

48" AND UNDER

OVER 48"

## CONCRETE COLLAR DETAIL

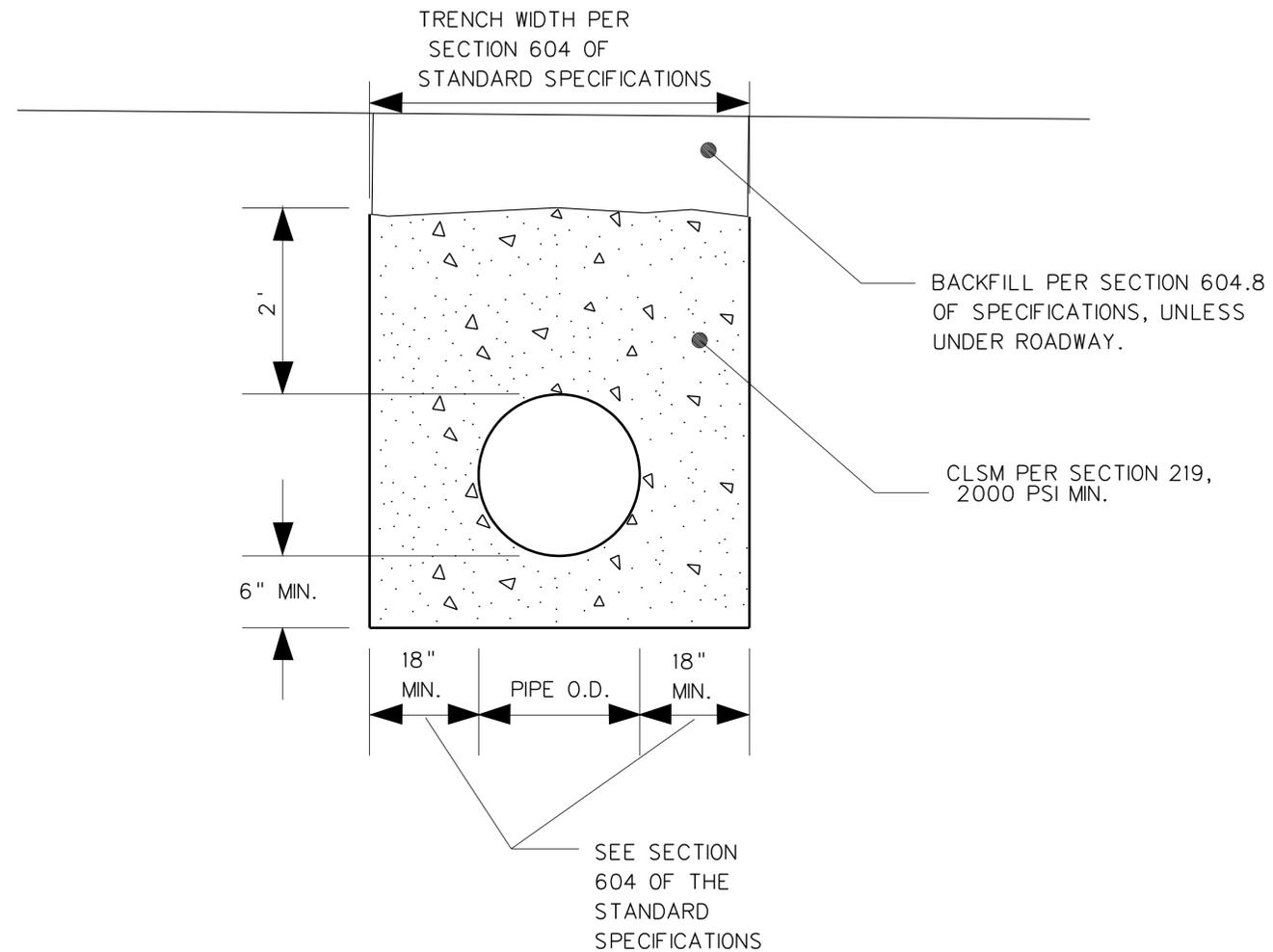
DIAMETER OF PIPE	A	B	CU. YD. CONC. *	DIAMETER OF PIPE	A	B	CU. YD. CONC. *
15"	1'-0"	0'-6"	0.18	48"	2'-0"	1'-0"	2.10
18"	1'-0"	0'-6"	0.21	54"	2'-6"	1'-0"	2.09
21"	1'-0"	0'-6"	0.24	60"	3'-0"	1'-6"	4.31
24"	1'-0"	0'-6"	0.27	72"	3'-0"	1'-6"	5.03
30"	1'-6"	0'-9"	0.75	84"	3'-0"	2'-0"	7.94
36"	1'-6"	0'-9"	0.92	96"	3'-0"	2'-0"	8.90
42"	2'-0"	1'-0"	1.84	108"	3'-0"	2'-0"	9.87

\* FOR INFORMATION ONLY

### NOTES :

A AND B ARE MINIMUM DIMENSIONS. FORMING WILL NOT BE REQUIRED IF MINIMUM DIMENSIONS ARE OBTAINED. METAL CONNECTING BANDS MAY BE SUBSTITUTED FOR A CONCRETE COLLAR TO JOIN EXISTING NEW METAL PIPES. THE COST OF METAL BANDS ARE TO BE INCLUDED IN THE UNIT BID PRICE FOR THE VARIOUS PIPES.

CONCRETE FOR CONSTRUCTING THE COLLAR SHALL BE IN ACCORDANCE WITH SECTION 715.12 OF THE SPECIFICATIONS; HOWEVER, TESTING WILL NOT BE REQUIRED. THE COST OF CONCRETE COLLAR IS TO BE INCLUDED IN THE UNIT BID PRICE OF PROPOSED PIPE.



## TYPE F DRAINAGE PIPE TRENCH

### NOTES

CONTROLLED LOW - STRENGTH MATERIAL (CLSM) SHALL BE A MIN. 2000 PSI.

THIS DETAIL SHALL BE USED ON PROPOSED PIPES / CULVERTS WHEN SPECIFIED ON THE PLANS. THE COST OF THE TYPE F TRENCH IS INCIDENTAL TO THE PIPE / CULVERT.

IF TYPE F TRENCH IS USED WHERE THERE IS NO EXISTING OR PROPOSED INLET, THE CLSM SHALL BE POURED FULL DEPTH 2' PAST EACH E.P. THE PIPE SHALL BE ENCASED IN 4" OF CLSM AN ADDITIONAL 10' MAX. BEYOND E.P. IF THERE IS AN EXISTING OR PROPOSED INLET THE CLSM SHALL BE POURED FULL DEPTH TO THE INLET.

WHEN TYPE F DRAINAGE PIPE TRENCH IS SPECIFIED CROSSING EXISTING ROADWAYS, REPAVING OF TRENCH SHALL BE PER SHEET DR-9.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
STANDARD DETAIL

### STANDARD DETAIL

PREPARED 1/7/11

REVISION DATE

TYPE F DRAINAGE  
PIPE TRENCH,  
CONCRETE COLLAR

STANDARD DETAIL SHEET DR-10