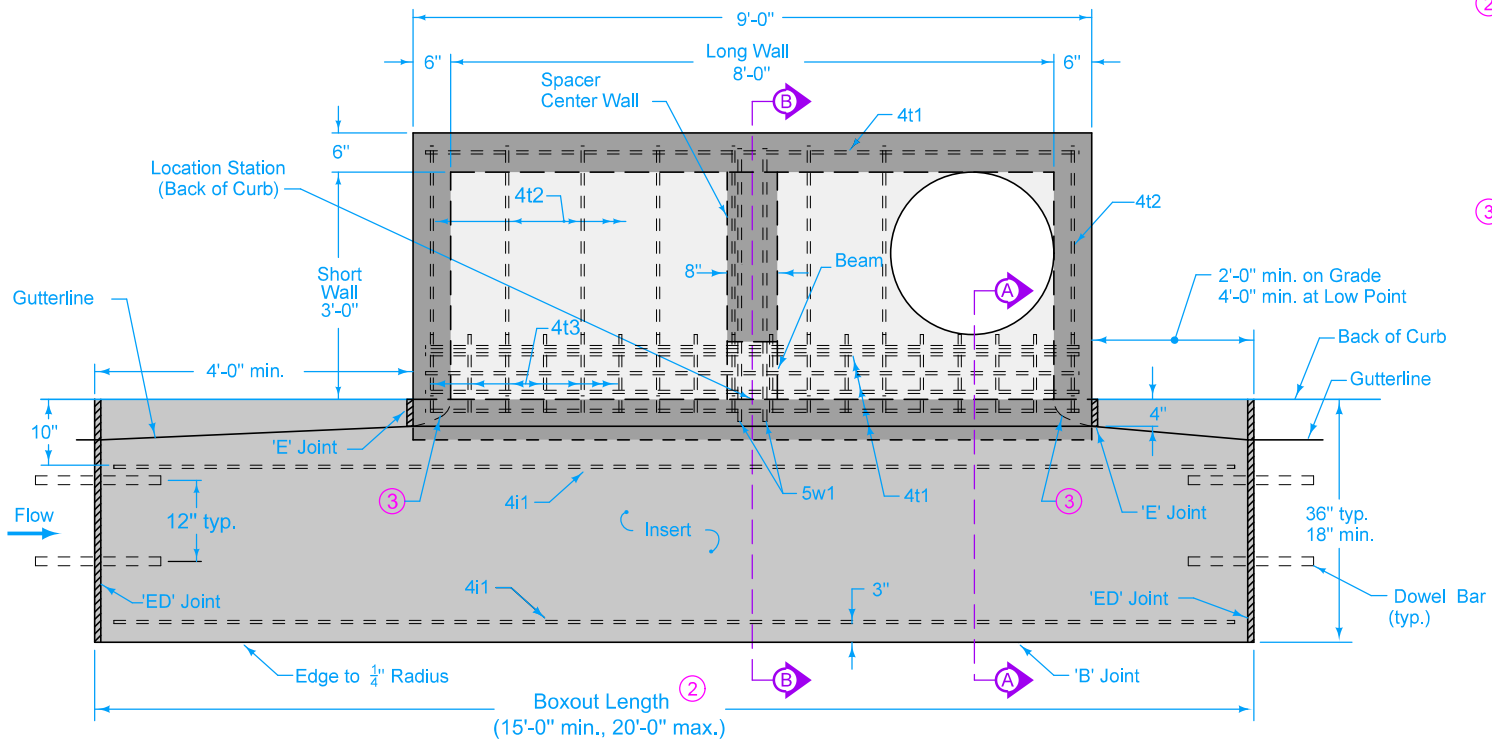


FIGURE 6010.509 SHEET 1 OF 3

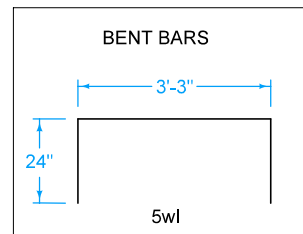
SUDAS	IOWADOT	REVISION
		5 04-17-18
FIGURE 6010.509	STANDARD ROAD PLAN	SW-509
		SHEET 1 of 3
REVISIONS: Added second Insert drawing to include 4" curb. Changed "Invert" callout to "Concrete Fillet". Modified circle notes.		
Paul D. Wigand SUDAS DIRECTOR		Brian Smith DESIGN METHODS ENGINEER
DOUBLE OPEN-THROAT CURB INTAKE, SMALL BOX		



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"
4i1	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"



② 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.

③ Rounded shaping at inlet.

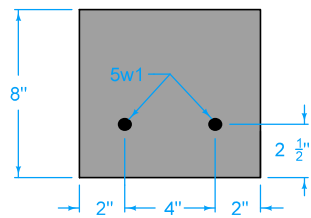
2'-0" min. on Grade
4'-0" min. at Low Point

Back of Curb
Gutterline

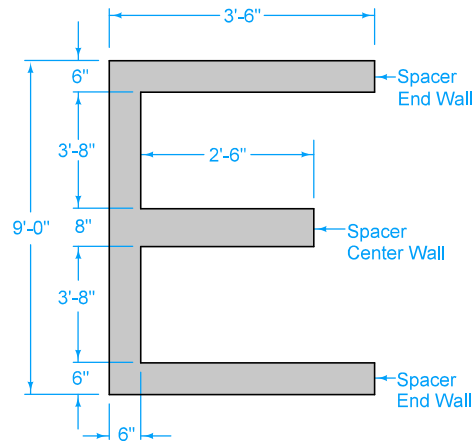
36" typ.
18" min.
Dowel Bar (typ.)

Boxout Length ②
(15'-0" min., 20'-0" max.)

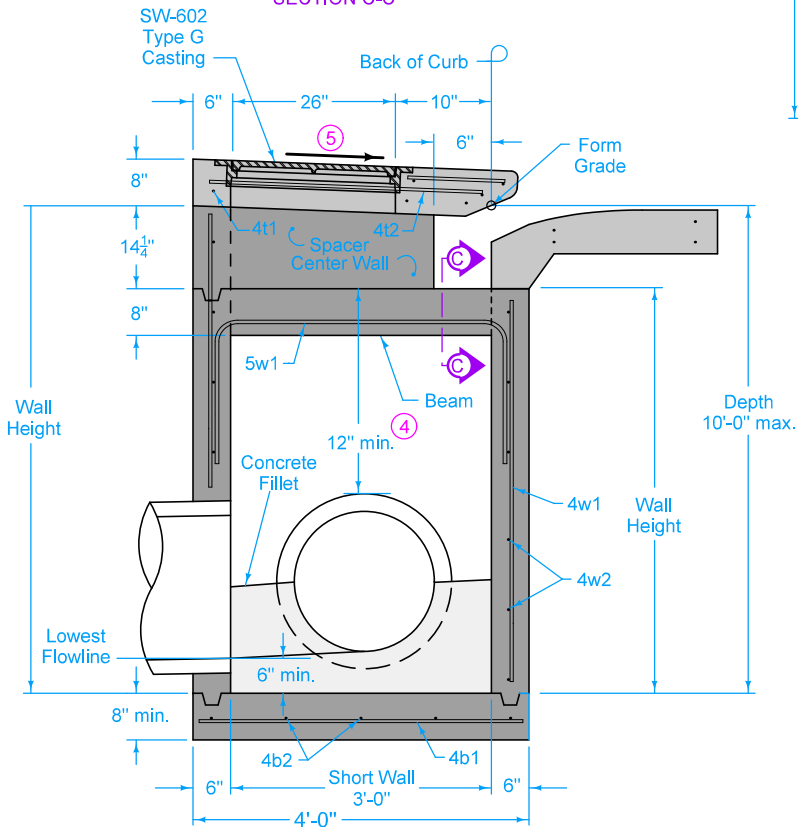
SUDAS IOWADOT	REVISION 5 04-17-18
	FIGURE 6010.509 STANDARD ROAD PLAN SW-509 SHEET 2 of 3
REVISIONS: Added second Insert drawing to include 4" curb. Changed 'Insert' callout to 'Concrete Filler'. Modified circle notes.	
Paul D. Wigand Brian Smith SUDAS DIRECTOR DESIGN METHODS ENGINEER	
DOUBLE OPEN-THROAT CURB INTAKE, SMALL BOX	



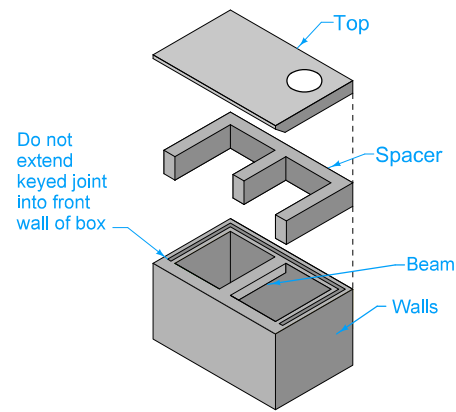
SECTION C-C



PLAN (SPACER)



SECTION B-B



ISOMETRIC
(Refer to SECTION B-B for alignment of Top with Spacer)

- ④ 12 inch minimum wall height above all pipes.
- ⑤ Slope of 1.5% or as specified in the contract documents.

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

FIGURE 6010.509 SHEET 3 OF 3

SUDAS	IOWADOT	REVISION
		5 04-17-18
FIGURE 6010.509	STANDARD ROAD PLAN	SW-509
		SHEET 3 of 3
REVISIONS: Added second Insert drawing to include 4" curb. Changed "invert" callout to "Concrete Fillet". Modified circle notes.		
<i>Paul D. Wigand</i> SUDAS DIRECTOR		<i>Brian Smith</i> DESIGN METHODS ENGINEER
DOUBLE OPEN-THROAT CURB INTAKE, SMALL BOX		