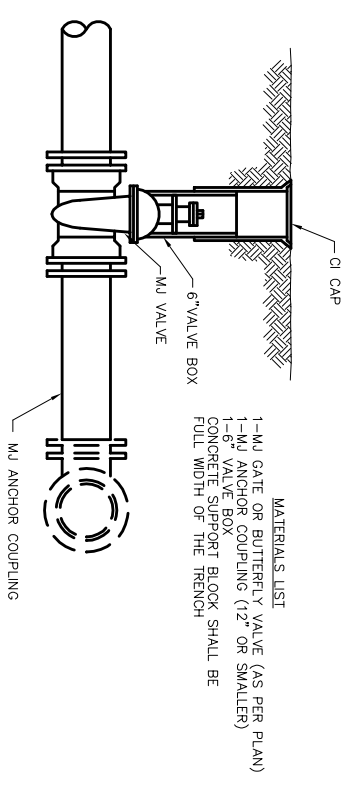


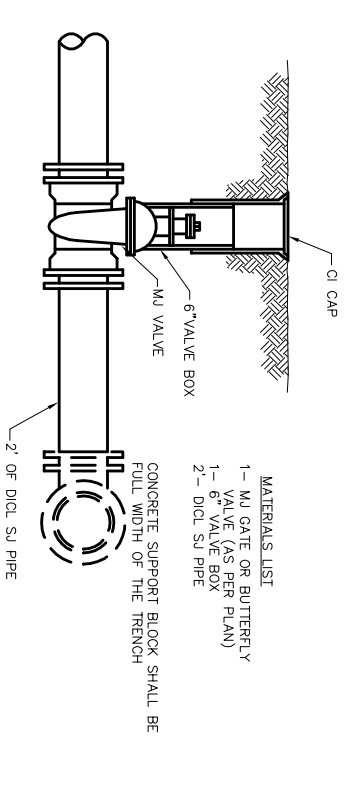
- MATERIALS LIST**
- 1-MU GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-6\"/>

LINE VALVE ASSEMBLY



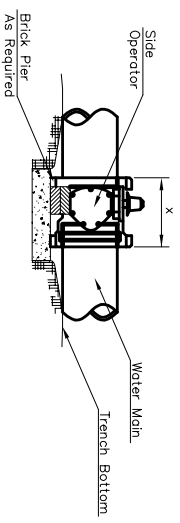
- MATERIALS LIST**
- 1-MU GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-MU ANCHOR COUPLING (12\"/>

ANCHORED VALVE ASSEMBLY



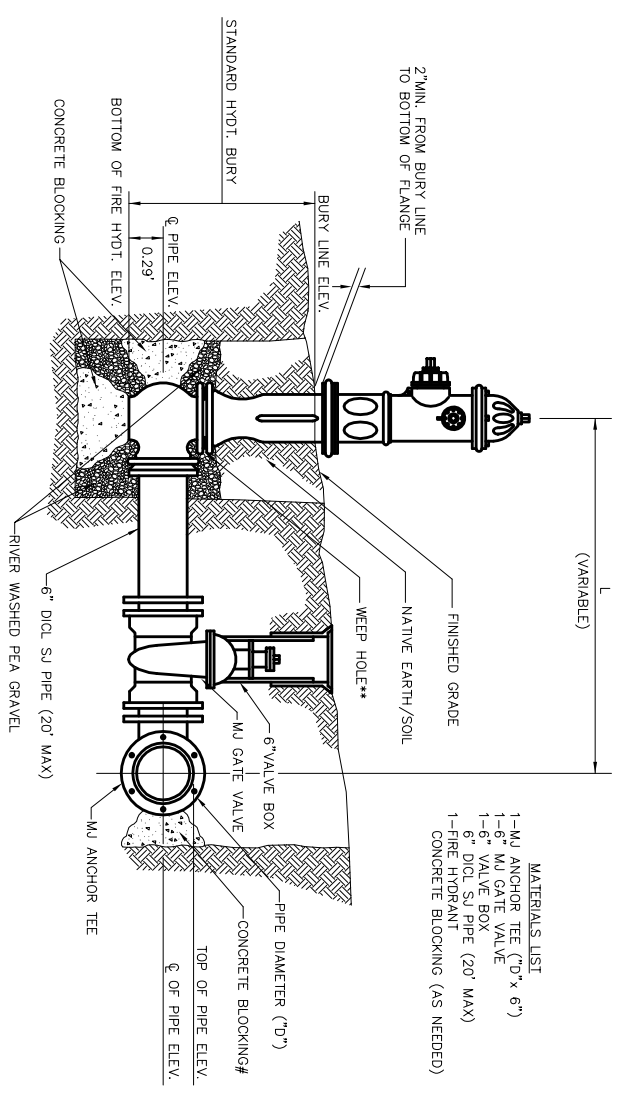
- MATERIALS LIST**
- 1-MU GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-6\"/>

VALVE ASSEMBLY



- NOTES**
- This detail covers Butterfly Valve installation, inclusive, regard- less of type of pipe or joint used. Larger lines to be detailed on plans.
 - 6\"/>

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION

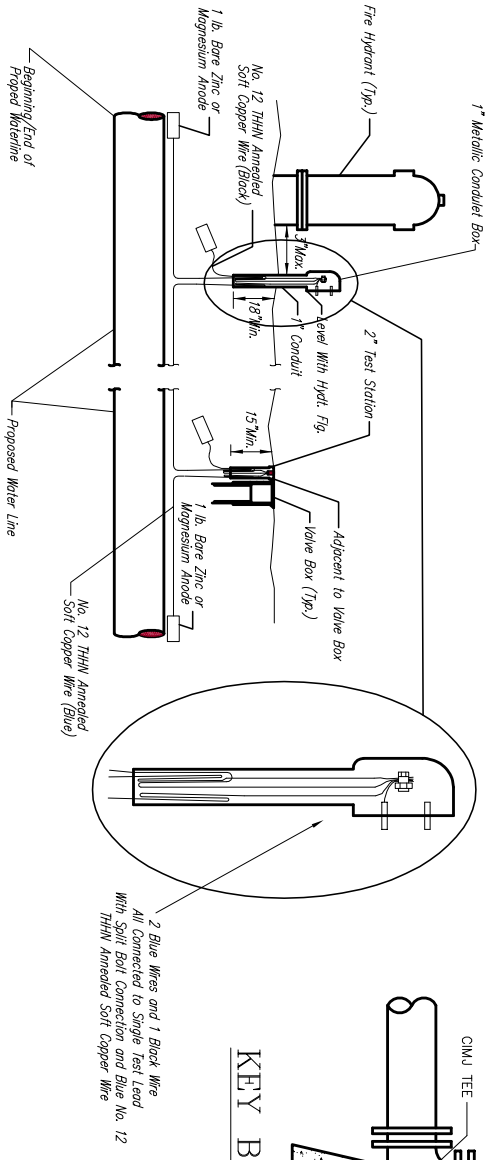


- MATERIALS LIST**
- 1-MU ANCHOR TEE (D"x 6")
 - 1-6\"/>

FIRE HYDRANTS REQUIRED

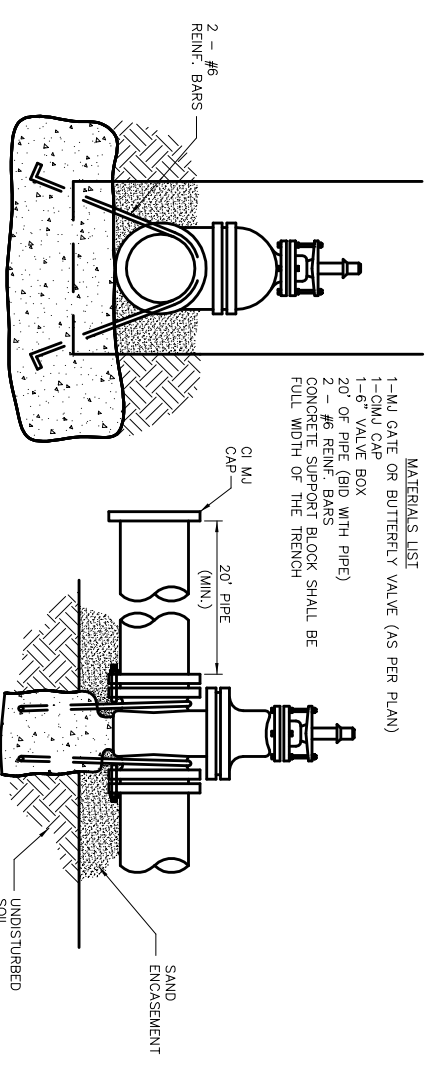
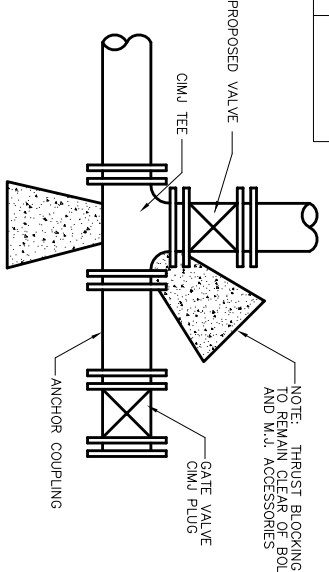
STATION	BURY LINE ELEVATION	TOP OF PIPE BURY ELEVATION*	FIRE HYDRANT BURY ELEVATION	FIRE HYDRANT REQUIRED#
S/A 0+05.00 LINE 1	1385.42	1380.04	6.0'	
S/A 3+23.80 LINE 2	1387.10	1383.22	4.5'	

FIRE HYDRANT ASSEMBLY PER CITY OF WICHITA SPECIFICATIONS



2 Blue Wires and 1 Black Wire All Connected to Single Test Lead With Split Bolt Connection and Blue No. 12 THHN Annealed Soft Copper Wire

KEY BLOCK DETAIL

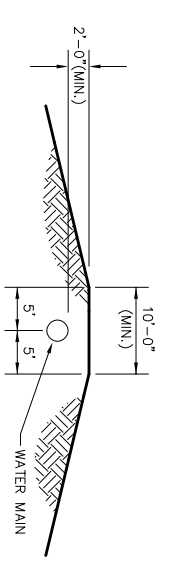


- NOTES:**
- Concrete block at valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
 - The thrust block shall be constructed such that bolts, nuts, and other MU accessories are kept clear of concrete.
 - All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

THRUST AT VALVES

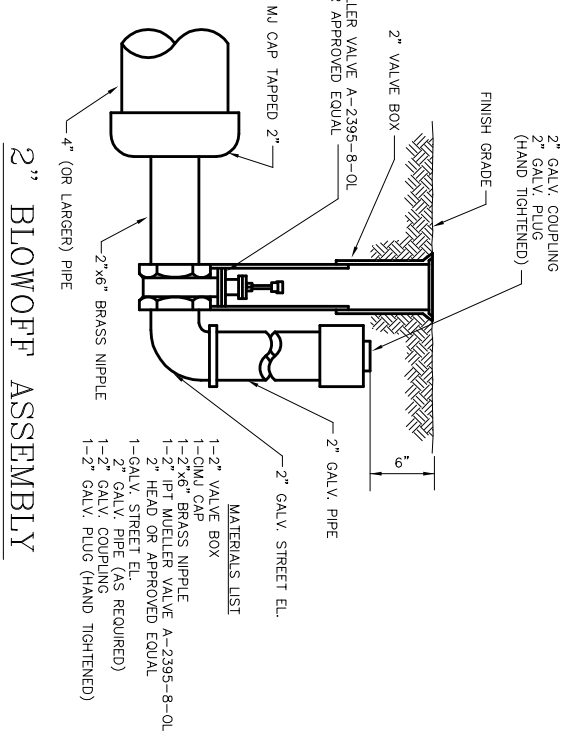
VALVE	THRUST AT 150 #/ft ²
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

ANCHORED VALVE ASSEMBLY, SPECIAL



PROTECTIVE FILL DETAIL

MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER MAIN IS LESS THAN (2) FEET. (COST SUBSIDIARY TO PIPE INSTALLATION)



2\"/>

- MATERIALS LIST**
- 1-2\"/>

TRACER WIRE

Conductive type pipe locator/tracer wire shall be installed to locate Polyvinyl Chloride (PVC) or any nonmetallic waterline pipes. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. Split-bolt connectors shall be used at splice locations. Electrical tape shall cover all splices so no bare wire is exposed. Test stations shall be installed adjacent to all the hydrants along the waterline and at blowoffs or valves near the ends of the waterlines. Any exceptions to the location of test stations shall be approved by the engineer. At each test station, the tracer wire shall be connected to a 1 lb. zinc or magnesium anode. Anodes shall also be attached to the tracer wire at both the beginning and the end of the proposed waterline. A typical layout of the tracer wire and test station is provided in the above figure.

The tracer wire shall be Blue No. 12 THHN annealed soft copper wire with thermal plastic insulation. The insulation shall be heat, oil, and gasoline resistant as manufactured by Temple Electric or approved equal. To allow for grade adjustment, a minimum of 12\"/>

The anodes shall be 1 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to Block No. 12 THHN annealed soft copper wire which shall be extended to the test station.

TRACER WIRE DETAIL

COST IS SUBSIDIARY TO PIPE INSTALLATION

Revised: 6-7-00, MCC

<p>THE CITY OF WICHITA</p>		<p>STANDARD WATER ASSEMBLY DETAILS</p>	
		<p>JAMES L. ARMOUR, P.E. - CITY ENGINEER</p>	<p>DATE DEC 98</p>
<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR WICHITA, KANSAS 67202 (316) 946-7140 (316) 946-5114 fax</p>	<p>PROJECT NUMBER 449-00318</p>	<p>CSA # 235375</p>	<p>SHEET 2 OF 11</p>