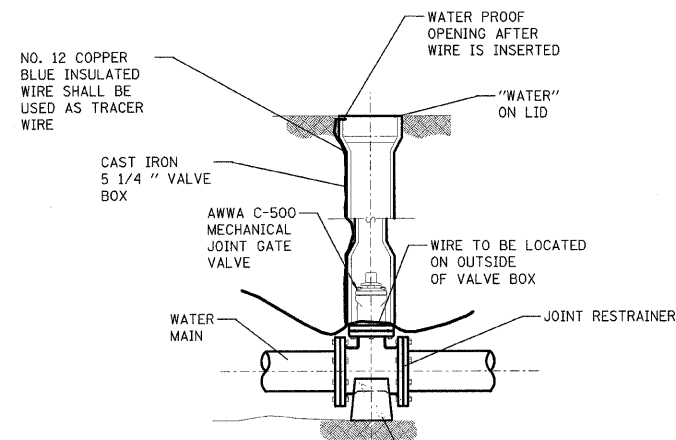
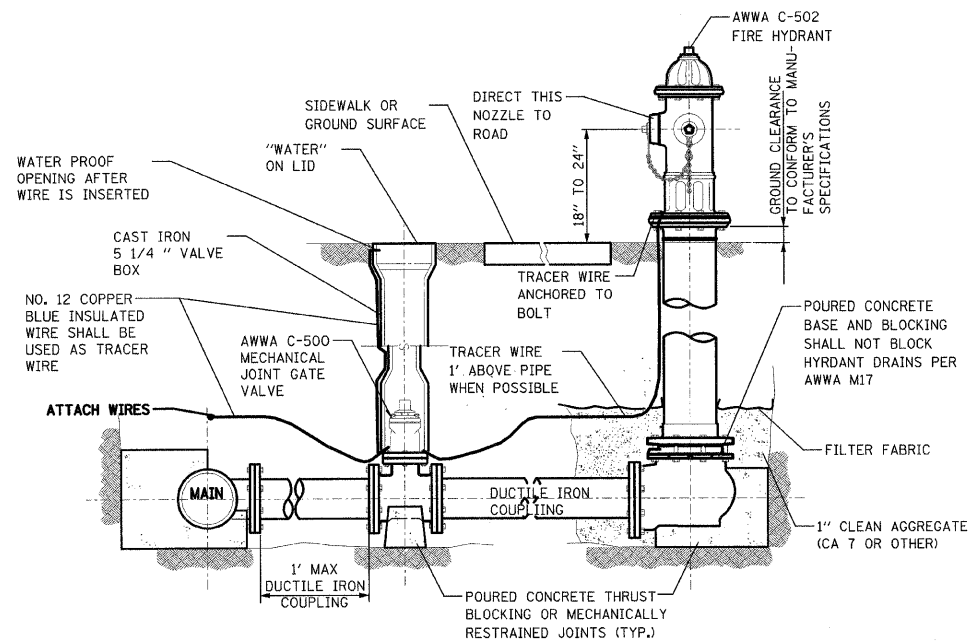


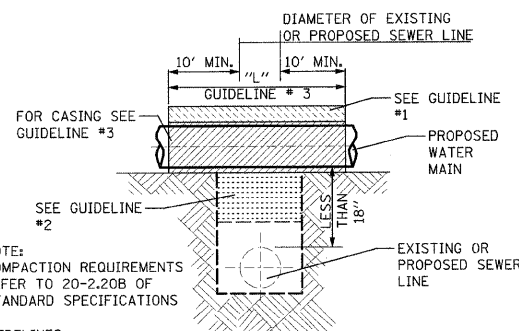
DETAIL FOR INSERTING GATE VALVE IN EXISTING WATER MAIN



STANDARD VALVE & VALVE BOX



STANDARD HYDRANT & VALVE BOX

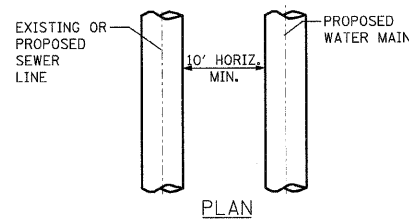


NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B OF STANDARD SPECIFICATIONS

GUIDELINES

1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.
4. PROVED ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.

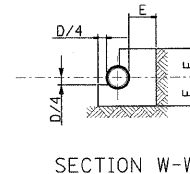
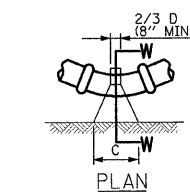
WATER MAIN ABOVE SEWER LINE WITH LESS THAN 18" VERTICAL SEPERATION



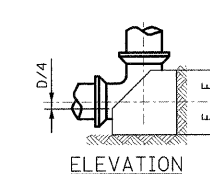
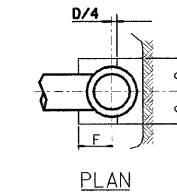
NOTE:

1. WHEN PROPOSED WATER MAIN IS LOCATED 10' OR MORE FROM EXISTING OR PROPOSED SEWER LINE NO SPECIAL CONSTRUCTION REQUIRED.
2. IF HORIZONTAL SEPERATION BETWEEN PROPOSED WATER MAIN & PROPOSED OR EXISTING SEWER LINE IS LESS THAN 10' MIN., PROPOSED WATER MAIN & PROPOSED OR EXISTING SEWER LINE MUST BE SEPERATED 18" VERTICAL IN UNDISTURBED SOIL.

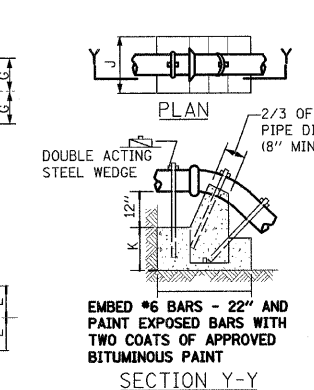
HORIZONTAL SEPERATION



THRUST BLOCK FOR HORIZONTAL BEND



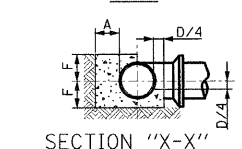
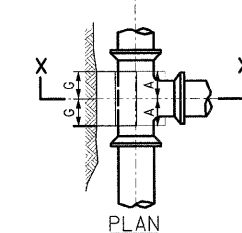
THRUST BLOCK FOR VERTICAL ELBOW



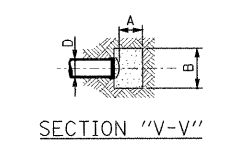
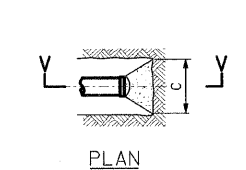
EMBED #6 BARS - 22" AND PAINT EXPOSED BARS WITH TWO COATS OF APPROVED BITUMINOUS PAINT

SECTION Y-Y

VERTICAL 1/16 & 1/8 BEND



THRUST BLOCK FOR TEES



THRUST BLOCK FOR CAP

THRUST BLOCK DIMENSIONS										
D	A	B	C	E	F	G	H	J	K	L
4" & 6"	8"	11"	1'-3"	8"	8"	8"	3"	2'-6"	2'-6"	3'-0"
8"	9"	1'-2"	1'-8"	9"	10"	9"	3"	3'-0"	2'-9"	4'-0"
10"	10"	1'-6"	2'-1"	10"	1'-0"	1'-0"	3"	4'-0"	3'-0"	4'-6"
12"	1'-0"	1'-8"	2'-6"	11"	1'-3"	1'-0"	3"	4'-6"	3'-6"	4'-9"
16"	1'-2"	2'-4"	3'-4"	1'-3"	1'-8"	1'-4"	4"	5'-2"	4'-0"	6'-6"
20"	1'-3"	3'-0"	4'-2"	1'-6"	2'-1"	1'-9"	4"	5'-6"	4'-9"	8'-0"
24"	1'-4"	3'-6"	5'-0"	1'-8"	2'-6"	2'-0"	5"	6'-0"	5'-6"	9'-6"

NOTE: MINIMUM REQUIRED BEARING DIMENSIONS. CARRY CONCRETE TO SOLID GROUND

THRUST BLOCK DETAILS

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p>TYPICAL WATER DETAILS</p> <p>SCALE: VERT. HORIZ. DATE</p> <p>DRAWN BY KOJ CHECKED BY LWJ</p>

CADD FILE: H:\4812\design\070-071W_details.dgn
PLOTTED: 11/3/2008

H.M. & G. NO. 402