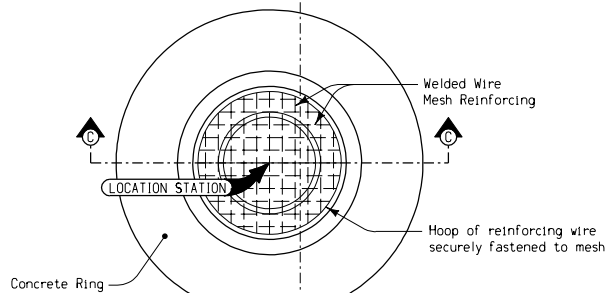
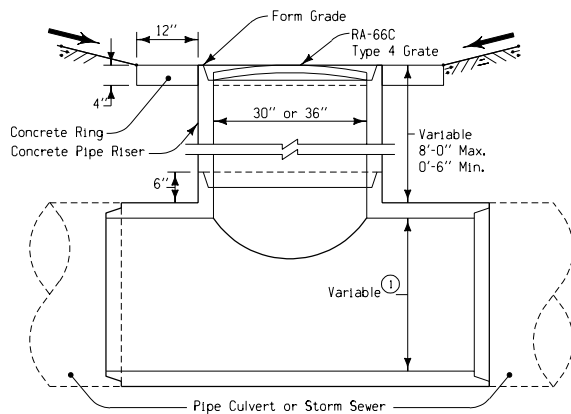


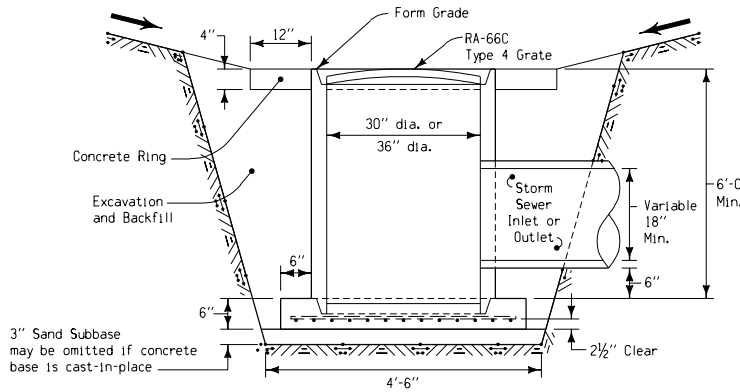
CASE 1 - PLAN



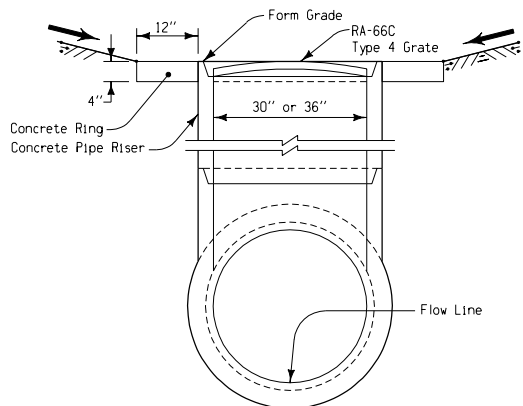
CASE 2 - PLAN



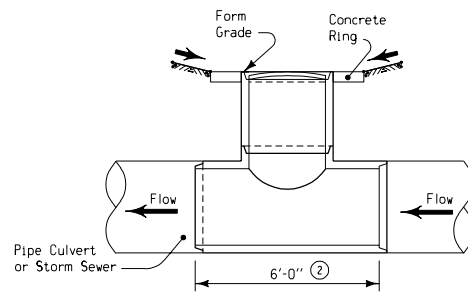
SECTION A-A



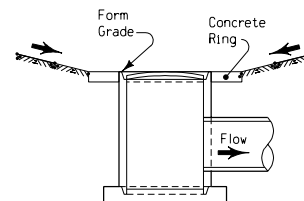
SECTION C-C



SECTION B-B



TYPICAL INSTALLATION CASE 1



TYPICAL INSTALLATION CASE 2

**GENERAL NOTES:**

This plan details the construction and installation of an open ditch intake.

Materials and methods of construction shall be in accordance with current Standard and Supplemental Specifications.

Price bid for "RA-64 Intake (Case 1 or Case 2)" of the size specified, shall be full compensation for furnishing all materials and constructing intakes as detailed herein.

All requirements of current Standard Specifications for "Excavation for Structures" applicable to the necessary excavation and backfill for intakes shall apply to this work. Excavation and backfill will not be classified, measured or paid for separately, but shall be considered incidental to and included with the price bid for the intake. Excess material excavated for intakes shall be placed as directed by the Engineer.

Refer to detail project plans for additional data regarding intake installations.

**CASE 1**


To be made up of appropriate accessory units and culvert pipe sections to make required inlet elevations. Refer to Standard Road Plans RF-1 and RA-53.

- ① 30 inch minimum for 30 inch diameter riser pipe; 36 inch minimum for 36 inch diameter riser pipe.
- ② This portion of culvert run (the tee section for intake only) shall be excluded from pay length and shall be considered part of the intake. The tee section shall be the same class as required for remainder of culvert.

**CASE 2**

Precast base shall be constructed using welded wire mesh reinforcing WWF 4" x 4" - W2.9. The groove portion of base shall be carefully constructed to ensure correct installation of intake well.

The well portion of the intake shall consist of 1500D concrete pipe (refer to Standard Road Plan RF-1) modified as indicated herein. Unless otherwise specified within detail project plans, the minimum depth of intake well shall be 4'-0". The intake may be constructed in lengths that will be convenient to transport and install. Openings may be formed when pipe is cast or may be cut out to desired elevation after pipe is complete. Openings shall be neatly shaped. Wire mesh may be left in place and cut to size when outlet pipe is installed and grouted in place.

 <b>Iowa Department of Transportation</b> Project Development Division	
<b>STANDARD ROAD PLAN</b>	<b>RA-64</b>
<small>REVISION: Replaces Standard Road Plan RA-32A &amp; RA-32B; Change Inlet Elevation to Form Grade.</small>	<small>REVISION NO. New</small>
<small>APPROVED BY: <i>[Signature]</i> DESIGN METHODS ENGINEER</small>	<small>11-05-99</small> <small>REVISION DATE 02-11-00</small>
<b>OPEN DITCH INTAKE</b>	