



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
STRUCTURES DIVISION
2ND FLOOR, WILLIAM R. SNODGRASS TENNESSEE TOWER
312 ROSA L. PARKS AVE.
NASHVILLE, TENNESSEE 37243
(615) 741-3351

WILL REID P.E.
COMMISSIONER

BILL LEE
GOVERNOR

TO: Structures Division Engineers, Managers, and Consultants

FROM: Ted A. Kniazewycz, P.E., F.ASCE
TDOT Director – Structures Division

DATE: March 9, 2026

RE: Structural Design Memorandum SDM 26-01
Use of Portable Barrier Rail

Effectively immediately, the use of portable barrier rail for phased construction of bridge projects will be based on Design Standard Drawing T-WZ-PCB2. This rail will replace the previously specified Structures Standard Drawing STD-2-1 and Design Standard Drawing T-WZ-PBR1 portable barrier rails.

Section 5-205.00 of TDOT Roadway Design Guidelines - PDN provides deflection (horizontal clearance) guidance for portable barrier rail in various scenarios. The required horizontal clearance for portable barrier rail (measured from bottom of rail to edge of slab) shall be based on the highest required edge distance unless specified otherwise by the roadway designer. The roadway designer shall also specify whether or not a stiffener tube is required on the rail. Do not bolt the rail to a new bridge deck or use the anchor pin details on T-WZ-PCB4. When necessary, the barrier may be bolted to an existing deck if it will be demolished in a future phase of the project.

Although the T-WZ-PCB2 rail will be specified on the bridge plans, contractors still have the option of using the older Structures Division Standard STD-2-1 and Design Standard Drawing T-WZ-PBR1 rails until 2030. These older rails are 3" wider than the T-WZ-PCB2 rail. If the older rails are used, the additional 3" of width shall encroach on the shoulder width specified on the bridge plans. The required horizontal clearance from the bottom of rail to the edge of slab shall not be reduced.

It is not necessary to show the rail quantity in the lower right corner of the bridge layout sheet. It is a roadway quantity that will be calculated by the roadway designer.

This directive is effective as of the date of this Structural Design Memorandum and supercedes SDM 22-01, which has been voided.

CC: SDG-01