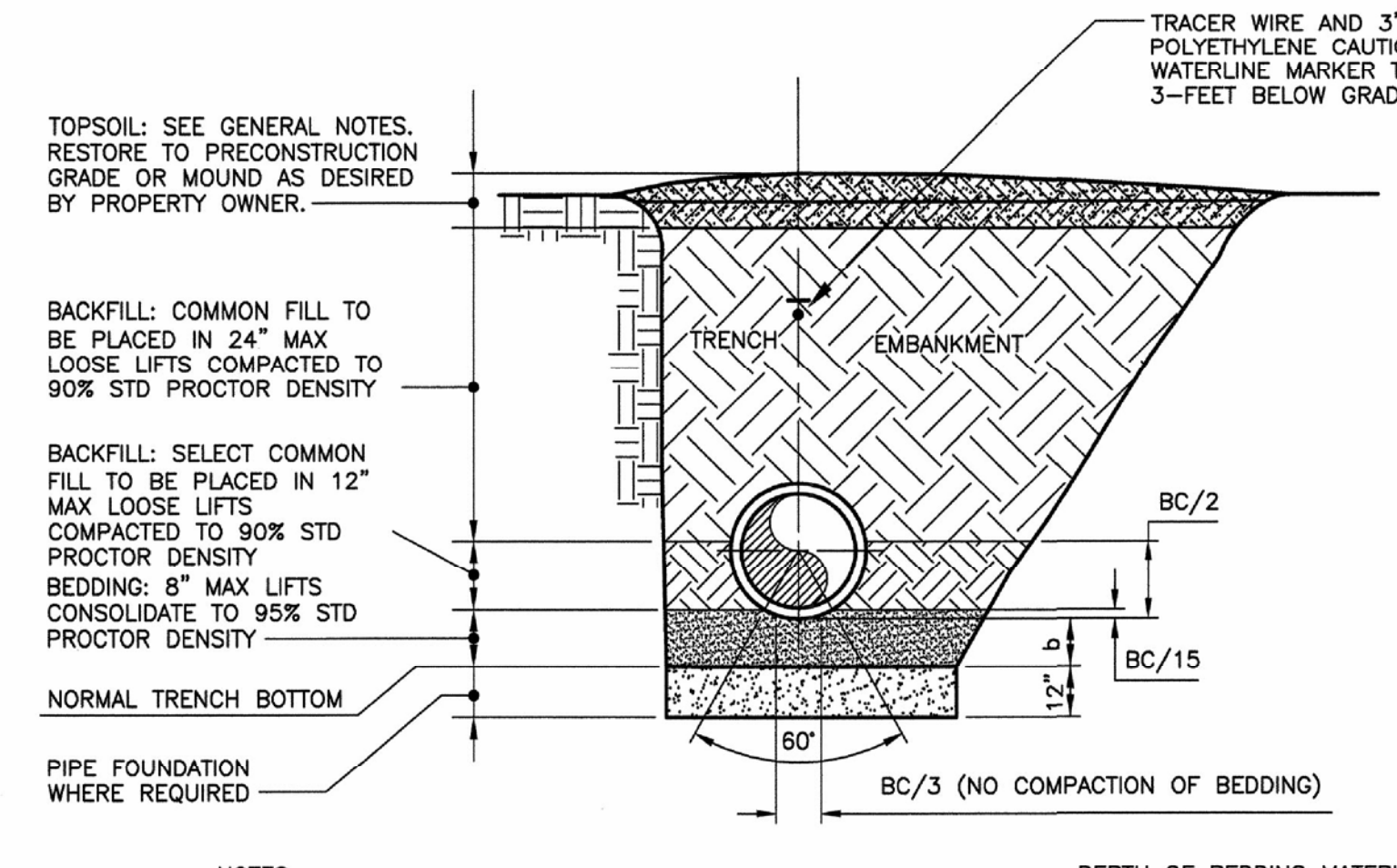


OD + 36" (36" OR LARGER)
 OD + 24" (33" OR SMALLER)

~~MATERIALS - SPEC SECTION 31-23-24~~
~~COMPACTION - ETC. - SPEC SECTION 31-23-23.15~~
~~PAVING - SPEC SECTION 32-04-17~~

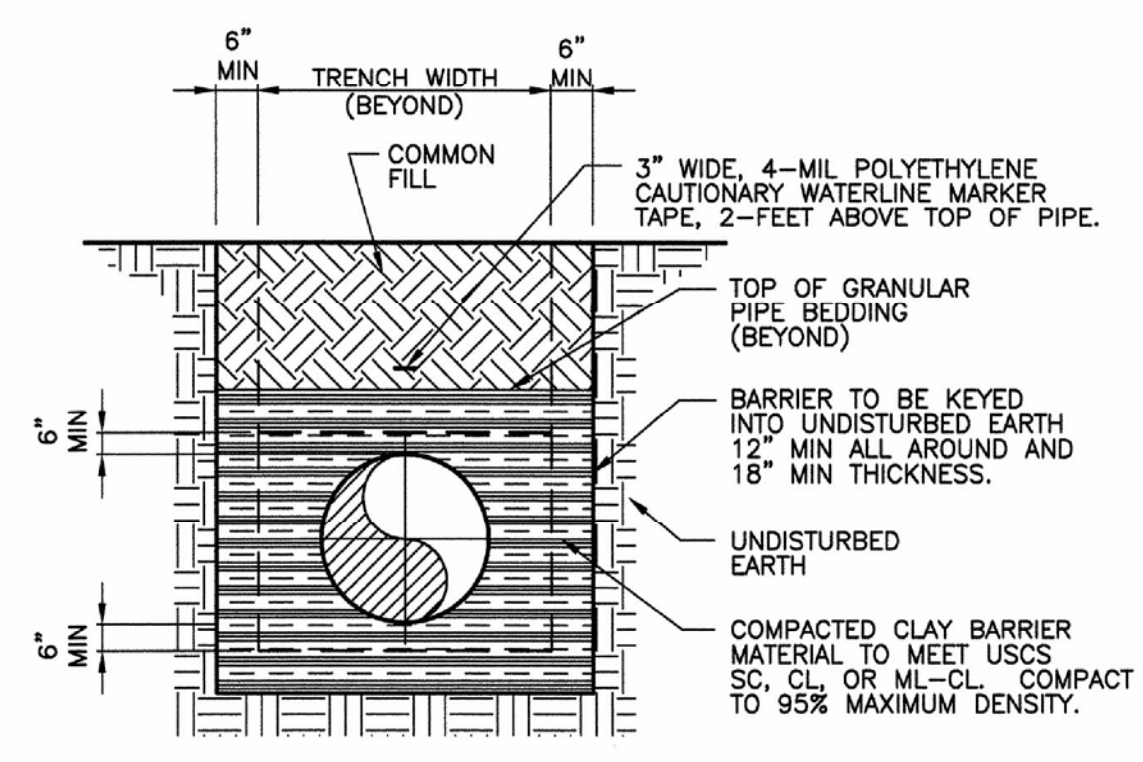
PIPE TRENCH - STEEL, DIP, PVC, AND HDPE
 DETAIL A



PIPE ID
 27" OR SMALLER 3"
 30" TO 60" 4"
 66" OR LARGER 6"

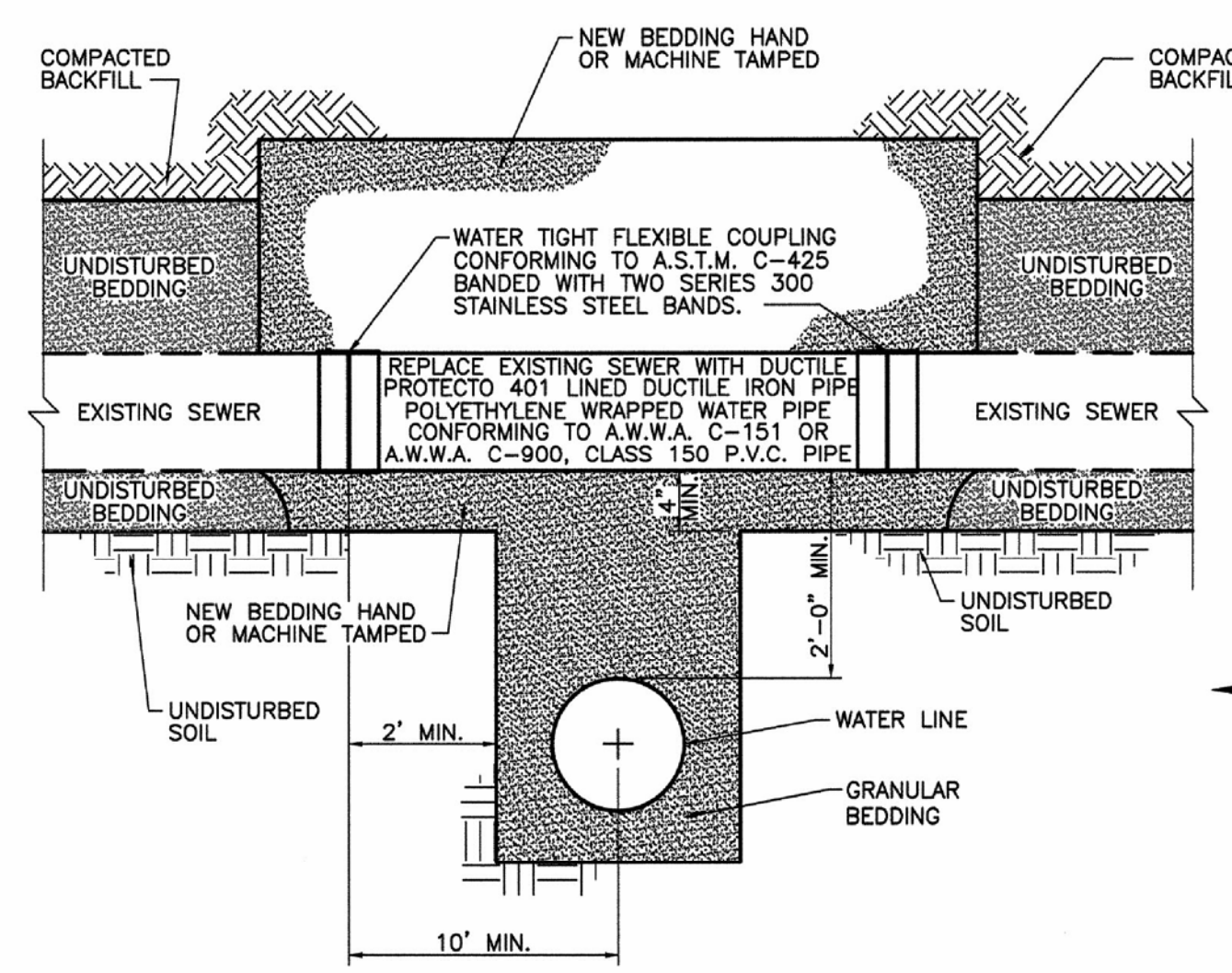
BC=OUTSIDE DIAMETER OF PIPE

TYPE R3 FOR PCCP PIPE BEDDING
 DETAIL B



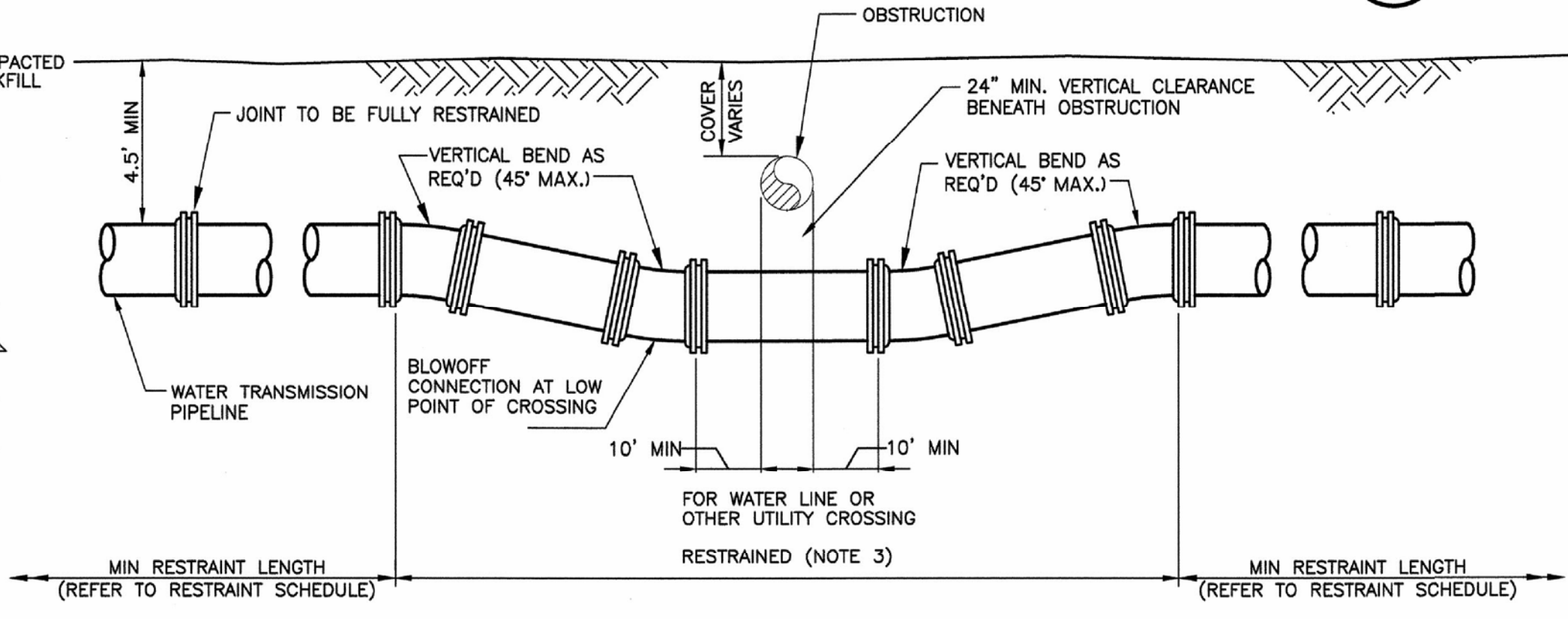
NOTE:
 MIN @ 1000 FT SPACING ON EACH SIDE OF STREAM CROSSING AND WETLAND

LOW PERMEABILITY GROUNDWATER BARRIER
 DETAIL C



NOTES:
 THIS STANDARD APPLIES ONLY FOR NON-PRESSURIZED SANITARY SERVICE TAPS AND SANITARY SEWERS, EIGHT (8) INCH AND SMALLER SANITARY SEWERS MAY NOT BE CUT WITHOUT THE EXPRESSED CONSENT OF THE OWNER OF THE UTILITY. A UTILITY REPRESENTATIVE WILL BE ON SITE DURING CONSTRUCTION.
 DUCTILE IRON PIPE USED TO REPLACE SECTION OF SANITARY SEWER SHALL BE PLACED IN A TRENCH, BEDDED, BACK FILLED AND COMPACTED IN ACCORDANCE WITH THE DISTRICT SPECIFICATIONS.

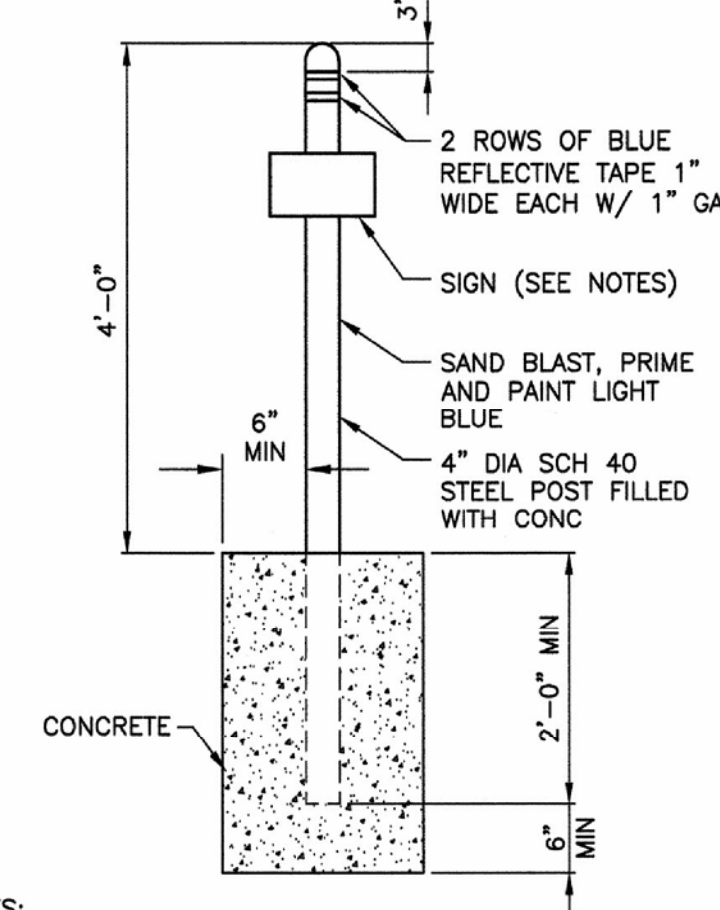
NEW WATERLINE CROSSING EXISTING STORM OR SANITARY SEWER
 DETAIL D



OBSTRUCTION CROSSING NOTES:
 1. AT THE CONTRACTOR'S OPTION, THE OBSTRUCTION CROSSING DETAIL CAN BE MODIFIED TO ELIMINATE THE USE OF BEND FITTINGS USING STANDARD NON-RESTRAINED JOINTS PROVIDED THE DEFLECTIONS ARE MADE USING 75 PERCENT OF MANUFACTURER'S STANDARD WRITTEN ALLOWABLE DEFLECTION GUIDELINES AND IS IN COMPLIANCE WITH PIPE SPECIFICATIONS. SHOULD THIS OPTION BE USED, NO ADDITIONAL COST SHALL BE PAID FOR ADDITIONAL TRENCH EXCAVATION TO MEET VERTICAL CLEARANCE REQUIREMENTS.
 2. WHERE AN OBSTRUCTION IS ENCOUNTERED THAT CANNOT BE BRIDGED WITH THE MINIMUM CLEARANCE BY DEFLECTING PIPE JOINTS, OBSTRUCTION CROSSING DETAIL SHALL BE USED. IF REQUIRED, ONE LENGTH OF PIPE, THAT HAS BEEN INSTALLED SHALL BE REMOVED TO ACCOMMODATE THE PIPING SHOWN IN THE OBSTRUCTION CROSSING DETAIL. AFTER THE PIPING HAS BEEN INSTALLED UNDER OR OVER THE OBSTRUCTION, A LENGTH OF PIPE SHALL BE FIELD CUT, IF REQUIRED, TO RETURN PIPE ALIGNMENT TO THE ORIGINAL LAYING SCHEDULE. PAYMENT FOR INSTALLING OBSTRUCTION CROSSING PIPE SHALL BE INCLUDED IN THE VARIOUS PRICES BID FOR PIPE INSTALLATION.
 3. WATER TRANSMISSION MAIN WILL BE RESTRAINED TO THE LIMITS SHOWN ON THE PROFILE DRAWINGS OR AS INDICATED IN THE RESTRAINT SCHEDULE (WHICHEVER IS GREATER).
 4. CATHODIC PROTECTION SHALL BE IN ACCORDANCE WITH REFERENCED SPECIFICATIONS AND DETAILS.

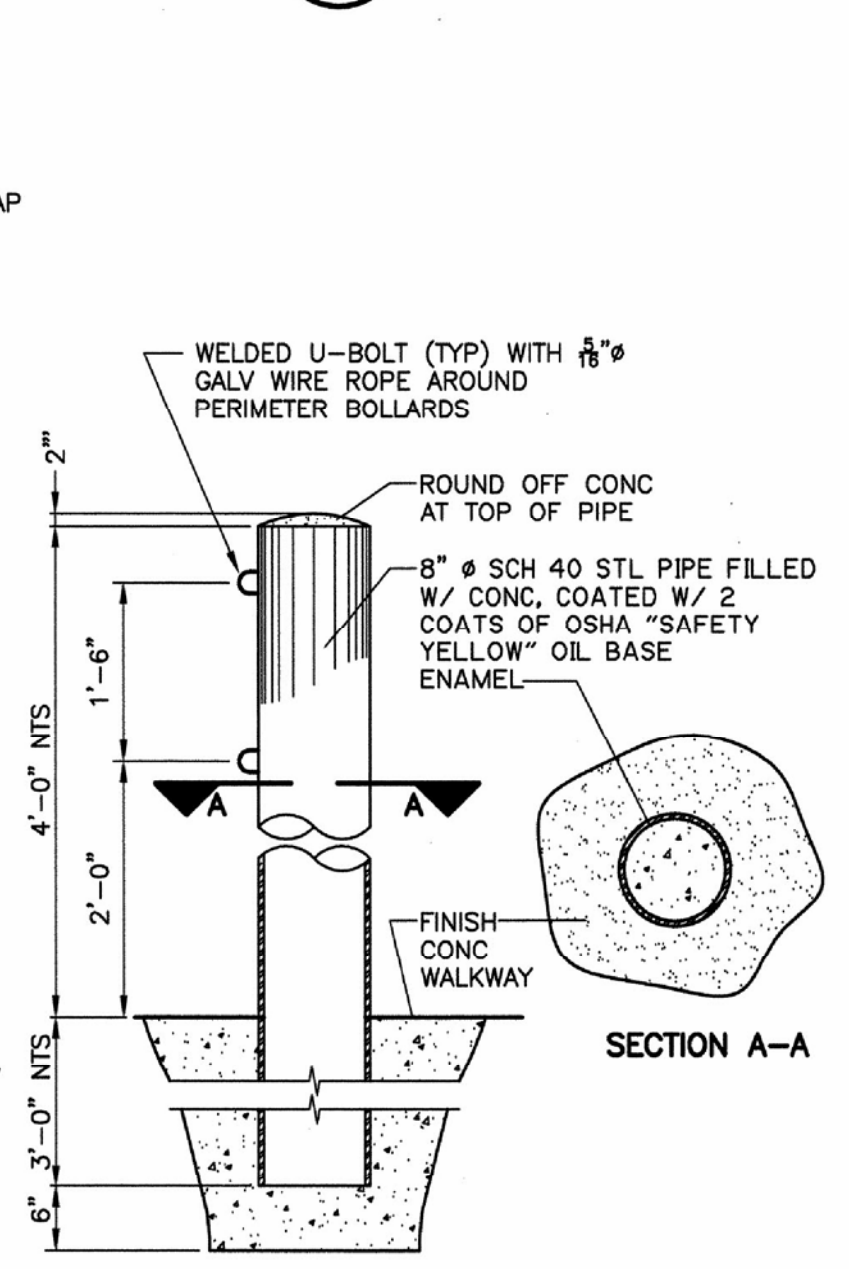
OBSTRUCTION CROSSING
 DETAIL E

STANDARD DETAILS SHOWN ON THIS SHEET SHALL BE USED AT ALL APPLICABLE LOCATIONS, UNLESS OTHERWISE NOTED. ALL STANDARD DETAILS SHOWN MAY NOT BE REQUIRED FOR THIS PROJECT.



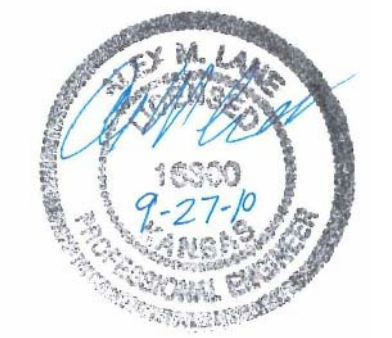
NOTES:
 1. SEE GENERAL NOTES AND SPECIFICATIONS FOR LOCATIONS.
 2. POST TO BE LOCATED DIRECTLY OVER CENTERLINE ON BOTH SIDES OF PIPE AT RAILROAD AND ROADWAY ROW CROSSINGS.
 3. MARKER POST SIGN SHALL BE PAINTED AND STAMPED AND CONTAIN THE FOLLOWING INFORMATION:
 WICHITA WATER UTILITIES
 BURIED WATER PIPELINE
 BEFORE EXCAVATION OR
 IN EMERGENCY CALL
 (316) 268-4968
 4. FURNISH AN ADDITIONAL 30 MARKER POST SIGNS TO OWNER.

MARKER POST
 DETAIL F



NOTES:
 1. FOUR BOLLARDS SHALL BE PLACED AROUND ALL BLOWOFFS, ISOLATION VALVES, AND AIR/VAC VAULTS WITH 5-FEET CLEARANCE TO SURFACE STRUCTURES, ALL AROUND.

FINISH CONCRETE WALKWAY
 DETAIL G



**BENTLEY TIE IN
 STANDARD DETAILS
 WICHITA, KANSAS**

Ruggles & Bohm, P.A.
 Engineering, Surveying, Land Planning

924 North Main (316) 264-8008
 Wichita, Kansas 67203 (316) 264-4621 fax
 www.rbkansas.com E-mail: info@rbkansas.com

DRAWING FILE: Details {02 Details} PROJECT NUMBER: W-549 DATE: June 28, 2010

DESIGN	AML	SHEET 2 OF 23
DRAWN	AML	
REVIEW		
UTILITY		