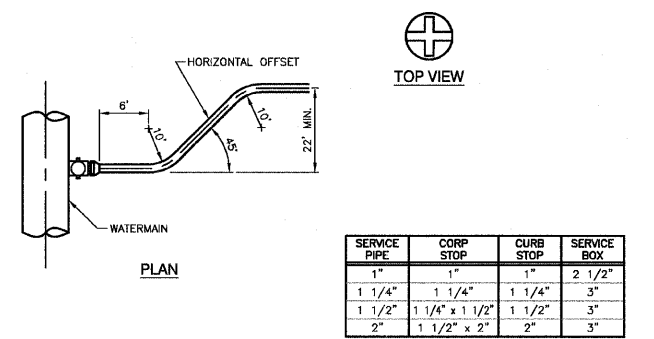
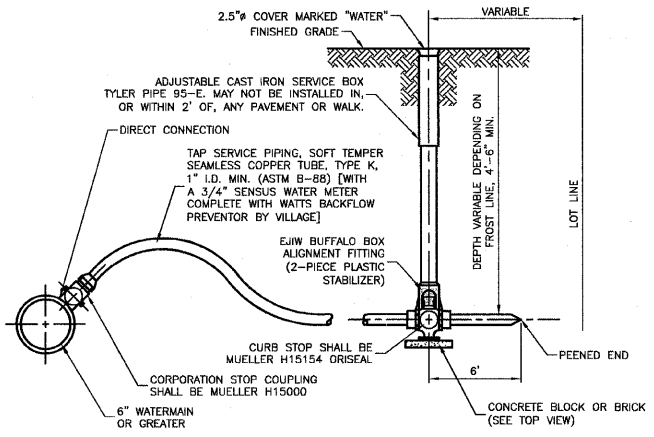
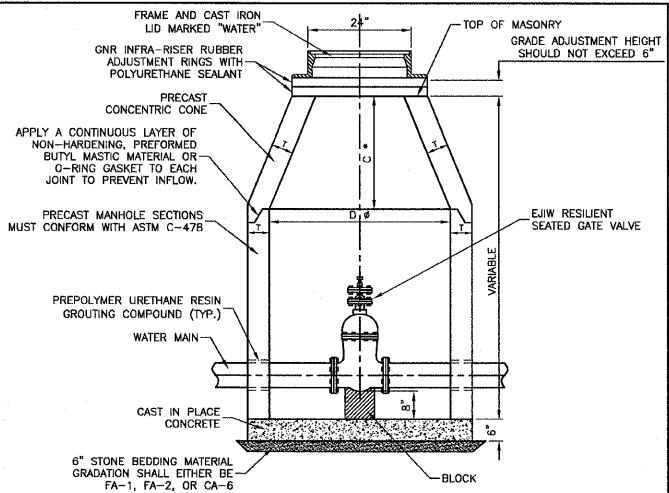


F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	3277R	COOK	541	182
STA.		TO STA.		
FED. ROAD DIST. NO.	BLK/MS	FED. RD PROJECT		

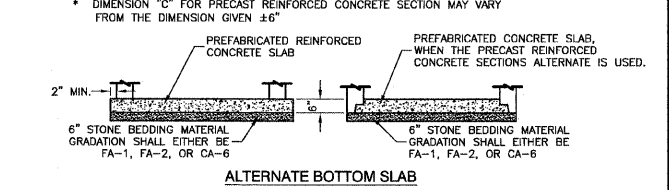
CONTRACT NO. 60774



TYPICAL WATER SERVICE INSTALLATION

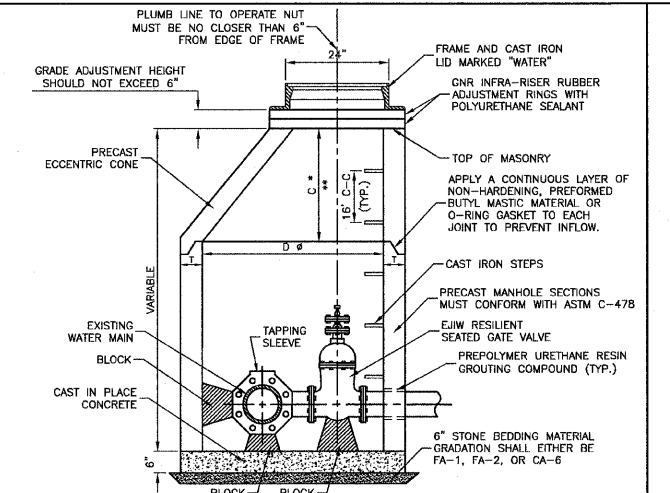


ALTERNATE MATERIALS FOR WALLS	D	C	T
PRECAST REINFORCED CONCRETE SECTION	4'-0"	2'-6"	4"
5'-0"	3'-9"	5"	
CAST-IN-PLACE CONCRETE	4'-0"	2'-6"	6"
5'-0"	3'-9"	6"	

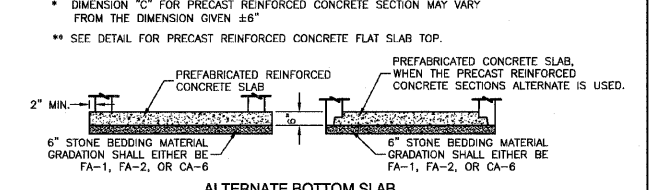


- NOTES:
1. CONCENTRIC CONE REQUIRED (VALVE TO ALIGN W/ CENTER OF FRAME OPENING).
 2. USE 4'-0" FOR WATER MAIN SIZES 8" AND UNDER. 5'-0" FOR SIZES 10" AND ABOVE.
 3. VALVE VAULT TO CONFORM TO ASTM C-478.
 4. ALL VALVES SHALL BE EAST JORDAN IRON WORKS RESILIENT SEATED GATE VALVES.
 5. ALL VALVES SHALL OPEN COUNTER CLOCKWISE AND CLOSE CLOCKWISE WITH NON-RISING STEM.
 6. PROVIDE CA-6 AGGREGATE BACKFILL MATERIAL AROUND VAULT TO SUB-GRADE ELEVATION; IN PAVED AREAS.

VALVE IN VAULT DETAIL

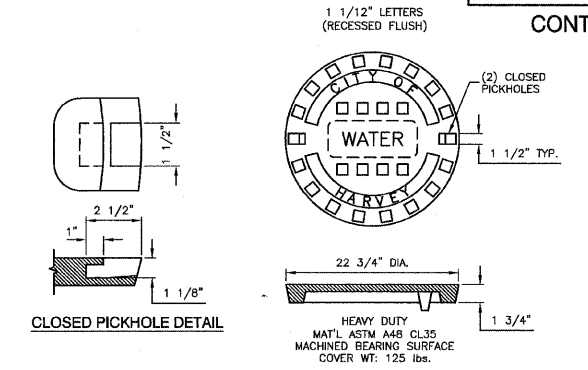


ALTERNATE MATERIALS FOR WALLS	D	C	T
PRECAST REINFORCED CONCRETE SECTION	5'-0"	3'-9"	5"
6'-0"	3'-9"	6"	
CAST-IN-PLACE CONCRETE	5'-0"	3'-9"	6"
6'-0"	3'-9"	6"	

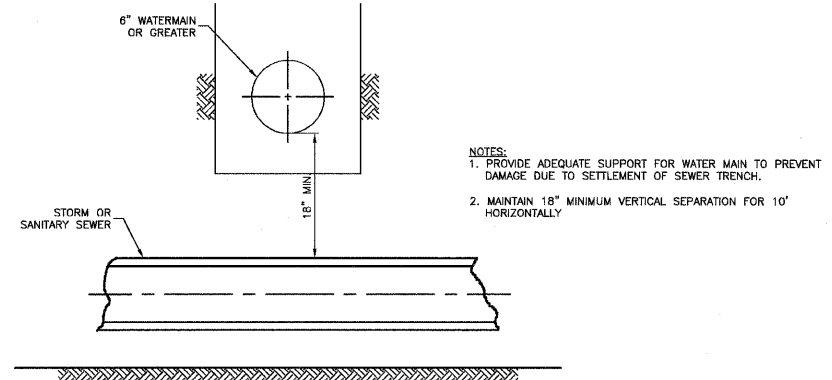


- NOTES:
1. VALVE TO ALIGN W/ CENTER OF FRAME OPENING.
 2. USE 5'-0" FOR WATER MAIN SIZES 8" AND UNDER. 6'-0" FOR SIZES 10" AND ABOVE.
 3. VALVE VAULT TO CONFORM TO ASTM C-478.
 4. ALL VALVES SHALL BE EAST JORDAN IRON WORKS RESILIENT SEATED GATE VALVES.
 5. ALL VALVES SHALL OPEN COUNTER CLOCKWISE AND CLOSE CLOCKWISE WITH NON-RISING STEM.
 6. PROVIDE CA-6 AGGREGATE BACKFILL MATERIAL AROUND VAULT TO SUB-GRADE ELEVATION; IN PAVED AREAS.

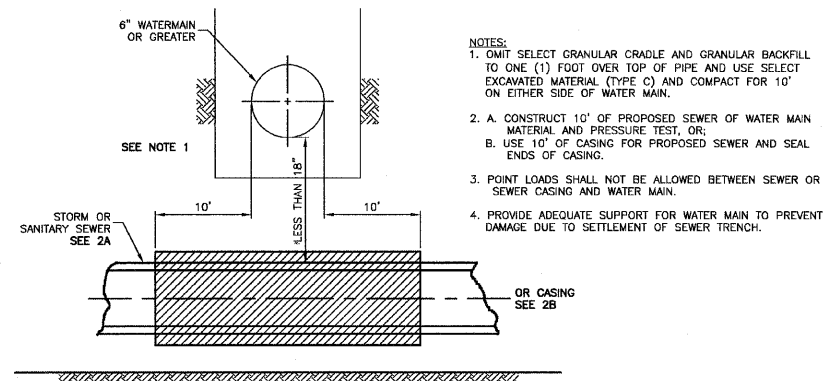
VALVE IN VAULT DETAIL FOR PRESSURE CONNECTION



SPECIAL LETTERED WATER VALVE VAULT LID



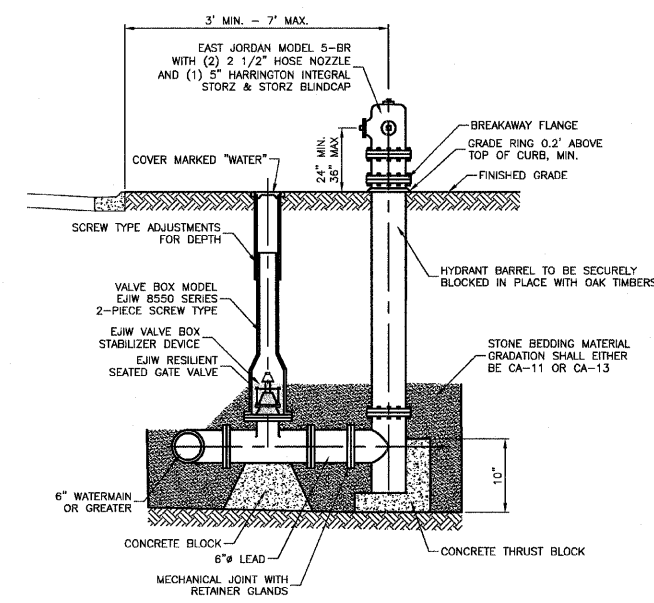
PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH 18" MINIMUM SEPARATION



PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH LESS THAN 18" MINIMUM SEPARATION

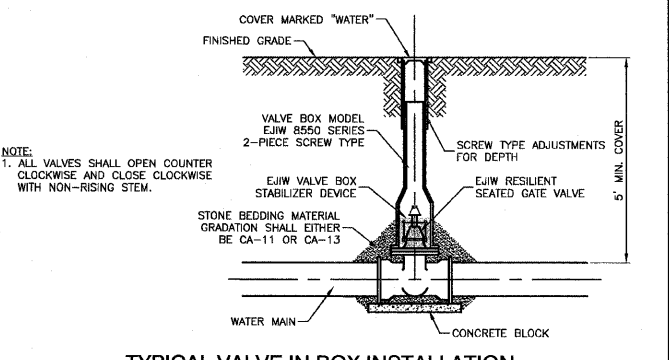
NOTE: TYPE C MATERIAL TO BE COMPACTED TO 90% OF MODIFIED PROCTOR MAXIMUM DENSITY

WATER AND SEWER SEPARATION REQUIREMENTS

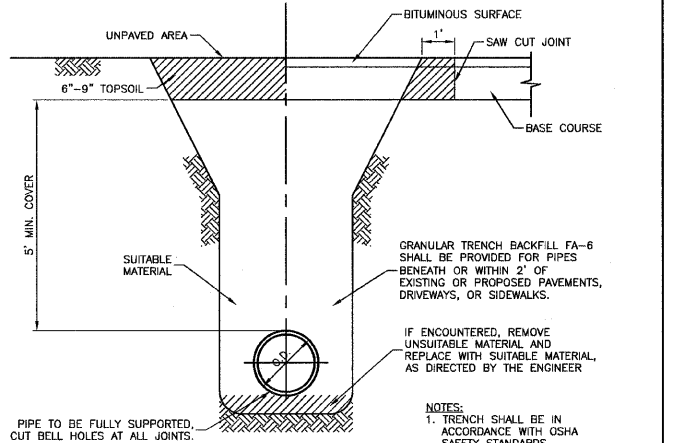


- NOTES:
1. HYDRANTS SHALL BE INSTALLED FACING TOWARD THE CURB. NO HYDRANT SHALL BE INSTALLED WITHIN 48" OF ANY OBSTRUCTION NOR SHALL ANY OBSTRUCTION BE PLACED WITHIN 48" OF A HYDRANT. ALL HYDRANTS AND VALVE BOX COVERS SHALL BE PAINTED SAFETY RED BY THE MANUFACTURER.
 2. ALL VALVES SHALL OPEN COUNTER CLOCKWISE AND CLOSE CLOCKWISE WITH NON-RISING STEM.
 3. HYDRANT DRAIN HOLE SHALL BE FREE OF CONCRETE.

FIRE HYDRANT INSTALLATION



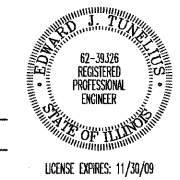
TYPICAL VALVE IN BOX INSTALLATION



TRENCH BACKFILL DETAIL FOR WATERMAIN

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:

Edward J. Vanalis
2/20/2008



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED WATERMAIN RELOCATION
STANDARD DETAILS

SCALE: VERT. NONE
HORIZ. NONE
DATE 2/29/08

DRAWN BY PS
CHECKED BY EJT