SECTION A-A (2" Cover - Thin Wall Detail)

- 3" Min. Tongue length (18" to 15" bevel) outside Face
- 2" Min. cover inside at joint
- 1 1/4" Min. cover outside joint
- 1" Min. cover inside at joint
- Joint Sealant
- Filter Fabric

SECTION A-A (2" Cover - Thick Wall Detail)

- 3" Min. Tongue length (18" to 15" bevel) outside Face
- 2" Min. cover inside at joint
- 1 1/4" Min. cover outside joint
- 1" Min. cover inside at joint
- Joint Sealant
- Filter Fabric

SECTION A-A (3" Cover - Thin Wall Detail)

- 3" Min. Tongue length (18" to 15" bevel) outside Face
- 2" Min. cover inside at joint
- 1 1/4" Min. cover outside joint
- 1" Min. cover inside at joint
- Joint Sealant
- Filter Fabric

SECTION A-A (3" Cover - Thick Wall Detail)

- 3" Min. Tongue length (18" to 15" bevel) outside Face
- 2" Min. cover inside at joint
- 1 1/4" Min. cover outside joint
- 1" Min. cover inside at joint
- Joint Sealant
- Filter Fabric

ALTERNATE BOTTOM SLAB TRANSVERSE JOINT
TYPICAL SECTION
(DOUBLE-SIDED TONGUE & GROOVE JOINT)
(All reinforcing not shown for clarity)

NOTE:
Bottom Slab Joints in Type B Boxes may be single tongue & groove joints as shown in Section A-4 when the Top Slab Joints are oriented as shown in Schematic A.

SCHEMATIC A
TYPE B BOX SECTION PLACEMENT
FOR SINGLE TONGUE & GROOVE JOINTS

TWO-PIECE PRECAST SEGMENT
ADDITIONAL JOINT DETAILS
(TYPE B BOX)
**PIPE BLOCKOUT NOTES**:

1. Cut box culvert reinforcement as required to maintain 2" cover.
2. For Precast Sections construct opening a minimum of 1-5/8" away from any box to box joint except opening may be a minimum of 1-0" away from joint when at least 2'-0" of clearance to the box to box joint is provided on the opposite side of the pipe opening.
3. Pipe blockout diameter to be 6" greater than pipe outside diameter.
4. See Drainage Plans for size, placement, and invert elevation.

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**SECTION F-F**

(Headwall, Toe Slab and Cutoff Wall Reinforcing not shown for clarity)

**C-I-P END CAP DETAILS AND CONNECTION TO PRECAST BOX**

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**SECTION H-H**

**SECTION I-I**

(Showing additional blockout reinforcing only)

Provide 50% of vertical reinforcing cut by blockout on each side of pipe at each face (Typ.).

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**ELEVATION VIEW**

**PIPE BLOCKOUT DETAILS**

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LINK SLAB TYPICAL SECTION
(Multiple Barrel Culvert shown, Single Barrel Culvert similar)

**Install dowels with an Adhesive Bonding Material System in accordance with Specification Section 416. The Contractor may substitute mechanical couplers in lieu of adhesive bonded dowels. Shift dowels to clear box culvert reinforcing.**

**NOTE:** Estimated quantities are based on the plan area of precast box slabs, and are provided for information only. No additional payment will be made for Link Slabs where these are required for the precast box culverts.

**BILL OF REINFORCING STEEL**

<table>
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<th>MARK</th>
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<th>LENGTH</th>
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<tbody>
<tr>
<td>W</td>
<td>x</td>
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<td>As req'd</td>
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**REINFORCING STEEL BENDING DIAGRAMS**

**NOTES:**
1. Allow dimensions are cut to cut.
2. Lap splice length for Bars 4M is 1'-4" minimum.

**DESIGN NOTE:**
1. Link Slab required when joint openings from differential settlement exceed 1/8" as determined in Link Slab Note 1.

**DIFFERENTIAL SETTLEMENT COUNTERMEASURES FOR PRECAST BOX CULVERTS**

**SCHEMATIC LONGITUDINAL SECTION (NEW CONSTRUCTION)**

**SCHEMATIC LONGITUDINAL SECTION (WIDENING)**