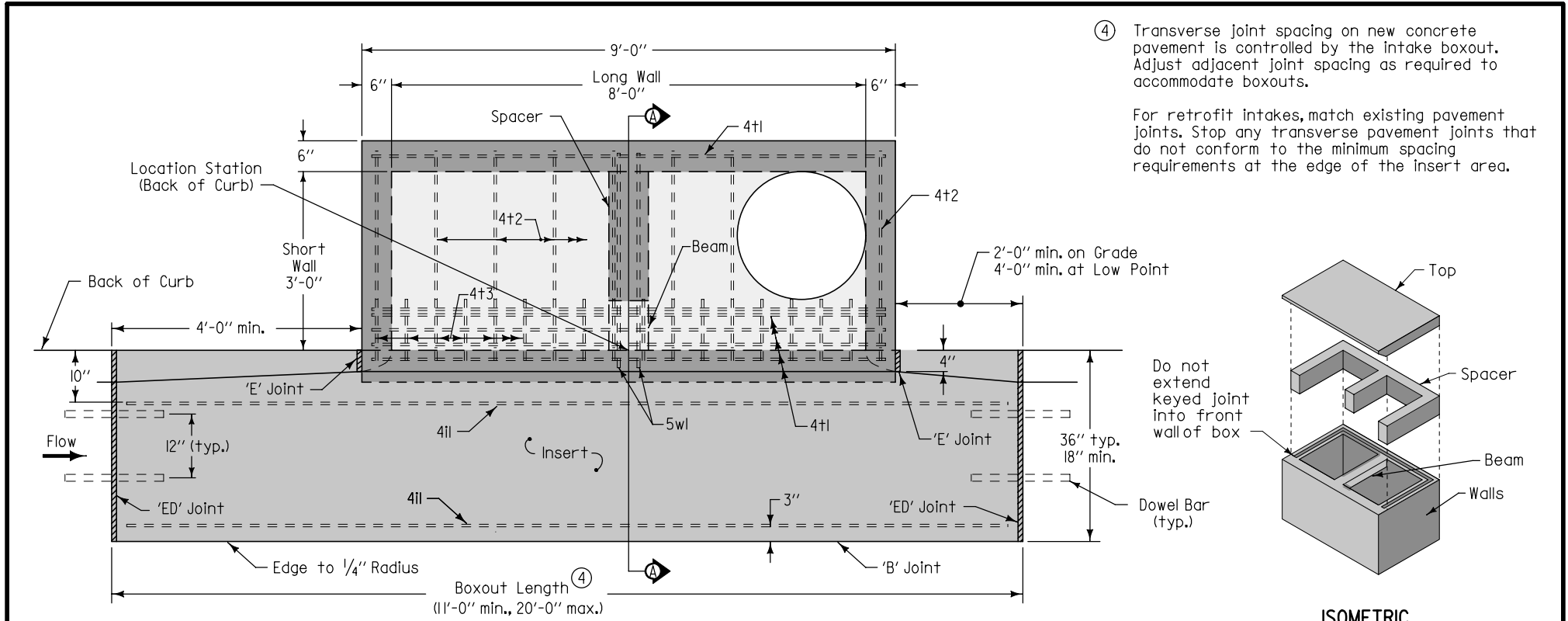
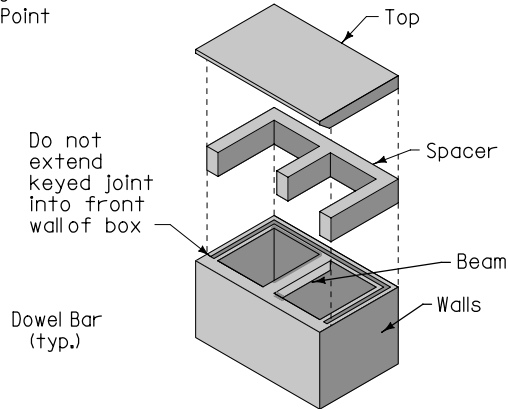


SUDAS	Iowa Department of Transportation	REVISION
		NEW 04-21-09
FIGURE 6010.509	STANDARD ROAD PLAN	SW-509
REVISIONS: New. Replaces SUDAS Type "M-1" Intake.		SHEET 1 of 2
SUDAS DIRECTOR		DESIGN METHODS ENGINEER
DOUBLE OPEN-THROAT INTAKE, SMALL BOX		



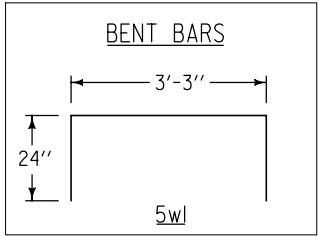
④ Transverse joint spacing on new concrete pavement is controlled by the intake boxout. Adjust adjacent joint spacing as required to accommodate boxouts.

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

PLAN



REINFORCING BAR LIST						
Mark	Size	Location	Shape	Count	Length	Spacing
4b1	4	Base	—	9	3'-6"	12"
4b2	4	Base	—	5	8'-6"	10"
4il	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"

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

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FIGURE 6010.509	STANDARD ROAD PLAN	SW-509
		SHEET 2 of 2
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