1. The QuadTrend 350 is manufactured by Energy Absorption Systems, see guidelines for crash cushions and barrier end treatment's current edition for specific system details.

2. Use system when direct attachment to barrier is required and the longitudinal space in front of the hazard is equal to the required minimum approach length as stated in Table 1. Install system according to manufacturer's specifications.

3. Cut pre-cast new Jersey barrier according to detail, prior to installation of system. Seal cut with the same type of sealer used on barrier. Do not cut bridge parapet. Install 1 section of modified New Jersey pre-cast barrier, cut according to detail. Install stabilization pins for rear anchor. See note 5.

4. Refer to STD DWG BA 3 SERIES before attaching crash cushion or end treatment to constant slope barrier. Complete slope transitions as detailed in applicable DD STD DWG. THE ADDITIONAL INFORMATION LISTED BELOW ARE THE MINIMUM REQUIREMENTS. MODIFICATION TO CONSTANT SLOPE BARRIER TRANSITION NOT REQUIRED, SEE BA 3 SERIES.

5. Place cable anchor foundation in such a manner that the redirecting cable lays 6:1 or flatter on top of the ground, and the foundation with the cable anchor bracket attached does not exceed 4 inches above ground level. Do not bury redirecting cable.

6. Securely install concrete pad according to manufacturer's requirements.

7. Use this detail when system is installed with constant slope barrier.

8. See note 3.


11. Install required markings according to STD DWG CC 1.

12. The recovery area is the area behind the end treatment and barrier system extending from the approach end of end treatment to the end of the calculated length of need.

13. Place cable anchor foundation in such a manner that the redirecting cable lays 6:1 or flatter on top of the ground, and the foundation with the cable anchor bracket attached does not exceed 4 inches above ground level. Do not bury redirecting cable.

14. Do not bury redirecting cable.

15. Use this detail when system is installed with New Jersey shaped barrier.


17. Complete slope transitions as detailed in applicable DD STD DWG. The additional information listed below are the minimum acceptable slope requirements.

18. A. Use a 10:1 or flatter slope in approach area.

19. B. A foreslope area of 12 ft x 25 ft at 6:1 or flatter required for rear anchor foundation installation.

20. C. Use a 4:1 or flatter foreslope in recovery area, after rear anchor slopes have been established.

21. D. Use 4:1 back slope to clear zone. Use in recovery area permitted on flat.

22. E. Recovery area is the area behind the end treatment and barrier system extending from the approach end of end treatment to the end of the calculated length of need.

23. F. Clear the recovery and approach areas of any fixed objects or hazards.

24. G. Do not place signs, posts, or other hazards in approach area.

25. H. Use breakdown signs or posts when placed in recovery area, maintain a minimum 10 foot clearance to the sides and rear of system. Mitigate potential hazards in the recovery area.

26. I. Construct platform as required even if the platform extends beyond the clear zone.

27. J. Install required markings according to STD DWG CC 1.

28. K. Do not place signs, posts, or other hazards in approach area.

29. L. Use breakdown signs or posts when placed in recovery area, maintain a minimum 10 foot clearance to the sides and rear of system. Mitigate potential hazards in the recovery area.

29. M. Install required markings according to STD DWG CC 1.

30. N. Do not place signs, posts, or other hazards in approach area.