

54.26 REALIGNING OR RESETTING W-BEAM GUARDRAIL

54.26.1 GENERAL

The Work consists of realigning or resetting W-beam guardrail installations including straightening of posts and replacement of broken or severely damaged posts.

54.26.2 MATERIALS

The Contractor shall supply all materials required for the realigning of the designated sections, including new posts, bolts and other hardware required for reinstallations.

When new post installations are required, the Contractor shall supply the posts in accordance with Specification 54.23, Supply and Installation of W-Beam Guardrail and Posts.

The Contractor shall supply suitable backfill material when the excavated material is unsuitable.

54.26.3 EQUIPMENT

The Contractor shall supply all equipment and tools necessary to complete the Work.

54.26.4 PROCEDURE

The Engineer will determine the locations of guardrail adjustments.

The scope of each type of work is as follows:

- Minor Realigning - where W-Beam guardrail is straightened and posts re-tamped without removing them from the soil
- Major Resetting - where W-Beam guardrail is disassembled, the posts are pulled out, and the guardrail is reinstalled in accordance with drawings TEB 3.12 or TEB 3.48.

All Work shall be performed during daylight hours only. No Work will be performed when the visibility is less than 700 metres.

Traffic control and signing shall be performed in accordance with Specification 55.1, Traffic Accommodation and Temporary Signing.

The realigned structures shall conform to drawings TEB 3.12 or TEB 3.48 as applicable.

Sufficient material shall be excavated around existing posts to allow for height and vertical adjustments.

Posts shall be accurately set to the required depth and alignment in a smooth, continuous installation, as shown in the drawings or as directed by the Engineer. Permissible tolerance for plumb and grade of posts shall be 6 mm maximum.

Backfill shall be thoroughly compacted using pneumatic tampers, in layers not exceeding 150 mm for the full depth of the excavation. Cementitious materials shall not be used for post support unless specifically authorized by the Engineer.

Guardrail laps shall be in the direction of traffic flow. Bolts shall be tightened to a torque of 100 N·m.

When performing guardrail adjustments, the Contractor shall check the adjoining posts for splitting, rotting or other damage and report these to the Engineer.

Installations facing traffic shall not be left unfinished and open-ended overnight.

54.26.5 TIME TO COMPLETE

In urgent situations, the Contractor shall complete the Work within 5 calendar days of the issuance of the Work Order. In all other cases, the Work shall be completed within 60 calendar days of the issuance of the Work Order.

54.26.6 MEASUREMENT AND PAYMENT

Measurement will be in metres of the length of W-Beam guardrail realigned or reset.

Measurement will also be made of the number of posts supplied and installed regardless of the length of post required.

Payment will be made at the unit price bid per metre for "W-Beam Guardrail - Realignment". This payment will be full compensation for straightening the guardrail sections, re-plumbing and tamping the posts, traffic accommodation and signing, and all labour, materials, equipment, tools and incidentals necessary to complete the Work.

Payment will be made at the unit price bid per metre for "W-Beam Guardrail - Resetting". This payment will be full compensation for removal of the guardrail sections, removal of the existing posts, reinstallation of existing posts where applicable, reinstallation of the W-Beam guardrail sections, traffic accommodation and signing, and all labour, materials, equipment, tools and incidentals necessary to complete the Work.

Payment for the supply of new posts will be made at the unit price bid per post for "Supply and Install Guardrail Posts" in accordance with Specification 54.23, Supply and Installation of W-Beam Guardrail and posts. When replacing post(s) only, there will be no separate or additional payment for removal of the old post.

In urgent situations where the Contractor is required to complete any type of guardrail Work within 5 calendar days of the issuance of the Work Order, an additional payment will be made at the unit price bid per occurrence for "Guardrail - Premium". This payment will be full compensation for complying with the accelerated scheduling required to complete the Work. This payment will be made only once per Work Order, regardless of the different types of guardrail Work completed.

54.26.7 WARRANTY

The warranty period for this Work shall be 1 year. The permissible tolerance for plumb and grade of the posts at the end of the warranty period shall be 13 mm.