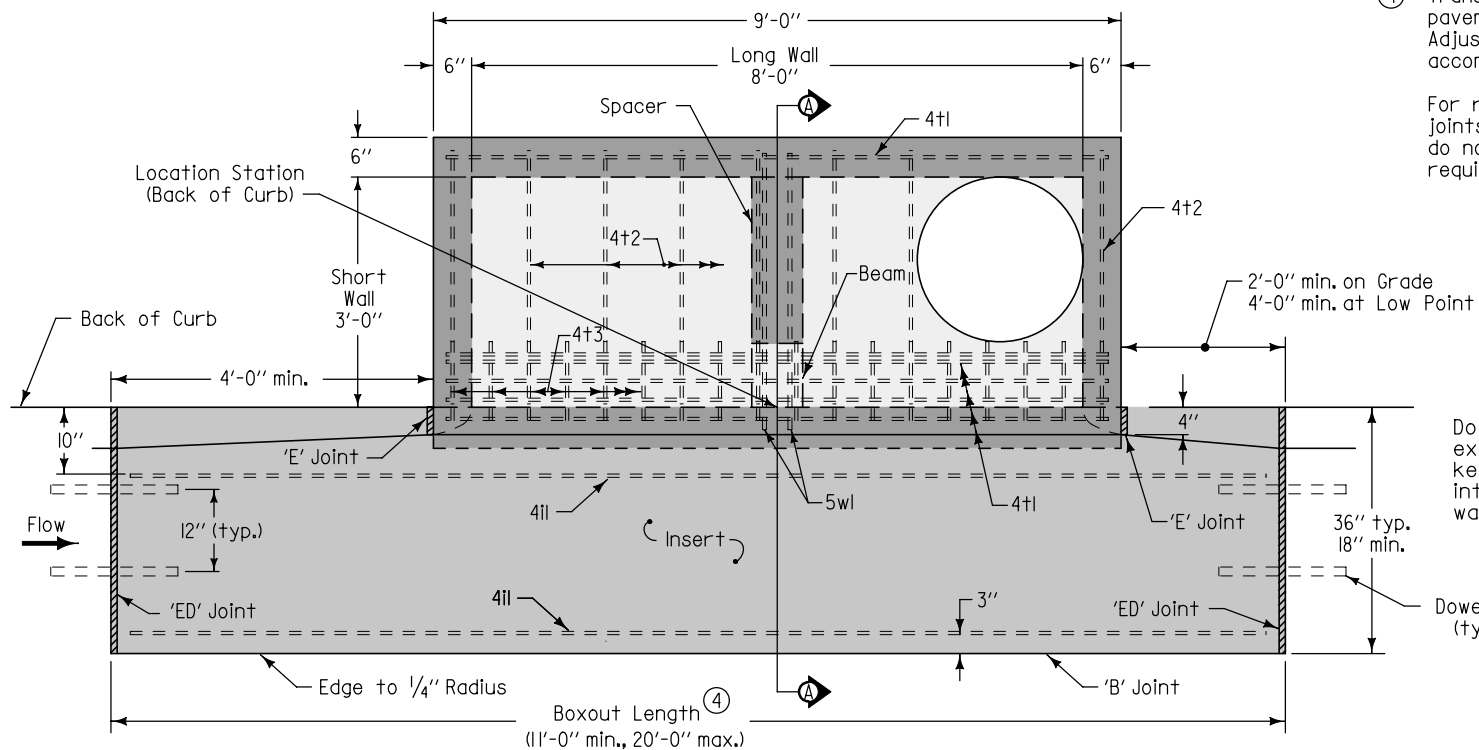




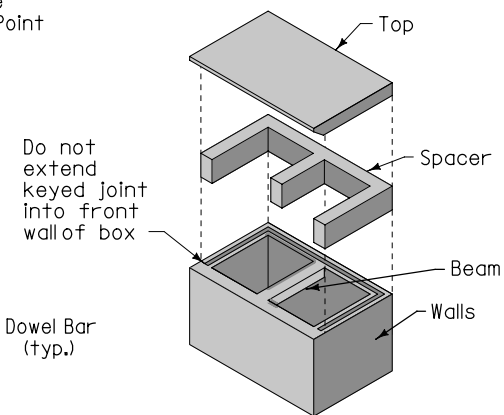
 SUDAS	 Iowa Department of Transportation	REVISION NEW 04-21-0	
		SW-509 SHEET 1 of 2	
FIGURE 6010.509	STANDARD ROAD PLAN	REVISIONS: New. Replaces SUDAS Type "M-1" Intake.	
 SUDAS DIRECTOR	 DESIGN METHODS ENGINEER		
DOUBLE OPEN-THROAT INTAKE, SMALL BOX			



PLAN

④ Transverse joint spacing on new concrete pavement is controlled by the intake boxout. Adjust adjacent joint spacing as required to accommodate boxouts.

For retrofit intakes, match existing pavement joints. Stop any transverse pavement joints that do not conform to the minimum spacing requirements at the edge of the insert area.

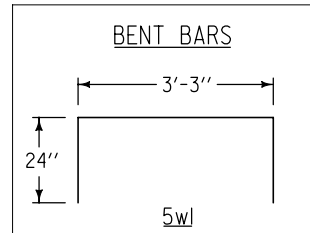


ISOMETRIC

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
4b1	4	Base	—	9	3'-6"	12"
4b2	4	Base	—	5	8'-6"	10"
4l1	4	Insert	—	4	Boxout Length minus 8"	See Insert
4t1	4	Top	—	6	8'-6"	See Plan
4t2	4	Top	—	8	3'-6"	12"
4t3	4	Top	—	18	10"	6"
4w1	4	Walls	—	22	Wall Height minus 4"	13"
4w2	4	Long Walls	—	Varies	4'-8"	12"
4w3	4	Short Walls	—	Varies	3'-8"	12"
5w1	5	Beam	⌈	2	7'-3"	4"

BENT BARS



MAXIMUM PIPE DIAMETERS

Pipe Location	Precast Structure	Cast-in-place Structure
Short Wall	24"	30"
Long Wall	60"	66"

SUDAS FIGURE 6010.509 REVISIONS: New. Replaces SUDAS Type "M-1" Intake. SUDAS DIRECTOR DESIGN METHODS ENGINEER	Iowa Department of Transportation STANDARD ROAD PLAN	REVISION NEW 04-21-09 SW-509 SHEET 2 of 2
	DOUBLE OPEN-THROAT INTAKE, SMALL BOX	