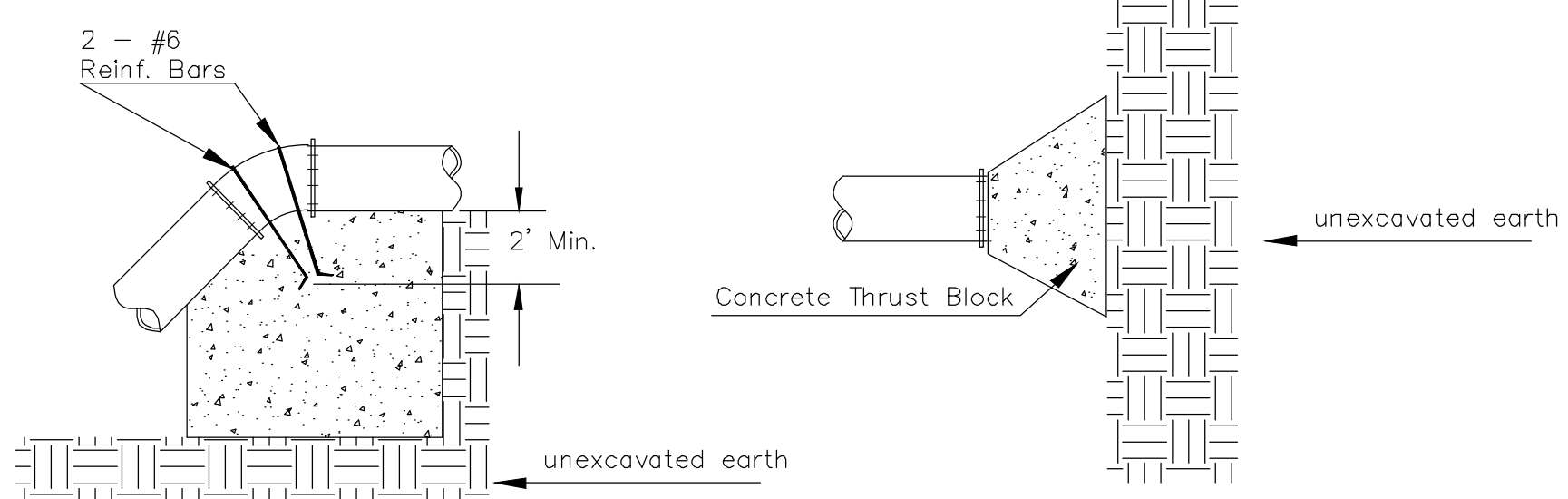


TEE

BEND

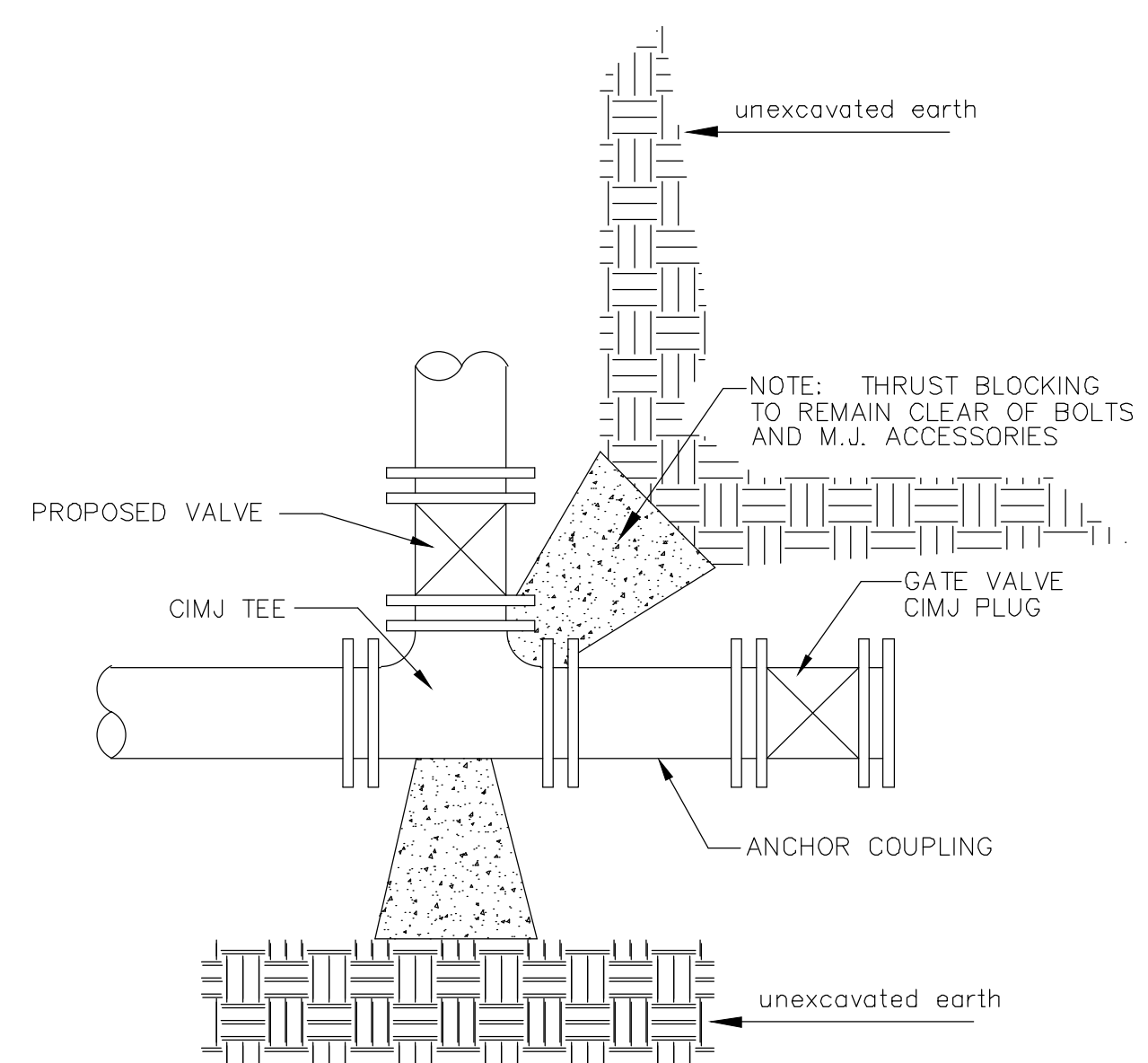


VERTICAL BEND

PLUG

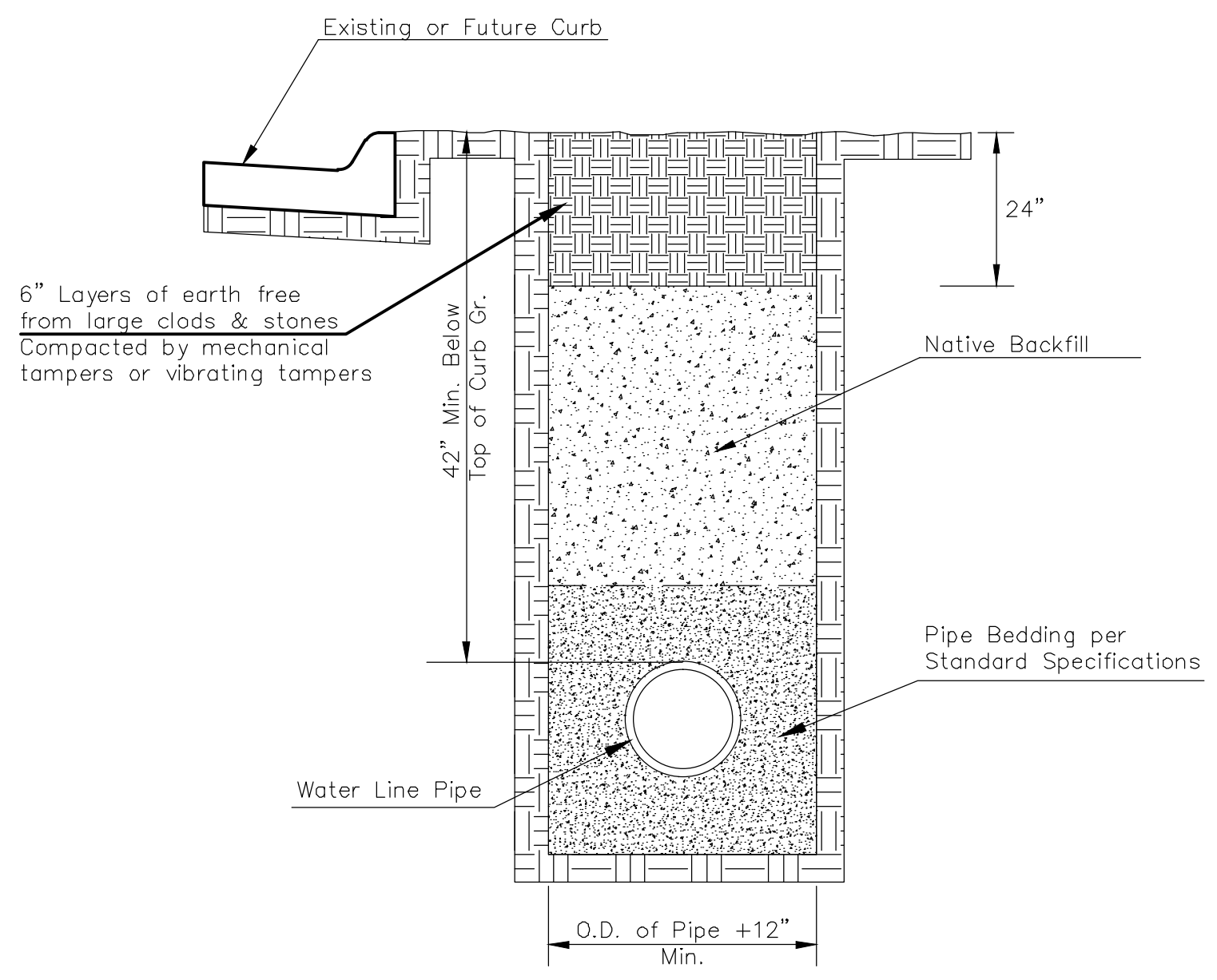
PIPE SIZE	THRUST AT FITTINGS IN TONS-AT 150#/IN ² P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

TYPICAL THRUST BLOCKS



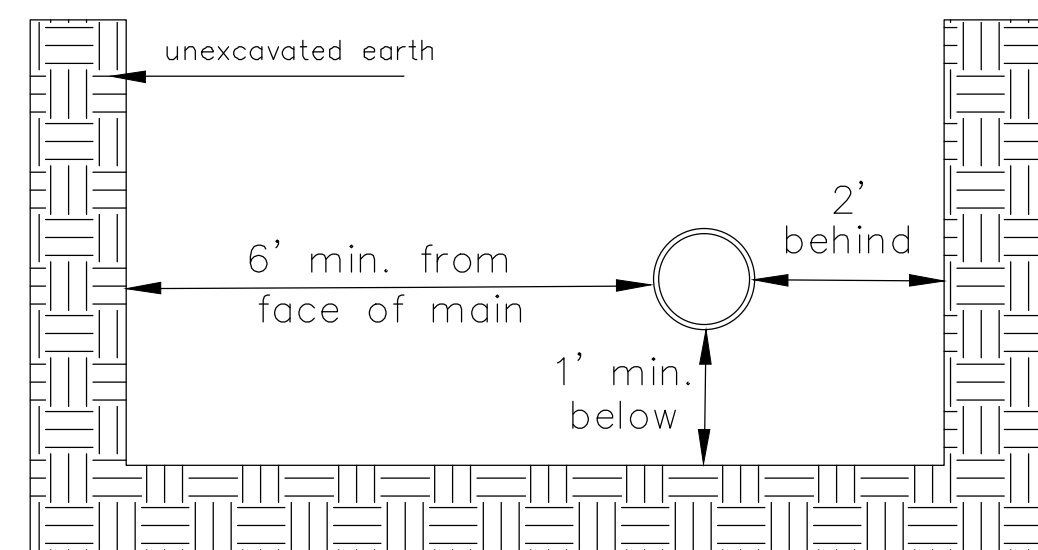
KEY BLOCK DETAIL

* PLANS GOVERN UNLESS OTHERWISE NOTED ON PLANS



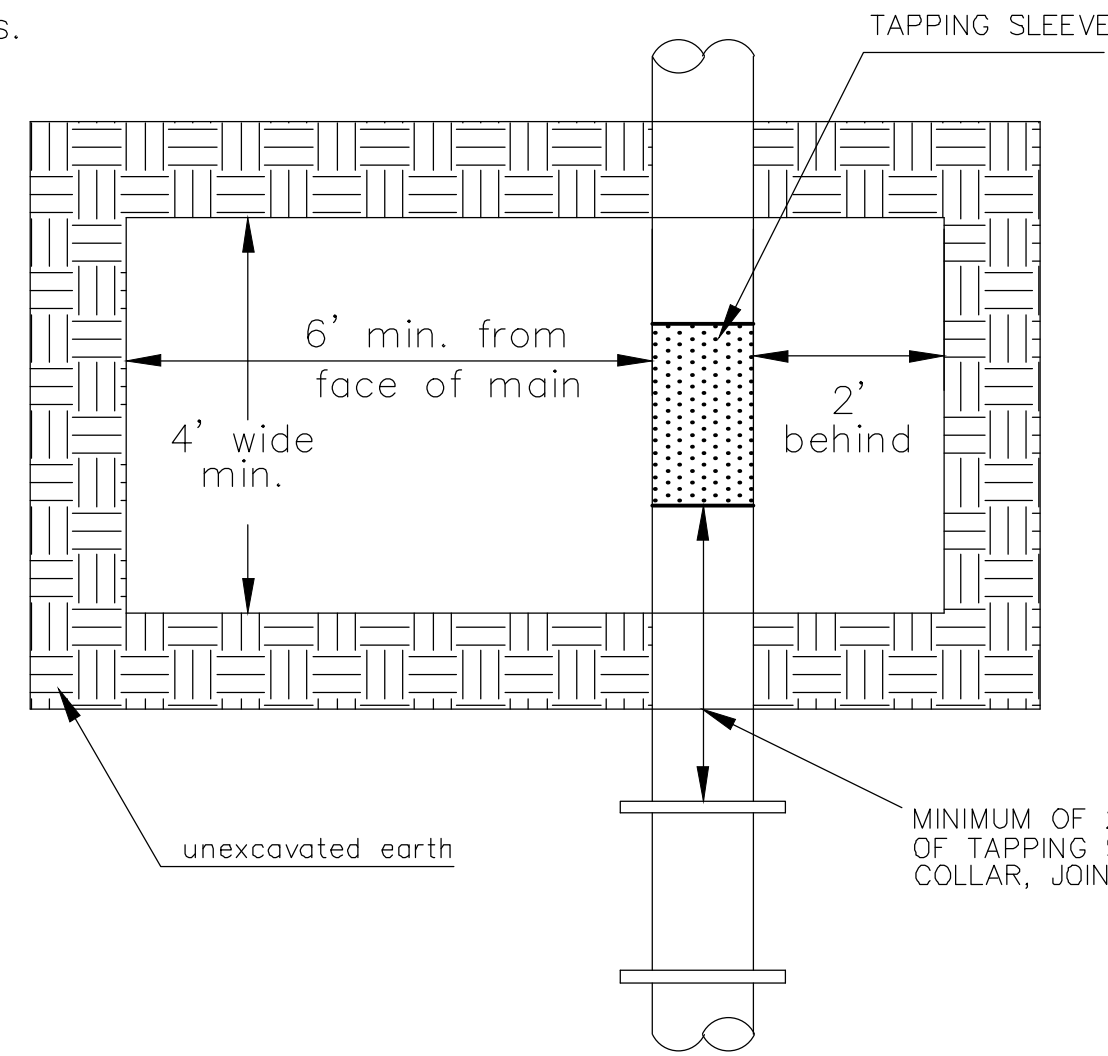
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

SIDE VIEW

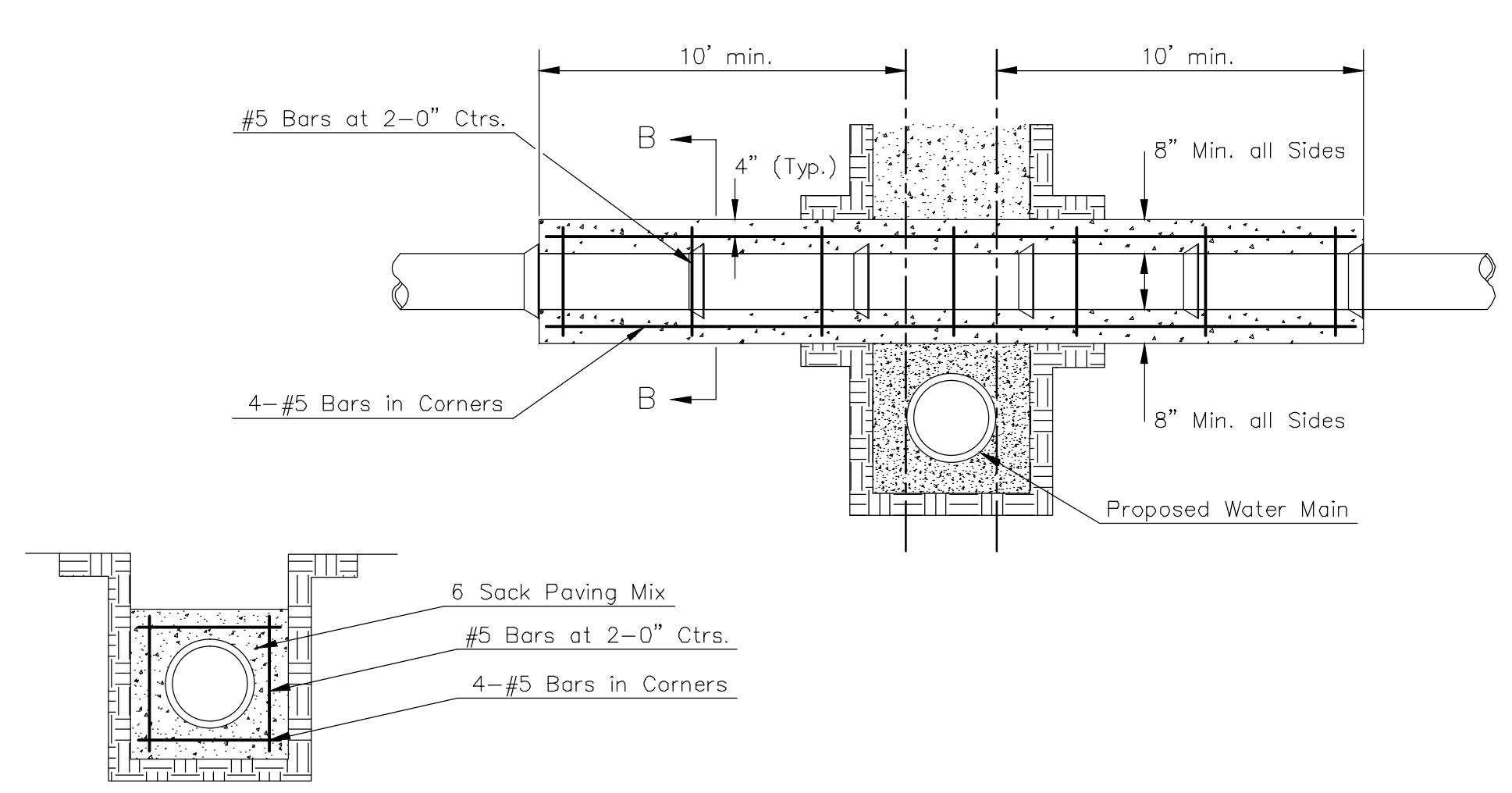


TOP VIEW

Note: When shoring is required it is to be per The City of Wichita Standard Specifications.



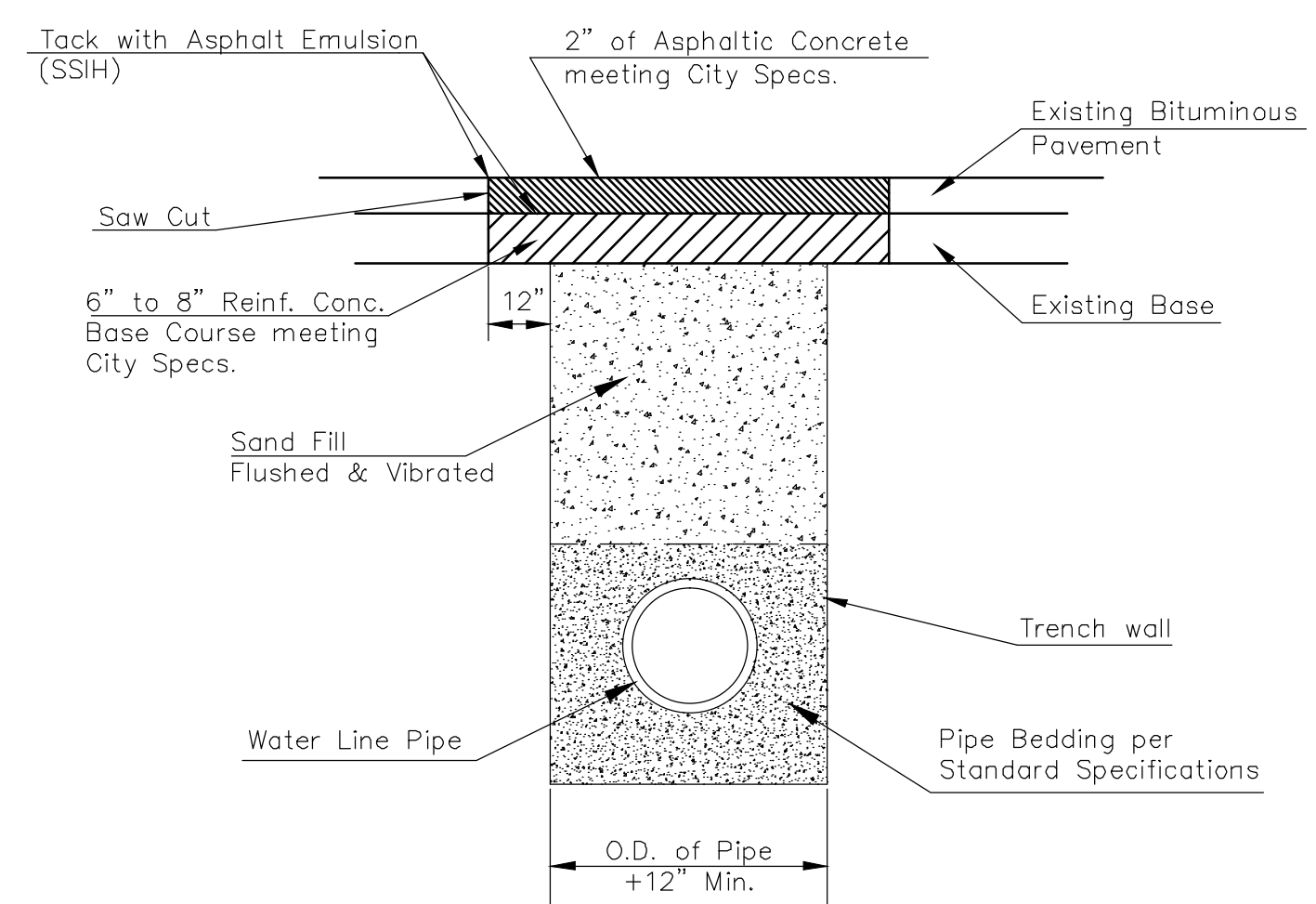
EXCAVATION FOR WET TAP



REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

SECTION B-B

Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS



<p>REvised JANUARY 2015</p> <p>MISCELLANEOUS WATER DETAILS</p> <p>CITY ENGINEER</p> <p>GARY JANZEN, P.E.</p>		
PROJECT NUMBER	OCA NUMBER	DATE
		04/2014
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR		58
455 NORTH MAIN STREET		59
WICHITA, KANSAS 67202-1620		
(316) 268-4501		

13TH & EDGEWOOD

DETAILS

CITY OF WICHITA, KANSAS

GARY JANZEN, P.E. - CITY ENGINEER

C.O.W. Project #472-86162; OCA #707069

POE & ASSOCIATES, INC.

CONSULTING ENGINEERS

544 West Douglas Avenue | Wichita, KS 67203

Phone 316.665.4114 | FAX 316.665.4444

Professional Engineer Seal: GARY L. JANZEN, License No. 16294, State of Kansas, dated 11/11/2015.

FINAL

Engineer: J. DICKMAN

Designer: J. UNRUH

Job No.: 87N-0582-01

Date: 8/31/2015