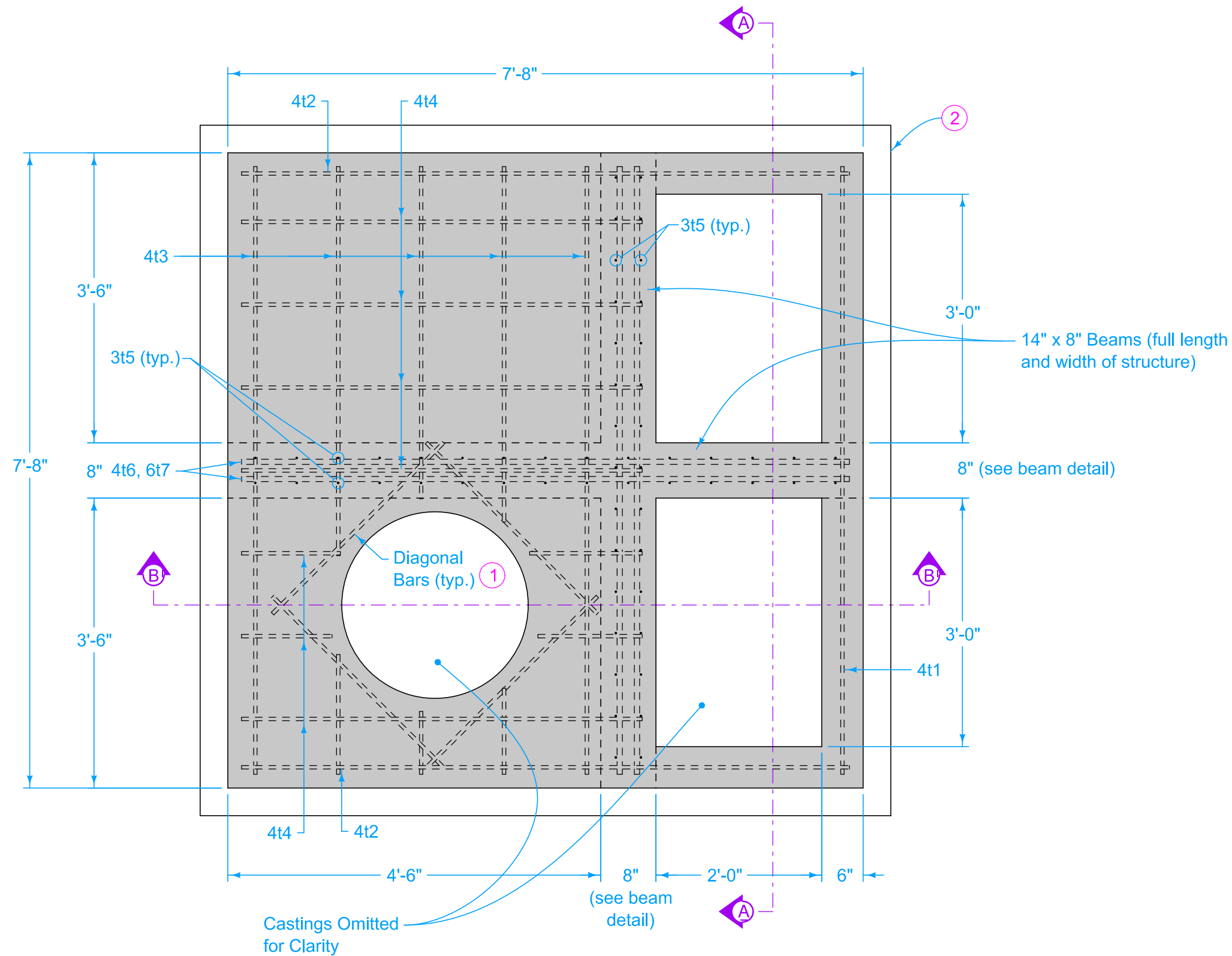


Maximum pipe diameters are set based on maximum structure depth of 6 feet-6 inches.

Refer to SW-514 for boxout details.

- ① Install four #4 diagonal bars at manhole opening and at all pipe openings.
- ② Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.

MAXIMUM PIPE DIAMETERS	
Wall	Max. Dia.
Front/Back	36"
Sides	42"



PLAN

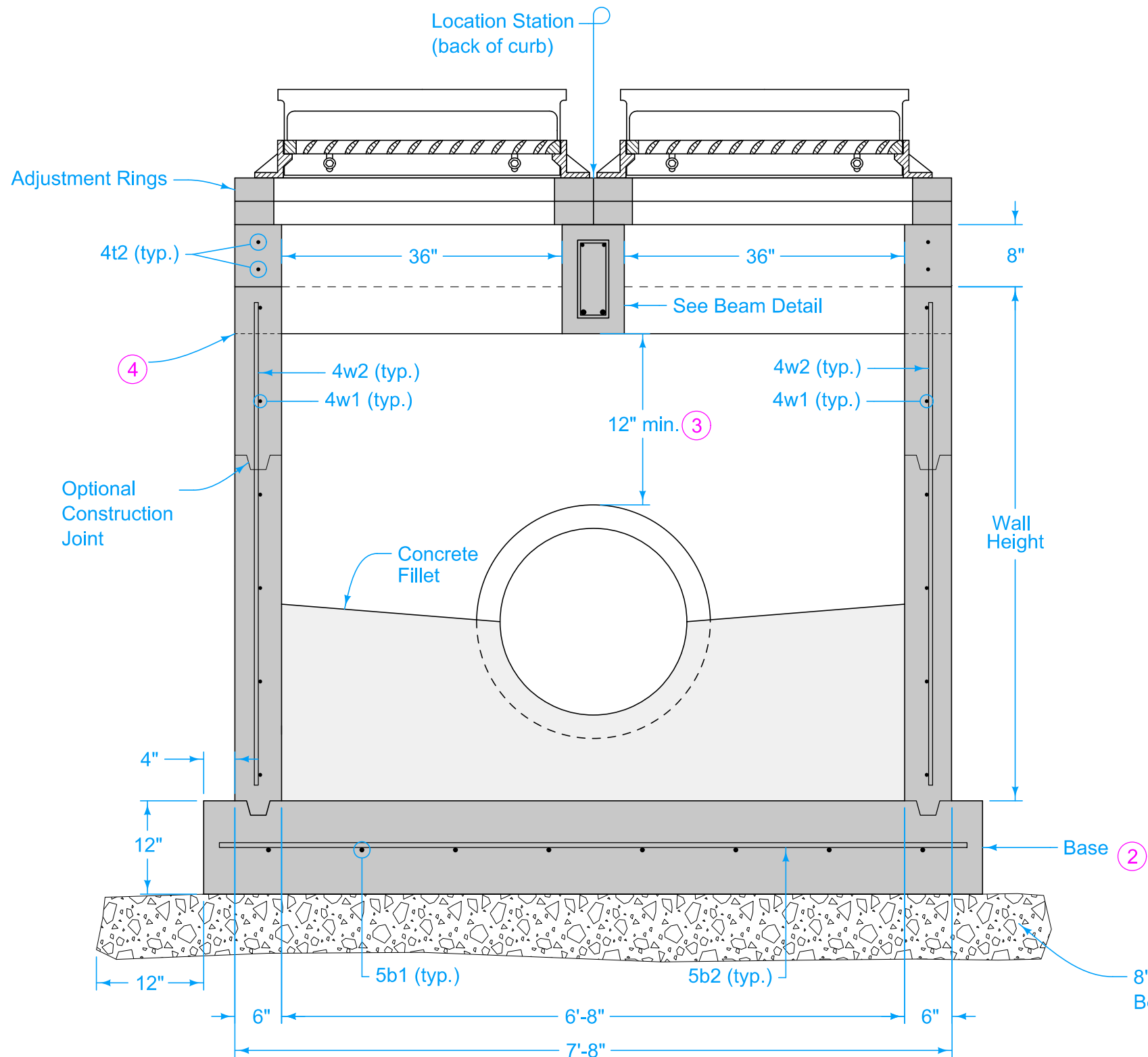
FIGURE 6010.516 SHEET 1 OF 3

SUDAS	IOWA DOT	REVISION	
		New	4-16-24
FIGURE 6010.516	STANDARD ROAD PLAN	SW-516	
		SHEET 1 of 3	

REVISIONS: New.

SUDAS DIRECTOR
 DESIGN METHODS ENGINEER

LARGE WELL DOUBLE GRATE INTAKE WITH MANHOLE



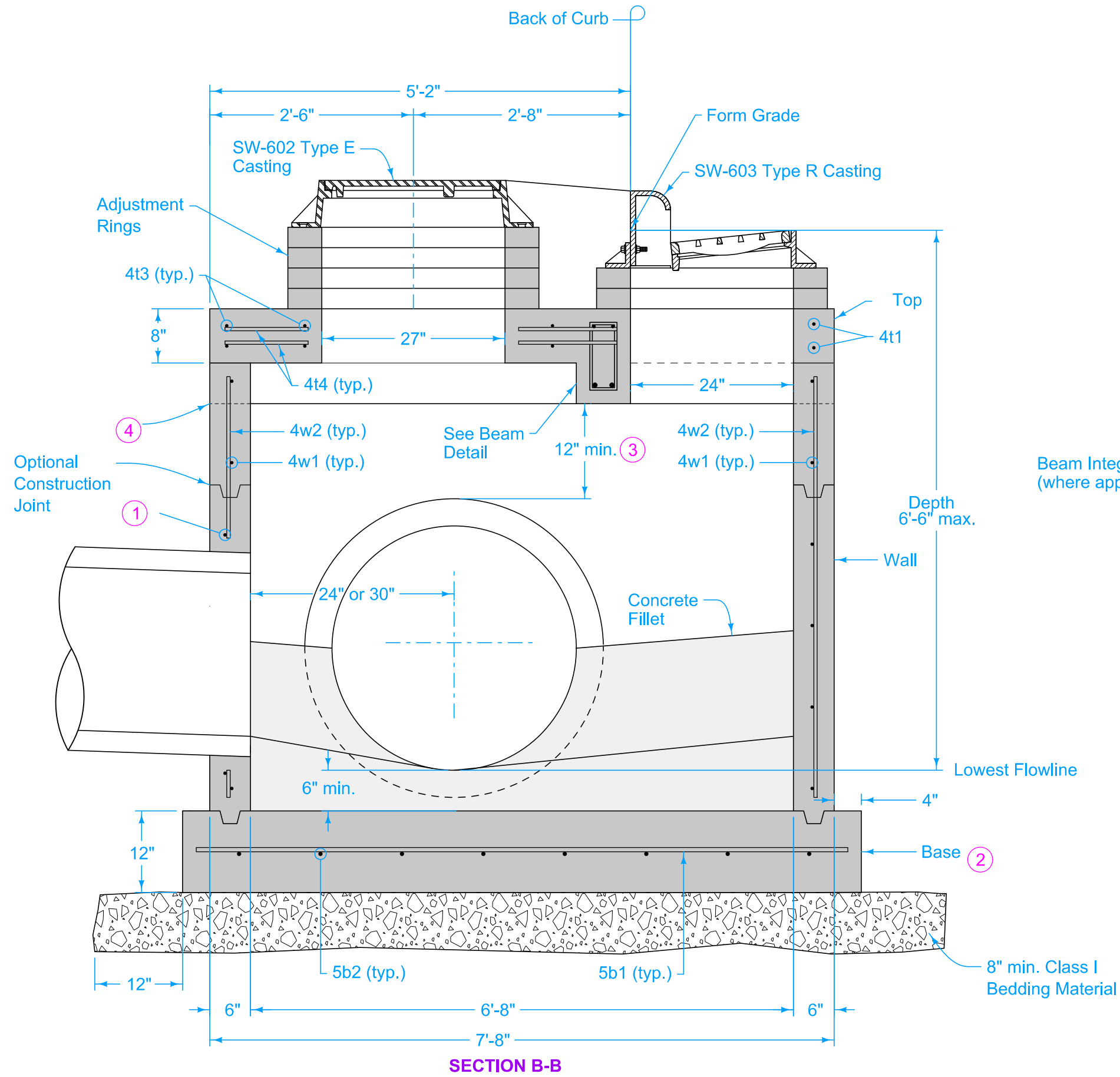
- 1 Install four #4 diagonal bars at manhole opening and at all pipe openings.
- 2 Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- 3 12 inch minimum wall height above all pipes.
- 4 Form pockets in the wall to receive integral beams in the top.

REINFORCING BAR LIST						
Mark	Size	Location	Shape	Count	Length	Spacing
4t1	4	Top	—	2	7'-4"	See Detail
4t2	4	Top	—	4	7'-4"	See Detail
4t3	4	Top	—	10	7'-4"	12"
4t4	4	Top	—	14	4'-2"	12"
3t5	3	Top	⊠	30	3'-1"	6"
4t6	4	Top	—	4	7'-4"	See Detail
6t7	6	Top	—	4	7'-4"	See Detail
4w1	4	Walls	—	Varies	7'-4"	12"
4w2	4	Walls	—	32	Wall Height minus 4"	12"
5b1	5	Base	—	9	7'-10"	12"
5b2	5	Base	—	9	7'-10"	12"

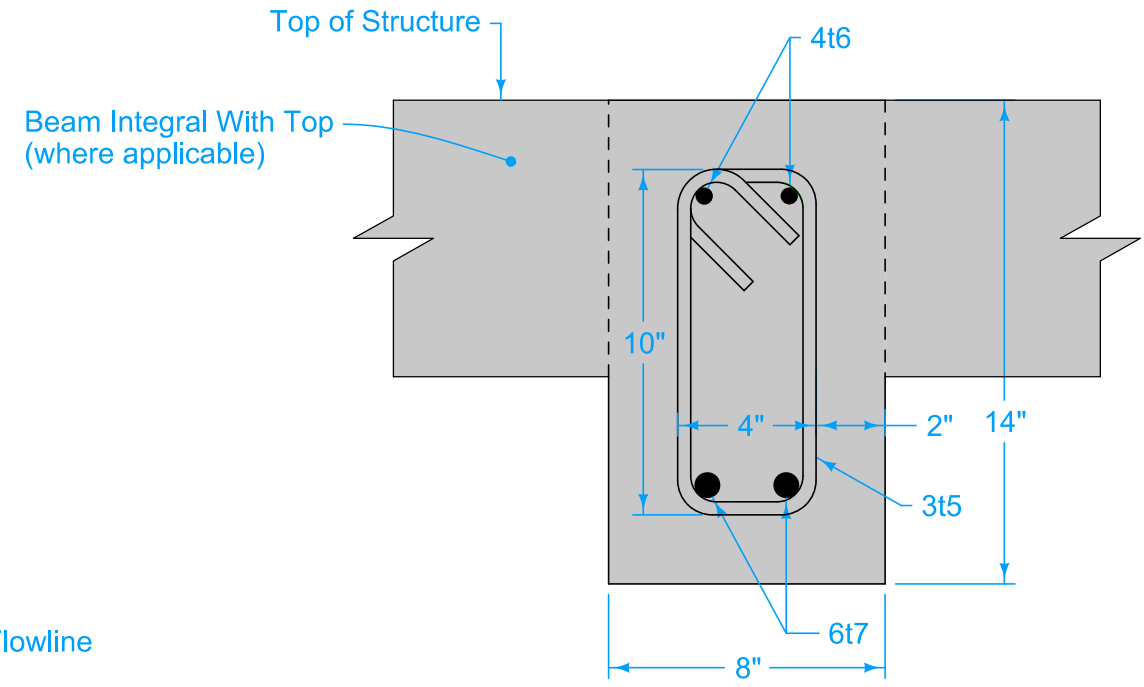
FIGURE 6010.516 SHEET 2 OF 3

SECTION A-A

		REVISION	
		New	4-16-24
FIGURE 6010.516		STANDARD ROAD PLAN	
		SW-516 SHEET 2 of 3	
REVISIONS: New.			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
LARGE WELL DOUBLE GRATE INTAKE WITH MANHOLE			



- ① Install four #4 diagonal bars at manhole opening and at all pipe openings.
- ② Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ③ 12 inch minimum wall height above all pipes.
- ④ Form pockets in the wall to receive integral beams in the top.



BEAM DETAIL

SUDAS IOWA DOT	REVISION
	New 4-16-24
FIGURE 6010.516	STANDARD ROAD PLAN
SW-516 SHEET 3 of 3	

REVISIONS: New.

SUDAS DIRECTOR
 DESIGN METHODS ENGINEER

LARGE WELL DOUBLE GRATE INTAKE WITH MANHOLE