

**Bureau of Project Delivery
Bridge Design and Technology Division**

BRADD

No. 035
August 8, 2012

**Face To Face Dimension Of The Bridge On The
Stake Out Plan**

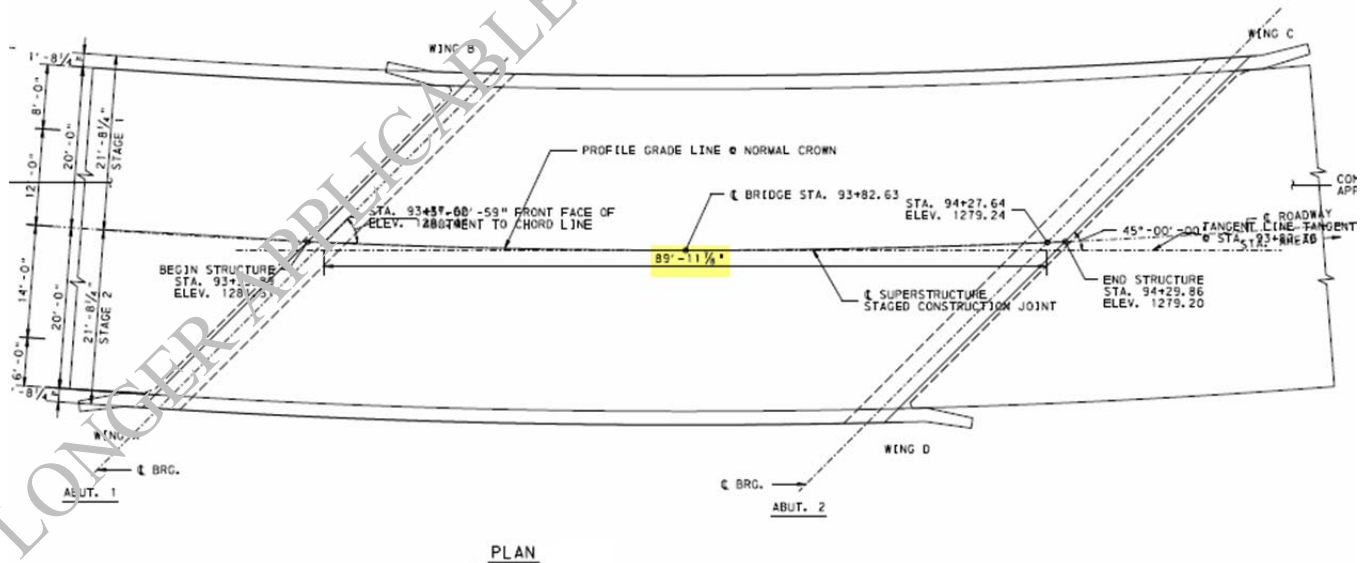
Since the release of BRADD Version 3.1.6.1, an issue with a dimension on the the Stake Out Plan has been reported. This issue, its symptoms and any workarounds are listed below.

1) Problem Statement:

For integral abutment superstructure-only bridges with a skewed superstructure and a horizontal curve, some values shown and used on the stake out plan are incorrect. The key value is the face-to-face chord dimension which is shorter than it should be. This causes the Abutment 2 coordinates shown on the stake-out plan to be incorrect.

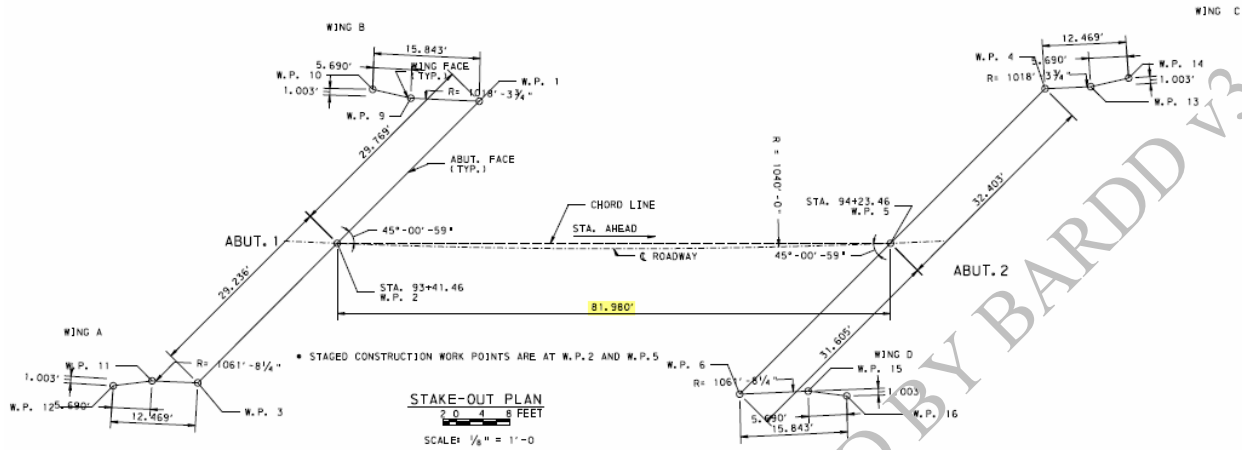
This error does not appear to affect any other job types or dimensions.

As an example, the Plan detail on the General Plan sheet for an integral abutment job with a 1000' horizontal curve and a 45° skew, shows the C.L. Bearing chord distance as 89'-11 7/8".



Archived copies of all previously distributed e-Notifications can be obtained from the PENNDOT BRADD website at <http://bradd.engrprograms.com/home> and clicking on "e-Notification" and then "Mailing List Archives."

The Stake-Out Plan, generated with version 3.1.6.0, shows a front face to front face distance as 81.960'.



But a quick calculation shows that this number should have been $84.33 = 89.99' - (2' + 2') / \sin(45^\circ)$.

Problem Workaround:

Manually adjust the value of the front-to-front distance as shown on the Stake-Out Plan. Then adjust all the coordinates on the Work Points table by the difference between the BRADD-calculated distance and the manually calculated distance.

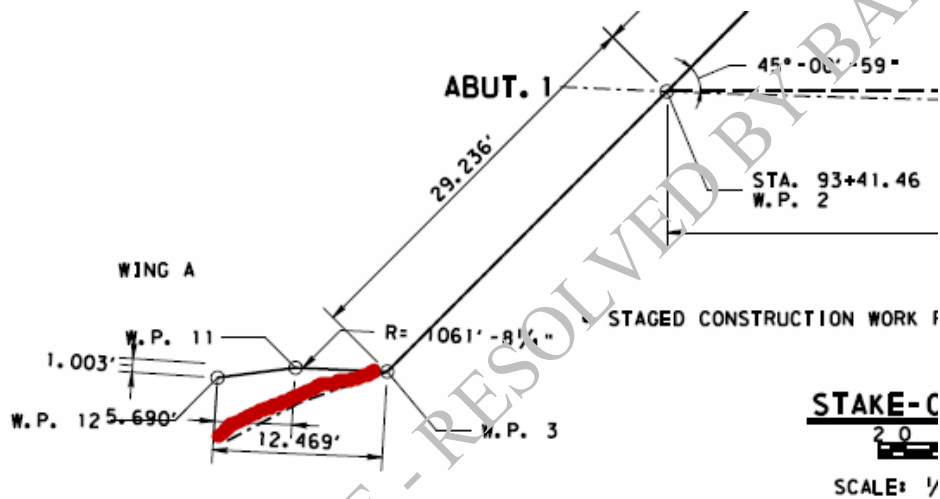
Problem Resolution:

A fix for this problem is available in BRADD version 3.1.6.2. This version can be downloaded as a patch from the BRADD website.

2) Problem Statement:

For integral abutment superstructure-only bridges with a negative radius horizontal curve, the wingwall work point coordinates are incorrect for both abutments. The incorrect coordinates computed for the wingwalls appear as the red line shown below when they are plotted.

This error does not appear to affect any other job types or dimensions.

**Problem Workaround:**

Manually recalculate all wingwall work point coordinates.

Problem Resolution:

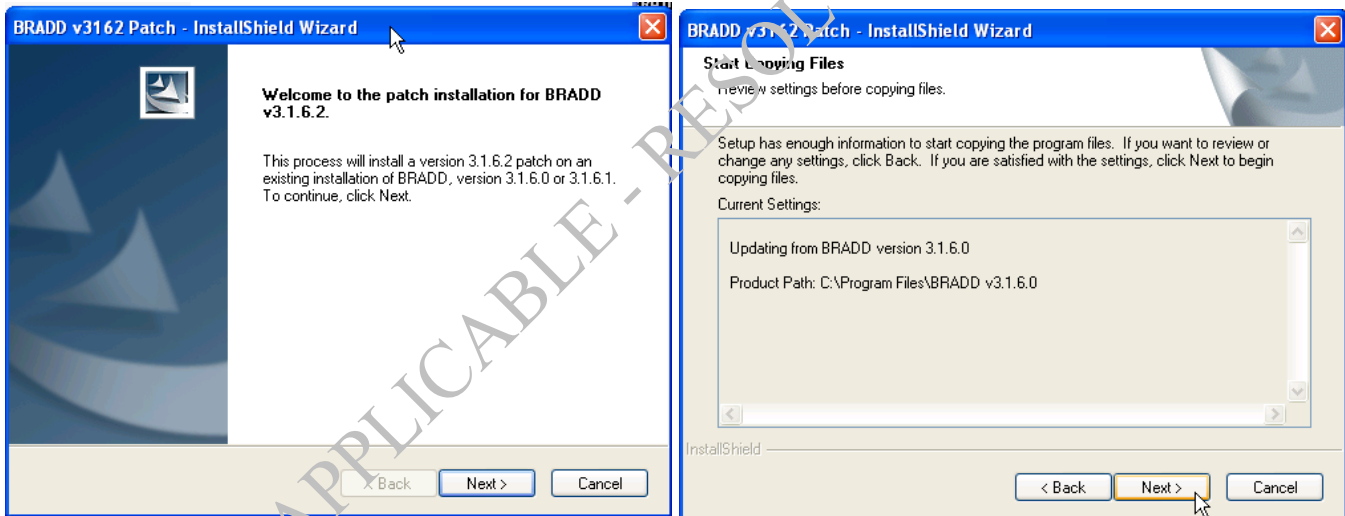
A fix for this problem is available in BRADD version 3.1.6.2. This version can be downloaded as a patch from the BRADD website.

Installing BRADD Version 3.1.6.2 Patch for Licensees

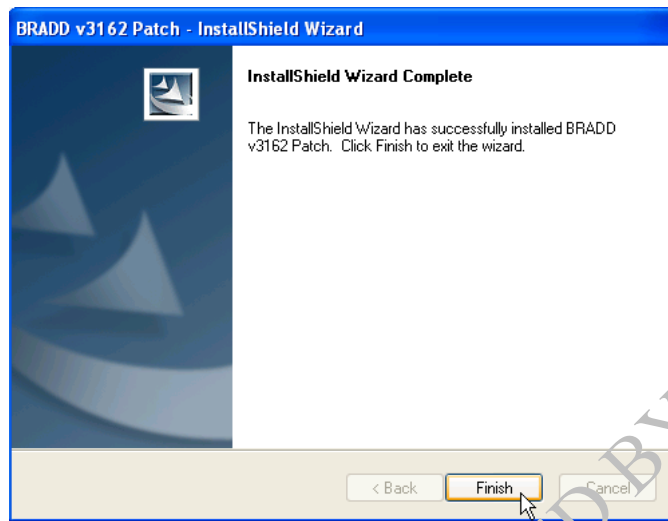
To download, go to the Downloads page on the BRADD web-site at <http://bradd.engrprograms.com> and select to download the BRADD version 3.1.6.2 Patch (BRADD_3162_patch.exe). Run this installation on a machine with a BRADD installation version 3.1.6.0 or 3.1.6.1. This is a cumulative patch and includes the files from version 3.1.6.1 patch (see e-Notification 031, February 29, 2012).

NOTES: To uninstall BRADD, you should uninstall the patches in reverse order starting with the newest (like, "BRADD Patch v3.1.6.2"), and once all patches are uninstalled then uninstall the full installation ("BRADD v3.1.6.0"). Also, having uninstalled any patch, the full installation will no longer work. In order to run BRADD v3.1.6.0, you will need to uninstall and reinstall that version.

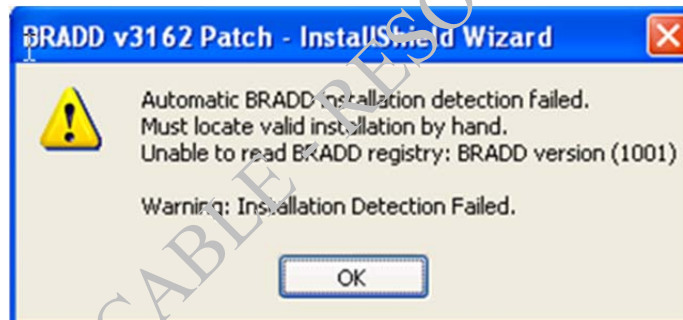
A standard patch installation session will display screens like those below:



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If there are problems locating the existing BRADD installation, a dialog similar to the following will be displayed:



Clicking OK on this dialog will cause the installation to allow you to select the BRADD installation path manually. The default path is "C:\Program Files\BRADD v3.1.6.0" or "C:\Program Files (x86)\BRADD v3.1.6.0". Once you have located the proper installation path, click OK.

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Installing BRADD Version 3.1.6.2 Patch for PENNDOT

PENNDOT's CADD workstations will be updated by the PENNDOT's CADD Support Unit. PENNDOT CADD users should contact PENNDOT BRADD's Manager for information or questions regarding the schedule for the rollout of this patch.

Please direct any questions to:

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