### Section AA

**Longitudinal Section**

- **Joint Min.**
- **Filter Fabric Jacket**
- **Revision**

**For Pipes 24" and Larger**

- **12" for Pipes 14" to 24"**
- **Through 19" to 30"**

**Cost of filter fabric jacket to be included in cost of pipe culverts.**

**CONCRETE COLLAR FOR EXTENSION OF EXISTING PIPE CULVERTS**

- **Concrete collar**
- **Main Line Pipe**
- **Stub Pipe**
- **Cut and Bend Pipe Reinforcement**
- **Concrete collar for joining mainline pipe and stub pipe.**

**CONCRETE COLLAR FOR JOINING PIPE AND CONCRETE PIPES WITH DISSIMILAR JOINTS**

- **Concrete jacket for connecting dissimilar types of pipe and concrete pipes with dissimilar joints.**

**Table:**

<table>
<thead>
<tr>
<th>Nominal Diameter</th>
<th>Reinforcement (lb/in²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>102&quot;</td>
<td>0.126</td>
</tr>
<tr>
<td>108&quot;</td>
<td>0.117</td>
</tr>
</tbody>
</table>

**Note:** Primer is required before pull-up.

**Profile Rubber Gasket**

- **Class ~ Concrete**
- **280**

**Steel Area Per Linear Foot**

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</table>

**MINIMUM WIDTHS**

- **For Woven Or Nonwoven Filter Fabric Jacket:**
- **Type D-3**

- **Masonry Plug:**
- **6" Pipes to 30"**
- **36" Pipes to 60"**
- **48" Pipes Above 60"**

**Miscellaneous Drainage Details**

- **2008 FDOT Design Standards**
- **Sheet No.**
- **07/01/07**

**Details of Bell & Spigot Concrete Pipe Joint Using Round or Profile Rubber Gasket**

**Concrete Jacket**

- **Filter Fabric Jacket Required**

**Double Gasket (Preferred Plastic)**

**Filter Fabric Jacket Required**

- **Profile Rubber Gasket**

**Elliptical Concrete Pipe Joints**

- **Overlap 2" Min.**

**Woven Or Nonwoven Filter Fabric**

- **Type D-3**

- **Steel Area Per Linear Foot**

**Concrete Collar**

- **Main Line Pipe**
- **stub pipe**

**Notes:**

- **Cost of concrete and bituminous coating to be included in contract unit price for pipe culvert.**
- **Concrete collar shall not be used to join:**
  - **Aluminum, Corrugated Polyethylene, or PVC**

**Pipe Plug**

- **6" Pipes to 30"**
- **36" Pipes to 60"**
- **48" Pipes Above 60"**

**CONCRETE JACKET**

- **For all pipe types - Concrete pipe shown**

**Filter Fabric Jacket**

- **Cost of filter fabric jacket to be included in cost of pipe culverts.**

**CONCRETE JACKET FOR CONNECTING DISSIMILAR TYPES OF PIPE AND CONCRETE PIPES WITH DISSIMILAR JOINTS**

**DISSIMILAR TYPES**

- **Bullnose Coating Required For:**
- **Dissimilar Joint**

- **Concrete jacket**

**Bullnose Coating**

- **For each pipe above 60"**

**Masonry Plug**

- **6" Pipes to 30"**
- **36" Pipes to 60"**
- **48" Pipes Above 60"**
**CONCRETE GUTTER AND DRAINS AT RETAINING WALLS**

**PLAN OF TOP**

**SECTION - STEEL PLATE**

**ON INTEGRAL PRECAST CONCRETE RISER FOR CONCRETE PIPE**

**METHOD FOR DETERMINING THE LENGTH OF SPECIAL PIPE REQUIRED UNDER RAILROADS**

**METHOD FOR SETTING LIMITS OF VARIABLE FRONT SLOPES AT DRAINAGE STRUCTURES**

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**Section 416**

**Railroad Company**

- CLEARANCE
- BELOW BOTTOM OF RAIL FEET

**Section 420**

- BOTTOM OF RAIL FEET
- CLEARANCE

**Section 421**

- SIDE VIEW

**Front View**

- GuARD AT PIPE ENDS

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**MISCELLANEOUS DRAINAGE DETAILS**

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**Note:** PVC pipe, Schedule 40, to be paid for under the contract unit price for Polyvinyl Chloride Pipe Culvert (4”), LF.

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