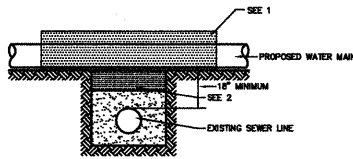


PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH 18" MINIMUM SEPARATION.

NOTE: CLASS IV MATERIAL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM 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 TO 10 FEET ON EITHER SIDE OF SEWER LINE.
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.

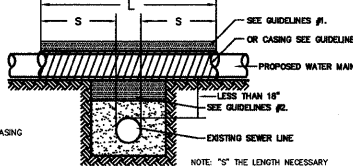


PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B

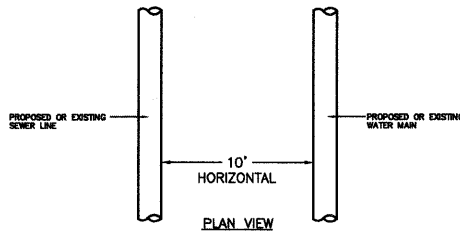
GUIDELINES

1. 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".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.
4. POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN CASING AND SEWER.

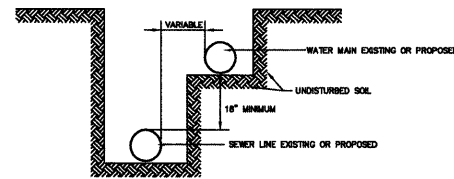


WATER AND SEWER SEPARATION REQUIREMENTS

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)

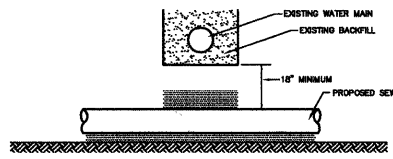


WATER AND SEWER SEPARATION REQUIREMENTS

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

GUIDELINES

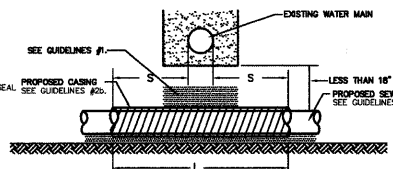
1. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.



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

GUIDELINES

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



WATER AND SEWER SEPARATION REQUIREMENTS

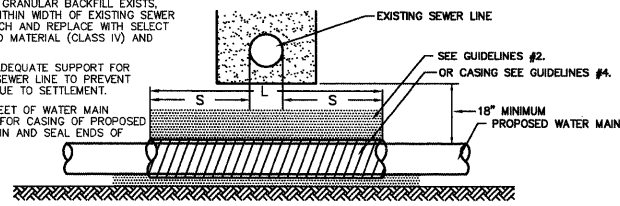
PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION.

GUIDELINES

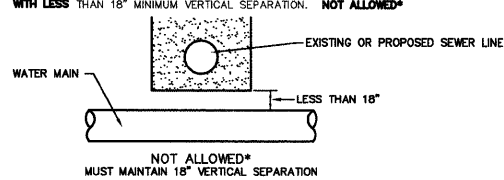
1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL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

NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B

NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AND MEASURED PERPENDICULAR TO EXISTING SEWER LINE.



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



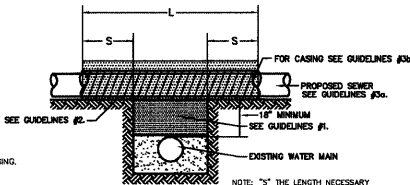
WATER AND SEWER SEPARATION REQUIREMENTS

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

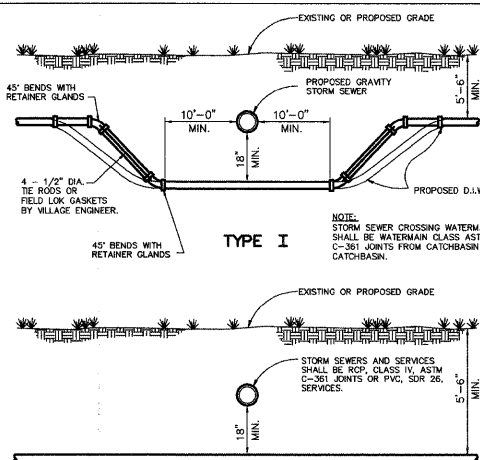
NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B

GUIDELINES

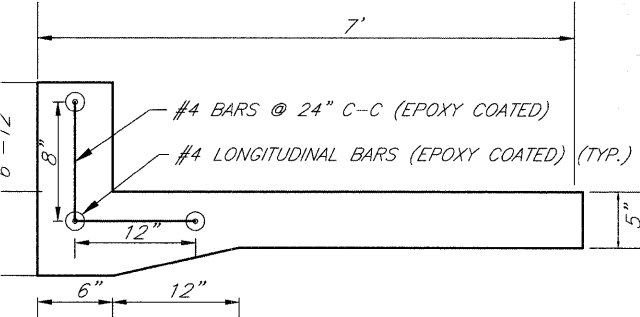
1. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF PROPOSED SEWER TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
2. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF SEWER AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE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



WATER AND SEWER SEPARATION REQUIREMENTS

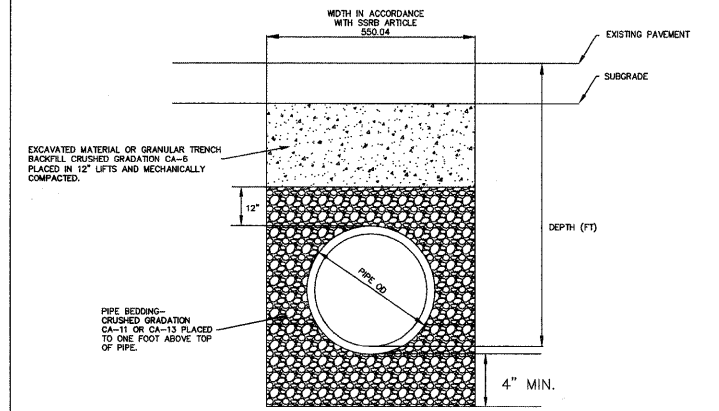


WATERMAIN CROSSING



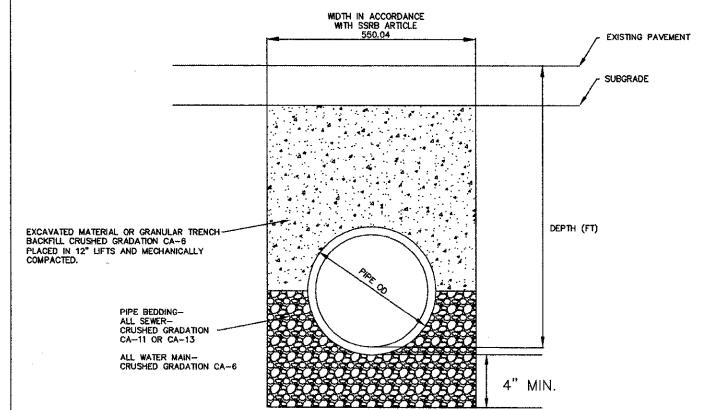
PORTLAND CEMENT CONCRETE SIDEWALK CURB

ALL TRENCH BACKFILL WILL BE MEASURED USING THE IDOT TRENCH BACKFILL TABLES



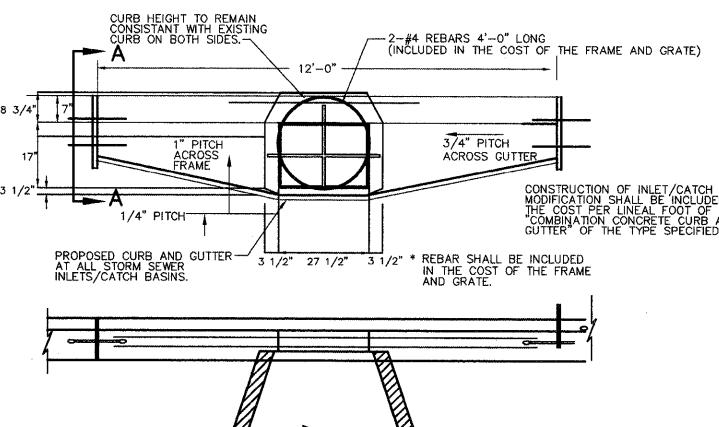
TRENCH BACKFILL DETAIL PVC SEWER

ALL TRENCH BACKFILL WILL BE MEASURED USING THE IDOT TRENCH BACKFILL TABLES



TRENCH BACKFILL DETAIL ALL SEWER AND WATER (EXCEPT PVC)

1. PIPE OPENINGS TO BE PRECAST INTO WALLS.
2. PRECAST REINFORCED CONCRETE SECTIONS WITH PREFORMED BITUMINOUS JOINTS AND INTEGRAL PRECAST BOTTOMS.
3. FRAME TO BE LAID IN 3/4" MASTIC BED.
4. ADJUSTING RINGS NOT TO EXCEED 8".
5. NEENAH R-4340-B ROUND BEEHIVE GRATE IN GRASS AREAS.
6. INLETS IN PAVEMENT AREAS SHALL BE NEENAH R-2015-D.
7. TWO 10' LONG 4" PERFORATED PVC SDR 35 FINGER DRAINS REQUIRED IN ALL PROPOSED PAVEMENT AREAS. SEE FINGER DRAIN DETAIL.



COMBINATION CONCRETE CURB AND GUTTER WITH TYPE 23 FRAME AND GRATE

FILE NAME = 3850-805-DT1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED = CAD	REVISED =	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	DETAILS	F.A.P. RTE. 330	SECTION 10-00213-00-CH	COUNTY LAKE	TOTAL SHEETS 47	SHEET NO. 17	GH# 3850.805
PLOT SCALE = 1/01	PLOT DATE = 8/23/2011	DRAWN = CAD	REVISED =			SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT #: 63616	ILLINOIS FED. AID PROJECT	
CHECKED = BLS	DATE = 8/23/2011	REVISED =	REVISED =								