

ARIZONA DEPARTMENT OF TRANSPORTATION  
ROADWAY ENGINEERING GROUP  
OFFICE MEMO

August 28, 1996

TO: Roadway Design Personnel  
Roadway Engineering Group

THRU: Roadway Design Section Managers

FROM: Terry H. Otterness  
Design Program Manager  
Roadway Design Section

RE: LOW SPEED APPROACH BARRIER TRANSITION DETAIL

The attached Detail was developed for limited usage and is to be considered only for very low speed applications when terminating concrete half-barrier.

The following design constraints shall be considered before implementing the detail on a project:

- The detail shall be considered only where operating speeds are expected to be very low.
- The transition should begin at on-ramps a maximum of 25' from the end of curb radius return to allow for a 5' curb transition (modified Type 2) and a 20' transition width for the gutter.
- The transition shall not be used on ramps which depart from frontage roads due to the higher speeds anticipated from through traffic at the intersection.
- The transition shall not be used on ramps, which depart from Single Point Urban Interchanges due to the higher speeds operating with the larger left turning radii.
- The use of barrier on most on-ramps does not typically terminate 25' from the radius return. In some instances, the barrier could be extended toward the crossroad in order to utilize this transition. The length of barrier extension to utilize this transition must be kept to a minimum; other approved end terminals should be utilized as appropriate for locations away from the crossroad.

The English or metric detail may be obtained on disc or file upon request through the Design Section Technical Support Team at 255-8673 or 8675.

Attachment

c: Bob Trujillo  
John Patterson  
Dan Lance