MAINE TURNPIKE AUTHORITY

DANIEL E. WATHEN, CHAIR
ROBERT D. STONE, VICE CHAIR
MICHAEL J. CIANCHETTE, MEMBER
JOHN E. DORITY, MEMBER
ANN R. ROBINSON, MEMBER
THOMAS J. ZUKE, MEMBER
KAREN S. DOYLE, MEMBER EX-OFFICIO

S. PETER MILLS, EXECUTIVE DIRECTOR

LOCATION MAP

CONTRACT 2018.05
EXIT 103 I-295 SOUTHBOUND UNDERPASS
BRIDGE REHABILITATION
MM 103.0
<table>
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<th>ITEM NO.</th>
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**Total Estimated Quantities:**
- **ROADWAY QTY:**
- **STRUCTURAL QTY:**
- **MAINLINE PAYING QTY:**
- **TOTAL UNIT QUANTITY:**
GENERAL NOTES

1. The pavement, subbase, and subbase depths as shown on the plans are intended to be nominal.
2. The crown for all courses of subbase and pavement shall be straight.
3. All necessary pavement cutting shall be smooth and done in such a manner as to leave a clean vertical face.
4. A strip of tarmacadam may be placed between all lots of pavement or subbase to form the edge of the pavement if required by the engineer.
5. A coating of non-pulsed asphalt shall be applied to the surface of the road.
6. The maximum dry density as determined by the modified proctor shall be determined to be 95% of the maximum dry density as determined by the modified proctor.
7. The maximum moisture content shall not exceed 6%.
8. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor and each layer of the subbase shall be compacted to not less than 95% of the maximum density as determined by the modified proctor.
9. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.
10. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.
11. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.
12. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.
13. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.
14. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.
15. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.
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18. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.
19. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.
20. The maximum moisture content shall be compacted to not less than 95% of the maximum dry density as determined by the modified proctor.

THE GOLD STAR MEMORIAL HIGHWAY
TYPICAL SECTIONS 1

EXIT 103 I-295 SOUTHBOUND UNDERPASS BRIDGE REHABILITATION
NOTES:
1. TEMPORARY PAVEMENT MARKINGS ON WET/CLEAN ROADWAY SHALL BE 6" SOLID WHITE, BROKEN WHITE, AND SOLID YELLOW PAINT LINES.
2. TEMPORARY PAVEMENT MARKINGS ON DRY ROADWAY SHALL BE 6" SOLID WHITE, BROKEN WHITE, AND A 1/4" DASH WHITE PAINT LINES.
3. TEMPORARY TAILGATE MARKER SHALL BE 6" X 6" X 1/4" BLACK/WHITE PAINT LINES. MARKERS SPACED AT 10' CROSSTRAIN 2' SPACED 6" X 6" X 1/4" CROSSTRAIN 6" 2'-6" SPACED 6" X 6" X 1/4" CROSSTRAIN 4'-0" TEMPORARY PAVEMENT MARKING TAPE SHALL BE USED ON ROAD ON SURFACE PAVEMENT A 3" PIECE EVERY 4'.
LANE CLOSURE FOR MILLING AND PAVING OPERATIONS
LANE 1
LANE CLOSURE FOR MILLING AND PAVING OPERATIONS
LANE 2
LANE CLOSURE FOR PAVEMENT MARKINGS
LANE 1

NOTES
1. FOR SIGN DETAILS, SEE SIGN SUMMARY SHEETS.
2. ALL SIGNS ARE TO BE MOUNTED ON HIGHWAY 350 APPROVED POSTS.
3. PROVIDE WIND AND WATER SHED AT ALL MILE LOCATIONS.
4. UNCOVER WIND AND WATER SHEDS WHEN PAVEMENT IS WELDED OR AS DETERMINED BY THE PRESENTER.
MAINTENANCE OF TRAFFIC PHASE 1
LEFT SHOULDER SHIMMING DETAIL

STA 29550 TO STA 34420

LEGEND:

TESTI: Temporary single solid yellow line
TESO: Temporary single solid white line
TEMPORARY CONCRETE BARRIER
SEE BRIDGE CONSTRUCTION PHASING PLANS FOR CONSTRUCTION PHASING CRITICAL CROSS SECTION ALONG THE BRIDGE
SEE BRIDGE CONSTRUCTION PHASING PLANS FOR CONSTRUCTION PHASING CRITICAL CROSS SECTION ALONG THE BRIDGE.
SEE BRIDGE CONSTRUCTION PHASING PLANS FOR CONSTRUCTION PHASING CRITICAL CROSS SECTION ALONG THE BRIDGE
NOTE: AT THE CONCLUSION OF PHASE 2A MAINTENANCE OF TRAFFIC, REVERT TO PHASE 2.
SEE BRIDGE CONSTRUCTION PHASING PLANS FOR CONSTRUCTION PHASING CRITICAL CROSS SECTION ALONG THE BRIDGE
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**NOTES:**
- **N.T.S.**
- **Stantec Consulting Services Inc.**
- **THE GOLD STAR MEMORIAL HIGHWAY**
- **EXIT 103 I-295 SOUTHBOUND UNDERPASS BRIDGE REHABILITATION**

**MOT SIGN SUMMARY (1 OF 2)**

**SHEET NUMBER:** WSDOT-02

**REVISION:**
- **Sheet Date:** 12/10/2018
- **Designated:**
- **Scale:**

**DOCUMENT CAN BE MANAGED ON COMPLIMENTARY SOFTWARE**

**CONTRACT:** 2018-03

**2018 PROJECTS AND PROGRAMS:**

**SHEETS RECEIVED:**
- **Total Sheets:** 44
NOTES:
1. The dimensions shown are approximate and may be modified in the field by the resident.
2. Riprap will be required on portions of the culvert end treatment that lie on or in slope. The remaining portions shall be loosened, seeded, and mulched as directed.
3. Install riprap by around the outside diameter of the culvert pipe.
REFERENCE: Erosion and Sediment Control of Culverts: Outlet Protection.

ROADWAY CULVERT END SLOPE TREATMENT

STONE CHECK DAM

NOTES:
1. Stone for temporary and permanent stone check dams shall meet the requirements of Specification 103.20, Stone Erosion Protection.
2. Temporary stone check dams will be paid for under Item 610.181.
TRANSLATION FROM EXISTING GUARDRAIL TO SPLODED GUARDRAIL

NOTES:
1. MAINTAIN STANDARD CLEARANCE OF BEAK ABOVE PANEL THROUGHOUT THE ENTIRE LENGTH OF TRANSITION.
2. A WINDROW OF THE NO. 4 PANEL SHALL BE PLACED BETWEEN THIS TRANSITION AND THE START OR ANY END TREATMENT OR AVERAGE.
3. ALL NEW POSTS SHALL BE 8 FT IN LENGTH UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
4. ALL NEW POSTS AND GUARDRAIL WOOD MATERIALS SHALL MATCH EXISTING UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
### REMOVE AND STACK SIGN SUMMARY

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### SIGN SUMMARY NOTES:

1. place text shall conform to maps.
2. sign type and locations shall be in accordance with maps.
3. the cost of breakaway and supports for type 1 signs shall be incidental to item 645.271.
4. sign locations are approximate and to be verified in the field.
5. the cost of resetting the conspicuity flags shall be incidental to item 645.271.
## General Notes

1. Pile caps are always exposed concrete bases 3" unless noted otherwise.

2. Studs, lag bolts, and nuts are always exposed concrete bases 1" unless noted otherwise.

3. For additional details concerning these drawings see the State's Manual of Highway Bridge Specifications for Architects, Engineers, and Contractors.

4. Floor Slabs, Girder, and Bearing Plates are always exposed concrete bases 1" unless noted otherwise.

5. For additional details concerning these drawings see the State's Manual of Highway Bridge Specifications for Architects, Engineers, and Contractors.

### Specifications

**Design**:
- Dilatation: 1/16 in for all spans.

**Construction**:
- Concrete Grade: 3000 psi.
- Rebars: 40,000 psi.
- Panel: 2000 psi.
- Letter: B.
STAGED CONSTRUCTION NOTES

PHASE 2 - DEMOLITION
- Install temporary arching panels and shotcrete to the east side of the existing undercrossed portion of the bridge.
- Remove temporary arching panels from the west side of the existing undercrossed portion of the bridge.
- Support temporary arching panels with temporary support structures.
- Seal and level supports during widening of the underpass.
- Complete undercrossed portion of the underpass along the western portion of the existing undercrossed portion.

PHASE 2 - CONSTRUCTION
- Install protective panels on the existing undercrossed portion of the bridge.
- Reconstruct bridge west.
- Install new pier columns and barriers.
- Install reinforced barrier to the west.
- Complete existing undercrossed portion of the bridge.
- Complete undercrossed portion of the bridge.
- Complete protective panels on the existing undercrossed portion of the bridge.

THE GOLD STAR MEMORIAL HIGHWAY
EXIT 103 I-295 SOUTHBOUND UNDERPASS
BRIDGE REHABILITATION
CONSTRUCTION PHASING 3

Sheet Number 5-18
4 of 26

Sheet 10 of 26
APARTMENT NOTES

1. Reinforcing Steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches cover in the footings unless otherwise noted.

2. Cover joints where waterstops are not required in accordance with standard detail size 101.

3. Place 4" (100 mm) diameter drain in basewall and wingwalls at 1 ft. spacing. Maximum spacing of drain location will be determined by the designer.

4. Construct French drains behind abutments and wingwalls in accordance with standard specifications section 55. French drains shall be.

5. Structural earth excavation abutments and retaining walls following more than 12 feet below the bottom of the structure shall be cast and reinforced in accordance with standard specifications section 201.5. Structural excavation.

6. Abutments, wingwalls, and their footings shall be backfilled with drain gravel (2" general area) 3" or sheet 5" for completion requirements. Perimeter wall columns shall be structural excavation limits in cut areas and a vertical plane located 10 ft. behind the walls in all areas.

7. The maximum factor of applied footing pressure for the proposed work area portion of the abutments is 50 ksf.
ABUTMENT NO. 2 - PROPOSED EAST WINDWALL

NOTE
ABUTMENT NO. 2 PROPOSED EAST WINDWALL SHOWN ABUTMENT NO. 1 PROPOSED EAST WINDWALL SIMILAR 15SF SHEETS S1-201 314 AND S2-03 FOR WINDWALL FOOTING GEOMETRY AND BAR DETAILS.

NOTE
REFER TO SHEET S2-03 FOR ABUTMENT NOTES.

THE GOLD STAR MEMORIAL HIGHWAY

EXIT 103 I-295 SOUTHBOUND UNDERPASS BRIDGE REHABILITATION

ABUTMENT NO. 2 & WINGWALL DETAILS
LEGEND
- LIMIT OF SURFACE PATCH REPAIR
- ESTIMATED SQUARE FOOT AREA OF REPAIR
- EPOXY INJECTION CRACK REPAIR

PIER 1 - ESTIMATED AREA OF REPAIR
COLUMN SURFACES

GENERAL NOTES
1. PIER REPAIR WORK SHALL INCLUDE PROVIDING ACCESS FOR INSPECTION, SURFACE PATCH REPAIRED AND SURGICAL EXCAVATION TO PIERHEAD REPAIRS TO 6 INCH DEPTH.
2. WHERE PIER WORK IS PERFORMED
3. THE CONTRACTOR SHALL PROVIDE SCAFFOLDING OR OTHER ACCEPTABLE MEANS OF ACCESS AT ALL PIERS LOCATIONS THAT WILL ALLOW THE RESIDENT TO SAFELY PERFORM A DETAILED CONCRETE INSPECTION ON ALL REPAIR SURFACES.
5. THE QUANTITIES OF PIER REPAIRS NOTED ON THESE SHEETS MAY BE VARIED DURING CONSTRUCTION.
6. TEMPORARY CONCRETE REPAIRS (TYPE 1) MAY BE USED FOR CLOSURES DURING PIER REPAIRS AS SHOWN IN THE NUT DETAILS.
7. CONTRACTOR SHALL NOT USE ANY EXISTING SPACE AT BASE OF COLUMNS 5elicating EXISTING SURFACES OR CHANGING PIER ELEVATION FOR CONSTRUCTION.
8. SEE SHEET 5 FOR CONCRETE SURFACE PATCH REPAIR DETAILS AND ADDITIONAL NOTES.

EXISTING PIER REPAIRS 1

TYPICAL PIER PLAN VIEW

EXIT 103 I-295 SOUTHBOUND UNDERPASS BRIDGE REHABILITATION
GENERAL NOTES:

1. SEE SHEET 5-06 FOR ADDITIONAL NOTES.

REMOVAL PROCEDURES:

   LIMITS. ESTIMATED REPAIR QUALITY MAY INCREASE AT THE CONTRACTOR'S DISCRETION.

2. PERFORM GENERAL FINISHING (SEE GENERAL NOTE 1 ON SHEET 5-06)

CONCRETE SURFACE PATCH/REPAIR PROCEDURE:

1. PREPARE AND PATCH REPAIR AREAS WITH CLASS AAA-AWCED CONCRETE SEE AWC SUPPLEMENTAL SPECIFICATIONS FOR MATERIAL
   PREPARATION, PLACEMENT, AND CURING REQUIREMENTS.

2. PERFORM GENERAL FINISHING (SEE GENERAL NOTE 1 ON SHEET 5-06)

LEGEND:

- LIMIT OF SURFACE PATCH REPAIR
- ESTIMATED SQUARED AREA OF REPAIR
- SPONGE}

PIER 2 - ESTIMATED AREA OF REPAIR

COLUMN SUPERS............................ 6 SQ FT

PIER 2 - EAST ELEVATION LOOKING WEST

LIMITS OF CONCRETE REMOVAL AND PLACEMENT
EXISTING PIER ENDINGS DRAWN TO REMAIN INTACT

CONCRETE SURFACE PATCH/REPAIR DETAIL

NOT TO SCALE

WEST ELEVATION, LOOKING EAST

TYPICAL PIER PLAN VIEW

EXIT 103 I-295 SOUTHBOUND UNDERPASS
BRIDGE REHABILITATION
THE GOLD STAR MEMORIAL HIGHWAY
EXISTING PIER REPAIRS 2

CONTRACT 208-05 SHEET 6-27
PIER NOTES

1. The maximum factored applied footing pressure is 145 kPa and 56.4 kPa for the standard and 30 year event load cases respectively.

2. The design will vary in width, shape, and design for varying loads.

3. Structural and foundation details are not shown.

4. Match scale with drawing and dimension details.

5. Dimension details are not shown.

6. Foundation options are not shown.

7. Foundation details are not shown.

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PROPOSED SEISMIC ISOLATION BEARING NOTES

1. PROPOSED SEISMIC LEAF/RUBBER ISOLATION BEARINGS FOR SHORTS T-1 AND T-2 SHALL BE DESIGNED AND MANUFACTURED BY THE US. S.E.P. COMPANY USING CARBON STEEL AND WELDED IN PLACE.

2. PROPOSED BEARING HEIGHTS SHOWN WITHIN THE HEIGHT OF THE EXISTING SEISMIC ISOLATION BEARINGS AT THE ADJACENT PIER SUPPORTS. THE BEARINGS SHALL BE ADJUSTED TO THE TOP OF ADJACENT PIER SUPPORT AND TOP OF COLUMN ELEVATIONS BASED ON FINAL DESIGN HEIGHT OF THE SEISMIC ISOLATION BEARINGS.

3. VERSACHROME 304 STAINLESS STEEL PLATES SHALL BE USED DURING THE PRIMARY WELD PROCESS.

4. APPEND THE THREADS ON THE ANCHOR BOLT WITHIN ASSEMBLY.

5. BEARINGS SHALL BE CONSIDERED DURING TEARDOWN.

6. ALL EXTERNAL PLATES SHALL MEET THE REQUIREMENTS OF ASTM A325 GRADE 5B.

7. NEW ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OR ASTM A325 GRADE 5B AND SHALL BE SHIPPED ON THREADS ON THE EMBEDDED PORTION OF THE BOLTS.

8. ALL BEARINGS SHALL BE SHARPENED TO REMOVE THE BEARING MARKS ON THE LINING AND SHOULDER. ALL EXTERNAL PLATES SHALL BE SHARPENED ON THE SURFACE OF THE BEARINGS.

9. THE BEARINGS SHALL BE DESIGNED SO THAT THEY MAY BE INSTALLED WHEN THE AMBIENT TEMPERATURE IS WITHIN THE RANGE OF 65° AND 90°F.

10. ALL PRECAUTIONS NECESSARY SHALL BE TAKEN TO PROTECT BEARINGS FROM HEAT, FLAME AND SPATTER. HEAT SHIELDING SHALL BE ENSURED TO PREVENT ANY DEGRADATION OF STEEL AND OR DAMAGE TO PAINTING OR ANY PROTECTIVELY COATING RESULTING FROM THE INSTALLATION OF HEATING PROCESSES.

11. STAINLESS STEEL PLATES SHALL BE HOT SPOUT-COOLED AFTER FABRICATION IN ACCORDANCE WITH ASTM A325 AND MANUFACTURED TO PREVENT HOT SPOT TEMPERATURES IN EXCESS OF 200°F.
**Structural Notes:**

1. **Camber Curves:** All camber curves are computed to compensate for all dead load deflections and for the curvature of the finished space profile.

2. **No Transverse Battens:** Battens will be allowed in the flange plates on web plates within 10 feet of the span length measured from the points of maximum negative bending moment. Battens will be placed on each side of the flange to ensure the proper shape of the structure.

3. **Sections:** No transverse battens will be allowed in the flange plates on web plates within 10 feet of the span length measured from the points of maximum negative bending moment. Battens will be placed on each side of the flange to ensure the proper shape of the structure.

4. **Bearing Stiffeners:** Bearing stiffeners shall be placed on the top flange and dead loads of the structure.

5. **Connection Plates:** Connection plates may be required to connect flanges and web plates at the ends of the structure.

6. **Elevation Details:** Elevation details are provided for the entire structure.

7. **Welding Standards:** Page S103A for additional notes.

8. **The entire design on all new steel shall be detailed in accordance with deflection limits and fabrication items at the time of construction.

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**Diagram Notes:**

- **Camber Diagram:**
  - **Top Web Cut Line:**
  - **Total Camber:**
  - **Superiorly:**
  - **Verical Curve:**
  - **Complete Load:**
  - **Total Deflection:**

- **Total Camber:**
  - **Deflected Location:**
  - **Deflection:**

- **Girder Elevation & Steel Details:**

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**Design:**

- **Stantec Consulting Services Inc.**
- **482 Payne Road**
- **Saugus, MA 01906**
- **(781) 897-3468**
- **Fax (781) 883-3376**

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**Project:**

- **The Gold Star Memorial Highway**
- **Exit 103 I-95 Southbound Underpass Bridge Rehabilitation**
- **Girder Elevation & Steel Details**

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**Contract:**

- **2018.05**

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**Sheet Number:** S-37
NOTES:
1. BOLTED FIELD SPlices SHALL be CONSIDERED SLEP CRITICAL CONNECTIONs WITH CLASS A RATING SURFACEs.
2. = DIAMETERS 5/8" 410 A325 HIGH STRENGTH BOLT IN 5/8" HOLE.
3. ONE ROW OF STUD SPHERE CONNECTIONs SHALL BE PLACED ALONG THE CENTERLINE OF THE TOP PLANE SPiCLE PLATE.

END OF G7 & G8 GIRDER CLIPPING DETAIL
(IASMENT NO.1 SPAN NO.2 SUNLANA)
TYPE CF+1
BETWEEN OA & GB

NOTE:
REVIEW TO PAGE 5003
OF THE STANDARD DETAILS FOR
TYPICAL FIELD DETAILS AND NOTES.

CUT & CHOP AS.
TOP & BOT. FLANGE.

TYPE CF+1
BETWEEN OA & GT

NOTE:
REVIEW TO PAGE 5003
OF THE STANDARD DETAILS FOR
TYPICAL FIELD DETAILS AND NOTES.

TYPE CF+2
BETWEEN OA & GT

NOTE:
REVIEW TO PAGE 5003
OF THE STANDARD DETAILS FOR
TYPICAL FIELD DETAILS AND NOTES.

SECTION A-A
10' x 10'

SECTION B-B
10' x 10'

STIFFENER & CONNECTION PLATE DETAILS
PROPOSED SHAPES 7 & 8

NOTE:
REVIEW TO PAGE 5003
OF THE STANDARD DETAILS FOR
TYPICAL FIELD DETAILS AND NOTES.

AT BEARING STIFFENERS

AT CONNECTION PLATES

LOADING: CYL. FIELD GOUL & NUT TO
EXISTING GIRDAR WEB.

LOADING: CYL. FIELD GOUL & NUT TO
EXISTING PLANGE.

LOADING: CYL. FIELD GOUL & NUT TO
EXISTING FLANGE.

LOADING: CYL. FIELD GOUL & NUT TO
EXISTING GIRDAR WEB.

LOADING: CYL. FIELD GOUL & NUT TO
EXISTING PLANGE.
TYPICAL PARAPET ELEVATION
(WEST PARAPET SHOWN FOR PARAPET OPPOSITE HAND)
NOT TO SCALE

NOTE
SEE SHEETS 3-42 AND 5-45 FOR ADDITIONAL NOTES AND DETAILS.
NOTES:
1. LIMITS OF DEMOLITION SHALL BE SAWCUT PER 85'-0"
   AT TOP OF SLAB AND 10' DEEP AT BOTTOM OF SLAB. BEFORE SAWING
   CONCRETE, CONTRACTOR SHALL USE LASER TO MARK CORRECT
   LIMITS OF DEMOLITION. CONTRACTOR SHALL SUBMIT A
   SAWCUT PLAN TO HNTB FOR APPROVAL. SAWCUTTING SHALL BE INCIDENTAL TO ITEM 00024 "REMOVING
   EXISTING SUPERSTRUCTURE CONCRETE.
2. FOR ADDITIONAL EXISTING BRIDGE DETAILS SEE AS-BUILT
   DRAWINGS AT THE BACK OF THIS PLAN SET.
3. THE CONTRACTOR SHALL INSTALL A REPAIR PROCEDURE
   TO THE RESIDENT FOR APPROVAL. PRIOR TO COMPLETING ALLE
   REQUIRED STEEL REPAIRS THE CONTRACTOR SHALL SUBMIT A
   REPAIR PROCEDURE TO THE RESIDENT FOR APPROVAL.
4. THE CONTRACTOR SHALL INSTALL A REPAIR PROCEDURE
   TO THE RESIDENT FOR APPROVAL. PRIOR TO COMPLETING ALLE
   REQUIRED STEEL REPAIRS THE CONTRACTOR SHALL SUBMIT A
   REPAIR PROCEDURE TO THE RESIDENT FOR APPROVAL.
5. THE CONTRACTOR SHALL INSTALL A REPAIR PROCEDURE
   TO THE RESIDENT FOR APPROVAL. PRIOR TO COMPLETING ALLE
   REQUIRED STEEL REPAIRS THE CONTRACTOR SHALL SUBMIT A
   REPAIR PROCEDURE TO THE RESIDENT FOR APPROVAL.
6. SHIELDING SHALL BE INSTALLED BELOW ALL AREAS OF PARTIAL
   OR FULL DEPTH DECK REPAIR LOCATED OVER OR WITHIN 10' OF,
   ACTIVE LANES ON THE MAIN TURNPRIKE.

AS-BUILT PLANS
SHEET NUMBER: AB-10
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THE GOLD STAR
MEMORIAL HIGHWAY

I-295 SOUTHBOUND UNDERPASS
BRIDGE REHABILITATION
DECK DEMOLITION AND REPAIR PLAN
SHEET NUMBER: 026-53

CONTRACT: 2006.02
14 OF 32
NOTES:
1. FOR ADDITIONAL SUPERSTRUCTURE NOTES SEE SHEET 1295-57.
2. FOR REINFORCING STEEL LAYOUT AT DECK ENDS SEE SHEET 1295-57.
3. FOR SECTION A-A SEE SHEET 1295-55.

CONCRETE TRANSITION BARRIER

PLAN

RAIL POST SPACING

30 SPACES @ 8'-0" - 400'-0"

RAIL POST SPACING

30 SPACES @ 8'-0" - 400'-0"

RAIL POST SPACING

30 SPACES @ 8'-0" - 400'-0"

RAIL POST SPACING

30 SPACES @ 8'-0" - 400'-0"

AS-BUILT PLANS

SHEET NUMBER: AB-12

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THE GOLD STAR MEMORIAL HIGHWAY

I-295 SOUTHBOUND UNDERPASS
BRIDGE REHABILITATION

SUPERSTRUCTURE DETAILS II

SHEET NUMBER: DFP-56

17 OF 39
SEISMIC ISOLATION BEARINGS NOTES

1. Seismic lead number isolation bearings shall be designed and fabricated by seismic energy products, LP of Athens, TX on approved plans.

2. Dimensions shown on the existing structure are based on as-built drawings; all dimensions shall be field verified prior to the fabrication of bearing, bolsters and plates. Bow plate dimensions may vary at each location. Additional adjustments will be required if the approved bearing dimensions differ from those shown.

3. Vacuuming elastomer to steel plates shall be done during the primary mold process.

4. Upset the threads on the anchor bolts after assembly.

5. Bearings shall be centered during transit.

6. All external plates shall meet the requirements of ASTM A572-09.

7. New anchor rods shall meet the requirements of ASTM A572-09 and shall be welded on the embedded portion of the rod.

8. All bearings shall be marked prior to shipping. The marks shall include the location of the bridge and a collision arrow pointing upwards. All marks shall be permanent and visible after the bearings are installed.

9. The bearings shall be designed so that they may be installed when the ambient air temperature is within the range of 45°F and 90°F.

10. All precast members shall be used to protect bearing components from being exposed. All anchor plates shall be designed to accept the maximum temperature of steel adjacent to the elastomer to deny the use of temperature indicating paints on other susceptible steel.

11. Steel plates and bolsters shall be hot dip galvanized after fabrication. In accordance with ASTM A572, all bolsters shall provide fast holes in the bolsters as required for the installation process. All necessary bolts and nuts shall be galvanized and other suitable materials shall be used.

12. Existing bearings shall be removed and transported to the Maine Turnpike Authority’s Saddleback Maintenance Facility at Wiscasset, ME, for evaluation of their condition and transportation shall be incidental to these seismic isolation bearing installations.
NOTES:
1. Units of demolition shall be sawn to depth prior to removal of concrete.
2. After installation of sundries, remove exposed area in each bolt at the junction of the nut and the exposed threads, with a center punch or similar tool.
3. Repairs on steel shall be performed in conformance with the applicable concrete pay item for repair concrete and repair area, see Sheet 1295-S11.
4. The post shall be constructed normal to grade, unless otherwise shown on the plan.
5. Where drilling and anchoring is specified, the contractor shall use a material listed on the Department's list of prequalified tie-down materials. Installation shall be in accordance with the manufacturer's recommendations.
6. Removal, trucking and stacking of aluminum railing at the Authority's Sanders maintenance facility shall be incidental to Item 902 - "Removal of Existing Structural Concrete." 
7. Removing, trucking and stacking of aluminum railing at the Authority's Sanders maintenance facility shall be incidental to Item 902 - "Removal of Existing Structural Concrete.
8. For sections at parapet and endpost, see Sheet 1295-S13.
9. For bump details see Sheet 1295-S15.

DESIGNED BY: HNTB CORPORATION
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THE GOLD STAR MEMORIAL HIGHWAY
I-295 SOUTHBOUND UNDERPASS BRIDGE REHABILITATION WINGWALL & ENDPOST MODIFICATIONS
CONTRACT: 2006.02
SHEET NUMBER: 1295-S12
AS-BUILT PLANS
SHEET NUMBER: AB-15
175 OF 176