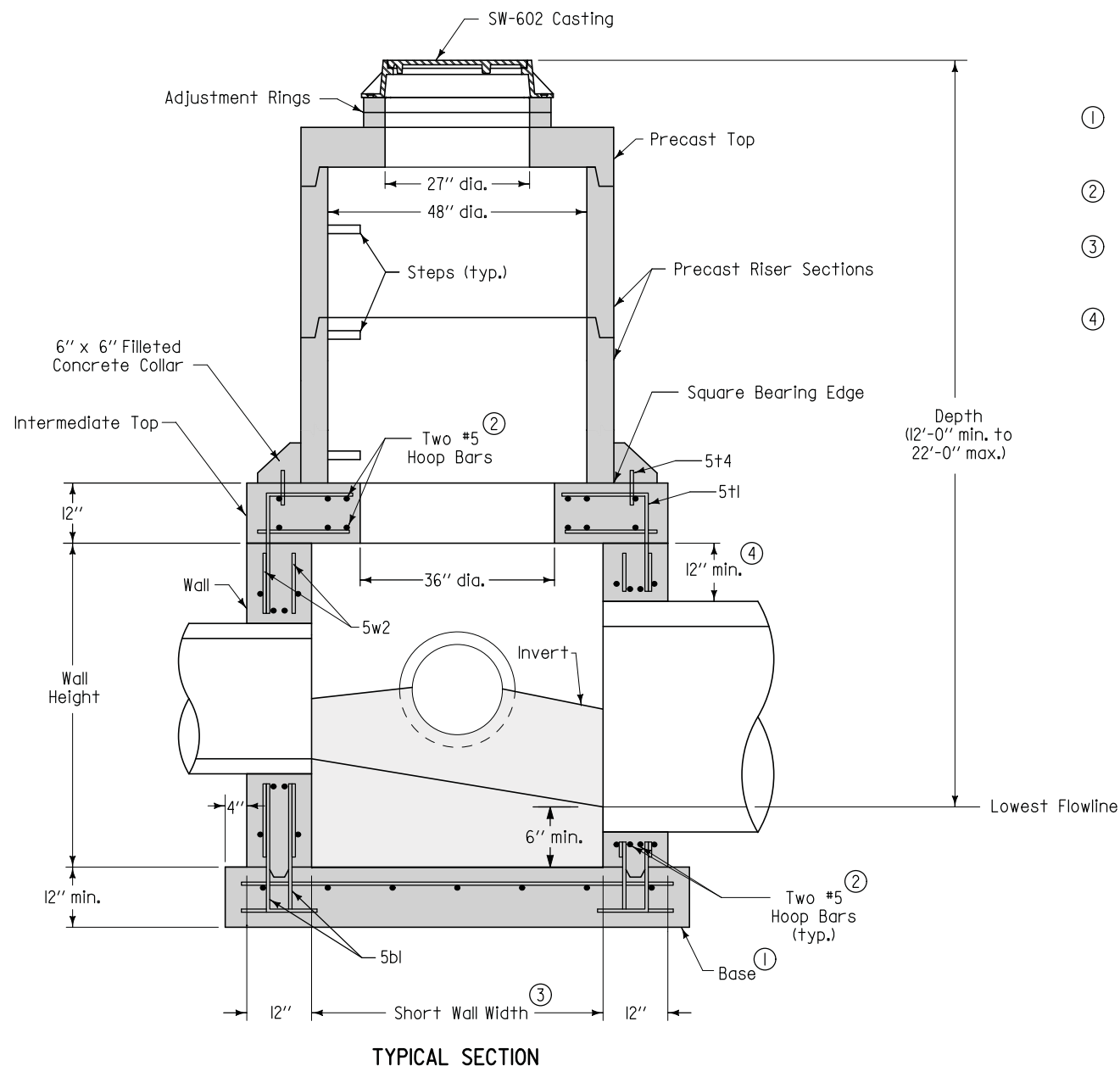
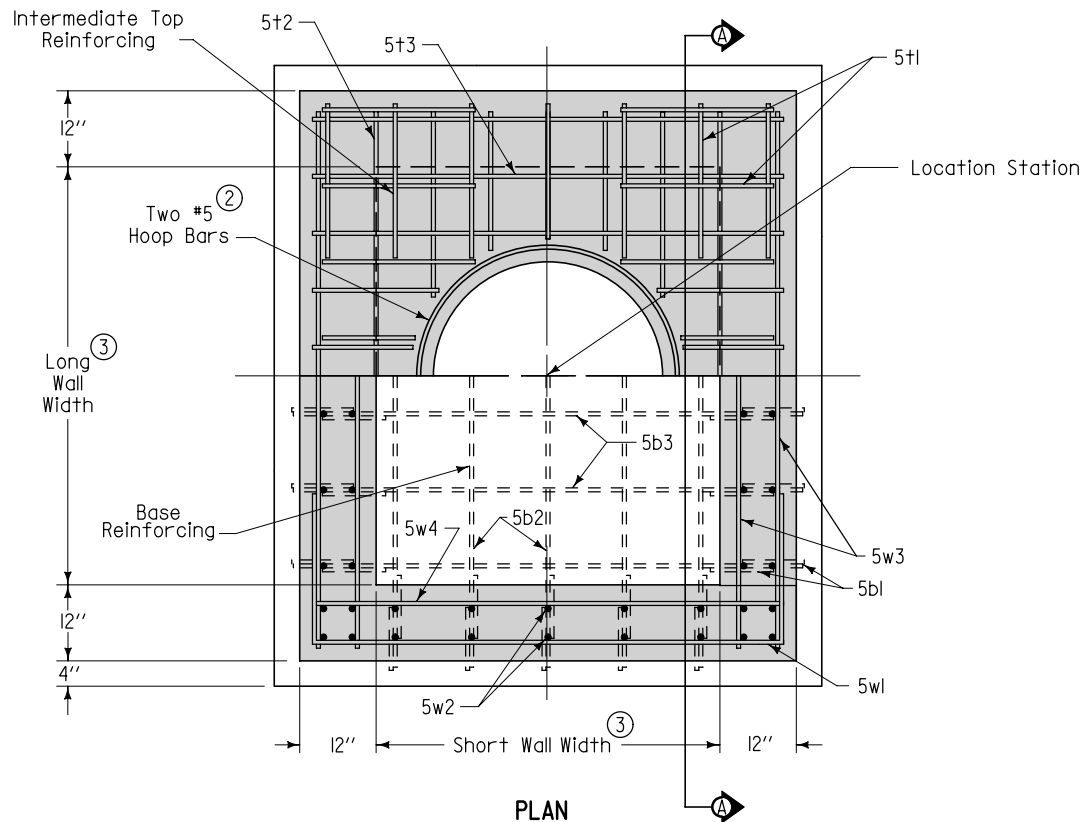




Adjacent walls may have different widths based upon pipe configuration, but structure must be rectangular.

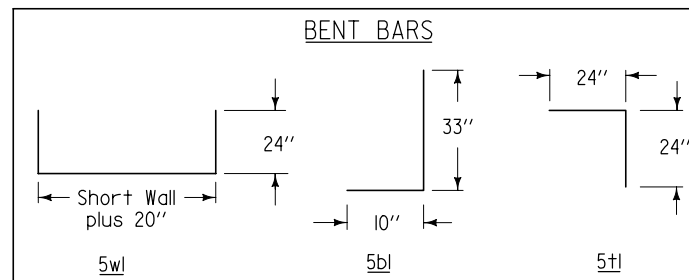
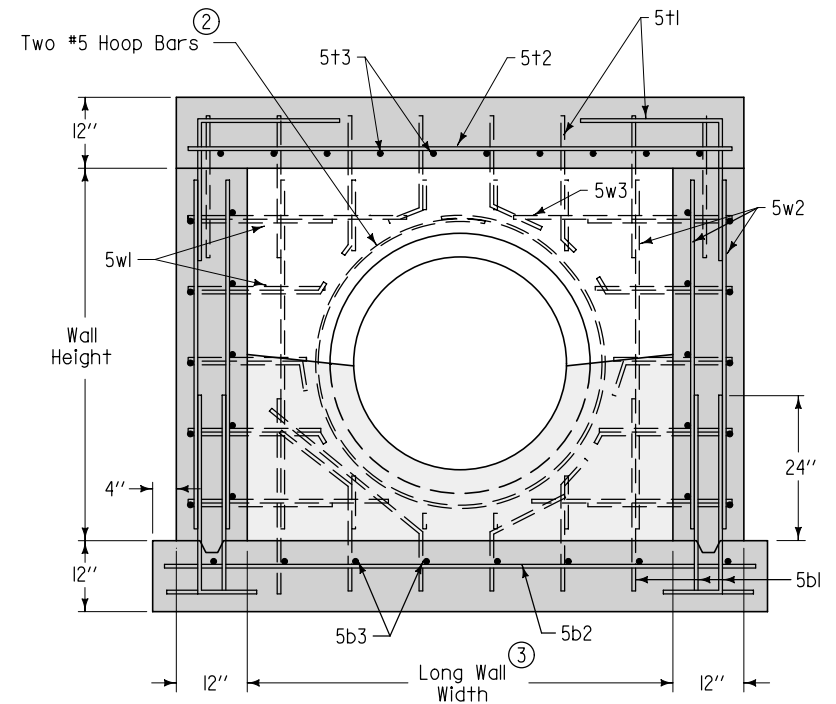
- ① Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ② Provide two #5 hoop bars at intermediate top opening and at all pipe openings.
- ③ Wall widths vary with pipe diameter and range from 4 feet minimum to 12 feet maximum. Provide 12 inches of wall width (minimum) each side of pipe opening.
- ④ 12 inch minimum wall height above all pipes.

 SUDAS	 Iowa Department of Transportation	REVISION	
		NEW	04-21-0
FIGURE 6010.404	STANDARD ROAD PLAN	SW-404	
		SHEET 1 of 2	
REVISIONS: New. Replaces SUDAS Type "M-D" Manhole.			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
RECTANGULAR BASE/ CIRCULAR TOP STORM SEWER MANHOLE			



REINFORCING BAR LIST					
Mark	Size	Location	Shape	Length	Spacing
5t1	5	Top		48"	12"
5t2	5	Top		Long Wall plus 20"	9"
5t3	5	Top		Short Wall plus 20"	9"
5t4	5	Top		8"	12"
5b1	5	Base		43"	12"
5b2	5	Base		Long Wall plus 26"	12"
5b3	5	Base		Short Wall plus 26"	12"
5w1	5	Wall		Short Wall plus 68"	12"
5w2	5	Wall		Wall Height minus 4"	12"
5w3	5	Wall		Long Wall plus 20"	12"
5w4	5	Wall		Short Wall plus 20"	12"

- ② Provide two #5 hoop bars at intermediate top opening and at all pipe openings.
- ③ Wall widths vary with pipe diameter and range from 4 feet minimum to 10 feet maximum. Provide 12 inches of wall width (minimum) each side of pipe opening.



SUDAS FIGURE 6010.404 REVISIONS: New. Replaces SUDAS Type "M-D" Manhole SUDAS DIRECTOR DESIGN METHODS ENGINEER	Iowa Department of Transportation STANDARD ROAD PLAN	REVISION NEW 04-21-09
		SW-404
		SHEET 2 of 2
RECTANGULAR BASE/ CIRCULAR TOP STORM SEWER MANHOLE		