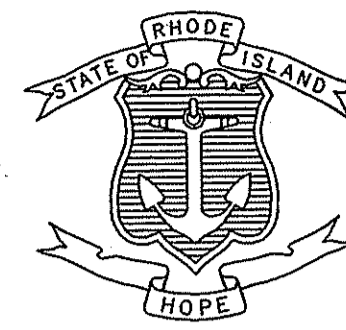


FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI			1	40

INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	STANDARD PLAN SYMBOLS & STANDARD LEGEND
3	STANDARD NOTES - 1
4	STANDARD NOTES - 2
5	JOB SPECIFIC PLAN SYMBOLS, LEGEND & NOTES
6	KEY PLAN
7	TYPICAL SECTIONS
8 - 31	DRAINAGE & UTILITY PLANS 1 - 24
32 & 33	TEMPORARY CROSSOVER DRAINAGE & UTILITY PLANS 1 & 2
34 - 37	TEMPORARY CROSSOVER PROFILES 1 - 4
38 & 39	EXISTING CONDITIONS PLANS 1 & 2
40	DRAINAGE DETAILS

STATE OF RHODE ISLAND



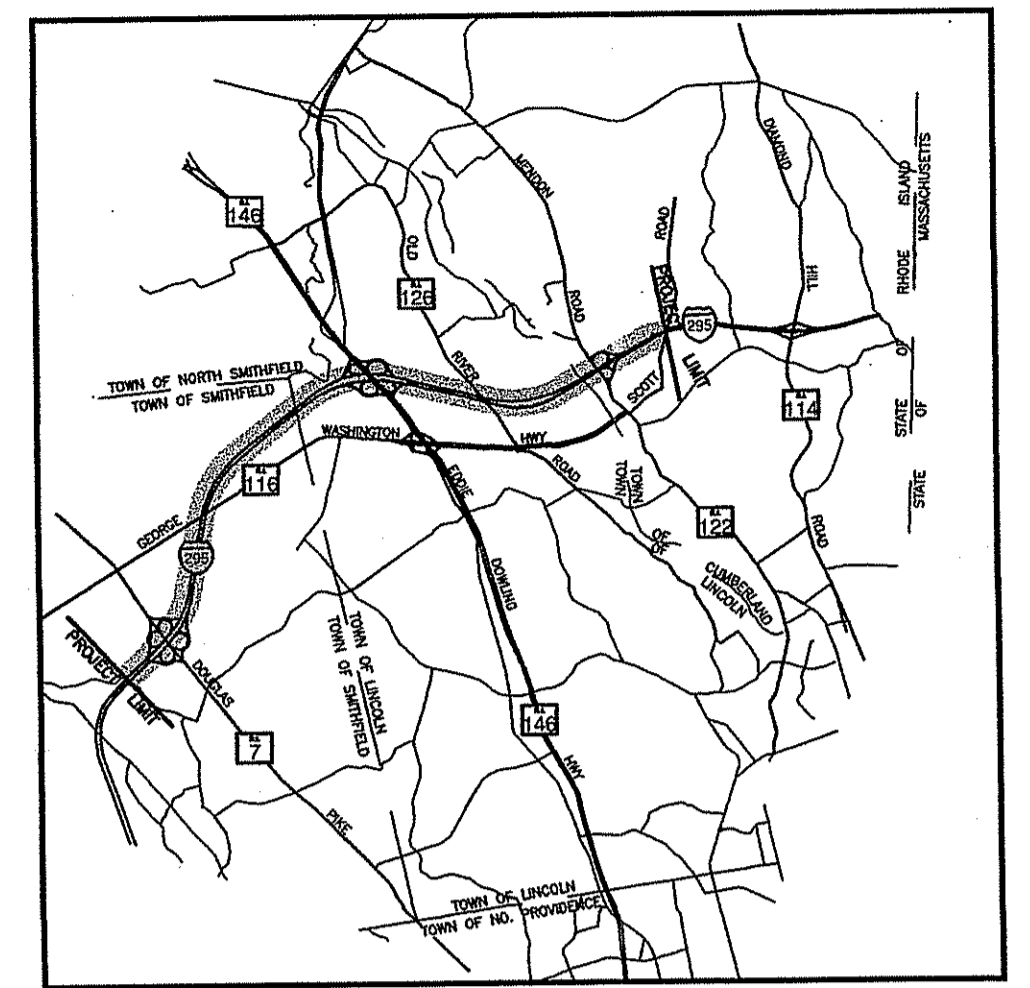
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED I-295

SAFETY IMPROVEMENTS - CONTRACT 3B

ROUTE 7 INTERCHANGE TO SCOTT ROAD

TOWNS OF SMITHFIELD, LINCOLN AND CUMBERLAND
COUNTY OF PROVIDENCE



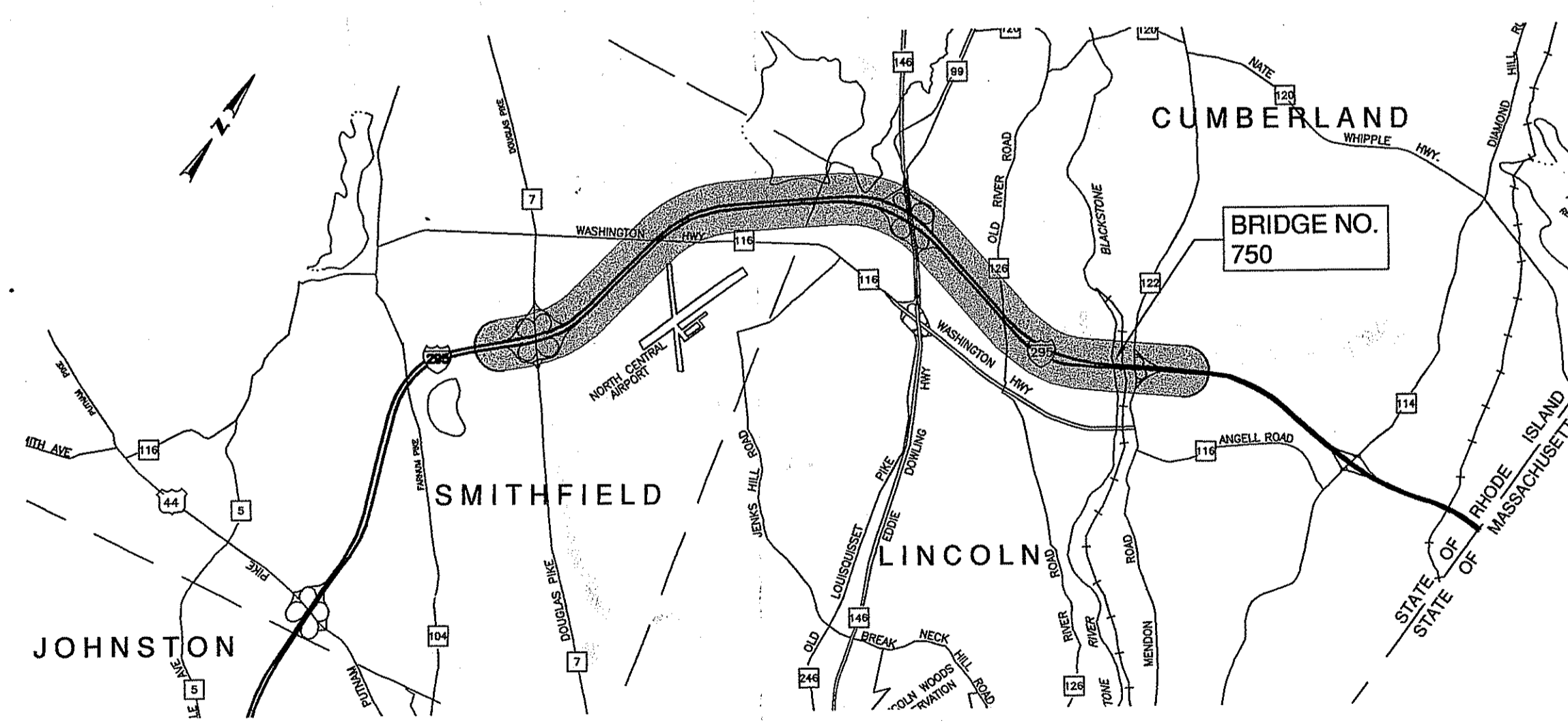
LOCATION MAP
N.T.S.

TEMPORARY PAVEMENT STRUCTURE

- 2" BITUMINOUS CONCRETE SURFACE COURSE TYPE I-1
- 5" BITUMINOUS CONCRETE BASE COURSE
- 12" (MINIMUM) GRAVEL BORROW SUBBASE COURSE

1.05 MILES

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS
SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION, AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISIONS.



LAYOUT PLAN
SCALE: 1"=1 mile

SCALES OF DRAWINGS

Plans	1 inch = 40 feet
Profiles	1 inch = 40 feet Horizontal
Profiles	1 inch = 8 feet Vertical

BASE OF LEVELS
NGVD 29



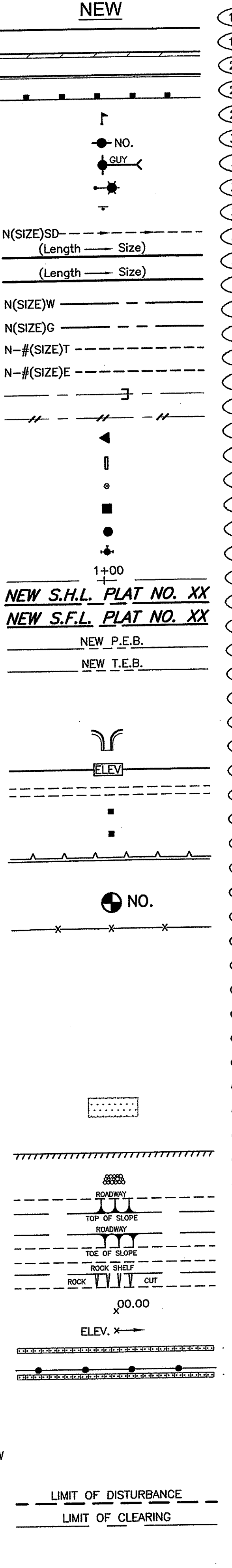
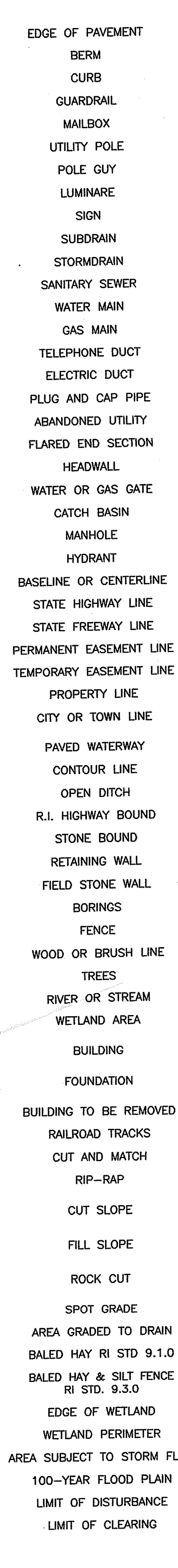
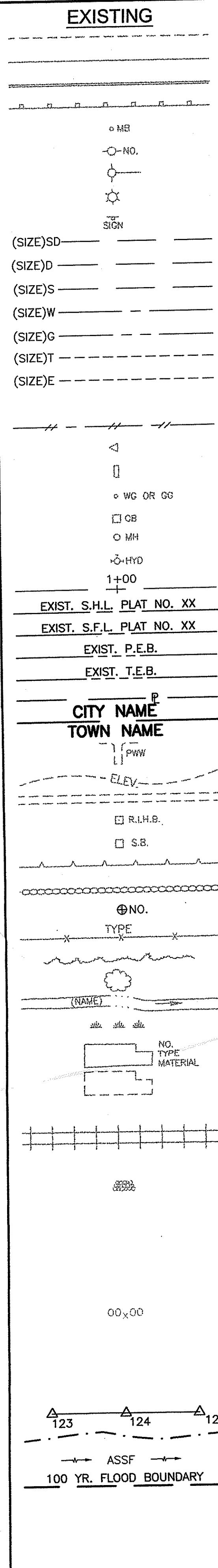
Contract Number _____
Number of Sheet 1
Total Sheets 40

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 08 2009 FILE # 09-0202
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.
Gregory D. Wenzel

R.I.D.E.M. APPLICATION SUBMISSION

R.I. DEPARTMENT OF TRANSPORTATION	
APPROVED	
DEPUTY CHIEF ENGINEER	DATE
APPROVED	
CHIEF ENGINEER	DATE
APPROVED	
DIRECTOR	DATE
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	
DIVISION ADMINISTRATOR	DATE

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.			2	XXX



- 1.1.0 UNDERDRAIN
- 1.3.0 CONCRETE CONNECTING COLLAR
- 2.1.0 CONCRETE HEADWALLS FOR PIPE CULVERTS
- 2.2.0 STANDARD HEADWALLS FOR MULTIPLE 3'-6" TO 7'-0" PIPE CULVERTS
- 2.3.0 (DIA.) PRECAST CONCRETE FLARED END SECTION
- 3.2.0 BRICK/SOLID BLOCK 4'-0" ROUND MANHOLE
- 3.2.1 (DIA.) BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND MANHOLE
- 3.3.0 BRICK/SOLID BLOCK TYPE "D" SQUARE CATCH BASIN
- 3.3.2 BRICK/SOLID BLOCK TYPE "F" SQUARE CATCH BASIN
- 3.3.3 SOLID BLOCK FLUSH SQUARE CATCH BASIN
- 3.4.0 BRICK/SOLID BLOCK TYPE "D" ROUND CATCH BASIN
- 3.4.1 BRICK/SOLID BLOCK ROUND CATCH BASIN WITH GUTTER INLET
- 3.4.2 BRICK/SOLID BLOCK TYPE "F" ROUND CATCH BASIN
- 3.4.3 BRICK/SOLID BLOCK TYPE "R" CATCH BASIN
- 3.4.4 SOLID BLOCK FLUSH ROUND CATCH BASIN
- 3.4.5 (DIA.) BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND CATCH BASIN
- 3.5.0 SOLID BLOCK SHALLOW TYPE "F" SQUARE CATCH BASIN
- 3.5.1 (SIZE) SOLID BLOCK SHALLOW 5'-0" OR 6'-0" SQUARE CATCH BASIN
- 3.6.0 BRICK/SOLID BLOCK DROP INLET
- 3.7.0 (DIA.) BRICK/SOLID BLOCK ROUND MANHOLE OR CATCH BASIN GREATER THAN 12'-0"
- 4.2.0 PRECAST 4'-0" ROUND MANHOLE
- 4.2.1 PRECAST 5'-0" ROUND MANHOLE
- 4.2.2 PRECAST 6'-0" ROUND MANHOLE
- 4.3.0 (SIZE) PRECAST 4'-0" OR 6'-0" SQUARE MANHOLE OR CATCH BASIN
- 4.4.0 (DIA.) PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN
- 4.5.0 PRECAST CONCRETE DROP INLET
- 4.5.1 PRECAST CONCRETE DROP INLET LATERAL OUTLET
- 4.5.2 PRECAST CONCRETE DROP INLET LONGITUDINAL OUTLET
- 5.3.0 CATCH BASIN AND MANHOLE STEP
- 5.4.0 CONCRETE COLLARS
- 6.1.0 LIGHT-DUTY SQUARE FRAME AND ROUND COVER
- 6.1.1 HEAVY DUTY SQUARE FRAME AND ROUND COVER
- 6.2.0 LIGHT-DUTY ROUND FRAME AND COVER
- 6.2.1 HEAVY-DUTY ROUND FRAME AND COVER
- 6.3.0 SQUARE FRAME AND GRATE
- 6.3.1 SQUARE FRAME AND GRATE
- 6.3.2 SQUARE FRAME AND GRATE (BICYCLE SAFE)
- 6.3.3 HIGH CAPACITY FRAME AND GRATE
- 6.3.4 HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE)
- 6.4.0 ROUND FRAME AND GRATE
- 7.1.0S PRECAST CONCRETE CURB (STRAIGHT)
- 7.1.0C PRECAST CONCRETE CURB (CIRCULAR)
- 7.1.1 3'-0" PRECAST CONCRETE TRANSITION CURB
- 7.1.2 6'-0" PRECAST CONCRETE TRANSITION CURB
- 7.1.4 PRECAST 2'-0" RADIUS CORNER
- 7.1.5 PRECAST CONCRETE INLET STONE (FOR SQUARE CATCH BASIN)
- 7.1.6 PRECAST CONCRETE INLET STONE (FOR ROUND CATCH BASIN)
- 7.1.8 PRECAST CONCRETE APRON STONE (FOR SQUARE CATCH BASIN)
- 7.2.0S PRECAST CONCRETE SLOPED FACE CURB (STRAIGHT)
- 7.2.0C PRECAST CONCRETE SLOPED FACE CURB (CIRCULAR)
- 7.2.1 PRECAST CONCRETE SLOPED FACE TRANSITION CURB
- 7.2.2 PRECAST CONCRETE TRANSITION CURB (VERTICAL FACE TO SLOPED FACE)
- 7.3.0S GRANITE CURB (STRAIGHT)
- 7.3.0C GRANITE CURB (CIRCULAR)
- 7.3.1 3'-0" GRANITE TRANSITION CURB
- 7.3.2 6'-0" GRANITE TRANSITION CURB
- 7.3.3 GRANITE WHEELCHAIR RAMP TRANSITION CURB
- 7.3.4 GRANITE 2'-0" RADIUS CORNER
- 7.3.5 GRANITE INLET STONE (FOR SQUARE CATCH BASIN)
- 7.3.6 GRANITE INLET STONE (FOR ROUND CATCH BASIN)
- 7.3.7 GRANITE APRON STONE (FOR SQUARE CATCH BASIN)
- 7.3.8 GRANITE APRON STONE (FOR ROUND CATCH BASIN)
- 7.4.0 GRANITE SLOPED FACE CURB
- 7.4.1 GRANITE SLOPED FACE TRANSITION CURB

- 7.4.2 GRANITE TRANSITION CURB (VERTICAL FACE TO SLOPE FACE)
- 7.5.0 BITUMINOUS CONCRETE LIP CURB
- 7.5.1A BITUMINOUS BERM (CONSTRUCTION METHOD A)
- 7.5.1B BITUMINOUS BERM (CONSTRUCTION METHOD B)
- 7.6.0 CURB SETTING DETAIL
- 8.2.0 BITUMINOUS CONCRETE DITCH
- 8.3.0 RIP-RAP DITCH
- 8.4.0 PAVED WATERWAY
- 9.1.0 BALED HAY EROSION CHECK
- 9.2.0 SILT FENCE DETAIL
- 9.3.0 BALED HAY DITCH EROSION CHECK AND SILT FENCE COMBINED
- 9.4.0 BALED HAY DITCH AND SWALE EROSION CHECK
- 9.5.0 LOG AND HAY CHECK DAM
- 9.7.0 DEWATERING BASIN
- 9.8.0 BALED HAY CATCH BASIN INLET PROTECTION
- 9.9.0 CONSTRUCTION ACCESS
- 10.1.0 WET STONE MASONRY RETAINING WALL
- 10.2.0 RUBBLE MASONRY WALL
- 10.3.0 CONCRETE RETAINING WALL
- 10.4.0 STONE MASONRY STEPS
- 14.1.0 CONCRETE HIGHWAY BOUND
- 15.1.0 POST AND MOUNTINGS FOR RURAL MAILBOX
- 15.2.0 (NO.) POST AND MULTIPLE MOUNTINGS FOR RURAL MAILBOXES
- 18.2.0 PRECAST TYPE "A" HANDHOLE
- 18.3.0 HEAVY DUTY TYPE "H" HANDHOLE
- 20.2.0 ALUMINUM LIGHTING STANDARDS
- 24.6.1 BI-DIRECTIONAL CONTROL DEVICE
- 26.2.0 STREET SIGN MOUNTING DETAIL
- 26.3.0 POLYETHYLENE DRUM WITH MARKINGS
- 31.1.0 PVC PLASTIC PIPE TYPE III BARRICADE
- 31.2.0 CHAIN LINK FENCE 3'-0" TO 4'-0"
- 31.2.1 CHAIN LINK FENCE 5'-0" TO 6'-0"
- 31.3.0 CHAIN LINK FENCE 5'-0" TO 6'-0" INTERMEDIATE POST
- 34.1.0 WOVEN WIRE RIGHT-OF-WAY FENCE (STEEL POST)
- 34.2.0 TYPICAL GUARDRAIL INSTALLATION
- 34.2.1 STEEL BEAM GUARDRAIL
- 34.2.2 STEEL BEAM GUARDRAIL DETAILS
- 34.2.3 STEEL BEAM GUARDRAIL DOUBLE FACED ASSEMBLY
- 34.2.5 STEEL BEAM GUARDRAIL REFLECTORIZED TRIANGULAR DELINEATOR
- 34.3.1 GUARDRAIL END SECTION
- 34.3.2 TERMINAL END SECTION (SINGLE FACE)
- 34.3.3 ANCHORAGE DETAILS APPROACH END SECTION
- 34.3.4 ANCHORAGE DETAILS TRAILING END SECTION
- 34.4.0 STEEL BACKED TIMBER GUARDRAIL
- 34.4.1 STEEL BACKED TIMBER GUARDRAIL TERMINAL SECTION-TYPE 1
- 40.1.0 DOUBLE-FACED PRECAST MEDIAN BARRIER
- 40.2.0 SINGLE-FACED PRECAST MEDIAN BARRIER
- 40.2.1 SINGLE-FACED PRECAST MEDIAN BARRIER
- 40.3.0 PRECAST MEDIAN BARRIER TRANSITION UNIT
- 40.5.0 PRECAST MEDIAN BARRIER FOR TEMPORARY TRAFFIC CONTROL
- 43.1.0 CEMENT CONCRETE SIDEWALK
- 43.2.0 BITUMINOUS CONCRETE SIDEWALK
- 43.3.0 WHEELCHAIR RAMP
- 43.3.1 WHEELCHAIR RAMP FOR LIMITED RIGHT-OF-WAY AREAS
- 43.4.0 DRIVEWAY DEVELOPMENT FOR 3'-0" TRANSITION CURB
- 43.4.1 DRIVEWAY DEVELOPMENT FOR 6'-0" TRANSITION CURB
- 43.5.0 CEMENT CONCRETE DRIVEWAYS
- 48.1.0 DETECTABLE WARNING SYSTEM
- 51.1.0 TREE PROTECTION DEVICE
- 51.1.1 DRIP LINE TREE PROTECTION DEVICE FOR EXISTING TREES
- 51.2.0 SHRUB PROTECTION DEVICE
- 51.3.0 TREE WELL
- 51.4.0 TREE WALL

- AB ADJUST CATCH BASIN TO GRADE
- ABM ADJUST CATCH BASIN TO MANHOLE
- AC ADJUST CURB STOP TO GRADE
- AD ADJUST DRAINAGE MANHOLE TO GRADE
- AE ADJUST ELECTRIC MANHOLE TO GRADE
- AFC ADJUST FRAME AND COVER TO GRADE
- AFG ADJUST FRAME AND GRATE TO GRADE
- AG ADJUST GAS GATE BOX TO GRADE
- AHH ADJUST HANDHOLE TO GRADE
- AS ADJUST SANITARY SEWER MANHOLE TO GRADE
- AT ADJUST TELEPHONE MANHOLE TO GRADE
- AW ADJUST WATER GATE BOX TO GRADE
- BCD BITUMINOUS CONCRETE DRIVEWAY
- 3" BITUMINOUS CONCRETE TYPE I-2
- 8" GRAVEL BORROW SUBBASE COURSE
- BPS BUILD NEW STRUCTURE OVER EXISTING PIPE
- CCB CLEAN CATCH BASIN
- CCP CUT AND CAP PIPE WITH RESTRAINT (ALL SIZES)
- CFP CLEAN AND FLUSH PIPE
- CG CLEARING AND GRUBBING
- CMH CLEAN MANHOLE
- CP (DEPTH) COLD PLANE
- CPP CUT AND PLUG PIPE (ALL TYPES, ALL SIZES)
- DB REMOVE AND DISPOSE BITUMINOUS CURB
- DC REMOVE AND DISPOSE CONCRETE CURB
- DCB REMOVE AND DISPOSE CATCH BASIN
- DDI REMOVE AND DISPOSE DROP INLET
- DF REMOVE AND DISPOSE FENCE
- DFC REMOVE AND DISPOSE FRAME AND COVER
- DFE REMOVE AND DISPOSE FLARED END SECTION
- DFG REMOVE AND DISPOSE FRAME AND GRATE
- DFH REMOVE AND DISPOSE FIRE HYDRANT
- DFP REMOVE AND DISPOSE FLEXIBLE PAVEMENT
- DG REMOVE AND DISPOSE GUARDRAIL
- DH REMOVE AND DISPOSE HEADWALL
- DHB REMOVE AND DISPOSE HIGHWAY BOUND
- DHH REMOVE AND DISPOSE HANDHOLE
- DL REMOVE AND DISPOSE LIGHT AND FOUNDATION
- DMB REMOVE AND DISPOSE MEDIAN BARRIER
- DMH REMOVE AND DISPOSE MANHOLE
- DMM REMOVE AND DISPOSE MEDIAN MARKER
- DOW REMOVE AND DISPOSE OBSERVATION WELL
- DP REMOVE AND DISPOSE PIPE
- DPB REMOVE AND DISPOSE PAVEMENT AND RIGID BASE
- DRB REMOVE AND DISPOSE RIGID BASE
- DS REMOVE AND DISPOSE SIGN
- DSS REMOVE AND DISPOSE TRAFFIC SIGNAL SYSTEM
- DSW REMOVE AND DISPOSE SIDEWALK
- DTD REMOVE AND DISPOSE TELEPHONE DUCT BANKS
- DUP REMOVE AND DISPOSE UTILITY POLE
- DWW REMOVE AND DISPOSE PAVED WATERWAY
- FF FILTER FABRIC RIPRAP FLARED END UNDERLAYMENT
- GET FLARED GUARDRAIL END TREATMENT
- IA IMPACT ATTENUATOR
- IDL IMPERVIOUS DITCH LINER
- LOD LIMIT OF DISTURBANCE
- LOR LIMIT OF REGRADING
- LS 4" LOAM AND SEED

- NFH NEW FIRE HYDRANT WITH GATE VALVE
- NIC NOT IN THIS CONSTRUCTION CONTRACT
- NWB FURNISH AND INSTALL NEW WATER GATE VALVE BOX
- NWVB FURNISH AND INSTALL NEW WATER GATE VALVE AND BOX
- NWCB FURNISH AND INSTALL NEW WATER CURB STOP BOX
- NWSB FURNISH AND INSTALL NEW WATER CURB STOP AND BOX
- PCD PERMANENT CHECK DAM
- PS 4" PLANTABLE SOIL AND SEED
- RCB RECONSTRUCT TYPE "D" CATCH BASIN, TO CATCH BASIN WITH GUTTER INLET
- RCM R.I.D.O.T. COMMUNICATIONS MANHOLE
- RHH REMOVE, HANDLE, HAUL, TRIM, RESET CURB EDGING, STRAIGHT, CIRCULAR (ALL TYPES)
- RLP RELOCATE LAMP POST
- RMB RELOCATE MAILBOX (BY OTHERS)
- RPM REMOVE PAVEMENT MARKINGS
- RRP RIP-RAP PAD (SEE DETAIL)
- RRS REMOVE AND RELOCATE SIGN
- RUP RELOCATE UTILITY POLE (BY OTHERS)
- SB STONE BAFFLE
- SBAE STEEL BEAM BRIDGE CONNECTION APPROACH END (W/O NESTED RAIL)
- SBTE STEEL BEAM BRIDGE CONNECTION TRAILING END (W/NESTED RAIL)
- SD- STRUCTURAL DISPOSITION - SEE CS PAGES OF SPECIFICATION
- SF REMOVE AND STOCKPILE FENCE
- SGA SPECIAL GRADED AGGREGATE
- SGC REMOVE AND STOCKPILE GRANITE CURB
- SGR REMOVE AND STOCKPILE GUARDRAIL
- SH REMOVE AND STOCKPILE HYDRANT
- SS REMOVE AND STOCKPILE SIGN
- STS REMOVE AND STOCKPILE TRAFFIC SIGNAL SYSTEM
- TB CONCRETE THRUST BLOCK
- TEP TIE EXISTING PIPE INTO NEW STRUCTURE
- TNP TIE NEW PIPE INTO EXISTING STRUCTURE
- TBT THRIE BEAM TRANSITION
- TBBC THRIE BEAM BRIDGE CONNECTION
- TT TREE TRIMMING
- WCM 4" WOOD CHIP MULCH
- 4DY 4" EPOXY RESIN PAVEMENT MARKINGS - DOUBLE YELLOW
- 6W 6" EPOXY RESIN PAVEMENT MARKINGS - WHITE
- 12W 12" EPOXY RESIN PAVEMENT MARKINGS - WHITE
- 6WT 6" PREFORMED PATTERNED MARKING (HIGH PERFORMANCE TAPE)
- 4Y 4" EPOXY RESIN PAVEMENT MARKINGS - YELLOW
- 6Y 6" EPOXY RESIN PAVEMENT MARKINGS - YELLOW
- P.G.L. PROFILE GRADE LINE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 08 2008 FILE # 09-202
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

THIS PLAN SHALL NOT BE ALTERED

REVISIONS		
NO.	DATE	BY
1	6/07	TRB

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
**I-295 SAFETY IMPROVEMENTS
CONTRACT 3B**
ROUTE 7 INTERCHANGE TO SCOTT ROAD
SMITHFIELD, LINCOLN & CUMBERLAND, RI

**STANDARD PLAN SYMBOLS &
STANDARD LEGEND**

CHECKED BY _____ DATE _____ SCALE NO SCALE

Gordon R. Archibald, Inc.
Professional Engineers
Pawtucket, RI

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.			3	XXX

GENERAL NOTES:

- ANY DAMAGE TO EXISTING PAVEMENT, BRIDGES, CONDUIT, SIDEWALK, FENCES, ETC., CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
- THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIAL AS FAR AWAY AS POSSIBLE FROM THE EDGE OF THE TRAVEL LANE SO AS NOT TO CAUSE A SAFETY HAZARD, IN ACCORDANCE WITH SECTION 106.06 OF THE R.I.D.O.T. STANDARD SPECIFICATION, LATEST EDITION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXISTING CONDITIONS ARE NOT OBLITERATED BEFORE CONTROL POINTS ARE LOCATED AND CONSTRUCTION LAYOUT IS ESTABLISHED. THE CONSTRUCTION LAYOUT SHALL BE PROVIDED IN SUFFICIENT DETAIL, THEREBY ENABLING HIM TO CONSTRUCT THE PROJECT IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. SURVEY WILL BE PROVIDED BY THE CONTRACTOR. THE RESIDENT ENGINEER WILL NOT AUTHORIZE CONSTRUCTION ACTIVITIES TO BEGIN UNTIL HE IS SATISFIED THAT ALL GROUND CONTROL HAS BEEN ESTABLISHED, TIED DOWN, AND DULY RECORDED IN STANDARD FIELD BOOKS.
- ALL R.I. STD. 9.9.0 CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.
- THE FREQUENCY AND APPLICATION RATES FOR THE DUST CONTROL ITEMS WILL BE AS DIRECTED BY THE ENGINEER.
- ALL SIDEWALK AND DRIVEWAYS DESIGNATED FOR REPLACEMENT SHALL BE CUT AND MATCHED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ASPHALT EMULSION TACK COAT SHALL BE PLACED PRIOR TO PAVEMENT PLACEMENT ON THE CONCRETE BASE OR COLD PLANED PAVEMENT, AND ON ANY NEW COURSE WHICH HAS BEEN OPEN TO TRAFFIC, OR ANY NEW COURSE WHICH HAS BEEN EXPOSED FOR MORE THAN 3 DAYS, AND/OR AS DIRECTED BY THE ENGINEER. IT SHALL ALSO BE APPLIED TO VERTICAL PAVEMENT FACES BETWEEN ADJOINING PAVEMENT SECTIONS. ALL APPLICATIONS ON BOTH HORIZONTAL AND VERTICAL SURFACES SHALL BE PAID FOR UNDER THE CONTRACT UNIT BID PRICE FOR CODE 403.0300 "ASPHALT EMULSION TACK COAT."
- THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND PLACING, AT HIS OWN EXPENSE, PLANTABLE SOIL AND SEED IN AREAS WHICH ARE OUTSIDE OF THE PROJECT'S AREAS OF DISTURBANCE AND WHICH ARE IMPACTED BY CONSTRUCTION OPERATIONS INCLUDING THOSE AREAS WHERE VEHICLES, EQUIPMENT AND MATERIALS ARE STORED WITH THE PERMISSION OF THE ENGINEER.
- UNDER NO CIRCUMSTANCE WILL THE CONTRACTOR BE ALLOWED TO STOCKPILE REMOVED PAVEMENT MATERIALS WITHIN THE PROJECT LIMITS.
- CLEANING AND SWEEPING OF PAVEMENT WILL INCLUDE REMOVAL OF ALL PAVEMENT DEBRIS PRIOR TO THE PLACEMENT OF EACH BITUMINOUS PAVEMENT LIFT. ALL CLEANING AND SWEEPING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER.
- PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE APPROVED OR MODIFIED BY THE ENGINEER.
- THE COORDINATE SYSTEM IS THE R.I. STANDARD GRID SYSTEM, NAD 83. THE VERTICAL CONTROL IS NGVD 29.
- PAVEMENT OPERATIONS FOR CURBED SECTIONS: IN AREAS WHERE CURBING IS SET TO FINISH LINE AND GRADE, THE CONTRACTOR WILL NOT BE REQUIRED TO UTILIZE THE SENSOR AND SKY-TYPE DEVICE FOR AUTOMATIC GRADE CONTROL, BUT WILL BE ALLOWED TO MANUALLY ADJUST THE BITUMINOUS PAVER FOR CONTROLLING GRADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ROADWAYS FREE OF DEBRIS RESULTING FROM THEIR CONSTRUCTION OPERATIONS. ALL DEBRIS SHALL BE REMOVED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.
- NO FUEL STORAGE, VEHICLE REFUELING, OR EQUIPMENT STORAGE SHALL TAKE PLACE IN DESIGNATED WETLANDS, NOR WITHIN 100' OF ANY WATER BODY. THIS REQUIREMENT SHALL NOT SUPERSEDE ANY FEDERAL, STATE OR LOCAL LAW, ORDINANCE, RULE OR REGULATION THAT APPLIES TO THE SAME, UNLESS THIS REQUIREMENT IS MORE STRINGENT THAN SAID LAW, ORDINANCE, RULE OR REGULATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT AT THE END OF FINAL PAVING OPERATIONS, FLOW TO EXISTING DRAINAGE STRUCTURES HAS BEEN REESTABLISHED AND THAT NO ISOLATED DEPRESSIONS REMAIN. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO PAVING AND COLD PLANING OPERATIONS.
- ALL EMBANKMENTS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 12" (AFTER COMPACTION) AND SHALL BE COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED. ALSO, EMBANKMENT CONSTRUCTION SHALL CONFORM TO SECTION 202.03.2 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- IF THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE, AS DESIGNATED ON THE COVERSHEET, THE CONTRACTOR IS ADVISED THAT UPON 12 (TWELVE) HOURS NOTICE THE ROADWAY SHALL BE OPEN TO EVACUEES AND EMERGENCY PERSONNEL. ANY EXTRA WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.
- THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS STATED IN THE ENVIRONMENTAL APPROVALS ISSUED FOR THE PROJECT FROM THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM), AND/OR THE ARMY CORPS OF ENGINEERS (ACOE), AND/OR THE COASTAL RESOURCES MANAGEMENT COUNCIL (CRMC). COPIES OF EACH OF THESE PERMITS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH THESE CONDITIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
- FOR ALL PROJECTS INVOLVING KNOWN SITE REMEDIATION ISSUES, THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE CONSTRUCTION RELATED PROVISIONS, CONDITIONS, AND STIPULATIONS OF ANY REMEDIAL PLANS DEVELOPED FOR THE PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH THE COMPLIANCE WITH THESE DOCUMENTS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
- NO UNPROTECTED CONSTRUCTED FEATURE MAY PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. HEADWALL, DRAINAGE INLET, ETC.
- THE REMAINING SECTION OR STUB OF A BREAKAWAY BASE MAY NOT PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. SIGN POSTS, LIGHT POLES, FIRE HYDRANTS, ETC.

DRAINAGE AND EROSION CONTROL NOTES:

- FOR ALL PROJECTS WITH AT LEAST ONE(1) ACRE OF SOIL DISTURBANCE. R.I.D.O.T. IS REQUIRED TO DEVELOP AND ENFORCE A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ORDER TO REMAIN IN COMPLIANCE WITH THE RIDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS OF THE GENERAL PERMIT AND THE SITE SPECIFIC SWPPP FOR THIS PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH ADHERENCE TO THE SWPPP SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
- NO UNDISTURBED AREAS SHALL BE CLEARED OF EXISTING VEGETATION AFTER OCTOBER 15 OF ANY CALENDAR YEAR OR DURING ANY PERIOD OF FULL OR LIMITED WINTER SHUTDOWN. ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEED OR PROTECTED BY THAT DATE. ANY SUCH AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION, AS DETERMINED BY THE RESIDENT ENGINEER OR ENVIRONMENTAL INSPECTOR, BY NOVEMBER 15 OF ANY CALENDAR YEAR, MUST BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATTING OR HAY MULCH, IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15 THROUGH APRIL 15, CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THAT DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE REESTABLISHED WITHIN 5 WORKING DAYS. ANY WORK TO CORRECT PROBLEMS RESULTING FROM FAILURE TO COMPLY WITH THIS PROVISION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THERE WILL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 2 WEEKS OF FINAL GRADING.
- STOCKPILES OF MATERIAL SHALL NOT BE LOCATED WITHIN REGULATED WETLANDS OR BUFFER ZONE AREAS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES OF ERODABLE MATERIAL SHALL ALSO BE SEED AND RINGED WITH R.I. STD. 9.1.0 TO STABILIZE.
- IF THE PLANS INCLUDE SPECIFIC AREAS FOR PLACEMENT OF CONSTRUCTION DEWATERING BASINS AND/OR EQUIPMENT AND MATERIALS STORAGE AND STOCKPILING, AND IF THE CONTRACTOR ELECTS TO UTILIZE ANY OTHER AREAS FOR THESE PURPOSES, THIS SHALL BE APPROVED BY THE ENGINEER ONLY AFTER OBTAINING ANY NECESSARY PERMITS AND/OR PERMIT MODIFICATIONS FROM THE APPROPRIATE REGULATORY AUTHORITY(IES). ANY PERMITTING REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE ACCOMPLISHED AT NO COST TO THE STATE. THE ENGINEER WILL COORDINATE SUBMISSION OF ANY REQUIRED PERMIT APPLICATION MATERIALS WITH THE R.I.D.O.T. OFFICE OF ENVIRONMENTAL PROGRAMS.
- JUTE MESH SHALL BE USED TO STABILIZE PLANTABLE SOIL AND/OR LOAM IN ALL DITCHES, ON ALL SLOPES ADJACENT TO WETLANDS AND WETLAND PERIMETERS, AND ON ALL SLOPES WITHIN WATER QUALITY BASINS. JUTE MESH IN DITCHES SHALL EXTEND TO AN ELEVATION 2 FEET ABOVE THE BOTTOM OF THE DITCH.
- SEEDING ON ALL SLOPES 3 TO 1 OR STEEPER SHALL CONSIST OF THE FOLLOWING APPLICATIONS UNLESS CHANGED IN THE CONTRACT.
 - SEEDING TYPE I.
 - ADHESIVE MULCH STABILIZER
- UNVEGETATED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR PERIODS IN EXCESS OF 2 WEEKS OR THROUGH THE INACTIVE WINTER SEASON.
- PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING PIPES AND/OR STRUCTURES WHICH ARE TO BE CONNECTED. ANY VARIATION FOUND FROM THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION. WORK CAN COMMENCE ONLY UPON THE ENGINEER'S AUTHORIZATION.
- ALL DRAINAGE AND UTILITY STRUCTURES WITHIN THE PAVED ROADWAY SHALL BE ADJUSTED TO GRADE WITH THE SURROUNDING PAVEMENT PRIOR TO THE WINTER SHUTDOWN.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL THROUGHOUT THE WORK AREA.
- CATCH BASIN RIM GRADES NOTED ON PLANS ARE DEPRESSED 0.1' LOWER THAN THE GUTTER GRADE. RIM ELEVATIONS SHOWN ARE FINAL GRADES. THE CONTRACTOR SHALL PLACE FRAMES AND GRATES 0.1' BELOW THE GRADE CONSTRUCTED IN THIS CONTRACT OR AS DIRECTED BY THE ENGINEER.
- PROVISIONS FOR CLEARING TO ACCESS OUTFALLS DURING THE CLEANING AND FLUSHING OF THE CLOSED DRAINAGE SYSTEM SHALL BE KEPT TO A MINIMUM.
 - ANY VEGETATIVE CLEARING SHALL BE LIMITED TO BRUSH AND TREES LESS THAN 3" DIAMETER.
 - NO HEAVY EQUIPMENT MAY ENCROACH UPON VEGETATED PERIMETER OR RIVERBANK WETLANDS AS WELL AS BIOLOGICAL WETLANDS.
- THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL DEVICES FOR OUTLET PROTECTION PRIOR TO CLEANING AND FLUSHING STORM WATER DRAINAGE. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL FLUSHED SEDIMENTS ARE REMOVED. AT ALL OUTFALL LOCATIONS WHERE PIPES ARE TO BE CLEANED AND FLUSHED, OUTLET PROTECTION (R.I. STD. 9.1.0 OR 9.3.0) SHALL BE INSTALLED TO TRAP SEDIMENTS. THESE SEDIMENTS SHALL THEN BE REMOVED AND DISPOSED OF LEGALLY BEFORE THE OUTLET PROTECTION DEVICES ARE REMOVED. IF OUTLET PROTECTION AT THE OUTFALL IS NOT FEASIBLE, THEN THE OUTLET PIPE OF THE LAST DRAINAGE STRUCTURE TO BE CLEANED SHALL BE PLUGGED TO CAPTURE ALL MATERIALS FLUSHED FROM PIPES. AFTER THE MATERIALS ARE REMOVED FROM THE DRAINAGE STRUCTURE, THE OUTLET SHALL BE UNPLUGGED TO RESUME NORMAL FUNCTIONING.
- R.I. STD. 9.8.0 BALED HAY INLET PROTECTION SHALL BE INSTALLED AT ALL CATCH BASINS AND INLETS WHENEVER SUBBASE IS EXPOSED, AND SHALL REMAIN IN PLACE UNTIL THE ABUTTING GROUND SURFACES ARE STABILIZED.
- WHERE BALED HAY INLET PROTECTION AND SILT FENCES ARE USED AT CATCH BASINS, THEY SHALL BE REMOVED AT THE END OF THE PROJECT OR AS DIRECTED BY THE ENGINEER IN ORDER TO PREVENT CLOGGING OF THE INLET.

DRAINAGE AND EROSION CONTROL NOTES (CONTINUED):

- DETENTION AND RETENTION BASINS MAY BE ROUGH GRADED AND STABILIZED WITH VEGETATION AND/OR OTHER EROSION CONTROL MEASURES AS REQUIRED BY THE ENGINEER PRIOR TO USE AS TEMPORARY SEDIMENTATION BASINS DURING PROJECT CONSTRUCTION. FINAL BASIN CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL SOURCES OF SEDIMENT HAVE BEEN ELIMINATED, FINAL ROADSIDE VEGETATION IS ESTABLISHED AND USE OF TEMPORARY BASINS IS NO LONGER REQUIRED AS DIRECTED BY THE ENGINEER. ANY ISSUES RELATING TO EROSION AND/OR SEDIMENT TRANSPORT INTO WETLAND AREAS RESULTING FROM SUCH USE OF SEDIMENTATION BASINS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY CORRECTIVE ACTION REQUIRED TO RESOLVE SUCH ISSUES SHALL BE COMPLETED BY THE CONTRACTOR.
- THE TOE OF ANY FILL SLOPE IS TO REMAIN AT LEAST 1' INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROL MEASURES WITH MATERIAL. ANY MATERIAL THAT IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR, OR ANY AGENT OF THE CONTRACTOR, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS ACCOMPLISHED.
- PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THOSE AREAS INDICATED ON THE PLANS. CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS, HOWEVER NO GRUBBING, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO INSTALLATION. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS.
- ALL HAY BALES, SILT FENCE OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. TEMPORARY SEED WILL CONFORM TO R.I.D.O.T. STANDARD TEMPORARY SEED MIX.
- 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 TO THE STATE.
- THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE SPECIFIED IN SUBSECTION L.02.03 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- ADDITIONAL EROSION CONTROLS, SHALL BE INSTALLED AS DIRECTED BY THE RESIDENT ENGINEER. THESE ADDITIONAL ITEMS WILL BE PAID AT THE UNIT PRICE FOR THAT BID ITEM.

UTILITY NOTES:

- EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE NOT SHOWN. CONTRACTOR IS TO ASSUME SERVICES ARE PRESENT TO ALL BUILDINGS.
- 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 CONTRACTOR'S 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 ADDITIONAL COST TO THE STATE.
- ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CAPPED.
- EXISTING WATER SERVICES SHALL BE RECONNECTED TO THE NEW WATER MAINS.
- UTILITY SERVICE CONNECTIONS SHALL BE MAINTAINED TO ALL EXISTING FACILITIES TO REMAIN.
- FIRE HYDRANTS SHALL NOT BE REMOVED FROM SERVICE WITHOUT WRITTEN AUTHORIZATION FROM THE FIRE DEPARTMENT OR THE WATER AUTHORITY.
- ALL NEW WATER LINES SHALL BE DISINFECTED TO THE SATISFACTION OF THE WATER AUTHORITY IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL UTILITY POLE RELATED WORK SHALL BE BY OTHERS.

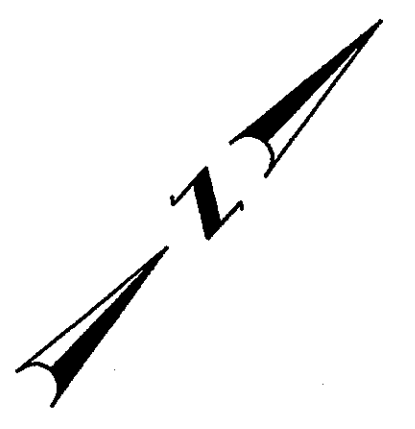
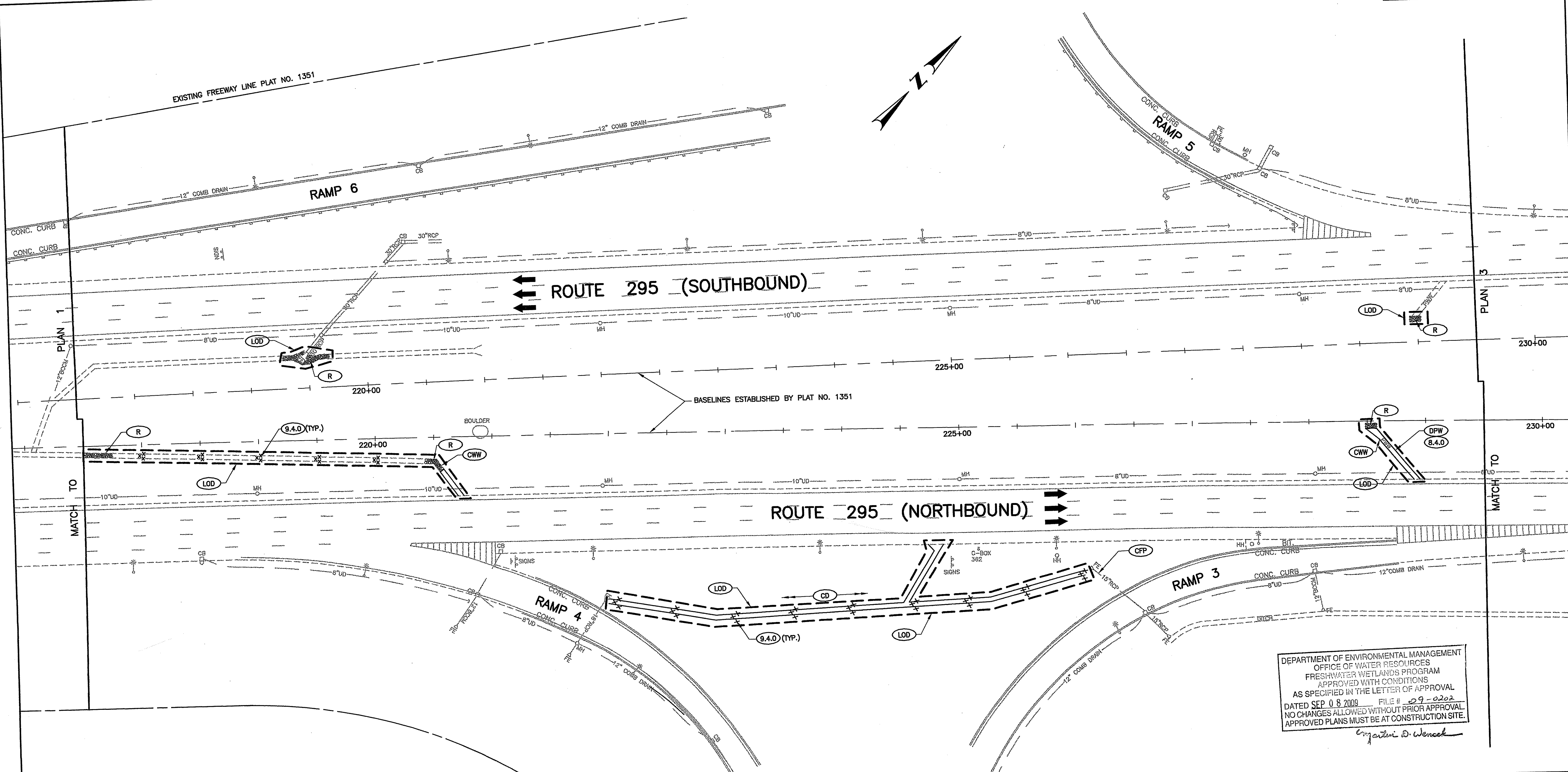
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 08 2009 FILE # 09-0202
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.
Elizabeth D. Wenzel

THIS PLAN SHALL NOT BE ALTERED

RHODE ISLAND DEPARTMENT OF TRANSPORTATION I-295 SAFETY IMPROVEMENTS CONTRACT 3B ROUTE 7 INTERCHANGE TO SCOTT ROAD SMITHFIELD, LINCOLN & CUMBERLAND, RI		
STANDARD NOTES - 1		
CHECKED BY _____ DATE _____ SCALE NO SCALE		

GORDON R. ARCHIBALD, INC.
Professional Engineers
Pawtucket, RI

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.			XXX	



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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DATED SEP 08 2009 FILE # 09-0202
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Ernestine D. Wencel

NOTE:
PLAN SCALE:
THESE PLANS WERE PREPARED SOLELY AS A GUIDE FOR THE CONTRACTOR IN DEFINING LIMITS OF WORK AND GENERAL LOCATION OF THE PROPOSED IMPROVEMENTS. THEY WERE COMPILED FROM EXISTING RIDOT CONSTRUCTION DRAWINGS. THEY ARE NOT TRUE TO SCALE. ACCORDINGLY, ALL DIMENSIONS AND DISTANCES SHOULD BE VERIFIED AND/OR ADJUSTED IN THE FIELD, AS REQUIRED, TO PROPERLY ACCOMPLISH THE INTENT OF THE DESIGN.

REVISIONS		
NO.	DATE	BY

**RHODE ISLAND
DEPARTMENT OF TRANSPORTATION**

**I-295 SAFETY IMPROVEMENTS
CONTRACT 3B**

ROUTE 7 INTERCHANGE TO SCOTT ROAD
SMITHFIELD, LINCOLN & CUMBERLAND, RI

DRAINAGE & UTILITY PLAN 2

STA. 217+50 TO STA. 229+50

CHECKED BY _____ DATE _____ SCALE 1"=40'

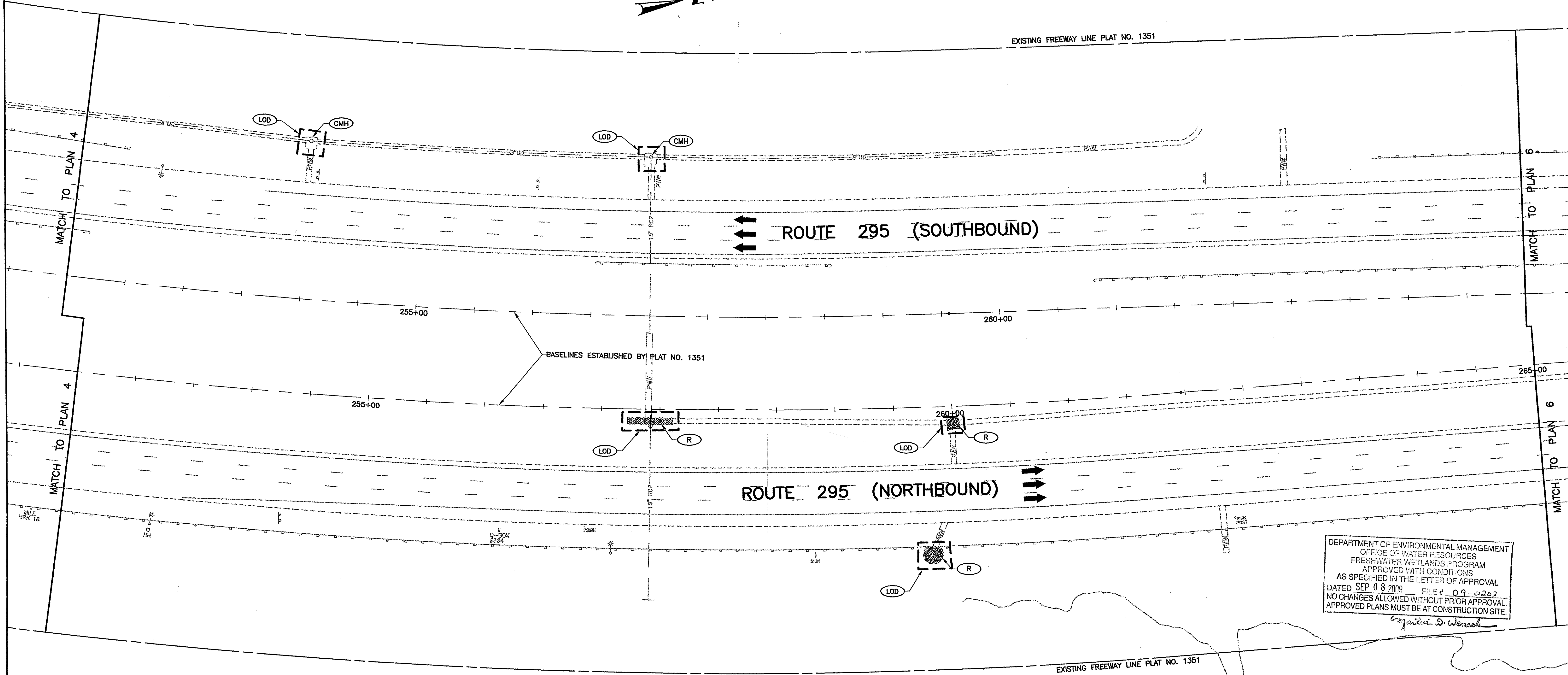
Gordon R. Archibald, Inc.
Professional Engineers
Pawtucket, RI

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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.			XXX	XXX



EXISTING FREEWAY LINE PLAT NO. 1351



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
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Ernest D. Wenzel

NOTE:

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REVISIONS		
NO.	DATE	BY

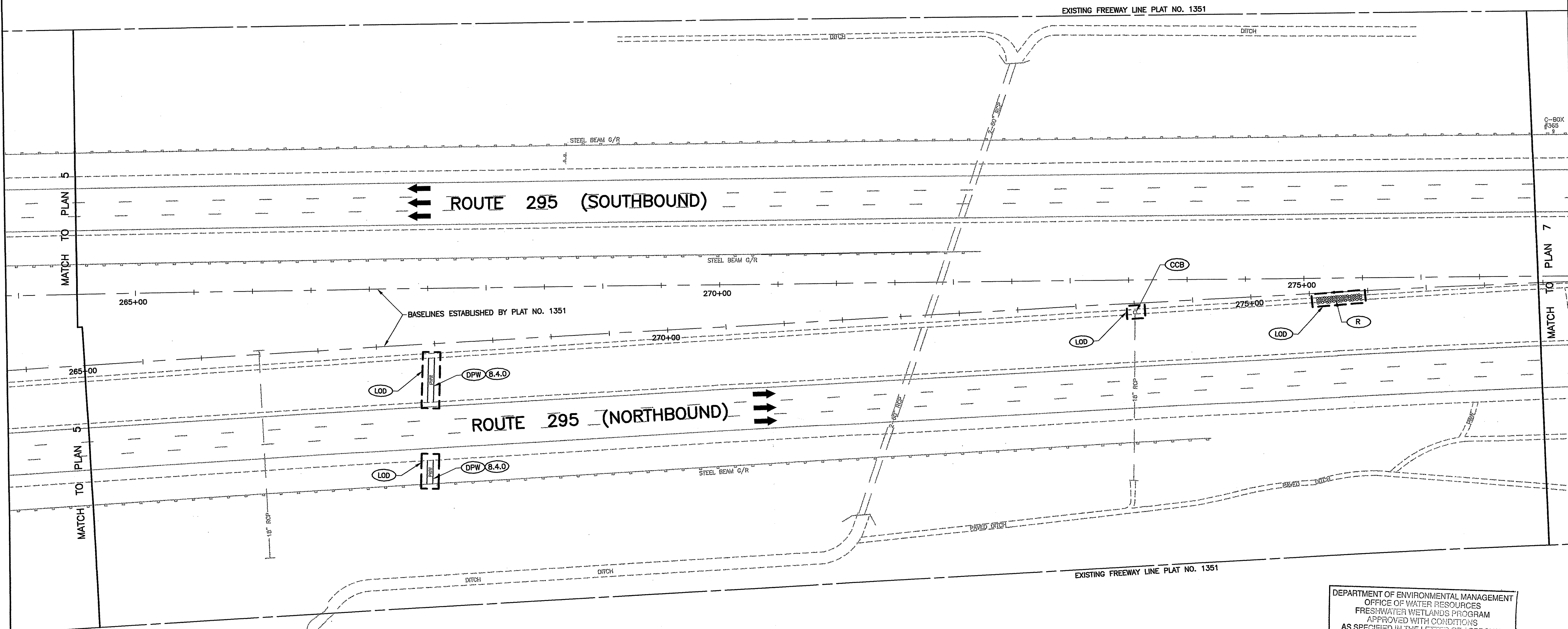
RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
**I-295 SAFETY IMPROVEMENTS
 CONTRACT 3B**
 ROUTE 7 INTERCHANGE TO SCOTT ROAD
 SMITHFIELD, LINCOLN & CUMBERLAND, RI

DRAINAGE & UTILITY PLAN 5
 STA. 252+00 TO STA. 265+00
 CHECKED BY _____ DATE _____ SCALE 1"=40'



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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.				XXX



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED SEP 08 2009 FILE # 09-0202
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.
Martini D. Wencel

NOTE:
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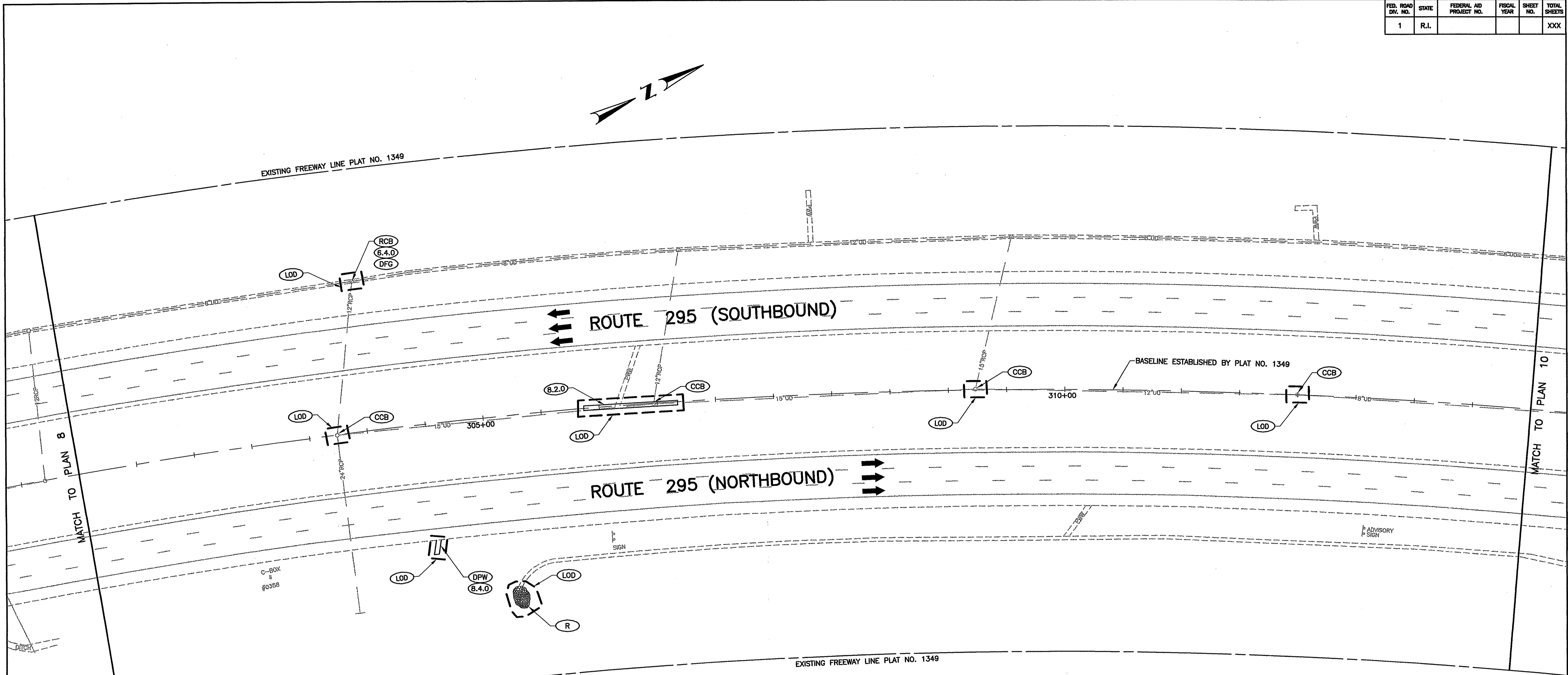
GORDON R. ARCHIBALD, INC.
 Professional Engineers
 Pawtucket, RI

REVISIONS		
NO.	DATE	BY

**RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION**
**I-295 SAFETY IMPROVEMENTS
 CONTRACT 3B**
 ROUTE 7 INTERCHANGE TO SCOTT ROAD
 SMITHFIELD, LINCOLN & CUMBERLAND, RI
DRAINAGE & UTILITY PLAN 6
 STA. 265+00 TO STA. 277+00
 CHECKED BY _____ DATE _____ SCALE 1"=40'

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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.			XXX	XXX



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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED SEP 08 2009 FILE # 09-0202
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.
Martin D. Wencel

NOTE:

PLAN SCALE:

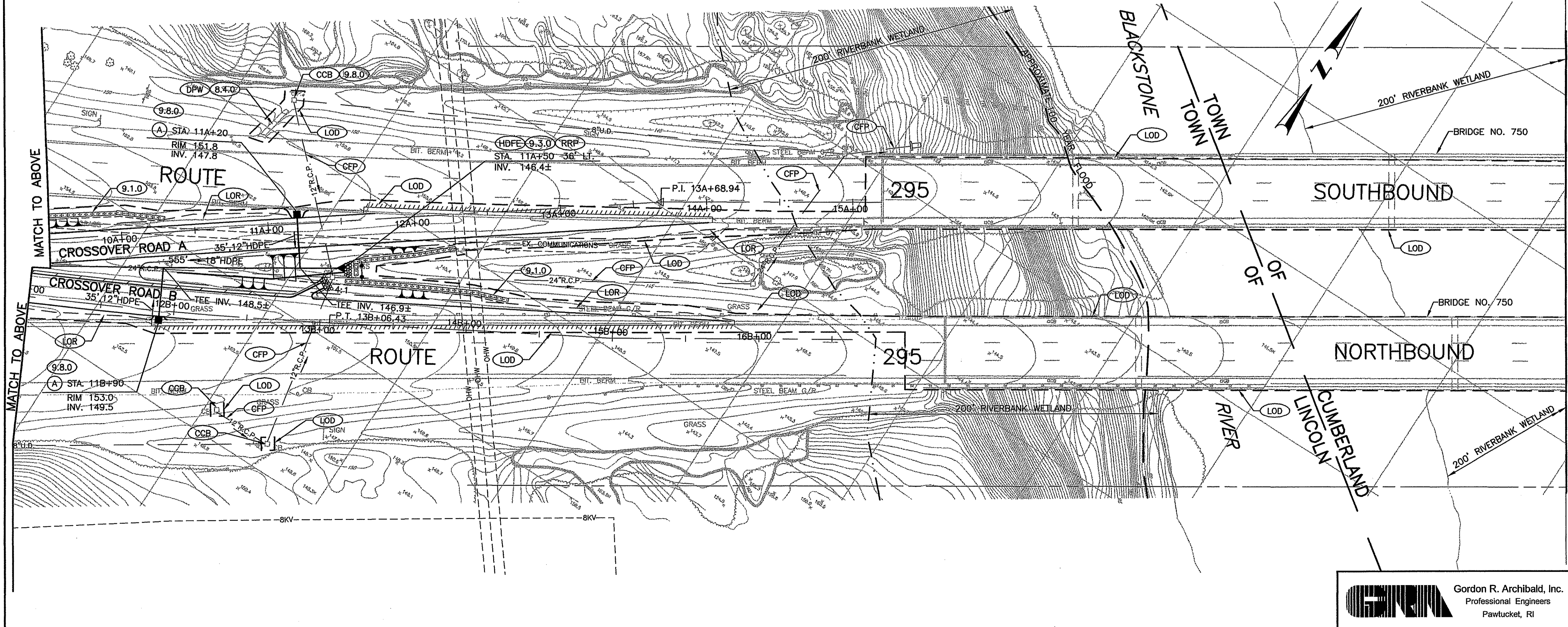
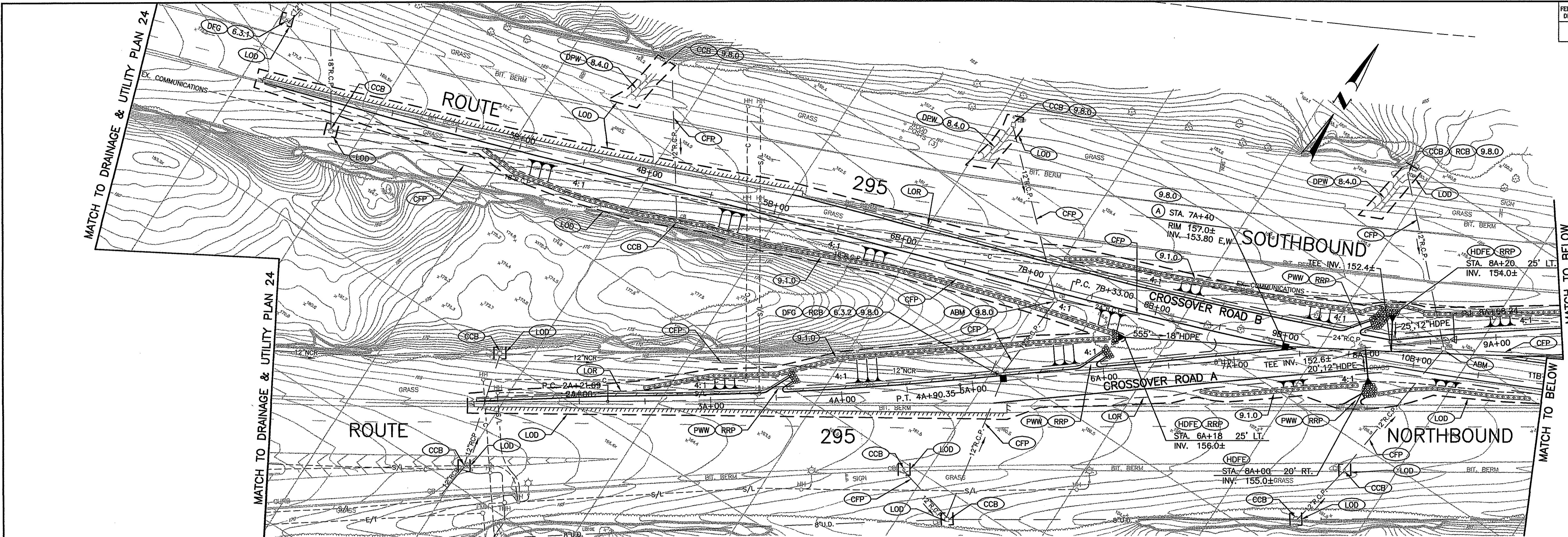
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 Pawtucket, RI

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
**I-295 SAFETY IMPROVEMENTS
 CONTRACT 3B**
 ROUTE 7 INTERCHANGE TO SCOTT ROAD
 SMITHFIELD, LINCOLN & CUMBERLAND, RI
DRAINAGE & UTILITY PLAN 9
 STA. 301+50 TO STA. 314+00
 CHECKED BY _____ DATE _____ SCALE 1"=40'

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.			X	XXX



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED SEP 08 2008 FILE # 29-0202
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
I-295 SAFETY IMPROVEMENTS
CONTRACT 3B
ROUTE 7 INTERCHANGE TO SCOTT ROAD
 SMITHFIELD, LINCOLN & CUMBERLAND, RI

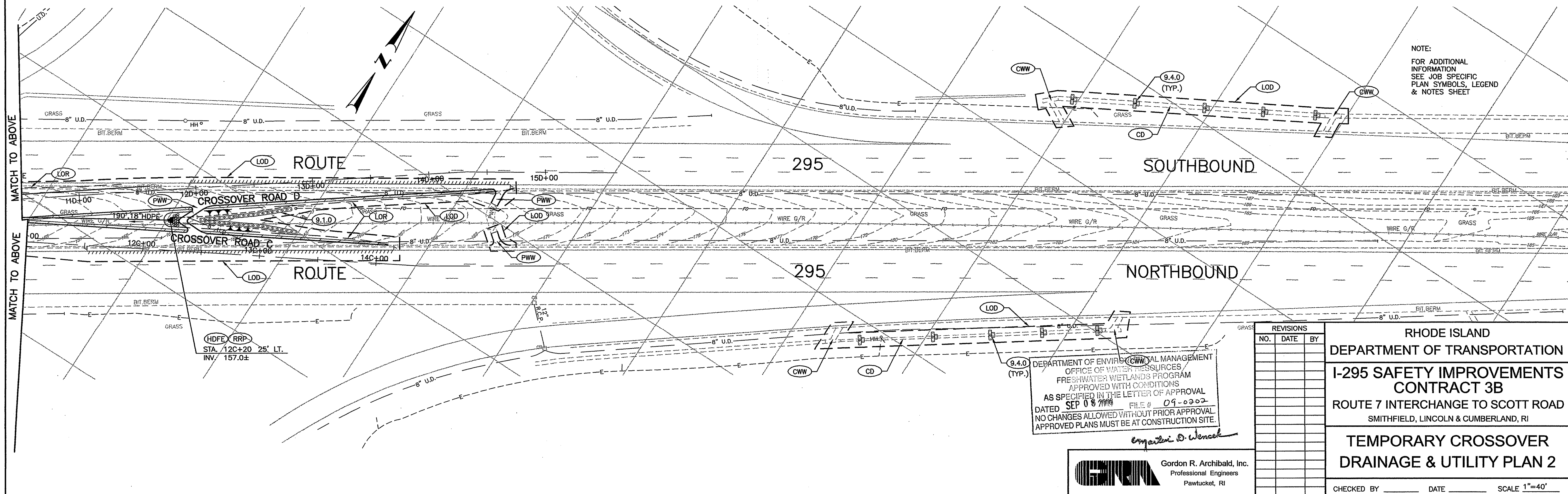
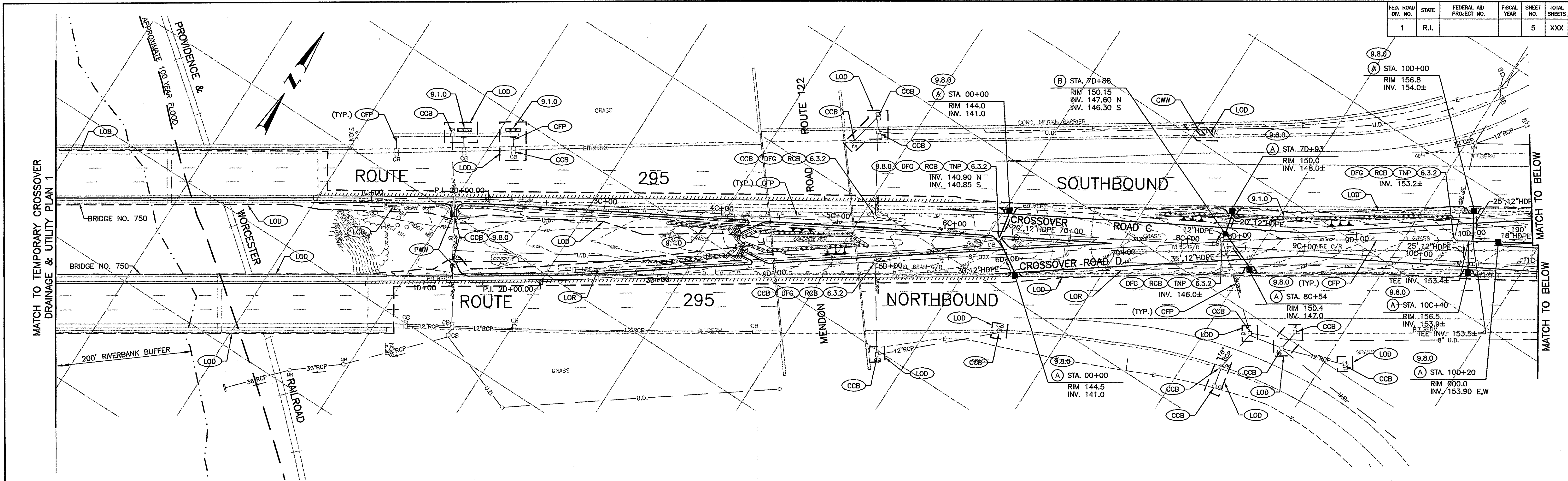
TEMPORARY CROSSOVER
DRAINAGE & UTILITY PLAN 1

CHECKED BY _____ DATE _____ SCALE 1"=40'

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 Professional Engineers
 Pawtucket, RI

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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.			5	XXX



NOTE:
FOR ADDITIONAL
INFORMATION
SEE JOB SPECIFIC
PLAN SYMBOLS, LEGEND
& NOTES SHEET

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 08 2009 FILE # 09-0002
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

Gordon R. Archibald

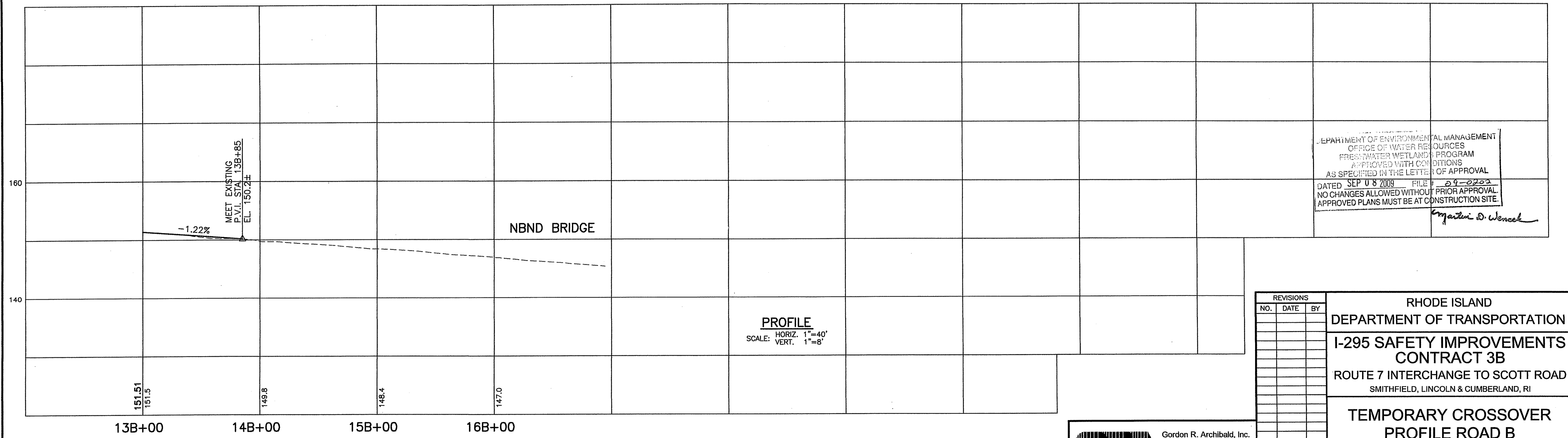
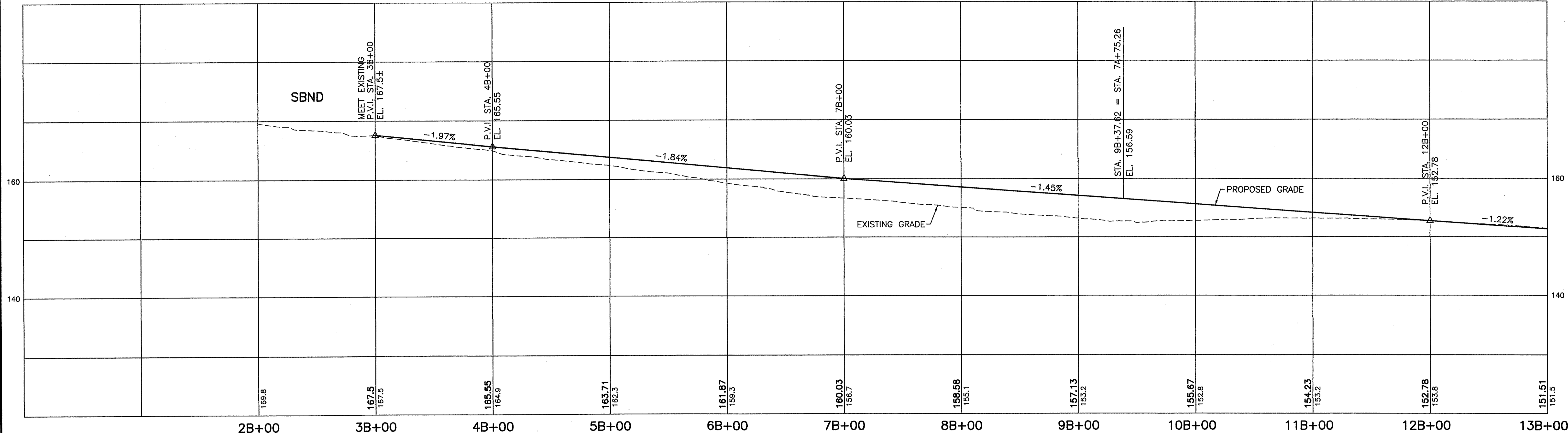
Gordon R. Archibald, Inc.
Professional Engineers
Pawtucket, RI

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
I-295 SAFETY IMPROVEMENTS
CONTRACT 3B
ROUTE 7 INTERCHANGE TO SCOTT ROAD
SMITHFIELD, LINCOLN & CUMBERLAND, RI

TEMPORARY CROSSOVER
DRAINAGE & UTILITY PLAN 2

CHECKED BY _____ DATE _____ SCALE 1"=40'



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLAND PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED SEP 08 2009 FILE # 09-0202
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.
Martin D. Wenzel

PROFILE
 SCALE: HORIZ. 1"=40'
 VERT. 1"=8'

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
I-295 SAFETY IMPROVEMENTS
CONTRACT 3B
 ROUTE 7 INTERCHANGE TO SCOTT ROAD
 SMITHFIELD, LINCOLN & CUMBERLAND, RI

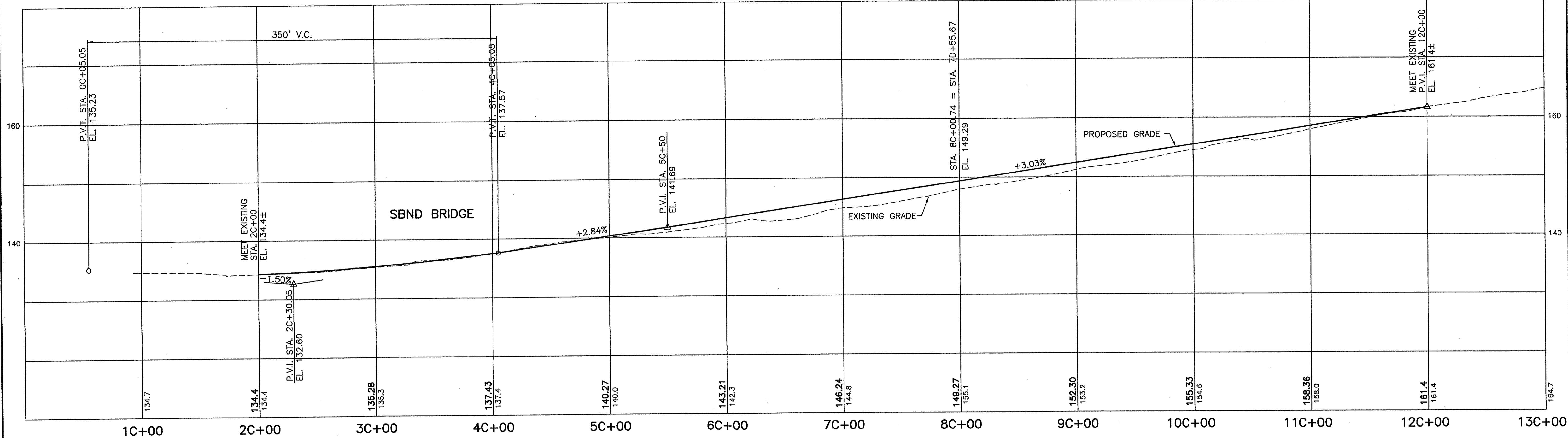
TEMPORARY CROSSOVER
PROFILE ROAD B

CHECKED BY _____ DATE _____ SCALE AS SHOWN

GRI Gordon R. Archibald, Inc.
 Professional Engineers
 Pawtucket, RI

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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.			XXX	



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 08 2009 FILE # 09-0202
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

PROFILE
SCALE: HORIZ. 1"=40'
VERT. 1"=8'

REVISIONS		
NO.	DATE	BY

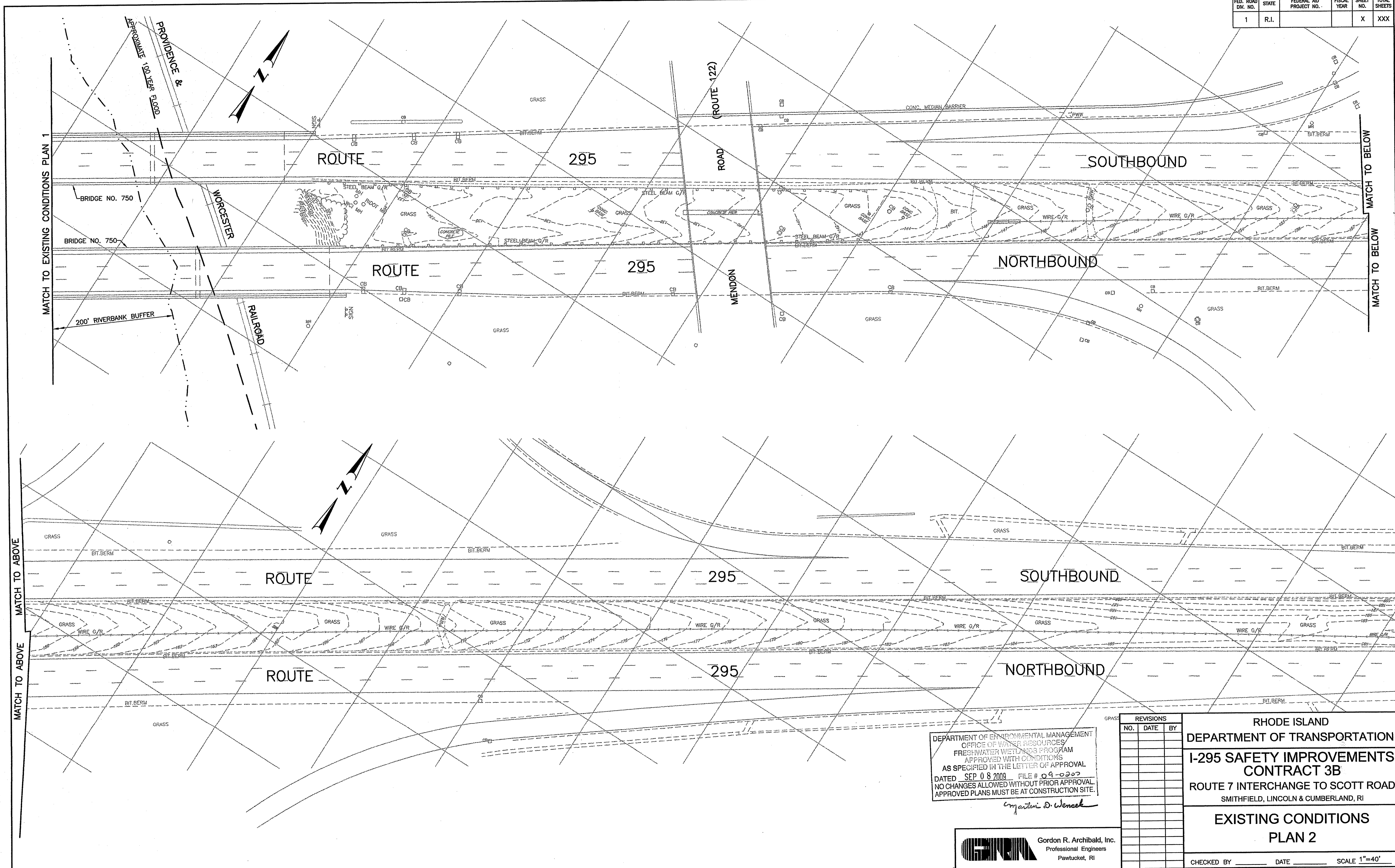
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
**I-295 SAFETY IMPROVEMENTS
CONTRACT 3B**
ROUTE 7 INTERCHANGE TO SCOTT ROAD
SMITHFIELD, LINCOLN & CUMBERLAND, RI
**TEMPORARY CROSSOVER
PROFILE ROAD C**

GRI Gordon R. Archibald, Inc.
Professional Engineers
Pawtucket, RI

CHECKED BY _____ DATE _____ SCALE AS SHOWN

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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.			X	XXX



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED SEP 08 2009 FILE # 09-0207
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

Christopher D. Wencsek

REVISIONS		
NO.	DATE	BY

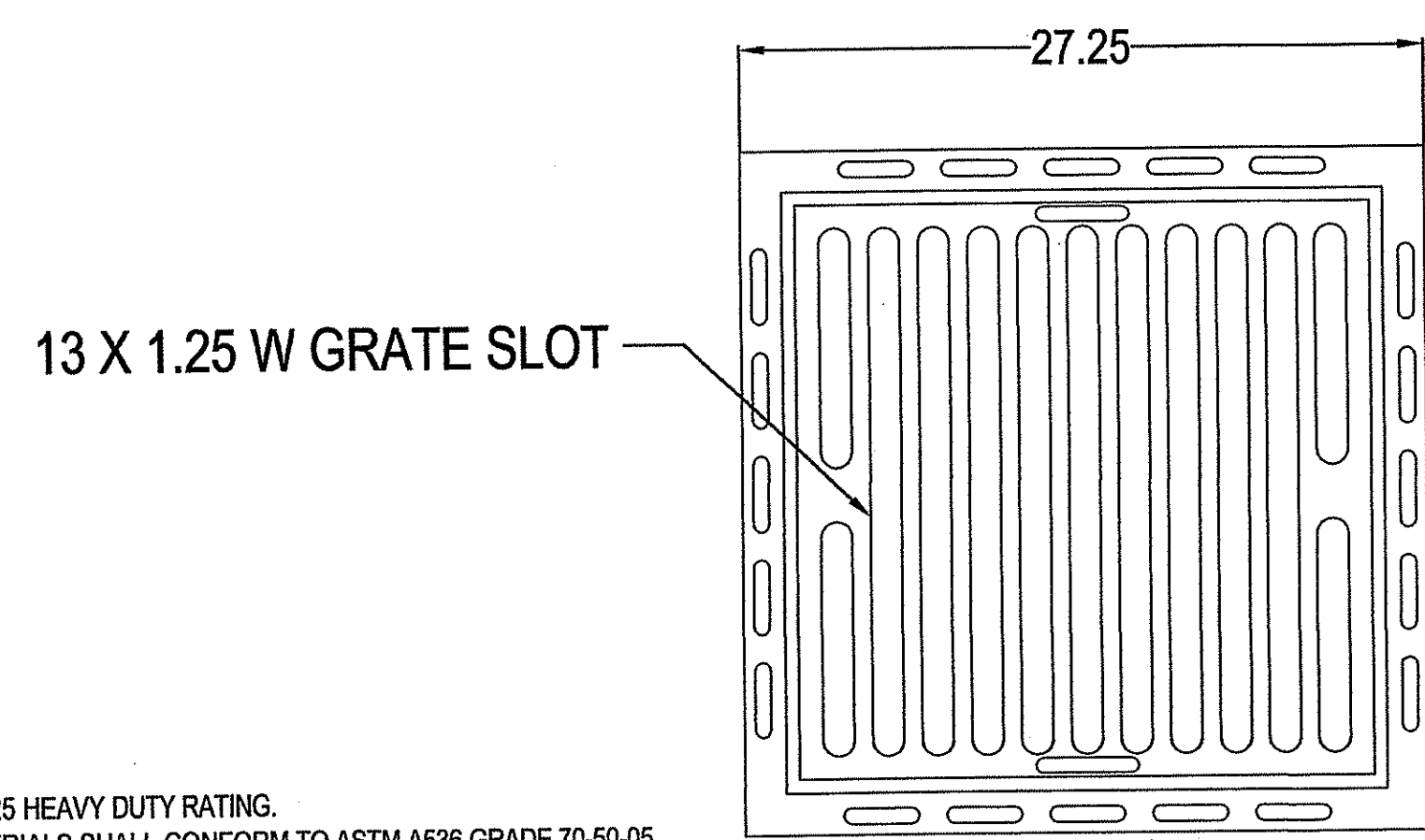
RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
**I-295 SAFETY IMPROVEMENTS
 CONTRACT 3B**
 ROUTE 7 INTERCHANGE TO SCOTT ROAD
 SMITHFIELD, LINCOLN & CUMBERLAND, RI

**EXISTING CONDITIONS
 PLAN 2**

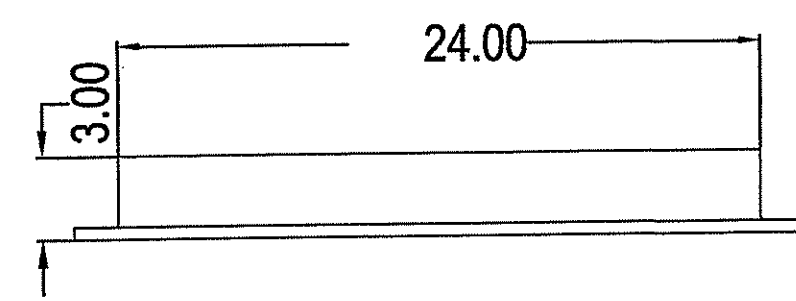
CHECKED BY _____ DATE _____ SCALE 1"=40'

G&P Gordon R. Archibald, Inc.
 Professional Engineers
 Pawtucket, RI

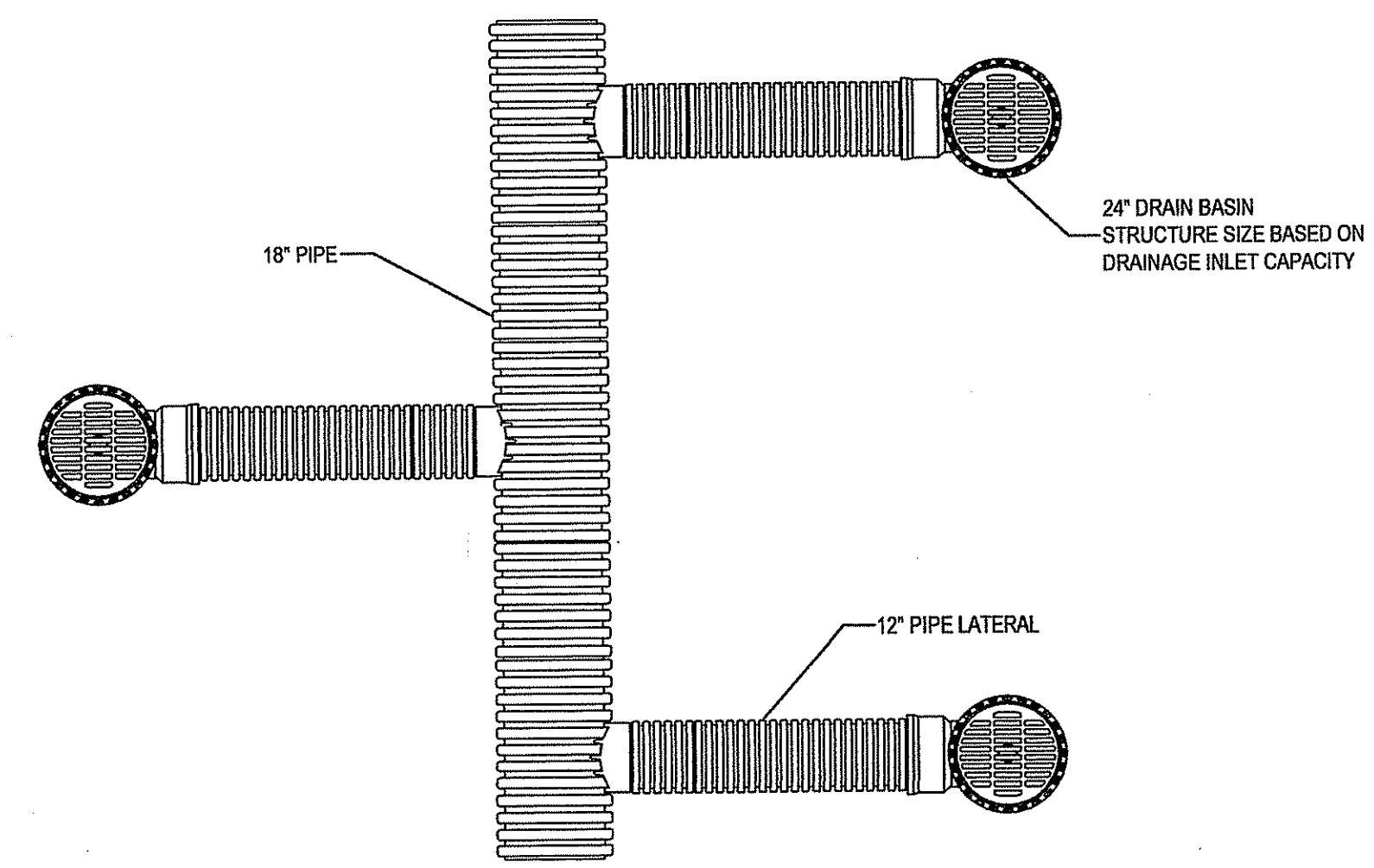
F:\FILES\CAD\B21\BR750-DECKREPLACEMENT\0087D HIGHWAY PLANS\0087D WETLAND\0087D_V1_000_EXIST002



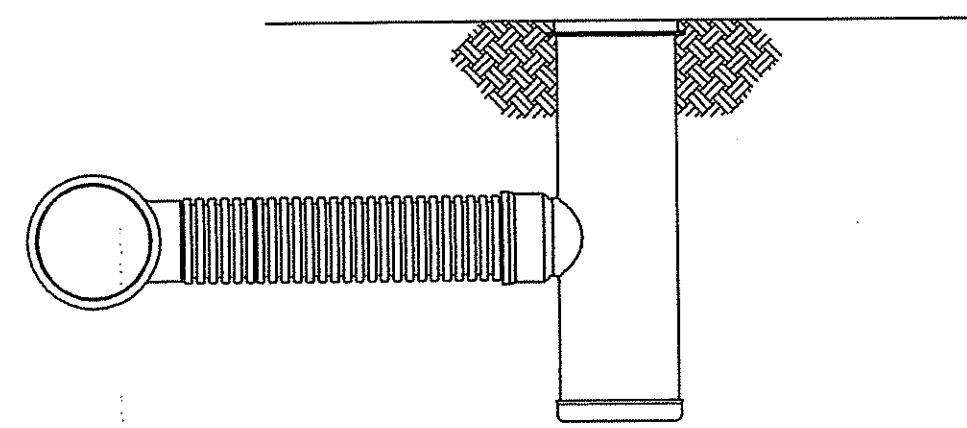
GRATE HAS H-25 HEAVY DUTY RATING. QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05. MATERIAL: DUCTILE IRON. PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT.



ROAD AND HIGHWAY STRUCTURE NOT TO SCALE

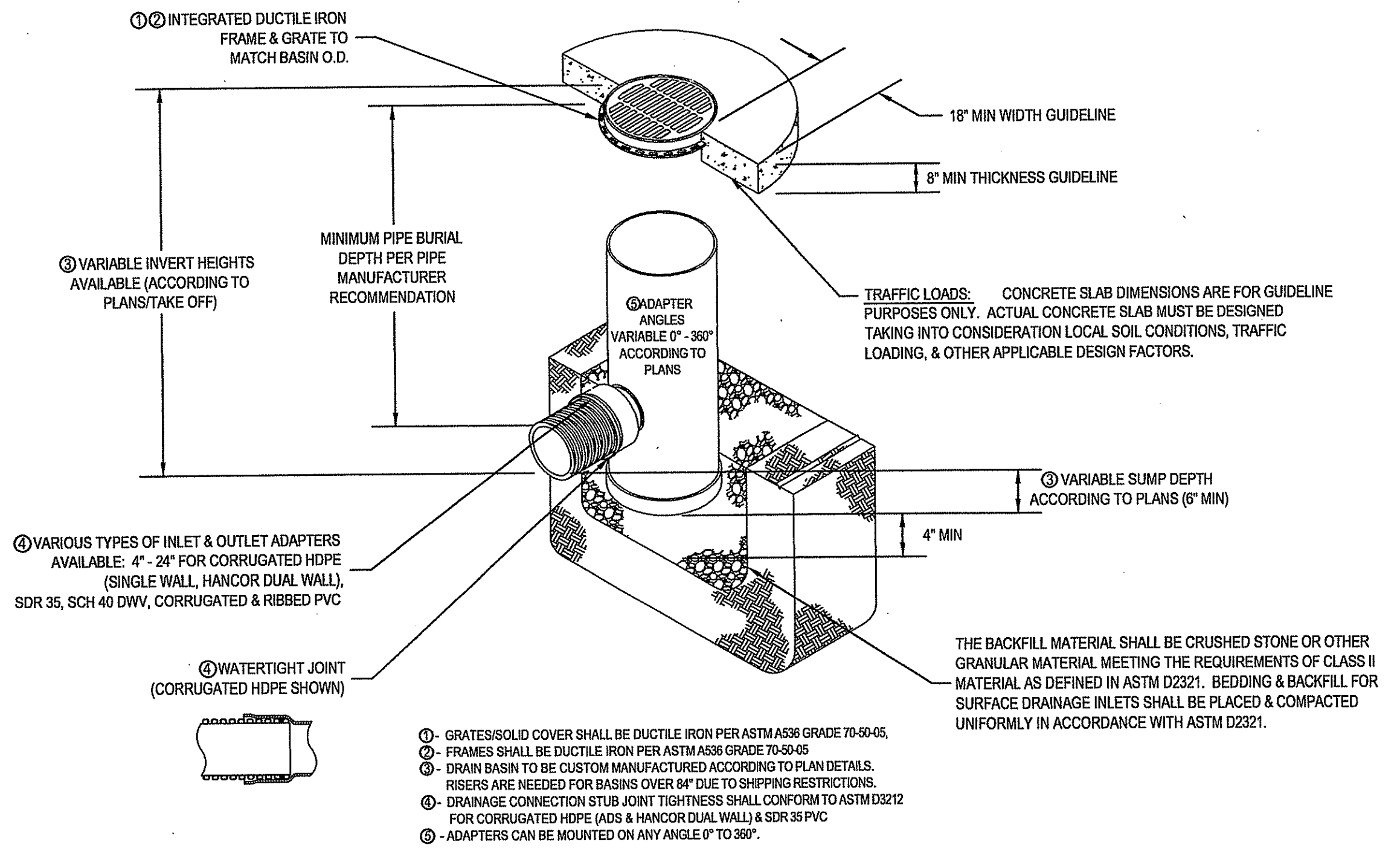


TOP VIEW

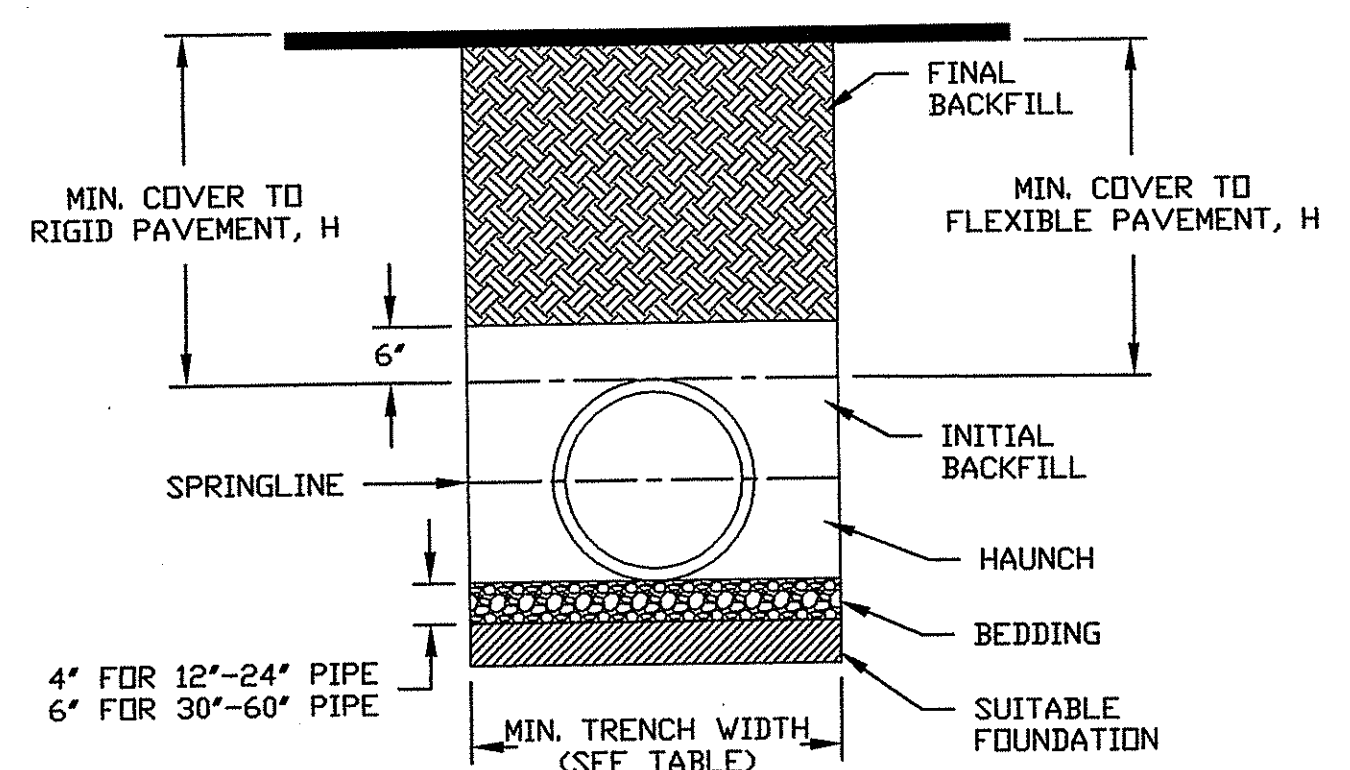


SIDE VIEW

OFFSET STRUCTURE DESIGN CONCEPT NOT TO SCALE



24" DRAIN BASIN NOT TO SCALE



NOTES:

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
- INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATON. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

TYPICAL TRENCH DETAIL NOT TO SCALE

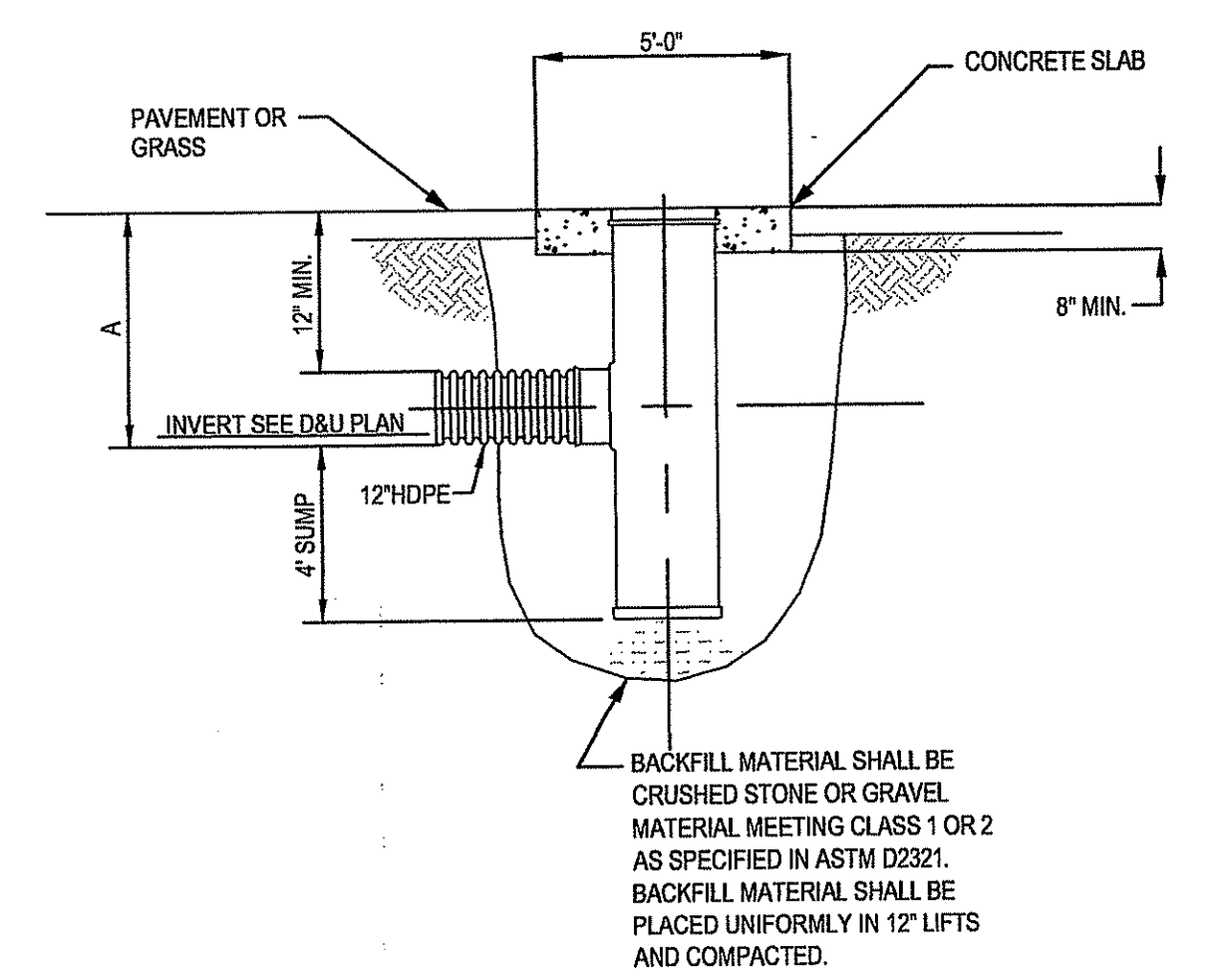
RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

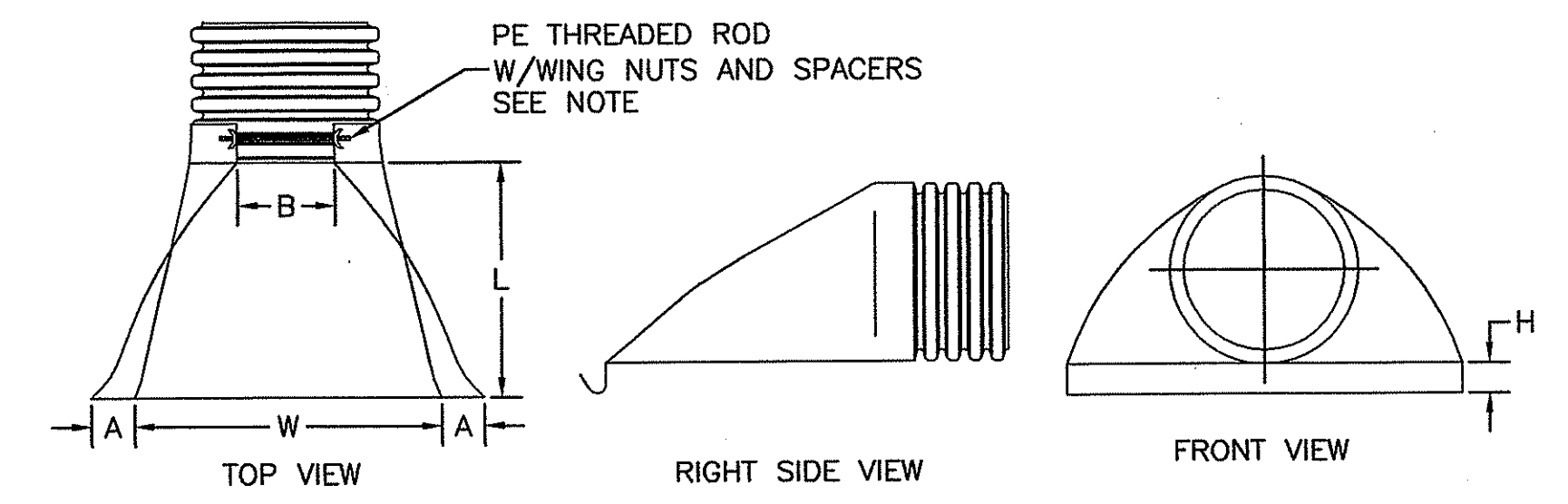
MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER



24" DRAIN BASIN (A) NOT TO SCALE



PART #	PIPE SIZE	A	B (MAX)	H	L	W
1210NP	12 in (300 mm)	6.50 in (165 mm)	10.00 in (254 mm)	6.50 in (165 mm)	25.00 in (635 mm)	29.00 in (737 mm)
1510NP	15 in (375 mm)	6.50 in (165 mm)	10.00 in (254 mm)	6.50 in (165 mm)	25.00 in (635 mm)	29.00 in (737 mm)
1810NP	18 in (450 mm)	7.50 in (191 mm)	15.00 in (381 mm)	6.50 in (165 mm)	32.00 in (813 mm)	35.00 in (889 mm)

- NOTE: ALL DIMENSIONS ARE NOMINAL.
- PE THREADED ROD W/WING NUTS PROVIDED FOR END SECTIONS 12"-24", 30"&36" END SECTIONS REQUIRE TWO(2) THREADED RODS FOR ASSEMBLY.
 - MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. OR APPROVED EQUAL.

FLARED END SECTION (HDPE) NOT TO SCALE

PIPE SIZE	A (ADS N-12 PIPE)
4"	17.00"
6"	19.00"
8"	21.00"
10"	24.00"
12"	26.00"
15"	29.00"
18"	32.00"

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Gordon R. Archibald, Inc.
Professional Engineers
Pawtucket, RI

REVISIONS		
NO.	DATE	BY

**RHODE ISLAND
DEPARTMENT OF TRANSPORTATION**

**I-295 SAFETY IMPROVEMENTS
CONTRACT 3B**

**ROUTE 7 INTERCHANGE TO SCOTT ROAD
SMITHFIELD, LINCOLN & CUMBERLAND, RI**

TYPICAL SECTION

CHECKED BY _____ DATE _____ SCALE AS SHOWN