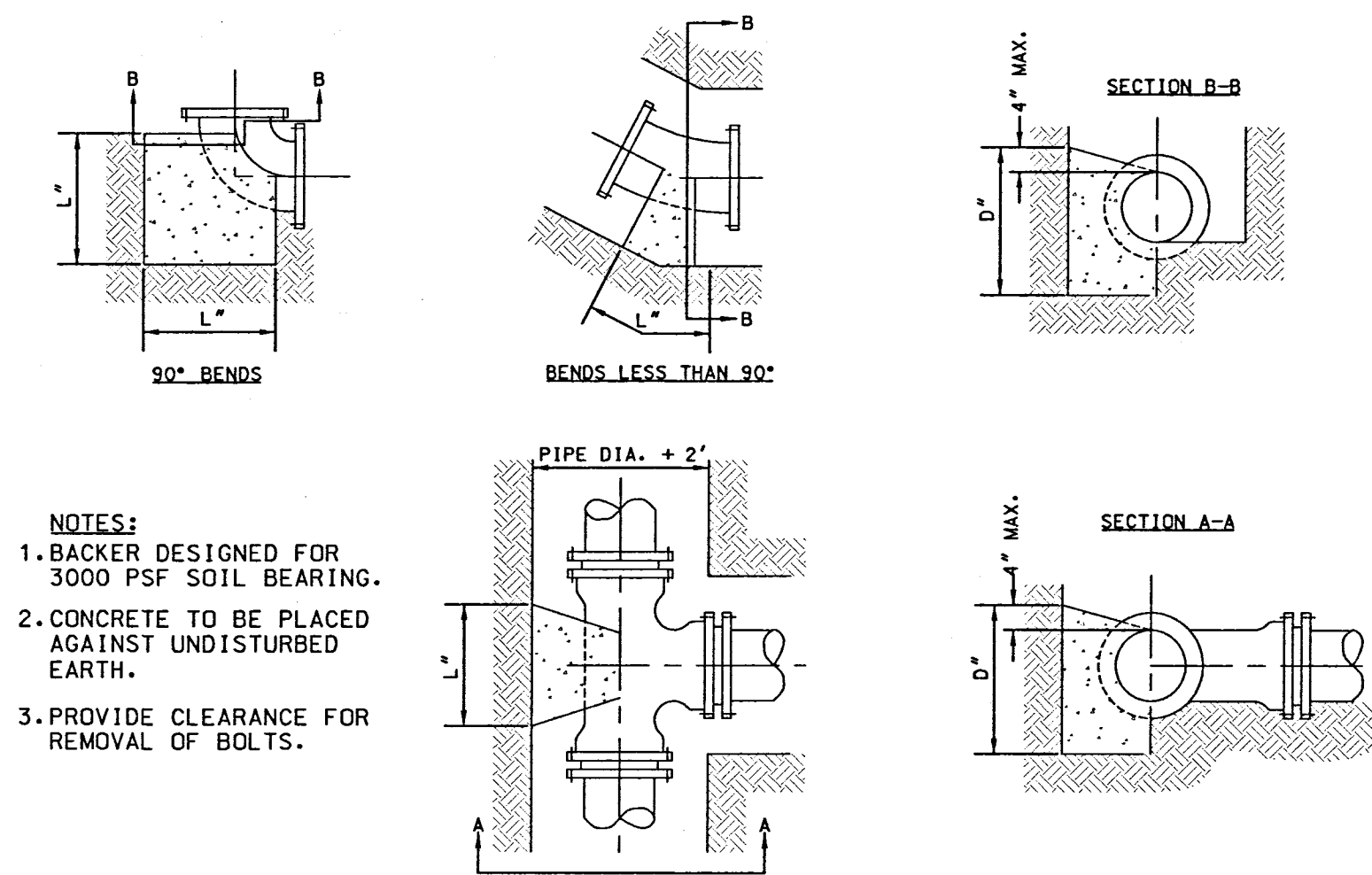
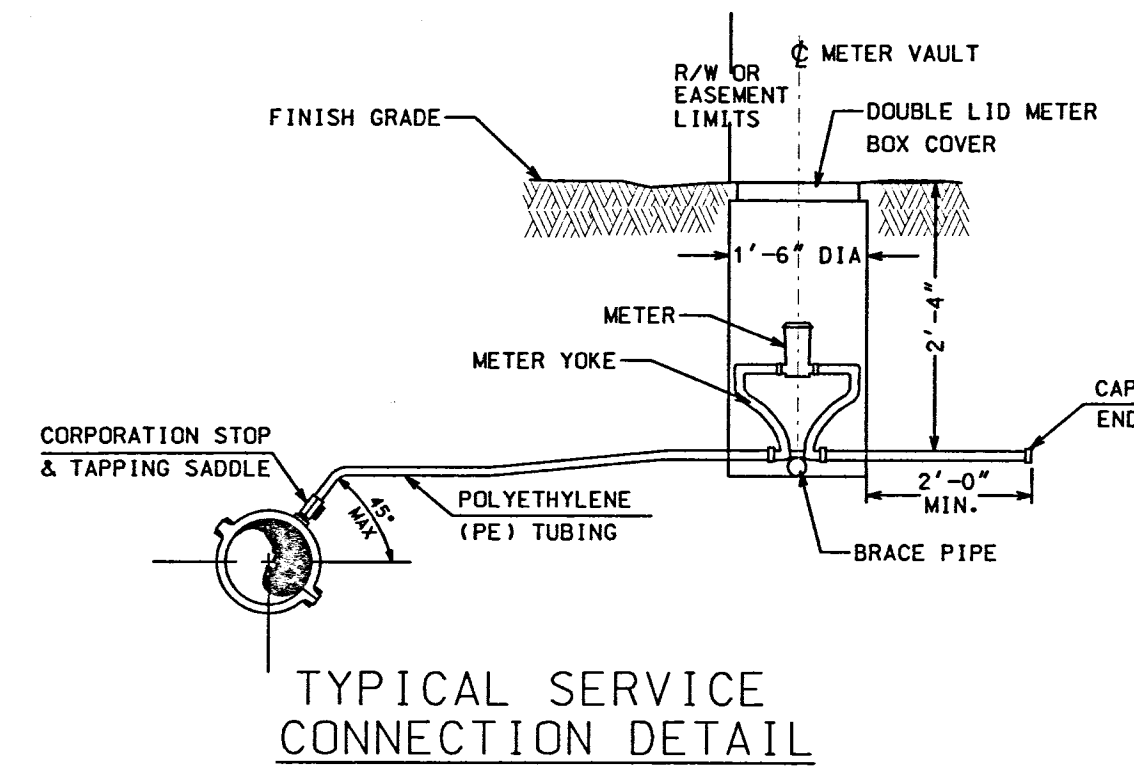
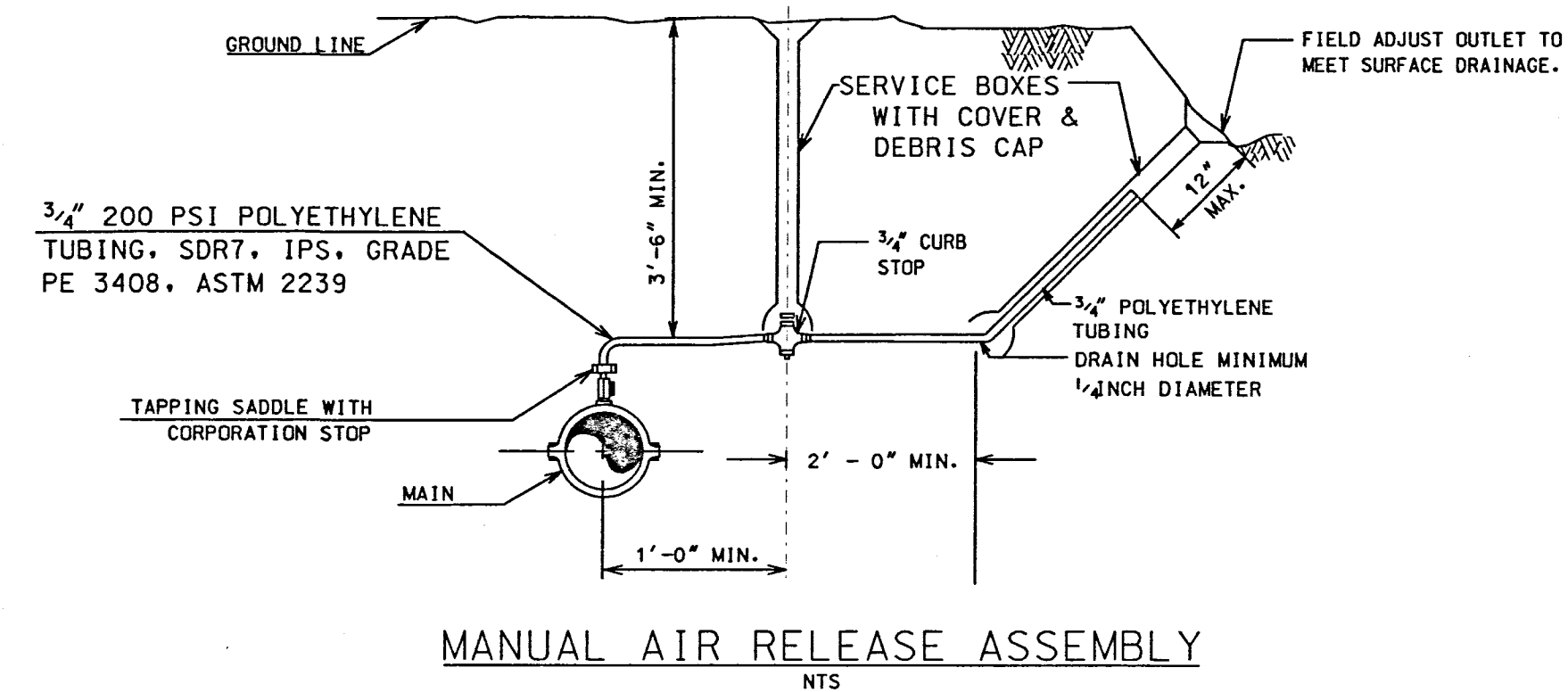




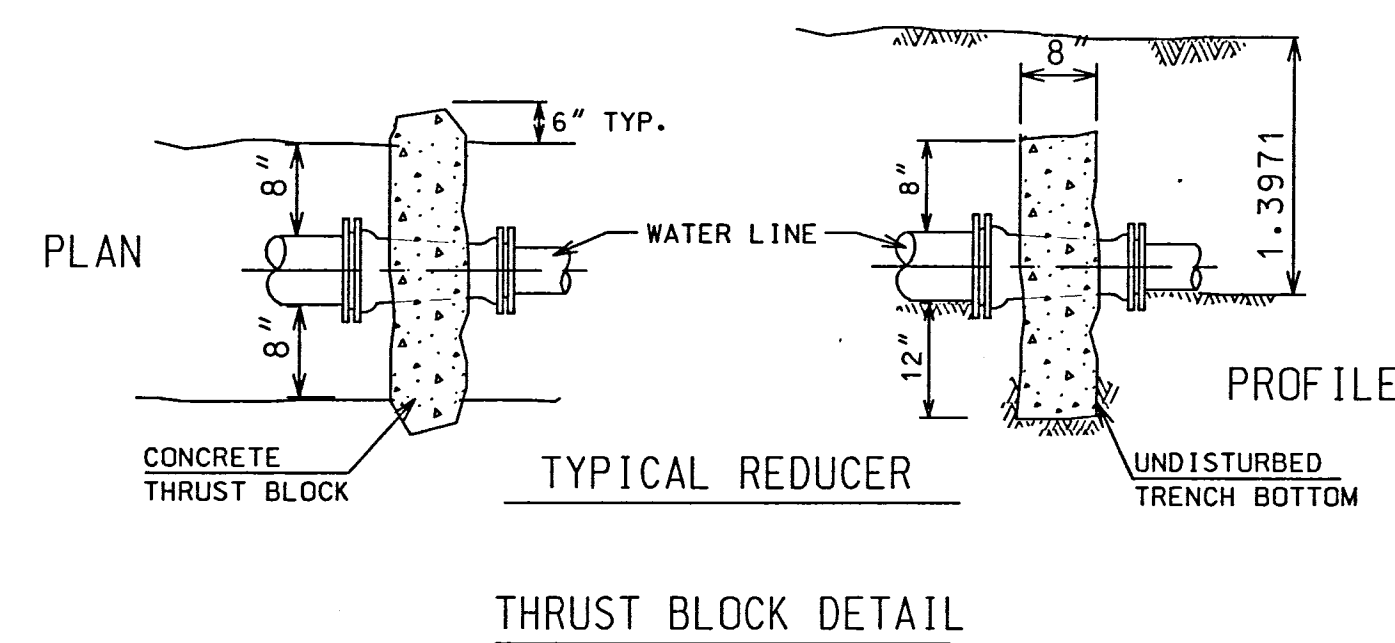
TYP. BEND AND TEE DETAILS

| BENDS        |     |                |         |     |     |    |    |    |    | TEES         |    |        |     |    |    |    |    |    |    |
|--------------|-----|----------------|---------|-----|-----|----|----|----|----|--------------|----|--------|-----|----|----|----|----|----|----|
| SIZE OF PIPE |     | DEGREE OF BEND |         |     |     |    |    |    |    | RUN          |    | BRANCH |     |    |    |    |    |    |    |
| L"           | D"  | 11 1/4°        | 22 1/2° | 45° | 90° | L" | D" | L" | D" | 3" - 4" - 6" | 8" | 12"    | 16" | L" | D" | L" | D" | L" | D" |
| 3"           | 8"  | 6              | 10      | 6   | 20  | 6  | 36 | 8  |    | 3"           | 16 | 7      |     |    |    |    |    |    |    |
| 4"           | 8"  | 6              | 10      | 6   | 20  | 6  | 36 | 8  |    | 4"           | 16 | 7      |     |    |    |    |    |    |    |
| 6"           | 8"  | 6              | 12      | 7   | 20  | 8  | 36 | 9  |    | 6"           | 16 | 7      |     |    |    |    |    |    |    |
| 8"           | 9"  | 8              | 16      | 9   | 24  | 12 | 50 | 11 |    | 8"           | 14 | 8      | 18  | 12 |    |    |    |    |    |
| 12"          | 14" | 12             | 24      | 14  | 36  | 18 | 60 | 18 |    | 12"          | 14 | 12     | 24  | 14 | 36 | 18 |    |    |    |
| 16"          | 18" | 16             | 32      | 18  | 36  | 36 | 70 | 26 |    | 16"          | 18 | 16     | 32  | 18 | 36 | 36 | 70 | 26 |    |

STEEL WILL BE USED AS REQUIRED BY ENGINEER

STEEL WILL BE USED AS REQUIRED BY ENGINEER

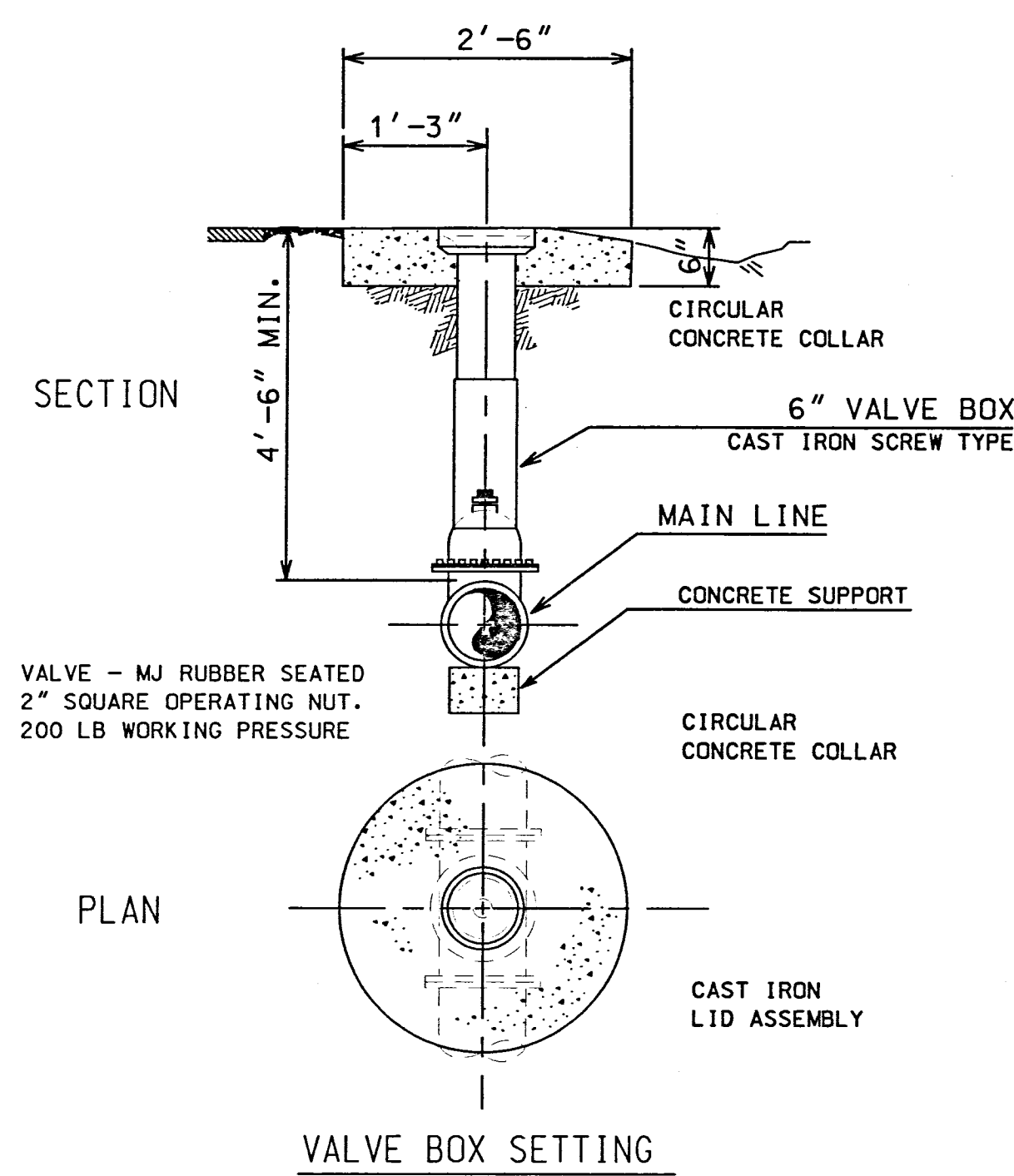
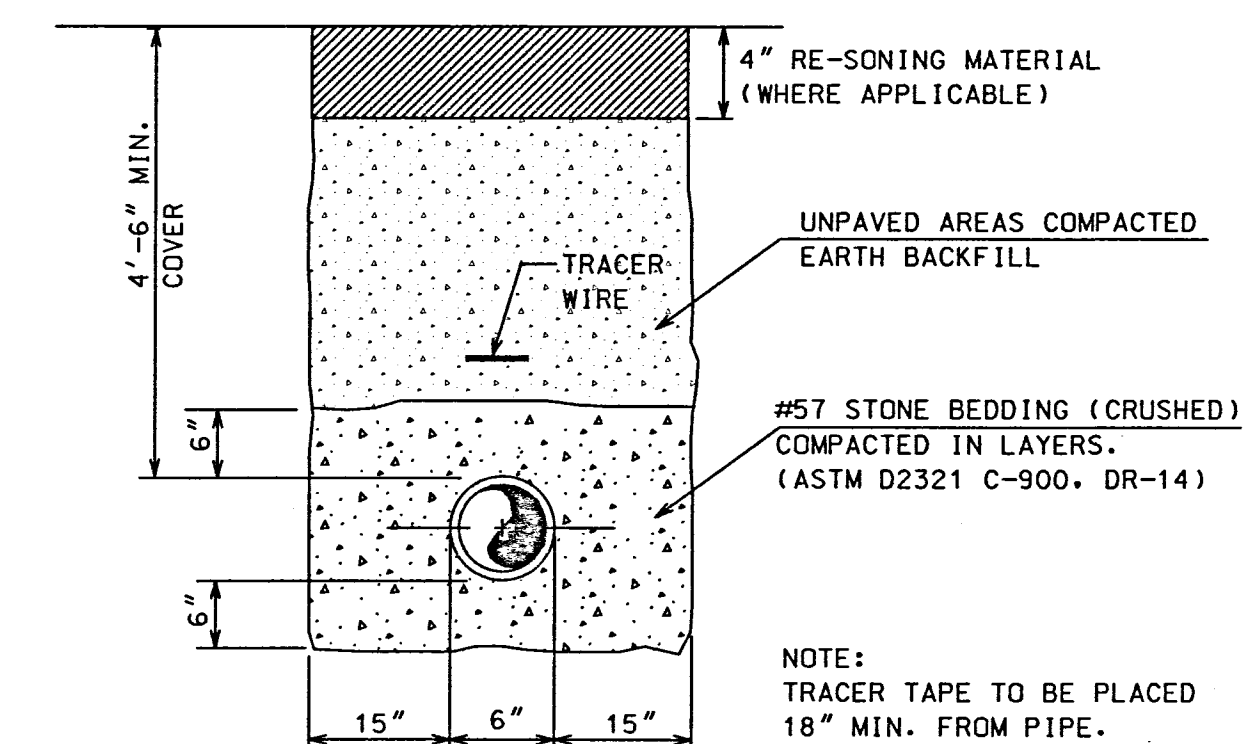
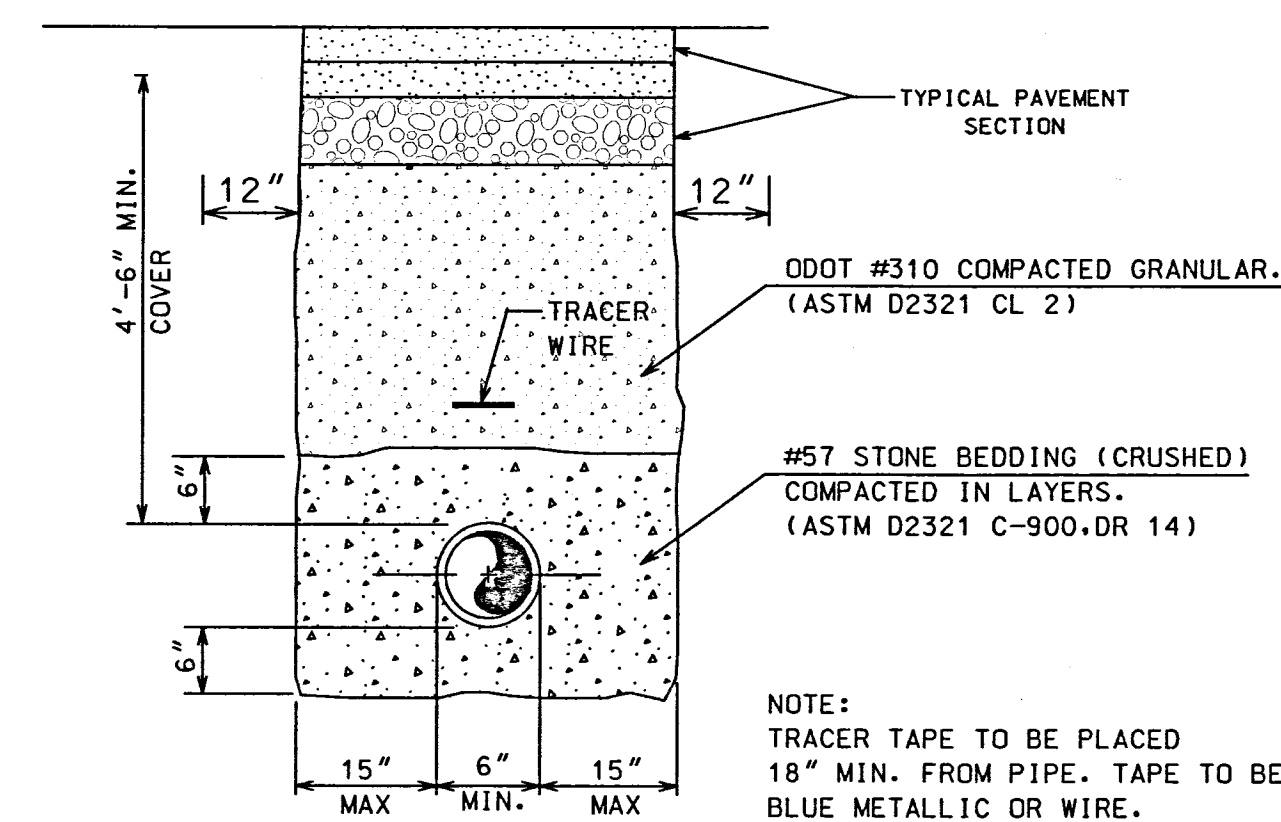
MINIMUM REQUIREMENTS



M.J. FITTINGS  
DUCTILE - IRON

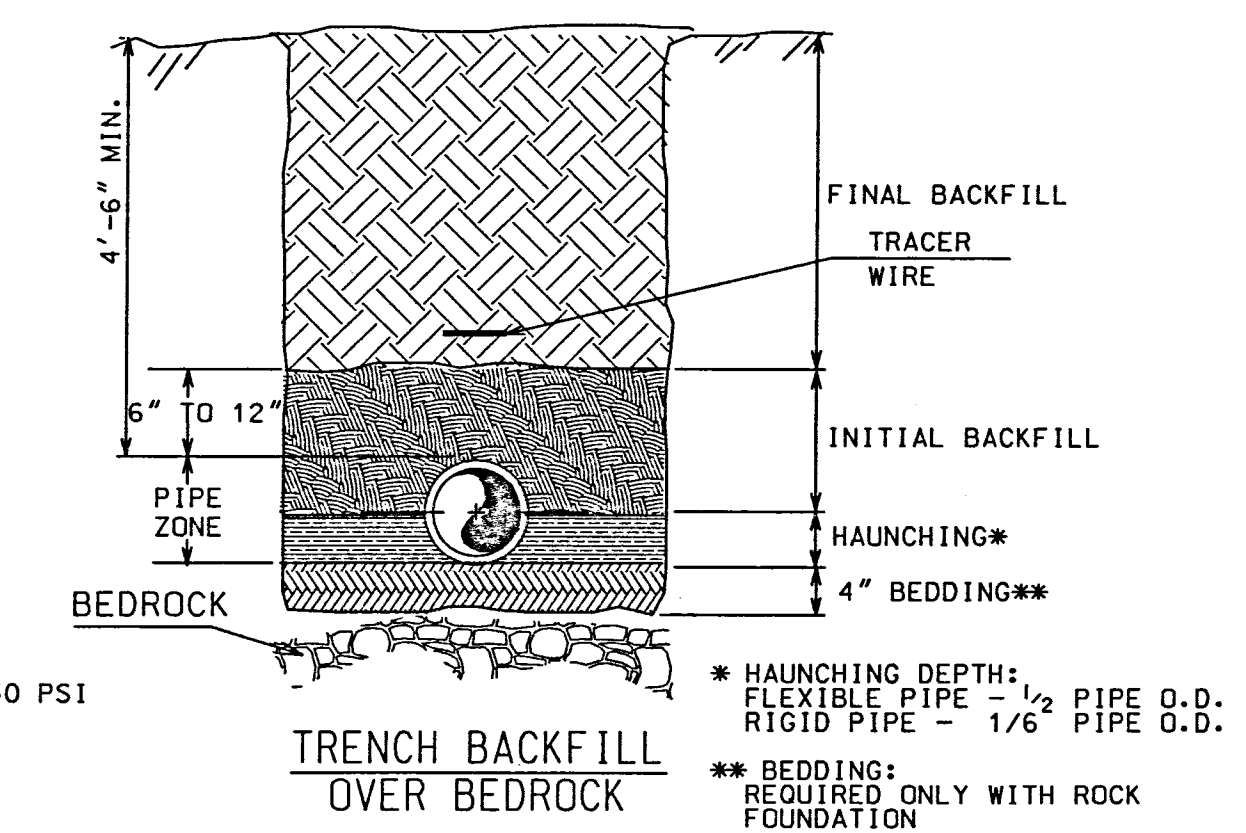
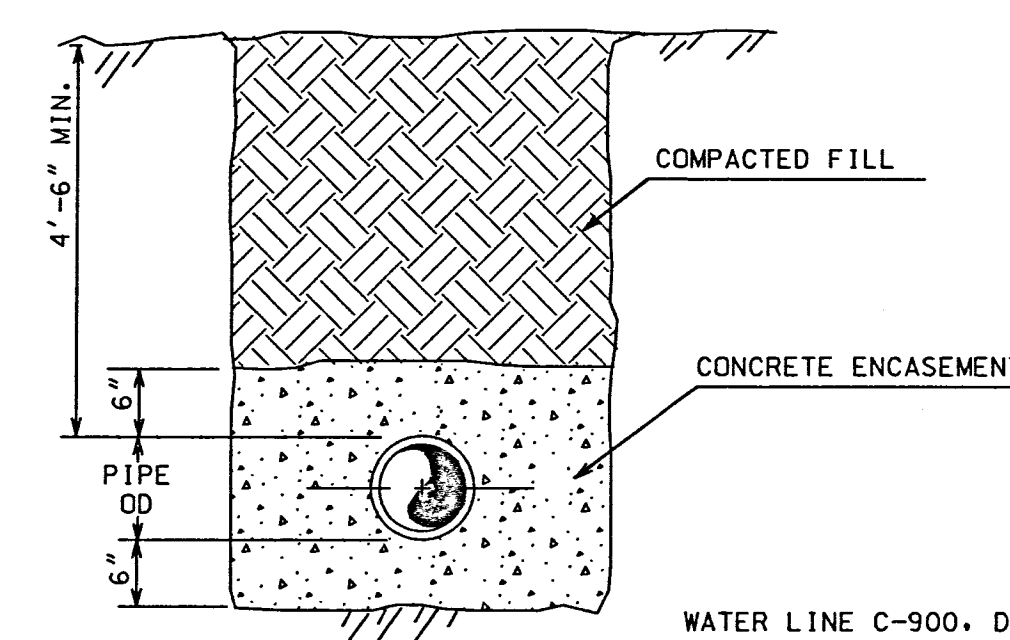
NOTE:

1. PROVIDE SUBSTANTIAL THRUST BLOCKING ON ALL FITTINGS.
2. KEEP ALL FLANGES, BOLTS CLEAN OF CONCRETE.



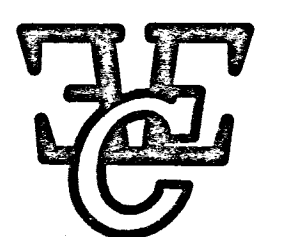
TYP. PIPE TRENCH DETAIL (PAVEMENT AREAS)

TYP. PIPE TRENCH DETAIL (NON-PAVEMENT AREAS)



REVISIONS

05-07-02  
-REVISED AIR RELEASE  
AND SERVICE CONNECTION  
DETAILS.



EICHER ENGINEERING  
AND CONSULTING

MARK J. EICHER, P.E.  
38 N. 4TH ST., SUITE 305  
ZANESVILLE, OHIO 43701  
(740) 450-9309

GEORGIA PINES ESTATES  
NEWTON TOWNSHIP  
MUSKINGUM COUNTY, OH

DATE 04/17/02

TITLE  
WATER LINE  
DETAILS

SHEET

C-11