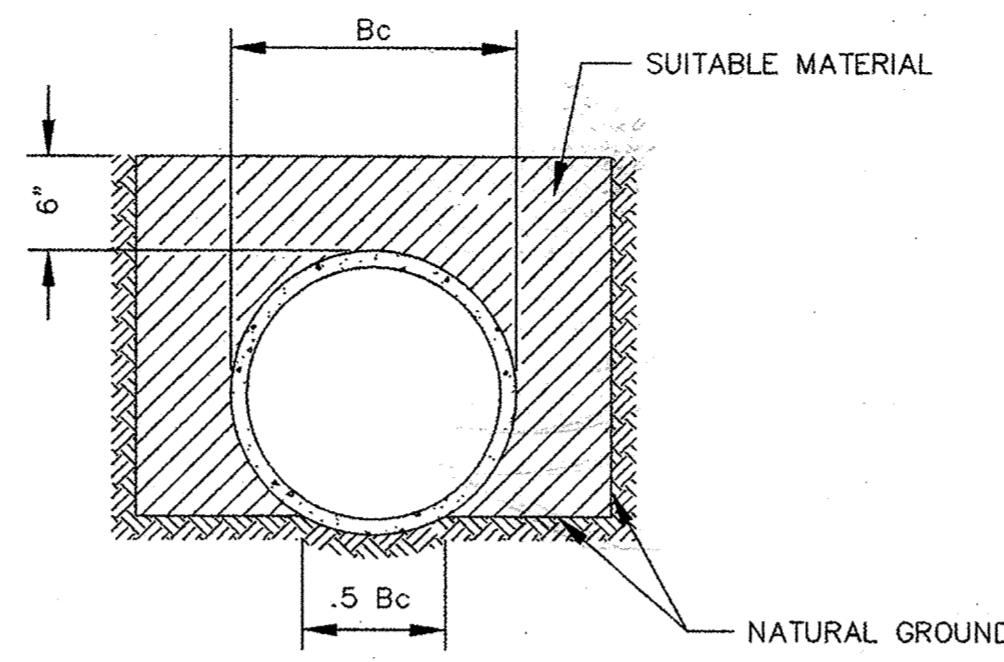


NOTE: ALL COSTS OF EXCAVATION BELOW GRADE AND PLACEMENT OF GRANULAR BEDDING SHALL BE INCLUDED IN THE BID PRICES FOR PIPE ITEMS.

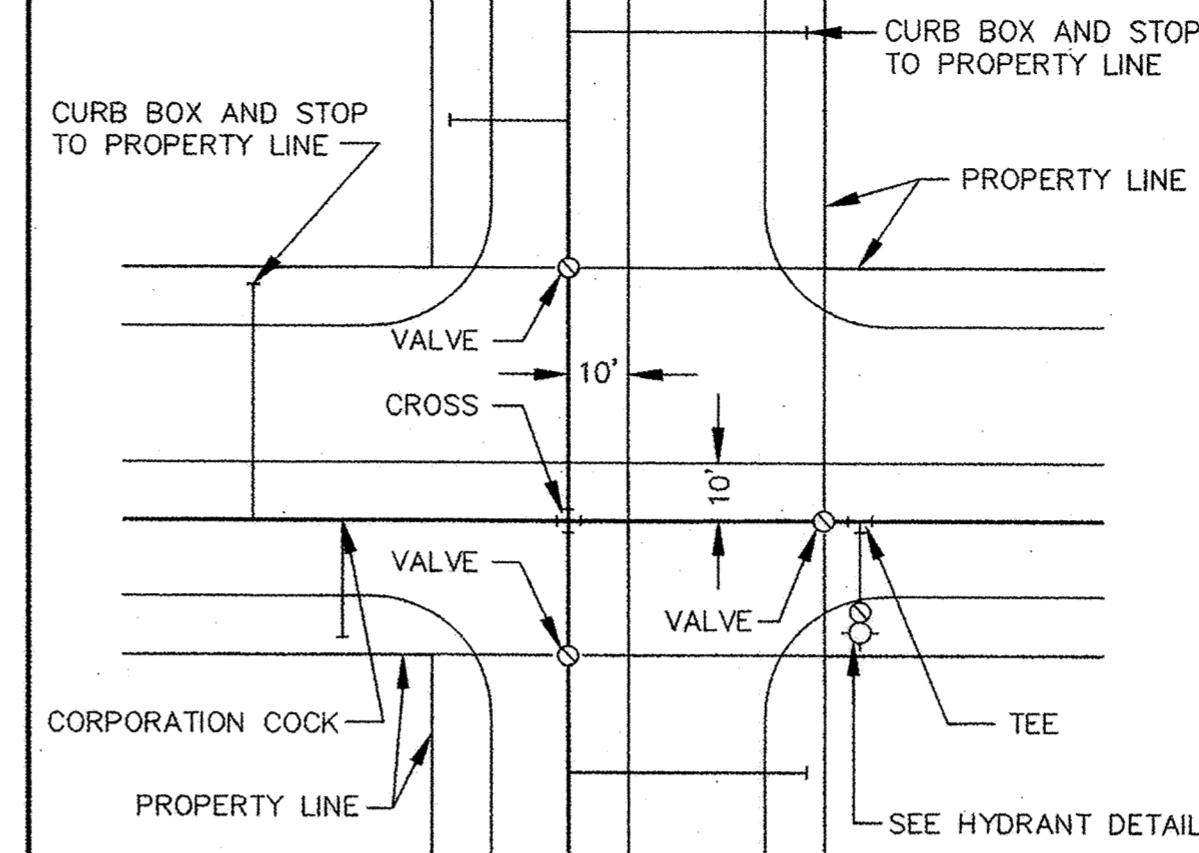
CLASS B PIPE BEDDING



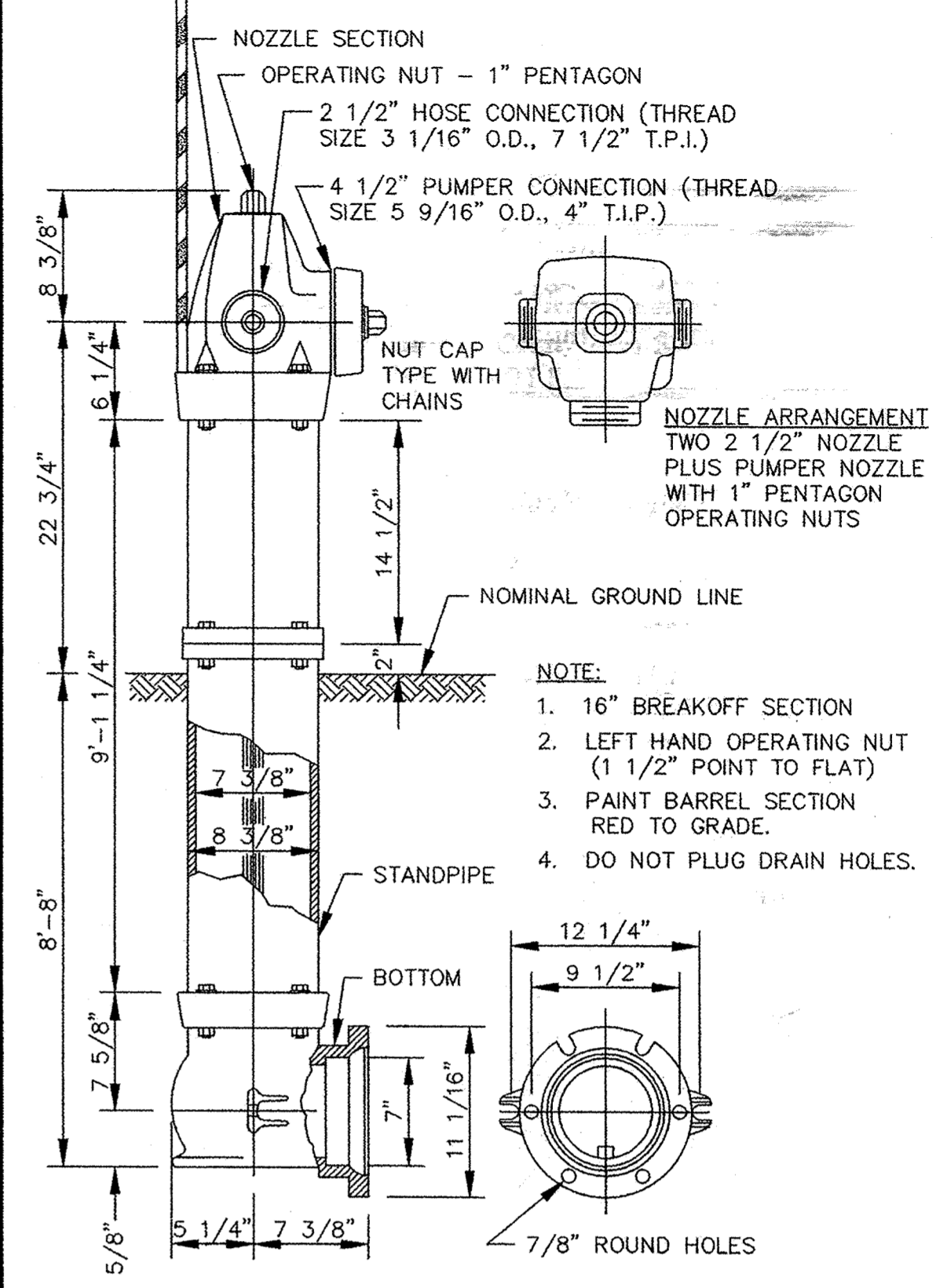
THE BOTTOM OF THE TRENCH SHALL BE SHAPED TO FIT THE PIPE BARREL FOR AT LEAST 50% OF THE OUTSIDE DIAMETER. THE REMAINDER OF THE PIPE IS SURROUNDED TO A HEIGHT OF AT LEAST 6" ABOVE ITS TOP BY SELECT FILL MATERIALS, PLACED BY HAND TOOLS AND COMPACTED TO COMPLETELY FILL ALL SPACES UNDER AND ADJACENT TO THE PIPE.

NOTE: ALL COSTS OF EXCAVATION BELOW GRADE AND PLACEMENT OF GRANULAR BEDDING SHALL BE INCLUDED IN THE BID PRICES FOR PIPE ITEMS.

CLASS C PIPE BEDDING



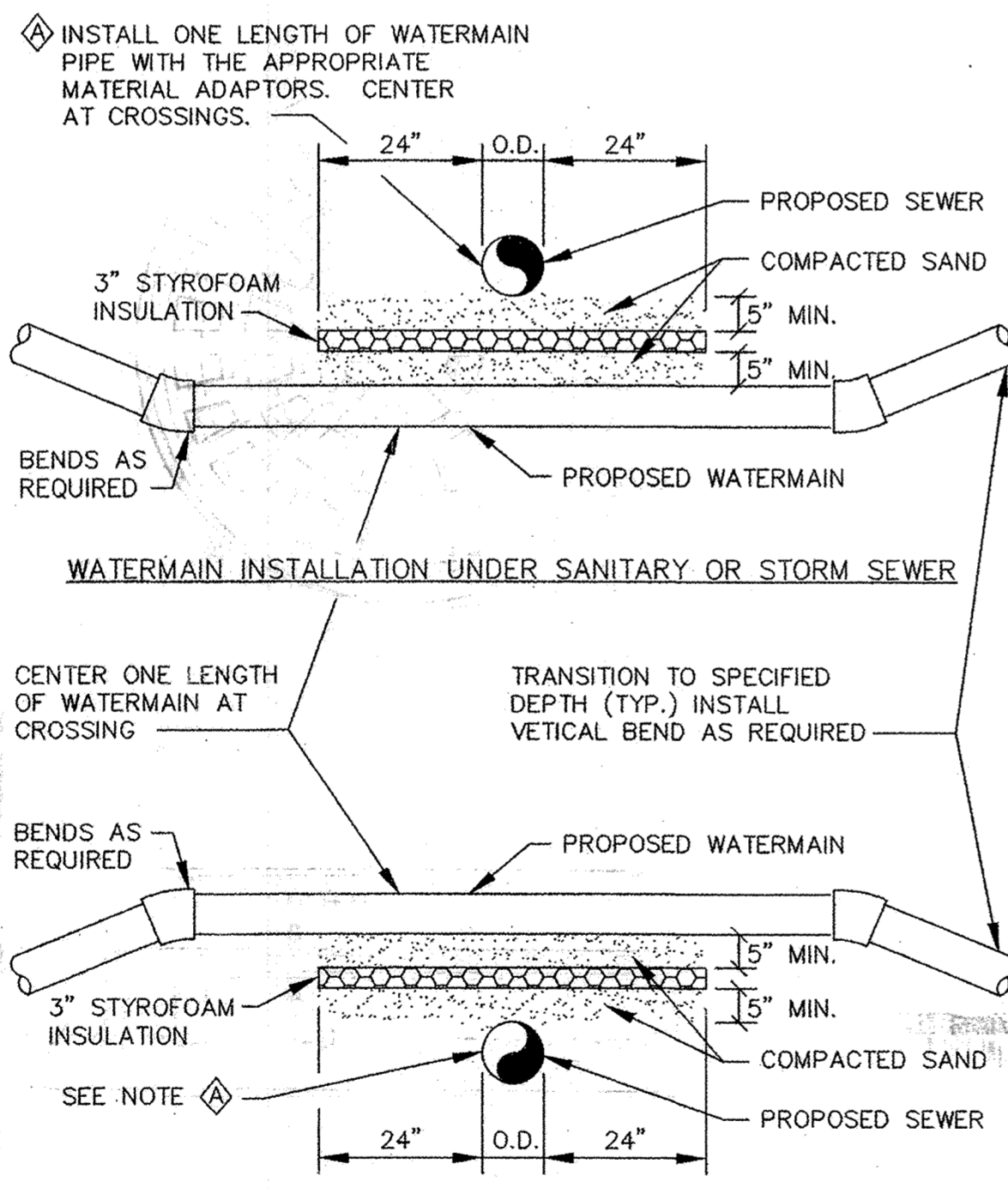
TYPICAL WATER LAYOUT



- NOTE:
- 16" BREAKOFF SECTION
 - LEFT HAND OPERATING NUT (1 1/2" POINT TO FLAT)
 - PAINT BARREL SECTION RED TO GRADE.
 - DO NOT PLUG DRAIN HOLES.

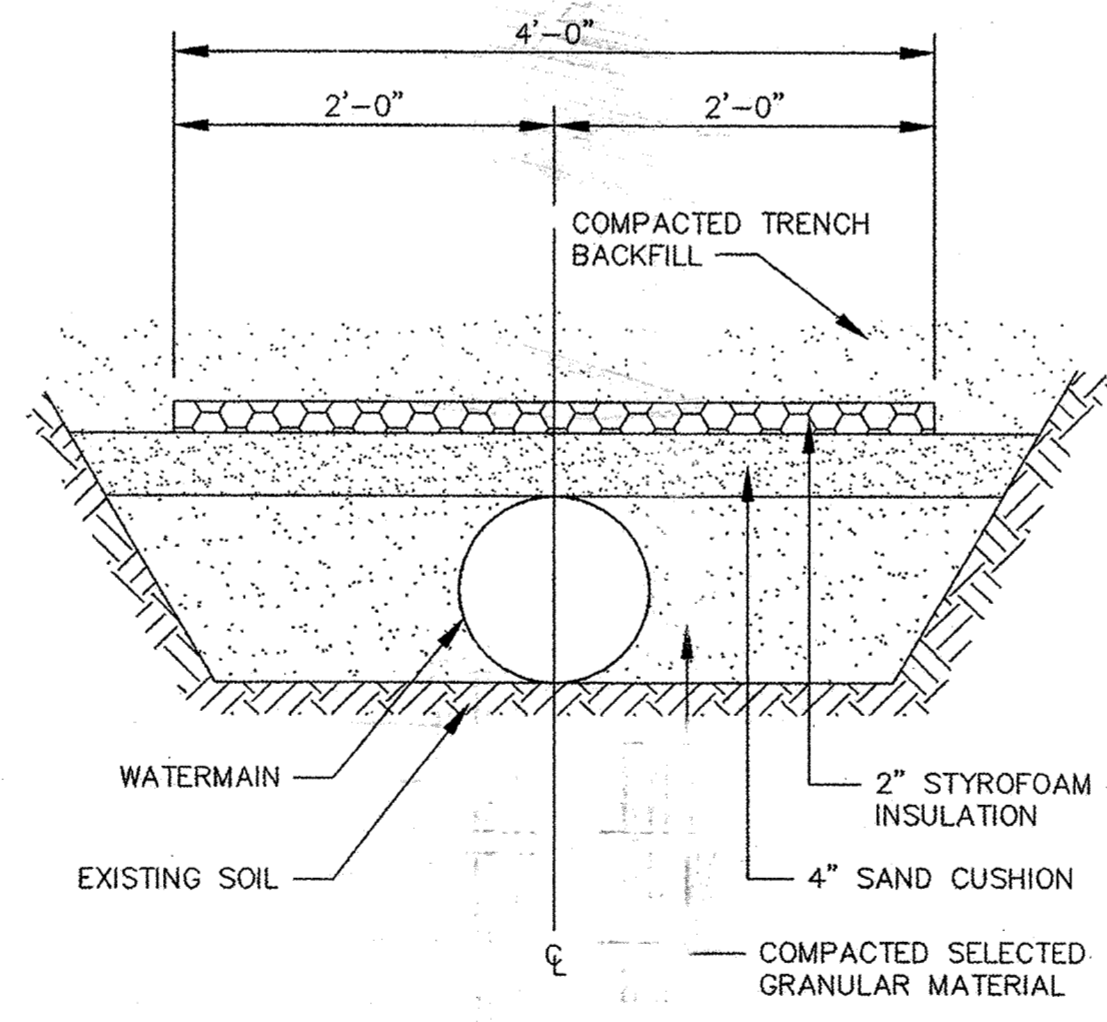
NOTE: HYDRANT LOCATING DEVICES REQUIRED - SEE SPECIFICATIONS.

PACER HYDRANT DETAIL

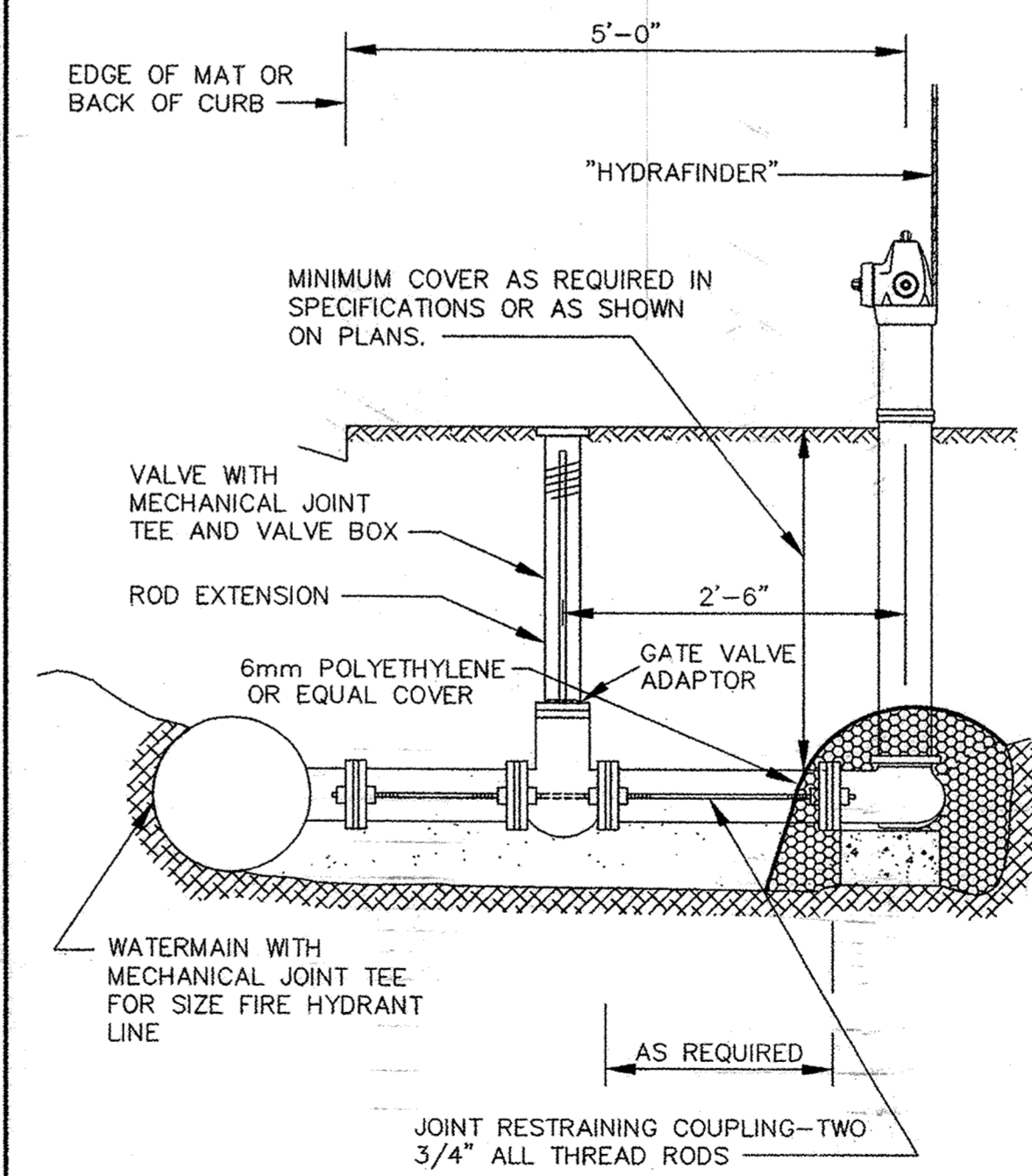


- NOTES:
1. WHEN WATERMAIN AND SANITARY SEWER CROSSINGS HAVE LESS THAN 18" VERTICAL SEPARATION, INSTALL CROSSING AS SHOWN.
 2. WHEN WATERMAIN COVER IS LESS THAN 7.5 FEET, INSTALL WATERMAIN UNDER SANITARY SEWER.

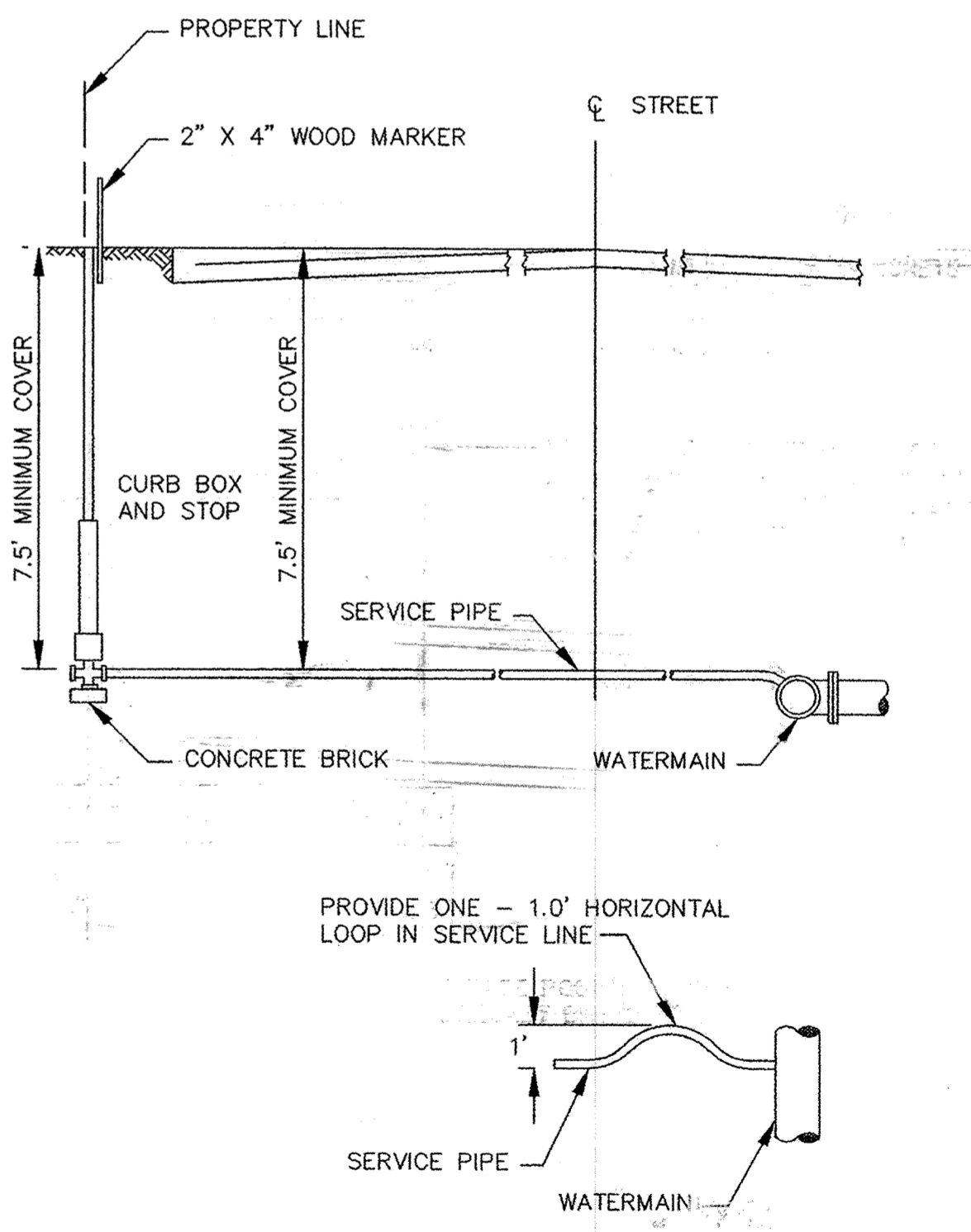
WATERMAIN CROSSING



PIPE INSULATION DETAIL



RODDING DETAIL



TYPICAL SERVICE DETAIL

CONTRACTOR: Ryan Contracting Co.
8700 13th Ave. East
Shakopee, MN 55379
952-894-3200

RECORD DRAWING
CONFORMING TO CONSTRUCTION RECORDS.
BY STEVE PFLIPSEN DATE 12/08/06
WESTWOOD PROFESSIONAL SERVICES

Westwood
Westwood Professional Services, Inc.
7099 Anagram Drive
Eden Prairie, MN 55344
PHONE 952-897-5150
FAX 952-897-0822
TOLL FREE 1-800-957-5150
www.westwoodps.com

PREPARED FOR:
D.R. Horton, Inc.
20860 Kenbridge Court, Suite 100
Lakeville, MN 55044

DESIGNED BY:	DRAWN BY:
APPROVED:	JOB NUMBER:
CAD DATE: April 14, 999 11:14:59 a.m.	
CAD FILE: 2300000-DR-SM.DWG	

DATE: _____ REG. NO. _____

NO.	DATE	BY	REVISION DESCRIPTION

1326 ENERGY PARK DRIVE
ST. PAUL, MINNESOTA 55108
(612) 644-4389
Howard R. Green Company
CONSULTING ENGINEERS

CITY OF ELK RIVER
TROTT BROOK FARMS 10TH ADDITION
WATER MAIN DETAILS

SHEET NO.	10
OF	12