SECTION 211116 - FACILITY FIRE HYDRANTS

Revise this Section by deleting and inserting text to meet Project-specific requirements.

* + - 1. RELATED DOCUMENTS
         1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
      2. SUMMARY
         1. Section Includes:

AWWA dry-barrel fire hydrants.

UL-listed, dry-barrel fire hydrants.

* + - * 1. Related Requirements:

Retain subparagraph below to cross-reference requirements Contractor might expect to find in this Section but are specified in other Sections.

Section 211100 "Facility Fire-Suppression Water-Service Piping" for piping and specialties for facility fire-suppression water-service piping outside the building and for service entrance piping into the building at the floor slab or wall.

* + - 1. SUBMITTALS
         1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the

General Conditions.

* + - * 1. Manufacturer’s installation instructions shall be provided along with product data.
        2. Submittals shall be provided in the order in which they are specified and tabbed (for

combined submittals).

* + - * 1. Product Data: For each type of product.
      1. CLOSEOUT SUBMITTALS
         1. Maintenance Data: For fire hydrants to include in maintenance manuals.

1. PRODUCTS
   * + 1. AWWA DRY-BARREL FIRE HYDRANTS

Use dry-barrel hydrants in areas with freezing weather; otherwise, use wet-barrel hydrants. AWWA is a post type and has interior coating. UL listed is a freestanding type.

* + - * 1. [Manufacturers:](http://www.specagent.com/Lookup?ulid=9242) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

American AVK Company

American Cast Iron Pipe Company

American Foundry Group, Inc

Clow Valve Company; a subsidiary of McWane, Inc.

EJ

Kennedy Valve Company, a division of McWane, Inc.

M & H Valve Company, a subsidiary of McWane, Inc.

Mueller Co

Approved equivalent.

* + - * 1. Description: Post type, with one NPS 4-1/2 and two NPS 2-1/2 outlets; and with 5-1/4-inch main valve, drain valve, and NPS 6 mechanical-joint inlet. Include interior coating according to AWWA C550. Hydrant shall have cast-iron body and compression-type valve that opens against pressure and closes with pressure.
        2. Standard: AWWA C502.

Verify, with manufacturer, availability of model if 200- or 250-psig pressure rating is required.

Pressure Rating: [**150 psig minimum**] [**200 psig minimum**] [**250 psig**].

* + - 1. UL-LISTED, DRY-BARREL FIRE HYDRANTS

Retain this article for UL-listed or FM Global-approved, dry-barrel fire hydrants.

* + - * 1. [Manufacturers:](http://www.specagent.com/Lookup?ulid=9242) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

American Cast Iron Pipe Company

American Foundry Group, Inc

Clow Valve Company; a subsidiary of McWane, Inc.

EJ

Kennedy Valve Company, a division of McWane, Inc.

M & H Valve Company, a subsidiary of McWane, Inc.

Mueller Co

Approved equivalent.

* + - * 1. Description: Freestanding, with one NPS 4-1/2 and two NPS 2-1/2 outlets; and with 5-1/4-inch main valve, drain valve, and NPS 6 mechanical-joint inlet. Hydrant shall have cast-iron body and compression-type valve that opens against pressure and closes with pressure.
        2. Standards: UL 246 and FM Global's "Approval Guide."
        3. Design: Base valve.

Verify, with manufacturer, availability of model if 175-, 200-, or 250-psig pressure rating is required.

* + - * 1. Pressure Rating: [**150 psig minimum**] [**175 psig minimum**] [**200 psig minimum**] [**250 psig**].
        2. Outlet Threads: NFPA 1963, with external hose thread used by local fire department. Include cast-iron caps with steel chains.

Revise "Operating and Cap Nuts" and "Direction of Opening" paragraphs below if required by authorities having jurisdiction.

* + - * 1. Operating and Cap Nuts: Pentagon, 1-1/2 inches point to flat.
        2. Direction of Opening: Hydrant valve opens by turning operating nut to left or counterclockwise.
        3. Exterior Finish: Red alkyd-gloss enamel paint unless otherwise indicated.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of fire hydrants.
          2. Examine roughing-in for facility fire-suppression water-service piping to verify actual locations of piping connections before installation.
          3. Proceed with installation only after unsatisfactory conditions have been corrected.
       2. FIRE HYDRANT INSTALLATION
          1. General: Install each fire hydrant with separate gate valve in supply pipe, anchor with restrained joints or thrust blocks, and support in upright position.
          2. Dry-Barrel Fire Hydrants: Install with valve below the frost line. Provide for drainage.
          3. AWWA Fire Hydrants: Comply with AWWA M17.
          4. UL-Listed or FM Global-Approved Fire Hydrants: Comply with NFPA 24.

END OF SECTION 211116