



# Standard Drawing Report

Date: October 3, 2017

Technical Owner: Traffic – Lewis H. Wardrip, P.E.

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

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



Expires 06/30/18

## 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 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."

## 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 the posted speeds 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 6":** Used for street name signs that are less than 36" long. This hardware is documented to have been used by Portland Transportation Maintenance Operations since at least several years prior to 2002 with no known issues.

**Single SNS Post cap 12":** Used for street name signs that are more than 36" long. Signs greater than 36" require the 12" stabilizing channel to prevent damage from high winds. This hardware is documented to have been used by Portland Transportation Maintenance Operations since at least several years prior to 2002 with no known issues.

**Double SNS Cross-Piece 6"**: Used for street name signs that are less than 36" long when two street name signs are mounted on the same pipe post. This hardware is documented to have been used by Portland Transportation Maintenance Operations since at least several years prior to 2002 with no known issues.

**Double SNS Cross-Piece 12"**: Used for street name signs that are more than 36" long when two street name signs are mounted on the same pipe post. Signs greater than 36" require the 12" stabilizing channel to prevent damage from high winds. This hardware is documented to have been used by Portland Transportation Maintenance Operations since at least several years prior to 2002 with no known issues.