Staff Bridge Branch 2829 W. Howard Place, 3<sup>rd</sup> Floor

Denver, CO 80204

## **MEMORANDUM**

DATE: Thursday, October 30, 2025

TO: ALL BRIDGE GEOMETRY USERS

FROM: Natasha Butler, PE, STATE BRIDGE ENGINEER

SUBJECT: CDOT GEOMETRY MANUAL

It has come to our attention that there may be potential errors in the Bridge Geometry software. The deadload calculations for ELEV+DL are shifting into continuous mode for exterior girders on some runs of precast girders (simple for dead load). We have not tracked down the source problem as to whether they are coding errors or a glitch in the program itself with horizontal curves. A temporary fix may be to add a third ghost deadload set that convinces the program the interior and exterior deadloads are still correct for simple spans. Please double-check any software output for these logical errors until we can discover the solution and provide additional guidance in the manual.

Structural personnel should review and become familiar with this issue. If you have any questions or other recommendations for improvement, please contact:

Greg Marcuson, P.E., Project Support Unit (greg.marcuson@state.co.us)

Distribution via e-mail:

Keith Stefanik Staff Bridge Employees Structural Consultants

