This master should be used by designers working on Port of Portland construction projects and by designers working for PDX tenants (“Tenants”). Usage notes highlight a few specific editing choices, however the entire section should be evaluated and edited to fit specific project needs.

SECTION 210553 - IDENTIFICATION FOR FIRE SUPPRESSION PIPING AND EQUIPMENT

1. GENERAL
   * + 1. DESCRIPTION
          1. This section describes the identification of valves, piping, and equipment components of the fire suppression systems to indicate their function and system served.
       2. REFERENCES
          1. ANSI: American National Standards Institute

ANSI A13.1: Scheme for the Identification of Piping Systems

* + - * 1. OSPSC: Oregon State Plumbing Specialty Code
      1. SUBMITTALS
         1. Product Data: Submit product data for products specified herein.
         2. Valve Tag Directory: Submit for approval prior to fabrication of valve tags.
         3. Equipment Nameplate Directory: Submit for approval prior to fabrication of labels.
         4. Include copy of valve tag and equipment nameplate directories in each set of operation and maintenance manuals.

1. PRODUCTS

Fill in abbreviated name of project in the blank below. Check with the PE, if necessary.

* + - 1. VALVE IDENTIFICATION
         1. Valve Tags:

General: Identify valves with metal tags. Legends shall be stamped or embossed. Tags shall indicate the function of the valve and its normal operating position; for example:

\_\_\_\_\_\_ (SPECIFIC PROJECT IDENTIFIER)

56 HW (NUMBER AND CONTENT OF PIPE)

ISOLATION (VALVE FUNCTION)

NO (NORMAL OPERATION POSITION)

Size: Valve tags 2-inch diameter with 1/4-inch-high letters.

Material: Use 0.050 or 0.064-inch brass tags.

Automatic Valves and Regulating Valves: Use 1/16-inch-thick laminated 3-ply plastic, center ply white, outer ply red, “lamicoid,” or equal. Form letters by exposing center ply.

Existing Buildings and Systems: Contact the Port for coordination with existing building tagging system and supplementary information required for any specific system before valve tagging begins.

* + - * 1. Valve Tag Directory: Include tag number, location, exposed or concealed, service, valve size, valve manufacturer, valve model number, tag material, and normal operating position of valve.
      1. PIPING MARKERS
         1. Acceptable Manufacturers: Brady, Seton, Marking Systems, Inc. (MSI), or equal.
         2. Label pipes with all-vinyl, self-sticking labels or letters. For pipe covering sizes up to and including 3/4-inch outside diameter, select labels with 1/2-inch letters. For sizes from 3/4- to 2‑inch outside diameter, 3/4-inch letters; above 2 inches outside diameter, 2-inch letters. The pipe markers shall be identified and color coded as follows with black directional arrows. Exposed sprinkler piping within circulation areas is void from labeling.

|  |  |  |
| --- | --- | --- |
| **SERVICE** | **PIPE MARKER** | **BACKGROUND COLOR** |
| Fire Protection | “FIRE PROTECTION WATER” | Red |
| Fire Sprinkler | “FIRE SPRINKLER”\* | Red |
| Dry Fire Sprinkler | “DRY FIRE SPRINKLER” | Red |
| Preaction Fire Sprinkler | “PREACTION FIRE SPRINKLER” | Red |

\* Adjacent to pipe marker, provide abbreviated zone identification as indicated on “key plans - Fire Protection.”

* + - 1. EQUIPMENT IDENTIFICATION
         1. Nameplates:

Tag all pumps and miscellaneous items of fire suppression equipment with engraved nameplates. Nameplates shall be 1/16-inch-thick, 3 x 5 laminated 3-ply plastic, center ply white, outer ply black. Form letters by exposing center ply.

Identify unit with code number as shown on the drawings and area served.

* + - * 1. Equipment Nameplate Directory: List pumps, and other equipment nameplates. Include Port- and Contractor-furnished equipment. List nameplate designation, manufacturer’s model number, location of equipment, area served or function, disconnect location, and normal position of HOA switch.

1. EXECUTION
   * + 1. VALVE IDENTIFICATION
          1. Valve Tags:

Attach to valve with a brass chain.

Valve tag numbers shall be continuous throughout the building for each system. Contractor shall obtain a list for each system involved from the Port to establish numbers following the listed sequences.

* + - * 1. Valve Tag Directory: Post final copy in operation and maintenance manual.
        2. Concealed Valves: Affix color coded “dot” to walls or ceilings wherever valves are concealed. Colors shall be as follows:

Fire Protection: Red.

* + - 1. PIPING MARKERS
         1. Unless recommendations of ANSI A13.1 are more stringent, apply labels or letters after completion of pipe cleaning, insulation, painting, or other similar work, as follows:

Every 20 feet along continuous exposed lines.

Every 10 feet along continuous concealed lines.

Adjacent to each valve and stubout for future.

Where pipe passes through a wall, into and out of concealed spaces.

On each riser.

On each leg of a “T.”

Locate conspicuously where visible.

* + - * 1. Further, apply labels or letters to lower quarters of the pipe on horizontal runs where view is not obstructed or on the upper quarters when pipe is normally viewed from above. Apply arrow labels indicating direction of flow.
        2. Spray a protective coating of clear epoxy over markers and arrows in corrosive atmosphere areas.
        3. Comply with OSPSC regarding identification of non-potable piping systems.
      1. EQUIPMENT IDENTIFICATION
         1. Nameplates: Attach to prominent area of equipment, either with sheet metal screws, brass chain, or contact cement as applicable.
         2. Nameplate Directory: Post final copy in operation and maintenance manual.

END OF SECTION 210553