

HARRIMAN UTILITY BOARD

FROSDICK WATERLINE EXTENSION

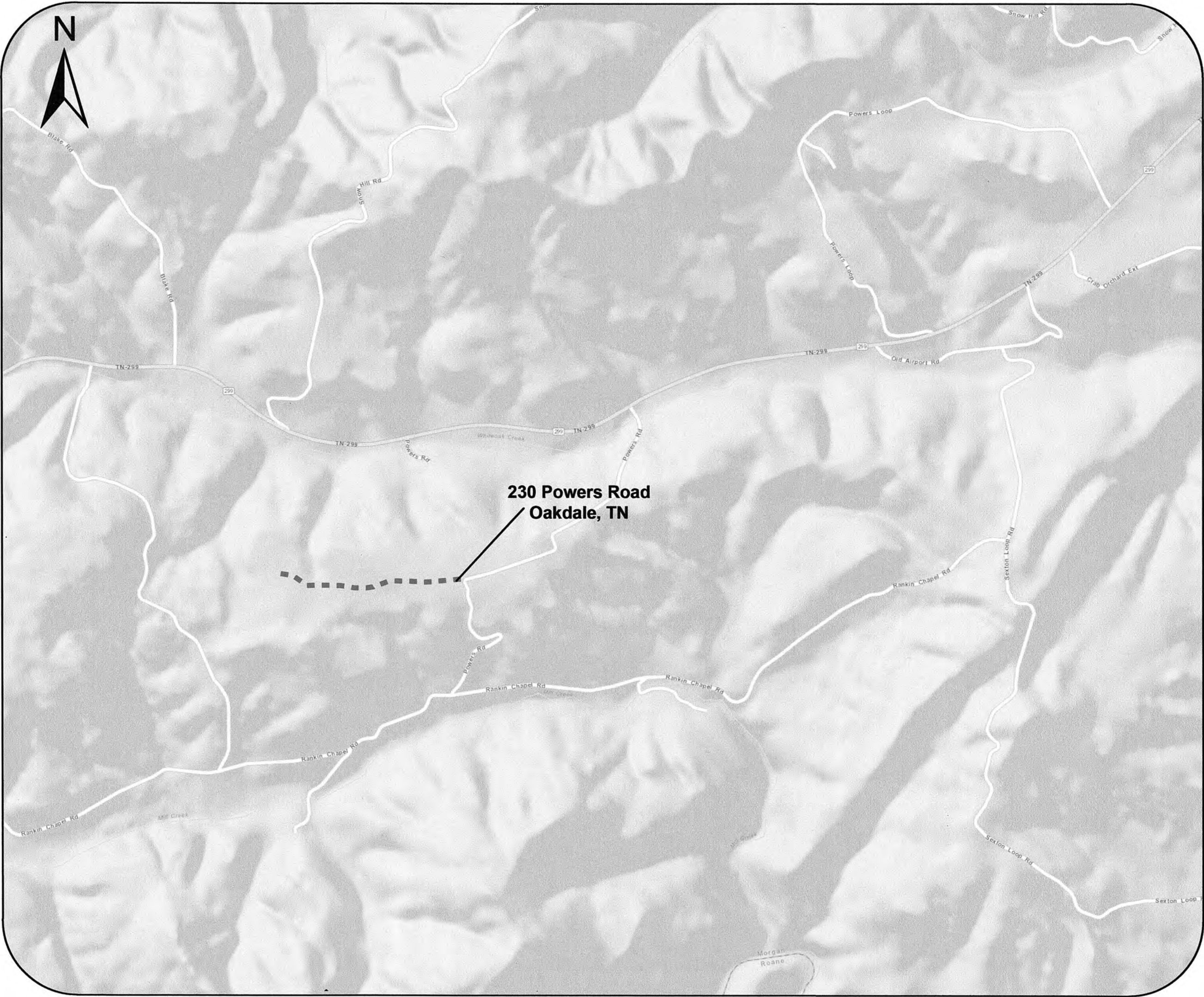
OAKDALE, TENNESSEE

DRAWING INDEX

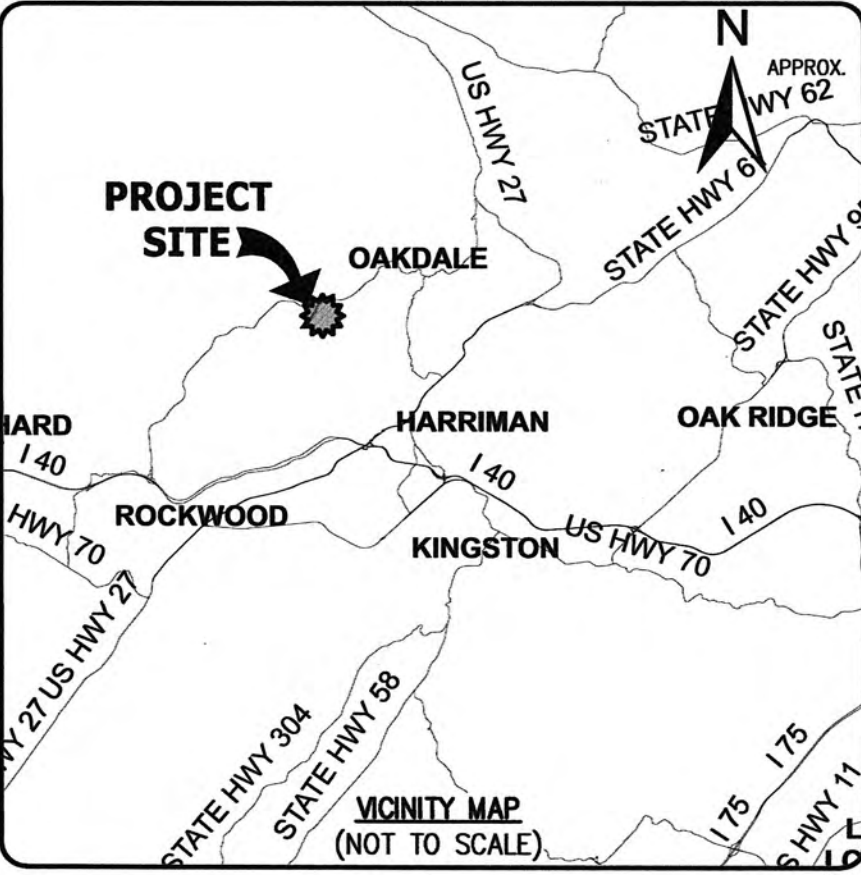
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|---|---|
| 1 | COVER SHEET |
| 2 | FROSDICK WATERLINE EXTENSION - STA. 0+00 TO STA. 21+23 (E.O.L.) |
| 3 | TYPICAL DETAILS |

GENERAL NOTES:

1. THE LOCATIONS OF THE EXISTING LINES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND INCOMPLETE. LINES SHALL BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM AT 811 AND POT-HOLING AS NECESSARY.
2. EXISTING WATER LINE DIAMETERS AND MATERIALS ARE FROM HISTORICAL RECORDS. INSTALLER SHALL VERIFY BY POT-HOLING PRIOR TO ORDERING MATERIAL FOR TIE-INS, CUT AND CAPS, AND BANDING.
3. PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD THE EXISTING LINES FROM DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. FURNISH ANY SPECIAL EQUIPMENT REQUIRED TO WORK OVER AND AROUND THE LINES WITHOUT CAUSING THEM DAMAGE. IF DAMAGE DOES OCCUR, IMMEDIATELY NOTIFY UTILITY OWNER AND WORK TO RESTORE SERVICE. COST OF REPAIR OR REPLACEMENT OF DAMAGED LINES SHALL BE INSTALLER'S RESPONSIBILITY.
4. LINES SHALL BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM AT 811.
5. TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE INSTALLER AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
6. STONE BEDDING AND BACKFILL SHALL BE INSTALLED IN STRICT COMPLIANCE WITH HUB STANDARD SPECIFICATIONS.
7. ALL WATER LINES AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH HUB STANDARD SPECIFICATIONS.
8. INSTALLER SHALL INSTALL WATER LINES AT A POSITIVE GRADE BETWEEN DESIGNATED HIGH AND LOW POINTS TO PREVENT TRAPPING OF AIR.
9. PROPOSED AIR RELEASE VALVES SHALL BE INSTALLED AT HIGH POINTS IN THE PROPOSED WATER LINE AND SHALL BE FIELD LOCATED BY THE ENGINEER.
10. INSTALLER TO COORDINATE FIELD LOCATIONS OF PROPOSED FIRE HYDRANTS, WATER SERVICES AND METERS WITH HUB LEAD GWS FOREMAN.
11. VALVES, HYDRANTS AND METER ASSEMBLIES SHALL BE ORIENTED SO AS TO ASSURE WATER LINE APPURTENANCES ARE NOT LOCATED WITHIN SIDEWALK AND/OR CURB/CURB & GUTTER AREAS.
12. INSTALLER SHALL USE RESTRAINED JOINT FITTINGS FOR ALL WATER PIPE FITTINGS, EXCEPT FOR FITTINGS AT TIE-IN CONNECTIONS WHICH SHALL BE RESTRAINED WITH CONCRETE THRUST BLOCKS.
13. INSTALLER SHALL INSTALL DETECTION WIRE AND WARNING TAPE PER HUB STANDARD SPECIFICATIONS.
14. WATER MAIN MIN. COVER SHALL BE 30" AND MAX COVER SHALL BE 54", UNLESS OTHERWISE APPROVED BY HUB LEAD GWS FOREMAN.
15. PAVEMENT SHALL BE SAW CUT IN RECTANGULAR SECTIONS WITH NEAT SQUARED EDGES.
16. BACKFILL IN PAVED AREAS SHALL BE COMPACTED IN MAXIMUM 6" LIFTS USING "JUMPING JACK" STYLE COMPACTOR.
17. ALL 1/2" WATER METERS AND 1/2" WATER SERVICE PIPE SHALL BE REPLACED WITH 3/4" WATER METERS AND 3/4" WATER SERVICE PIPE.
18. WATER TAPS MUST BE PERFORMED WITH "HOT" LINES. TEMPORARY SHUT-DOWNS ARE NOT ALLOWED.
19. METER CONNECTIONS TO EXISTING METERS SHALL INCLUDE NEW CURB STOP AND SPUD TO METER AND NEW RUBBER GASKET ON METER.
20. WATER LINES SHALL BE INSTALLED WITH A MINIMUM OF 10' HORIZONTAL SEPARATION FROM EXISTING SANITARY SEWER. WHERE 10' SEPARATION CANNOT BE ACHIEVED, WATER LINE SHALL BE MINIMUM 18" ABOVE SANITARY SEWER.
21. PRESSURE TESTING AND DISINFECTION PROCEDURES SHALL BE IN ACCORDANCE WITH HUB STANDARD SPECIFICATIONS.

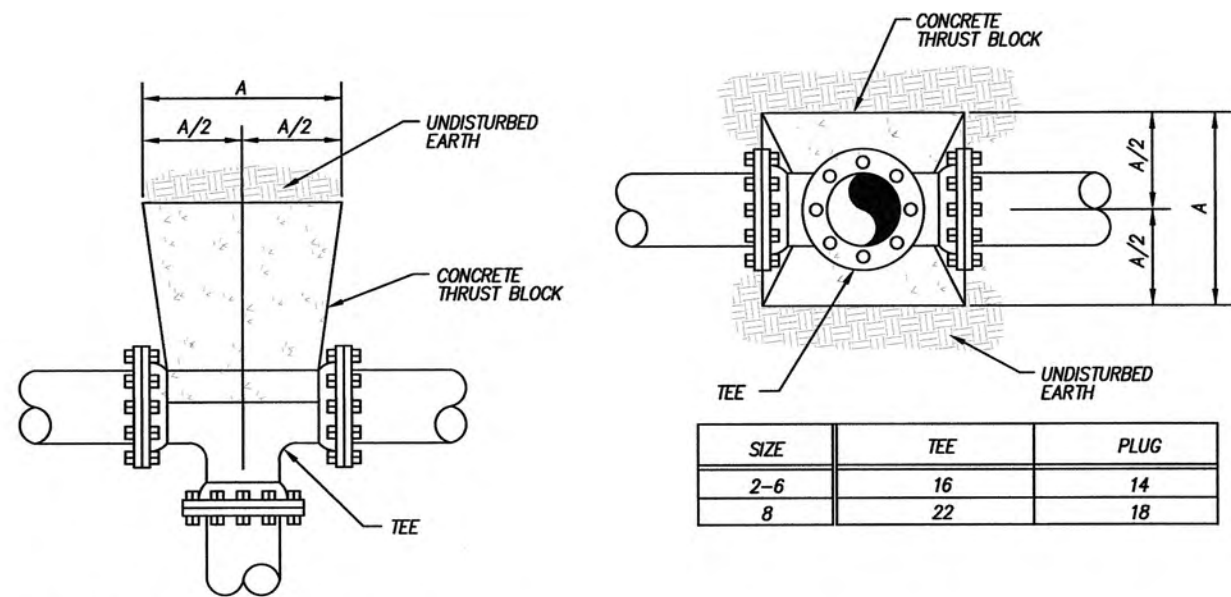


LOCATION MAP
SCALE: 1"=1000'



REVISIONS		DATE
CLIENT:	HARRIMAN UTILITY BOARD 300 NORTH ROANE STREET HARRIMAN, TN 37748 (865) 882-3242	
PROJECT:	FROSDICK WATERLINE EXTENSION OAKDALE, TENNESSEE	
COVER SHEET		
	PROJECT NO.	HUB No. 1-107-491
	DRAWING DATE	APRIL 25, 2017
	PM	CV
	DRAWN	MB
		1





- NOTES:
1. FITTING JOINTS SHALL NOT BE POURED IN CONCRETE OR HAVE CONCRETE SPILLED ON THE BOLTS OR NUTS. THE FITTING SHALL BE WRAPPED IN A LAYER OF POLYETHYLENE PLASTIC PRIOR TO POURING THE THRUST BLOCK.
 2. ROD AND EYE BOLT DIAMETER SHALL BE A MINIMUM OF 3/4" AND SHALL MATCH THE SIZE OF THE BOLT PROVIDED WITH THE FITTING.
 3. CONTRACTOR SHALL REPLACE FITTING BOLTS WITH THREADED ROD FOR 1/2 OF THE BOLTS SUPPLIED WITH EACH FITTING. RODS SHALL BE EQUALLY SPACED.

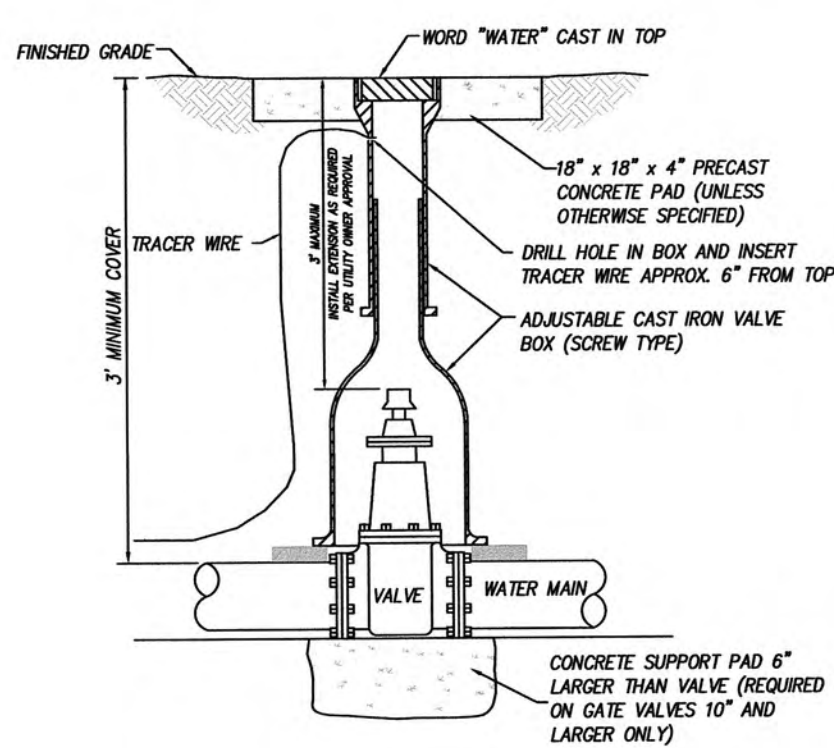
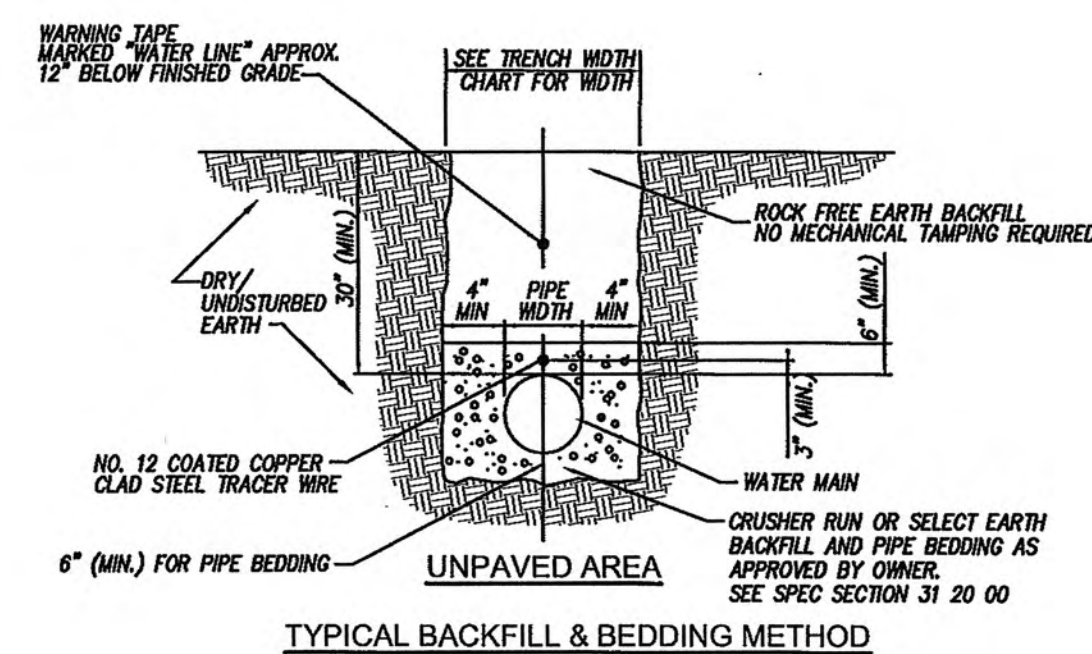
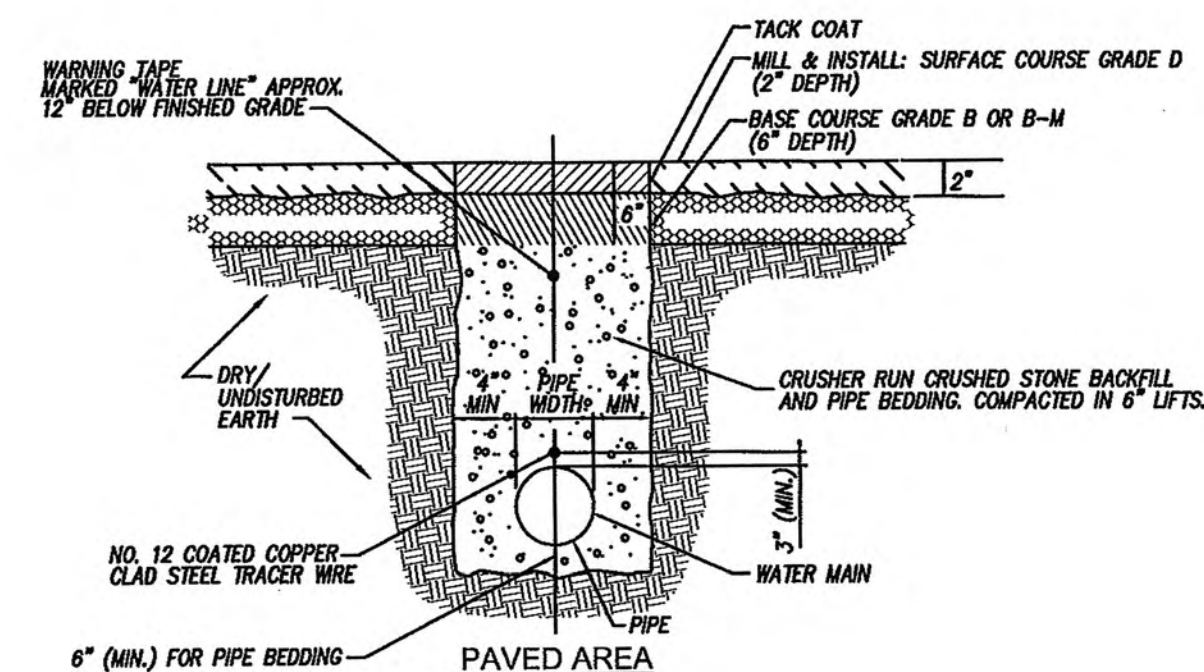
THRUST BLOCK DIMENSION "A"
NOT TO SCALE

TYPICAL THRUST BLOCKS FOR TEES

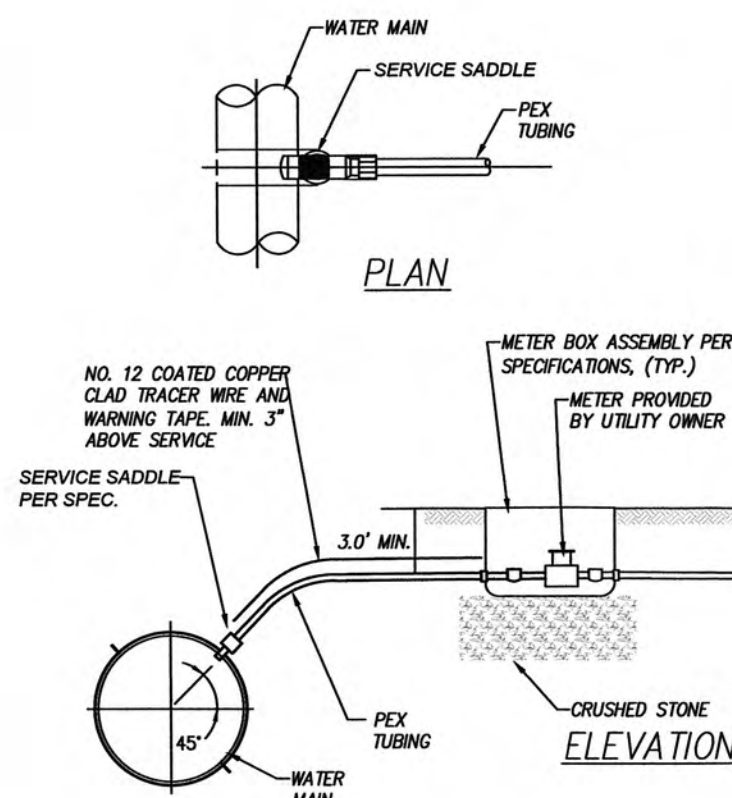
Fitting/Valve Type	Pipe Size (Inches)			
	2	4	6	8
Plug	40	40	60	80
Inline Valve	40	40	60	80
Tee	40	40	60	80
90° Bend	20	40	40	40
45° Bend	20	20	20	20
22.5° Bend	20	20	20	20
11.25° Bend	20	20	20	20
3" Bend	20	20	20	20

- NOTES:
1. CONTRACTOR SHALL USE RESTRAINED JOINT FITTINGS FOR EVERY FITTING INSTALLED ON THE PROJECT. REACTION BLOCKING SHALL ONLY BE USED AT TIE-IN CONNECTIONS TO SECURE NEW PIPE TO EXISTING PIPE.
 2. WHERE RESTRAINED JOINT FITTINGS ARE REQUIRED BY THE PLANS OR SPECIFICATIONS, RESTRAINED JOINT FITTINGS MUST BE INSTALLED AS REQUIRED BY THE TABLE AND NOTES FOUND WITHIN THE PLANS AND SPECIFICATIONS.
 3. MECHANICAL RESTRAINED JOINT FITTINGS SHALL BE "MECALUG" AS MANUFACTURED BY EBAA IRON, INC. OR APPROVED EQUAL AND SHALL BE INSTALLED ON EVERY FITTING.
 4. CONTRACTOR SHALL INSTALL BELL RESTRAINTS FOR PUSH-IN JOINT PIPE A MINIMUM DISTANCE FROM EACH VALVE OR FITTING AS REQUIRED IN THE ABOVE TABLE.

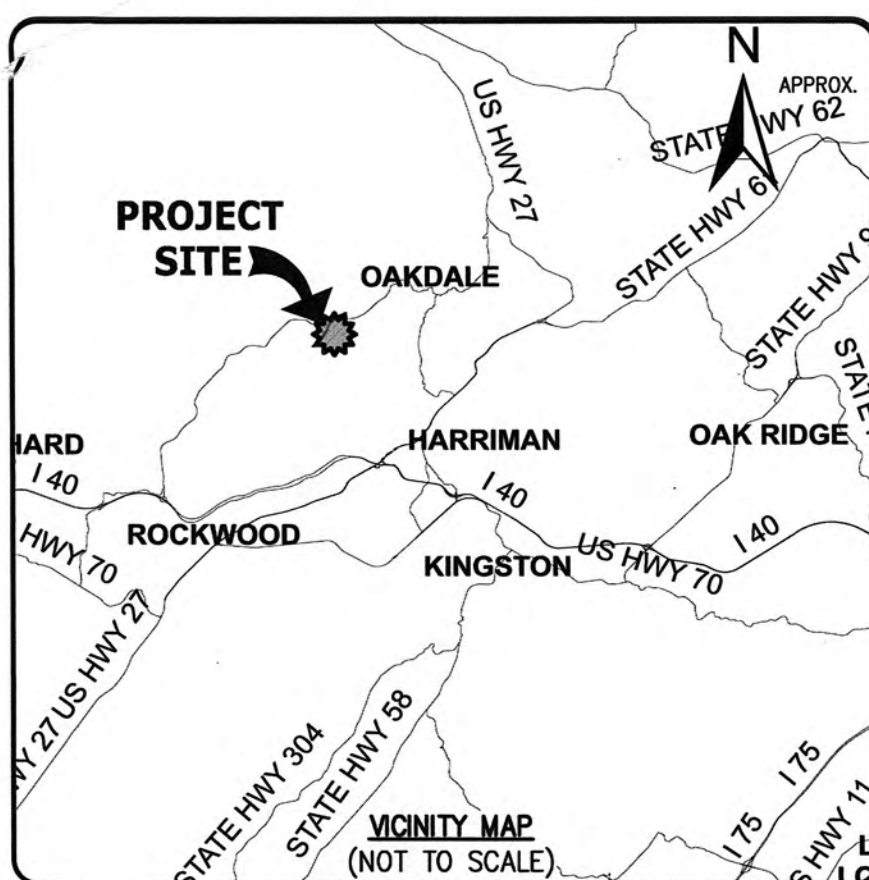
THRUST RESTRAINT JOINT TABLE



TYPICAL VERTICAL GATE VALVE
ASSEMBLY
N.T.S.

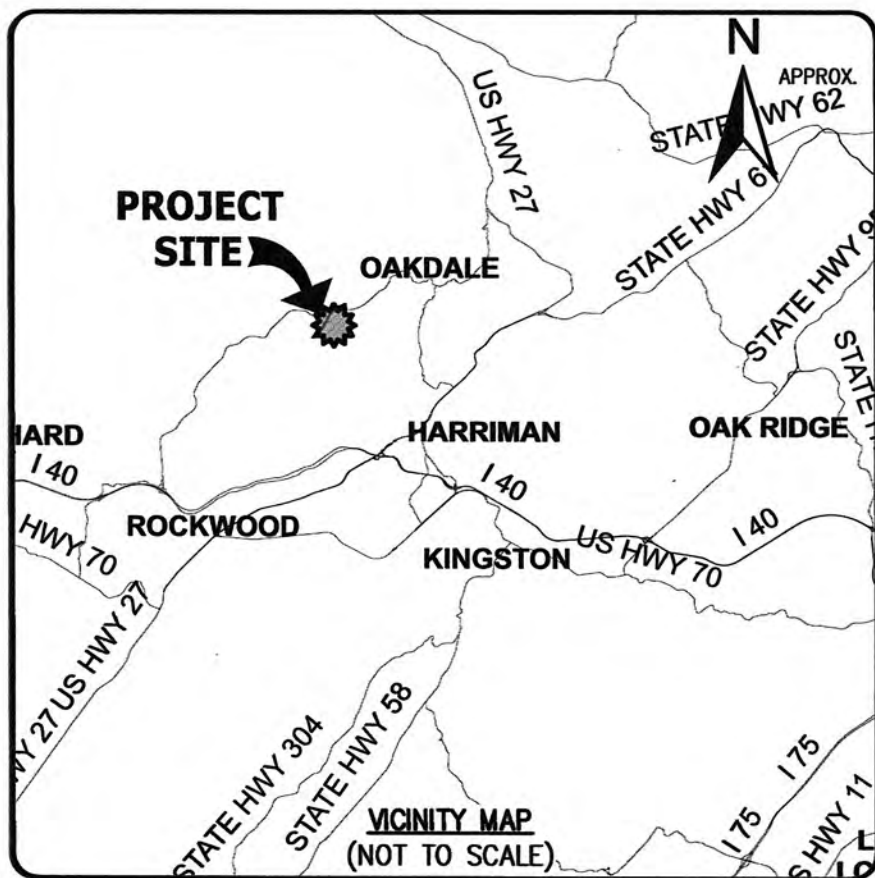


WATER SERVICE DETAIL
N.T.S.



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Frosdick Waterline Extension



Note: HUB to coordinate locations of water taps with property owner.

Sta. 21+23 (E.O.L.)
Install (1) ¾" End of Line
Blowoff Assembly
with ¾" Meter

Install (1) ¾" PEX Water
Service Assembly (Typical)

Sta. 0+00
Cut in 2"x2" M.J. Tee
and install (1) 2" Gate
Valve with Box

Proposed 2" SDR 17
PVC Water Line

Legend

- Water Meter
- Blowoff Assembly
- Existing Water Line
- Proposed Water Line
- Approx. House Location

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