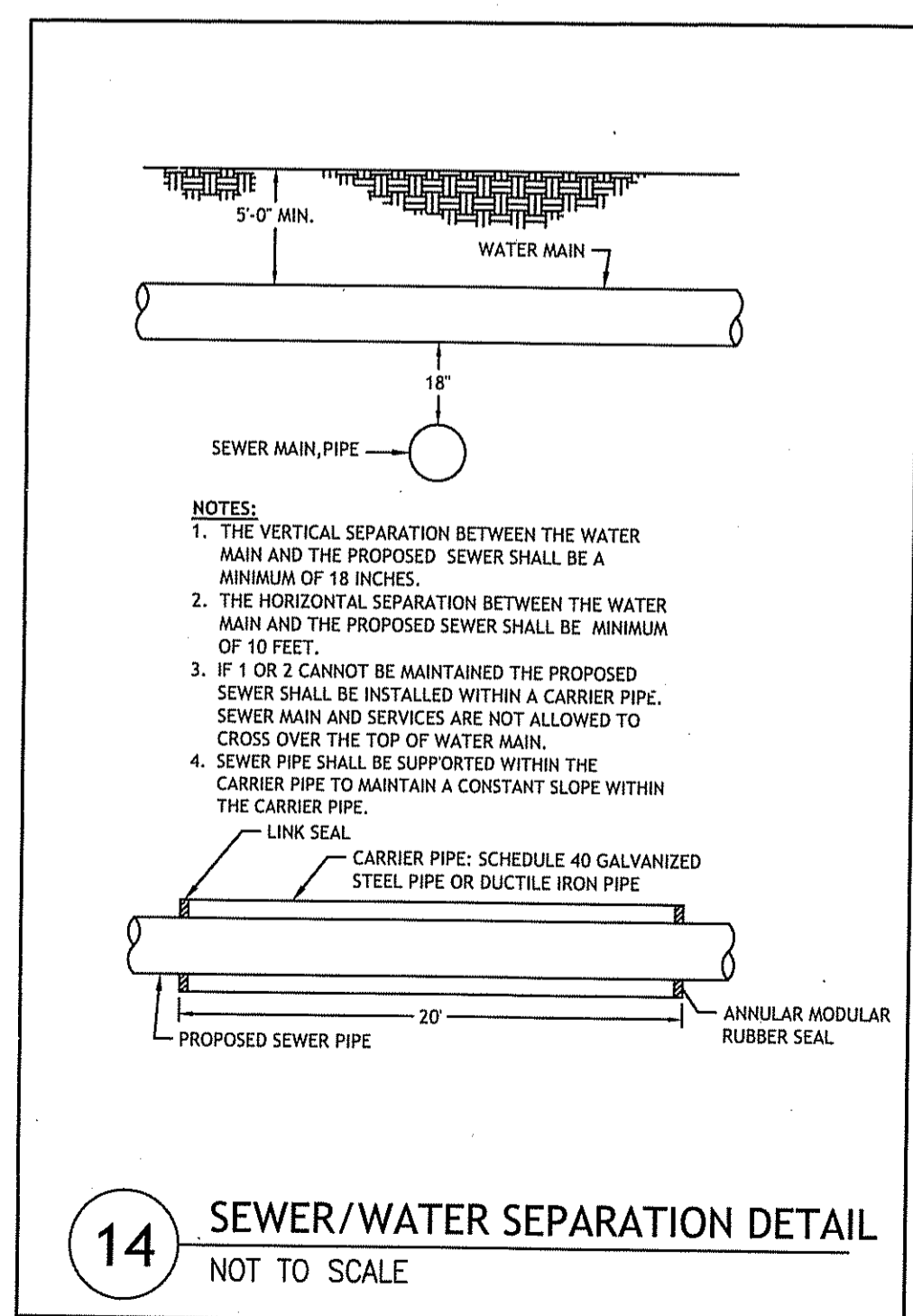
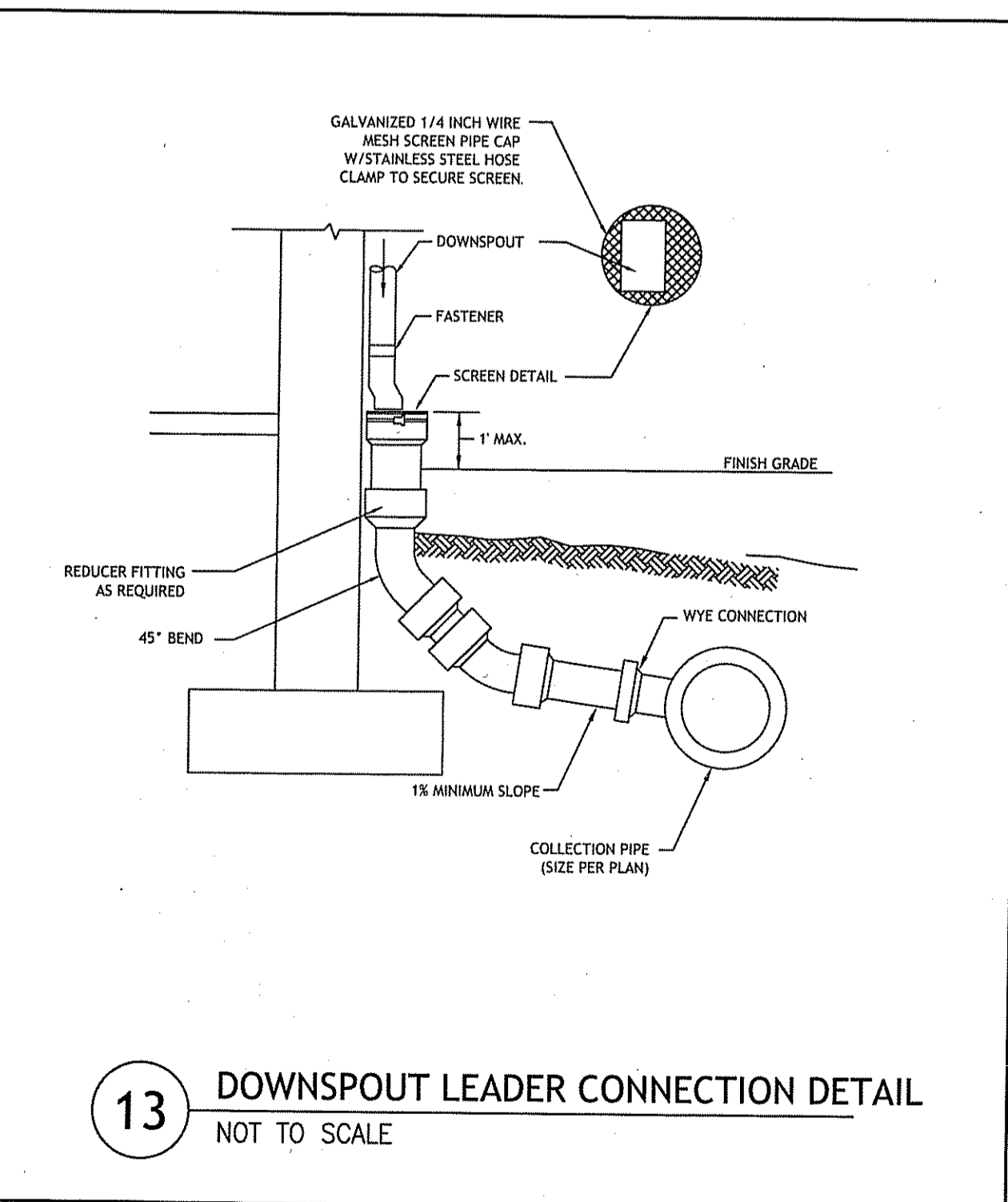
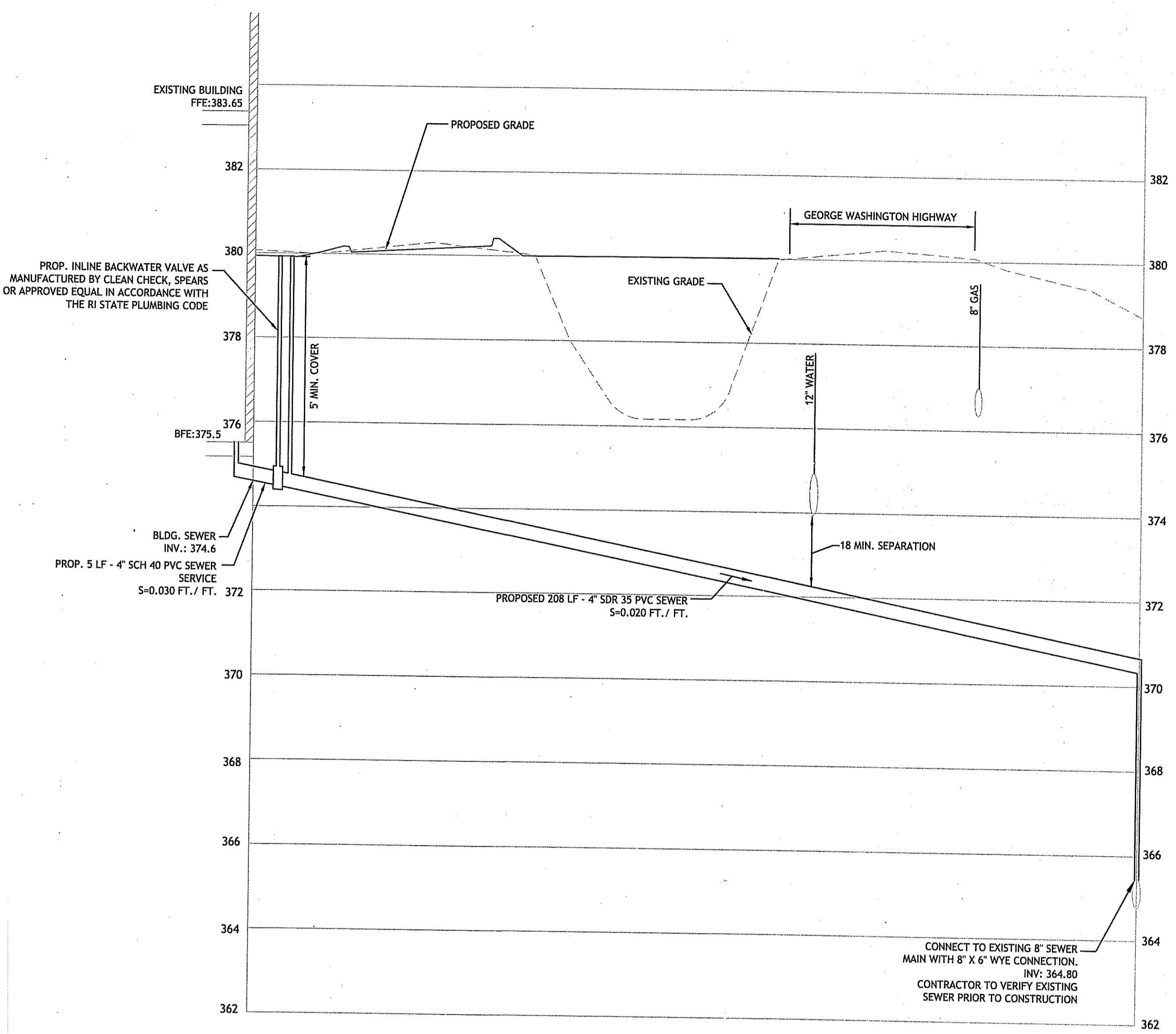
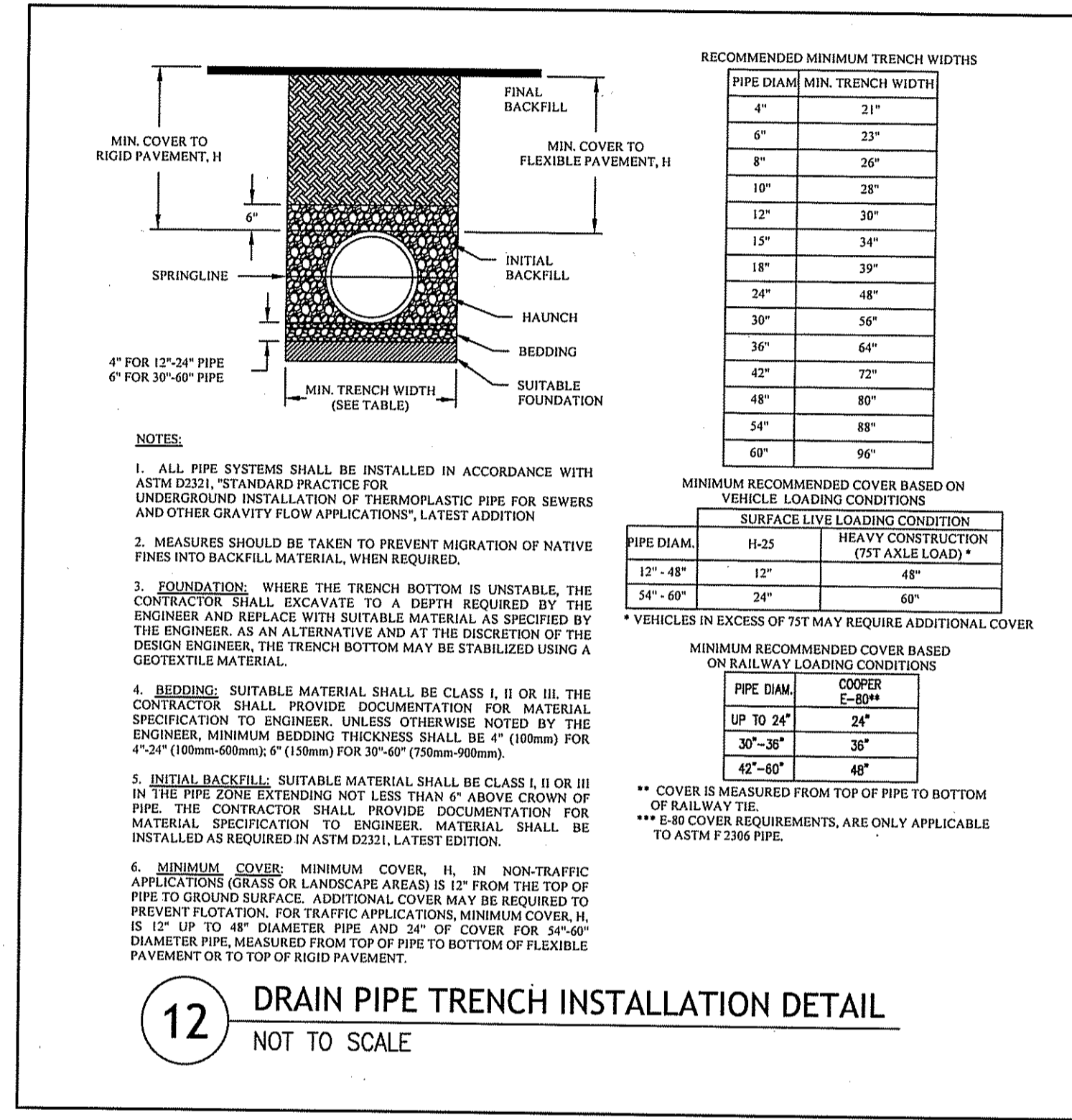
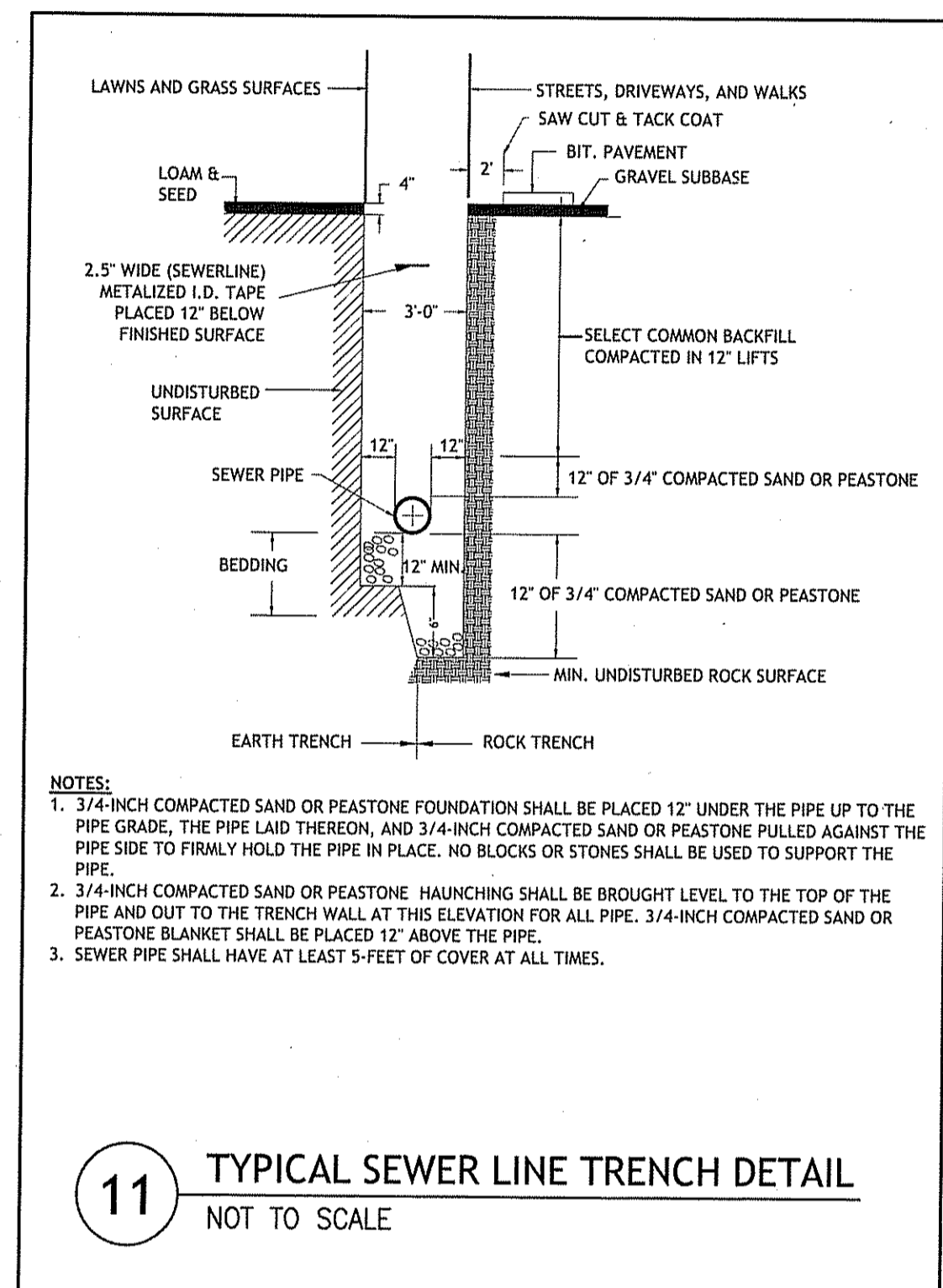
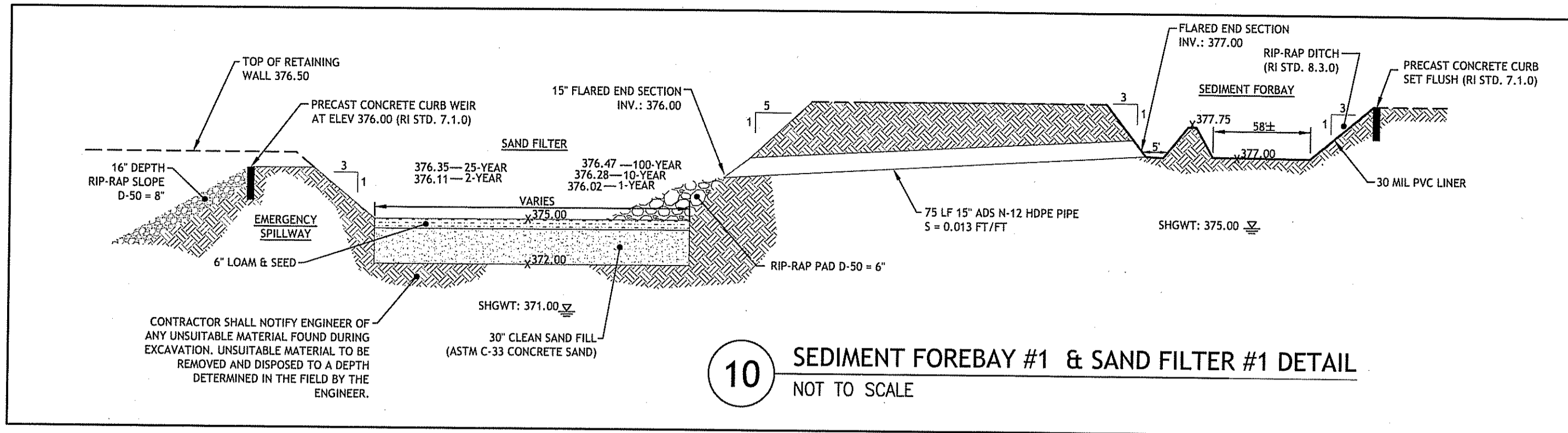
GRAHAM DEVELOPMENT COMPANY, LLC.
328 GEORGE WASHINGTON HIGHWAY
SMITHFIELD, RHODE ISLAND
AP 48, LOT 53

REVISIONS:

NO.	DATE	DESCRIPTION
1	FEB. 2015	RIDEM COMMENTS
		TOWN SOIL EROSION
		RIDOT COMMENTS

DESIGNED BY: JHW & JMM
DRAWN BY: JHW & JMM
CHECKED BY: JAC
DATE: SEPT 2015
PROJECT NO: 04-32d

PRELIMINARY
SITE DETAILS
SHEET 7 OF 8



JCE
 JOE CASALI ENGINEERING, INC.
 CIVIL SITE DEVELOPMENT, E.C.E.
 DRAINAGE - WETLANDS - EROSION - TRAFFIC - FLOODPLAIN
 300 POST ROAD, WARWICK, RI 02888
 (401) 944-1300 (603) 844-1313 FAX WWW.JCEONLINE.COM

JOSEPH A. CASALI
 No. 7250
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 2-2-16

GRAHAM DEVELOPMENT COMPANY, LLC.
 328 GEORGE WASHINGTON HIGHWAY
 SMITHFIELD, RHODE ISLAND
 AP 48, LOT 53

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 6 2016 FILE # 15-0214
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
 Charles A. Hester

REVISIONS:

NO.	DATE	DESCRIPTION
1	FEB. 2015	RIDEM COMMENTS TOWN SOIL EROSION RIDOT COMMENTS

DESIGNED BY: JHW & JMM
 DRAWN BY: JHW & JMM
 CHECKED BY: JAC
 DATE: SEPT 2015
 PROJECT NO: 04-324

PRELIMINARY
SEWER PROFILE & DETAILS
 SHEET 8 OF 8

04/04/16 - David Graham/04-324-328 CHW, smithfield\jcd\Graham [Planec] FWW Revision.dwg Apr. 22, 2016 1:30pm

APR 22 2016