STATE OF RHODE ISLAND

DEPARTMENT OF TRANSPORTATION

PLANS, PROFILES AND SECTIONS OF PROPOSED

BRIDGE REHABILITATION/1R IMPROVEMENTS

KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (RT. 12)

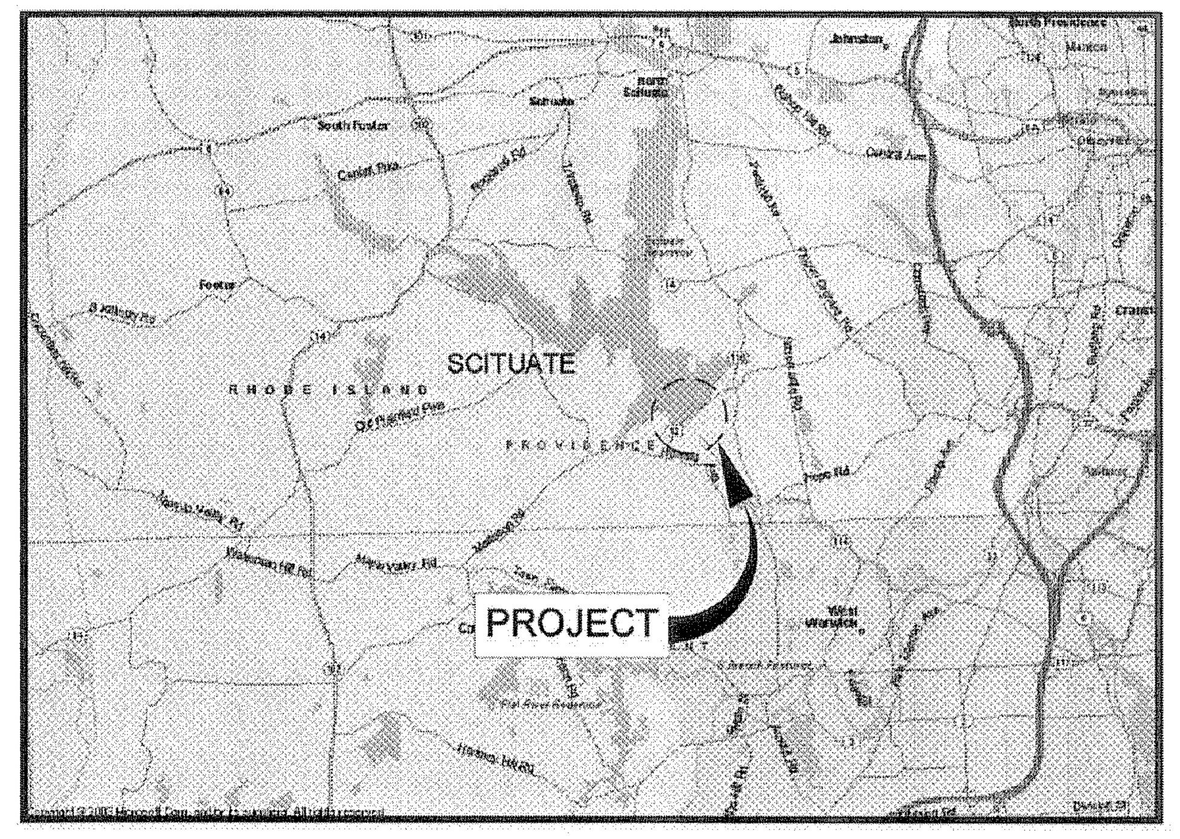
PROJECT LIMITS

SCITUATE AVE. STA. 3+50± TO STA. 45+75±
SCITUATE, RHODE ISLAND
COUNTY OF PROVIDENCE

R.I. CONTRACT NO. XXXX-CB-XXX F.A. PROJECT NO. XXXXX

LENGTH = 0.8 MILES

INDEX OF DRAWINGS

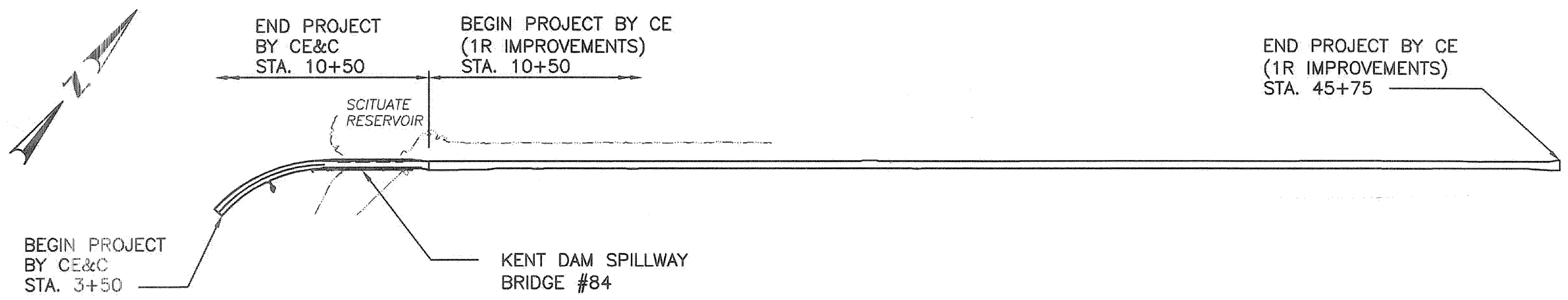


LOCATION MAP

MAR – 8 2013

DESIGN DESIGNATION

2012 AADT =	3,300 V.P.D.
2032 AADT =	4,000 V.P.D.
2012 DHV =	330 V.P.H.
2032 DHV =	400 V.P.H.
D =	50/50
K =	10%
T =	2%
V =	40 MPH



LAYOUT PLAN
SCALE: 1"=300'

RECEIVED
MAR 0 8 2013
Department Of Environmental Management
Office Of Technical & Customer Assistance

RIDEM SUBMISSION
FEBRUARY 2013

STEVEN M. CABRAL
4847
REGISTERED
PROFESSIONAL ENGINEER
[illegible]

[illegible]

...T OF ENVIRONMENTAL MANAGEMENT
...CE OF WATER RESOURCES
...TER WETLANDS PROGRAM
...VED WITH CONDITIONS
AS ... IN THE LETTER OF APPROVAL
MAR 1 8 2013 FILE # 12-0198
...S ALLOWED WITHOUT PRIOR APPROVAL
...PLANS MUST BE AT CONSTRUCTION SITE

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, WITH ALL REVISIONS, 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.

BASE OF LEVELS
NGVD 1929 VERTICAL
RI PLANE COORDINATE SYSTEM
NAD 1983 HORIZONTAL

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

Contract Number ______
Volume Number 1
Number of Sheet 1
Total Sheets 46

R.I. DEPARTMENT OF TRANSPORTATION

APPROVED
______ DEPUTY CHIEF ENGINEER ______ DATE

APPROVED
______ CHIEF ENGINEER ______ DATE

APPROVED
______ DIRECTOR ______ DATE

US 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
–	RI	–	–	2	46

EXISTING

	EDGE OF PAVEMENT
	BERM
	CURB
	GUARDRAIL
MB	MAILBOX
NO.	UTILITY POLE
	POLE GUY
	LUMINARE
SIGN	SIGN
(SIZE)SD	SUBDRAIN
(SIZE)D	STORMDRAIN
(SIZE)S	SANITARY SEWER
(SIZE)W	WATER MAIN
(SIZE)G	GAS MAIN
(SIZE)T	TELEPHONE DUCT
(SIZE)E	ELECTRIC DUCT
	PLUG AND CAP PIPE
	ABANDONED UTILITY
	FLARED END SECTION
	HEADWALL
WG OR GG	WATER OR GAS GATE
CB	CATCH BASIN
MH	MANHOLE
HYD	HYDRANT
1+00	BASELINE OR CENTERLINE
EXIST. S.H.L. PLAT NO. XX	STATE HIGHWAY LINE
EXIST. S.F.L. PLAT NO. XX	STATE FREEWAY LINE
EXIST. P.E.B.	PERMANENT EASEMENT LINE
EXIST. T.E.B.	TEMPORARY EASEMENT LINE
P	PROPERTY LINE
CITY NAME / TOWN NAME	CITY OR TOWN LINE
PWW	PAVED WATERWAY
ELEV.	CONTOUR LINE
	OPEN DITCH
R.I.H.B.	R.I. HIGHWAY BOUND
S.B.	STONE BOUND
	RETAINING WALL
	FIELD STONE WALL
NO.	BORINGS
TYPE	FENCE
	WOOD OR BRUSH LINE
	TREES
(NAME)	RIVER OR STREAM
	WETLAND AREA
NO. TYPE MATERIAL	BUILDING
	FOUNDATION
	BUILDING TO BE REMOVED
	RAILROAD TRACKS
	CUT AND MATCH
	RIP–RAP
	CUT SLOPE
	FILL SLOPE
	ROCK CUT
00x00	SPOT GRADE
	AREA GRADED TO DRAIN
	BALED HAY RI STD 9.1.0
	BALED HAY & SILT FENCE RI STD. 9.3.0
123 124 125	EDGE OF WETLAND
	WETLAND PERIMETER
ASSF	AREA SUBJECT TO STORM FLOW
100 YR. FLOOD BOUNDARY	100–YEAR FLOOD PLAIN
	LIMIT OF DISTURBANCE
	LIMIT OF CLEARING

NEW

	EDGE OF PAVEMENT
	BERM
	CURB
	GUARDRAIL
	MAILBOX
NO.	UTILITY POLE
GUY	POLE GUY
	LUMINARE
	SIGN
N(SIZE)SD	SUBDRAIN
(Length — Size)	STORMDRAIN
(Length — Size)	SANITARY SEWER
N(SIZE)W	WATER MAIN
N(SIZE)G	GAS MAIN
N–#(SIZE)T	TELEPHONE DUCT
N–#(SIZE)E	ELECTRIC DUCT
	PLUG AND CAP PIPE
	ABANDONED UTILITY
	FLARED END SECTION
	HEADWALL
	WATER OR GAS GATE
	CATCH BASIN
	MANHOLE
	HYDRANT
1+00	BASELINE OR CENTERLINE
NEW S.H.L. PLAT NO. XX	STATE HIGHWAY LINE
NEW S.F.L. PLAT NO. XX	STATE FREEWAY LINE
NEW P.E.B.	PERMANENT EASEMENT LINE
NEW T.E.B.	TEMPORARY EASEMENT LINE
	PROPERTY LINE
	CITY OR TOWN LINE
	PAVED WATERWAY
ELEV.	CONTOUR LINE
	OPEN DITCH
	R.I. HIGHWAY BOUND
	STONE BOUND
	RETAINING WALL
	FIELD STONE WALL
NO.	BORINGS
	FENCE
	WOOD OR BRUSH LINE
	TREES
	RIVER OR STREAM
	WETLAND AREA
	BUILDING
	FOUNDATION
	BUILDING TO BE REMOVED
	RAILROAD TRACKS
	CUT AND MATCH
	RIP–RAP
ROADWAY / TOP OF SLOPE	CUT SLOPE
ROADWAY / TOE OF SLOPE	FILL SLOPE
ROCK SHELF / ROCK / CUT	ROCK CUT
00.00	SPOT GRADE
ELEV.	AREA GRADED TO DRAIN
	BALED HAY RI STD 9.1.0
	BALED HAY & SILT FENCE RI STD. 9.3.0
	EDGE OF WETLAND
	WETLAND PERIMETER
	AREA SUBJECT TO STORM FLOW
	100–YEAR FLOOD PLAIN
LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE
LIMIT OF CLEARING	LIMIT OF CLEARING

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	CONCRETE CURB 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 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

MAR – 8 2013

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 1 8 2013 FILE # 12-0178
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY
1	6/07	TRB

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

STANDARD PLAN SYMBOLS & STANDARD LEGEND

CHECKED BY _____ DATE _____ SCALE NO SCALE

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_002_STDSYM

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	3	46

GENERAL NOTES:

1. 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.
2. 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.
3. 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 CONFORMITY 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.
4. ALL R.I. STD. 9.9.0 CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.
5. THE FREQUENCY AND APPLICATION RATES FOR THE DUST CONTROL ITEMS WILL BE AS DIRECTED BY THE ENGINEER.
6. ALL SIDEWALK AND DRIVEWAYS DESIGNATED FOR REPLACEMENT SHALL BE CUT AND MATCHED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
7. 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."
8. 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.
9. UNDER NO CIRCUMSTANCE WILL THE CONTRACTOR BE ALLOWED TO STOCKPILE REMOVED PAVEMENT MATERIALS WITHIN THE PROJECT LIMITS.
10. 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.
11. PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE APPROVED OR MODIFIED BY THE ENGINEER.
12. THE COORDINATE SYSTEM IS THE R.I. STANDARD GRID SYSTEM, NAD 83. THE VERTICAL CONTROL IS NGVD 29.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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).
20. 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 COMPLIANCE WITH THESE DOCUMENTS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
21. 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.
22. 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:

1. 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 RIPDES 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).
2. 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 SEEDED 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 RESTABILIZED 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.
3. 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 SEEDED AND RINGED WITH R.I. STD. 9.1.0 TO STABILIZE.
4. 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.
5. 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.
6. SEEDING ON ALL SLOPES 3 TO 1 OR STEEPER SHALL CONSIST OF THE FOLLOWING APPLICATIONS UNLESS CHANGED IN THE CONTRACT.
   a. SEEDING TYPE I.
   b. ADHESIVE MULCH STABILIZER
7. UNVEGETATED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR PERIODS IN EXCESS OF 2 WEEKS OR THROUGH THE INACTIVE WINTER SEASON.
8. 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.
9. ALL DRAINAGE AND UTILITY STRUCTURES WITHIN THE PAVED ROADWAY SHALL BE ADJUSTED TO GRADE WITH THE SURROUNDING PAVEMENT PRIOR TO THE WINTER SHUTDOWN.
10. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL THROUGHOUT THE WORK AREA.
11. 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.
12. PROVISIONS FOR CLEARING TO ACCESS OUTFALLS DURING THE CLEANING AND FLUSHING OF THE CLOSED DRAINAGE SYSTEM SHALL BE KEPT TO A MINIMUM.
   a. ANY VEGETATIVE CLEARING SHALL BE LIMITED TO BRUSH AND TREES LESS THAN 3" DIAMETER.
   b. NO HEAVY EQUIPMENT MAY ENCROACH UPON VEGETATED PERIMETER OR RIVERBANK WETLANDS AS WELL AS BIOLOGICAL WETLANDS.
13. 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.
14. 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.
15. 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):

16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE SPECIFIED IN SUBSECTION L.02.03 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
22. 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:

1. 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.
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE AND UTILITIES BOTH UNDERGROUND AND OVERHEAD BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH CHAPTER 39–1.2 OF THE R.I. GENERAL LAWS ENTITLED "EXCAVATION NEAR UNDERGROUND UTILITY FACILITIES", WITH AMENDMENTS EFFECTIVE AS OF NOVEMBER 1, 2009 AND, WHEN NECESSARY, 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.
3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CAPPED.
4. EXISTING WATER SERVICES SHALL BE RECONNECTED TO THE NEW WATER MAINS.
5. UTILITY SERVICE CONNECTIONS SHALL BE MAINTAINED TO ALL EXISTING FACILITIES TO REMAIN.
6. FIRE HYDRANTS SHALL NOT BE REMOVED FROM SERVICE WITHOUT WRITTEN AUTHORIZATION FROM THE FIRE DEPARTMENT OR THE WATER AUTHORITY.
7. ALL NEW WATER LINES SHALL BE DISINFECTED TO THE SATISFACTION OF THE WATER AUTHORITY IN ACCORDANCE WITH THE SPECIFICATIONS.
8. 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 MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY
1	4/07	TRB
2	3/10	RBH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

STANDARD NOTES - 1

CHECKED BY _____ DATE _____ SCALE NO SCALE

COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

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FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	4	46

LANDSCAPE NOTES:

1. ALL PLANT MATERIAL MUST BE TAGGED AT THE NURSERY (A RECOGNIZED GROWER OF PLANT MATERIAL) IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION. ALL PLANT MATERIAL MUST BE NURSERY GROWN; NO PLANTATION GROWN PLANT MATERIAL WILL BE ACCEPTED.
2. ALL PLANT SUBSTITUTIONS AND/OR CHANGES IN PLANT LOCATION MUST BE APPROVED IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
3. ALL PLANT MATERIAL IS TO BE FIELD LOCATED BY A REPRESENTATIVE FROM THE R.I.D.O.T. LANDSCAPE ARCHITECTURE UNIT.
4. A R.I.D.O.T. LANDSCAPE REPRESENTATIVE MUST BE ON SITE TO APPROVE ALL TRIMMING AND CLEARING NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
5. ANY TOPSOIL USED AS PLANTABLE SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS, AND SHALL CONFORM TO SECTION M.18 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
6. ALL TREES AND SHRUBS SHALL BE MULCHED WITH PINE BARK MULCH IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
7. ALL TREES AND/OR SHRUBS THAT ARE PLANTED AS A BED SHALL BE MULCHED AS A BED.
8. PROVIDE A MINIMUM 6'–8" BRANCHING STANDARD ON ALL TREES INSTALLED ADJACENT TO SIDEWALKS AND/OR PEDESTRIAN ACCESS AREAS.

STRUCTURAL NOTES FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS:

GENERAL

1. ALL SUPPORT DESIGNS AND ASSOCIATED SHOP DRAWING REVIEWS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION, OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (THE "SPECIFICATIONS"), INCLUDING THE LATEST INTERIM SPECIFICATIONS, EXCEPT AS MODIFIED HEREIN.

CONSTRUCTION DRAWINGS AND DETAILS

1. THE FOLLOWING NOTES SHALL BE INCLUDED ON ALL PLANS AND/OR SHOP DRAWINGS IN REFERENCE TO ANCHOR BOLTS:
   - "PRETENSIONING OF ALL ANCHOR NUTS IS REQUIRED, AND SHALL BE ACCOMPLISHED BY TIGHTENING TO 1/6TH TURN BEYOND THE SNUG–TIGHT POSITION."
   - "THE MAXIMUM CLEARANCE BETWEEN THE BOTTOM OF THE LEVELING NUTS AND THE TOP OF THE CONCRETE IS CRITICAL AND SHALL NOT EXCEED THE AMOUNT SPECIFIED ON THIS DRAWING."
2. THE USE OF GROUT UNDER BASE PLATES SHALL GENERALLY NOT BE PERMITTED. IF SPECIFIC CONDITIONS WARRANT ITS USE, THE GROUT SHALL NOT BE CONSIDERED LOAD CARRYING; LOADS SHALL BE DIRECTLY SUPPORTED BY THE ANCHOR BOLTS. ADEQUATE DRAINAGE SHALL BE PROVIDED.
3. THE DAMPENING EFFECTS OF VIBRATION MITIGATION DEVICES SHALL NOT BE CONSIDERED IN THE DESIGN OF STRUCTURAL SUPPORTS FOR SIGNS AND TRAFFIC SIGNALS. IF THE CONTRACTOR CHOOSES TO USE THESE DEVICES FOR WARRANTY PURPOSES, THE TYPE OF DEVICES PROPOSED SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO FABRICATION OF SUPPORTS.

TRAFFIC SIGNAL NOTES:

1. ALL SALVAGED TRAFFIC SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE R.I.D.O.T. MAINTENANCE HEADQUARTERS, 360 LINCOLN AVENUE, WARWICK, RHODE ISLAND, 02888.
2. BACK PLATES SHALL BE INSTALLED ON ALL TRAFFIC SIGNAL HEADS.
3. THE CONTRACTOR SHALL SUPPLY AND INSTALL ON THE UPPER LEFT HAND CORNER OF THE BACK OF THE CONTROLLER CABINET DOOR A LAMINATED INTERSECTION GRAPHIC AND TABLE DEPICTING THE TRAFFIC DETECTOR RELAY CHANNEL ASSIGNMENTS. THE DIAGRAM SHALL BE A GRAPHIC OF THE INDIVIDUAL INTERSECTION ORIENTED SIMILAR TO THE PLANS SHOWING THE LOCATIONS OF EACH OF THE LOOP DETECTORS. THE DIAGRAM SHALL, AT A MINIMUM, INCLUDE DETECTOR NUMBERS, STREET NAME LABELS, NORTH ARROW, AND CONTROLLER CABINET LOCATION. THE ASSIGNMENT INFORMATION SHALL BE INCLUDED IN A TABLE WHICH SHALL INCLUDE, AT A MINIMUM, THE APPROACH NAME, DETECTOR NUMBER, TERMINAL NUMBER, DETECTOR RACK SLOT NUMBER, RELAY NUMBER, RELAY CHANNEL NUMBER, AND PHASE ASSOCIATED WITH EACH DETECTOR.
4. TRAFFIC CONTROLLER CABINETS, UNLESS OTHERWISE NOTED, SHALL BE NEMA TS2 TYPE 1 CABINET SIZE 6 ("P" TYPE) WITH NOMINAL DIMENSIONS OF 52"Hx44"Wx24"D.
5. ALL DELAY AND EXTENSION TIMES, AS CALLED FOR ON THE PLANS, FOR PROPOSED LOOP DETECTORS SHALL BE PROGRAMMED IN THE TRAFFIC SIGNAL CONTROLLER AND NOT THE DETECTOR RELAY.
6. A BARE GROUND WIRE SHALL BE PLACED IN ALL PVC CONDUITS AND SHALL BE BONDED TO GROUND RODS IN ACCORDANCE WITH SECTION T.03 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
7. THE FINAL POSITION OF SIGNAL HEADS, PEDESTRIAN PUSHBUTTONS, DETECTORS, AND STOP LINE AND CROSSWALK PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD ACCORDING TO ACTUAL INTERSECTION CHARACTERISTICS.
8. A 2' MINIMUM BUFFER SHALL BE PROVIDED BETWEEN THE CURB AND ALL LATERAL OBSTRUCTIONS (INCLUDING ALL SIGNAL POLES AND TRAFFIC/PEDESTRIAN SIGNAL HEADS) TO PROVIDE ADEQUATE CLEARANCE FOR TURNING VEHICLES.
9. ALL FOUNDATIONS MUST HAVE CONES OR BARRELS BOLTED TO FOUNDATION BASES UNTIL ACTUAL POLE IS INSTALLED.
10. WHEN PLACING TRAFFIC SIGNAL HANDHOLES OR CONDUIT IN EXISTING PORTLAND CEMENT CONCRETE SIDEWALKS, THE ENTIRE SIDEWALK SQUARE OF CONCRETE SHALL BE REPLACED IN ACCORDANCE WITH R.I. STD. 43.1.0. NO PATCHES WILL BE ALLOWED.
11. ALL PEDESTRIAN PUSHBUTTONS SHALL BE COMPLIANT WITH "THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES" (ADAAG) AND SHALL INCLUDE A PRESSURE–ACTIVATED (NON–MOVING) BUTTON. SIGNS APPLICABLE TO PUSHBUTTON ACTUATION SHALL BE INSTALLED SUCH THAT THE CROSSING ASSIGNED TO EACH BUTTON IS CLEARLY INDICATED. IF SITE CONDITIONS DO NOT ALLOW PEDESTRIAN PUSHBUTTONS TO BE INSTALLED WHERE CALLED FOR ON THE PLANS, THE R.I.D.O.T. TRAFFIC ENGINEERING UNIT SHALL BE CONSULTED WITH THROUGH AN R.F.I. PRIOR TO INSTALLING THE PUSHBUTTONS. THE FINAL PLACEMENT OF ALL PEDESTRIAN PUSHBUTTONS SHALL BE IN ACCORDANCE WITH ADAAG AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
12. ALL LOOP DETECTORS SHALL BE CENTERED WITHIN EACH LANE AS DELINEATED, UNLESS OTHERWISE DIMENSIONED ON PLANS.
13. ALL LOOP DETECTORS SHALL BE CUT INTO THE FINAL PAVEMENT SURFACE COURSE.
14. TRAFFIC SIGNAL CONTROLLERS SHALL BE WIRED SO THAT ANY FIRE PRE–EMPTION SHALL OVERRIDE MANUAL (PUSH BUTTON) OPERATION.
15. THE CONTRACTOR SHALL WORK CONTINUOUSLY TO RESTORE TRAFFIC SIGNAL OPERATION TO ITS INTENDED PURPOSE WHEN REPLACING THE TRAFFIC SIGNAL EQUIPMENT. A POLICE DETAIL IS REQUIRED TO DIRECT TRAFFIC AT THE INTERSECTION AT ALL TIMES WHEN THE TRAFFIC SIGNAL IS INOPERATIVE. AT NO TIME SHALL THE CONTRACTOR LEAVE THE SITE BEFORE RESTORING FULL TRAFFIC OPERATIONS.

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

1. ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS, CHANNELIZING DEVICES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. ALL SIGN MOUNTINGS FOR TEMPORARY AND CONSTRUCTION SIGNS SHALL BE IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
3. THE CONTRACTOR SHALL COVER ALL EXISTING AND/OR TEMPORARY SIGNS THAT ARE NOT RELEVANT TO THE TRAFFIC CONTROL REQUIRED DURING ANY PARTICULAR STAGE OF THE CONTRACT.
4. ADVANCE FLAGPERSON SIGNS (W20–7A) SHALL BE USED IN ADVANCE OF ANY POINT AT WHICH A FLAGPERSON OR A POLICE OFFICER HAS BEEN STATIONED TO CONTROL TRAFFIC. WHEN NEEDED, AN APPROPRIATE DISTANCE MESSAGE MAY BE DISPLAYED ON A SUPPLEMENTAL PLATE (24"x18") BELOW THE FLAGPERSON SYMBOL SIGN. THE SIGN SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE FLAGPERSON IS NOT AT THE STATION.
5. POLICE OFFICERS (AND NOT FLAGPERSONS) SHALL BE UTILIZED WHEN WORK WILL IMPACT SIGNALIZED INTERSECTIONS AND LIMITED ACCESS HIGHWAYS.
6. POLYETHYLENE DRUMS SHALL BE UTILIZED AS A CHANNELIZING DEVICE WHEN A TRAFFIC CONTROL SET–UP IS TO REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT. CONES SHALL BE UTILIZED WHEN A TRAFFIC CONTROL SET–UP IS TO REMAIN ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY BROKEN DOWN AT THE END OF THE WORKDAY.
7. ARROW PANELS SHALL BE SET IN THE FLASHING FOUR CORNERS CAUTION MODE UNLESS UTILIZED FOR A MERGING TAPER. ARROW PANELS SET IN THE FLASHING ARROW MODE SHALL NOT BE UTILIZED FOR LANE SHIFTS.
8. TEMPORARY CONSTRUCTION SIGNS AND OTHER WORKZONE TRAFFIC CONTROL DEVICES THAT ARE DAMAGED OR REQUIRE RELOCATION SHALL BE REPLACED AND / OR RELOCATED UNDER THE PAY ITEM FOR "MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION."
9. THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED ON THE TRAVEL LANES OR SHOULDERS. THEY MAY BE PARKED WITHIN THE STATE RIGHT–OF–WAY ONLY IN AREAS 30' BEYOND THE OUTSIDE EDGE OF THE TRAVEL LANES AND/OR IN AREAS APPROVED BY THE ENGINEER.
10. TEMPORARY CONSTRUCTION SIGNS AND OTHER TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC, AND SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER APPROPRIATE.
11. THE INTENDED VEHICLE PATHS THROUGH EACH WORK ZONE SHALL BE CLEARLY MARKED AT ALL TIMES. WATERBORNE PAVEMENT MARKINGS SHALL BE INSTALLED BEFORE THE END OF THE WORK SHIFT ON ALL COLD–PLANED AND NEW ROADWAY SURFACES THAT WILL BE OPENED TO TRAFFIC AT THE END OF THE SHIFT.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Charles A. Horbert

COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

REVISIONS		
NO.	DATE	BY
1.	4/07	TRB
2.	11/07	TRB
3	3/10	RBH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

STANDARD NOTES - 2

CHECKED BY _____ DATE _____ SCALE NO SCALE

0143B_V1_004_STDNOTES02

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	5	46

JOB SPECIFIC LEGEND

3.3.5	BRICK/SOLID BLOCK DOUBLE GRATE CATCH BASIN GRATE PERPENDICULAR TO EDGE OF PAVEMENT
RRP	TYPICAL LAYOUT OF RIP–RAP OUTLET PROTECTION AT FLARED END SECTIONS AND HEADWALLS
24.2.0	SIGN POST SELECTION AND INSTALLATION DETAILS U–CHANNEL POST (SIGNS UP TO 8'–0"W x 4'–0"H)
26.1.0	FLUORESCENT TRAFFIC CONE
34.3.5	GUARDRAIL CONNECTION TO EXISTING ENDPOST APPROACH END SECTION, STANDARD 34.3.5
34.3.6	GUARDRAIL CONNECTION TO EXISTING END POST TRAILING END SECTION, STANDARD 34.3.6
DRC	REMOVE AND DISPOSE DRY RUBBLE CURB
GAD	6" SPECIAL GRADED AGGREGATE FOR SHAPING AND TRIMMING DRIVEWAYS OR SHOULDERS (303.0100)
M	PLACEMENT OF MILLINGS BENEATH GUARDRAIL (213.0100)
P	2" MODIFIED CLASS 12.5 HOT MIX ASPHALT SURFACE COURSE 7" CLASS 19 HOW MIX ASPHALT BASE COURSE 12" GRAVEL BORROW SUBBASE COURSE
P–1	2" MODIFIED CLASS 12.5 HOT MIX ASPHALT SURFACE COURSE 2"MICRO MILLING
P–2	2" MODIFIED CLASS 12.5 HOT MIX ASPHALT SURFACE COURSE 7" CLASS XX PORTLAND CEMENT CONCRETE BASE 12" GRAVEL BORROW SUBBASE COURSE
P–3	2" MODIFIED CLASS 12.5 HOT MIX ASPHALT SURFACE COURSE 5" CLASS 19 HOW MIX ASPHALT BASE COURSE 2" GRAVEL BORROW SUBBASE COURSE
R&D	REMOVE & DISPOSE
R&R	REMOVE & RESET
RCC	REPLACE GAINER DAM STRUCTURE CEMENT CONCRETE COVER (702.9901)
RRM	TWO–WAY REFLECTORIZED PAVEMENT MARKERS (SLOTTED IN PAVEMENT) YELLOW (T20.9901)
RRP	PLACED RIP–RAP OUTLET PROTECTION
RSF	REMOVE AND STOCKPILE REMOVE AND STOCKPILE PROTECTIVE CHAIN LINK FENCE 6 FEET HIGH
RSSM	REMOVE AND STOCKPILE SHOCK ABSORBING BARRIER MODULES LEFT IN PLACE
RSTB	REMOVE AND STOCKPILE PRECAST MEDIAN BARRIER FOR TEMPORARY TRAFFIC CONTROL STD. 40.5.0 LEFT IN PLACE.
S–1	CUTTING AND MATCHING ASPHALT, REFER TO R.I. STD. 47.1.1 (932.0100)
S–3	FULL DEPTH SAWCUT OF BITUMINOUS PAVEMENT (932.0200)
SCCB	SEDIMENTATION CONTROL – CATCH BASIN
SCI	SEDIMENTATION CONTROL – INLET STRUCTURE
— · · — · · —	200' RIVERBANK WETLAND
— · — · —	50' PERIMETER WETLAND

JOB SPECIFIC GENERAL NOTES:

1. ANY SUBCONTRACTOR EMPLOYED BY THE CONTRACTOR AND R.I.D.O.T. PERSONNEL ON THIS PROJECT SHALL WORK WITHIN THE SAME PROTECTED WORK AREAS AS THE CONTRACTOR. NO SEPARATE LANE CLOSURES WILL BE PAID FOR.
2. TOPOGRAPHIC CONDITIONS ARE OBTAINED FROM AERIAL PHOTOGRAMMETRY. ACCURACY OF INFORMATION IS WITHIN ONE–HALF FOOT.

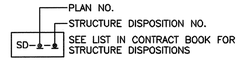
JOB SPECIFIC DRAINAGE AND EROSION CONTROL NOTES:

1. ALL DRAINAGE PIPES SHALL BE REINFORCED CONCRETE PIPE (RCP), CLASS III, WITH MORTAR JOINTS UNLESS OTHERWISE NOTED ON THE PLANS. ALL RCP 30" AND LARGER SHALL HAVE "O" RING GASKETS, AND THE JOINTS ON THE OUTSIDE OF THE PIPE SHALL BE MORTARED.
2. ALL CATCH BASIN INLET GRATES SHALL HAVE 3–FLANGE FRAMES, UNLESS OTHERWISE NOTED ON THE PLANS.
3. ALL R.I. STD. 4.4.0M CATCH BASINS SHALL HAVE A 4–FOOT DIAMETER, UNLESS OTHERWISE NOTED ON THE PLANS.
4. THE DRAINAGE SYSTEM SHALL BE INSPECTED AND CLEANED, AS REQUIRED, AFTER THE FINAL RIDING SURFACE HAS BEEN APPLIED AND PRIOR TO ACCEPTANCE OF THE OVERALL PROJECT. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF WORK IN ACCORDANCE WITH SUBSECTION 104.11 OF THE STANDARD SPECIFICATIONS.
5. IN ALL CLEAR AND GRUB SLOPE AREAS 2:1 OR STEEPER WHICH WILL REMAIN EXPOSED TO EROSION FOR MORE THAN 2 WEEKS, THE CONTRACTOR SHALL BE RESPONSIBLE TO COVER THESE AREAS WITH FILTER FABRIC AND (R–3) RIP–RAP AT NO ADDITIONAL COST TO THE STATE.
6. 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 RIPDES 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 PROJECT SUPPLEMENTAL DVD. 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).

JOB SPECIFIC PAVEMENT MARKINGS NOTES:

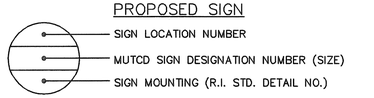
1. WATERBORNE TRAFFIC MARKINGS (T20.0004, T20.0006, T20.0012, T20.0104, AND T20.0106) SHALL BE USED ON COLD PLANED SURFACES AND INTERMEDIATE PAVEMENT LAYERS WHICH WILL BE OPENED TO TRAFFIC AT THE COMPLETION OF EACH DAY'S PAVING OPERATION.
2. TEMPORARY WATERBORNE PAVEMENT MARKINGS (T20.9901 AND T20.9902) SHALL BE PLACED ON THE FINAL SURFACE COURSE LAYER WHICH WILL BE OPENED TO TRAFFIC AT THE COMPLETION OF EACH DAY'S PAVING OPERATION.
3. EPOXY RESIN PAVEMENT MARKINGS ((T20.2006, T20.2012, T20.2014, T20.2016, T20.2020, T20.2022 AND T20.9903) SHALL BE PLACED ON THE FINAL SURFACE COURSE LAYER NO SOONER THAN 2 WEEKS BUT NO LONGER THAN 4 WEEKS FROM THE COMPLETION OF EACH DAY'S PAVING OPERATION.

STRUCTURE DISPOSITIONS

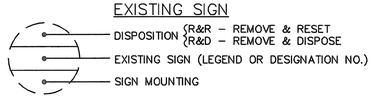


TYPICAL SIGN DESIGNATION SYMBOL

PROPOSED SIGN

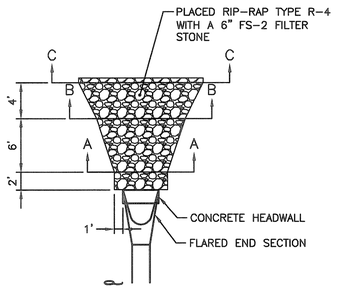


EXISTING SIGN



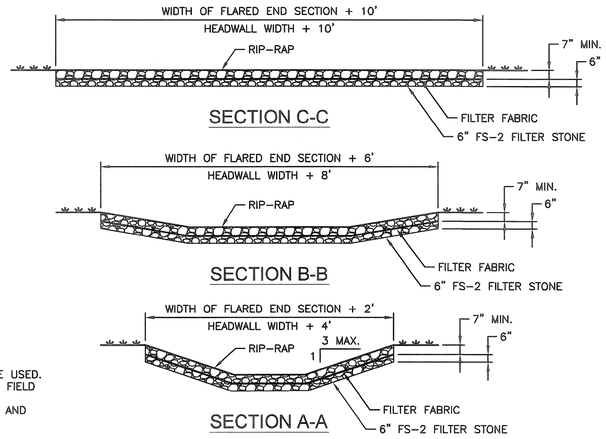
JOB SPECIFIC PLAN SYMBOLS

EXISTING		PROPOSED
○ GCS	GAS CURB STOP	● GCS
○ WCS	WATER CURB STOP	● WCS
○ HH	ELECTRIC HANDHOLE	⊠ HH
○ SHH	SIGNAL HANDHOLE	□ SHH
	UTILITY TEST PIT (SEE SUBSURFACE UTILITY PLANS)	⊞ TP–32
	PAVEMENT CORE	⊕ PC–X–X



NOTES:

1. UNLESS OTHERWISE SPECIFIED, PLACED RIP–RAP SHALL BE USED.
2. DIMENSIONS MAY BE MODIFIED BY THE ENGINEER TO MEET FIELD CONDITIONS OR BE SHOWN OTHERWISE ON THE PLANS.
3. PLACE A LAYER OF FILTER FABRIC BETWEEN THE RIP–RAP AND FILTER STONE.



RRP TYPICAL LAYOUT OF RIP-RAP OUTLET PROTECTION AT FLARED END SECTIONS AND HEADWALLS

NOT TO SCALE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

JOB SPECIFIC
PLAN SYMBOLS, LEGEND & NOTES

CHECKED BY _____ DATE _____ SCALE NO SCALE

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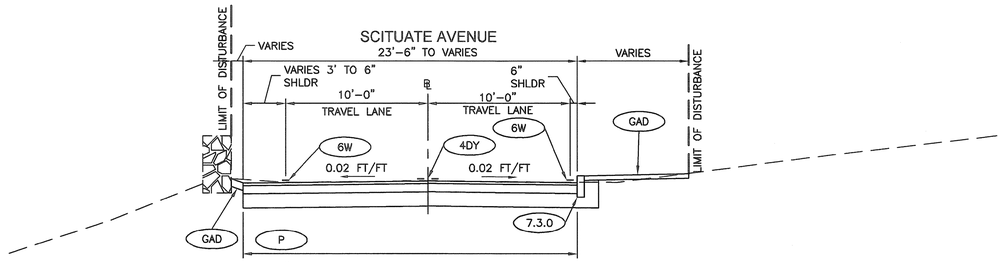
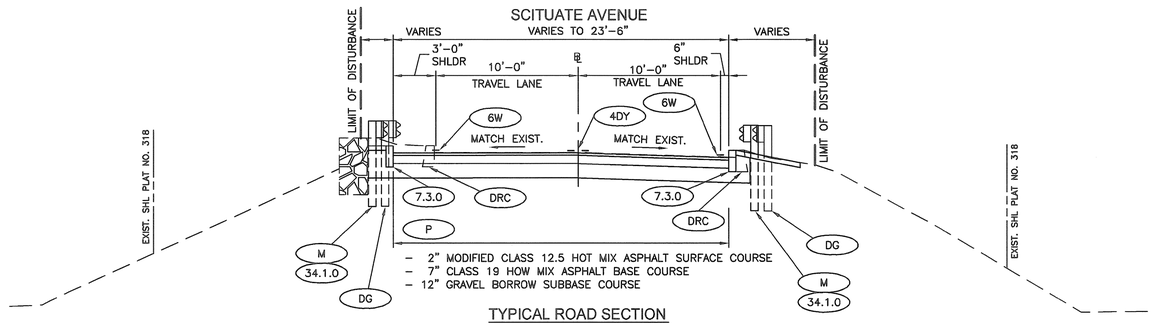
0143B_V1_005_JSNOTSYM001

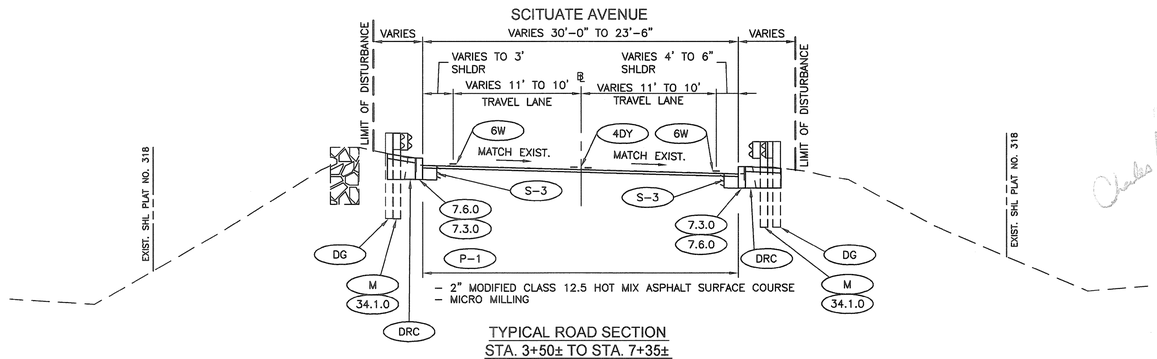
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	6	46



TYPICAL ROAD SECTION
STA. 10+00± TO STA. 10+50±



TYPICAL ROAD SECTION
STA. 7+35± TO STA. 7+45±



TYPICAL ROAD SECTION
STA. 3+50± TO STA. 7+35±

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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NOTE:
FOR TYPICAL BRIDGE SECTION STA. 7+45± TO STA. 10+00± SEE "LONGITUDINAL & TRANSVERSE SECTIONS".

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

TYPICAL SECTIONS

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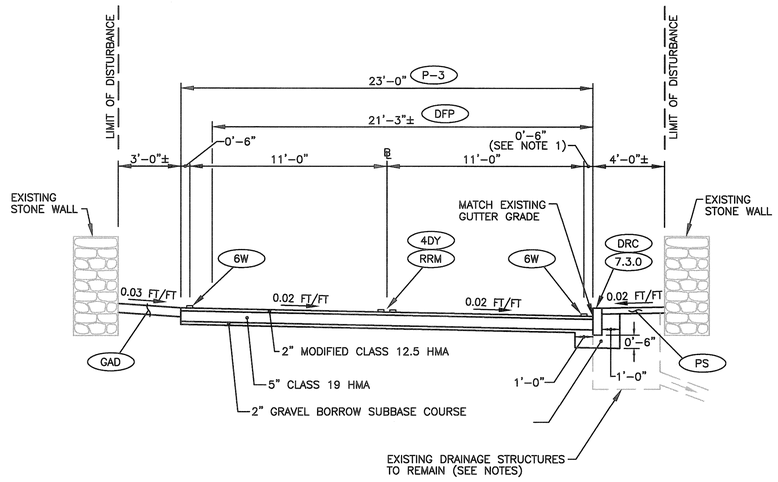
400 SMITH STREET
PROVIDENCE, RI 02908

CHECKED BY _____ DATE _____ SCALE 1" = 5'

0143B_V1_006_TYPICAL001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	7	46



SCITUATE AVENUE PROPOSED TYPICAL SECTION STA. 12+50 TO STA. 42+75
SCALE: 1"=4'

NOTES:

1. THE RIGHT SHOULDER WIDTH MAY VARY IN ORDER TO MATCH THE FACE OF ANY EXISTING DRAINAGE STRUCTURES WHICH ARE NOT FLUSH WITH THE PROPOSED CURB LINE. HORIZONTAL TRANSITIONS BETWEEN THE PROPOSED CURB LINE AND THE FACE OF DRAINAGE STRUCTURE INLETS SHALL BE A MINIMUM OF 18 FEET IN LENGTH.

2. THE TYPICAL CURB REVEAL OVER THE GAINER DAM SHALL BE 0'-6". AT EXISTING DRAINAGE STRUCTURES, THE CURB REVEAL WILL VARY TO MATCH THE TOP OF EXISTING DRAINAGE STRUCTURES. THE VERTICAL TRANSITIONS BETWEEN THE 0'-6" CURB REVEAL AND THE TOP OF EXISTING DRAINAGE STRUCTURES SHALL BE A MINIMUM OF 12 FEET IN LENGTH.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

1R TYPICAL SECTION

CHECKED BY _____ DATE _____ SCALE _____

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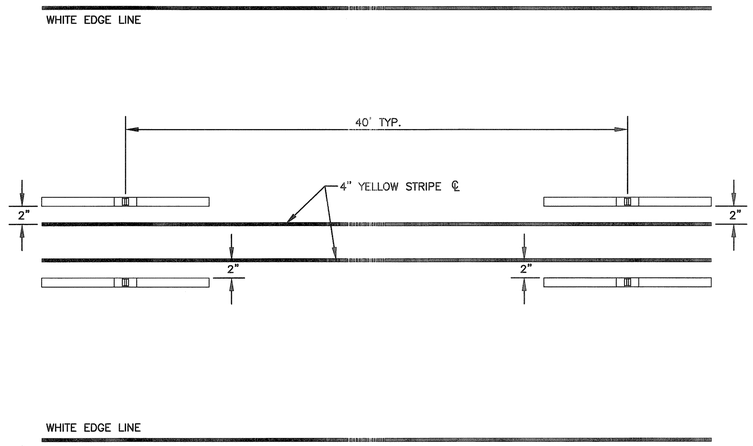
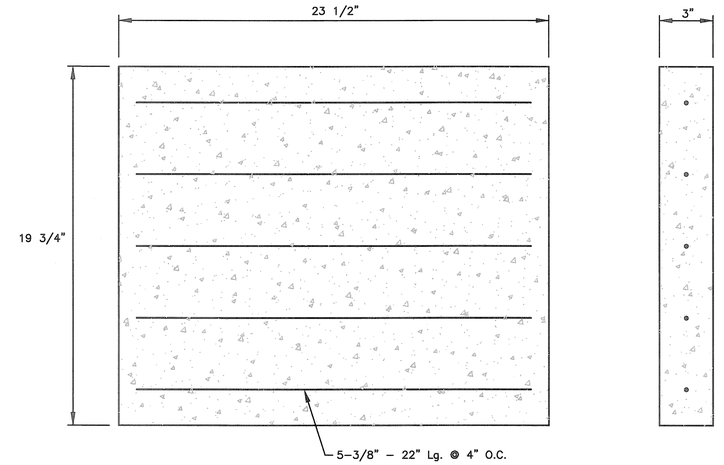
0130D_V1_007_1R TYP SEC

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	8	46



TWO LANE TWO-WAY TRAFFIC RECESSED (SLOTTED IN PAVEMENT)
PAVEMENT MARKER PLACEMENT DETAIL

NOT TO SCALE

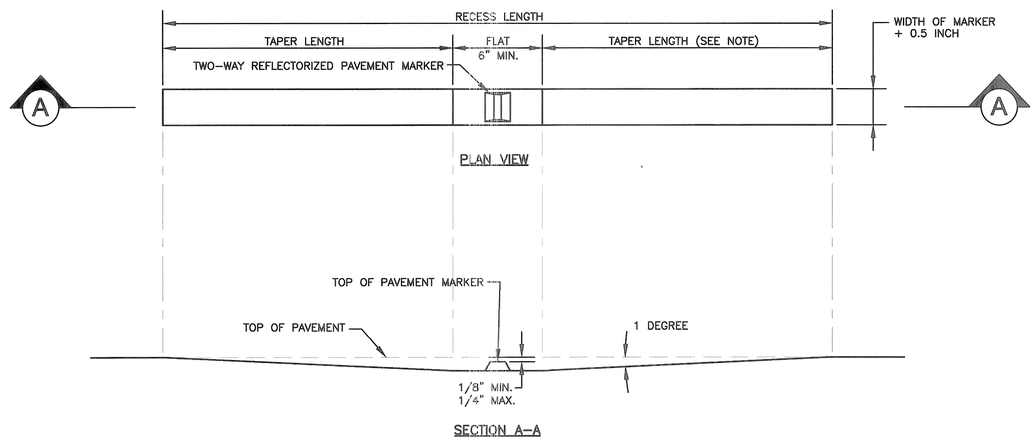


PLAN CROSS SECTION

RCC

REPLACE GAINER DAM DRAINAGE STRUCTURE
CEMENT CONCRETE COVER DETAIL

NOT TO SCALE



TWO-WAY RECESSED (SLOTTED IN PAVEMENT)
PAVEMENT MARKER INSTALLATION DETAILS

NOT TO SCALE

NOTE: TAPER LENGTH BASED ON HEIGHT OF REFLECTORIZED PAVEMENT MARKER

RRM

TWO-WAY REFLECTORIZED PAVEMENT MARKERS
(SLOTTED IN PAVEMENT) YELLOW DETAILS

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

1R MISCELLANEOUS DETAILS

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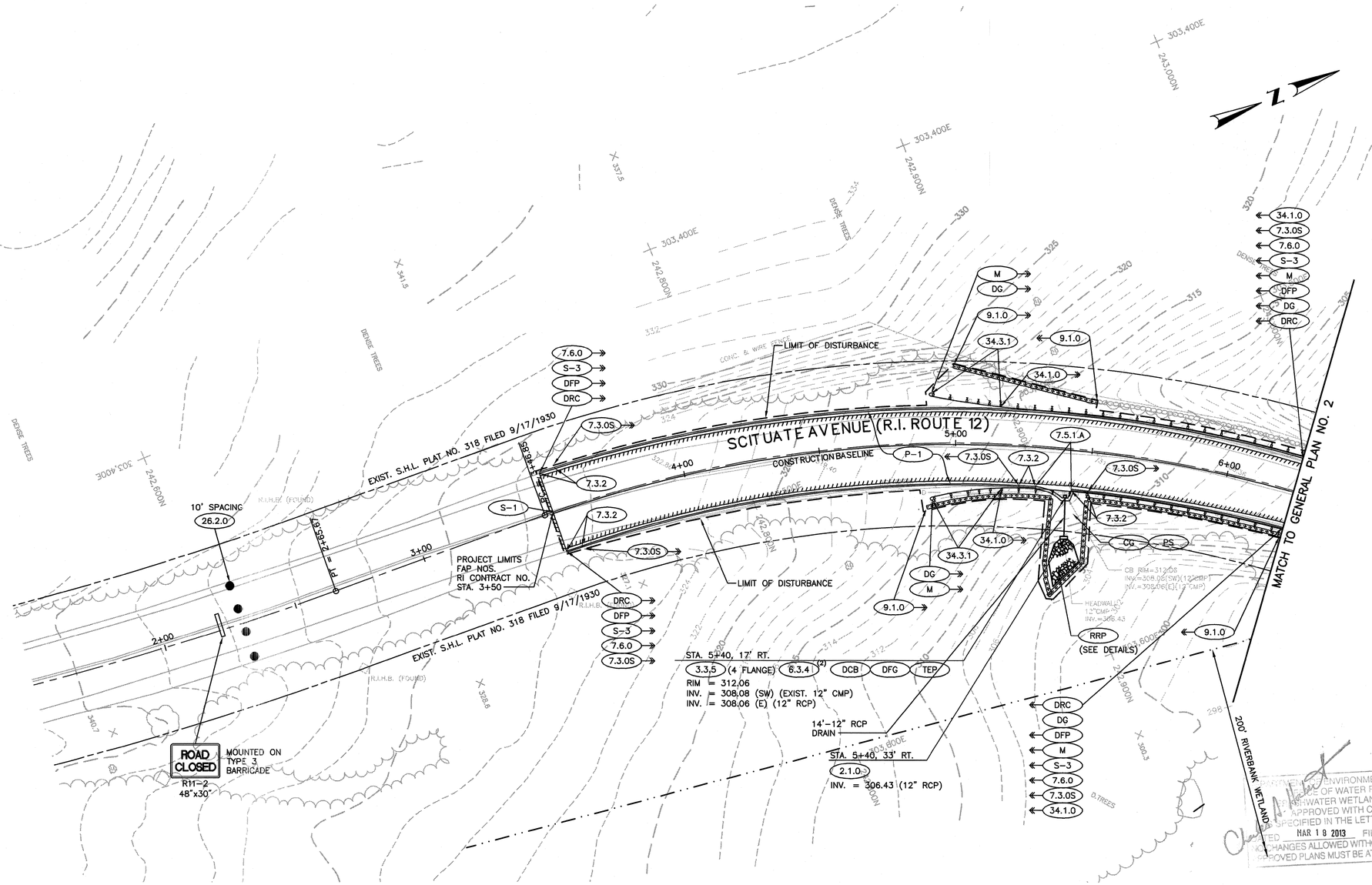
CHECKED BY _____ DATE _____ SCALE _____

0130D_V1_008_1R DETAILS

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	9	46



NOTE:
1. THE CONTRACTOR SHALL AVOID DRIVING POSTS THROUGH PAVED WATERWAYS BY OMITTING A POST AND NESTING EXTRA SECTIONS FOR ADDITIONAL STIFFNESS.

RECEIVED
MAR - 8 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

GENERAL PLAN NO. 1

CHECKED BY _____ DATE _____ SCALE 1"=20'

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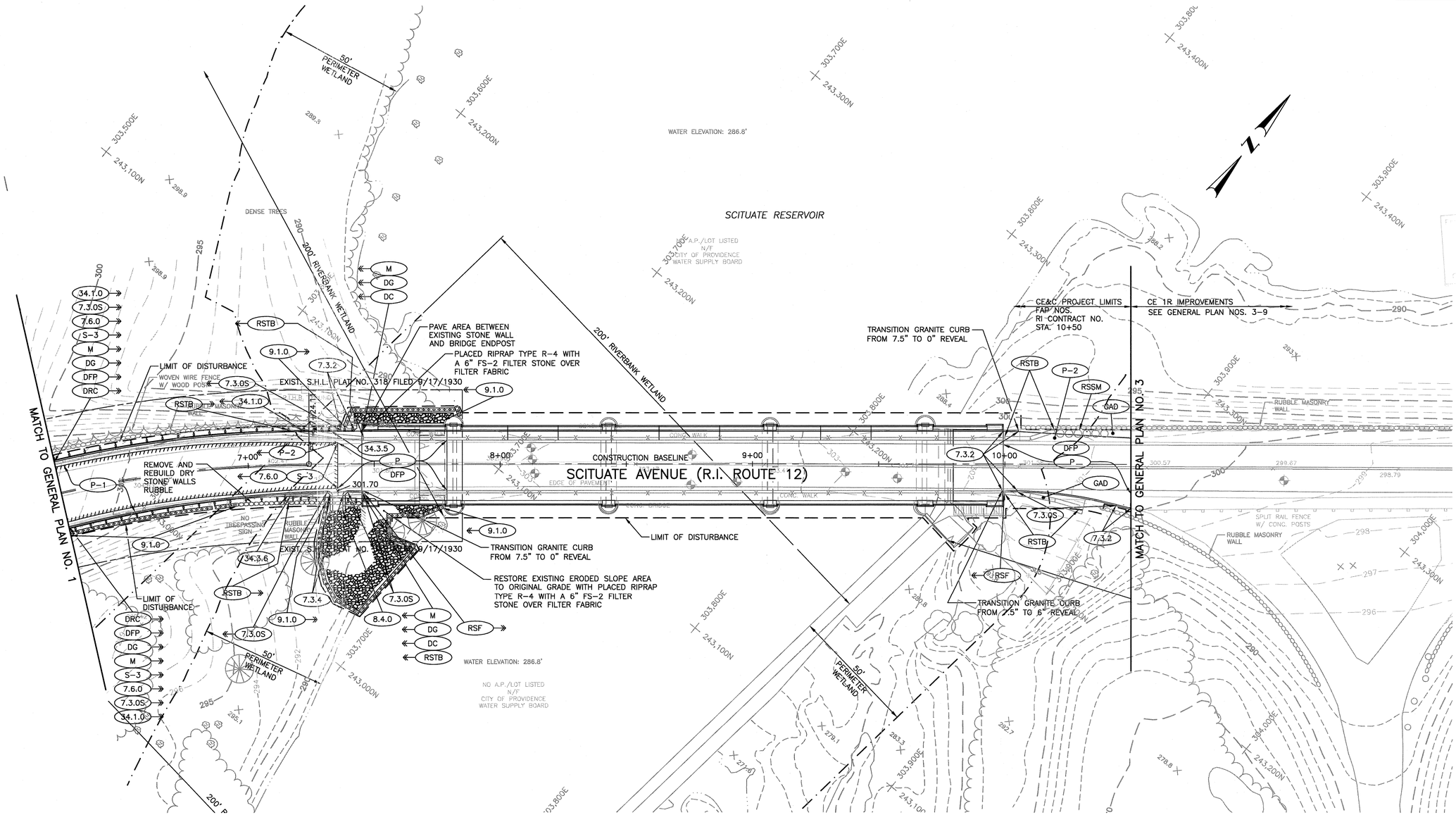
0143B_V1_009_GENERAL001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	10	46



NOTE:
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MAR - 8 2013

STATE OF RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
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PROVIDENCE, RI 02908

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
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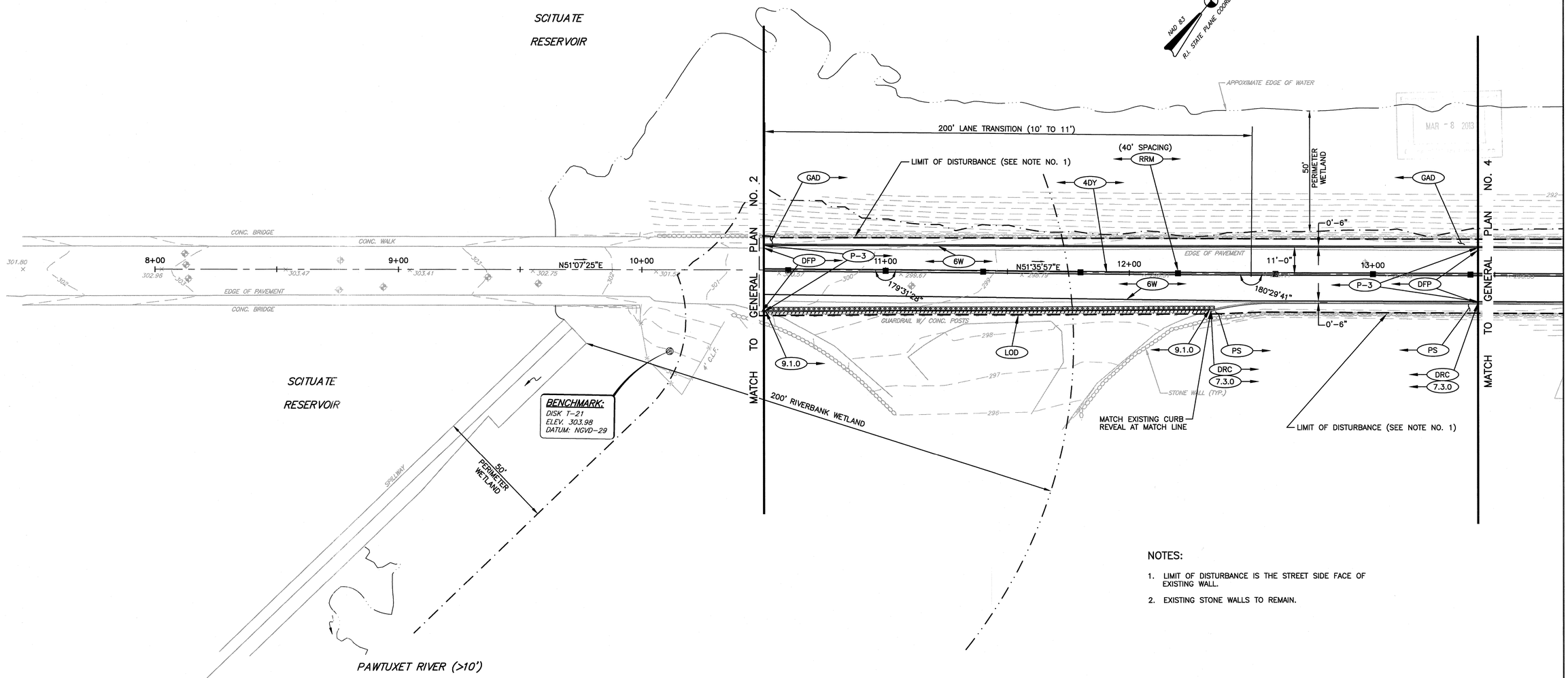
SCITUATE, RHODE ISLAND

GENERAL PLAN NO. 2

CHECKED BY _____ DATE _____ SCALE 1"=20'

0143B_V1_010_GENERAL002

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	11	46



NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

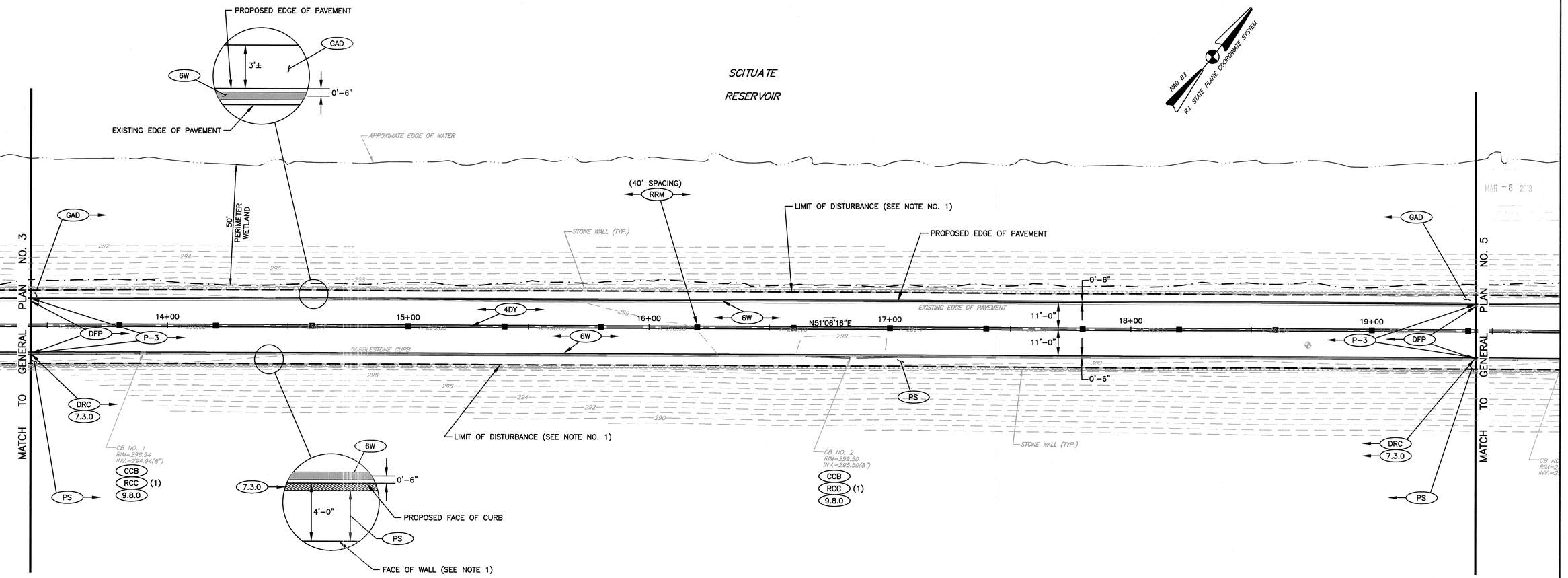
GENERAL PLAN No. 3

CHECKED BY _____ DATE _____ SCALE 1"=20'

0130D_V1_011_GENERAL003

S:\175.50 Gainer Dam - Scituate Culvert\CAD Dwg\DESIGN PLANS\0130D_V1_011_GENERAL003.dwg, Layout1, 10/25/2012 12:17:06 PM, 1:1
Plotted: Oct 25, 2012 at 12:17pm

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	12	46



NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

MAR - 8 2013

RI DEPT. OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

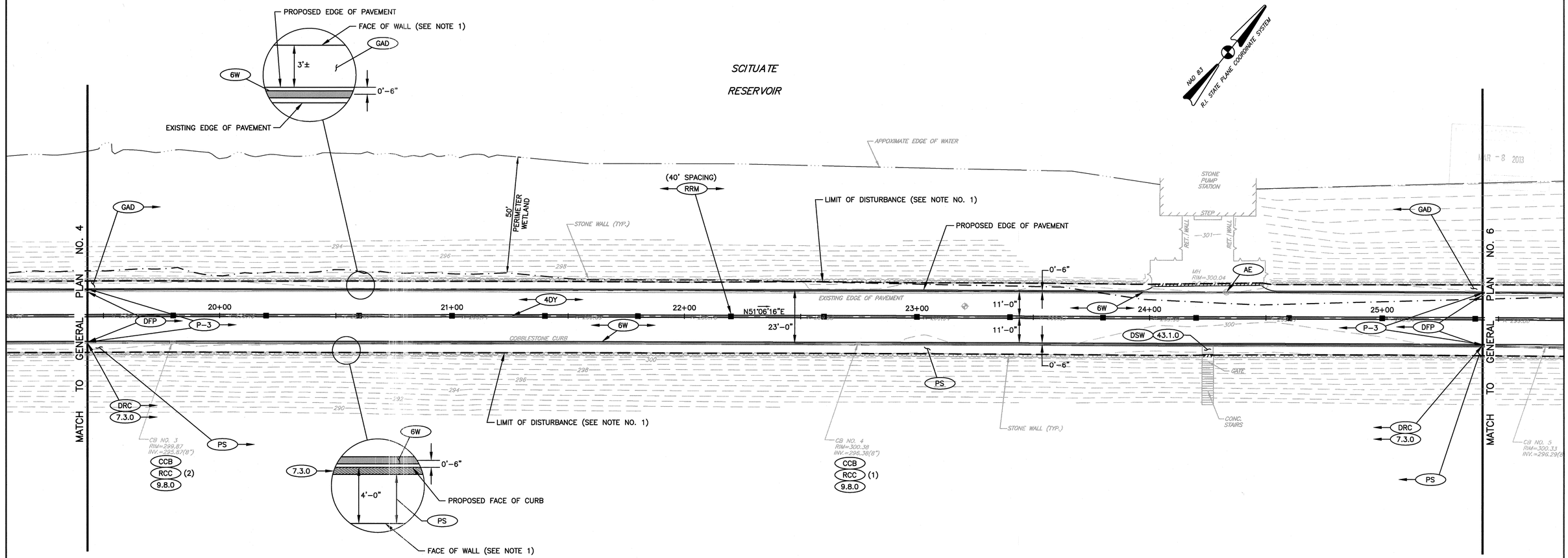
BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GENERAL PLAN No. 4

CHECKED BY _____ DATE _____ SCALE 1"=20'

0130D_V1_012_GENERAL004

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	13	46



NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

RECEIVED MAR -8 2013

DEPT. OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Horbert

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

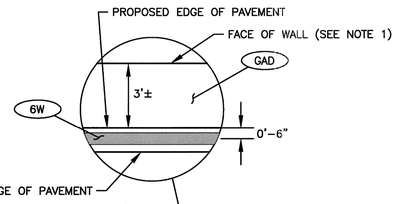
GENERAL PLAN No. 5

CHECKED BY _____ DATE _____ SCALE 1"=20'

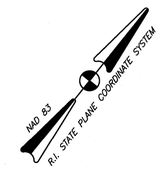
0130D_V1_013_GENERAL005

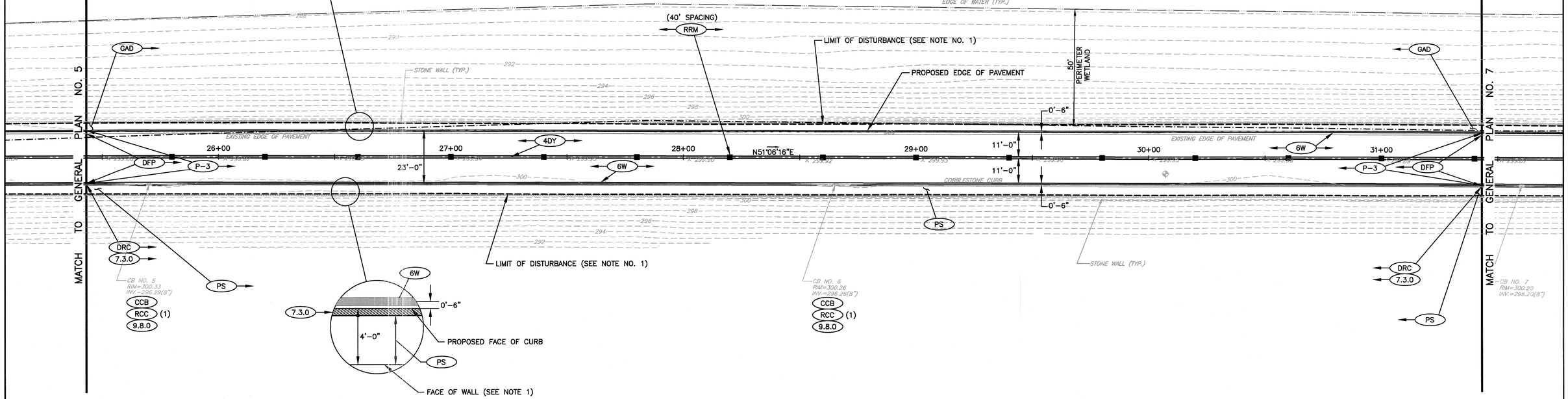
S:\775.50 Gainer Dam - Scituate\Current\CAD Dwg\DESIGN PLANS\0130D_V1_013_GENERAL005.dwg, Layout1, 10/25/2012 12:20:58 PM, 1:1

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	14	46



SCITUATE RESERVOIR





NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

MAR - 8 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
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DATED MAR 1 8 2013 FILE # 12-0018
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REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

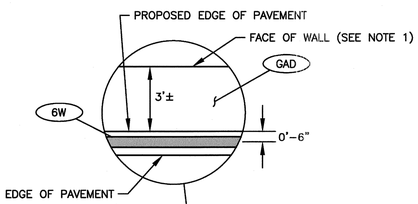
GENERAL PLAN No. 6

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

CHECKED BY _____ DATE _____ SCALE 1"=20'

0130D_V1_014_GENERAL006

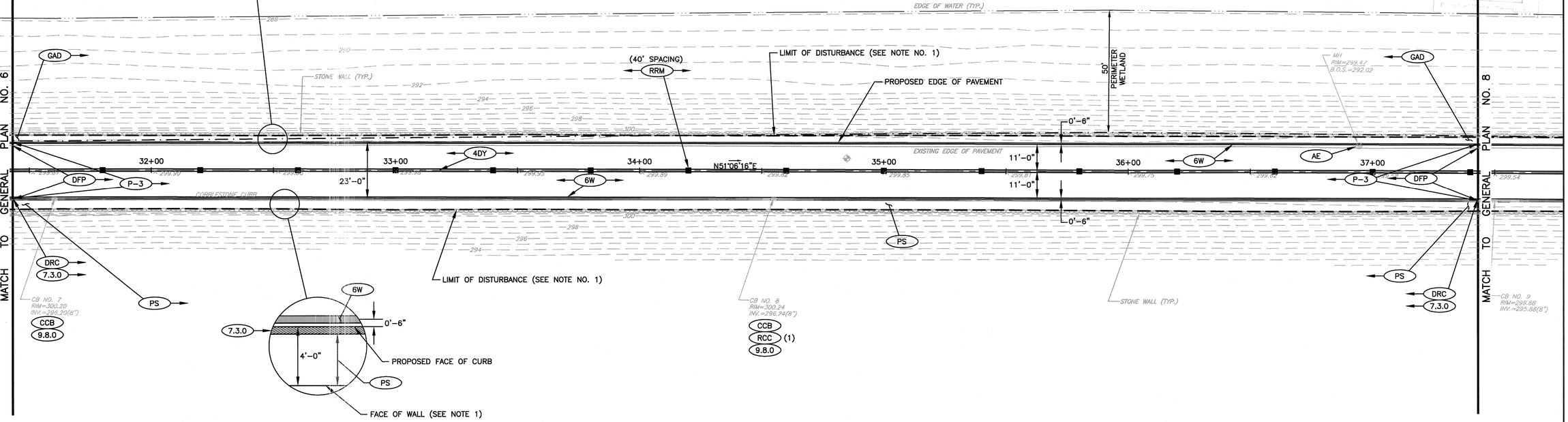
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	15	46



SCITUATE

RESERVOIR

MAR - 8 2013



NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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DATED MAR 18 2013 FILE # 12-0198
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REVISIONS		
NO.	DATE	BY

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GENERAL PLAN No. 7

CHECKED BY _____ DATE _____ SCALE 1"=20'

0130D_V1_015_GENERAL007

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	16	46

PROPOSED EDGE OF PAVEMENT
FACE OF WALL (SEE NOTE 1)
GAD
3'±
6W
0'-6"
EXISTING EDGE OF PAVEMENT

SCITUATE RESERVOIR

NAD 83 R.I. STATE PLANE COORDINATE SYSTEM

APPOXIMATE EDGE OF WATER

BMP NO. 1
GAINER DAM MEMORIAL
PARKING AREA
PAVEMENT REDUCTION AREA

MATCH TO GENERAL PLAN NO. 7

MATCH TO GENERAL PLAN NO. 9

GAD
STONE WALL (TYP.)
50' PERIMETER WETLAND
(40' SPACING)
RRM
LIMIT OF DISTURBANCE (SEE NOTE NO. 1)
PROPOSED EDGE OF PAVEMENT
MH RIM=298.86 B.O.S.=291.66
5' SPLIT RAIL FENCE
LOD
TREELINE
MEMORIAL
EDGE OF PAVEMENT
PS
DFP
PS
6W
PLANT BED
2' SPLIT RAIL FENCE
0'-6"
38+00
39+00
40+00
N51°06'16"E
AE
41+00
11'-0"
42+00
43+00
299.54
299.43
299.35
299.18
299.01
298.85
298.77
298.75
299.57
300.60
301.43
303.14
DFP
P-3
23'-0"
6W
4DY
11'-0"
0'-6"
CURBSTONE CURB
PS
DRC
7.3.0
PS
CB NO. 9
RIM=299.88
INV.=295.88(8")
CCB
RCC (1)
9.8.0
LIMIT OF DISTURBANCE (SEE NOTE NO. 1)
CB NO. 10
RIM=299.02
INV.=295.07(8")
CCB
RCC (1)
9.8.0
GRANITE POST
ETR
PS
7.3.2
9.1.0
6W
7.3.0
DRC
6W
0'-6"
7.3.0
4'-0"
PS
PROPOSED FACE OF CURB
FACE OF WALL (SEE NOTE 1)

NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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CROSSMAN ENGINEERING
| a division of Crossman Corporation |
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REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GENERAL PLAN No. 8

CHECKED BY _____ DATE _____ SCALE 1"=20'

0130D_V1_016_GENERAL008

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	17	46

50' PERIMETER WETLAND

NAD 83
R.I. STATE PLANE COORDINATE SYSTEM

BMP NO. 2
REFER TO OLD SCITUATE AVENUE PAVEMENT REDUCTION PLAN

4' WIRE FENCE W/ CONC. POSTS

LOD

NO TRESPASSING

ROAD CLOSED

RAMP NARROWS

LIMIT OF WORK
STA. 45+75±
RI CONTRACT NO.

5' SPLIT RAIL FENCE

4DY
9.1.0
LOD
6W
P-3
DFP
PS
S-3

1277'±

GATE

CONCRETE BARRIER

LIMIT OF WORK

EXISTING EDGE OF PAVEMENT

GUARDRAIL

44+00
45+00
46+00
47+00
48+00
49+00

N51°06'16"E

303.14
303.98
303.98
303.23
302.98
302.39
301.83
300.81
299.05
297.43
295.55

PLAN NO. 8 GENERAL TO MATCH

4' C.L.F.

POST

POST

LEDGE

CONC. SIGN POSTS (2)

MH
RIM=302.30

302.1

305.3

PAVEMENT COVERED W/ SAND & PINE NEEDLES

SPEED LIMIT 30

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Charles A. Horbert

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GENERAL PLAN No. 9

CHECKED BY _____ DATE _____ SCALE 1"=20'

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| a division of Crossman Corporation |
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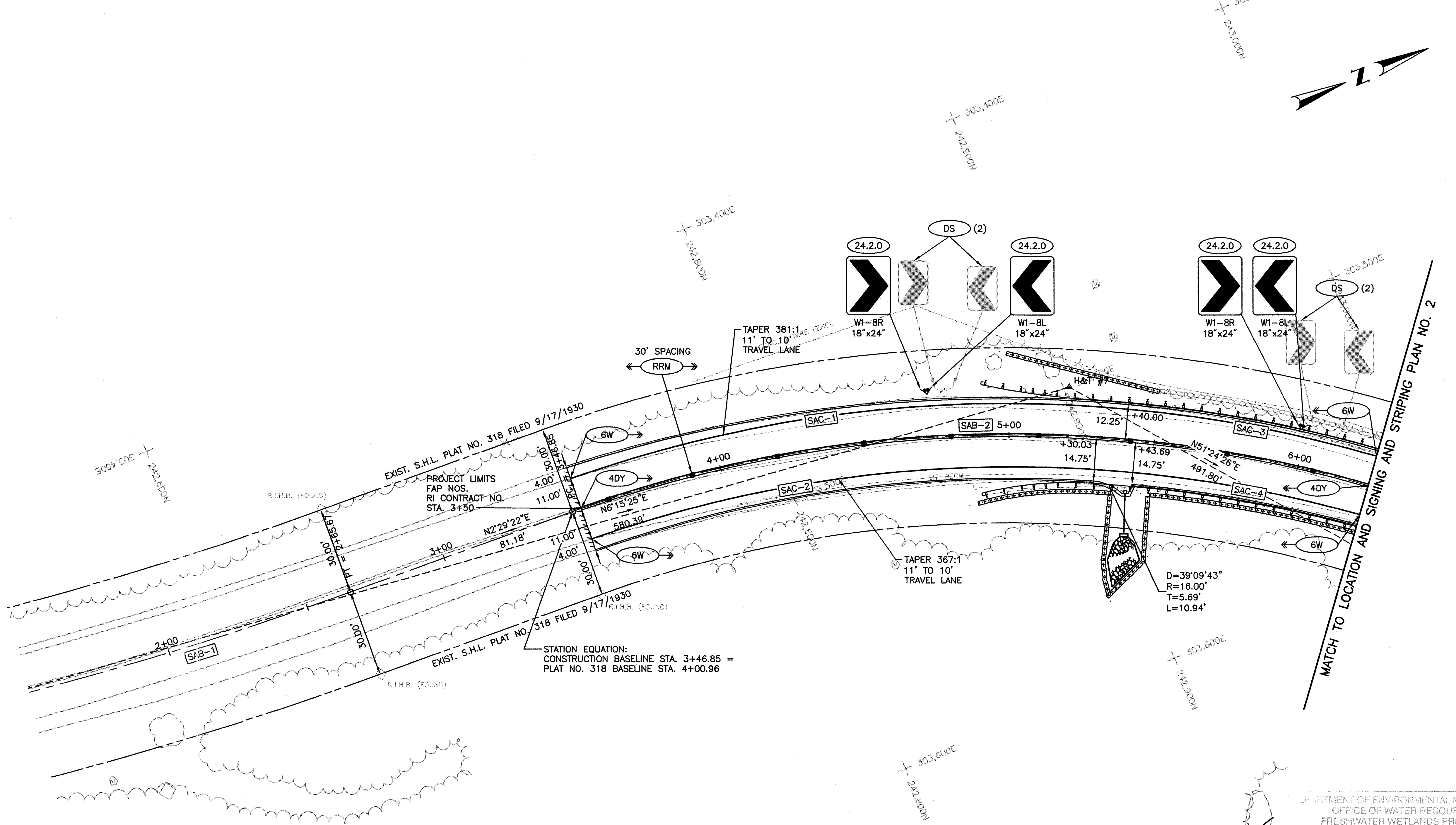
0130D_V1_017_GENERAL009

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	18	46



CURB CURVE COORDINATE DATA (NAD–83)

CURVE NO.	STATION	R.I. STATE COORDINATE SYSTEM NORTHING	EASTING
SAC–1	PC 3+50.00	242731.5601	303460.2067
	RP	242693.3571	303948.0130
	PCC 5+40.00	242918.4478	303513.5609
	PI	242830.4098	303467.9482
SAC–2	PC 3+50.00	242730.0448	303490.1690
	RP	242709.6420	303916.5812
	PT 5+30.03	242897.4212	303533.1981
	PI	242818.1798	303494.3860
SAC–3	PCC 5+40.00	242918.4478	303513.5609
	RP	242704.2745	303926.9412
	PT 7+27.50	243066.6065	303634.5904
	PI	243005.2314	303558.5237
SAC–4	PC 5+43.69	242909.1891	303539.1875
	RP	242685.2385	303963.6828
	PT 7+27.29	243047.9407	303649.3624
	PI	242988.9104	303581.2460

CURB CURVE DATA

CURVE	DELTA	RADIUS	TANGENT	LENGTH	PC STA.	OFFSET	PT STA.	OFFSET
SAC–1	22°–54'–39"	489.30'	99.15'	195.66'	3+50.00	15.00', LT.	5+40.00	12.25', LT.
SAC–2	23°–21'–22"	426.90'	88.24'	174.02'	3+50.00	15.00', RT.	5+30.03	14.75', RT.
SAC–3	23°–42'–45"	465.57'	97.74'	192.68'	5+40.00	12.25', LT.	7+27.50	13.00', LT.
SAC–4	21°–16'–22"	479.95'	90.14'	178.20'	5+43.69	14.75', RT.	7+27.29	10.80', RT.

BASELINE CURVE DATA

CURVE	DELTA	RADIUS	TANGENT	LENGTH
SAB–1	17°–57'–30"	1265.73'	200.00'	396.72'
SAB–2	48°–38'–03"	444.45'	200.84'	377.26'

BASELINE COORDINATE DATA (NAD–83)

CURVE NO.	STATION	R.I. STATE COORDINATE SYSTEM NORTHING	EASTING
SAB–1	PC –1+31.05	242259.3450	303392.9535
	RP	242701.5308	302206.9711
	PT 2+65.67	242646.5546	303471.5107
	PI	242446.7433	303462.8238
SAB–2	PC 3+46.85	242727.6580	303475.0366
	RP	242708.3536	303919.0680
	PT 7+24.11	243054.3592	303640.1117
	PI	242928.3053	303483.7598

COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

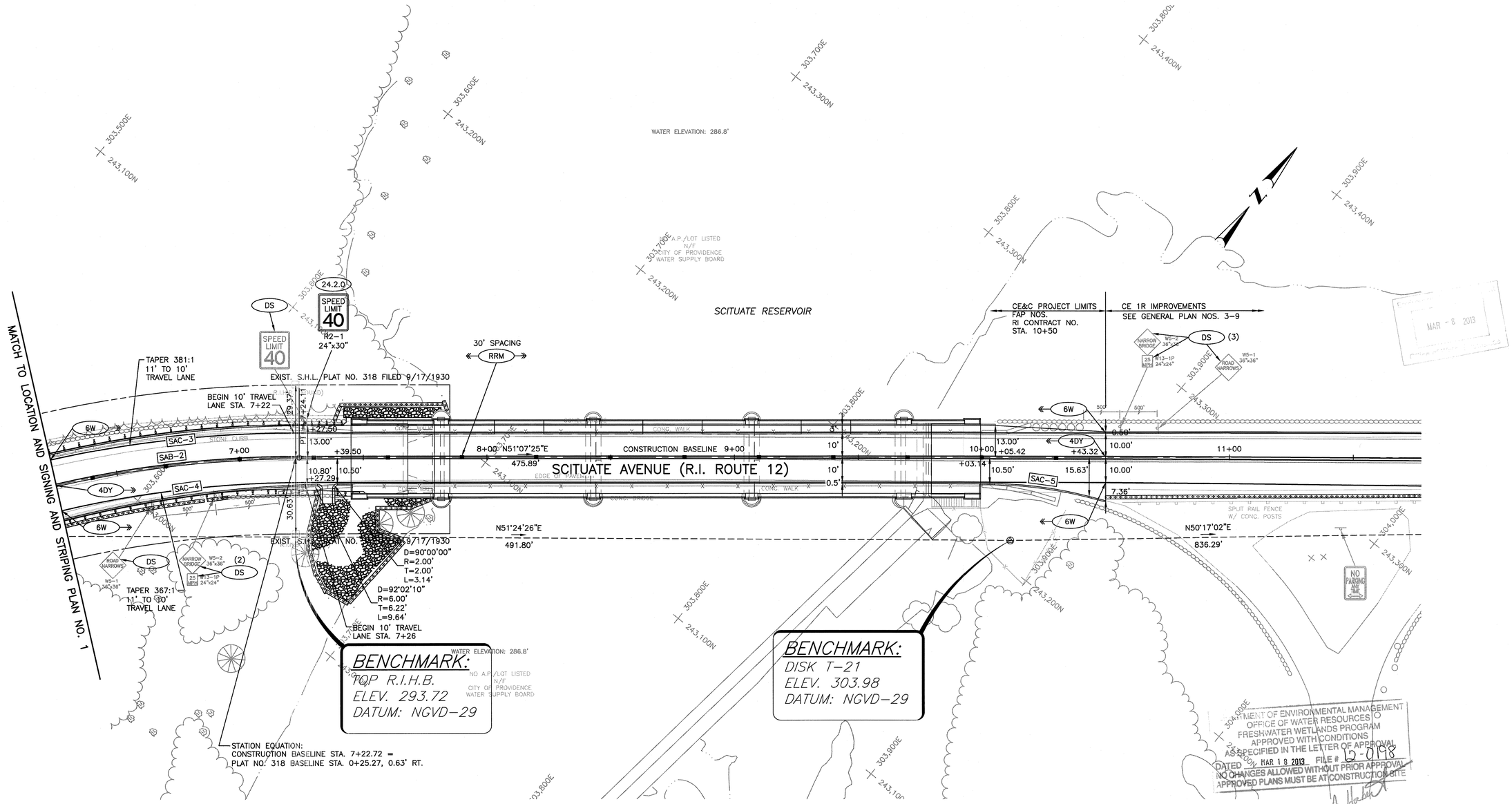
BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

LOCATION AND SIGNING AND STRIPING PLAN NO. 1

CHECKED BY ________ DATE ________ SCALE 1"=20'

0143B_V1_018_LOCATION001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	19	46



CURB CURVE COORDINATE DATA (NAD-83)			
CURVE NO.	STATION	R.I. STATE COORDINATE SYSTEM	
		NORTHING	EASTING
SAC-3	PCC 5+40.00	242918.4478	303513.5609
	RP	242704.2745	303926.9412
	PT 7+27.50	243066.6065	303634.5904
	PI	243005.2314	303558.5237
SAC-4	PC 5+43.69	242909.1891	303539.1875
	RP	242685.2385	303963.6828
	PT 7+27.29	243047.9407	303649.3624
	PI	242988.9104	303581.2460
SAC-5	PC 10+03.14	243221.3157	303863.9268
	RP	243096.7555	303964.3496
	PT 10+43.32	243242.5400	303898.4188
	PI	243234.1282	303879.8188

CURB CURVE DATA								
CURVE	DELTA	RADIUS	TANGENT	LENGTH	PC STA.	OFFSET	PT STA.	OFFSET
SAC-3	23°-42'-45"	465.57'	97.74'	192.68'	5+40.00	12.25', LT.	7+27.50	13.00', LT.
SAC-4	21°-16'-22"	479.95'	90.14'	178.20'	5+43.69	14.75', RT.	7+27.29	10.80', RT.
SAC-5	14°-32'-30"	160.00'	20.41'	40.61'	10+03.14	10.50', RT.	10+43.32	15.63', RT.

BASELINE CURVE DATA				
CURVE	DELTA	RADIUS	TANGENT	LENGTH
SAB-2	48°-38'-03"	444.45'	200.84'	377.26'

BASELINE COORDINATE DATA (NAD-83)			
CURVE NO.	STATION	R.I. STATE COORDINATE SYSTEM	
		NORTHING	EASTING
SAB-2	PC 3+46.85	242727.6580	303475.0366
	RP	242708.3536	303919.0680
	PT 7+24.11	243054.3592	303640.1117
	PI	242928.3053	303483.7598

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

LOCATION AND SIGNING AND STRIPING PLAN NO. 2

CHECKED BY _____ DATE _____ SCALE 1"=20'

0143B_V1_019_LOCATION002

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	20	46

CONTROL SURVEY STATION

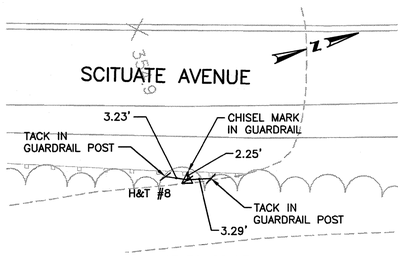
Client: RIDOT Station Number: 1
City/Town: Scituate County: Providence State: R.I.

Coordinate System: R.I. STATE PLANE NAD 1983

Coordinate: N 242325.0295 / E 303437.0613

Elevation: 354.36 (NGVD–29)

Description: HUB & TACK #8



NOT TO SCALE

CONTROL SURVEY STATION

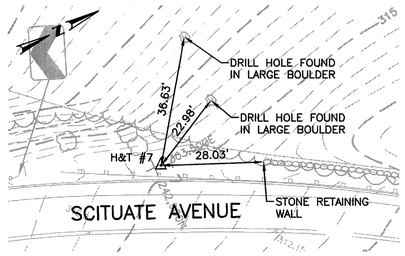
Client: RIDOT Station Number: 2
City/Town: Scituate County: Providence State: R.I.

Coordinate System: R.I. STATE PLANE NAD 1983

Coordinate: N 242901.9642 / E 303500.3153

Elevation: 315.70 (NGVD–29)

Description: HUB & TACK #7



NOT TO SCALE

CONTROL SURVEY STATION

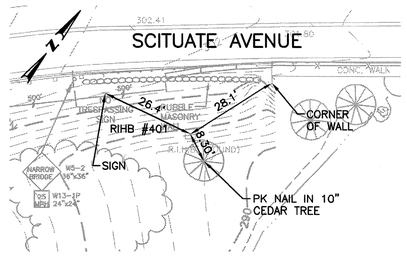
Client: RIDOT Station Number: 3
City/Town: Scituate County: Providence State: R.I.

Coordinate System: R.I. STATE PLANE NAD 1983

Coordinate: N 243029.5481 / E 303658.2234

Elevation: 293.70 (NGVD–29)

Description: RIHB #401



NOT TO SCALE

CONTROL SURVEY STATION

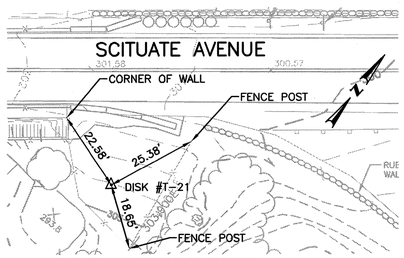
Client: RIDOT Station Number: 4
City/Town: Scituate County: Providence State: R.I.

Coordinate System: R.I. STATE PLANE NAD 1983

Coordinate: N 243208.7430 / E 303884.7081

Elevation: 303.98 (NGVD–29)

Description: DISK #T–21



NOT TO SCALE

CONTROL SURVEY STATION

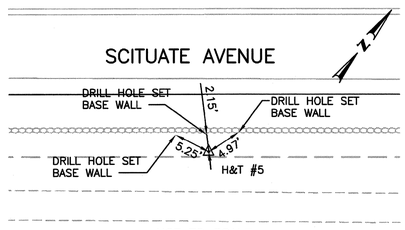
Client: RIDOT Station Number: 5
City/Town: Scituate County: Providence State: R.I.

Coordinate System: R.I. STATE PLANE NAD 1983

Coordinate: N 243743.1212 / E 304527.9984

Elevation: 299.25 (NGVD–29)

Description: HUB & TACK #5



NOT TO SCALE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

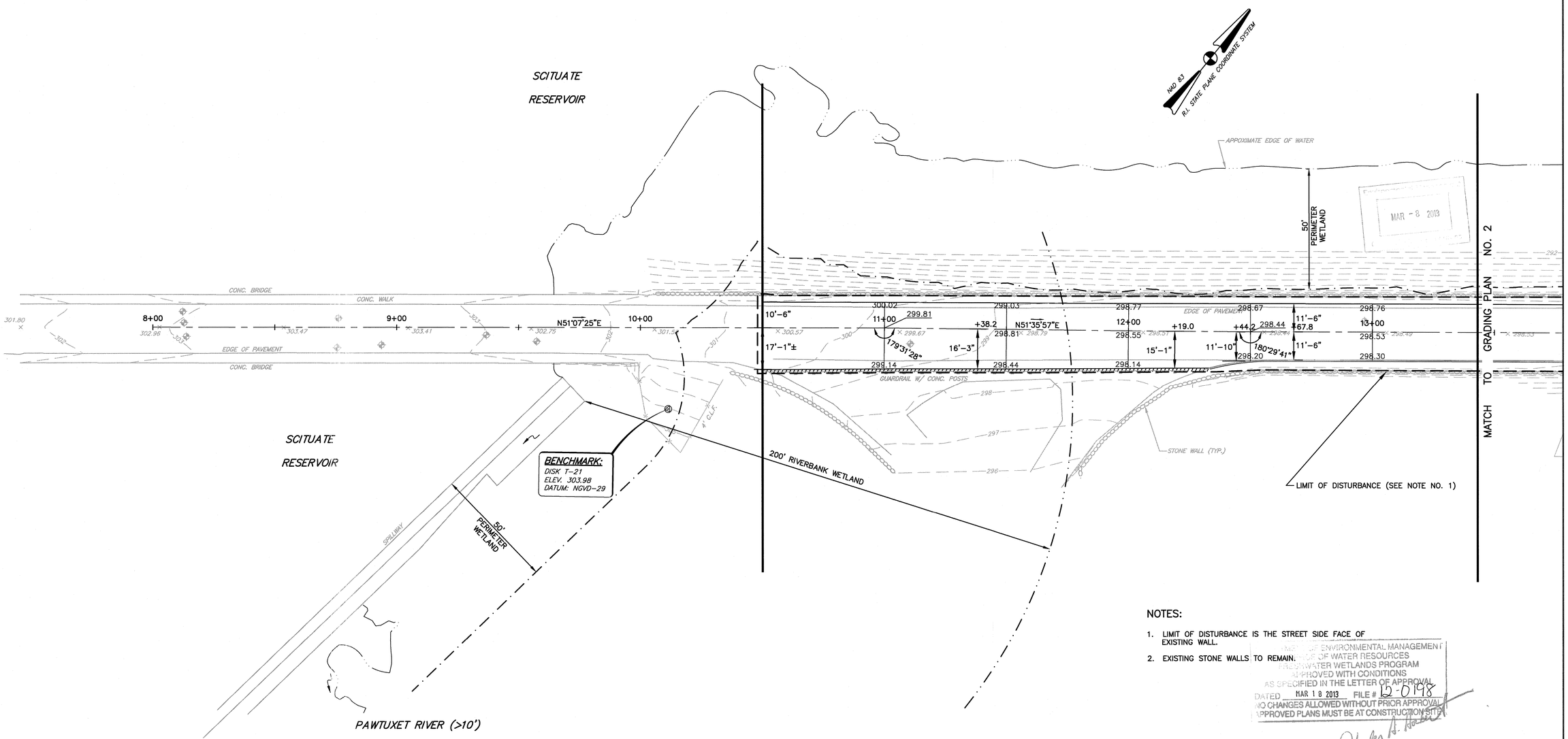
HORIZONTAL/VERTICAL
CONTROL TIE PLAN NO. 1

CHECKED BY _____ DATE _____ SCALE _____

COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_020_LOCDATA001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	21	46



NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
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DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GRADING PLAN No. 1

CHECKED BY _____ DATE _____ SCALE 1"=20'

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

0130D_V1_021_GRADING001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	22	46

SCITUATE

RESERVOIR

NAD 83
R.I. STATE PLANE COORDINATE SYSTEM

MAR - 8 2013

APPROXIMATE EDGE OF WATER

50' PERIMETER WETLAND

STONE WALL (TYP.)

LIMIT OF DISTURBANCE (SEE NOTE NO. 1)

MATCH TO GRADING PLAN NO. 1

298.84		298.92		299.00		299.08		299.16		299.24		299.32		299.40		299.46		299.52		299.59		299.65				
298.61	+70.5	298.69	+89.9	14+00	+9.3	298.77		298.85		298.93		299.01		299.09	+63.7	+84.8	299.17	299.23		299.29		299.36		299.42		
298.38	11'–6"	298.46	11'–7" ±		11'–6"	298.54		298.62		298.70		298.78		298.86	N51°06'16"E		298.94	299.00		299.06		299.13		299.19		
															11'–6"	11'–11"										

																	299.40		299.46		299.52		299.59		299.65	
																	299.17	+10.2	299.23		299.29		299.36		299.42	
																	298.94	11'–6"	299.00		299.06		299.13		299.19	

CB NO. 1
RIM=298.94
INV.=294.94(8")

LIMIT OF DISTURBANCE (SEE NOTE NO. 1)

CB NO. 2
RIM=299.50
INV.=295.50(8")

STONE WALL (TYP.)

MATCH TO GRADING PLAN NO. 3

NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

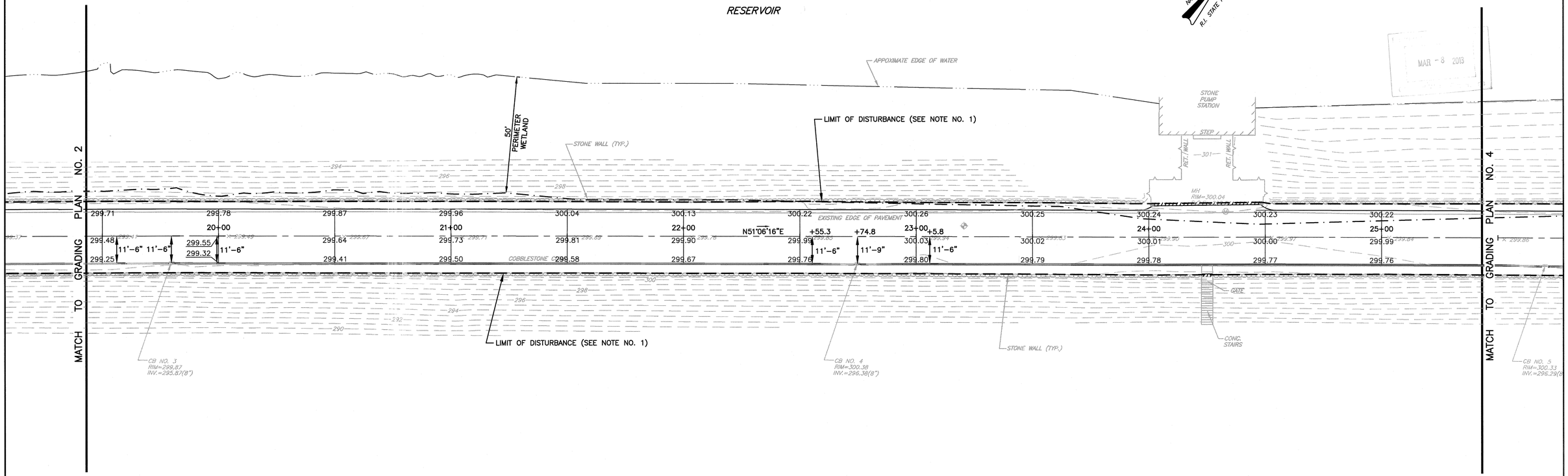
GRADING PLAN No. 2

CHECKED BY _____ DATE _____ SCALE 1"=20'

0130D_V1_022_GRADING002

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	23	46



MAR - 8 2013

NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GRADING PLAN No. 3

CHECKED BY _____ DATE _____ SCALE 1"=20'

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

0130D_V1_023_GRADING003

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	24	46

SCITUATE

RESERVOIR

NAD 83
R.I. STATE PLANE COORDINATE SYSTEM

MAR - 8 2013

MATCH TO GRADING PLAN NO. 3

EDGE OF WATER (TYP.)

LIMIT OF DISTURBANCE (SEE NOTE NO. 1)

50' PERIMETER WETLAND

STONE WALL (TYP.)

EXISTING EDGE OF PAVEMENT

26+00 300.20 299.98 299.75 +70.3 12'-0" +91.7 11'-6" 299.97 299.74

27+00 300.19 299.96 299.73

28+00 300.18 299.95 299.72

300.17 299.94 299.71

300.16 299.93 299.70

N51°06'16"E +46.0 300.14 299.91 299.68 +65.5 11'-6" 11'-11"

+86.7 29+00 300.13 299.90 299.67 11'-6"

COBBLESTONE CURB

300.12 299.89 299.66

30+00 300.11 299.88 299.65

300.10 299.87 299.64

31+00 300.09 299.86 299.63 40.9 11'-6"

MATCH TO GRADING PLAN NO. 5

CB NO. 5
RIM=300.33
INV.=296.29(8")

LIMIT OF DISTURBANCE (SEE NOTE NO. 1)

CB NO. 6
RIM=300.26
INV.=296.26(8")

STONE WALL (TYP.)

CB NO. 7
RIM=300.20
INV.=296.20(8")

NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GRADING PLAN No. 4

CHECKED BY _____ DATE _____ SCALE 1"=20'

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

0130D_V1_024_GRADING004

MAR - 8 2013

NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. [signature]

REVISIONS		
NO.	DATE	BY

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GRADING PLAN No. 5

CHECKED BY ________ DATE ________ SCALE 1"=20'

0130D_V1_025_GRADING005

S:\775.50 Gainer Dam - Scituate\Current\ACAD Dwg\DESIGN-PLANS\0130D_V1_025_GRADING005.dwg, Layout1, 10/25/2012 12:42:00 PM, 1:1

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	26	46

SCITUATE RESERVOIR

NAD 83 R.I. STATE PLANE COORDINATE SYSTEM

APPOXIMATE EDGE OF WATER

LIMIT OF DISTURBANCE (SEE NOTE NO. 1)

50' PERIMETER WETLAND

STONE WALL (TYP.)

MH RIM=298.86 B.O.S.=291.66

GAINER DAM MEMORIAL PARKING AREA PAVEMENT REDUCTION AREA

5' SPLIT RAIL FENCE

TREELINE

MEMORIAL

EDGE OF PAVEMENT

PLANT BED

2' SPLIT RAIL FENCE

MATCH TO GRADING PLAN NO. 5

MATCH TO GRADING PLAN NO. 7

	38+00	39+00	40+00	N51°06'16"E	41+00	42+00	43+00
	299.62	299.33	299.04		299.16	300.87	302.52
11'-8" / 11'-6"	299.39	299.10	298.81	11'-6" / 11'-7" / 11'-6"	298.93	300.64	302.29
	299.16	298.87	298.58		298.70	300.41	302.06

11'-6" 11'-5" 11'-6"

COBBLESTONE CURB

CB NO. 9 RIM=299.88 INV.=295.88(8")

CB NO. 10 RIM=299.02 INV.=295.07(8")

GRANITE POST

EDGE

NOTES:

1. LIMIT OF DISTURBANCE IS THE STREET SIDE FACE OF EXISTING WALL.
2. EXISTING STONE WALLS TO REMAIN.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GRADING PLAN No. 6

CHECKED BY _____ DATE _____ SCALE 1"=20'

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

0130D_V1_026_GRADING006

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	27	46

50' PERIMETER WETLAND

NAD 83
R.I. STATE PLANE COORDINATE SYSTEM

TO MATCH GRADING PLAN NO. 6

5' SPLIT RAIL FENCE

4' WIRE FENCE W/ CONC. POSTS

LOD

PROJECT LIMIT
STA. 45+75

EXISTING EDGE OF PAVEMENT

RAMP NARROWS

NO TRESPASSING

ROAD CLOSED

GATE

CONCRETE BARRIER

GUARDRAIL

44+00 303.30 304.06 304.24 303.87 303.54
303.07 303.84 304.02 303.65 303.29
302.84 303.61 303.79 303.40 302.98

10'-10" +77.6
11'-5"
45+00 +91.4
11'-0" +35.8
14'-8"± +66.8
5'-2"±
6'-7"±

46+00 N51°06'16"E 302.39 302.98
47+00 301.83
48+00 300.81
49+00 299.05 297.43 295.55

4' C.L.F.

POST

POST

LEDGE

CONC. SIGN POSTS (2)

MH
RIM=302.30

302.1

305.3

PAVEMENT COVERED W/ SAND & PINE NEEDLES

SPEED LIMIT 30

MAR 14 2013

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

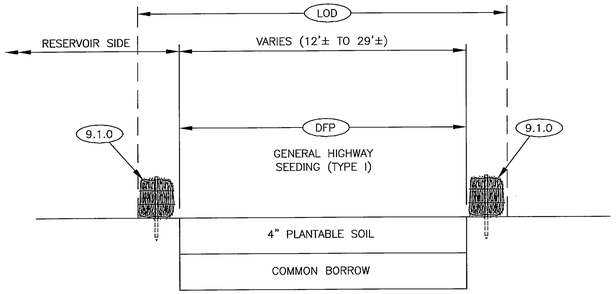
BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

GRADING PLAN No. 7

CHECKED BY _____ DATE _____ SCALE 1"=20'

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

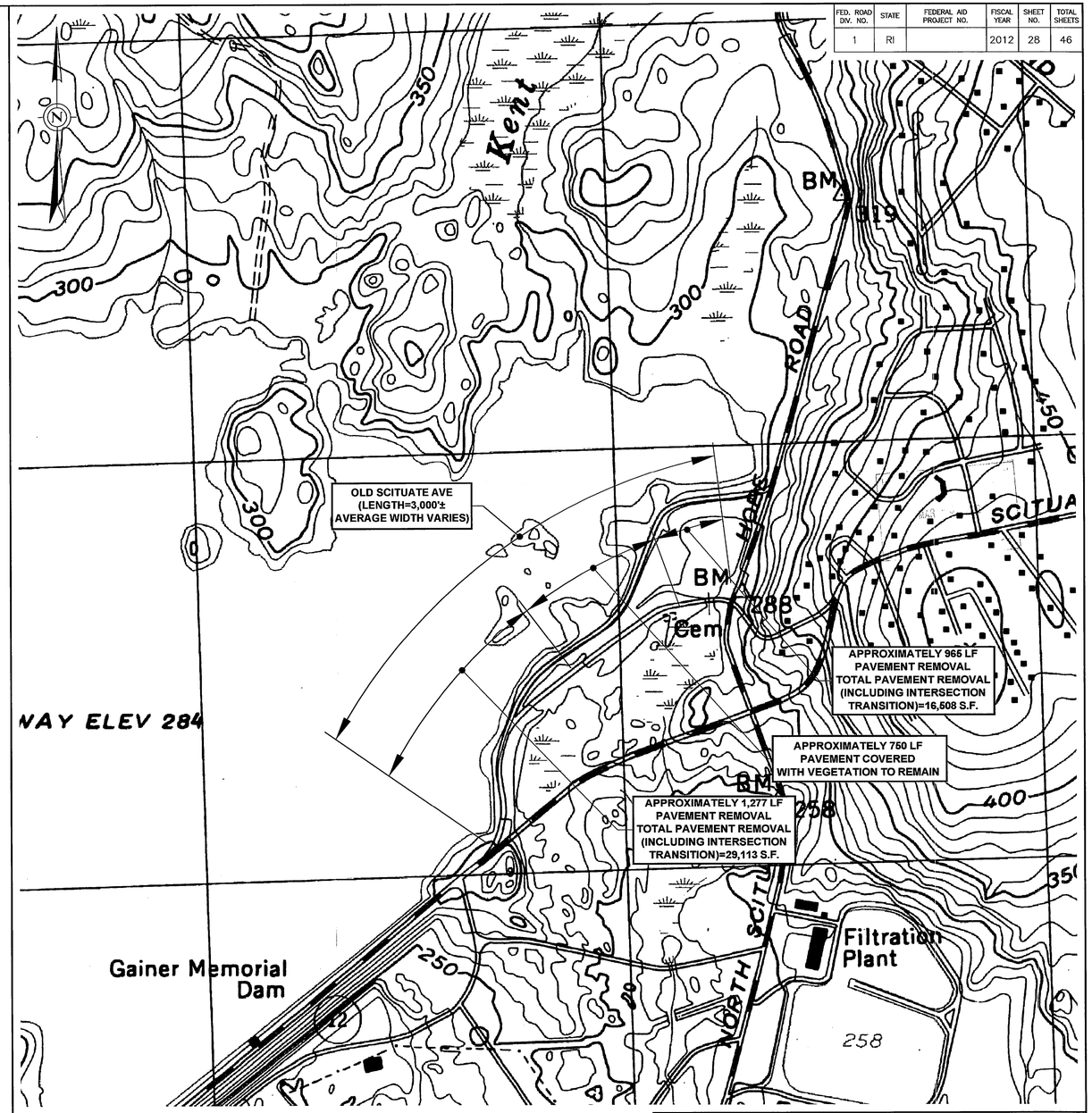
0130D_V1_027_GRADING007



BMP NO. 2
OLD SCITUATE AVENUE
PAVEMENT REMOVAL DETAIL

NOT TO SCALE

OLD SCITUATE AVENUE
PAVEMENT REDUCTION AREA



OLD SCITUATE AVENUE

SCALE: 1"=500'

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0178
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

CROSSMAN ENGINEERING
| a division of Crossman Corporation |
151 Centerville Road | Warwick, Rhode Island 02886

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI		2012	28	46

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

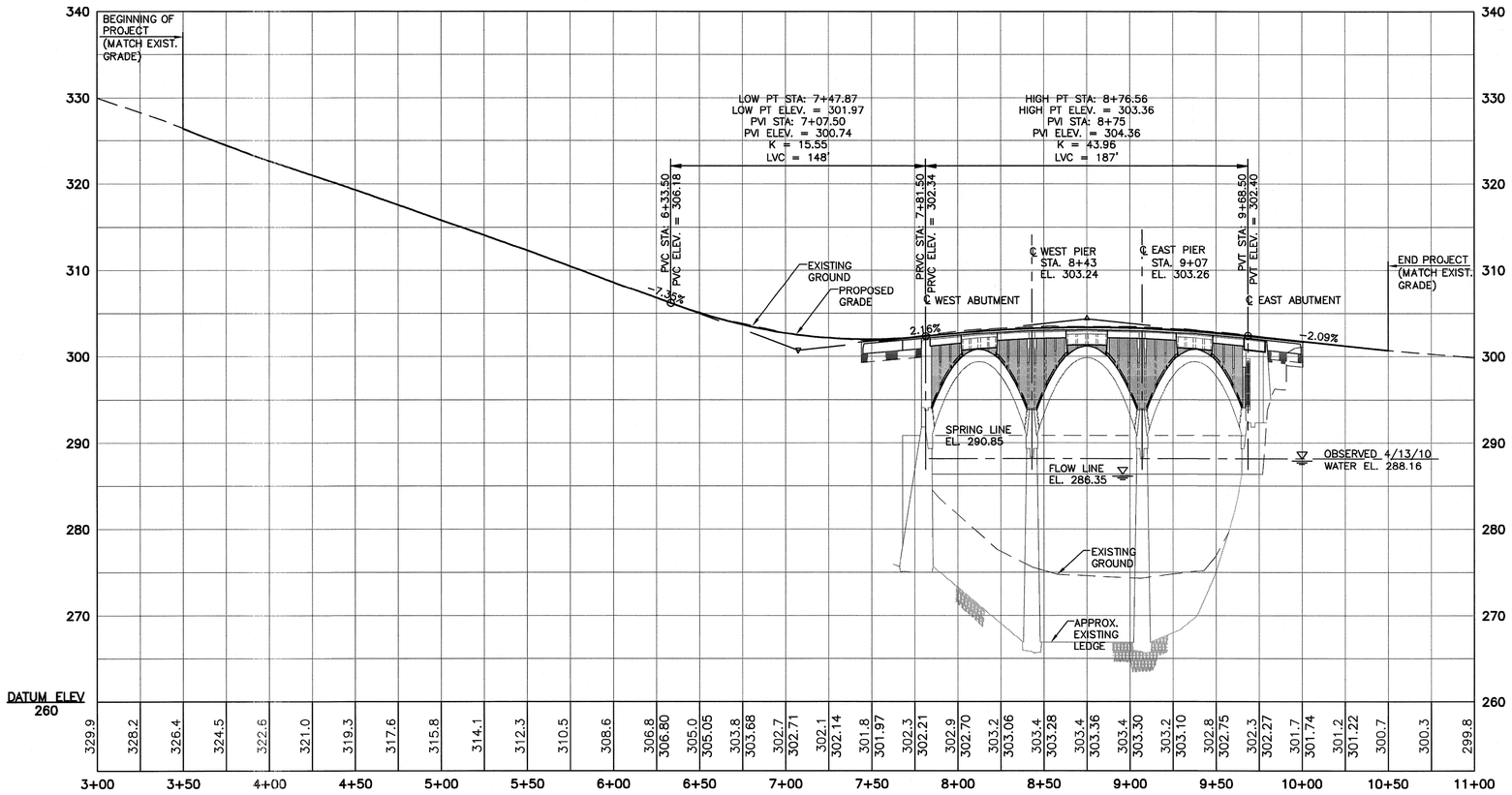
BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE NO. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE RHODE ISLAND

OLD SCITUATE AVENUE
PAVEMENT REDUCTION PLAN

CHECKED BY _____ DATE _____ SCALE AS SHOWN

0130D_V1_028_PAVEMENT

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	29	46



SCITUATE AVENUE PROFILE

HOR. SCALE IN FEET
0 40 80 120 200
0 8 16 24 40
VERT. SCALE IN FEET

MAR - 8 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

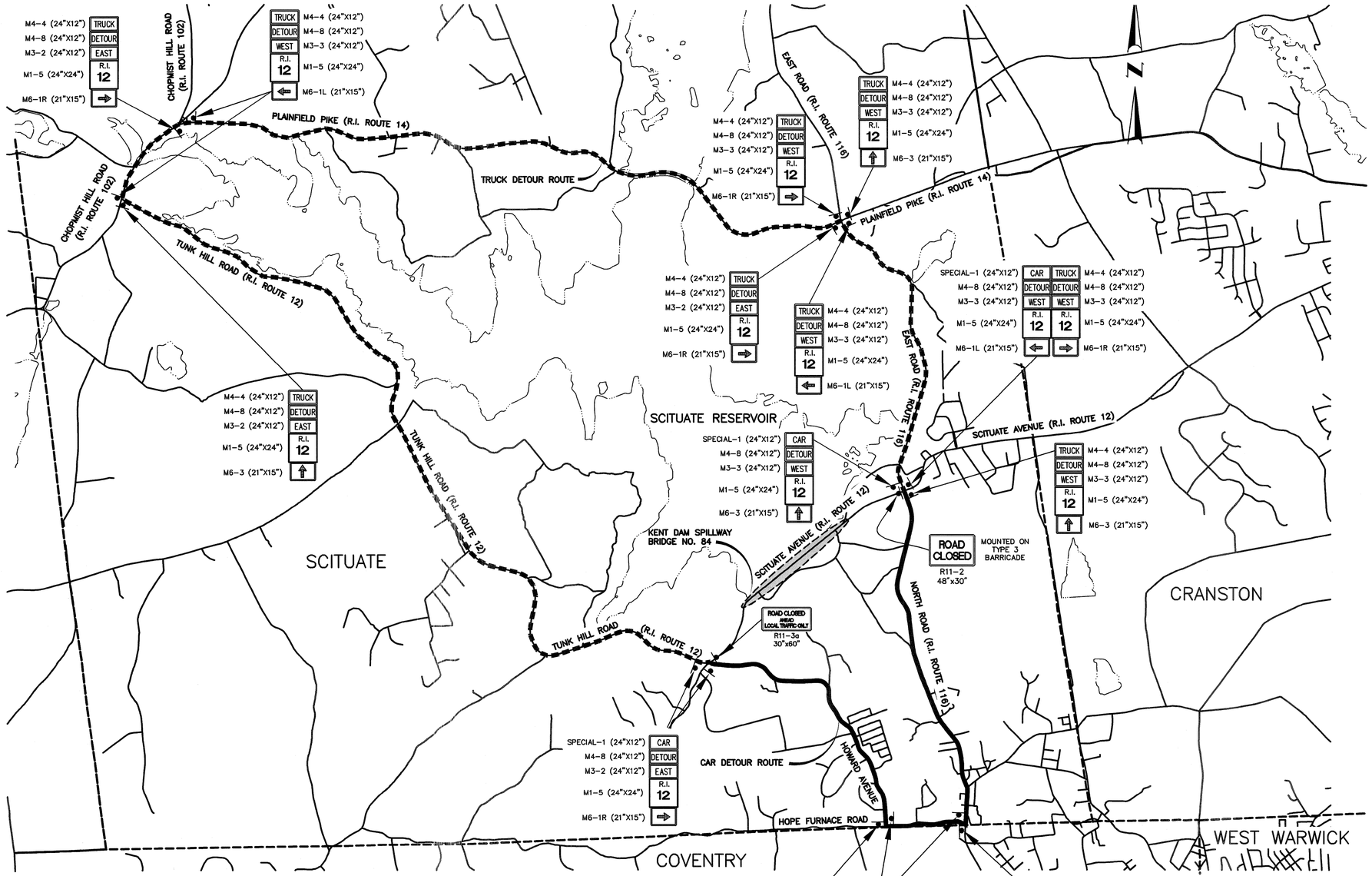
PROFILE
SCITUATE AVENUE STA. 3+00 TO 11+00

CHECKED BY _____ DATE _____ SCALE AS SHOWN

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_029_PROFILE001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	30	46



SCITUATE AVENUE DETOUR ROUTE

NOT TO SCALE

NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND TEMPORARY TRAFFIC CONTROL ZONE ACTIVITIES SHALL MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION.
2. TEMPORARY GUIDE SIGNS, DIRECTIONAL SIGNS, AND ROUTE SIGNS USED IN TEMPORARY TRAFFIC CONTROL ZONES SHALL HAVE A BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND.
3. TEMPORARY CONSTRUCTION SIGNS AND BARRICADES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY SECTION OPEN TO TRAFFIC.
4. ALL SIGNS AND BARRICADES ARE TO BE PLACED AND RELOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
5. CONES SHOULD BE USED WHEN A TRAFFIC CONTROL SET UP IS UTILIZED ONLY DURING WORKING HOURS AND IT IS SUBSEQUENTLY BROKEN DOWN AT THE END OF THE WORKDAY.
6. SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE R.I. SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.
7. TEMPORARY CONSTRUCTION SIGNS SHALL BE REMOVED OR COVERED WHEN WORK IS NOT TAKING PLACE.
8. THE CONTRACTOR SHALL NOTIFY THE RI DEPARTMENT OF TRANSPORTATION AT LEAST SEVEN (7) CALENDAR DAYS PRIOR TO THE COMMENCEMENT OF THE ACTUAL FIELD WORK.

LEGEND

- RIDOT APPROVED TEMPORARY SIGN SUPPORT
- FLUORESCENT TRAFFIC CONES R.I. STD. 26.1.0
- POLYETHYLENE DRUM BARRICADE WITH MARKINGS, R.I. STD. 26.2.0
- DIRECTION OF TRAFFIC FLOW
- PORTABLE CHANGEABLE MESSAGE SIGN
- POLICE VEHICLE WITH FLASHING LIGHT BAR
- ADVANCE WARNING ARROW PANEL
- WORK SPACE
- CAR DETOUR ROUTE
- TRUCK DETOUR ROUTE

REVISIONS NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

DETOUR PLAN

CHECKED BY _____ DATE _____ SCALE NTS

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_030_DETOUR001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	31	46

LIST OF ABBREVIATIONS

A

ABUTMENT	= ABUT.
ALTERNATE	= ALT.
ANCHOR BOLT	= A.B.
APPROVED	= APPD.
APPROXIMATE	= APPROX.
AVERAGE	= AVG.

B

BEAM	= BM.
BACK TO BACK	= B TO B
BETWEEN	= BTWN
BEARING	= BRG.
BITUMINOUS	= BIT.
BUILDING	= BLDG.
BUILDING LINE	= B.L.
BOLT CIRCLE	= B.C.
BOTTOM	= BOT.

C

CENTER TO CENTER	= C TO C
CENTERLINE	= ℄
CIRCLE	= CIR.
CLEARANCE	= CL.
COLUMN	= COL.
CONCRETE	= CONC.
CONDUIT	= COND.
CONNECTION	= CONN.
CONSTRUCTION	= CONST.
CONTRACTION	= CONTR.
COUNTERSINK	= CSK.
COUPLING	= CPLG.
CLASS I CONTROLLED LOW STRENGTH MATERIAL	= CLMS

D

DETAIL	= DET.
DIAGONAL	= DIAG.
DIAPHRAGM	= DIAPHM.
DIAMETER	= DIA.
DIMENSION	= DIM.
DRAWING	= DWG.
DRAIN	= DR.

E

EACH	= EA.
EACH FACE	= E.F.
ELEVATION	= EL.
EXISTING	= EXIST.
EXPANSION	= EXP.

F

FAR FACE	= F.F.
FAR SIDE	= F.S.
FABRICATE	= FAB.
FACE TO FACE	= F TO F
FLANGE	= FLG.
FLAT HEAD	= F.H.
FOOTING	= FTG.
FOUNDATION	= FDN.
FURNISH, FABRICATE & ERECT	= F.F. & E.

G

GAGE	= GA.
GALVANIZE	= GALV.
GRADE	= GR.
GRATING	= GRTG.
GROUND	= GND.

H

HEIGHT	= HGT.
HEXAGON	= HEX.
HORIZONTAL	= HORIZ.

I

INCH	= IN.
INFORMATION	= INFO.
INSIDE DIAMETER	= I.D.
INVERT	= INV.

J

JOINT	= JT.

L

LENGTH	= LGTH.
LIGHTING	= LTG.
LONG	= LG.
LOAD & RESISTANCE FACTOR DESIGN	= LRFD

M

MATERIAL	= MATL.
MAXIMUM	= MAX.
MEAN HIGH WATER	= M.H.W.
MEAN SEA LEVEL	= M.S.L.
MINIMUM	= MIN.
MISCELLANEOUS	= MISC.

N

NEAR FACE	= N.F.
NEAR SIDE	= N.S.
NOT TO SCALE	= N.T.S.
NUMBER	= NO.

O

ON CENTER	= O.C.
OPENING	= OPNG.
OUTSIDE DIAMETER	= O.D.
OPTIONAL	= OPT.

P

PLATE	= PL
POINT OF VERTICAL CURVATURE	= P.V.C.
POINT OF VERTICAL TANGENCY	= P.V.T.
POLYVINYL CHLORIDE	= PVC
POINT OF TANGENCY	= P.T.
POUNDS PER SQUARE INCH	= P.S.I.
POUNDS PER SQUARE FOOT	= P.S.F.

R

RADIUS	= RAD.
RAILROAD	= RR
REQUIRED	= REQD.
REINFORCING	= REINF.
REHABILITATION	= REHAB.
REMOVE & DISPOSE	= R & D

S

SECTION	= SECT.
SCHEDULE	= SCH.
SCHEMATIC	= SCHEM.
SHEET	= SH.
SPACES	= SP.
STATION	= STA.
SYMMETRICAL	= SYM.
STAY IN PLACE	= S.I.P.

T

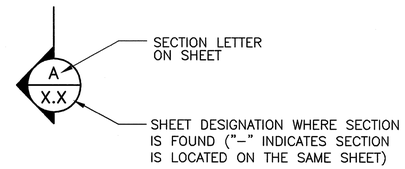
TOP	= T
TYPICAL	= TYP.

V

VARIES	= VAR.
VERTICAL CURVE	= V.C.
VERTICAL	= VERT.

W

WELDED WIRE FABRIC	= W.W.F.
WITH	= W/
WIDE FLANGE	= W
WORKING POINT	= W.P.



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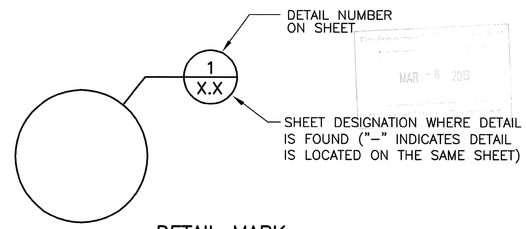

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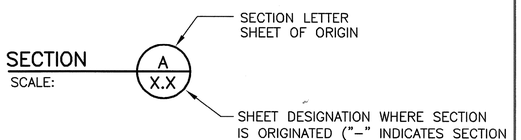
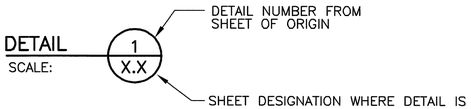


SECTION TITLE



DETAIL TITLE

SECTION & DETAIL DESIGNATIONS

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

BRIDGE STANDARD PLAN
ABBREVIATIONS & SYMBOLS

CHECKED BY _____ DATE _____ SCALE NONE

COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_031_STDSYM

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	32	46

GENERAL NOTES

1. ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
   - THE *2004* EDITION OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
   - THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, *5TH EDITION, 2010,* INCLUDING THE LATEST INTERIM REVISIONS.
   - THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
2. 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.
3. ALL ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).
4. COORDINATES USED ON THESE PLANS ARE BASED ON THE STATEWIDE COORDINATE SYSTEM, THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
5. TOPOGRAPHIC CONDITIONS WERE OBTAINED FROM AERIAL PHOTOGRAMMETRY. THE ACCURACY OF VERTICAL TOPOGRAPHY IS WITHIN ***ONE-HALF OF A FOOT***.
6. FOR BENCH MARKS AND TIES SEE HIGHWAY LOCATION PLANS.
7. ANGLES ARE SHOWN TO THE NEAREST SECOND.
8. ALL FOOTINGS SHALL BE APPROVED BY THE ENGINEER AS TO DIMENSIONS, ELEVATIONS, AND SUITABILITY OF FOUNDATION MATERIAL BEFORE THE PLACING OF CONCRETE.
9. ALL WORKING POINTS ARE SHOWN AT THE CENTERLINES OF BEARINGS OF ABUTMENTS AND AT THE CENTERLINES OF PIERS, UNLESS OTHERWISE NOTED.
10. ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
11. IF THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE AS DESIGNATED ON THE COVER SHEET, 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.
12. 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.
13. 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 TO THE STATE.

DESIGN DATA

1. DESIGN SPECIFICATIONS

- THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6 *TH* EDITION, *2012,* INCLUDING ALL INTERIM REVISIONS TO DATE.
- THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL *2007* EDITION INCLUDING ALL REVISIONS TO DATE.
- ALL OTHER APPLICABLE DESIGN SPECIFICATIONS ARE REFERENCED IN SECTION 1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED *2007*.
- THE *2004* EDITION OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
- IN CASE OF CONFLICT, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED 2007 SHALL GOVERN.

2. LOAD MODIFIERS

THE LOAD MODIFIERS FOR THIS PROJECT ARE AS FOLLOWS:

- THE LOAD MODIFIER FOR DUCTILITY SHALL BE TAKEN AS 1.0 FOR ALL LIMIT STATES.
- THE LOAD MODIFIER FOR REDUNDANCY SHALL BE TAKEN AS 1.0 FOR ALL LIMIT STATES .
- THE LOAD MODIFIER FOR OPERATIONAL IMPORTANCE SHALL BE TAKEN AS 1.0.

3. LOAD FACTORS

ALL LOAD FACTORS SHALL BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT AS MODIFIED IN THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL 2007 AND AS SPECIFIED BELOW.

- THE LOAD FACTOR FOR TEMPERATURE GRADIENT SHALL BE TAKEN AS ZERO FOR ALL LIMIT STATES.
- THE LOAD FACTOR FOR LIVE LOAD FOR THE EXTREME EVENT I SHALL BE TAKEN AS ZERO.
- THE LOAD FACTOR FOR DEAD LOAD FOR THE EXTREME EVENT I AND EXTREME EVENT II SHALL BE TAKEN AS 1.0
- THE LOAD FACTOR FOR SETTLEMENT FOR ALL LIMIT STATES SHALL BE TAKEN AS 1.0

4. LIVE LOADS

- THE DESIGN VEHICULAR LIVE LOAD SHALL BE THE HL-93 DESIGNATION ADJUSTED FOR DYNAMIC LOAD ALLOWANCE AND MULTIPLE PRESENCE FACTOR.
- THE DESIGN PEDESTRIAN LIVE LOAD SHALL BE 75 PSF.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

BRIDGE STANDARD NOTES SHEET 1

CHECKED BY _____ DATE _____ SCALE NONE

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_032_NOTES01

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	33	46

MATERIALS

REINFORCING STEEL:

- AASHTO DESIGNATION M 31, GRADE 60

CONCRETE STRENGTHS:

- CLASS HP ¾" f'c=5,000 PSI — BRIDGE DECK PARAPET, END POST, & MOMENT SLAB
- CLSM — ARCH CAVITY

CONCRETE NOTES

1. CLASSES OF CONCRETE SHALL BE HIGH PERFORMANCE CLASS HP, CLASS X, CLASS XX AND CLASS A, AS DESCRIBED IN THE RI STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. REFER TO THE "MATERIAL" NOTES FOR CLASSES OF CONCRETE SPECIFIED FOR VARIOUS COMPONENTS.

   ALL CLASSES OF CONCRETE ARE TO BE MODIFIED THROUGH THE ADDITION OF CALCIUM NITRITE-BASED CORROSION INHIBITOR IN ACCORDANCE WITH SECTION 605 OF THE RI STANDARD SPECIFICATIONS. IN ADDITION, HP CONCRETE USED FOR DECKS ONLY SHALL ALSO BE MODIFIED WITH ADDITION OF SYNTHETIC FIBERS IN ACCORDANCE WITH SECTION 604 OF THE RI STANDARD SPECIFICATIONS. HP CONCRETE USED FOR PRESTRESSED PRECAST CONCRETE IS NOT REQUIRED TO BE MODIFIED WITH THE USE OF SYNTHETIC FIBER.

2. THE CONTRACTOR MAY, AT THE APPROVAL OF THE ENGINEER, PROPOSE THE USE OF SELF-CONSOLIDATING CONCRETE FOR ANY CLASS OF CONCRETE ON THIS PROJECT. RI STANDARD SPECIFICATIONS SECTION 606 "SELF CONSOLIDATING CONCRETE (SCC)", CONTAINS THE REQUIREMENTS FOR MODIFYING ALL CLASSES OF CONCRETE MIX DESIGN FOR SELF-CONSOLIDATING APPLICATIONS.

3. ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED. (AE)

4. 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.

5. 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.

6. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL MAIN REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO EARTH (FOOTINGS, ABUTMENT AND WALL FACES, BACKWALLS)		3"
DECK SLABS (WITH WEARING SURFACE)	TOP	2" (+1/4", -0")
	BOTTOM	1" (+1/8", -0")
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.

7. HORIZONTAL CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON PLANS WILL NOT BE PERMITTED WITHOUT A WRITTEN REQUEST BY THE CONTRACTOR AND PRIOR AUTHORIZATION BY THE ENGINEER.

8. UNLESS OTHERWISE NOTED ON THE PLANS, ALL NEWLY POURED 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.

9. ALL EXPOSED EDGES AND REENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM ¾" CHAMFER.

10. 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.

11. UNLESS OTHERWISE NOTED ON THE PLANS, JOINT FILLER IS TO BE A PREFORMED, NON-EXPANSIVE, NON-EXTRUDING TYPE IN ACCORDANCE WITH SECTION M.02.11.1 OF THE RI STANDARD SPECIFICATIONS.

12. PLACEMENT, FINISHING AND CURING OF BRIDGE DECK CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 814 OF THE RI STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH THE SEQUENCE AND DIRECTION OF POURS AS SHOWN ON THE PLANS.

13. EMBEDMENT LENGTHS FOR DRILLED AND GROUTED DOWELS SHALL BE IN ACCORDANCE WITH SECTION 819 OF THE RI STANDARD SPECIFICATIONS.

14. IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS, 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.

15. WATER STOPS ARE REQUIRED FOR HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS IN ABUTMENTS AND WALLS WHEN EXPOSED TO BACKFILL EARTH MATERIAL. WATER STOPS SHALL BE INSTALLED AT THE LOCATIONS DETAILED ON THE PLANS, AT THE LOCATIONS AS SPECIFIED ABOVE AND AT ALL LOCATIONS AS DIRECTED BY THE ENGINEER, ALL IN ACCORDANCE WITH SECTION 812 OF THE RI STANDARD SPECIFICATIONS.

MAR 19 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 19 2013 FILE # 12-0178
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

BRIDGE STANDARD NOTES
SHEET 2

CHECKED BY _____ DATE _____ SCALE NONE

COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	34	46

GENERAL NOTES REGARDING TEMPORARY CONSTRUCTION CONDITIONS:

1. DESIGN WIND PRESSURES FOR CONSTRUCTION:

MINIMUM WIND PRESSURES TO BE USED BY THE CONTRACTOR FOR DESIGN DURING THE CONSTRUCTION CONTRACT (WITH THE EXCEPTION OF SIGNS) SHALL BE FROM THE FOLLOWING TABLE:

HEIGHT ABOVE GROUND	WIND PRESSURE (PSF)
UP TO 17'	*
OVER 17' AND UP TO 33'	*
OVER 33' AND UP TO 50'	*
OVER 50' AND UP TO 75'	*
OVER 75' AND UP TO 100'	*

TABLE NOTES:

A. APPLICATION OF THE TABULAR PRESSURE:

- BRIDGE COMPONENTS DURING CONSTRUCTION, PRIOR TO THE INSTALLATION OF THE PERMANENT BRACING SYSTEMS, NOT INCLUDING CRANE LIFTING.
- FALSE WORK, SHORING, AND SCAFFOLDING AS DEFINED IN FHWA "GUIDE DESIGN SPECIFICATION FOR BRIDGE TEMPORARY WORKS", EXCLUDING 3-DIMENSIONAL LATTICED OR TRUSSED FRAMES OR TOWERS;
- TEMPORARY SHEILDING.

WIND PRESSURES FOR ALL OTHER STRUCTURES SHALL BE CALCULATED BASED ON ASCE "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION", SEI/ASCE 37-02 (ALL REFERENCES TO THE ASCE 7 IN THE SEI/ASCE 37-02 PUBLICATION, SHALL BE THE LATEST REVISION OF ASCE 7). THE EXPOSURE CATEGORY SHALL BE "C".

B. WHERE APPLICABLE HIGHER AMTRAK WIND REQUIREMENTS SHALL SUPERSEDE THESE REQUIREMENTS.

C. FOR STRUCTURES SITUATED ABOVE LIVE INTERSTATE TRAFFIC, THE TABULAR VALUES SHALL BE INCREASED BY 5 PSF.

DESIGNER NOTES:

a. THE DESIGNER IS TO FILL THE ABOVE TABULAR PRESSURES (INDICATED WITH ASTERISKS "") USING THE FOLLOWING VALUES:*

HEIGHT ABOVE GROUND	*WIND PRESSURE (PSF)*	
(FEET)	*EXP B*	*EXP C*
UP TO 17'	*23*	*33*
OVER 17' AND UP TO 33'	*27*	*37*
OVER 33' AND UP TO 50'	*30*	*41*
OVER 50' AND UP TO 75'	*34*	*44*
OVER 75' AND UP TO 100'	*37*	*47*

b. EXPOSURE CATEGORIES ARE DEFINED AS FOLLOWS (NOTE THAT EXPOSURE "A" NO LONGER EXISTS AS OF THE RELEASE OF ASCE 7-05, AND THAT EXPOSURE "D" IS NOT APPLICABLE TO RHODE ISLAND):

- *EXPOSURE B = URBAN AND SUBURBAN AREAS, WOODED AREAS OR OTHER TERRAIN WITH NUMEROUS CLOSELY SPACED OBSTRUCTIONS HAVING THE SIZE OF SINGLE-FAMILY DWELLINGS OR LARGER. THIS EXPOSURE SHALL PREVAIL IN THE UPWIND DIRECTION FOR A DISTANCE OF AT LEAST 2630 FEET, OR 10 TIMES THE HEIGHT OF THE STRUCTURE, WHICHEVER IS GREATER.*
- *EXPOSURE C = OPEN TERRAIN WITH SCATTERED OBSTRUCTIONS HAVING HEIGHTS GENERALLY LESS THAN 30 FEET, INCLUDING FLAT OPEN COUNTRY, GRASSLANDS, AND ALL WATER SURFACES IN HURRICANE-PRONE REGIONS. THIS EXPOSURE SHALL APPLY FOR ALL CASES WHERE EXPOSURE B DOES NOT APPLY.*

THE DESIGNER SHALL INDICATE THE APPROPRIATE EXPOSURE CATEGORY FOR THE PROJECT IN THE NOTES ABOVE. REFER TO THE RI LRFD BRIDGE DESIGN MANUAL AND THE COMMENTARY OF ASCE 7-05 FOR GUIDANCE IN THE APPLICATION OF EXPOSURE CATEGORIES.

2. ERECTION OF BRIDGE COMPONENTS:

FOR THE ERECTION OF STRUCTURES, THE FOLLOWING SHALL APPLY:

- THE CONTRACTOR SHALL SUBMIT AN ERECTION PLAN THAT PROVIDES COMPLETE DETAILS OF THE PROCESS INCLUDING, BUT NOT LIMITED TO, TEMPORARY SUPPORTS, SCHEDULING AND OPERATION SEQUENCING, CRANE PLACEMENT, AND ASSUMED LOADS AND CALCULATED STRESSES DURING VARYING STAGES OF LIFTING. THIS APPLIES TO STRUCTURES OF ANY KIND. THE CAPACITY OF THE CRANE AND ALL LIFTING AND CONNECTING DEVICES SHALL BE ADEQUATE FOR 125 PERCENT OF THE TOTAL PICK LOAD INCLUDING SPREADERS AND OTHER MATERIALS. THIS FACTOR OF SAFETY SHALL BE IN ADDITION TO ALL MANUFACTURERS' PUBLISHED FACTORS OF SAFETY.
- A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF RHODE ISLAND, WILL BE REQUIRED TO STAMP THE CONTRACTOR'S ERECTION PLAN.
- THE CONTRACTOR'S PROFESSIONAL ENGINEER WILL BE REQUIRED TO INSPECT AND PROVIDE WRITTEN APPROVAL OF EACH PHASE OF A GIRDER INSTALLATION, PRIOR TO ALLOWING VEHICLES OR PEDESTRIANS ON OR BELOW THE STRUCTURE. THE PROFESSIONAL ENGINEER MUST ALSO STAMP ALL CHANGES TO THE CONTRACTOR'S ERECTION PLAN. ADDITIONALLY, ALL PROPOSED CHANGES MUST BE SUBMITTED TO RIDOT FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION.
- A MANDATORY PRE-ERECTION CONFERENCE WILL BE HELD AT LEAST TWO WEEKS PRIOR TO THE START OF THE GIRDER INSTALLATION TO DISCUSS THE PLAN AND PROCEDURES, WORK SCHEDULES, CONTINGENCY PLANS, SAFETY REQUIREMENTS AND TRAFFIC CONTROL. THE CONTRACTOR'S PROFESSIONAL ENGINEER AND ERECTION SUBCONTRACTOR WILL BE REQURIED TO ATTEND THIS MEETING, AS WILL THE RIDOT RESIDENT ENGINEER, THE DESIGN PROJECT ENGINEER AND THE DESIGN CONSULTANT. BASED UPON DISCUSSIONS AT THIS MEETING AND A REVIEW OF THE CONTRACTOR'S ERECTION PLAN, RIDOT MAY ORDER THE CONTRACTOR TO MODIFY AND RESUBMIT THE ERECTION PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.
- THE CONTRACTOR WILL BE REQUIRED TO PERFORM DAILY INSPECTIONS OF THE ERECTED GIRDERS UNTIL THE BRIDGE DECK IS COMPLETELY POURED.
- THE COST OF PREPARING AND STAMPING THE ERECTION PLAN, COMPUTATIONS, AND REPORTS, RESPONDING TO RIDOT'S COMMENTS AND MAKING THE NECESSARY REVISIONS, AND ATTTENDANCE AT MEETINGS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SUPERSTRUCTURE PAY ITEM, BE IT CONCRETE, STEEL OR TIMBER.

SUGGESTED SEQUENCE OF CONSTRUCTION:

1. SET-UP DETOUR
2. CLOSE ROAD
3. INSTALLL EROSION CONTROLS
4. INSTALL FLOATING OIL CONTAINMENT BOOM
5. INSTALL PROTECTIVE SHIELDING
6. REMOVE AND DISPOSE REINFORCED CONCRETE PARAPETS AND SIDEWALKS
7. SAW CUT AND REMOVE AND DISPOSE TOP OF SPANDREL WALL/COPING
8. REMOVE AND DISPOSE SAND AND DEBRIS WITHIN OPEN AREA BELOW EXISTING DECK AND BETWEEN EXISTING CROSS WALLS
9. DAMP PROOF INTERIOR SURFACES OF ARCH RIB AND SPANDREL WALLS
10. INSTALL 1" POLYETHELENE FOAM ON INTERIOR SURFACE OF EXISTING SPANDREL WALLS
11. INSTALL 4" PVC DRAIN AND CONNECT TO EXISTING ARCH DRAIN
12. FILL OPEN AREA BELOW EXISTING DECK AND BETWEEN EXISTING CROSS WALLS WITH CLSM (FLOWABLE, NON-EXCAVATABLE)
13. REMOVE AND DISPOSE REINFORCED CONCRETE DECK
14. CLEAN TOP OF CLSM FILL
15. OVERLAY WITH CONCRETE LEVELING COURSE TO SPECIFIED GRADE
16. PLACE PRECAST ELEMENTS; DRILL AND GROUT TO CLSM
17. PERFORM CONCRETE REPAIR
18. REMOVE PROTECTIVE SHIELDING
19. REMOVE EROSION CONTROLS
20. REMOVE DETOUR AND OPEN TO TRAFFIC

OMIT STEPS 14 AND 15 FOR CAST IN PLACE ELEMENTS.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

BRIDGE STANDARD NOTES SHEET 3

CHECKED BY _____ DATE _____ SCALE NONE

COMMONWEALTH
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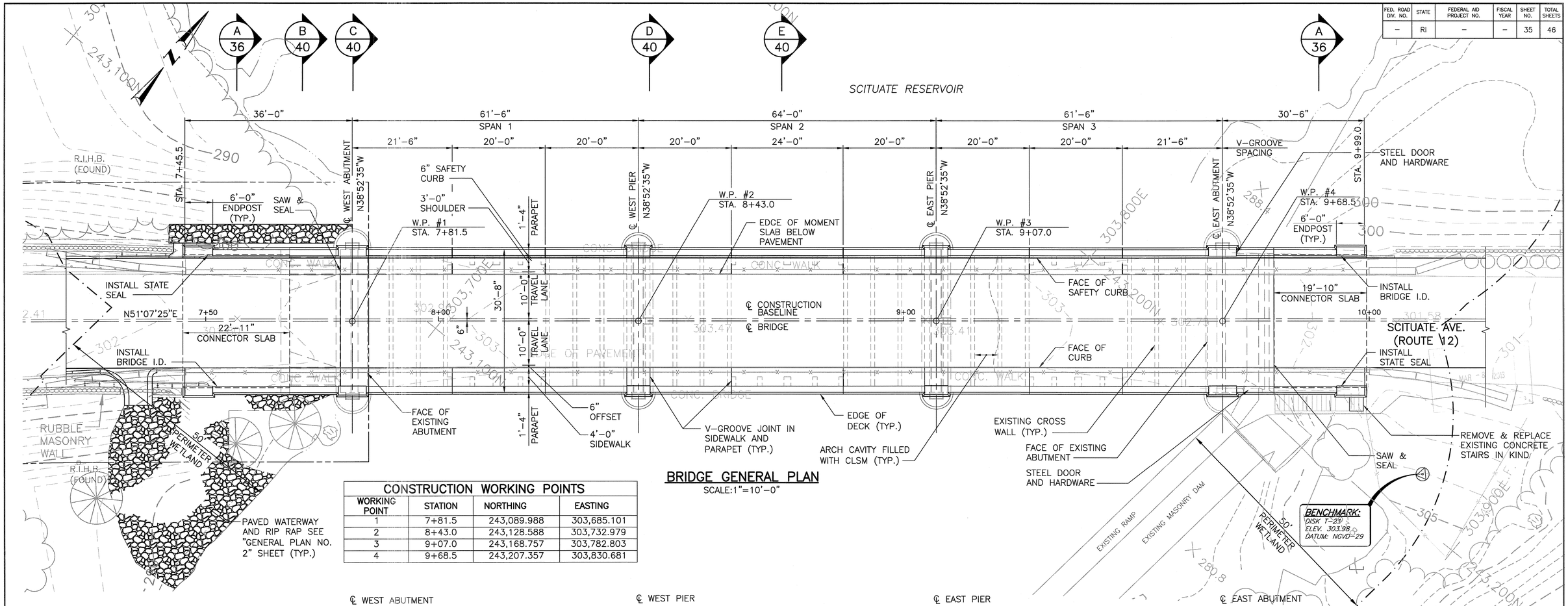
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_034_NOTES03

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	35	46

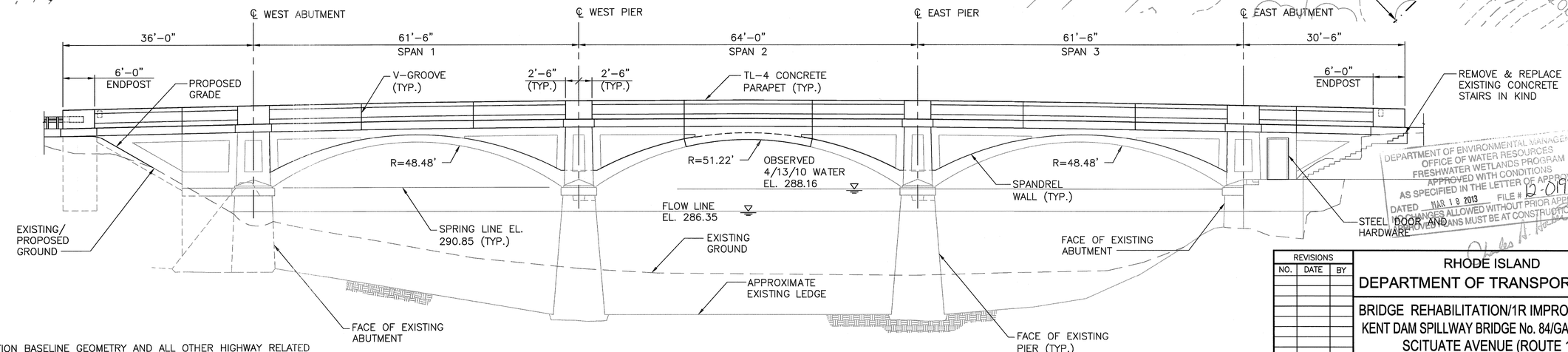


BRIDGE GENERAL PLAN

SCALE:1"=10'–0"

CONSTRUCTION WORKING POINTS

WORKING POINT	STATION	NORTHING	EASTING
1	7+81.5	243,089.988	303,685.101
2	8+43.0	243,128.588	303,732.979
3	9+07.0	243,168.757	303,782.803
4	9+68.5	243,207.357	303,830.681



SOUTH ELEVATION

SCALE:1"=10'–0"

NOTES:

1. FOR CONSTRUCTION BASELINE GEOMETRY AND ALL OTHER HIGHWAY RELATED WORK INCLUDING BUT NOT LIMITED TO APPROACH ROADWAY CONSTRUCTION, DRAINAGE, AND STRIPING, REFER TO HIGHWAY PLANS.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

BRIDGE GENERAL PLAN AND ELEVATION

CHECKED BY _____ DATE _____ SCALE AS SHOWN

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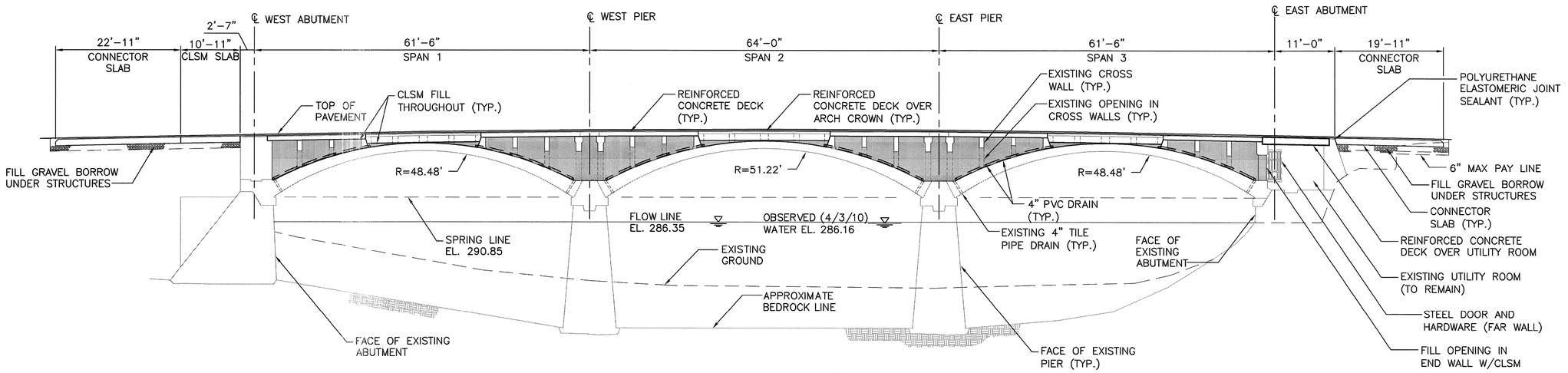
0143B_V1_035_GENPLAN

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	36	46



LONGITUDINAL SECTION

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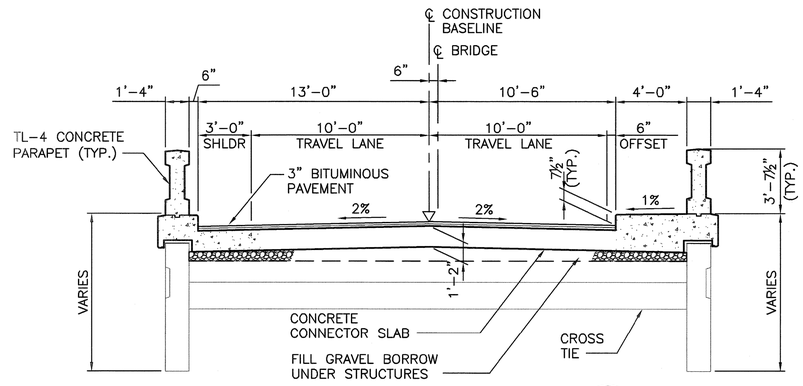

TYPICAL SECTION AT APPROACH

SCALE:1/4"=1'–0"

A
35

MAR – 6 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 1 8 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

LONGITUDINAL & TRANSVERSE SECTIONS

CHECKED BY _____ DATE _____ SCALE AS SHOWN

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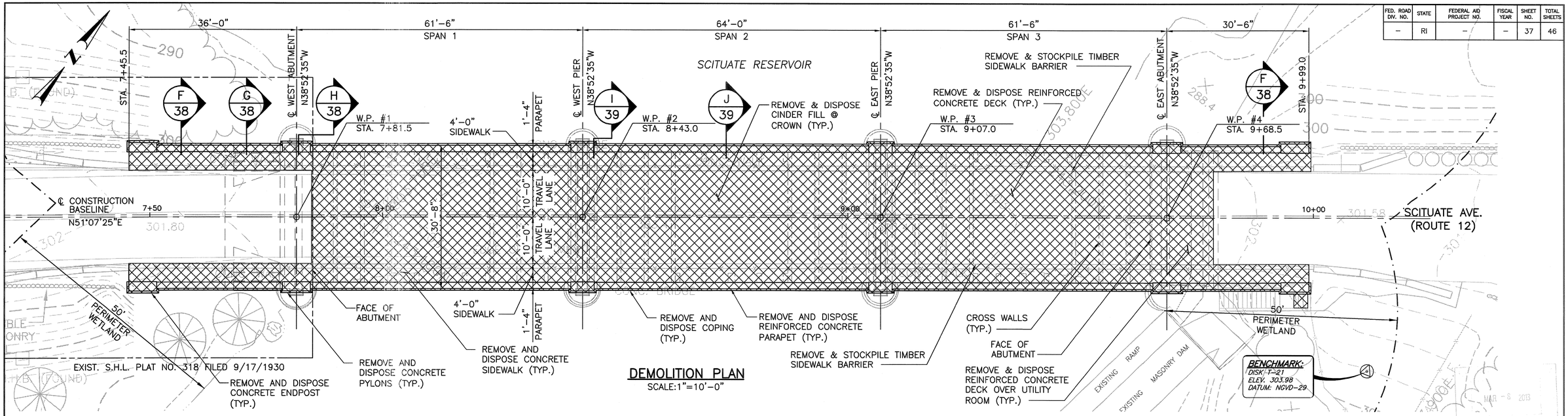
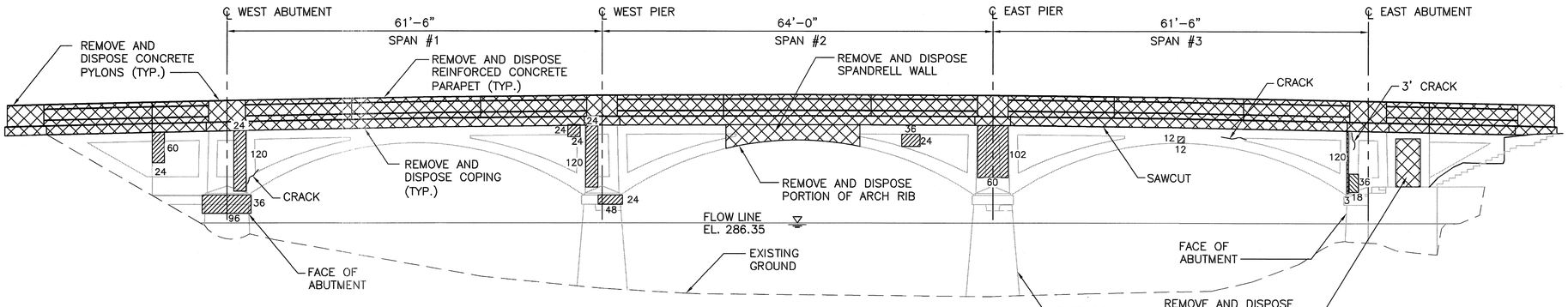
PROVIDENCE, RI 02908

0143B_V1_036_BTYPICAL01

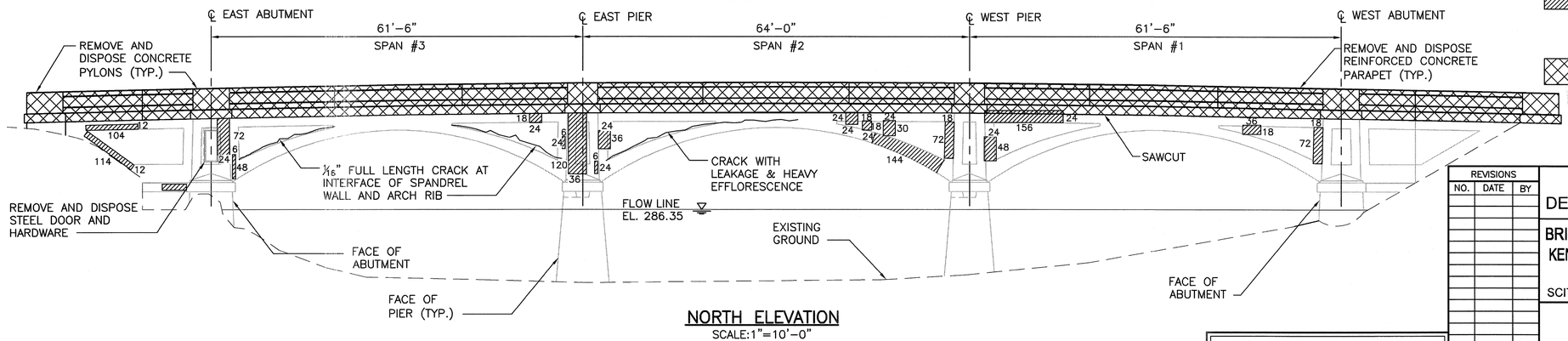
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	37	46



DEMOLITION PLAN
SCALE:1"=10'-0"



SOUTH ELEVATION
SCALE:1"=10'-0"



NORTH ELEVATION
SCALE:1"=10'-0"

DEMOLITION NOTES:
1. DETAILS ARE TAKEN FROM ORIGINAL CONSTRUCTION PLANS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. PLANS FOR THE ORIGINAL DESIGN ARE AVAILABLE ON CONTRACT CD.
2. THE PARAPETS, SIDEWALK AND PYLONS ARE TO BE REMOVED AND DISPOSED IN THEIR ENTIRETY TO A DEPTH AS SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXISTING BRIDGE CONSTRUCTION.
4. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY DEMOLITION AND CONSTRUCTION DEBRIS FROM FALLING TO THE AREA ADJACENT TO OR BELOW THE STRUCTURE.

LEGEND:
DENOTES AREAS OF REINFORCED CONCRETE TO BE REPAIRED BY FORM AND CAST IN PLACE METHOD (CODE 817.2140). (DIMENSIONS ARE SHOWN IN INCHES).

DENOTES AREAS OF REINFORCED CONCRETE TO BE REMOVED AND DISPOSED.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

MAR - 8 2013

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

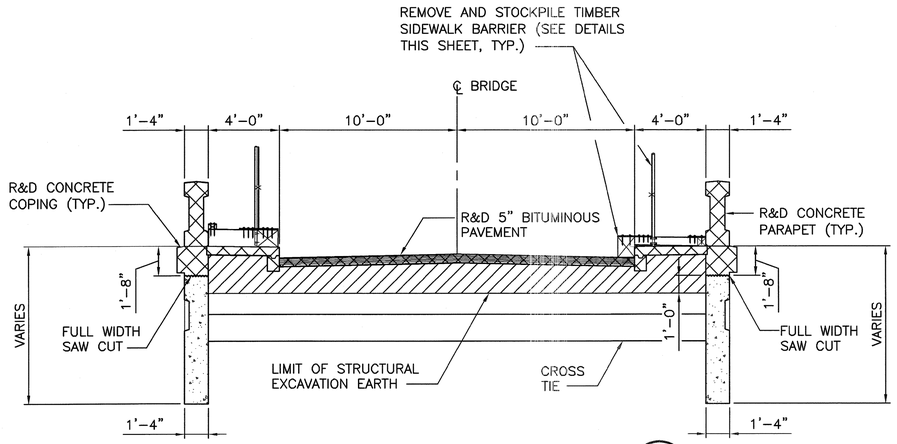
DEMOLITION PLAN & ELEVATIONS

CHECKED BY _____ DATE _____ SCALE AS SHOWN

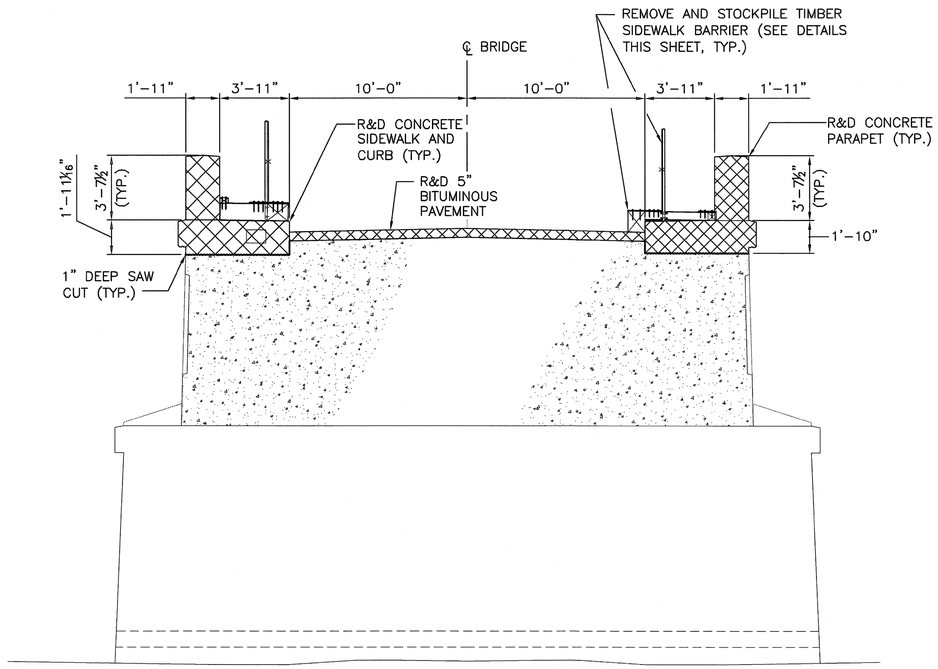
COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_037_DEMO01

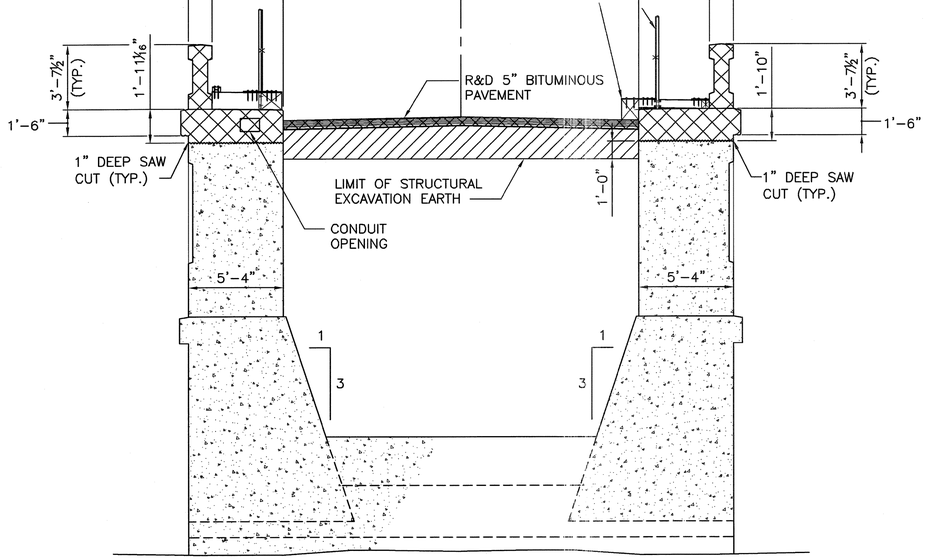
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	38	46



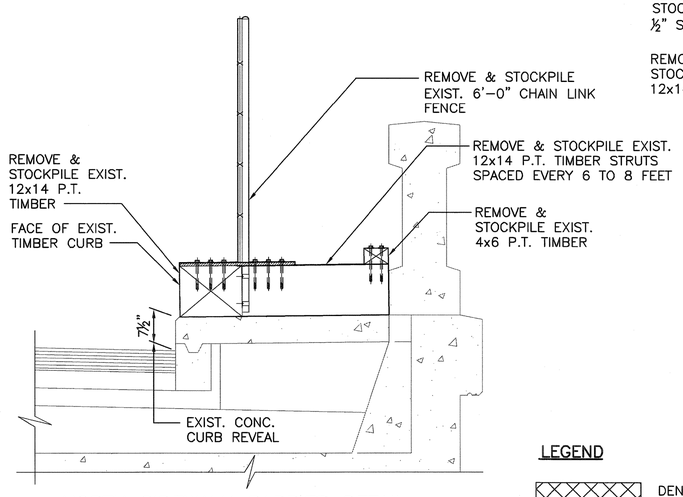
SECTION AT WEST ABUTMENT APPROACH (F / 37)
SCALE:1/4"=1'–0"
(EAST ABUTMENT APPROACH SIMILAR)



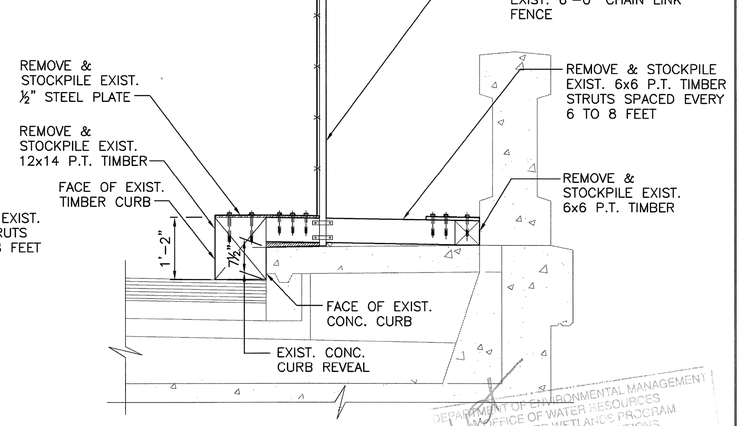
SECTION AT WEST ABUTMENT (H / 37)
SCALE:1/4"=1'–0"



SECTION AT WEST ABUTMENT RETURN (G / 37)
SCALE:1/4"=1'–0"



NORTH SIDEWALK BARRIER DETAIL
SCALE: 3/4"=1'–0"



SOUTH SIDEWALK BARRIER DETAIL
SCALE: 3/4"=1'–0"

LEGEND

DENOTES AREAS OF REINFORCED CONCRETE TO BE REMOVED AND DISPOSED

DENOTES AREAS OF STRUCTURAL EXCAVATION EARTH

MAR – 8 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
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REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

DEMOLITION DETAILS
SHEET - 1

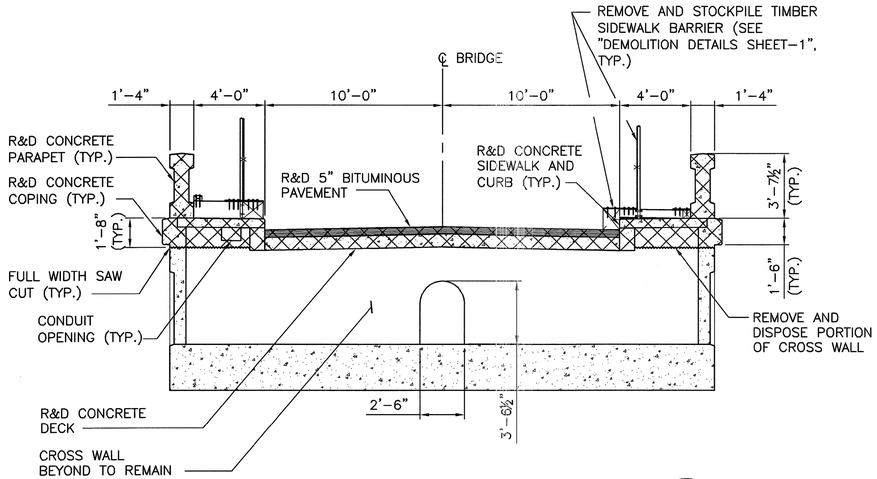
CHECKED BY _____ DATE _____ SCALE AS SHOWN

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

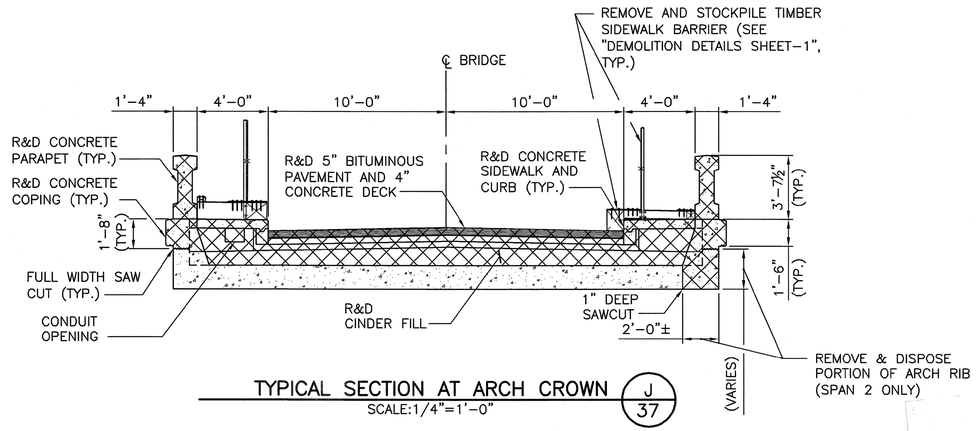
0143B_V1_038_DEM002

P:\0143B\038\Kent Dam Spillway Bridge\Structural\Drawings_Contract_Drawings\0143B_V1_038_DEM002.dwg, Layout1, 1/25/2013 1:27:08 PM, PRF

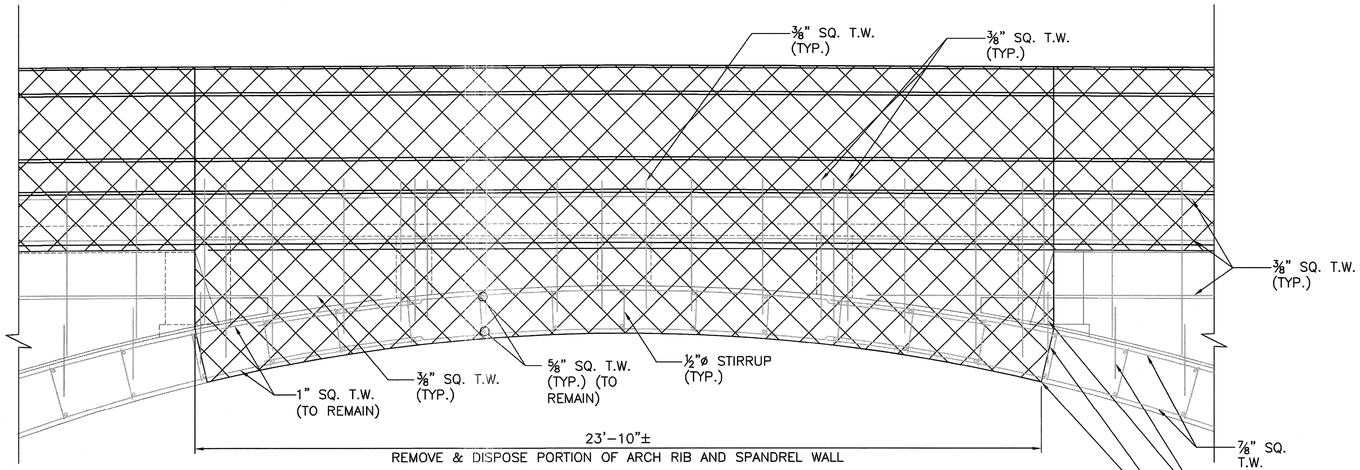
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	39	46



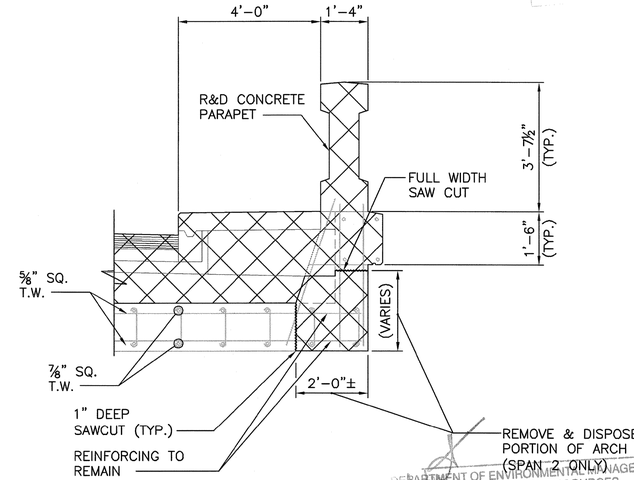
TYPICAL SECTION AT ARCH SPRING LINE I / 37
SCALE:1/4"=1'–0"



TYPICAL SECTION AT ARCH CROWN J / 37
SCALE:1/4"=1'–0"



ARCH CROWN ELEVATION @ SPAN 2
SCALE: ½"=1'–0"



ARCH CROWN SECTION @ SPAN 2
SCALE: ½"=1'–0"

MAR – 6 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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DATED MAR 18 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
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LEGEND

AREAS OF REINFORCED CONCRETE TO BE REMOVED AND DISPOSED

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

DEMOLITION DETAILS
SHEET - 2

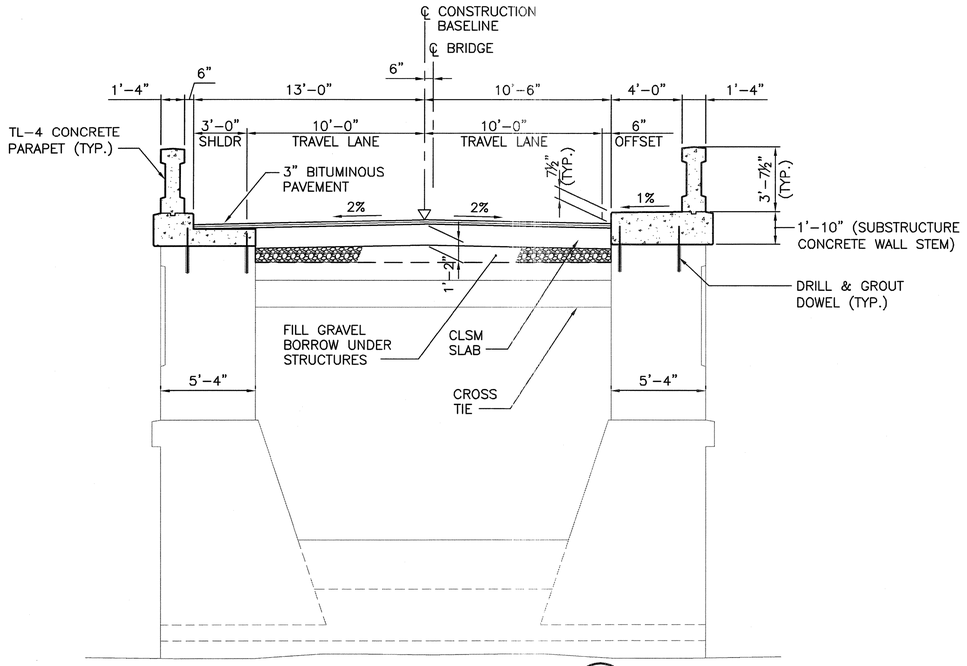
CHECKED BY _____ DATE _____ SCALE AS SHOWN

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

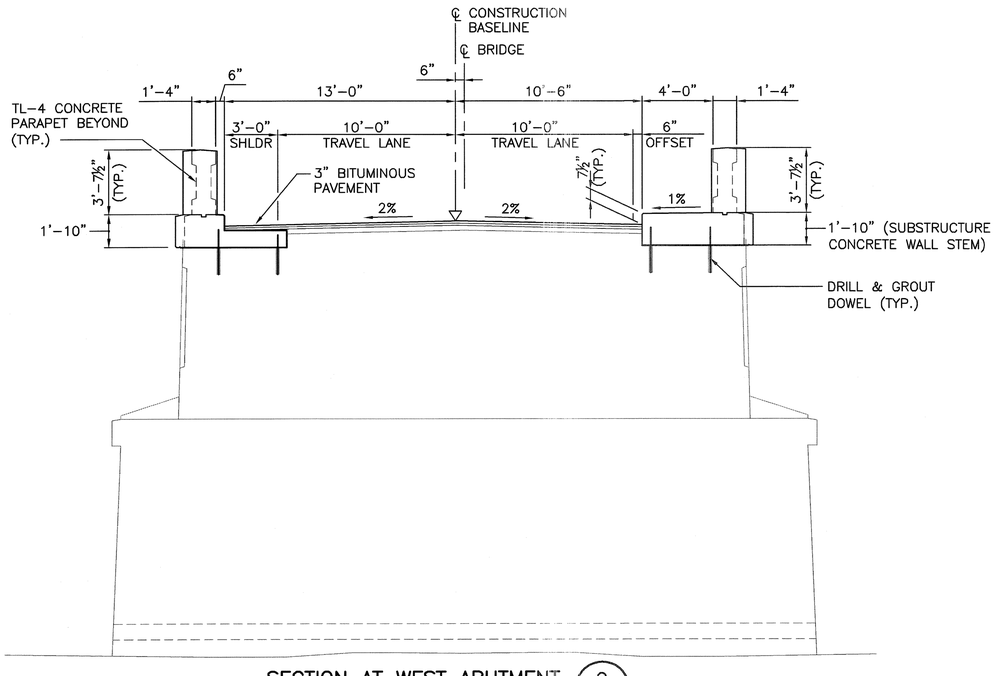
0143B_V1_039_DEM003

P:\0143B\CIB\3-Kent Dam Spillway Bridge\Structural\Drawings_Drawings\KentDS_V1_CIB_DEM003.dwg, Layout1 (3), 1/22/2013 1:34:48 PM, RMF

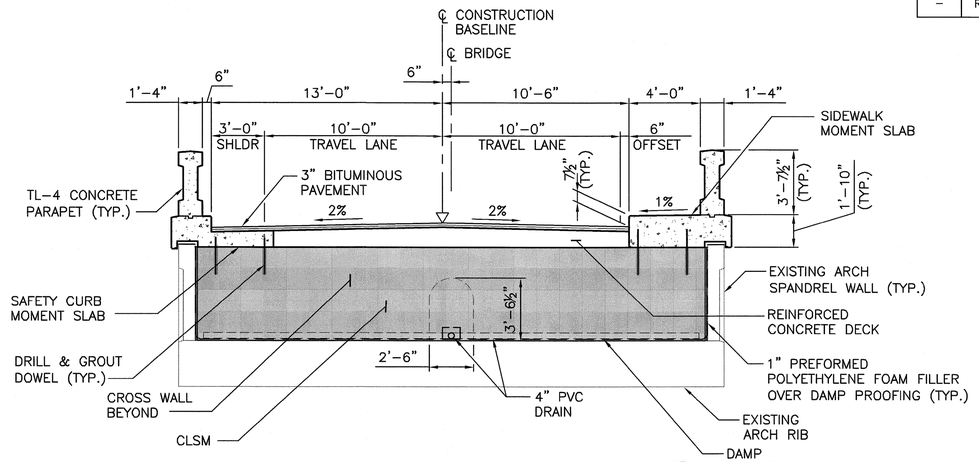
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	40	46



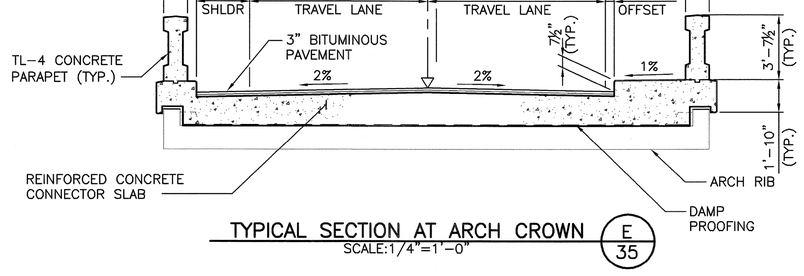
SECTION AT WEST ABUTMENT RETURN — B / 35
SCALE:1/4"=1'–0"



SECTION AT WEST ABUTMENT — C / 35
SCALE:1/4"=1'–0"



TYPICAL SECTION AT ARCH SPRING LINE — D / 35
SCALE:1/4"=1'–0"



TYPICAL SECTION AT ARCH CROWN — E / 35
SCALE:1/4"=1'–0"

MAR – 8 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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DATED MAR 18 2013 FILE # 12-0198
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

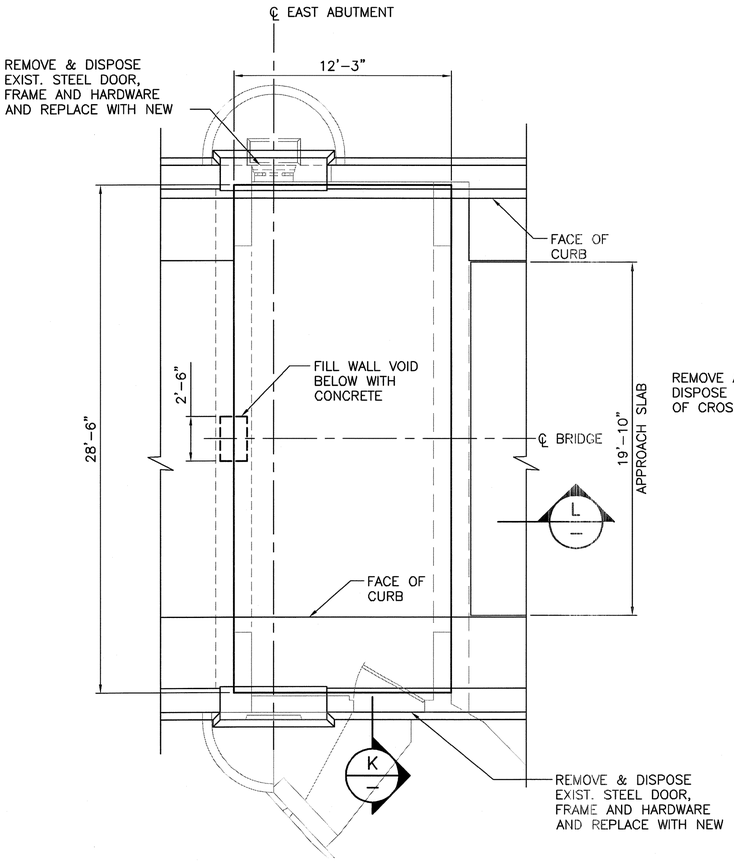
TYPICAL BRIDGE SECTIONS

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

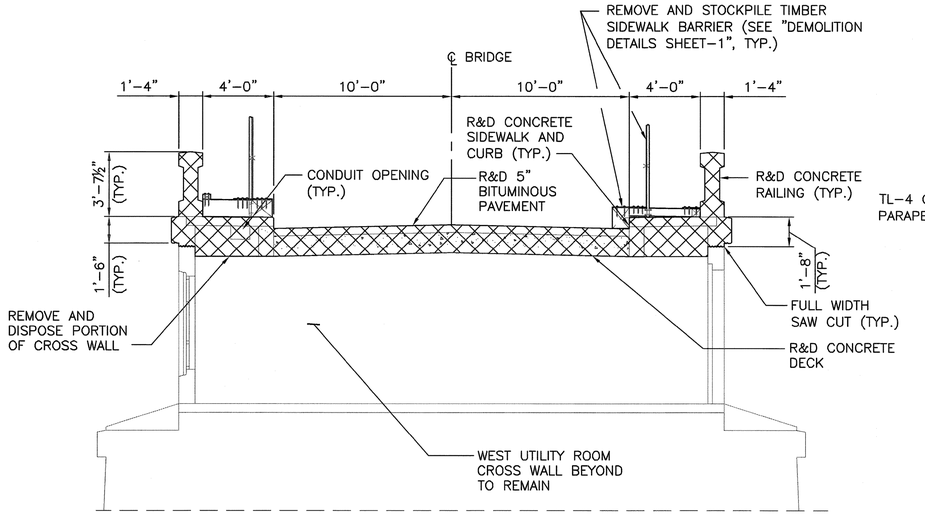
CHECKED BY _____ DATE _____ SCALE AS SHOWN

0143B_V1_040_BTYPICAL02

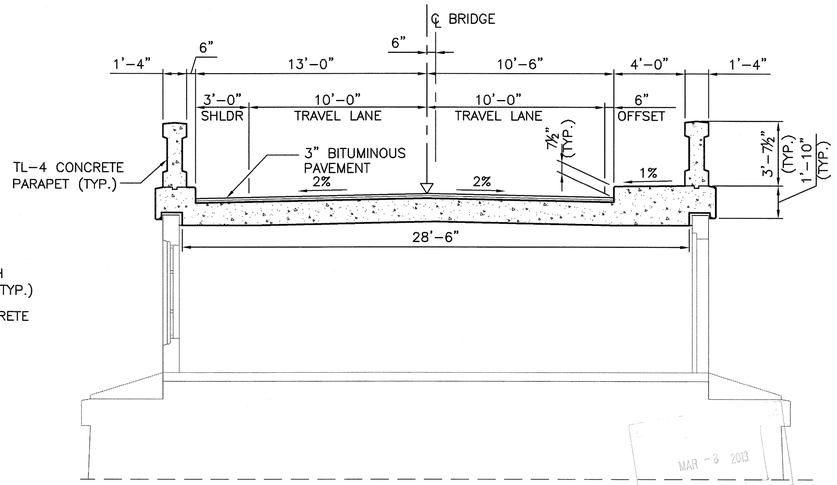
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	41	46



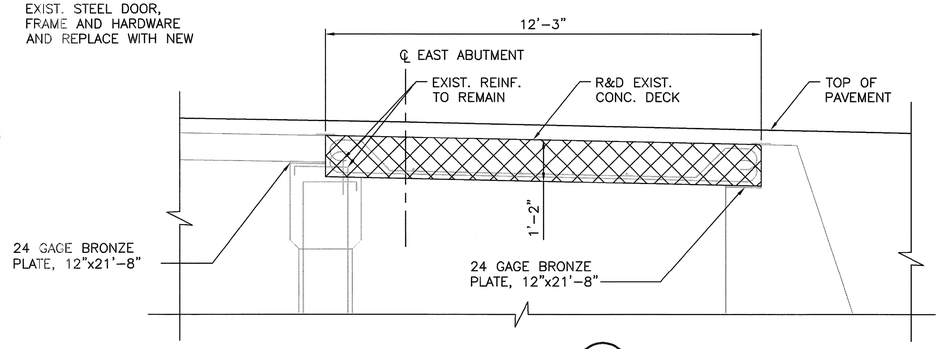
UTILITY ROOM DECK PLAN
SCALE:1/4"=1'–0"



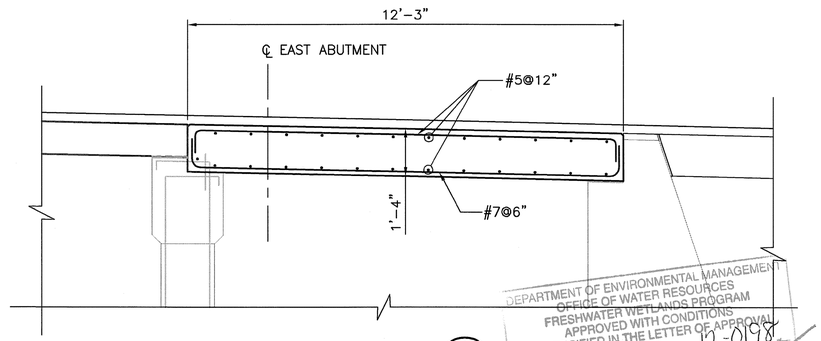
K — UTILITY ROOM SECTION (LOOKING EAST)
SCALE: ¼"=1'–0"



K — UTILITY ROOM SECTION (LOOKING EAST)
SCALE: ¼"=1'–0"



DEMO SECTION — L
SCALE: ½"=1'–0"



PROPOSED SECTION — L
SCALE: ½"=1'–0"

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 19 2013 FILE # 12-0198
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

MAR – 8 2013

LEGEND

AREAS OF REINFORCED CONCRETE TO BE REMOVED AND DISPOSED

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

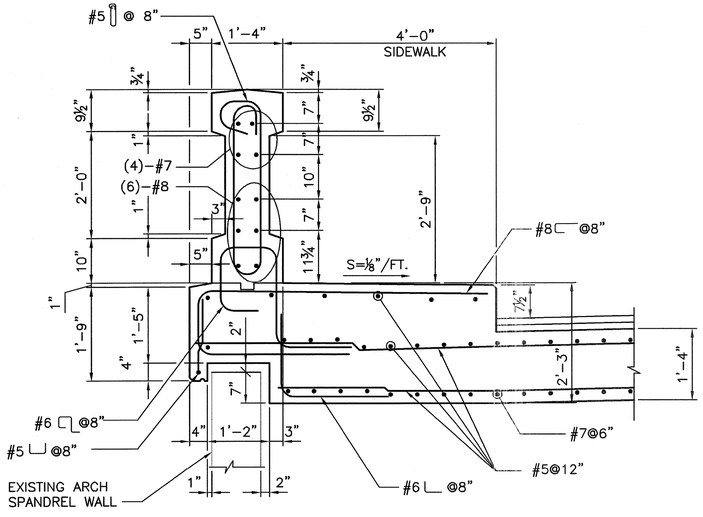
UTILITY ROOM PLAN AND DETAILS

CHECKED BY _____ DATE _____ SCALE AS SHOWN

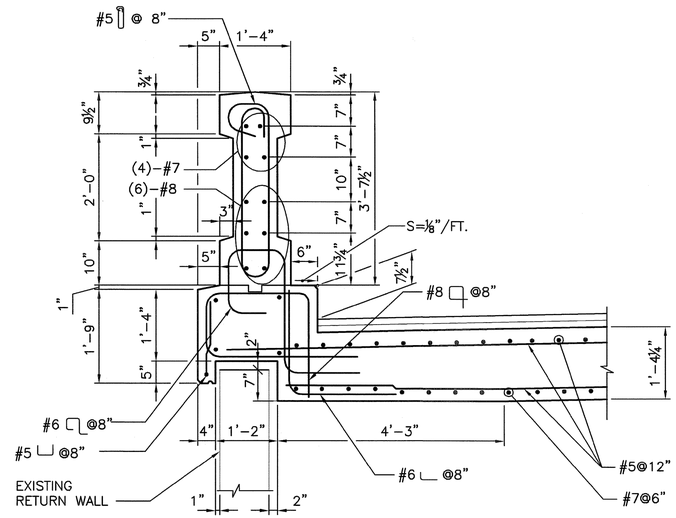
COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_041_BTYPICAL03

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	42	46



UTILITY ROOM SLAB DETAIL @ SIDEWALK
SCALE: ¾"=1'-0"



UTILITY ROOM SLAB DETAIL @ SAFETY CURB
SCALE: ¾"=1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

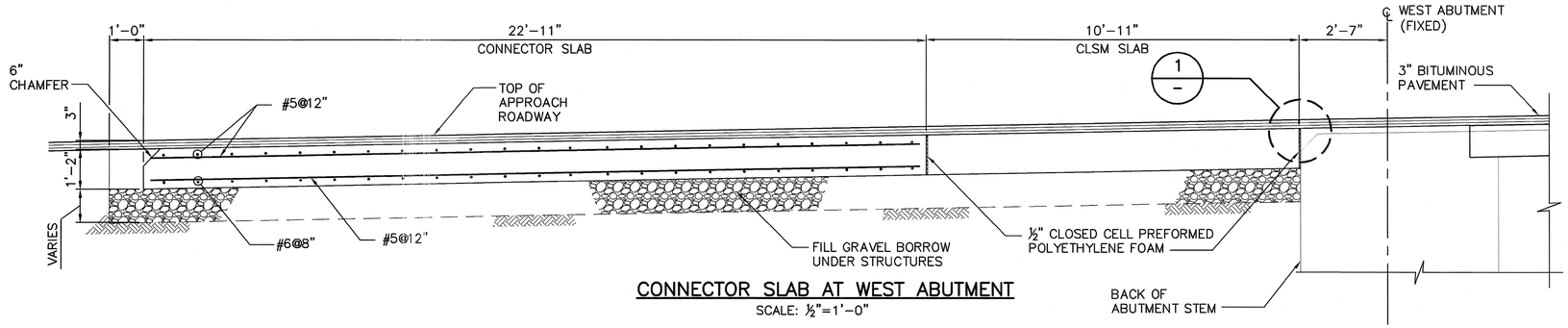
UTILITY ROOM
DETAILS

CHECKED BY _____ DATE _____ SCALE AS SHOWN

COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

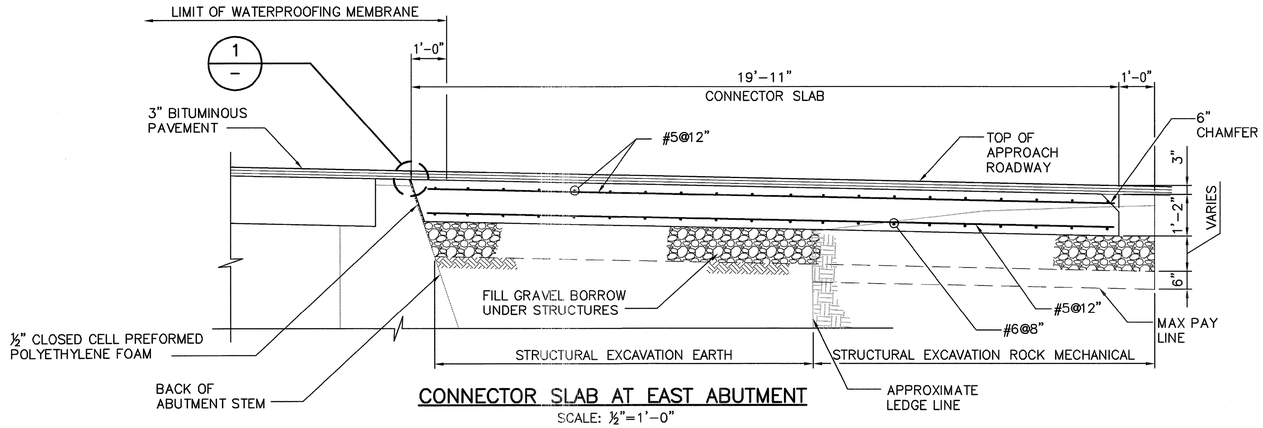
0143B_V1_042_BTYPICAL04

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	43	46



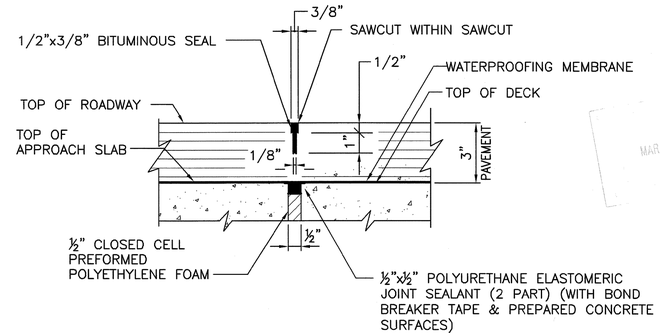
CONNECTOR SLAB AT WEST ABUTMENT

SCALE: ½"=1'–0"



CONNECTOR SLAB AT EAST ABUTMENT

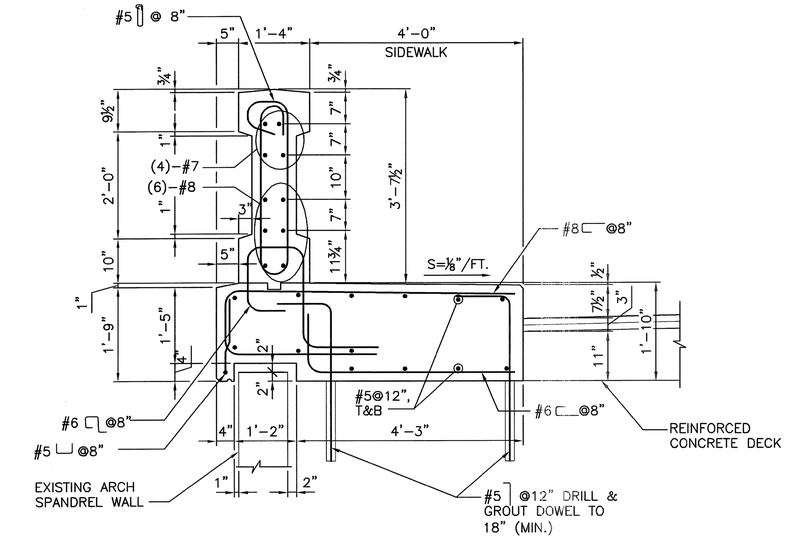
SCALE: ½"=1'–0"



SAW AND SEAL DETAIL
FOR 3" BITUMINOUS WEARING SURFACE

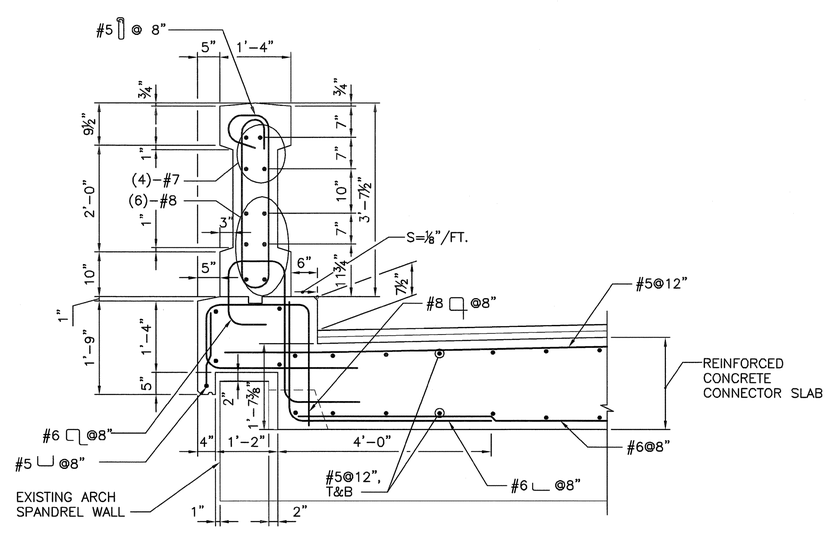
SAW & SEAL DETAIL (1/–)

NOT TO SCALE



PARAPET & SIDEWALK MOMENT SLAB DETAIL

SCALE: ¾"=1'–0"



PARAPET & CONNECTOR SLAB @ SAFETY CURB DETAIL

SCALE: ¾"=1'–0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

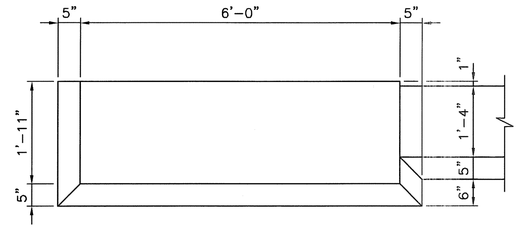
ABUTMENT & SIDEWALK/CURB DETAILS

CHECKED BY _____ DATE _____ SCALE AS SHOWN

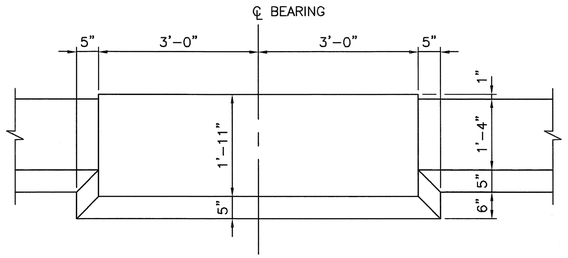
COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_043_ABUTDETL001

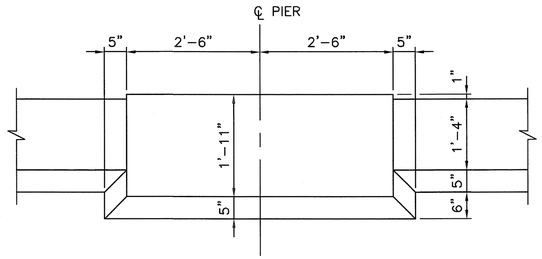
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	44	46



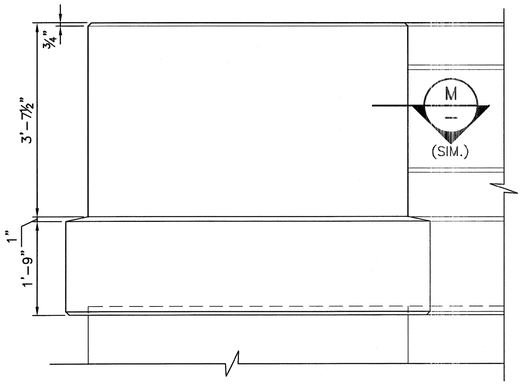
PLAN



PLAN



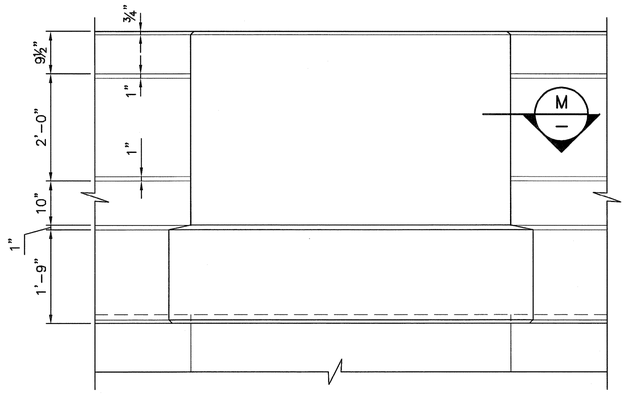
PLAN



ELEVATION

TYPICAL ENDPOST

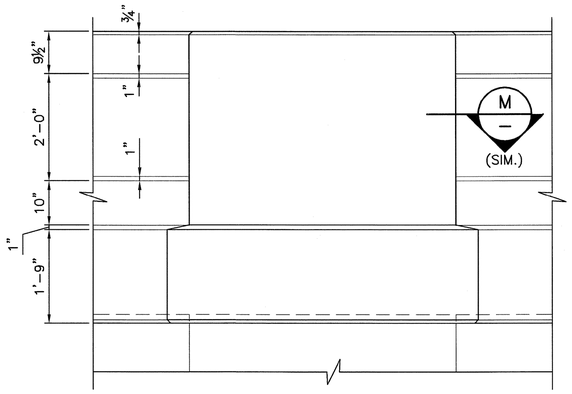
SCALE: ¾"=1'–0"



ELEVATION

TYPICAL PARAPET @ ABUTMENT

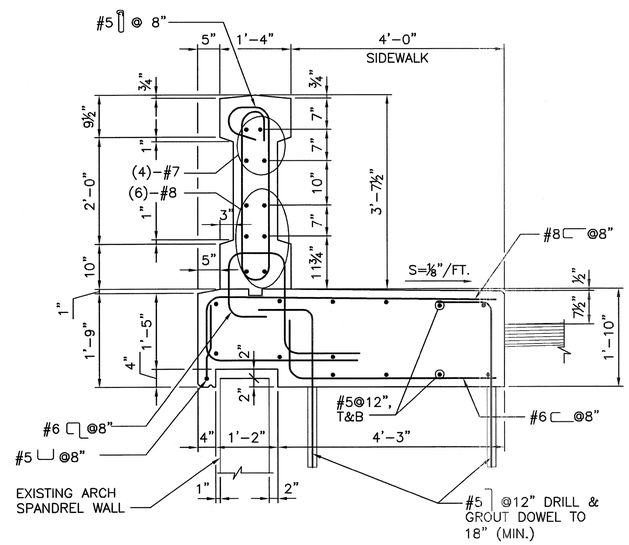
SCALE: ¾"=1'–0"



ELEVATION

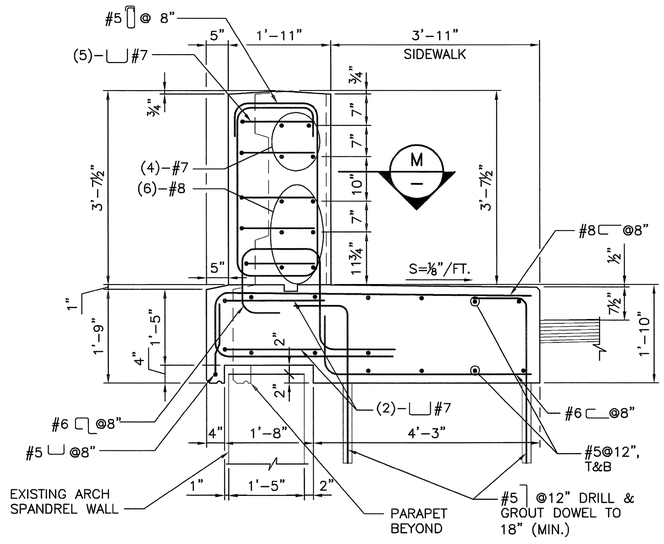
TYPICAL PARAPET @ PIER

SCALE: ¾"=1'–0"



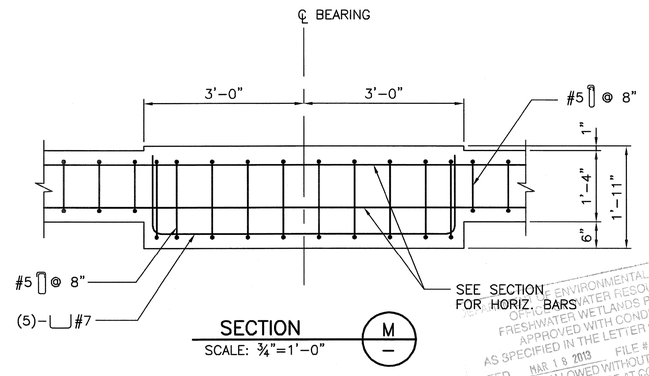
TYPICAL PARAPET DETAIL

SCALE: ¾"=1'–0"



TYPICAL SECTION @ ABUT. & PIERS DETAIL

SCALE: ¾"=1'–0"



SECTION

SCALE: ¾"=1'–0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

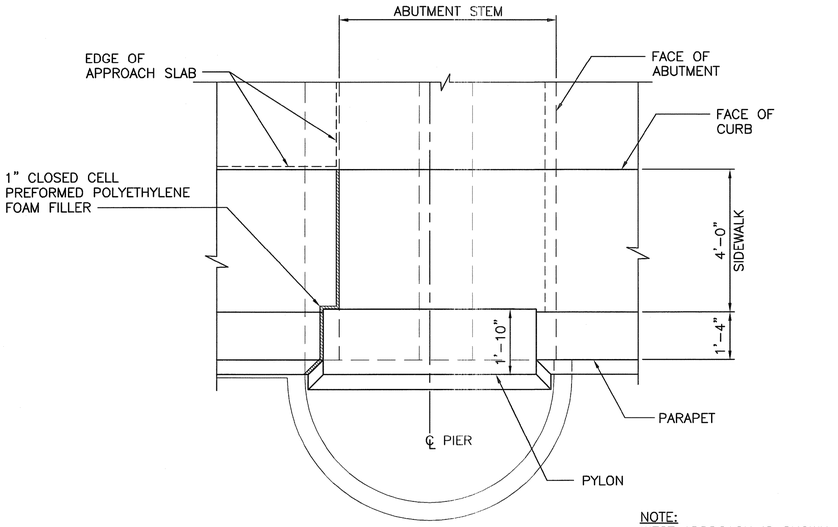
TYPICAL PARAPET DETAILS

CHECKED BY _____ DATE _____ SCALE AS SHOWN

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

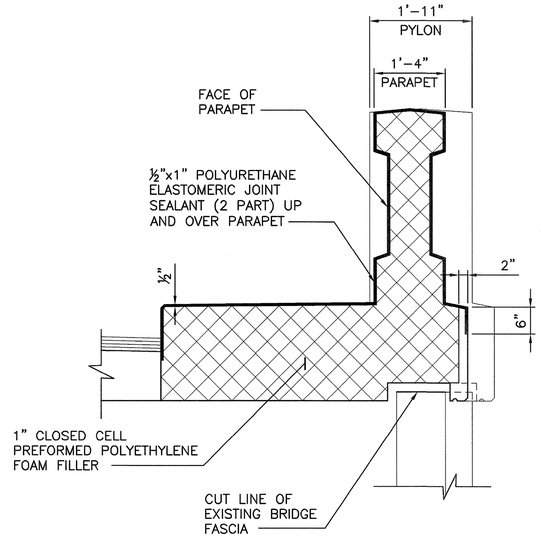
0143B_V1_044_BTYPICAL005

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	45	46

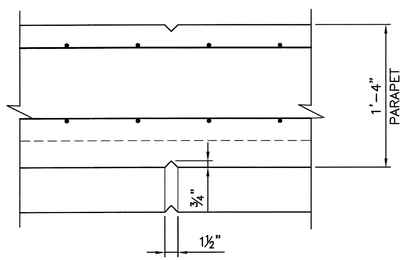


NOTE:
WEST APPROACH IS SHOWN, EAST APPROACH IS SIMILAR.

TYPICAL SIDEWALK JOINT PLAN
SCALE: ½"=1'-0"

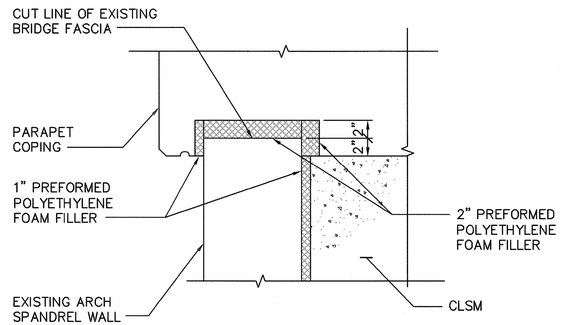


TYPICAL WALL JOINT SECTION AT PARAPET/PYLON
SCALE: ¾"=1'-0"

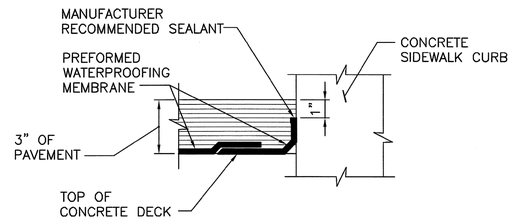


V-GROOVE JOINT IN PARAPET
SCALE: 1½"=1'-0"

NOTE:
1. V-GROOVE IN SIDEWALK IS SIMILAR.
2. REFER TO GENERAL PLAN FOR V-GROOVE LOCATIONS.



MOMENT SLAB DETAIL
SCALE: 1½"=1'-0"



DECK WATERPROOFING DETAIL AT SIDEWALK
NOT TO SCALE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION/1R IMPROVEMENTS
KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

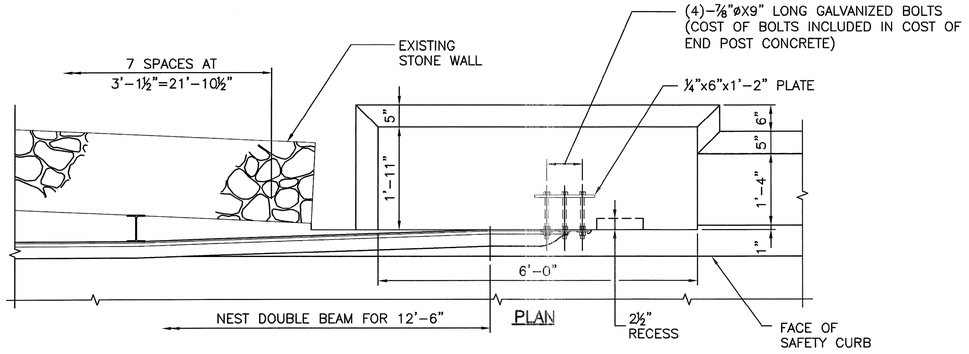
MISCELLANEOUS DETAILS

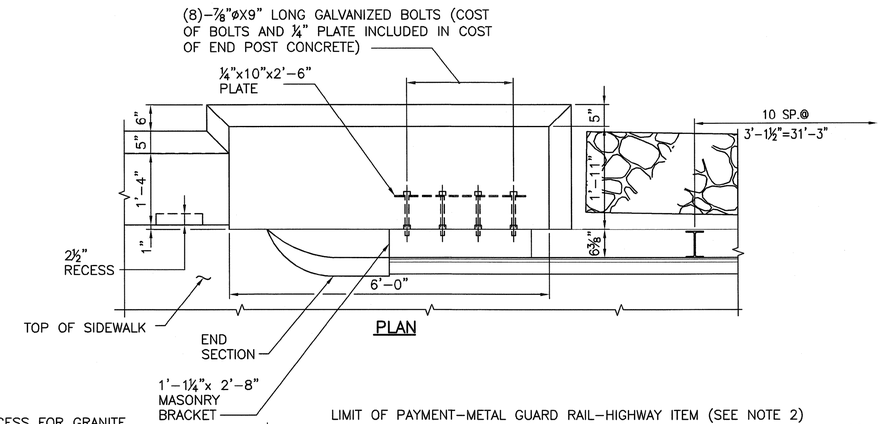
CHECKED BY _____ DATE _____ SCALE AS SHOWN

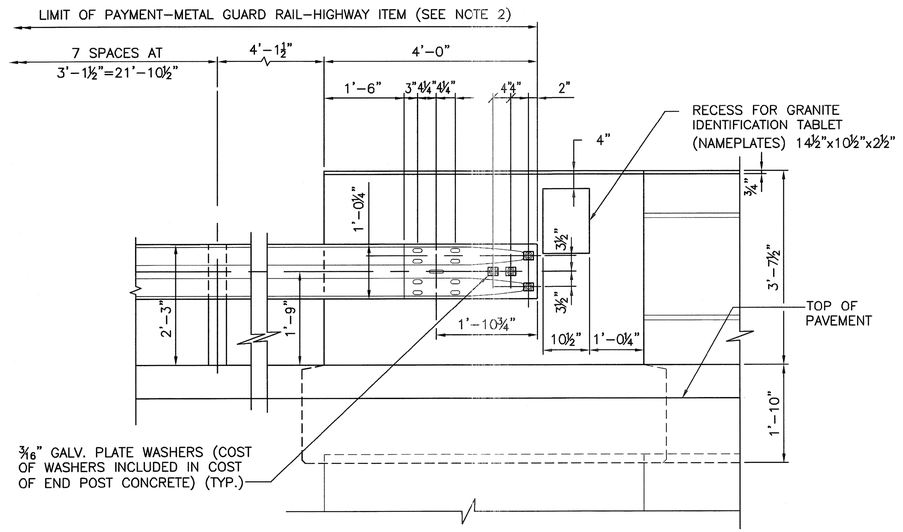
COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

0143B_V1_045_MISCDTLS001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
–	RI	–	–	46	46



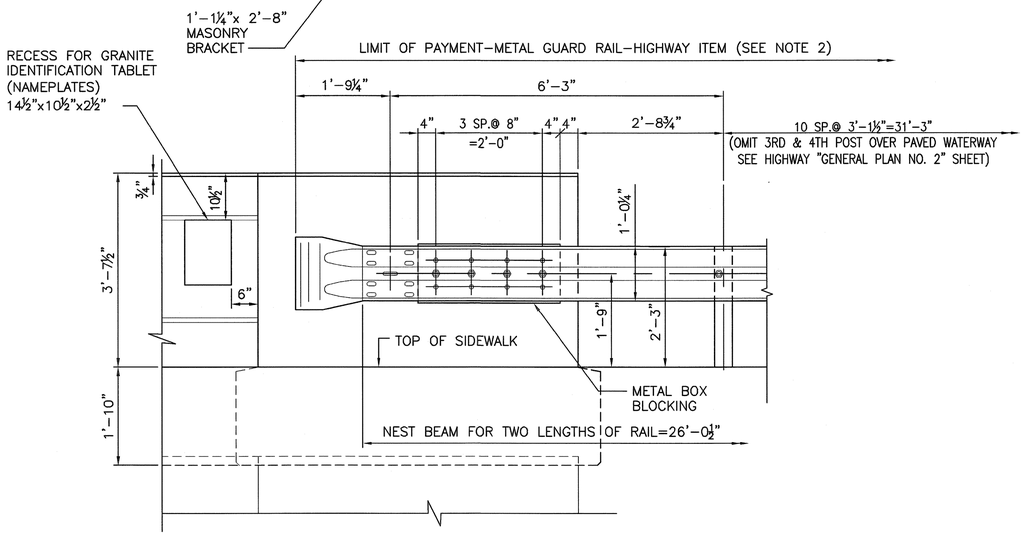




ELEVATION

NORTHWEST ENDPOST

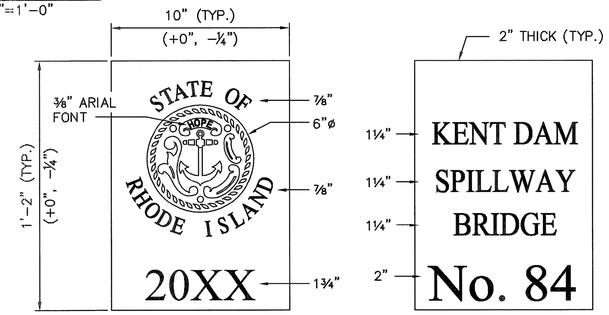
SCALE: ¾"=1'–0"



ELEVATION

SOUTHWEST ENDPOST

SCALE: ¾"=1'–0"



STATE SEAL TABLET

BRIDGE NAME TABLET

NOTE:
ALL FONT STYLES ARE TO BE TIMES NEW ROMAN, UNLESS NOTED OTHERWISE.

GRANITE IDENTIFICATION TABLETS (NAMEPLATES)

SCALE: 3"=1'–0"

NOTES:

1. TO INSURE PROPER GUARD RAIL ANCHORAGE, THE GUARD RAIL INSTALLATION SHALL BEGIN AT EACH END OF THE BRIDGE AND WORK INTO THE APPROACHES.
2. THE COST OF THE GUARD RAIL TRANSITION TO BRIDGE END POSTS ARE HIGHWAY ITEMS. APPROACH SECTIONS AND TRAILING SECTIONS ARE SEPARATE ITEMS IN THE PROPOSAL.
3. THE COST OF BRIDGE RAIL ANCHORAGE (PLATES, ANCHOR BOLTS, WASHERS AND PLATE SLEEVES) IS INCLUDED IN COST OF END POST CONCRETE.

MAR – 8 2013

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
MAR 18 2013 FILE # 12-0198
DATED
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

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KENT DAM SPILLWAY BRIDGE No. 84/GAINER DAM
SCITUATE AVENUE (ROUTE 12)
SCITUATE, RHODE ISLAND

END POST DETAILS

CHECKED BY _____ DATE _____ SCALE AS SHOWN

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RI 02908

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