Place bond breaker

Trowel smooth and place bond breaker

Width of insert (36’’ typ., 18’’ min.)

Edge of Gutter (if applicable)

Normal Pavement Slope

Insert shaping may be modified for insert widths less than 36 inches. For an 18 inch insert, reduce dimensions indicated by 1/4 inch.

SECTION A-A

(6 Inch Standard Curb Insert)

FACE OF 6” STANDARD CURB

FACE OF 4” SLOPED CURB

Edge of Gutter

Normal Pavement Slope

FIGURE 6010.509

STANDARD ROAD PLAN

DOUBLE OPEN-THROAT CURB

INTAKE, SMALL BOX

SUDAS

IOWADOT

REVISION 04-21-20

SHEET 1 of 3

FIGURE 6010.509 STANDARD ROAD PLAN SHEET 1 of 3

REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17’.

SUDAS

IOWADOT

REVISION 04-21-20

SHEET 1 of 3

FIGURE 6010.509 STANDARD ROAD PLAN SHEET 1 of 3

REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17’.

SUDAS

IOWADOT

REVISION 04-21-20

SHEET 1 of 3

FIGURE 6010.509 STANDARD ROAD PLAN SHEET 1 of 3

REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17’.
2. Transverse joint spacing on new concrete pavement is controlled by the intake boxout. Adjust adjacent joint spacing as required to accommodate boxouts.

For retrofit intakes, match existing pavement joints. Stop any transverse pavement joints that do not conform to the minimum spacing requirements at the edge of the insert area.

3. Rounded shaping at inlet.

---

**REINFORCING BAR LIST**

<table>
<thead>
<tr>
<th>Mark</th>
<th>Size</th>
<th>Location</th>
<th>Shape</th>
<th>Count</th>
<th>Length</th>
<th>Spacing</th>
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</thead>
<tbody>
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<td>4w1</td>
<td>4</td>
<td>Base</td>
<td>4</td>
<td>9</td>
<td>3'-6&quot;</td>
<td>12&quot;</td>
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<tr>
<td>4w2</td>
<td>4</td>
<td>Base</td>
<td>4</td>
<td>5</td>
<td>8'-6&quot;</td>
<td>10&quot;</td>
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<tr>
<td>4w3</td>
<td>4</td>
<td>Insert</td>
<td>4</td>
<td>4</td>
<td>Boxout Length minus 8&quot;</td>
<td>See Insert</td>
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<tr>
<td>4w4</td>
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<td>Top</td>
<td>4</td>
<td>6</td>
<td>8'-6&quot;</td>
<td>See Plan</td>
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<tr>
<td>4w5</td>
<td>4</td>
<td>Top</td>
<td>4</td>
<td>8</td>
<td>3'-6&quot;</td>
<td>12&quot;</td>
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<tr>
<td>4w6</td>
<td>4</td>
<td>Top</td>
<td>4</td>
<td>18</td>
<td>10&quot;</td>
<td>6&quot;</td>
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<td>4</td>
<td>Walls</td>
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<td>22</td>
<td>Wall Height minus 4&quot;</td>
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<td>Long Walls</td>
<td>Varies</td>
<td></td>
<td>4'-8&quot;</td>
<td>12&quot;</td>
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<tr>
<td>4w9</td>
<td>4</td>
<td>Short Walls</td>
<td>Varies</td>
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<td>3'-8&quot;</td>
<td>12&quot;</td>
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<tr>
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<td>5</td>
<td>Beam</td>
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<td>2</td>
<td>7'-3&quot;</td>
<td>4&quot;</td>
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<tr>
<td>5w2</td>
<td>5</td>
<td>Beam</td>
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<tr>
<td>5w3</td>
<td>5</td>
<td>Beam</td>
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<td>5w4</td>
<td>5</td>
<td>Beam</td>
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</tbody>
</table>

**BENT BARS**

- Width: 3'-3"
- Length: 24'
- Count: 5w1

---

**Additional Notes**

- Adjust adjacent joint spacing as required to accommodate boxouts.
- Rounded shaping at inlet.
- Transverse joint spacing on new concrete pavement is controlled by the intake boxout.
- For retrofit intakes, match existing pavement joints.
- Stop any transverse pavement joints that do not conform to the minimum spacing requirements at the edge of the insert area.
**FIGURE 6010.509**

**DOUBLE OPEN-THROAT CURB**

**INTAKE, SMALL BOX**

**SECTION C-C**

1. **SW-602 Type G Casting**
2. **Back of Curb**
3. **Form Grade**
4. **Concrete Fillet**
5. **Wall Height**
6. **Lowest Flowline**
7. **Wall Height**
8. **Depth 10'-0' max.**
9. **4w1 Wall Height**
10. **4w2**
11. **4b1**
12. **4b2**
13. **5w1**
14. **Beam**
15. **5w1**

**SECTION B-B**

- **8'' min. Class I Bedding Material**
- **8'' min.**
- **6'' min.**
- **4'-0''**
- **3'-0''**
- **12''**

**MAXIMUM PIPE DIAMETERS**

<table>
<thead>
<tr>
<th>Pipe Location</th>
<th>Precast Structure</th>
<th>Cast-in-place Structure</th>
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</thead>
<tbody>
<tr>
<td>Short Wall</td>
<td>24''</td>
<td>30''</td>
</tr>
<tr>
<td>Long Wall</td>
<td>60''</td>
<td>66''</td>
</tr>
</tbody>
</table>

- **Alignment of Top with Spacer**
- **Do not extend keyed joint into front wall of box**
- **12 inch minimum wall height above all pipes.**
- **Slope of 1.5% or as specified in the contract documents.**

**ISOMETRIC**

(Refer to SECTION B-B for alignment of Top with Spacer)