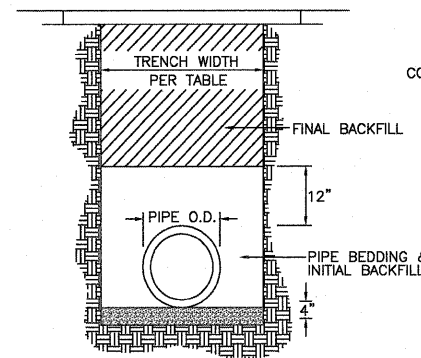


### PIPE BEDDING & BACKFILL



TRENCH WIDTH - MINIMUM TO COMPLY WITH OSHA SAFETY STANDARDS

PIPE SIZE	ALLOWABLE TRENCH WIDTH	MINIMUM TRENCH WIDTH
6"	3'-2"	3'-2"
8"	3'-2"	3'-2"
10"	3'-2"	3'-2"
12"	3'-4"	3'-4"
15"	3'-6"	3'-6"
18"	3'-8"	3'-8"
21"	4'-4"	4'-4"
24"	4'-8"	4'-8"

**PIPE BEDDING & INITIAL BACKFILL** FOR PVC (IDOT CA-11 OR CA-13) TO 1 FOOT OVER PIPE. FOR RCP & DIP, CA-6 TO SPRING LINE. PLACE IN MAXIMUM 6" LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY PER AASHTO T-99.

**FINAL BACKFILL** IN PAVEMENT AREAS AND WHERE TRENCH FALLS WITHIN A 1 TO 1 SLOPE EXTENDED FROM THE EDGE OF THE PAVEMENT, MATERIAL SHALL BE TRENCH-BACKFILL (CA-7 PER I.D.O.T. SPECS.) COMPACTED TO 95% STANDARD PROCTOR DENSITY PER AASHTO T-99.

IN AREAS WHERE GRASS IS REMOVED AND PARKWAY RESTORATION IS REQUIRED LANDSCAPE FABRIC SHALL BE PLACED BETWEEN THE BACKFILLED MATERIAL AND THE REQUIRED TOPSOIL AS DIRECTED BY THE MUNICIPAL DIRECTOR OF PUBLIC WORKS.

IN LANDSCAPE AREAS MATERIAL SHALL BE SELECT, EXCAVATED MATERIAL, FREE OF ROCKS AND DEBRIS COMPACTED TO 95% STANDARD PROCTOR DENSITY PER AASHTO T-99.

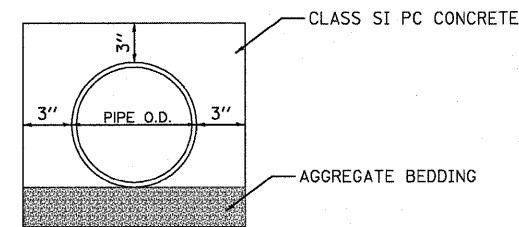
**UTILITY CROSSINGS** AT UTILITY CROSSINGS, INSTALL TRENCH BACKFILL, AS ABOVE, FROM THE PIPE BEDDING TO 1 FOOT OVER THE HIGHER PIPE. SUCH A GRANULAR CRADLE SHALL BE CONSTRUCTED REGARDLESS OF WHETHER THE CROSSING OCCURS IN PAVED OR LANDSCAPED AREAS.

WHERE UTILITY CROSSINGS INCLUDE A WATER MAIN, USE CLASS IV COMPACTED SELECT EXCAVATED MATERIAL BETWEEN PIPES AS REQUIRED BY THE STANDARD SPECIFICATIONS FOR SEWER & WATER MAIN CONSTRUCTION IN ILLINOIS, STANDARD DRAWINGS 19 THROUGH 24.

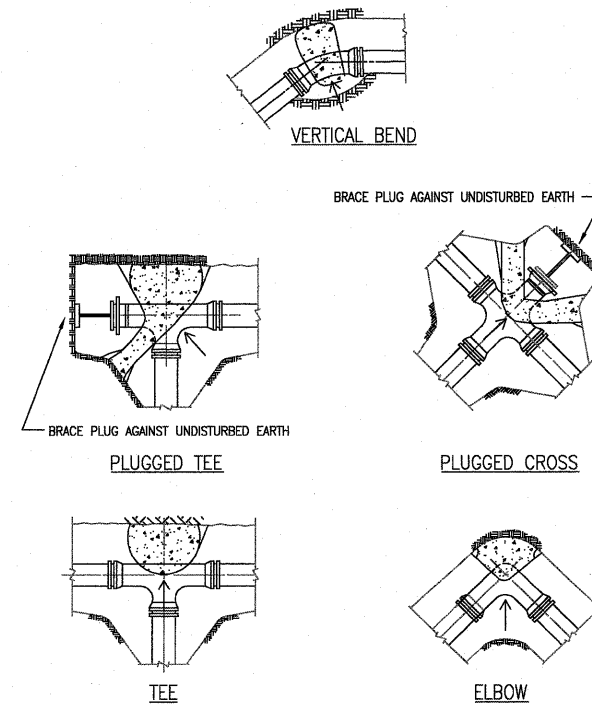
**NOTES:**

1. TRENCH WIDTH - MINIMUM TO COMPLY WITH OSHA SAFETY STANDARDS.
2. RESTORATION TO ORIGINAL SURFACE REQUIRED.
3. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE MUNICIPALITY BEFORE BACKFILLING AND RESTORATION WORK ARE TO COMMENCE.

### CONCRETE ENCASEMENT DETAIL



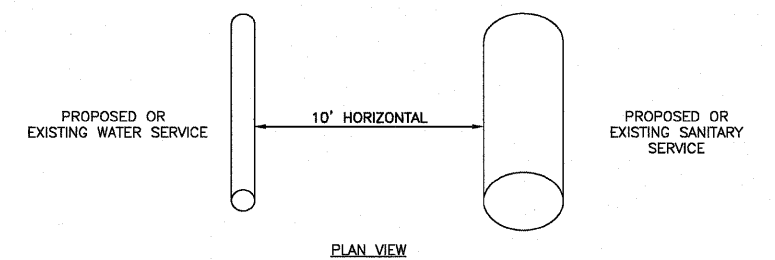
### THRUST BLOCKS



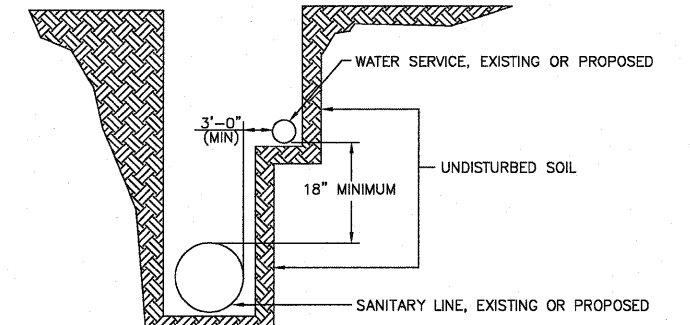
NOTE: ALL BLOCKS BEAR AGAINST UNDISTURBED EARTH. ARROWS INDICATE DIRECTION OF THRUST. ALL BLOCKS TO BE 3000 P.S.I CONCRETE. ALL FITTINGS SHOWN IN PLAN EXCEPT VERTICAL BEND.

### HORIZONTAL SEPARATION

PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER).



PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET FROM EXISTING WATER (OR SEWER)



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USER NAME = #USER#	DESIGNED - KMB	REVISED -
	DRAWN - CEY	REVISED -
PLOT SCALE = #SCALE#	CHECKED - KAC	REVISED -
PLOT DATE = 3/3/2011	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

UTILITY DETAILS  
LAKE STREET OVER ADDISON CREEK

SCALE: N.T.S. SHEET NO. 2 OF 3 SHEETS STA. 96+40 TO STA. 106+68

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3537	3264-T	COOK	110	66
CONTRACT NO. 60H44				
ILLINOIS FED. AID PROJECT				