NOTES:
1. Use of this joint is limited to a maximum of 1" of one way thermal movement or 30° maximum skew.
2. See Dwg. No. 10.1.3 for Construction Sequence Notes.
3. This detail must be used with deck drains. See Dwg. No. 7.3.1 for details.
ASPHALTIC BRIDGE JOINT DETAIL

SCALE: 3” = 1’-0"

NOTES:
1. Use of this joint is limited to a maximum of 1” of one way thermal movement or 30° maximum skew.
2. See Dwg. No. 10.1.3 for Construction Sequence Notes.
CONSTRUCTION SEQUENCE NOTES:
(Use for Bridges with HMA Wearing Surface)

1. CENTER 19” WIDE STRIP OF ROOFING FELT OVER THE JOINT LOCATION.

2. PLACE WATERPROOFING MEMBRANE AND HMA WEARING SURFACE UNIFORMLY ACROSS THE DECK AND JOINT LOCATIONS.

3. SAW CUT AND REMOVE THE HMA WEARING SURFACE AND MEMBRANE WATERPROOFING TO THE LIMITS REQUIRED.

4. PLACE BACKER ROD, POLYMER MODIFIED BINDER AND STEEL PLATE SECURED IN PLACE WITH GALVANIZED NAILS.

5. COAT THE SURFACES OF THE BLOCK-OUT WITH THE POLYMER MODIFIED ASPHALTIC BINDER.

6. PLACE COMPACTED AGGREGATE/BINDER TO FILL ALL VOIDS AND OBTAIN A FINAL AND EVEN SURFACE WITH THE ADJACENT WEARING SURFACE.

7. IT IS NOT NECESSARY TO CONSTRUCT THE JOINT AT MEAN TEMPERATURE, HOWEVER, THE MANUFACTURER SHOULD BE CONSULTED FOR INSTALLATION GUIDELINES FOR EXTREME CLIMATE CONDITIONS.

CONSTRUCTION SEQUENCE NOTES:
(Use for Bridges with Exposed Concrete Deck)

1. MAINTAIN THE REQUIRED BLOCK-OUT WHILE PLACING CONCRETE.

2. CLEAN THE BLOCK OUT TO REMOVE DELETERIOUS AND FOREIGN MATERIALS.

3. PLACE BACKER ROD, POLYMER MODIFIED BINDER AND STEEL PLATE SECURED IN PLACE WITH GALVANIZED NAILS.

4. COAT THE SURFACES OF THE BLOCK-OUT WITH THE POLYMER MODIFIED ASPHALTIC BINDER.

5. PLACE COMPACTED AGGREGATE/BINDER TO FILL ALL VOIDS AND OBTAIN A FINAL AND EVEN SURFACE WITH THE ADJACENT WEARING SURFACE.

6. IT IS NOT NECESSARY TO CONSTRUCT THE JOINT AT MEAN TEMPERATURE, HOWEVER, THE MANUFACTURER SHOULD BE CONSULTED FOR INSTALLATION GUIDELINES FOR EXTREME CLIMATE CONDITIONS.
JOINT DETAIL AT S3–TL4 RAILING

SAFETY CURB

SIDEWALK

COMPACTED AGGREGATE/BINDER, TERMINATE AT CURB LINE

1/4" x 8" PLATE, TERMINATE AT CURB LINE

NON-SAG JOINT SEALER

COMPACTED AGGREGATE/BINDER, TERMINATE AT CURB LINE

NON-SAG JOINT SEALER

POLYETHYLENE BACKER ROD

POLYMER MODIFIED ASPHALTIC BINDER

NO SPLICING OF POLYETHYLENE BACKER ROD AT CURB LINE

NOTE:
Modify drawing to show actual beam type.

SCALE: 3/4" = 1'-0"
JOINT DETAIL AT CT–TL2 BARRIER

SAFETY CURB  SIDEWALK

NOTE:
Modify drawing to show actual beam type.
JOINT DETAIL AT CP–PL2 BARRIER

SAFETY CURB

SIDEWALK

NOTE:
Modify drawing to show actual beam type.

SCALE: \( \frac{3}{4}'' = 1' - 0'' \)
JOINT DETAIL AT CF BARRIERS

NOTE:
Modify drawing to show actual beam type.

SECTION 1

JOINT DETAILS
CF BARRIERS
ASPHALTIC BRIDGE JOINT
(MEDIANs WITHOUT APPROACH CURB)

DETAIL AT MEDIAN

SCALE: $\frac{3}{4}" = 1' - 0"$

NOTE:
Modify drawing to show actual beam type.

(MEDIANs WITH APPROACH CURB)

DETAIL AT MEDIAN

SCALE: $\frac{3}{4}" = 1' - 0"$

DATE OF ISSUE
JUNE 2013

JOINT DETAIL AT MEDIAN

ASPHALTIC BRIDGE JOINT
END OF BLOCKOUT WITH ELASTOMERIC CONCRETE

2" CHAMFER

X" (See Note 1)

CHECKERED

L6x4x8 (TYP.)

MITER AND SHOP WELD
CUT AND VULCANIZE SEAL AS REQUIRED BY MANUFACTURER

½" GAP

BEND POINT

FACE OF RAIL

½" Ø S.S. SCREWS WITH S.S. NUTS @ 12" O.C. MAX. (SEE NOTE 6, TYP.)

½" GALVANIZED REMOVABLE SLIDING CHECKERED

1½"

FACE OF CURB

ELASTOMERIC CONCRETE

CONTINUOUS NEOPRENE STRIP SEAL

STEEL EXTRUSION (TYP.)

PLAN – STRIP SEAL JOINT AT SIDEWALK
SCALE: 1" = 1'-0"

NOTES:
1. X" = (Joint Width + ½")
2. See Dwg. No. 10.2.16 for Construction Notes to be placed on Construction Drawings.
PLAN – STRIP SEAL JOINT AT SAFETY CURB

SCALE: 1" = 1'-0"

NOTES:
1. $X'' = (\text{Joint Width} + \frac{1}{2})$
2. See Dwg. No. 10.2.16 for Construction Notes to be placed on Construction Drawings.
**BAR appENDS**

**PLAN, SKEW ≤ 35°**

**STRIP SEAL JOINT DETAILS**

---

**NOTES:**

1. $X'' = (Joint\ Width + \frac{1}{2})$
2. See Dwg. No. 10.2.16 for Construction Notes to be placed on Construction Drawings.
PLAN – STRIP SEAL JOINT AT SIDEWALK

SCALE: 1" = 1'-0"

NOTES:

1. \( X'' = \text{(Joint Width} + \frac{3}{4}) \)
2. See Dwg. No. 10.2.16 for Construction Notes to be placed on Construction Drawings.
PLAN - STRIP SEAL JOINT AT SAFETY CURB

SCALE: 1" = 1'-0"

NOTES:
1. $X'' = (\text{Joint Width} + \frac{1}{2})$
2. See Dwg. No. 10.2.16 for Construction Notes to be placed on Construction Drawings.
SECTION 1

SCALE: 3" = 1'-0"

(DEPENDING ON CONCRETE DECKS)

NOTE:
This detail must be used with deck drains. See Dwg. No. 7.3.1 for details.

DATE OF ISSUE
JUNE 2013

TRANSVERSE SECTION
THRU ROADWAY
STRIP SEAL JOINT DETAILS

massDOT
LRFD BRIDGE
MANUAL, PART II

DRAWING NUMBER
10.2.7
TRANSVERSE SECTION THRU SIDEWALK

SECTION 2
SCALE: 3" = 1'-0"

NOTES:
1. For steel and concrete bridges with span length of up to 190’ and 270’ respectively, this dimension shall be taken as 2½". For bridges with longer spans this dimension shall be taken as thermal movement due to the temperature fall as per Part I, Paragraph 3.7.1 of the Bridge Manual, plus ½”. In such cases, an angle with a longer horizontal leg shall be provided to accommodate total calculated dimension.
2. The stud anchor or sinusoidal anchorage shall be omitted at Safety Curb.
3. See Dwg. No. 10.2.16 for Construction Notes to be placed on Construction Drawings.

See Table For Joint Opening At 70°F on Dwg. No. 10.2.9
SECTION 3
SCALE: 3" = 1'-0"

NOTES:
1. For steel and concrete bridges with span length of up to 190’ and 270’ respectively, this dimension shall be taken as 2H. For bridges with longer spans this dimension shall be taken as thermal movement due to the temperature fall as per Part I, Paragraph 3.7.1 of the Bridge Manual, plus 1\(\frac{1}{2}\)
2. See Dwg. No. 10.2.16 for Construction Notes to be placed on Construction Drawings.

<table>
<thead>
<tr>
<th>MANUFACTURER</th>
<th>STEEL EXTRUSION MODEL</th>
<th>NEOPRENE STRIP SEAL MODEL</th>
<th>JOINT OPENING @ 70°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATSON BOWMAN ACME</td>
<td>TYPE A</td>
<td>SE-400</td>
<td>1(\frac{1}{2})</td>
</tr>
<tr>
<td>D.S. BROWN</td>
<td>TYPE SSA2</td>
<td>A2R-400</td>
<td>1(\frac{1}{2})</td>
</tr>
</tbody>
</table>
10.2.10

LONGITUDINAL SECTIONS

S3–TL4 RAILING

STRIP SEAL JOINT DETAILS
10.2.11

**LONGITUDINAL SECTIONS**

**CP–PL2 BARRIER**

**STRIP SEAL JOINT DETAILS**
SECTION 4
SCALE: 1" = 1'-0"

NOTE:
See Dwg. No. 10.2.16 for Construction Notes to be placed on Construction Drawings.
SECTION 5
SCALE: 3" = 1'-0"

NOTES:
1. For steel and concrete bridges with span length of up to 190' and 270' respectively, this dimension shall be taken as 2 1/4". For bridges with longer spans this dimension shall be taken as thermal movement due to the temperature fall as per Part I, Paragraph 3.7.1 of the Bridge Manual, plus 1/2".
2. See Dwg. No. 10.2.16 for Construction Notes to be placed on Construction Drawings.

See Table For Joint Opening At 70°F on Dwg. No. 10.2.9
SECTION 6
STEEL EXTRUSION SHOP SPLICE DETAIL
SCALE: 6” = 1’-0”

SECTION 7
STEEL EXTRUSION FIELD SPLICE DETAIL
SCALE: 6” = 1’-0”
STRIP SEAL JOINT NOTES:

1. THE DETAILS SHOWN HERE ARE INTENDED AS A GENERAL GUIDE FOR A TYPICAL GLANDULAR TYPE STRIP SEAL JOINT SYSTEM. SHOP DRAWINGS WHICH INCLUDE DETAILS OF THE GLAND SHAPE, STEEL EXTRUSION SHAPE, WELDING PROCEDURE SPECIFICATIONS, ANCHOR ARRANGEMENT, TEMPERATURE CORRECTION REQUIREMENTS, AND TEMPORARY SUPPORT DETAILS SHALL BE SUBMITTED FOR APPROVAL OF THE ENGINEER ACCORDING TO THE STANDARD SPECIFICATIONS.

2. ALL STRUCTURAL STEEL COMPONENTS SHALL CONFORM TO AASHTO M270 GRADE 36. AFTER THE COMPLETION OF ALL WELDING OPERATIONS STEEL PLATE ASSEMBLIES SHALL BE HOT-DIP GALVANIZED.

3. ELASTOMERIC CONCRETE BLOCKOUT SHALL BE SANDBLASTED, CLEANED WITH COMPRESSED OIL LESS AIR, AND PRIMED WITH BONDING COMPOUND PRIOR TO CASTING ELASTOMERIC CONCRETE.

4. NEOPRENE STRIP SEAL SHALL BE BONDED TO STEEL EXTRUSION WITH APPROVED ADHESIVE.

5. INSTALL CONTINUOUS NEOPRENE STRIP SEAL IN THE FIELD. SPICING OF SEAL IS NOT PERMITTED. TEMPORARY SEAL SHALL BE REQUIRED ON STAGE CONSTRUCTION PROJECTS.

6. PRIOR TO PLACEMENT OF SIDEWALK/SAFETY CURB CONCRETE, LUBRIFICATE STAINLESS STEEL SCREWS WITH GRAPHITE AND SET SECURELY IN PLACE. MACHINE SCREWS TO BE TEMPORARILY REMOVED AFTER CONCRETE HAS ATTAINED FINAL SET.

7. NO WELDING OF PORTIONS OF STEEL EXTRUSIONS IN DIRECT CONTACT WITH NEOPRENE SEAL SHALL BE PERMITTED.