

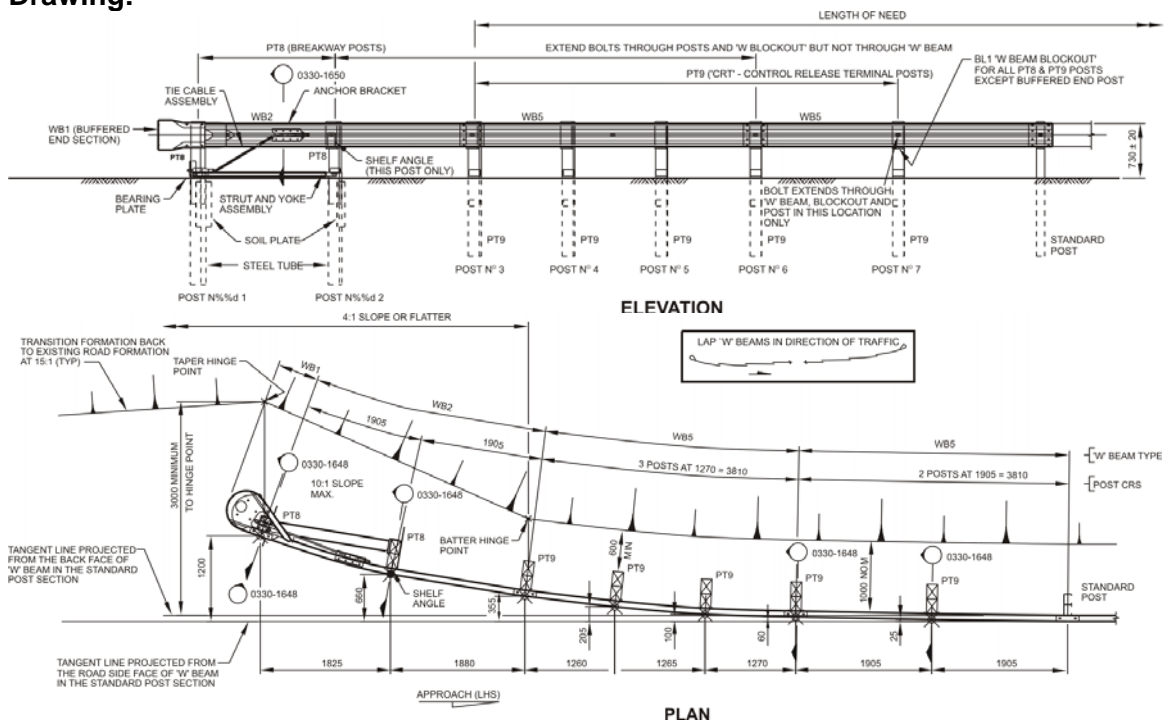
WEST AUSTRALIAN MODIFIED ECCENTRIC LOADER TERMINAL (WAMELT)

REVISION REGISTER

| Issue & Revision | Description | Date |
|------------------|---|-------------|
| 1 | Issued for use. | 23/2/04. |
| 1 A | Minor editorial revisions. | 3/03/2006. |
| 1 B | Modification to the table showing length of need. | 16/06/2006. |
| 1 C | Guidance added on the limitations of the terminal due to its use of timber posts and installation difficulties. | 19/07/2006. |

The WAMELT is the TL 3 approved Minnesota Eccentric Loader Terminal with a MELT nose and is a gating end treatment.

Drawing:



Ownership: Non-proprietary.

Supplier: Not Applicable.

Test Level: Deemed to comply to Test Level 3 by Main Roads.

| Test Level | Length | Speed | Length of Need (m) | Flare | Post Details | Suppliers Drawing |
|----------------------|--------|-----------|--------------------|----------------|--|-------------------|
| 3 (deemed to comply) | 11.3m | 100 km/hr | 7.49 m | 1.2m parabolic | Post 1+2 = Treated Timber Breakaway posts in steel soil tubes with attached soil plates. Post 3-7 = Treated Timber CRT posts. | Main Roads |

The length of need commences from post 3 ie 3.81 m from the start of the WAMELT.

Design

- Design to be in accordance with the relevant Main Roads Standard Drawings.
- Refer to Main Roads Drawings 0330-1646 for grading requirements around the WA MELT.
- As the end treatment is gating a run-out area in accordance with the requirements of AS / NZS 3845 Figure F11 should be provided.

Limitations

- The timber posts have associated supply and durability issues and the parabolic flare creates installation difficulties. Designers are advised to utilise the other approved crashworthy terminals available.
- Shall not be used on Main Roads Freeways.
- Must be installed on parabolic flare to ensure correct operation of the end treatment.
- Should only be used in an embankment situation to reduce the likelihood of a secondary collision with the backside of the barrier in an end-on collision.

Installation and Maintenance Requirements

Installation to be in accordance with Main Roads Standard Drawings and specifications. Upon impact the majority of the system is expected to be damaged beyond repair and needs to be entirely replaced.

Parts to be Replaced after Impact

Rail and posts.

Parts Typically Re-Useable after Impact

Any undamaged posts and rails.

References

Details of development of the WAMELT can be found in Appendix B of the Main Roads document "Review Report and Investigation into Standard Safety Barriers Part 1: Barrier End Treatments."

Relevant FHWA Approval Letters

(Refer to website http://safety.fhwa.dot.gov/fourthlevel/hardware/term_cush.htm)

| Code | Description |
|-------|------------------------------------|
| CC-56 | Approval of Minnesota ELT to TL 3. |

Drawings

Refer to Main Roads standard drawings 0330-1647-1651 inclusive.