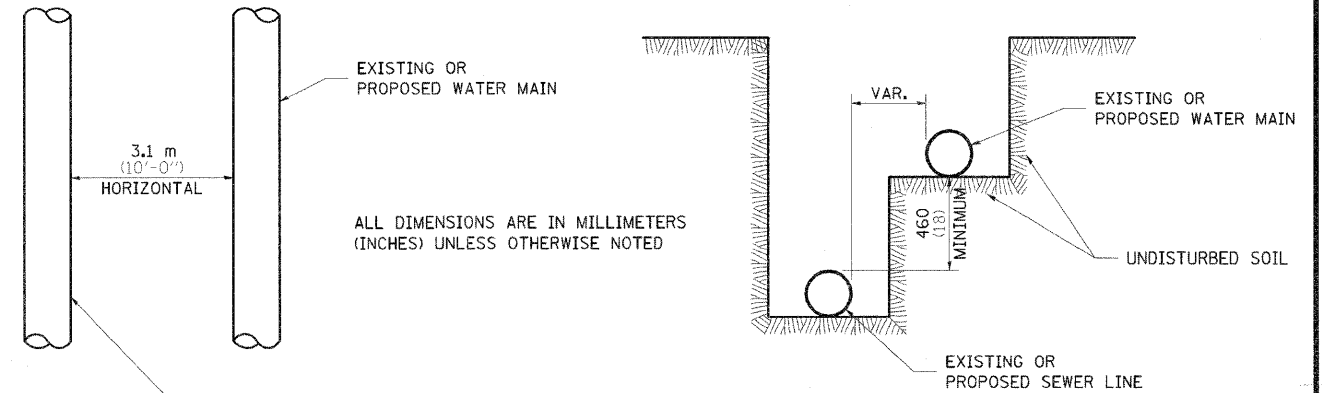
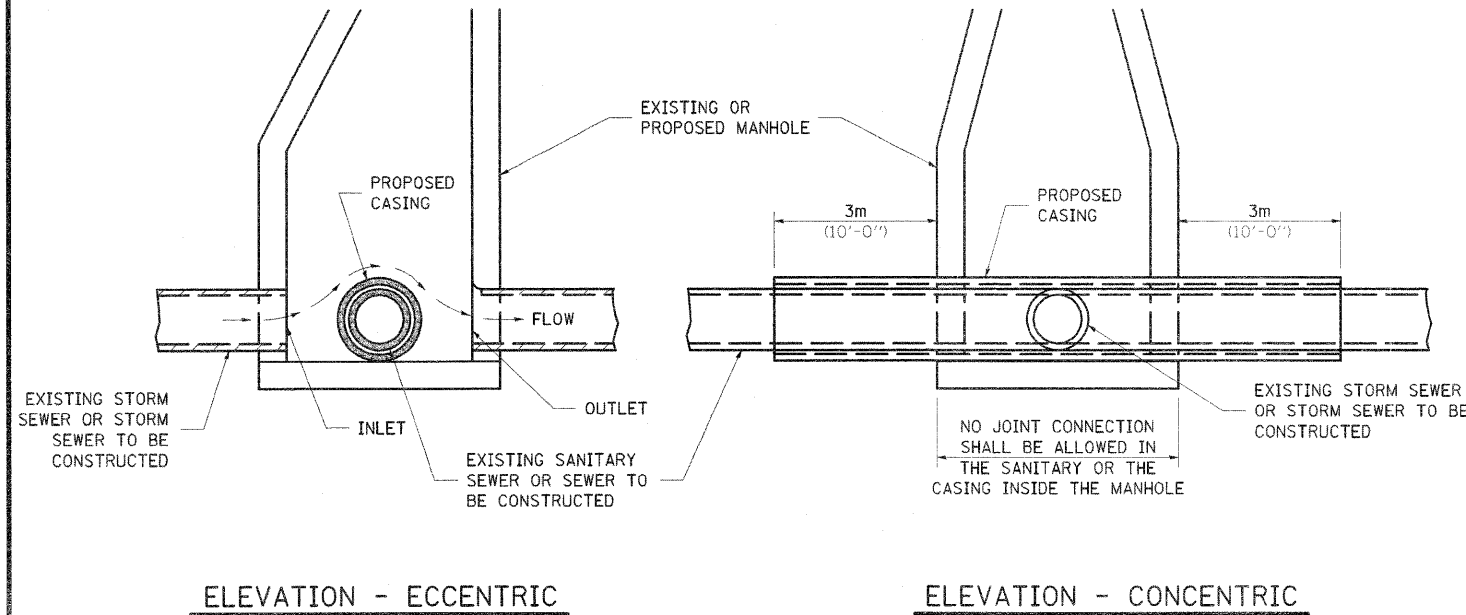


SEWER AND WATER MAIN CROSSINGS

THIS DETAIL IS FOR UNKNOWN UTILITIES UNLESS QUANTITIES ARE INCLUDED IN THE PLANS THE EXTRA WORK WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.

WHEN PROPOSED SEWER (OR WATER) IS LOCATED 3.1 m (10'-0") OR MORE FROM EXISTING WATER (OR SEWER) NO SPECIAL CONSTRUCTION REQUIRED.

WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 3.1 m (10'-0") FROM EXISTING WATER (OR SEWER) DETAILS BELOW SHALL APPLY.



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

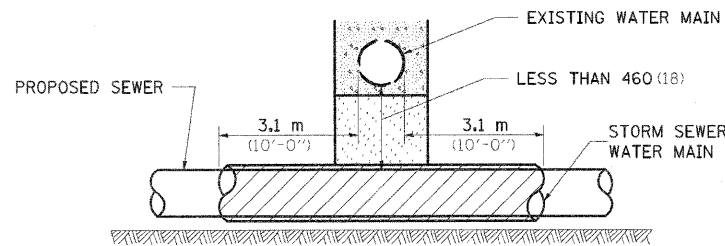
WATER AND SEWER HORIZONTAL SEPARATION REQUIREMENTS

CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

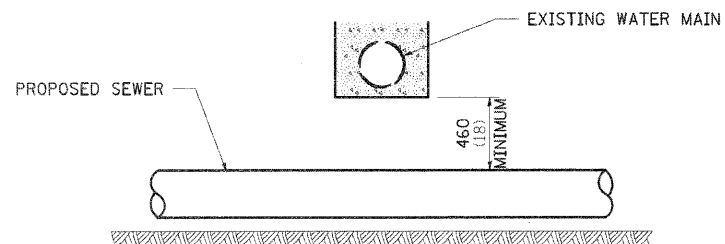
AT GRADE CROSSING OF SANITARY AND STORM SEWER

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN
 PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH



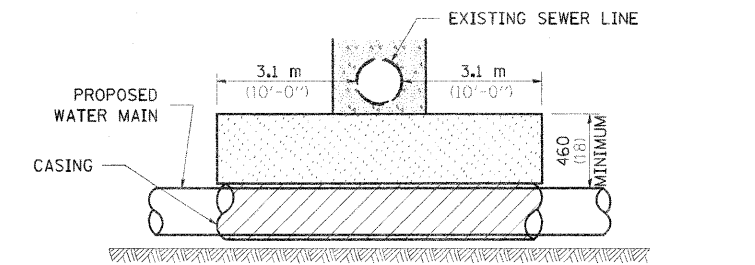
PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH
 MAINTAIN 460 (18) MINIMUM VERTICAL SEPARATION FOR 3.1m (10') HORIZONTALLY



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

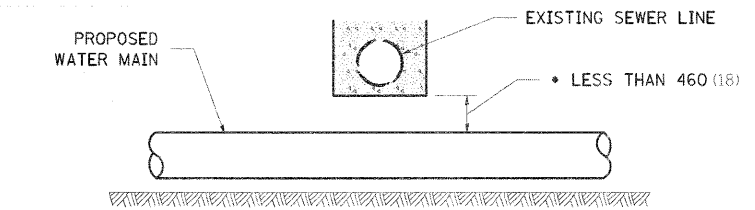
PROPOSED SEWER LINE BELOW EXISTING WATER MAIN

PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT
 PLACE TRENCH BACKFILL FOR 3.1 m (10') ON EITHER SIDE OF SEWER LINE



CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH
 MAINTAIN 460 (18) MINIMUM VERTICAL SEPARATION FOR 3.1 m (10') HORIZONTALLY

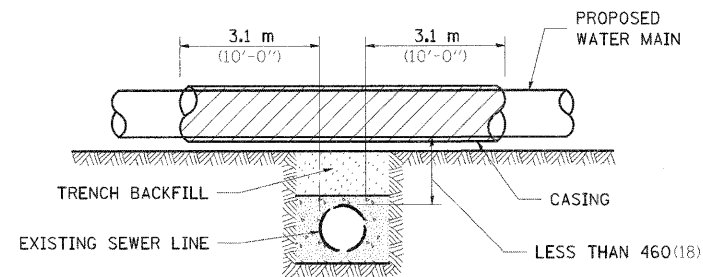


• NOT ALLOWED
 MUST MAINTAIN 460 (18) VERTICAL SEPARATION

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE

POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN OR WATER MAIN CASING AND SEWER

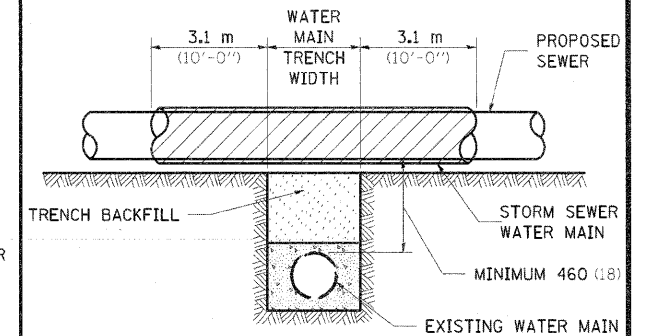


CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE

PROVIDE ADEQUATE SUPPORT FOR SEWER TO PREVENT SETTLING AND BREAKING THE WATER MAIN.



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

EXISTING WATER MAIN BELOW PROPOSED SEWER LINE WITH MINIMUM 460 (18) VERTICAL SEPARATION

FILE NAME = 0264987-ent-de-ta1s-384.dgn	USER NAME = 3202090971	DESIGNED -	REVISED - 10-15-04	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A. RTE. 303	SECTION 129K-1	COUNTY WINNEBAGO	TOTAL SHEETS 401	SHEET NO. 297	
	PLOT SCALE = 100.0000' / IN.	DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 2	ILLINOIS FED. AID PROJECT	CONTRACT NO. 64987
	PLOT DATE = 1/18/2011	CHECKED -	REVISED -			SEWER AND WATER MAIN CROSSINGS					