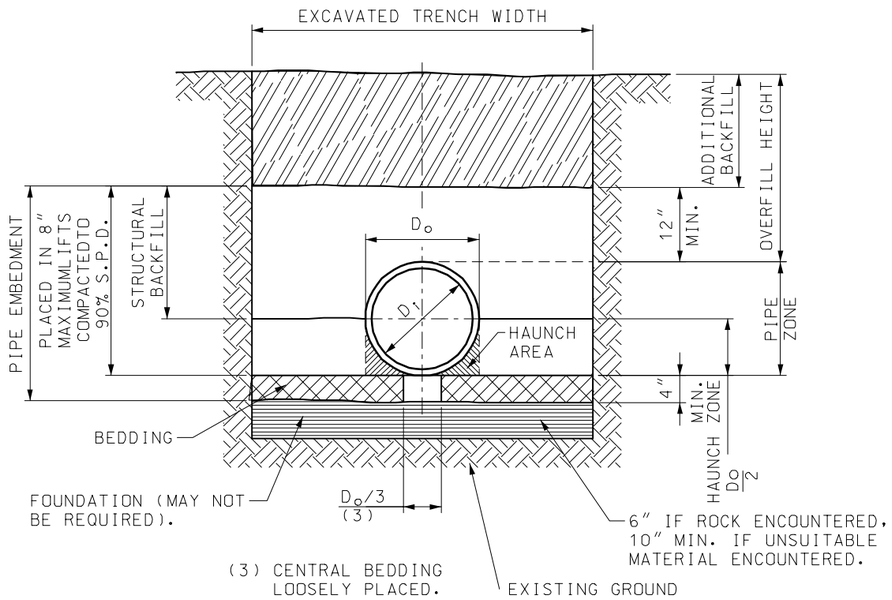
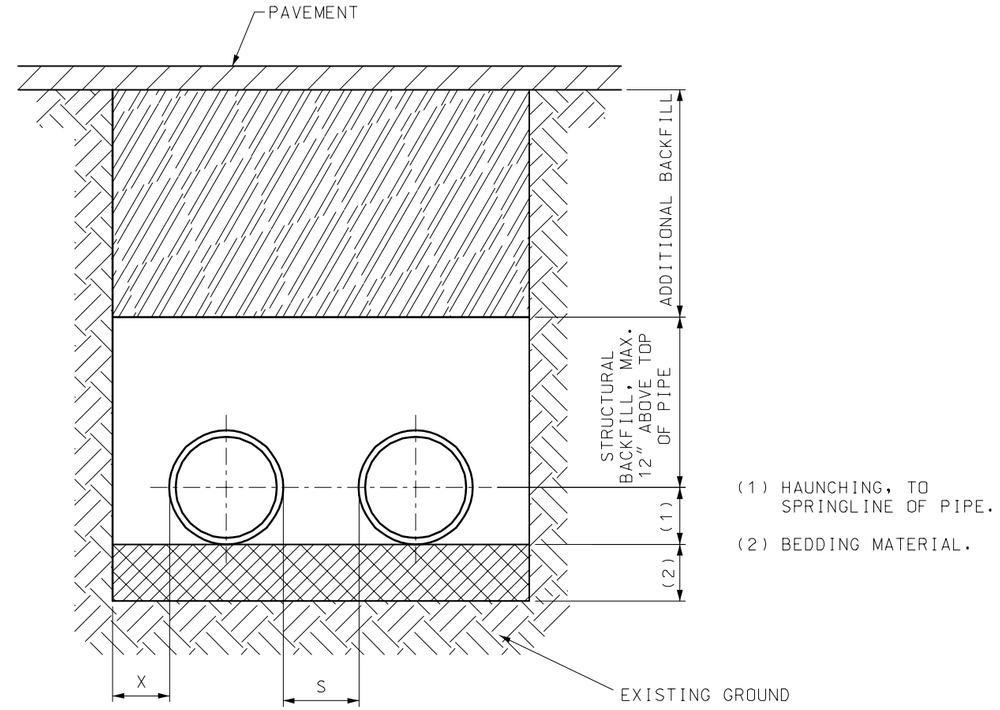


TYPICAL TRENCH DETAIL



PARALLEL PIPE INSTALLATION
TYPICAL TRENCH CROSS-SECTION

TABLE I
CORRUGATED POLYETHYLENE AND POLYVINYL CHLORIDE CIRCULAR PIPE

SPECIFIED DIA OF PIPE (IN.)	MIN OVERFILL HEIGHT (FT)	POLYETHYLENE MAX OVERFILL HEIGHT✳ (FT)	POLYVINYL CHLORIDE MAX OVERFILL HEIGHT✳ (FT)		TRENCH WIDTH (IN.)
			CLASS 1	CLASS 2	
12	1	38	49	26	34
15	1	39	46	22	39
18	1	40	51	23	44
24	1	40	N/A	21	55
30	1	40	51	19	67
36	1	38	50	18	76
42	2	10	N/A	17	84
48	2	9	N/A	17	95
54	2	8	N/A	N/A	104
60	2	8	N/A	N/A	113

✳ MAXIMUM OVERFILL MEASURED FROM THE TOP OF PIPE TO SURFACE.

PIPE SIZE	S (IN.)	X (IN.)
12	12	9
15	12	9
18	12	9
24	12	10
30	15	16
36	18	18
42	21	18
48	24	18

CONSTRUCTION SEQUENCE

1. PLACE BEDDING MATERIAL TO GRADE.
2. COMPACT BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
3. INSTALL PIPE TO GRADE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE SPRINGLINE.
5. COMPLETE BACKFILL ACCORDING TO SPECIFICATIONS.

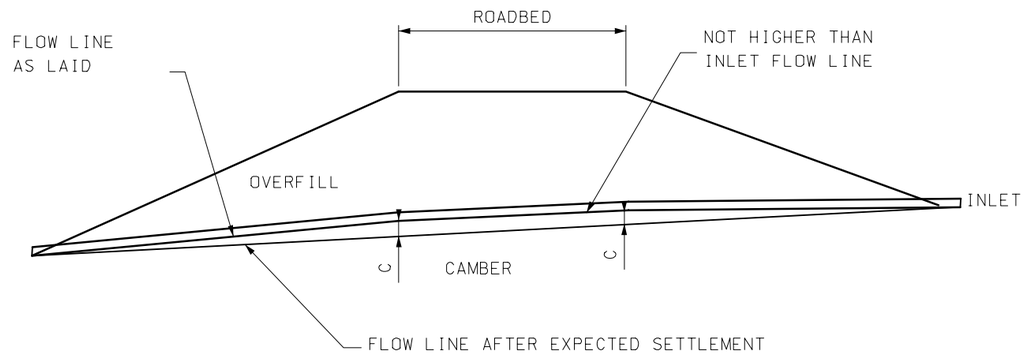
LEGEND

D_i = NORMAL INSIDE DIAMETER OF PIPE.
D_o = OUTSIDE DIAMETER OF PIPE.
H = FILL COVER HEIGHT OVER PIPE (FEET).
MIN. = MINIMUM
MAX. = MAXIMUM
= UNDISTURBED SOIL

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

CORRUGATED POLYETHYLENE AND POLYVINYL CHLORIDE PIPE INSTALLATION METHODS

DATE:_____ EFFECTIVE: 07-01-2004 **730.00B** 1/2



NOTE:

ON YIELDING SOIL, PIPE CULVERTS SHALL BE PLACED ON A CAMBERED FLOW LINE. THE AMOUNT OF CAMBER WILL VARY WITH SOIL CONDITION AND WILL BE SPECIFIED ON THE DESIGN PLANS.

TYPICAL CAMBERED FLOW LINE

TABLE II

MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIA. (IN.)	MINIMUM COVER (FT) FOR INDICATED AXLE LOADS (THOUSANDS OF POUNDS)			
	18-50	50-75	75-110	110-150
12-36	2.0	2.5	3.0	3.0
42-48	3.0	3.0	3.5	4.0

THE CONTRACTOR SHALL PROVIDE MINIMUM COVER PLUS ANY ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. IN UNPAVED SITUATIONS, THE SURFACE MUST BE MAINTAINED TO A LEVEL AND NON-RUTTED CONDITION.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

CORRUGATED POLYETHYLENE PIPE INSTALLATION METHODS

DATE:_____ EFFECTIVE: 07-01-2004 730.00B 2/2