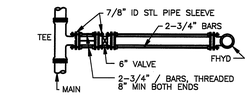
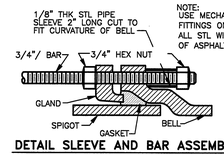


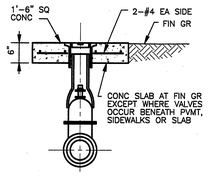
DETAIL STRAPPING FIRE HYDRANT TO MAIN



DETAIL SLEEVE AND BAR ASSEMBLY

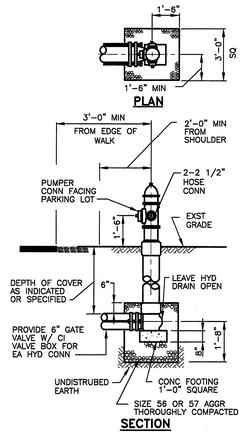
STRAPPING VALVE & FIRE HYDRANT TO MAIN

NO SCALE



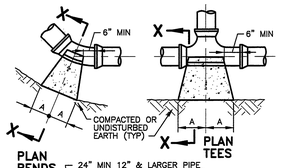
VALVE BOX SETTING

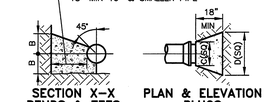
NO SCALE



FIRE HYDRANT INSTALLATION

NO SCALE



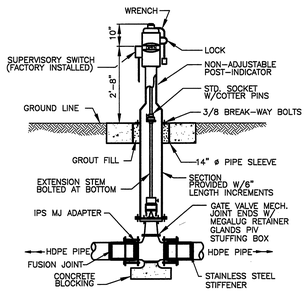


SIZE	1/4 BEND		1/8 BEND		1/16 BEND		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
10"	26"	17"	4"	17"	10"	13"	16"	20"	14"	36"
12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"
18"	42"	31"	24"	30"	15"	24"	27"	36"	30"	60"
24"	54"	40"	30"	40"	24"	26"	36"	48"	48"	78"

NOTES:
1. PROVIDE 2 SQ.FT. BEARING AREA FOR PIPE SIZES LESS THAN 6".
2. BASED ON 2000 PSF SOIL BEARING AND 100 PSI STATIC PRESSURE + AWWA WATER HAMMER.

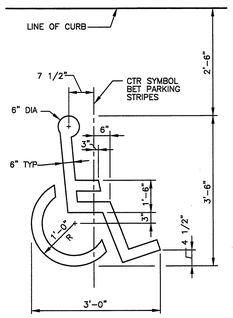
THRUST BLOCKS

NO SCALE



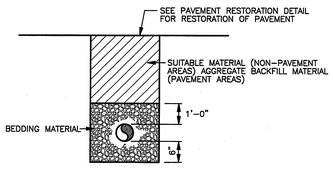
POST INDICATOR VALVE (PIV)

NO SCALE



ACCESSIBLE SYMBOL

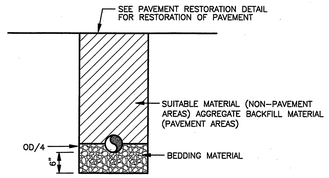
NO SCALE



NOTES:
1. MAXIMUM AND MINIMUM TRENCH WIDTHS ARE 2'-0"-1'-2" FOR 4" ø PIPE AND 2'-8"-1'-6" FOR 8"ø PIPE, MEASURED 1 FOOT ABOVE THE TOP OF THE PIPE.

TRENCH DETAIL (PVC DETAIL)

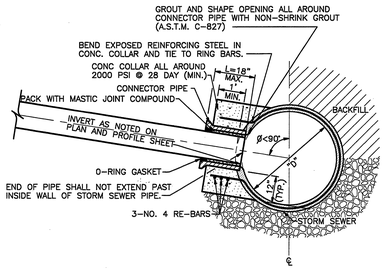
NO SCALE



NOTES:
1. MAXIMUM AND MINIMUM TRENCH WIDTHS ARE 2'-0"-1'-2" FOR 4" ø PIPE AND 2'-8"-1'-6" FOR 8"ø PIPE, MEASURED 1 FOOT ABOVE THE TOP OF THE PIPE.

TRENCH DETAIL (CONC & DI PIPE)

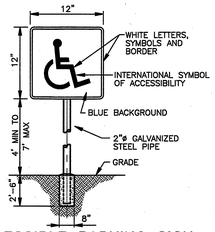
NO SCALE



PVC PIPE CONNECTION INTO STORM SEWER

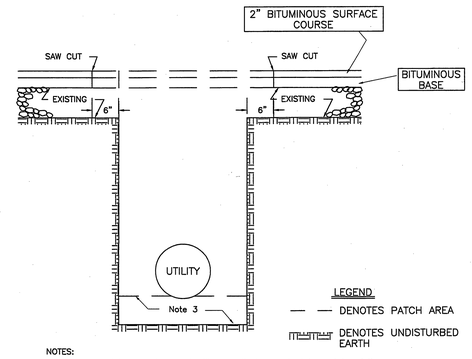
NO SCALE

12" X 18" VAN ACCESSIBLE SIGN



ACCESSIBLE PARKING SIGN

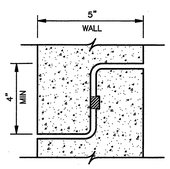
NO SCALE



NOTES:
1. Surface and base replacement will generally be required to match existing asphalt layers and shall be compacted in lifts according to Virginia Department of Transportation Road and Bridge Specifications.
2. Bedding material shall be according to requirement of each utility.
3. Saw cut to be made with mechanical saw and sides to be tacked with bituminous material type RC-250 or equal.
4. Street opening permit required before any work in public right-of-way. Contact City Development Assistance Center for permit, Phone (853-1090).
5. Contact City Engineering Inspector 48 hours prior to beginning any work, Phone (853-2856)

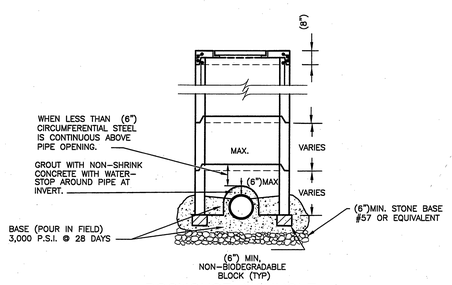
TYPICAL DETAIL PAVEMENT CUTTING AND REPLACEMENT

NO SCALE



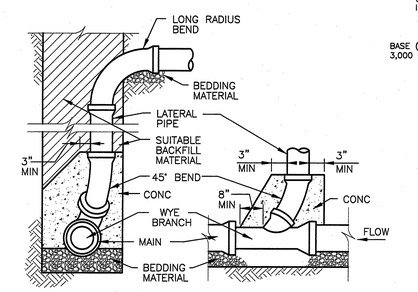
O-RING JOINT DETAIL

NO SCALE

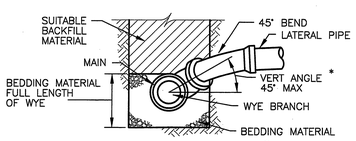


DOGHOUSE MANHOLE

NO SCALE



VERTICAL CONNECTION

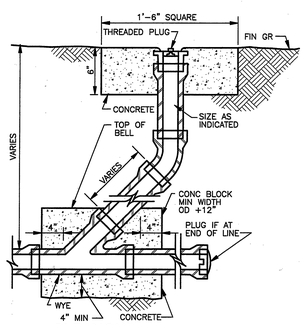


STANDARD CONNECTION VERTICAL ANGLE 45° MAX.

* WHERE VERT ANGLE EXCEEDS 45°, CONN SHALL BE CONC ENCASED.

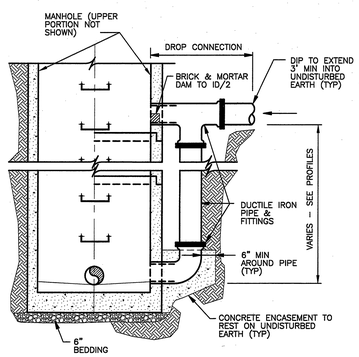
GRAVITY WYE CONNECTION

NO SCALE



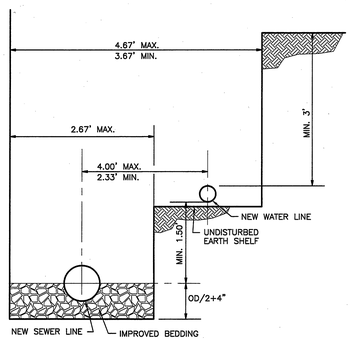
CLEANOUT

NO SCALE



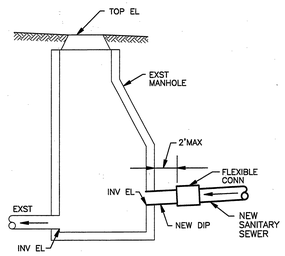
DROP MANHOLE CONNECTION

NO SCALE



METHOD OF PLACEMENT OF WATER LINE AND SEWER LINE WITHIN THE SAME TRENCH

NO SCALE



NOTES:
1. TAP INTO EXST MANHOLE BY CORING
2. SECURE 8" DIP SPOOL PIECE, IN PLACE, WITH NON-SHRINK GROUT
3. CONNECT 8" DIP SPOOL PIECE TO NEW 8" SANITARY SEWER WITH A FLEXIBLE CONNECTION
4. RESHAPE MANHOLE INVERT

CONNECTION TO EXST MANHOLE

NO SCALE

SEALS

COMMONWEALTH OF VIRGINIA MARTY L. CRON No. 036331 6/27/06 PROFESSIONAL ENGINEER

CONSULTANT

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CARILION Health System

CMC CONSOLIDATION
CARILION ROANOKE MEMORIAL HOSPITAL
ROANOKE, VIRGINIA

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ISSUE DATE: JUN 04, 2004
DESIGNED BY: MDD
DRAWN BY: MDD
CHECKED BY: MLC
SUBMITTED BY: BJC

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CIVIL

DETAILS

C502