Standard Drawing Report

Date: May 1, 2026

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

Standard Drawing No. P-413 **Calculation Book No.** n/a

Drawing Title: Street Name Sign Hardware Details for Cantilever Mount

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

Background Information, Including Reference Material:

The draft versions of what became standard drawing P-413 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 metal or wooden poles with a smaller and different type of 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-413 dated April 14, 2011, and included a cantilever bracket and a bracket extension.

The bracket extension was removed and replaced by larger versions of the cantilever bracket with the 2026 update.

Assumption Made:

The sign hardware shown on P-413 is used for cantilever mounting street name signs on signal or street light poles. 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 and orientation of a cantilever mounted street name sign.

Design Narrative:

16.5" SNS Cantilever Bracket: Used for street name signs up to a maximum of 24 inches in length. This hardware is documented to have been used by PBOT Maintenance Operations since at least 2010 with no known issues.

24" SNS Cantilever Bracket: Used for street name signs up to a maximum of 36 inches in length. Maintenance Operations began using this bracket in 2025 due to the unavailability of the bracket extension.

36" SNS Cantilever Bracket: Used for street name signs up to a maximum of 60 inches in length. This newly created detail was added to accommodate the longer street name signs often encountered when using the 12" tall street name sign blades.

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 bracket extension.

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

1) Removed the bracket extension.
2) Added the 24" and 36" cantilever brackets.
3) Revised note 6 to specify three bands be used with bracket installation.
4) Included maximum sign length guidance for each bracket size.