

## **INTENDED USE**

SGR40 is an *NCHRP Report 350* TL-2 T-intersection system. Layout of this system is shown on Sheet 1 of 2, and described below. The T-intersection system is a 27 in. [690 mm] high rail system.

The nose section of this T-intersection system consists of a 12.5 ft. [3.82 m] curved W-beam segment which has an 8 ft. [2.44 m] radius. The curved section is attached to a straight W-beam section on the secondary road via common W-beam splicing details. The secondary road W-Beam should have a 25 ft. [7.62 m] minimum length and should be terminated with a positive anchor. Five Controlled Released Terminal (CRT) posts, spaced at 6.25 ft. [1.91 m], are placed along the curved section and secondary road section.

On the primary road direction, the curved section is spliced to a 6.25 ft. [1.91 m] short W-beam segment at CRT post 7. The short W-beam section has also two  $7-7/8 \times 7-7/8 \times 72$  in. [ $200 \times 200 \times 1980$  mm] posts embedded 44 in. [1117.6 mm] in soil. Starting at post 8, a stiffer rail section is used to act as a transition to the bridge rail. The transition section consists of the 6.25 ft. [1905 mm] short W-beam segment which is spliced to a 12.5 ft. [3810 mm] W-beam guardrail.

The W-beam guardrail is backed by an MC 8 × 22.8 [MC 200 x 33.9] structural steel channel which runs from post 9 to the bridge barrier. The transition has three timber posts which are  $9-7/8 \times 9-7/8 \times 78$  inches [250 × 250 × 1980 mm]. They are embedded 50 in. [1270 mm] in soil (Post Detail A). The five timber posts (post 8 to post 12) have  $7-7/8 \times 7-7/8 \times 14$  in. [200 × 200 × 360 mm] wood blockouts.

See FHWA Acceptance Letter B-209 for additional information and acceptable modifications. Details of the system are available upon request.

## APPROVALS

Federal Highway Administration (FHWA) Eligibility Letter B-209, November 10, 2010.

## **CONTACT INFORMATION**

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