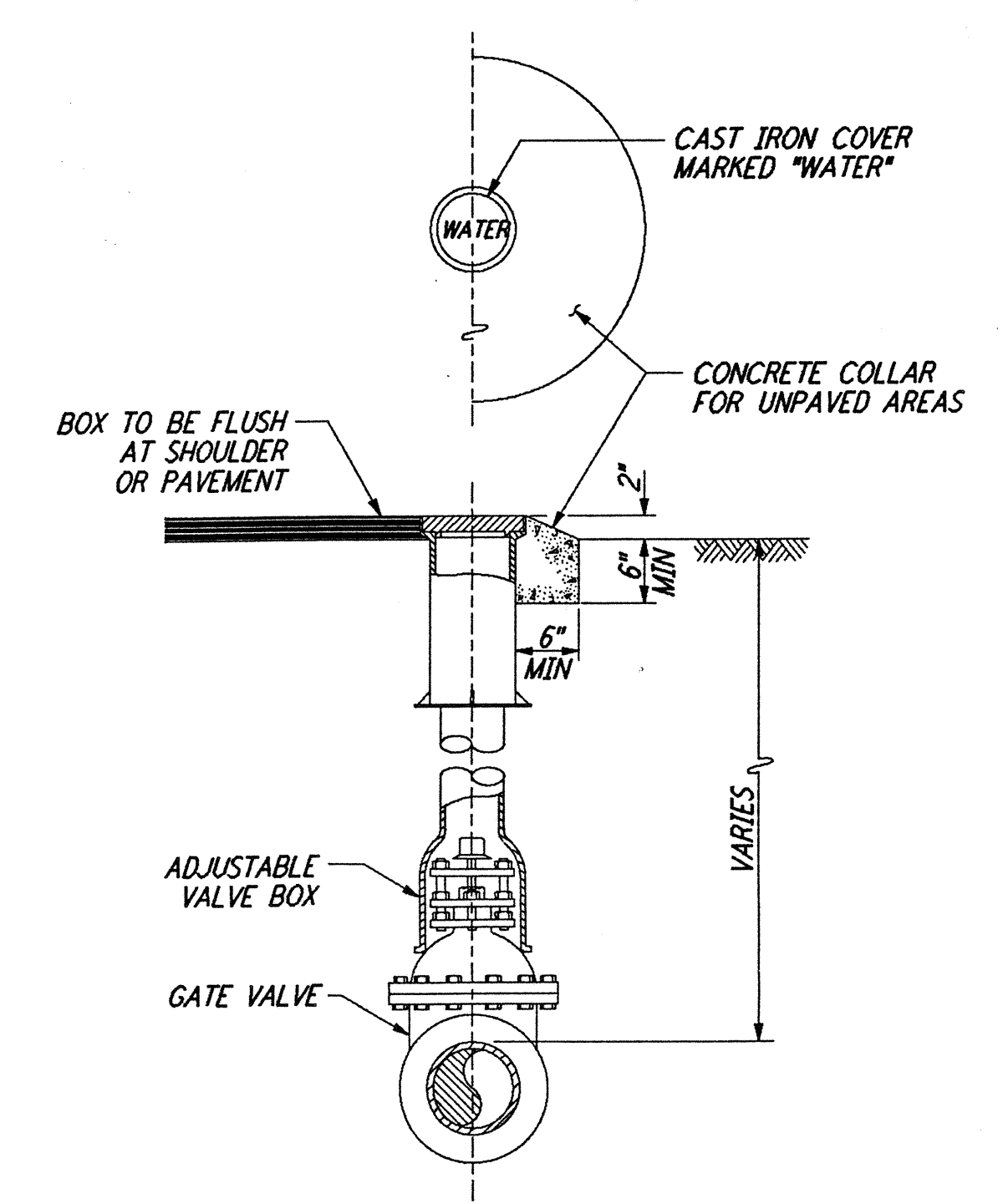
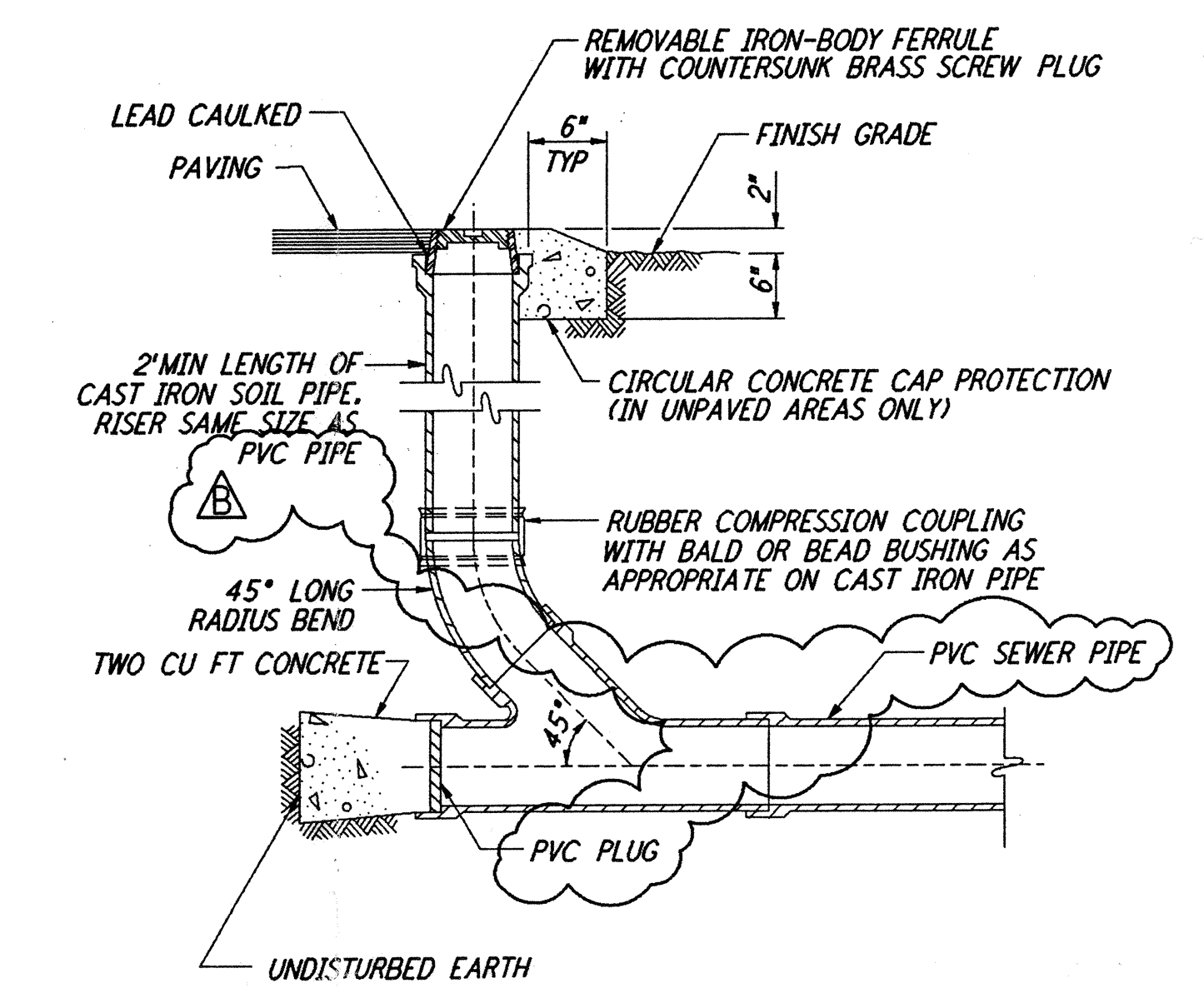


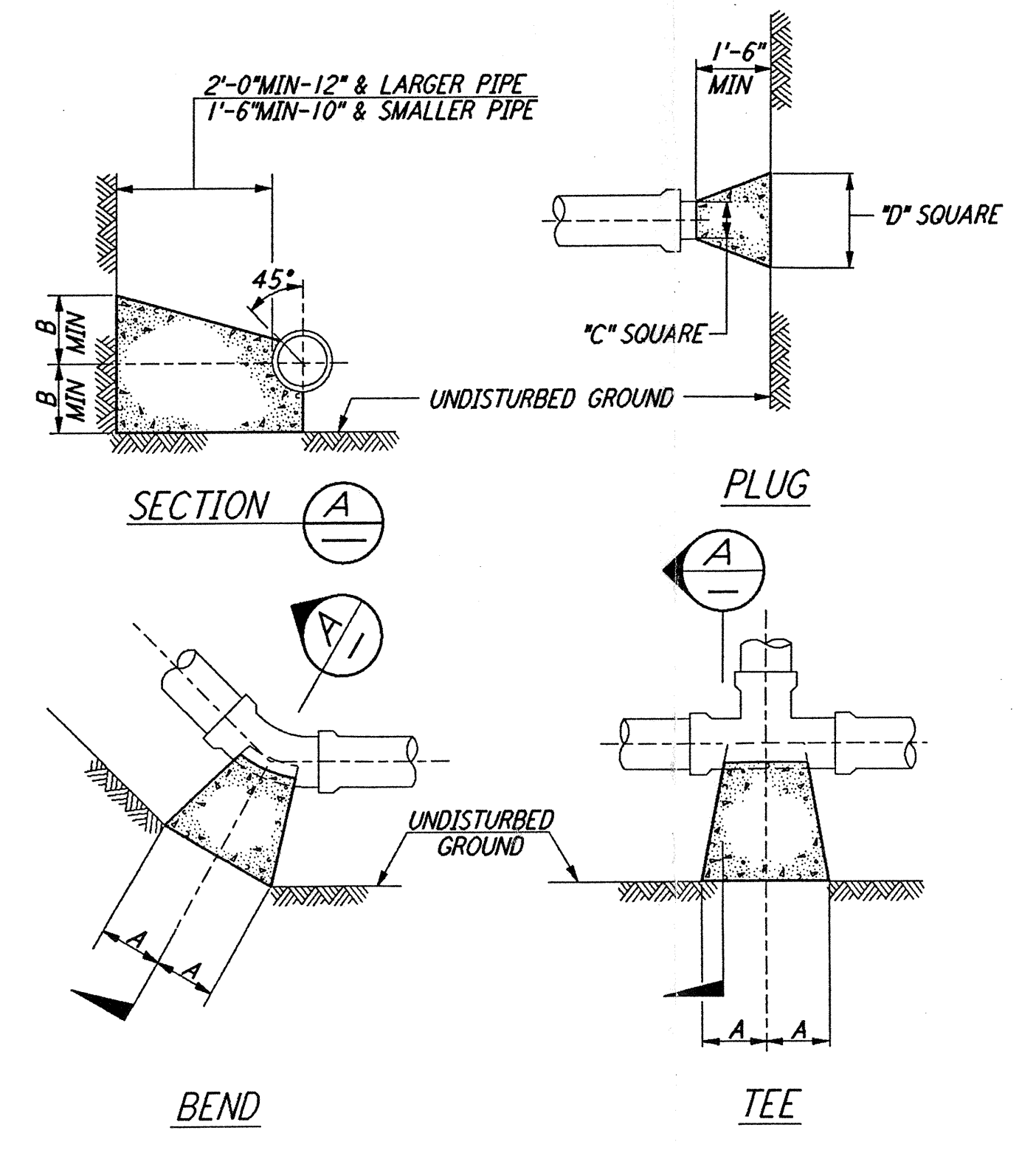
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VALVE BOX (1) REF: WA-C-055, WA-C-009, WA-C-040, WA-C-509, WA-C-510
 NOT TO SCALE
 NOTE: VALVE SIZE 12" MAXIMUM

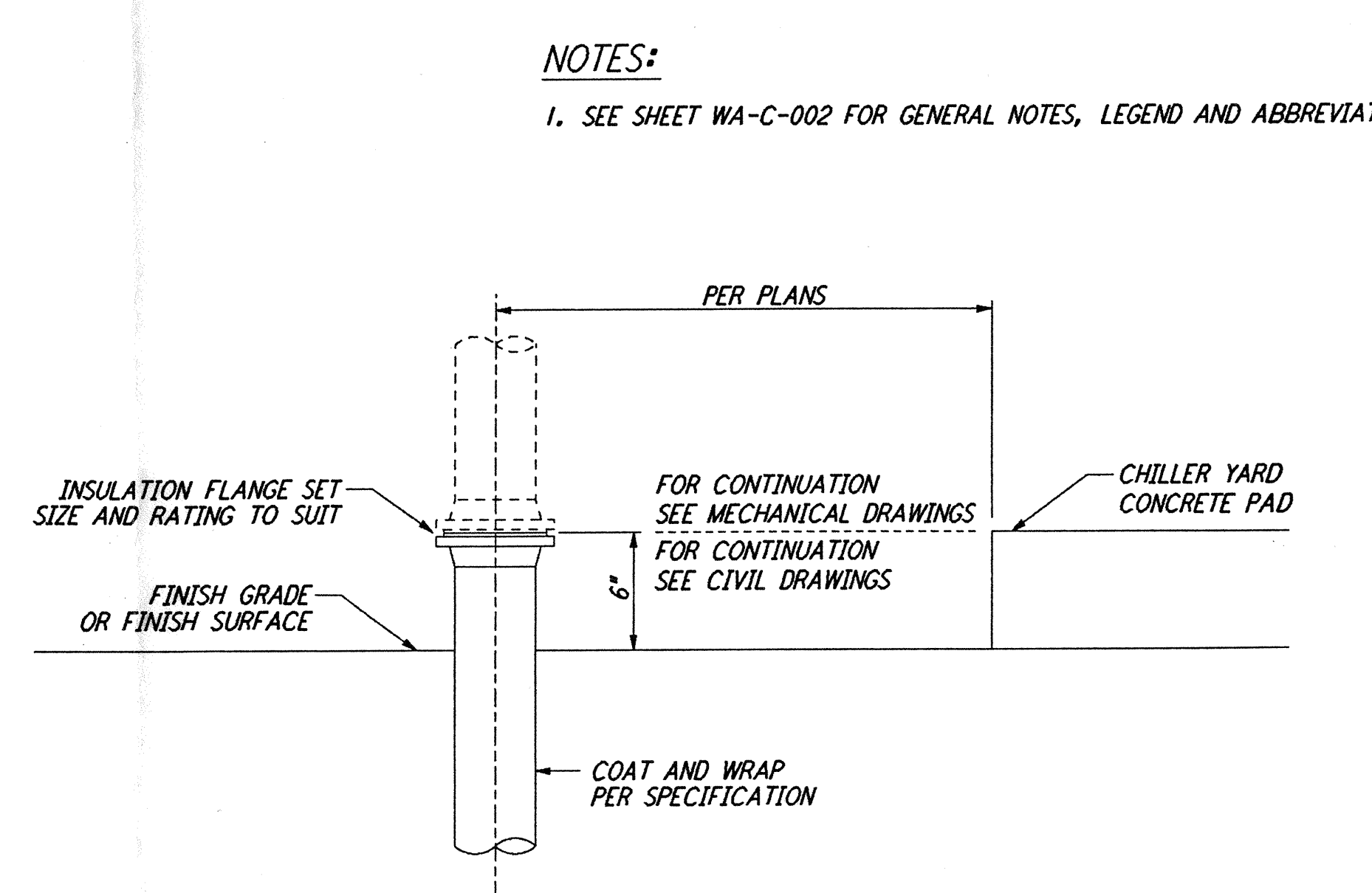


SANITARY SEWER CLEANOUT (2) REF: WA-C-055, WA-C-009, WA-C-040, WA-C-509, WA-C-510
 NOT TO SCALE

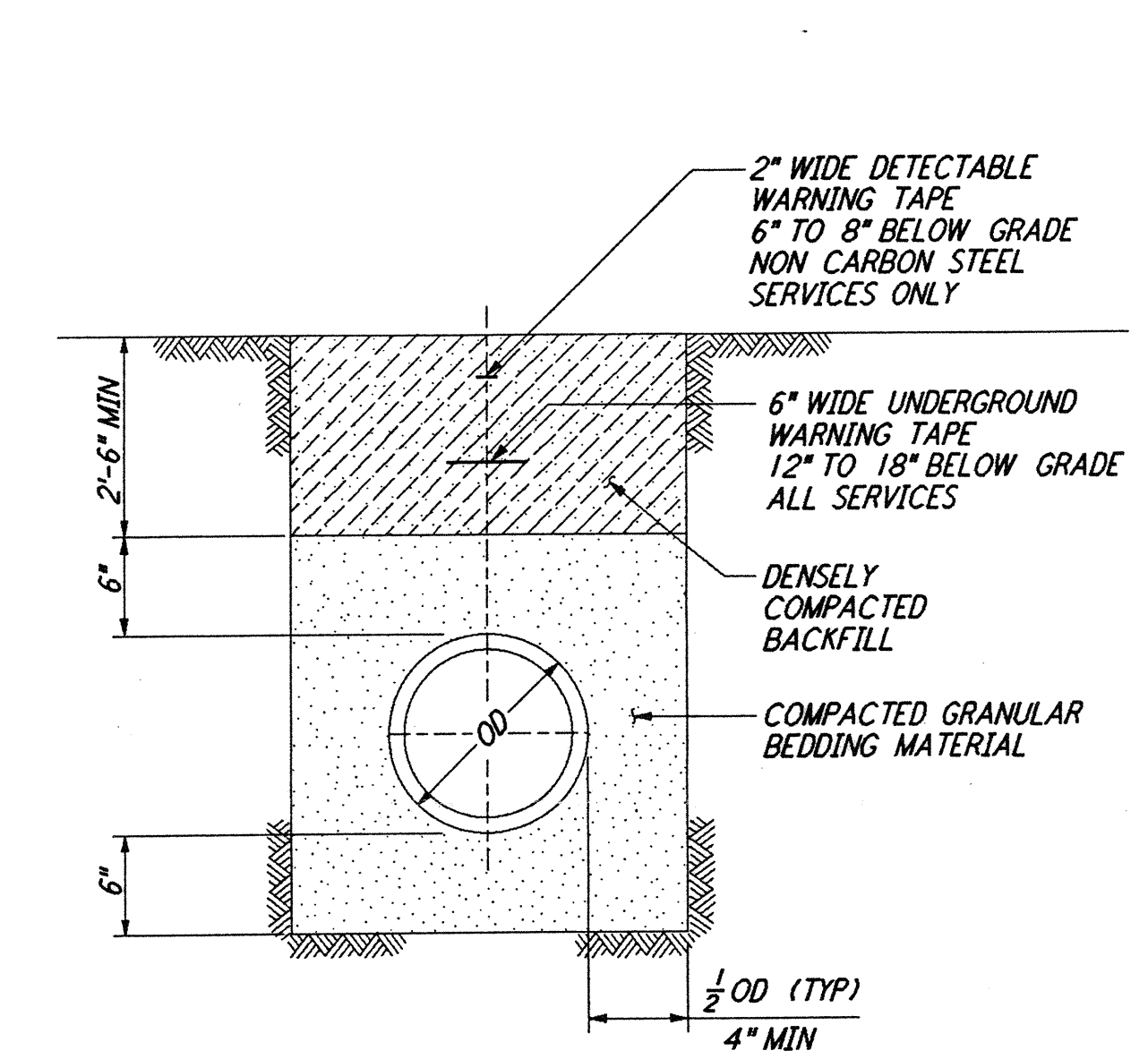


| TYPE | SIZE | 90° BEND | | 45° BEND | | 2 1/2° BEND | | TEE | | PLUG | |
|--------------------------|------|----------|-----|----------|-----|-------------|-----|-----|-----|------|-----|
| | | A | B | A | B | A | B | A | B | C | D |
| TYPE I 4000 PSF FILL | 4" | 6" | 8" | 4" | 6" | 3" | 6" | 6" | 6" | 8" | 13" |
| | 6" | 8" | 10" | 6" | 8" | 3" | 8" | 8" | 8" | 10" | 15" |
| | 8" | 12" | 12" | 8" | 10" | 5" | 9" | 9" | 12" | 12" | 20" |
| | 10" | 16" | 14" | 10" | 12" | 6" | 10" | 11" | 14" | 14" | 25" |
| | 12" | 18" | 16" | 12" | 14" | 8" | 11" | 14" | 16" | 16" | 30" |
| TYPE II 2000 PSF FILL | 4" | 14" | 8" | 7" | 8" | 4" | 6" | 8" | 10" | 8" | 19" |
| | 6" | 16" | 10" | 9" | 10" | 6" | 8" | 10" | 12" | 10" | 21" |
| | 8" | 22" | 13" | 12" | 13" | 8" | 10" | 13" | 16" | 12" | 20" |
| | 10" | 26" | 17" | 14" | 17" | 10" | 13" | 16" | 20" | 14" | 36" |
| | 12" | 29" | 21" | 16" | 21" | 11" | 16" | 18" | 24" | 16" | 41" |
| 14" | 35" | 24" | 19" | 24" | 12" | 20" | 22" | 27" | 18" | 48" | |

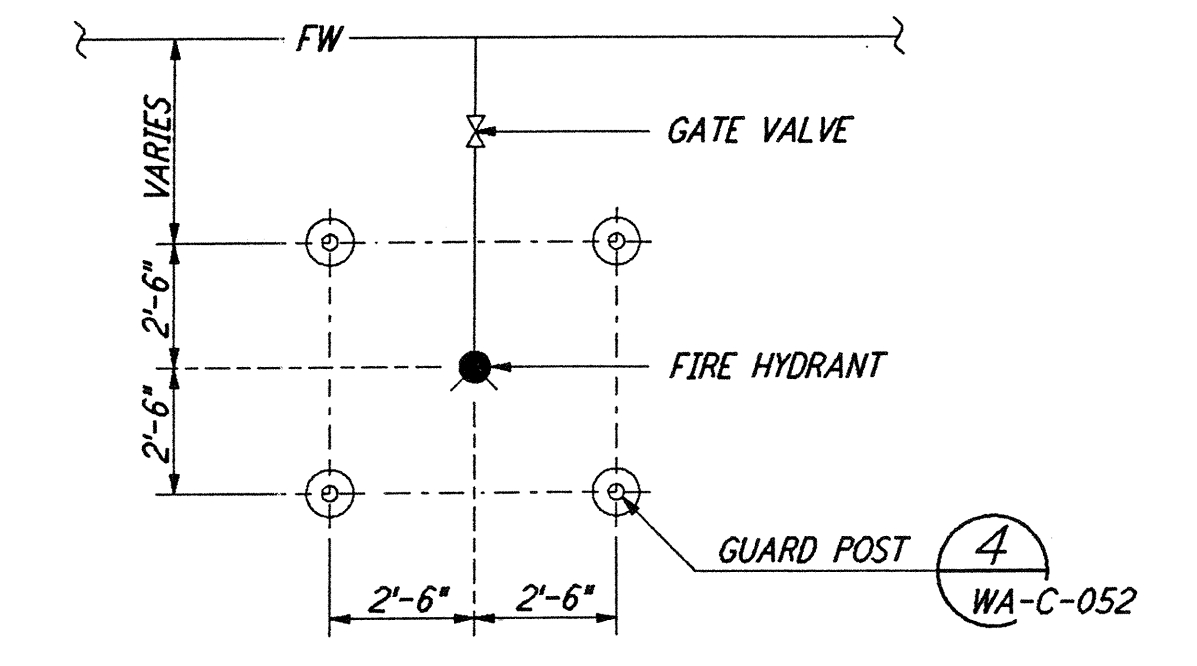
NOTES:
 1. BASED ON 150 PSI STATIC PRESSURE PLUS AWWA WATER HAMMER.
 2. ALL OTHER CONDITIONS MUST BE CALCULATED.



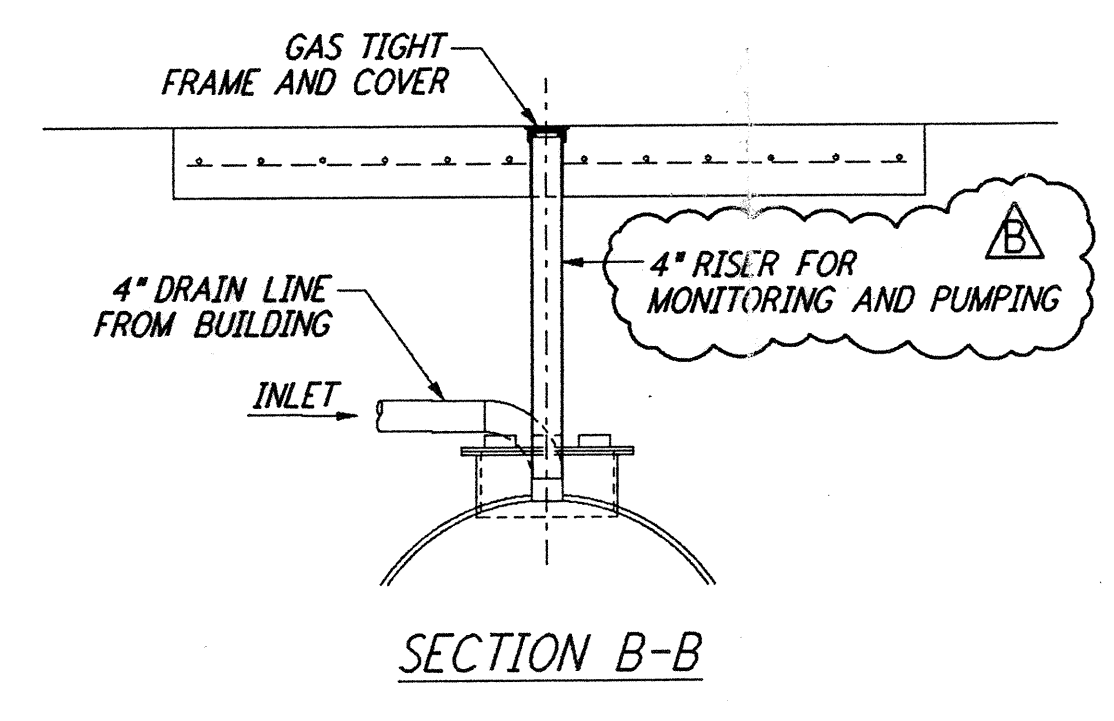
PIPE CONNECTION (4) REF: WA-C-055, WA-C-009, WA-C-023, WA-C-027, WA-C-043, WA-C-047, WA-C-509, WA-C-510
 (UNDERGROUND TO OVERHEAD)
 NOT TO SCALE



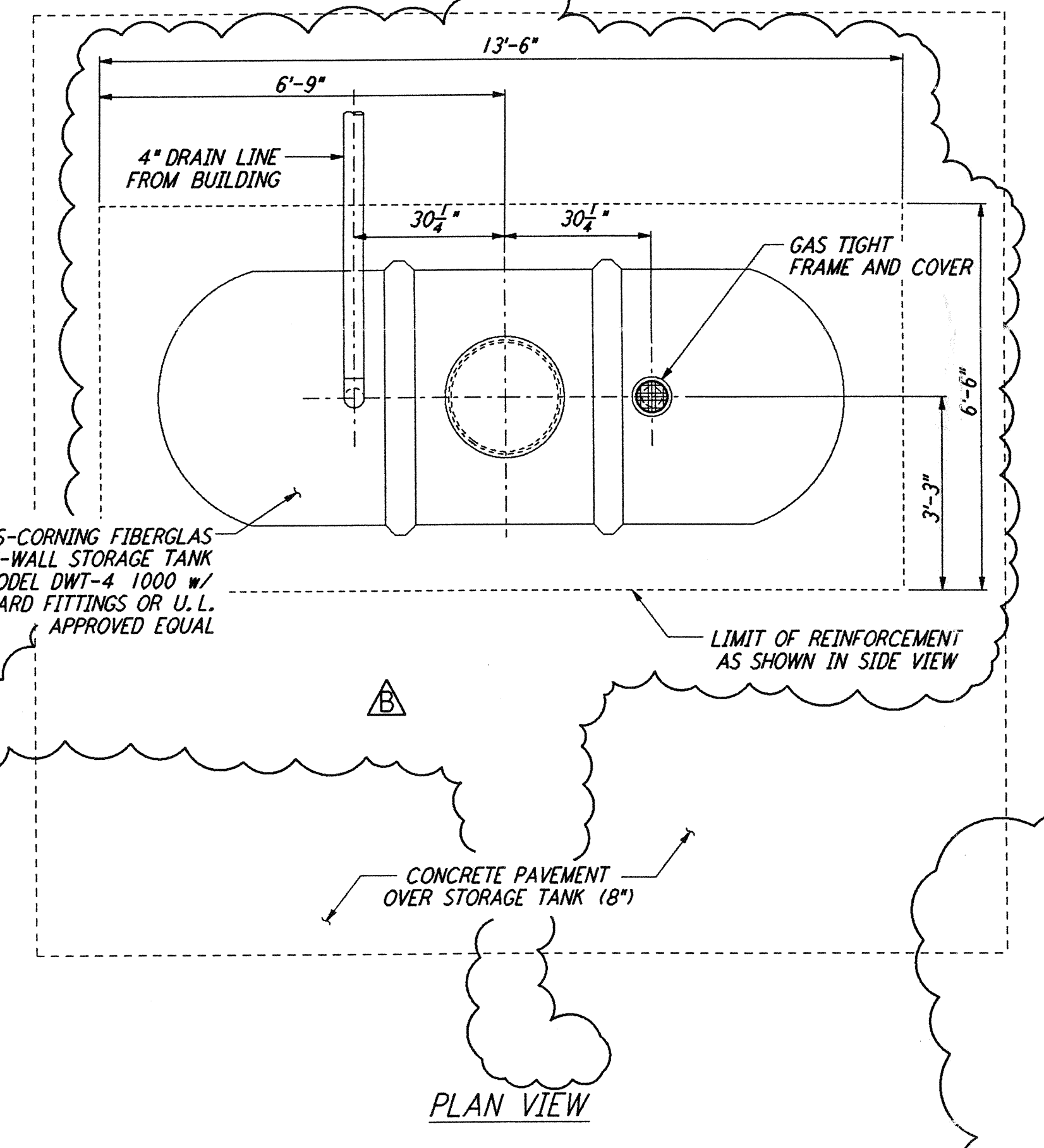
TRENCH BEDDING (5) REF: WA-C-055, WA-C-009, WA-C-023, WA-C-027, WA-C-043, WA-C-047, WA-C-509, WA-C-510
 NOT TO SCALE



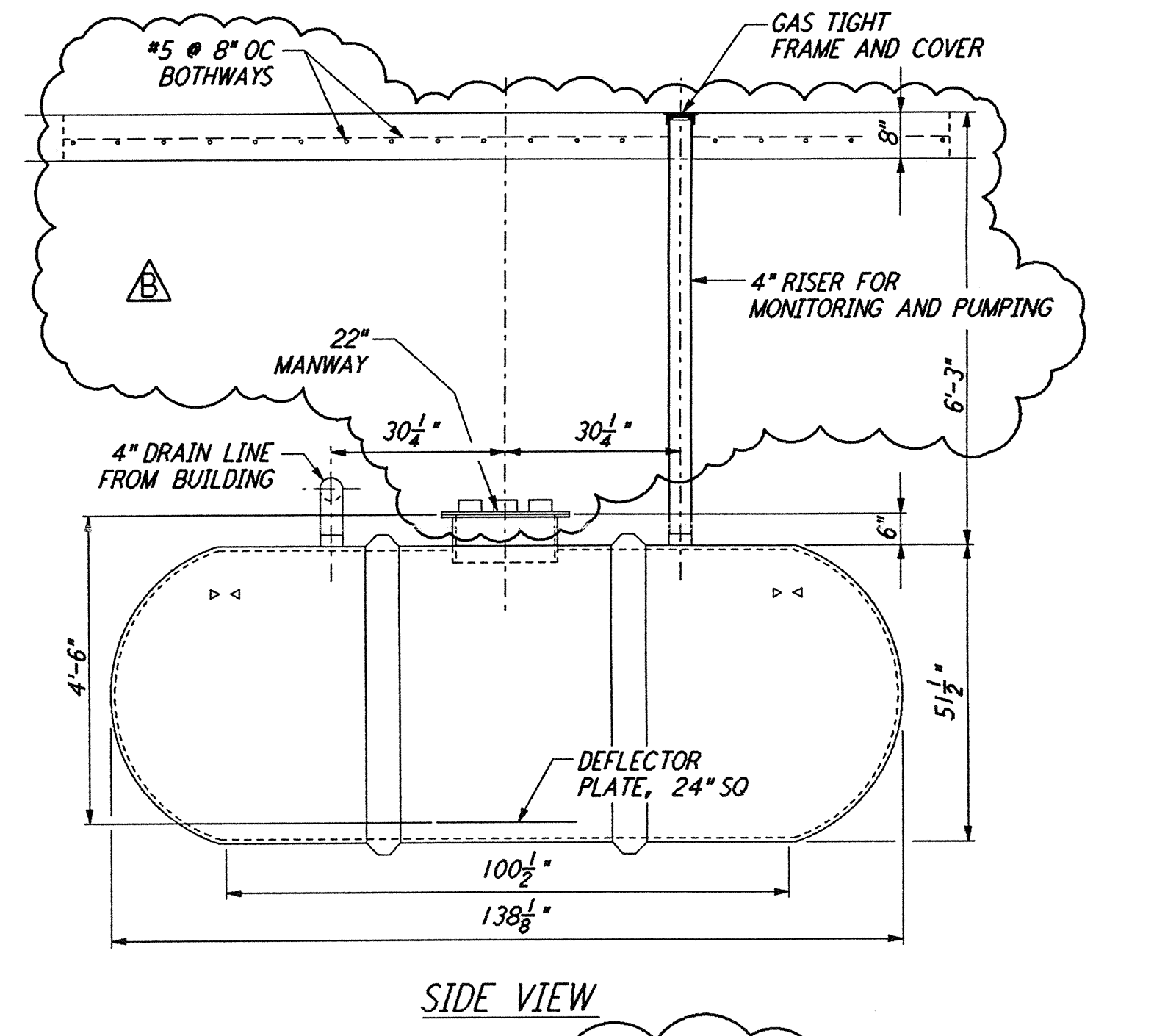
GUARD POST LOCATIONS (6) REF: WA-C-055, WA-C-009, WA-C-040, WA-C-509, WA-C-510
 (FIRE HYDRANT)
 NOT TO SCALE



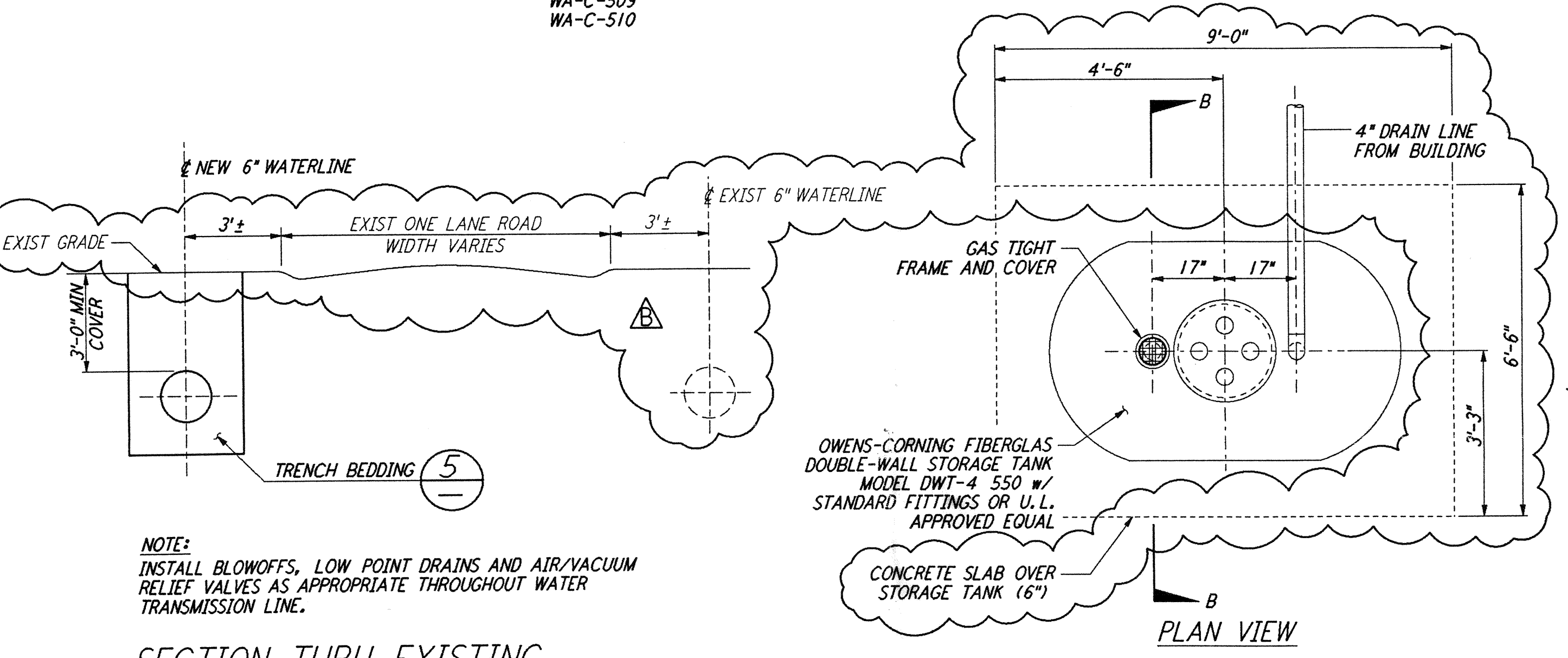
SECTION B-B



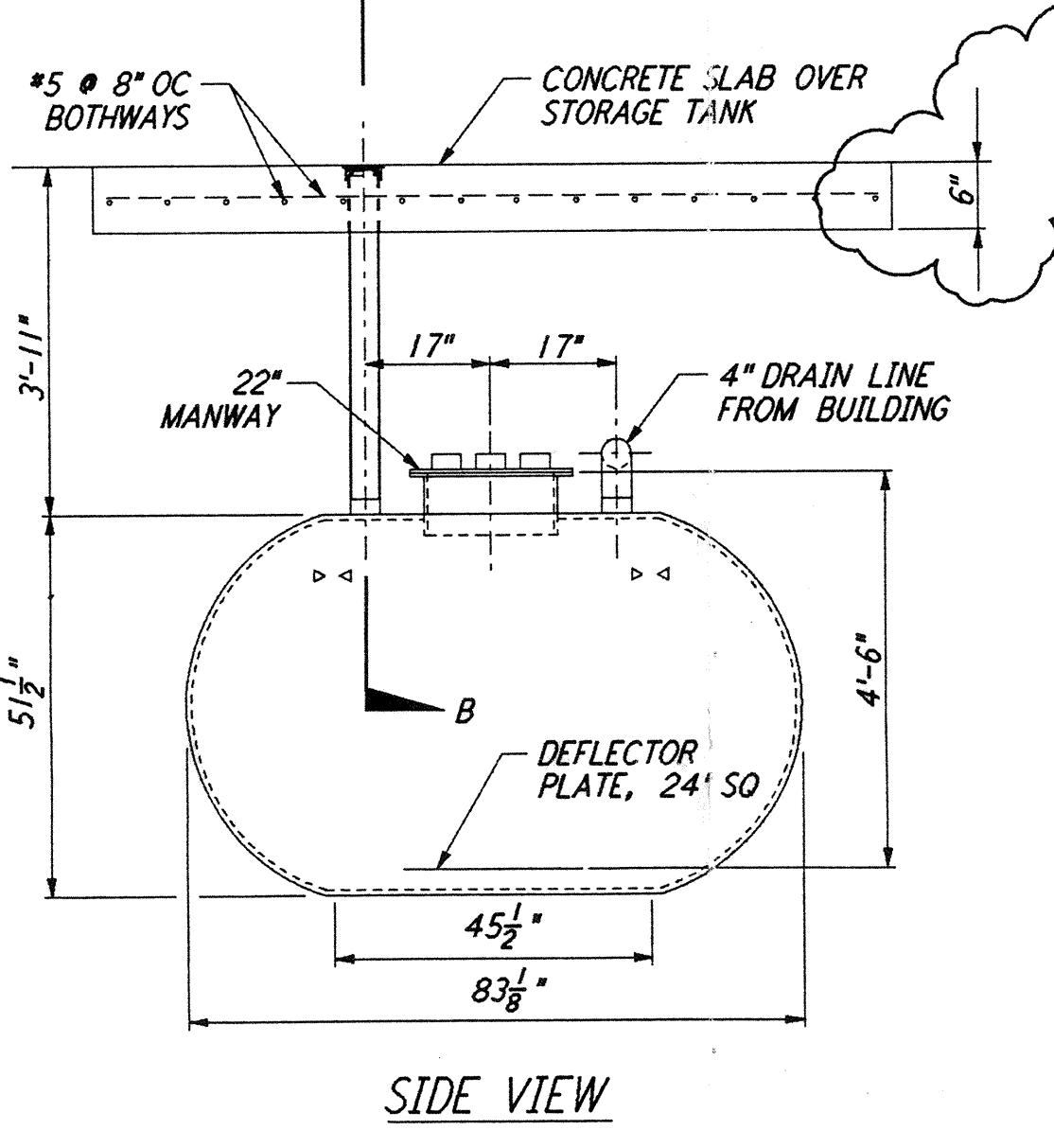
PLAN VIEW



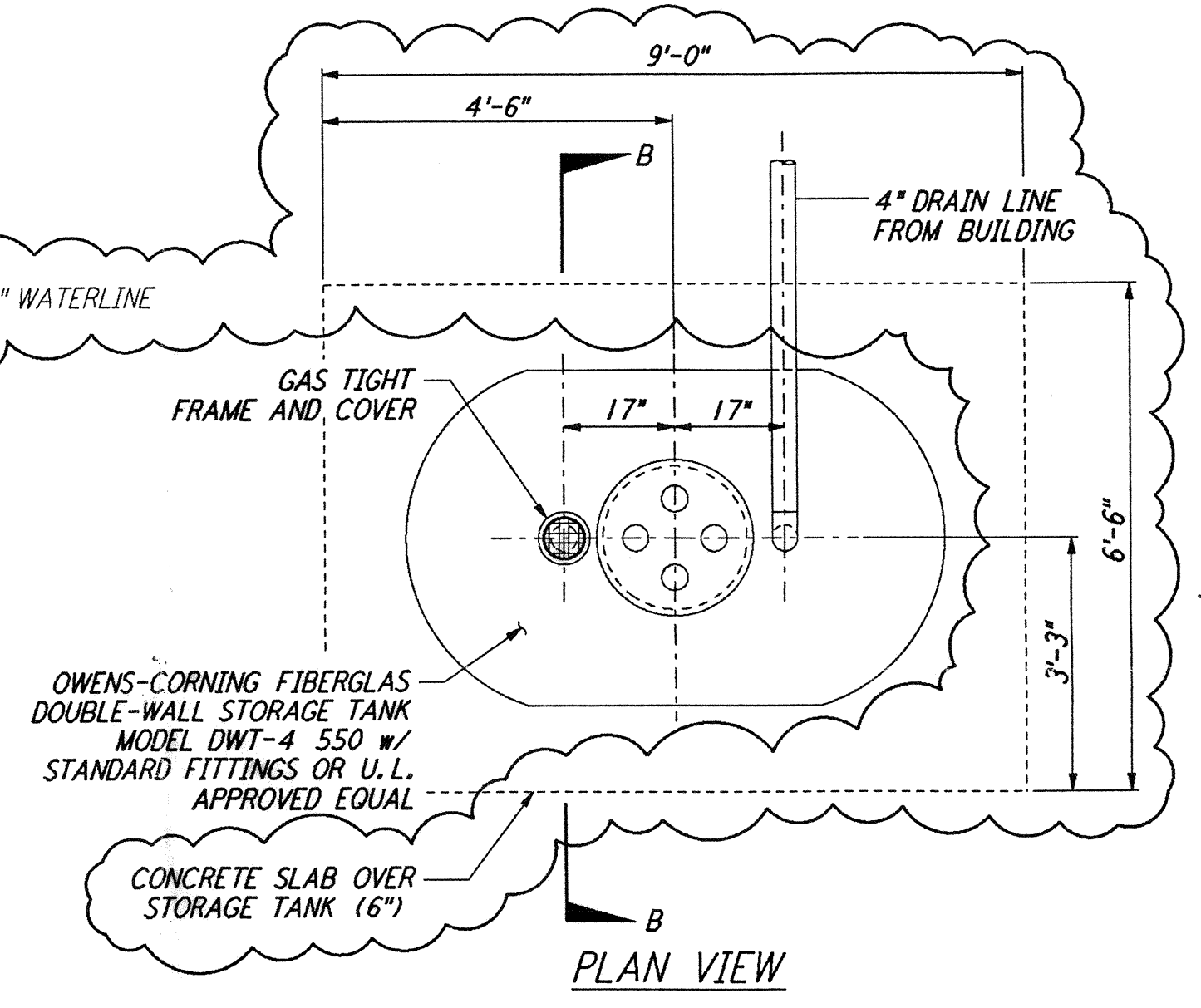
SIDE VIEW



SECTION THRU EXISTING AND NEW WATERLINES (7) REF: WA-C-055
 NOT TO SCALE



SIDE VIEW



PLAN VIEW

DOUBLE-WALL HOLDING TANK
 500 GALLONS
 NOT TO SCALE

(8) REF: WA-C-055, WA-C-023, WA-C-027, WA-C-043, WA-C-047

DOUBLE-WALL HOLDING TANK
 1000 GALLONS W/ PIPING SUMP
 NOT TO SCALE

(9) REF: WA-C-055, WA-C-009, WA-C-023, WA-C-040, WA-C-509, WA-C-510

| NO. | DATE | BY | CHKD | ENGR | PROJ | DESCRIPTION |
|-----|---------|-----|------|------|------|---------------------------|
| B | 5/22/96 | WRB | ML | JB | MDW | BID ADDENDUM #2 |
| A | 4/19/96 | WRB | ML | JB | MDW | FINAL DESIGN REVIEW & BID |

| | |
|----------|-----|
| DRAWN | WRB |
| CHECKED | |
| ENGINEER | |
| PROJ | |

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 GRAVITATIONAL-WAVE OBSERVATORY
 SITE NO. 1 - HANFORD, WASHINGTON

CIVIL
 UTILITY DETAILS
 SHEET 1

SCALE: AS NOTED
 CONTRACT NUMBER: PPI50969
 PROJECT NUMBER: 8094

WA-C-055