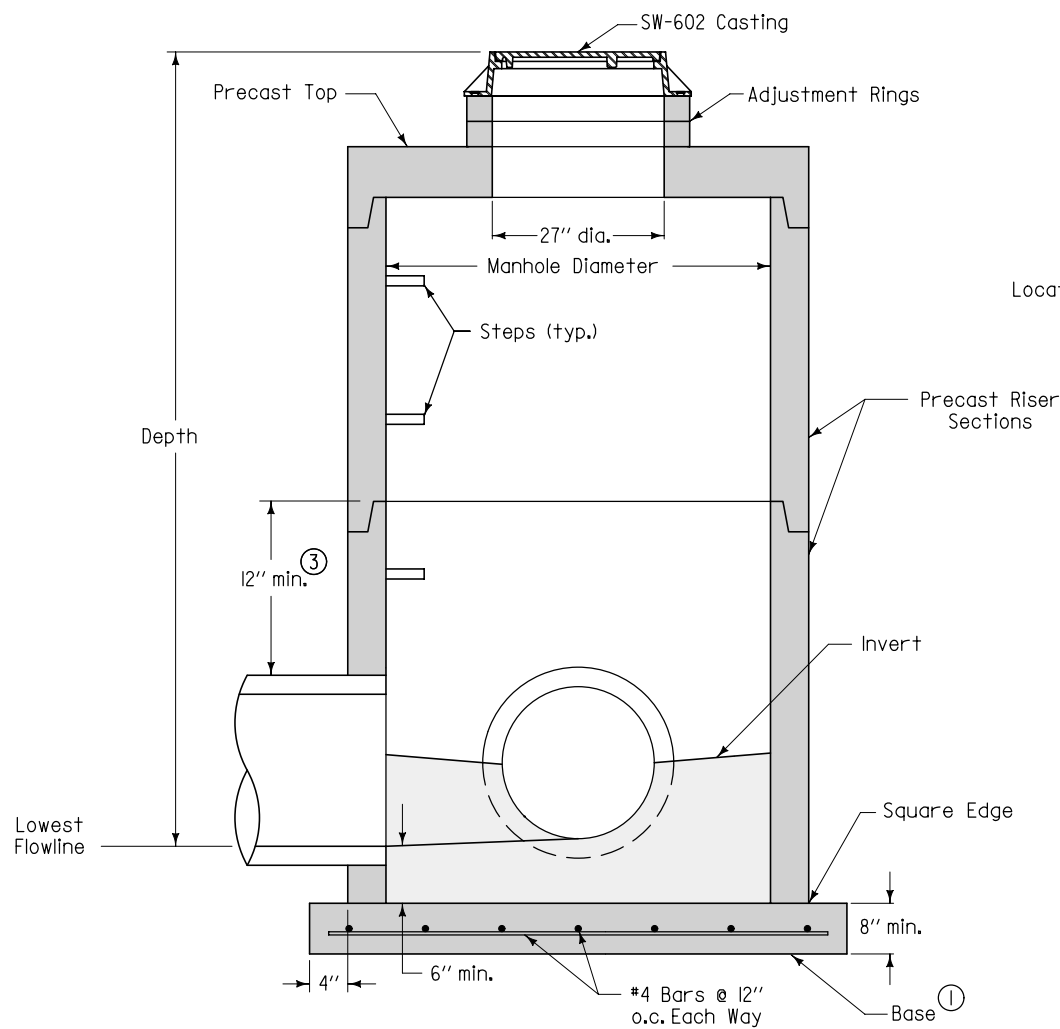
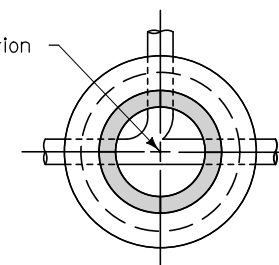


- ① Cast-in-place base shown. If base is precast integral with bottom riser, the footprint of the base is not required to extend beyond the outer edge of the riser.
- ② For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
- ③ 12 inch minimum riser height above all pipe openings.



TYPICAL SECTION



PLAN

Manhole Diameter (inches)	Maximum Pipe Diameter (inches) for 2 Pipes ^②	
	At 180° Separation	At 90° Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

SUDAS	Iowa Department of Transportation	REVISION	
		NEW	04-21-09
FIGURE 6010.401		STANDARD ROAD PLAN	
		SW-401 SHEET 1 of 1	
REVISIONS: New. Replaces SUDAS Type "M-A" Manhole. Will replace RA-50.			
SUDAS DIRECTOR		DESIGN METHODS ENGINEER	
CIRCULAR STORM SEWER MANHOLE			