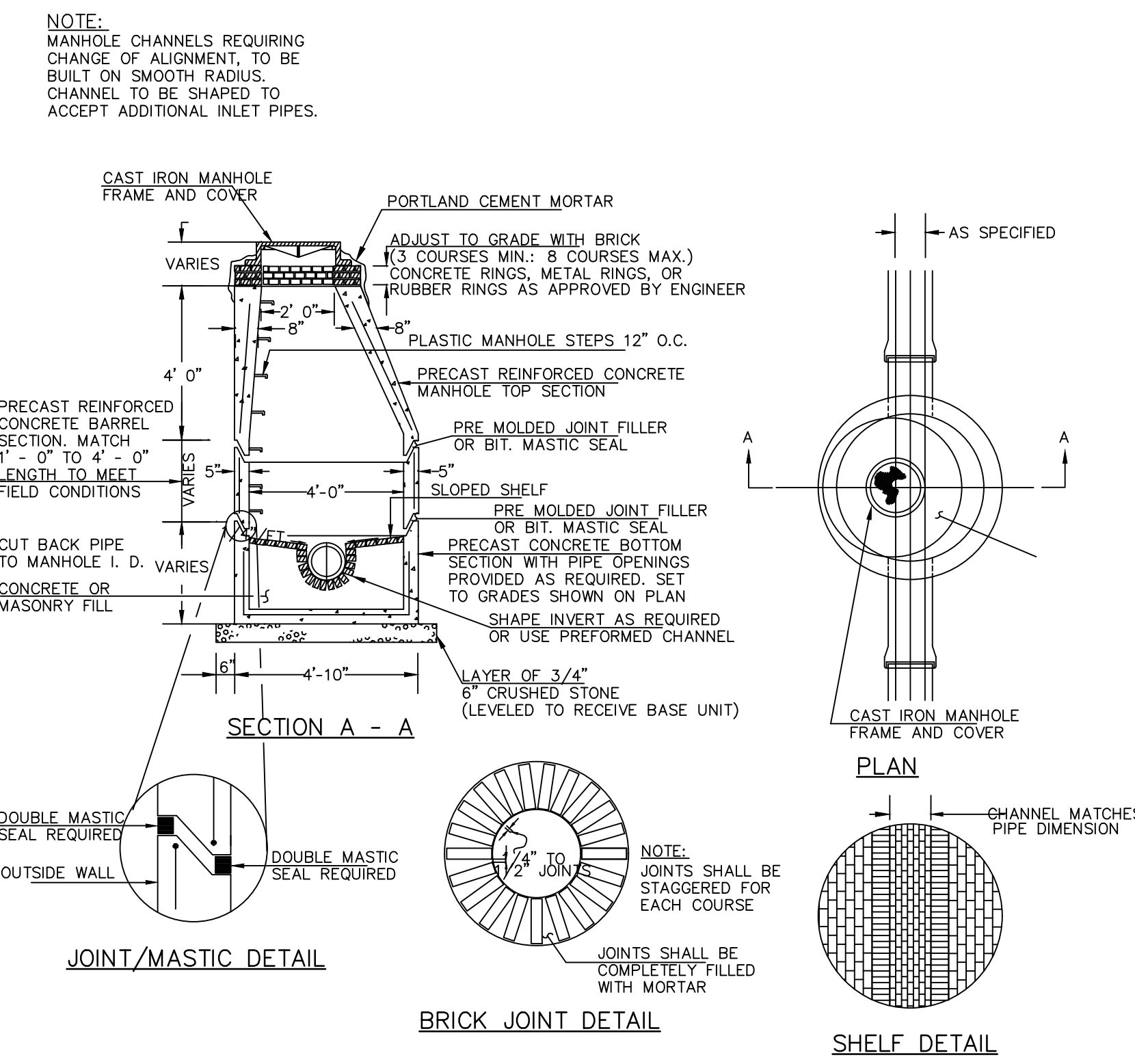
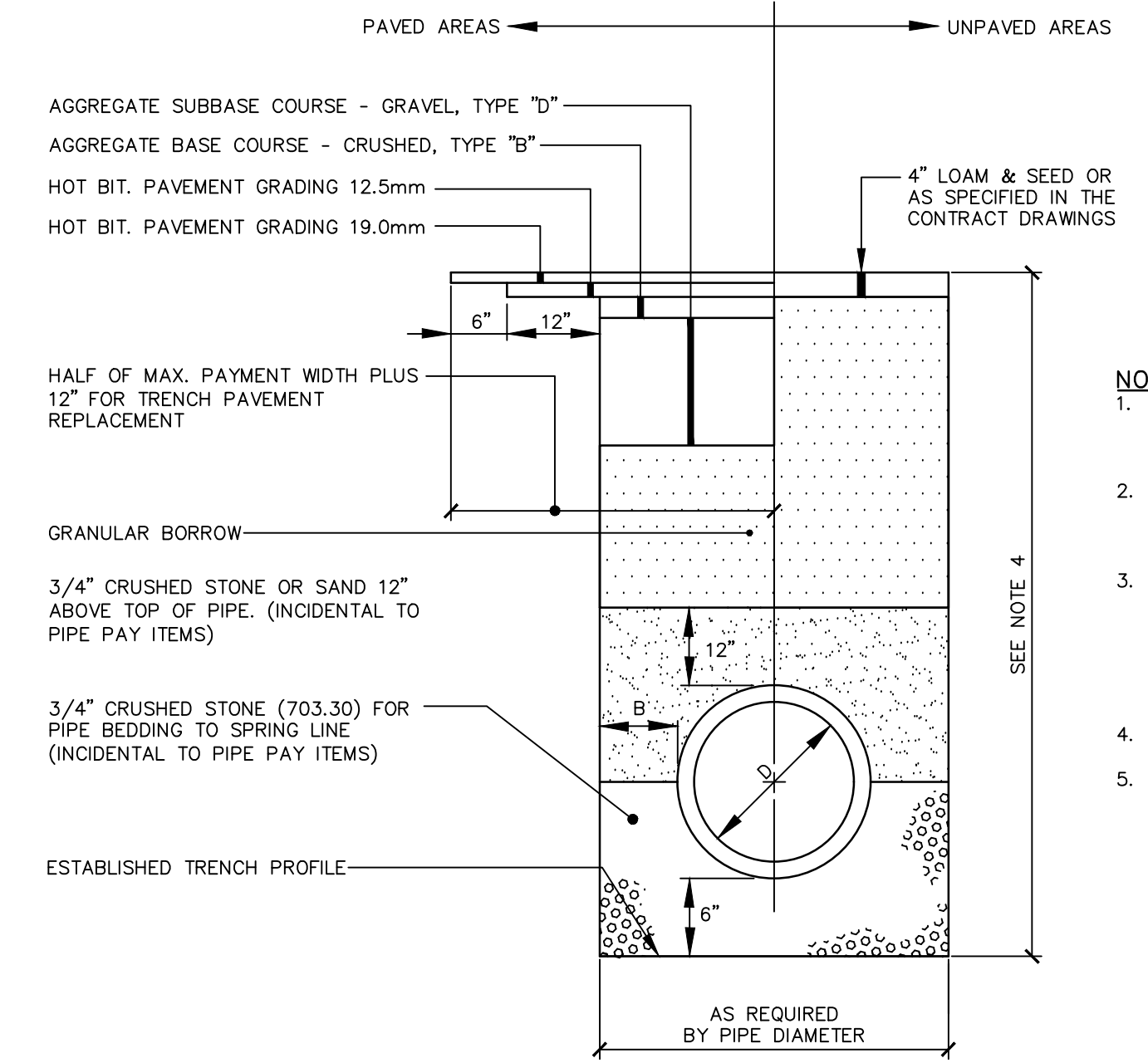


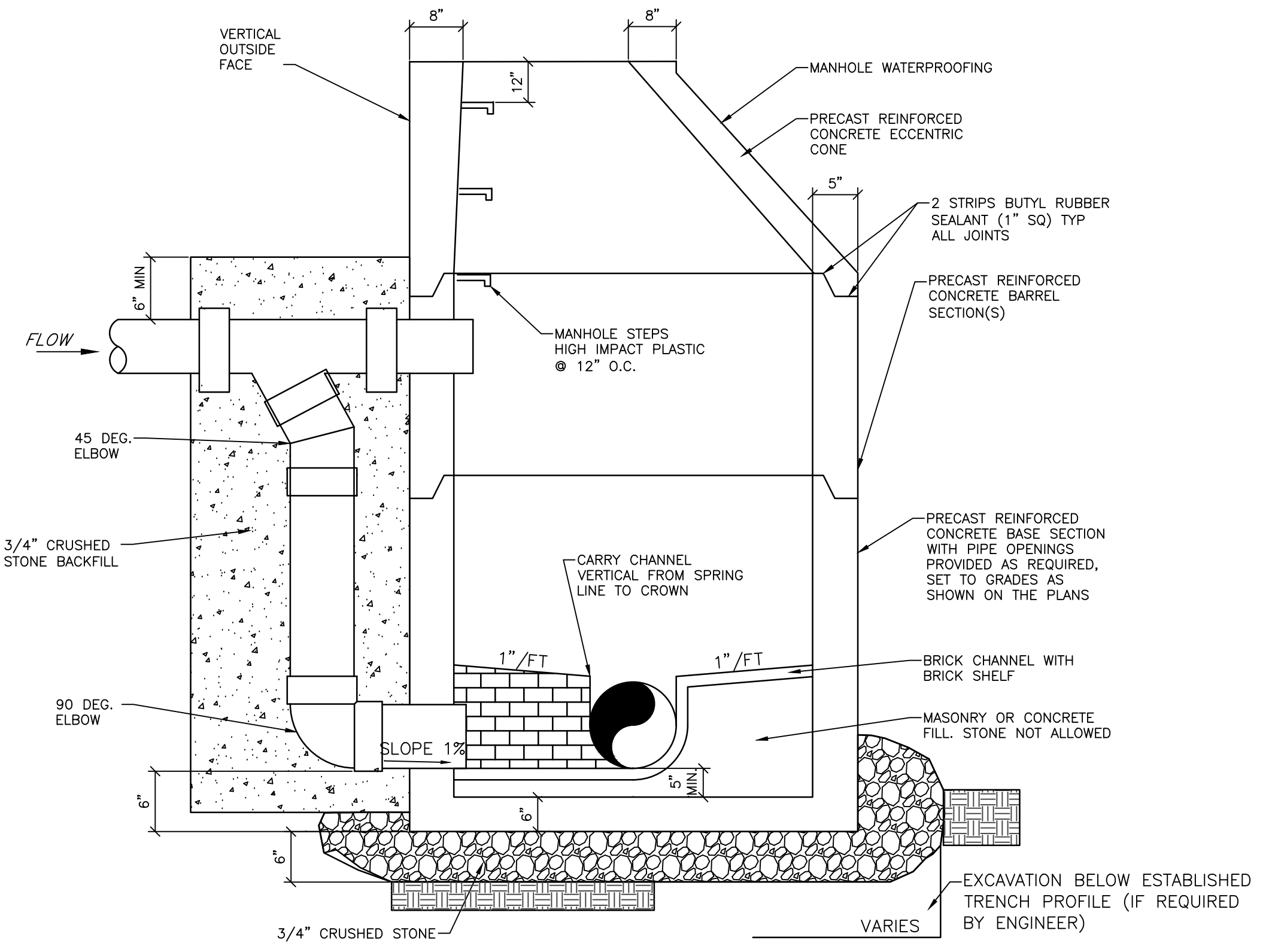
TYPICAL "A" CAST IRON MANHOLE COVER AND FRAME
NOT TO SCALE



PRECAST CONCRETE MANHOLE TYPE "A"
NOT TO SCALE

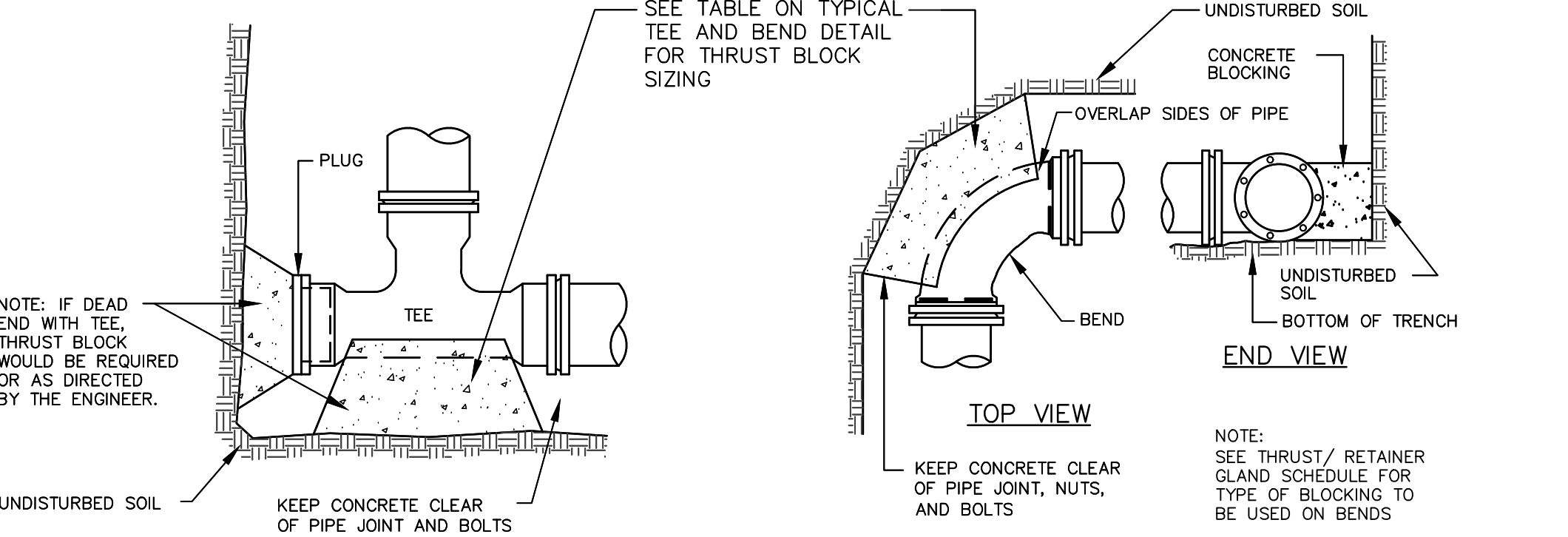


TYPICAL PIPE INSTALLATION DETAIL
NOT TO SCALE

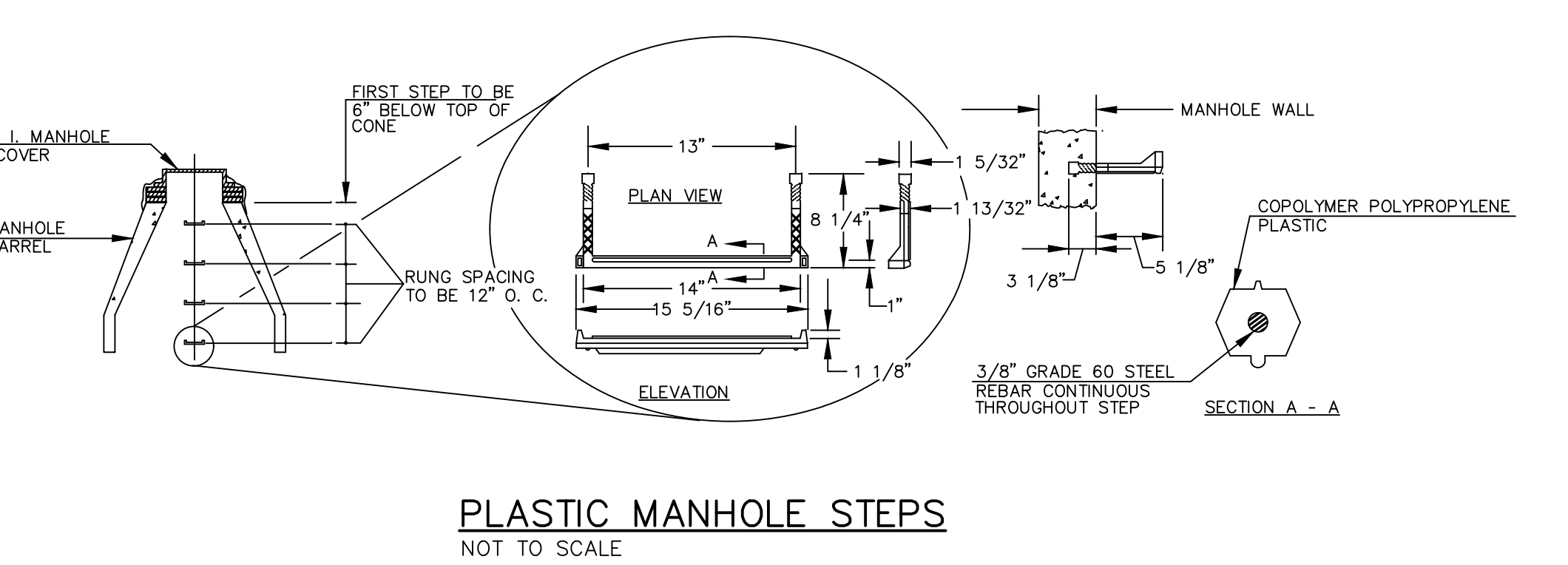


OUTSIDE DROP SANITARY MANHOLE DETAIL
NOT TO SCALE

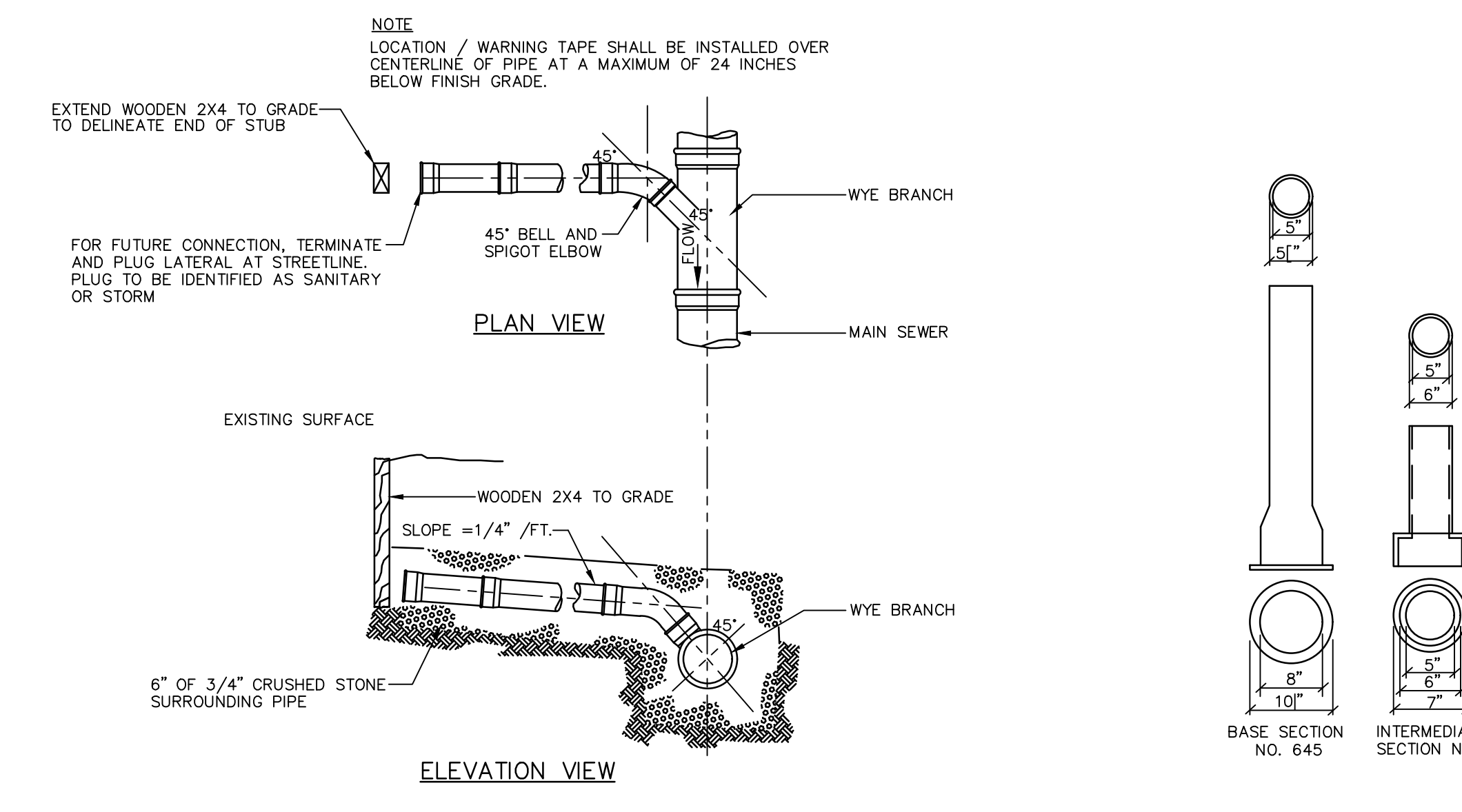
| CONCRETE THRUST BLOCK SIZE REQUIREMENTS | | |
|---|--|-----|
| FITTINGS | SQ. FT. OF BEARING ON UNDISTURBED SOIL | |
| 90° BENDS | 4.0 | 2.0 |
| 45° BENDS | 8.0 | 4.0 |
| TEES AND PLUGS | 12 | 10 |



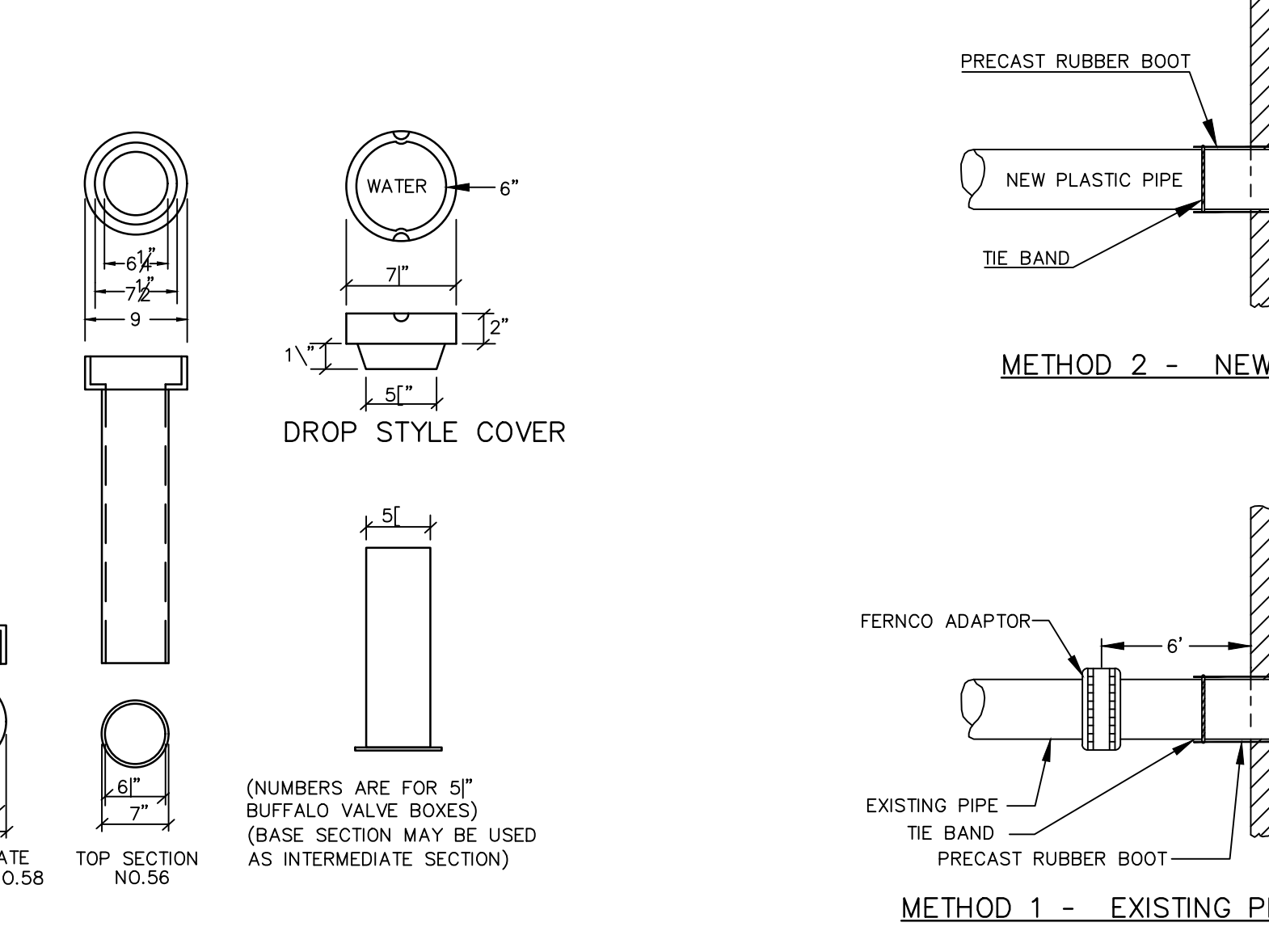
TEE & BEND BLOCKING
NOT TO SCALE



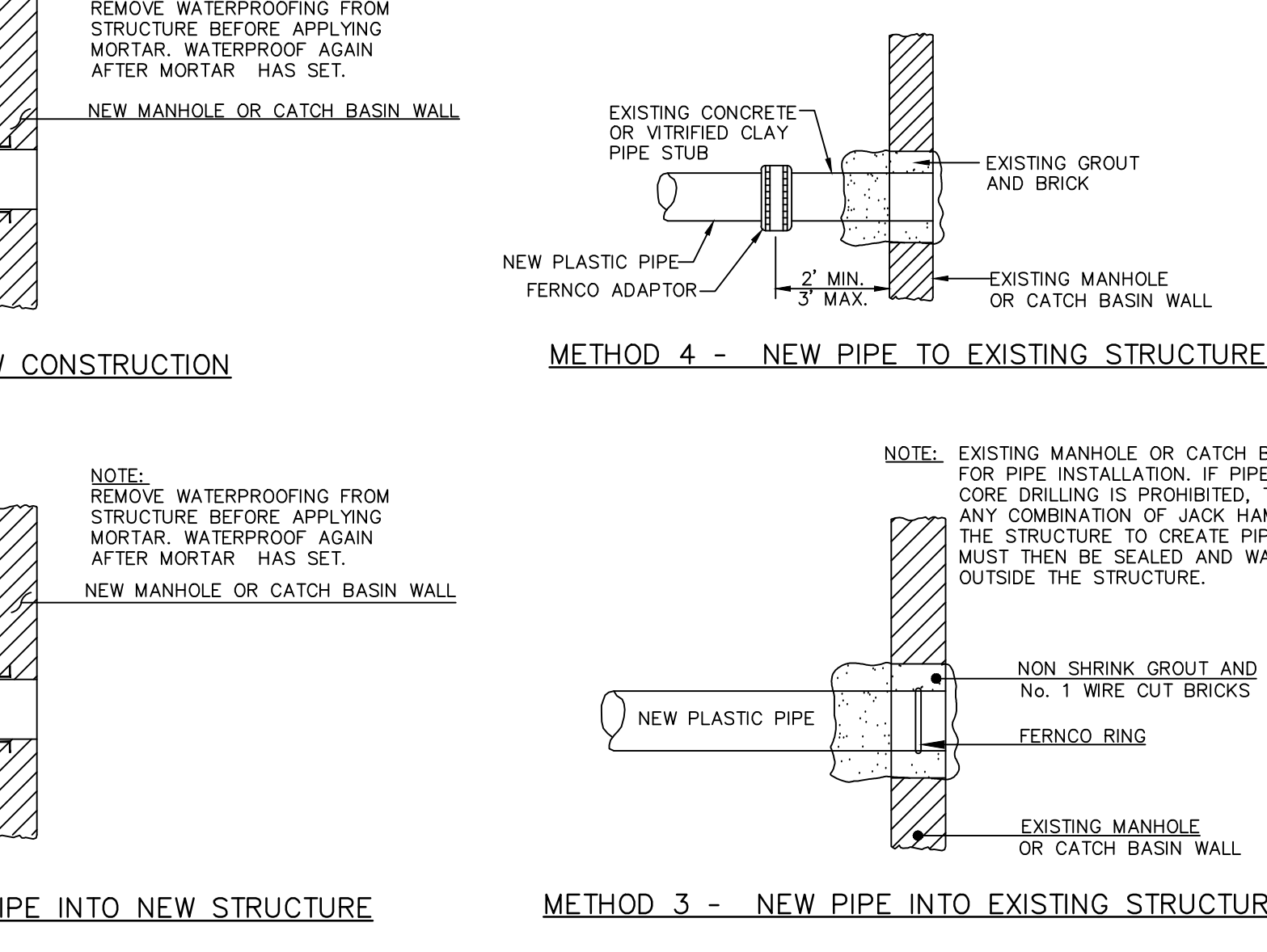
PLASTIC MANHOLE STEPS
NOT TO SCALE



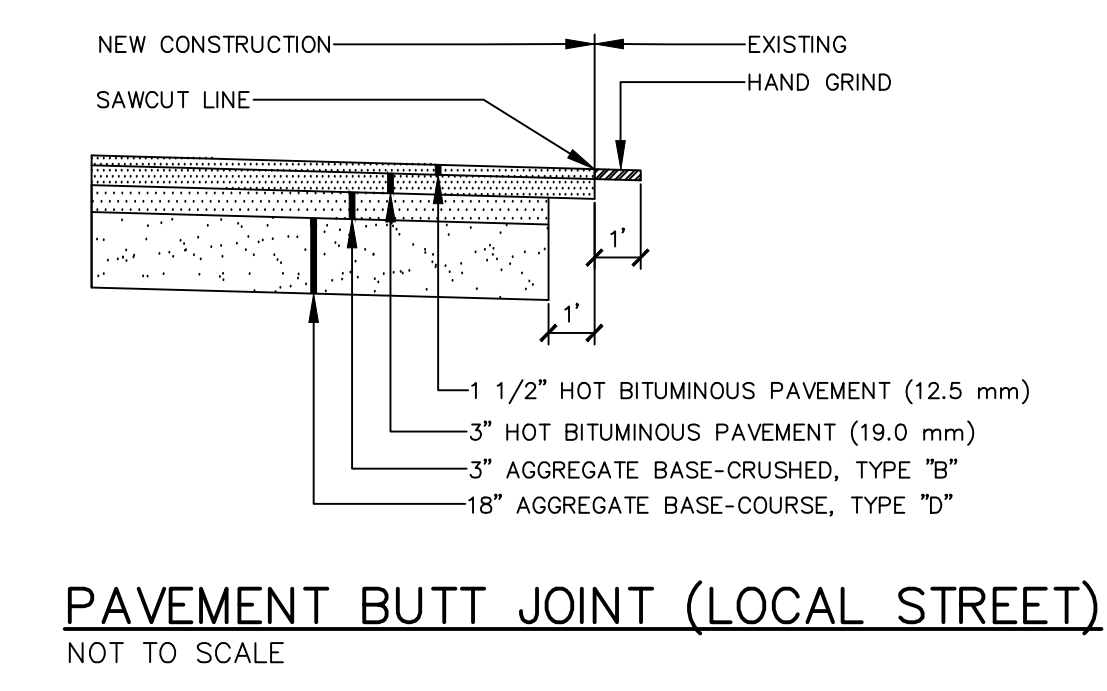
TYPICAL SEWER LATERAL WYE CONNECTION
NOT TO SCALE



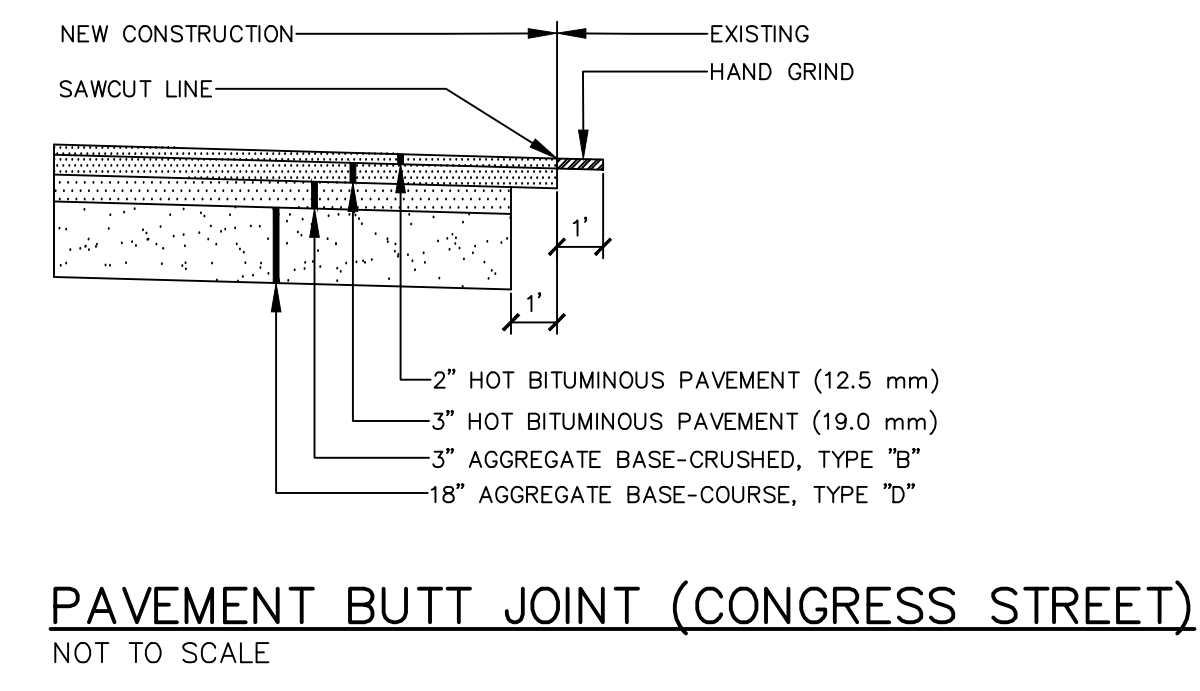
VALVE BOX & COVER
NOT TO SCALE



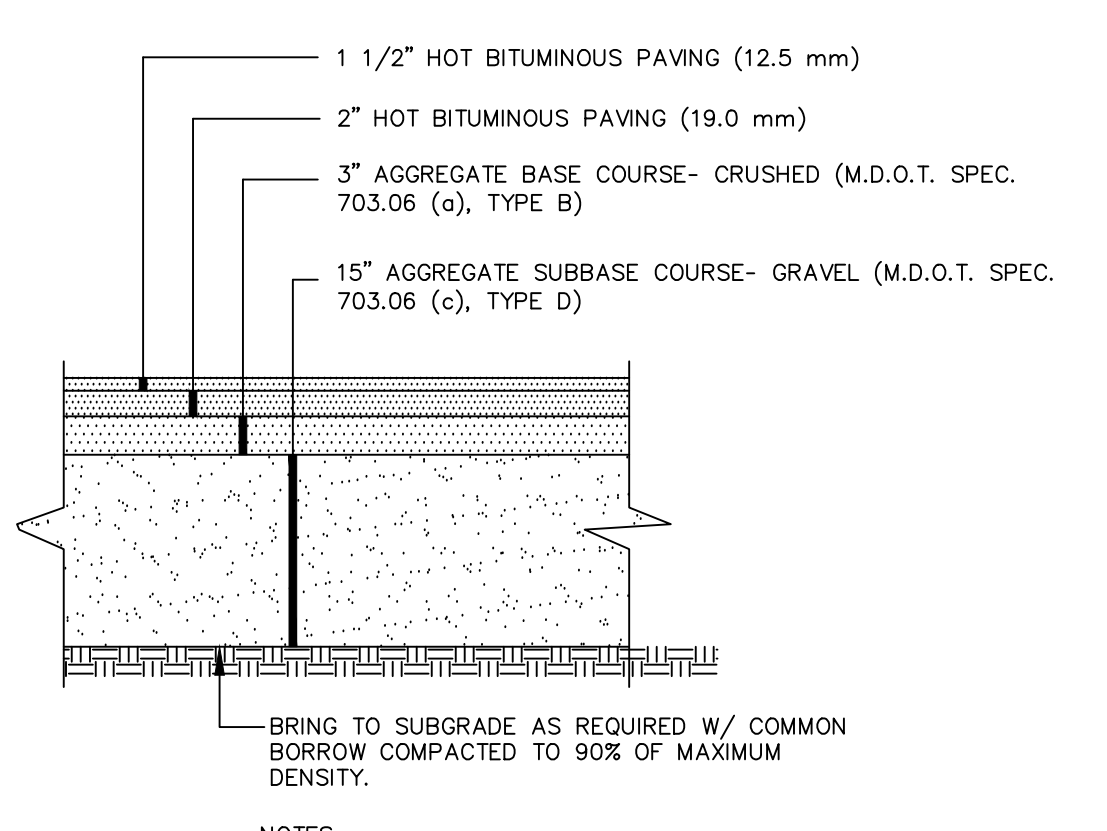
PLASTIC PIPE CONNECTION
NOT TO SCALE



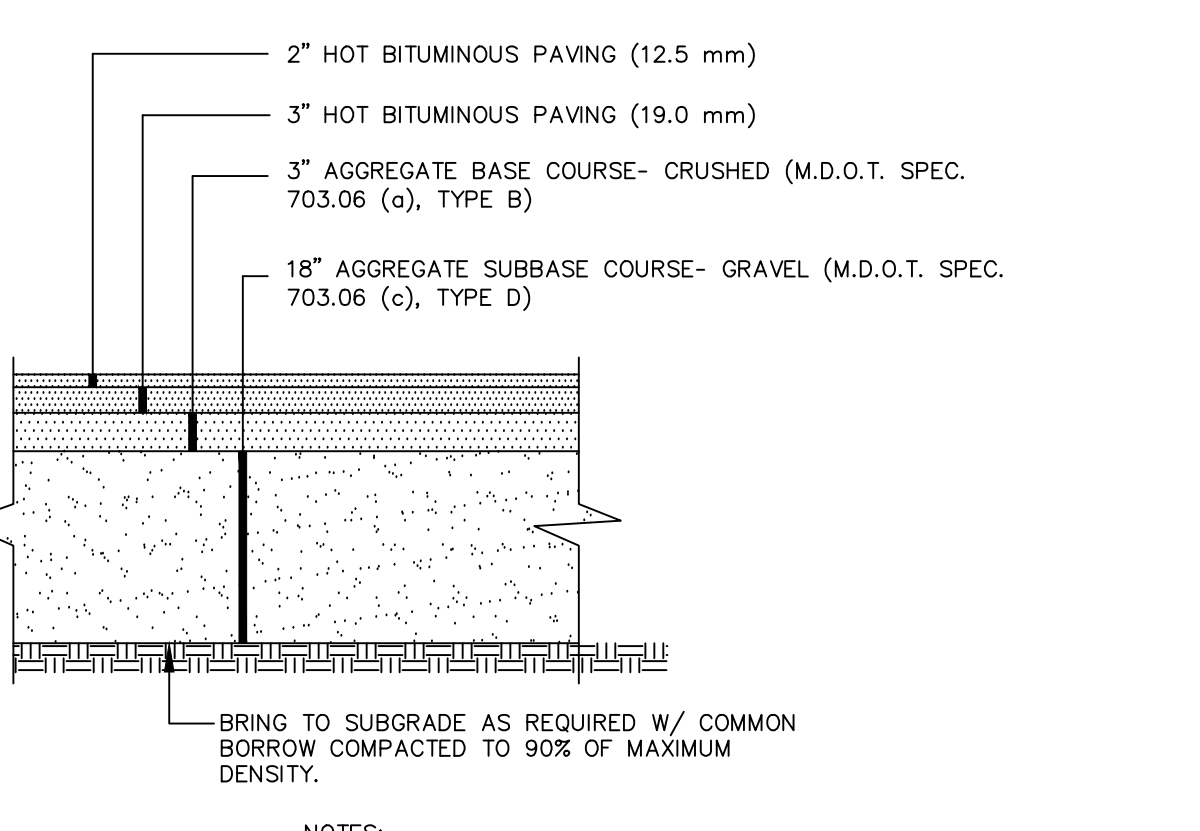
PAVEMENT BUTT JOINT (LOCAL STREET)
NOT TO SCALE



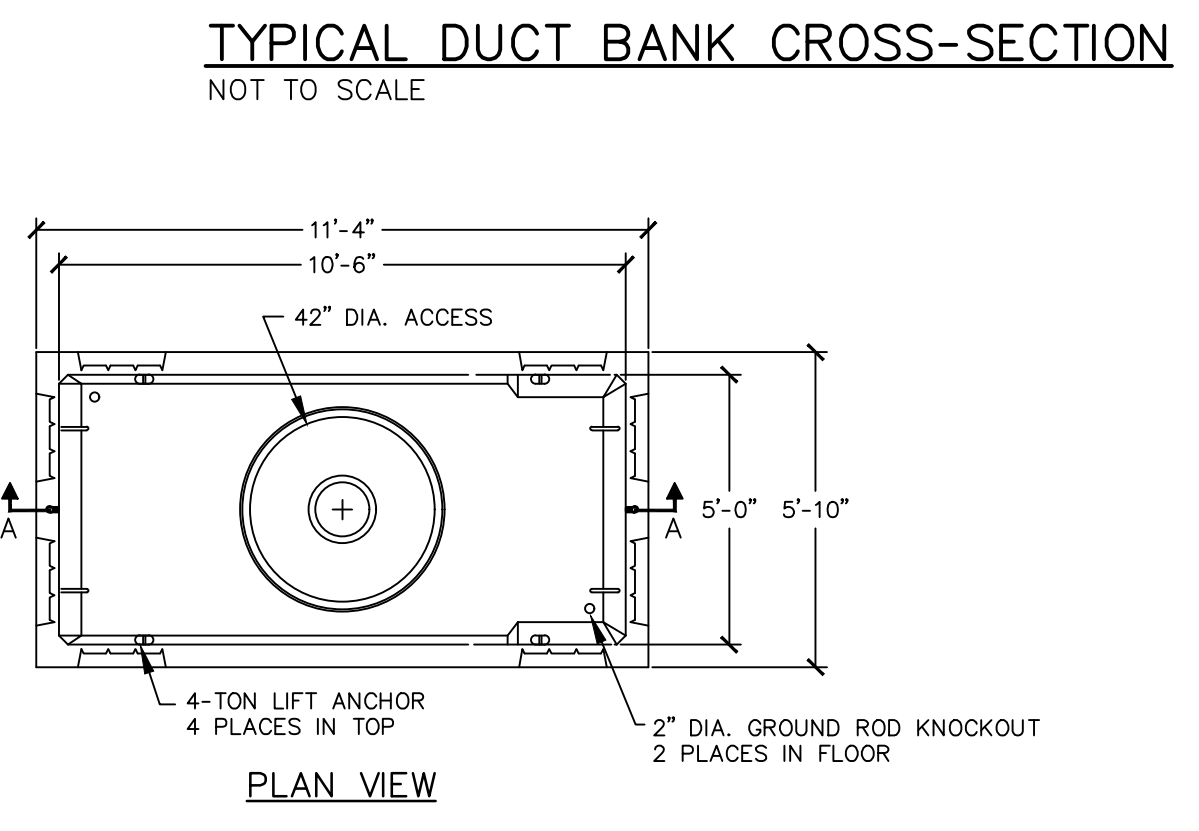
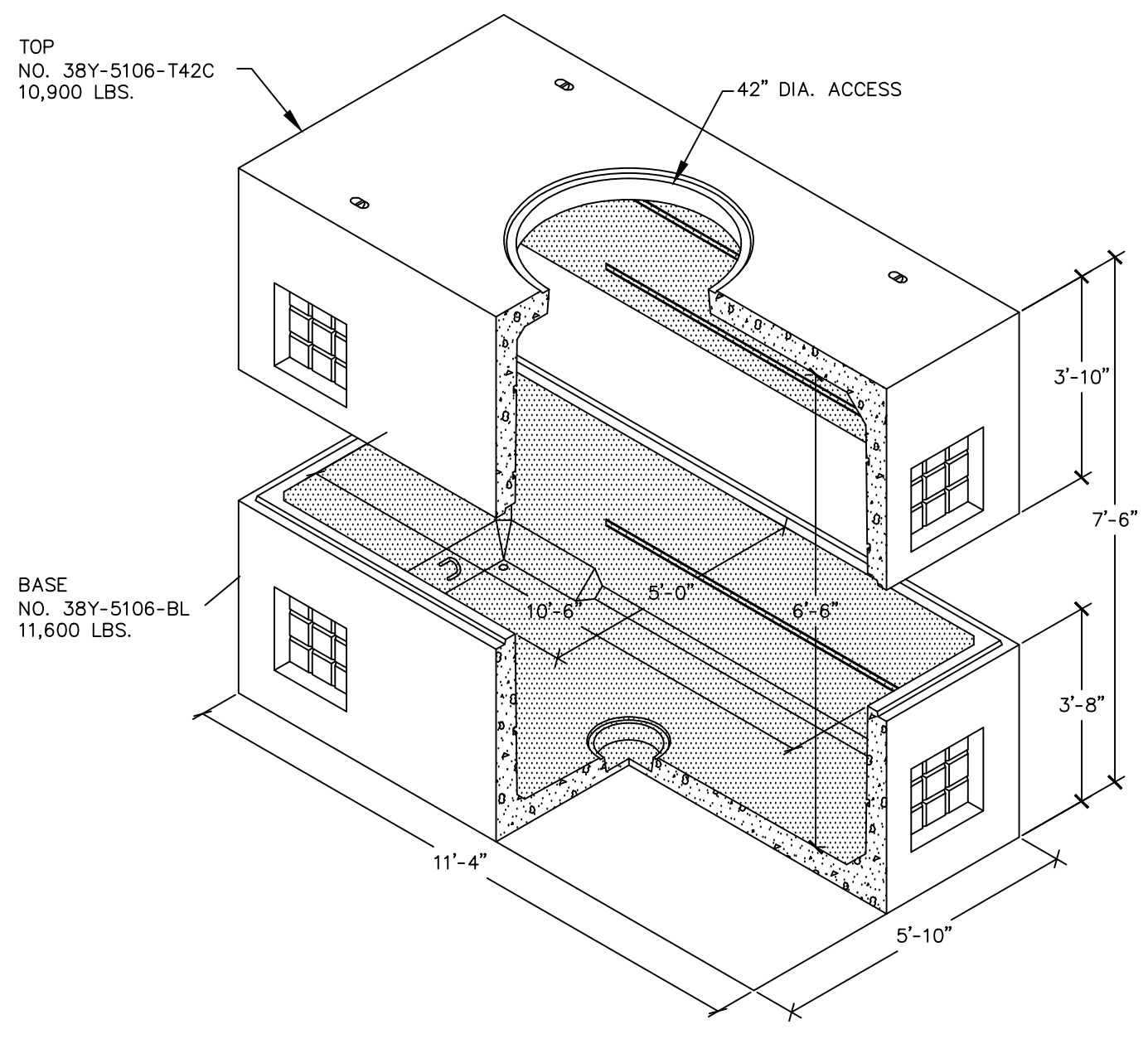
PAVEMENT BUTT JOINT (CONGRESS STREET)
NOT TO SCALE



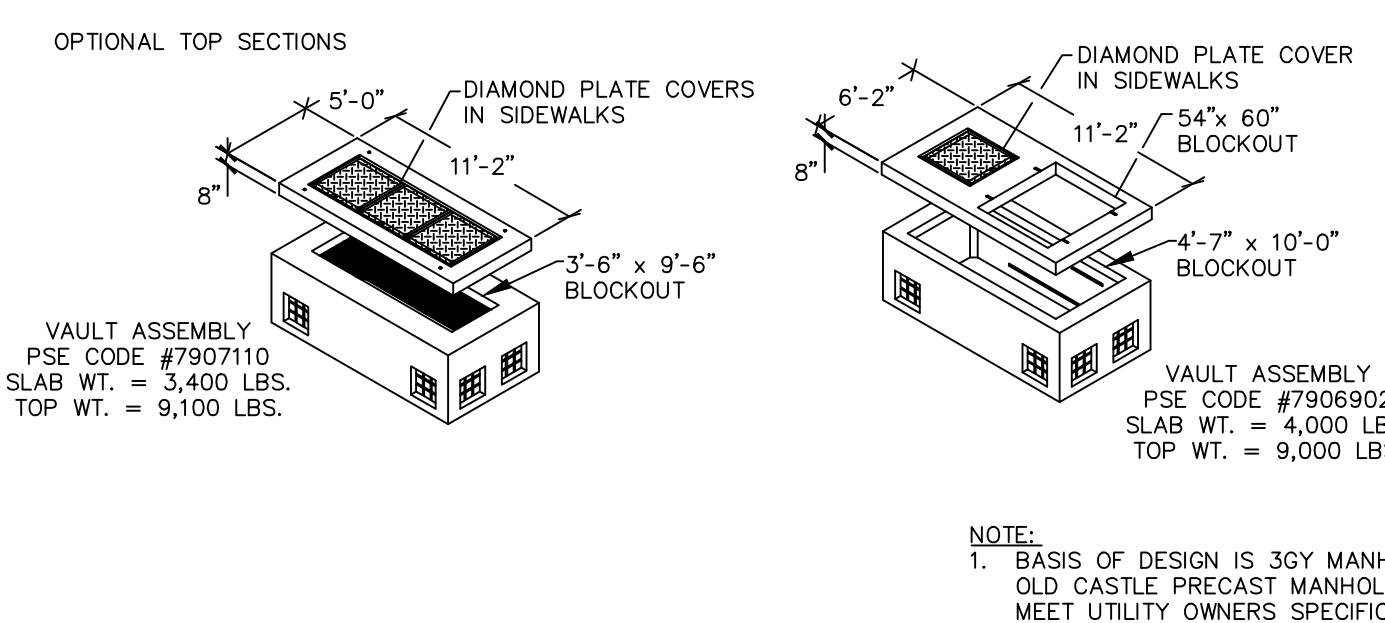
TYPICAL ROADWAY SECTION (LOCAL STREET)
NOT TO SCALE



TYPICAL ROADWAY SECTION - CONGRESS STREET
NOT TO SCALE



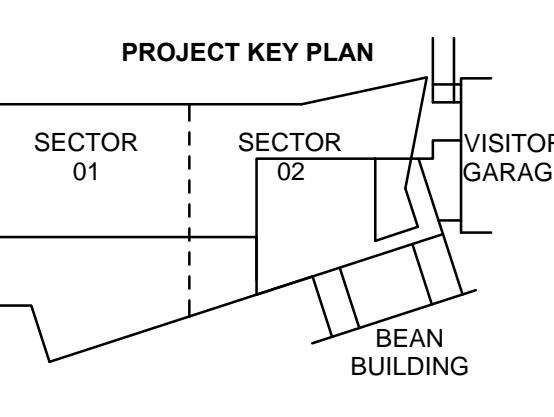
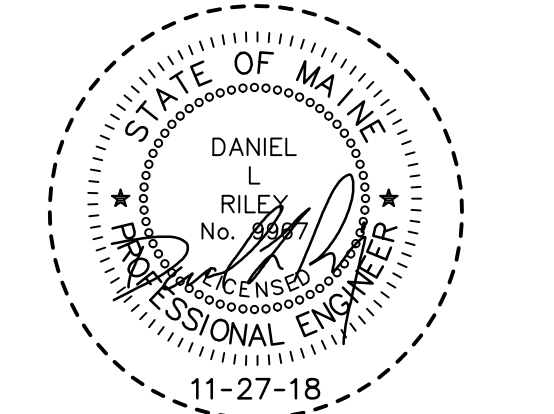
TYPICAL DUCT BANK CROSS-SECTION
NOT TO SCALE



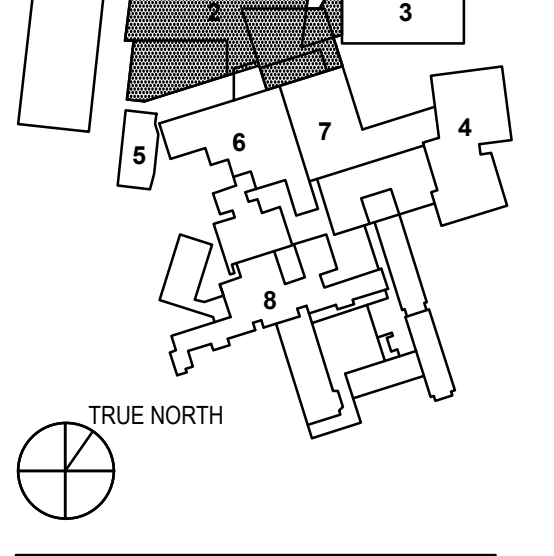
ELECTRICAL & TELECOMMUNICATIONS MANHOLE
NOT TO SCALE

| TABLE OF DIMENSIONS PVC TRUSS, CMP, & POLYETHYLENE PIPE | | | | |
|---|-------|-----------|-------|------------------|
| D | A | B | C | WGT. PER 100 FT. |
| 8" | 3'-0" | 1'-1 1/2" | 0'-0" | 12.850 |
| 10" | 3'-0" | 1'-1 1/2" | 0'-0" | 17.850 |
| 12" | 3'-0" | 1'-1 1/2" | 0'-0" | 22.850 |
| 14" | 3'-0" | 1'-1 1/2" | 0'-0" | 27.850 |
| 16" | 3'-0" | 1'-1 1/2" | 0'-0" | 32.850 |
| 18" | 3'-0" | 1'-1 1/2" | 0'-0" | 37.850 |
| 20" | 3'-0" | 1'-1 1/2" | 0'-0" | 42.850 |
| 22" | 3'-0" | 1'-1 1/2" | 0'-0" | 47.850 |
| 24" | 3'-0" | 1'-1 1/2" | 0'-0" | 52.850 |
| 26" | 3'-0" | 1'-1 1/2" | 0'-0" | 57.850 |
| 28" | 3'-0" | 1'-1 1/2" | 0'-0" | 62.850 |
| 30" | 3'-0" | 1'-1 1/2" | 0'-0" | 67.850 |
| 32" | 3'-0" | 1'-1 1/2" | 0'-0" | 72.850 |
| 34" | 3'-0" | 1'-1 1/2" | 0'-0" | 77.850 |
| 36" | 3'-0" | 1'-1 1/2" | 0'-0" | 82.850 |
| 38" | 3'-0" | 1'-1 1/2" | 0'-0" | 87.850 |
| 40" | 3'-0" | 1'-1 1/2" | 0'-0" | 92.850 |
| 42" | 3'-0" | 1'-1 1/2" | 0'-0" | 97.850 |
| 44" | 3'-0" | 1'-1 1/2" | 0'-0" | 102.850 |
| 46" | 3'-0" | 1'-1 1/2" | 0'-0" | 107.850 |
| 48" | 3'-0" | 1'-1 1/2" | 0'-0" | 112.850 |
| 50" | 3'-0" | 1'-1 1/2" | 0'-0" | 117.850 |
| 52" | 3'-0" | 1'-1 1/2" | 0'-0" | 122.850 |
| 54" | 3'-0" | 1'-1 1/2" | 0'-0" | 127.850 |
| 56" | 3'-0" | 1'-1 1/2" | 0'-0" | 132.850 |
| 58" | 3'-0" | 1'-1 1/2" | 0'-0" | 137.850 |
| 60" | 3'-0" | 1'-1 1/2" | 0'-0" | 142.850 |
| 62" | 3'-0" | 1'-1 1/2" | 0'-0" | 147.850 |
| 64" | 3'-0" | 1'-1 1/2" | 0'-0" | 152.850 |
| 66" | 3'-0" | 1'-1 1/2" | 0'-0" | 157.850 |
| 68" | 3'-0" | 1'-1 1/2" | 0'-0" | 162.850 |
| 70" | 3'-0" | 1'-1 1/2" | 0'-0" | 167.850 |
| 72" | 3'-0" | 1'-1 1/2" | 0'-0" | 172.850 |
| 74" | 3'-0" | 1'-1 1/2" | 0'-0" | 177.850 |
| 76" | 3'-0" | 1'-1 1/2" | 0'-0" | 182.850 |
| 78" | 3'-0" | 1'-1 1/2" | 0'-0" | 187.850 |
| 80" | 3'-0" | 1'-1 1/2" | 0'-0" | 192.850 |
| 82" | 3'-0" | 1'-1 1/2" | 0'-0" | 197.850 |
| 84" | 3'-0" | 1'-1 1/2" | 0'-0" | 202.850 |
| 86" | 3'-0" | 1'-1 1/2" | 0'-0" | 207.850 |
| 88" | 3'-0" | 1'-1 1/2" | 0'-0" | 212.850 |
| 90" | 3'-0" | 1'-1 1/2" | 0'-0" | 217.850 |
| 92" | 3'-0" | 1'-1 1/2" | 0'-0" | 222.850 |
| 94" | 3'-0" | 1'-1 1/2" | 0'-0" | 227.850 |
| 96" | 3'-0" | 1'-1 1/2" | 0'-0" | 232.850 |
| 98" | 3'-0" | 1'-1 1/2" | 0'-0" | 237.850 |
| 100" | 3'-0" | 1'-1 1/2" | 0'-0" | 242.850 |

| TABLE OF DIMENSIONS REINFORCED CONCRETE PIPE | | | | |
|--|-------|-------|-------|------------------|
| D | A | B | C | WGT. PER 100 FT. |
| 12" | 3'-0" | 0'-0" | 0'-0" | 8.510 |
| 15" | 3'-0" | 0'-0" | 0'-0" | 12.720 |
| 18" | 3'-0" | 0'-0" | 0'-0" | 16.930 |
| 21" | 3'-0" | 0'-0" | 0'-0" | 21.140 |
| 24" | 3'-0" | 0'-0" | 0'-0" | 25.350 |
| 27" | 3'-0" | 0'-0" | 0'-0" | 29.560 |
| 30" | 3'-0" | 0'-0" | 0'-0" | 33.770 |
| 33" | 3'-0" | 0'-0" | 0'-0" | 37.980 |
| 36" | 3'-0" | 0'-0" | 0'-0" | 42.190 |
| 39" | 3'-0" | 0'-0" | 0'-0" | 46.400 |
| 42" | 3'-0" | 0'-0" | 0'-0" | 50.610 |
| 45" | 3'-0" | 0'-0" | 0'-0" | 54.820 |
| 48" | 3'-0" | 0'-0" | 0'-0" | 59.030 |
| 51" | 3'-0" | 0'-0" | 0'-0" | 63.240 |
| 54" | 3'-0" | 0'-0" | 0'-0" | 67.450 |
| 57" | 3'-0" | 0'-0" | 0'-0" | 71.660 |
| 60" | 3'-0" | 0'-0" | 0'-0" | 75.870 |
| 63" | 3'-0" | 0'-0" | 0'-0" | 80.080 |
| 66" | 3'-0" | 0'-0" | 0'-0" | 84.290 |
| 69" | 3'-0" | 0'-0" | 0'-0" | 88.500 |
| 72" | 3'-0" | 0'-0" | 0'-0" | 92.710 |
| 75" | 3'-0" | 0'-0" | 0'-0" | 96.920 |
| 78" | 3'-0" | 0'-0" | 0'-0" | 101.130 |
| 81" | 3'-0" | 0'-0" | 0'-0" | 105.340 |
| 84" | 3'-0" | 0'-0" | 0'-0" | 109.550 |
| 87" | 3'-0" | 0'-0" | 0'-0" | 113.760 |
| 90" | 3'-0" | 0'-0" | 0'-0" | 117.970 |
| 93" | 3'-0" | 0'-0" | 0'-0" | 122.180 |
| 96" | 3'-0" | 0'-0" | 0'-0" | 126.390 |
| 99" | 3'-0" | 0'-0" | 0'-0" | 130.600 |
| 102" | 3'-0" | 0'-0" | 0'-0" | 134.810 |



- 1 - NOT USED
- 2 - CONGRESS STREET
- 3 - VISITOR GARAGE
- 4 - EAST TOWER
- 5 - CENTRAL UTILITY PLANT
- 6 - BEAN BUILDING
- 7 - RICHARDS BUILDING
- 8 - MAINE GENERAL BUILDING



| NO. | ISSUE | DATE |
|------------|------------|------|
| Job Number | 152189.000 | |
| Drawn | MALMANN | |
| Checked | DLR | |
| Approved | DLR | |