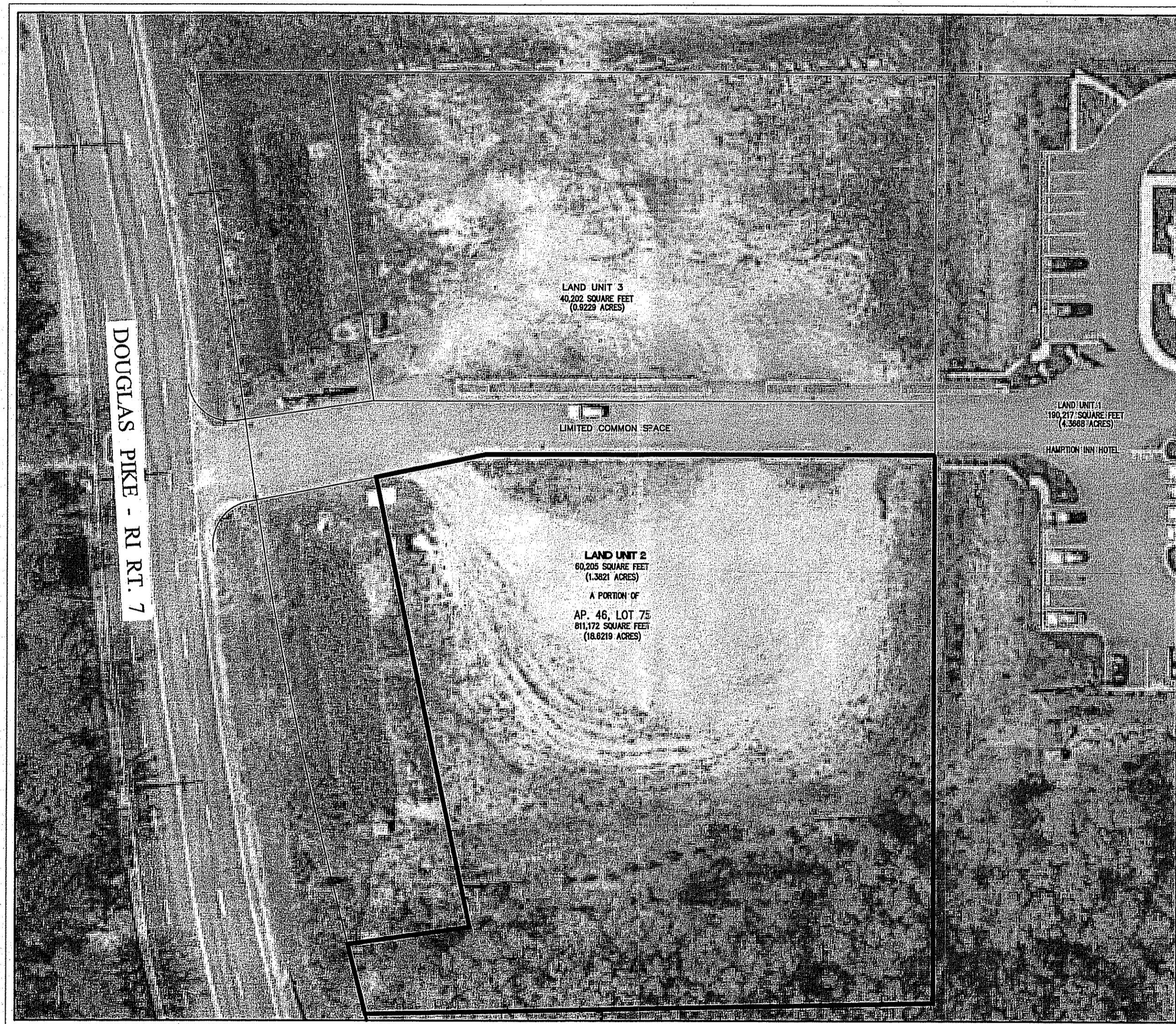


LAURA'S RESTAURANT

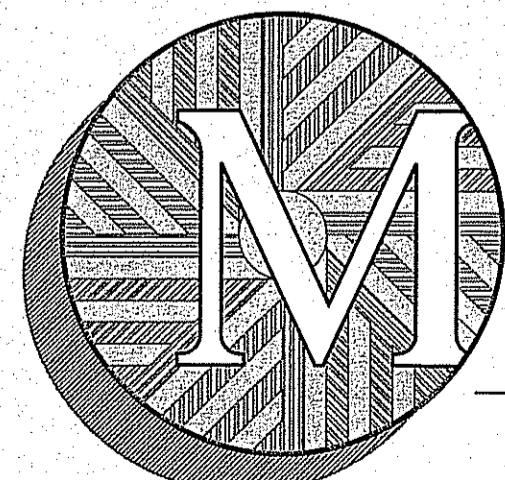
Portion of
ASSESSOR'S PLAT 46, LOT 75
LAND UNIT 2
Douglas Pike ~ RI Route 7
Smithfield, Rhode Island



PREPARED FOR:

945DP LLC

PREPARED BY:



**MILLSTONE
ENGINEERING, P.C.**

CIVIL ENGINEERING LAND PLANNING

250 CENTERVILLE ROAD, BUILDING E12, WARWICK, RHODE ISLAND 02886, p. (401)921-3344 f. (401)921-3303

SEPTEMBER 2016

REV. OCT 2016 REV. DEC 2016
REV. JAN 2017 REV. FEB. 2017

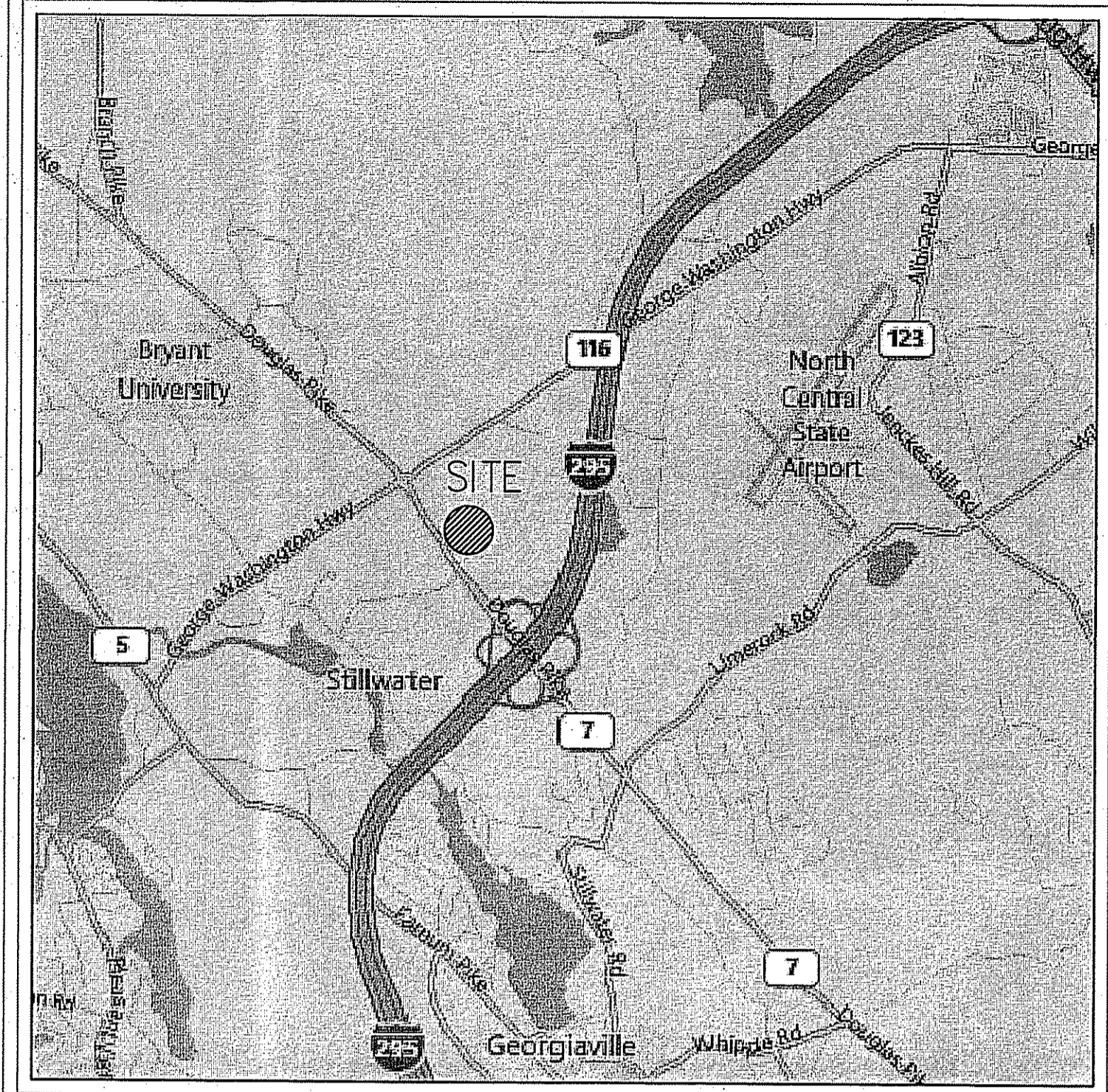
AERIAL
IMAGE
SCALE: NOT TO SCALE

Kindly be advised that this
Permit is not equivalent to a
verification of the type or extent
of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 09 2017 FILE # 16-0270
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

OWNER / APPLICANT:

LAND UNIT 2
945DP LLC
c/o RALPH BRANCA
640 GEORGE WASHINGTON HIGHWAY
LINCOLN, RI 02865



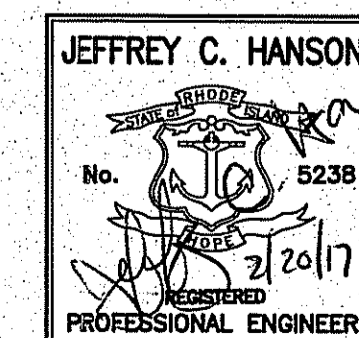
LOCUS
NOT TO SCALE

TABLE OF CONTENTS:

SHEET #	TITLE:
1	COVER SHEET
2	EXISTING CONDITIONS / SITE PREPARATION PLAN
3	SITE LAYOUT PLAN
4	SITE GRADING / UTILITY PLAN
5	LANDSCAPE PLAN (by others)
6	NOTES and DETAILS
7	DETAILS - 1
8	DETAILS - 2



250 CENTERVILLE ROAD, BUILDING E12, WARWICK, RHODE ISLAND 02886
p. (401)921-3344 f. (401) 921-3303 www.MillstoneEng.com



Drawn By: MJV

Checked By: JCH

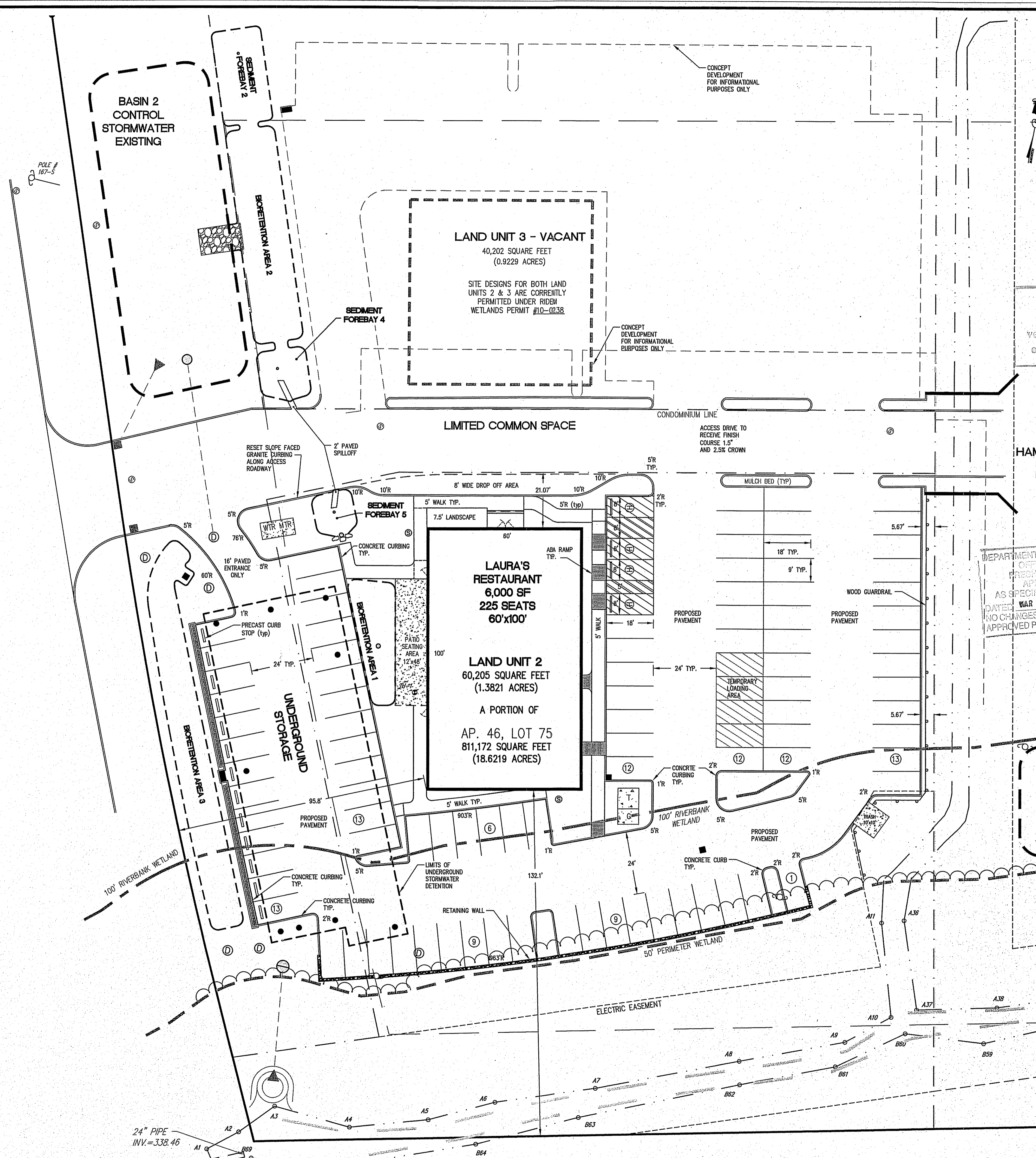
Sheet

1

of 87
FILE NO.: 16.260.377

REFERENCE:
MAPPING TAKEN FROM GOOGLE
EARTH

DOUGLAS PIKE (ROUTE 7)



REFERENCE:

1. THAT PLAN SET ENTITLED "RIDEM PRELIMINARY DETERMINATION APPLICATION FOR SITE DEVELOPMENT OF A PORTION OF ASSESSOR'S PLAT 46, LOT 75 SMITHFIELD RHODE ISLAND" PREPARED FOR CLYDE DEVELOPMENT CO., LLC. PREPARED BY JOHN P. CAITO CORPORATION, DATED DECEMBER 2010, SHEETS 1 THROUGH 5. SAID PLAN SET PERMITTED BY RIDEM UNDER APPLICATION # 10-0238.
2. THOSE PLANS ENTITLED "ALTA/ACSM LAND TITLE SURVEY ROUTE 7 - DOUGLAS PIKE SMITHFIELD, RHODE ISLAND E.S.A. SITE #1163" PREPARED BY JOHN LIBBY CONSULTING, PREPARED FOR OUTLER LIMITS SURVEY, INC AND BOHLER ENGINEERING, P.C., DATED 06-20-02, SHEETS 5 AND 6 OF 6.

NOTES:

1. THE SITE IS LOCATED IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAN (500-YEAR FLOOD). REFERENCE: FIRM FLOOD INSURANCE RATE MAP PROVIDENCE COUNTY, RHODE ISLAND PANEL 167 OF 451 MAP NUMBER 44007C0167H EFFECTIVE DATE OCTOBER 2, 2015.
2. THE DEVELOPMENT OF LAND UNITS 2 AND 3 WERE APPROVED BY THE RIDEM UNDER PRELIMINARY DETERMINATION APPLICATION NO. 10-0238 WHERE THE DEVELOPMENT RECEIVED AN INSIGNIFICANT ALTERATION PERMIT. THE APPROVED LIMIT OF DISTURBANCE HAS BEEN SHOWN AND NEARLY ALL PROPOSED WORK HAS BEEN KEPT INSIDE OF THOSE APPROVED LIMITS. A SMALL MODIFICATION ALONG THE STREET HAS BEEN ADDED TO THE LIMIT OF DISTURBANCE. THE AREA CURRENTLY IS MAINTAINED LAWN OR OTHERWISE DEVELOPED. NO NEW DISTURBANCE IS PROPOSED WITHIN ANY WETLANDS.
3. EXISTING SLOPE FACED GRANITE CURBING BEING REMOVED SHALL BE STOCKPILED AND RE-SET ALONG ACCESS ROADWAY AS NOTED.

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

LEGEND:

- SUBJECT LOT LINE
- EXISTING CONTOUR
- WETLAND EDGE/FLAG
- 100' RIVERBANK WETLAND
- 50' PERIMETER WETLAND
- EXISTING SLOPED FACE CURB
- EXISTING CATCH BASIN
- EXISTING SEWER MANHOLE
- EXISTING UTILITY POLE
- PROPOSED CURB / EOP
- PROPOSED SEWER MANHOLE
- PROPOSED DRAIN MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED OUTLET STRUCTURE
- PROPOSED WOOD GUARDRAIL

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 09 2017 FILE # 16-0170
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

ZONING DATA

HC HIGHWAY COMMERCIAL	COMMERCIAL USE
REFERENCE	TABLE 4.3
	RESTAURANT AND ENTERTAINMENT

DIMENSIONAL REQUIREMENTS ARTICLE 5

HC HIGHWAY COMMERCIAL	REQUIRED	PROPOSED
MINIMUM LOT AREA (TABLE 1)	60,000 Sq.Ft.	N/A
MINIMUM LOT FRONTAGE (TABLE 1)	300 ft.	N/A
MINIMUM LOT WIDTH (TABLE 1)	300 ft.	N/A
MINIMUM YARD DIMENSIONS (TABLE 1)		
FRONT YARD	60 ft.	95.8 ft.
SIDE YARD	40 ft.	132.1 ft.
REAR YARD	50 ft.	> 50 ft.

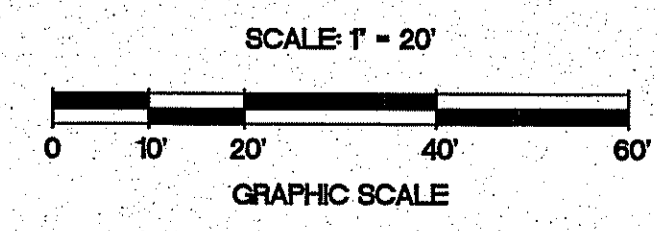
OFF-STREET PARKING AND LOADING REQUIREMENTS ARTICLE 7

USE AND DESCRIPTION	PARKING REQUIRED	PARKING PROPOSED	LOADING REQUIRED	LOADING PROPOSED
6000 S.F. @ 225 SEATS * EATING AND DRINKING ESTABLISHMENT (7.4.B.8) (10 EMPLOYEES)	85 SPACES	100 SPACES	1 SPACE	1 SPACE**

* 1 SPACE PER 3 SEATS PLUS 1 SPACE PER EMPLOYEE
** LOADING OPERATIONS SHALL OCCUR PRIOR TO THE RESTAURANT BEING OPEN TO THE PUBLIC RESULTING IN NO CONFLICT BETWEEN PARKING SPACE USES BY PATRONS AND LOADING. ALSO THERE ARE 10 MORE SPACES THAN REQUIRED

HANDICAP REQUIREMENTS RI STATE BLDG CODE SBC-16, SEC. 412(5)(b)

HANDICAP PARKING CRITERIA	REQUIRED	PROPOSED
76-100 TOTAL SPACES IN LOT	4	4 SPACES
FOUR (4) ACCESSIBLE SPACES REQUIRED		



NO.	DATE	REVISION
1	10/3/16	TRC
2	10/24/16	ENGINEERING COMMENTS
3	12/21/16	ENGINEERING COMMENTS
4	1/27/17	ENGINEERING COMMENTS
5	2/16/2017	RIDEM COMMENTS

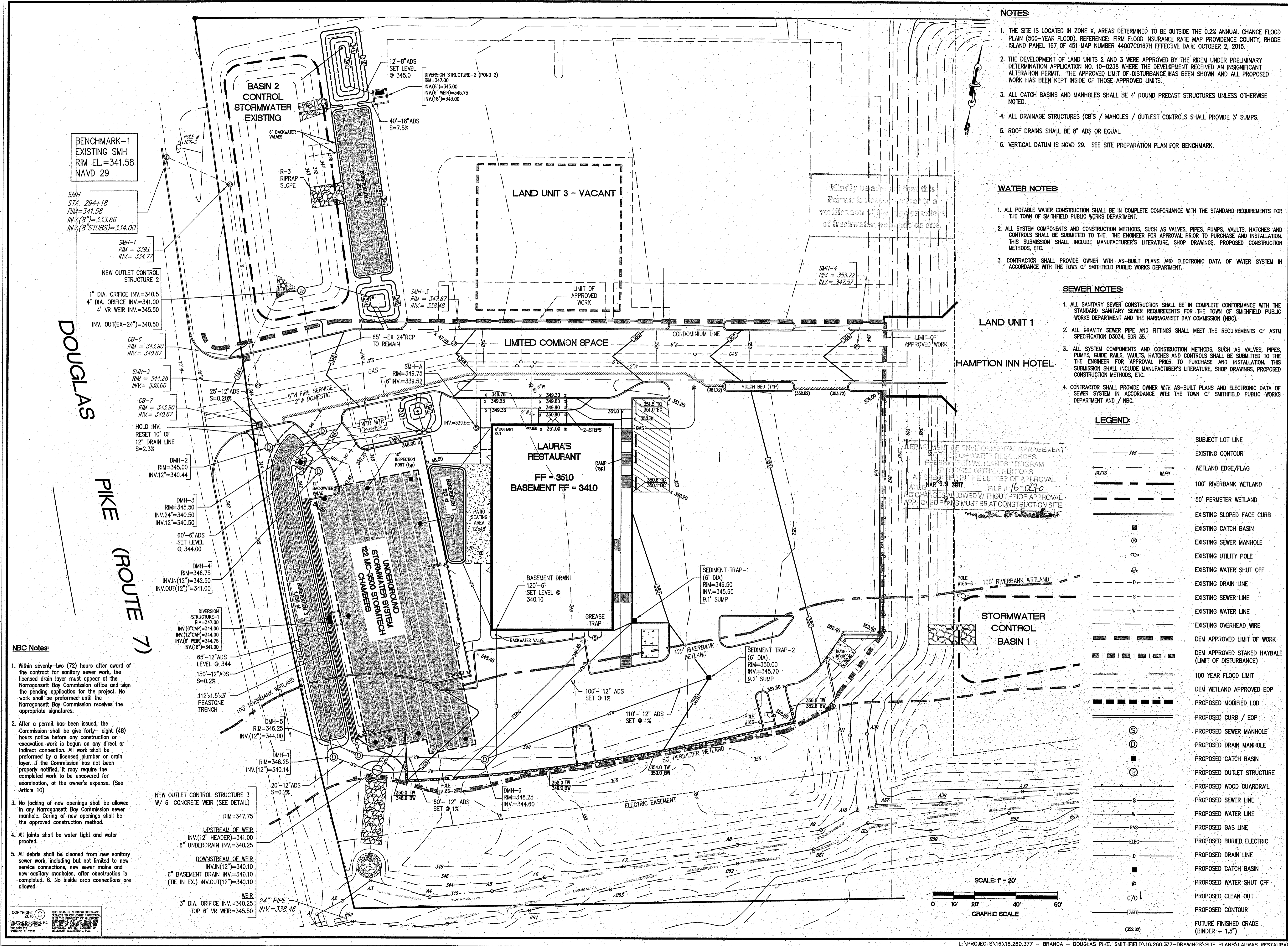
JEFFREY C. HANSON
No. 5238
REGISTERED PROFESSIONAL ENGINEER

ILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING
250 CENTREVILLE ROAD, BUILDING B12, WARWICK, RHODE ISLAND 02886, P. (401)921-1344 F. (401)921-1300

SITE LAYOUT PLAN
LAURA'S RESTAURANT
PORTION of AP. 46, LOT 75
LAND UNIT CONDO #2
DOUGLAS PIKE (RT-7)
SMITHFIELD
PREPARED FOR:
945DP LLC
SCALE: 1"=20'
SEPTEMBER 2016

Drawn By: MJV
Checked By: JCH
Sheet
3 of 7
FILE NO: 16.260.377

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NOTES:

1. THE SITE IS LOCATED IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN (500-YEAR FLOOD). REFERENCE: FIRM FLOOD INSURANCE RATE MAP PROVIDENCE COUNTY, RHODE ISLAND PANEL 167 OF 451 MAP NUMBER 44007C0167H EFFECTIVE DATE OCTOBER 2, 2015.
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3. ALL CATCH BASINS AND MANHOLES SHALL BE 4' ROUND PRECAST STRUCTURES UNLESS OTHERWISE NOTED.
4. ALL DRAINAGE STRUCTURES (CB'S / MAHOLES / OUTLEST CONTROLS) SHALL PROVIDE 3' SUMPS.
5. ROOF DRAINS SHALL BE 8" ADS OR EQUAL.
6. VERTICAL DATUM IS NGVD 29. SEE SITE PREPARATION PLAN FOR BENCHMARK.

WATER NOTES:

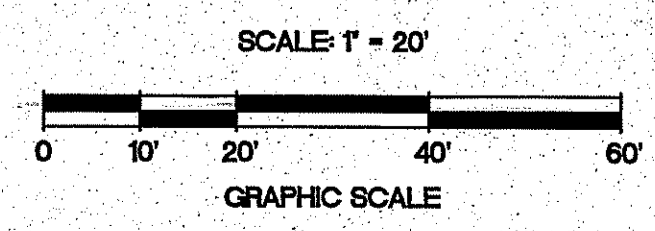
1. ALL POTABLE WATER CONSTRUCTION SHALL BE IN COMPLETE CONFORMANCE WITH THE STANDARD REQUIREMENTS FOR THE TOWN OF SMITHFIELD PUBLIC WORKS DEPARTMENT.
2. ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS VALVES, PIPES, PUMPS, VAULTS, HATCHES AND CONTROLS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS SUBMISSION SHALL INCLUDE MANUFACTURER'S LITERATURE, SHOP DRAWINGS, PROPOSED CONSTRUCTION METHODS, ETC.
3. CONTRACTOR SHALL PROVIDE OWNER WITH AS-BUILT PLANS AND ELECTRONIC DATA OF WATER SYSTEM IN ACCORDANCE WITH THE TOWN OF SMITHFIELD PUBLIC WORKS DEPARTMENT.

SEWER NOTES:

1. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN COMPLETE CONFORMANCE WITH THE STANDARD SANITARY SEWER REQUIREMENTS FOR THE TOWN OF SMITHFIELD PUBLIC WORKS DEPARTMENT AND THE NARRAGANSETT BAY COMMISSION (NBC).
2. ALL GRAVITY SEWER PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION D3034, SDR 35.
3. ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS VALVES, PIPES, PUMPS, GUIDE RAILS, VAULTS, HATCHES AND CONTROLS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS SUBMISSION SHALL INCLUDE MANUFACTURER'S LITERATURE, SHOP DRAWINGS, PROPOSED CONSTRUCTION METHODS, ETC.
4. CONTRACTOR SHALL PROVIDE OWNER WITH AS-BUILT PLANS AND ELECTRONIC DATA OF SEWER SYSTEM IN ACCORDANCE WITH THE TOWN OF SMITHFIELD PUBLIC WORKS DEPARTMENT AND / NBC.

LEGEND:

---	SUBJECT LOT LINE
---	EXISTING CONTOUR
---	WETLAND EDGE/FLAG
---	100' RIVERBANK WETLAND
---	50' PERMETER WETLAND
---	EXISTING SLOPED FACE CURB
---	EXISTING CATCH BASIN
---	EXISTING SEWER MANHOLE
---	EXISTING UTILITY POLE
---	EXISTING WATER SHUT OFF
---	EXISTING DRAIN LINE
---	EXISTING SEWER LINE
---	EXISTING WATER LINE
---	EXISTING OVERHEAD WIRE
---	DEM APPROVED LIMIT OF WORK
---	DEM APPROVED STAKED HAYBALE (LIMIT OF DISTURBANCE)
---	100 YEAR FLOOD LIMIT
---	DEM WETLAND APPROVED EOP
---	PROPOSED MODIFIED LOD
---	PROPOSED CURB / EOP
---	PROPOSED SEWER MANHOLE
---	PROPOSED DRAIN MANHOLE
---	PROPOSED CATCH BASIN
---	PROPOSED OUTLET STRUCTURE
---	PROPOSED WOOD GUARDRAIL
---	PROPOSED SEWER LINE
---	PROPOSED WATER LINE
---	PROPOSED GAS LINE
---	PROPOSED BURIED ELECTRIC
---	PROPOSED DRAIN LINE
---	PROPOSED CATCH BASIN
---	PROPOSED WATER SHUT OFF
---	PROPOSED CLEAN OUT
---	PROPOSED CONTOUR
---	FUTURE FINISHED GRADE (BINDER + 1.5')



BENCHMARK-1
EXISTING SMH
RIM EL.=341.58
NAVD 29

SMH
STA. 294+18
RIM=341.58
INV.(8")=333.86
INV.(8"STUBS)=334.00

SMH-1
RIM = 339.1
INV. = 334.77

NEW OUTLET CONTROL
STRUCTURE 2
1" DIA. ORIFICE INV.=340.5
4" DIA. ORIFICE INV.=341.0
4" VR WEIR INV.=345.50
INV. OUT(EX-24")=340.50

DOUGLAS
PIKE
(ROUTE 7)

SMH-2
RIM = 344.28
INV. = 336.00

DMH-2
RIM=345.00
INV.12"=340.44

DMH-3
RIM=345.50
INV.24"=340.50
INV.12"=340.50

DMH-4
RIM=346.75
INV.12"=342.25
INV.OUT(12")=341.00

DMH-5
RIM=346.25
INV.12"=340.14

DMH-1
RIM=346.25
INV.12"=340.14

DMH-6
RIM=348.25
INV.=344.60

WEIR
3" DIA. ORIFICE INV.=340.25
TOP 6" VR WEIR=345.50

- NBC Notes:**
1. Within seventy-two (72) hours after award of the contract for sanitary sewer work, the Commission shall be given forty-eight (48) hours notice before any construction or excavation work is begun on any direct or indirect connection. All work shall be performed by a licensed plumber or drain layer. If the Commission has not been properly notified, it may require the completed work to be uncovered for examination, at the owner's expense. (See Article 10)
 2. After a permit has been issued, the Commission shall be given forty-eight (48) hours notice before any construction or excavation work is begun on any direct or indirect connection. All work shall be performed by a licensed plumber or drain layer. If the Commission has not been properly notified, it may require the completed work to be uncovered for examination, at the owner's expense. (See Article 10)
 3. No jacking of new openings shall be allowed in any Narragansett Bay Commission sewer manhole. Coring of new openings shall be the approved construction method.
 4. All joints shall be water tight and water proofed.
 5. All debris shall be cleaned from new sanitary sewer work, including but not limited to new service connections, new sewer mains and new sanitary manholes, after construction is completed. 6. No inside drop connections are allowed.

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250 CENTERVILLE ROAD, BUILDING #12, WARWICK, RHODE ISLAND 02886, P. (401)921-1344 F. (401)921-3300

NO.	DATE	REVISION
1	10/3/16	TRC
2	10/24/16	ENGINEERING COMMENTS
3	12/21/16	ENGINEERING COMMENTS
4	1/27/17	ENGINEERING COMMENTS
5	2/16/2017	RIDEM COMMENTS

JEFFREY C. HANSON
No. 5238
2/20/17
REGISTERED PROFESSIONAL ENGINEER

ILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING
250 CENTERVILLE ROAD, BUILDING #12, WARWICK, RHODE ISLAND 02886, P. (401)921-1344 F. (401)921-3300

GRADING / UTILITY PLAN

LAURA'S RESTAURANT

PORTION of
A.P. 46, LOT 75
LAND UNIT CONDO #2
DOUGLAS PIKE (RT-7)
SMITHFIELD

PREPARED FOR:
945DP LLC

SCALE: 1"=20"
SEPTEMBER 2016

Drawn By: MJV
Checked By: JCH
Sheet
4 of 87
FILE NO.: 16.260.377

GENERAL NOTES:

- THE STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION CONSTRUCTION STANDARD DETAILS, ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO. THE STANDARD SPECIFICATIONS MAY BE OBTAINED AT THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION. IN ADDITION, THE TOWN OF SMITHFIELD STANDARD SPECIFICATIONS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO.
- ALL REQUIRED SITE IMPROVEMENTS SHALL BE INSPECTED BY THE TOWN ENGINEER TO ENSURE SATISFACTORY COMPLETION. IN NO CASE SHALL THE INSTALLATION OF ANY IMPROVEMENTS BE STARTED UNTIL PRIOR NOTIFICATION IS GIVEN TO THE TOWN. AT LEAST A 48-HOUR NOTICE SHALL BE GIVEN TO THE TOWN PRIOR TO ANY SUCH START OF CONSTRUCTION. A FINAL INSPECTION OF ALL SITE IMPROVEMENTS, UTILITIES AND GRADING WILL BE MADE TO DETERMINE WHETHER THE WORK IS SATISFACTORY AND IN SUBSTANTIAL AGREEMENT WITH THE APPROVED FINAL CONSTRUCTION DRAWING AND THE TOWN SPECIFICATIONS.
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7233) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND, FEDERAL GOVERNMENT AND TOWN OF SMITHFIELD PRIOR TO COMMENCING ANY WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS.
- STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS, WETLAND, OR ADJACENT TO DRAINAGE STRUCTURES.
- ALL MATERIAL FOR FILL SHALL BE CLEAN AND FREE OF MATTER WHICH COULD POLLUTE ANY DOWN STREAM WATERCOURSE.
- FILL MATERIAL SHALL BE COMPACTED IN ONE FOOT (MAXIMUM) LIFTS TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR TEST).
- CONTRACTOR SHALL PROVIDE OWNER WITH A COMPLETE SET OF AS-BUILT DRAWINGS OF ALL INFRASTRUCTURE. AS-BUILT DRAWINGS SHALL BE CERTIFIED BY A LICENSED PROFESSIONAL LAND SURVEYOR OR ENGINEER.
- WORK SHOWN ON THE PLANS FOR WHICH THERE ARE NO PARTICULAR DETAILS OR SPECIFICATIONS DOES NOT RELIEVE THE CONTRACTOR FROM FINISHING AND INSTALLING THE WORK. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE CONTRACT DOCUMENTS AND PLANS AND INSPECT THE SITE, AND THE BID PRICE SHALL INCLUDE ALL SERVICES AND MATERIALS AS NECESSARY TO COMPLETE THE PROJECT. ANY CHANGES TO THE PROJECT OR THE INSTALLATION OF AN ITEM FOR WHICH NO PARTICULAR DETAIL OR SPECIFICATION WAS PROVIDED MUST BE REVIEWED BY AND ACCEPTABLE TO THE ENGINEER.
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES 2003 INCLUDING ALL REVISIONS.

EROSION CONTROL and SOIL STABILIZATION PROGRAM:

- DENUDED SLOPES SHALL NOT BE LEFT EXPOSED FOR PERIODS OF TIME.
 - ALL DISTURBED SLOPES EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION YEAR.
 - 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). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
 - HAY OR STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 2000 LBS/ACRE.
 - ALL HAYBALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
 - THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS.
 - THE SEED MIX SHALL BE INOCULATED WITH TWENTY FOUR (24) HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
 - THE DESIGN MIX FOR TEMPORARY EROSION CONTROL AND SOIL STABILIZATION SHALL BE COMPRISED OF THE FOLLOWING:
- | TYPE | % BY WEIGHT |
|---------------------|-------------|
| CREeping RED FESCUE | 70 |
| ASTORIA BENTGRASS | 5 |
| BIRDFOOT TREFFOIL | 10 |
| PERENNIAL RYEGRASS | 10 |
- APPLICATION RATE 100 LBS/ACRE
- LIMING AND FERTILIZING AS REQUIRED TO COMPLEMENT OR UPGRADE EXISTING CONDITIONS.
- THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE (1) YEAR, AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.
 - THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
 - STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
 - STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS OR FLOOD PLAINS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN THIRTY PERCENT (30%) AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED AND COMPLETELY ENCLOSED WITH A CONTINUOUS LINE OF STAKED HAYBALES AND/OR SILT/FENCE. (SEE DETAIL).
 - ON BOTH STEEP AND LONG SLOPES, CONSIDERATION SHALL BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.

SEDIMENTATION CONTROL PROGRAM:

- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY SEDIMENTS FROM ENTERING THE STATE HIGHWAY OR ADJOINING PROPERTIES.
- BANKS OR SLOPES OVER 5% SHALL BE SEEDED AS SOON AS POSSIBLE AND SHALL BE PROTECTED WITH A HAY, STRAW OR FIBER MULCH.
- DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER 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 WATERCOURSES OR THOSE AREAS SUBJECTED TO STORM WATER FLOW.
- ADDITIONAL HAYBALES, SILT FENCE OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.

SMP OPERATION and MAINTENANCE PLAN

LONG-TERM MAINTENANCE OF THE DRAINAGE SYSTEM SHALL BE COMPLETED BY THE APPLICANT/OPERATOR UNDER A LEGALLY BINDING AND ENFORCEABLE MAINTENANCE AGREEMENT.

OWNER: 945DP LLC
C/O RALPH BRANCA
640 GEORGE WASHINGTON HIGHWAY
LINCOLN, RI 02965

THE CONTRACTOR / OPERATOR SHALL MAINTAIN ALL DRAINAGE COMPONENTS DURING AND DIRECTLY AFTER CONSTRUCTION. ALL OPERATIONAL MAINTENANCE REQUIREMENTS WILL BE RECORDED ON THE TITLE.

OPERATOR / CONTRACTOR: DEFAULTS TO OWNER UNTIL THE OPERATOR HAS BEEN DETERMINED

THE ENTIRE STORMWATER SYSTEM SHALL BE INSPECTED THROUGHOUT THE CONSTRUCTION PROCESS AND REPORTED ON THE ATTACHED CONSTRUCTION INSPECTION REPORTING FORMS.

THE ENTIRE STORMWATER MANAGEMENT SYSTEM SHALL BE INSPECTED ON A BI-ANNUAL BASIS FOR GENERAL PROBLEMS AND TO ENSURE PROPER FUNCTION AND AFTER STORM EVENTS GREATER THAN OR EQUAL TO THE 1-YR, 24-HR TYPE III PRECIPITATION EVENT (2.8"). THESE INSPECTIONS SHALL BE REPORTED ON THE ATTACHED O&M INSPECTION REPORTING FORMS.

ALL INSPECTIONS REPORTS SHALL BE KEPT ON FILE WITH THE STORMWATER MANAGEMENT OPERATION AND MAINTENANCE PLAN.

DIVERSION STRUCTURES / SEDIMENT TRAPS:

- THE ENTIRE STRUCTURE SHALL BE CHECKED FOR STRUCTURAL INTEGRITY
- THE RIMS SHALL BE CHECKED TO BE SURE THEY ARE SEATED PROPERLY AND KEPT CLEAR OF VEGETATIVE OVERTROWTH IF IN UNPAVED AREAS
- INLETS AND OUTLETS ARE CLEAR OF OBSTRUCTIONS
- SEDIMENT ACCUMULATION IN SUMP ARE MEASURED AND REMOVED WHEN A 12" DEPTH IS REACHED
- THAT THE STRUCTURE AS WELL AS ALL INLETS AND OUTLETS ARE WATER TIGHT

SEDIMENT FOREBAYS / PEASTONE TRENCH:

- THE SLOPES SHALL BE INSPECTED FOR EROSION AND GULLING
- STONE SHALL BE REINFORCED IF EROSION IS PRESENT AT OUTFALLS OR IF IT HAS BEEN COMPROMISED
- INSPECT ALL STRUCTURAL COMPONENTS SUCH AS TRASH RACKS, ACCESS GATES, VALVES, PIPES, WEIRS, WALLS, ORIFICE STRUCTURES AND SPILLWAY STRUCTURES FOR DEFECTS AND ANY MUST BE REPAIRED IMMEDIATELY
- INSPECT FOR SEDIMENT ACCUMULATION AND IT SHALL BE REMOVED IF IT REACHES 6" OR 25% OF THE STORAGE VOLUME
- MOW GRASSES TO MAINTAIN A 4-6" STRONG STAND OF TURF AND MOW IMMEDIATELY SHOULD IT REACH 10". ALL CLIPPINGS SHALL BE COLLECTED AND DISPOSED OF PROPERLY
- NO WOODY GROWTH SHALL EVER BE ALLOWED TO REMAIN IN AND AROUND THE FOREBAY OR TRENCH
- AREAS OF EROSION OR DISTURBANCE SHALL BE RE-ESTABLISHED IMMEDIATELY
- INLETS AND OUTLETS SHALL BE CLEARED OF DEBRIS AS NEEDED

BIORETENTION & DETENTION BASIN:

- THE SURFACE SHALL BE INSPECTED FOR DEBRIS AND TRASH
- CLEAN OUT SHALL BE PERFORMED BY HAND
- IF STANDING WATER IS OBSERVED FOR MORE THAN 48 HRS AFTER A RAIN EVENT THE TOP 6" SHALL BE ROTOTILLED AND ANY COMPACTED SEDIMENTS BROKEN UP / REMOVED
- THE SLOPES SHALL BE INSPECTED FOR EROSION AND GULLING
- PLANTINGS SHALL BE CHECKED FOR GOOD HEALTH AND PRUNED IN FALL
- MOW GRASSES TO MAINTAIN A 4-6" STRONG STAND OF TURF AND MOW IMMEDIATELY SHOULD IT REACH 10". ALL CLIPPINGS SHALL BE COLLECTED AND DISPOSED OF PROPERLY
- NO WOODY GROWTH SHALL EVER BE ALLOWED TO REMAIN IN AND AROUND THE FACILITY OTHER THAN WHAT WAS PLANTED FOR TREATMENT PROCESSES
- AREAS OF EROSION OR DISTURBANCE SHALL BE RE-ESTABLISHED IMMEDIATELY

CHAMBERS:

- THE INLETS SHALL BE INSPECTED FOR DEBRIS AND TRASH
- CLEAN OUT SHALL BE PERFORMED BY HAND
- THE INSPECTION PORTS SHALL BE OPENED AND OBSERVED
- CHAMBERS SHALL BE INSPECTED FOR DAMAGE / PONDING
- OUTLET STRUCTURE SHALL BE INSPECTED

SMP OPERATION and MAINTENANCE PLAN (cont.)

SPILLWAYS:

- THE SIDE SLOPES SHALL BE INSPECTED FOR EROSION AND GULLING
- WEIR SHALL BE INSPECTED FOR SETTLEMENT AND CORRECTED IMMEDIATELY IF FOUND
- MOW GRASSES TO MAINTAIN A 4-6" STRONG STAND OF TURF AND MOW IMMEDIATELY SHOULD IT REACH 10". ALL CLIPPINGS SHALL BE COLLECTED AND DISPOSED OF PROPERLY
- NO WOODY GROWTH SHALL EVER BE ALLOWED TO REMAIN IN AND AROUND THE WEIRS
- AREAS OF EROSION OR DISTURBANCE SHALL BE RE-ESTABLISHED IMMEDIATELY
- INLETS AND OUTLETS SHALL BE CLEARED OF DEBRIS AS NEEDED
- THE SIDE SLOPES SHALL BE INSPECTED FOR EROSION AND GULLING

ESTIMATED O&M BUDGET & FUNDING SOURCE:

THE PROJECT OPERATOR IS STILL TBD BUT UNTIL ITS CREATION THE OWNER SHALL BE RESPONSIBLE FOR FUNDING THE O&M BUDGET.

ESTIMATE OF O&M BUDGET:

BIANNUAL INSPECTIONS:	\$1500 EA x 2	\$3,000
BI-WEEKLY MOWING:	\$250 EA x 13	\$3,250
REPAIRS:	\$1,500	\$1,500
ADDITIONAL INSPECTIONS:	\$1,500 EA x 2	\$3,000
TOTAL ESTIMATE:		\$10,750 / YR

POLLUTION PREVENTION PLAN:

GENERAL: LONG-TERM MANAGEMENT OF THE POLLUTION PREVENTION PLAN SHALL BE THE RESPONSIBILITY OF THE OWNER / OPERATOR.

OWNER: 945DP LLC
C/O RALPH BRANCA
640 GEORGE WASHINGTON HIGHWAY
LINCOLN, RI 02965

THE CONTRACTOR SHALL MANAGE THE POLLUTION PREVENTION PLAN DURING THE CONSTRUCTION PROCESS.

CONTRACTOR: TBD

SOLID WASTE CONTAINMENT:

- TRASH RACKS WHERE PRACTICAL SHALL BE INSTALLED AND MAINTAINED ON ALL INLET STRUCTURES WITHIN THE DRAINAGE SYSTEM. INSPECTIONS FOR TRASH SHALL BE ON A WEEKLY BASIS.
- TRASH RECEPTACLES SHALL BE PROVIDED THROUGHOUT THE DEVELOPMENT.
- STREET SWEEPING SHALL BE PERFORMED ON AN ANNUAL BASIS.
- PET WASTE DISPOSAL STATIONS SHALL BE PROVIDED WHERE APPLICABLE.

SNOW DISPOSAL AND DEICING:

- SAND AND DEICING MATERIALS SHALL BE STORED UNDER COVER ON SITE TO PREVENT EXPOSURE TO STORMWATER.
- SNOW REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH RIDEM'S SNOW DISPOSAL POLICY.

DRIVEWAY AND PARKING LOT SEALANTS:

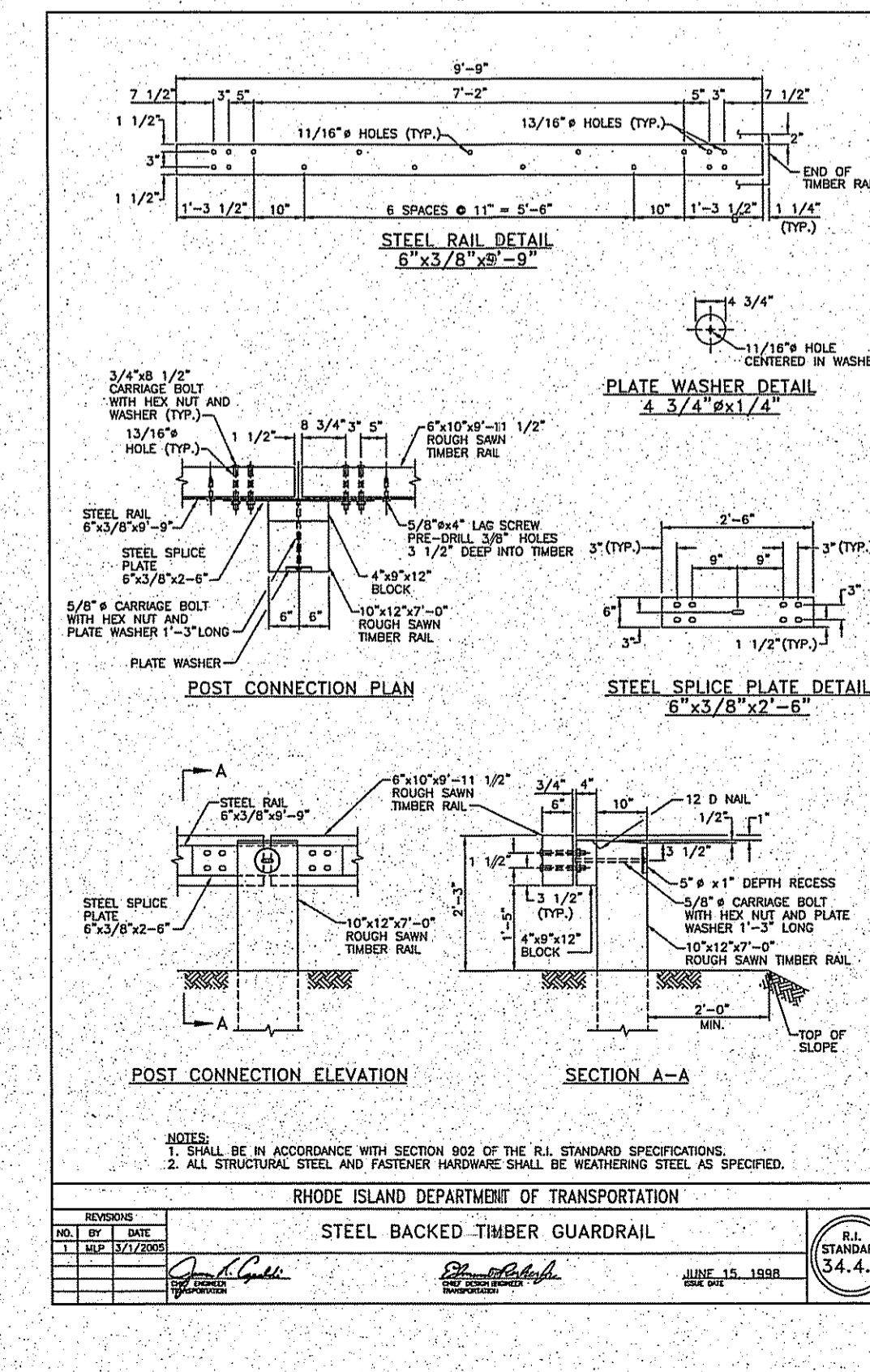
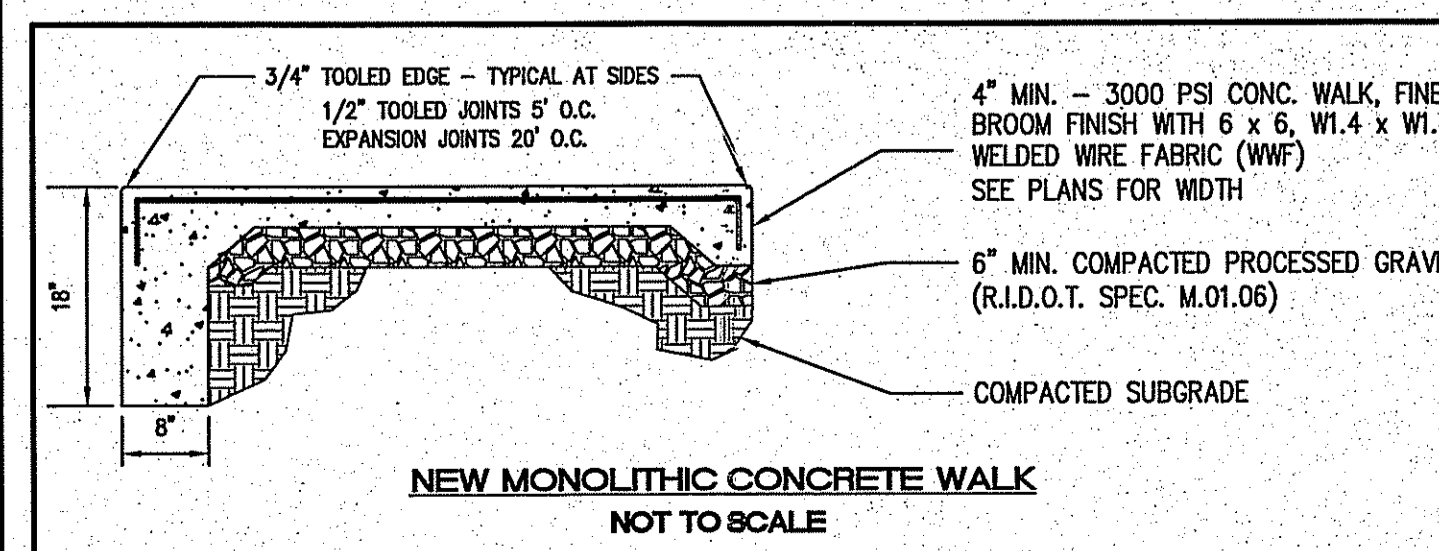
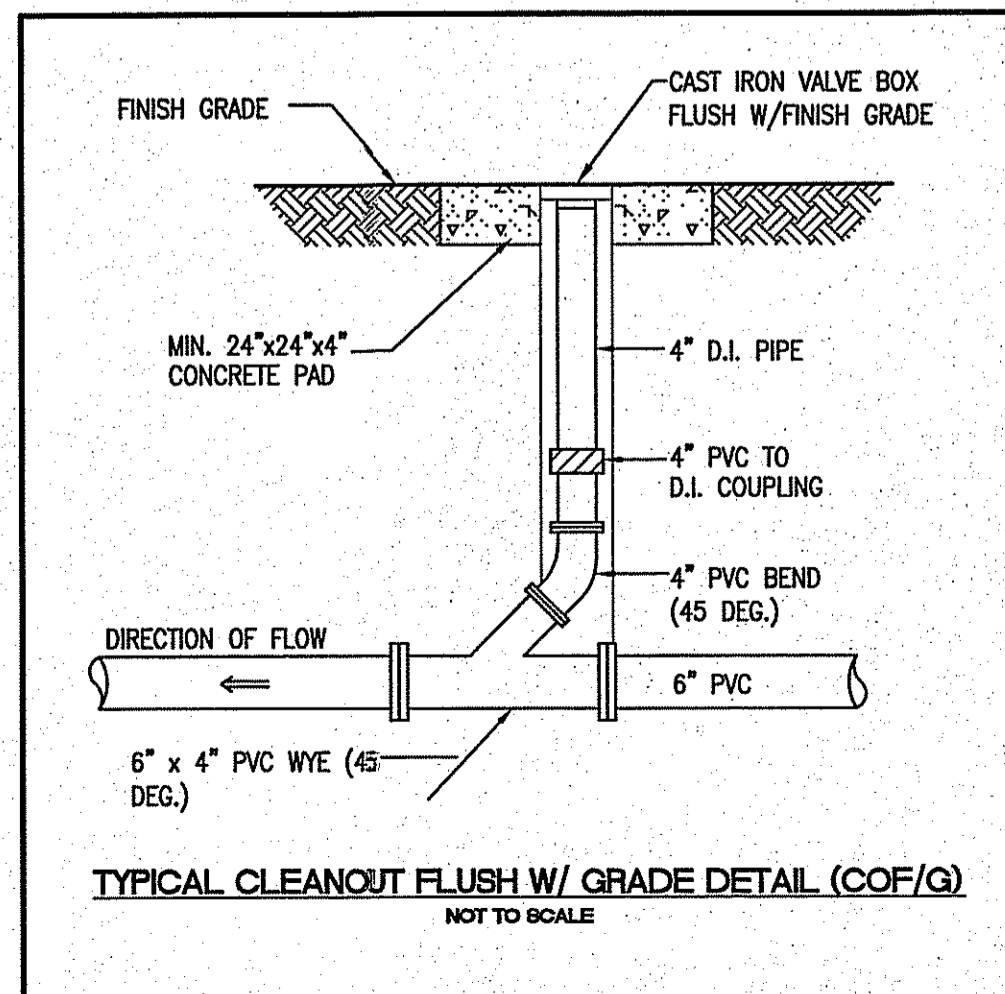
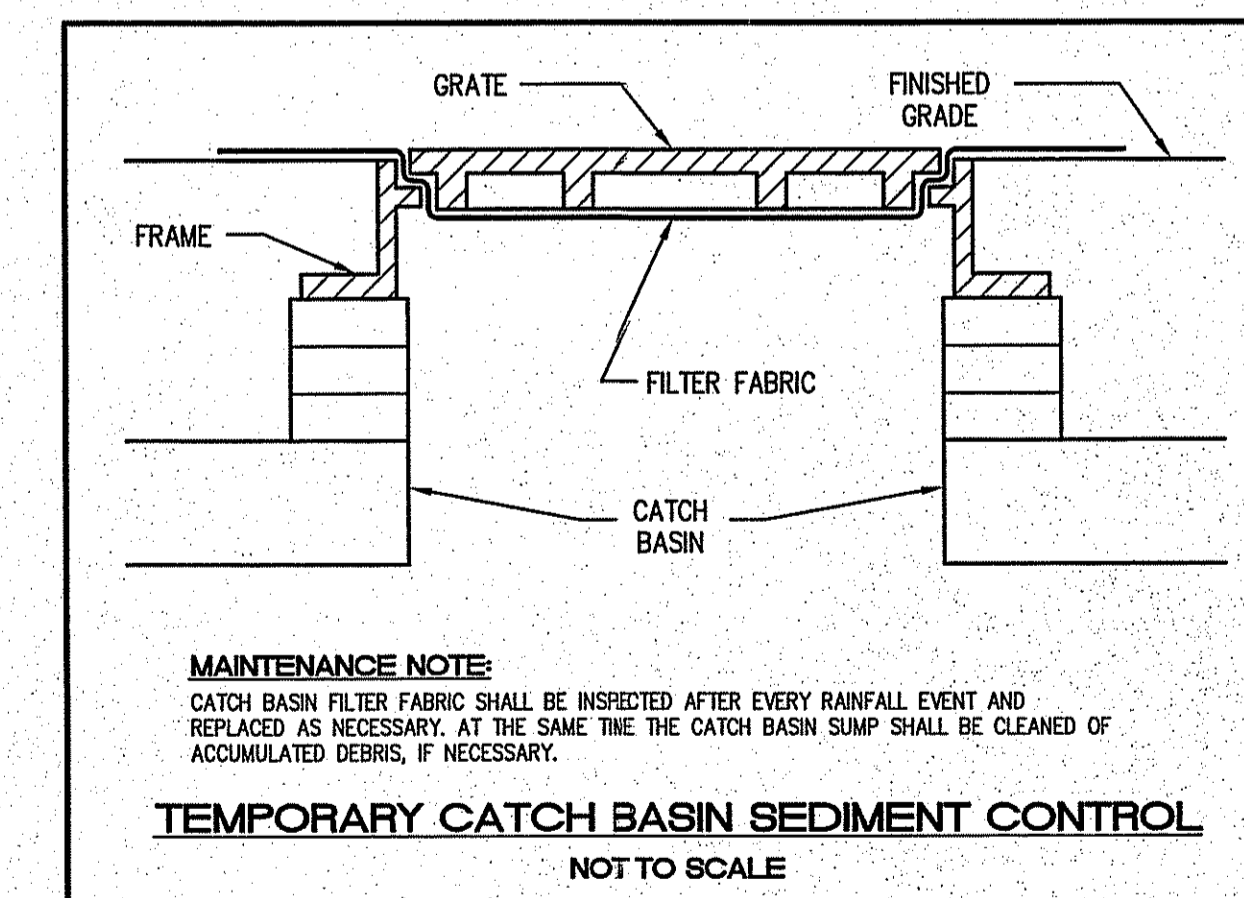
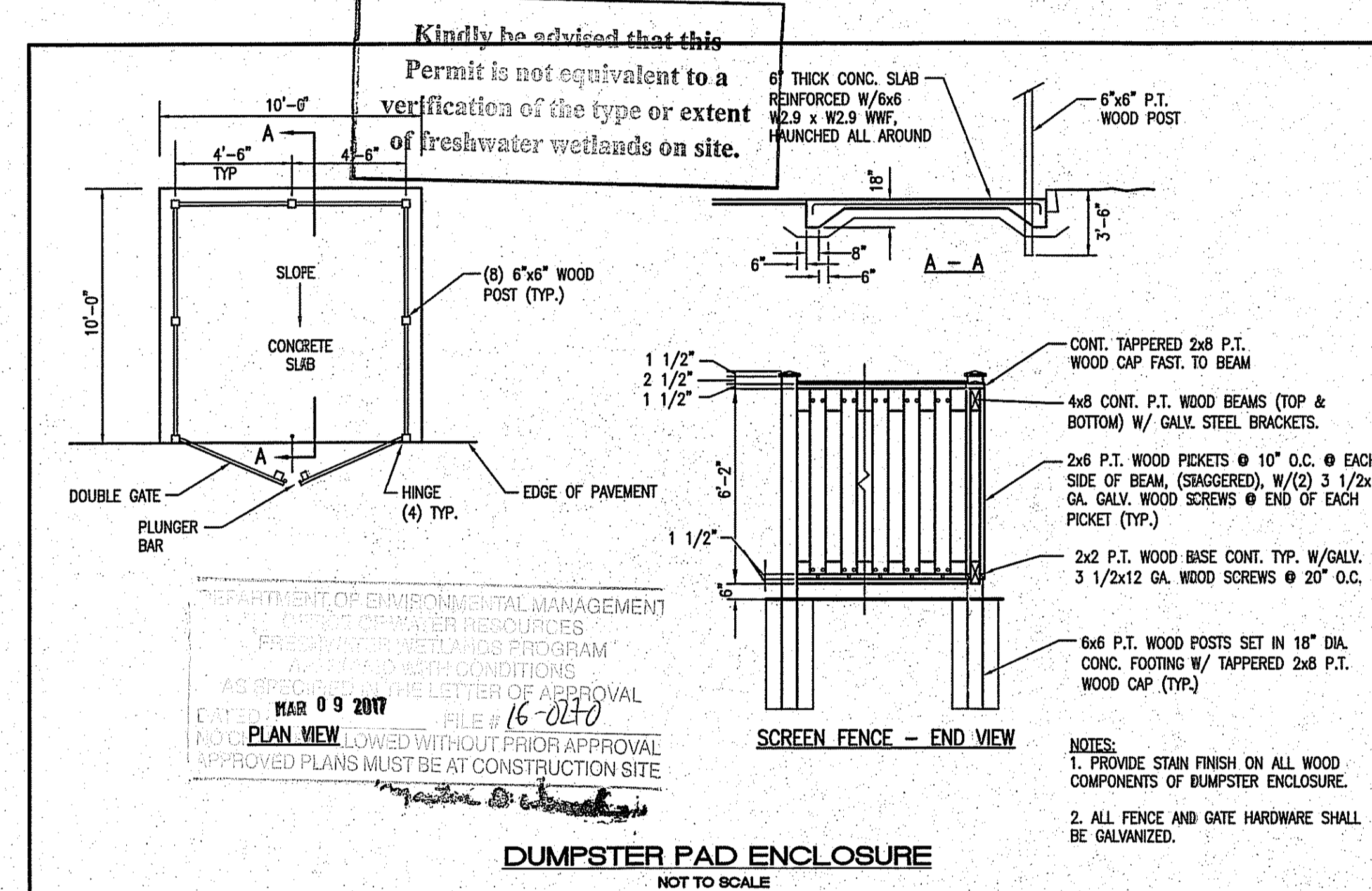
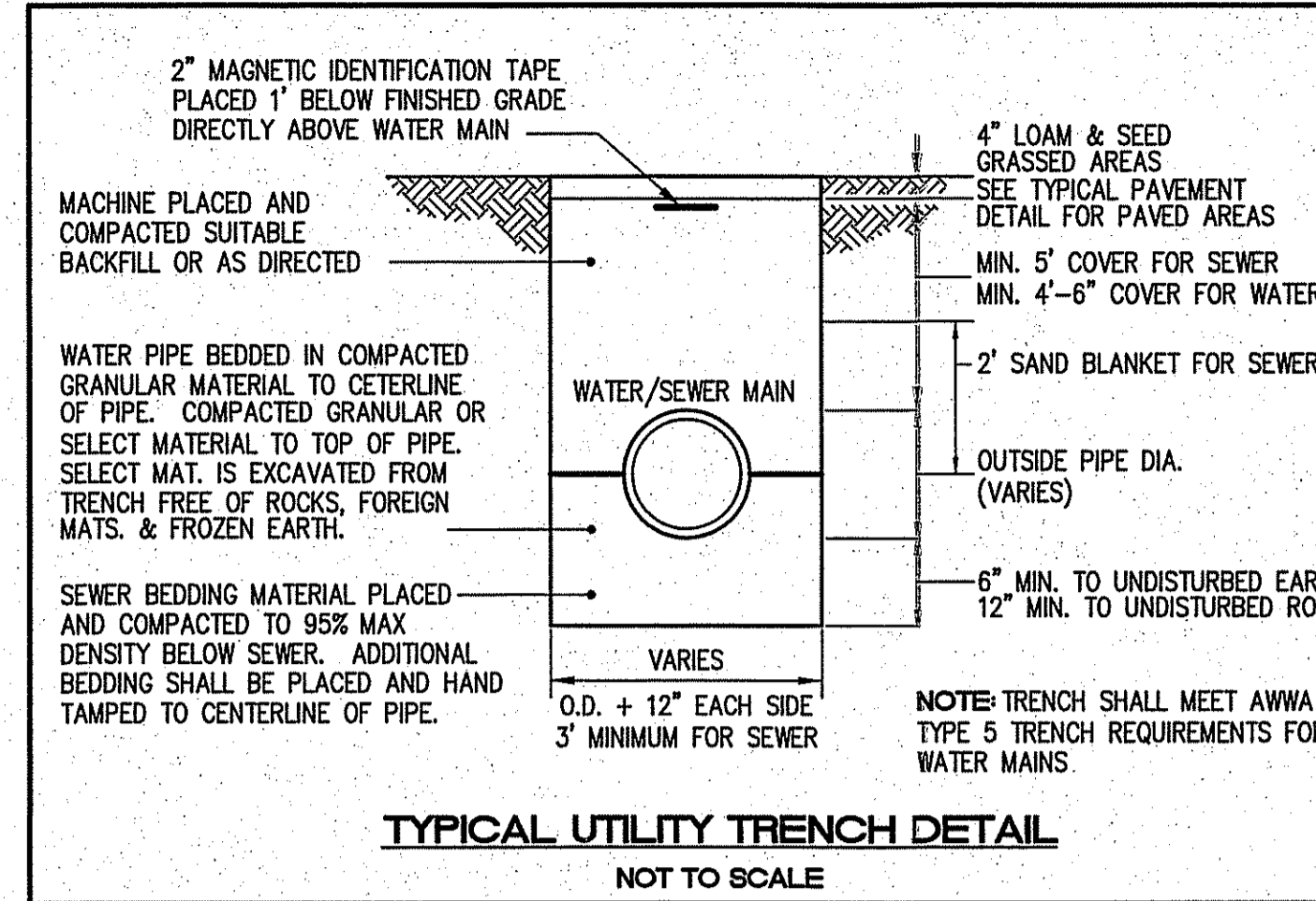
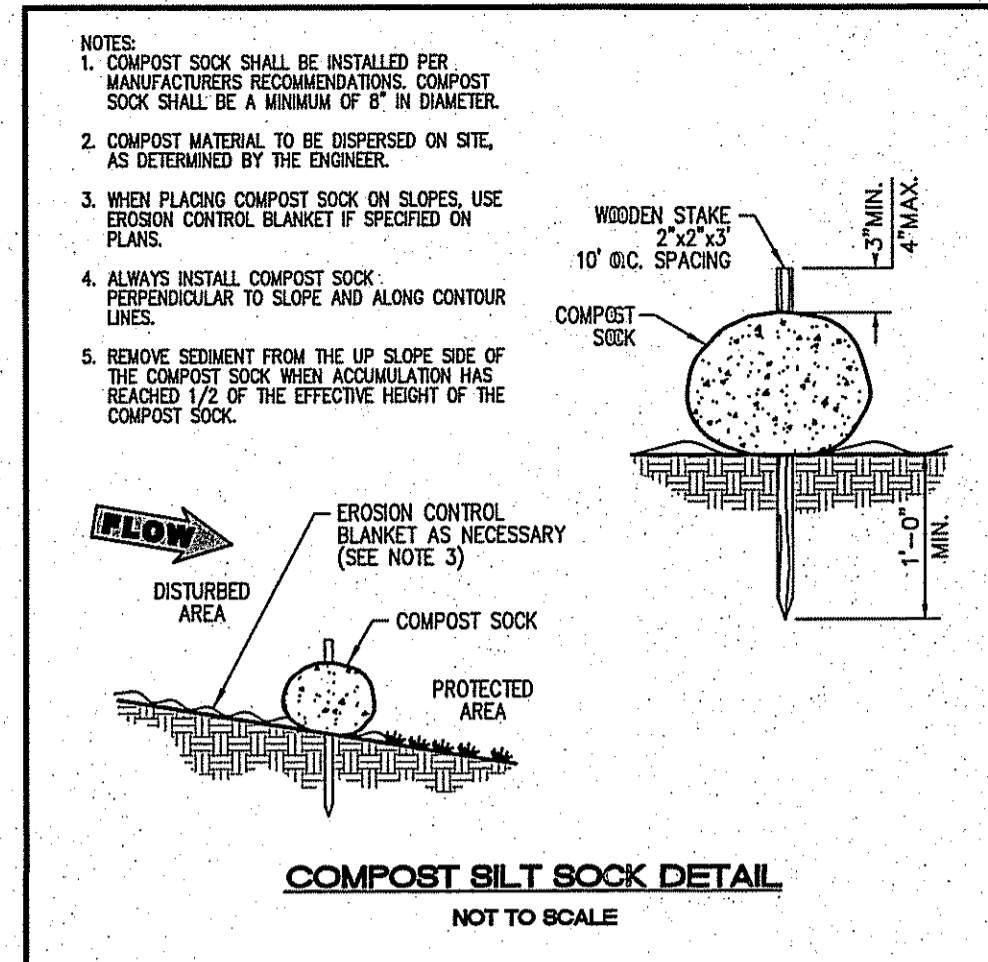
- ON STANDARD ASPHALT AREAS, ONLY ASPHALT BASED SEALANTS ARE ALLOWED, NO COAL-TAR BASED SEALANTS SHALL BE USED ON THIS SITE.

HAZARDOUS MATERIALS CONTAINMENT:

- NO HAZARDOUS MATERIALS SHALL BE STORED OUTSIDE TO AVOID EXPOSURE TO STORMWATER.

LANDSCAPE MANAGEMENT:

- GRASS CLIPPINGS FROM LAWN CARE PROCEDURES IN AND AROUND THE STORMWATER FACILITY MUST BE COLLECTED AND DISPOSED OF OFF SITE.
- GENERAL LAWN HEIGHTS ON SITE SHALL BE KEPT AT A 4-6" HEIGHT.
- FERTILIZER AND WATERING DEMANDS SHALL BE HAVE PROFESSIONAL OVERSIGHT AND BOTH USES MINIMIZED TO MAXIMUM EXTENT PRACTICAL.



NO.	DATE	REVISION
1	12/21/16	ENGINEERING COMMENTS
2	2/16/2017	RIDEM COMMENTS

JEFFREY C. HANSON
No. 5238
Professional Engineer

ILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING
250 CENTERVILLE ROAD, BUILDING B12, WARWICK, RHODE ISLAND 02886, P. (401) 921-3344 F. (401) 921-3303

NOTES & DETAILS

Laura's RESTAURANT

PORTION OF A.P. 46, LOT 75
LAND UNIT CONDO #2
DOUGLAS PIKE (RT-7)
SMITHFIELD

PREPARED FOR:
945DP LLC

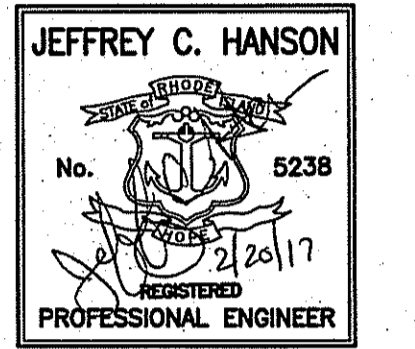
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Checked By: JCH
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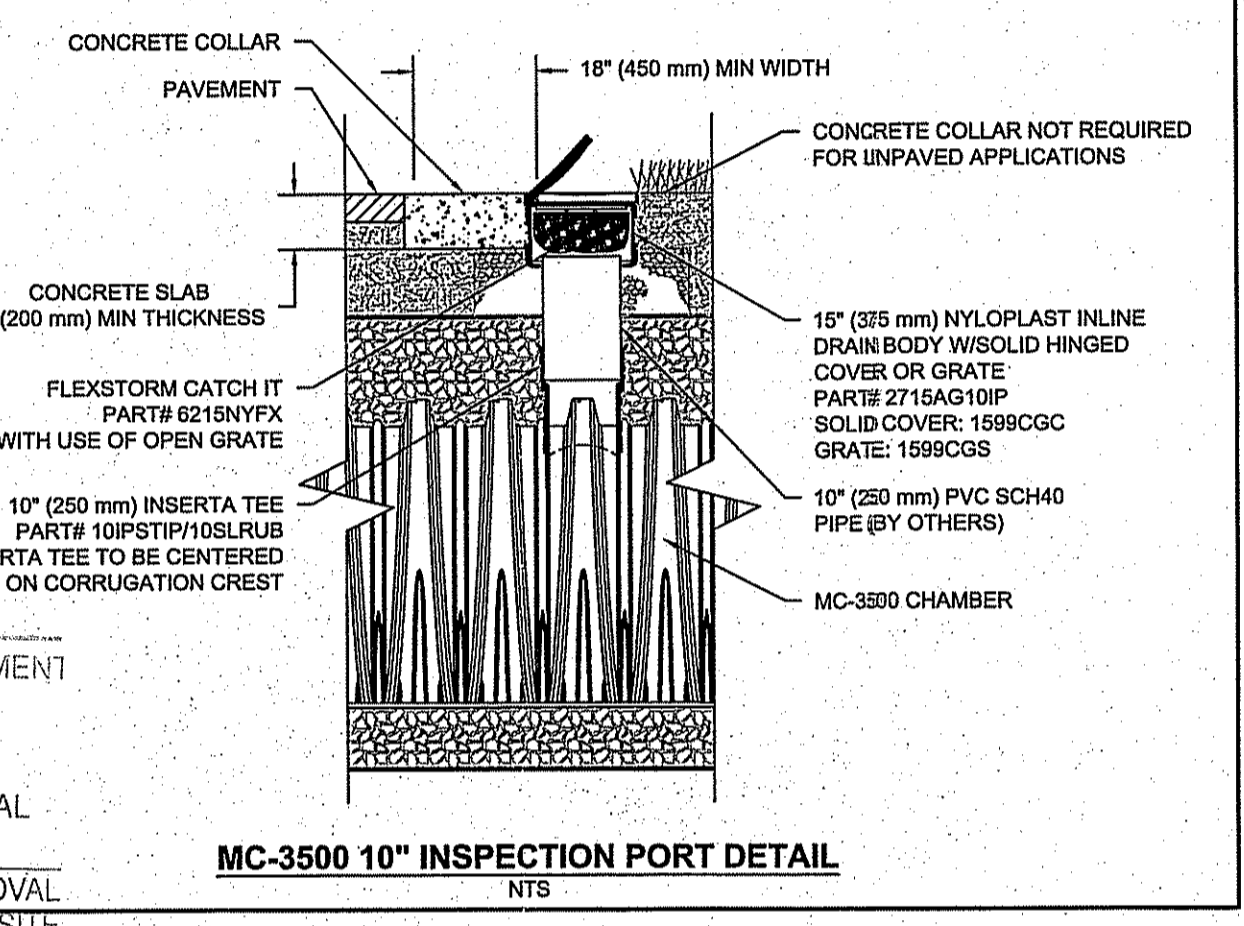
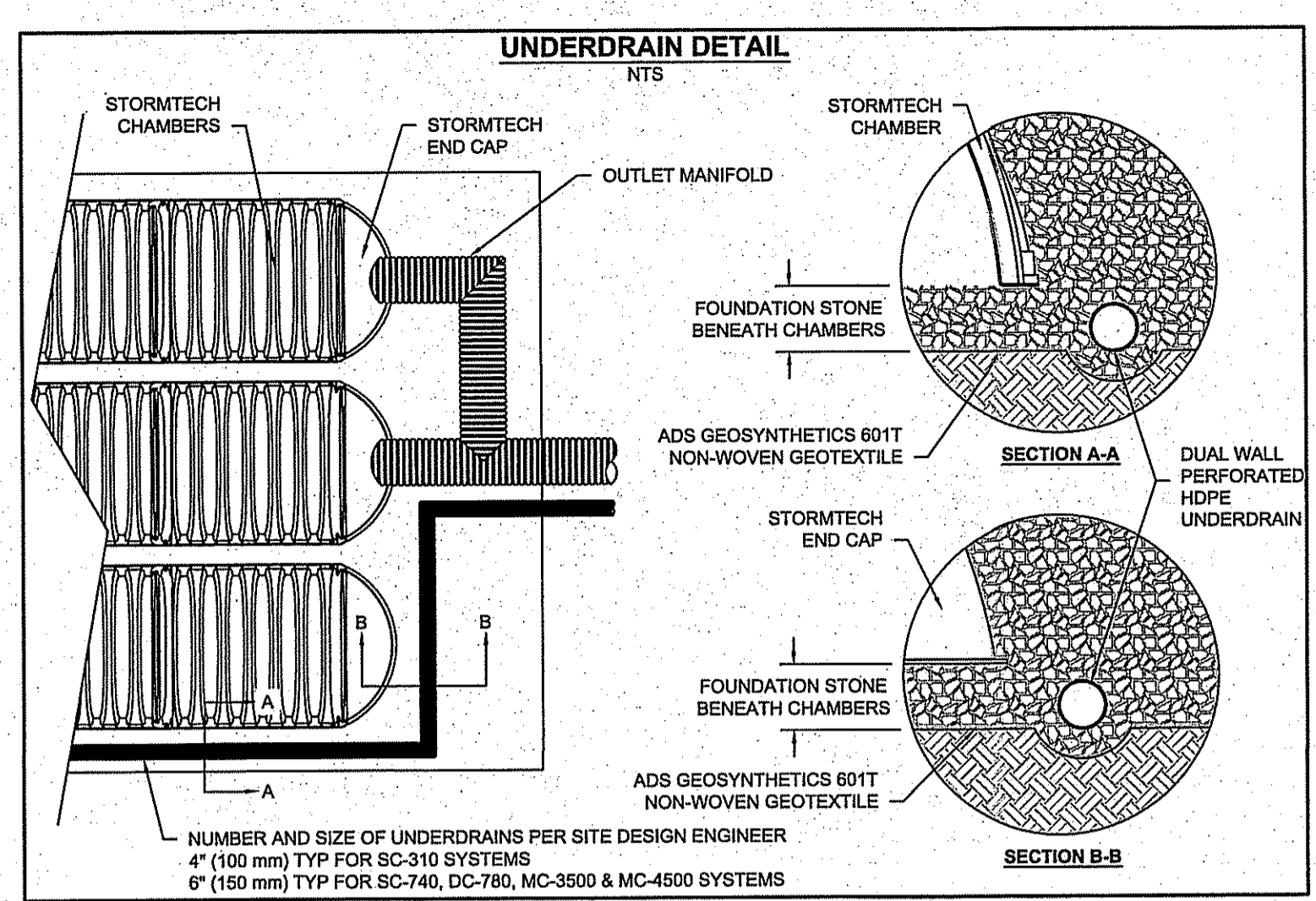
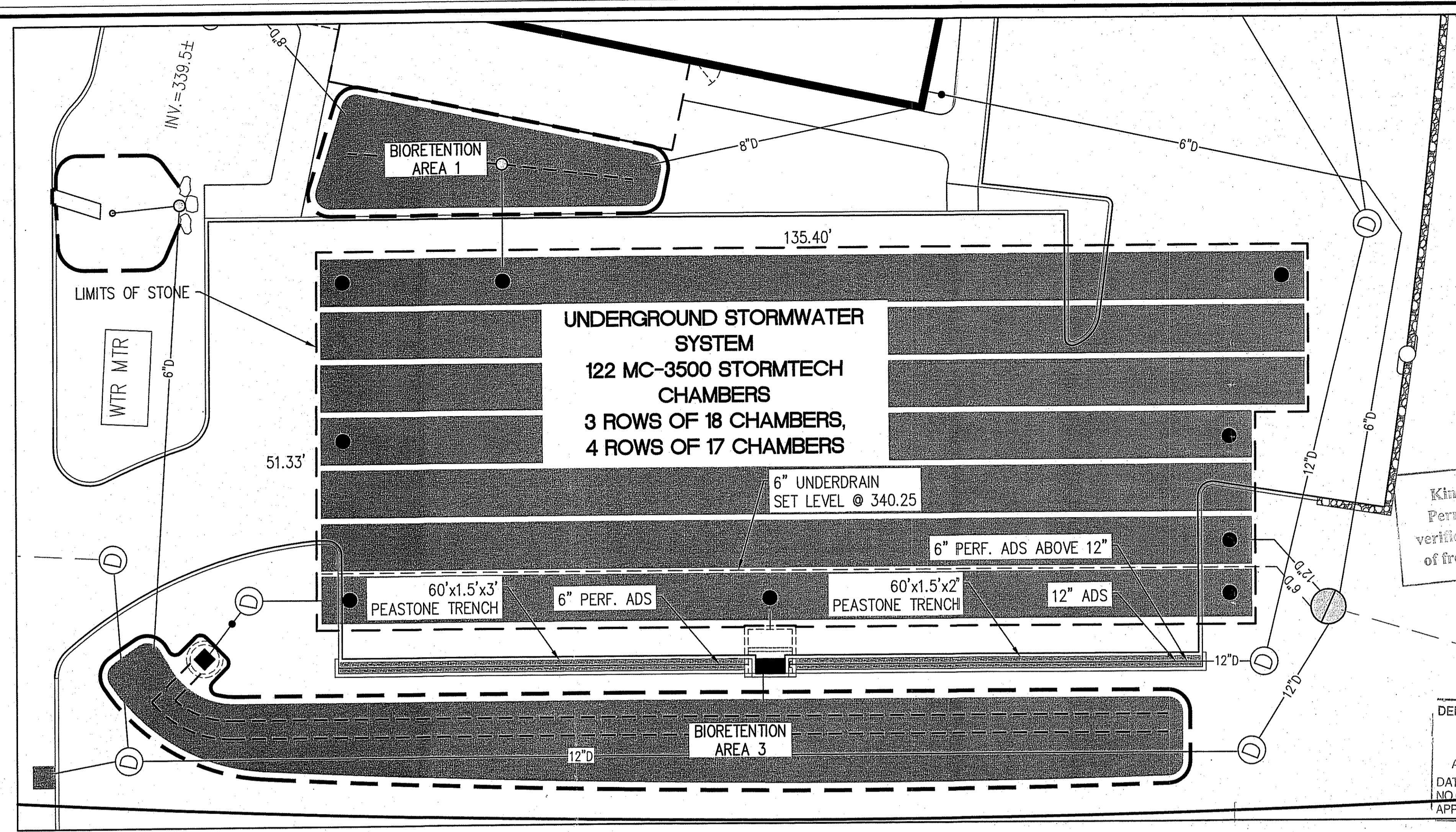
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FILE NO.: 16.260.377

NO.	DATE	REVISION
1	10/3/2016	TRC
2	10/24/16	ENGINEERING COMMENTS
3	12/21/2016	ENGINEERING COMMENTS
4	2/16/2017	RIDEM COMMENTS

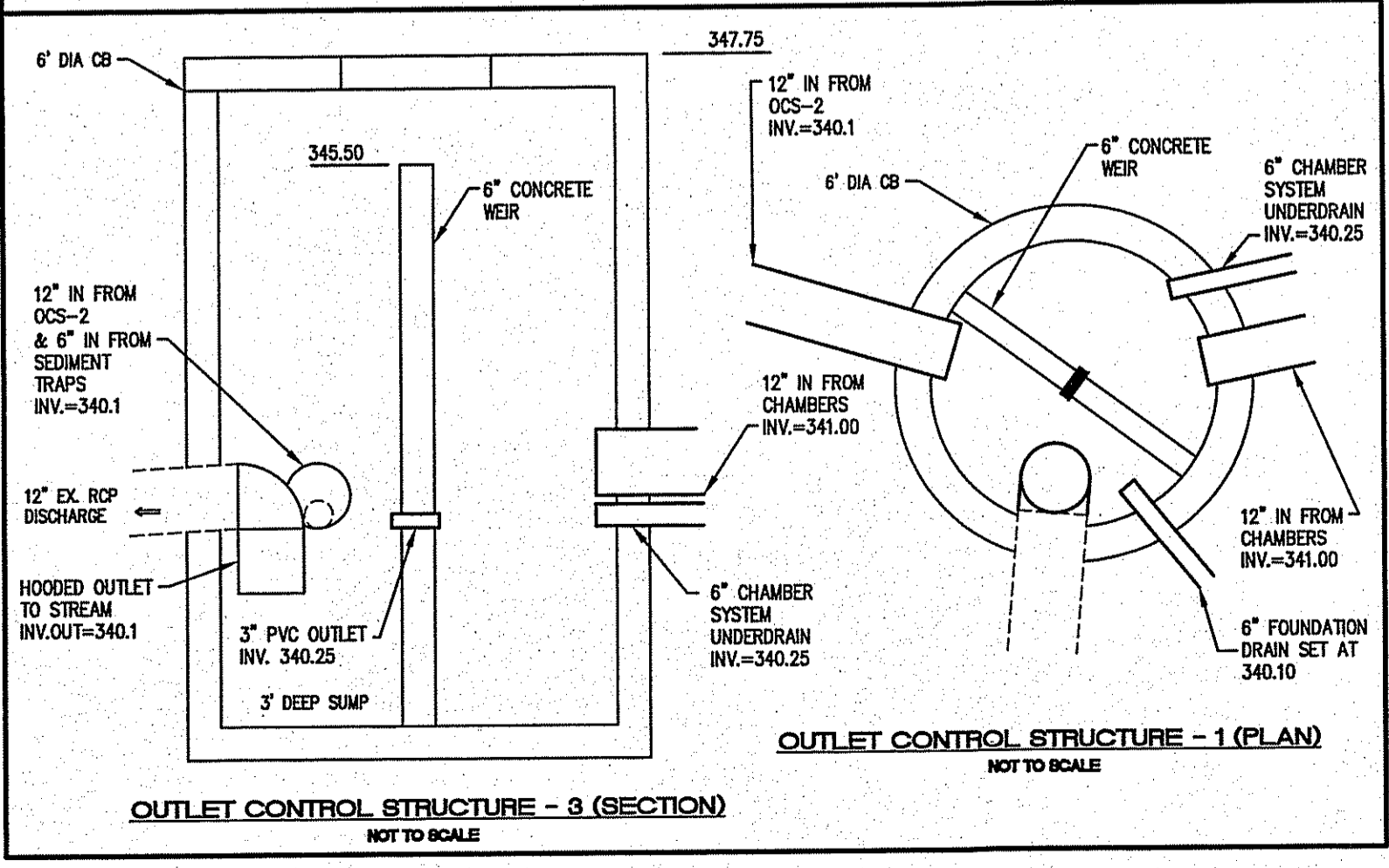
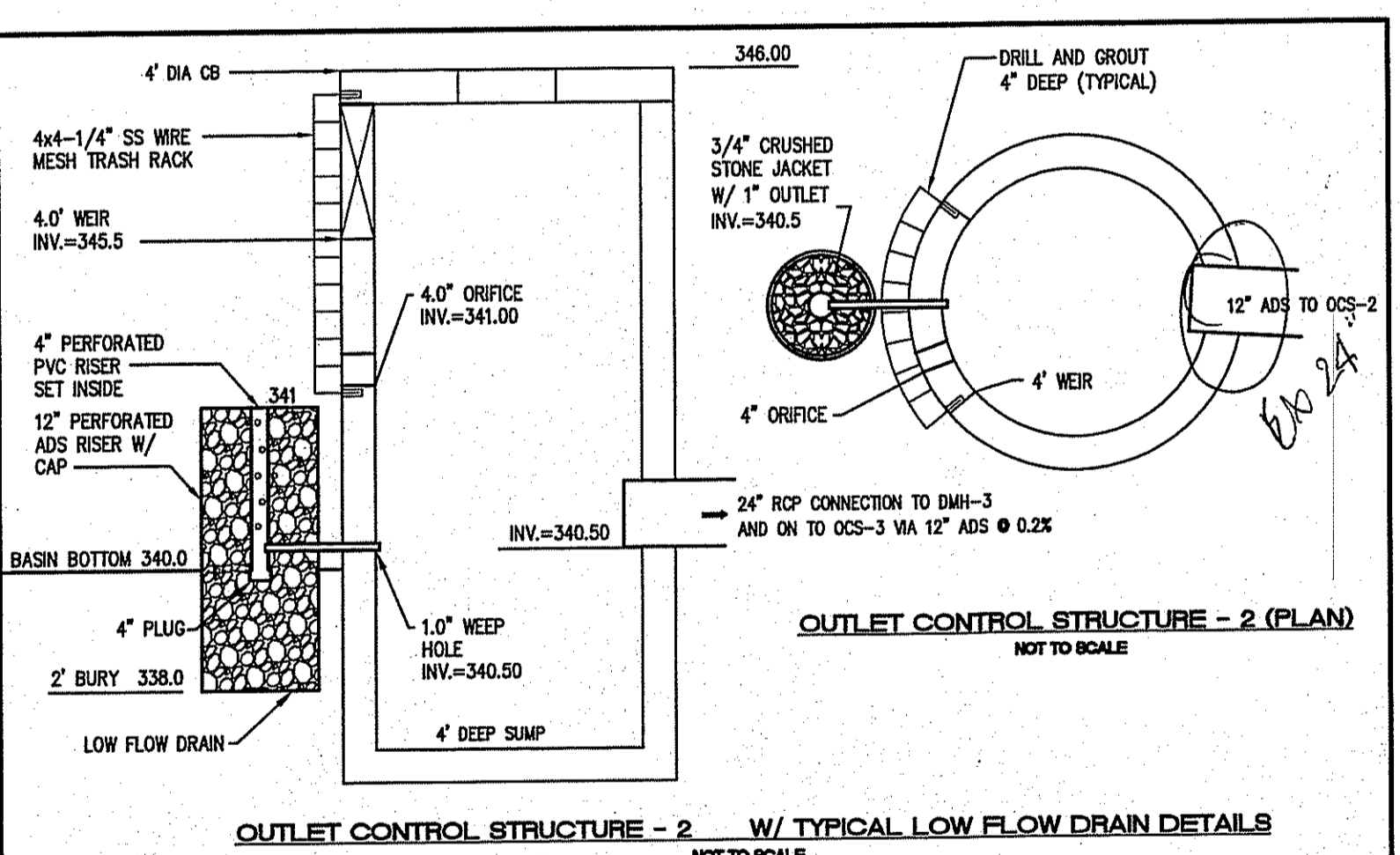


ILLSTONE ENGINEERING, P.C.
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 250 CENTERVILLE ROAD, BUILDING 212, WARWICK, RHODE ISLAND 02886, A (401)941-1344 F (401)941-3300



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAR 09 2017 FILE # 16-0270
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

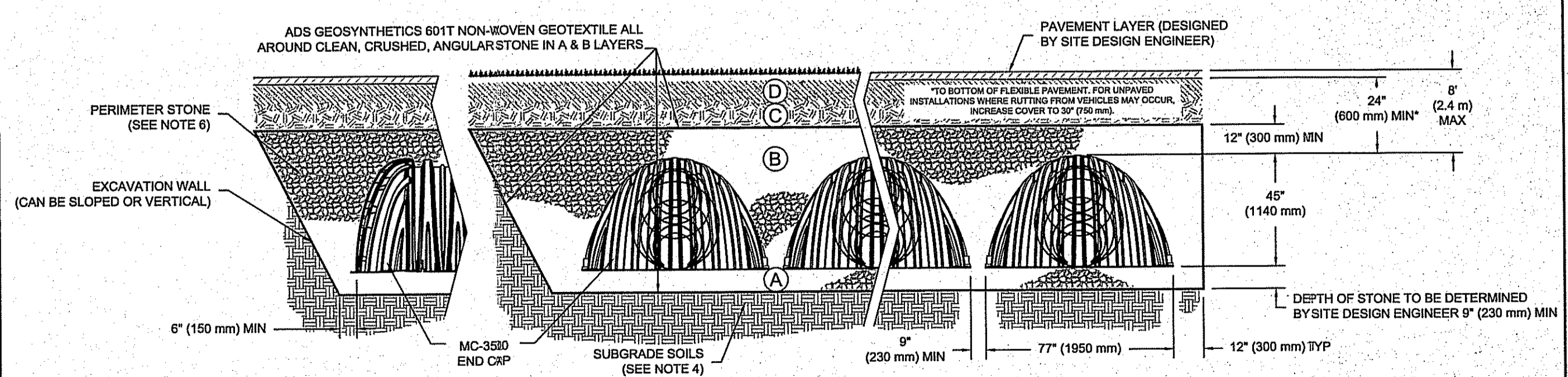


REFERENCE: DETAILS & NOTES SHOWN PROVIDED BY STORMTECH

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24\"/>		

PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR, FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: 'CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE.'
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9\"/>

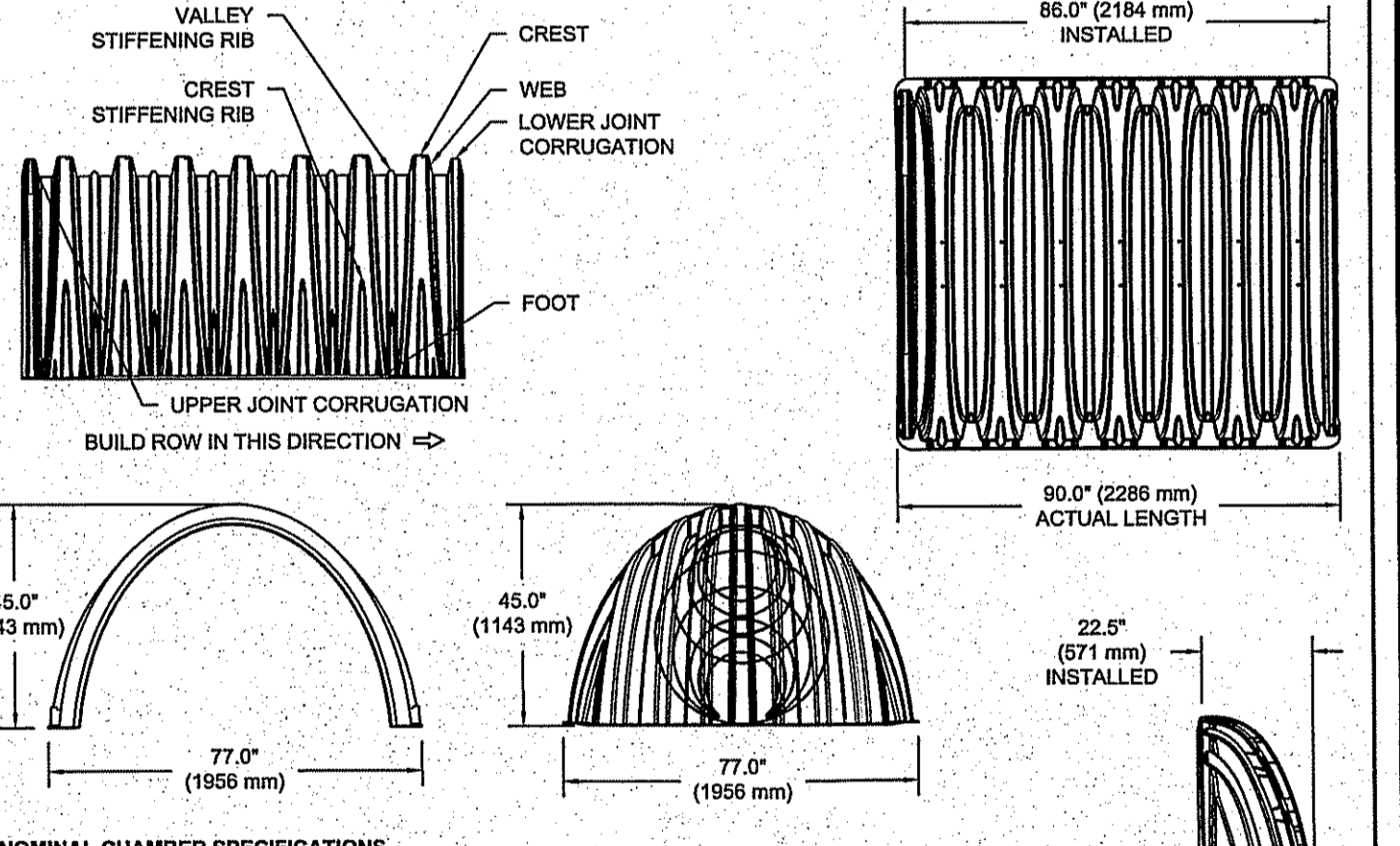


*FOR COVER DEPTHS GREATER THAN 8.0' (2.4 m) PLEASE CONTACT STORMTECH

NOTES:

- MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

MC-3500 TECHNICAL SPECIFICATION



NOMINAL CHAMBER SPECIFICATIONS
 SIZE (W X H X INSTALLED LENGTH) 77.0\"/>

NOMINAL END CAP SPECIFICATIONS
 SIZE (W X H X INSTALLED LENGTH) 77.0\"/>

PART #	STUB	B	C
MC3500EPP0BT	6\"/>		

NOTE: ALL DIMENSIONS ARE NOMINAL
 CUSTOM PRECURED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12\"/>

DETAILS - 1

LAURA'S RESTAURANT

PORTION of
 A.P. 46, LOT 75
 LAND UNIT CONDO #2
 DOUGLAS PIKE (RT-7)
 SMITHFIELD

PREPARED FOR:
 945DP LLC

NOT TO SCALE
 SEPTEMBER 2016

Drawn By: MJV
 Checked By: JCH
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FILE NO: 16.260.377

