

THE JERSEY CITY MUNICIPAL UTILITIES AUTHORITY

REQUIREMENTS FOR FIRE AND DOMESTIC WATER LINE AND METER INSTALLATIONS

- 1) All fire service applications and all domestic service applications two (2) inches and larger must be submitted to the JCMUA's Bureau of Water Engineering for approval. Five (5) sets of plans shall be submitted for approval. All plans shall be signed and sealed by a Professional Engineer or Registered Architect licensed to practice in New Jersey.
- 2) Submitted plans shall be standard engineering drawings, size 24 inches x 36 inches. Included shall be a site plan showing adjacent streets with water main, service, and details indicated. Also included shall be a key map showing general location within the City.
- 3) Indicated on the submitted plans shall be the size of tap, location of tapping and curb gate valves, detailed meter set-up, and size of facility's meter. Also indicated on the plans shall be the type of occupancy of the facility receiving the water service. (i.e. hospital, warehouse, apartment building, etc.)
- 4) All existing water service lines to be abandoned shall be cut and capped at the main, in accordance with JCMUA standards, and inspected within 24 hours after installation of new tap. The maximum of one (1) tap shall be made for both domestic and fire service per facility. The tap shall be the maximum of one (1) size smaller than the City's water main. No tapping shall be done by anyone except by United Water Jersey City (UWJC) unless specifically approved by JCMUA.
- 5) Only one domestic/ fire service is allowed for each facility. Applicant may install check meters on individual branch connections downstream of domestic meter setup where there is more than one owner/ tenant for a facility. However, only one water bill will be issued for the facility.
- 6) A solid ductile iron tapping sleeve such as Mueller H-615 tapping sleeve or approved equal shall be utilized for all taps 2-inches and larger. The tapping sleeve shall pass pressure testing based on AWWA standards before tap is made.
- 7) For all services included herein, two (2) gate valves are required that are to be installed by the applicant; a tapping valve, located at the tap and curb valve, located in the sidewalk before the meter. Tapping gates shall be furnished opened right. All tapping and curb valves shall be double disc gate valves and meet AWWA standards. The wet tap up to 12 inches shall be performed by UWJC.
- 8) For taps off mains sixteen (16) inches and larger, the applicant shall furnish and install an additional gate valve adjacent to the tapping valve. No taps shall be

permitted on mains larger than twenty (20) inches unless there is no alternative water source, and special written approval is issued by the JCMUA.

- 9) Valve box parts for all valves shall be provided by the applicant. All tapping gate valves larger than 2-inches and all curb valves / stops regardless of size require a valve box with the word "Water" cast in the cover. Buried corporation valves/ stops shall be used at the tap for Class K copper services 2-inches and smaller.
- 10) All service pipes, sizes 2-inches through 12-inches, shall be Pressure Class 350 psi, cement-lined ductile iron pipe with mechanical joints.
- 11) The applicant shall install the meter inside the building. If the building line is in excess of 75 ft. from the main, the applicant shall place the meter in a pit near the sidewalk or street in close proximity to the tap.
- 12) For a regular fire suppression system (combined service line larger than 2"), a combined reduced pressure detector assembly (Ames 5000 SS, Ames 5000 RPDA or Watts 909 RPDA*) shall be installed on the main fire service line and a reduced pressure backflow preventer on the bypass (Ames 4000 SS or Watts 909*) (refer to Figure 1). On the limited fire suppression system (combined service line 1.5" or 2"), a fire line detector check with a single check valve (Ames 1000 DCV*) shall be installed on the main fire line and a reduced pressure backflow preventer (Ames 4000 SS or Watts 909*) shall be installed downstream of the bypass (refer to Figure 2). All regular fire suppression systems must have OS&Y valves, however, limited fire suppression systems may use ball valves (Victaulic Series 728 Firelock*) instead of OS&Y valves. The fire unit shall be furnished with a 5/8 inch x 3/4 inch metered bypass. Bypass meters shall be Jersey City standard single displacement Sensus meters with touchpad and radio read capabilities. The same radio MXU unit shall be used for a combined domestic and fire service.
- 13) For domestic service, an approved reduced pressure backflow preventer (Ames 4000 SS or Watts 909*) is required when the JCMUA determines that there is a cross-connection hazard and the facility presents a threat to the City's distribution system water quality in accordance with the Plumbing Subcode of the New Jersey State Uniform Construction Code, NJAC 5:23-3.15 and the New Jersey Safe Drinking Water Act NJAC 7:10-10 Physical Connections and Cross Connections Control by Containment. Some services which require such devices include: a hospital, school, chemical plant, factory, and a facility with sewage ejectors.
- 14) If a reduced pressure backflow preventer is not required on the domestic service, a check valve should be installed downstream of the test tee.
- 15) All meters sizes 2 inches through 6 inches shall be single compound meters and all meters 8 inches and larger shall be duplex compound manifold meters.
- 16) All meters shall be adequately restrained with metal brackets fastened to the floor or

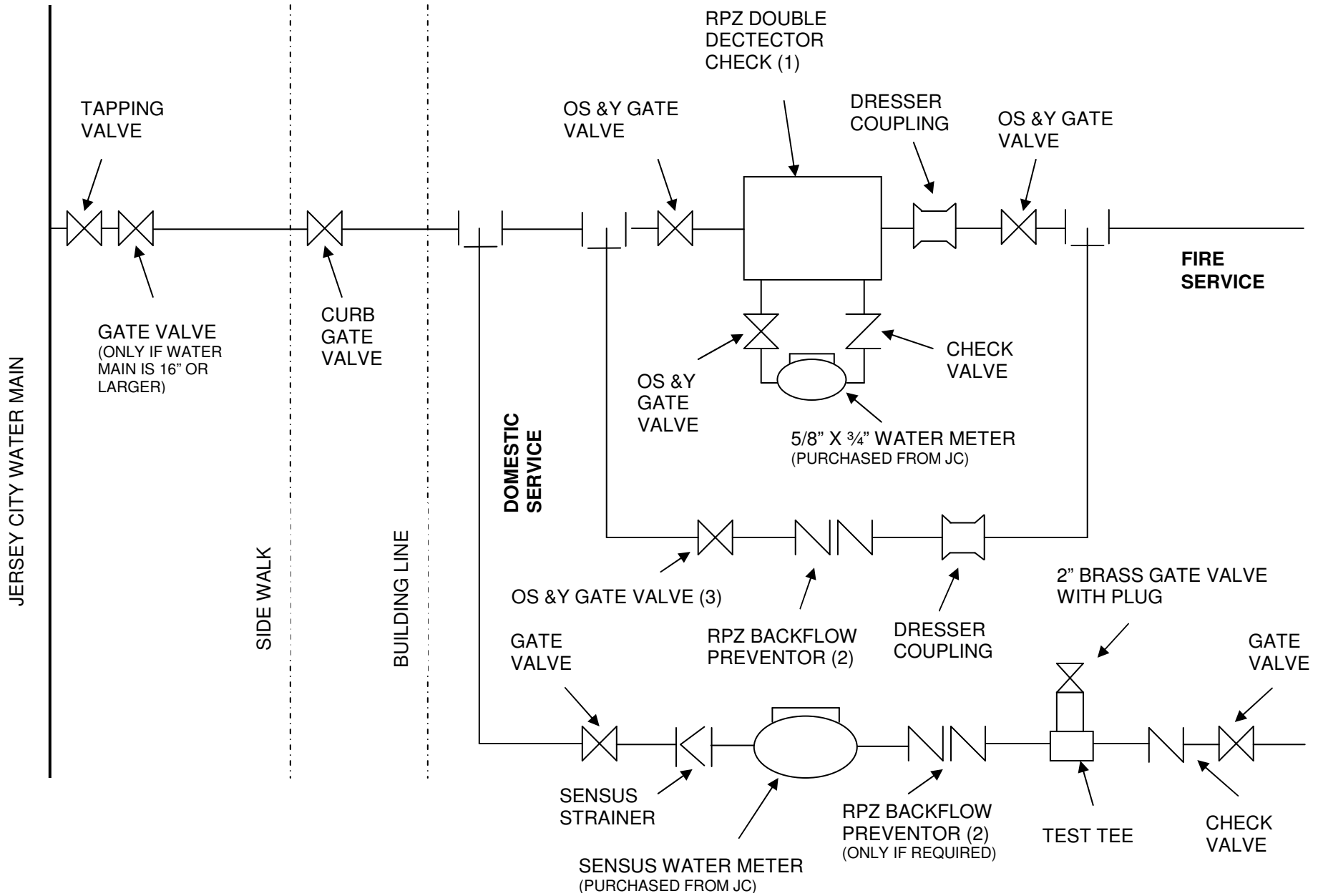
wall or other approved means such as uniflanges where internal pipe pressure and flow warrant such restraints. Meters, detector checks, and valves may be seated on concrete block and tapered shims to provide adequate support. Meters shall be installed approximately 36" above floor grade.

- 17) All meter installations in meter pit or vault shall be pre-approved by JCMUA and have proper access openings for meter reading and replacement.
- 18) Each compound meter shall have strainer installed on the inlet side immediately before the meter. All strainers must be purchased from JCMUA or its authorized agent.
- 19) All meters 2" and larger shall be furnished with Sensus ECR/WP Remote Touch Pad Modules and Radio MXU units for both types of reading capabilities.
- 20) Remote Touch Pad Module wire shall be connected to the meter register utilizing a gel cap for watertight sealing of all terminal connections. Touch pads may be wall mounted or lid mounted where a meter pit is utilized. Touch pads are to be installed on exterior building wall facing the street and located as close as possible to street. The radio MXU unit must be installed with mounting bracket and likewise is to be installed in proximity to street.
- 21) All installations of equipment and components shall be performed in accordance with manufacturer's recommendations.
- 22) All meters including touch pad modules, and radio MXU units shall be purchased through the permit clerk at JCMUA office. Approved plans must be submitted to the permit clerk for issuance of required permits.
- 23) After obtaining the required permits (street opening, tap, and meter) the applicant shall call UWJC at (201) 239-1108 to schedule the tap. The excavation shall be completed twenty-four (24) hours prior to the scheduled tap, and verified by JCMUA or its authorized agent before the tap will be installed. Excavation shall be constructed in accordance with OSHA requirements for sheeting and safety.
- 24) Upon completion of the installation, the applicant shall submit three (3) sets of "as built" plans, to the JCMUA's Bureau of Water Engineering. The JCMUA will authorize supply water upon acceptance of the "as built" drawings.

* Specified model or approved equal.

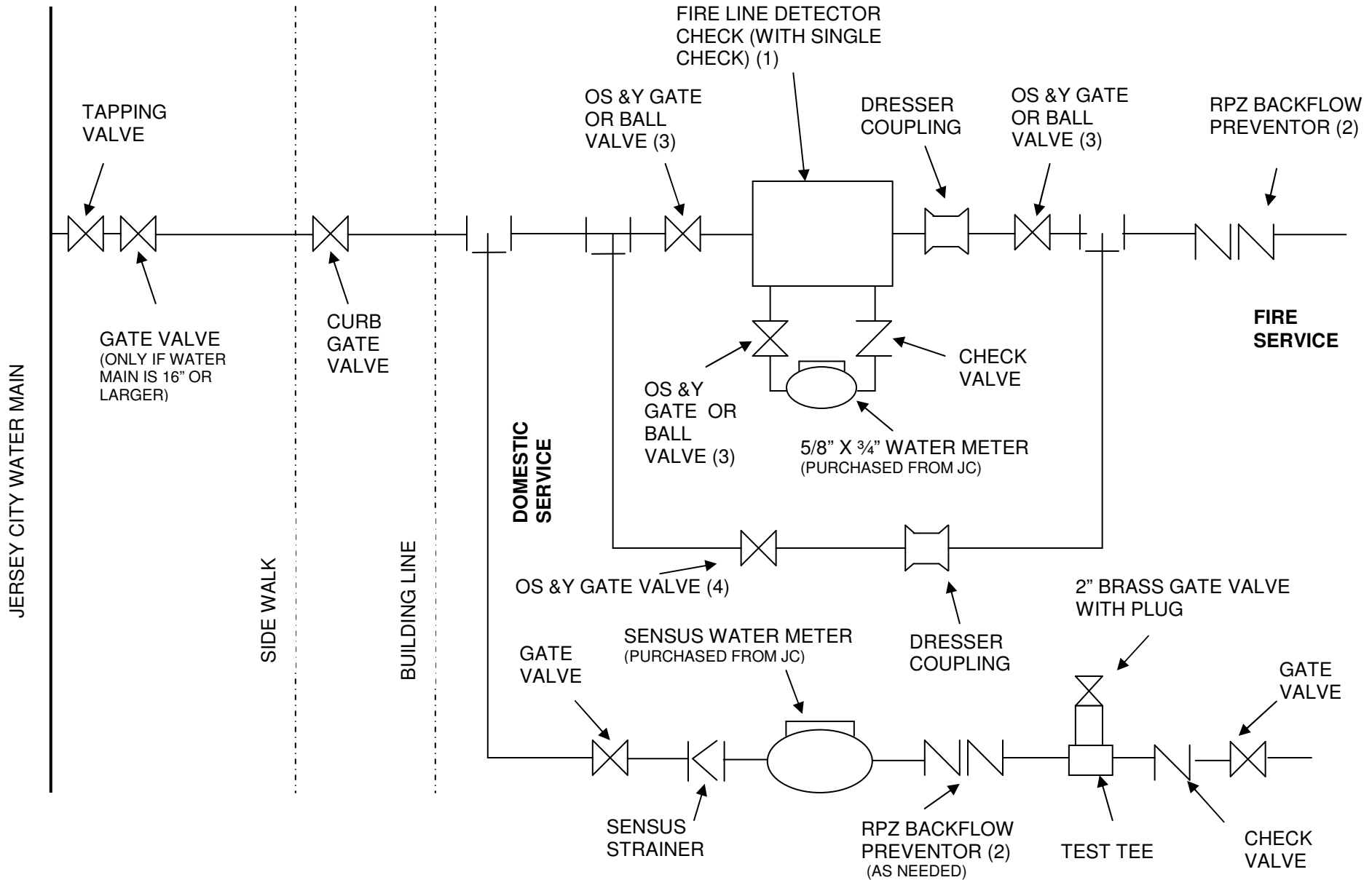
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FIGURE 1. J.C.M.U.A. REQUIREMENTS FOR FIRE AND DOMESTIC WATER LINE AND METER INSTALLATIONS



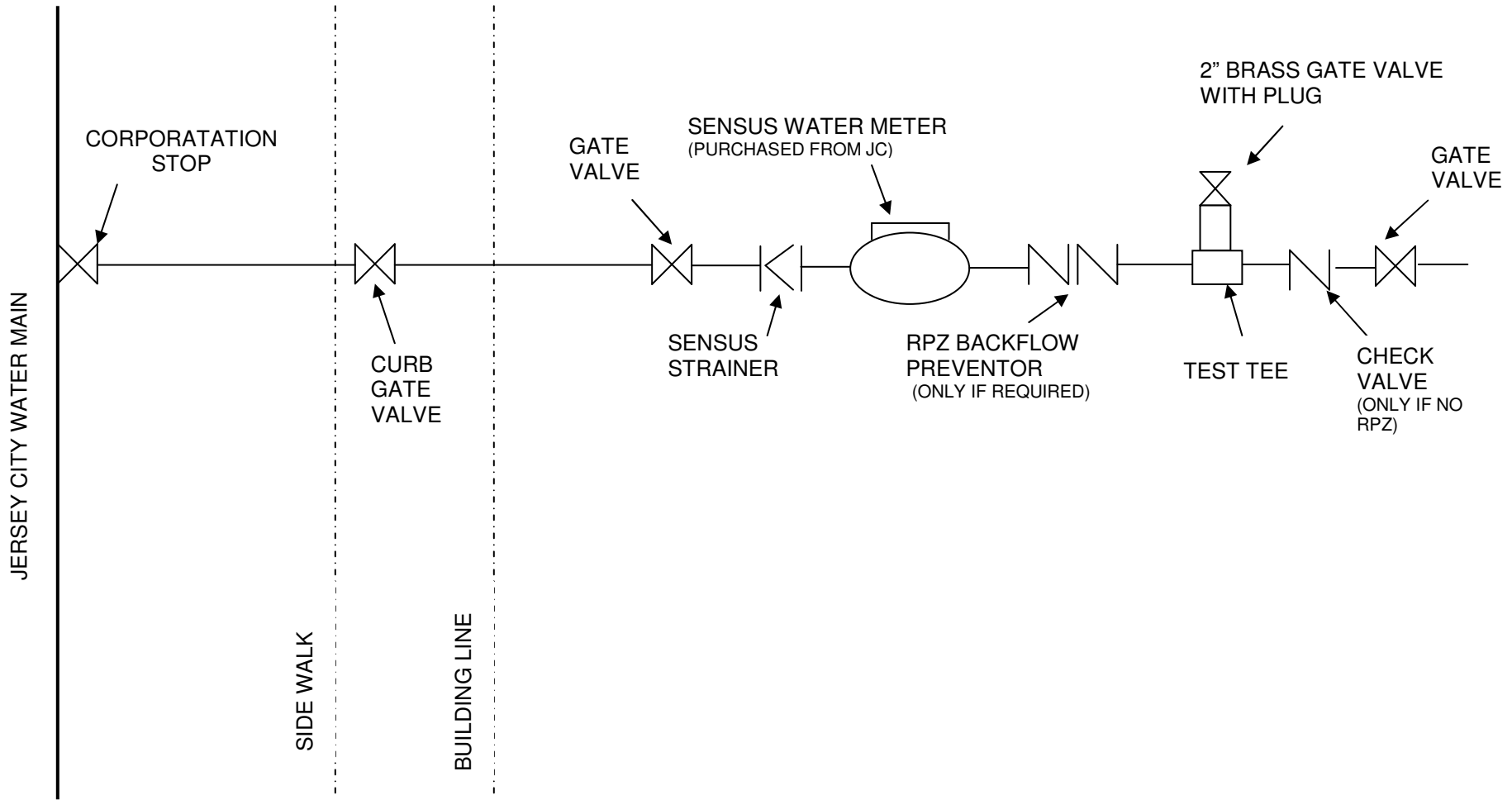
(1) Ames 5000 SS, Ames 5000 RPDA or Watts 909 RPDA, (2) Ames 4000 SS or Watts 909, (3) Gate valve sealed by JCMUA or agent (UWJC)
 Must use model # specified or approved equal

**FIGURE 2. J.C.M.U.A. REQUIREMENTS FOR FIRE AND DOMESTIC WATER LINE AND METER INSTALLATIONS
(LIMITED FIRE SUPPRESSION SYSTEM - CONNECTION SIZE OF 1 1/2" OR 2")**



(1) Ames 1000 DCV, (2) Ames 4000 SS or Watts 909, (3) Victaulic Series 728 Firelock Ball Valve, (4) Gate valve sealed by JCMUA or agent (UWJC)
Must use model # specified or approved equal

FIGURE 3. J.C.M.U.A. REQUIREMENTS FOR DOMESTIC WATER LINE AND METER INSTALLATIONS



** Gate valve sealed by JCMUA or agent (UWJC)