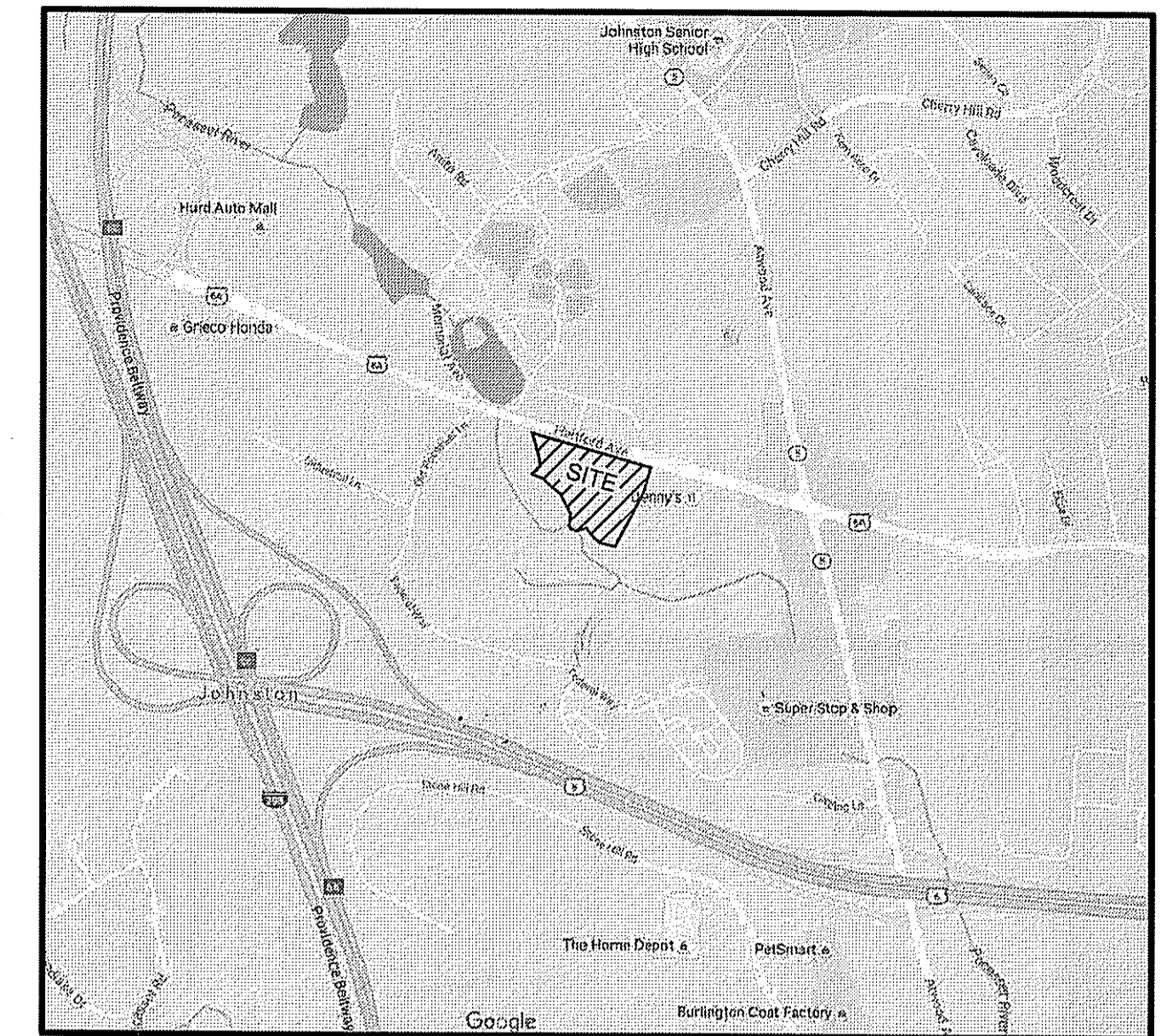


**SHEET INDEX:**

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**LOCUS MAP**  
NOT TO SCALE

# PARKSIDE SHOPPING CENTER

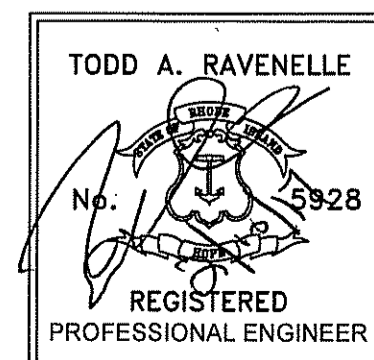
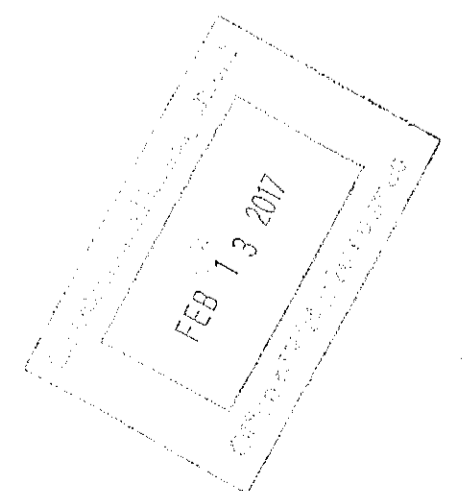
## PLAT 44/3, LOTS 84,85,295 & 355

HARTFORD AVENUE

JOHNSTON, RI

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED **MAR 15 2017** FILE # **16-0303**  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Christopher D. Wenzel*



Gordon R. Archibald, Inc.  
Civil and Environmental Engineers  
Pawtucket, Rhode Island

**RIDEM SUBMISSION**  
**NOVEMBER 2016**  
REVISED FEBRUARY 2017

**GENERAL NOTES**

- REFERENCE IS MADE TO THE RIDOT 2010 EDITION "STANDARD AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" INCLUDING ALL REVISIONS, ADDENDA AND SUPPLEMENTAL SPECIFICATIONS, AND RIDOT 1998 "STANDARD DETAILS" INCLUDING ALL REVISIONS. ALL PROJECT SITE IMPROVEMENTS SHALL CONFORM TO THESE REGULATIONS AND THE SUB-REFERENCES INCORPORATED THEREIN.
- EXISTING UTILITIES HAVE BEEN PLOTTED FROM BEST AVAILABLE DATA AND ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE AND UTILITIES BOTH UNDERGROUND AND OVERHEAD BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH THE "DIG SAFE LAW" ENACTED BY R.I. LEGISLATURE BILL NO. 79S-291, WHICH BECAME EFFECTIVE JULY 1, 1979 AND BY CONTACTING THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY APPLICABLE CITY, TOWN, STATE OR FEDERAL AGENCY. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE DIG SAFE PROGRAM. IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES AND ENSURE THAT ALL UTILITIES HAVE BEEN MARKED PRIOR TO COMMENCING THEIR WORK. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANY, SHALL BE REPAIRED OR REPLACED AT NO COST TO THE OWNER.
- CONTRACTOR SHALL RECOGNIZE THAT WORK UNDER EXISTING OVERHEAD UTILITIES IS REQUIRED AND THAT MINIMUM CLEARANCE SHALL CONFORM TO UTILITY COMPANY REQUIREMENTS AND SHALL BE MAINTAINED AT ALL TIMES. THIS MAY REQUIRE SPECIAL CONSTRUCTION TECHNIQUES. SHOULD THE CONTRACTOR ELECT TO RELOCATE THE EXISTING OVERHEAD UTILITIES, THEN THE CONTRACTOR SHALL COORDINATE AND BEAR ALL ASSOCIATED COSTS.
- THE CONTRACTOR SHALL MAINTAIN ALL EXCAVATION IN A DRY CONDITION. NO SEPARATE PAYMENT OR ALLOWANCE SHALL BE MADE FOR DEWATERING.
- FILL NEEDED FOR THE EMBANKMENTS SHALL MEET SECTION M.01.01 COMMON BORROW OF THE RIDOT STANDARDS AND SPECIFICATIONS, 2004 EDITION UNLESS OTHERWISE NOTED.
- ALL GRASSED AREAS DISTURBED BY THE CONTRACTOR SHALL BE LOAMED AND SEEDED OR SODDED IF SO DIRECTED BY THE ENGINEER AND RETURNED TO THEIR ORIGINAL CONDITION. ALL OTHER VEGETATED OR WOODED AREAS DISTURBED SHALL BE LOAMED AND SEEDED.
- ALL EXISTING CURBING, SIDEWALK, AND OTHER PAVEMENT DISTURBED BY THE CONTRACTOR SHALL BE REPLACED AND RESTORED, IN KIND AT NO ADDITIONAL COST TO THE OWNER.
- ALL EXISTING PIPE, SUBSURFACE STRUCTURES, PAVEMENTS, EXCESS EXCAVATED MATERIALS AND MISCELLANEOUS MATERIALS REMOVED DURING THE COURSE OF WORK OF INSTALLING DRAINAGE, WATER, SEWER, STEAM, UNDERGROUND ELECTRIC AND COMMUNICATION LINES SHALL BE LEGALLY DISPOSED OF OFF THE PROJECT SITE BY THE CONTRACTOR OR AS DIRECTED BY THE OWNER.
- CONTINUOUS DUST CONTROL, USING CALCIUM CHLORIDE OR OTHER APPROVED METHODS, SHALL BE PROVIDED BY THE CONTRACTOR FOR ALL EARTH STOCKPILES, EARTH PILED ALONG EXCAVATIONS AND SURFACES OF BACK FILLED TRENCHES, AS DIRECTED AND SPECIFIED BY THE ENGINEER.
- THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH ALL PERMITS, LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN AND SPECIFIED.
- SOIL EROSION CONTROL MEASURES TO BE USED ON THE PROJECT ARE INDICATED ON THE PLANS. EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE PROVISIONS OF THE RHODE ISLAND SOIL EROSION & SEDIMENT CONTROL HANDBOOK AND THE EROSION AND SEDIMENT CONTROL PLAN IN THE SPECIFICATIONS.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES, A CONTINUOUS UNINTERRUPTED LINE OF STAKED COMPOST FILTER SOCK OR SILT FENCING SHALL BE INSTALLED IN LOCATIONS SHOWN ON THE PLANS AND MAINTAINED IN EFFECTIVE CONDITION UNTIL DISTURBED AREAS HAVE BEEN STABILIZED WITH VEGETATION. FOLLOWING SUCCESSFUL STABILIZATION OF DISTURBED AREAS, ALL SILT FENCING AND COMPOST FILTER SOCK SHALL BE REMOVED. PRIOR TO REMOVAL OF THE SILT FENCING AND COMPOST FILTER SOCK, ALL ACCUMULATED TRAPPED SEDIMENT MUST BE REMOVED TO A SUITABLE UPLAND SITE.
- UNTIL VEGETATIVE COVER IS ESTABLISHED AND DISTURBED AREAS ARE STABILIZED, ACCUMULATED SEDIMENTS SHALL BE REMOVED AS SOON AS SEDIMENTS HAVE ACCUMULATED TO A DEPTH OF SIX (6) INCHES.
- THE LIMITS OF ALL CLEARING, GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE SHALL BE TOTALLY UNDISTURBED.
- SOIL STOCKPILES AND DEPOSITION AREA FOR CONSTRUCTION MATERIALS SHALL BE LOCATED WITHIN THE LIMIT OF WORK AND SHALL BE SURROUNDED BY STAKED COMPOST FILTER SOCK.
- PLANTING OF GRASS SHALL BE ACCOMPLISHED BY THE CONTRACTOR AS EARLY AS POSSIBLE UPON COMPLETION OF GRADING AND CONSTRUCTION.
- THE CONTRACTOR'S WORK SHALL INCLUDE THE CLEARING AND GRUBBING OF THE WORK SITE WITHIN THE LIMITS OF DISTURBANCE DEFINED ON THE PLANS. THE WORK INCLUDES CUTTING AND REMOVING FROM THE GROUND, AND DISPOSING TREES, STUMPS, BRUSH, SHRUBS, HEDGES, ROOTS AND OTHER VEGETATION WHICH OCCUR WITHIN THE LIMIT OF DISTURBANCE. THE OWNER SHALL BE NOTIFIED AND APPROVE THE LIMITS OF CLEARING AND GRUBBING PRIOR TO THE START OF WORK.
- THE SITE EQUALS 8.7 ACRES AND IS COMPRISED OF PARCELS A.P. 44, LOTS 84, 85, 295 AND 355. THE SITE IS ZONED B2 REDEVELOPMENT OVERLAY DISTRICT (ROD). THE EXISTING SITE USE IS COMMERCIAL BUSINESS AND VACANT. THE PROPOSED USE IS COMMERCIAL BUSINESS.
- THERE ARE NO KNOWN EASEMENTS, PLAT RESTRICTIONS OR COVENANTS LOCATED ON THE SITE.
- THERE ARE NO KNOWN UNUSUAL NATURAL FEATURES, HISTORIC AREAS, CEMETERYS, ETC. LOCATED ON THE SITE.
- FLOOD ZONES 'AE', 'X' AND 'SHADED X' SHOWN ON THIS PLAN PER FEMA FIRM MAP NUMBER 44003C0205G, EFFECTIVE 12/3/10 AND 44007C0284H, REVISED OCTOBER 2, 2015.
- THE WETLAND EDGE DELINEATED ON THIS PLAN WAS VERIFIED UNDER RIDEM APPLICATION NO. 15-0266.

**EROSION AND SEDIMENT CONTROL NOTES**

- DENUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED IN AREAS WHERE WORK IS TO CEASE FOR 14 DAYS AND NOT SET TO RESUME WITHIN 21 DAYS OR THE INACTIVE WINTER SEASON.
- 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.
- THE SEEDING MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
- THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING:
 

MIXTURE	BY WT.	SEEDING DATE
RED FESCUE	70	APRIL 1 - JUNE 13
KENTUCKY BLUEGRASS	15	AUG. 15 - OCT. 15
COLONIAL BENTGRASS	5	
PERENNIAL RYEGRASS 10		
TOTAL 100 LBS./ACRE		
- 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 SHOULD BE IN THE AMOUNT OF 3,000-4,000 LBS/ACRE.
- ALL COMPOST FILTER SOCK, SILT FENCES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED AND THE PROJECT RECEIVES A FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER. IF NEEDED TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. THE FOLLOWING SPECIES ARE RECOMMENDED:
 

SPECIES	LBS/AC.	LBS/1,000 SQ.FT.	SEEDING DATE
ANNUAL RYEGRASS	40-80	1.0-1.5	3/1-6/1
PERENNIAL RYEGRASS	40-60	1.0-1.5	3/1-6/1
SUDAN GRASS	30-40	0.7-1.0	5/15-8/15
MILLET	30-40	0.7-1.0	5/15-8/15
WINTER RYE	120	3.0	4/15-6/15
OATS	86-120	0.5-5.0	3/1-6/15
WEeping	5-20	0.5-5.0	5/1-7/1
- THE CONTRACTOR MUST REPAIR AND OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.
- THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST - JUNE 1ST AND AUGUST 15TH TO OCTOBER 15TH.
- STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
- EROSION CONTROL DEVICES SHOULD INSPECTED WEEKLY AND AFTER RAINFALL EVENTS OF > 1/2" IN A 24-HOUR PERIOD. MAINTENANCE AND REPAIRS SHALL BE COMPLETED WITH 24 HOURS OF THE INSPECTION WHEN NECESSARY.
- IMMEDIATELY UPON COMPLETION OF THE CLEARING AND GRUBBING OPERATION AND PRIOR TO ANY ROUGH GRADING, TEMPORARY COMPOST FILTER SOCK OR SILT FENCES SHALL BE PLACED AS INDICATED ON THE PLANS.
- ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE PERIODICALLY MAINTAINED AS PER THE RESPECTIVE PROGRAMS DURING THE CONSTRUCTION.
- ALL INLETS (CATCH BASINS) TO BE INSTALLED AS PART OF THE PROPOSED DRAINAGE SYSTEMS SHALL BE PROVIDED WITH FABRIC FILTER BAG PROTECTION DEVICES (SILT SACK MANUFACTURED BY ACF ENVIRONMENTAL OR APPROVED EQUAL). DEVICES SHALL BE INSTALLED, MAINTAINED, AND CLEANED IN ACCORDANCE WITH RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (REVISED AUGUST 2014) FOR THE DURATION OF CONSTRUCTION AND UNTIL ALL STORMWATER CONTROLS ARE FULLY STABILIZED AND ONLINE.

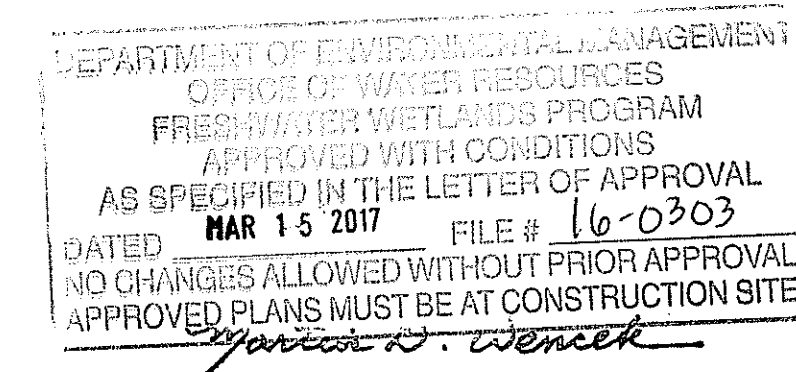
**STORMWATER MAINTENANCE NOTES**

- ALL MAINTENANCE (INCLUDING CLEANING) REQUIRED DURING THE CONSTRUCTION PHASE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL INCLUDE:
  - MEASURES NEEDED TO ENSURE THE PROPER OPERATION OF THE STORMWATER MANAGEMENT PRACTICES, SYSTEMS TO INCLUDE INSPECTION, CLEANING AND REPAIRS TO THE BIORETENTION SYSTEMS INCLUDING ALL PIPES, SWALES, INTAKE AND DISCHARGE STRUCTURES, CATCH BASIN SUMPS, AND MANHOLES.
  - INSPECTION OF ALL SLOPES, BERMS, AND OTHER CONTROL STRUCTURES FOR STRUCTURAL INTEGRITY/STABILITY AND EVIDENCE OF SOIL EROSION PROCESSES, AND MAINTENANCE OF THESE ELEMENTS AS REQUIRED. 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.
- UPON COMPLETION OF 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.
- AFTER THE COMPLETION OF THE ENTIRE PROJECT TO THE SATISFACTION OF THE ENGINEER, ALL MAINTENANCE OF THE DRAINAGE SYSTEM SHALL THEN BE THE RESPONSIBILITY OF THE UNIVERSITY OF RHODE ISLAND OR THEIR APPOINTED AGENTS.
- IN ACCORDANCE WITH THE LONG-TERM OPERATION AND MAINTENANCE PLAN (O&M PLAN) FOR THE PROJECT, THE DRAINAGE SYSTEM AND ALL BEST MANAGEMENT PRACTICES SHALL BE INSPECTED, CLEANED AND MAINTAINED (ROUTINE MAINTENANCE) A MINIMUM OF TWO (2) TIMES IN A GIVEN CALENDAR YEAR TO ENSURE THAT ALL SYSTEM ELEMENTS ARE FUNCTIONING PROPERLY.
- CLEANING AND ROUTINE MAINTENANCE OF CATCH BASINS, MANHOLES, AND OTHER SYSTEM ELEMENTS SHALL INCLUDE THE REMOVAL OF ALL ACCUMULATED SEDIMENTS AND DEBRIS (EITHER MANUALLY OR BY VACUUM TRUCK) AS WELL AS OTHER ACTIVITIES REQUIRED TO ENSURE THE CONTINUED OPERATIONAL PERFORMANCE. ANY BARE SPOTS OR ERODED AREAS WITHIN SWALES, AT INLETS/OUTLETS, OR OTHER LOCATIONS WITHIN THE SYSTEMS MUST BE REPLANTED AND/OR STABILIZED IMMEDIATELY FOLLOWING OBSERVATIONS TO PREVENT SUBSEQUENT EROSION OR CLOGGING. SHOULD THE INSPECTION OF THE SYSTEMS REVEAL ANY EVIDENCE OF SEDIMENT ACCUMULATION WITHIN ANY OF THE BIORETENTION SWALES, SEDIMENTS SHALL BE REMOVED AND THE SURFACE LAYER RESTORED TO ITS ORIGINAL DEPTH AND CONDITION.
- BY THEIR NATURE, BIORETENTION SWALES HAVE AN OPERATIONAL LIFE CYCLE THAT WILL REQUIRE THE TILLING AND RESEEDING OF THE TOP LAYER (1/2") OF THE SWALE TO RESTORE DESIGN PERCOLATION RATES THROUGH THE SURFACE LAYER (WHICH MAY BECOME REDUCED OVER TIME DUE TO CLOGGING, BLINDING, AND/OR OTHER FACTORS). THIS TILLING SHOULD BE PERFORMED APPROXIMATELY ONCE EVERY 5-10 YEARS, WHEN INFILTRATION CAPACITY IS DIMINISHED TO THE POINT WHERE STANDING WATER REMAINS IN THE SWALE MORE THAN 72 HOURS FOLLOWING A RAINFALL EVENT. THE TILLING/RESEEDING OPERATION SHALL BE CONDUCTED DURING THE SPRING OR FALL GROWING PERIOD, WITH TILLING ACCOMPLISHED USING A ROTARY TILLER OR DISC HARROW AND THE SWALE BOTTOM RESEEDED IMMEDIATELY FOLLOWING TILLING TO PREVENT EROSION.
- ALL SEDIMENT, DEBRIS, AND OTHER MATERIALS REMOVED IN THE MAINTENANCE OF THE STORMWATER SYSTEMS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- ALL LANDSCAPED AND GRASSED AREAS SURROUNDING SHALL BE MOWED AT LEAST ONCE PER GROWING SEASON, WITH GRASSED AREAS FLANKING THE BIORETENTION AREAS CUT TO A HEIGHT NO SHORTER THAN FOUR (4) INCHES. GRASS PLANTINGS WITHIN THE BIORETENTION AREAS PROPER SHALL BE CUT AT LEAST ANNUALLY, SUCH THAT THE HEIGHT OF GRASS DOES NOT EXCEED TEN (10) INCHES ABOVE THE BIORETENTION SOIL MEDIA SURFACE. MOWING AND CUTTING WITHIN ALL BIORETENTION AREAS SHALL BE PERFORMED IN A MANNER THAT DOES NOT COMPACT THE UNDERLYING MEDIA (I.E., HAND-OPERATED, SMALL SCALE EQUIPMENT).
- THE URI OFFICE OF CAPITAL PROJECTS SHALL BE RESPONSIBLE FOR ALL REPAIRS, REPLACEMENTS, AND OTHER WORK NECESSARY TO MAINTAIN THE PROPER FUNCTIONING OF THE SUBJECT BIORETENTION/FILTERING SYSTEMS. ANY REQUIRED REPAIR AND/OR REPLACEMENT OF DRAINAGE STRUCTURES OR FACILITIES SHALL BE PERFORMED PROMPTLY TO ENSURE PROPER FUNCTIONING OF THE SYSTEM(S). IN THE EVENT OF A SIGNIFICANT DECREASE IN PERFORMANCE OF A SYSTEM (E.G., STANDING WATER / PROLONGED DRAWDOWN TIMES), THE PERTINENT SYSTEMS ELEMENTS SHALL BE REPAIRED OR REPLACED SO AS TO RE-ESTABLISH ORIGINAL DESIGN FUNCTIONALITY.
- ANY INCIDENT OF INADVERTENT OR DELIBERATE DISCHARGE OF WASTE OIL OR OTHER CONTAMINANT(S) TO THE SYSTEMS SHALL BE IMMEDIATELY REPORTED TO THE RIDEM OFFICE OF WATER RESOURCES AT 401-222-6820. THE RIDEM AFTER-HOURS EMERGENCY TELEPHONE NUMBER IS (401) 222-3070.
- OPERATION AND MAINTENANCE OF THE DRAINAGE SYSTEMS SHALL BE CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE TERMS AND CONDITIONS SET FORTH IN THE RIDEM APPROVALS ISSUED FOR THE PROJECT. WRITTEN NOTIFICATION OF ANY CHANGES TO (A) THE PHYSICAL INFRASTRUCTURE OF THE SYSTEMS OR (B) O&M PLAN PROCEDURES SHALL BE PROVIDED TO THE RIDEM OFFICE OF WATER RESOURCES.

**DATA FOR ZONE B2 (ROD)**

**ZONING REQUIREMENT**

MINIMUM AREA	N/A
MINIMUM WIDTH	N/A
FRONT YARD MIN.	20'
SIDE YARD MIN.	10'
REAR YARD MIN.	40'
MAXIMUM FLOORS	6
MAXIMUM BUILDING COVERAGE	100%



**DRAINAGE LEGEND**

- (A) R.I. STD. 4.4.0(MOD.), PRECAST 4'-0" DIA OR 6'-0" DIA. CATCH BASIN, WITH 4'-0" DEEP SUMP, R.I. STD. 6.3.4 FRAME AND GRATE
- (B) R.I. STD. 4.4.0(MOD.), PRECAST 4'-0" DIA OR 6'-0" DIA. CATCH BASIN, WITH 4'-0" DEEP SUMP, R.I. STD. 6.4.0 ROUND FRAME AND GRATE
- (C) R.I. STD. 4.2.0, PRECAST 4'-0" DIA. MANHOLE, WITH R.I. STD. 6.2.1 FRAME AND COVER

**LEGEND**

- (2.1.0) CONCRETE HEADWALLS FOR PIPE CULVERTS
- (2.3.0) PRECAST CONCRETE FLARED END SECTION
- (4.3.0) PRECAST 4'-0" OR 6'-0" SQUARE MANHOLE OR CATCH BASIN
- (4.4.0) PRECAST 4'-0" OR 6'-0" ROUND CATCH BASIN
- (4.7.0) TOP COVER FOR 4'-0" OR 6'-0" SQUARE MANHOLE OR CATCH BASIN
- (5.3.0) CATCH BASIN AND MANHOLE STEP
- (6.2.1) HEAVY-DUTY ROUND FRAME AND COVER
- (6.3.4) HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE)
- (7.1.0) PRECAST CONCRETE CURB
- (7.1.1) 3' PRECAST CONCRETE TRANSITION CURB
- (7.1.2) 6' PRECAST CONCRETE TRANSITION CURB
- (7.1.3) PRECAST CONCRETE WHEELCHAIR RAMP TRANSITION CURB
- (7.1.4) PRECAST 2'-0" RADIUS CORNER
- (7.1.9) PRECAST CONCRETE RAMP STONE
- (7.6.0) CURB SETTING DETAIL
- (8.3.0) RIP - RAP DITCH
- (9.9.0) CONSTRUCTION ACCESS
- (20.1.0) PAVEMENT MARKINGS - ARROWS AND ONLY
- (24.2.0) SIGN POST SELECTION AND INSTALLATION DETAIL
- (24.6.0) PARKING SIGN MOUNTING DETAIL
- (27.1.0) REGULATORY SIGNS
- (43.1.0) CEMENT CONCRETE SIDEWALK
- (43.3.0) WHEELCHAIR RAMP
- (43.3.1) WHEELCHAIR RAMP FOR LIMITED RIGHT-OF-WAY AREAS
- (47.1.1) TRANSVERSE PAVEMENT CUT AND MATCH
- (48.1.0) DETECTABLE WARNING SYSTEM
- (51.1.0) TREE PROTECTION DEVICE
- (CBLK) CONCRETE BLOCK WALL (SEE DETAIL)
- (CBP) CATCH BASIN INLET PROTECTION
- (CG) CLEAR AND GRUB
- (CFS) COMPOST FILTER SOCK
- (DC) REMOVE AND DISPOSE CONCRETE CURB
- (DW#) DRIVEWAY ENTRANCE DETAIL (SEE GENERAL PLAN)
- (EOP) EDGE OF NEW PAVEMENT
- (LS) 4" LOAM AND SEED
- (LOD) LIMIT OF DISTURBANCE
- (LOR) LIMIT OF REGRADING
- (RD) REMOVE AND DISPOSE
- (NPS) NEW PAVEMENT STRUCTURE
- (RDF) REMOVE AND DISPOSE FENCE
- (RDL) REMOVE AND DISPOSE LIGHT
- (RDP) REMOVE AND DISPOSE PAVEMENT
- (RDS) REMOVE AND DISPOSE SIGN
- (RDT) REMOVE AND DISPOSE TREE
- (RUP) RELOCATE UTILITY POLE (BY OTHERS)
- (SMH) SANITARY SEWER MANHOLE (SEE DETAIL)
- (SB) STONE Baffle (SEE DETAIL)
- (WCR) WHEELCHAIR RAMP
- (4W) 4" EPOXY RESIN PAVEMENT MARKINGS - WHITE
- (6W) 6" EPOXY RESIN PAVEMENT MARKINGS - WHITE
- (4Y) 4" EPOXY RESIN PAVEMENT MARKINGS - YELLOW
- (12W) 12" EPOXY RESIN PAVEMENT MARKINGS - WHITE
- (4DY) 4" EPOXY RESIN PAVEMENT MARKINGS - DOUBLE YELLOW
- PROPOSED CURB
- CUT & MATCH PAVEMENT
- COMPOST FILTER SOCK
- NEW CONCRETE
- 100 YEAR FLOOD BOUNDARY
- FLOOD ZONE BOUNDARY
- 50' WETLAND PERIMETER
- 200' RIVERBANK PERIMETER
- FLAGGED WETLAND EDGE
- PROPERTY LINE
- ZONING BUILDING SETBACK LINE
- STREAM BANK

PROJECT  
**PARKSIDE SHOPPING CENTER**  
 PLAT 44/3, LOTS 84,85,295 & 355  
 1460 HARTFORD AVENUE  
 JOHNSTON, RI

TODD A. BAYLLE  
 REGISTERED PROFESSIONAL ENGINEER

APPLICANT  
**PICERNE HOLDING, LLC**  
 75 LAMBERT LIND HIGHWAY  
 WARWICK, RI 02886

Gordon R. Archibald, Inc.  
 Civil and Environmental Engineers  
 Pawtucket, Rhode Island

DRAWING TITLE  
**NOTES AND LEGEND**

NO.	DATE	REVISIONS

PROJECT NO.: 1677

DATE: FEBRUARY 2017

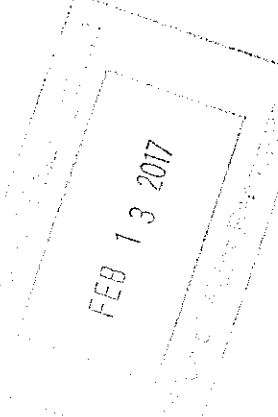
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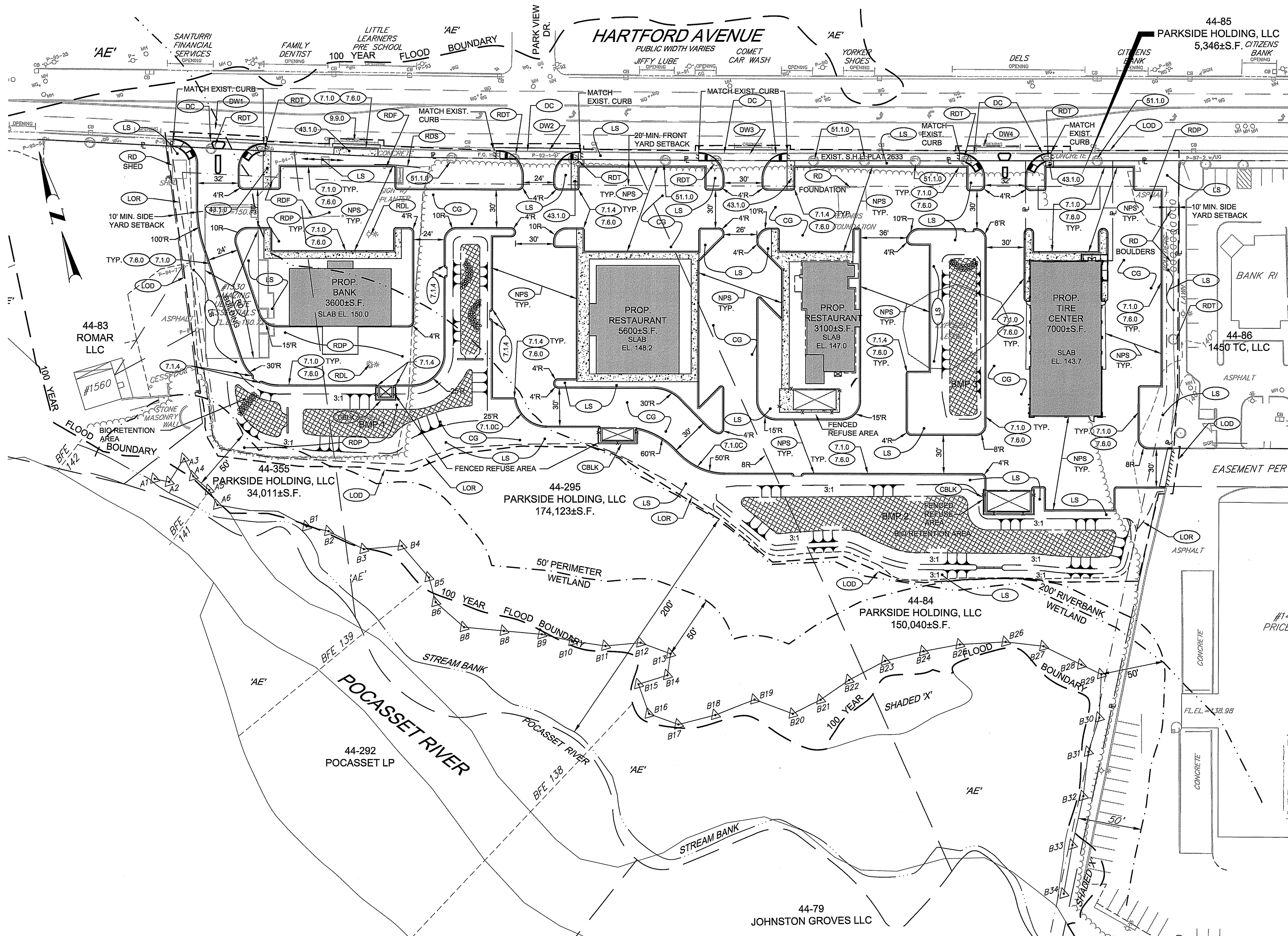
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SHEET 2 OF 11

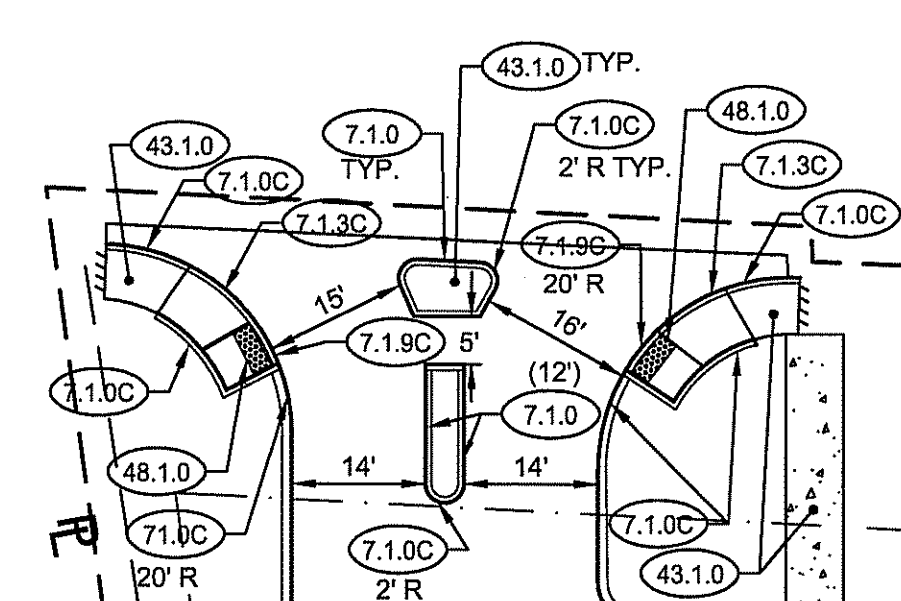
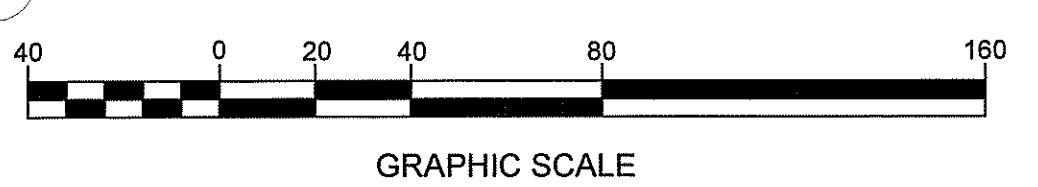




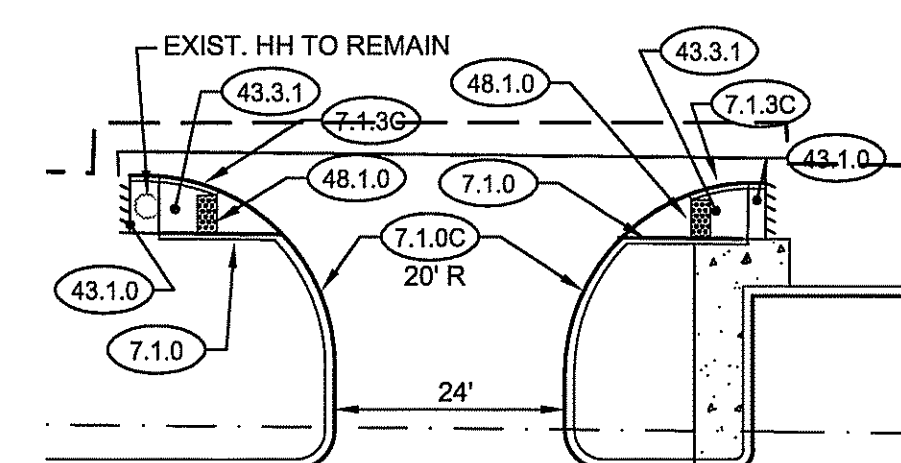


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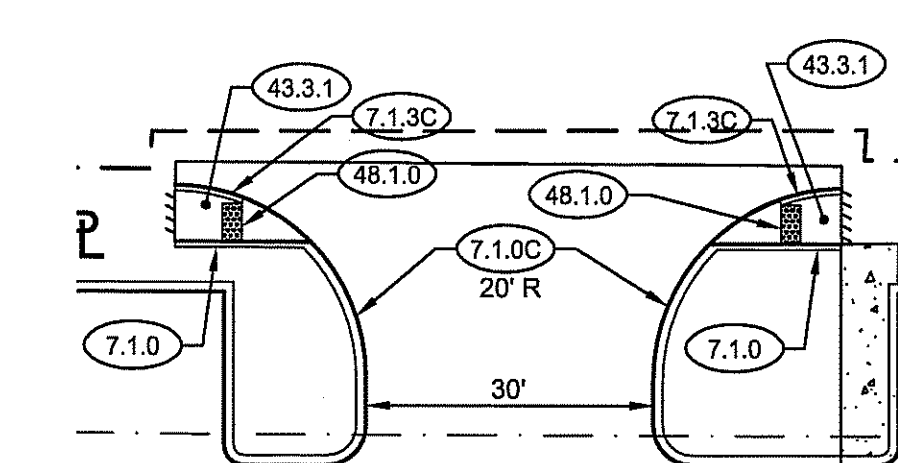
*Matthew W. Wenczer*



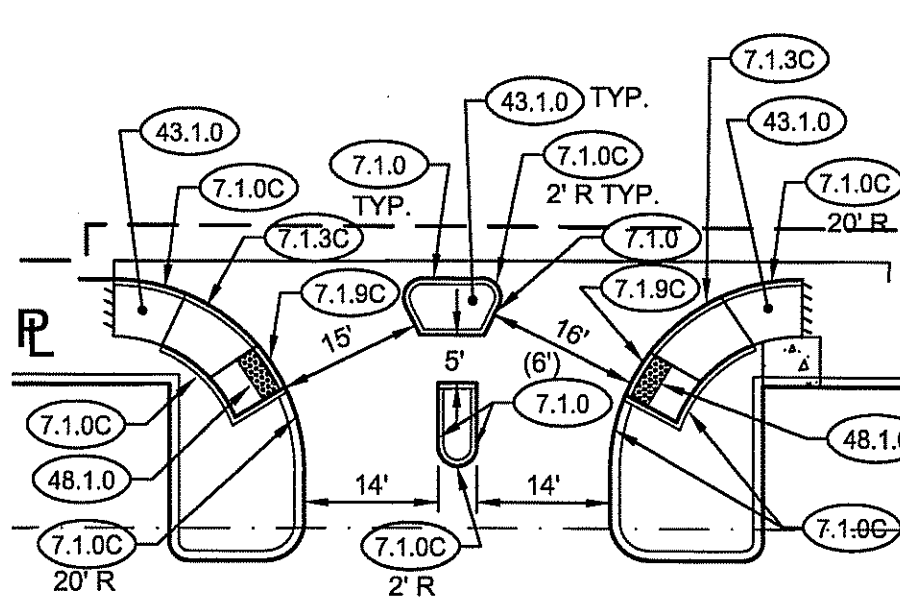
DRIVEWAY DETAIL DW1



DRIVEWAY DETAIL DW2

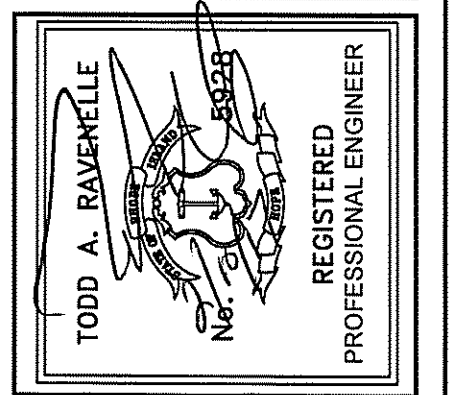


DRIVEWAY DETAIL DW3



DRIVEWAY DETAIL DW4

PROJECT  
**PARKSIDE SHOPPING CENTER**  
 PLAT 44/3, LOTS 84, 85, 295 & 355  
 1460 HARTFORD AVENUE  
 JOHNSTON, RI



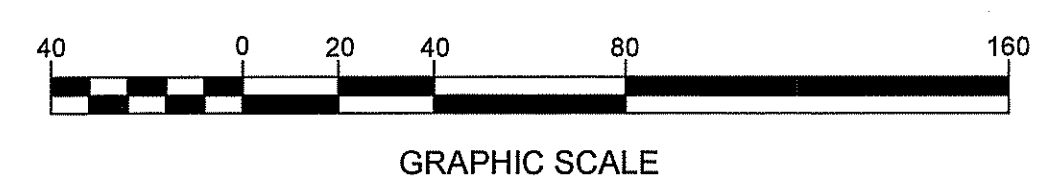
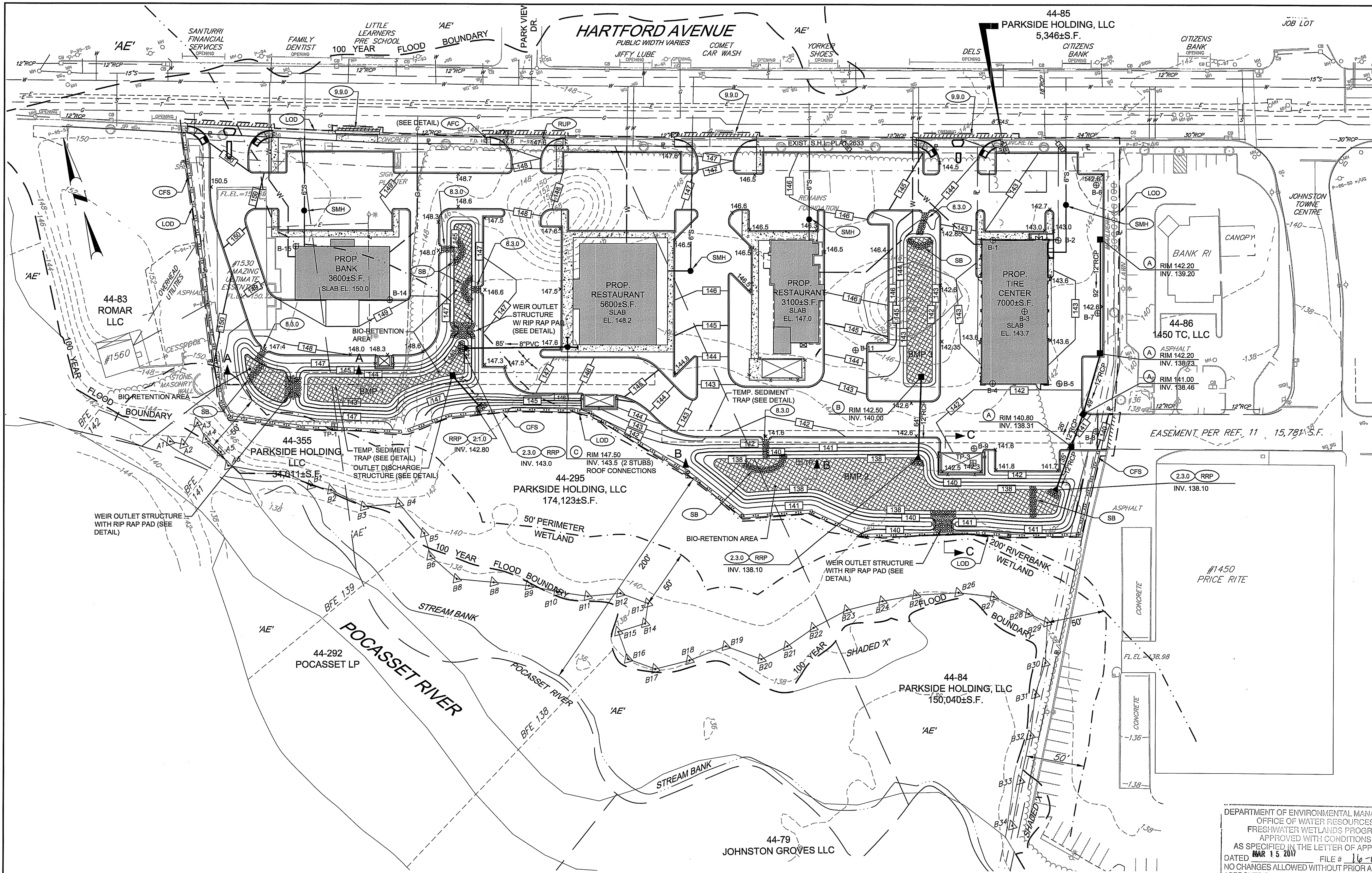
APPLICANT  
**PICERNE HOLDING, LLC**  
 75 LAMBERT LIND HIGHWAY  
 WARWICK, RI 02886

**Gordon R. Archibald, Inc.**  
 Civil and Environmental Engineers  
 Pawtucket, Rhode Island

DRAWING TITLE	
<b>GENERAL PLAN</b>	
NO.	DATE
REVISIONS	BY

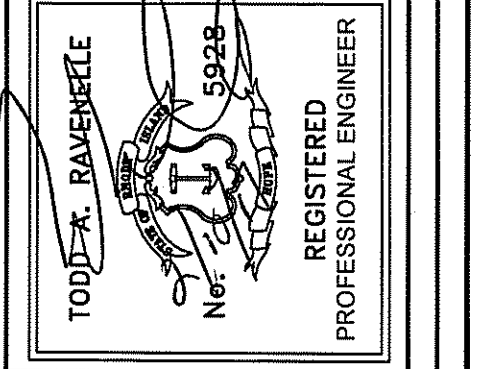
PROJECT NO.: 1677  
 DATE: FEBRUARY 2017  
 SCALE:  
 DRAWN BY: JLH  
 CHECKED BY: TAR

DRAWING NUMBER  
**4**  
 SHEET 4 OF 11



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED MAR 15 2017 FILE # 16-0303  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PROJECT  
**PARKSIDE SHOPPING CENTER**  
 PLAT 44/3, LOTS 84,85,295 & 355  
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**Gordon R. Archibald, Inc.**  
 Civil and Environmental Engineers  
 Pawtucket, Rhode Island

DRAWING TITLE  
**GRADING PLAN / EROSION CONTROL**

NO.	DATE	REVISIONS	BY

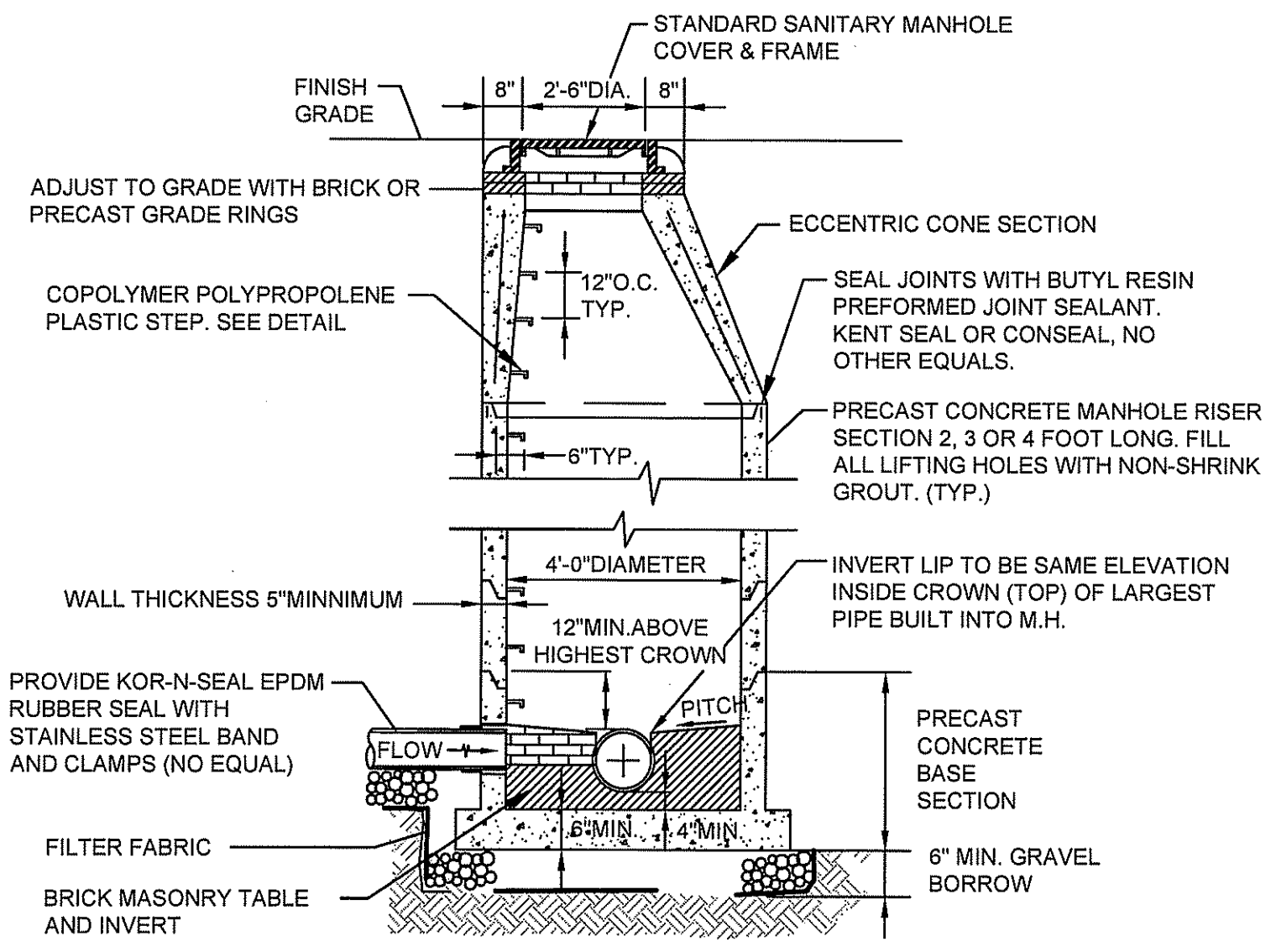
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 DATE: FEBRUARY 2017  
 SCALE: 1" = 40'  
 DRAWN BY: JLH  
 CHECKED BY: TAR

DRAWING NUMBER  
**5**  
 SHEET 5 OF 11

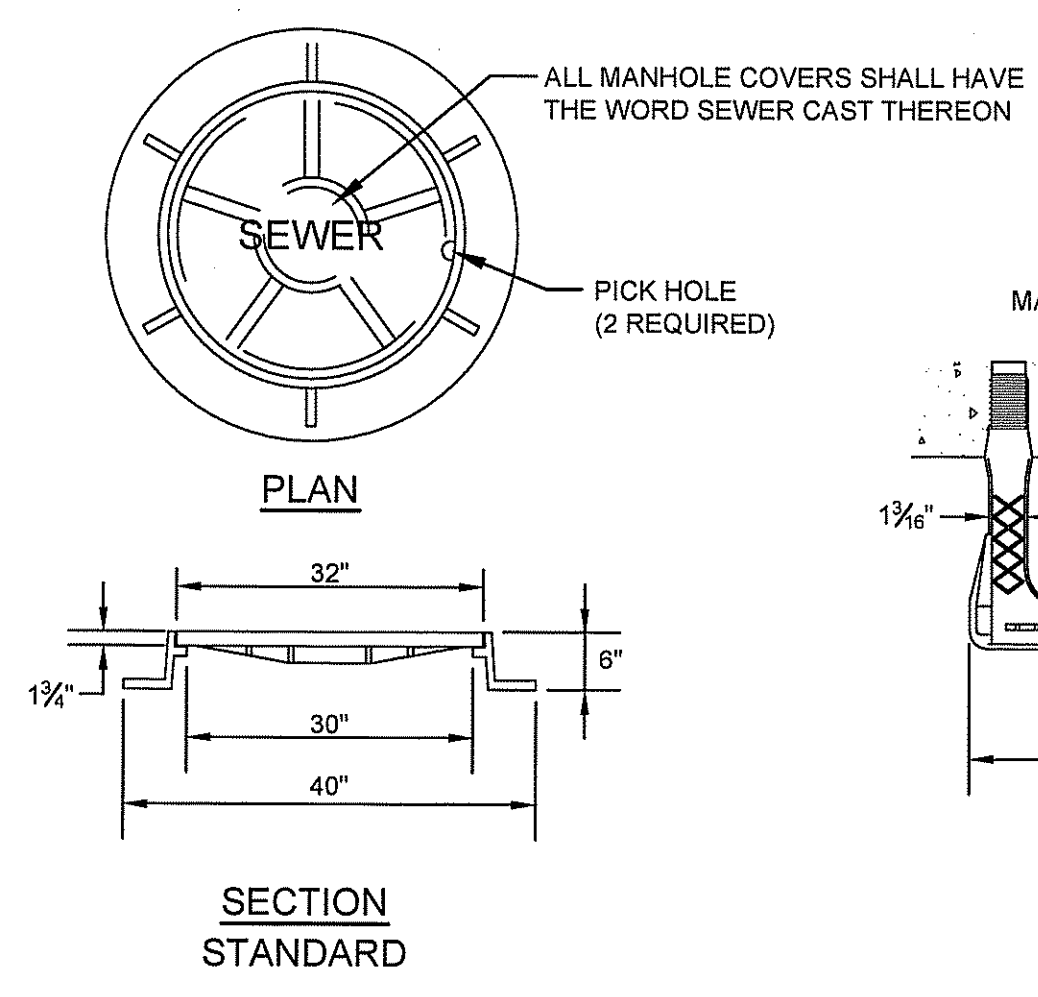
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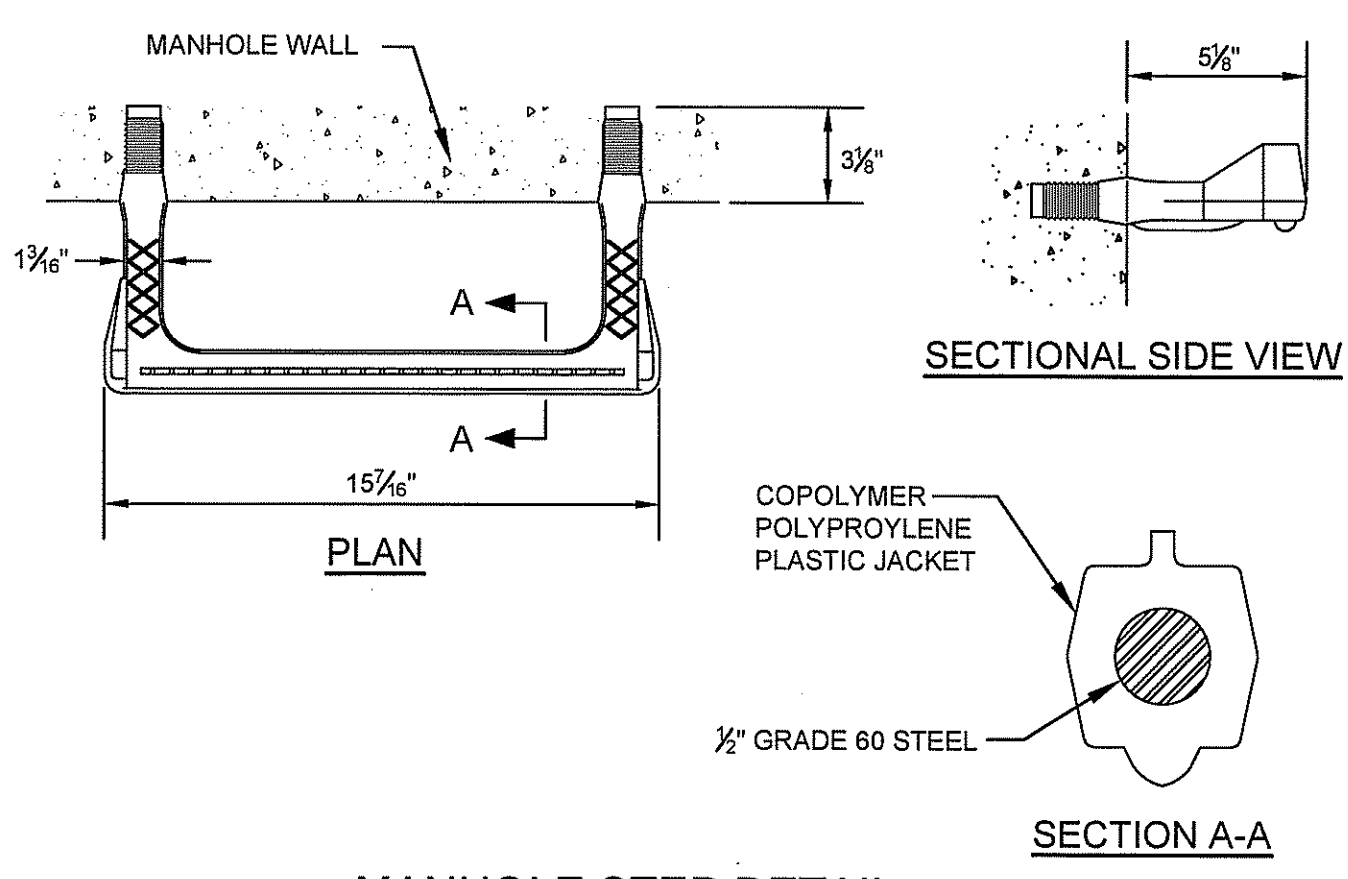




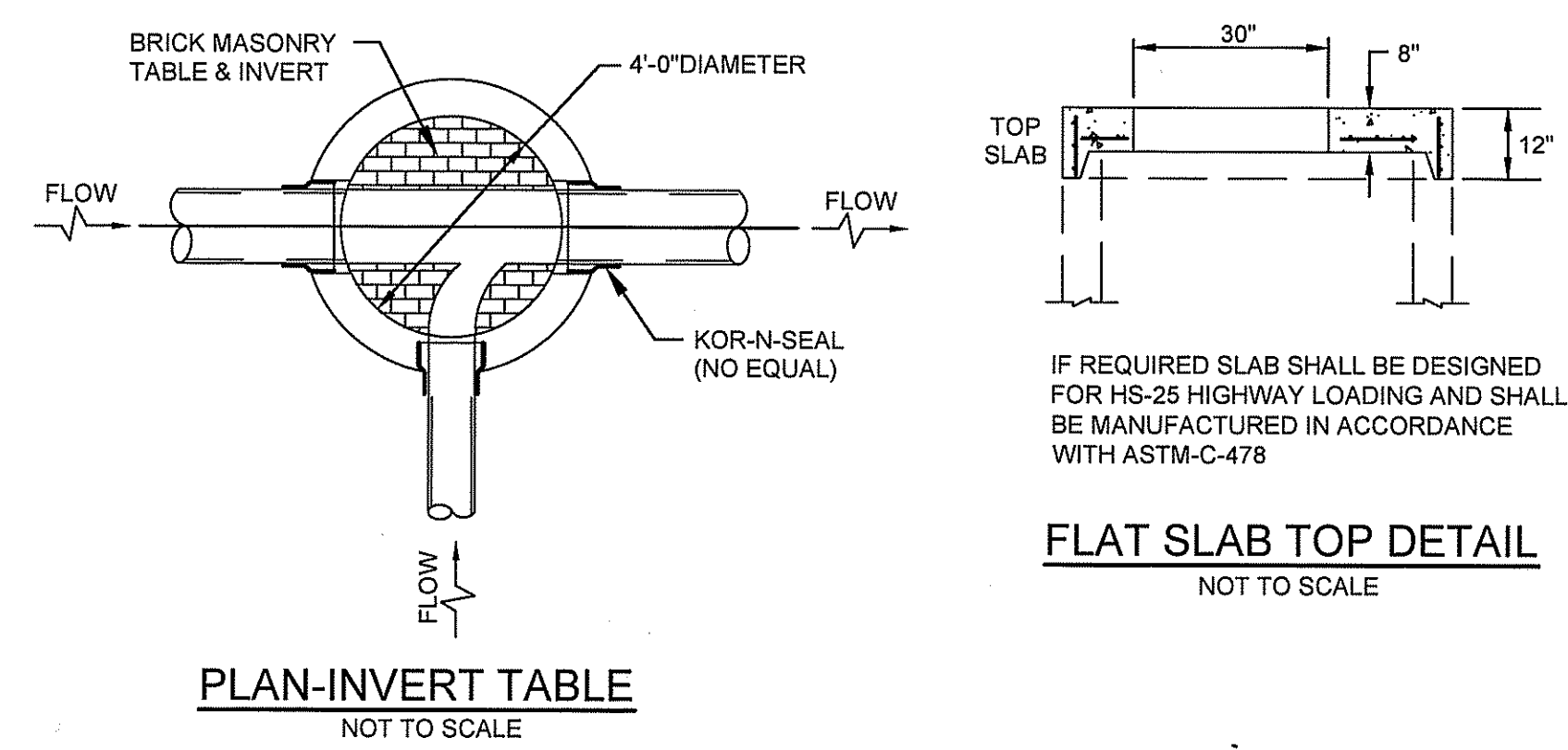
**SANITARY SEWER MANHOLE DETAIL (SMH)**  
NOT TO SCALE



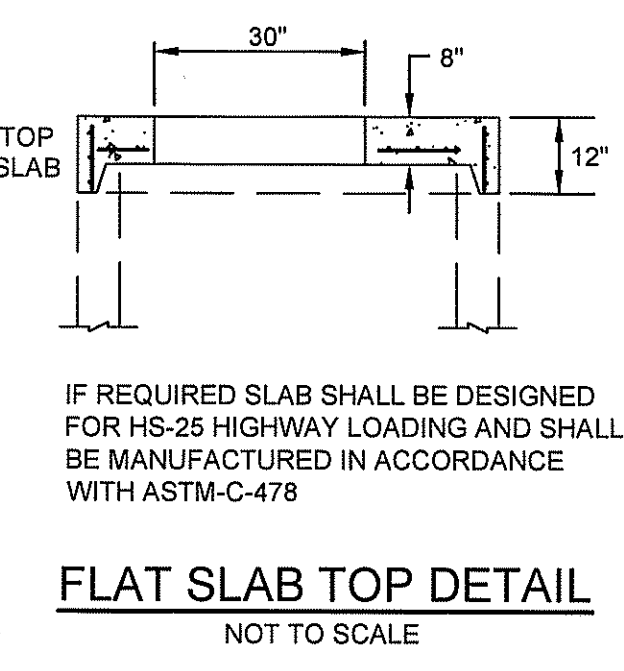
**SEWER MANHOLE COVER DETAILS**  
NOT TO SCALE



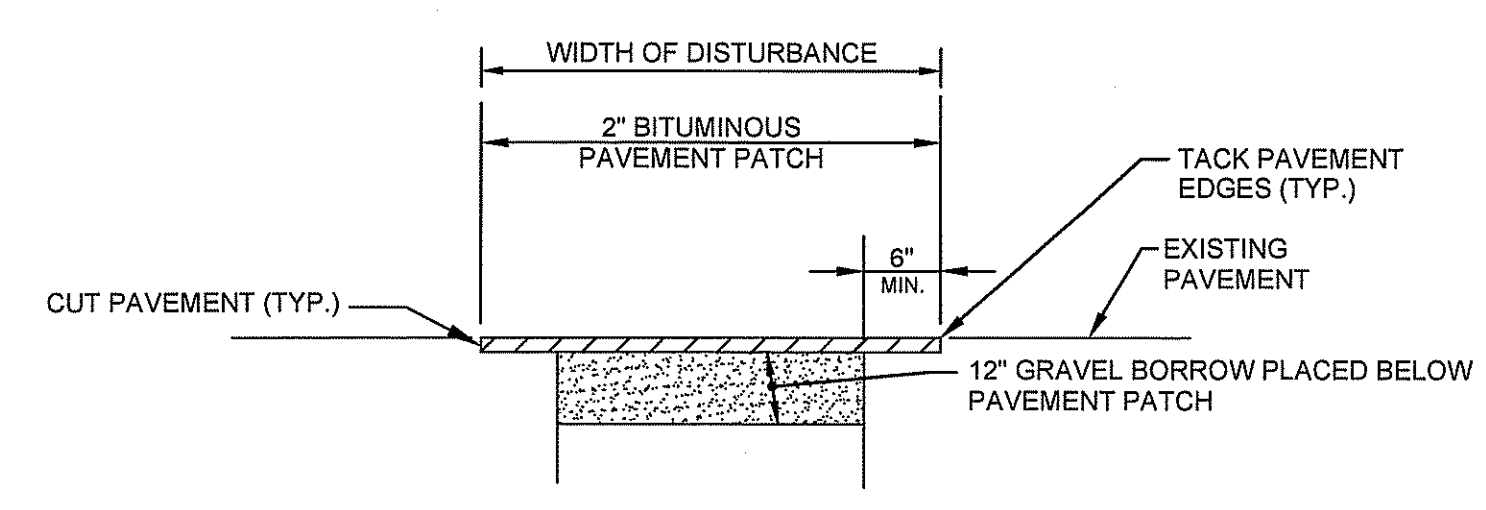
**MANHOLE STEP DETAIL**  
NOT TO SCALE



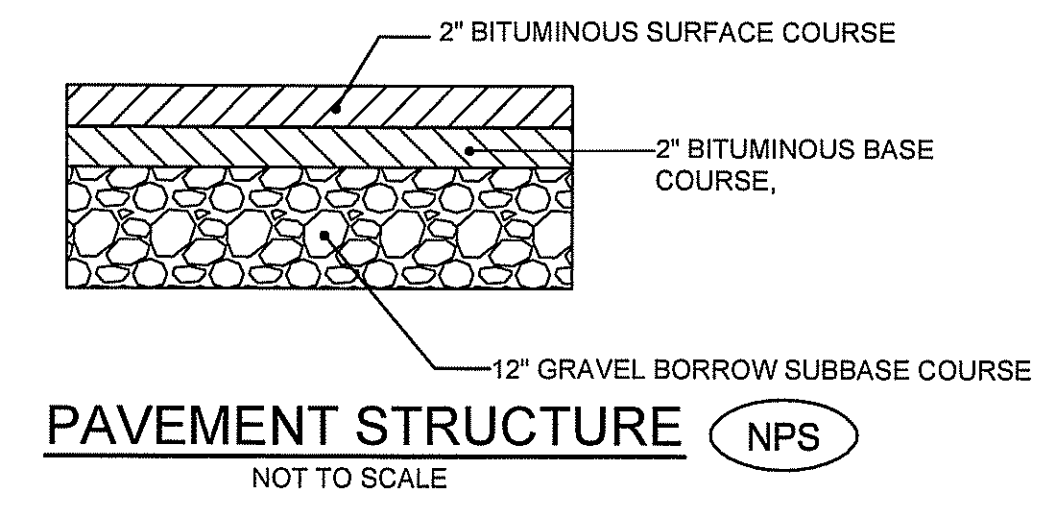
**PLAN-INVERT TABLE**  
NOT TO SCALE



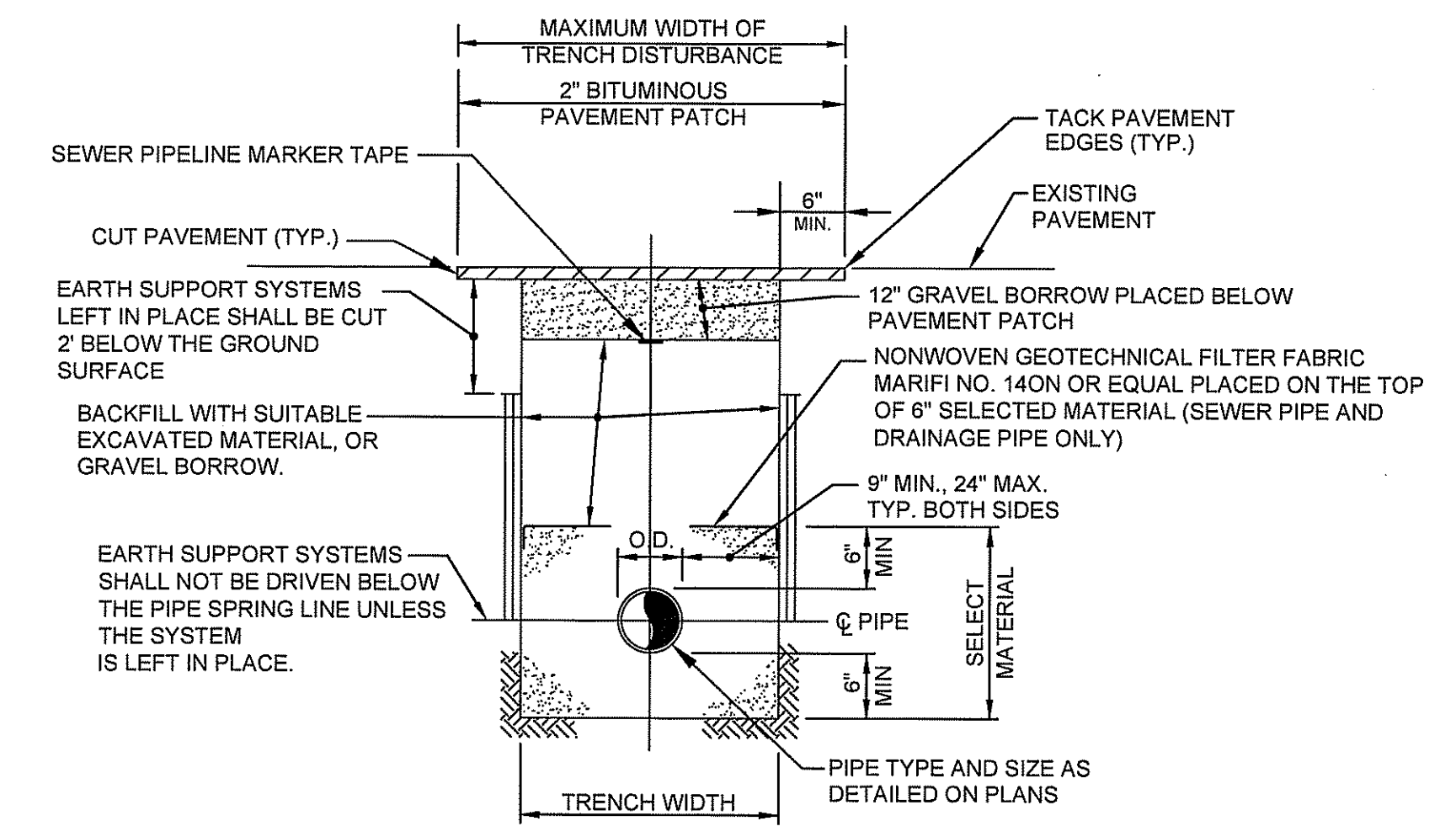
**FLAT SLAB TOP DETAIL**  
NOT TO SCALE



**TEMPORARY PAVEMENT PATCH**  
NOT TO SCALE



**PAVEMENT STRUCTURE (NPS)**  
NOT TO SCALE

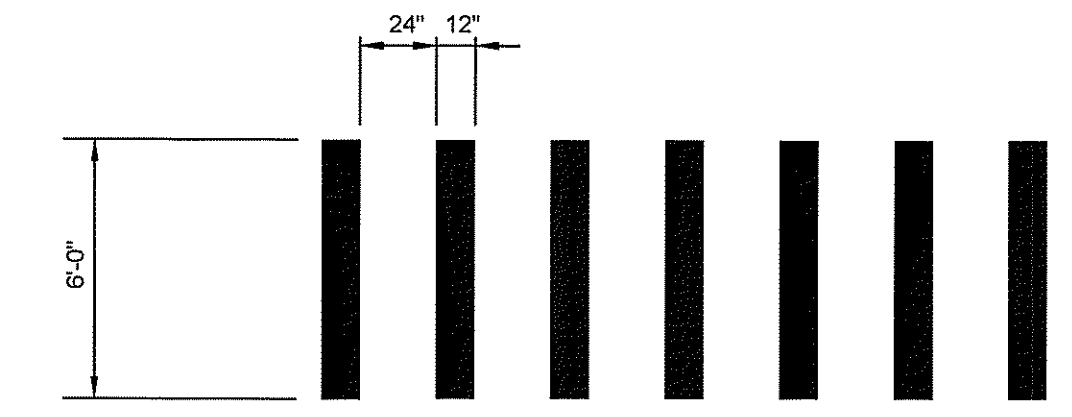


**TYPICAL TRENCH DETAIL FOR SEWER LATERALS, SERVICE CONNECTIONS, AND STORM WATER DRAINAGE PIPE**  
NOT TO SCALE

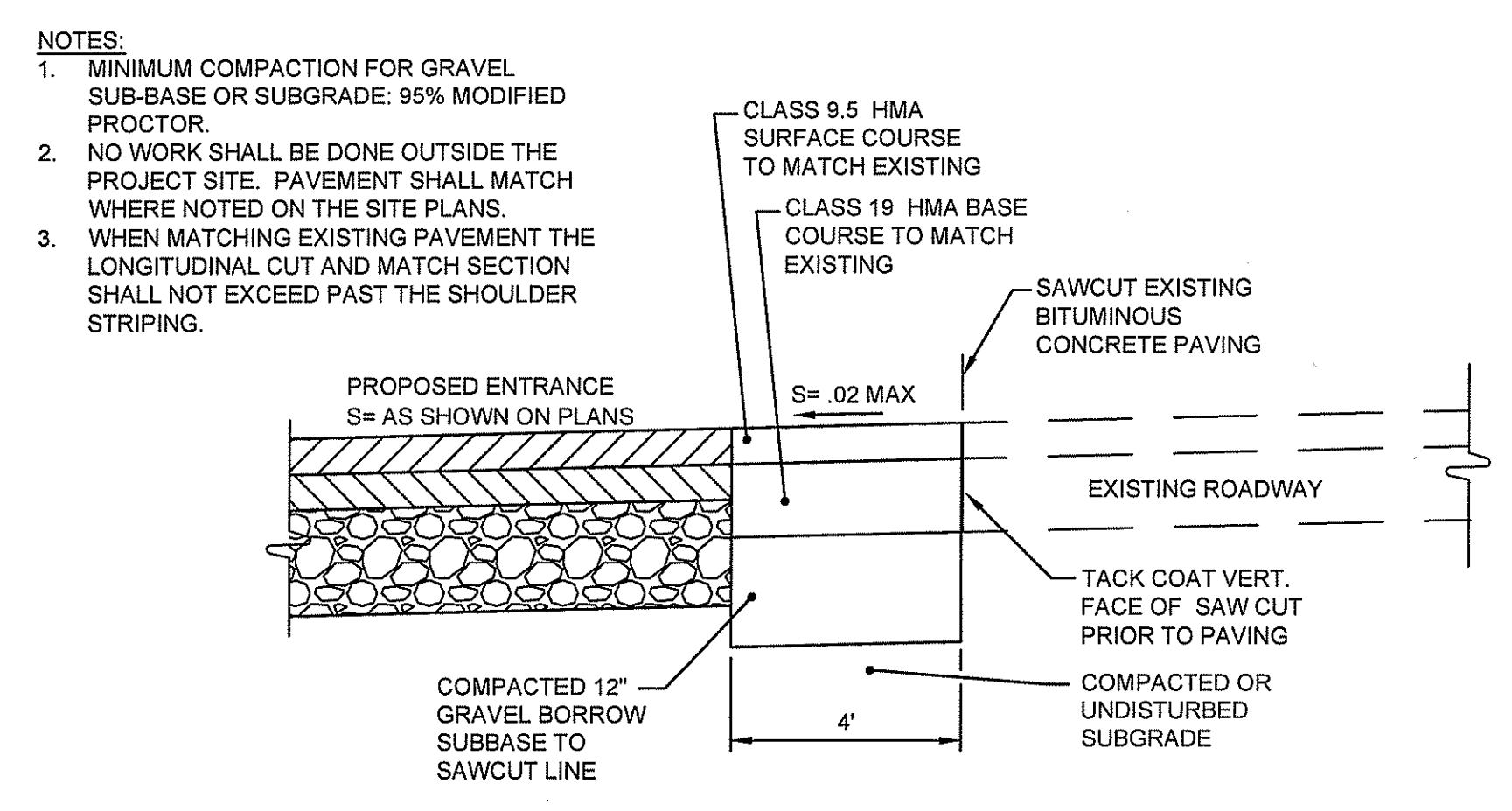
- NOTES:**
1. THE HORIZONTAL LIMIT FOR ROCK EXCAVATION IN TRENCHES SHALL BE 27" BEYOND THE O.D. OF THE PIPE. THE VERTICAL LIMIT SHALL BE 6" BELOW THE O.D. OF THE PIPE. CONTRACTOR TO TAKE ALL ROCK QUANTITIES INDEPENDENT OF THE ENGINEER AND CONFIRM THESE QUANTITIES ON A WEEKLY BASIS WITH THE ENGINEER FOR APPROVAL. ALL APPROVED CALCULATIONS AND QUANTITIES SHALL BE SUBMITTED TO THE WSA CONSTRUCTION DIVISION WITH MONTHLY PROGRESS PAYMENT FOR REVIEW.
  2. CONTRACTOR SHALL ADJUST THE WIDTH OF SAW CUT OF EXISTING PAVEMENT BASED ON ACTUAL EQUIPMENT AND EARTH SUPPORT SYSTEM USED. MAXIMUM WIDTH OF DISTURBANCE SHALL BE WIDTH OF EARTH SUPPORT SYSTEM PLUS 1'-0".
  3. BEDDING MATERIAL FOR SEWER PIPE SHALL BE CRUSHED STONE.
  4. CONTRACTOR SHALL PROTECT ALL UTILITIES FROM DAMAGE AND IS RESPONSIBLE FOR REPAIR OF ALL UTILITIES DAMAGED OUTSIDE THE LIMIT OF DISTURBANCE.

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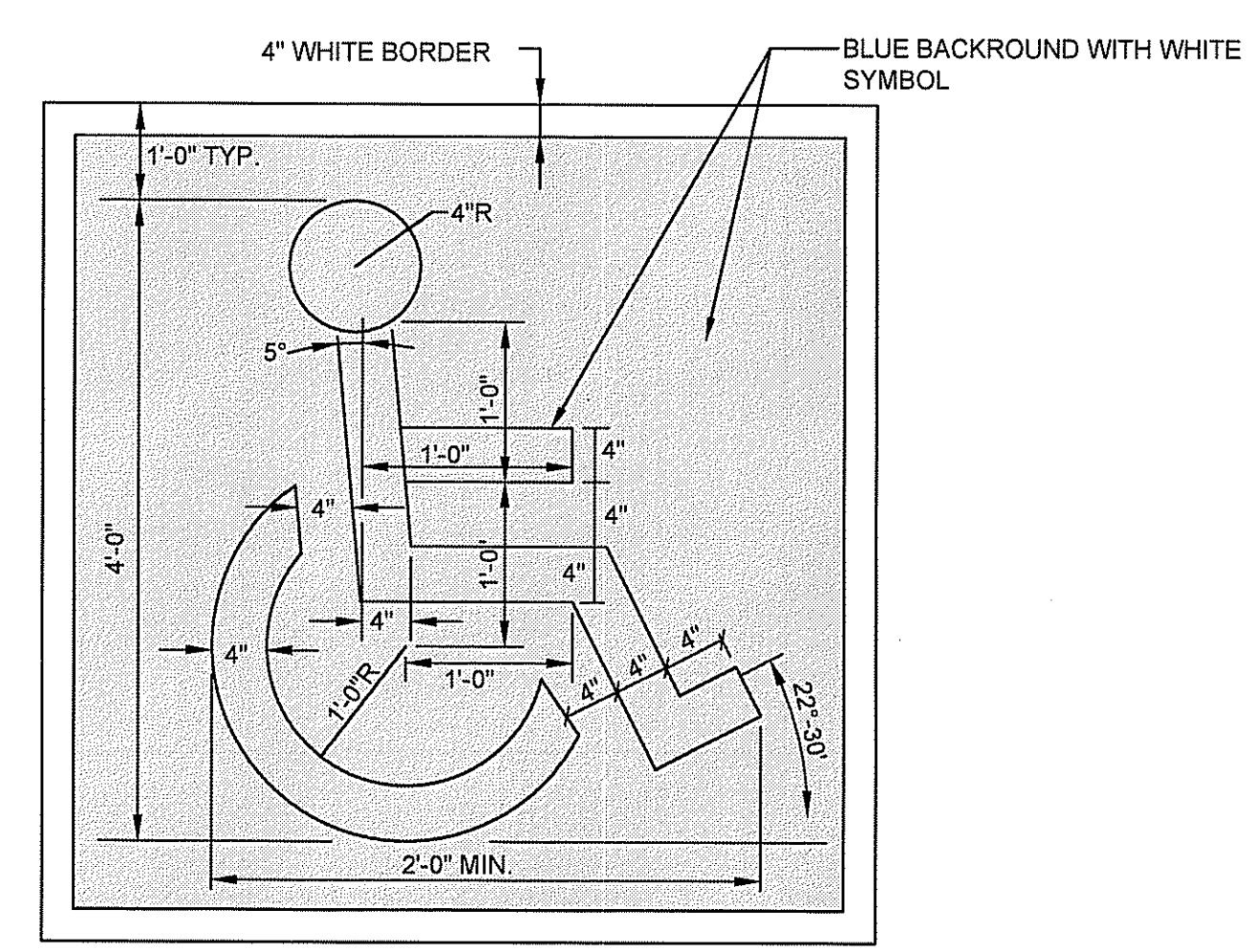
*Martin D. Wencel*



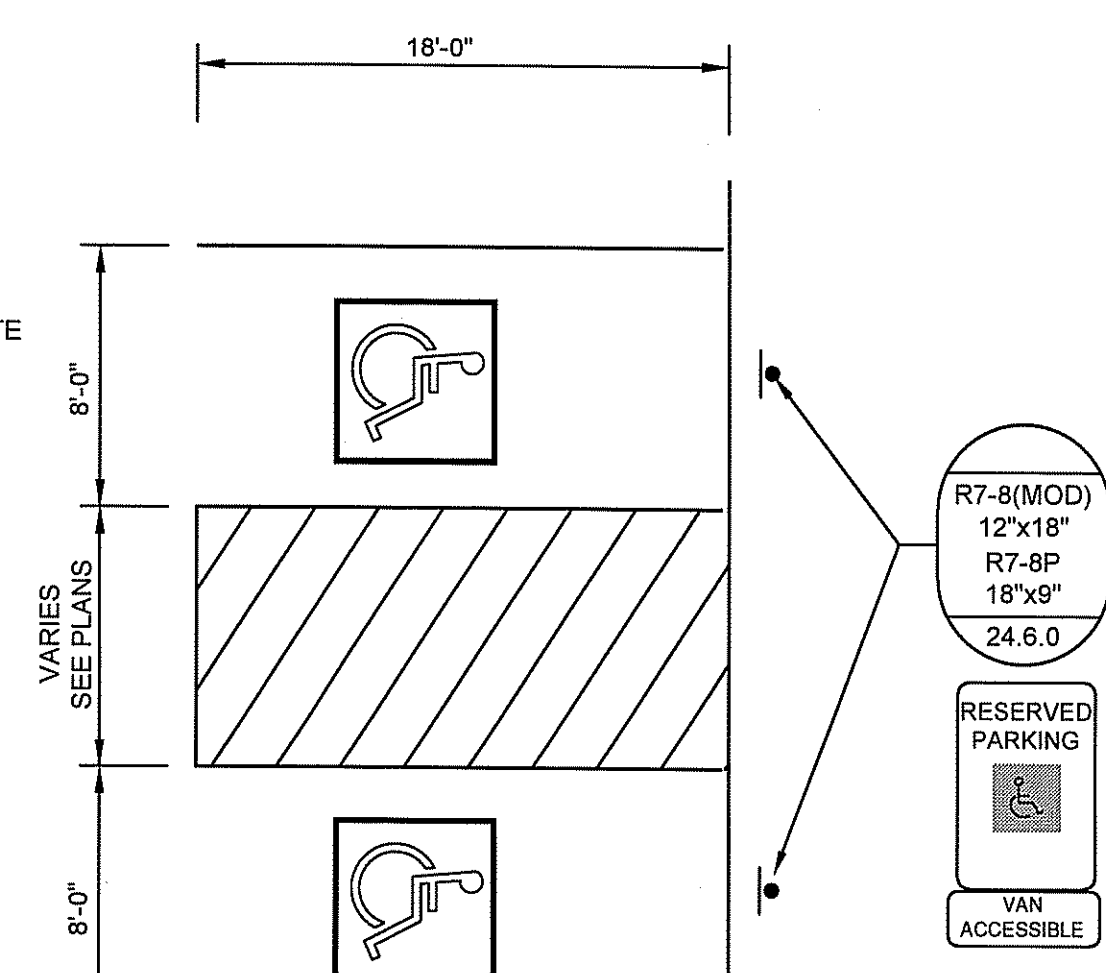
**CONTINENTAL CROSSWALK PAVEMENT MARKING DETAIL**  
N.T.S.



**ENTRANCE ACCESS SAWCUT & MATCH DETAIL**  
NOT TO SCALE

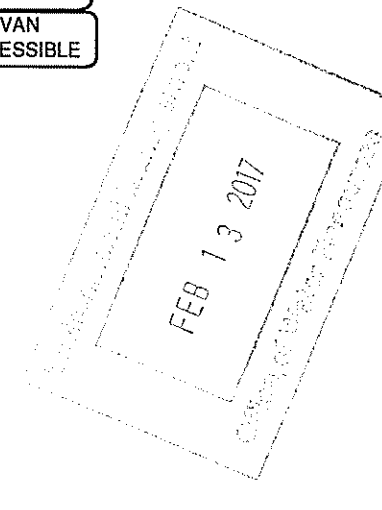


**PAINTED HANDICAP SYMBOL**  
NOT TO SCALE

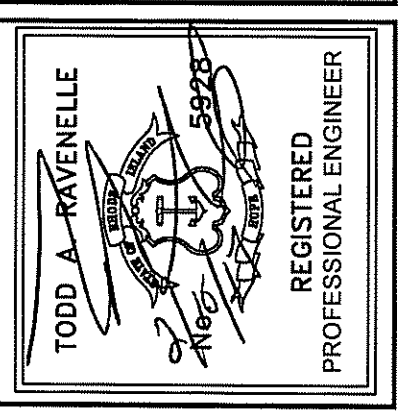


**HANDICAP PARKING STALL VAN ACCESSIBLE**  
NOT TO SCALE

NOTE:  
NOT TO SCALE  
ALL PARKING AREA STRIPING SHALL BE 4" WIDE WHITE UNLESS LABELED OTHERWISE.



PROJECT  
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JOHNSTON, RI



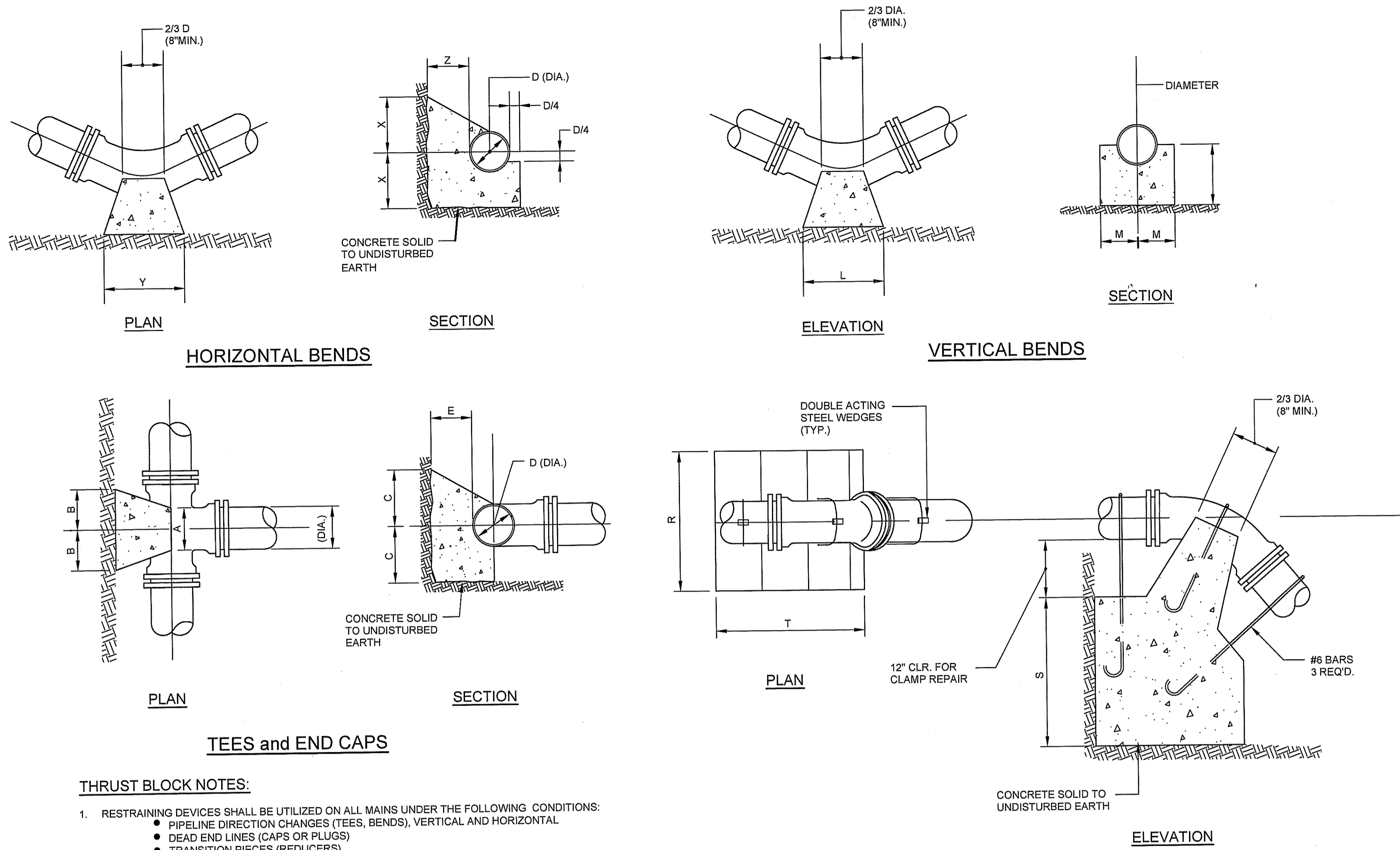
APPLICANT  
**PICERNE HOLDING, LLC**  
75 LAMBERT LIND HIGHWAY  
WARWICK, RI 02886



DRAWING TITLE		DETAILS - 2	
BY			
REVISIONS			
NO.	DATE	BY	

PROJECT NO.: 1677  
DATE: FEBRUARY 2017  
SCALE: AS NOTED  
DRAWN BY: JLH  
CHECKED BY: TAR

DRAWING NUMBER  
**8**  
SHEET 8 OF 11

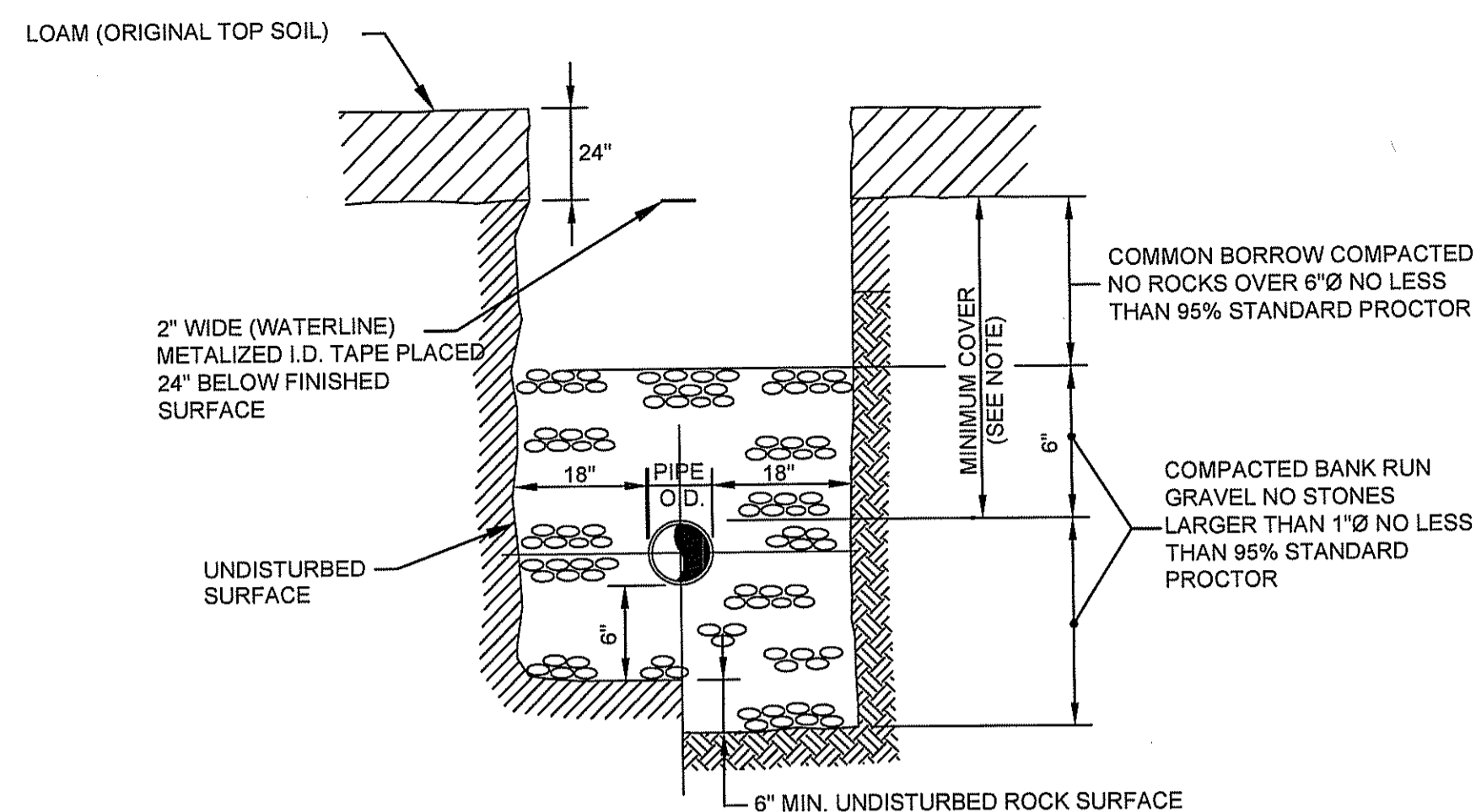


**HORIZONTAL BENDS**

**VERTICAL BENDS**

**TEES and END CAPS**

**CONCRETE ANCHORAGE**



**TYPICAL TRENCH DETAIL FOR WATER MAIN AND SERVICES**  
NOT TO SCALE

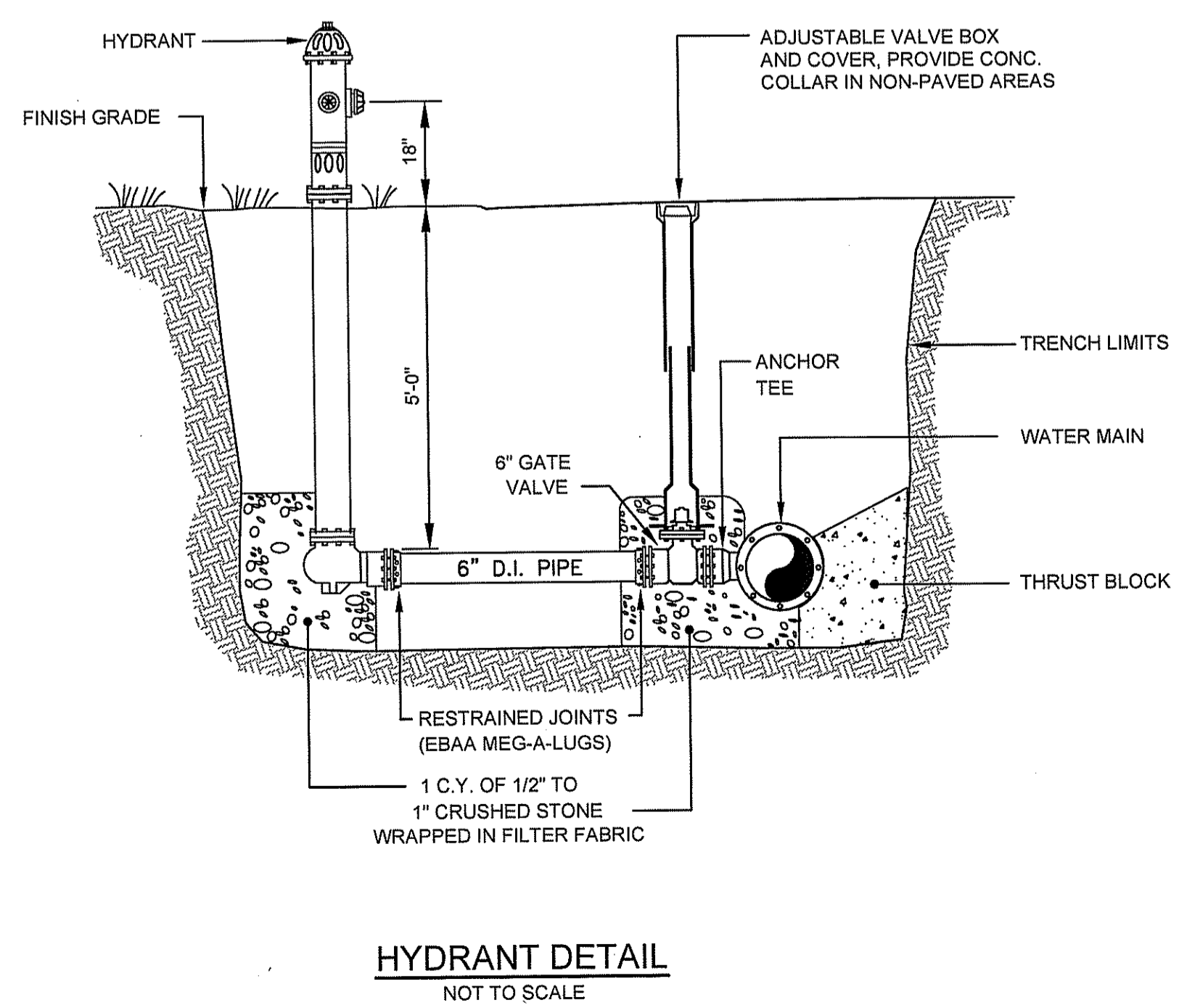
**NOTES:**

1. ALL WATER MAIN AND SERVICE TRENCH INSTALLATION SHALL COMPLY WITH THE UNIVERSITY OF RHODE ISLAND WATER SYSTEM WORK SPECIFICATIONS.
2. WATERMAIN AND SERVICES SHALL BE INSTALLED WITH A MINIMUM COVER OF 5 FEET TO THE CROWN OF THE PIPE IN AN AMERICAN WATER WORKS ASSOCIATION "TYPE 5 TRENCH".

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*Martin D. Wencsek*

**THRUST BLOCK NOTES:**

1. RESTRAINING DEVICES SHALL BE UTILIZED ON ALL MAINS UNDER THE FOLLOWING CONDITIONS:
  - PIPELINE DIRECTION CHANGES (TEES, BENDS), VERTICAL AND HORIZONTAL
  - DEAD END LINES (CAPS OR PLUGS)
  - TRANSITION PIECES (REDUCERS)
  - VALVES ON DEAD END LINES
  - HYDRANTS
  - TAPPING SLEEVES
2. THRUST BLOCKS SHALL BE DESIGNED TO WITHSTAND THE FORCE IMPARTED BY THE HYDRAULIC INFLUENCE ENCOUNTERED WITHIN THE MAIN. MINIMUM 1-1/2 TIMES THE ANTICIPATED WORKING PRESSURE OF THE MAIN, BUT NOT LESS THAN 150 PSI. MAXIMUM LATERAL BEARING CAPACITY SHALL BE 1600 LB/SF.
3. ALL THRUST BLOCKS SHALL BE CONSTRUCTED FROM CONCRETE 3000 PSI. AT 28 DAYS, SIZED ACCORDING TO THE SIZE OF PIPELINE, TYPE OF FITTING, WATER PRESSURE AND THE CHARACTERISTICS OF THE SOIL. BEARING SURFACE SHALL BE AGAINST UNDISTURBED SOLID EARTH FOR THE REQUIRED BEARING AREA. THE CONCRETE SHALL BE PROPERLY FORMED AS TO SLOPE FOR THE GIVEN APPLICATION AND BEARING WIDTH. THE CONCRETE SHALL BE IN CONTACT ONLY WITH THE FITTING, NOT WITH THE PIPE ITSELF, FASTENERS OR THE JOINT. CURING TIME SHALL BE A MINIMUM OF 7 DAYS.
4. STONE, TIMBER, CONCRETE BLOCK OR ANY MATERIALS THAT DETERIORATE ARE STRICTLY FORBIDDEN TO USE AS A PERMANENT THRUST BLOCK OR RESTRAINT.
5. OPTIONAL THRUST RESTRAINT SHALL BE VIA RESTRAINED JOINT, DUCTILE IRON PIPE MEETING ANSI/AWWA C151/A21.51 AND ANSI/AWWA C11/A21.11 AND APPROVED BY THE UTILITIES DEPARTMENT. RESTRAINED JOINT PIPE LENGTHS (RESTRAINED LENGTH) SHALL BE SUFFICIENT TO RESTRAIN THRUST IMPARTED BY 1-1/2 TIMES THE ANTICIPATED WORKING PRESSURE, BUT NOT LESS THAN 150 PSI WITH A 1.5 FACTOR OF SAFETY.
6. THE USE OF TIE RODS MAY BE ALLOWED BY WRITTEN PERMISSION OF THE UTILITIES DEPARTMENT. THIS TYPE OF RESTRAINT CONFIGURATION WILL ONLY BE CONSIDERED IN SITUATIONS WHERE APPROVED TYPES OF RESTRAINT SYSTEMS CANNOT BE USED. IF ALLOWED, THEY SHALL BE OF SUFFICIENT STRENGTH TO WITHSTAND FORCES IMPARTED TO THEM. A FACTOR OF SAFETY SHALL BE 2.0 FOR ALL ROD THICKNESS CALCULATIONS. ALL RODS SHALL BE STAINLESS STEEL OR PROTECTED FROM CORROSION WITH TWO COATS OF EPOXY PAINT.
7. APPROVED THRUST RESTRAINT SHALL BE BY AN APPROVED RESTRAINING GLAND SYSTEM UTILIZING IN COMBINATION WITH MECHANICAL JOINT PIPE AND FITTINGS. ALL CALCULATIONS MUST BE PROVIDED AND SHALL BE IN CONFORMANCE WITH THE MANUFACTURING REQUIREMENTS FOR LENGTH, FITTING AND TYPE OF RESTRAINT.
8. BLOCKING UNDER THE PIPE SHALL NOT BE PERMITTED EXCEPT WHERE A CONCRETE CRADLE IS PROPOSED.



**HYDRANT DETAIL**  
NOT TO SCALE

TEES					HORIZONTAL BENDS					VERTICAL BENDS					ANCHORAGES																							
PIPE SIZE-D (DIA.)					PIPE SIZE-D (DIA.)					PIPE SIZE-D (DIA.)					PIPE SIZE-D (DIA.)																							
	6"	8"	12"	16"	20"	BEND	6"	8"	12"	16"	20"	BEND	6"	8"	12"	16"	20"	BEND	6"	8"	12"	16"	20"	BEND	6"	8"	12"	16"	20"									
A	8"	10"	1-0"	1-3"	1-6"	X	1-0"	1-0"	1-0"	1-3"	1-6"	L	1-3"	1-8"	2-6"	3-6"	4-8"	8	R	2-6"	3-0"	4-6"	5-4"	6-0"	8	R	2-6"	3-0"	4-6"	5-4"	6-0"							
B	8"	10"	1-2"	1-4"	1-6"	Y	1-0"	1-6"	2-0"	2-6"	3-0"	M	7"	8"	11"	1-4"	1-6"	T	3-0"	4-0"	4-9"	7-0"	9-6"	8	S	2-6"	2-9"	3-6"	2-6"	5-6"	8	T	3-0"	4-0"	4-9"	7-0"	9-6"	
C	10"	1-0"	1-3"	1-6"	1-8"	Z	8"	10"	1-2"	1-4"	1-6"	N	7"	8"	11"	1-4"	1-6"	16	R	2-0"	2-8"	4-0"	4-6"	5-0"	16	S	1-9"	2-3"	2-6"	3-2"	3-8"	16	T	2-6"	3-4"	4-0"	6-0"	8-6"
D	8"	10"	1-2"	1-6"	1-10"	X	1-0"	1-4"	1-6"	1-9"	2-6"	L	9"	1-0"	1-9"	2-6"	3-0"	32	R	1-6"	2-0"	3-0"	3-8"	4-3"	32	R	1-6"	2-0"	3-0"	3-8"	4-3"							
E	8"	10"	1-2"	1-6"	1-10"	Y	1-0"	1-4"	1-6"	1-9"	2-6"	M	7"	7"	8"	10"	1-2"	32	S	1-3"	1-9"	2-0"	2-4"	2-6"	32	S	1-3"	1-9"	2-0"	2-4"	2-6"							
						Z	8"	10"	1-2"	1-4"	1-6"	N	7"	7"	8"	10"	1-0"		T	2-0"	2-6"	3-0"	4-6"	5-9"		T	2-0"	2-6"	3-0"	4-6"	5-9"							

**THRUST BLOCKS**  
NOT TO SCALE

PROJECT  
**PARKSIDE SHOPPING CENTER**  
PLAT 44/3, LOTS 84,85,295 & 355  
1460 HARTFORD AVENUE  
JOHNSTON, RI

TODD A. BAKELLE  
REGISTERED PROFESSIONAL ENGINEER

APPLICANT  
**PICERNE HOLDING, LLC**  
75 LAMBERT LIND HIGHWAY  
WARWICK, RI 02886

**Gordon R. Archibald, Inc.**  
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DRAWING TITLE  
**DETAILS - 3**

NO.	DATE	REVISIONS

PROJECT NO.: 1677

DATE: FEBRUARY 2017

SCALE: AS NOTED

DRAWN BY: JLH

CHECKED BY: TAR

DRAWING NUMBER

**9**

SHEET 9 OF 11

FEB 13 2017





