

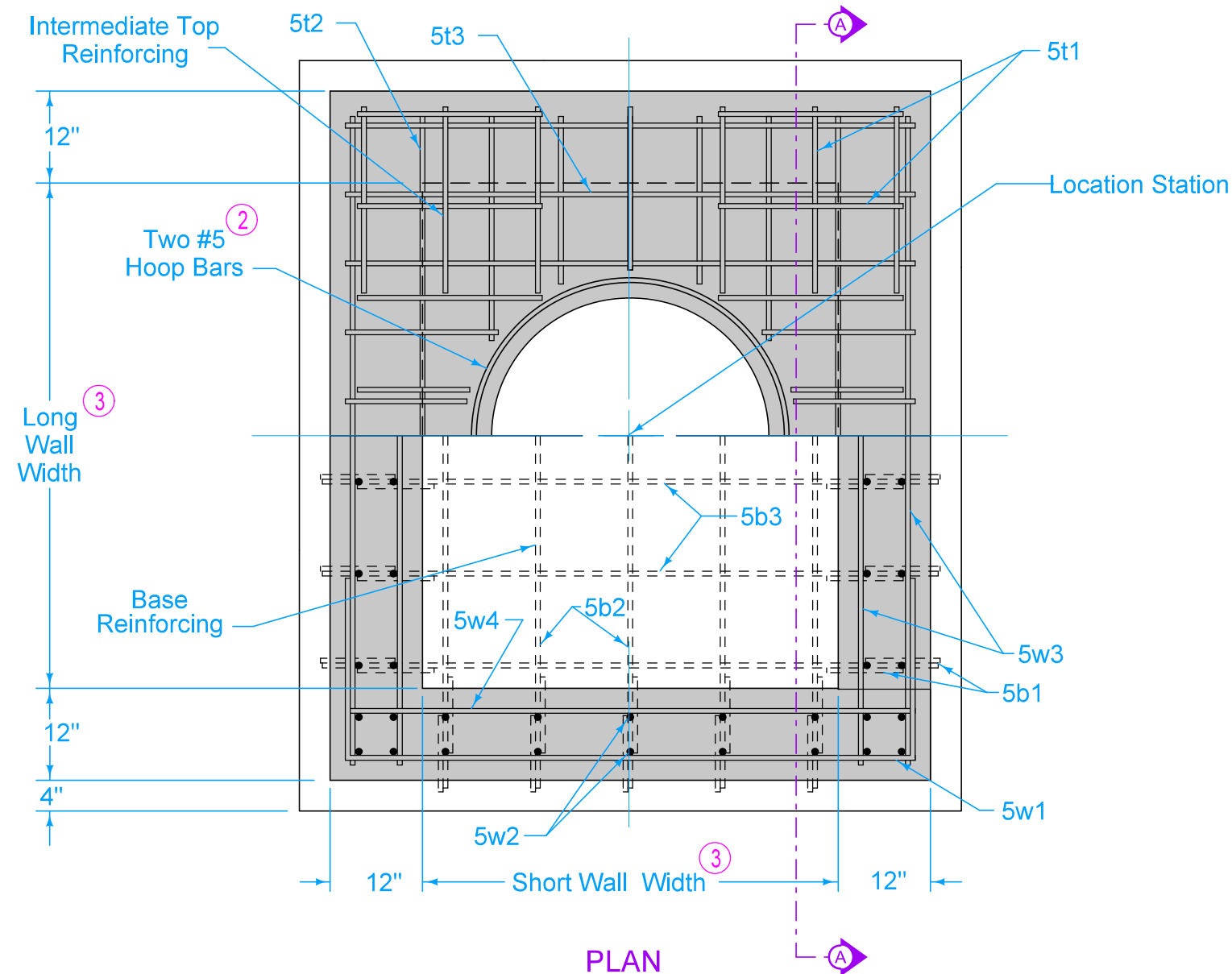
Adjacent walls may have different widths based upon pipe configuration, but structure must be rectangular.

If manhole depth exceeds 20 feet, install steps.

- 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.

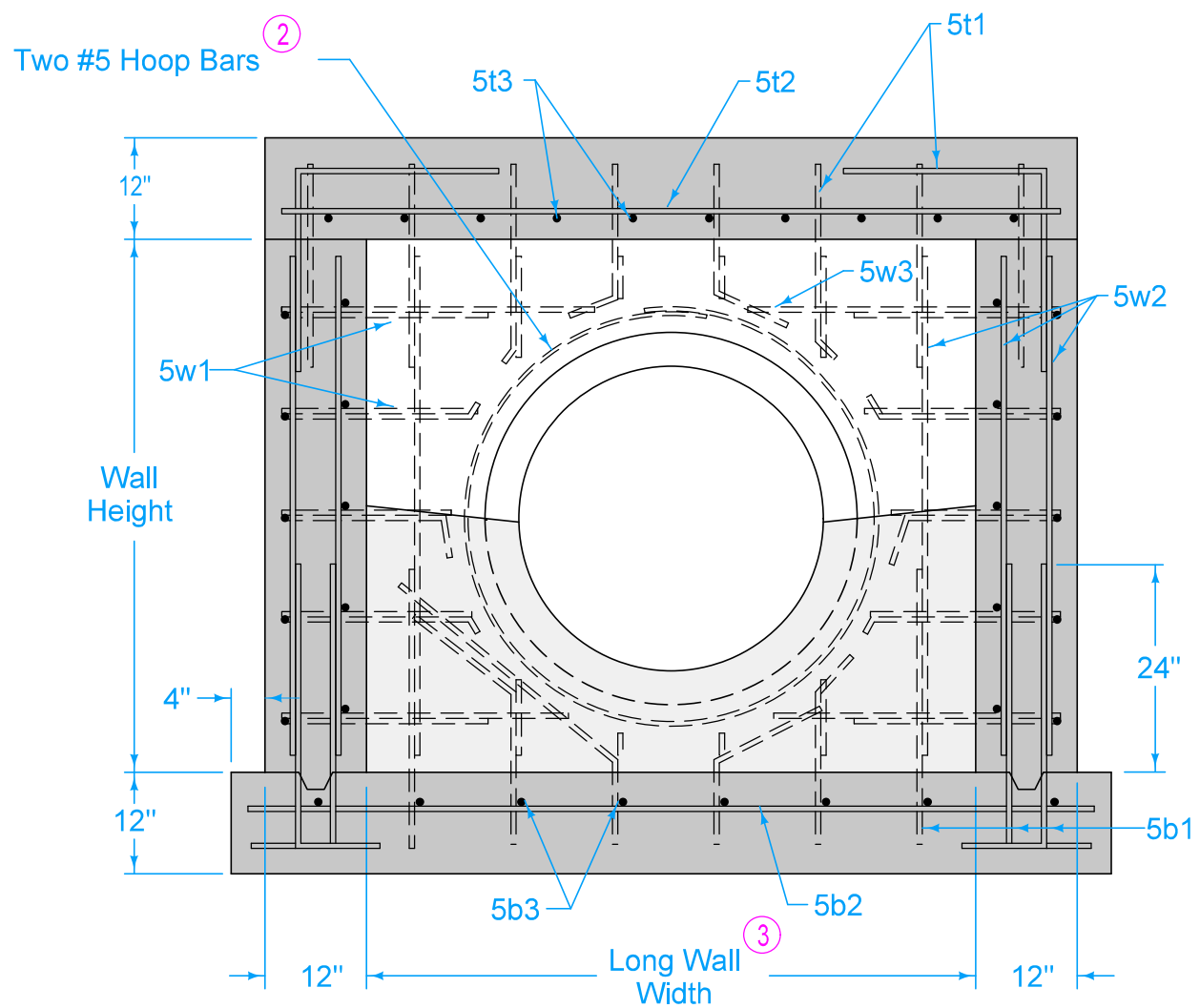
FIGURE 6010.404 SHEET 1 OF 2

|                                                          |                    |                                         |          |
|----------------------------------------------------------|--------------------|-----------------------------------------|----------|
| SUDAS                                                    | IOWA DOT           | REVISION                                |          |
|                                                          |                    | 4                                       | 04-20-21 |
| FIGURE 6010.404                                          | STANDARD ROAD PLAN | SW-404                                  |          |
|                                                          |                    | SHEET 1 of 2                            |          |
| REVISIONS: Added manhole depth note.                     |                    |                                         |          |
| Paul D. Wrigand<br>SUDAS DIRECTOR                        |                    | Shawn Miller<br>DESIGN METHODS ENGINEER |          |
| RECTANGULAR BASE/<br>CIRCULAR TOP<br>STORM SEWER MANHOLE |                    |                                         |          |



PLAN

- 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.



SECTION A-A

| 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"     |

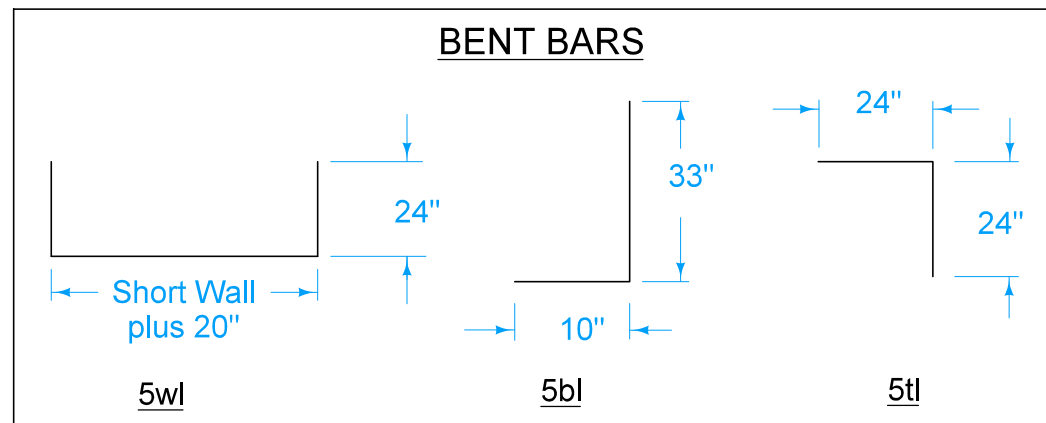


FIGURE 6010.404 SHEET 2 OF 2

|                                                                   |                               |  |
|-------------------------------------------------------------------|-------------------------------|--|
| SUDAS<br>IOWA DOT<br><b>FIGURE 6010.404</b><br>STANDARD ROAD PLAN | REVISION<br>4   04-20-21      |  |
|                                                                   | <b>SW-404</b><br>SHEET 2 of 2 |  |

REVISIONS: Added manhole depth note.

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**RECTANGULAR BASE/  
 CIRCULAR TOP  
 STORM SEWER MANHOLE**