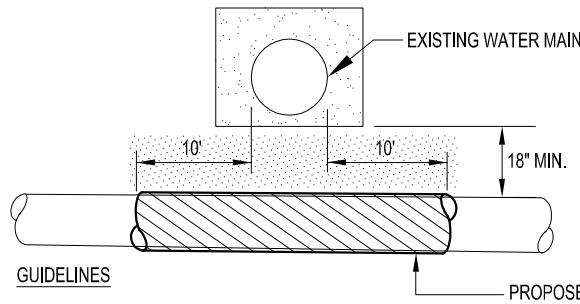


**PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH 18" MINIMUM SEPARATION.**

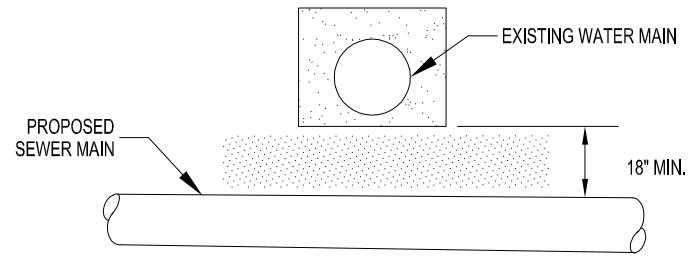


NOTE:  
CLASS IV MATERIALS  
SHALL BE COMPACTED  
TO 95% OF STANDARDS  
PROCTOR DENSITY.

**GUIDELINES**

1. IF THE SELECT GRANULAR BACKFILL EXISTS; REMOVE WITHIN WIDTH OF PROPOSED SEWER TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
2. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP FEET ON EITHER SIDE OF THE WATER MAIN.
3. PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.

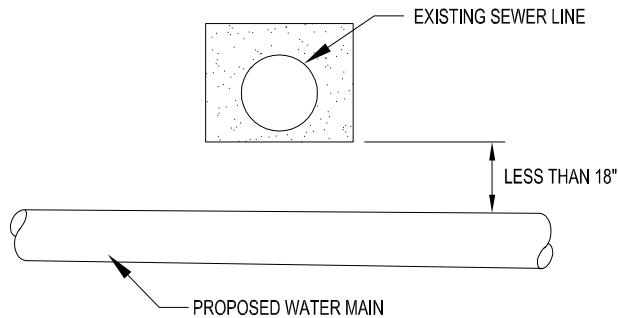
**PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM SEPARATION.**



**GUIDELINES**

1. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.
2. MAINTAIN 18" MINIMUM VERTICAL SEPARATION FOR 10 FEET HORIZONTALLY.

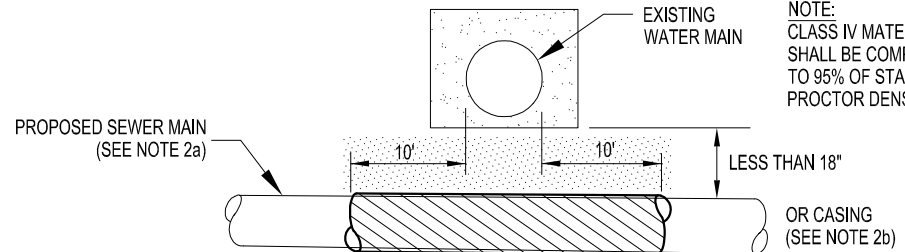
**PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH < 18" MIN. SEPARATION**



**NOT ALLOWED: MUST MAINTAIN 18" VERTICAL SEPARATION**

*\*THE REQUIREMENTS ON THIS DETAIL ARE TAKEN FROM THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (SEE PAGES 160-173)*

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



NOTE:  
CLASS IV MATERIALS  
SHALL BE COMPACTED  
TO 95% OF STANDARDS  
PROCTOR DENSITY.

**GUIDELINES**

1. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 10 FEET ON EITHER SIDE OF WATER MAIN.
- 2a. CONSTRUCT 10 FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR
- 2b. USE 10 FEET OF CASING FOR PROPOSED SEWER AND SEAL ENDS OF CASING.
3. POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN.
4. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.

Revised:
1. 06/12/2015
2.
3.
4.

Drawing Name

# WATER AND SEWER SEPARATION REQUIREMENTS

Drawing Number	UG-04b
Date:	04/15/2007
Drawn	Checked
EM	AW



City of  
**Crystal Lake**  
Illinois