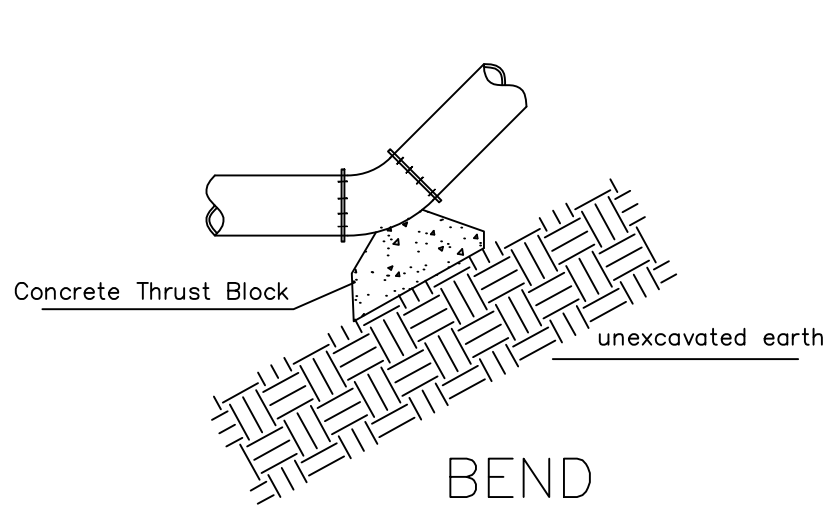
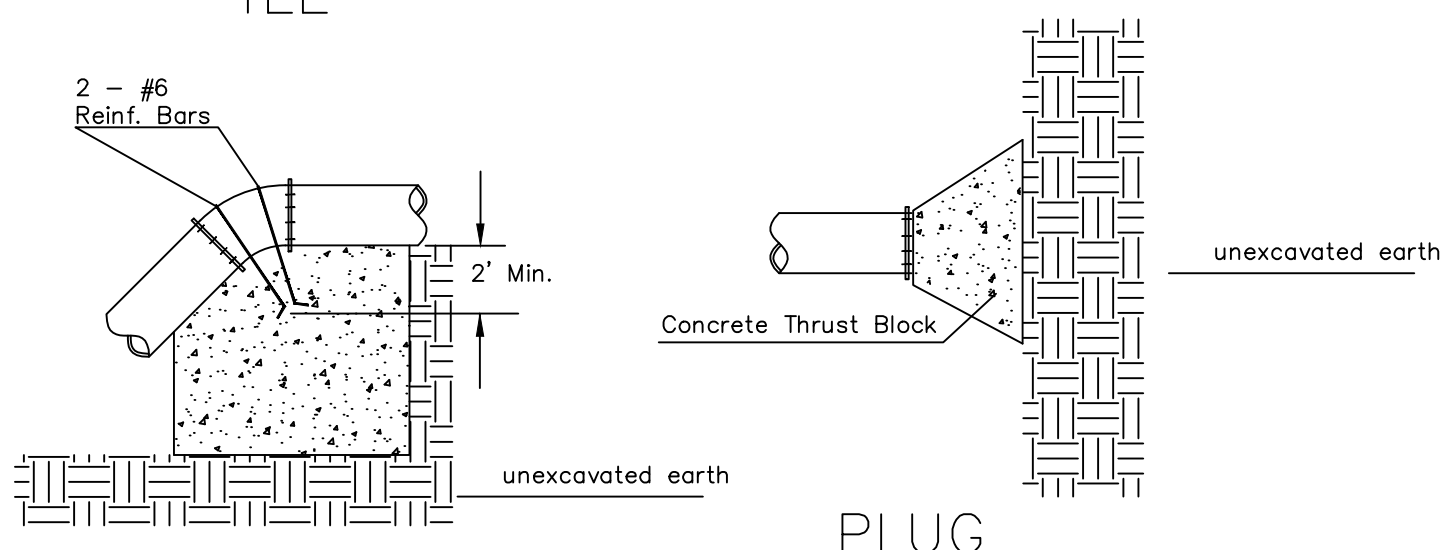


TEE



BEND

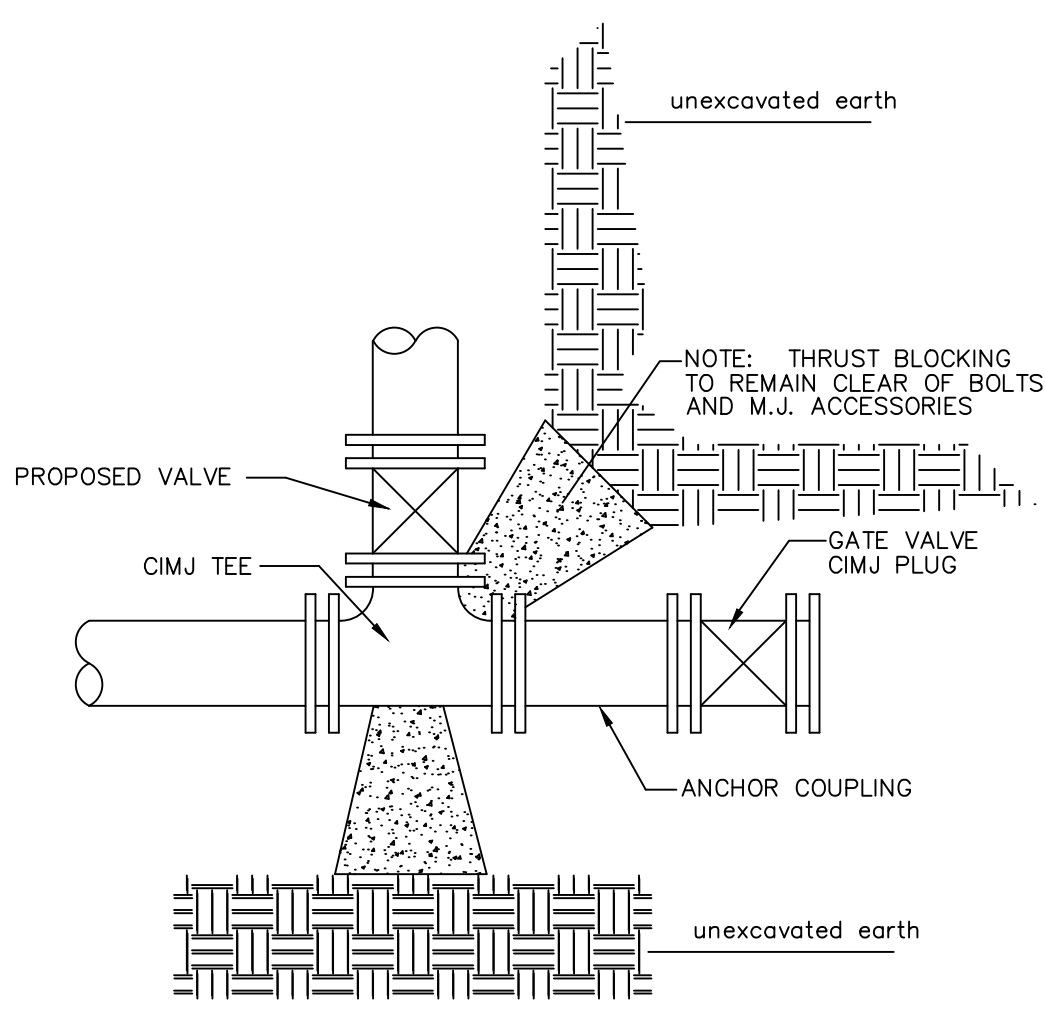


VERTICAL BEND

PLUG

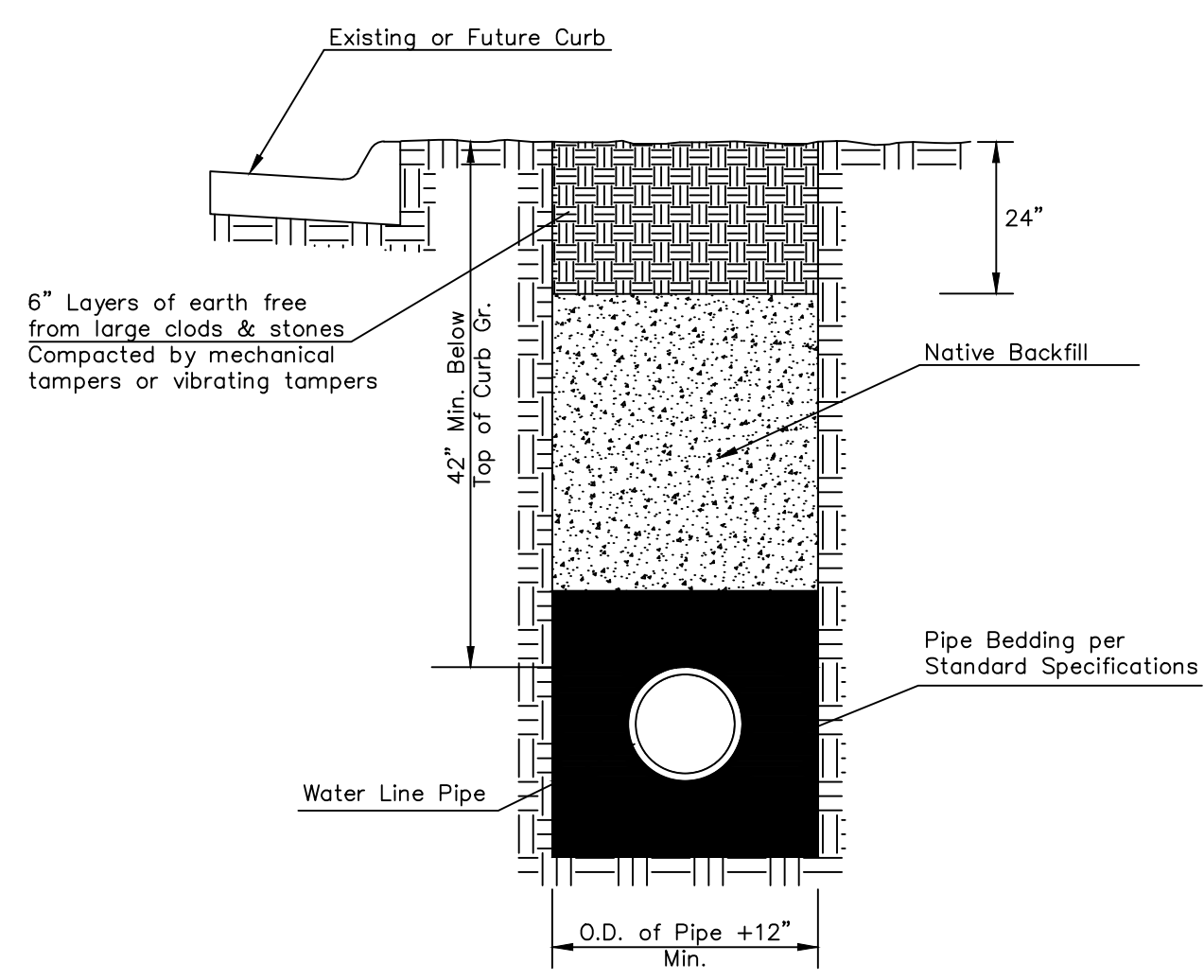
PIPE SIZE	THRUST AT FITTINGS IN TONS-AT 150#/IN ² P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

TYPICAL THRUST BLOCKS



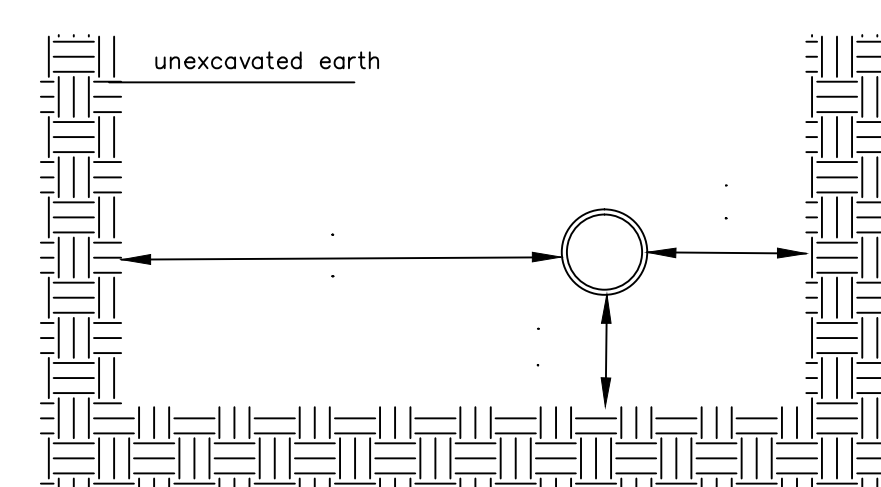
KEY BLOCK DETAIL

* PLANS GOVERN
UNLESS OTHERWISE NOTED ON PLANS



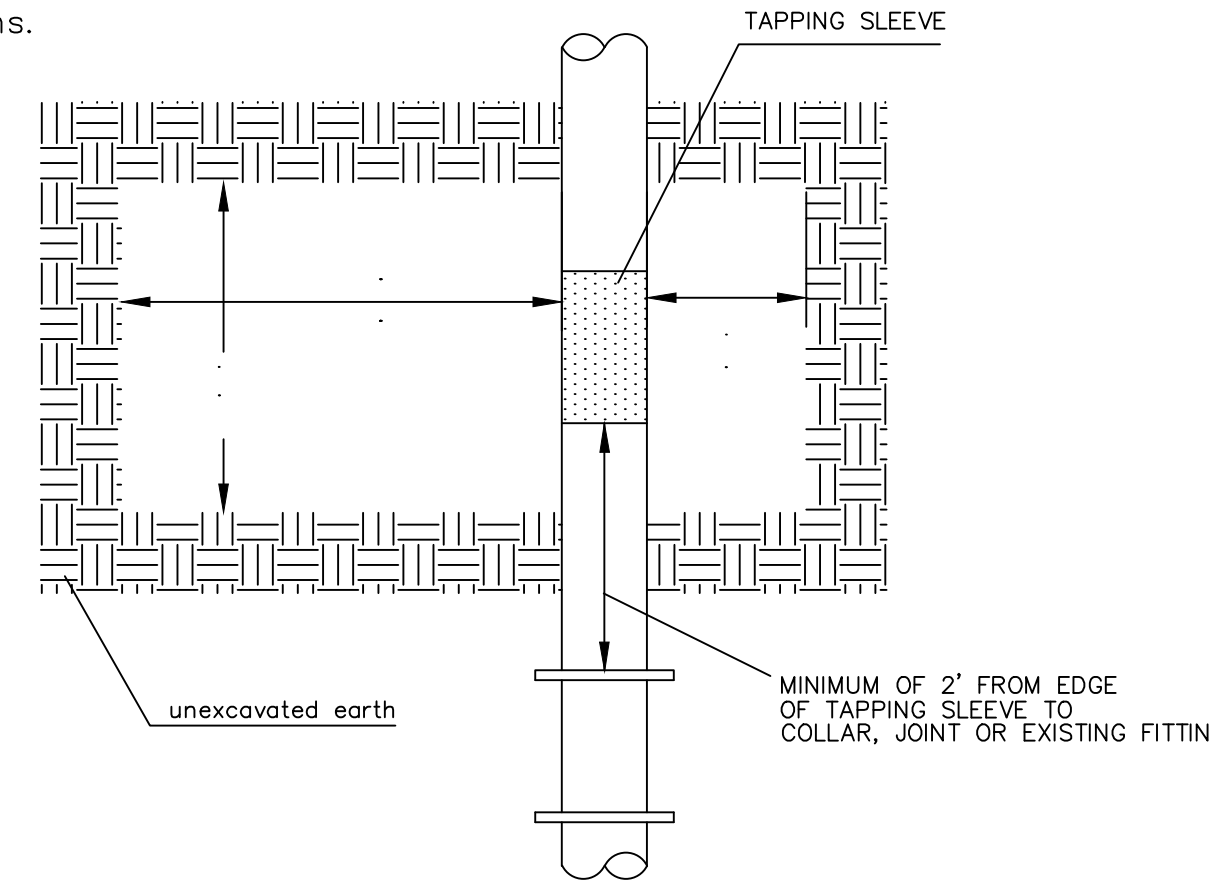
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

SIDE VIEW

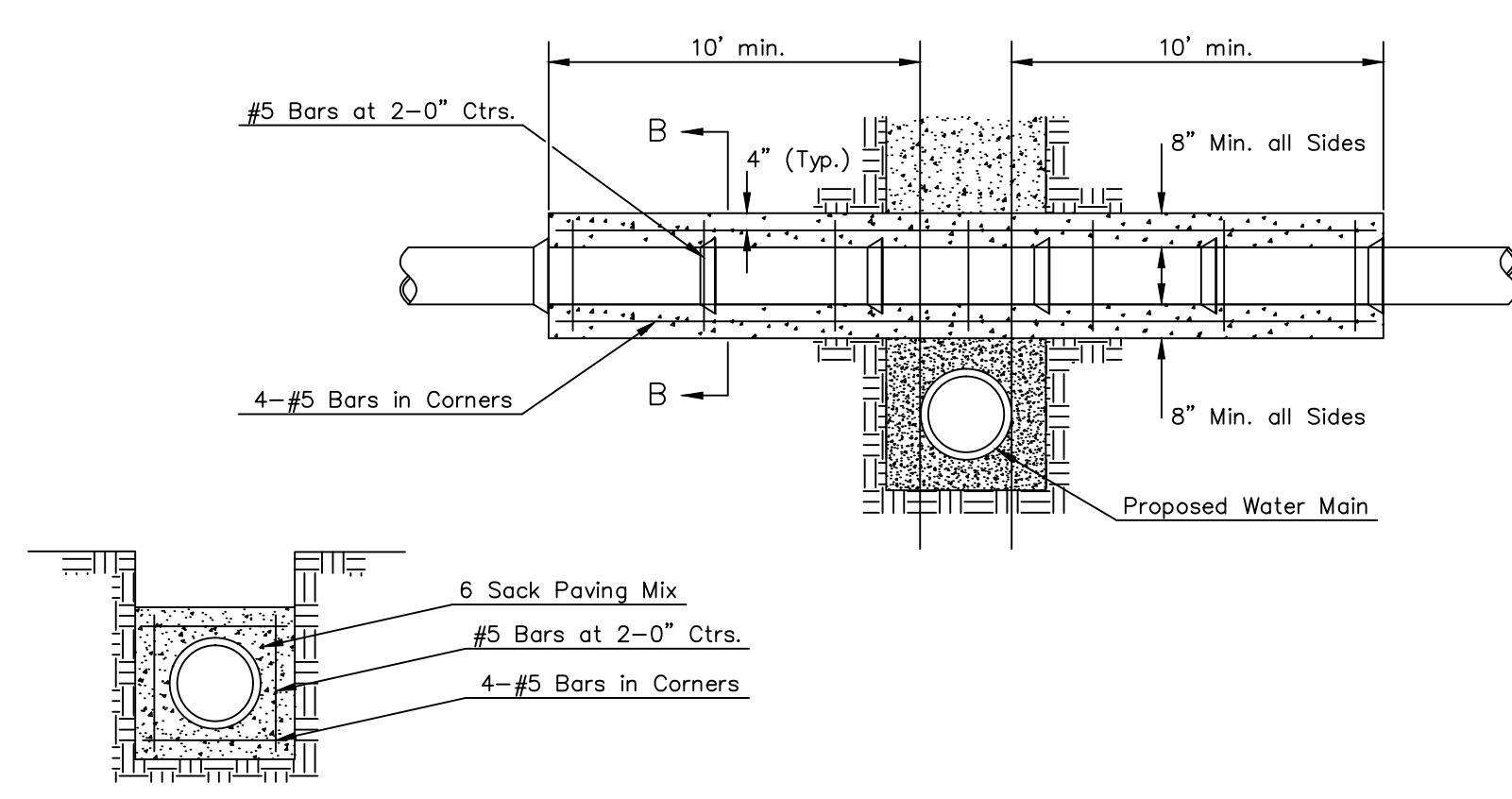


TOP VIEW

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



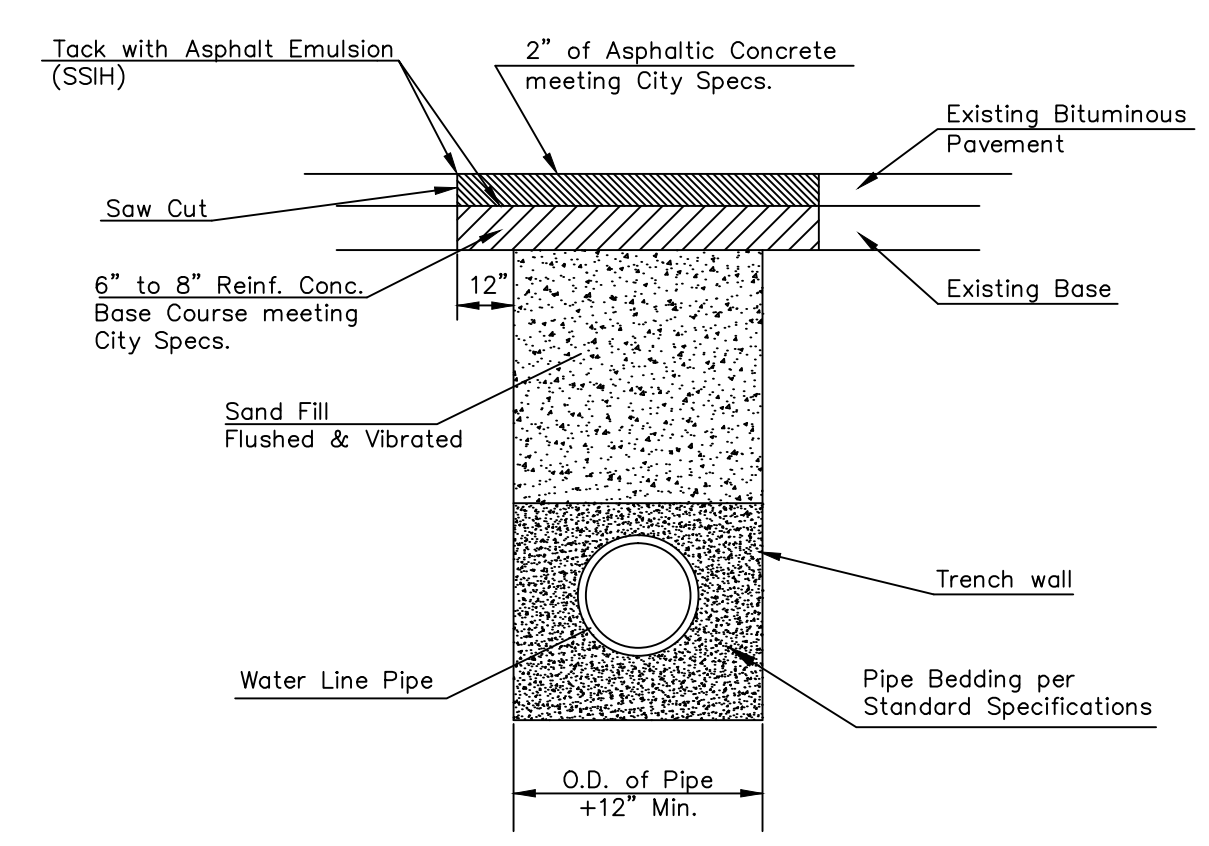
EXCAVATION FOR WET TAP



SECTION B-B

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

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



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

Millimeters
Scale For Microminfining

Inches

J:\WICHTA\77025 - Ethel\WMCADD\06_Civil\WL-104_DETAIL\SHEET4.dwg May 07, 2015 - 4:44pm mabarrete
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MISCELLANEOUS WATER DETAILS
CITY ENGINEER
GARY JANZEN, P.E.
PROJECT NUMBER OCA NUMBER DATE
04/2014
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501
SHEET
_ of _
WL-104

no.	date	by	ckd	description
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Burns & McDonnell
SINCE 1898
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	AUGUST 25, 2014	detailed	M. CHARRETTE
designed	J. MCNIFF	checked	S. WILSON



ETHEL NEIGHBORHOOD WATER MAIN REPLACEMENT
DETAIL SHEET 4

project	77025	contract	448-90612
drawing	C091 - 0		
sheet	98	of	101 sheets
file	WL-104_DETAIL\SHEET4.dwg		

Name
Discipline
License No.