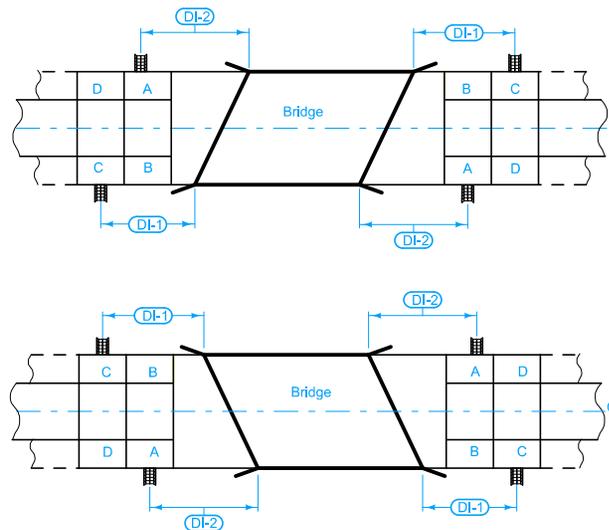


PLAN



PCC SHOULDER PANEL LOCATIONS ²

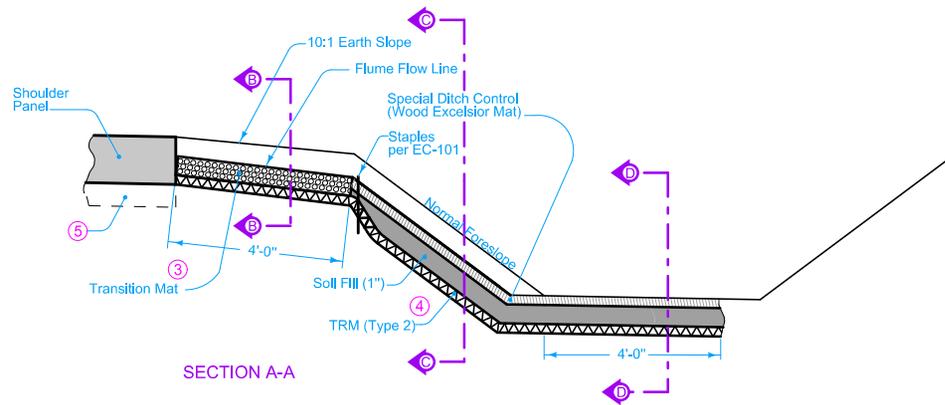
Price bid for "Bridge End Drain, DR-401" is full compensation for furnishing, installing, and constructing the Bridge End Drain as shown.

- ¹ Continue 4 inch sloped curb to edge of flume per section B-B. Refer to [BR-201](#), [BR-202](#), [BR-203](#), or [BR-204](#) for details of 4 inch curb.
- ² DI-1 and DI-2 distances measured from center of Bolt Pattern.
- ³ Abut Transition Mat (see [EC-105](#)) panels to the edge of the pavement to prevent from being undercut by water. Cut panels to fit around guardrail posts to ensure pavement edge contract. No deduction will be made for area of Transition Mat removed for guardrail posts.

- Possible Contract Items:
 Bridge End Drain, DR-401
 Paved Shoulder, Portland Cement Concrete (Paved Shoulder Panel for Bridge End Drain)
- Incidental to Paved Shoulder:
 Modified Subbase
 Polymer Grid
- Incidental to Bridge End Drain:
 Transition Mat
 Seeding and Fertilizing
 Soil Fill
 Special Ditch Control (Wood Excelsior Mat)
 Turf Reinforced Mat, Type 2
 Watering for Sod, Special Ditch Control, or Slope Protection
 Mobilization for Watering
- Possible Tabulation:
 104-8A

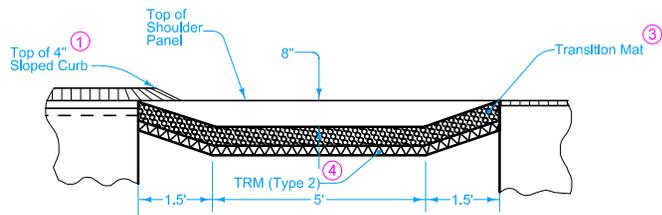
	REVISION	
	2	4-18-17
STANDARD ROAD PLAN	DR-401	
SHEET 1 of 2		
REVISIONS: Replaced text "Outlet or Channel Scour Protection" with "Transition Mat". Renumbered notes. Added hyperlinks to EC-104 and EC-105.		
APPROVED BY DESIGN METHODS ENGINEER		

SCOUR PROTECTION
FOR BRIDGE END DRAIN

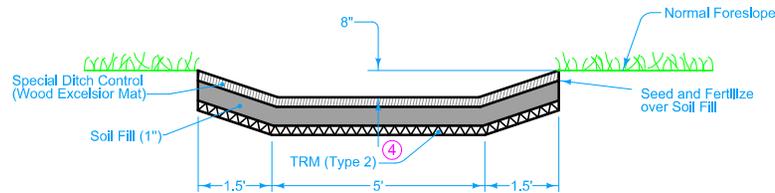


SECTION A-A

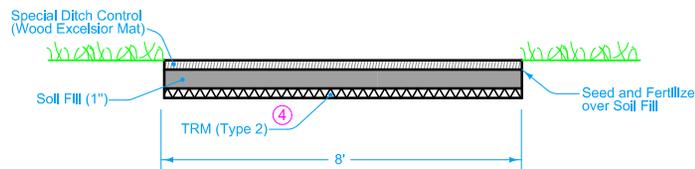
- ① Continue 4 inch sloped curb to edge of flume per section B-B. Refer to BR-201, BR-202, BR-203, or BR-204 for details of 4 inch curb.
- ③ Abut Transition Mat (see EC-105) panels to the edge of the pavement to prevent from being undercut by water. Cut panels to fit around guardrail posts to ensure pavement edge contact. No deduction will be made for area of Transition Mat panel removed for guardrail posts.
- ④ Extend TRM (see EC-104) flume 4 feet beyond toe of slope.
- ⑤ Install modified subbase and polymer grid under PCC shoulder panels as shown in Section A-A on BR-201, BR-202, BR-203, or BR-204.
- ⑥ Transition the flume flow line depth from 3 inches at the downstream edge of Transition Mat to 8 inches with an approximate transition rate of 1 inch vertical per 1 foot horizontal.
- ⑦ Transition the flume flow line depth from 8 inches at the toe of slope to 0 inches with an approximate transition rate of 2 inches vertical per 1 foot horizontal.



SECTION B-B



SECTION C-C



SECTION D-D

IOWA DOT	REVISION	
	2	4-18-17
STANDARD ROAD PLAN		DR-401
REVISIONS: Replaced text "Outlet or Channel Scour Protection" with "Transition Mat". Renumbered notes. Added hyperlinks to EC-104 and EC-105.		SHEET 2 of 2
<i>Brian Smith</i> APPROVED BY DESIGN METHODS ENGINEER		
SCOUR PROTECTION FOR BRIDGE END DRAIN		