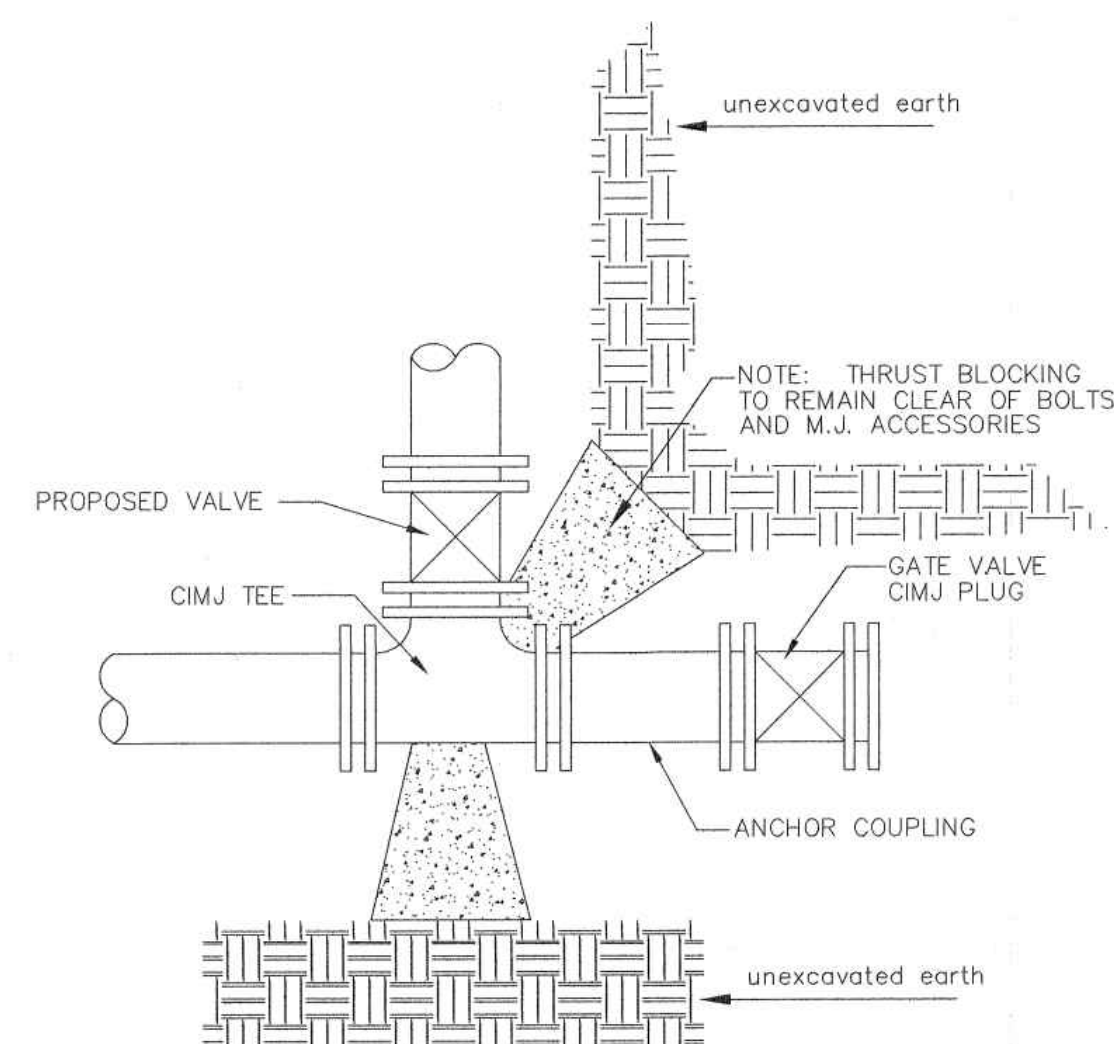


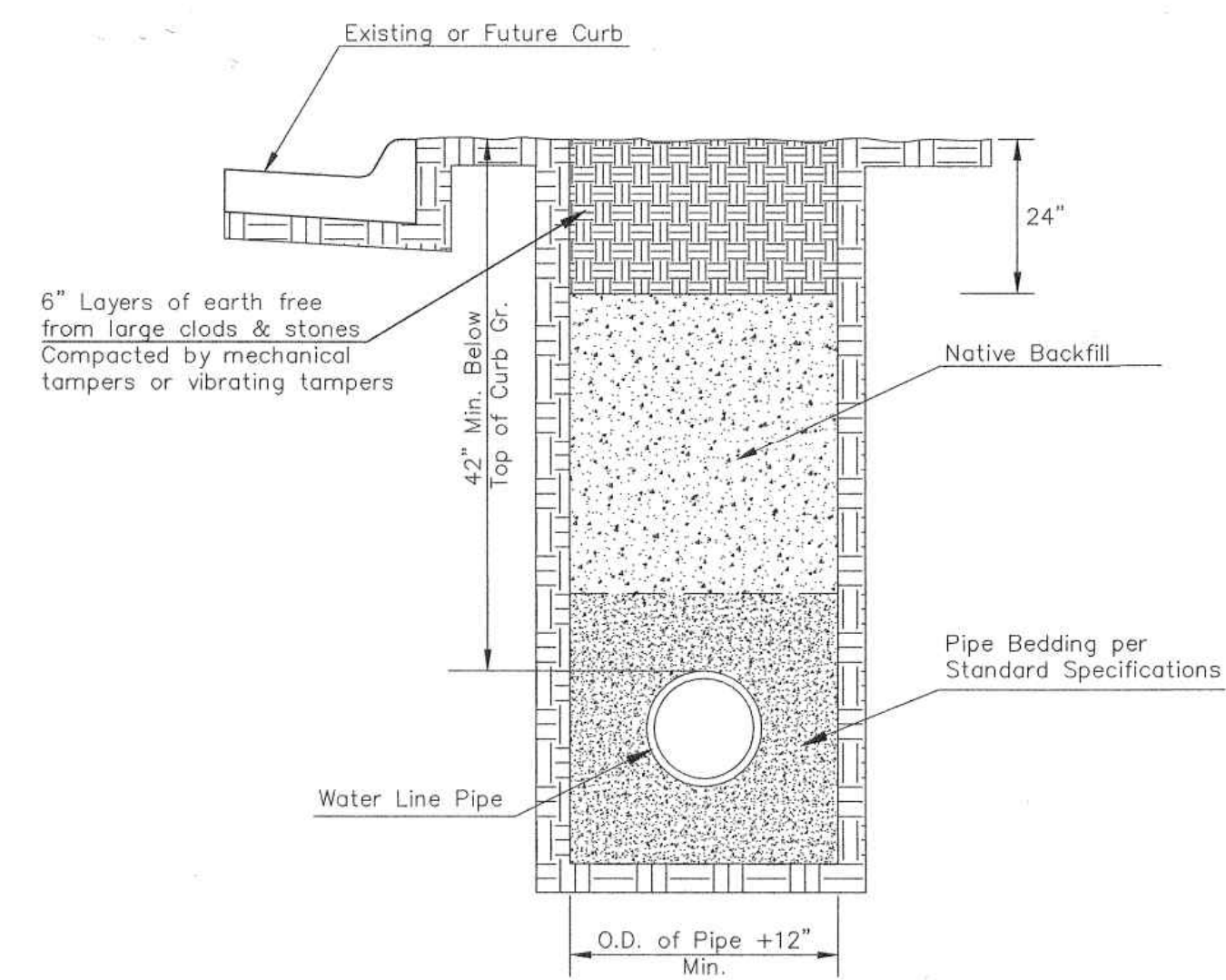
PIPE SIZE	THRUST AT FITTINGS IN TONS—AT 150#/IN ² P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

TYPICAL THRUST BLOCKS



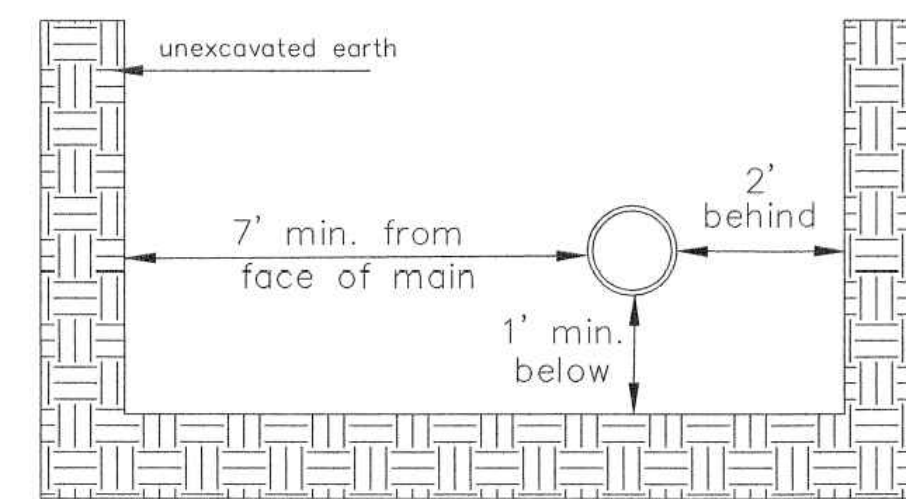
KEY BLOCK DETAIL

* PLANS GOVERN
UNLESS OTHERWISE NOTED ON PLANS



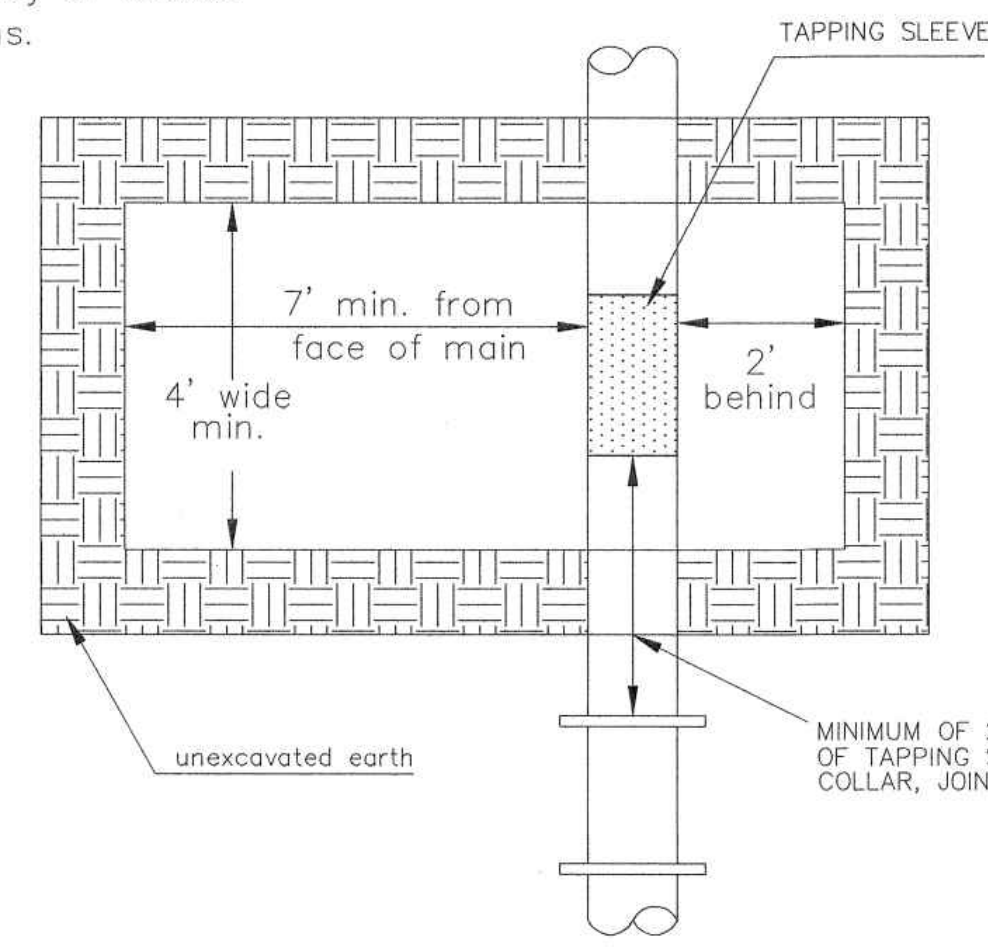
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

SIDE VIEW

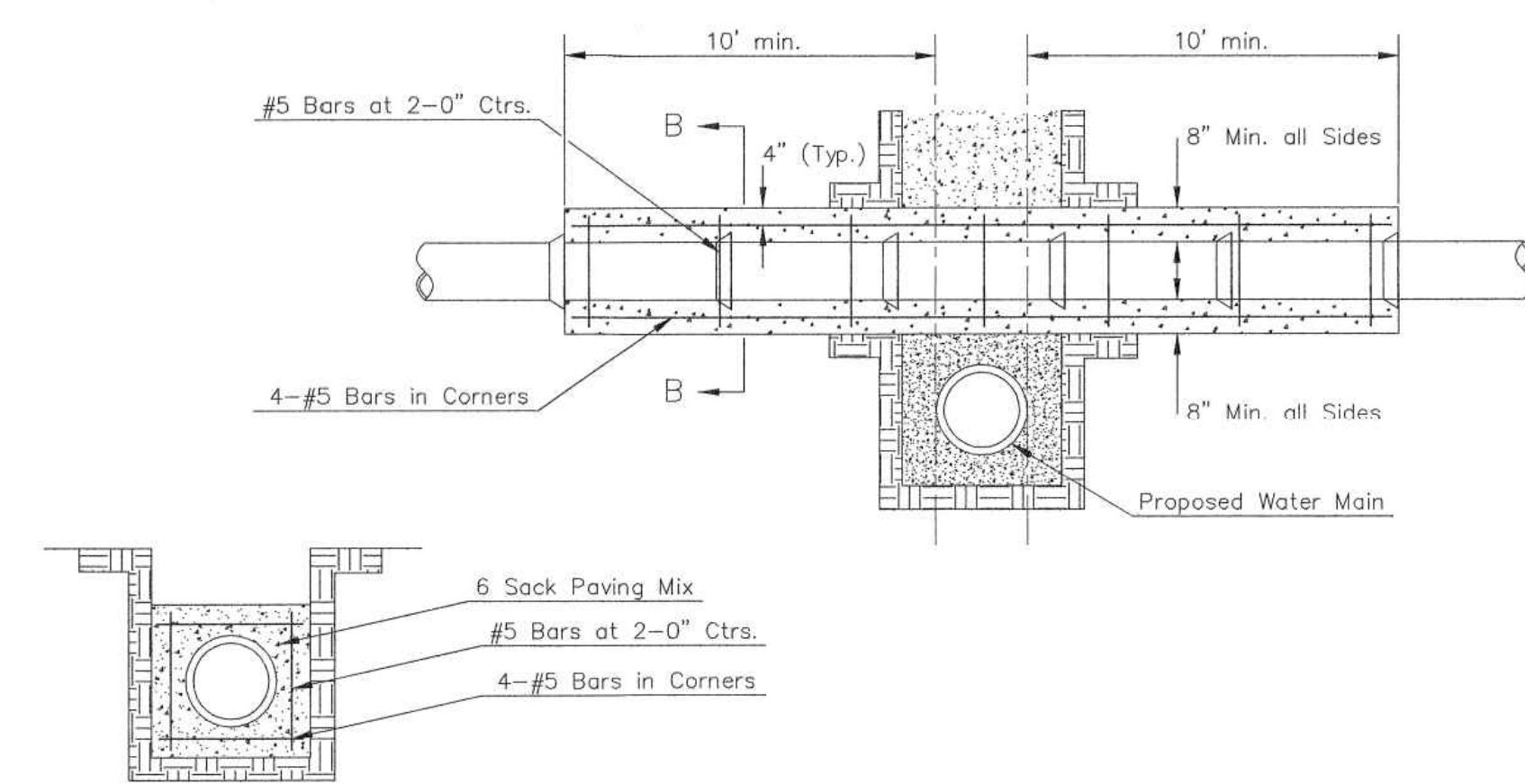


Note: When shoring is required it is to be per The City of Wichita Standard Specifications.

TOP VIEW



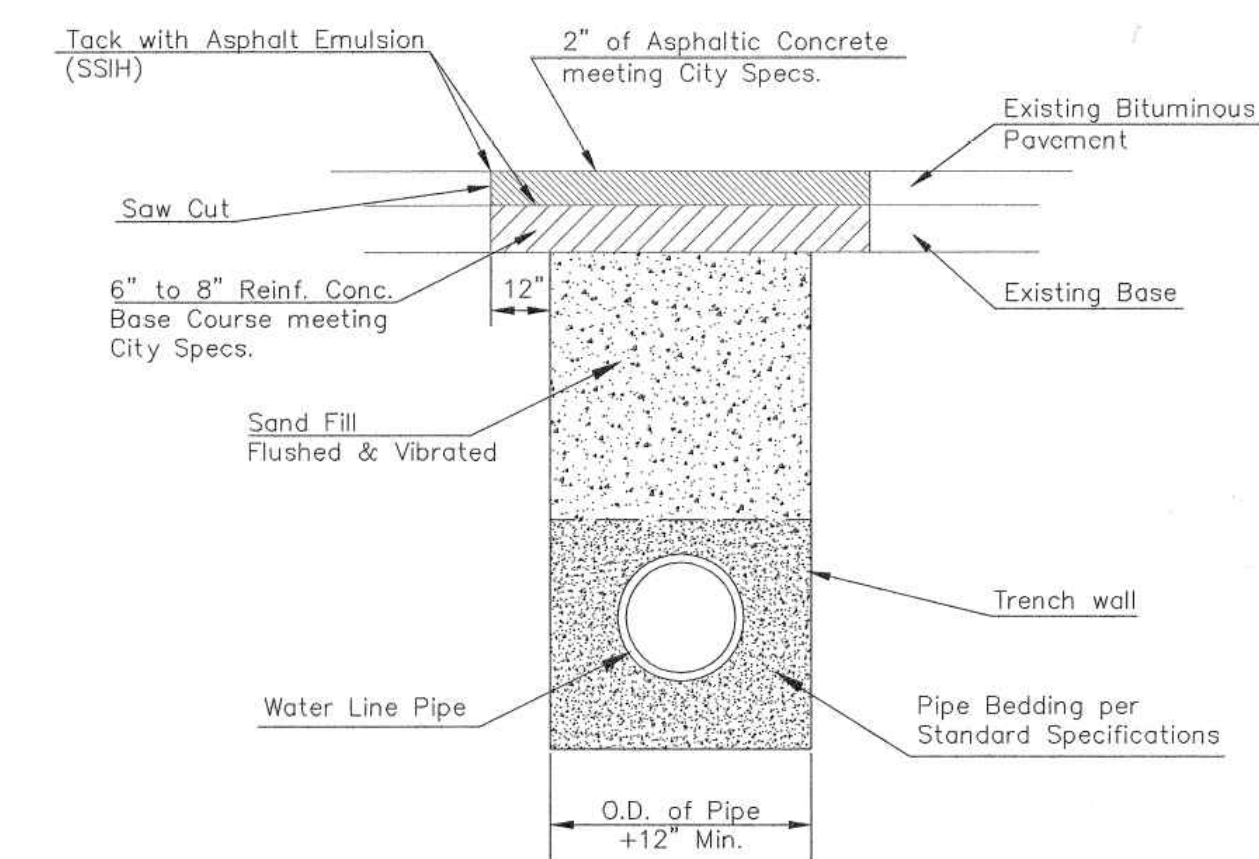
EXCAVATION FOR WET TAP



SECTION B-B

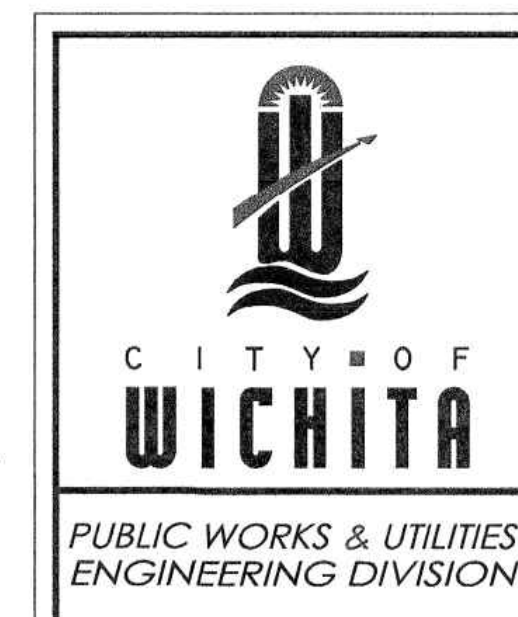
Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

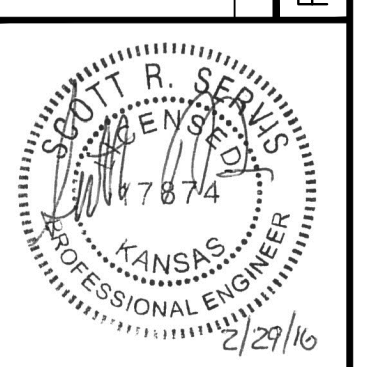
REVISED: JULY 2015



MISCELLANEOUS WATER DETAILS		
CITY ENGINEER		
GARY JANZEN, P.E..		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR		
455 NORTH MAIN STREET		
WICHITA, KANSAS 67202-1620		
(316) 268-4501		

WL-104

REV	DATE	DESCRIPTION
0	2-29-16	FINAL PLANS - FOR CONSTRUCTION



SCOTT R. SERVIS
ENGINEER
KS # 17874

200 N. EMPORIA, SUITE 100
WICHITA, KANSAS 67203-4400-4309
PH: (316) 268-4400
www.kawvalley.com | info@kawvalley.com

KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/16

STORM SEWER IMPROV.
LOT 1&2, NAHOLA ADDITION
WICHITA, KANSAS

WATER STANDARD DETAILS

PROJ. NO.	G14D0066
DESIGNER	SRS
DRAWN BY	EAM
CFN	0066DDET
SHEET	09
REV	0