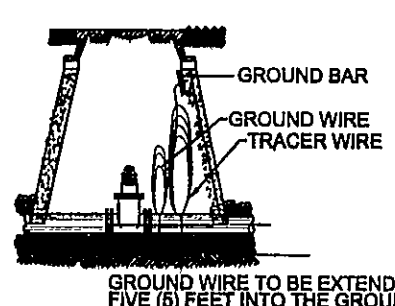
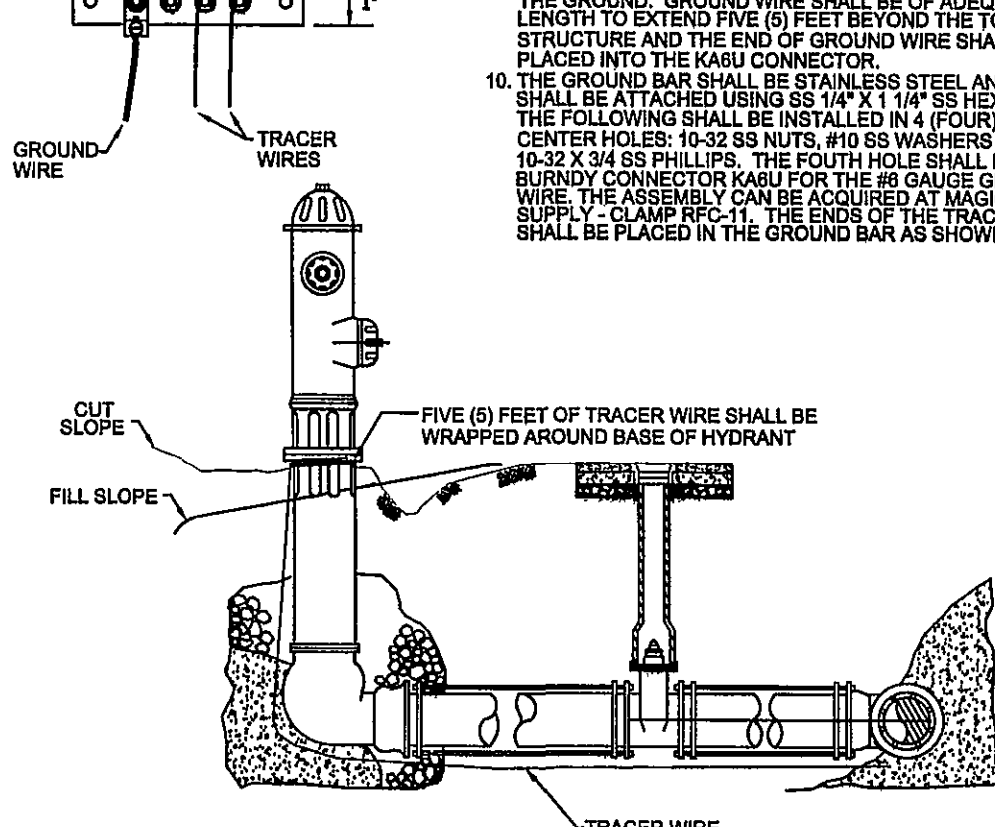


NOTES:

1. WATER LINE SHALL HAVE A MINIMUM OF 3.0 FEET OF COVER.
2. MAINTAIN A MINIMUM OF 18" CLEARANCE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE AT ALL WATER, SANITARY SEWER, AND STORM DRAIN CROSSINGS. WHERE THIS CLEARANCE CAN NOT BE ACHIEVED, CONCRETE PIERS SHALL BE UTILIZED IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY'S WATER AND SANITARY SEWER STANDARDS.
3. WATER MAIN PIPE MATERIAL SHALL BE DUCTILE IRON, CLASS 350, PER WESTERN VIRGINIA WATER AUTHORITY DEVELOPMENT STANDARDS.
4. THE LENGTH AND LOCATION OF EXISTING 12" WATER MAIN BEYOND THE LAST VALVE WAS NOT LOCATED BY FIELD SURVEY. THE POSITION SHOWN ON THE PLANS WAS TAKEN FROM PREVIOUS PLANS. THE CONTRACTOR SHALL VERIFY LOCATION PRIOR TO BEGINNING CONSTRUCTION.
5. KNIGHTSBRIDGE DRIVE IS A PRIVATE STREET. THE VIRGINIA VARSITY OWNER SHALL OBTAIN WRITTEN PERMISSION FROM THE KNIGHTSBRIDGE DRIVE OWNER FOR OPEN CUTTING THE PAVEMENT PRIOR TO WATERLINE CONSTRUCTION.
6. CONTRACTOR SHALL SAW CUT PAVEMENT WITH A MECHANICAL SAW. CUT SIDES OF REMAINING PAVEMENT SHALL BE TACK COATED WITH BITUMINOUS MATERIAL TYPE RC-250 OR EQUAL PRIOR TO PLACEMENT OF NEW PAVEMENT. REFER TO WVWA DETAIL W-25, THIS SHEET, FOR ADDITIONAL NOTES AND DETAILS.

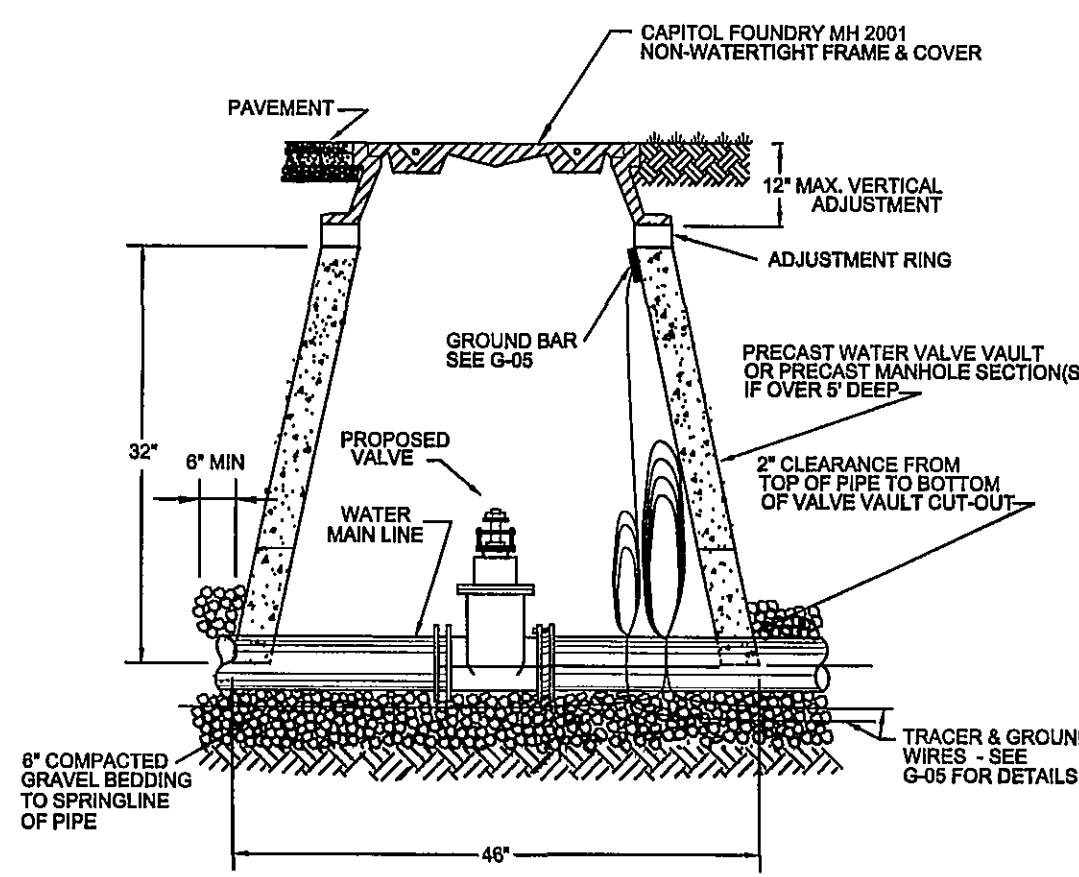


Ground Bar
3/4" x 1" x 1/4"



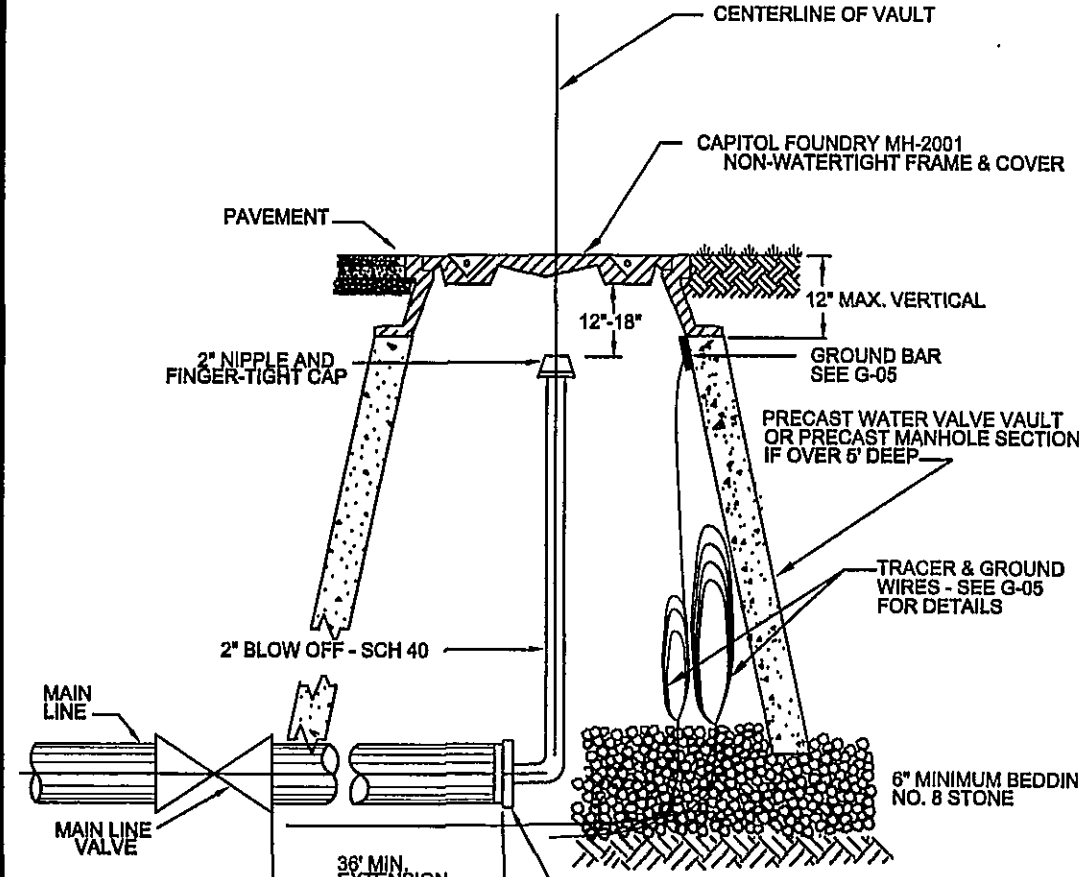
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	DATE
07/01/04	TRACER WIRE FOR NON-METALLIC PRESSURE PIPE	G-05
03/01/08		



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

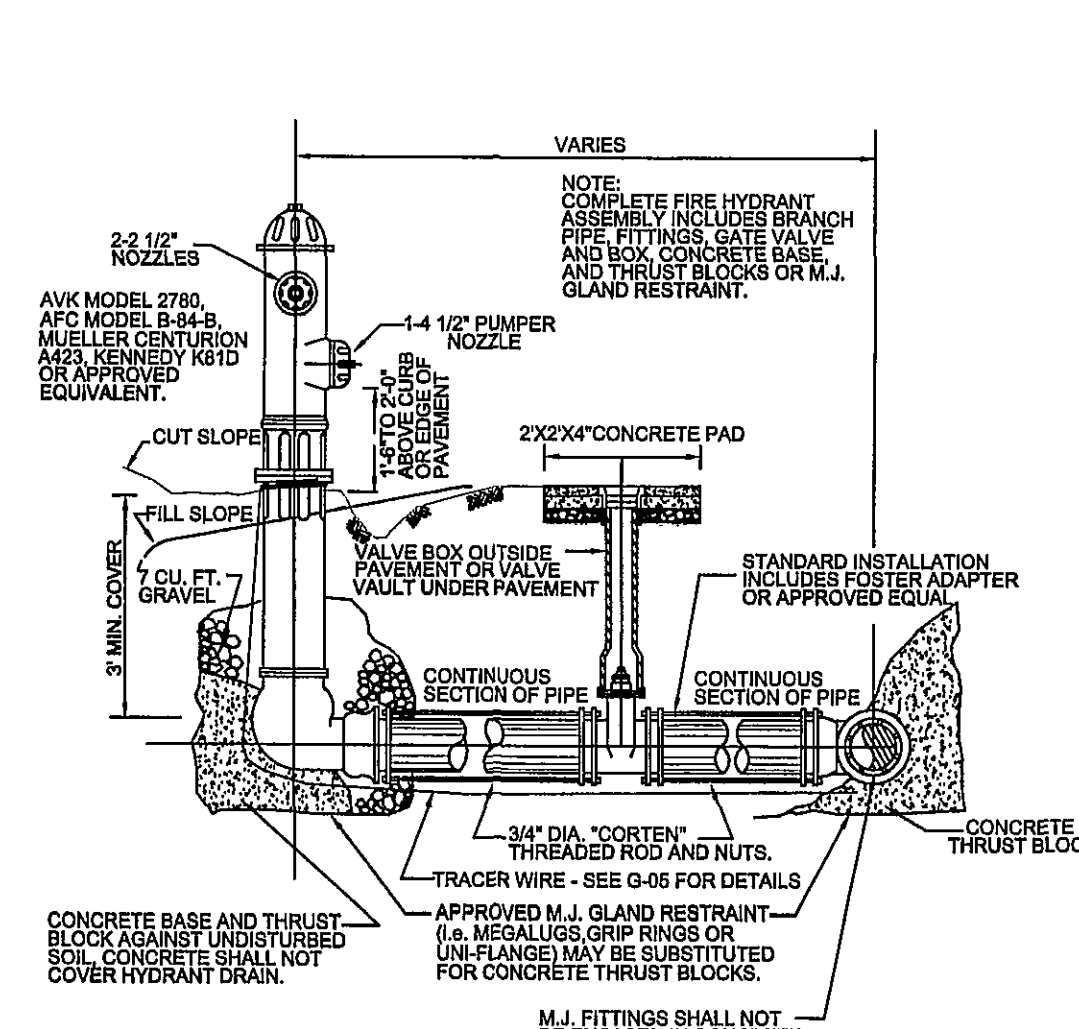
REVISION DATE	DESCRIPTION	DATE
07/01/04	WATER LINE VALVE INSTALLATION	W-08
03/01/08		



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	DATE
07/01/04	BLOW-OFF ASSEMBLY FOR MAIN LINE TEMPORARY TERMINATION	W-10
03/01/08		

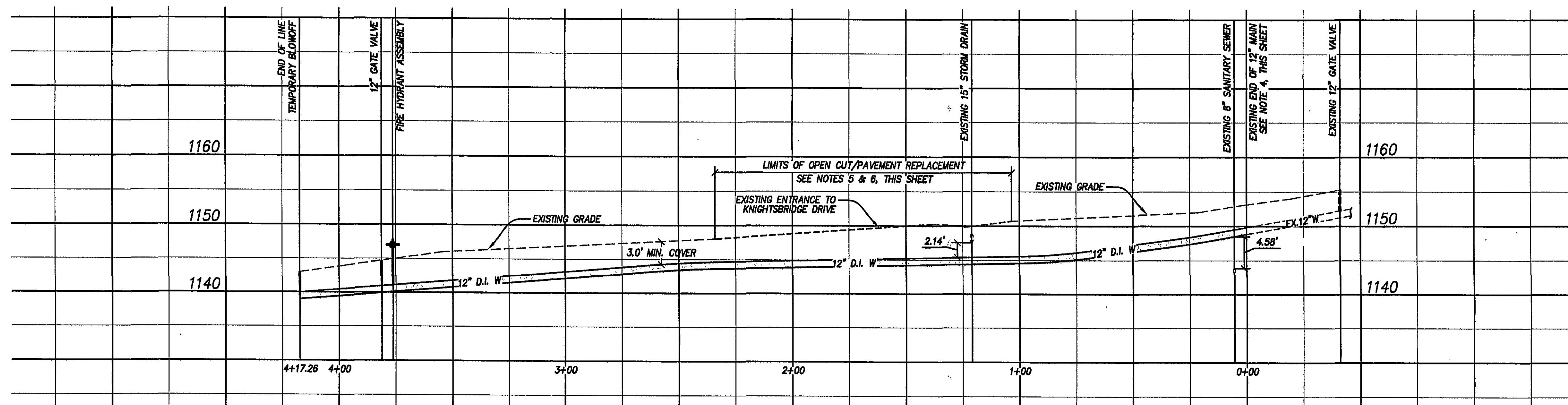
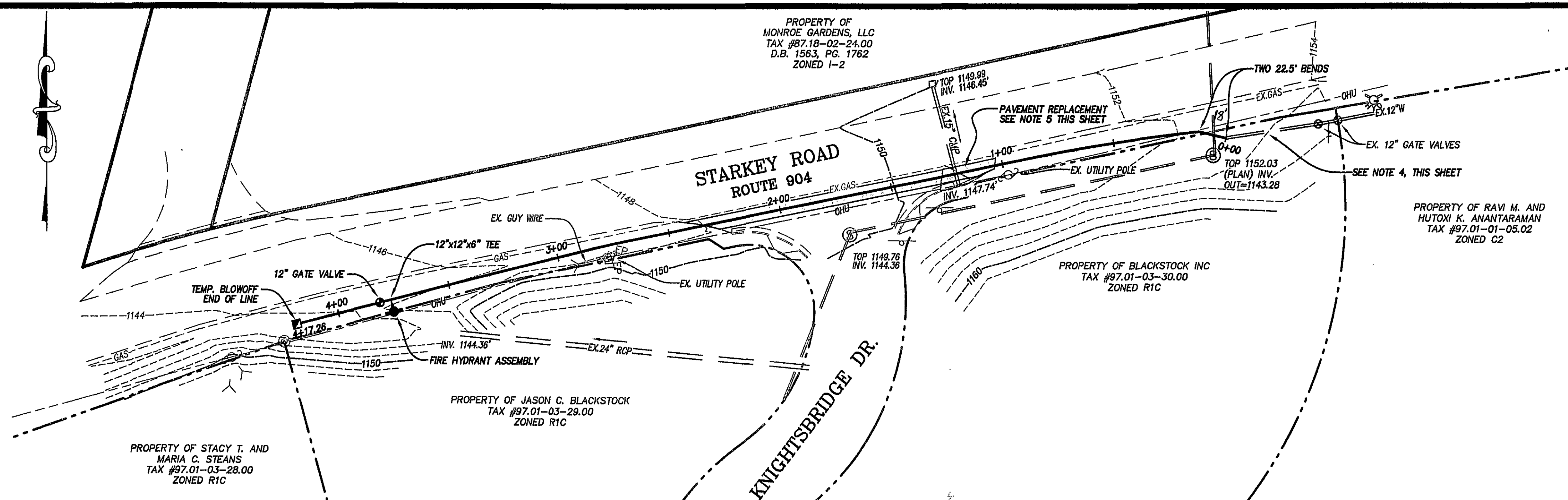
- NOTES:
1. PUBLIC HYDRANTS SHALL BE PAINTED SILVER WITH AN OIL-BASED PAINT AND PRIVATE HYDRANTS SHALL BE PAINTED WHITE WITH AN OIL-BASED PAINT.
 2. FIRE HYDRANT SHALL BE INSTALLED 2' MAX. FROM BACK OF CURB OR 6' MIN. AND 12' MAX. WHEN CURB IS NOT PRESENT. FIRE HYDRANT TO BE INSTALLED WITHIN RIGHT-OF-WAY OR EASEMENT LINE.
 3. AREA AROUND HYDRANT AT A RADIUS OF 4' TO BE LEVEL AND UNOBSTRUCTED.
 4. WATERPROOF BAGS SHALL BE PLACED OVER ALL NEWLY INSTALLED FIRE HYDRANTS.
 5. HIGH PRESSURE (OVER 120 PSI) REQUIRES THE USE OF ALL 3 RESTRAINTS.



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	DATE
07/01/04	FIRE HYDRANT ASSEMBLY	W-18
03/01/08		

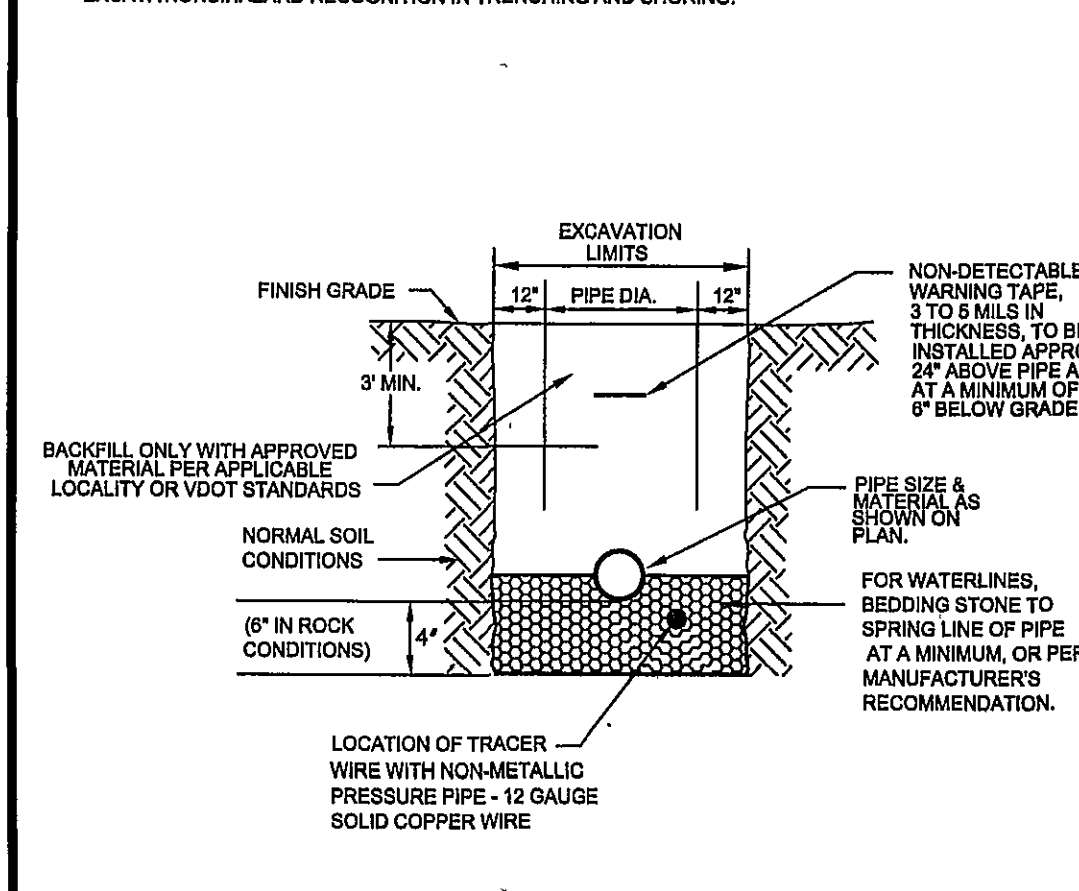
PROPERTY OF
MONROE GARDENS, LLC
TAX #87.18-02-24.00
D.B. 1563, PG. 1782
ZONED I-2



WATERLINE PROFILE

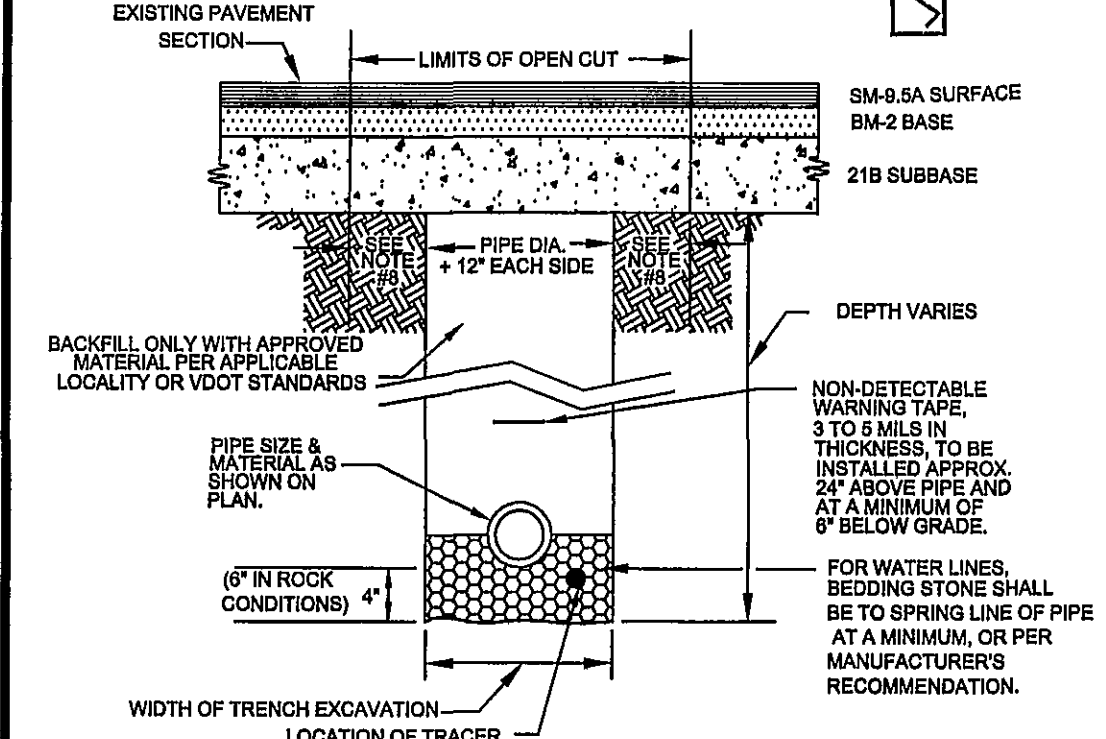
SCALE: 1"=30'(H), 1"=10'(V)

- NOTES:
1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
 2. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #88 STONE.
 3. IN AREAS NOT SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 6" LIFTS FROM BOTTOM OF TRENCH TO 1" ABOVE THE PIPE AND THE REMAINING SHALL BE PLACED IN 10" LIFTS AND SHALL BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698.
 4. BEDDING REQUIREMENTS FOR DUCTILE IRON WATER LINE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA.
 5. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING."



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

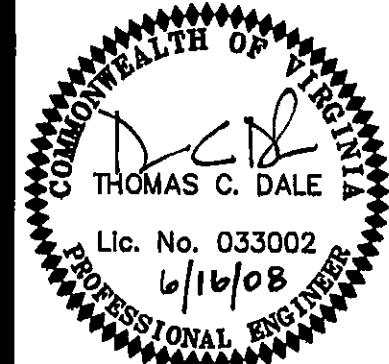
REVISION DATE	DESCRIPTION	DATE
07/01/04	BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS	W-24
03/01/08		



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	DATE
07/01/04	BEDDING AND BACKFILL UNDER PAVEMENT AND RIGHT-OF-WAY	W-25
03/01/08		

LUMSDEN ASSOCIATES P.C.
ENGINEERS SURVEYORS-PLANNERS
ROANOKE, VIRGINIA



WATERLINE PLAN, PROFILE
NOTES & DETAILS

VIRGINIA VARSITY STORAGE
STARKEY ROAD EXPANSION
PREPARED FOR
VIRGINIA VARSITY STORAGE
CAVE SPRING MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

NO.	DATE	DESCRIPTION
1	4/11/08	SHEET 3A ADDED TO PLAN SET
2	6/16/08	NOTE 3 & PROFILE LABELS
3		
4		
5		

DATE: April 11, 2008

SCALE:
1" = 30'(H), 1" = 10'(V)
COMMISSION NO: 06-289

SHEET 3A OF 5

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