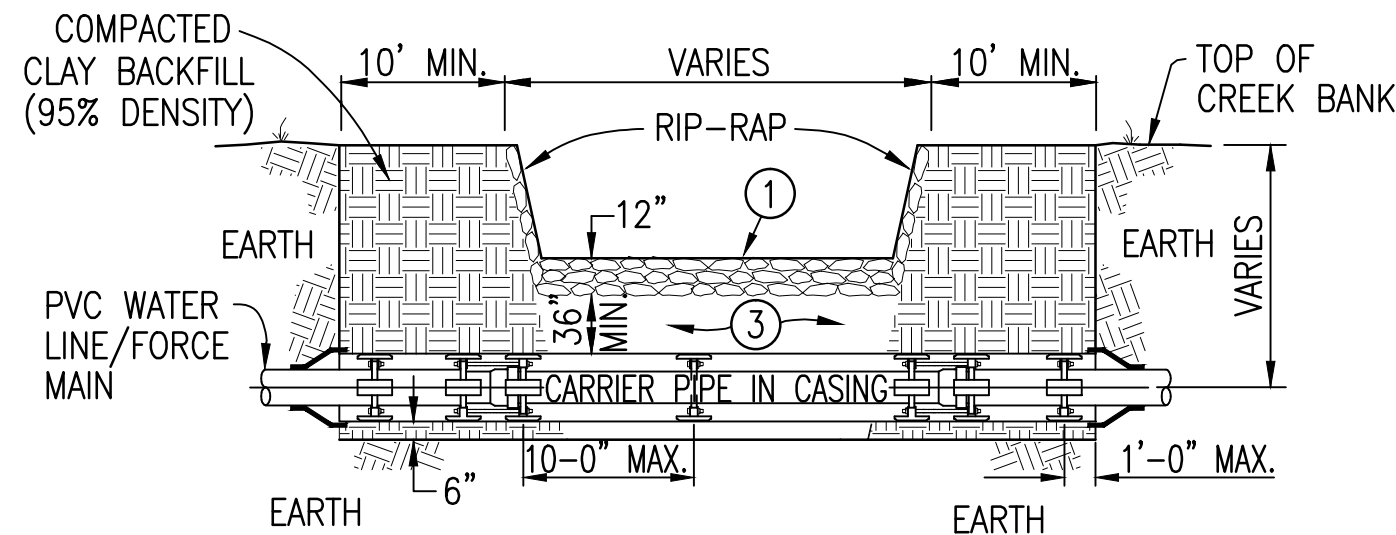


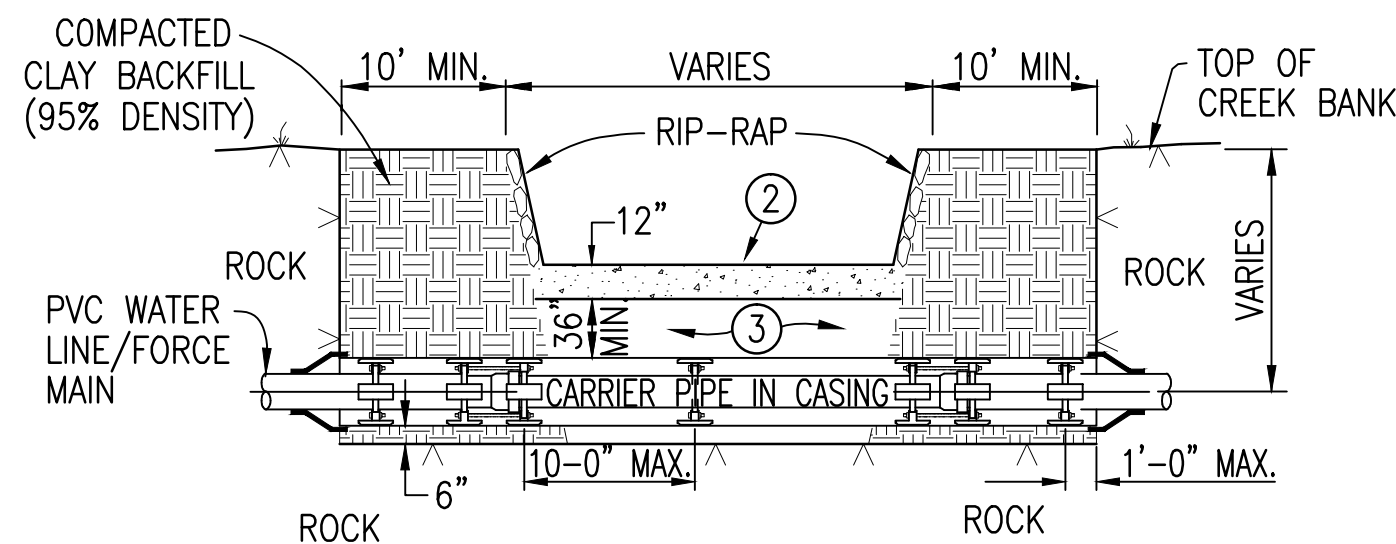
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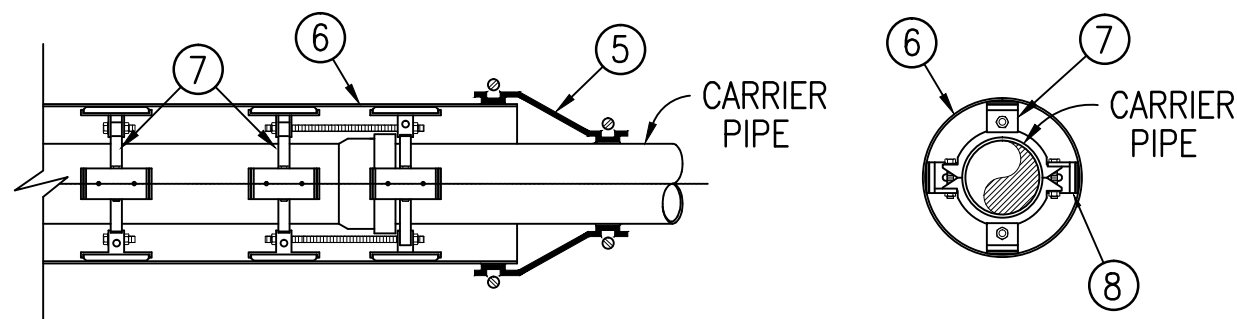
- NOTES:
1. RIP-RAP (LAY TOP FLUSH WITH CREEK BED).
  2. CONCRETE (POUR TOP FLUSH WITH CREEK BED).
  3. CRUSHED STONE OR CONCRETE AS REQUIRED.
  4. ALL PIPE AND FITTINGS FOR WATER LINE/FORCE MAIN SHALL BE RESTRAINED JOINT DUCTILE IRON WITHIN LIMITS OF STREAM CROSSING.
  5. USE WATERTIGHT WRAP AROUND END SEALS WITH STAINLESS STEEL BANDS.
  6. SMOOTH WALL STEEL CASING PIPE BITUMINOUS COATING INSIDE & OUT.
  7. USE UNI-FLANGE SERIES 1390 FOR JOINT RESTRAINT/CASING SPACERS. USE UNI-FLANGE SERIES 1300 FOR CASING SPACERS ONLY.
  8. IF REQUIRED, STEEL PLATES SHALL BE PLACED BETWEEN RUNNERS AND RUNNER PADS TO MAINTAIN 1/2" MAXIMUM CLEARANCE BETWEEN RUNNER PAD AND CASING.
  9. RESTRAIN PIPE IN CASING.



IN EARTH BED



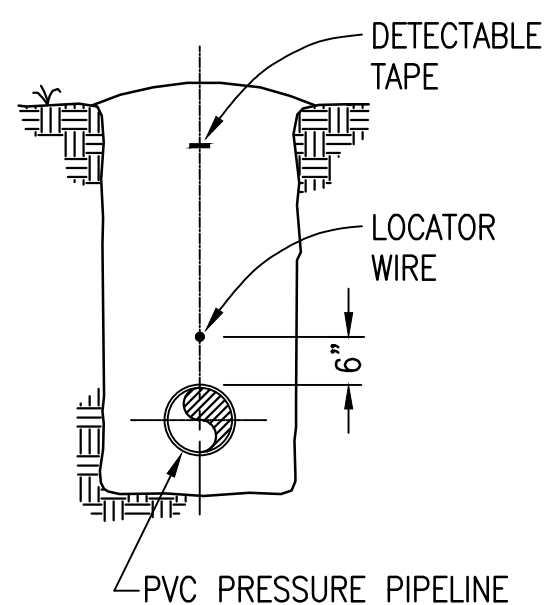
IN ROCK BED



CREEK CROSSING/CASING PIPE  
w/P.V.C. CARRIER PIPE

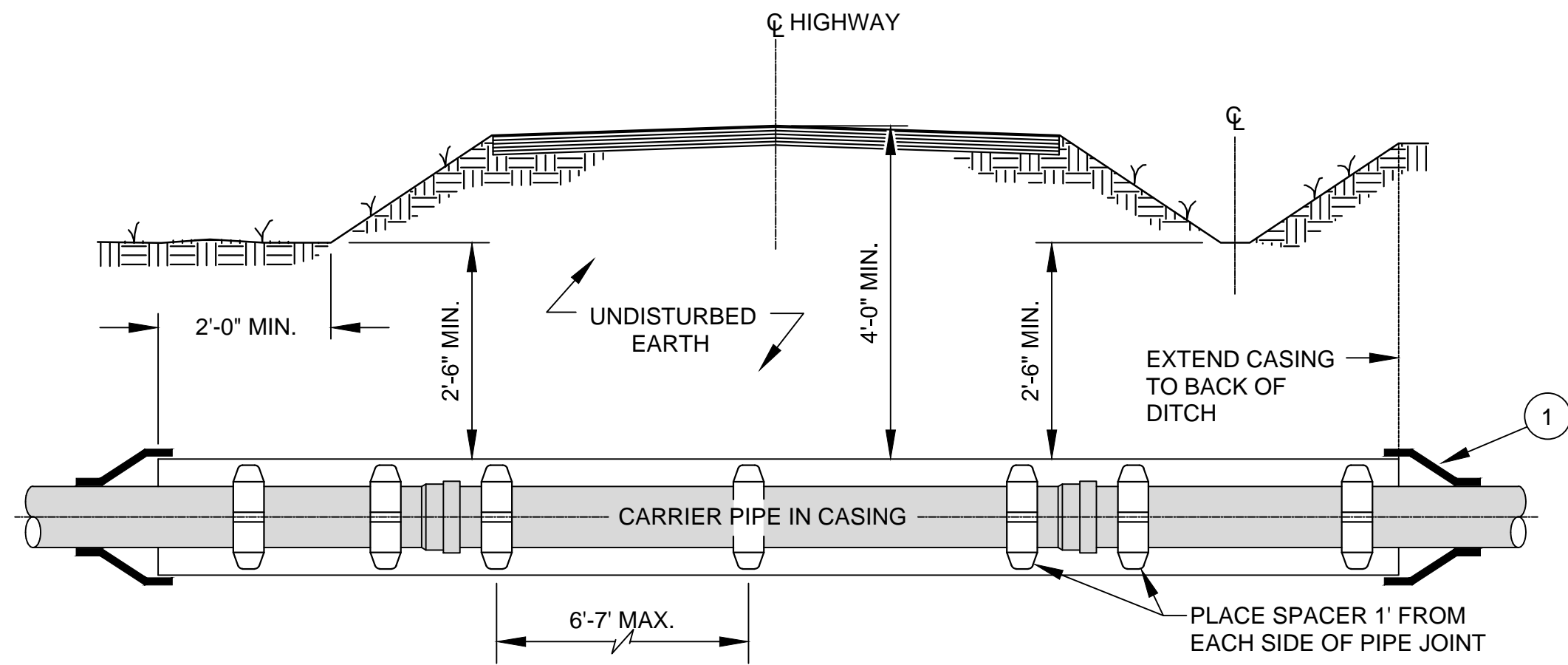
NOT TO SCALE

(UNI-FLANGE JOINT RESTRAINT/CASING SPACERS)



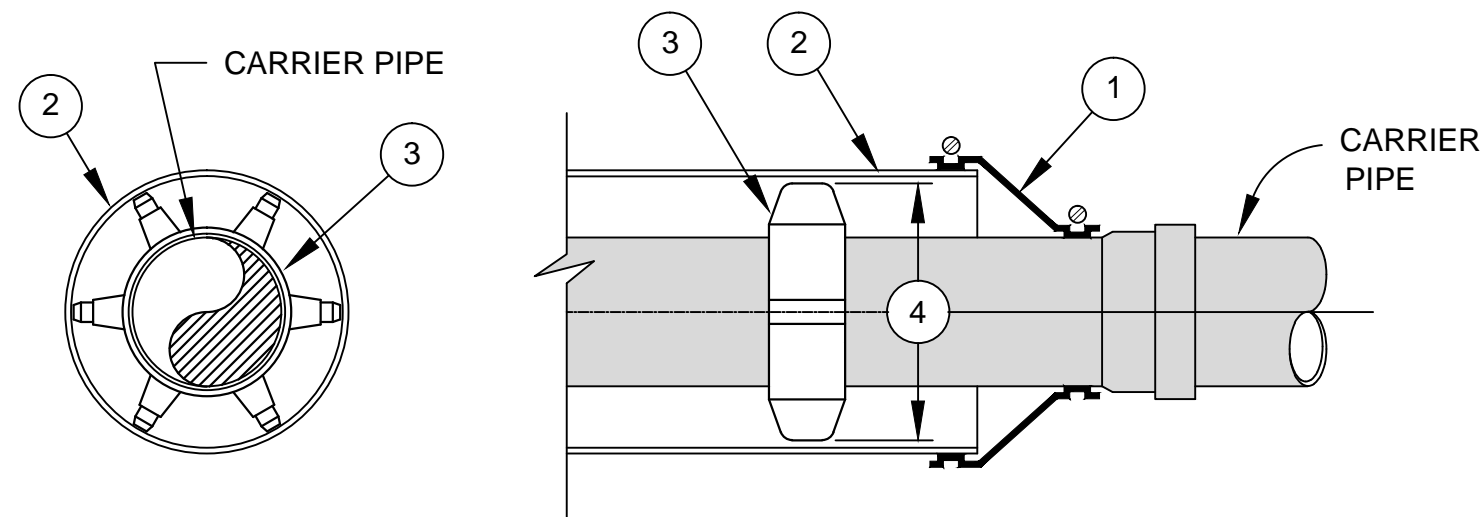
DETECTABLE WIRE DETAIL

NOT TO SCALE



TYPICAL DETAIL OF ROAD CROSSING  
W/CASING AND CARRIER PIPE

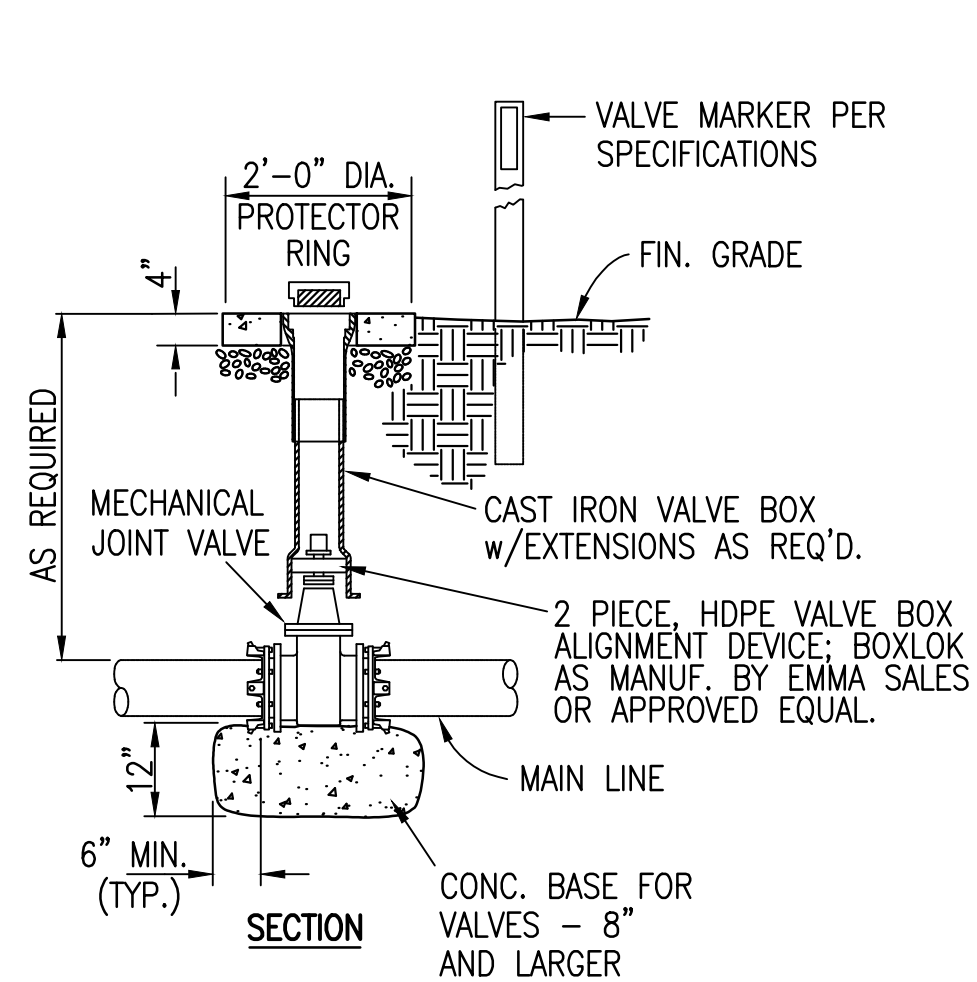
NOT TO SCALE



1. USE WATERTIGHT WRAP AROUND END SEALS WITH STAINLESS STEEL BANDS.
2. SMOOTH WALL STEEL CASING PIPE WITH BITUMINOUS COATING INSIDE & OUT.
3. CASING SPACERS SHALL BE STAINLESS STEEL TYPE INSTALLED IN A CENTERED/RESTRAINED CONFIGURATION. USE PSI MODEL S8G-2, APS MODEL SSIM OR APPROVED EQUAL FOR 4" THRU 24" DIA. CARRIER PIPES. USE PSI MODEL S12G-2, APS MODEL SSIM OR APPROVED EQUAL FOR 26" DIA. AND LARGER CARRIER PIPES.
4. SPACER RISERS/RUNNERS SHALL BE SIZED AND TRIMMED TO MAINTAIN 1/2" MAXIMUM CLEARANCE BETWEEN RUNNER AND CASING PIPE.
5. CARRIER PIPE IN ALL CASING OVER 60 FEET IN LENGTH SHALL BE DUCTILE IRON WITH LOCKING GASKETS.

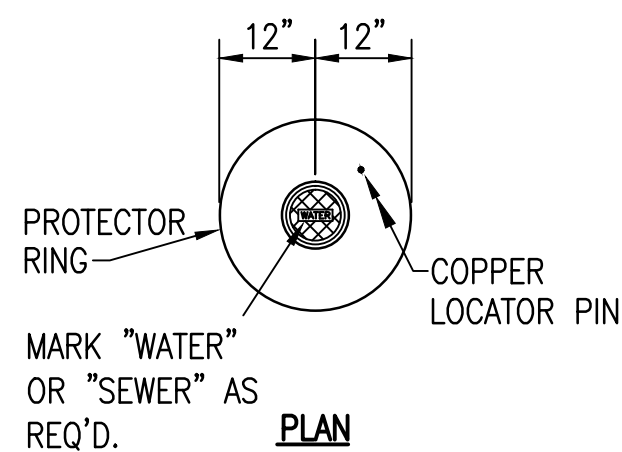
CASING PIPE W/CARRIER PIPE DETAIL

NOT TO SCALE

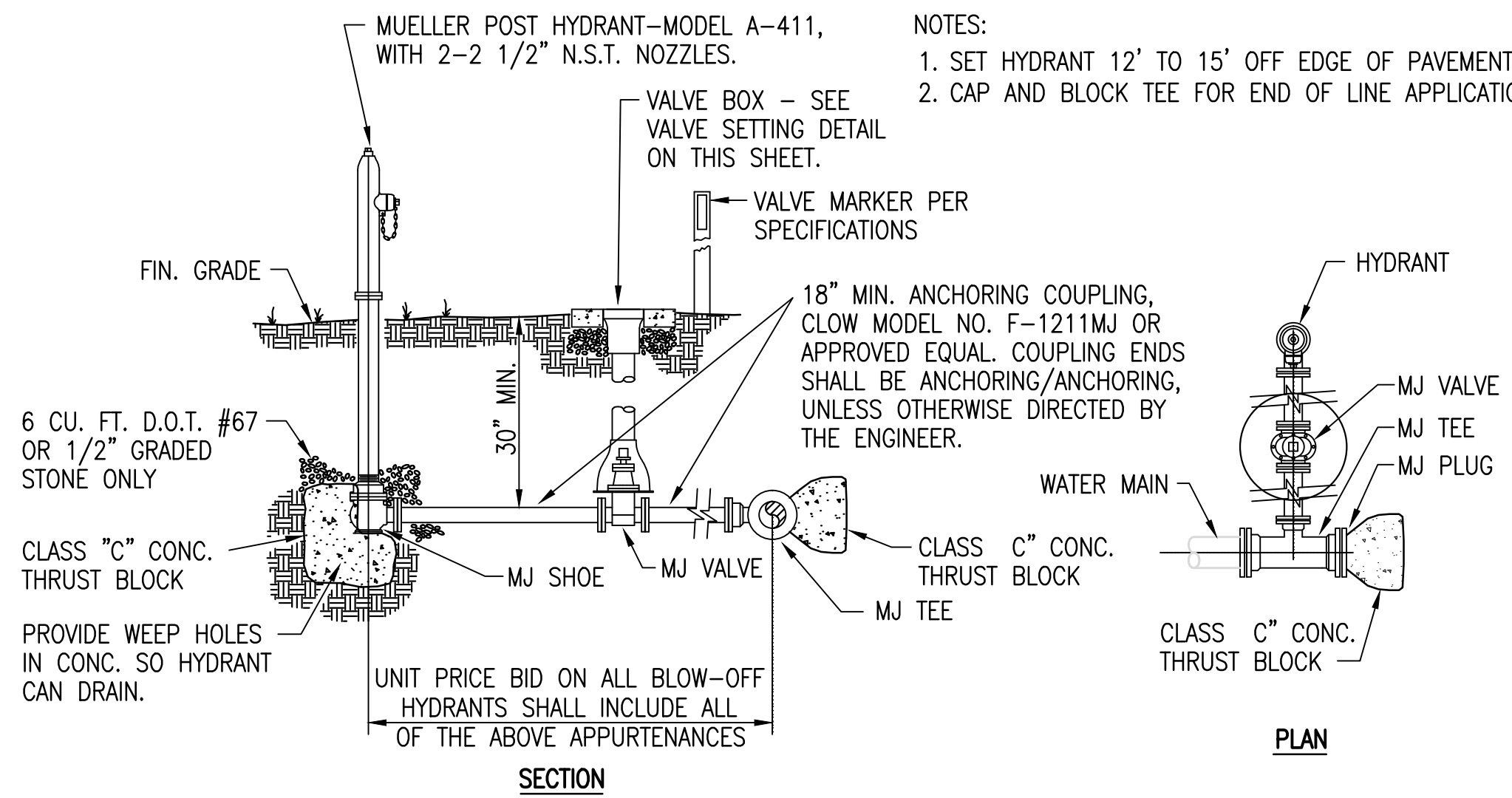
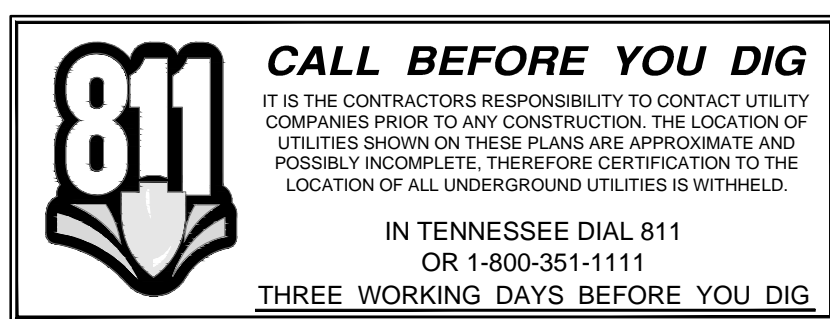
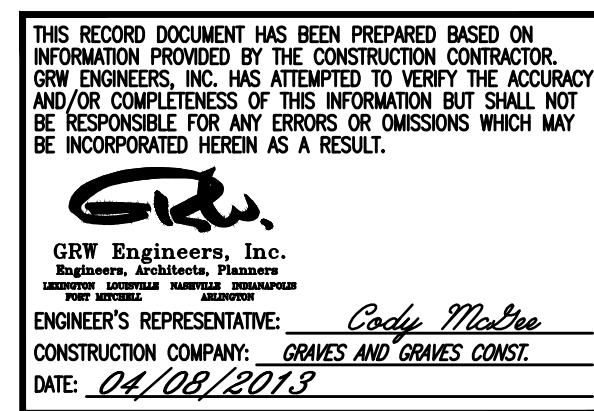


VALVE SETTING DETAIL

NOT TO SCALE

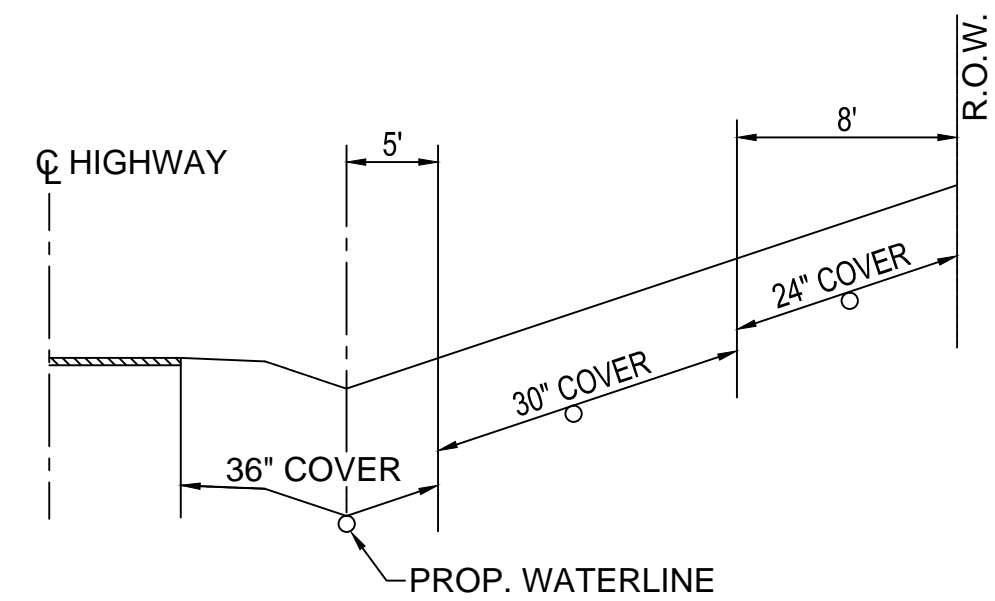


- NOTES:
1. USE PRECAST CONC. PROTECTOR RING w/INTEGRAL COPPER LOCATOR PIN, AS MANUF. BY ROSS CONSTRUCTION OR APPROVED EQUAL, FOR VALVES OUTSIDE PAVED AREAS.
  2. PLACE GROUT IN SPACE BETWEEN CONCRETE PAD AND VALVE BOX.
  3. VALVES IN ROADWAY DO NOT REQUIRE A CONCRETE PAD OR MARKER.
  4. VALVES SHALL BE RESTRAINED WITH MEGALUG TYPE RESTRAINT SYSTEM.



BLOW-OFF ASSEMBLY

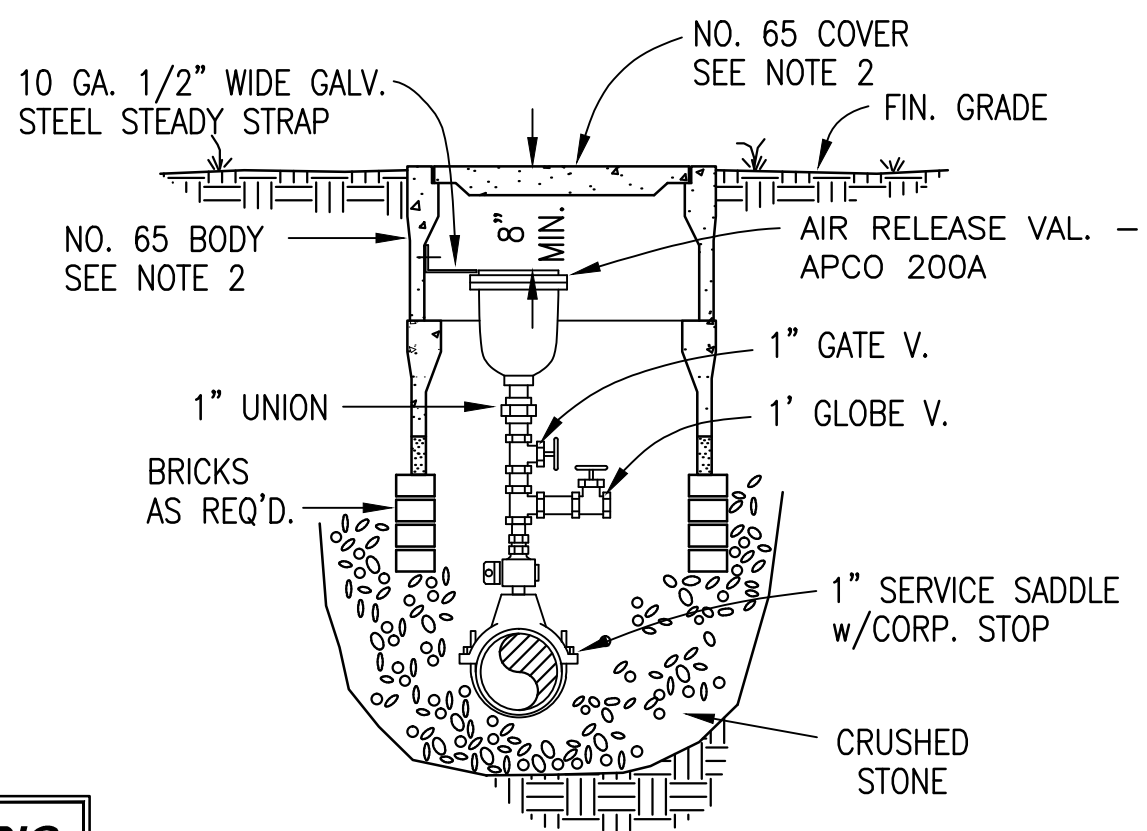
NOT TO SCALE



MIN. COVER FOR LONGITUDINAL  
UNDERGROUND WATER LINE INSTALLATIONS

NOT TO SCALE

- NOTES:
1. THE CONTRACTOR SHALL MAKE PROVISIONS TO GIVE ADEQUATE SPACE FOR AIR RELEASE APPURTENANCES (SEE SHOP DRAWINGS).
  2. 17"x28" CONC. METER BOX - AS MANUF. BY BROOKS PRODUCTS, INC. MEMPHIS, TN - OR APPROVED EQUAL.
  3. SEAL SLOTS IN METER BOX W/NON-SHRINK GROUT.
  4. ALL ACCESSORY VALVES AND PIPING SHALL BE BRASS.



AIR RELEASE VALVE

NOT TO SCALE

This document, originally issued, sealed, and signed by JAMES W. HILBORN, Tennessee Professional Engineer, No. 16514, on 4-08-2013, shall not be used in lieu of a certified document.

GRW PROJECT NO. 3927-03

CLIENT PROJECT NO. \_\_\_\_\_

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ENGINEERS - ARCHITECTS - PLANNERS  
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STANDARD WATER LINE DETAILS

WATER LINE INTERCONNECTION  
CITY OF LOBELVILLE, TENNESSEE

DESIGNED	JWH
DRAWN	SG
REVIEWED	JWH
APPROVED	JWH

NO.	DATE	DESCRIPTION

DATE: OCTOBER 2010

SCALE: AS NOTED

SHEET NO.

C-07

STATE SUBMITTAL