

SECTION 02515 - HYDRANTS**PART 1 GENERAL****1.1 REFERENCES**

1. General: The work shall comply with the most recent standards or tentative standards as published at the date of the contract and as listed in this specification using the abbreviation shown.
2. American National Standards Institute (ANSI)/American Water Works Association (AWWA):
 - 1) C 502 Standard for Hydrants, Dry Barrel Fire Hydrants (Includes addendum C 502a-95)

PART 2 PRODUCTS**2.1 EQUIPMENT**

1. Fire Hydrants: Shall be traffic type with safety flange protection conforming to ANSI/AWWA C 502 and shall have not less than 6 inch diameter barrel, 4-1/2 inch minimum hydrant valve and a measured loss of not more than 2.5 psi through the hydrant at 600 gpm. Hydrant shall have a 6 inch mechanical joint connection to the water main, two 2 1/2 inch hose outlets and one 4-1/2 inch pumper outlet and be so designed that if broken off, the hydrant valve will remain closed. Minimum bury depth shall be 3-1/2 feet or to accommodate depth of water main. Direction of opening shall be left (counterclockwise) with 1-1/2 inch pentagon shape operating nut, and nozzle threading shall be National Standard. Hydrants shall be Mueller A-421, American Flow Control Mark-73, Clow Medallion, or Kennedy Valve Co. K-81D, AVK 27, or US Pipe M-94.

Hydrants to be accepted into the Authority's water system shall be painted in accordance with the following:

Hydrant: Sherwin Williams, Industrial Enamel Safety Red
Caps: Cataphote, silver white alert paint, Model T6801

Hydrants which will remain a part of a private water system shall be painted in accordance with the following:

Hydrant: Sherwin Williams, Industrial Enamel Safety Red
Caps: Williams, Industrial Enamel Safety Red

2. Blowoff Hydrants: Blowoff hydrant shall be non-freezing post hydrant self draining type, furnished with a 2 inch FIP inlet, a non-turning operating rod, and shall open counter-clockwise. All of the working parts shall be of bronze-to-bronze design, and be serviceable from above grade without excavation. The outlet shall also be bronze 2 1/2 inch NST and fitted with a protective cap. Hydrants shall be lockable to prevent unauthorized use. Hydrants shall be similar to Kupferle Foundry Co. Mainguard No. 78, Mueller A412, or approved equal.

Provisions shall be made for blow-off assemblies at the ends of any approved dead end lines by means of a regular blow-off assembly or hydrant, as may be directed by the Authority (see Standard Detail W-4). Blow-off assemblies shall be placed behind the curb. No flushing device shall be directly connected to any sewer. Chambers or pits containing blow-offs shall be drained to the surface of the ground where they are not subject to flooding from surface water, or to absorption pits located above the seasonal groundwater table.

PART 3 EXECUTION**3.1 INSTALLATION**

1. **General:** Installation shall be in accordance with the manufacturer's instructions and Standard Detail W-2. Hydrants and their gate valves shall be harnessed to the main water line such that the hydrant could be removed and the valve would still be harnessed to the main water line.
2. **Hydrant Location:** Fire hydrants should be located two to ten feet from the curb or outside edge of the shoulder and five feet from fixed objects with the pumper connection facing the street. Fire hydrants shall be set so that the traffic flange is 2 inches above finished grade, and shall be supported on a concrete cradle so that the drain line is not obstructed and no load transfers to the pipe.
3. **Blowoff Hydrants:** The installation of blowoff hydrants shall be in accordance with the manufacturers instructions.
4. **Hydrant Disassembly:** Should the need arise for disassembling the hydrant, such as for adding extensions, a brass sleeve shall be employed to protect the oil seals from damage when removing the hydrant housing from the upper stem.

END OF SECTION