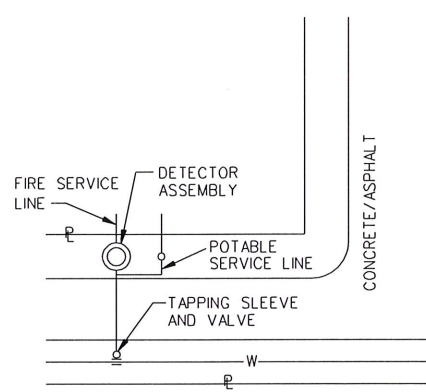
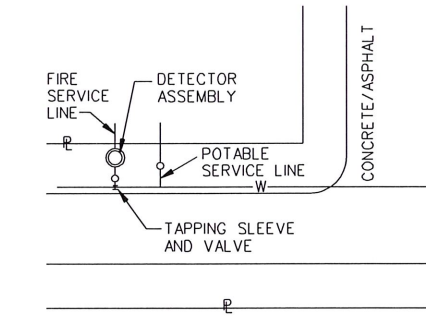


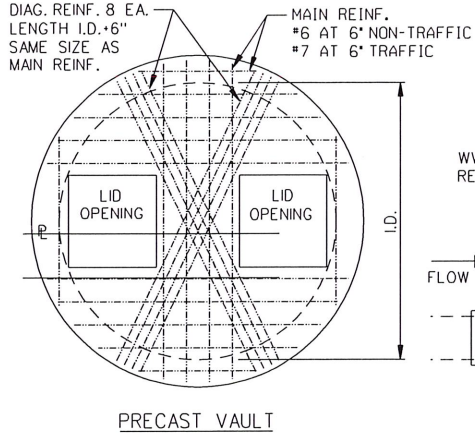
PATH NAME: /E1/PARTS/STD/DGN/STD/553-DBL-CHK-DETECT.DGN LFM 05/16/2012



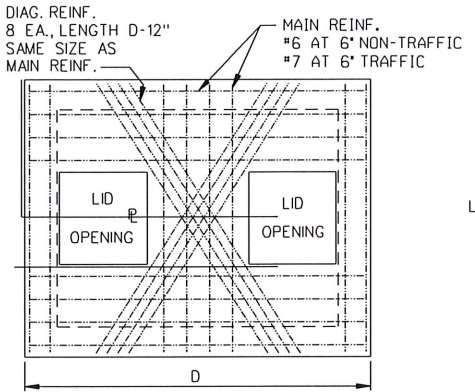
TYPICAL LOCATION  
LONG SERVICE



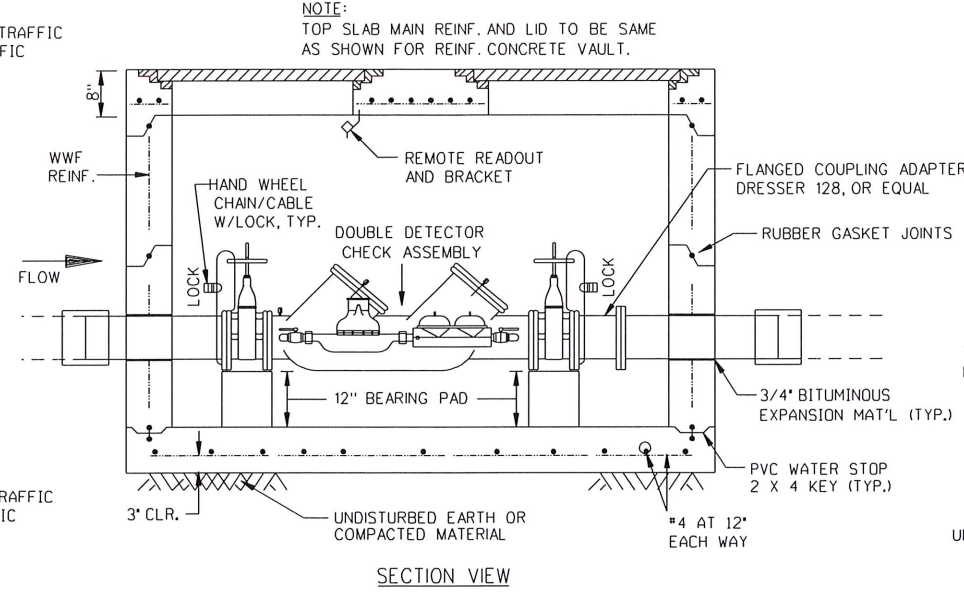
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SHORT SERVICE



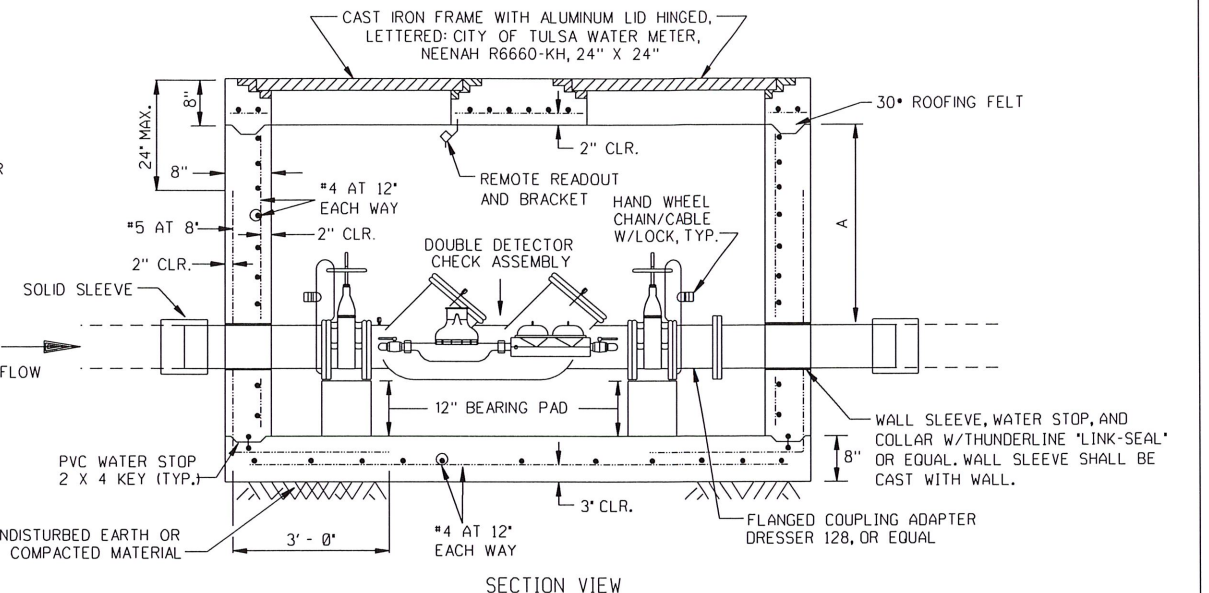
PRECAST VAULT



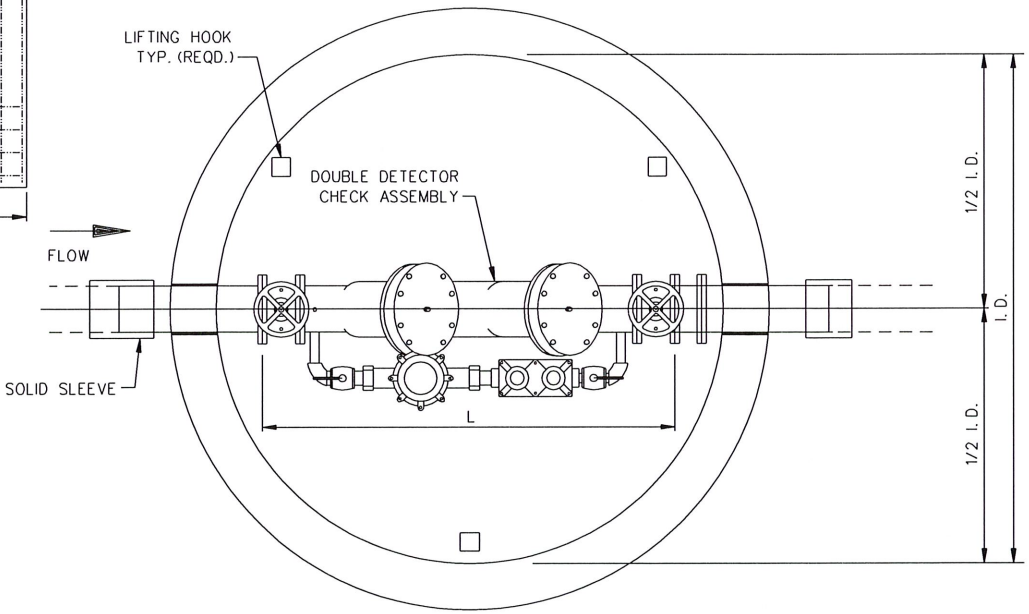
CAST-IN-PLACE VAULT  
TOP SLAB REINF. PLAN



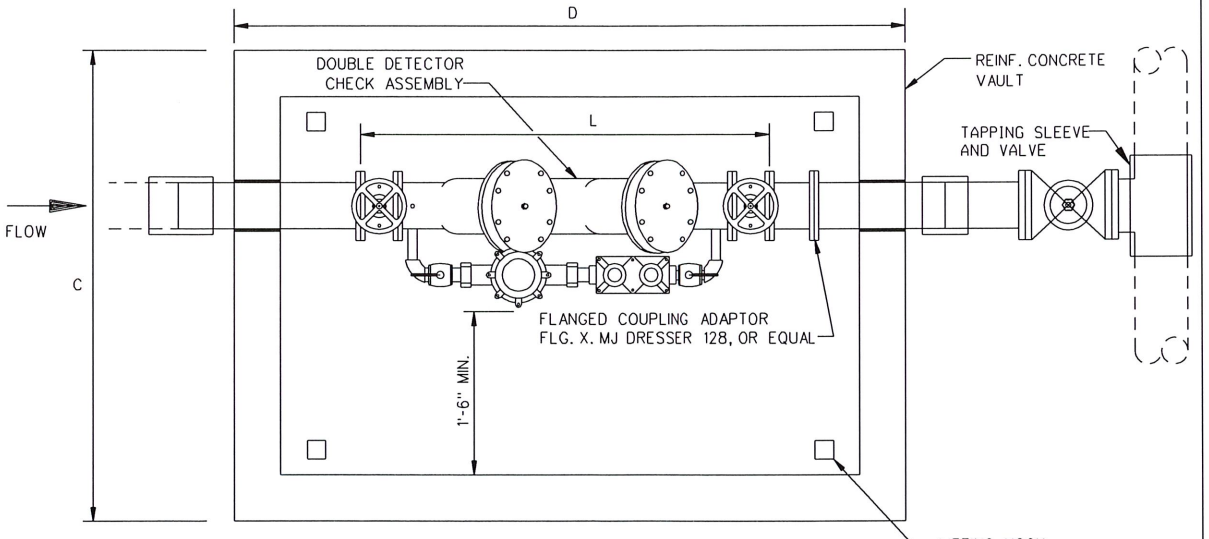
SECTION VIEW



SECTION VIEW



PLAN VIEW  
ALTERNATE PRECAST CONCRETE VAULT

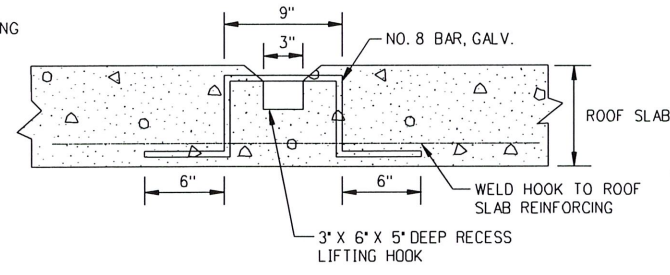


PLAN VIEW  
REINFORCED PRECAST CONCRETE VAULT

- NOTE:
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH FITTINGS COMPATIBLE WITH THE TYPE OF PIPE FURNISHED.
  - PRECAST CONCRETE VAULT SECTIONS SHALL CONFORM TO ANSI/ASTM C478.
  - NOTICE SHALL BE GIVEN TO THE ENGINEERING SERVICES DEPARTMENT 48 HOURS IN ADVANCE SO THAT A REPRESENTATIVE OF THE DEPARTMENT MAY WITNESS THE POURING OF THE VAULT AND INSPECT THE MATERIALS. A REPORT SHALL BE FURNISHED ON THE 7 DAY AND 28 DAY STRENGTH OF THE CONCRETE WHICH SHALL BE AT LEAST 4000 PSI. REINFORCING STEEL SHALL BE GR. 60. BOLTS AND NUTS SHALL CONFORM TO ASTM A-307 GR. B, AND ASTM A-563 GR. A RESPECTIVELY. STRUCTURAL STEEL SHALL BE ASTM A-36.
  - WHERE RESTRAINED JOINTS ARE REQUIRED, THEY SHALL BE EBAAMEGALUG SERIES 1100 OR EQUAL.
  - DOUBLE CHECK DETECTOR ASSEMBLY CONSISTS OF A DOUBLE CHECK VALVE, TWO RESILIENT WEDGED GATE VALVES, AND A PARALLEL METER ASSEMBLY WITH DOUBLE CHECK VALVE. THE ASSEMBLY SHALL BE TESTED BY A CITY OF TULSA APPROVED BACK FLOW ASSEMBLY TESTER BEFORE IT WILL BE ACCEPTED.
  - USE DUCTILE IRON PIPING AND DI/CI FITTINGS FROM THE MAIN LINE TAPPING SLEEVE TO DOWNSTREAM FROM THE METER CHECK VALVE AT THE CONNECTING SLEEVE. PIPE SHALL BE WRAPPED WITH POLYETHYLENE FILM AND TAPED.
  - DRAWINGS NOT TO SCALE.

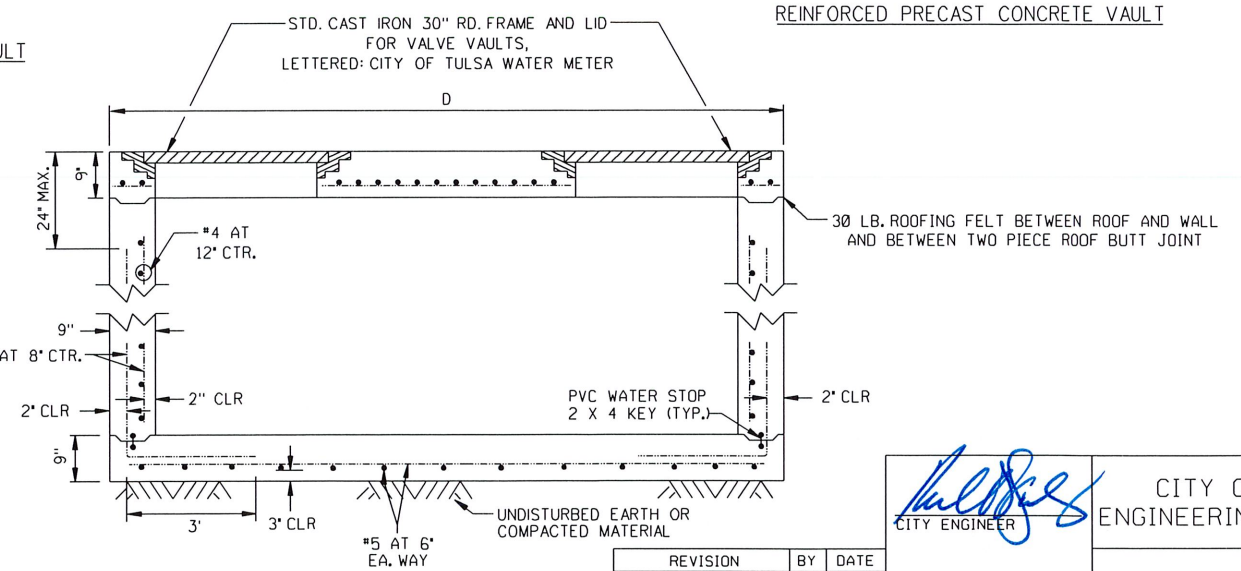
| LINE AND DET. CHECK SIZE | DIM. A MIN. | DIM. C MIN. | DIM. D* MIN. | PRECAST CONC. I.D., MIN. |
|--------------------------|-------------|-------------|--------------|--------------------------|
| 4"                       | 3'          | 5'- 6"      | L + 40"      | L + 24"                  |
| 6"                       | 3'          | 5'- 9"      | L + 40"      | L + 24"                  |
| 8"                       | 4'          | 6'- 0"      | L + 40"      | L + 24"                  |
| 10"                      | 5'          | 6'- 3"      | L + 40"      | L + 24"                  |

L = LAYING LENGTH OF ASSEMBLY INCLUDING VALVES  
MIN. WALL THICKNESS OF PRECAST VAULT = (1/12 X I.D.) + 1"  
MIN. I.D. FOR PRECAST VAULT SHALL BE 72"  
\* MINIMUM DIM. D FOR CAST-IN-PLACE VAULT SHALL BE 88"



LIFTING HOOK DETAIL

NOTE: IN SIDEWALKS, COVER HOOK OPENING WITH A STEEL PLATE. SECURE WITH SCREWS AND EXPANSION SLEEVE ANCHORS.



SECTION VIEW  
VALVE VAULT FOR TRAFFIC LOADS

| REVISION | BY | DATE |
|----------|----|------|
|          |    |      |
|          |    |      |

*[Signature]*  
CITY ENGINEER

*[Signature]*  
DESIGN MANAGER

CITY OF TULSA, OKLAHOMA  
ENGINEERING SERVICES DEPARTMENT

4"-10" DOUBLE DETECTOR CHECK AND VAULT ASSEMBLY

DATE: MARCH 2022

STD. 553