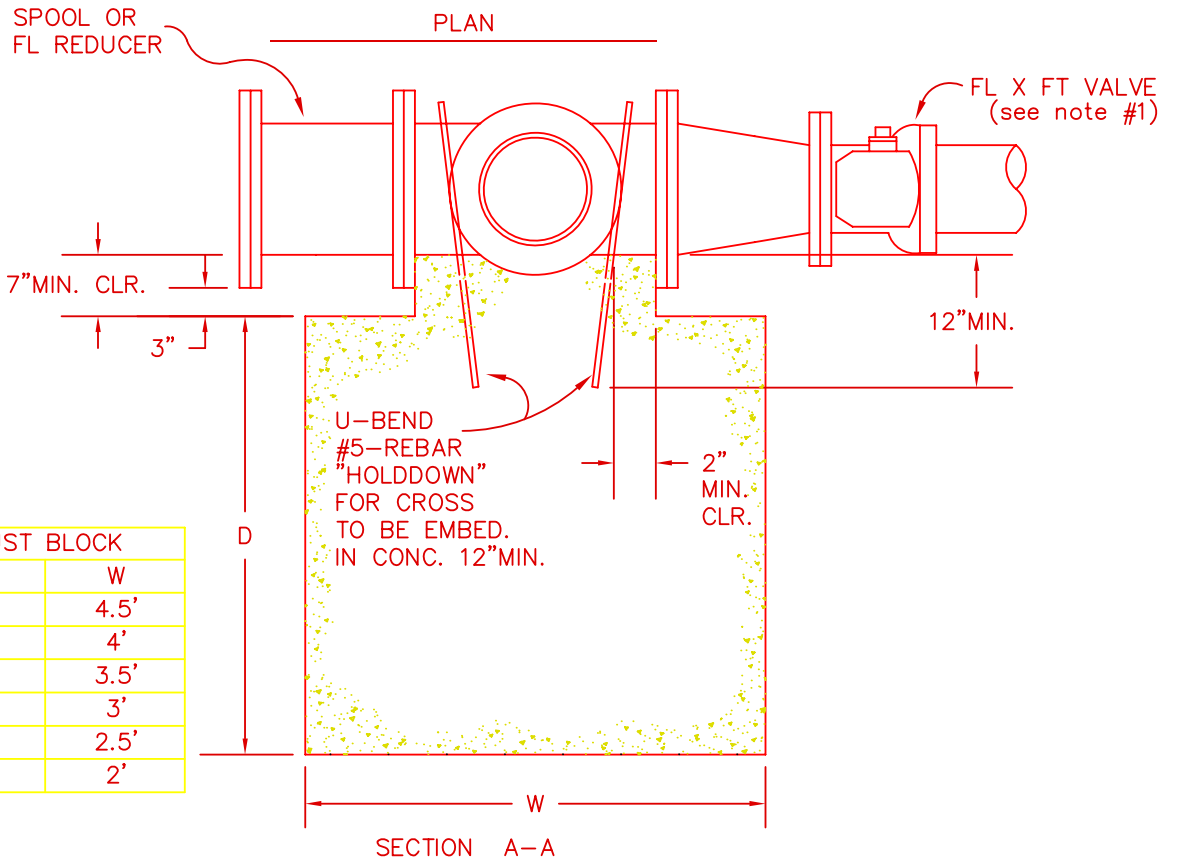
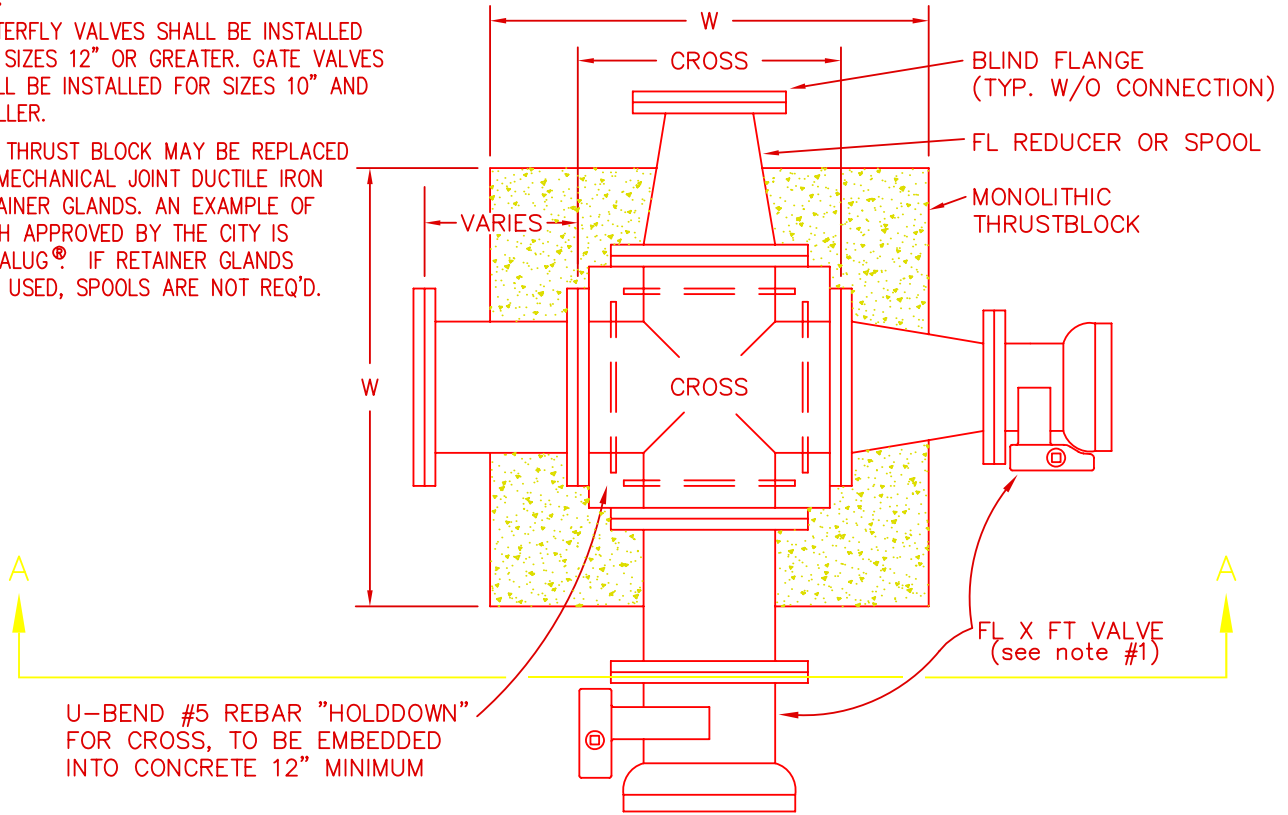


NOTES:

1. BUTTERFLY VALVES SHALL BE INSTALLED FOR SIZES 12" OR GREATER. GATE VALVES SHALL BE INSTALLED FOR SIZES 10" AND SMALLER.
2. THE THRUST BLOCK MAY BE REPLACED BY MECHANICAL JOINT DUCTILE IRON RETAINER GLANDS. AN EXAMPLE OF SUCH APPROVED BY THE CITY IS MEGALUG®. IF RETAINER GLANDS ARE USED, SPOOLS ARE NOT REQ'D.



SIZE OF THRUST BLOCK		
SIZE OF CROSS	D	W
16"	4.5'	4.5'
14"	4'	4'
12"	3.5'	3.5'
10"	3'	3'
8"	2'	2.5'
6"	1.5'	2'



DEPARTMENT OF CITY SERVICES

STANDARD DETAIL 411

Thrust Block for Flange Cross

APPROVED

DATE