SECTION 400581.26 – FREEZE-PROOF YARD HYDRANTS

Note that this section has only been edited for NYSOGS standardization and has not been technically edited. The designer shall make all technical edits specific to the project for this section.

This Section specifies non-freeze yard hydrant (also called "post hydrant") assemblies for installation in irrigation and potable water systems.

This Section includes provisions for Work performed using unit price payment method when applicable.

1. GENERAL
	* + 1. SUMMARY
				1. Section Includes: Non-freeze yard hydrants.
				2. Related Requirements:

List other Sections directly related to or affecting Work of this Section. Include Sections specifying information expected to be found in this Section as well as Sections required to describe complete system or assembly requirements.

Section 330110.58 - Disinfection of Water Utility Piping Systems: Requirements for flushing and disinfecting.

Section 331416 - Site Water Utility Distribution Piping: Pressure testing of non-freeze yard hydrants.

Section 331417 - Site Water Service Utility Laterals: Piping, trenching, backfilling, and compaction requirements.

* + - 1. REFERENCE STANDARDS

List reference standards included within text of this Section, with designations, numbers, and complete document titles.

LEED requires compliance with specific editions of referenced standards. NSF International:

NSF 61 - Drinking Water System Components - Health Effects.

NSF 372 - Drinking Water System Components - Lead Content.

* + - 1. COORDINATION

In following Paragraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

* + - * 1. Coordinate Work of this Section with installation of water mains.
			1. SUBMITTALS

Only request submittals needed to verify compliance with Project requirements.

* + - * 1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Product Data: Submit manufacturer information regarding component materials, fittings, assembly and parts diagram, and accessories.
				5. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

Include separate Paragraphs for additional certifications.

* + - * 1. Manufacturer Instructions: Submit detailed instructions on installation requirements, including storage and handling procedures.
				2. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
				3. Qualifications Statement:

Coordinate following Subparagraph with requirements specified in QUALIFICATIONS Article.

Submit qualifications for manufacturer.

* + - 1. CLOSEOUT SUBMITTALS
				1. Project Record Documents: Record actual locations of non-freeze yard hydrants.
			2. MAINTENANCE MATERIAL SUBMITTALS
				1. Tools: Furnish [**one tee wrench**] [**<\_\_\_\_\_\_\_\_> tee wrenches**] of required length to Director’s Representative.
			3. QUALITY ASSURANCE

Include this Article to specify compliance with overall reference standards affecting products and installation included in this Section.

* + - * 1. Materials in Contact with Potable Water: Certified according to NSF 61 and NSF 372.

In following Paragraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

* + - * 1. Perform Work according to <**\_\_\_\_\_\_\_\_**> standards.

Include following Paragraph only when cost of acquiring specified standards is justified.

* + - * 1. Maintain <**\_\_\_\_\_\_\_\_**> [**copy**] [**copies**] of each standard affecting Work of this Section on Site.
			1. QUALIFICATIONS

Coordinate following Paragraph with requirements specified in SUBMITTALS Article.

* + - * 1. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum [**three**] <**\_\_\_\_\_\_\_\_**> years' [**documented**] experience.
			1. DELIVERY, STORAGE, AND HANDLING
				1. Delivery:

Seal hydrant ends to prevent entry of foreign matter.

Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.

* + - * 1. Store materials according to manufacturer instructions.
				2. Protection:

Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.

Provide additional protection according to manufacturer instructions.

1. PRODUCTS
	* + 1. NON-FREEZE YARD HYDRANTS
				1. [Manufacturers](http://www.specagent.com/LookUp/?ulid=13341&mf=04&src=wd):

designer to provide two manufacturers and approved equivalent for all listed products.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

In following Subparagraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

Furnish materials according to <**\_\_\_\_\_\_\_\_**> standards.

Insert descriptive specifications below to identify Project requirements and to eliminate conflicts with products specified above.

* + - * 1. Description:

Type: Non-freeze.

Closure Valve: Free-floating, compression type.

Barrel: Automatic drain after use.

Stem: Nourishing.

Main Valve: 1-1/2 inches

Lubrication: Furnish access hole in operating nut.

* + - * 1. Materials:

Body: [**Galvanized steel**] <**\_\_\_\_\_\_\_\_**>.

Head: [**Cast iron**] [**Bronze**] <**\_\_\_\_\_\_\_\_**>.

Outlets: [**Brass**] <**\_\_\_\_\_\_\_\_**>.

Main Valve: [**Bronze**] [**Stainless steel**] <**\_\_\_\_\_\_\_\_**>.

Drain Valve: [**Bronze**] [**Stainless steel**] <**\_\_\_\_\_\_\_\_**>.

Operating Rod: [**Stainless steel**] <**\_\_\_\_\_\_\_\_**>.

* + - * 1. Operation:

[**Cam-type, cast-iron lever control**] [**Operating nut**].

Drain Valve: Actuated when main valve is in CLOSED position.

* + - * 1. Connections:

Hose Connection: [**One**] <**\_\_\_\_\_\_\_\_**> each, [**3/4**] [**1**] <**\_\_\_\_\_\_\_\_**>-inch hose connections[**, with threaded quick-disconnect adapters**].

Drain Port: [**1/8**] [**1/2**] <**\_\_\_\_\_\_\_\_**> inch

Inlet:

Size: [**3/4**] [**1**] <**\_\_\_\_\_\_\_\_**> inch

Type: Threaded.

* + - * 1. Accessories:

Operating handle lock.

Casing Guard: [**Aluminum**] <**\_\_\_\_\_\_\_\_**>.

1. EXECUTION
	* + 1. EXAMINATION
				1. Identify required lines, levels, contours, and datum locations.
				2. Verify that elevations [**of existing facilities**] prior to excavation and installation of non-freeze yard hydrants are as indicated on Drawings.
			2. PREPARATION
				1. Locate, identify, and protect from damage utilities to remain.
				2. Do not interrupt existing utilities without permission and without making arrangements to provide temporary utility services.

Notify Director’s Representative not less than <**\_\_\_\_\_\_\_\_**> days in advance of proposed utility interruption.

Do not proceed without written permission from Director’s Representative.

* + - 1. INSTALLATION
				1. Perform trench excavation, backfilling, and compaction as specified in Section [**331417 - Site Water Service Utility Laterals**] <**\_\_\_\_\_\_-\_\_\_\_\_\_\_\_\_\_\_\_**>.
				2. Install non-freeze yard hydrants in conjunction with pipe laying.
				3. Provide support blocking and drainage gravel while installing non-freeze yard hydrants; do not block drain hole.
				4. Orientation:

Set [**valves**] [**and**] [**hydrants**] plumb.

Set non-freeze yard hydrants with outlets as indicated on Drawings.

Set non-freeze yard hydrants with centerline of outlets [**<\_\_\_\_\_\_\_\_> inches above finished grade**] [**as indicated on Drawings**].

* + - * 1. After main-line pressure testing, flush non-freeze yard hydrants and check for proper drainage.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

In following Paragraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

* + - * 1. Installation Standards: Install Work according to <**\_\_\_\_\_\_\_\_**> standards.
				2. Disinfection of Water Piping System: Flush and disinfect non-freeze yard hydrants with water mains as specified in Section 330110.58 - Disinfection of Water Utility Piping Systems.
			1. FIELD QUALITY CONTROL
				1. Testing: Pressure test non-freeze yard hydrants with water mains as specified in Section 331416 - Site Water Utility Distribution Piping.

END OF SECTION 400581.26