

① Insert shaping may be modified for insert widths less than 36 inches. For an 18 inch insert, reduce dimensions indicated by 1/4 inch.

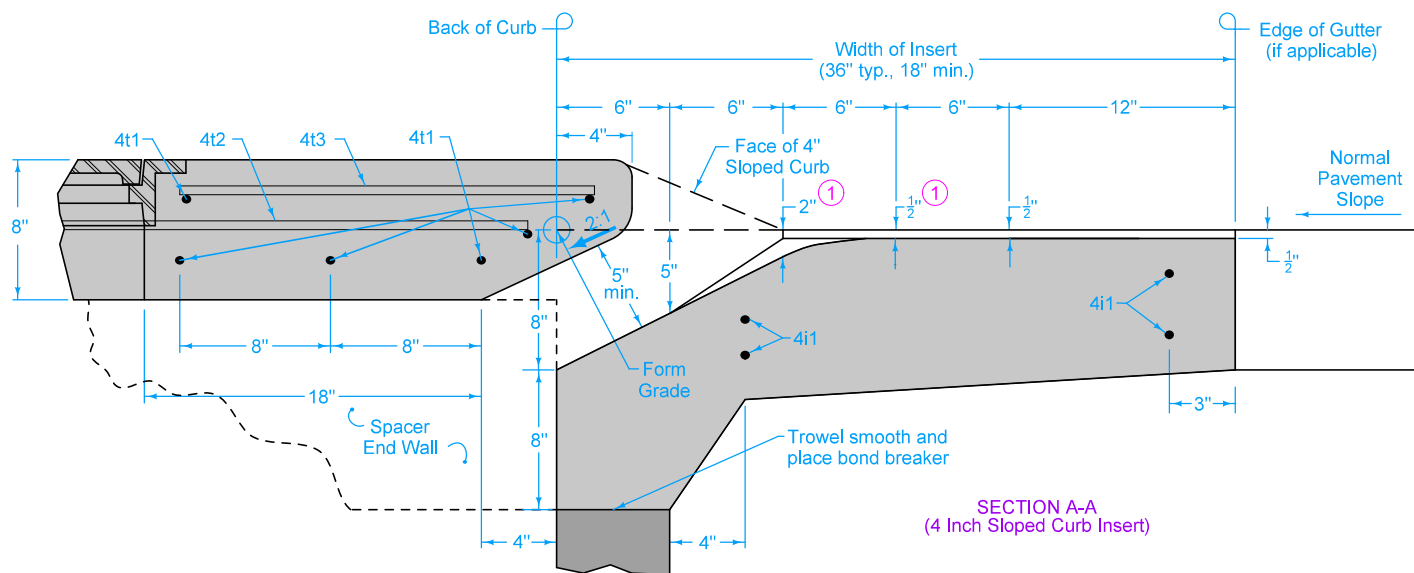
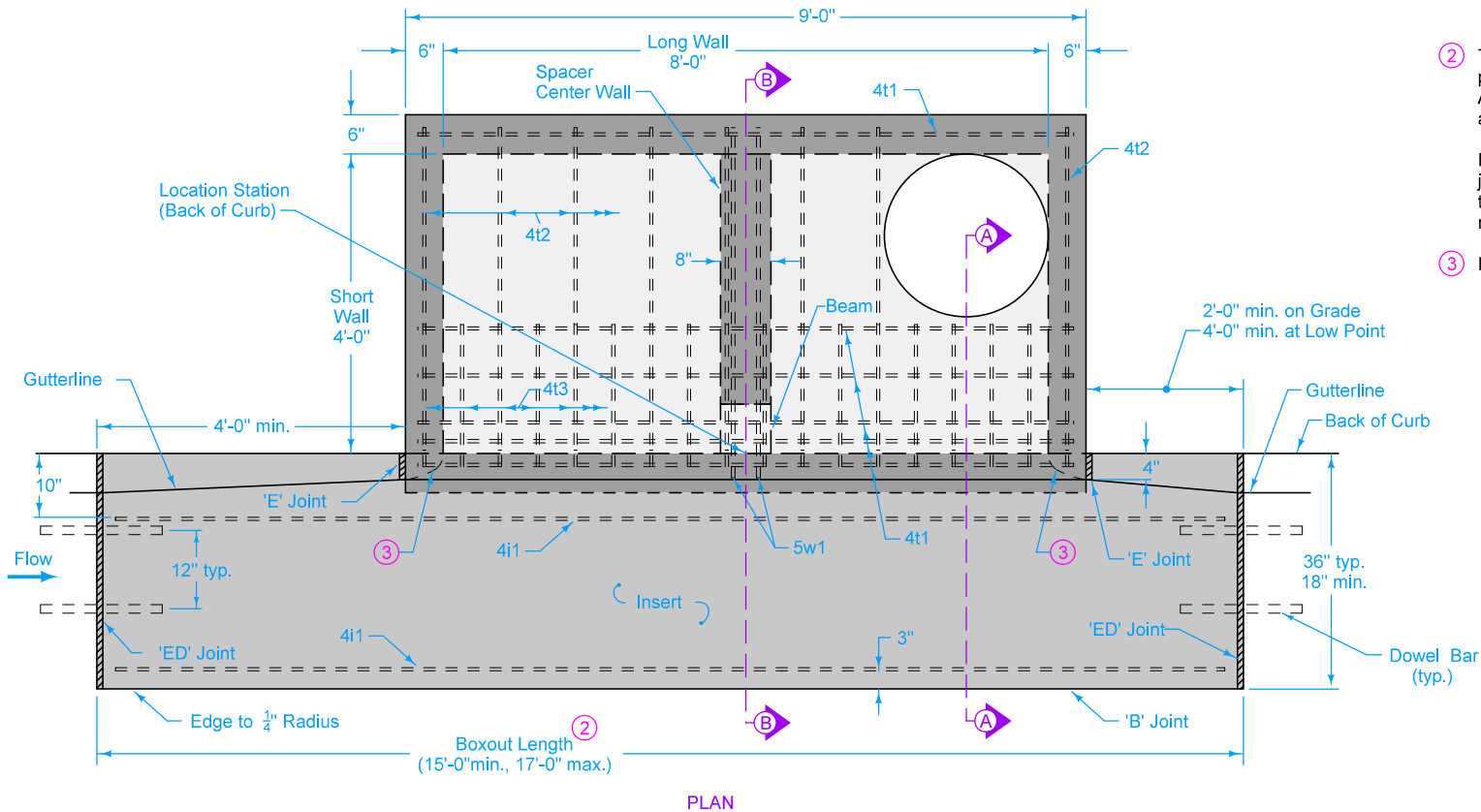


FIGURE 6010.510 SHEET 1 OF 3

SUDAS	IOWADOT	REVISION
		6 04-21-20
FIGURE 6010.510	STANDARD ROAD PLAN	<b>SW-510</b>
		SHEET 1 of 3
REVISIONS: Added Class 1 Bedding Material and changed maximum box out length to 17'.		
<i>Paul D. Wigand</i> SUDAS DIRECTOR		<i>Scott Miller</i> DESIGN METHODS ENGINEER
<b>DOUBLE OPEN-THROAT CURB INTAKE, LARGE BOX</b>		



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 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

Gutterline

4'-0" min.

10"

'E' Joint

12" typ.

'ED' Joint

Edge to 1/4" Radius

Boxout Length ②  
(15'-0" min., 17'-0" max.)

PLAN

Gutterline  
Back of Curb

4"

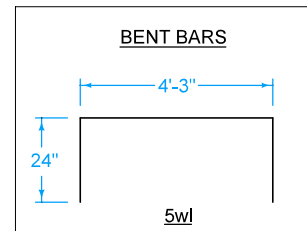
36" typ.  
18" min.  
Dowel Bar (typ.)

'E' Joint

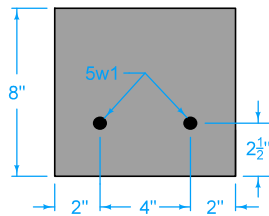
'B' Joint

### REINFORCING BAR LIST

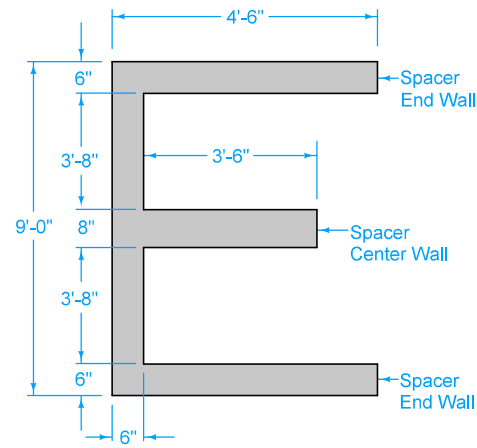
Mark	Size	Location	Shape	Count	Length	Spacing
4b1	4	Base	—	9	4'-6"	12"
4b2	4	Base	—	6	8'-6"	11"
4i1	4	Insert	—	4	Boxout Length minus 8"	See Insert
4t1	4	Top	—	7	8'-6"	See Plan
4t2	4	Top	—	8	4'-4"	12"
4t3	4	Top	—	18	1'-10"	6"
4w1	4	Walls	—	24	Wall Height minus 4"	13"
4w2	4	Long Walls	—	Varies	4'-8"	12"
4w3	4	Short Walls	—	Varies	8'-8"	12"
5w1	5	Beam	┌	2	8'-3"	4"



SUDAS	IOWADOT	REVISION
		6 04-21-20
FIGURE 6010.510	STANDARD ROAD PLAN	<b>SW-510</b>
		SHEET 2 of 3
REVISIONS: Added Class 1 Bedding Material and changed maximum box out length to 17'.		
<i>Paul D. Wigand</i> SUDAS DIRECTOR		<i>Steve Miller</i> DESIGN METHODS ENGINEER
<b>DOUBLE OPEN-THROAT CURB INTAKE, LARGE BOX</b>		



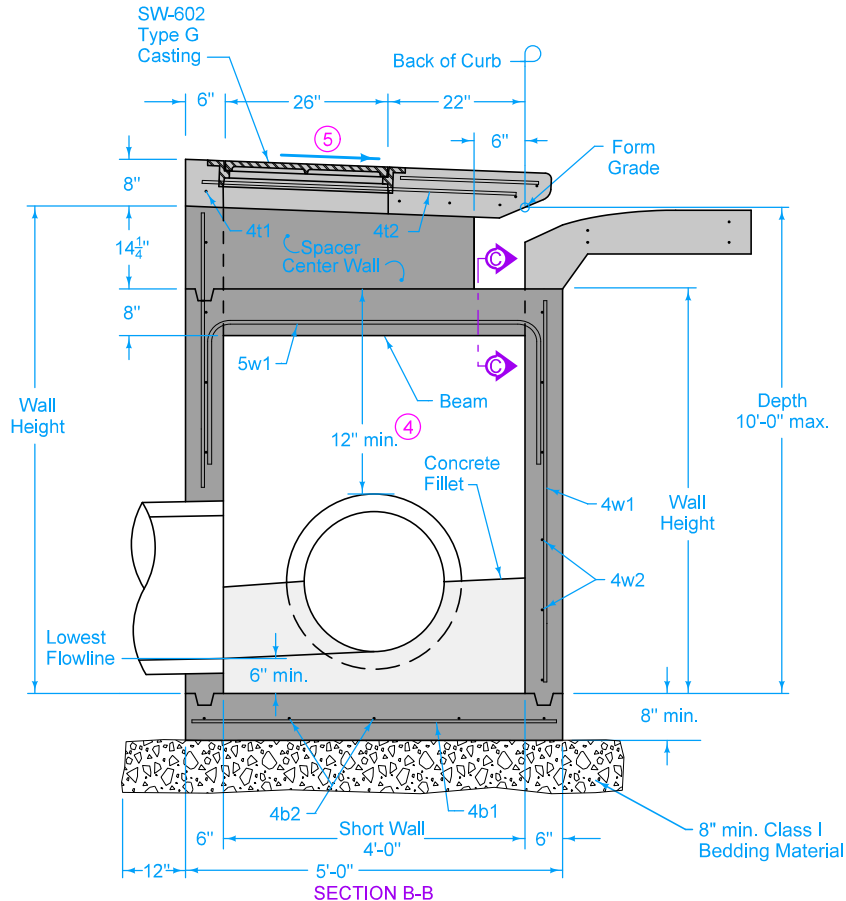
SECTION C-C



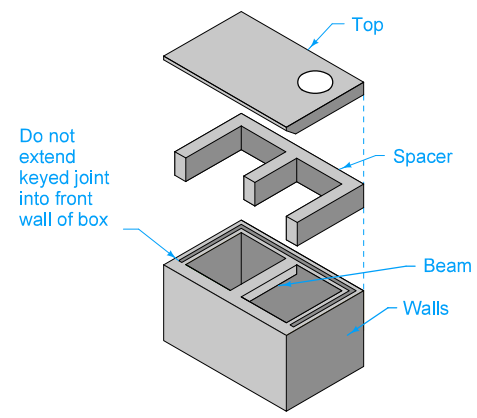
PLAN (SPACER)

- 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	30"	36"
Long Wall	60"	66"



SECTION B-B



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

FIGURE 6010.510 SHEET 3 OF 3

SUDAS	IOWADOT	REVISION
		6 04-21-20
FIGURE 6010.510	STANDARD ROAD PLAN	<b>SW-510</b>
		SHEET 3 of 3
REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17'.		
<i>Paul D. Weigand</i> SUDAS DIRECTOR		<i>Steve Miller</i> DESIGN METHODS ENGINEER
<b>DOUBLE OPEN-THROAT CURB INTAKE, LARGE BOX</b>		