



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Design Memorandum No. 22-04

February 9, 2022

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/ Joseph Novak
Joseph Novak
State Construction Engineer, Construction Management

SUBJECT: Payment of Construction Zone Energy Absorbing Terminals and Temporary Traffic Barriers

REVISES: *Indiana Design Manual (IDM), Chapter 17*
Section 17-4.13

EFFECTIVE: Lettings on or after June 1, 2022

The use of different wall types on multiple contracts can lead to confusion in measurements for payment of Construction-Zone Energy-Absorbing Terminals (CZ) and Temporary Traffic Barrier, Anchored and Unanchored. Also, if a CZ is placed on Type 1 or Type 3 Temporary Traffic Barriers, the unit is measured differently than that on Type 2 Temporary Traffic Barriers. This has resulted in confusion to both bidders and inspectors regarding appropriate payment of the CZ's. This has also proven to be cumbersome for designers to determine an accurate estimate of these construction items within a given project because they can be used and moved between projects.

The changes to the method of measurement are summarized as follows:

1. All CZ terminals used on Type 1, Type 2, or Type 3 Temporary Traffic Barrier will be measured by each CZ terminal placed.
2. End treatments that are not CZ terminals will be measured by the liner foot included with the Temporary Traffic Barrier.
3. Each project location within a contract that has Temporary Traffic Barrier and if required an End Treatment will be measured for payment.

Revisions to Standard Specifications Section 801, Method of Measurement and Basis of Payment have been approved by the Standards Committee. Lettings on or after June 1, 2022, that include End Treatments and Temporary Traffic Barrier should be based on RSP 801-T-232 Traffic Controls for Construction and Maintenance.

The referenced Indiana Design Manual (IDM) section has been revised to include additional information on the revised basis of payment for CZ and Temporary Traffic Barriers. A summary of changes and IDM revisions are included for reference.

For questions related to this design memo please contact the Division of Construction Management, John Ritter at jritter@indot.in.gov.

Chapter 17 Revisions

17-4.13 Temporary Traffic Barrier (TTB) [Rev. Feb. 2022]

The total pay quantity of each type of TTB should be computed only once, regardless of how many traffic-maintenance phases it is to be used in, or how many times it must be moved within each project. Payment will be made for Temporary Traffic Barrier placed in, or relocated to, a separate project in the same contract.

The length of the longitudinal portion of TTB should be taken from the beginning point of where it is required to the ending point of where it is required. Gaps required to accommodate public road approaches or drives should be subtracted out. The length of each such gap should be taken as the approach or drive width plus its radii. The lengths of each flared portion should be measured along the flare.

A construction-zone energy-absorbing terminal (CZ), if required for use with TTB type 1, type 2, or type 3, is a separate pay item to be quantified only once, regardless of how many traffic-maintenance phases it is to be used in, or how many times it must be moved within each project. Payment will be made for construction zone energy absorbing terminal, CZ placed in, or relocated to, a separate project in the same contract.

The length of each end treatment type, if required for use with TTB type 4, and end treatments, other than construction-zone energy-absorbing terminals (CZ) used on type 1, type 2, or type 3 should be taken as 37.58 ft where used along an outside shoulder, or 12.5 ft where used along a median shoulder. Such lengths should be included in the linear quantities of TTB.

Delineation, and anchoring or other means required to control deflection, are included in the TTB quantities, so they should not be considered when determining the pay quantities.