WATER CONSTRUCTION DETAILS THE VILLAS AT WOODLAWN

JUNE 9, 1998

96-8344A



YYWW WWYY

A -

WATER MAIN 2 EXCAVATE FOR JOINT AS REQUIRED, PIPE IS TO BE FULLY SUPPORTED. NO HIGH OR LOW SPOTS WILL BE PERMITTED.

YYWY WWYY YY YHY WHYYY EARTH EARTH FILL FILL -#8 SOLID COPPER #8 SOLID COPPER TRACER WIRE TRACER WIRE 1/2" MINUS CRUSHED 9" MIN. STONE FILL TO 6" WATER -19" MIN - ABOVE TOP OF PIPE WATER MAIN -MAIN MINIMUM 3" OF 1/2" MINUS CRUSHED STONE. (PRIOR TO PIPE INSTALLATION) - NO. 12 UL. APPRVD. 600 V. INSULATED LOCATER WIRE

EARTH EXCAVATION

THROUGH SOLID ROCK EXCAVATION

NOT TO SCALE

TYPICAL WATER MAIN INSTALLATION DETAILS

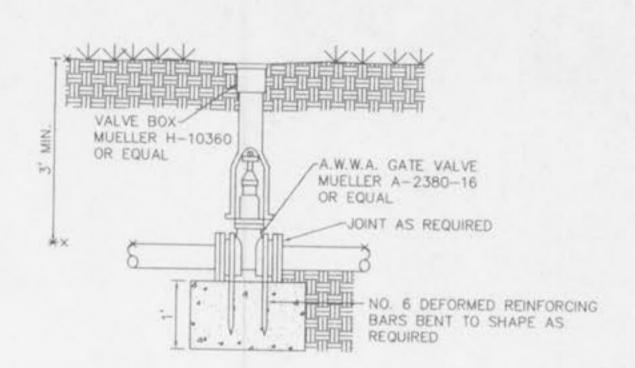
SECTION A-A

SANITARY SEWER WATER MAIN 3' MIN, FROM TOP OF SANITARY SEWER TO 10' MIN. BETWEEN SANITARY SEWER AND WATER MAIN BOTTOM OF WATER SANITARY SEWER () MAIN WATER MAIN

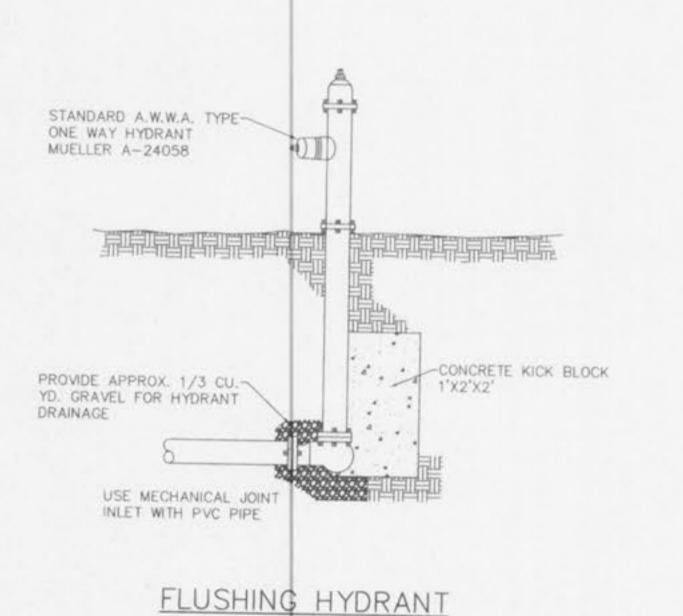
VERTICAL DISTANCE

HORIZONTAL DISTANCE

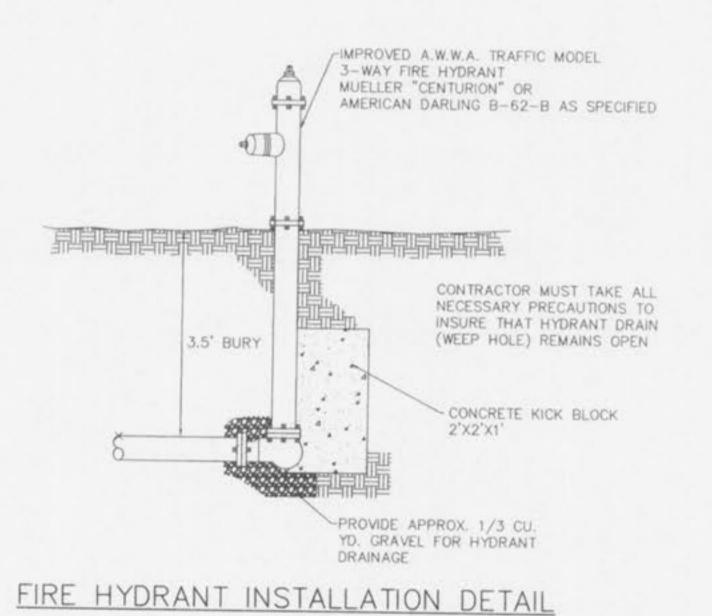
TYPICAL WATER AND SEWER SEPARATION NOT TO SCALE



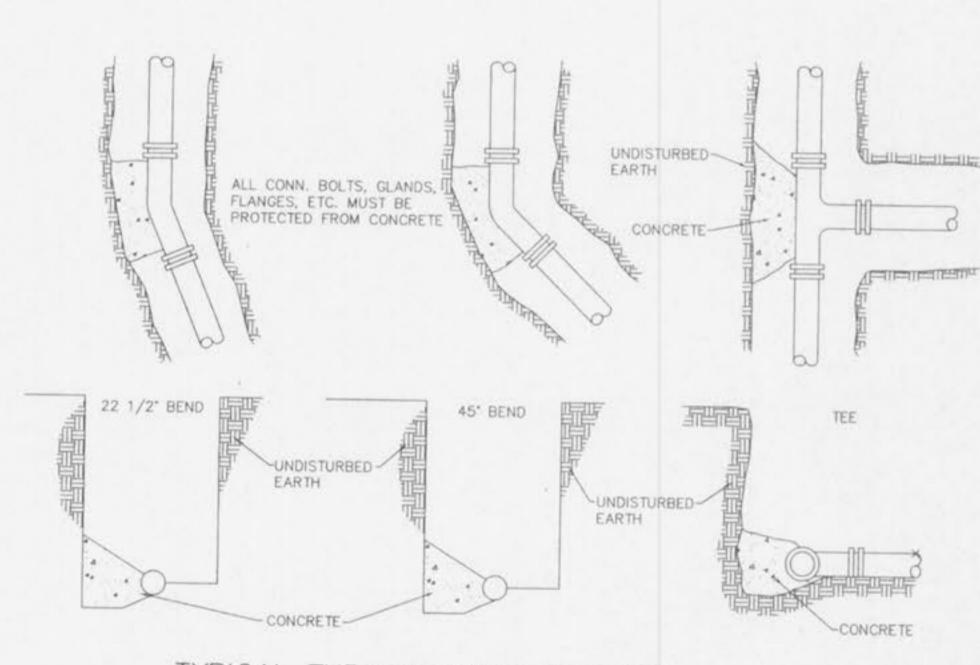
GATE VALVE W/THRUST BLOCK NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



TYPICAL THRUST BLOCK DETAILS

MAIN SIZE (I.D.)	MIN. THRUST BLOCK BEARING DIMENSIONS TO BEAR AGAINST UNDISTURBED EARTH						
	45" BEND	22 1/2" BEND	TEE	VALVE	CROSS		
- 4	.5' X 1'	.5' X 1'	.5' X 1'	.5' X 1'	.5' X 1'		
4"	1' X 1'	1' X 1'	2' X 1'	2' X 1'	1' X 1'		
6"	1.5' X 1'	1' X 1'	2' X 1'	2' X 1'	1' X 1'		
8"	2' X 1'	1' X 1'	2' X 2.5'	2' X 2'	1' X 1.5'		
10"	2' X 2.5'	1.5' X 2'	2' X 3.5'	2' X 3'			
12"	2' X 3.5'	1.5' X 2.5'	3' X 3.5'	3' X 3'	2' X 2'		
16"	3' X 4'	2' X 3'	4' X 4.5'	3' X 4.5'	2' X 3' 3' X 3.5'		

SIZE (I.D.)	MIN. THRUST BLOCK BEARING DIMENSIONS TO BEAR AGAINST UNDISTURBED EARTH						
	45° BEND	22 1/2" BEND	TEE	VALVE	CROSS		
2"	5' X 1'	.5' X 1'	.5' X 1'	.5' X 1'	.5' X 1'		
4"	1' X 1'	1' X 1'	2" X 1"	2' X 1'	1' X 1'		
6"	1.5' X 1'	1' X 1'	2' X 1'	2' X 1'	1' X 1'		
8"	2' X 1'	1' X 1'	2' X 2.5'	2' X 2'			
10"	2' X 2.5'	1.5' X 2'	2' X 3.5'	2' X 3'	1' X 1.5'		
12"	2' X 3.5'	1.5' X 2.5'	3' X 3.5'		2' X 2'		
16"	3' X 4'	2' X 3'	4' X 4.5'	3' X 3' 3' X 4.5'	2' X 3' 3' X 3.5		