



## BRIDGE TECHNICAL DIRECTION BTD2008/06

### *JOINTS IN PRECAST CONCRETE BARRIER ELEMENTS ON A GRADE*

#### **Background**

It has been long standing RTA practice to limit the road grade for which barrier railing posts may be perpendicular to the top of the concrete parapet. The existing limits have been set on the basis of aesthetics. For consistency, this Bridge Technical Direction extends the principles developed for barrier railing posts to joints in precast concrete elements of barriers.

#### **Information**

Clause 26.3.1 of the RTA Structural and Detailing Manual limits to 4% the maximum grade of the bridge deck on which the barrier railing posts may be perpendicular to the deck. Posts perpendicular to the deck on deck grades exceeding 4% are visually unacceptable.

#### **Bridge Technical Direction**

In all cases where the grade of the structure does not exceed 4%, joints between any precast elements of traffic or pedestrian barriers that are visible from either side of the barrier shall be perpendicular to the top of the concrete parapet, footway surface or deck surface, as appropriate.

Where the grade of the structure exceeds 4% at any location, joints between precast elements shall be vertical for the full length of the bridge deck.

These requirements apply irrespective of whether there are barrier railing posts attached to the top of the concrete parapet or not.

**Effective date:** 25/02/2008

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Principal Bridge Engineer

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