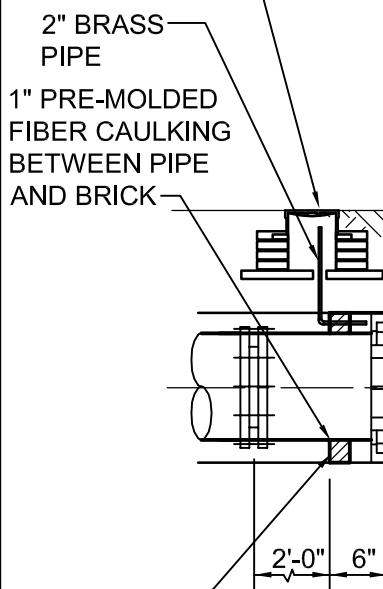


OPTION 1
 SEE "AIR VENT
 ASSEMBLY" WS_03
 (NOTE CONNECTION
 BETWEEN CASING AND
 CARRIER PIPE)



1/4 DRAINAGE DITCH

STEEL CASING
 (FOR LENGTH SEE
 CONTRACT DOCUMENTS)

SEE NOTE 4

FINISH GRADE

BRICK AND MORTAR
 CAP 4" MIN. THICKNESS

OPTION 2
 2" STAINLESS
 STEEL PIPE

1/4 DRAINAGE DITCH

BIRD SCREEN

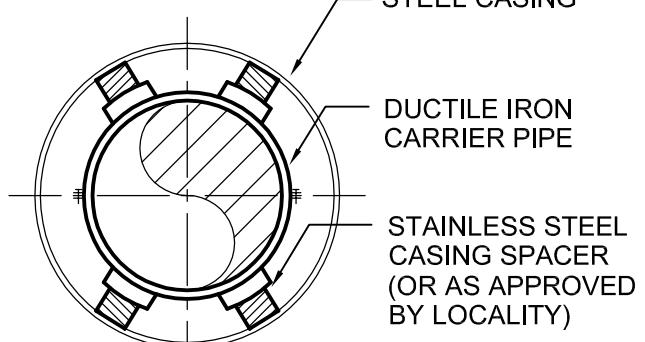


STAINLESS STEEL
 CASING SPACER
 (OR AS APPROVED
 BY LOCALITY)

TOP OF PAVEMENT

SECTION

6" 2'-0"
 RESTRAINED
 MECHANICAL
 JOINT (TYP)



SECTION A-A

SEE WS_04, SHEET 2 OF 2 FOR NOTES.

STEEL CASING DETAIL

NOT TO SCALE

STEEL CASING PIPE SELECTION CHART

DUCTILE IRON PIPE SIZE	4"	6"	8"	12"	16"	24"	30"	36"
STEEL CASING PIPE SIZE (O.D.)	12"	18"	18"	24"	30"	42"	48"	54"

NOTES:

1. ALL JOINTS INSIDE OF CASING PIPE AND ONE JOINT BEYOND SHALL BE RESTRAINED MECHANICAL JOINTS OR AS APPROVED BY LOCALITY.
2. INSTALL CASING PIPE AS SHOWN ON DRAWINGS OR MIN. 5 FT. BEYOND EDGE OF PAVEMENT.
3. STAINLESS STEEL SPACERS
SPACERS SHALL BE BOLT-ON STYLE WITH A TWO PIECE SHELL MADE FROM T-304 STAINLESS STEEL OF A MINIMUM 14 GAUGE THICKNESS. THE SHELL SHALL BE LINED WITH A RIBBED PVC SHEET OF A 0.090" THICKNESS THAT OVERLAPS THE EDGES. RUNNERS MADE FROM UHMW POLYMER, SHALL BE ATTACHED TO RISERS AT APPROPRIATE POSITIONS TO PROPERLY LOCATE THE CARRIER WITHIN THE CASING AND TO EASE INSTALLATION. RISERS TO BE MADE FROM T-304 STAINLESS STEEL OF A MINIMUM 14 GAUGE THICKNESS AND SHALL BE ATTACHED TO THE SHELL BY MIG WELDING. ALL WELDS SHALL BE FULLY PASSIVATED. ALL FASTENERS SHALL BE MADE FROM T-304 STAINLESS STEEL. CASING SPACERS SHALL BE MODEL CCS AS MANUFACTURED BY CASCADE WATERWORKS MANUFACTURING COMPANY OF YORKVILLE, IL., MODEL SSI AS MANUFACTURED BY ADVANCE PRODUCTS & SYSTEMS, INC. OF LAFAYETTE, LA., OR APPROVED EQUAL.
4. SPACER WIDTH AND PLACEMENT INTERVALS
IN ALL INSTANCES SPACER SHOULD BE PLACED TO SUPPORT THE CARRIER WITHIN TWO FEET OF THE END OF EACH PIPE JOINT. CONSULT SPACER MANUFACTURER FOR RECOMMENDATIONS ON SPACER WIDTH AND ADDITIONAL PLACEMENT INTERVALS.

STEEL CASING DETAIL

NOT TO SCALE

REFERENCE	CATEGORY	DATE	SHEET No.	DETAIL No.
200,801-804	WATER & SANITARY	6/16	2 OF 2	WS_04