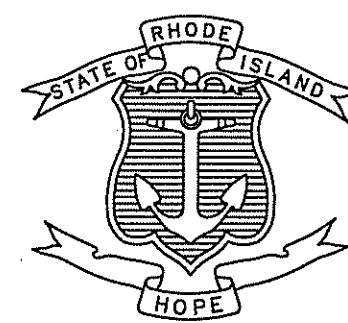


| FED. ROAD DIV. NO. | STATE | FEDERAL AID PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|--------------------|-------|-------------------------|-------------|-----------|--------------|
| | RI | | 2015 | 1 | 10 |

STATE OF RHODE ISLAND



DEPARTMENT OF TRANSPORTATION

PLAN, PROFILE AND SECTIONS OF PROPOSED

STATE HIGHWAY

REPAIRS TO COLE'S BRIDGE No.134

PAWTUCKET AVENUE (ROUTE 114) OVER TEN MILE RIVER

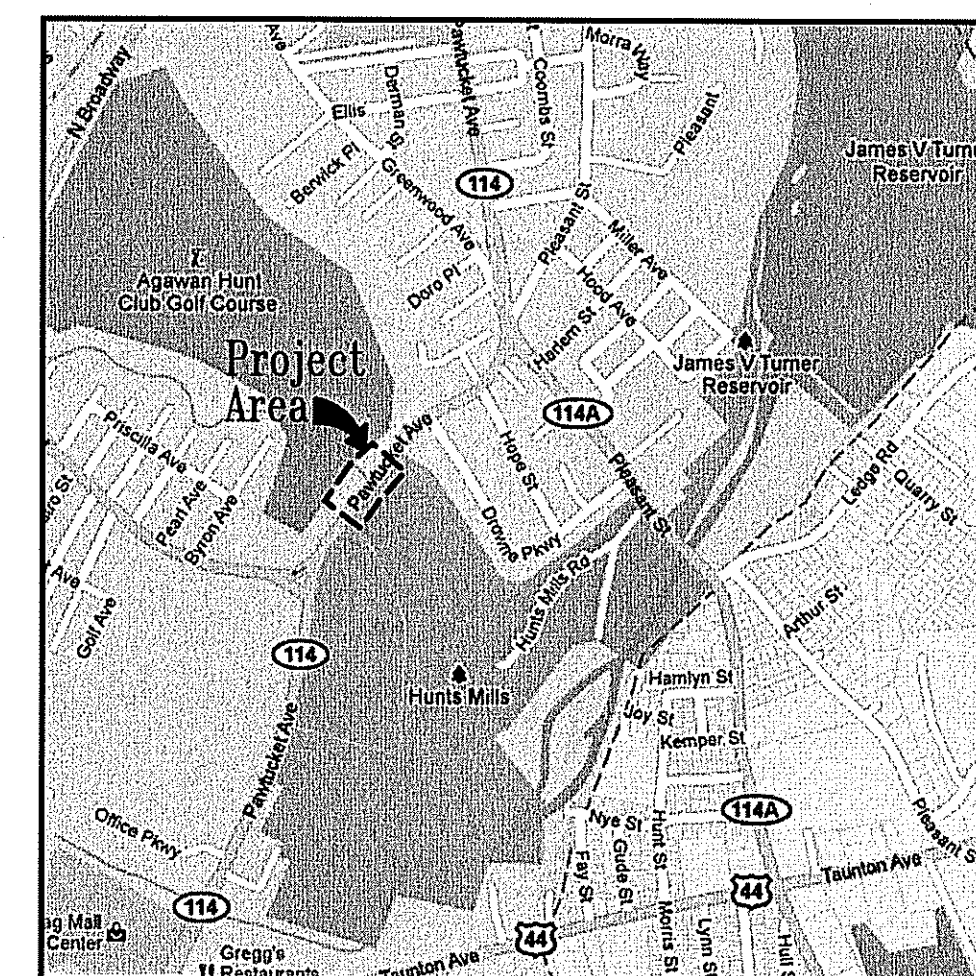
CITY OF EAST PROVIDENCE

COUNTY OF PROVIDENCE

R.I. CONTRACT NO. 2015-CB-004 F.A. PROJECT NO. xxx-0134(xxx)

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. | MAINTENANCE AND PROTECTION OF TRAFFIC - 1 |
| 7. | MAINTENANCE AND PROTECTION OF TRAFFIC - 2 |
| 8. | MAINTENANCE AND PROTECTION OF TRAFFIC - 3 |
| 9. | BRIDGE GENERAL PLAN AND NOTES |
| 10. | CONCRETE REPAIR PLAN, DETAILS, AND NOTES |



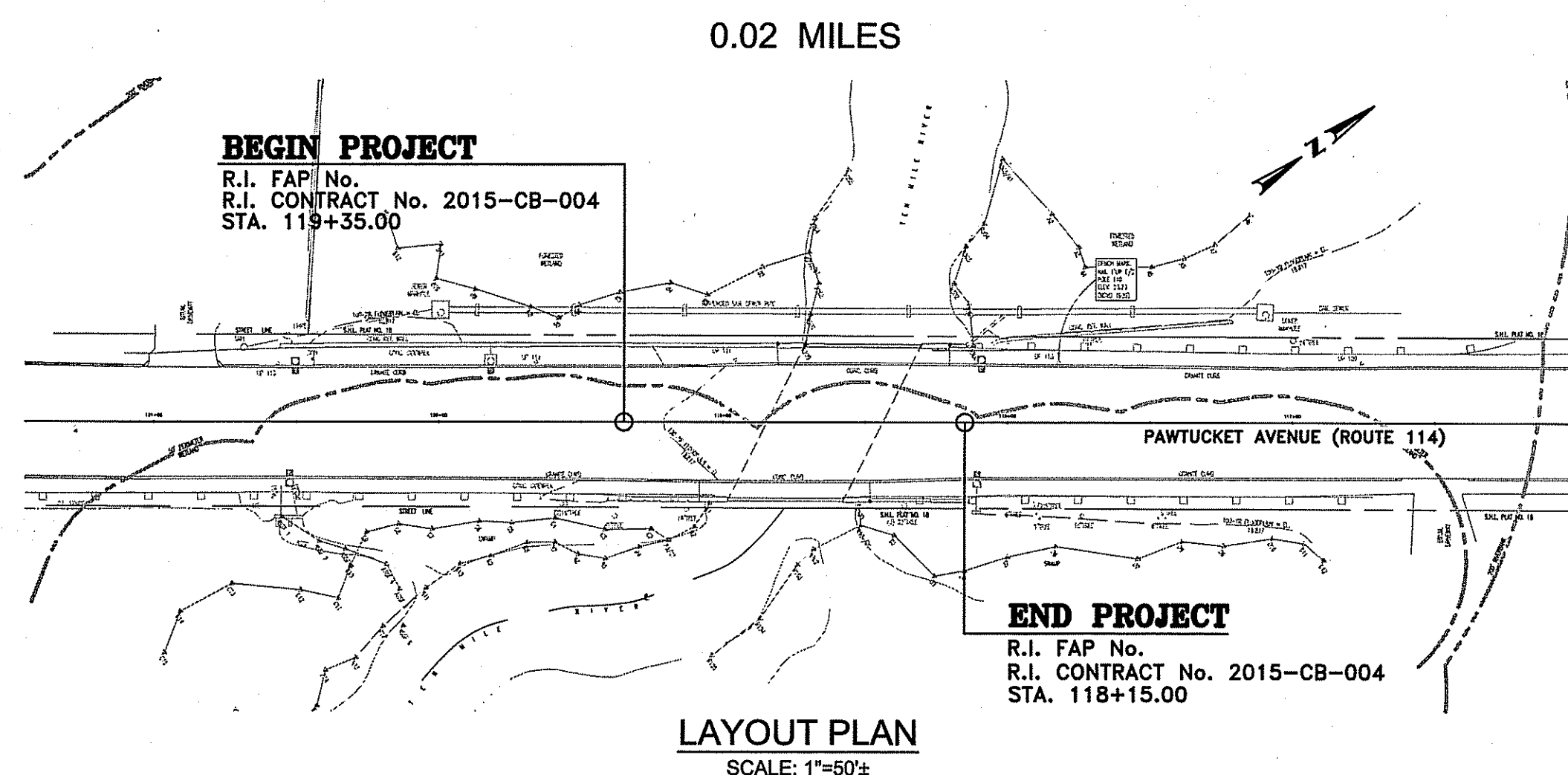
LOCATION MAP
SCALE: N.T.S.

| DESIGN | DESIGNATION |
|--------------|---------------|
| AADT(2011) | 14,280 V.P.D. |
| AADT(2031) | 18,060 V.P.D. |
| D | 59%/41% |
| K | 12% |
| T | 3% |
| DDHV(2011) | 1,710 V.P.H. |
| DHV(2031) | 2,160 V.P.D. |
| DESIGN SPEED | 45 M.P.H. |

HURRICANE EVACUATION ROUTE
THIS PROJECT INCLUDES WORK ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE.
REFER TO NOTE 18 ON SHEET 3

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS

SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010 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.



SCALES OF DRAWINGS

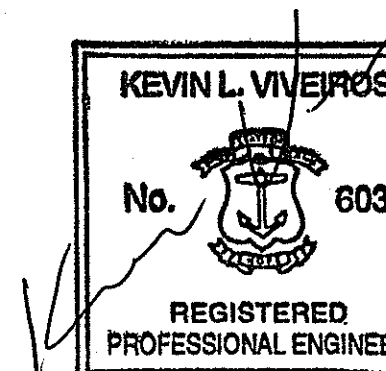
| | |
|----------------|-----------------------------|
| Plans | 1 inch = 20 feet |
| Profiles | 1 inch = 20 feet Horizontal |
| Profiles | 1 inch = 4 feet Vertical |
| Cross Sections | 1 inch = 4 feet Horizontal |
| Cross Sections | 1 inch = 4 feet Vertical |

BASE OF LEVELS
NGVD 29



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO. 15-046
DATED JUL 31 2015
SEE LETTER OF SAME DATE.
Charles D. Horvath

**RIDEM PERMIT
SUBMISSION
MAY 2015**

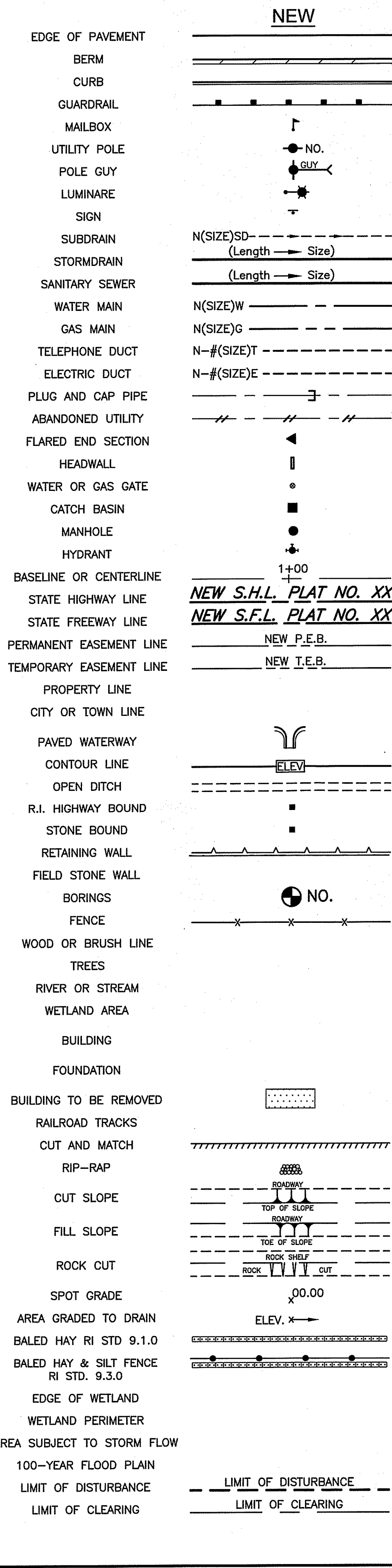
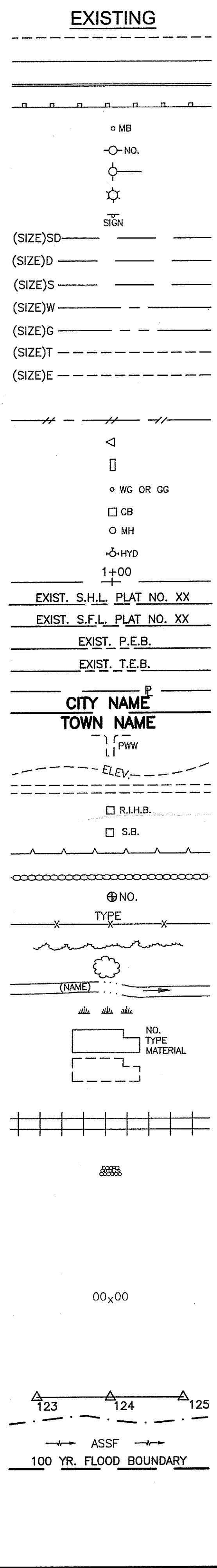


| R.I. DEPARTMENT OF TRANSPORTATION | |
|--|------|
| APPROVED | DATE |
| DEPUTY CHIEF ENGINEER | DATE |
| APPROVED | DATE |
| CHIEF ENGINEER | DATE |
| APPROVED | DATE |
| DIRECTOR | DATE |
| DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION | |
| APPROVED | DATE |
| DIVISION ADMINISTRATOR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

Contract Number 2015-CB-004

Number of Sheet 1

Total Sheets 10



- 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)
- 7.1.7 PRECAST CONCRETE APRON STONE (FOR SQUARE CATCH BASIN)
- 7.1.8 PRECAST CONCRETE APRON STONE (FOR ROUND 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
- 18.2.2 HEAVY DUTY TYPE "H" HANDHOLE
- 18.3.0 ALUMINUM LIGHTING STANDARDS
- 20.2.0 BI-DIRECTIONAL CONTROL DEVICE
- 24.6.1 STREET SIGN MOUNTING DETAIL
- 26.2.0 POLYETHYLENE DRUM WITH MARKINGS
- 26.3.0 PVC PLASTIC PIPE TYPE III BARRICADE
- 31.1.0 CHAIN LINK FENCE 3'-0" TO 4'-0"
- 31.2.0 CHAIN LINK FENCE 5'-0" TO 6'-0"
- 31.2.1 CHAIN LINK FENCE 5'-0" TO 6'-0" INTERMEDIATE POST
- 31.3.0 WOVEN WIRE RIGHT-OF-WAY FENCE (STEEL POST)
- 34.1.0 TYPICAL GUARDRAIL INSTALLATION
- 34.2.0 STEEL BEAM GUARDRAIL
- 34.2.1 STEEL BEAM GUARDRAIL DETAILS
- 34.2.2 STEEL BEAM GUARDRAIL DOUBLE FACED ASSEMBLY
- 34.2.3 STEEL BEAM GUARDRAIL FIXTURES
- 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
- 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 |
| (NWWB) | 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) | THREE BEAM TRANSITION |
| (TBBC) | THREE 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 |

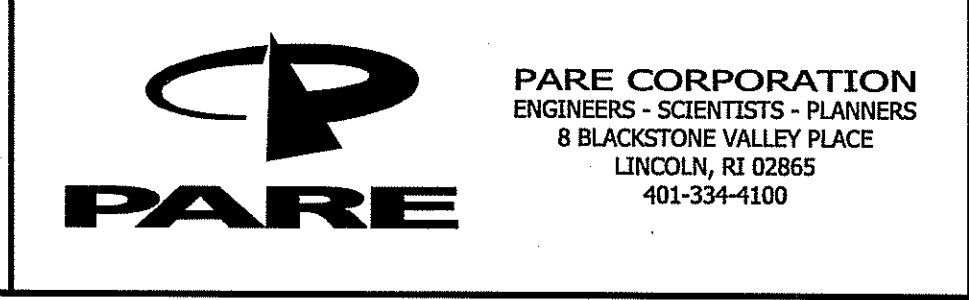
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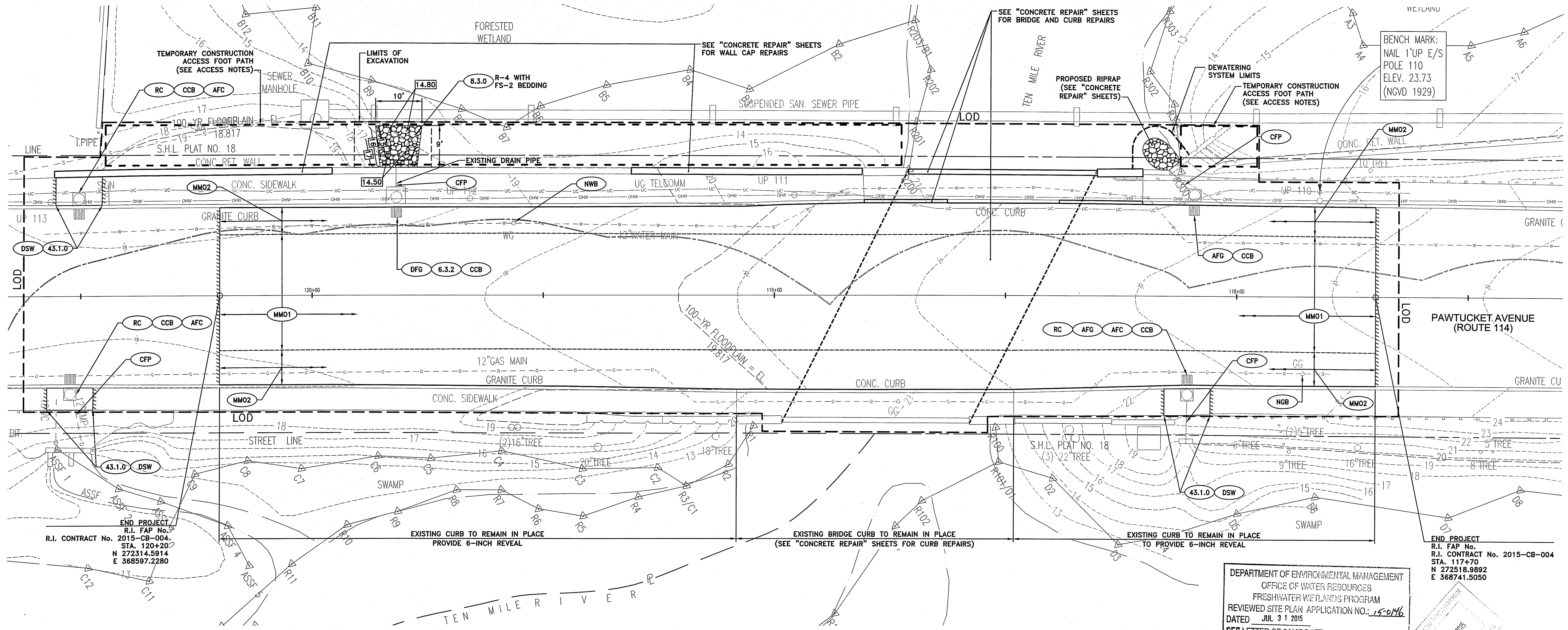
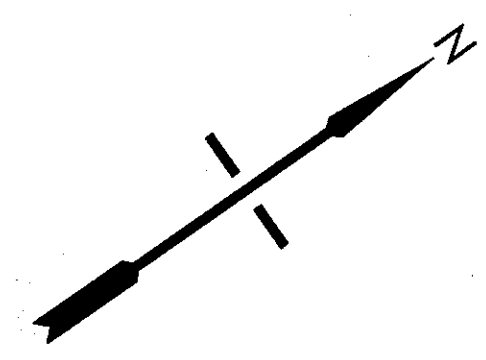
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO.: 15-0116
DATED JUL 31 2015
SEE LETTER OF SAME DATE

DEPARTMENT OF TRANSPORTATION
REPAIRS TO
COLES BRIDGE NO. 134
PAWTUCKET AVENUE (ROUTE 114)
OVER TEN MILE RIVER
EAST PROVIDENCE, RHODE ISLAND

STANDARD PLAN SYMBOLS & STANDARD LEGEND

CHECKED BY: _____ DATE: _____ SCALE: _____



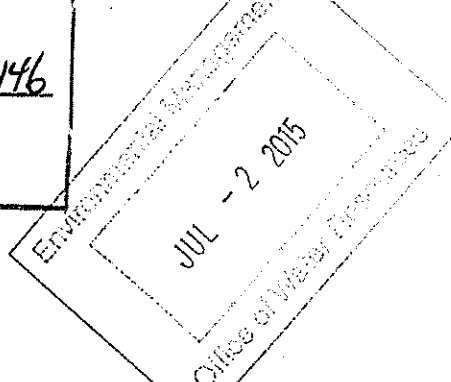


END PROJECT
R.I. FAP No. 2015-CB-004
R.I. CONTRACT No. 2015-CB-004
STA. 120+20
N 272314.5914
E 368597.2280

END PROJECT
R.I. FAP No. 2015-CB-004
R.I. CONTRACT No. 2015-CB-004
STA. 117+70
N 272518.9892
E 368741.5050

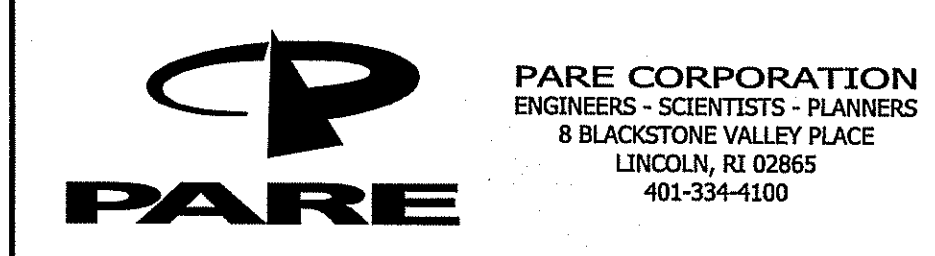
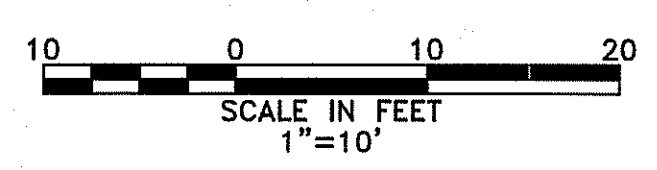
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO.: 15-0146
DATED JUL 31 2015
SEE LETTER OF SAME DATE.

Charles A. Hester



NOTES:
1. PROPOSED ELEVATION SPOT GRADES HAVE BEEN PROVIDED ALONG THE SHOULDER EDGELINES. MM02 IS PROPOSED ALONG THE SHOULDER TO ACHIEVE THE APPROPRIATE ELEVATION TO PROVIDE 6-INCH REVEALS ALONG THE FACE OF EXISTING CURB.

ACCESS NOTES:
1. ACCESS TO THE SITE WILL BE PROVIDED VIA A TEMPORARY FOOT PATH AS SHOWN ON THE PLAN. NO VEHICLES SHALL BE PERMITTED ON THE PATH.
2. CLEARING FOR THE ACCESS PATH IS LIMITED TO REMOVAL OF SHRUBS AND VINES. NO TREE CLEARING OR EARTH WORK IS PROPOSED.
3. AREAS DISTURBED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESTORED TO THEIR PRE-EXISTING CONDITIONS WITH LOAM AND SEED AT NO ADDITIONAL COST TO THE STATE.



| REVISIONS | | |
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| NO. | DATE | BY |
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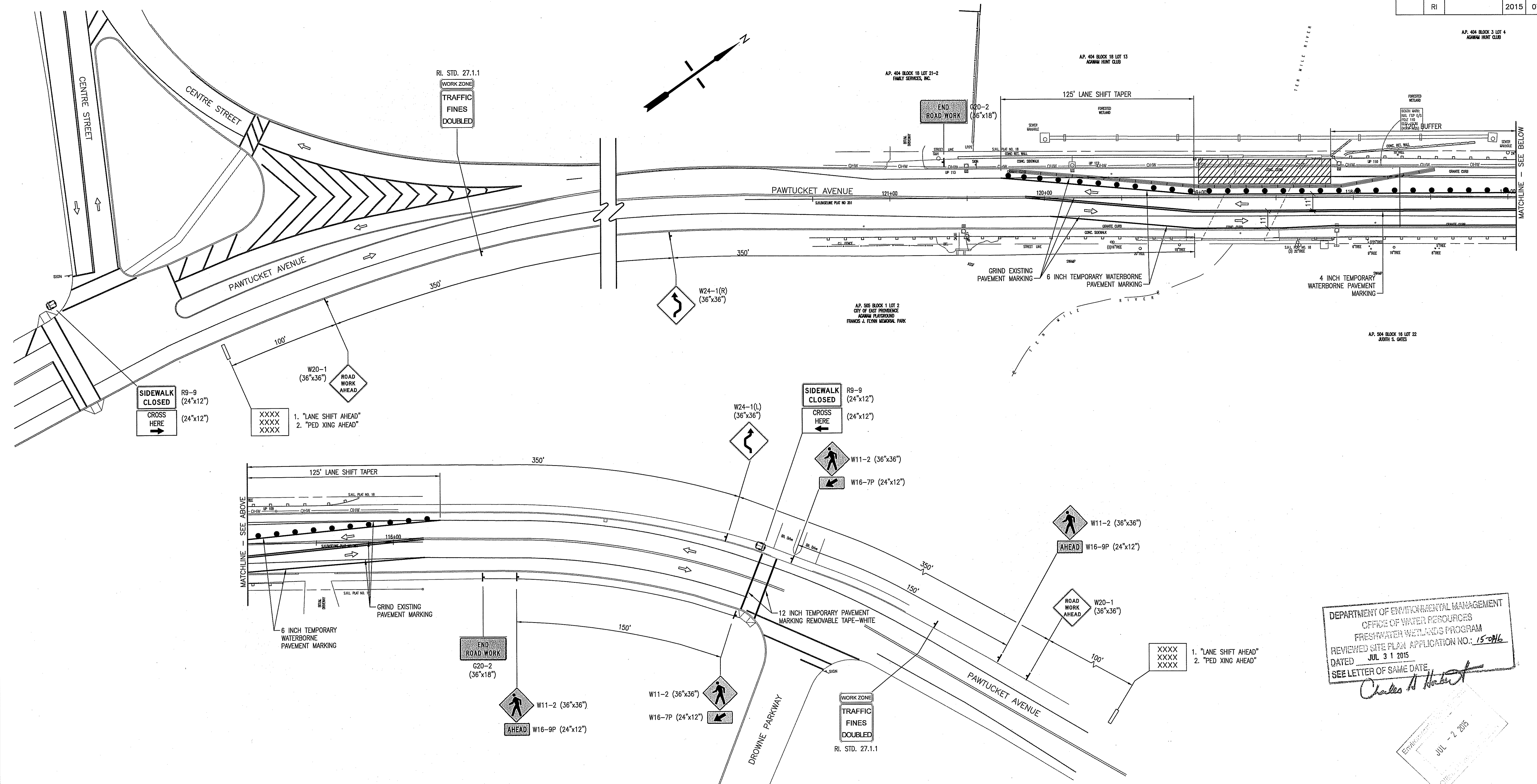
**RHODE ISLAND
DEPARTMENT OF TRANSPORTATION**

**REPAIRS TO
COLES BRIDGE NO. 134
PAWTUCKET AVENUE (ROUTE 114)
OVER TEN MILE RIVER**

EAST PROVIDENCE, RHODE ISLAND

GENERAL PLAN

CHECKED BY: _____ DATE: _____ SCALE: 1"=10'-0"

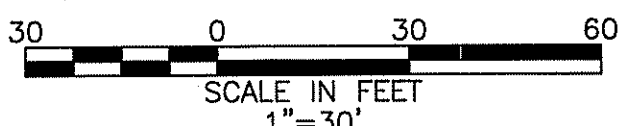


DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 REVIEWED SITE PLAN APPLICATION NO.: 15-0116
 DATED JUL 3 1 2015
 SEE LETTER OF SAME DATE
Charles H. Harber

ENVIRONMENTAL
 JUL - 2 2015

- LEGEND**
- PVC PLASTIC PIPE BARRICADE, R.I. STD. 26.3.0
 - PRECAST CONCRETE MEDIAN BARRIER WITH REFLECTIVE DELINEATORS, R.I. STD. 40.5.0
 - WORK ZONE
 - DRUM, R.I. STD. 26.2.0 (MAX. SPACING IS 10'-0" O.C.)
 - TRAFFIC CONE
 - TEMPORARY SIGN, R.I. STD. 24.3.0
 - DIRECTION OF TRAVEL
 - CHANGEABLE MESSAGE BOARD

- NOTES:**
- THE CONTRACTOR SHALL REMOVE THE EXISTING CONCRETE AND PLASTIC BARRIERS AT THE REPAIR AREA AND SHALL DELIVER THE BARRIERS TO THE WARREN AVENUE MAINTENANCE FACILITY OR A LOCATION COORDINATED WITH THE ENGINEER AND THE RIDOT EAST PROVIDENCE SUPERINTENDENT.
 - THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE THE AREA UNPROTECTED AT ANY TIME DURING THE TRANSITION FROM THE EXISTING CONDITION TO THE PROPOSED TRAFFIC/PEDESTRIAN SETUP.
 - UPON THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES.



PARE
 PARE CORPORATION
 ENGINEERS - SCIENTISTS - PLANNERS
 8 BLACKSTONE VALLEY PLACE
 LINCOLN, RI 02865
 401-334-1100

| REVISIONS | | |
|-----------|------|----|
| NO. | DATE | BY |
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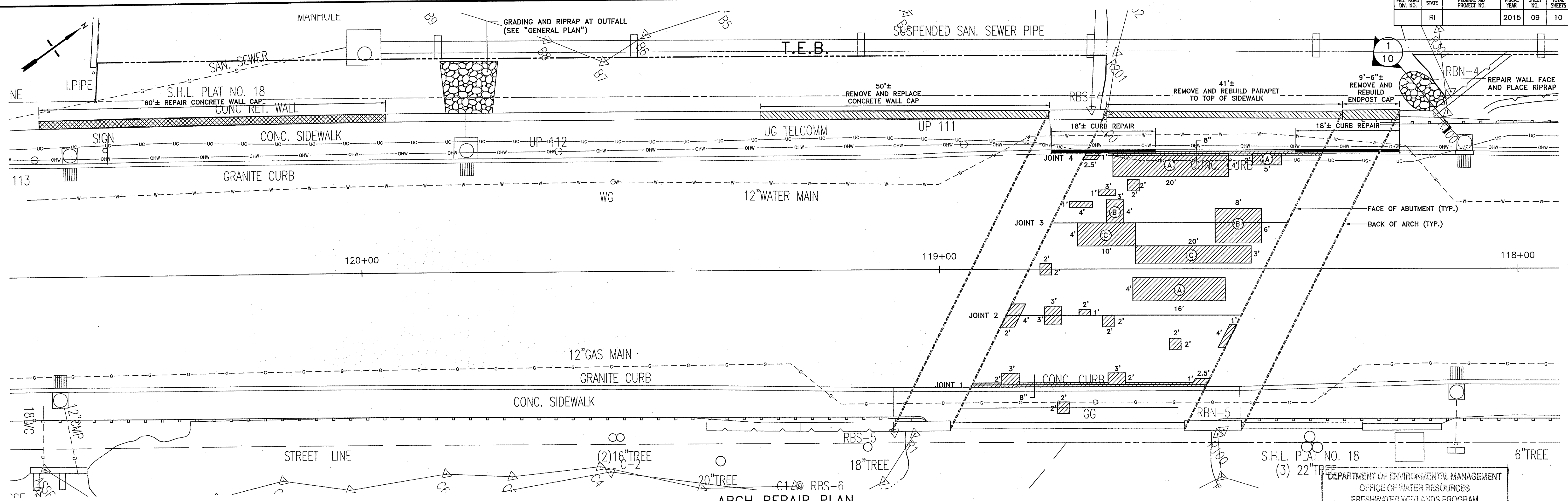
**RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION**

**REPAIRS TO
 COLES BRIDGE NO. 134
 PAWTUCKET AVENUE (ROUTE 114)
 OVER TEN MILE RIVER**

EAST PROVIDENCE, RHODE ISLAND

**TEMPORARY TRAFFIC
 CONTROL PLAN No. 1**

CHECKED BY: _____ DATE: _____ SCALE: 1"=30'-0"



ARCH REPAIR PLAN
1/8" = 1'-0"

GENERAL NOTES

- ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
 - THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS), AMENDED 2013.
 - THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, FIFTH EDITION, 2010, INCLUDING THE LATEST INTERIM REVISIONS.
 - THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
- DIMENSIONS, STATIONS, AND ELEVATIONS ARE SHOWN TO THE NEAREST ONE-HUNDREDTH OF A FOOT OR ONE-EIGHTH OF AN INCH, EXCEPT STRUCTURAL STEEL DIMENSIONS WHICH ARE TO THE NEAREST ONE-SIXTEENTH OF AN INCH.
- ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
- THE EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND WERE LOCATED USING THE BEST AVAILABLE INFORMATION. NO BUILDING SERVICE CONNECTIONS (ELECTRIC, TELEPHONE, GAS, WATER, SANITARY AND OTHERS) ARE SHOWN. THE CONTRACTOR IS TO ASSUME THAT SERVICES TO ALL BUILDINGS ARE PRESENT.
- BOTH FEDERAL AND STATE LAW (RI. GENERAL LAW 39-1.2) REQUIRE NOTIFICATION OF APPROPRIATE UTILITY COMPANIES BEFORE DIGGING, TRENCHING, BLASTING, DEMOLISHING, BORING, BACK FILLING, GRADING, LANDSCAPING, OR OTHER EARTH MOVING OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES (INCLUDING THROUGH THE "DIG SAFE" PROGRAM) TO ENSURE THAT ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "DIG SAFE" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANIES, SHALL BE REPAIRED OR REPLACED (AS DEEMED APPROPRIATE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY) AT NO ADDITIONAL COST OF THE STATE.
- THE CONTRACTOR SHALL ANTICIPATE THAT SCAFFOLDING, BARGES, AND/OR OTHER MEANS OF ACCESS WILL BE NECESSARY TO PERFORM THE WORK. ALL WORK TO PROVIDE AND REMOVE THIS ACCESS WILL BE PAID FOR UNDER ITEM CODE 817.9904.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY CONCRETE DEBRIS FROM FALLING INTO THE TEN MILE RIVER OR ENTERING ANY CATCH BASIN. PAYMENT FOR TAKING SUCH PRECAUTIONS SHALL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE CONCRETE DEMOLITION AND REPAIR ITEMS.

REPAIR NOTES

- EXCEPT AS NOTED ON THE PLANS, CONCRETE REPAIRS SHALL BE IN ACCORDANCE WITH SECTION 817 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
- PAYMENT FOR CONCRETE REPAIR AND REPLACEMENT WORK WILL BE MADE AS FOLLOWS:
 - ARCH REPAIRS** - ITEM CODE 817.2110, "REPAIRS TO STRUCTURAL CONCRETE MASONRY (PATCHING MORTAR)"
 - PARAPET AND ENDPOST CAP REPLACEMENT** - ITEM CODE 803.0300, "PARTIAL REMOVAL AND DISPOSAL OF EXISTING CONCRETE MASONRY" AND ITEM CODE 808.9901, "CONCRETE CLASS XX 3/4"
 - WALL CAP REPLACEMENT AND REPAIR** - ITEM CODE 803.0300, "PARTIAL REMOVAL AND DISPOSAL OF EXISTING CONCRETE MASONRY", ITEM CODE 808.9901, "CONCRETE CLASS XX 3/4" (REPLACEMENT SECTION), AND ITEM CODE 817.9903, "REPAIRS TO CONCRETE WALL CAP (PATCHING MORTAR)" (REPAIR SECTION)
 - CURB REPAIRS** - ITEM CODE 803.0300, "PARTIAL REMOVAL AND DISPOSAL OF EXISTING CONCRETE MASONRY" AND ITEM CODE 808.9901, "CONCRETE CLASS XX 3/4"
- MATERIAL USED TO REPAIR CONCRETE SPALLS SHALL MATCH THE COLOR AND TEXTURE OF THE EXISTING MATERIAL, AS PER SECTION 817.03.4.d OF THE STANDARD SPECIFICATIONS.
- MATERIAL FOR ARCH REPAIRS SHALL BE TYPE R2 OR R3 AS DEFINED IN ASTM C928.
- THE LIMITS OF ALL REPAIRS WILL BE MARKED BY THE ENGINEER PRIOR TO BEGINNING CONCRETE REMOVAL.
- ALL LOOSE AND DELAMINATED CONCRETE SHALL BE REMOVED TO SOUND CONCRETE. THE ENGINEER SHALL BE THE SOLE JUDGE IN DETERMINING THE SOUNDNESS OF THE CONCRETE TO REMAIN.
- CHIPPING HAMMERS SHALL BE NO MORE THAN 20 POUNDS.
- AFTER REMOVAL OF ALL LOOSE AND DELAMINATED CONCRETE, ALL HEAVY OXIDES AND SCALES SHALL BE REMOVED FROM AFFECTED REINFORCING BY POWER TOOL CLEANING TO BARE METAL (SSPC SP-6) IN ORDER TO PROMOTE MAXIMUM BOND OF THE NEW CONCRETE.
- IF THE EXPOSED REINFORCING IS CORRODED AND HAS LOST MORE THAN 25% OF ITS CROSS SECTION AS DETERMINED BY THE ENGINEER, THE REINFORCING SHALL BE SUPPLEMENTED WITH A NEW BAR PLACED PARALLEL TO THE EXISTING BAR. NEW BARS CONSIDERED MAIN REINFORCEMENT SHALL BE EXTENDED BEYOND THE AFFECTED AREA IN EACH DIRECTION BY THE REQUIRED LAP LENGTHS. IF NECESSARY, ADDITIONAL CONCRETE REMOVAL WILL BE REQUIRED TO PROVIDE THE REQUIRED LAP LENGTH. THE SIZE OF THE SUPPLEMENTAL REINFORCING SHALL MATCH THE EXISTING REINFORCING SIZE.

- IF 1/2 OF THE REBAR SURFACE IS EXPOSED, THE DEPTH OF CONCRETE REMOVAL SHALL BE SUCH AS TO INCLUDE ALL DETERIORATED CONCRETE BUT NOT LESS THAN THAT DEPTH NECESSARY TO ALLOW FOR A 1" ANNULAR CLEARANCE AROUND THE REINFORCING.
- ALL ARCH REPAIRS SHOWN ARE ON THE UNDERSIDE OF THE ARCH.
- DIMENSIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE LIMITS OF ALL REPAIRS SHALL BE MARKED BY THE ENGINEER. NO PAYMENT WILL BE MADE FOR REPAIRS NOT MARKED BY THE ENGINEER.
- WHERE REPAIRS ARE TO BE MADE ON BOTH SIDES OF AN EXISTING JOINT, CONCRETE SHALL BE REMOVED AND REPAIR MATERIAL PLACED ON ONE SIDE ONLY BEFORE CONCRETE IS REMOVED ON THE OTHER SIDE. 1/2" CLOSED-CELL FOAM SHALL BE PLACED BETWEEN THE ADJACENT REPAIR AREAS. THE CLOSED-CELL FOAM SHALL BE CONSIDERED INCIDENTAL TO THE REPAIRS.
- NOTE SOME ARCH REPAIR AREAS ARE MARKED WITH A LETTER INDICATOR. THESE AREAS SHALL BE SEQUENCED AS FOLLOWS:
 - ALL REPAIRS AREAS MARKED "A" SHALL BE COMPLETE AND HAVE CURED FOR AT LEAST 24 HOURS BEFORE ANY CONCRETE IS REMOVED FROM AREAS MARKED "B" AND "C."
 - SUBSEQUENTLY, ALL REPAIRS AREAS MARKED "B" SHALL BE COMPLETE AND HAVE CURED FOR AT LEAST 24 HOURS BEFORE ANY CONCRETE IS REMOVED FROM AREAS MARKED "C."
 - SUBSEQUENTLY, REPAIRS MAY BE MADE TO AREAS MARKED "C."
- ALL OTHER AREAS MAY BE REPAIRED AT ANY TIME WITHOUT SEQUENCING RESTRICTIONS.
- FOR BRIDGE, PARAPET, ENDPOST CAP, WALL CAP, AND CURB REPAIR DETAILS, SEE "CONCRETE REPAIR DETAILS" SHEET.

CONCRETE NOTES

- CLASS OF CONCRETE SHALL BE CLASS XX AS DESCRIBED IN THE RI STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. CLASS XX CONCRETE SHALL BE USED WHERE THE WALL CAP AND PARAPET ARE CALLED OUT TO BE REMOVED AND REBUILT. PATCHING MORTAR SHALL BE USED AT ALL OTHER REPAIR LOCATIONS. SEE ALSO THE "CONCRETE REPAIR DETAILS" SHEET.
- THE CONTRACTOR MAY, AT THE APPROVAL OF THE ENGINEER, PROPOSE THE USE OF SELF-CONSOLIDATING CONCRETE FOR ANY CLASS OF CONCRETE ON THIS PROJECT. SECTION 606 'SELF CONSOLIDATING CONCRETE (SCC)', CONTAINS THE REQUIREMENTS FOR MODIFYING ALL CLASSES OF CONCRETE MIX DESIGN FOR SELF-CONSOLIDATING APPLICATIONS.

- ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED.
- EXCEPT FOR FOOTINGS CAST BELOW GRADE, ALL REINFORCING STEEL SHALL BE EPOXY COATED. ALL WIRE TIES AND MISCELLANEOUS HARDWARE USED FOR PLACEMENT OF EPOXY COATED REINFORCING SHALL ALSO BE EPOXY COATED. EPOXY COATING FOR REINFORCING STEEL SHALL CONFORM TO AASHTO DESIGNATION M 284.
- ALL CRITICAL LAP SPLICES SHALL BE AS SHOWN ON THE PLANS. ALL SPLICES NOT SHOWN ON THE PLANS SHALL BE LAPPED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR CLASS C LAP SPLICES.
- UNLESS OTHERWISE INDICATED ON THE PLANS, ALL MAIN REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

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| CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO EARTH (FOOTINGS, ABUTMENT AND WALL FACES, BACKWALLS) | 3" |
| ALL OTHER BARS | 2" |
- COVER TO TIES AND STIRRUPS MAY BE 0.5 INCH LESS THAN THE ABOVE VALUES SPECIFIED FOR MAIN REINFORCING, BUT IN NO CASE LESS THAN 1.5 INCHES.
- UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CONCRETE SURFACES VISIBLE IN ELEVATION TO ONE FOOT BELOW FINAL GROUND LINE (AND THE UNDERSIDE OF ALL CONCRETE DECK SLABS OUTSIDE OF THE FASCIA BEAMS), SHALL RECEIVE A CONCRETE SURFACE RUBBED FINISH IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.
- ALL EXPOSED EDGES AND REENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM 3/4" CHAMFER.
- ALL JOINT SEALANT SHALL BE POLYURETHANE, POLYURETHANE ELASTOMERIC, OR SILICONE SEALANT AS DESIGNATED ON THE PLANS. THE COLOR OF THE JOINT SEALANT, WHERE EXPOSED, SHALL BE NEUTRAL (LIGHT GRAY OR TAN). THE COLOR OF THE SEALANT, WHERE NOT EXPOSED, WILL BE AT THE DISCRETION OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATIONS DURING CONSTRUCTION UNTIL SUCH TIME WHEN THE SURFACES ARE APPROVED AND ACCEPTED. ANY CONCRETE STAINS OR DISCOLORATIONS OCCURRING PRIOR TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.

- UNLESS OTHERWISE NOTED ON THE PLANS, ALL METAL TIES OR ANCHORAGES WHICH ARE REQUIRED FOR CONCRETE FORMWORK SHALL BE SO CONSTRUCTED THAT THEY CAN BE REMOVED TO AT LEAST TWO INCHES BELOW THE EXPOSED SURFACE OF THE CONCRETE WITHOUT CAUSING DAMAGE TO THE CONCRETE SURFACE. SNAP TIES MAY BE USED ONLY IF APPROVED BY THE ENGINEER. IF THE CONTRACTOR PROPOSES TO USE THEM, A CATALOG CUT AND OTHER NECESSARY INFORMATION MUST BE SUBMITTED TO THE ENGINEER TO DEMONSTRATE THAT THE TIES WILL SNAP-OFF FAR ENOUGH INTO THE CONCRETE TO ALLOW FOR PROPER PATCHING. SNAP TIES MUST PROVIDE ADEQUATE STRENGTH TO SUPPORT THE FORMS. ALL CAVITIES SHALL BE FILLED WITH AN APPROVED CEMENT MORTAR MEETING THE REQUIREMENTS OF ASTM C 928.

LEGEND:

- REPAIRS TO UNDERSIDE OF ARCH (PATCHING MORTAR) - REFLECTED VIEW
- REPAIRS TO WALL CAP (PATCHING MORTAR)
- REBUILD PARAPET, ENDPOST CAP, AND WALL CAP (CLASS XX CONCRETE)
- SEQUENCING INDICATOR (SEE REPAIR NOTE 14)

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO. 1550916
DATED JUL 31 2015

| REVISIONS | | |
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RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REPAIRS TO COLES BRIDGE NO. 134
PAWTUCKET AVENUE (ROUTE 114)
OVER TEN MILE RIVER

EAST PROVIDENCE, RHODE ISLAND

CONCRETE REPAIR PLAN AND NOTES

CHECKED BY: _____ DATE: _____ SCALE: _____

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

