

NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO THE EXISTING WATER MAIN

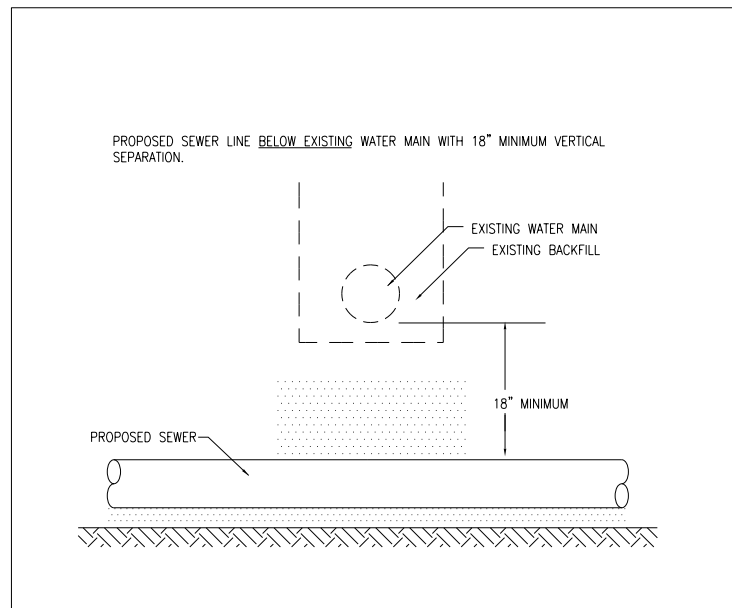
GUIDELINES

- 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" FEET.
- A) CONSTRUCT "L" FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR;
B) USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED SEWER AND SEAL ENDS OF CASING.

WATER AND SEWER SEPARATION REQUIREMENTS

VERTICAL SEPARATION

DETAIL 2



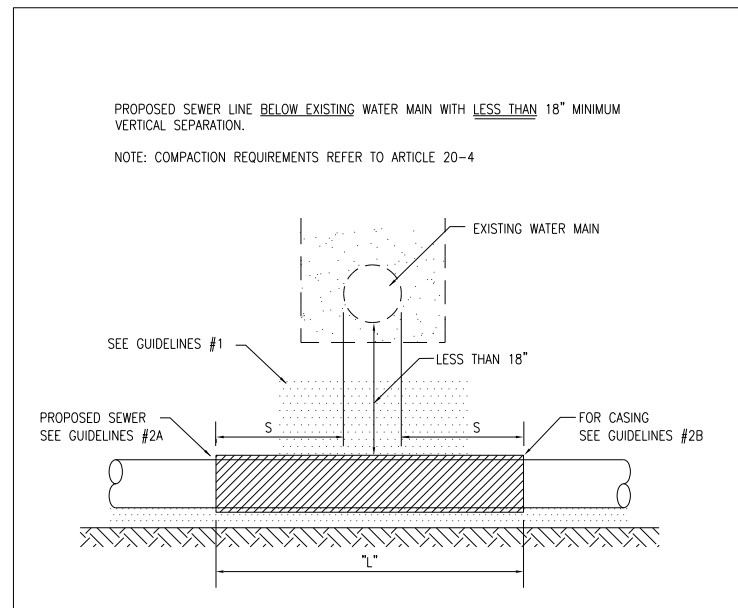
GUIDELINES

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

WATER AND SEWER SEPARATION REQUIREMENTS

VERTICAL SEPARATION

DETAIL 3



NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO THE EXISTING WATER MAIN

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.
- A) CONSTRUCT "L" FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR;
B) USE "L" 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

VERTICAL SEPARATION

DETAIL 4

NOTE:

- IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED IN SECTION 8-003.01 IN THE BDE MANUAL, BOTH THE WATER MAIN AND STORM SEWER MUST BE EITHER:
 - CONSTRUCTED WITH WATER MAIN QUALITY PIPE AND JOINTS THAT COMPLY WITH 35 ILL. ADM. CODE 653.119 AND SHALL BE PRESSURE TESTED IN ACCORDANCE WITH "AWWA STANDARD FOR INSTALLATION OF DUCTILE-IRON WATER MAINS AND THEIR APPURTENANCES" FOR A WORKING PRESSURE EQUAL TO OR GREATER THAN THE MAXIMUM POSSIBLE SURCHARGE HEAD TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.
 - ENCASED IN A CARRIER PIPE WITH SEALED ENDS AND JOINTS COMPLYING WITH 35 ILL. ADM. CODE 653.119.
- THE WATER MAIN QUALITY SEWER OR CARRIER PIPE SHALL EXTEND ON EACH SIDE OF THE CROSSING TO A POINT WHERE THE PERPENDICULAR DISTANCE FROM THE OUTSIDE OF THE WATER MAIN TO THE OUTSIDE OF THE STORM SEWER IS AT LEAST 10 FEET.
- POINT LOADS BETWEEN THE SEWER OR SEWER CASING AND THE WATER MAIN ARE PROHIBITED.
- ADEQUATE SUPPORT SHALL BE PROVIDED FOR THE WATER MAIN TO PREVENT DAMAGE RESULTING FROM SETTLING OF THE SEWER TRENCH.
- FOR THE REQUIRED LENGTH OF THE WATER MAIN QUALITY STORM SEWER OR CARRIER PIPE, OMIT THE SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE FOOT OVER THE CROWN OF THE SEWER AND USE SELECTED EXCAVATED MATERIAL (CLASS IV) COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY. WHERE IT IS NOT POSSIBLE FOR A PROPOSED SEWER TO CROSS UNDER AN EXISTING WATER MAIN, THE SPECIFICATIONS SHALL REQUIRE THE CONSTRUCTION METHODS STIPULATED ABOVE AND THAT ANY SELECT GRANULAR BACKFILL ABOVE THE CROWN OF THE WATER MAIN BE REMOVED WITHIN THE WIDTH OF THE PROPOSED STORM SEWER TRENCH AND BE REPLACED WITH SELECT EXCAVATED MATERIAL (CLASS IV) COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY. WHERE A PROPOSED STORM SEWER MUST CROSS OVER A PROPOSED WATER MAIN, AN 18-INCH VERTICAL SEPARATION SHALL BE MAINTAINED.
- REFER TO THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS FOR MORE DETAILS.

FILE NAME : C:\Projects\3006-DS-002\05 CAD\Shets\160L28-sh-t-drain-notes.dgn
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DESIGNED - JKO	REVISED -
DRAWN - JKO	REVISED -
CHECKED - NH	REVISED -
DATE - 2/6/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 173
AT TIFFANY ROAD**

DRAINAGE DETAILS

SCALE: NTS SHEET NO. 3 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	134-N-1	LAKE	62	24
CONTRACT NO.				60L28

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT
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