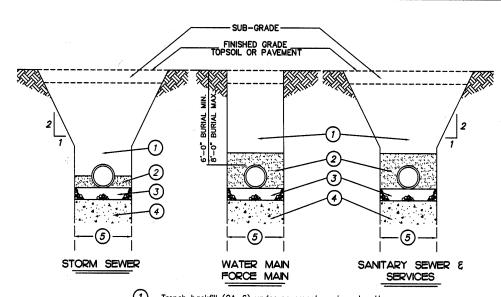


THE WATER SERVICE PIPING AND BUILDING SEWER PIPING MAY BE INSTALLED IN A COMMON TRENCH PROVIDED THAT THE WATER SERVICE PIPE IS PLACED ON A SHELF A MINIMUM OF EIGHTEEN (18) INCHES ABOVE AND TWENTY-FOUR (24) INCHES HORIZONTALLY FROM THE BUILDING SEWER PIPING. SUCH INSTALLATION SHALL USE, FOR A BUILDING SEWER MATERIAL LISTED IN EXHIBIT G, TABLE D FOR A BUILDING DRAIN. (SEE VILLAGE PLUMBING CODE).

VILLAGE OF LAKE IN THE HILLS	REVISIONS NO. BY DATE			
PUBLIC WORKS DEPARTMENT	- 1.	LT	10/04	
DATE APPROVED: 12-09-04				
				COMMON TRENCH FOR WATER
	& SANITARY SEWE		& SANITARY SEWER SERVICES	
				U-2



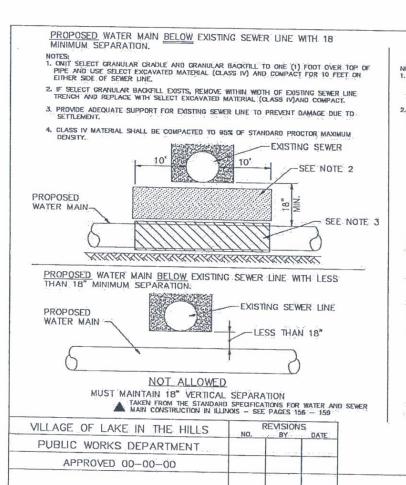
- Trench backfill (CA-6) under pavement, curb and gutter as indicated in road subgrades and within 2 feet of any proposed curb and gutter or sidewalk. Mechanically compacted backfill of excavated materials in other locations if approved by the VILLAGE Engineer. Refer to trench backfill special provisions for materials and compaction requirements.
- 2 SANTARY SEWER (ESVCP, DIP), WATER MAIN, FORCE MAIN
 Compacted granular material CA-6 to 6" above top of pipe.
- SANITARY SEWER (PVC)

 Compacted granular material CA-6 to 12" above top of pipe (also see note #1 below).
- 2 STORM SEWER
 Compacted granular backfill material CA-6 to spring line
- 6" compacted granular bedding, CA-6 gradation.
- Unsuitable material to be removed where directed by Engineer and replaced with suitable material and compacted.
- 5 Trench Width Pipe O.D. + 12" minimum Pipe O.D. + 18" maximum

NOTES

- 1. PVC pipe conforming to the SDR specified in the plans shall be installed to the latest revised specification requirements of ASTM D-2321 using either compacted Class I or Class II granular embedment materials for bedding, haunching and initial backfill of 12 inches over the top of pipe to provide the necessary support for the pipe so that the maximum deflection does not exceed 5% of the pipe's original internal diameter.
- 2. All CA-6 to be IDOT approved or meet IDOT specifications.

VILLAGE OF LAKE IN THE HILLS	REVISIONS NO. BY DATE				
PUBLIC WORKS DEPARTMENT	1.	LT	10/04		
DATE APPROVED: 12-09-04					
				TRENCH BEDDING/BACKFILLI	NO.
			CROSS SECTION	NG	
					U-3



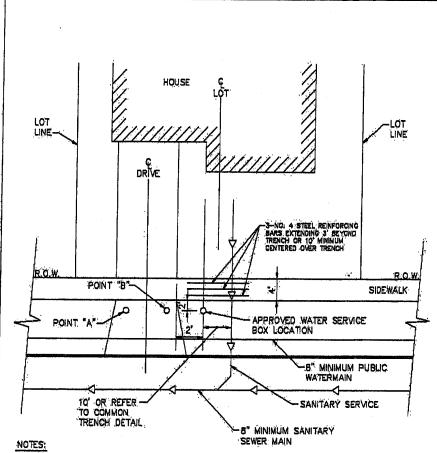
PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH 18" MINIMUM SEPARATION. NOTES: 1. PROMDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH. EXISTING 2. MAINTAIN 18" MINIMUN VERTICAL WATER MAIN SEPARATION FOR 10 FEET HORIZON TALLY. PROPOSED 00 SEWER PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH LESS THAN 18" SEPARATION. NOTES:

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 20. CONSTRUCT 10 FEET OF PROPOSED SEWER WITH WATERMAIN QUALITY PIPE AND PRESSURE b. 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. CLASS IV MATERIAL TO BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY. EXISTING WATER MAIN 10" 10' LESS THAN 18" PROPOSED SEWER - SEE NOTE 20.-SEE NOTE 2b.

WATER AND SEWER SEPARATION REQUIREMENTS DETAIL

U - 4

EXISTING WATERMAIN BELOW PROPOSED SEWER LINE WITH 18" PROPOSED WATERMAN ABOVE EXISTING SEWER LINE WITH 18" MINIMUM SEPARATION. MINIMUM SEPARATION. EXISTING WATERMAIN BELOW PROPOSED SEWER LINE WITH NOTE: CLASS IV MATERIAL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY. LESS THAN 18" SEPARATION. SEE NOTE 1 PROPOSED WATERMAIN NOTES: : NANNININIA. 3: OMT SELECT GRANULAR GRADLE 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 SEMER LINE. MIN. SEE NOTE 2 2. If SELECT CRAINLAR BACKFUL EXISTS, REMOVE WITHIN WOTH OF EXISTING SCHOOL LINE, TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT. EXISTING SEWER LINE DELETED 1/19/99 PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" SEPARATION. MOTE: CLASS IV MATERIAL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DEHSITY. SEE NOTE 1-10 PROPOSED WATERMAIN TRININININI. NOTES: 1. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OWE TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASSIV) AND COMPACT FOR 10 FEET ON EITHER SIDE OF SEMER LINE. . 18 -CASING, SEE NOTE 3 - SEE. NOTE: 2. 2. IF SELECT GRANLLAR BACKFILL EXISTS, REMOVE WITHIN MOTH OF EXISTING SEWER LINE TREACH AND REPLACE WITH SELECT EXCAVATED EXISTING SEWER LINE MATERIAL (CLASS IV) AND COMPACT. REVISIONS 3. USE A CASING FOR PROPOSED WATER MAIN AND SEAL ENDS OF CASING. VILLAGE OF LAKE IN THE HILLS 4. POINT LOADS SHALL HOT BE ALLOWED BETWEEN WATER MAIN OR WATERMAIN AND SEWER. DATE PUBLIC WORKS DEPARTMENT ▲ TAKEN FROM THE STANDARU SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLIHOIS — SEE PAGES 156—159. APPROVED 00-00-00 WATER AND SEWER SEPARATION REQUIREMENTS DETAILS U~5



- 1. WATER SHUTOFF BOX MAY NOT BE LOCATED IN PROPOSED DRIVEWAY. THE RELOCATED BOX SHALL BE LOCATED AT THE HOUSE SIDE OF THE DRIVEWAY AS PER DETAIL ABOVE.
- 2. IF WATER SHUTOFF BOX RELOCATION IS REQUIRED IT SHALL BE DONE AS FOLLOWS:

CASE 1 - EXISTING SHUTOFF BOX AT POINT "A"

WATER MAIN SHALL BE RE-TAPPED OUT OF PROPOSED DRIVEWAY LOCATION. A CONTINUOUS LENGTH OF COPPER (NO COUPLINGS) SHALL BE RUN FROM THE NEW CORPORATION STOP TO THE RELOCATED SHUTOFF BOX, THE ABANDONED CORPORATION STOP SHALL BE CAPPED ACCORDING TO WATER DEPARTMENT STANDARDS.

CASE 2 - EXISTING SHUTOFF BOX AT POINT "B"

THE EXISTING CORPORATION STOP MAY REMAIN A CONTINUOUS LENGTH OF COPPER (NO COUPLINGS) SHALL BE RUN FROM THE CORPORATION STOP TO THE RELOCATED SHUTOFF BOX.

- 3. FOR FAR SIDE SERVICE CONNECTIONS CONSULT THE PUBLIC WORKS DEPARTMENT.
- 4. NO SANITARY SEWER SERVICE CONNECTIONS DIRECTLY INTO MANHOLES

	MLLAGE OF LAKE IN THE HILLS	NO.	REVISION BY	S Date		
	PUBLIC WORKS DEPARTMENT				·	
L	APPROVED 00-00-00				'	
					WATER SERVICE AND SANIT	ARY
l					SEWER LOT LOCATION DET	AIL
						U6