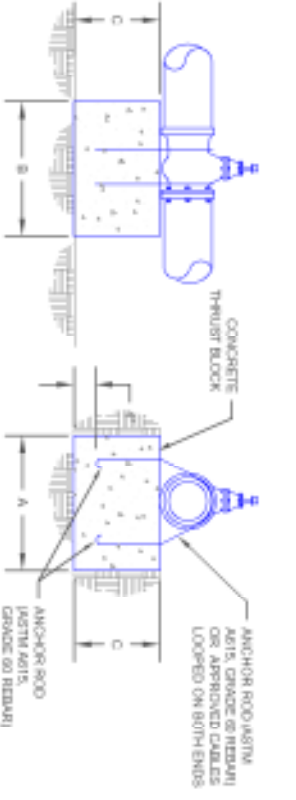


SD-1 TYPICAL BLOW-OFF ASSEMBLY



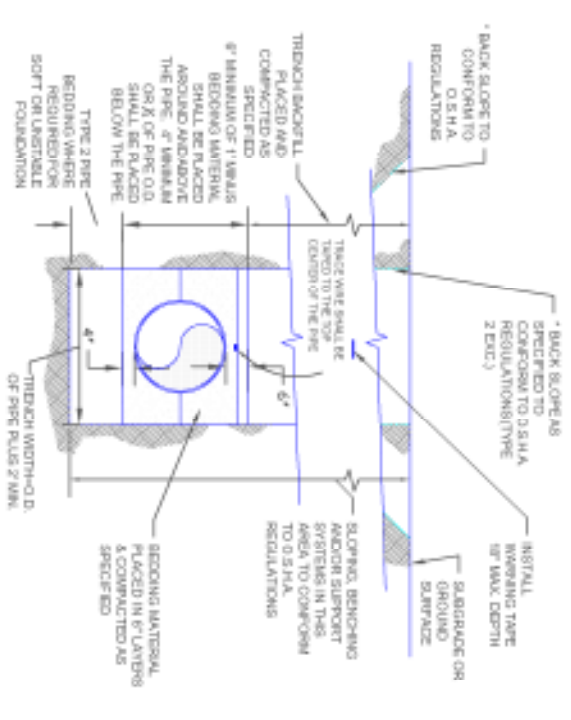
- NOTES:
1. DIAGRAM DENOTES GATE VALVES ONLY. VALVES 12 INCH AND LARGER TO BE BUTTERFLY AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS WITH BLOCS CENTERED UNDER LOAD BEARING PORTION OF VALVE.
 2. STEEL CABLE OR WIREMAN DIA. OR AS APPROVED BY THE ENGINEER W/ANCHOR BOLTS MAY BE SUBSTITUTED FOR ANCHOR ROD.

STANDARD THRUST BLOCK DIMENSIONS

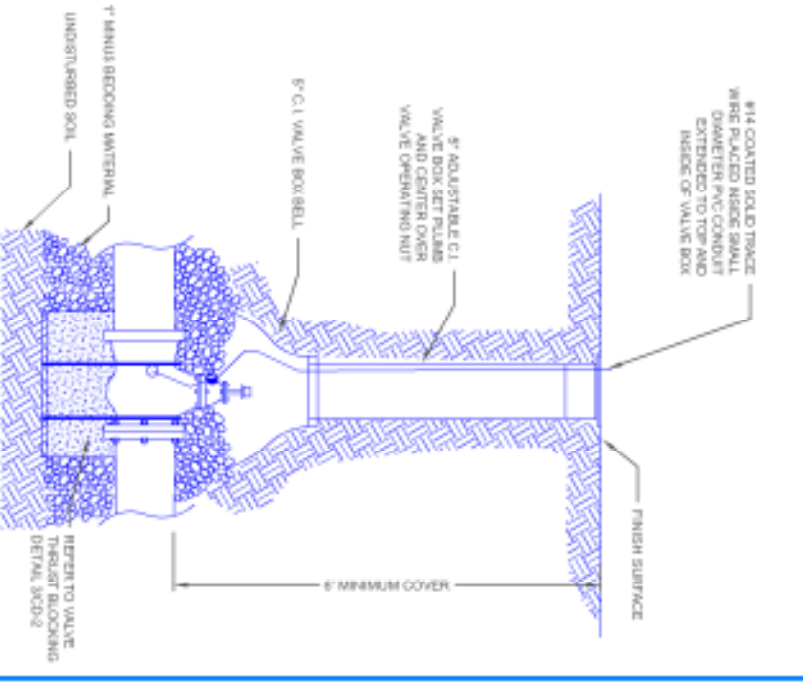
ANCHOR VALVE SIZE	300 PSI	150 PSI	300 PSI	250 PSI	300 PSI
1/2"	12"	12"	12"	12"	12"
3/4"	12"	12"	12"	12"	12"
1"	12"	12"	12"	12"	12"
1 1/4"	12"	12"	12"	12"	12"
1 1/2"	12"	12"	12"	12"	12"
1 3/4"	12"	12"	12"	12"	12"
2"	12"	12"	12"	12"	12"

NOTE: Dimensions shown above are minimum working pressure in gpm.

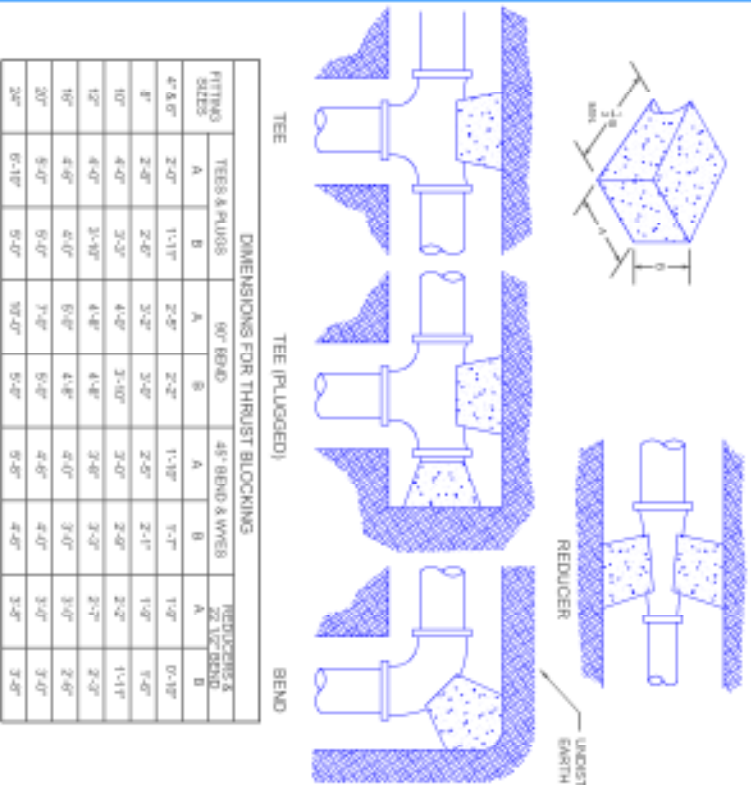
SD-2 VALVE THRUST BLOCKING DETAIL



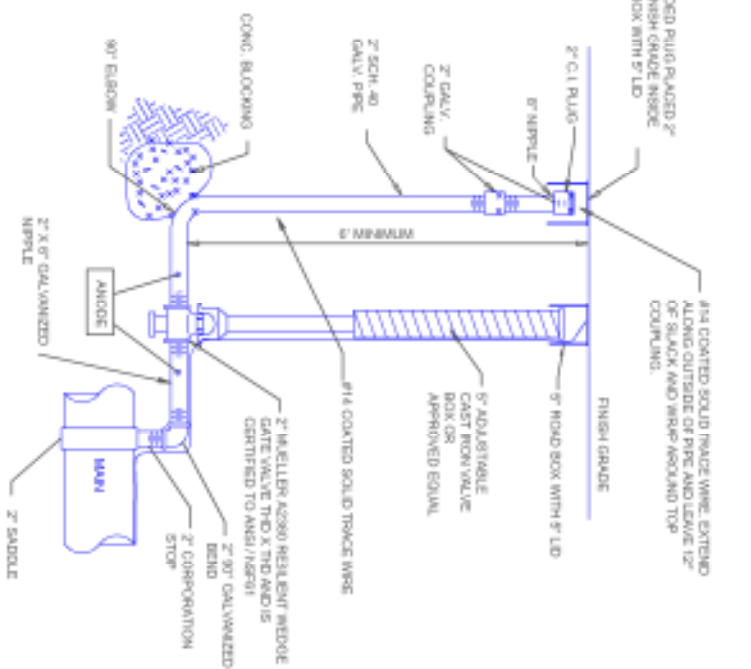
SD-3 TYPICAL UTILITY TRENCH DETAIL



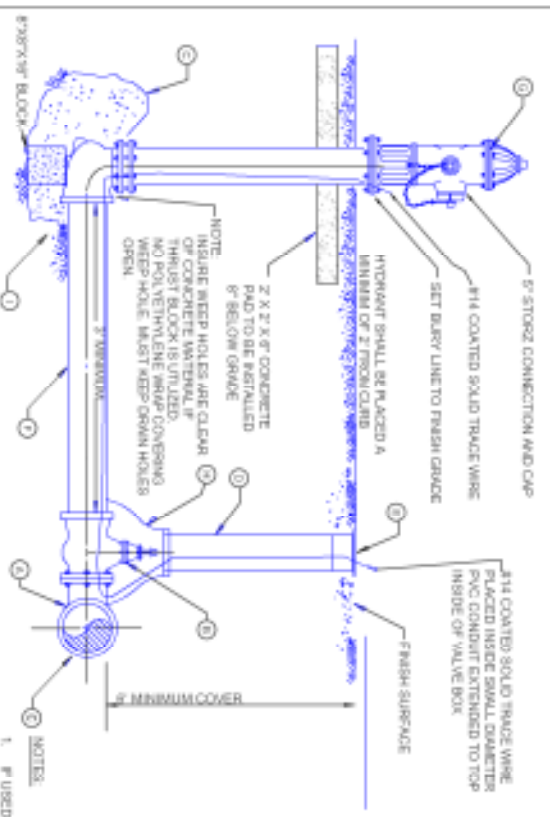
SD-4 VALVE DETAIL



SD-5 THRUST BLOCK DETAIL



SD-6 2-INCH MANUAL AIR RELIEF DETAIL



SD-7 HYDRANT DETAIL

- NOTES:
1. IF USED, DUCTILE IRON PIPE SHALL BE WRAPIPED WITH 8 MIL POLYETHYLENE.
 2. IF MAIN IS BELOW GRADE, STAKE AND DEPTH, USE BENDS AS REQUIRED TO INSURE THAT HYDRANT IS PLACED ABOVE GRADE AS SHOWN. PLACE BENDS BETWEEN HYDRANT VALVE & MAIN TO MAKE VALVE TO NORMAL DEPTH WHEN MAIN IS BELOW GRADE. SHOWN.
 3. IF THRUST BLOCK IS NOT USED, PLACE VALVE & HYDRANT ON A FIRM AND/OR WELDED ROCK.
 4. ALL JOINTS ON HYDRANT LEADS SHALL BE RESTRAINED.
 5. DIMENSIONS ARE IN FEET AND INCHES.
 6. IF 6\"/>

NO.	DESCRIPTION	DATE	BY
REVISIONS			
DESIGN ENGINEER		P.E. NO.	DATE
MISSOULA WATER CITY WATER		1345 E. BRIDGEMAN RD. BOX 2008 MISSOULA, MT 59806	Phone: (406) 552-1700
DESIGN BY	DATE	APPR. BY	DATE
DATE	BY	DATE	BY
CITY	STATE	PROJECT NUMBER	SHEET NUMBER
			SD-1