



NOTES:

1. THE SEPARATION OF WATER MAINS AND SEWERS SHALL COMPLY WITH THE FOLLOWING GENERAL REQUIREMENTS.
 - A. PARALLEL INSTALLATION:
 1. NORMAL CONDITIONS: THE INSIDE EDGE OF A WATER MAIN SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM THE INSIDE EDGE OF ANY SANITARY SEWER, STORM SEWER OR SEWER MANHOLE.
 2. UNUSUAL CONDITIONS: WHEN LOCAL CONDITIONS PREVENT A HORIZONTAL SEPARATION OF 10 FEET. THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH WITH THE ELEVATION OF THE INVERT OF THE WATER MAIN AT LEAST 18 INCHES HIGHER THAN THE TOP OF THE SEWER.
 - B. CROSSINGS:
 1. NORMAL CONDITIONS: WHENEVER POSSIBLE, THE BOTTOM OF THE WATER MAIN SHALL BE AT LEAST 18 INCHES HIGHER THAN THE TOP OF THE SEWER.
 2. WHENEVER SEWER MUST CROSS UNDER WATER MAINS, THE SEWER SHOULD BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN. WHEN THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHOULD BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF SEWER. ONE FULL LENGTH OF WATER MAIN SHOULD BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.



**DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
TOWN OF BILLERICA,
MASSACHUSETTS**

**MINIMUM WATER &
SEWER PIPE
SEPARATION**

CREATED BY: DCW/KCS

SCALE: NTS

FILE:

CHECKED BY: GA/JT

DATE: 06/29/2015