Standard Drawing Report

Date: May 1, 2026

Technical Owner: Traffic – Jennifer Ruth Tower, P.E.

Standard Drawing No. P-412 **Calculation Book No.** n/a

Drawing Title: Street Name Sign Hardware Details for Pipe Post Mount

Original Report Date: October 3, 2017 (Michelle Dellinger)

Background Information, Including Reference Material:

The draft versions of what became standard drawing P-412 were first created in 2002 to document hardware that the Portland Transportation Maintenance Operations group used for sign installations. Prior to 2002 the Portland Bureau of Transportation (PBOT) relied on Maintenance Operations crews to install signs for capital projects. In 2002 during the creation of the first version of this standard drawings Maintenance Operations staff Traffic Engineer Dave Hutson was asked how long they had been using this particular sign hardware. Dave Hutson replied that Maintenance Operations had been using the hardware, "…for several years… This is not a new standard."

In 2009 PBOT began transitioning to the current street name sign design. Prior to this, the sign blanks were 6" tall, had an extruded "dog bone" profile, and were secured to the tops of pipe posts by a smaller and different type of post cap hardware than is currently used.

The blanks for the current street name sign designs are either 8" or 12" tall and flat, requiring different supporting hardware. This hardware was shown on the newly created standard drawing P-412 dated April 14, 2011, and included 6" and 12" versions.

Assumption Made:

The sign hardware shown on P-412 is used for mounting street name signs on the top of two-inch pipe posts. Standard drawing P-420 includes details of when to use 8-inch street name signs vs. 12-inch street name signs depending on characteristics of the roadway. Standard drawing P-400 includes details of mounting height for a street name signs on a two-inch pipe post.

Design Narrative:

Single SNS Post cap 12": Used for post-mounted street name signs. This hardware is documented to have been used by PBOT Maintenance Operations since at least 2010 with no known issues.

Double SNS Cross-Piece 12": Used for post-mounted street name signs when two street name signs are mounted on the same pipe post. This hardware is documented to have been used by PBOT Maintenance Operations since at least 2010 with no known issues.

For the March 2015 update, the following revisions were made:

1) Added note that this standard drawing is only for use with 8" and12" tall sign blanks.
2) Added note that signs greater than 36" long must use the 12" hardware.

For the September 2022 update, the following revisions were made:

1) The 6" hardware was removed based on feedback from Maintenance Operations that they no longer use it due to observed installation failures. Only the 12" hardware is now used, no matter how long the street name sign is.

For the May 2026 update, the following revisions were made:

1) Updated design of the post cap to reflect the current product used; it can fit on both round and square pipe posts and has six set screws instead of five.