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Jim Mills/CO/FDOT@FDOT, FDOT-DDE DPME
Subject: Status of Temporary Low Profile Barrier System - 45 mph or less.

The following is an update on the status of the development of a new temporary "low profile" barrier to replace the Temporary Curb for low speed (45 mph or less) conditions which was discontinued beginning with the October 2002 letting. In short, we plan to have a new Interim Index drawing of the new barrier published on-line by July 2003.

The new barrier was developed under a FDOT Research Project by the University of Florida. The final report, including the NCHRP 350 crash test report, was received last week (February 11). The next step will be to request FHWA acceptance for use on the National Highway System. We plan to submit this request the week of February 24. According to the FHWA web site, a turnaround time of 2 months should be expected. During this time period we will begin developing the final details and new Index drawings. We will also be developing an end treatment(s) for this barrier. While our planned publish date is July, we will publish sooner if at all possible.

Please be aware that this new barrier is very different than the temporary curb. The temporary curb measured 12" wide at the base and 9" high, no reinforcement, could be asphalt or concrete, precast or cast in place, was very simple to construct or install, and was relatively inexpensive.

The new barrier is 27" wide with a 1" batter into the traffic side, and 18" high. It is heavily reinforced and has a continuous tension 8"x8"x1/2" steel angle. Units are 12' long and are connected by 1-1/4" bolts. See sketches below. Because it is a totally new system, initially there will be some lag time for precasters to gear up with new forms, etc. to manufacture these units. It obviously will be a higher cost as well. On the plus side, there will be no limit on the depth of drop off being shielded.

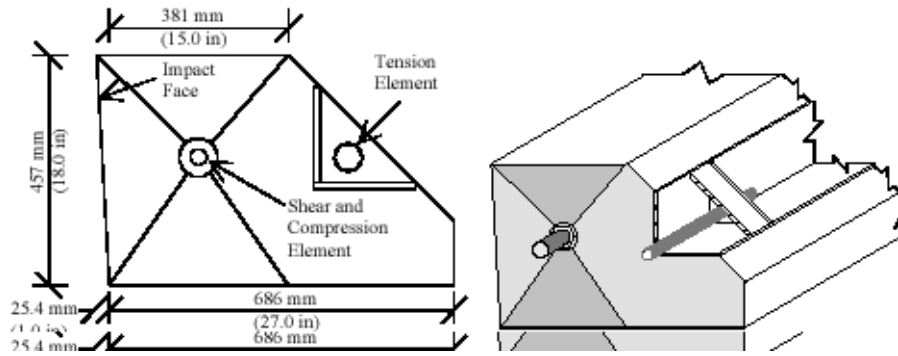
Until this new barrier is available, the following "standard" treatments should be considered:

- a. Use standard precast concrete temporary barrier wall (Index 415)
- b. Require the optional shoulder treatment. (Index 600 sheet 6 of 10)
- c. Require the drop-off to be restored within one work period. (Index 600 sheet 6 of 10).

In some urban conditions where numerous driveways and intersections exist, option "a" may create sight distance problems. This must be carefully considered when calling for this option. If this option is not practical the plans must specify that treatment is restricted to option "b" or "c". However, when restricting the contractor to option "b" or "c", constructability must be carefully considered.

There may be some instances where the standard treatments are not practical. Districts are advised to treat these instances as Design Exceptions (horizontal clearance) in accordance with the Plans Preparation Manual, Volume I, Chapter 23. As with any design exception, all possible safety mitigation measures must be considered, including but not limited to, use of warning and channelizing devices, warning signs, special lighting, special monitoring, speed enforcement, use of changeable message signs, restricting the length of the drop-off, maximizing the distance to the drop-off, restricting the time period of the drop-off, etc.

Please advise appropriate staff and consultants. If you have any questions, or if we can be of assistance on situations where one of the standard treatments is determined to be impractical, please contact this office.



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