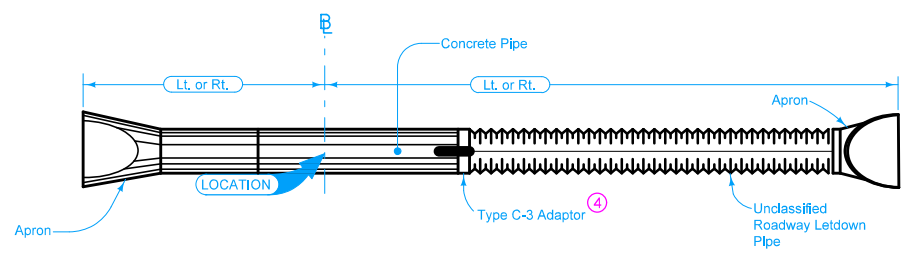


SECTION



PLAN

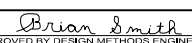
$\bar{E}$  is  $\bar{C}$  of roadway, dike, survey, or other as detailed on the plans.

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

<b>IOWA DOT</b>	REVISION	
	1	04-18-17
<b>STANDARD ROAD PLAN</b>		<b>DR-653</b>
		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>		
<b>UNCLASSIFIED ROADWAY LETDOWN PIPE WITH METAL APRON</b>		