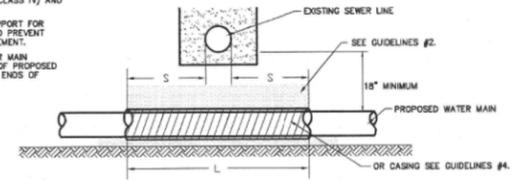
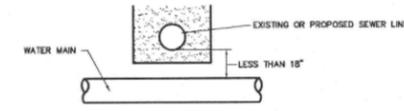


PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION.

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



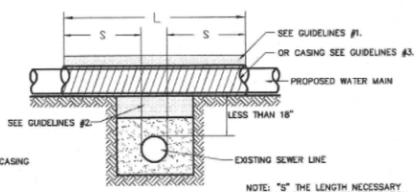
PLACEMENT OF WATER MAIN BELOW EXISTING OR PROPOSED SEWER LINE WITH LESS THAN 18" MINIMUM VERTICAL SEPARATION. **NOT ALLOWED***



NOT ALLOWED*
MUST MAINTAIN 18" VERTICAL SEPARATION
WATER AND SEWER SEPARATION REQUIREMENTS

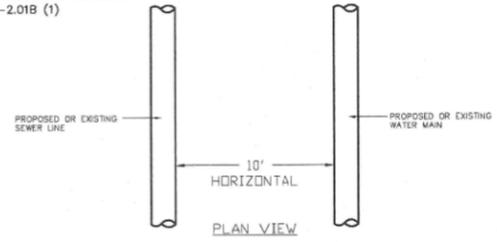
PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" VERTICAL SEPARATION.

- GUIDELINES**
- OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
 - IF SELECT GRANULAR BACKFILL EXISTS REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
 - USE 1/2" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.
 - POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN CASING AND SEWER.

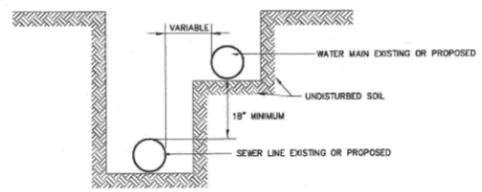


WATER AND SEWER SEPARATION REQUIREMENTS

WHEN PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED. SEE SECTION 41-2.01B (1)



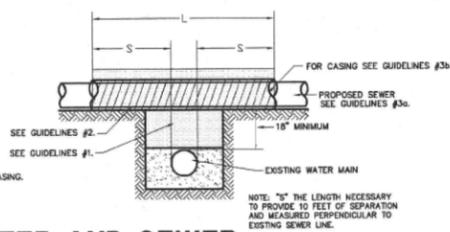
WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY. SEE SECTION 41-2.01B (2)



WATER AND SEWER SEPARATION REQUIREMENTS

PROPOSED SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION ABOVE EXISTING WATER MAIN.
NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B

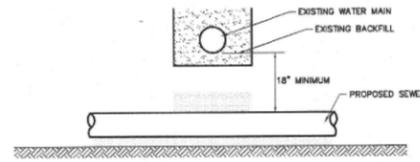
- GUIDELINES**
- IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF PROPOSED SEWER TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
 - OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF SEWER AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
 - CONSTRUCT 1/2" FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR:
 - USE 1/2" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED SEWER AND SEAL ENDS OF CASING.



WATER AND SEWER SEPARATION REQUIREMENTS

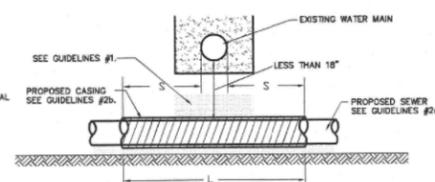
PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH 18" MINIMUM VERTICAL SEPARATION.

- GUIDELINES**
- PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.

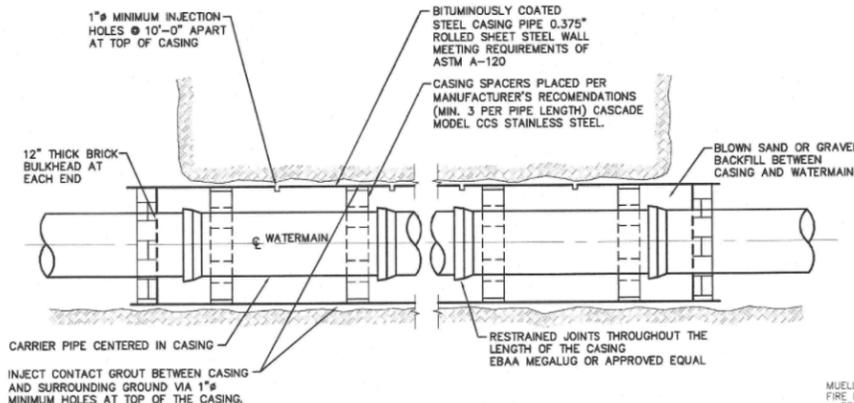


PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH LESS THAN 18" VERTICAL SEPARATION.

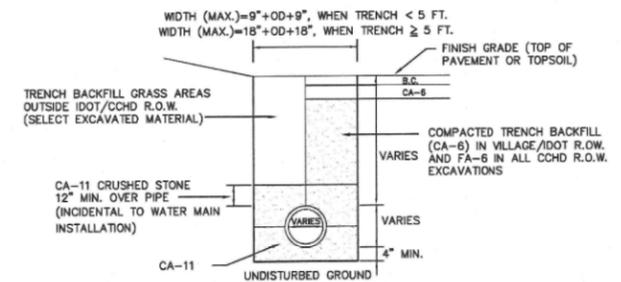
- GUIDELINES**
- OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF SEWER AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR "S" FEET ON EACH SIDE OF WATER MAIN.
 - CONSTRUCT 1/2" FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR:
 - USE 1/2" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED SEWER AND SEAL ENDS OF CASING.
 - PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.



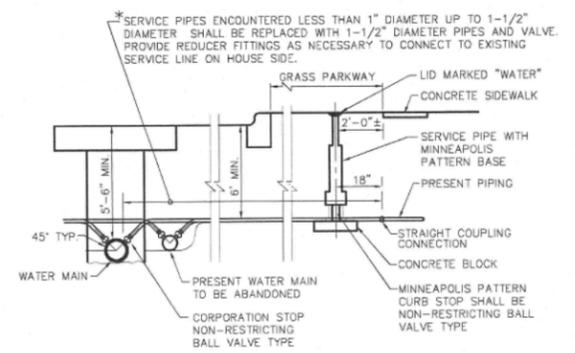
WATER AND SEWER SEPARATION REQUIREMENTS



CASING PIPE INSTALLATION
NOT TO SCALE

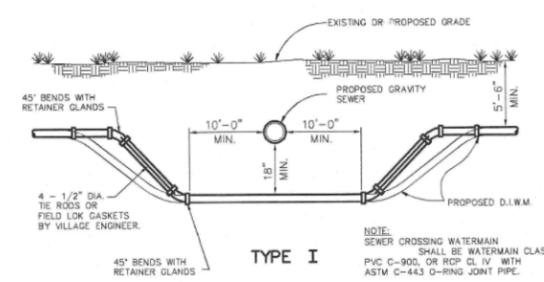


WATERMAIN TRENCH

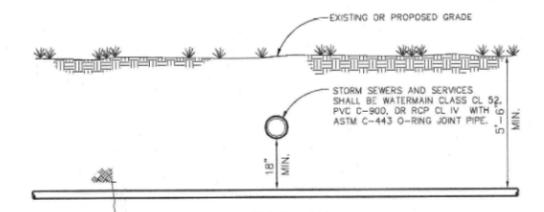


- NOTES:**
- EXISTING SERVICE PIPES MAY BE OF VARYING SIZES AND MATERIALS. CONTRACTOR SHALL FURNISH SUITABLE CONNECTOR TO COPPER PIPE AND FITTINGS.
 - ALL CORP AND CURB STOPS SHALL BE FLARE TYPE CONNECTIONS.
 - THE EXISTING SERVICE BOX SHALL BE REMOVED AND THE NEW SERVICE BOX PLACED AS CLOSE AS POSSIBLE TO THE ORIGINAL LOCATION.
 - SERVICE TAP SHALL INCLUDE SMITH-BLAIR 317 SERVICE SADDLE OR APPROVED EQUAL.

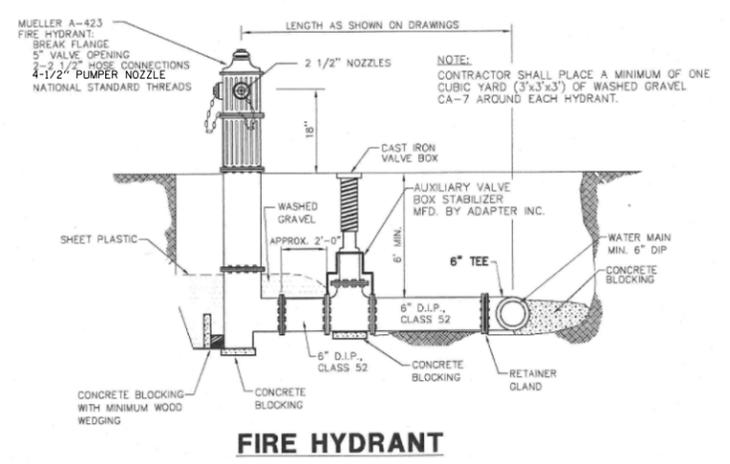
TYPICAL WATER SERVICE CONNECTION



TYPE I



TYPE II WATERMAIN CROSSING



FIRE HYDRANT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN DETAILS

FILE NAME =	USER NAME = BAW\jort	DESIGNED - JLV	REVISED -
g:\ch11\0158\road\Sheets\0160\T35-SHT-WM	STD-NORTHFIELD.dgn	DRAWN - KAL	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - RCB	REVISIONS -	REVISED -
PLOT DATE = 11/1/2012	DATE - 10/31/2012	REVISED -	

SCALE: N.T.S.	SHEET NO. 230 OF 919 SHEETS	F.A.P. RTE. 305	SECTION (1920.01,1518,2022&1922,4BR)	COUNTY COOK	TOTAL SHEETS 919	SHEET NO. 230
				CONTRACT NO. 60T35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						