December 6, 2017

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION
DEPARTMENT OF ADMINISTRATION

DIVISION OF PURCHASES BID NO. 7565516

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

RHODE ISLAND CONTRACT NO.2017-CB-070

FEDERAL-AID PROJECT NO. FAP Nos: BRO-472(001), STP-RESF(360)

Horton Farm Bridge No. 472

Horton Farm Road Bridge No. 472

CITY/TOWN OF East Providence

COUNTY OF PROVIDENCE

NOTICE TO PROSPECTIVE BIDDERS

ADDENDUM NO. 4 Prospective bidders and all concerned are hereby notified of the following changes in the Plans, Specifications, Proposal and Distribution of Quantities for this contract. These changes shall be incorporated in the Plans, Specifications, Proposal and Distribution of Quantities, and shall become an integral part of the Contract Documents.

A. Clarification

1. Item Code 901.0191

   The unit price for Item Code 901.0191 has been modified so it is no longer the only acceptable bid price.

B. Specifications - Job Specific

1. Pages JS-25A thru JS-25G

   Insert pages JS-25A thru JS-25G attached to this Addendum No. 4. Details for the geogrid have been added.

2. Page JS-46A

   Insert page JS-46A attached to this Addendum No. 4. Item Code 702.9912 has been added.

3. Page JS-47(R-1)

   Remove page JS-47(R-1) in its entirety and replace with revised page JS-47(R-2) attached to this Addendum No. 4. This specification has been updated to include Item Codes 704.9902, 704.9904 and 704.9905.

4. Page JS-47A

   Insert page JS-47A attached to this Addendum No. 4. This specification has been updated and extends onto this page.

5. Page JS-47B

   Insert page JS-47B attached to this Addendum No. 4. Item Codes 708.9901, 708.9902 and 708.9905 have been added.

C. Distribution of Quantities

1. Index Pages 1(R-3) thru 4(R-3)

   Remove index pages 1(R-3) thru 4(R-3) in their entirety and replace with revised index pages 1(R-4) thru 4(R-4) attached to this Addendum No. 4. The index has been revised and updated items are indicated in bold.

2. Index Page 5

   Insert index page 5 attached to this Addendum No. 4. The index has been revised and extends onto this new page.

3. Page 61(R-1)

   Remove page 61(R-1) in its entirety and replace with revised page 61(R-2) attached to this Addendum no. 4. The quantity for Item Code 926.0120 has been updated.

4. Page 93

   Remove page 93 in its entirety and replace with revised page 93(R-1) attached to this Addendum No. 4. Item Code 701.2112 has been added.

5. Page 94

   Insert page 94 attached to this Addendum No. 4. Item Codes 701.2112, 702.0512, 702.0605, 702.0300 and 704.0400 have been added.

D. Plans

1. VOLUME 1 SHEET 5(R-1) - JOB SPECIFIC PLAN SYMBOLS, LEGEND & NOTES

   Remove and replace Sheet 5(R-1) in its entirety with Sheet 5(R-2) attached to this Addendum No. 4. This sheet has been revised.

2. VOLUME 1 SHEET 17(R-1) - GENERAL PLAN SHEET 6 OF 11

   Remove and replace Sheet 17(R-1) in its entirety with Sheet 17(R-2) attached to this Addendum No. 4. This sheet has been revised.

3. VOLUME 1 SHEET 19(R-1) - GENERAL PLAN SHEET 8 OF 11

   Remove and replace Sheet 19(R-1) in its entirety with Sheet 19(R-2) attached to this Addendum No. 4. This sheet has been revised.

4. VOLUME 1 SHEET 30(R-1) - DRAINAGE & UTILITY PLAN SHEET 6 OF 11

   Remove and replace Sheet 30(R-1) in its entirety with Sheet 30(R-2) attached to this Addendum No. 4. This sheet has been revised.

5. VOLUME 1 SHEET 32(R-1) - DRAINAGE & UTILITY PLAN SHEET 8 OF 11

   Remove and replace Sheet 32(R-1) in its entirety with Sheet 32(R-2) attached to this Addendum No. 4. This sheet has been revised.

ATTACHMENTS

6. VOLUME 1 SHEET 42 - LOCATION PLAN SHEET 6 OF 11

   Remove and replace Sheet 42 in its entirety with Sheet 42(R-1) attached to this Addendum No. 4. This sheet has been revised.

7. VOLUME 1 SHEET 44 - LOCATION PLAN SHEET 8 OF 11

   Remove and replace Sheet 44 in its entirety with Sheet 44(R-1) attached to this Addendum No. 4. This sheet has been revised.

8. VOLUME 1 SHEET 55(R-1) - LIGHTING PLAN SHEET 1 OF 11

   Remove and replace Sheet 55(R-1) in its entirety with Sheet 55(R-2) attached to this Addendum No. 4. This sheet has been revised.

9. VOLUME 1 SHEET 58(R-1) - LIGHTING PLAN SHEET 4 OF 11

   Remove and replace Sheet 58(R-1) in its entirety with Sheet 58(R-2) attached to this Addendum No. 4. This sheet has been revised.

10. VOLUME 2 SHEET 1 - COVER SHEET AND INDEX

    Remove and replace Sheet 1 in its entirety with Sheet 1(R-1) attached to this Addendum No. 4. This sheet has been revised.

11. VOLUME 2 SHEET 5 - GENERAL BRIDGE NOTES SHEET 2 OF 3

    Remove and replace Sheet 5 in its entirety with Sheet 5(R-1) attached to this Addendum No. 4. This sheet has been revised.

12. VOLUME 2 SHEET 6(R-1) - GENERAL BRIDGE NOTES SHEET 3 OF 3

    Remove and replace Sheet 6(R-1) in its entirety with Sheet 6(R-2) attached to this Addendum No. 4. This sheet has been revised.

13. VOLUME 2 SHEET 7 - GENERAL PLAN AND ELEVATION

    Remove and replace Sheet 7 in its entirety with Sheet 7(R-1) attached to this Addendum No. 4. This sheet has been revised.

14. VOLUME 2 SHEET 8(R-1) - TYPICAL BRIDGE & APPROACH SECTIONS

    Remove and replace Sheet 8(R-1) in its entirety with Sheet 8(R-2) attached to this Addendum No. 4. This sheet has been revised.

15. VOLUME 2 SHEET 10(R-1) - CONSTRUCTION STAGING & DEMOLITION DETAILS SHEET 2 OF 3

    Remove and replace Sheet 10(R-1) in its entirety with Sheet 10(R-2) attached to this Addendum No. 4. This sheet has been revised.

16. VOLUME 2 SHEET 11(R-1) - CONSTRUCTION STAGING & DEMOLITION DETAILS SHEET 3 OF 3

    Remove and replace Sheet 11(R-1) in its entirety with Sheet 11(R-2) attached to this Addendum No. 4. This sheet has been revised.

17. VOLUME 2 SHEET 22 - NORTH ABUTMENT PLAN AND ELEVATION

    Remove and replace Sheet 22 in its entirety with Sheet 22(R-1) attached to this Addendum No. 4. This sheet has been revised.

ATTACHMENTS

18. VOLUME 2 SHEET 23 - SOUTH ABUTMENT PLAN AND ELEVATION

    Remove and replace Sheet 23 in its entirety with Sheet 23(R-1) attached to this Addendum No. 4. This sheet has been revised.

19. VOLUME 2 SHEET 24(R-1) - ABUTMENT DETAILS

    Remove and replace Sheet 24(R-1) in its entirety with Sheet 24(R-2) attached to this Addendum No. 4. This sheet has been revised.

20. VOLUME 2 SHEET 28(R-1) - GEOGRID PLAN AND DETAILS

    Remove and replace Sheet 28(R-1) in its entirety with Sheet 28(R-2) attached to this Addendum No. 4. This sheet has been revised.

21. VOLUME 2 SHEET 30 - PIER SECTIONS AND DETAILS SHEET 1 OF 2

    Remove and replace Sheet 30 in its entirety with Sheet 30(R-1) attached to this Addendum No. 4. This sheet has been revised.

22. VOLUME 2 SHEET 31 - PIER SECTIONS AND DETAILS SHEET 2 OF 2

    Remove and replace Sheet 31 in its entirety with Sheet 31(R-1) attached to this Addendum No. 4. This sheet has been revised.

23. VOLUME 2 SHEET 33 - FRAMING PLAN

    Remove and replace Sheet 33 in its entirety with Sheet 33(R-1) attached to this Addendum No. 4. This sheet has been revised.

24. VOLUME 2 SHEET 34 - GIRDER ELEVATION AND DETAILS

    Remove and replace Sheet 34 in its entirety with Sheet 34(R-1) attached to this Addendum No. 4. This sheet has been revised.

25. VOLUME 2 SHEET 35 - STEEL DETAILS

    Remove and replace Sheet 35 in its entirety with Sheet 35(R-1) attached to this Addendum No. 4. This sheet has been revised.

26. VOLUME 2 SHEET 36(R-1) - DIAPHRAGM DETAILS

    Remove and replace Sheet 36(R-1) in its entirety with Sheet 36(R-2) attached to this Addendum No. 4. This sheet has been revised.

27. VOLUME 2 SHEET 38(R-1) - DECK GRADES

    Remove and replace Sheet 38(R-1) in its entirety with Sheet 38(R-2) attached to this Addendum No. 4. This sheet has been revised.

28. VOLUME 2 SHEET 39(R-1) - DECK PLAN

    Remove and replace Sheet 39(R-1) in its entirety with Sheet 39(R-2) attached to this Addendum No. 4. This sheet has been revised.

29. VOLUME 2 SHEET 39A - DECK POUR SEQUENCE AND DETAILS

    Insert Sheet 39A attached to this Addendum No. 4. The "Deck Pour Sequence Plan and Details" sheet has been added.

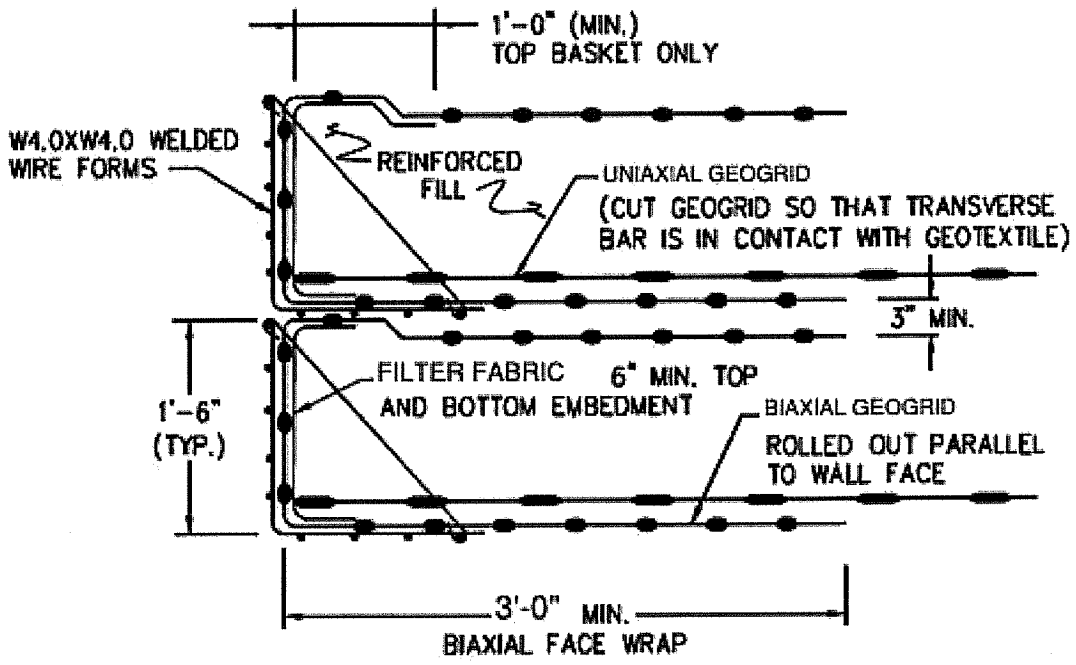
ATTACHMENTS

30. VOLUME 2 SHEET 40(R-1) - DECK REINFORCEMENT DETAILS

Remove and replace Sheet 40(R-1) in its entirety with Sheet 40(R-2) attached to this Addendum No. 4. This sheet has been revised.

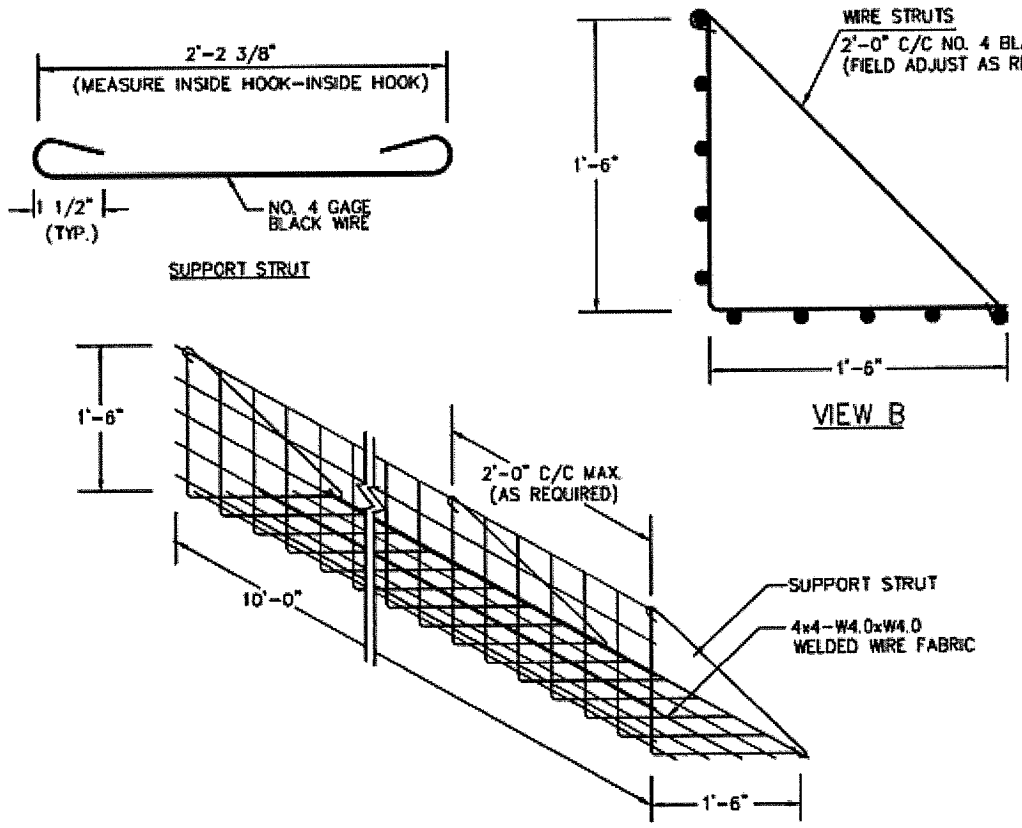
RI Department of Transportation

Administrator, Division of Project Management



WALL FACE DETAIL
NOT TO SCALE

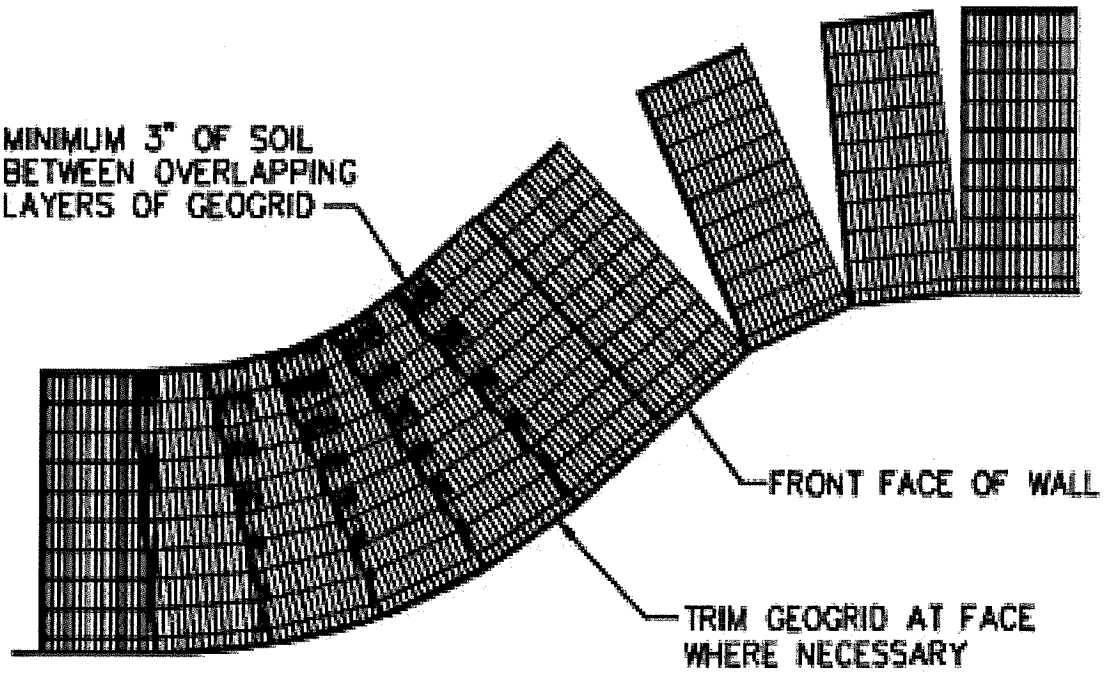
Addendum No. 4



NOTES:

1. FACING TO CONSIST OF PREFABRICATED WWF 4x4-W4.0xW4.0 FORMS PER ASTM A497.
2. ALL FORMS AND STRUTS WILL BE FABRICATED WITH BLACK WIRE.
3. OVERALL LENGTH OF WIRE FORMS IS 10'-0". EFFECTIVE CONSTRUCTED WIDTH IS 9'-8" WITH 4" OVER LAPPING AT ENDS.

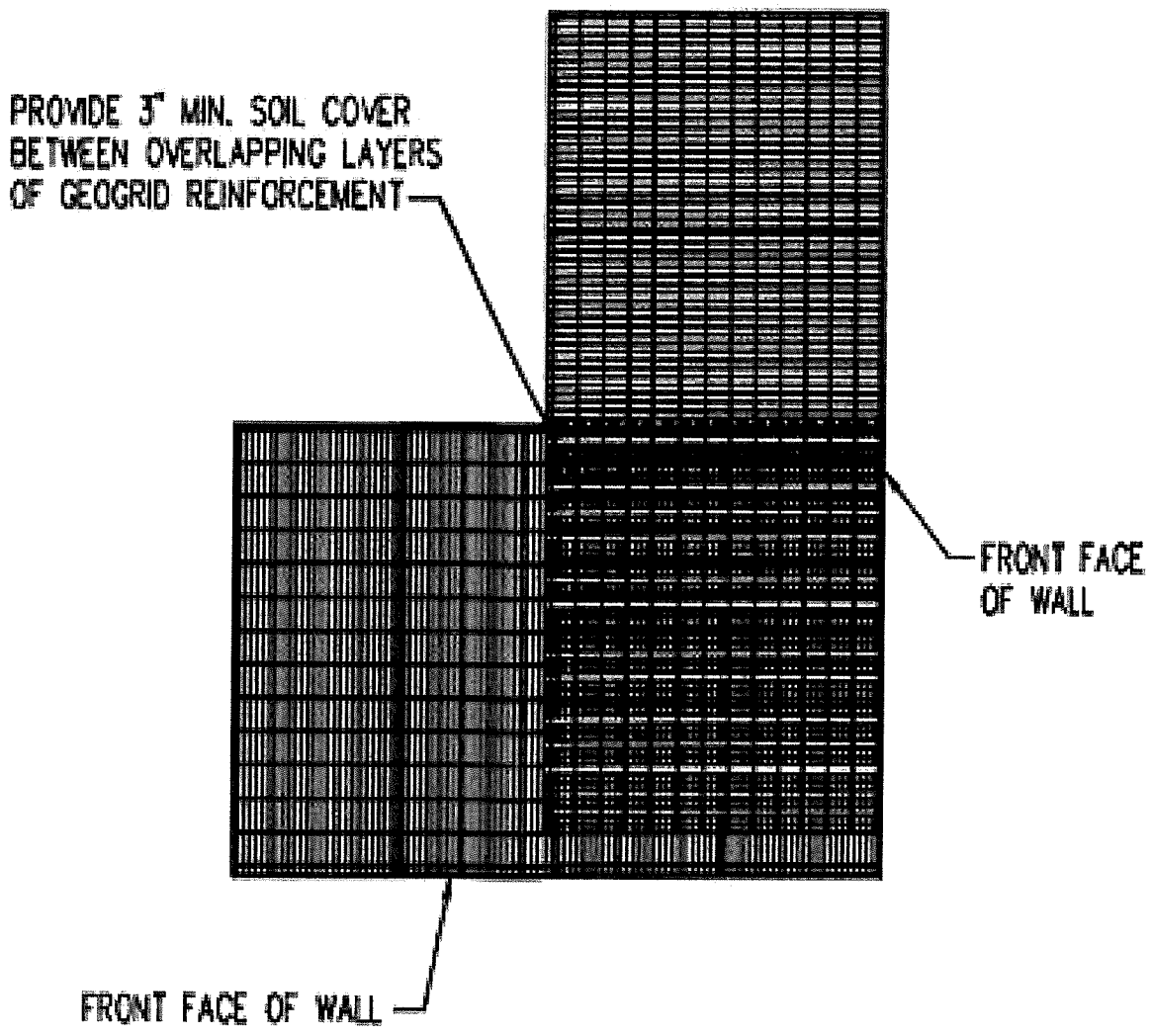
Addendum No. 4



GEOGRID PLACEMENT ON CURVES

NOT TO SCALE

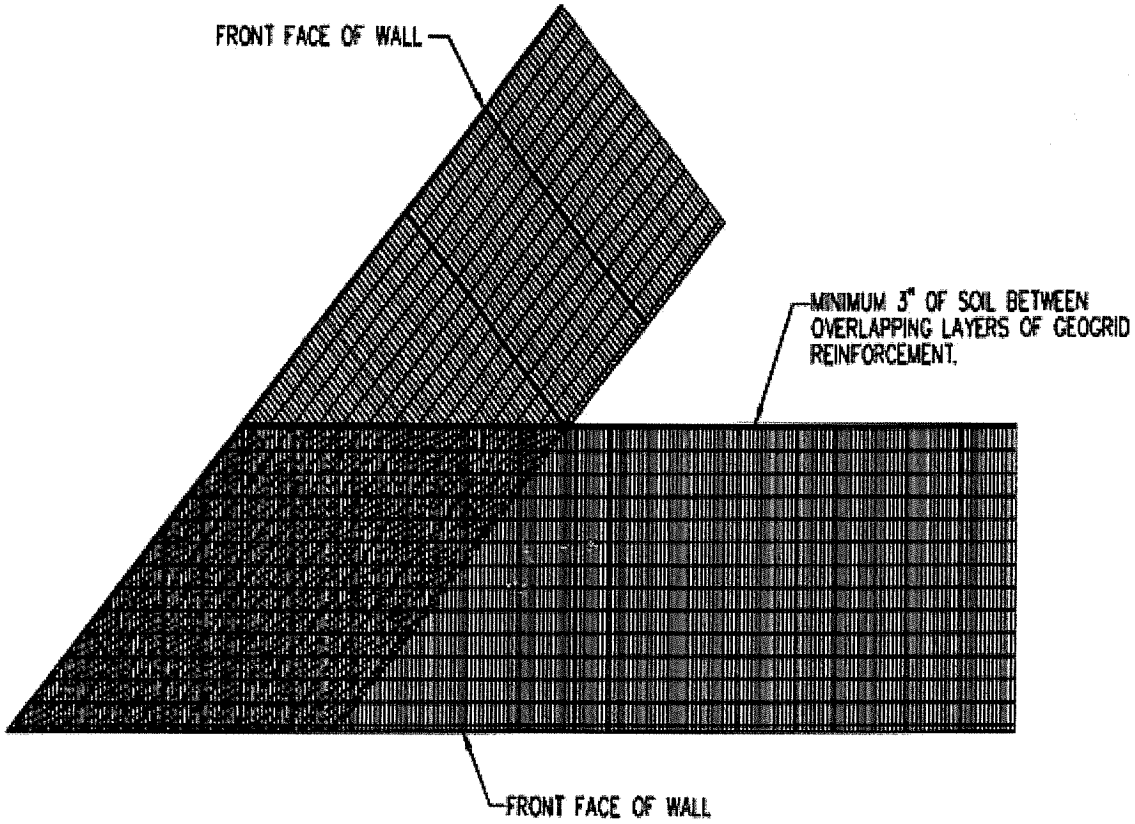
Addendum No. 4



GEOGRID 90° CORNER DETAIL

NOT TO SCALE

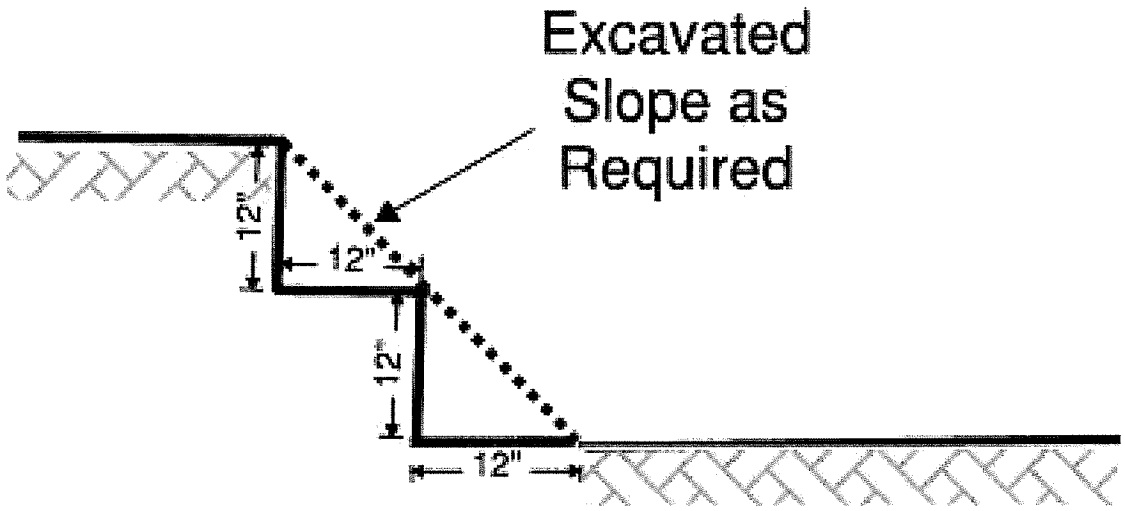
Addendum No. 4



GEOGRID ACUTE CORNER DETAIL

NOT TO SCALE

Addendum No. 4

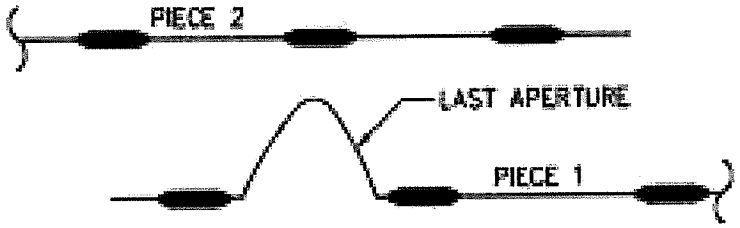


TYPICAL BENCH CUT INTO
SLOPE AT TRANSITION

Addendum No. 4

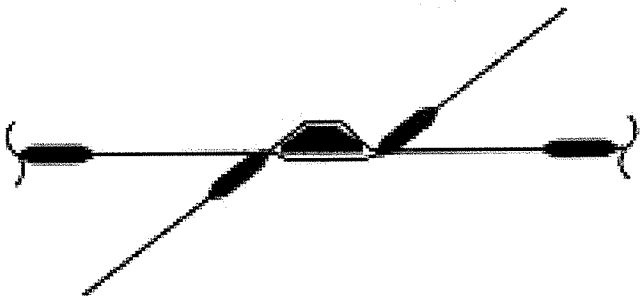
TO FORM A BODKIN CONNECTION FOR SPLICING GEOGRID:

1. BEND THE LAST APERTURE OF ONE PIECE OF GEOGRID AS SHOWN.



2. PASS THE RIBS OF THE BENT APERTURES THROUGH THE RIBS OF THE SECOND PIECE OF GEOGRID AND INSERT THE BODKIN BAR INTO THE SPACE BETWEEN THE TWO GEOGRID LAYERS.

3. PULL GEOGRID TAUT TO TENSION CONNECTION.



NOTE:

IT IS RECOMMENDED THAT THE SPLICED GEOGRID PIECE ON EITHER SIDE OF THE BODKIN CONNECTION BE AT LEAST 6 FEET LONG UNLESS THE GEOGRID TERMINATES IN A FIXED CONNECTION

GEOGRID SPLICE BODKIN CONNECTION

NOT TO SCALE

Addendum No. 4

CODE 702.9912
INFILTRATION BASIN

DESCRIPTION: Except for the excluded items of work indicated below, the work under this item shall consist of furnishing all labor, materials, tools, equipment and incidentals to construct the infiltration basin as detailed on the plans and as directed by the engineer. The work shall include all excavating soil, placing gravel, placing plantable soil, trimming and fine grading, and seeding for the construction of the infiltration basin. All incidentals required to complete the work as described in the Special Provisions and elsewhere in the Contract Documents complete and in place and accepted by the Engineer.

Excluded Items of Work: The item of work is excluded from this item and instead will be measured and paid separately under their own appropriate bid item as listed in the proposal is the 12 inch BCCMP discharging into the swale.

MATERIALS:
Gravel Borrow shall be specified on the plans and shall meet the requirements as specified in the RIDOT Standard Specifications for Road and Bridge Construction. Plantable Soil shall be specified on the plans and shall meet the requirements as specified in the RIDOT Standard Specifications for Road and Bridge Construction. Seeding shall be specified on the plans and shall meet the requirements as specified in the RIDOT Standard Specifications for Road and Bridge Construction.

CONSTRUCTION METHODS: All construction shall be in accordance with the contract documents and the specifications and in accordance with RIDOT Standard Specifications for Road and Bridge Construction.
Where possible the excavation to remove the original soil shall be accomplished using light equipment with turf-type tires. The use of equipment with narrow tracks or narrow tires, rubber tires with large lugs or high pressure tires is not acceptable

METHOD OF MEASUREMENT: The item will not be measured for payment.

BASIS OF PAYMENT: **Item 702.9912** will be paid for at the contract unit price per lump sum as listed in the proposal. The price so stated shall constitute full and complete the work as described in this Special provision and elsewhere in the contract documents, complete in place and acceptable by the engineer.

CODE 704.9901
REPAIR CATCH BASIN - RPC
CODE 704.9902
REPAIR CATCH BASIN W/ GUTTER INLET- RCI
CODE 704.9903
REPAIR DOUBLE GRATE CATCH BASIN - RDC
CODE 704.9904
RECONSTRUCT DROP INLET - RPD
CODE 704.9905
RECONSTRUCT MANHOLE- RMH

DESCRIPTION: Work under these items shall consist of repairing the top portion of existing drainage structures in conformity with lines, grades, dimensions and details shown on the plans or as directed by the Engineer.

MATERIALS: Clay/concrete brick or concrete block, mortar collars, concrete collars and precast concrete cover panels shall conform to the plans and to Section M. 04. "Materials" of the Standard Specifications.

CONSTRUCTION METHODS: The walls of the existing structures are deteriorated. For catch basins located in the median, a new precast concrete cover panel should be placed to support the median barrier. For double grate catch basins located in the median, a new precast concrete cover panel should be placed to support the median barrier. The precast concrete cover panels must be on site before demolition of the catch basins can proceed. The concrete shall be checked for spalling and soundness. All spalled concrete shall be removed and replaced to a depth of 26" minimum. Loose blocks or bricks shall be removed and re-laid in new mortar. The top course of bricks will be removed from every catch basin and discarded. New bricks will be reset as required to adjust the catch basin. The walls of the existing structure shall be repaired as shown on the plans or as directed by the Engineer. The Contractor will point all existing mortar joint exhibiting deterioration or as directed by the Engineer. Any excavation required around the structure shall be done in a manner to cause the lease disturbance to the surrounding areas. Brickwork shall be in accordance with the applicable provision of Section 702 of the Standard Specifications. When the mortar has set, the backfill shall be compacted to 95% density as defined in AASHTO T-180, Method A or D. Concrete collars shall be installed as shown on the plans or as directed by the Engineer.

METHOD OF MEASUREMENT: "REPAIR CATCH BASIN - RPC", "REPAIR CATCH BASIN W/ GUTTER INLET- RCI", "REPAIR DOUBLE GRATE CATCH BASIN – RDC", "RECONSTRUCT DROP INLET – RPD", and "RECONSTRUCT MANHOLE- RMH" shall be measured for payment by EACH as indicated in the contract documents.

BASIS OF PAYMENT: Payment for the quantity determined under the "METHOD OF MEASUREMENT" section will be included in the unit bid item, as designated in the proposal. This payment shall constitute full compensation for all materials, bricks or concrete blocks, precast concrete cover panels, removing, stockpiling and/or disposing excess materials, repairing existing

walls, constructing new walls, pointing existing mortar joints, all excavations and backfill, installing concrete collars, equipment, tools, labor and incidentals necessary to complete the work of this item to the satisfaction of the Engineer.

CODE 708.9901
CLEAN AND REGRADE JUTE MESH DITCH
CODE 708.9902
CLEAN AND REGRADE DITCH
CODE 708.9905
CLEAN AND REGRADE RIP RAP DITCH

DESCRIPTION: This item of work shall consist of furnishing all equipment, labor, material, and performing all work as required to clean as may be necessary, and regrade the ditch as shown on the plans or as directed by the Engineer.

It is anticipated that the ditches, within the limits of the contract, be cleaned as required.

1. Cleaning will be conducted just prior to the start of any excavation.
2. Cleaning of the ditch shall include the removal from the job site of all sludge, dirt, sand, gravel, roots and grease, and all debris and legally disposed of.
3. The ditch shall be regraded along the centerline to meet the field conditions and to establish positive drainage flow to the outlet.
4. Cleaning of The ditch shall be regrades along the section to meet the field conditions and the materials shall be placed in accordance with the RIDOT standard drawing and the contract documents.

METHOD OF MEASUREMENT: "CLEAN AND REGRADE JUTE MESH DITCH", "CLEAN AND REGRADE DITCH" and "CLEAN AND REGRADE RIP RAP DITCH" shall be measured for payment along the centerline of the ditch, complete for cleaning and regarding each type of ditch. Cleaning shall be considered incidental to ditch regrading and the bid price for this item shall include all such cleaning work, debris removal and disposal, where required and/or directed.

BASIS OF PAYMENT: "CLEAN AND REGRADE JUTE MESH DITCH", "CLEAN AND REGRADE DITCH" and "CLEAN AND REGRADE RIP RAP DITCH" shall be paid for by the number of linear feet of ditch as specified herein to the satisfaction of the Engineer. The Contract Unit Price shall include all payments for labor, materials, equipment, and appurtenant work necessary to satisfactorily clean and regrade the ditch as specified.

Table of Contents - Distribution of Quantities

Project Name - Horton Farm Bridge No. 472
Estimate Name - Addendum No. 4
R.I. Contract No. - 2017-CB-070
FAP Nos: BRO-472(001), STP-RESF(360)

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
106	925.0112 Cont.	STAGE 2E		4.00	0005	01
		STAGE 2F		5.00	0005	01
		STAGE 2H		4.00	0005	01
		STAGE 2I		4.00	0005	01
		ROUNDING				
		PROJECT WIDE		8.00	0005	01
		Item 925.0112 Total:		**120.00**		
107	926.0120	**ANCHORED PRECAST CONCRETE BARRIER FOR TEMPORARY TRAFFIC CONTROL**	**LF**			
		BRIDGE NO. 472				
		PROJECT WIDE		600.00	0011	02
		Item 926.0120 Total:		**600.00**		
108	926.0121	**UNANCHORED PRECAST CONCRETE BARRIER FOR TEMPORARY TRAFFIC CONTROL STANDARD 40.5.0**	**LF**			
		LANE F				
		STAGE 2A THROUGH 2D		385.00	0005	01
		ROUNDING				
		PROJECT WIDE		30.00	0005	01
		STAGE 1D/2D (MAX FOR STAGE 1/2)				
		I-195 110+40 TO 134+10, RT		2,370.00	0005	01
		I-195 119+50 TO 127+50, LT		815.00	0005	01
		Item 926.0121 Total:		**3,600.00**		
109	926.0140	**REFLECTIVE DELINEATORS FOR TEMPORARY CONCRETE BARRIERS**	**EACH**			
		CONTINGENCY				
		PROJECT WIDE		72.00	0005	01
		FROM ITEM 926.0140				
		ASSUME EVERY 50 FT		144.00	0005	01
		ROUNDING				

Distribution of Quantities

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
172	402.9901 Cont.	73+13 TO 83+00, LT/RT		193.00	0005	01
		RAMP CR-5				
		83+43 TO 92+41, LT/RT		236.00	0005	01
		RAMP CR-6				
		115+50 TO 123+50, LT/RT		319.00	0005	01
		RAMP DR-5				
		70+23 TO 78+13, LT/RT		147.00	0005	01
		RAMP DR-6				
		95+41 TO 100+80, LT/RT		68.00	0005	01
		ROUNDING				
		PROJECT WIDE		3.00	0005	01
		Item 402.9901 Total:		**8,645.00**		
173	402.9902	**FRICTION COURSE FOR SHOULDERS**	**TON**			
		I-195 EB				
		70+87 TO 159+20, RT		1,343.00	0005	01
		I-195 WB				
		70+87 TO 159+20, LT		1,281.00	0005	01
		ROUNDING				
		PROJECT WIDE		1.00	0005	01
		Item 402.9902 Total:		**2,625.00**		
174	701.0412	**REINFORCED CONCRETE PIPE M 170 CLASS III 12 INCH**	**LF**			
		PAWTUCKET AVE				
		40+30, RT		225.00	0005	01
		Item 701.0412 Total:		**225.00**		
175	701.2112	**12'' BCCMCP M190 TYPE B W/BENDS AND BANDS**	**LF**			
		LANE F				
		25+50, RT		15.00	0005	01
		26+50, RT		82.00	0005	01

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
175	701.2112 Cont.	ROUNDING				
		PROJECT WIDE		3.00	0005	01
		Item 701.2112 Total:		**100.00**		
176	702.0512	**FRAME AND GRATE STANDARD 6.3.0**	**EACH**			
		PROJECT WIDE				
		PROJECT WIDE		2.00	0005	01
		Item 702.0512 Total:		**2.00**		
177	702.0605	**PRECAST CATCH BASIN 4' DIAMETER STANDARD 4.4.0**	**EACH**			
		PROJECT WIDE				
		PROJECT WIDE		2.00	0005	01
		Item 702.0605 Total:		**2.00**		
178	702.9912	**INFILTRATION BASIN**	**LS**			
		I-195				
		122+38 TO 123+34, RT		1.00	0005	01
		Item 702.9912 Total:		**1.00**		
179	704.0300	**RECONSTRUCT CATCH BASIN/VERTICAL WALLS**	**VLF**			
		PROJECT WIDE				
		PROJECT WIDE		102.00	0005	01
		Item 704.0300 Total:		**102.00**		
180	704.0400	**RECONSTRUCT MANHOLE/VERTICAL WALLS**	**VLF**			
		PROJECT WIDE				
		PROJECT WIDE		17.00	0005	01
		Item 704.0400 Total:		**17.00**		

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	STP-RESF(360)	2017	5	144

JOB SPECIFIC LEGEND

6YT	6" TEMPORARY PAVEMENT REMOVABLE TAPE – YELLOW
6W	6" EPOXY RESIN PAVEMENT MARKING – WHITE
8W	8" EPOXY RESIN PAVEMENT MARKING – WHITE
3.3.5	BRICK/SOLID BLOCK DOUBLE GRATE CATCH BASIN GRATE PERPENDICULAR TO EDGE OF PAVEMENT
7.3.9	GRANITE RAMP STONE
7.3.9C	GRANITE RAMP STONE CURVED
20.1.0	PAVEMENT MARKINGS ARROWS AND ONLY
24.1.0	SIGN POST SELECTION AND INSTALLATION DETAILS SQUARE POST (SIGNS UP TO 8'–0"W X 4'–0"H)
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
34.3.7	GUARDRAIL CONNECTION TO BARRIER – APPROACH END SECTION
34.3.8	GUARDRAIL CONNECTION TO BARRIER – TRAILING END SECTION
CCS	CEMENT CONCRETE SURFACE (ITEM CODE 904.0110)
CDF	CONTROL DENSITY FILL
CDI	CLEAN DROP INLET
CGI	CLEAN GUTTER INLET
CRD	CLEAN AND REGRADE DITCH (ITEM CODE 708.9902)
CS	CRUSHED STONE
CST	CONCRETE SURFACE TREATMENT
DCS	REMOVE AND DISPOSE CONCRETE SURFACE
DEC	REMOVE AND DISPOSE CONDUIT – ALL SIZES
DGC	REMOVE AND DISPOSE GRANITE CURB
DT (SIZE)	CUTTING AND DISPOSING ISOLATED TREES AND STUMPS (ITEM CODE 201.0301 OR 201.0302)
ETR	EXISTING TO REMAIN
FDC	1.5" FRICTION COURSE 2" MODIFIED CLASS 12.5 9" CLASS 19 12" GRAVEL BORROW SUBBASE
FDCC	1.5" FRICTION COURSE 2" MODIFIED CLASS 12.5 10" CEMENT CONCRETE 12" GRAVEL BORROW SUBBASE
JMD	CLEAN AND REGRADE JUTE MESH DITCH (ITEM CODE 708.9901)
MMO	MICRO–MILLING 2.2" AND OVERLAY WITH 1.5" FRICTION COURSE
MUL	MULCH
NGB	FURNISH AND INSTALL NEW GAS GATE VALVE BOX
PF	PERVIOUS FILL (ITEM CODE 203.0700)
PT–2	PAVEMENT TRANSITION – FULL DEPTH TO EXISTING
PT–3	PAVEMENT TRANSITION – MICRO–MILLING TO EXISTING
RC	REPAIR CONCRETE AS NEEDED
RCC	REMOVE AND STOCKPILE CURB CORNER
RCG	REMOVE AND DISPOSE CONCRETE GORE
RCI	REPAIR CATCH BASIN WITH GUTTER INLET
RDC	REPAIR DOUBLE GRATE CATCH BASIN
RDI	RECONSTRUCT DROP INLET
RMH	RECONSTRUCT MANHOLE
RPC	REPAIR CATCH BASIN
RPD	REPAIR DROP INLET
RPM	REPAIR MANHOLE
RRD	CLEAN AND REGRADE RIP RAP DITCH
RS	RUMBLE STRIP
S–1	FULL DEPTH SAWCUT OF BITUMINOUS PAVEMENT
S–2	FULL DEPTH SAWCUT OF CONCRETE SIDEWALK
	SLOPE RESTORATION AREA
TP–X	PROPOSED TEST PIT
MMOS	MICRO–MILLING 2.2" AND OVERLAY WITH 1.5" FRICTION COURSE FOR SHOULDERS
RCS	REMOVE CONCRETE SLAB

JOB SPECIFIC LEGEND - LIGHTING

2CL	250 WATT HPS CUTOFF LUMINAIRE ON 30' ALUMINUM POLE 6' ARM (ITEM CODE T07.990 & T08.200)
4CL	400 WATT HPS CUTOFF LUMINAIRE ON 40' ALUMINUM POLE 10' ARM (ITEM CODE T07.9901 & T08.2041)
DHH	REMOVE AND DISPOSE HANDHOLE AND RETURN FRAME AND COVER TO RIDOT
R.S.	RIGID STEEL
S/L	SERVICE LINE
UG	UNDERGROUND
R&S	REMOVE AND STOCKPILE POLE/LUMINAIRE AT RIDOT MAINTENANCE DEPT. 300 LINCOLN AVENUE, WARWICK
R&D	REMOVE AND DISPOSE STANDARD FOUNDATION
18.1.0	CONCRETE LIGHT STANDARD BASE
18.1.1	BREAKAWAY SUPPORT COUPLINGS FOR LIGHT STANDARDS
18.2.2	PRECAST TYPE "B" HEAVY DUTY HANDHOLE
18.3.1	ALUMINUM POLE – GROUNDING DETAIL
18.3.2	TYPICAL LUMINAIRE – WIRING DETAIL
18.4.0	SERVICE PEDESTAL
18.4.1	SERVICE PEDESTAL – GROUNDING DETAIL
18.4.2 MOD	SERVICE PEDESTAL – 240/480 VOLTS – 3W (SWITCHGEAR DETAIL)
18.4.3 MOD	SERVICE PEDESTAL – 240/480 VOLTS – 3W (POWER SCHEMATIC)
18.4.6	SERVICE PEDESTAL FOUNDATION
18.6.1	LIGHTING CONDUIT – ROAD / RAMP CROSSING
18.6.3	PULLBOXES – TYPE "V" AND TYPE "W"
18.7.0	RISER POLE DETAIL
C	COMMUNICATION CONDUIT

JOB SPECIFIC GENERAL NOTES:

1. ALL SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR OR R.I.D.O.T. ON THIS PROJECT SHALL WORK WITHIN THE SAME PROTECTED WORK AREAS AS THE CONTRACTOR. NO SEPARATE LANE CLOSURES WILL BE PAID FOR.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STORM DRAIN PIPE SIZES WHERE NEEDED TO COMPLETE THE WORK.
3. IT IS THE INTENT OF THE PROPOSED DRAINAGE DESIGN TO AVOID EXISTING UTILITIES. AT LOCATIONS WHERE THERE IS AN UNANTICIPATED CONFLICT, THE CONTRACTOR SHALL, WHERE POSSIBLE AND AS DIRECTED BY THE ENGINEER, MODIFY THE DRAINAGE STRUCTURES SUCH THAT THE PROPOSED DRAINAGE AVOIDS THE UTILITY.
4. SANITARY SEWER, GAS, WATER AND OTHER UTILITY SERVICES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL RELOCATED UTILITY POLES ARE PROPERLY STABILIZED DURING EACH PHASE OF CONSTRUCTION.
6. THE FINAL LOCATION OF ALL WHEELCHAIR RAMPS MUST BE COORDINATED, IN THE FIELD, WITH THE PROPOSED LOCATIONS OF UTILITY POLES, LANDSCAPING, DRAINAGE GRATES AND COVERS TO ENSURE A CLEAR PEDESTRIAN PATH.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE PROPER UTILITY AGENCIES FOR THE SEQUENCE OF CONSTRUCTION TO REMOVE THE EXISTING STREET LIGHTING AND THE INSTALLATION OF NEW STREET LIGHTING. STREET AND SIDEWALK LIGHTING MUST BE PROVIDED AT ALL TIMES.
8. THE CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS WITHIN THE DRIP LINE OF ANY TREES OR SHRUBS.
9. ALL ITEMS NOT REFERENCED FOR MODIFICATION WILL BE "EXISTING TO REMAIN" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
10. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND STOCKPILED MATERIAL A MINIMUM DISTANCE OF 30 FEET FROM THE I–195 MAINLINE, AND 10 FEET FROM THE PAWTUCKET AVENUE OUTSIDE EDGE OF TRAVEL LANE SO AS NOT TO CAUSE A SAFETY HAZARD. ALL STORAGE AND LAYDOWN AREAS REQUIRE APPROVAL BY THE ENGINEER. ALL WORKZONES SHALL BE BEHIND BARRIERS AS SHOWN ON THE MAINTENANCE AND PROTECTION OF TRAFFIC PLANS.
11. THE FREQUENCY AND APPLICATION RATES FOR WATER FOR DUST CONTROL SHALL BE DETERMINED BY THE ENGINEER, PAID FOR UNDER ITEM CODE 906.0100. NO CALCIUM CHLORIDE FOR DUST CONTROL SHALL BE USED ON THIS PROJECT.
12. THE CONTRACTOR SHALL EXERCISE CARE WHEN WORKING IN THE AREA OF EXISTING HIGHWAY BOUNDS. ANY HIGHWAY BOUNDS DISTURBED OR DESTROYED AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE RESET OR REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER AND IN CONFORMANCE WITH SECTION 915. OF THE R.I. STANDARD SPECIFICATIONS. SAID RESETTING OR REPLACING OF BOUND REQUIRED SHALL BE AT THE CONTRACTOR'S EXPENSE.
13. NO LONGITUDINAL DROP–OFFS WILL BE ALLOWED TO REMAIN BETWEEN LANES DURING NON–CONSTRUCTION HOURS. THE CONTRACTOR SHALL SCHEDULE THE MICROMILLING OPERATIONS TO PROVIDE A CONSISTENT FULL–WIDTH PAVEMENT SURFACE AT THE END OF THE WORK DAY.

JOB SPECIFIC GENERAL NOTES - DRAINAGE & UTILITY:

1. ALL EROSION CONTROL MEASURES SHALL BE PUT IN PLACE PRIOR TO COMMENCING WORK.
2. ALL REINFORCED CONCRETE PIPE SHALL BE AASHTO. CLASS III WITH MORTAR JOINTS UNLESS OTHERWISE NOTED.
3. ALL EXISTING DRAIN PIPES, CATCH BASINS, AND DRAIN MANHOLES TO REMAIN WITHIN THE PROJECT LIMITS ARE TO BE CLEANED AS NEEDED IN ACCORDANCE WITH THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.
4. EXISTING PIPE INVERT ELEVATIONS SHOWN ON THE DRAINAGE AND UTILITY PLANS ARE APPROXIMATE.
5. ADJUSTMENTS TO BE MADE TO NARRAGANSETT BAY COMMISSION (NBC) MANHOLE FRAMES AND COVERS WILL REQUIRE A NBC SEWER ALTERATION PERMIT. SEE CS PAGES.
6. DRAINAGE STRUCTURES NEEDING TO BE RECONSTRUCTED, AS INDICATED ON THE PLANS, SHALL BE RECONSTRUCTED PRIOR TO PLACING ANY TEMPORARY TRAFFIC OVER THAT STRUCTURE.

JOB SPECIFIC GENERAL NOTES - SIGNS:

1. PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
2. ALL NEW AND RELOCATED SIGNS SHALL BE MOUNTED AT THE BACK OF CURB OR LOCATED AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009 EDITION WITH THE LATEST REVISIONS.

JOB SPECIFIC GENERAL NOTES - PAVEMENT MARKINGS:

TEMPORARY PAVEMENT MARKINGS:

1. THE CONTRACTOR SHALL PROVIDE 15 MIL THICK WATERBORNE PAINT PAVEMENT MARKINGS TO MATCH THE FINAL COLORS, WIDTHS AND LOCATIONS. ON THE ROADWAY MICRO MILLING SURFACES AND THE BASE AND INTERMEDIATE BITUMINOUS SURFACE COURSES OF NEWLY PAVED ROADWAYS WHICH WILL BE OPENED TO TRAFFIC AT THE COMPLETION OF EACH DAY'S PAVING OPERATION. THESE WATERBORNE PAVEMENT MARKINGS SHALL ALSO BE USED ON EXISTING ROADWAY SURFACES, WHICH ARE IN NEED OF RE–STRIPING BUT ARE SCHEDULED TO BE REPAVED WITHIN A YEAR.
2. THE CONTRACTOR SHALL PROVIDE 8 MIL THICK TEMPORARY WATERBORNE PAINT PAVEMENT MARKINGS ON THE FINAL SURFACE COURSE OF NEWLY PAVED ROADWAYS THAT WILL BE OPENED TO TRAFFIC AT THE COMPLETION OF EACH DAY'S PAVING OPERATION.
3. ALL TEMPORARY PAVEMENT MARKINGS THAT ARE NO LONGER APPLICABLE SHALL BE REMOVED, AND NEW PAVEMENT MARKINGS SHALL BE PLACED PRIOR TO ALLOWING TRAFFIC TO TRAVEL ON THE AFFECTED ROAD.
4. EXISTING EPOXY PAVEMENT MARKINGS AND CONFLICTING WATERBORNE PAVEMENT MARKINGS SHALL BE REMOVED BY GRINDING THE MARKINGS OFF THE PAVEMENT. THIS SHALL BE PAID FOR UNDER ITEM CODE T20.1000.

PERMANENT PAVEMENT MARKINGS:

1. THE INSTALLATION OF PERMANENT PAVEMENT MARKINGS WILL NOT BE ALLOWED PRIOR TO THE COMPLETE PLACEMENT OF THE FINAL RIDING SURFACE WITHIN THE PROJECT LIMIT.
2. PERMANENT PAVEMENT MARKINGS SHALL BE WHITE AND YELLOW EPOXY RESIN PAVEMENT MARKINGS AT THE LOCATIONS INDICATED IN THE PLANS. THE EPOXY PAVEMENT MARKINGS SHALL BE PLACED ON THE FINAL SURFACE COURSE NO SOONER THAN 2 WEEKS, BUT NO LATER THAN 4 WEEKS FROM THE COMPLETION OF PAVING OPERATION.

JOB SPECIFIC GENERAL NOTES - ELECTRICAL:

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST REVISION OF THE NATIONAL ELECTRICAL CODE, STATE OF RHODE ISLAND, AND THE CITY OF EAST PROVIDENCE ELECTRICAL STANDARDS AND CODES.
2. ALL WORK SHALL BE COORDINATED WITH LOCAL PUBLIC UTILITIES. NO CONSTRUCTION SHALL COMMENCE UNTIL THE CONTRACTOR HAS NOTIFIED DIG–SAFE AND ALL UTILITIES HAVE BEEN PROPERLY IDENTIFIED. COORDINATE ELECTRICAL WORK WITH NARRAGANSETT ELECTRIC CO., A NATIONAL GRID CO., THROUGH THOMAS CAPOBIANCO AT TEL. (401) 784–7248.
3. ALL LIGHTING CONDUITS ARE TO BE 3" PVC SCH. 40, EXCEPT WHERE OTHERWISE SHOWN, AND SHALL BE INSTALLED AT A DEPTH OF 24" BELOW GRADE FOR DIRECT BURIED INSTALLATIONS. INSTALL NYLON PULLING ROPE IN ALL SPARE CONDUITS FOR FUTURE USE. COMMUNICATIONS CONDUITS SHALL BE 4" PVC SCH. 40, EXCEPT WHERE OTHERWISE SHOWN. MAINTAIN CONDUIT SEPARATION AS SHOWN IN DETAILS.
4. PROVIDE ENOUGH SLACK (CABLE) AT ALL HANDHOLES AND PULLBOXES TO ALLOW FOR SPLICING AND REPAIRS TO BE MADE.
5. IDENTIFY AND TAG ALL CIRCUITS AT EACH HANDHOLE AND PULLBOX. PROVIDE NUMBERING TAGS ACCORDING TO CIRCUIT DESIGNATION AND AS SHOWN ON THE PLANS.

JOB SPECIFIC GENERAL NOTES - LIGHTING DEMOLITION:

1. THE CONTRACTOR SHALL DISCONNECT, REMOVE AND DISPOSE OF ALL EXISTING CONDUCTORS AND DOUBLE DAVIT LIGHTING STANDARDS AND LUMINAIRES FROM STA. 70+90 TO STA. 119+30.

JOB SPECIFIC GENERAL NOTES - SITE RESTORATION:

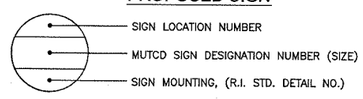
1. ALL PUBLIC AND PRIVATE PROPERTY WITHIN OR ADJACENT TO THE PROJECT LIMITS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO ITS PRE–CONSTRUCTION CONDITION BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL RESTORATION SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2004 EDITION WITH AMENDMENTS. THE COST OF RESTORATION SHALL BE INCLUDED IN THE PRICES BID FOR OTHER SCHEDULED ITEMS OF WORK AND NO SEPARATE PAYMENT SHALL BE MADE.

JOB SPECIFIC GENERAL NOTES - SURVEY:

1. PRIOR TO THE REMOVAL OF ANY EXISTING ROADWAY OR CURBING, THE CONTRACTOR MUST COORDINATE WITH THE RESIDENT ENGINEER AND THE RIDOT SURVEY SECTION. CONSTRUCTION LAYOUT SHALL BE PREFORMED BY THE CONTRACTOR.
2. SURVEY TRAVERSE FOR THE LOCATION OF BRIDGES NOS. 471 & 472 WAS PERFORMED BY BRYANT ASSOCIATES IN JANUARY 2013. HUBS WITH TACKS SET ARE FOR TEMPORARY CONTROL AND SHALL BE VERIFIED PRIOR TO CONSTRUCTION LAYOUT USE.

TYPICAL SIGN DESIGNATION SYMBOL

PROPOSED SIGN



ADDENDUM NO. 4

Louis Berger
166 VALLEY STREET, BUILDING 5
PROVIDENCE, RI 02909
TEL 401 521 5980
WWW.LOUISBERGER.COM

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

JOB-SPECIFIC PLAN SYMBOLS, LEGEND & NOTES

CHECKED BY PWS DATE 8/1/17 SCALE NO SCALE

JBNOTSYM.DWG

R-2	FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		RI	STP-RESF(360)	2017	17	144

LIMIT OF MMO
LANE "F"
STA 19+85±

LIMIT OF FDC
LANE "F"
STA 20+05±

LIMIT OF STRUCTURAL FILL BEHIND ABUTMENT
SEE BRIDGE 472 GEOGRID PLAN AND DETAILS, SHEET 28
LANE "F" STA 21+07± RT & STA 22+11± LT

APPROACH SLAB

EXIST. S.H.L. PLAT NO. 996

BRIDGE 472 ℄ BRG. NORTH ABUTMENT STA. 22+14.38

⇦ LANE "D" I-195 WB

PROP. TEMP PAVEMENT
STA 110+40 TO 134+10

LANE "C" I-195 EB ⇨

BRIDGE 472 ℄ BRG. SOUTH ABUTMENT
STA. 24+72.88

INFILTRATION BASIN

MAINTAIN EXISTING OUTLET

LIMIT OF STRUCTURAL FILL BEHIND ABUTMENT
SEE BRIDGE 472 GEOGRID PLAN AND DETAILS, SHEET 28
LANE "F" STA 24+76± RT & STA 26+09± LT

LIMIT OF FDC
LANE "F"
STA 26+60±

LIMIT OF MMO
LANE "F"
STA 26+80±

HUB 112
N 264746.7941
E 540585.1161

EXISTING OUTLET TO BE MODIFIED INSTALL HEADWALL

SWALE

RAMP CR-6 ⇦

MATCHLINE SHEET 5
MATCHLINE SHEET 6

MATCHLINE SHEET 6
MATCHLINE SHEET 7

MATCHLINE SHEET 6
MATCHLINE SHEET 8

MATCHLINE SHEET 6
MATCHLINE SHEET 9

40 0 40 80 160
HORIZONTAL SCALE IN FEET
SCALE 1" = 40'-0"

ADDENDUM NO. 4

ENTIRE SHEET REPLACED BY ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

GENERAL PLAN

SHEET 6 OF 11

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CHECKED BY PWS DATE 8/1/17 SCALE 1"=40'

GENERAL.DWG

R-2

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	STP-RESF(360)	2017	19	144

MATCHLINE SHEET 6
MATCHLINE SHEET 8

MATCHLINE SHEET 7
MATCHLINE SHEET 8

8.1.1
SWALE
EXISTING OUTLET TO BE MODIFIED INSTALL HEADWALL
RHH
DG
34.1.0
34.2.0
34.2.5
S-1
FDC
RCG
MMO
LOD
7.3.0S
LIMIT OF MMO
LANE "F"
STA 27+75±
CONNECT TO EXISTING GUARDRAIL
LIMIT OF WORK
LANE "F"
STA 27+75±
EXIST. S.H.L. PLAT NO. 906
LANE "F"
(EAST SHORE EXPRESSWAY)
(HORTON FARM RD)
PS
PT-3
PT-2
ETR
DGC
RAMP FR-1
LIMIT OF FDC
RAMP FR-1
STA 130+90±
LIMIT OF MMO
RAMP FR-1
STA 130+70±
LIMIT OF FDC
RAMP FR-1
STA 131+95±
LIMIT OF MMO
RAMP FR-1
STA 132+15±
LIMIT OF MMO
RAMP FR-1
STA 132+25±
34.3.1
34.3.3
WARREN AVENUE
BOYD AVENUE
STA. 29+84.86 LANE "F" ℄ BACK =
STA. 129+00.00 LANE"F" ℄ AHEAD
ADMIN/OFFICE
2,200 SF
RIDOT MAINTENANCE BUILDING
(F.F. EL. 86.40±)
STORAGE AREA
SALT STORAGE BUILDING
(F.F. EL. 88.05±)
54+00
55+00
56+00
57+00
58+00
59+00
60+00
61+00
62+00
63+00
64+00
125+00
126+00
127+00
128+00
129+00
130+00
131+00
132+00
133+00
133+68.78
134+00
135+00

40 0 40 80 160
HORIZONTAL SCALE IN FEET
SCALE 1" = 40'-0"

ADDENDUM NO. 4

REVISIONS		
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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

GENERAL PLAN

SHEET 8 OF 11

CHECKED BY PWS DATE 6/1/17 SCALE 1"=40'

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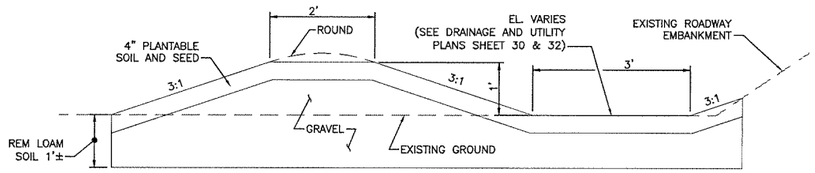
GENERAL.DWG

R-2

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	STP-RESF(360)	2017	30	144

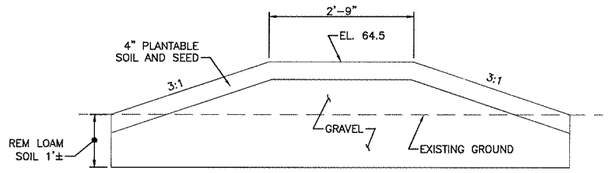


SECTION
SCALE: NOT TO SCALE

8.1.1
SWALE

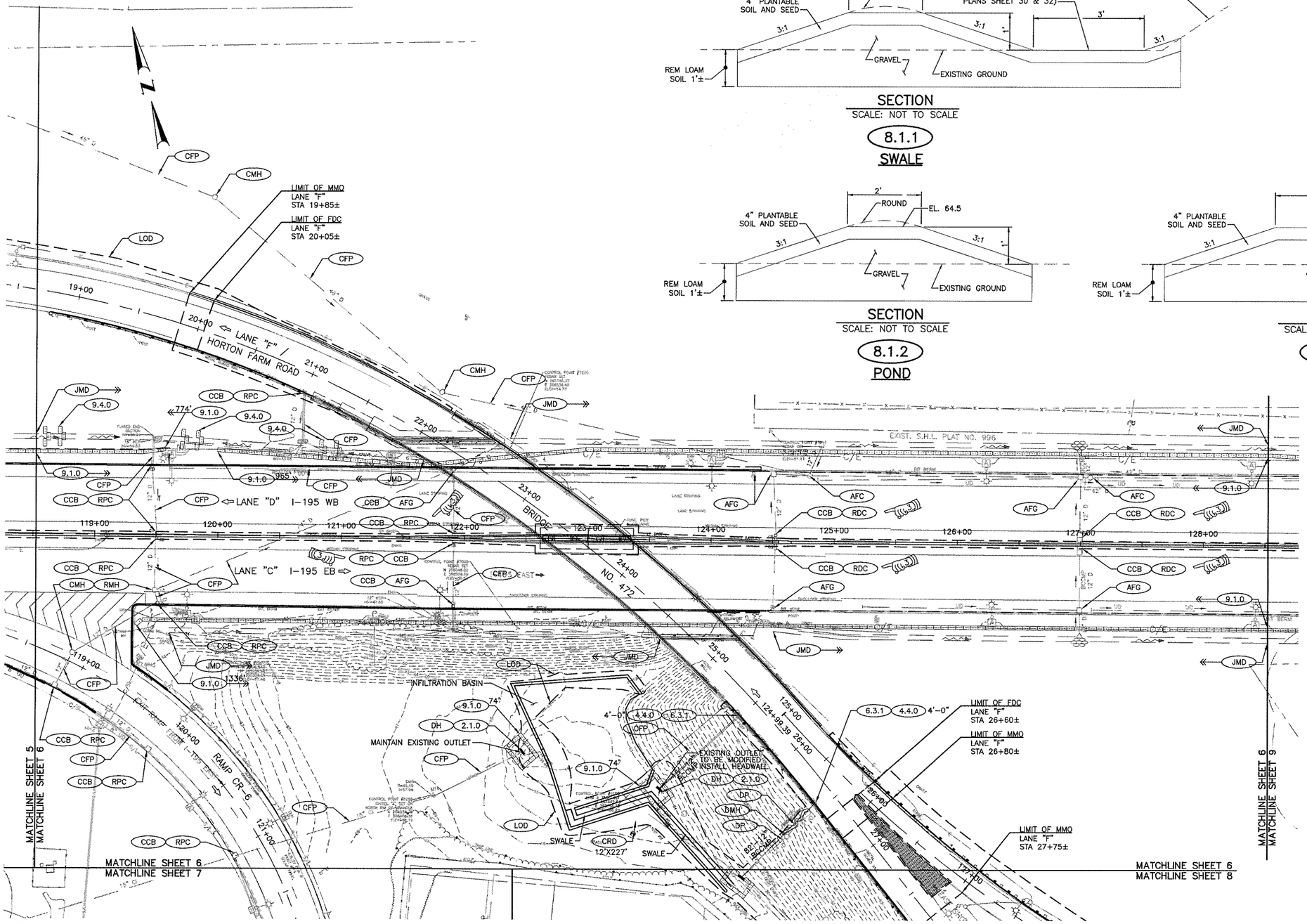
SECTION
SCALE: NOT TO SCALE

8.1.2
POND



SECTION
SCALE: NOT TO SCALE

8.1.3
WEIR



NOTE:
1. SEE DRAINAGE DETAILS FOR DISPOSITION OF STRUCTURE AND FRAME AND GRATE OR FRAME AND COVER.
2. DISPOSITION OF ALL STRUCTURES TO BE VERIFIED BY THE ENGINEER.
3. EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. THE GAS AND ELECTRIC WAS TAKEN FROM PLANS PROVIDED BY NATIONAL GRID.
4. SEE LIGHTING PLANS FOR DISPOSITION OF EXISTING LIGHTING SYSTEM.

40 0 40 80 160
HORIZONTAL SCALE IN FEET
SCALE 1" = 40'-0"

ADDENDUM NO. 4

(4) ENTIRE SHEET REPLACED BY ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

DRAINAGE & UTILITY PLAN

SHEET 6 OF 11

CHECKED BY PWS DATE 6/1/17 SCALE 1"=40'

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DRAINUTL.DWG

R-2

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	STP-RESF(360)	2017	32	144

MATCHLINE SHEET 6
MATCHLINE SHEET 8

MATCHLINE SHEET 7
MATCHLINE SHEET 8

SWALE
DH 2.1.0
EXISTING OUTLET TO BE MODIFIED INSTALL HEADWALL
LIMIT OF MMO LANE "F" STA 27+75±
CRD 12'X227'
LOD
9.1.0
9.3.0 306'
CCB
AFG
LIMIT OF FDC RAMP FR-1 STA 130+70±
LIMIT OF MMO RAMP FR-1 STA 130+90±
LIMIT OF FDC RAMP FR-1 STA 131+95±
LIMIT OF MMO RAMP FR-1 STA 132+15±
LIMIT OF WORK RAMP FR-1 STA 132+25±
DWW 8.4.0 6'X250'
DROP INLET STA 131+18, 51.19' RT DMH RIM = 75.79 DI INLET = 75.4 ±
LANE "F" / HORTON FARM ROAD
RAMP FR-1
EXIST. STR. FLAT NO. 306
WARREN AVENUE
BOYD AVENUE
REAFORD PET CENTER
ADMIN. OFFICE 2,400 SF
RIDOT MAINTENANCE BUILDING (F.F. EL. 86.30±)
STORAGE AREA
SALT STORAGE BUILDING (F.F. EL. 88.05±)
STA. 29+84.86 LANE "F" ℄ BACK = STA. 129+00.00 LANE"F" ℄ AHEAD
54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00 63+00 64+00
125+00 126+00 127+00 128+00 129+00 130+00 131+00 132+00 133+00 133+68.78 134+00 135+00 137+00

NOTE:
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2. DISPOSITION OF ALL STRUCTURES TO BE VERIFIED BY THE ENGINEER.
3. EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. THE GAS AND ELECTRIC WAS TAKEN FROM PLANS PROVIDED BY NATIONAL GRID.
4. SEE LIGHTING PLANS FOR DISPOSITION OF EXISTING LIGHTING SYSTEM.

40 0 40 80 160
HORIZONTAL SCALE IN FEET
SCALE 1" = 40'-0"

ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

DRAINAGE & UTILITY PLAN

SHEET 8 OF 11

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CHECKED BY PWS DATE 6/1/17 SCALE 1"=40'

DRAINUTL.DWG

R-1

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	STP-RESF(360)	2017	42	144

P.I. COORDINATE DATA		
No.	NORTHING	EASTING
P.I. #8	265478.7553	368203.5276
P.I. #9	265081.0447	368621.7870

CONSTRUCTION ℄ COORDINATE DATA			
CURVE	DESCRIPTION	NORTHING	EASTING
B-8	PC STA 15+22.58	265490.4070	367869.8223
	CC	264610.9430	367839.1147
	PCC STA 21+60.86	265248.6651	368445.5060
B-9	PCC STA 21+60.86	265248.6651	368445.5060
	CC	264379.0440	367618.6087
	PT STA 26+40.86	264858.0090	368718.8780
B-10	PC STA 124+99.39	264925.6221	368699.4465
	CC	265376.8724	369591.8439
	PT STA 127+91.33	264687.8742	368867.0809
B-24	PC STA 119+28.57	265086.7884	368179.4184
	CC	264842.3631	367915.1456
	PT STA 123+25.84	264716.4973	368252.4016

CONSTRUCTION ℄ CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
B-8	880.00'	638.28'	333.91'	41°-33'-28"
B-9	1200.00'	480.00'	243.25'	22°-55'-06"
B-10	1000.00'	291.94'	147.02'	16°-43'-37"
B-24	359.98'	397.27'	221.60'	63°-13'-53"

PROPOSED CONSTRUCTION CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C-19	864.00'	223.01'	112.13'	14°-47'-20"
C-20	1184.00'	106.98'	53.52'	5°-10'-36"
C-21	1080.53'	278.20'	139.87'	14°-45'-07"
C-32	890.11'	181.03'	90.83'	11°-39'-11"
C-33	1226.00'	55.25'	27.63'	2°-34'-56"
C-34	1226.00'	364.70'	183.71'	17°-02'-38"
C-35	864.00'	52.74'	26.38'	3°-29'-52"
C-36	1184.00'	366.62'	184.79'	17°-44'-29"
C-37	1080.53'	37.25'	18.63'	1°-58'-30"

P.I. #8
STA. 19+85.00 OFFSET: 25.67 LT
STA. 18+80.00 OFFSET: 16.00 RT
STA. 19+85.00 OFFSET: 16.00 RT
STA. 21+07.14 OFFSET: 16.00 RT
STA. 119+84.79 OFFSET: 56.21 LT
STA. 119+56.00 OFFSET: 56.09 LT
⇦ LANE "D" I-195 WB
PCC +60.86
⇦ LANE "F" / HORTON FARM ROAD
R=880.00' L=638.28'
STA. 22+14.94 OFFSET: 26.00 LT
STA. 23+53.81 NAD83 LANE F ℄ = STA. 122+92.01 NAD83 I-195 ℄
STA. 124+40.00 OFFSET: 56.63 LT
S74°35'40"E 3080.48'
BRIDGE NO. 472
STA. 119+35.92 OFFSET: 55.93 RT
STA. 119+56.00 OFFSET: 55.87 RT
LANE "C" I-195 EB ⇨
STA. 121+61.61 OFFSET: 56.92 RT
STA. 119+30.93 OFFSET: 60.93 RT
STA. 119+30.94 OFFSET: 102.54 RT
STA. 119+33.23 OFFSET: 106.74 RT
ESC +28.57
STA. 119+60.17 OFFSET: 125.74 RT
PC +28.57
STA. 119+02.17 OFFSET: 144.55 RT
STA. 118+75.43 OFFSET: 127.65 RT
STA. 118+61.20 OFFSET: 120.34 RT
RAMP CR-6 R=380.00' L=397.27'
STA. 122+38.69 OFFSET: 117.48 RT
STA. 123+33.87 OFFSET: 109.58 RT
INFILTRATION BASIN
STA. 25+32.44 OFFSET: 16.00 RT
STA. 25+40.21 OFFSET: 109.51 RT
SWALE
PT +40.86
STA. 26+40.86 OFFSET: 16.00 RT
STA. 26+60.00 OFFSET: 16.00 RT
STA. 26+80.00 OFFSET: 16.00 RT
S23°31'27"E 344.00'
STA. 25+18.91 OFFSET: 180.51 RT
STA. 25+51.80 OFFSET: 120.17 RT
STA. 124+99.39 NAD83 LANE FR-1 ℄ = STA. 25+71.72 NAD83 LANE F ℄, 11.18' LT
STA. 124+40.00 OFFSET: 56.21 RT
STA. 125+37.40 OFFSET: 14.75 LT
STA. 125+90.94 OFFSET: 14.43 LT
STA. 126+11.47 OFFSET: 14.24 LT
R=1000.00' L=291.94'
MATCHLINE SHEET 5 MATCHLINE SHEET 6
MATCHLINE SHEET 6 MATCHLINE SHEET 7
MATCHLINE SHEET 6 MATCHLINE SHEET 8
MATCHLINE SHEET 6 MATCHLINE SHEET 9

40 0 40 80 160
HORIZONTAL SCALE IN FEET
SCALE 1" = 40'-0"

NOTE:
1. IN AREAS OF (PAV) & (MMO) PROPOSED EDGE TREATMENTS SHALL BE CONSTRUCTED AT THE SAME LOCATION AS EXISTING UNLESS OTHERWISE NOTED.

ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

LOCATION PLAN

SHEET 6 OF 11

CHECKED BY PWS DATE 6/1/17 SCALE 1"=40'

LOCATION.DWG

R-1

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	STP-RESF(360)	2017	44	144

MATCHLINE SHEET 6
MATCHLINE SHEET 8

MATCHLINE SHEET 7
MATCHLINE SHEET 8

STA. 26+54.30
OFFSET: 109.86 RT

STA. 27+75.00
OFFSET: 16.00 RT

LANE "F" / HORTON FARM ROAD 344.00'

PT +91.33

PC +84.86

S23°31'27"E
129.00

S69°15'27"E
1957.23'

WARREN AVENUE

RAMP FR-1

S43°33'03"E
451.53'

STA. 130+70.00
OFFSET: 10.00 RT

STA. 130+70.00
OFFSET: 10.00 LT

STA. 131+95.56
OFFSET: 10.00 LT

STA. 131+95.00
OFFSET: 11.00 RT

STA. 132+35.17
MATCH EXIST.

PC +42.86

STA. 132+87.50
OFFSET: 17.81 LT

STA. 132+25.71
MATCH EXIST.

R=280.00'
L=125.92'

R=1600.00'
L=1103.62'

STA. 29+84.86 LANE "F" ℄ BACK =
STA. 129+00.00 LANE"F" ℄ AHEAD

STA. 130+29.32 NAD83 LANE F ℄ =
STA. 58+80.74 NAD83 WARREN AVE ℄

STA. 133+68.78 NAD83 LANE FR-1 ℄ =
STA. 62+81.63 NAD83 WARREN AVE ℄, 12.29' LT

BOYD AVENUE

ADMIN. OFFICE
2,200 SF

RIDOT MAINTENANCE BUILDING
(F.F. EL. 89.50±)

STORAGE AREA

SALT STORAGE BUILDING
(F.F. EL. 88.05±)

R=2500.00'
L=2063.76'

P.I. #10

40 0 40 80 160
HORIZONTAL SCALE IN FEET
SCALE 1" = 40'-0"

P.I. COORDINATE DATA		
No.	NORTHING	EASTING
P.I. #10	264015.6164	369085.6670

CONSTRUCTION ℄ COORDINATE DATA			
CURVE	DESCRIPTION	NORTHING	EASTING
B-10	PC STA 124+99.39	264925.6221	368699.4465
	CC	265376.8724	369591.8439
	PT STA 127+91.33	264687.8742	368867.0809
B-11	PC STA 129+00.00	264542.5982	368856.1807
	CC	263903.7851	367389.2391
	PT STA 140+03.62	263463.0696	368927.3450
B-22	PC STA 132+42.86	264360.6219	369178.1842
	CC	264553.5414	369381.1179
	PT STA 133+68.78	264291.5867	369282.2254

CONSTRUCTION ℄ CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
B-10	1000.00'	291.94'	147.02'	16°-43'-37"
B-11	1600.00'	1103.62'	574.78'	39°-31'-14"
B-22	280.00'	125.92'	64.04'	25°-46'-00"

PROPOSED CONSTRUCTION CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C-21	1080.53'	278.20'	139.87'	14°-45'-07"

NOTE:
1. IN AREAS OF (PAV) & (MMO) PROPOSED EDGE TREATMENTS SHALL BE CONSTRUCTED AT THE SAME LOCATION AS EXISTING UNLESS OTHERWISE NOTED.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

LOCATION PLAN

SHEET 8 OF 11

CHECKED BY PWS DATE 6/1/17 SCALE 1"=40'

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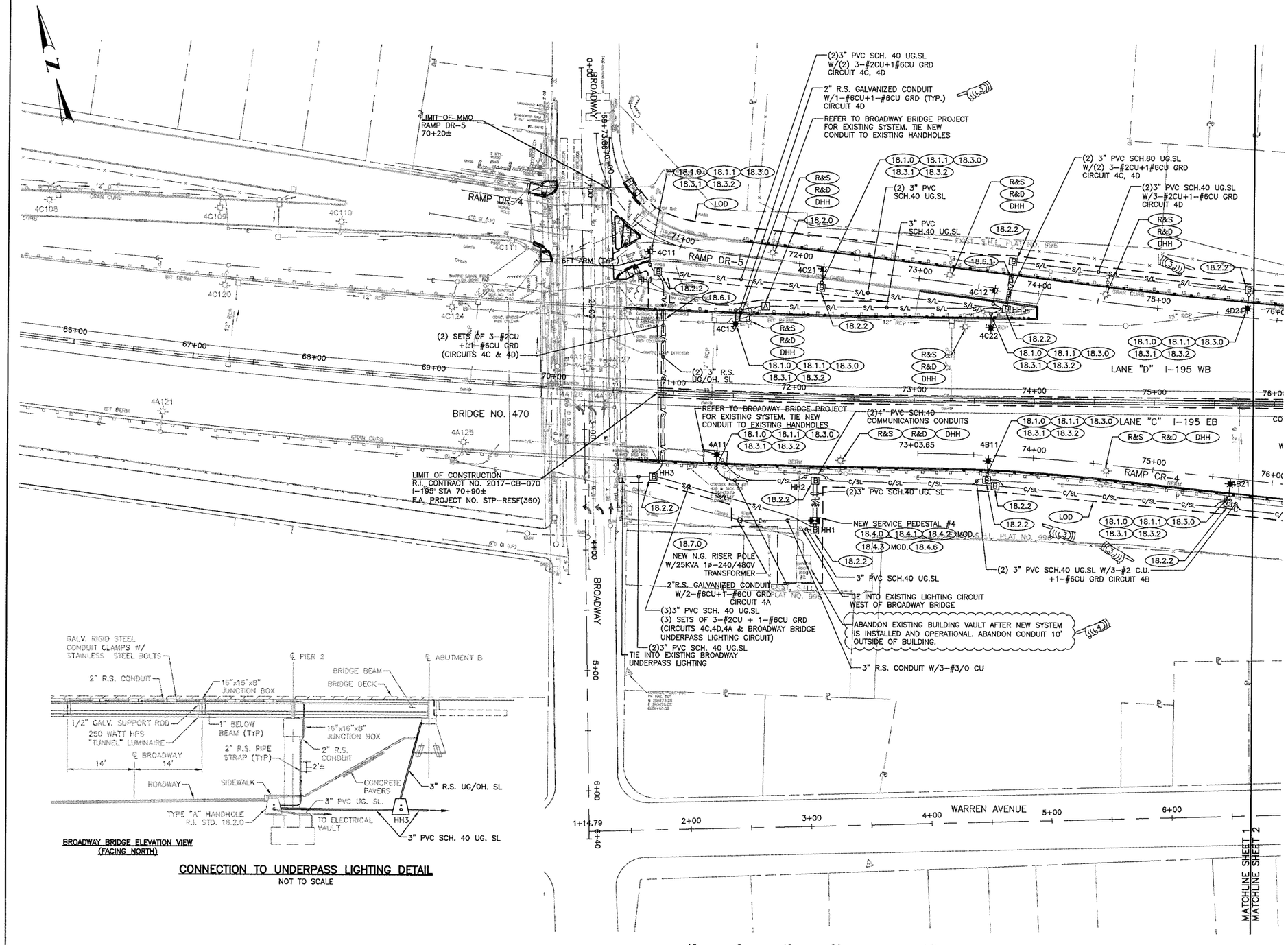
ADDENDUM NO. 4

LOCATION.DWG

R-2

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	STP-RESF(360)	2017	55	144



ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

LIGHTING PLAN

SHEET 1 OF 11

CHECKED BY _____ DATE _____ SCALE 1"=40'

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LIGHTING.DWG

R-2

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	STP-RESF(360)	2017	58	144

NORTH SPRUCE STREET
NORTH ROSE STREET
NORTH BLOSSOM STREET
ROUTE 114
LOT 8
LOT 9
LOT 9.1
LOT 3
LOT 22
LOT 23
LIMIT OF CONSTRUCTION RAMP DR-6 STA 101+00±
(2)3" PVC SCH. 40 UG.SL W/3-#2CU + 1-#6CU GRD CIRCUIT 5A
(2) 3" PVC SCH. 80 UG.SL W/3-#2CU + 1-#6CU GRD CIRCUIT 5A
3" PVC SCH. 40 UG.SL W/3-#2CU + 1-#6 C.U. GRD CIRCUIT 5A
CONNECT TO EXISTING HANDHOLE
(2)3" PVC SCH. 40 UG.SL W/3-#2CU+1-#6CU GRD CIRCUIT 5A
(2)3" PVC SCH. 40 UG.SL W/3-#2CU + 1-#6CU GRD CIRCUIT 5A
(2)3" RS CONDUITS W/3-#2CU+1-#6 C.U. GRD CIRCUIT 5A
(2)3" PVC SCH.40 UG.SL W/(2) 3-#2 C.U.+1#6 C.U. GRD CIRCUITS 5C,5D
CONNECT TO EXISTING (2)3" RS CONDUITS
18.7.0 NEW RISER POLE W/37.5KVA 1Ø-240/480V TRANSFORMER
ABANDON EXISTING BUILDING VAULT AFTER NEW SYSTEM IS INSTALLED AND OPERATIONAL. ABANDON CONDUIT 10' OUTSIDE OF BUILDING.
(2)-3" PVC SCH. 40 UG.SL W/(2). 3-#2CU+1-#6CU GRD CIRCUITS 5A,5B
NEW SERVICE PEDESTAL #5 200A-240/480V - 3W
(2)-3" PVC
(2)-3" PVC SCH. 40 UG.SL W/(2) 3-#2 CU + 1-#6CU GRD CIRCUIT 5A
(2)-3" PVC SCH. 40 UG.SL W/(2)-#2CU + 1-#6CU GRD CIRCUITS 5A,5B
(2)3" PVC SCH.40 UG.SL W/(2)-#2CU +1-#6CU GRD CIRCUITS 5C,5D
2" R.S. GALVANIZED CONDUIT W/2-#6CU +1-#6CU GRD(TYP.) CIRCUIT 5C
(2) 4" PVC SCH.40 COMMUNICATIONS CONDUITS
CAP FOR FUTURE USE
CONNECT TO EXISTING (2)3" RS CONDUITS
(2)3" PVC SCH. 40 UG.SL W/(2)-3-#2CU +1-#6CU GRD CIRCUITS 5C,5D
(2)3" PVC SCH. 40 UG.SL W/3-#2CU+1-#6 C.U. GRD CIRCUIT 5C
(2)4" PVC SCH. 40 COMMUNICATIONS CONDUITS
(2)3" RS CONDUITS W/3-#2CU+1-#6CU CIRCUIT 5C AND (2)4" RS COMMUNICATIONS CONDUITS
(2)3" PVC SCH. 40 UG.SL W/3-#2CU + 1-#6CU GRD CIRCUIT 5C
(2) 3" PVC SCH. 40 EMPTY SL CONDUITS
(2) 4" PVC SCH.40 COMMUNICATIONS CONDUITS
EXCAVATION SHALL NOT OCCUR WITHIN 5'± OF THE EXISTING ITS POLE WITHOUT APPROVAL OF THE ENGINEER
BRIDGE NO. 471
RAMP DR-6
LANE "D" I-195 WB
LANE "C" I-195 EB
LANE "E" (EAST SHORE EXPRESSWAY)
EXIST. S.H.I. PLAT NO. 996
PLAT NO. 1945
LOT 1
LOT 1.1
LOT 2
LOT 3
LOT 4
SOUTH SPRUCE STREET
SOUTH ROSE STREET
SOUTH BLOSSOM STREET
PAWTUCKET AVENUE
WARREN AVENUE
MATCHLINE SHEET 3
MATCHLINE SHEET 4
MATCHLINE SHEET 4
MATCHLINE SHEET 5
HORIZONTAL SCALE IN FEET
SCALE 1" = 40'-0"

ADDENDUM NO. 4

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REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

LIGHTING PLAN

SHEET 4 OF 11

CHECKED BY _____ DATE _____ SCALE 1"=40'

LIGHTING.DWG

R-1	FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		RI	BRO-0472(001)	2017	1	53

INDEX

BRIDGE PLAN SET
HORTON FARM ROAD BRIDGE NO. 472
SUPERSTRUCTURE REPLACEMENT

STATE OF RHODE ISLAND

DEPARTMENT OF TRANSPORTATION

PLAN, PROFILE AND SECTIONS OF PROPOSED

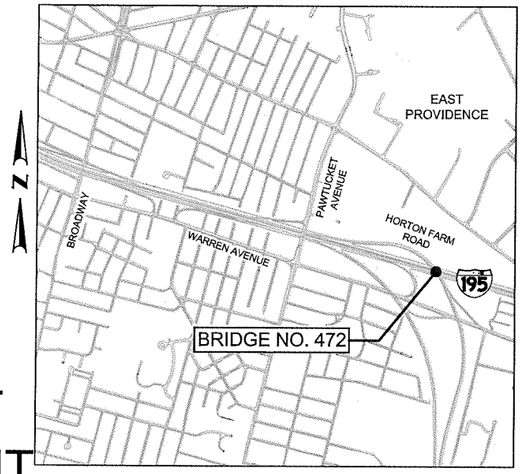
STATE HIGHWAY
IMPROVEMENTS TO I-195
ACCELERATED BRIDGE CONSTRUCTION (ABC) OF BRIDGE NO. 472 SUPERSTRUCTURE REPLACEMENT

VOLUME 2 OF 2 - BRIDGE PLANS

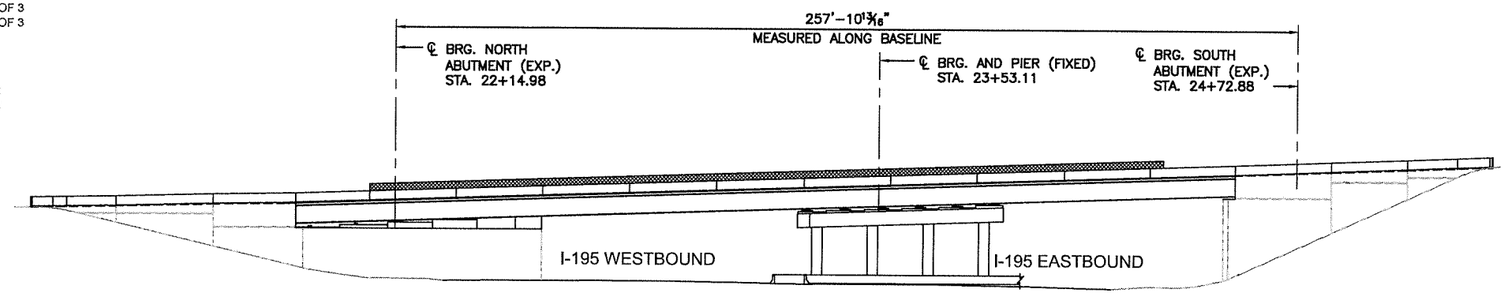
HORTON FARM ROAD BRIDGE NO. 472

CITY OF EAST PROVIDENCE
COUNTY OF PROVIDENCE

R.I. CONTRACT NO. 2017-CB-070 F.A. PROJECT NO. BRO-0472(001)



LOCATION MAP
SCALE: 1"=1,000'



ELEVATION
SCALE: 1" = 20'

DESIGN DESIGNATION

HORTON FARM ROAD

AADT (2013)	22,100 V.P.D.
AADT (2033)	25,300 V.P.D.
D	100%
K	10%
T	8%
DDHV	2,530 V.P.H.
DDV	2,530 V.P.H.
DESIGN SPEED	50 M.P.H.

HURRICANE EVACUATION ROUTE

This project includes work on a designated Hurricane Evacuation and Diversionary Route as follows:
- Intersection of Pawtucket Avenue & Warren Avenue
- Pawtucket Avenue Bridge 471
- Pawtucket Avenue
- East Shore Expressway On Ramp to I-195 over Bridge 472

Refer to General Note 16 on Sheet 4.

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS

SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED AUGUST 2013, 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.

SCALES OF DRAWINGS
AS SHOWN

BASE OF LEVELS
NGVD 29

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Contract Number 2017-CB-070
Number of Sheet 1
Total Sheets 53

ADDENDUM NO. 4

R.I. DEPARTMENT OF TRANSPORTATION

APPROVED

ADMINISTRATOR. PROJECT MANAGEMENT DATE

APPROVED

CHIEF ENGINEER OF INFRASTRUCTURE DATE

APPROVED

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

COVER.DWG

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	5	53

MATERIALS

STRUCTURAL STEEL:

- AASHTO DESIGNATION M 270, GRADE 50

REINFORCING STEEL:

- AASHTO DESIGNATION M 31, GRADE 60

CONCRETE STRENGTHS:

- CLASS HP ¾" f'c = 5,000 PSI (28 DAYS)

  BRIDGE DECK, BARRIER ON BRIDGE, APPROACH SLAB BRACKET SUPPORT, BARRIER ON WINGWALL, END POST, TOP OF BACKWALL

- CLASS HP HIGH EARLY STRENGTH ¾" f'c = 3,000 PSI (48 HOURS) AND 5,000 PSI (28 DAYS)

  TYPICAL LONGITUDINAL DECK CLOSURE POUR BETWEEN ADJACENT PHASE 1 AND PHASE 2 STAGES, APPROACH SLAB CLOSURE POUR

- CLASS XX ¾" f'c = 4,000 PSI (28 DAYS)

  APPROACH SLAB

- CLASS HP (AE) ¾" f'c = 4,000 PSI

  REHABILITATION / REPAIR CONCRETE

- CLASS MC ¾" f'c = 3,500 PSI (28 DAYS), f'c = 5,000 PSI (56 DAYS)

  PIER CAP, PIER COLUMN, AND PIER FOOTING

GROUT STRENGTHS:

- HIGH STRENGTH NON-SHRINK GROUT ¾" f'c = 3,000 PSI (24 HOURS AND 8,000 PSI (28 DAYS)

  CONCRETE BEARING PEDESTALS

CONCRETE NOTES

1. CLASSES OF CONCRETE SHALL BE HIGH PERFORMANCE CLASS HP AND CLASS XX 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.

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. 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.

4. UNLESS OTHERWISE NOTED ON THE PLANS, ALL REINFORCING STEEL SHALL BE GALVANIZED. ALL WIRE TIES AND MISCELLANEOUS HARDWARE USED FOR PLACEMENT OF GALVANIZED REINFORCING SHALL BE EPOXY NON-METALLIC. REINFORCING STEEL SHALL BE GALVANIZED PER ASTM A767 CLASS I (GALVANIZED STEEL).

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. THE TOP BARS IN THE DECK SLABS SHALL BE SPLICED AT THE CENTER OF SPANS BETWEEN GIRDERS. THE BOTTOM BARS SHALL BE SPLICED OVER THE GIRDERS.

7. 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 BOTTOM	2" (+1/4", -0") 1 1/2" (+1/8", -0")
DECK SLABS (EXPOSED DECKS)	TOP BOTTOM	3" (+1/4", -0") 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.

8. ANCHOR RODS SHALL CONFORM TO ASTM F1554. ANCHOR RODS, NUTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232.

9. ALL ANCHOR BOLTS SHALL BE SET PRIOR TO PLACEMENT OF CONCRETE UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.

10. 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.

11. UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CONCRETE SURFACES VISIBLE IN ELEVATION TO ONE FOOT BELOW FINAL GROUND LINE (AND THE UNDERSIDE OF ALL CONCRETE DECK SLABS OUTSIDE OF THE FASCIA BEAMS), SHALL RECEIVE A CONCRETE SURFACE RUBBED FINISH IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.

12. THE ENTIRE TOPSIDE SURFACES OF ABUTMENT BEAM SEATS, AS WELL AS VERTICAL FACES OF BACKWALLS, SHALL BE PROVIDED WITH A FILM-FORMING SEALER (M12.03.1) CONCRETE SURFACE TREATMENT-PROTECTIVE COATING IN ACCORDANCE WITH SECTION 820 OF THE RI STANDARD SPECIFICATIONS.

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

14. 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.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATIONS DURING CONSTRUCTION UNTIL SUCH TIME WHEN THE SURFACES ARE APPROVED AND ACCEPTED. ANY CONCRETE STAINS OR DISCOLORATIONS OCCURRING PRIOR TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.

16. 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.

17. 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.

18. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL DECK FORMS SHALL BE OF THE REMOVABLE TYPE THAT WILL PRODUCE THE DIMENSIONS SHOWN ON THE PLANS.

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

20. 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.

21. 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.

22. HAND HELD VIBRATORS SHALL BE EQUIPPED WITH RUBBER TIPPED HEADS WHEN USED TO CONSOLIDATE CONCRETE AROUND GALVANIZED REINFORCEMENT AND EMBEDMENTS.

REINFORCEMENT NOTE

THE CONTRACTOR'S BAR FABRICATOR SHALL VERIFY THE CORRECTNESS IN PREPARING HIS ORDER LISTS AND BENDING DIAGRAMS. ANY EXPENSE INCIDENT TO REVISIONS OF MATERIAL AS SHOWN ON THE ORDER LISTS AND BENDING DIAGRAMS IN ORDER TO MAKE IT COMPLY WITH THE DESIGN DRAWINGS SHALL BE BORNE BY THE CONTRACTOR. SHOP DRAWINGS FOR ALL REINFORCEMENT DETAILS AND SCHEDULE SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING.

STRUCTURAL STEEL NOTES

1. FRAMING DIMENSIONS ARE GIVEN ALONG CENTERLINES OF GIRDERS AND ALONG CENTERLINES OF BEARINGS ON ABUTMENTS AND PIER. THE FABRICATOR IS RESPONSIBLE FOR INCORPORATING THE CAMBER, CROSS SLOPE, AND OTHER EFFECTS THAT MAY IMPACT THE OVERALL GIRDER LENGTHS, DIMENSIONS AND/OR THE DETAILING.

2. INSTABILITY DURING CONSTRUCTION OF THE HORIZONTALLY CURVED GIRDERS (INCLUDING DURING LIFTING, TRANSPORTING AND ERECTION) MAY PRESENT A HAZARDOUS SITUATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS AND MEASURES TO ENSURE STABILITY AND THEREBY SAFETY DURING THE STEEL ERECTION AND CONSTRUCTION.

3. THE SHOPS FABRICATING THE STRUCTURAL STEEL (EXCEPT FOR EXPANSION JOINTS, RAILINGS AND BEARINGS), MUST BE CERTIFIED FOR "MAJOR STEEL BRIDGES (CBR)" IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM OR EQUIVALENT. SHOPS FABRICATING THE EXPANSION JOINTS, RAILINGS AND BEARINGS SHALL, AT A MINIMUM, BE CERTIFIED FOR "SIMPLE STEEL BRIDGE STRUCTURES (SBR)".

   THE SHOPS SHALL ALSO BE CERTIFIED UNDER THE AISC "SOPHISTICATED PAINT ENDORSEMENT (SPE)" QUALITY PROGRAM OR THE SSPC-QP3 PAINT CERTIFICATION PROGRAM.

   THE FABRICATOR MUST SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED.

4. THE STEEL ERECTOR/CONTRACTOR FOR THIS PROJECT SHALL BE CERTIFIED FOR "ADVANCED CERTIFIED STEEL ERECTOR (ACSE)" IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM. THE ERECTOR/CONTRACTOR OF THE STRUCTURAL STEEL SHALL BE REQUIRED TO SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED.

5. THIS BRIDGE CONTAINS FATIGUE SENSITIVE DETAILS (FSD). THESE DETAILS HAVE BEEN DESIGNATED ON THE STEEL FRAMING AND/OR THE STEEL DETAIL SHEETS.

6. SHOP DRAWINGS FOR ALL FABRICATED STEEL INCLUDING BEARINGS, EXPANSION JOINTS, RAILINGS AND FALSEWORK SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING PRIOR TO FABRICATION.

7. INSPECTION OF BRIDGE WELDS INCLUDING RADIOGRAPHIC TESTING (RT) AND MAGNETIC PARTICLE TESTING (MT) SHALL BE IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS AND THE AASHTO/AWS BRIDGE WELDING CODE, EXCEPT THAT THE REMAINING PERCENTAGE OF BRIDGE GROOVE WELDS NOT RT TESTED SHALL BE MT OR DYE-PENETRANT TESTED.

8. STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE LATEST PROVISIONS OF AASHTO DESIGNATION M270 GRADE 36 AND GRADE 50, AS DESIGNATED ON THE PLANS.

9. ALL AASHTO M 270 STRUCTURAL STEEL USED IN GIRDERS (INCLUDING CONNECTION PLATES AND STIFFENERS), SHALL MEET THE ZONE 2 CHARPY V-NOTCH FRACTURE TOUGHNESS TEST REQUIREMENTS AS SPECIFIED IN TABLE 6.6.2-2 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR "NONFRACTURE-CRITICAL". THE ZONE 2 FRACTURE TOUGHNESS REQUIREMENTS ARE AS FOLLOWS:

   NONFRACTURE-CRITICAL

   GRADE 36 15 FT-LBS @ 40°F (UP TO 4 INCHES THICK)
   GRADE 50 15 FT-LBS @ 40°F (UP TO AND INCLUDING 2 INCHES THICK)
   GRADE 50 20 FT-LBS @ 40°F (FROM 2 INCH THICK UP TO AND INCLUDING 4 INCHES THICK)

   SAMPLING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO T 243. THE FREQUENCY OF TESTING SHALL BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

   THE CHARPY V-NOTCH FRACTURE TOUGHNESS TEST REQUIREMENT IS NOT MANDATORY FOR THE FOLLOWING STEEL COMPONENTS:

   - BEARINGS
   - EXPANSION JOINTS
   - DRAINAGE MATERIAL
   - RAILINGS
   - SUPPORT OF EXCAVATION COMPONENTS

11. WELDING SHALL BE IN ACCORDANCE WITH THE LATEST BRIDGE WELDING CODE AASHTO/AWS D1.5 (INCLUDING ALL INTERIMS TO DATE) AND APPLICABLE SUPPLEMENTAL AWS PUBLICATIONS.

ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY
1	12/06/17	LBG

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

GENERAL BRIDGE NOTES

SHEET 2 OF 3

CHECKED BY PNF DATE 9/22/17 SCALE NONE

GENERAL NOTES SHEETS.DWG

R-2	FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		RI	BRO-0472(001)	2017	6	53

STRUCTURAL STEEL NOTES CONT.

12. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO AASHTO DESIGNATION M 164, AND THEY SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 824 OF THE RI STANDARD SPECIFICATIONS.
13. WASHERS MEETING AASHTO DESIGNATION M 293 ARE TO BE USED OVER ALL HOLES THAT ARE MORE THAN 1/16" IN DIAMETER GREATER THAN THE BOLT DIAMETER AND UNDER ALL PARTS TURNED DURING ASSEMBLY.
14. WELDING ELECTRODES SHALL HAVE THE SAME CORROSION RESISTANCE AS THE BASE METAL AND SHALL BE FREE OF MOISTURE AT THE TIME OF USE.
15. STRUCTURAL STEEL SHALL BE PREPARED AND PAINTED IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.
16. UNLESS OTHERWISE SPECIFIED, THE UPPER SURFACES OF GIRDER TOP FLANGES SHALL BE FREE OF PAINT, OIL OR OTHER IMPURITIES THAT WOULD IN ANY WAY REDUCE THE BOND OF CONCRETE TO STEEL.
17. PRIOR TO FABRICATION, ALL MATERIALS SHALL FIRST BE SOLVENT CLEANED TO SSPC-SP1 TO REMOVE ALL OIL, GREASE, AND DIRT; FOLLOWED BY BLAST-CLEANING TO SSPC-SP10 TO REMOVE ALL MILL SCALE, RUST, AND OTHER DELETERIOUS MATERIALS FROM THE SURFACE OF THE STEEL TO BE FABRICATED.
18. PRIOR TO SHOP COATING AS SPECIFIED IN SECTION 825 OF THE RI STANDARD SPECIFICATIONS, ALL CORNERS AND EDGES OF STEEL WHICH HAVE BEEN FLAME CUT OR OTHERWISE HARDENED SHALL BE SOFTENED BY GRINDING OR BLAST-CLEANING TO PROVIDE A SURFACE SUITABLE FOR APPLICATION OF THE SPECIFIED PAINT SYSTEM.
19. WELDING OF ATTACHMENTS TO GIRDER FLANGES OR WEBS FOR CONSTRUCTION PURPOSES IS NOT PERMITTED EXCEPT WHEN APPROVED BY THE ENGINEER.
20. THE ENDS OF ALL GIRDERS SHALL BE VERTICAL AFTER ALL DEAD LOADS HAVE BEEN PLACED.
21. INTERMEDIATE STIFFENERS SHALL BE PLACED ON THE INTERIOR SIDE OF THE FASCIA GIRDER WEBS AND ON BOTH SIDES OF ALL INTERIOR GIRDER WEBS.
22. BEARING STIFFENERS SHALL BE FABRICATED AS SHOWN ON THE PLANS AND SHALL BE PLACED ON BOTH SIDES OF ALL GIRDER WEBS.
23. INTERMEDIATE STIFFENERS AND CONNECTION PLATES SHALL BE SET PERPENDICULAR TO THE FLANGES OF THE GIRDERS.
24. END BEARING STIFFENERS AT GIRDER ENDS SHALL BE PLUMB AFTER DEAD LOADS ARE APPLIED.
25. BOLTED CONNECTIONS SHALL BE DESIGNED AS SLIP-CRITICAL CONNECTIONS. THE FAYING SURFACES SHALL SATISFY CLASS B SURFACE CONDITION AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
26. THE GIRDERS SHALL BE CAMBERED TO THE AMOUNTS SHOWN ON THE PLANS. THE FABRICATOR'S SHOP DRAWINGS SHALL INCLUDE, IN ADDITION TO ANY CUTTING OR CAMBER DIAGRAMS NECESSARY FOR THEIR PURPOSES, A SHOP ASSEMBLY DIAGRAM WHICH PROVIDES CAMBER OFFSETS CALCULATED BY THE FABRICATOR AT THE REFERENCE POINTS PROVIDED BY THE ENGINEER (USUALLY TENTH POINTS OF THE SPANS), THE INFORMATION PROVIDED SHALL BE SUFFICIENT ENOUGH FOR THE ENGINEER TO EVALUATE WHETHER THE CAMBER HAS BEEN CORRECTLY INTERPRETED.
27. ALL SHOP CONNECTIONS AND SPLICES SHALL BE WELDED. WELDING PROCEDURES AND TECHNIQUES TO BE USED IN FABRICATION AND ERECTION OF THE GIRDERS SHALL BE AS SHOWN ON THE SHOP DRAWINGS AND SHALL INCORPORATE THE FOLLOWING:
    - BOTH FLANGES AND THE WEB SHALL BE COMPLETELY FABRICATED FOR THEIR ENTIRE LENGTHS BEFORE THE WELDING OF THE FLANGES TO THE WEB IS PERFORMED.
    - ALL THE WEB AND FLANGE SPLICES OTHER THAN THOSE SHOWN ON THE PLANS MUST BE APPROVED BY THE ENGINEER. ALTERNATE OR ADDITIONAL SPLICES ARE TO BE LOCATED AND DESIGNED BY THE FABRICATOR AND SHOWN ON THE SHOP DRAWINGS. THESE SPLICES ARE TO FULLY DEVELOP THE STRENGTH OF THE WEB AND FLANGES PLATES. WEB SPLICES, IF USED, SHALL BE LOCATED 2'-0" MINIMUM FROM ANY STIFFENER.
    - NO MORE THAN TWO SHOP WEB SPLICES WILL BE PERMITTED BETWEEN FIELD SPLICES. SPLICING OF GIRDERS BY FIELD WELDING WILL NOT BE PERMITTED.
28. ALL FILLET WELDS SHALL BE IN ACCORDANCE WITH THE BRIDGE WELDING CODE ASSHTO/AWS D1.5 TABLE 2.1 (¼" MINIMUM).
29. ALL SHEAR STUD CONNECTORS SHALL BE WELDED BY THE AUTOMATIC TIMED ELECTRIC ARC PROCESS. SHEAR STUDS SHALL BE INSPECTED AND TESTED IN ACCORDANCE WITH SECTION 824 OF THE RI STANDARD SPECIFICATIONS.
30. WHEN STEEL DIE STAMPS ARE USED TO IDENTIFY PIECES AND MEMBERS, FABRICATORS SHALL UTILIZE LOW STRESS STAMPS.
31. FOR SIZE AND LOCATION OF ANCHOR BOLTS, SEE ABUTMENT, AND BEARING DRAWINGS.
32. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE EXPANSION JOINT SYSTEM PROVIDED WILL BE COMPATIBLE WITH BOTH THE END OF DECK HAUNCHES AND/OR THE STRUCTURAL STEEL FRAMING CONFIGURATION. THAT IS, THE EXPANSION JOINT SYSTEM AND ALL ITS INHERENT COMPONENTS AND ATTACHMENT DEVICES SHALL BE SIZED OR ARRANGED TO BE COMPATIBLE WITH THE GIRDER AND DIAPHRAGM FLANGES, CONNECTION PLATES, BOLTS, SHEAR STUDS, AND REINFORCING STEEL THAT SHARE THE END HAUNCH REGION.

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'	23
OVER 17' AND UP TO 33'	27
OVER 33' AND UP TO 50'	30
OVER 50' AND UP TO 75'	34
OVER 75' AND UP TO 100'	37

   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 SHIELDING.

   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 B.

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

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 BEAM/MODULAR UNIT 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 BEAM/MODULAR UNIT 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 REQUIRED 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 ATTENDANCE AT MEETINGS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SUPERSTRUCTURE PAY ITEM, BE IT CONCRETE, STEEL OR TIMBER.

3. TEMPORARY BARRIER ON BRIDGES
   - TEMPORARY BARRIER TO BE UTILIZED ON BRIDGES AND THEIR APPROACH DURING CONSTRUCTION SHALL MEET TEST LEVEL TL-4.

UTILITY NOTES

1. NO CONSTRUCTION EQUIPMENT OR PERSONNEL SHALL BE PERMITTED WITHIN A TEN (10) FOOT RADIUS OF THE ENERGIZED OVERHEAD LINES.

SHOP DRAWING SUBMITTAL

1. BRIDGE DEMOLITION
2. REMOVE AND DISPOSE EXISTING SUPERSTRUCTURE
3. REMOVE AND DISPOSE EXISTING SUBSTRUCTURE
4. CRANE SUBMITTALS
5. TEMPORARY PROTECTIVE SHIELDING
6. CONCRETE: MIX DESIGNS, PLACING AND METHODS AND EQUIPMENT, CURING PLAN AND METHODS, PERSONNEL RESOURCES
7. REINFORCING STEEL, SPLICES AND INSERTS
8. CONCRETE FORMS
9. STRUCTURAL STEEL
10. DRILL AND GROUT REINFORCING
11. BRIDGE BEARING ASSEMBLIES
12. BEAM ERECTION PROCEDURES
13. BRIDGE NAME/SEAL TABLETS
14. CONTROLLED LOW STRENGTH MATERIAL
15. CONCRETE SURFACE REPAIR
16. ACCELERATED BRIDGE CONSTRUCTION SCHEDULE
17. TEMPORARY EARTH SUPPORT SYSTEM DESIGN
18. TEMPORARY SHORING
19. MATERIAL CUT SHEETS
20. UTILITY SUPPORTS
21. MISCELLANEOUS METALS
22. DELETED
23. STRIP SEAL EXPANSION JOINT ASSEMBLIES
24. CONCRETE SUBCONTRACTORS QUALIFICATIONS AND EXPERIENCE
25. STRUCTURAL STEEL PAINT SYSTEMS
26. WELDING PROCEDURES
27. QUALITY CONTROL PLAN FOR BRIDGE SUPERSTRUCTURE
28. DELETED
29. DELETED
30. DELETED
31. CONCRETE SURFACE TREATMENT (PROTECTIVE COATING)
32. SHEAR CONNECTORS
33. BRIDGE IDENTIFICATION AND MINIMUM CLEARANCE SIGNS
34. SNOW FENCE

NECESSARY SUBMITTALS MAY NOT BE LIMITED TO THE ABOVE LIST AND MAY REQUIRE OTHER SUBMITTALS AT THE RESIDENT ENGINEER'S REQUEST FOR: SHOP DRAWINGS, CERTIFICATE OF COMPLIANCE, PRODUCT INFORMATION, CATALOG CUTS, TEST DATA OR OTHER.

ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/06/17	LBG

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

GENERAL BRIDGE NOTES

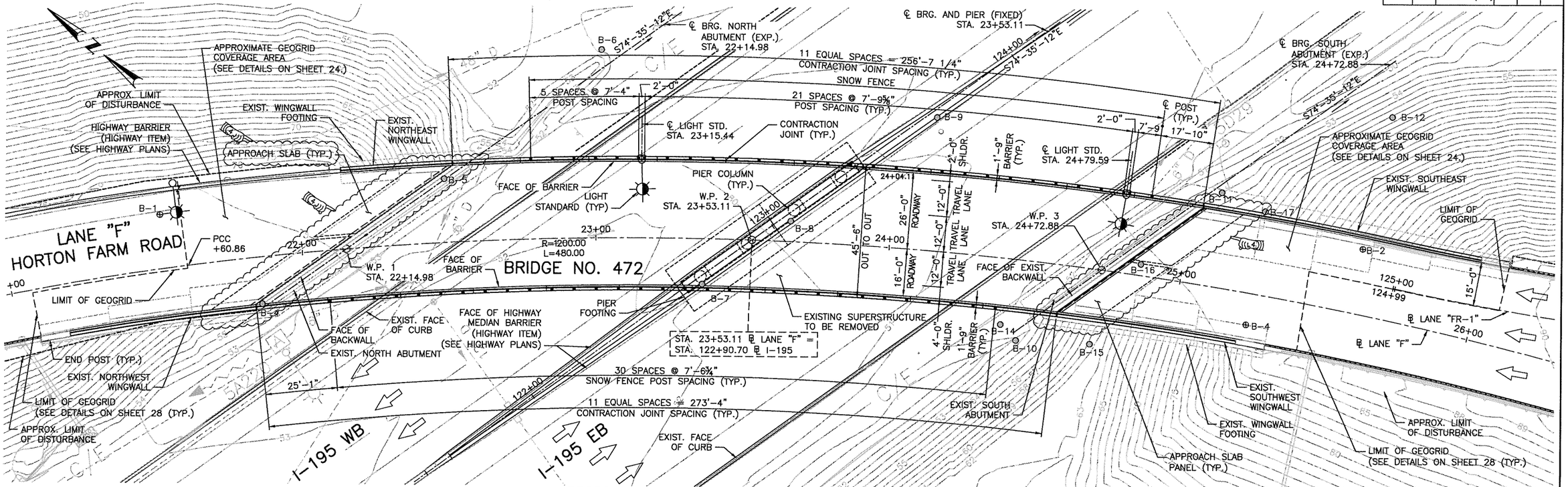
SHEET 3 OF 3

CHECKED BY PNF DATE 9/22/17 SCALE NONE

GENERAL NOTES SHEETS.DWG

R-1

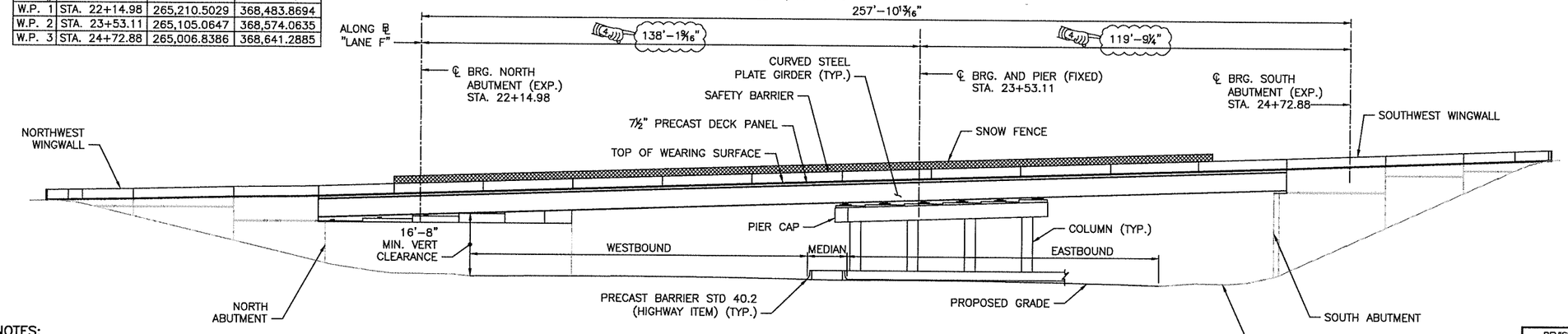
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	7	53



PROPOSED BRIDGE PLAN

SCALE: 1/16"=1'-0"

WORKING POINTS			
W.P. #	STATION	NORTHING	EASTING
W.P. 1	STA. 22+14.98	265,210.5029	368,483.8694
W.P. 2	STA. 23+53.11	265,105.0647	368,574.0635
W.P. 3	STA. 24+72.88	265,006.8386	368,641.2885



PROPOSED WESTERLY BRIDGE ELEVATION

(EASTERLY ELEVATION SIMILAR)

SCALE: 1/16"=1'-0"

LEGEND:

ELECTRIC DUCT	E
SANITARY SEWER	S
DRAINAGE	D
WATER MAIN	W
GAS MAIN	G
OVERHEAD WIRE	OHW
CATCH BASIN	CB
DRAINAGE MANHOLE	DMH
SEWER MANHOLE	SMH
UTILITY POLE	UP
WATER GATE	WG
DIRECTION OF TRAVEL	
BORING (2005)	⊕B-X
BORING (1979)	⊙B-X
TEST PITS (2005)	⊞ TP-X

NOTES:

1. BORINGS SHOWN ON GENERAL PLAN ARE SHOWN AT APPROXIMATE LOCATIONS DEVELOPED FROM "HORTON FARM BRIDGE – SUBSURFACE EXPLORATION PLAN" DEVELOPED BY PAUL ALDINGER AND ASSOC., INC., DATED MAY 2005, AS APPEARS IN HORTON FARM BRIDGE GEOTECHNICAL REPORT DATED FEBRUARY 2012.
2. BORINGS ARE SHOWN FOR THE PURPOSE OF DESIGN AND SHOW CONDITIONS AT BORING POINTS ONLY, AND DO NOT NECESSARILY SHOW THE NATURE OF THE MATERIALS TO BE ENCOUNTERED DURING CONSTRUCTION.
3. BORINGS SHOWN THUS: ⊕B-X DRILLED BY NEW HAMPSHIRE BORING INC. OF BROCKTON, MA FROM MARCH TO APRIL 2005.
4. BORINGS SHOWN THUS: ⊙B-X DRILLED BY GUILD DRILLING CO., INC. OF EAST PROVIDENCE, RI BETWEEN JUNE AND DECEMBER 1979. LOGS NOT INCLUDED IN PLANS, SEE APPENDIX OF SPECIAL PROVISIONS FOR 1979 BORING LOGS.
5. TEST PITS SHOWN THUS: ⊞ TP-X EXCAVATED BY J.J. CARDOSI, INC. OF EAST PROVIDENCE, RI IN MAY 2005.
6. BORINGS B-3 AND B-5, AND TEST PITS TP-1 AND TP-2, CONDUCTED IN 2005 DO NOT APPEAR WITHIN LIMITS OF PLAN. FOR LOCATIONS SEE "HORTON FARM BRIDGE – SUBSURFACE EXPLORATION PLAN" DEVELOPED BY PAUL ALDINGER AND ASSOC., INC., DATED MAY 2005, AS APPEARS IN HORTON FARM BRIDGE GEOTECHNICAL REPORT DATED FEBRUARY 2012.
7. FOR CONSTRUCTION BASELINE CURVE DATA, SEE HIGHWAY SHEET 42.

ADDENDUM NO. 4

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REVISIONS		
NO.	DATE	BY
1	12/6/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

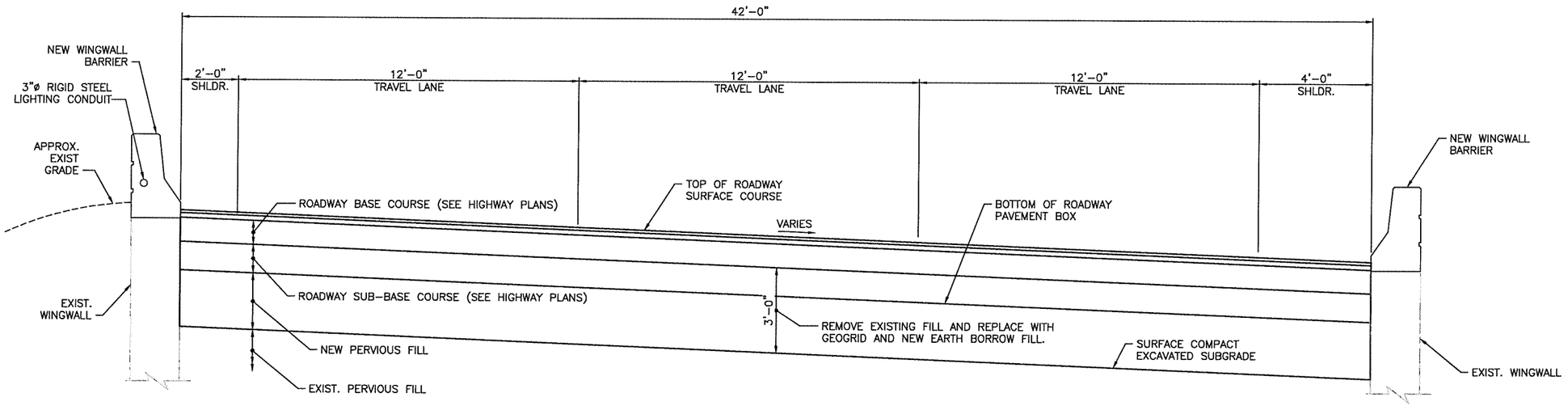
GENERAL PLAN AND ELEVATION

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

GENERAL PLAN.DWG

R-2

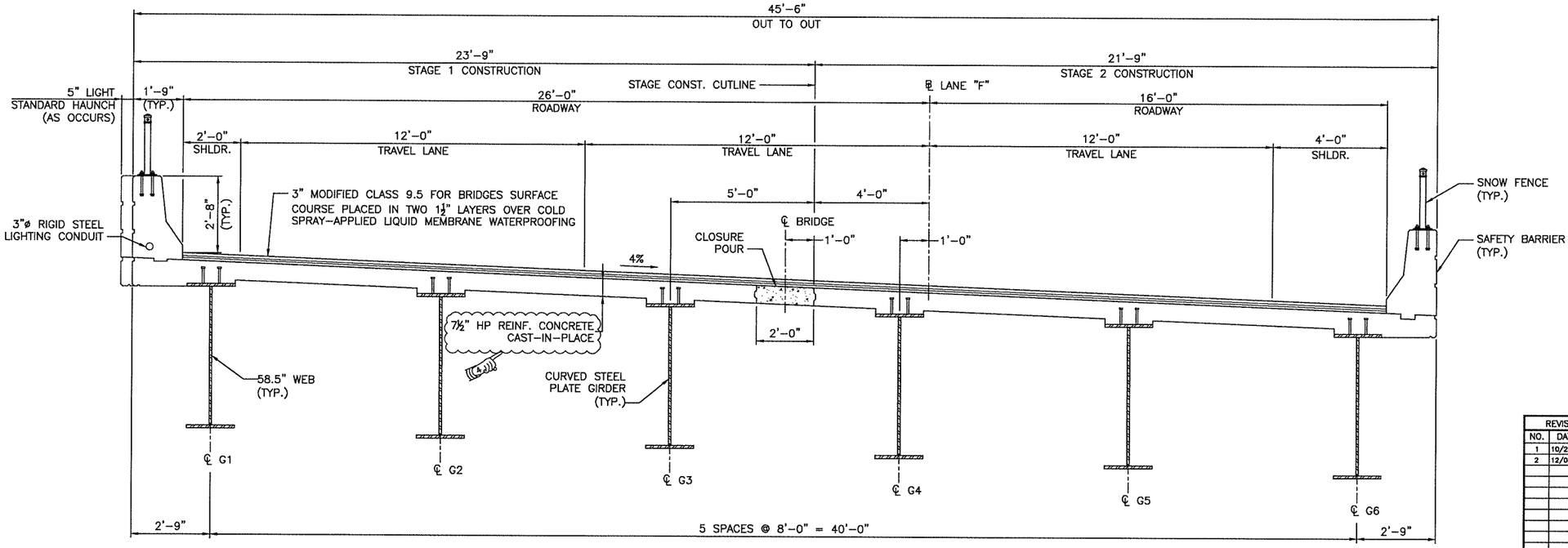
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	8	53



TYPICAL APPROACH SECTION

STA. 21+75 & 25+25

SCALE: 1/2"=1'-0"



TYPICAL TRANSVERSE BRIDGE SECTION

(LOOKING UPSTATION)

SCALE: 1/2"=1'-0"

(SPAN 1 SHOWN, SPAN 2 SIMILAR)

ADDENDUM NO. 4

NOTES:

1. SEE HIGHWAY PLANS FOR NOTES AND DIMENSIONS NOT SHOWN.
2. FOR PAVEMENT MARKING LAYOUT SEE HIGHWAY SIGNING AND STRIPING PLANS.
3. FOR LIGHTING LOCATION, SEE SHEET 7.
4. FOR LIGHTING DETAILS, SEE SHEET 49.
5. FOR SNOW FENCE DETAILS SEE SHEET 48.

(2) ENTIRE SHEET REPLACED BY ADDENDUM NO. 2

REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/06/17	LBG

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

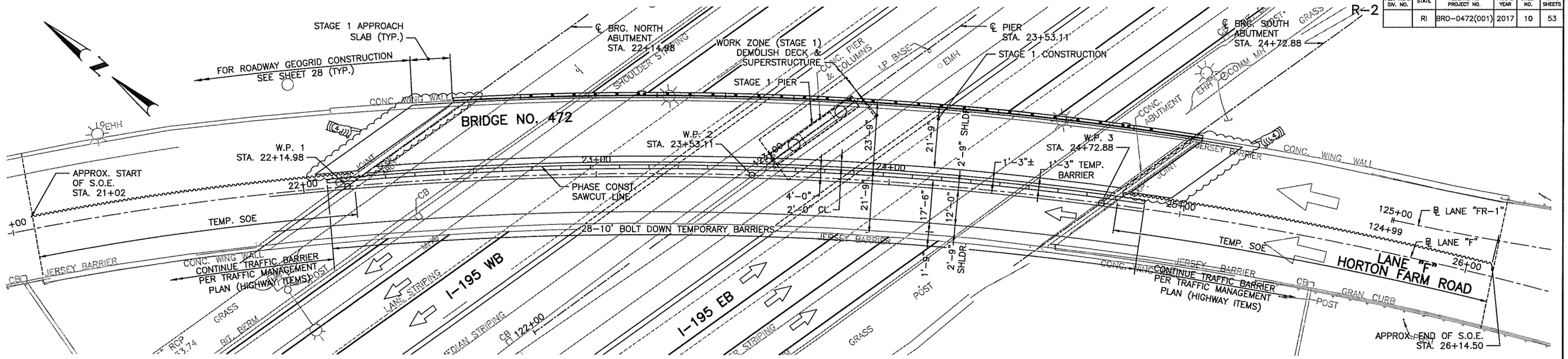
TYPICAL BRIDGE & APPROACH SECTIONS

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

TYPICAL SECTIONS.DWG

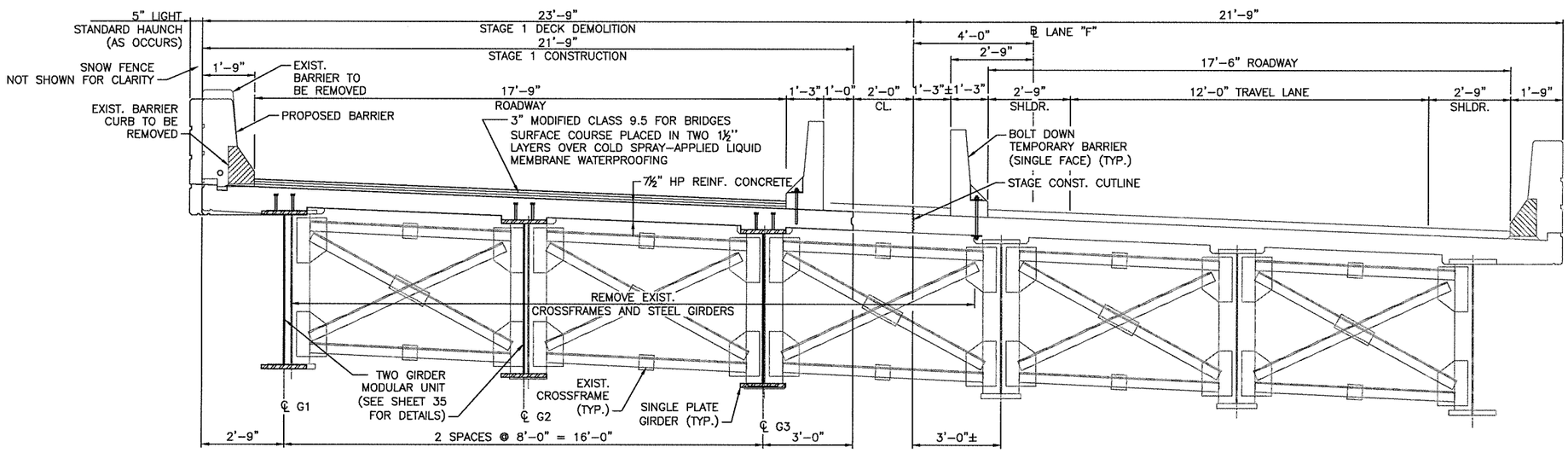
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	10	53

R-2



STAGE 1 PLAN

SCALE: 1/16"=1'-0"



SECTION STAGE 1

(LOOKING UPSTATION)
SCALE: 1/2"=1'-0"

STAGE 1 DEMOLITION

1. INSTALL MAINTENANCE AND PROTECTION OF TRAFFIC ON I-195 EB AND WB AND ON RAMP THEN CONSTRUCT MEDIAN CROSS-OVER "STAGE 1", SEE HIGHWAY PLANS.
2. INSTALL TEMPORARY SOE TO LIMITS SHOWN ON STAGE 1 PLAN.
3. INSTALL TEMPORARY PROTECTIVE SHIELDING, SEE SHEET 13 FOR DETAILS.
4. DEMOLISH EXISTING HORTON FARM ROAD BRIDGE PARAPETS AND DECK AFTER INSTALLING TEMPORARY PROTECTIVE SHIELDING.
5. AFTER REMOVING TEMPORARY SHIELDING, DEMOLISH EXISTING SUPERSTRUCTURE INCLUDING CROSSFRAMES AND STEEL GIRDERS
6. DEMOLISH EXISTING PIER.

(NOT SHOWN) 7. DEMOLISH EXISTING APPROACH SLABS, TOP OF ABUTMENT BACKWALLS, AND WINGWALL BARRIERS.

STAGE 1 CONSTRUCTION

1. CONSTRUCT PROPOSED APPROACH SLAB SHELF.
2. CONSTRUCT PROPOSED PIER FOOTING, COLUMN AND CAP.
3. INSTALL TWO GIRDER MODULAR UNITS.
4. INSTALL SINGLE PLATE GIRDER AND CONNECT WITH PREVIOUSLY INSTALLED TWO GIRDER.
5. CONSTRUCT DECK.
6. CONSTRUCT WINGWALL BARRIERS AND FILL SHEAR STUD BLOCKOUTS.
7. CONSTRUCT APPROACH SLAB.
8. INSTALL SNOW FENCE.
9. INSTALL GEOGRID, SEE SHEET 28.

ADDENDUM NO. 4

(2) ENTIRE SHEET REPLACED BY ADDENDUM NO. 2

REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/06/17	LBG

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

CONSTRUCTION STAGING & DEMOLITION DETAILS

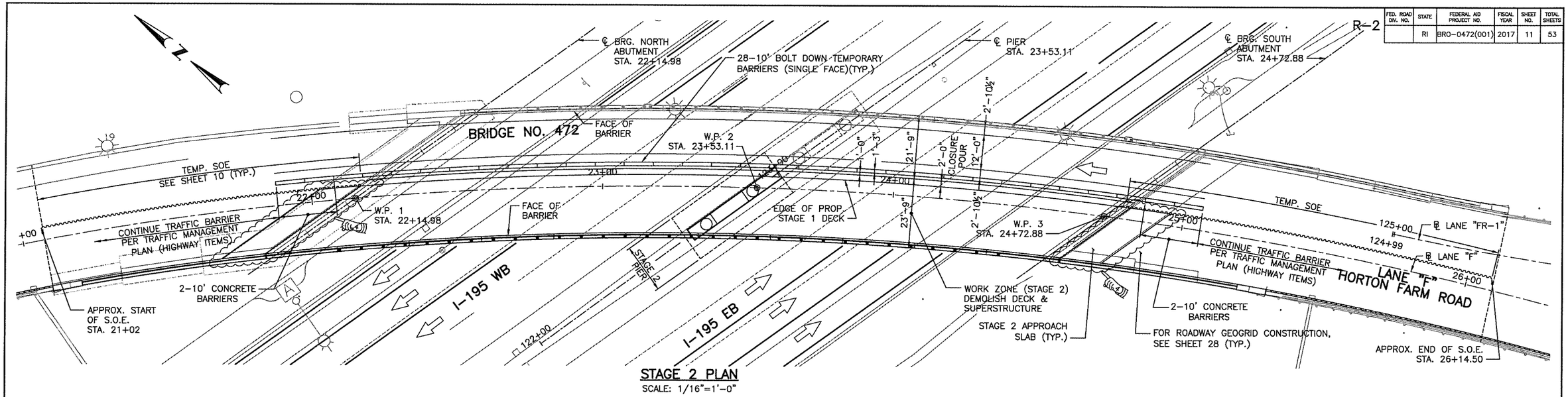
SHEET 2 OF 3

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

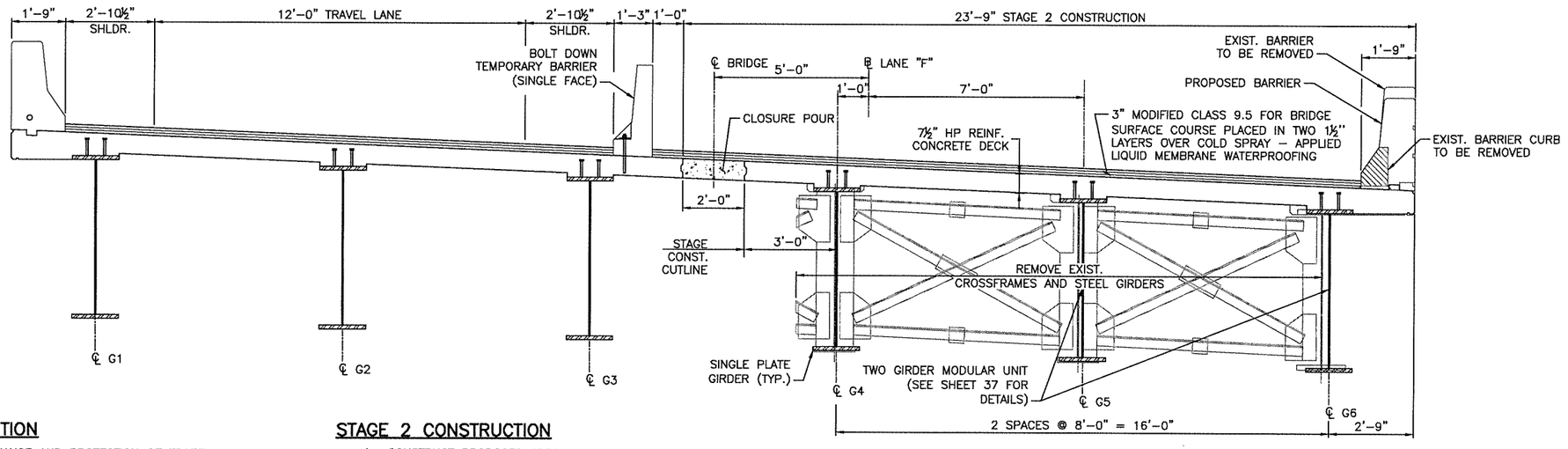
STAGING PLANS.DWG

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	11	53

R-2



STAGE 2 PLAN
SCALE: 1/16"=1'-0"



SECTION STAGE 2
(LOOKING UPSTATION)
SCALE: 1/2"=1'-0"

STAGE 2 DEMOLITION

1. INSTALL MAINTENANCE AND PROTECTION OF TRAFFIC ON I-195 EB AND WB AND ON RAMP THEN CONSTRUCT MEDIAN CROSS-OVER "STAGE 2", SEE HIGHWAY PLANS.
2. INSTALL TEMPORARY PROTECTIVE SHIELDING, SEE SHEET 13 FOR DETAILS.
3. DEMOLISH EXISTING HORTON FARM ROAD BRIDGE PARAPETS AND DECK AFTER INSTALLING TEMPORARY PROTECTIVE SHIELDING.
4. AFTER REMOVING TEMPORARY SHIELDING, DEMOLISH EXISTING SUPERSTRUCTURE INCLUDING CROSS FRAMES AND STEEL GIRDERS.
5. DEMOLISH EXISTING PIER CAPS, COLUMNS AND PIER FOOTING.

(NOT SHOWN) 6. DEMOLISH EXISTING APPROACH SLABS, TOP OF ABUTMENT BACKWALLS, AND WINGWALL BARRIERS.

STAGE 2 CONSTRUCTION

1. CONSTRUCT PROPOSED APPROACH SLAB SHELF.
2. CONSTRUCT PROPOSED PIER FOOTING, COLUMNS AND CAP.
3. INSTALL TWO GIRDER MODULAR UNITS.
4. INSTALL SINGLE GIRDER AND CONNECT WITH PREVIOUSLY INSTALLED TWO GIRDER UNIT.
5. INSTALL C.I.P. DECK.
6. CONSTRUCT CLOSURE POUR BETWEEN STAGE 1 AND STAGE 2 DECK.
7. CONSTRUCT WINGWALL BARRIERS.
8. CONSTRUCT END CLOSURE POURS AND PLACE APPROACH SLABS AND WEARING SURFACE.

(NOT SHOWN) 9. INSTALL GEOGRID, SEE SHEET 28.

ADDENDUM NO. 4

ENTIRE SHEET REPLACED BY ADDENDUM NO. 2

REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

CONSTRUCTION STAGING & DEMOLITION DETAILS
SHEET 3 OF 3

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

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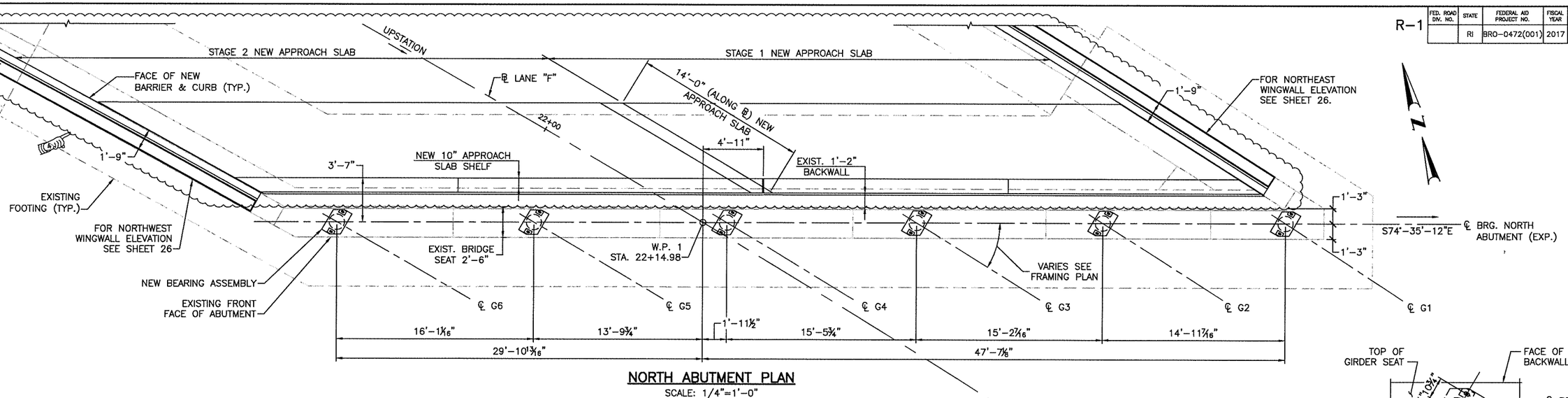
STAGING PLANS.DWG

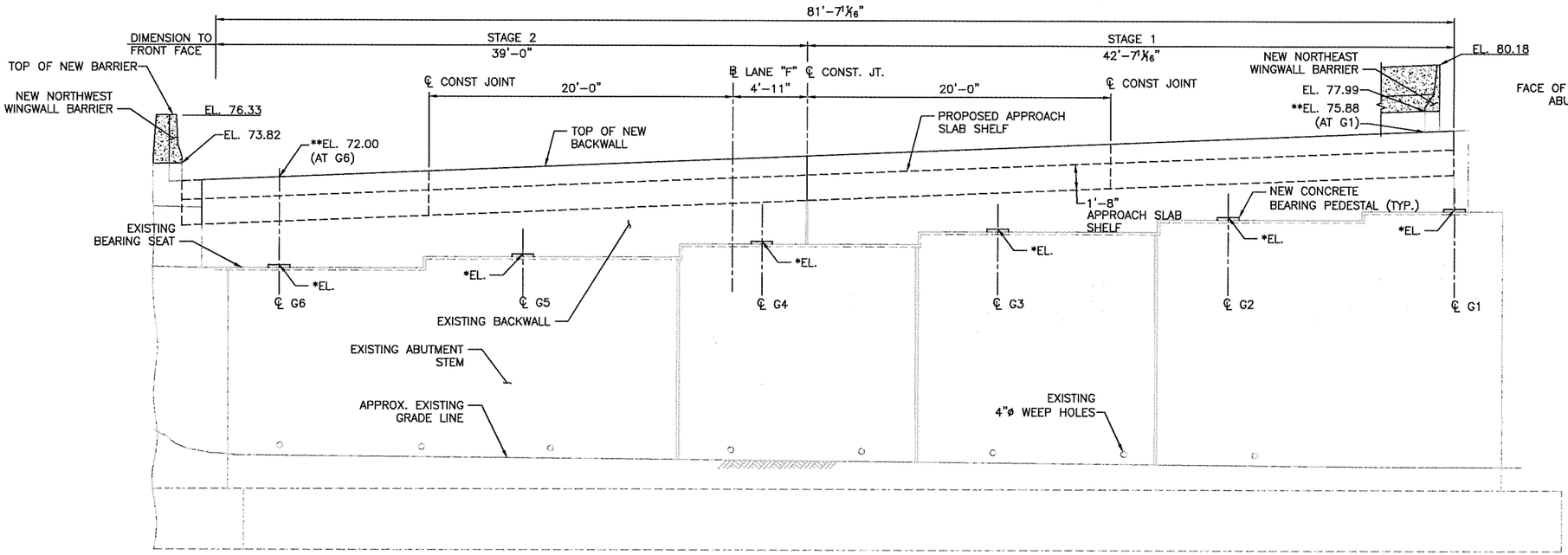
R-1

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	22	53



NORTH ABUTMENT PLAN

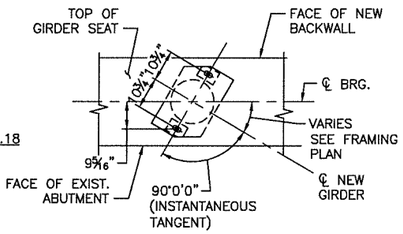
SCALE: 1/4"=1'-0"



NORTH ABUTMENT ELEVATION

SCALE: 1/4"=1'-0"

ABUTMENT ELEVATIONS	
LOCATION	SEAT EL.
GIRDER G1	EL. 70.60
GIRDER G2	EL. 69.82
GIRDER G3	EL. 69.01
GIRDER G4	EL. 68.22
GIRDER G5	EL. 67.44
GIRDER G6	EL. 66.71



ANCHOR BOLT LAYOUT PLAN (NORTH ABUTMENT)

NOT TO SCALE:

NOTES:

1. FOR ABUTMENT SECTIONS AND DETAILS, SEE SHEET 24.
2. FOR WINGWALL ELEVATIONS, SEE SHEET 26.
3. FOR BEARING LAYOUT AND DETAILS, SEE SHEET 44.
4. ABUTMENT CONCRETE SHALL BE: CLASS XX, ¾", CEMENT CONCRETE EXCEPT AS NOTED ON SHEET 5.
5. FOR VERTICAL CONSTRUCTION JOINT DETAIL AT BACKWALL AND APPROACH SLAB SEAT, SEE SHEET 24.

LEGEND:

NEW CONCRETE AREA

* ELEVATIONS TAKEN AT CENTERLINE OF BEARING SEE TABLE FOR GIRDER SEAT ELEVATIONS FOR ALL GIRDERS.

** ELEVATIONS TAKEN AT FRONT FACE OF BACKWALL.

ADDENDUM NO. 4

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NO.	DATE	BY
1	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

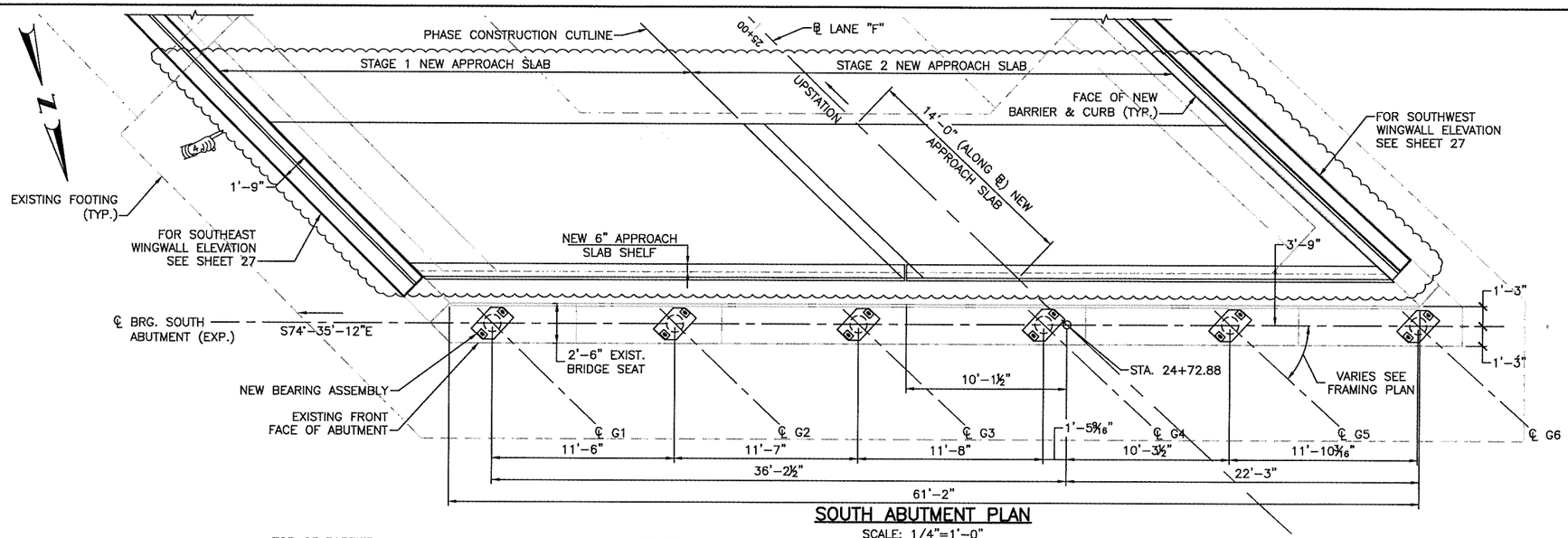
IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

NORTH ABUTMENT PLAN AND ELEVATION

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

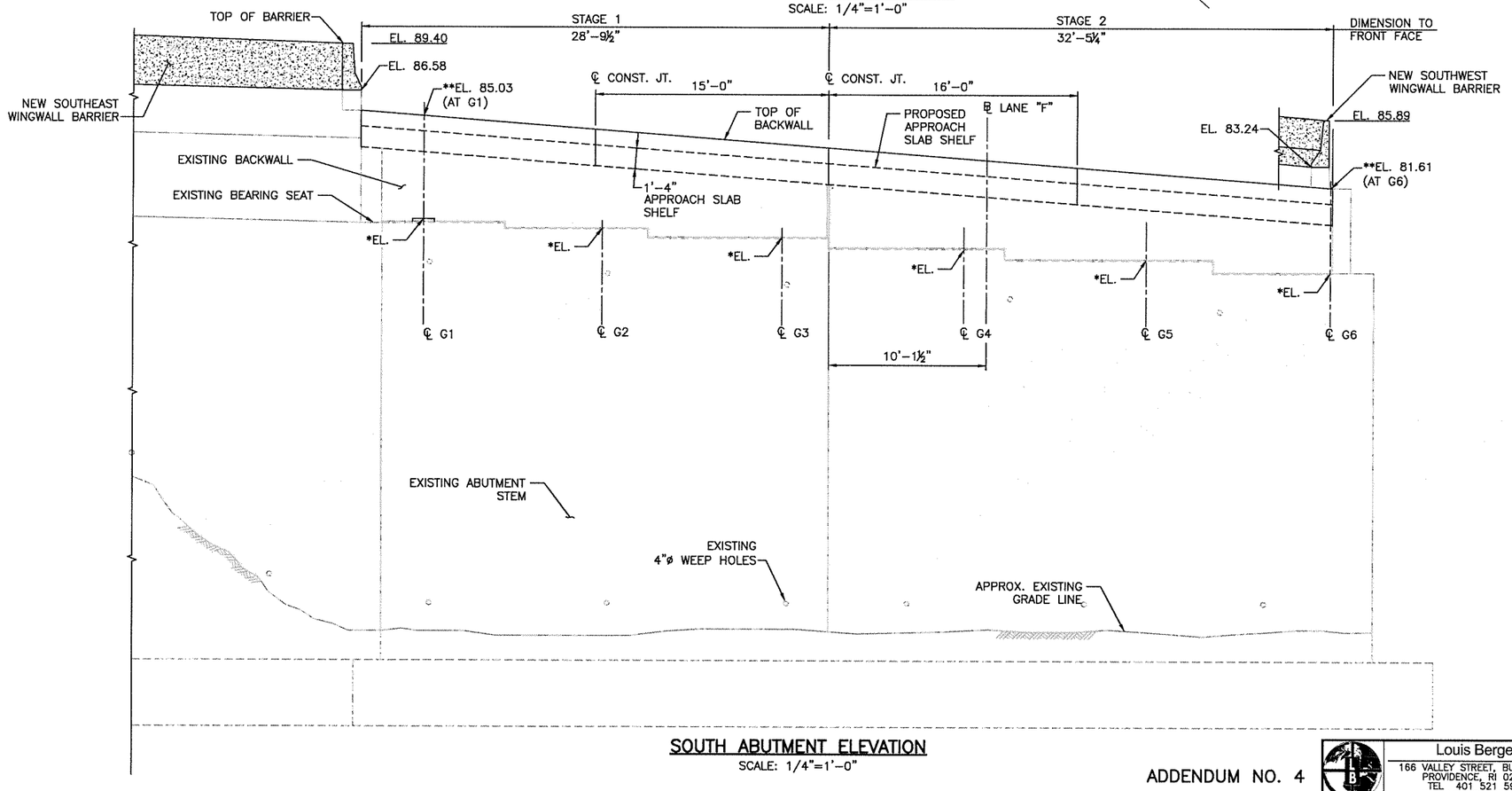
NORTH ABUTMENT.DWG

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	23	53



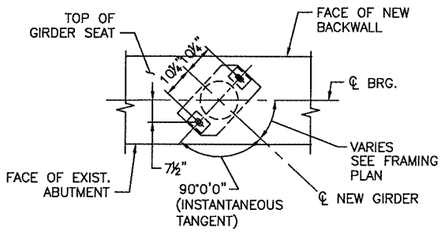
SOUTH ABUTMENT PLAN

SCALE: 1/4"=1'-0"



SOUTH ABUTMENT ELEVATION

SCALE: 1/4"=1'-0"



ANCHOR BOLT LAYOUT PLAN (SOUTH ABUTMENT)

NOT TO SCALE:

NOTES:

1. FOR ABUTMENT NOTES, SEE SHEET 22.
2. FOR ABUTMENT SECTIONS AND APPROACH SLAB SHELF, SEE SHEET 24.

LEGEND:

NEW CONCRETE AREA

* ELEVATIONS TAKEN AT CENTERLINE OF BEARING SEE TABLE FOR GIRDER SEAT ELEVATIONS FOR ALL GIRDERS.

** ELEVATIONS TAKEN AT FRONT FACE OF BACKWALL.

BOTTOM OF BEAM ABUTMENT ELEVATIONS	
LOCATION	SEAT EL.
GIRDER G1	EL. 79.66
GIRDER G2	EL. 79.02
GIRDER G3	EL. 78.44
GIRDER G4	EL. 77.77
GIRDER G5	EL. 77.06
GIRDER G6	EL. 76.24

ADDENDUM NO. 4

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REVISIONS		
NO.	DATE	BY
1	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

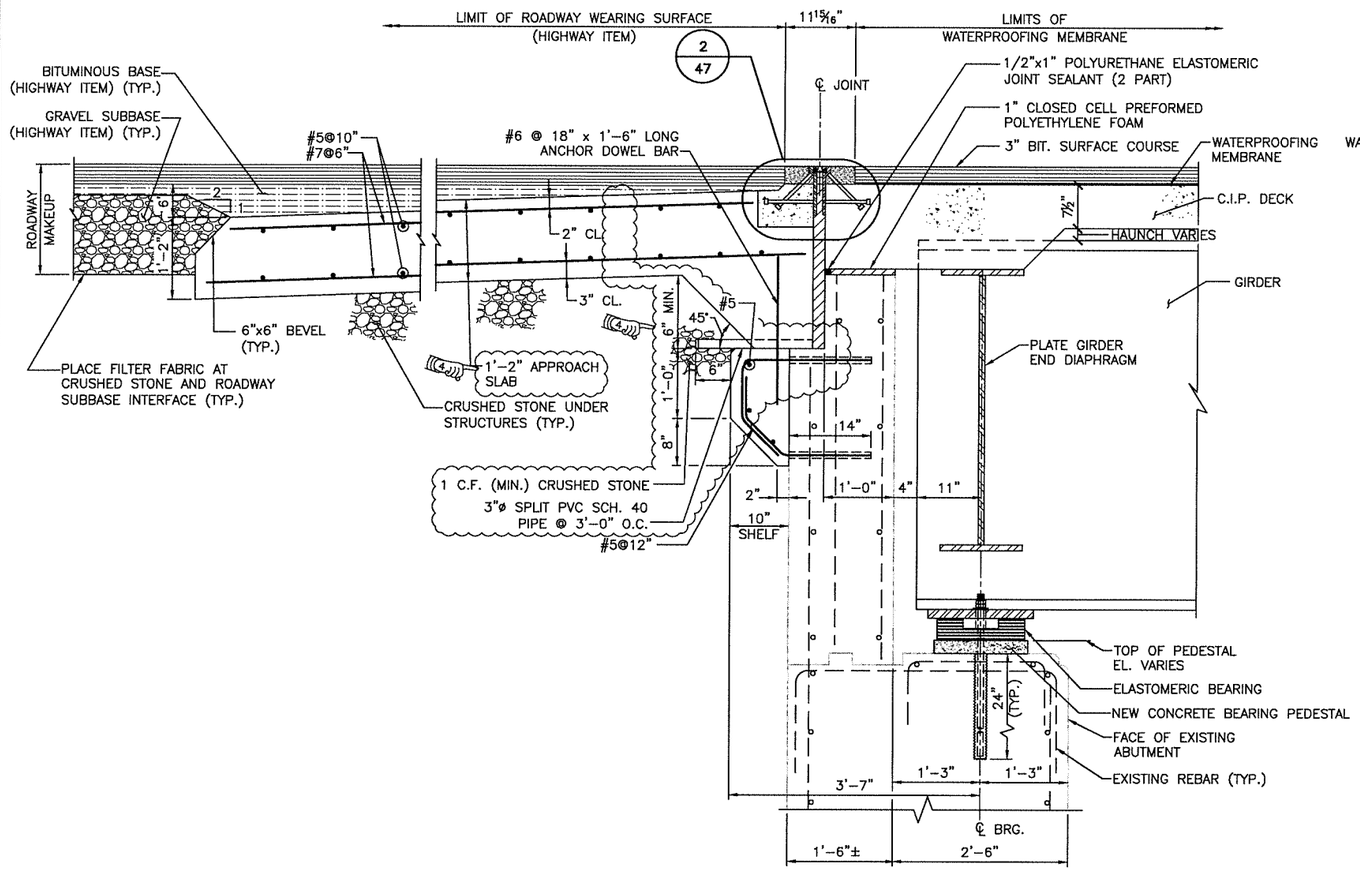
SOUTH ABUTMENT PLAN AND ELEVATION

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

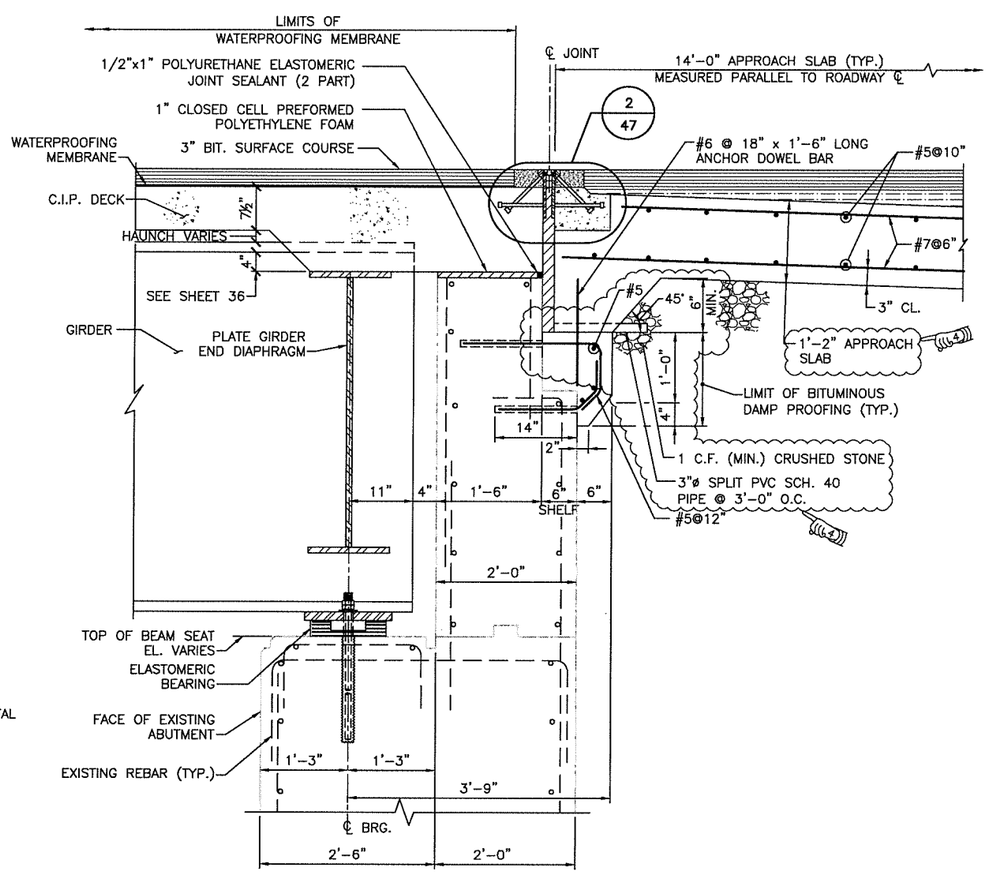
SOUTH ABUTMENT.DWG

R-2

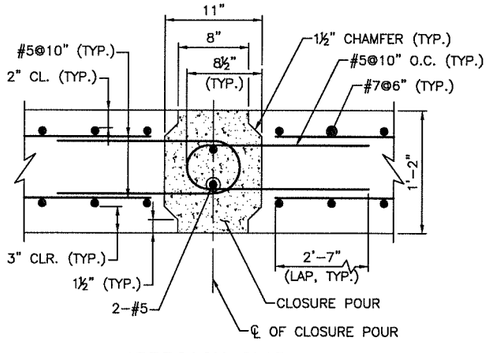
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	24	53



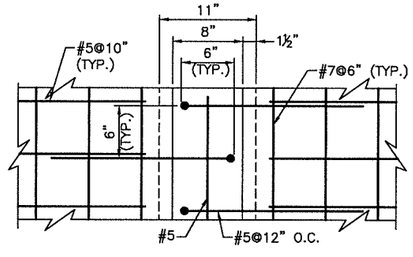
SECTION AT NORTH ABUTMENT (EXP.)
SCALE: 1"=1'-0"



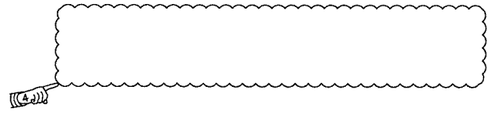
SECTION AT SOUTH ABUTMENT (EXP.)
SCALE: 1"=1'-0"



APPROACH SLAB CLOSURE POUR
SCALE: 1½"=1'-0"



TYPICAL HORIZONTAL SECTION THRU APPROACH SLAB CLOSURE POUR
SCALE: 1½"=1'-0"



NOTES:

1. FOR END DIAPHRAGM DETAILS, SEE SHEET 36.
2. FOR DECK DETAILS, SEE SHEET 40.

(2) ENTIRE SHEET REPLACED BY ADDENDUM NO. 2

ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

ABUTMENT DETAILS

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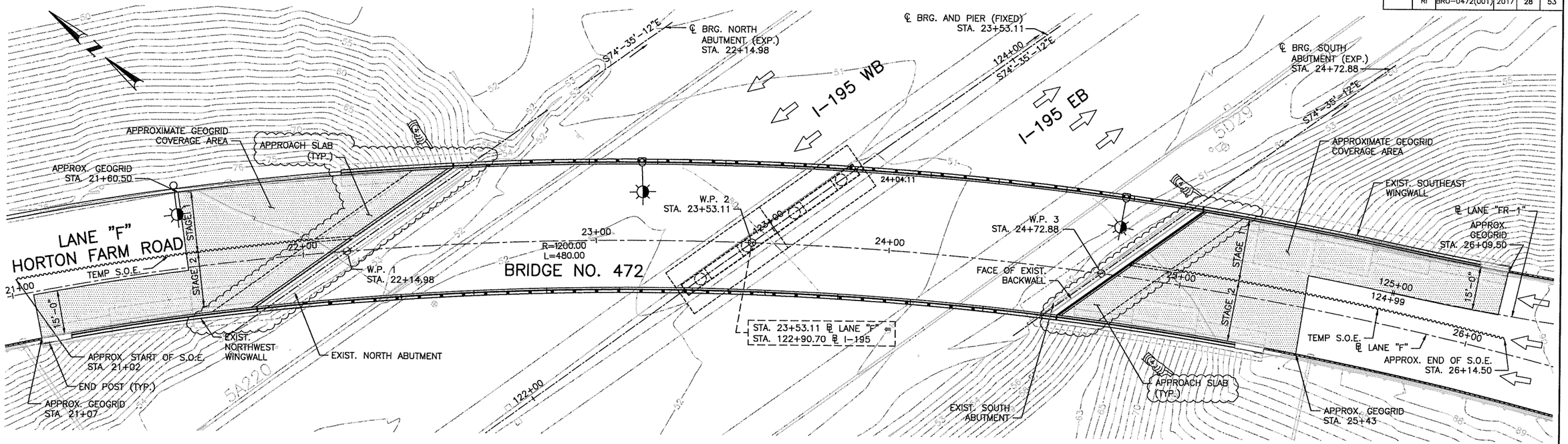
ABUTMENT DETAILS.DWG

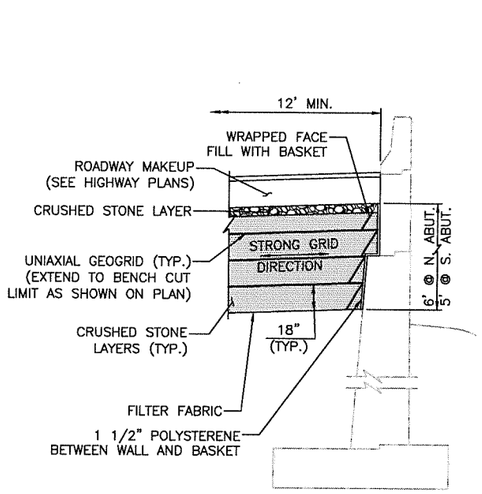
R-2

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	28	53

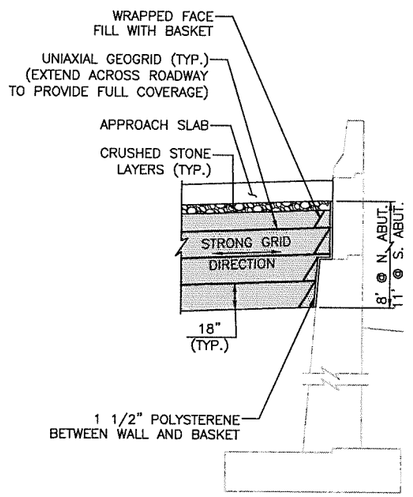


PROPOSED GEOGRID PLAN

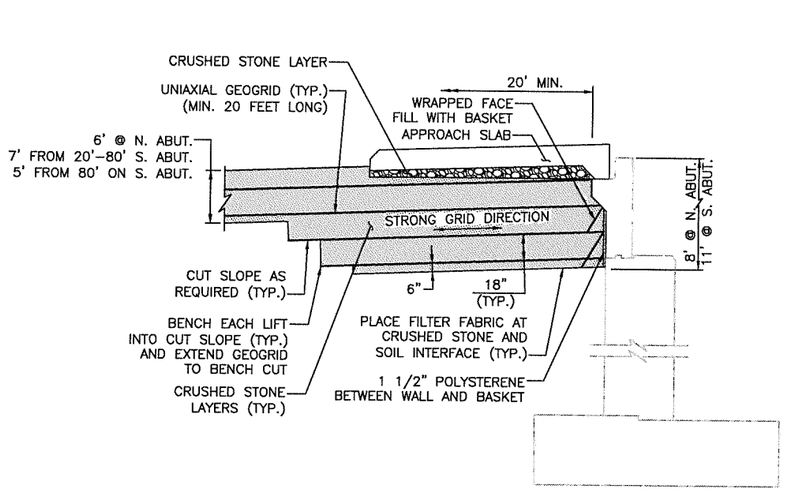
SCALE: 1/16"=1'-0"



AT END OF WINGWALL



AT APPROACH SLAB



BEHIND ABUTMENT

LIMIT OF STRUCTURAL FILL AND WRAPPED REINFORCED CRUSHED STONE

NOT TO SCALE:

ENTIRE SHEET REPLACED BY ADDENDUM NO. 2

ADDENDUM NO. 4

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REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

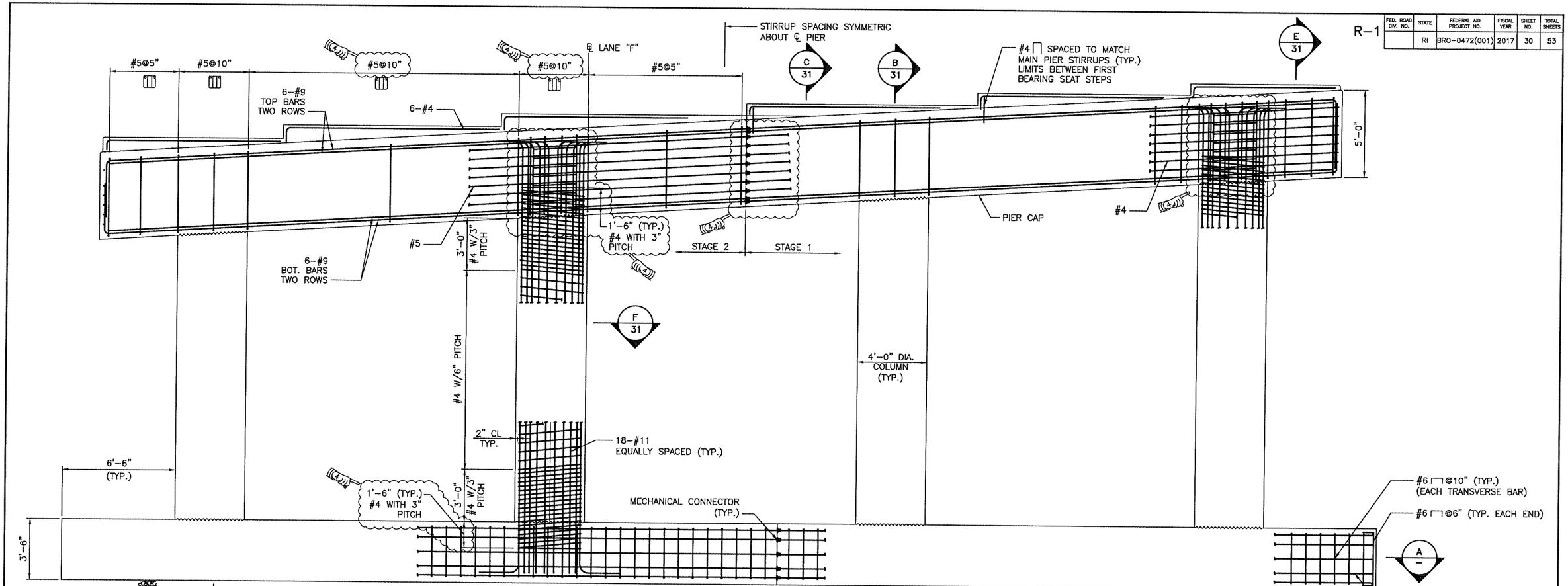
IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

GEOGRID PLAN AND DETAILS

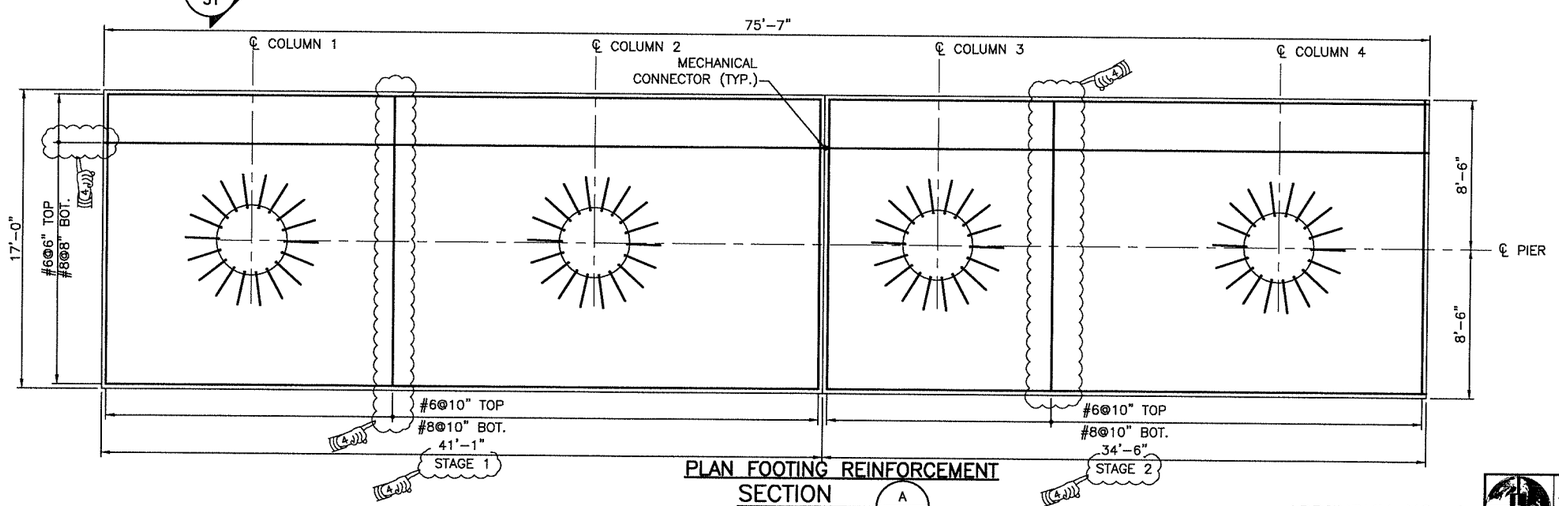
CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

GEOGRID PLAN AND DETAILS.DWG

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	30	53



ELEVATION – PIER REINFORCEMENT
SCALE: 3/8"=1'–0"



PLAN FOOTING REINFORCEMENT
SECTION A –
SCALE: 1/4"=1'–0"

ADDENDUM NO. 4

NOTES:

1. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET 9.

REVISIONS		
NO.	DATE	BY
1	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

PIER SECTIONS AND DETAILS

SHEET 1 OF 2

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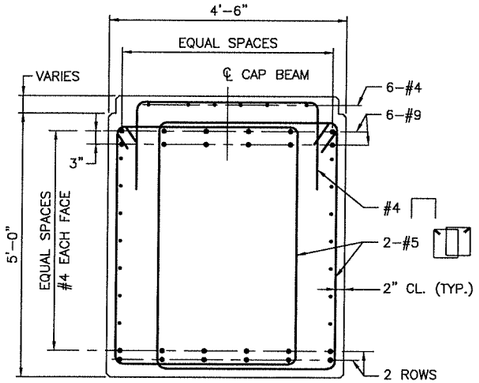
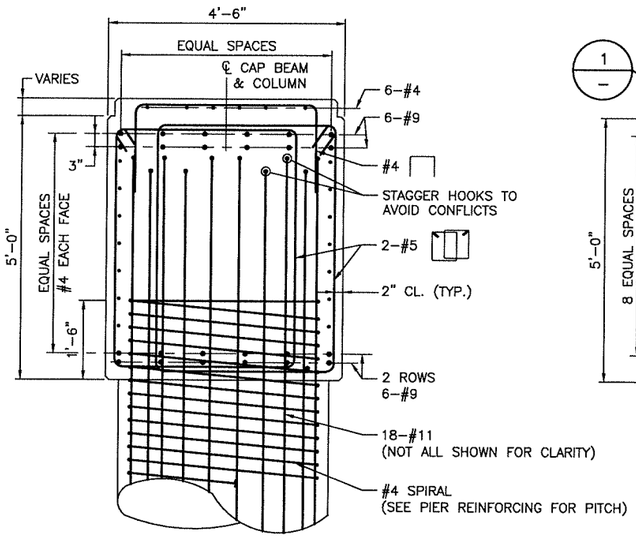
PRECAST PIER SECTIONS AND DETAILS.DWG

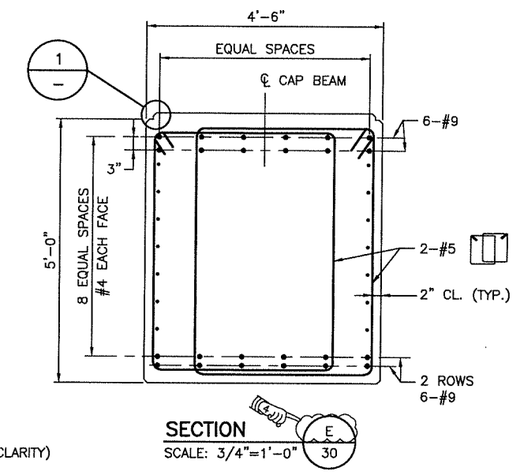
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	31	53



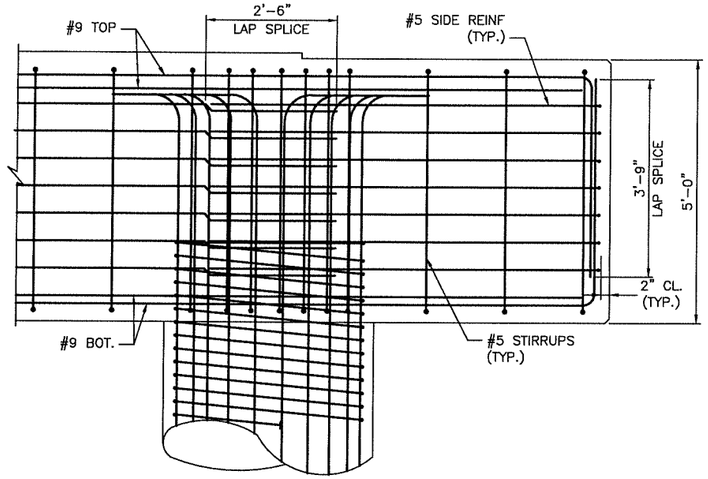
SECTION C / 30
SCALE: 3/4"=1'-0"



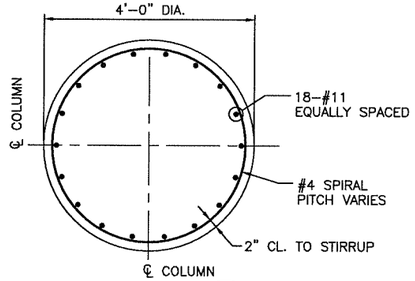
SECTION B / 30
SCALE: 3/4"=1'-0"



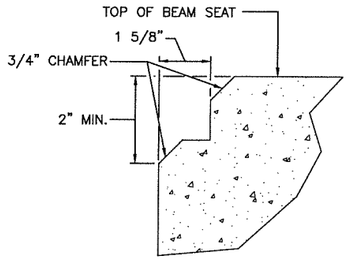
SECTION E / 30
SCALE: 3/4"=1'-0"



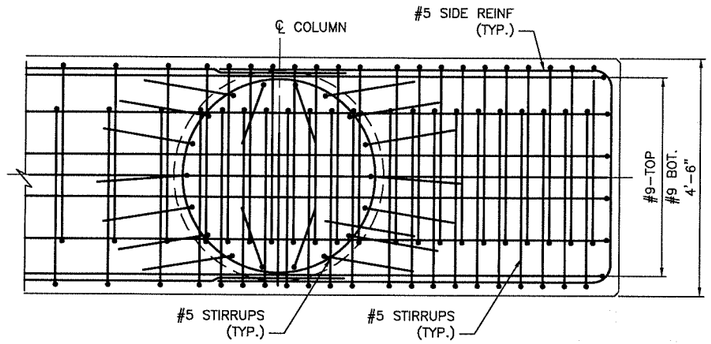
ELEVATION



SECTION F / 30
SCALE: 3/4"=1'-0"

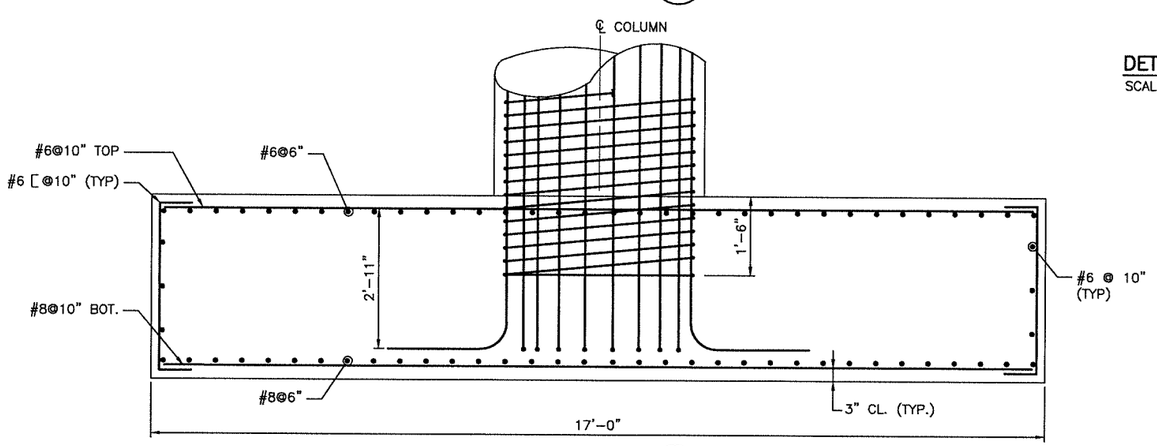


DETAIL 1 / —
SCALE: 3"=1'-0"



PLAN

PIER CAP END DETAILS
SCALE: 3/4"=1'-0"



SECTION B / 30
SCALE: 3/4"=1'-0"

ADDENDUM NO. 4

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166 VALLEY STREET, BUILDING 5
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REVISIONS		
NO.	DATE	BY
1	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

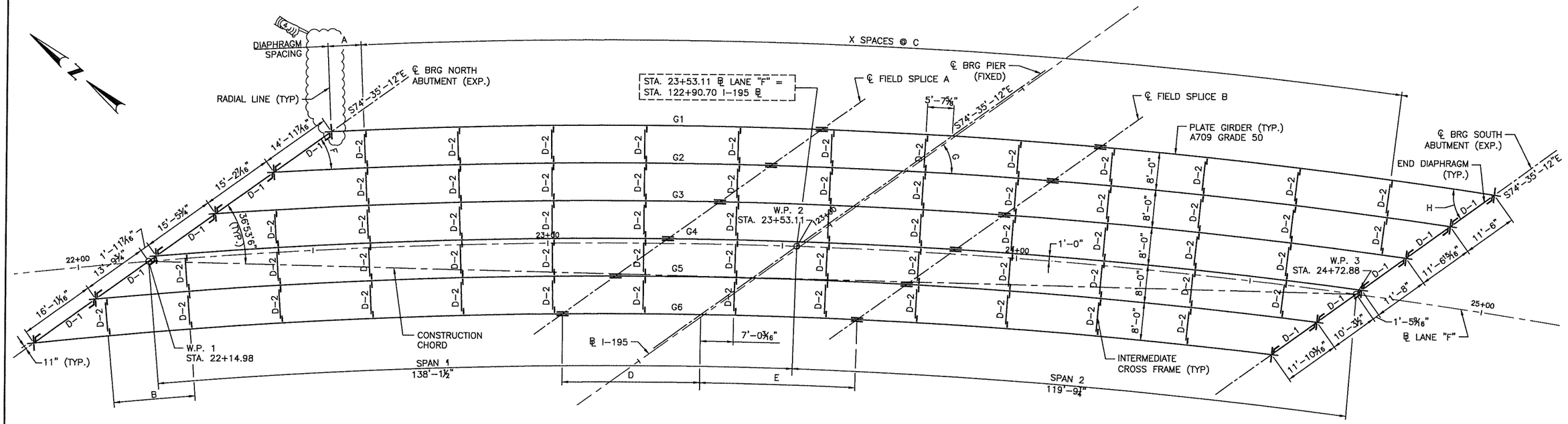
PIER SECTIONS AND DETAILS

SHEET 2 OF 2

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

PRECAST PIER SECTIONS AND DETAILS.DWG

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	33	53



FRAMING PLAN

SCALE: 1"=10'-0"

NOTES:

1. FRAMING DIMENSIONS ARE GIVEN ALONG CENTERLINES OF GIRDERS AND ALONG CENTERLINES OF BEARINGS ON ABUTMENTS AND PIERS.
2. STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE LATEST PROVISIONS OF AASHTO DESIGNATION M270 (ASTM DESIGNATION A709) GRADE 50, AS DESIGNATED ON THE PLANS.
3. FOR SIZE AND LOCATION OF ANCHOR BOLTS, SEE PIER AND ABUTMENT DRAWINGS.
4. THE ENDS OF ALL GIRDERS SHALL BE VERTICAL AFTER ALL DEAD LOADS HAVE BEEN PLACED.
5. INTERMEDIATE STIFFENERS SHALL BE PLACED ON THE INTERIOR SIDE OF THE FASCIA GIRDERS UNLESS OTHERWISE DETAILED ON THE DRAWINGS.
6. STRUCTURAL STEEL SHALL BE PREPARED AND PAINTED IN ACCORDANCE WITH THE SPECIAL PROVISIONS OF THE SPECIFICATIONS.
7. HIGH STRENGTH BOLTS SHALL CONFORM TO AASHTO DESIGNATION M 164 (ASTM A 325) AND SHALL BE ⅞" DIAMETER.
8. THE MAIN LOAD CARRYING MEMBERS ARE GIRDERS G1 TO G6.
9. END DIAPHRAGMS (D-1) AND ALL INTERMEDIATE CROSS FRAMES (D-2) SHALL BE AS SHOWN ON SHEET 36.

	TABLE OF ANGLES AND DIMENSIONS (DIMENSIONS MEASURED ALONG CL GIRDER)									
GIRDER NO.	A	X	B	C	D	E	ANGLE F	ANGLE G	ANGLE H	RADIUS
GIRDER G1	6'-11 1/2"	11	N/A	19'-11 7/16"	27'-9 3/4"	31'-6 15/16"	32°38'30"	38°49'51"	44°16'47"	1225'-0"
GIRDER G2	19-6 1/16"	11	N/A	19-9 7/8"	28'-1 3/8"	31'-10 5/8"	32°02'56"	38°21'38"	43°53'32"	1217'-0"
GIRDER G3	12'-6 13/16"	11	N/A	19'-8 5/16"	28'-5 3/16"	32'-2 9/16"	31°26'17"	37°52'45"	43°29'49"	1209'-0"
GIRDER G4	6'-1 1/2"	12	N/A	19-6 3/4"	28'-9 1/4"	32'-6 11/16"	30°48'29"	37°23'09"	43°05'35"	1201'-0"
GIRDER G5	2'-0 1/16"	11	17'-7 1/2"	19'-5 3/16"	29'-1 /2"	32'-11"	30°09'27"	36°52'48"	42°40'51"	1193'-0"
GIRDER G6	15'-10 7/8"	11	17'-6 1/16"	19-3 5/8"	29'-6"	33'-3 9/16"	29°29'06"	36°21'41"	42°15'35"	1185'-0"

NOTE:
ANGLE DIMENSIONS F, G AND H ARE TAKEN TANGENT TO GIRDER AT CENTERLINE OF BEARING.

ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY
1	12/06/17	LBG

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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

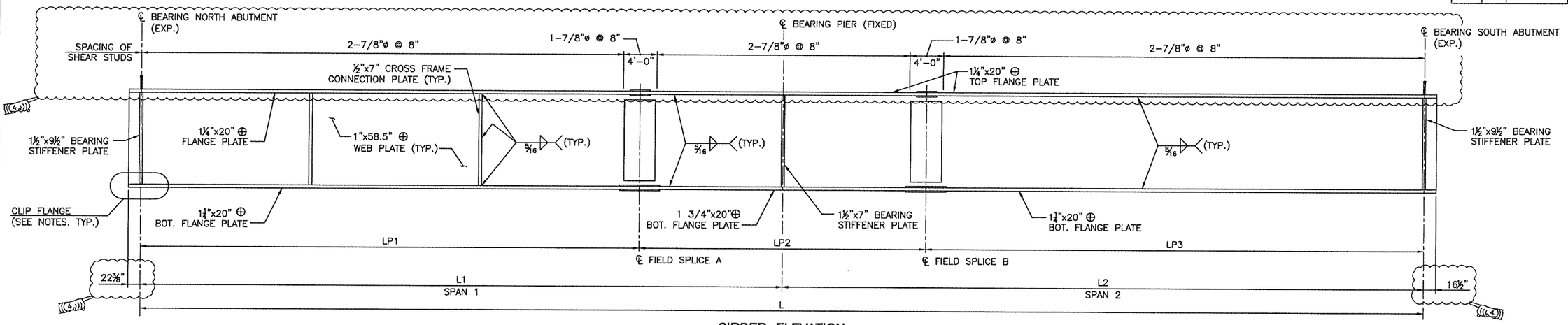
FRAMING PLAN

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

FRAMING PLAN.DWG

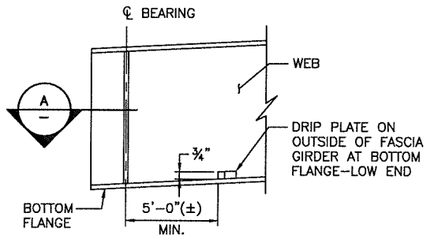
R-1

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	34	53

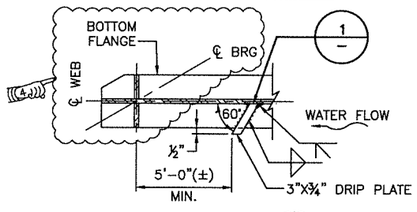


GIRDER ELEVATION

NOT TO SCALE:

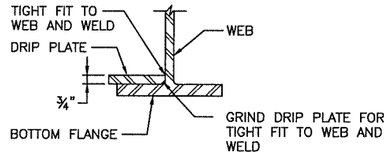


PARTIAL GIRDER ELEVATION



SECTION

NOT TO SCALE: A

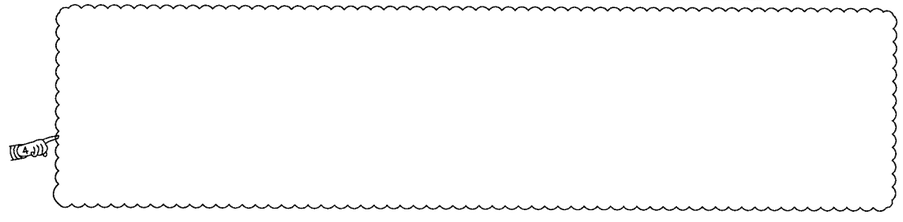


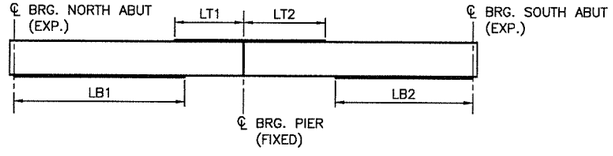
DETAIL

NOT TO SCALE: 1

DRIP PLATE DETAILS

	GIRDER DIMENSIONS ALONG C.L. OF GIRDER					
	SPAN LENGTH AND LOCATION OF SPLICE					
GIRDER NO.	L1	L2	LP1	LP2	LP3	L
GIRDER G1	132'-3 15/16"	116'-6"	104'-6 3/16"	59'-4 11/16"	84'-11 1/16"	248'-9 15/16"
GIRDER G2	134'-0 13/16"	117'-5 15/16"	105'-11 3/8"	60'-0 1/16"	85'-7 5/16"	251'-6 3/4"
GIRDER G3	135'-10 15/16"	118'-6 1/2"	107'-5 3/4"	60'-7 3/4"	86'-3 15/16"	254'-5 7/16"
GIRDER G4	137'-10 1/2"	119'-7 5/8"	109'-1 1/4"	61'-3 7/8"	87'-0 15/16"	257'-6 1/8"
GIRDER G5	139'-11 11/16"	120'-9 7/16"	110'-10 3/16"	62'-0 1/2"	87'-10 7/16"	260'-9 1/8"
GIRDER G6	142'-2 9/16"	121'-11 7/8"	112'-8 9/16"	62'-9 9/16"	88'-8 5/16"	264'-2 7/16"





TENSION ZONE DIAGRAM

NOT TO SCALE:

	TENSION ZONE			
GIRDER NO.	LB1	LB2	LT1	LT2
GIRDER G1	98'-3 13/16"	83'-2 5/8"	34'-0 1/8"	33'-3 3/8"
GIRDER G2	101'-10 11/16"	84'-6 1/2"	32'-2 1/8"	32'- 11 7/16"
GIRDER G3	103'-8 5/8"	84'-7"	32'-2 5/16"	33'-11 1/2"
GIRDER G4	105'-4 3/16"	84'-6 3/8"	32'-6 5/16"	35'- 1 1/4"
GIRDER G5	107'- 11 7/8"	84'-2 3/16"	31'-11 13/16"	36'-7 1/4"
GIRDER G6	111'-5 3/4"	83'-2 7/16"	30'-8 13/16"	38'- 9/7/16"

GIRDER ELEVATION NOTES:

1. ⊕ INDICATES CHARPY V-NOTCH TEST REQUIREMENTS (ON TENSION MEMBERS)
2. ALL DIMENSIONS SHOWN ARE HORIZONTAL.

NOTES:

1. FOR ADDITIONAL NOTES SEE SHEET 33.
2. BEARING STIFFENER PLATE SHALL BE MILLED FOR TIGHT FIT AND WELDED WITH 5/16" FILLET WELDS BOTH SIDES OF WEB.
3. BEARING STIFFENERS SHALL BE FABRICATED AS SHOWN ON THE PLANS AND SHALL BE PLACED ON BOTH SIDES OF ALL GIRDER WEBS.
4. INTERMEDIATE CONNECTION PLATES SHALL BE SET PERPENDICULAR TO THE FLANGES OF THE GIRDERS.
5. END BEARING STIFFENERS AT GIRDER ENDS SHALL BE PLUMB.
6. ALL SHEAR STUDS SHALL BE FIELD WELDED BY THE AUTOMATIC TIMED ELECTRIC ARC PROCESS.
7. CLIP BOTTOM FLANGE AT ABUTMENTS, SEE BEARING DETAILS ON SHEETS 44 AND 46.
8. SEE SHEAR CONNECTOR DETAILS ON SHEET 39.

ADDENDUM NO. 4

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REVISIONS		
NO.	DATE	BY
1	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

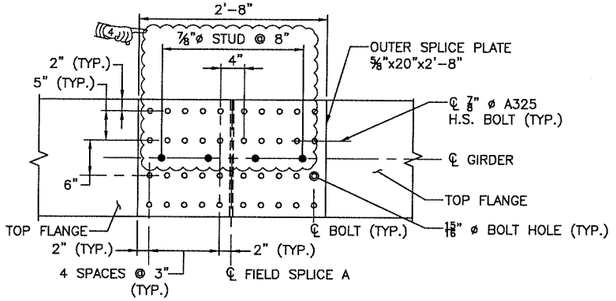
IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

GIRDER ELEVATION AND DETAILS

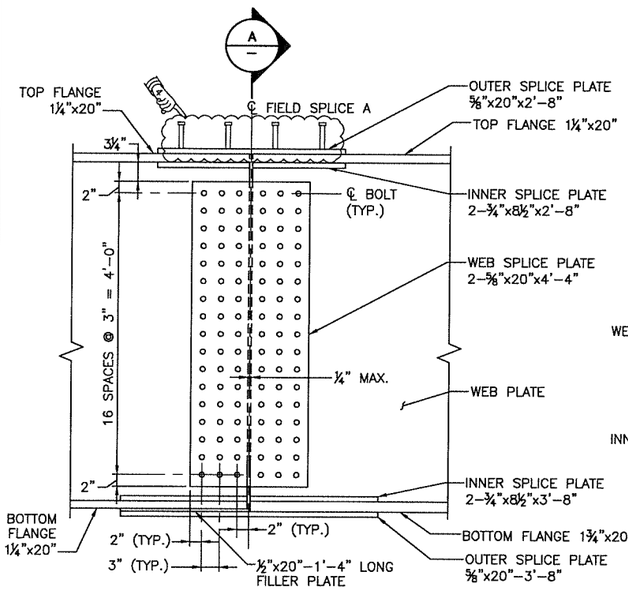
CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

GIRDER DETAILS.DWG

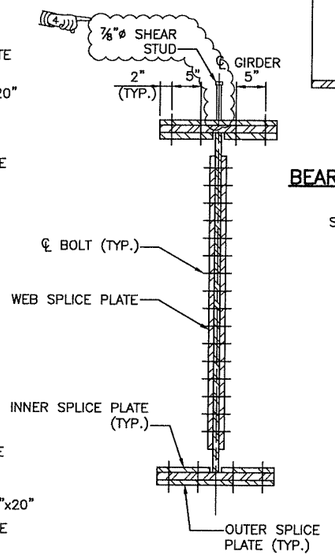
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	35	53



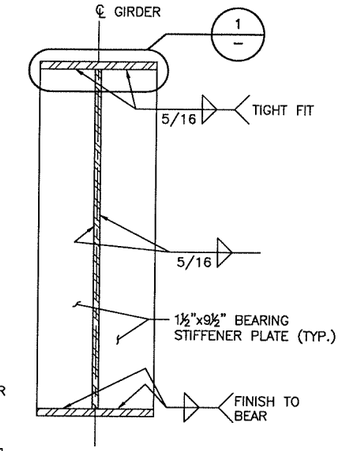
TOP FLANGE
SCALE: 1"=1'-0"



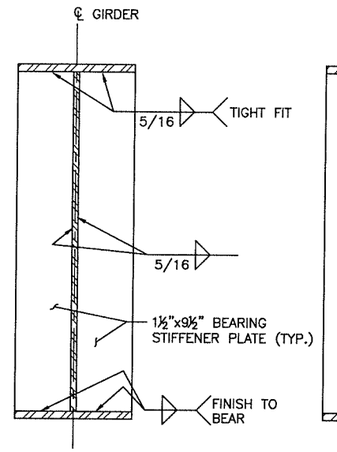
ELEVATION
SCALE: 1"=1'-0"



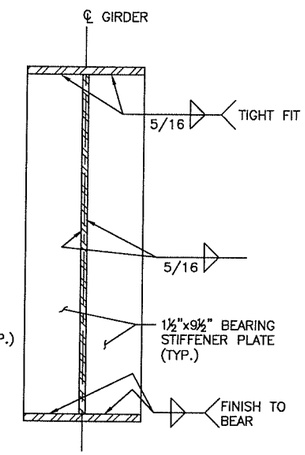
SECTION
SCALE: 1"=1'-0"



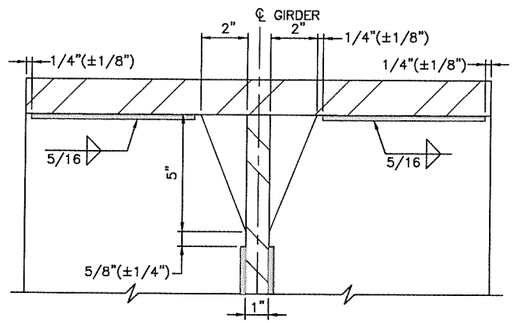
BEARING STIFFENER PLATES
SCALE: 1"=1'-0"



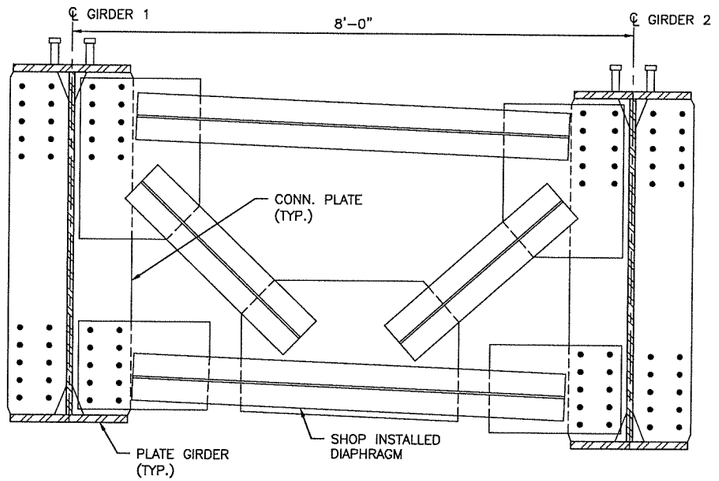
CROSS FRAME CONNECTION PLATES INTERIOR
SCALE: 1"=1'-0"



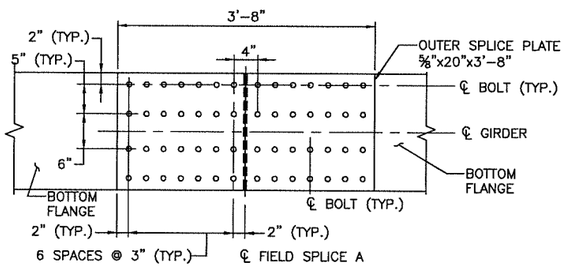
CROSS FRAME CONNECTION PLATES EXTERIOR
SCALE: 1"=1'-0"



DETAIL (1/–) (AT 20" FLANGE)



TYPICAL MODULAR UNIT
SCALE: 1"=1'-0"



BOTTOM FLANGE
SCALE: 1"=1'-0"

FIELD SPLICE DETAILS
(SPLICE A SHOWN, SPLICE B SIMILAR OPPOSITE HAND)

ALL SPLICE BOLTS SHALL HAVE NO THREADS IN SHEAR PLANE

ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY
1	12/08/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

STEEL DETAILS

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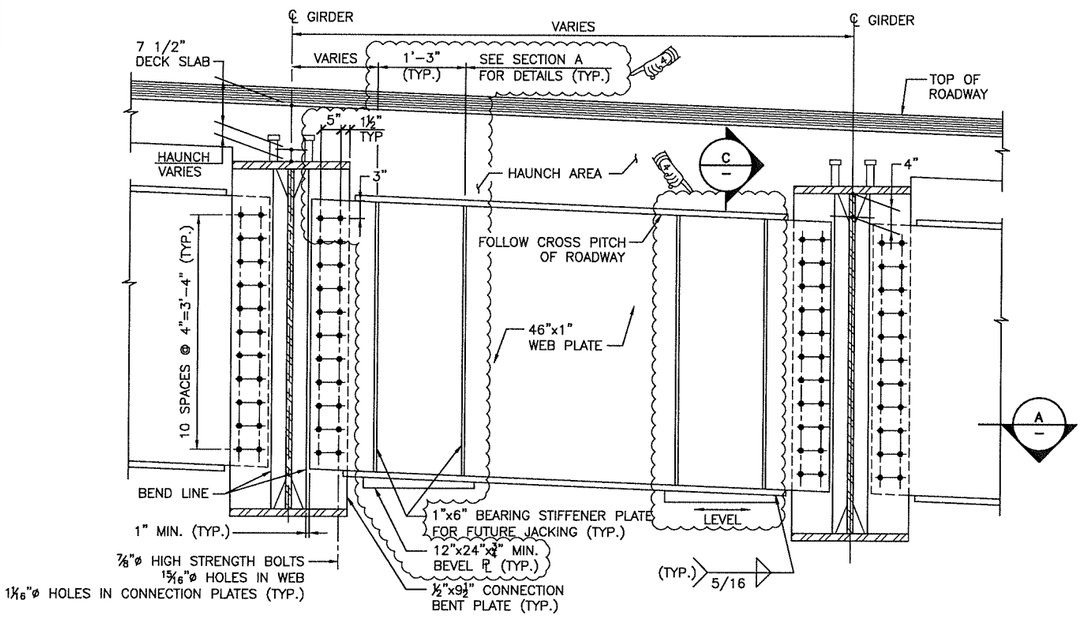
CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

STEEL DETAILS.DWG

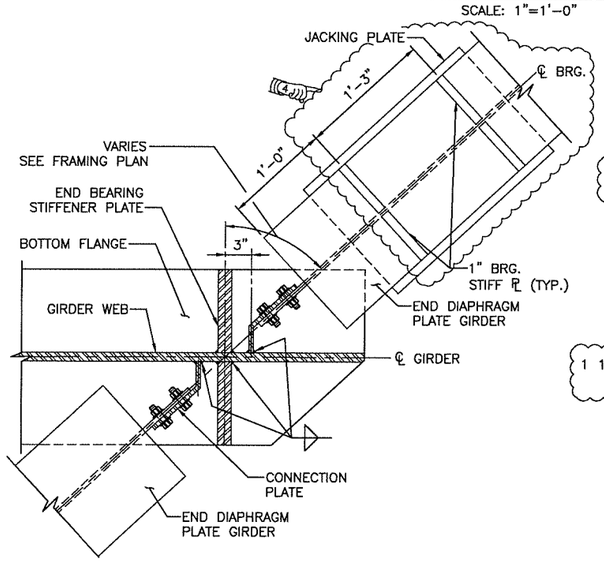
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	2017	36	53



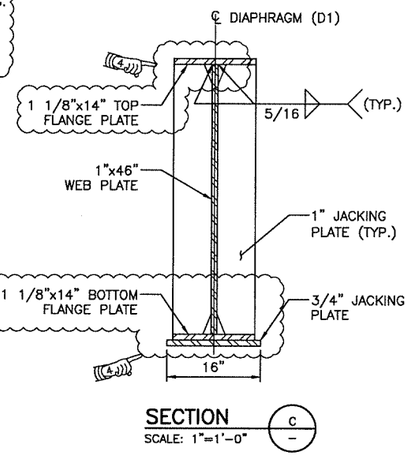
NOTE:
END BEARING STIFFENER NOT SHOWN FOR CLARITY.

END DIAPHRAGM (D1)

SCALE: 1"=1'-0"



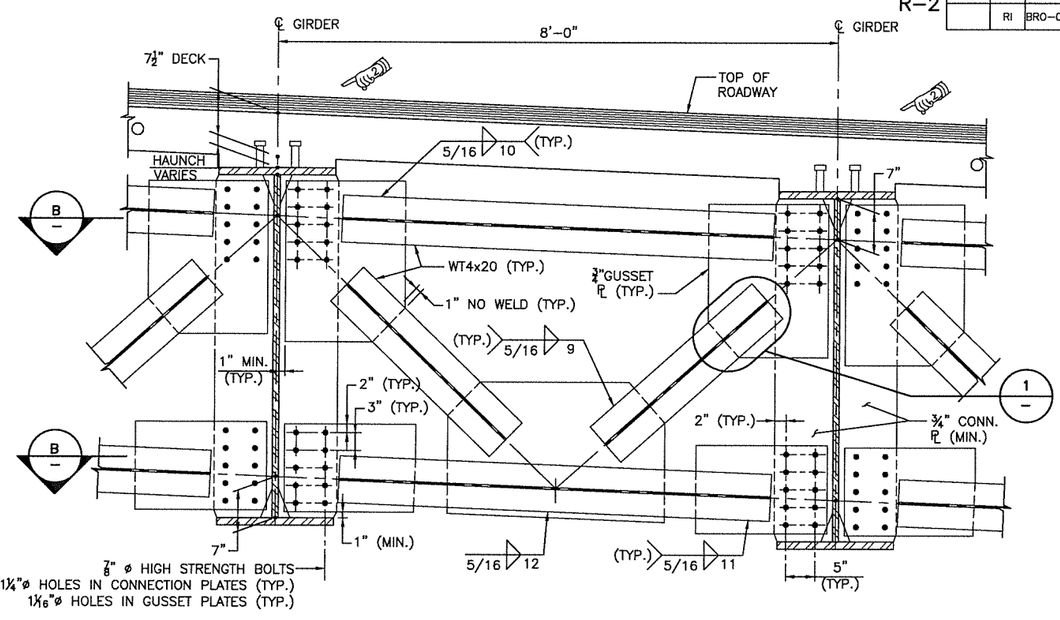
SECTION A
SCALE: 1½"=1'-0"



SECTION C
SCALE: 1"=1'-0"

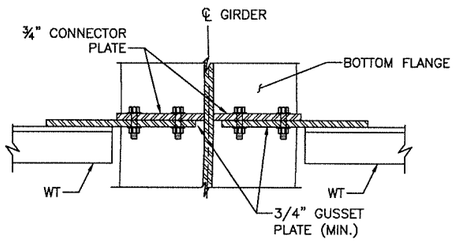
END DIAPHRAGM NOTES:

1. THE END DIAPHRAGMS ARE TO FOLLOW THE CROSS PITCH OF THE ROADWAY.
2. LOCATIONS OF HOLES IN CONNECTION PLATES SHALL BE DETERMINED BY THE FABRICATOR.



INTERMEDIATE "K" FRAME (D2)

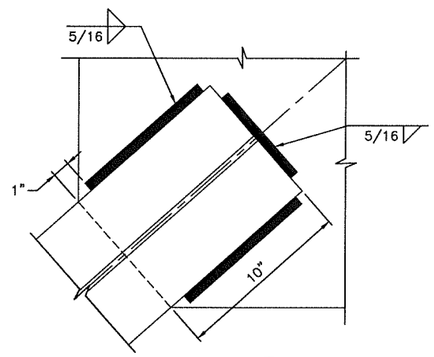
SCALE: 1"=1'-0"



SECTION B
SCALE: 1½"=1'-0"

INTERMEDIATE DIAPHRAGM NOTE:

1. DO NOT TIGHTEN BOLTS UNTIL AFTER DECK IS IN PLACE.



DETAIL 1
SCALE: 3"=1'-0"

ADDENDUM NO. 4

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REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/08/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

DIAPHRAGM DETAILS

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

DIAPHRAGM DETAILS.DWG

R–2	FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		RI	BRO–0472(001)	2017	38	53

CONCRETE DECK DEFLECTIONS (INCHES)

GIRDER NO.	CL BRG. N. ABUT.	SPAN 1									CL BRG. PIER	SPAN 2									CL BRG. S. ABUT.
		0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L		0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	
GIRDER G1	0.00	0.56	1.05	1.37	1.52	1.47	1.26	0.92	0.53	0.21	0.00	0.02	0.15	0.35	0.53	0.67	0.72	0.67	0.52	0.30	0.00
GIRDER G2	0.00	0.53	0.96	1.28	1.43	1.41	1.21	0.91	0.55	0.20	0.00	0.01	0.15	0.32	0.50	0.62	0.67	0.63	0.49	0.27	0.00
GIRDER G3	0.00	0.53	0.98	1.30	1.45	1.42	1.24	0.92	0.55	0.23	0.00	0.00	0.12	0.31	0.48	0.61	0.66	0.61	0.48	0.27	0.00
GIRDER G4	0.00	0.56	1.04	1.38	1.54	1.51	1.31	0.99	0.60	0.22	0.00	-0.01	0.12	0.28	0.47	0.59	0.65	0.61	0.48	0.27	0.00
GIRDER G5	0.00	0.61	1.13	1.50	1.68	1.66	1.45	1.09	0.68	0.28	0.00	-0.03	0.08	0.27	0.44	0.58	0.64	0.61	0.48	0.27	0.00
GIRDER G6	0.00	0.67	1.24	1.67	1.90	1.90	1.68	1.29	0.80	0.33	0.00	-0.06	0.04	0.21	0.41	0.56	0.63	0.61	0.48	0.27	0.00

SUPERIMPOSED DEAD LOAD DEFLECTIONS (INCHES)

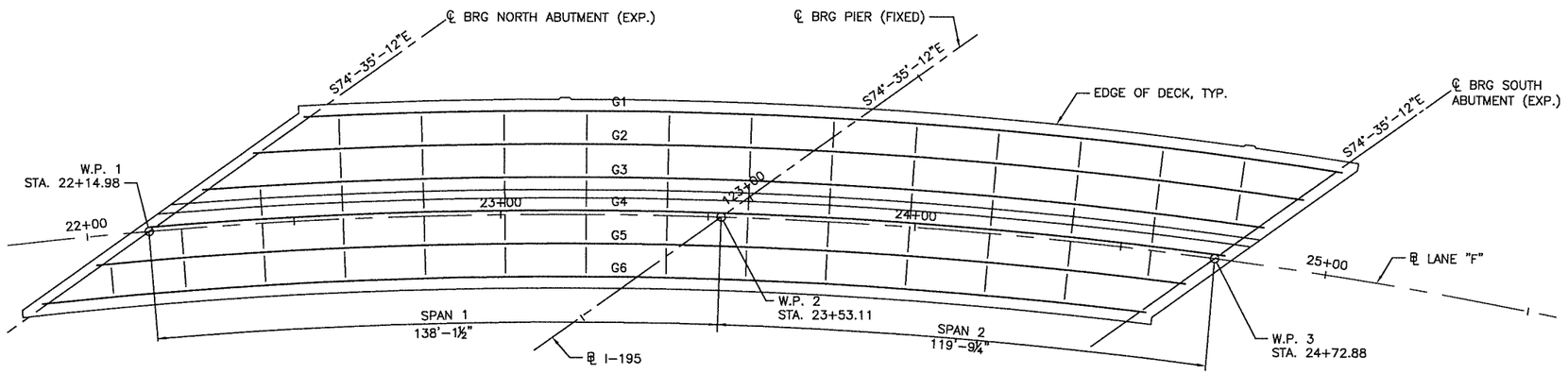
GIRDER NO.	CL BRG. N. ABUT.	SPAN 1									CL BRG. PIER	SPAN 2									CL BRG. S. ABUT.
		0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L		0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	
GIRDER G1	0.00	0.23	0.44	0.57	0.64	0.62	0.53	0.39	0.22	0.09	0.00	0.01	0.06	0.14	0.22	0.28	0.30	0.28	0.22	0.13	0.00
GIRDER G2	0.00	0.18	0.33	0.45	0.51	0.51	0.44	0.34	0.21	0.08	0.00	-0.01	0.03	0.09	0.15	0.20	0.22	0.21	0.17	0.09	0.00
GIRDER G3	0.00	0.17	0.31	0.41	0.46	0.46	0.40	0.30	0.18	0.08	0.00	-0.01	0.02	0.07	0.12	0.16	0.18	0.17	0.14	0.08	0.00
GIRDER G4	0.00	0.18	0.33	0.44	0.49	0.47	0.41	0.30	0.18	0.07	0.00	-0.01	0.03	0.07	0.13	0.16	0.18	0.17	0.13	0.07	0.00
GIRDER G5	0.00	0.21	0.39	0.52	0.57	0.56	0.48	0.35	0.21	0.08	0.00	-0.01	0.03	0.09	0.15	0.19	0.21	0.20	0.15	0.09	0.00
GIRDER G6	0.00	0.25	0.47	0.62	0.70	0.70	0.62	0.47	0.29	0.12	0.00	-0.02	0.03	0.10	0.18	0.24	0.27	0.26	0.20	0.11	0.00

TOP OF FORM ELEVATIONS BEFORE PLACEMENT OF CONCRETE

GIRDER NO.	CL BRG. N. ABUT.	SPAN 1									CL BRG. PIER	SPAN 2									CL BRG. S. ABUT.
		0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L		0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	
GIRDER G1	76.59	77.81	78.95	79.87	80.56	80.97	81.16	81.16	81.08	81.12	81.30	81.75	82.36	83.07	83.75	84.38	84.87	85.24	85.45	85.55	85.56
GIRDER G2	75.88	77.01	78.02	78.92	79.60	80.06	80.30	80.38	80.38	80.40	80.61	81.05	81.66	82.31	83.00	83.59	84.10	84.47	84.73	84.87	84.94
GIRDER G3	75.18	76.28	77.30	78.17	78.84	79.28	79.54	79.63	79.65	79.72	79.92	80.35	80.93	81.62	82.27	82.88	83.39	83.78	84.04	84.21	84.31
GIRDER G4	74.48	75.61	76.67	77.54	78.21	78.65	78.88	78.96	78.96	78.99	79.21	79.65	80.25	80.90	81.59	82.20	82.71	83.11	83.39	83.56	83.67
GIRDER G5	73.78	74.99	76.10	77.03	77.71	78.14	78.34	78.36	78.33	78.33	78.50	78.92	79.51	80.22	80.89	81.53	82.07	82.47	82.75	82.93	83.03
GIRDER G6	73.10	74.39	75.58	76.58	77.33	77.78	77.96	77.93	77.78	77.68	77.77	78.16	78.77	79.46	80.20	80.87	81.43	81.86	82.14	82.31	82.38

FINISH GRADE ELEVATIONS ALONG C.L. GIRDER

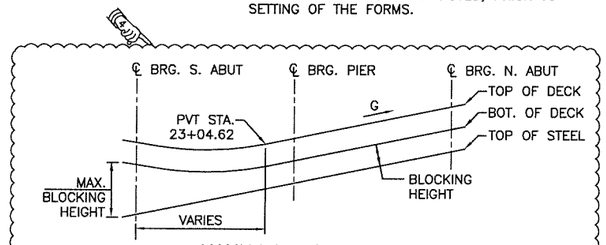
GIRDER NO.	CL BRG. N. ABUT.	SPAN 1									CL BRG. PIER	SPAN 2									CL BRG. S. ABUT.
		0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L		0.1L	0.2L	0.3L	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	
GIRDER G1	77.47	77.89	78.34	78.80	79.28	79.76	80.24	80.73	81.21	81.69	82.18	82.60	83.03	83.45	83.88	84.30	84.73	85.16	85.58	86.01	86.43
GIRDER G2	76.76	77.18	77.61	78.06	78.53	79.02	79.52	80.01	80.50	81.00	81.49	81.92	82.35	82.79	83.22	83.65	84.08	84.51	84.95	85.38	85.81
GIRDER G3	76.05	76.46	76.89	77.33	77.80	78.28	78.78	79.28	79.79	80.29	80.79	81.23	81.67	82.11	82.55	82.99	83.43	83.86	84.30	84.74	85.18
GIRDER G4	75.35	75.75	76.17	76.60	77.06	77.54	78.03	78.55	79.06	79.57	80.09	80.53	80.98	81.43	81.87	82.32	82.76	83.21	83.65	84.10	84.55
GIRDER G5	74.66	75.05	75.45	75.88	76.33	76.80	77.29	77.80	78.32	78.85	79.37	79.83	80.28	80.73	81.18	81.64	82.09	82.54	83.00	83.45	83.90
GIRDER G6	73.97	74.35	74.74	75.16	75.60	76.06	76.54	77.05	77.57	78.11	78.65	79.11	79.57	80.03	80.49	80.95	81.41	81.87	82.33	82.79	83.26



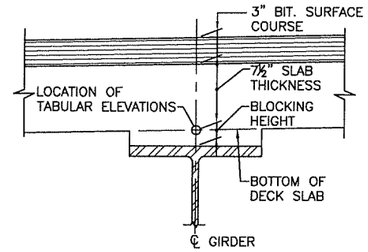
DECK GRADES
SCALE: 1/16"=1'-0"

DECK GRADE NOTES:

1. ELEVATIONS OF GIRDERS ARE GIVEN AT THE CENTERLINE OF BEARING OF EACH GIRDER AND AT THE TENTH POINTS OF EACH SPAN.
2. FINISH GRADE ELEVATIONS SHOWN IN THE TABLE ARE THE PROPOSED TOP OF DECK ELEVATIONS AFTER ALL DEAD LOADS HAVE TAKEN PLACE.
3. TOP OF GIRDER ELEVATIONS SHOWN IN THE TABLE ARE THE THEORETICAL ELEVATIONS AT THE TOP OF GIRDER PRIOR TO PLACING OF CONCRETE.
4. BEFORE THE FORMS ARE BUILT, ELEVATIONS ON THE TOPS OF GIRDER SHALL BE OBTAINED AT THE POINTS INDICATED IN THE TABLE. THE DIFFERENCE BETWEEN THE ELEVATIONS OBTAINED AND THE TOP OF FORM ELEVATIONS SHOWN IN THE TABLE ARE THE ACTUAL BLOCKING DISTANCES FROM THE TOP OF GIRDER TO THE BOTTOM OF SLAB AT THE CENTERLINE OF GIRDER. IF THE ACTUAL ELEVATIONS OBTAINED VARY BY MORE THAN 1", THE ENGINEER SHALL BE CONTACTED, AND ANY ADJUSTMENTS APPROVED, PRIOR TO SETTING OF THE FORMS.



HAUNCH ELEVATION
NOT TO SCALE:



HAUNCH DETAIL
SCALE: 1 1/2"=1'-0"

NOTE:

AFTER THE GIRDERS ARE ERECTED, BUT BEFORE THE DECK IS PLACED, ELEVATIONS ON THE TOP OF FLANGE OF THE GIRDERS ARE TO BE OBTAINED AT THE POINTS INDICATED IN THE ELEVATION TABLE. THE DIFFERENCE BETWEEN THE ELEVATIONS OBTAINED AND THOSE SHOWN IN THE TABLE GIVES THE ACTUAL BLOCKING DISTANCE FROM THE TOP OF FLANGE TO THE BOTTOM OF SLAB AT CENTER LINE OF WEB.

ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

DECK GRADES

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

Louis Berger
166 VALLEY STREET, BUILDING 5
PROVIDENCE, RI 02909
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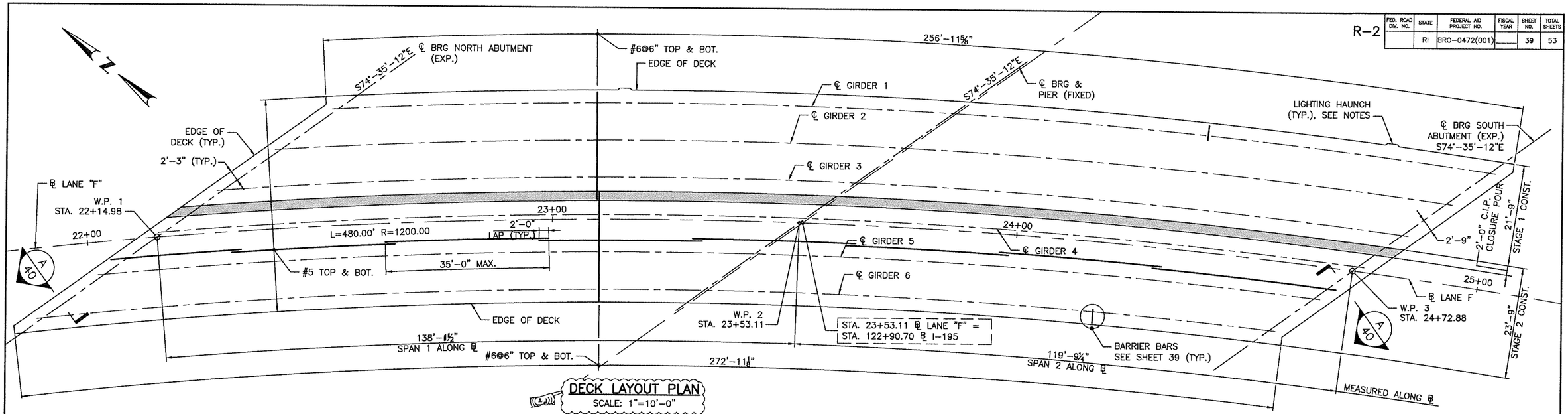
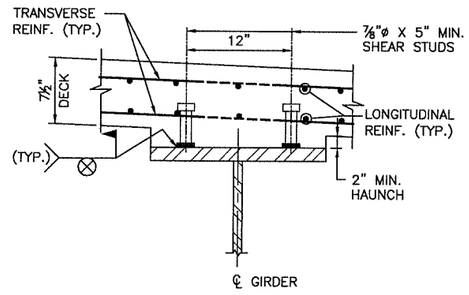
DECK GRADES.DWG

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	____	39	53

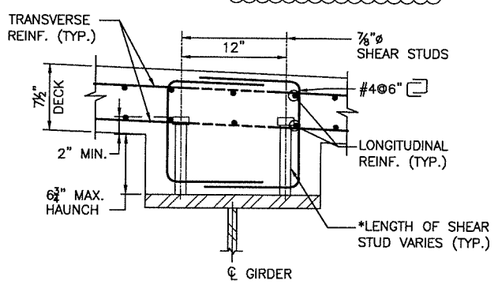
R-2



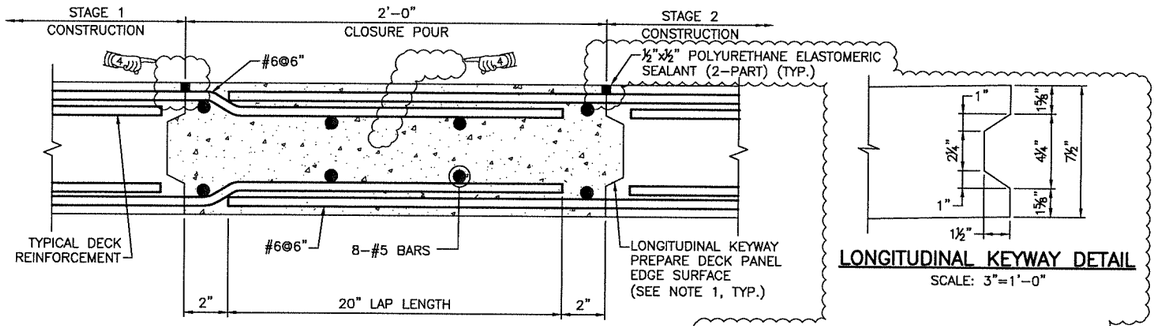
DECK LAYOUT PLAN
SCALE: 1"=10'-0"



SHEAR CONNECTOR DETAIL
FOR HAUNCHES ≤ 4"
SCALE: 1 1/2"=1'-0"



SHEAR CONNECTOR FOR HAUNCH > 4"
SCALE: 1 1/2"=1'-0"



TYPICAL LONGITUDINAL CLOSURE POUR DETAIL
SCALE: 3"=1'-0"

LONGITUDINAL KEYWAY DETAIL
SCALE: 3"=1'-0"

NOTES:

1. FOR ADDITIONAL PLAN REINFORCING DETAILS SEE SHEETS 40 AND 43.
2. SPACE HAUNCH REINFORCING BETWEEN GIRDERS OR BEAMS AND TIE TO BOTTOM REINFORCING OF DECK.
3. TRANSVERSE REINFORCEMENT LISTED AS STRAIGHT SHALL BE SHOP OR FIELD BENT AS REQUIRED TO PROVIDE MINIMUM COVER.
4. DECK SLAB REINFORCING COVER SHALL HAVE TOLERANCE OF (+)1/4", (−)0" FOR TOP BARS AND (+)1/8", (−)0" FOR BOTTOM BARS.
5. CHAIRS SHALL BE SPACED TO PROVIDE THE REQUIRED CONCRETE COVER WITH THE SPECIFIED TOLERANCES. MAXIMUM SPACING OF CHAIRS SHALL BE 5'-0" ON CENTER, PREFERABLY LOCATED AT THE INTERSECTION OF REINFORCEMENT. CHAIRS SHALL HAVE APPROVED CORROSION PROTECTION (i.e. EPOXY COATED, PLASTIC COATED, ETC.)
6. DECK CONCRETE PLACEMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIAL PROVISIONS.
7. SHOULD ADDITIONAL HAUNCH REINFORCING OR ADJUSTMENTS TO THE SHEAR STUD LENGTHS BE NECESSARY DUE TO DEVIATIONS IN THE AS BUILT CAMBER OF THE SUPERSTRUCTURE STEEL IT SHALL BE CONSIDERED AS INCIDENTAL TO THE APPROPRIATE BID ITEMS FOR REINFORCING STEEL AND/OR SHEAR STUDS. THE ADJUSTED LENGTHS OF SHEAR STUDS SHALL BE DETERMINED BY THE ENGINEER. THE REQUIREMENTS FOR REINFORCING HAUNCHES GREATER THAN 4" HIGH AS SHOWN ON THIS SHEET.
8. FOR LOCATION OF LIGHTS, SEE GENERAL PLAN SHEET 7. FOR LIGHT SUPPORT DETAILS, SEE SHEET 49.

SHEAR STUD NOTES:

1. HAUNCH MUST BE REINFORCED WHERE DEPTH EXCEEDS 4". AT THESE LOCATIONS, USE THE REINFORCING LAYOUT SHOWN.
2. * INDICATES LENGTH OF SHEAR STUD VARIES. EXTEND 3" MIN. TO 5½" MAX. INTO DECK.
3. METHOD OF FORMING HAUNCH TO BE DETERMINED BY THE CONTRACTOR. REMOVE FORMS AFTER 24 HOURS.

ENTIRE SHEET REPLACED BY ADDENDUM NO. 2

REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/06/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

DECK PLAN

ADDENDUM NO. 4

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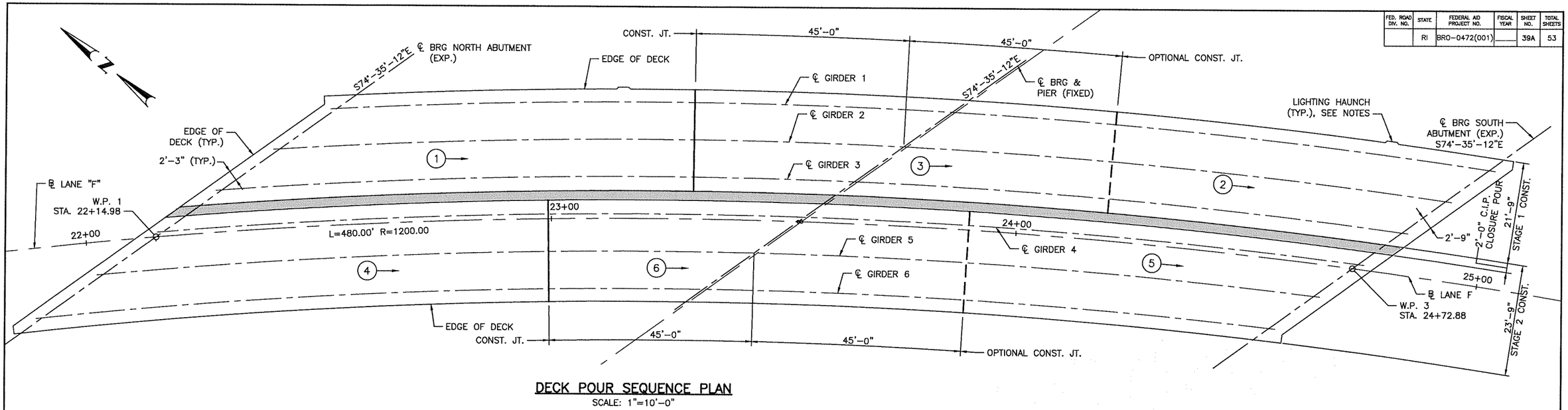
CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

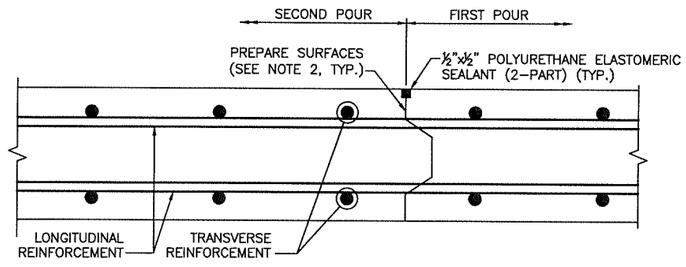
DECK PANEL LAYOUT PLAN.DWG

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)		39A	53



DECK POUR SEQUENCE PLAN

SCALE: 1"=10'-0"



TRANSVERSE CONSTRUCTION JOINT DETAIL IN DECK SLAB

SCALE: 3"=1'-0"

LEGEND:

(4) → INDICATES POUR NUMBER AND DIRECTION OF POUR

NOTES:

1. BRIDGE DECK SHALL BE PLACED IN ACCORDANCE WITH THE PLACEMENT SEQUENCE SHOWN ON THE PLANS.
2. THE SURFACE OF THE PREVIOUSLY CAST CONCRETE SHALL BE BLAST CLEANED, ROUGHENED, WETTED WITH CLEAN WATER, AND THEN FLUSHED WITH A MORTAR COMPOSED OF EQUAL PARTS OF THE CEMENT AND SAND SPECIFIED FOR THE NEW CONCRETE, BEFORE NEW CONCRETE IS PLACED ADJACENT THERETO. NEW CONCRETE SHALL BE PLACED BEFORE MORTAR HAS TAKEN INITIAL SET.
3. THE CONTRACTOR MAY SUBMIT A PROPOSAL DETAILING THE ELIMINATION OF THE CLOSURE POUR FOR THE APPROVAL OF THE ENGINEER. THE PROPOSAL SHALL DETAIL THE CONTRACTOR'S MEANS AND METHODS FOR ACCURATELY CONSTRUCTING THE DECK SLAB TO THE LINES, GRADES, AND THICKNESS SHOWN ON THE PLANS WITHOUT LEAKAGE OF CONCRETE.
4. DOWEL BAR SPLICERS SHALL BE USED WHERE USE OF LAP SPLICES IS NOT FEASIBLE.

ENTIRE SHEET ADDED BY ADDENDUM NO. 4

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

DECK POUR SEQUENCE PLAN AND DETAILS

CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

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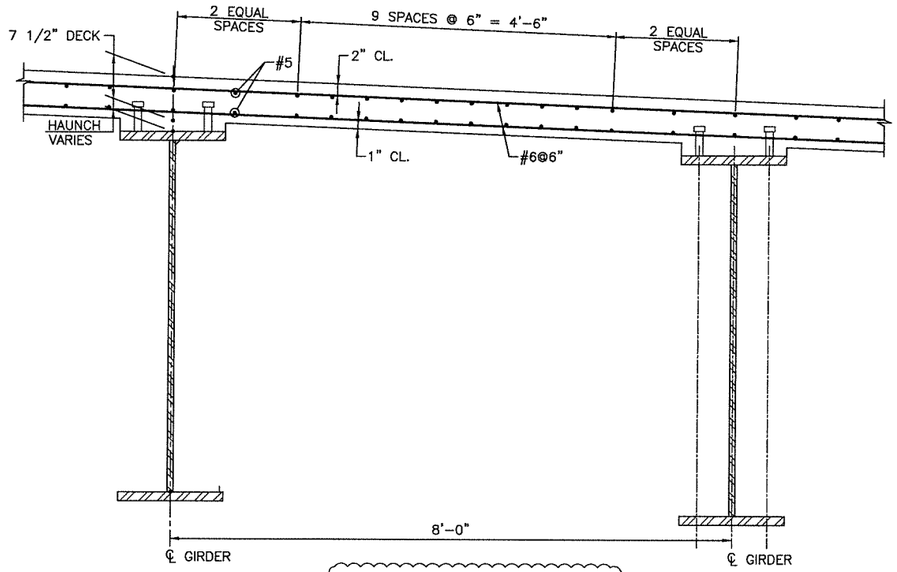
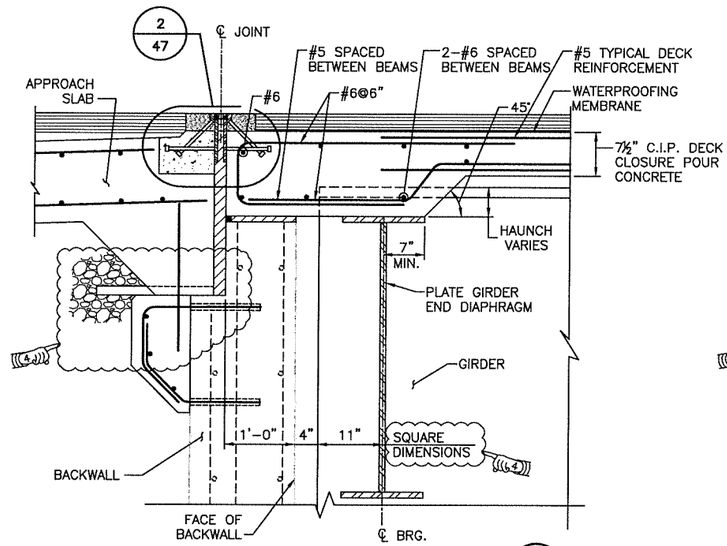
DECK POUR SEQUENCE.DWG

R-2

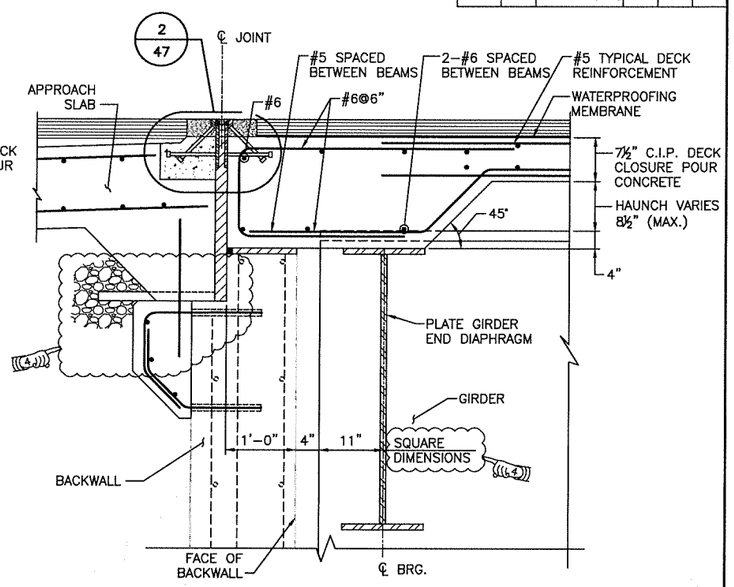
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BRO-0472(001)	____	40	53



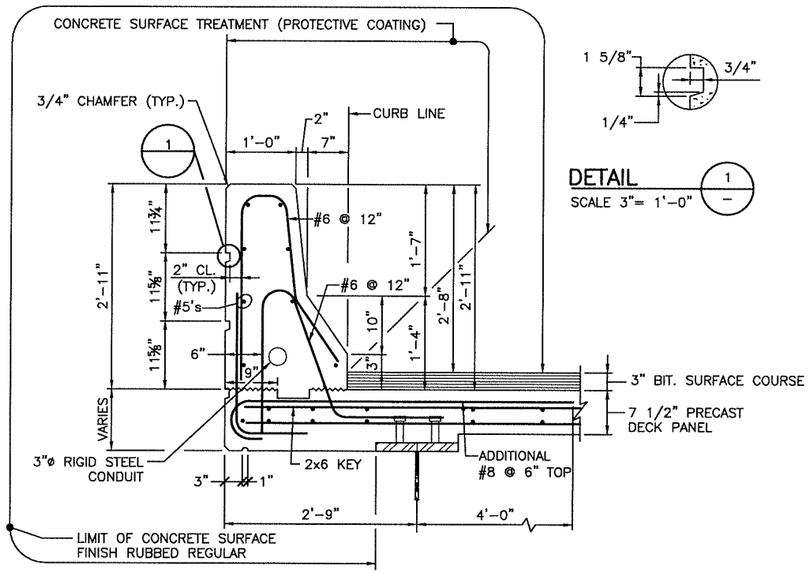
TYPICAL DECK REINFORCING
SCALE: 1"=1'-0"



TYPICAL DECK END SECTION AT ABUTMENT (A 38,43)
SCALE: 1"=1'-0"



DECK END SECTION AT ABUTMENT-MAXIMUM HAUNCH
SCALE: 1"=1'-0"



DETAIL 1
SCALE 3"= 1'-0"

SECTION THRU SAFETY BARRIER
SCALE: 1"=1'-0"

NOTE:

PROTECTIVE COATING FOR CONCRETE SURFACE TREATMENT SHALL BE A DEPARTMENT APPROVED FILM-FORMER WITH A WHITE TOP COAT.

ADDENDUM NO. 4

ENTIRE SHEET REPLACED BY ADDENDUM NO. 2

REVISIONS		
NO.	DATE	BY
1	10/25/17	LBG
2	12/08/17	LBG

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

IMPROVEMENTS TO I-195
ABC BRIDGE NO. 472 OVER I-195
SUPERSTRUCTURE REPLACEMENT
EAST PROVIDENCE, RHODE ISLAND

DECK REINFORCEMENT DETAILS

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CHECKED BY PNF DATE 9/22/17 SCALE AS NOTED

DECK DETAILS.DWG