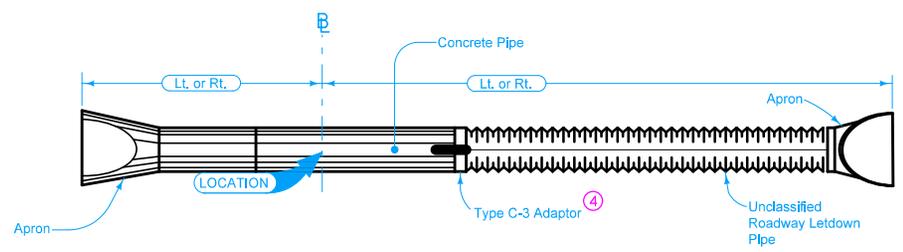


SECTION



PLAN

\bar{E} is \bar{C} of roadway, dike, survey, or other as detailed on the plans.

Skew angle is the angle which one end of the pipe is ahead (by stationing) of a line perpendicular to the \bar{E} . (Example: skew Rt. ahead 30 degrees)

Standard type joint couplings are required. See **Materials I.M. 441**.

- ① Refer to the following:
 DR-201 for circular concrete.
 DR-202 for low clearance concrete.
 DR-203 for circular metal.
 DR-204 for arch metal (metal pipe only).
 DR-205 for circular concrete with end wall.
 DR-206 for low clearance concrete with end wall.
- ② Optional "D" Section only when specified in tabulation.
- ③ See DR-121
- ④ See DR-122.

Possible Tabulation:
104-3

IOWA DOT	REVISION	
	1	04-18-17
STANDARD ROAD PLAN		DR-653
		SHEET 1 of 1
<small>REVISIONS: Modified note 1 to include references to additional apron types. Added note 4.</small>		
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>		
UNCLASSIFIED ROADWAY LETDOWN PIPE WITH METAL APRON		