MISCELLANEOUS QUANTITIES

1 LS Shear Developer
1 LS Shear Developer
1 LS Shear Structure, Cleating, Type 4
1 LS Shear Structure, Cleating, Type 4
1 LS Shear Structure, Cleating, Type 4
1 LS Shear Structure, Cleating, Type 4
1 LS Shear Structure, Cleating, Type 4

6160 Ft Beam Piers, Steel Formers

NOTES:

Shear developers shall be 3" diameter steel.

If existing shear developers do not interfere with proposed shear studs, they may be cleared and left in place.

Regardless of whether or not the existing shear developers remain, all beams shall provide new shear developments.

This bridge is painted with lead-based paint.

See Subsection 7.5 of the Standard Specifications for Protection of Worker and Environment during the Blast Cleaning of Structures.

The contractor shall notify each utility company 48 hours in advance of work commencing on any company's facilities.

The engineer shall inspect the structural steel parts that have been blasted for evidence of cracks or loss of section due to corrosion of more than 2% portion. Such deterioration shall be repaired in full as per the relevant bridge engineer.

The estimated area of structural steel to be coated is 34,000 square feet.

Sealant shall be applied along the perimeter of bearing plates to concrete contact surfaces after cutting away any protruding portion of load plates.

Sealant shall be applied along the perimeter of existing drain pipes and pipes.

Sealant shall be applied along the perimeter of all beam ends where encased in the backwall.

STRUCTURAL STEEL DETAILS

DATE

CONTRACTOR

JOB NO.

MDOT

DESIGN UNIT

SHEET

504 DF 23011 56772A

1 of 2
TYPICAL DECK SECTION
(NORTH END WIDENING UPTATION)

POUR DIAGRAM
(NORTH ROUND)

POUR A
POUR B
POUR C

REF PT A
REF PT 1
LNE CHRM A B

REF PT 2
LNE CHRM A B

REF PT 0
LNE CHRM A B

NO BRIDGE CONST 4
4 PIER 1
4 PIER 2
2 T DEVICE
1 PIER 2
4 PIER 1
2 T DEVICE

POUR A
POUR B
POUR C

SLAB FASCA

SUPERSTRUCTURE DETAILS
DATE
CONT. SEC.
JOB NO.
DESIGN UNIT
SUPERSTRUCTURE DRAWING

MDOT
Design Department of Transportation

504 OF 23011
S6722A
SHEET
MISCELLANEOUS QUANTITIES

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>538</td>
<td>Fixtures</td>
</tr>
<tr>
<td>365</td>
<td>Points</td>
</tr>
<tr>
<td>489</td>
<td>Screws</td>
</tr>
<tr>
<td>489</td>
<td>Cylinders</td>
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</tbody>
</table>

SUPERSTRUCTURE CONCRETE
NIGHT CASTING QUANTITIES

<table>
<thead>
<tr>
<th>Section</th>
<th>Left</th>
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<tbody>
<tr>
<td>A</td>
<td>50.3</td>
<td>55.9</td>
</tr>
<tr>
<td>B</td>
<td>30.7</td>
<td>113.3</td>
</tr>
<tr>
<td>C</td>
<td>50.4</td>
<td>72.0</td>
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</table>

1½" TRAPEZOID RIB

Note: The following table shows the concrete night casting quantities for the Superstructure details. The contractor shall submit details and calculate information for approval by the Engineer. Expansion joint must fall on axis of this pattern.

SUPERSTRUCTURE DETAILS

<table>
<thead>
<tr>
<th>Date</th>
<th>CONF. SEC.</th>
<th>JOB NO.</th>
<th>DESIGN UN.</th>
<th>SHEET</th>
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<td>504</td>
<td>25011</td>
<td>56772A</td>
<td>22 of 29</td>
<td></td>
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</table>
NOTES:

JOINT TYPES

The expansion joint device shall be of a type that includes a continuous membrane or equivalent seal across the deck. Unless otherwise noted in the plan, the contractor shall use the option shown on the sheets listed below:

<table>
<thead>
<tr>
<th>Device</th>
<th>Manufacturer</th>
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</thead>
<tbody>
<tr>
<td>WAD STORM SEAL TYPE M</td>
<td>WATSON BROWN &amp; ACRE, INC.</td>
</tr>
<tr>
<td>WAD STORM SEAL TYPE B</td>
<td>WATSON BROWN &amp; ACRE, INC.</td>
</tr>
<tr>
<td>STAINLESS-STEEL</td>
<td>E.J. BROWN</td>
</tr>
<tr>
<td>FEMLINE SEAL</td>
<td>D. D. BROWN</td>
</tr>
<tr>
<td>OILER &amp; SEAL</td>
<td>STRUCTURAL RUBBER PRODUCTS CO</td>
</tr>
</tbody>
</table>

In the event of the joint type selected shall be subject to the approval of the engineer.

The expansion joint device shall be shop fabricated to conform to the details of the bridge deck, etc. It shall be installed in accordance with fabrication drawings and instructions subject to the approval of the engineer.

The top of the expansion joint device shall be set 1'-0" below the concrete slab throughout with a tolerance of ± 1/2".

The steel anchorage for steel seal clamps shall be set 1'-0" below the concrete slab throughout with a tolerance of ± 1/2".

The steel anchorage for the expansion joint device shall be set 1'-0" below the concrete slab throughout with a tolerance of ± 1/2".

The seal clamps shall be not slip galvanized in accordance with subsection 720.10 of the standard specifications.

The area of the steel anchorage and seal clamps which will be in contact with the concrete of the bridge deck shall be cleaned with T-100 or other approved solvent.

Where the seal clamps are located in a steel anchor plate, a lubricant-compatible corrosion-resistant seal shall be used in accordance with subsection 720.10 of the standard specifications.

In the event of the selected seal being of the seal clamps, it shall be sealed by an approved method prior to cold curing and shall be subject to the approval of the engineer.

Details at curbs and barriers:

The details in this sheet show an approach main of terminating the expansion joint device at a curb or parapet. Variations of aligning the device shall be considered and may be used if approved by the engineer.

MATERIALS

The cost of all materials and labor required for proper installation of the expansion joint and the respective items of the curb, parapet, or barrier is included in the payment for the expansion joint device.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Joint Type</th>
<th>Location</th>
<th>Width</th>
<th>Length</th>
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<tbody>
<tr>
<td>SD-01</td>
<td>60&quot;</td>
<td>Pier 1</td>
<td>55&quot;</td>
<td>1&quot;</td>
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<tr>
<td>SD-02</td>
<td>60&quot;</td>
<td>Pier 2</td>
<td>55&quot;</td>
<td>1&quot;</td>
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<tr>
<td>SD-03</td>
<td>60&quot;</td>
<td>Pier 3</td>
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<td>1&quot;</td>
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Expansive Joint Device:

<table>
<thead>
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<th>Cont. Sec.</th>
<th>Job No.</th>
<th>Description</th>
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