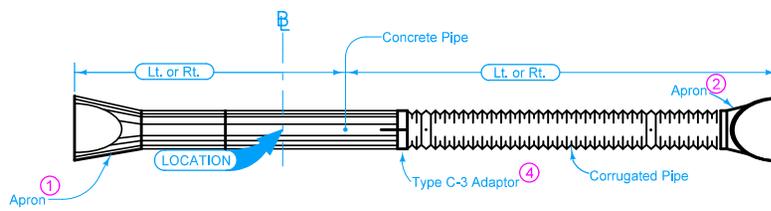


A= Concrete Pipe Length  
 B+C+E= C.M.P. or P.E.P. Length

SECTION



PLAN

$\bar{C}$  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  $\bar{C}$ . (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-205 for circular concrete with end wall.  
 DR-206 for low clearance concrete with end wall.
- ② Refer to the following:  
 DR-203 for the circular metal.  
 DR-204 for arch metal.
- ③ See DR-121.
- ④ See DR-122.
- ⑤ Optional "D" section only when specified in the tabulation. Refer to DR-141.

Possible Tabulation:  
 104-3

<b>IOWA DOT</b>	REVISION	
	2	04-18-17
<b>STANDARD ROAD PLAN</b>		<b>DR-641</b>
		SHEET 1 of 1
REVISIONS: Modified notes 1 and 2 to include references to additional apron types.		
 APPROVED BY DESIGN METHODS ENGINEER		
<b>CONCRETE/CORRUGATED PIPE        CULVERT LETDOWN STRUCTURE        WITH METAL APRON</b>		