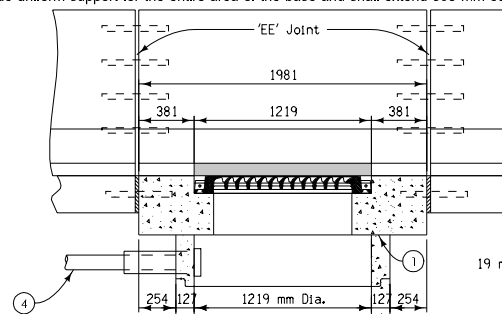
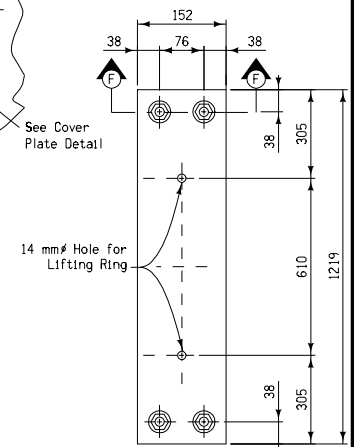
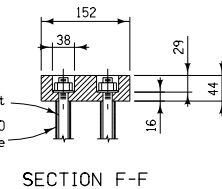
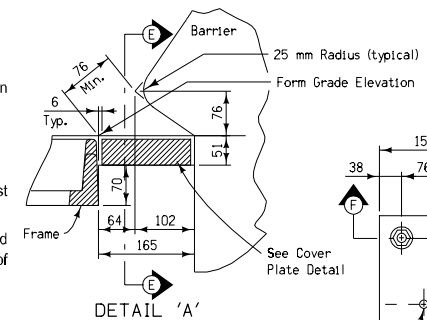
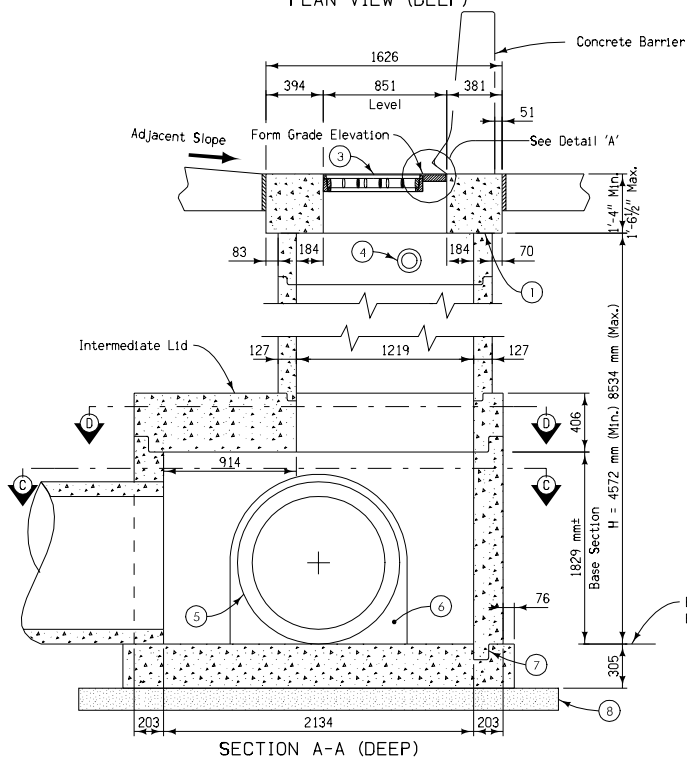


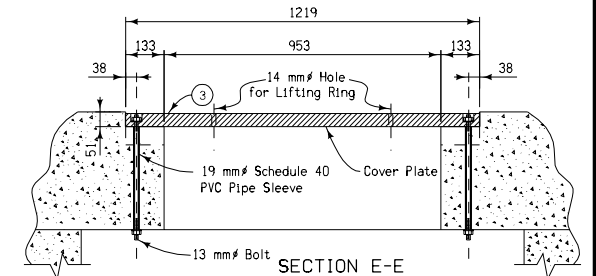
- ① Trowel smooth and place 2 layers of 13.6 kg. roofing felt to prevent bond.
- ② Cast frame into intake top. See Standard Road Plan RA-66D for frame and grate details.
- ③ Top elevation of grate and cover plate shall be 6 mm below Form Grade Elevation.
- ④ Possible subdrain. See plans for location and elevation. See Standard Road Plan RF-19C for connection details.
- ⑤ 920 mm maximum concrete pipe.
- ⑥ Oversized hole for pipe opening to be field grouted. See Standard Road Plan RA-56.
- ⑦ Intake base may be cast in place or precast. If precast, the base and first wall section may be cast separately with a keyway or as one unit.
- ⑧ If intake base is precast, it shall be placed on a 150 mm bed of sand. This bedding shall be compacted and provide uniform support for the entire area of the base and shall extend 305 mm outside the edge of base.



Remove cover plate before constructing concrete barrier.



All Plate steel to be ASTM A36, galvanized after fabrication.



All dimensions given in millimeters unless noted.

METRIC VERSION	Iowa Department of Transportation Highway Division	
	STANDARD ROAD PLAN RA-48B(2)	
	REVISION: NEW	REVISION NO. NEW
	APPROVED BY <i>Deanna Mayhew</i> DESIGN METHODS ENGINEER	REVISION DATE 04-18-06
	SINGLE GRATE BARRIER INTAKE, CIRCULAR (Sheet 2 of 5)	

For joint details, see Standard Road Plans RH-50, RH-51 and RH-52.