

Arizona Department of Transportation

ROADWAY ENGINEERING GROUP

MEMORANDUM

To: All Roadway Design Personnel

ADOT and Consultants

Date: May 6, 2002

Supercedes April 30, 2002 Memo

From: John L. Louis

Assistant State Engineer

Roadway Engineering Group

Subject: SRT-350 Guard Rail End Treatment

Modification to Breakaway End Post

and Straight Flare.

The ADOT PRIDE Traffic Product Evaluation Committee has reviewed and approved the Manufacturer's (Trinity Industries) request to implement the new SRT 350 Breakaway Post System in lieu of the previous 8 Post System for new construction. The new system (7 posts) uses a straight flare and a steel breakaway end-post assembly thereby facilitating ease of construction and maintenance.

Designers please take note of the following information and implement when feasible on all new projects not yet advertised for bid:

- 1. The new plan layout detail is available on the Roadway Design website under Roadway Plans Details. Go to http://www.dot.state.az.us/ROADS/Rdwyeng/updates/drawings.html. Note that the offset at post #1 is 4'. There is no longer the option for 3' or 3.5' offsets as with the 8 post system. If the 3' or 3.5' offset is essential, the 8 post system can still be utilized
- 2. The manufacturer's approved drawing (# SS-355) is available at the same website address under <u>Guardrail End</u> Treatment.
- 3. Designers are reminded that the SRT-350 systems are gating systems and allow the vehicle to penetrate behind the rail on an end hit. A minimum runout area of approximately 75' x 20' that is relatively traversable and reasonably free of fixed obstacles is preferred for all guard rail end terminals, however, an energy absorbing terminal has a better chance of containing a vehicle. An energy absorbing guard rail terminal may be preferable in some locations. Therefore, it is important that the guard rail terminal selection be site specific and the proper alternatives shown on the barrier summary sheet for each location.

Maintenance forces may continue to repair the existing 8 post and 9 post systems in accordance with the previously approved manufacturer drawings as they still meet NCHRP 350 crash test criteria.

Questions may be directed to Ken Cooper at 602-712-8674 or Terry Otterness at 602-712-4285.

Please distribute copies of this memo to all design personnel, project managers, consultants and other affected construction and maintenance personnel within your respective groups.

JLL/THO

C:

Roadway Engineering Group Regional Traffic Engineers (4)

Traffic Group Materials Group

Valley Freeway Group Local Government Section

Statewide Project Management Group Engineering Consultant Services

Districts (10) Central Maintenance Group

FHWA District Permits (9)

Bridge Group Contracts and Specifications Section

Construction Group Frank Darmiento