USE THIS DETAIL FOR "3R" PROJECTS ONLY

1. Install end treatment using this drawing only when there is insufficient room to install materials as required in SDWG CC 8A without the purchase of additional right of way.

2. APPROVED SYSTEMS: ET-2000 and ET-PLUS manufactured by Trinity Industries and the SKT-350, manufactured by Road Systems Inc. Refer to UDOT's guidelines for crash cushions and barrier end treatments for specific system details.

3. SYSTEM OFFSET:
   A. INSTALL SYSTEM WITH 2 FT OFFSET (25:1 FLARE RATE) WHEN USED WITH A TANGENT BARRIER SYSTEM.
   B. INSTALL SYSTEM AT THE SAME FLARE RATE AS THE BARRIER IT IS BEING ATTACHED TO.

4. REFER TO GUIDELINES FOR CRASH CUSHION AND BARRIER END TREATMENTS FOR POST REQUIREMENTS.
   A. Post 1
      1) ET SERIES-HINGE BREAKAWAY POST (HBA)
      2) SKT-350 PLUG WELDED POST INSIDE FOUNDATION TUBE
   B. INSTALL SYSTEM AT THE SAME FLARE RATE AS THE BARRIER IT IS BEING ATTACHED TO.

5. RAIL ELEMENTS
   A. USE 12 1/2 FT RAIL ELEMENTS AS SPECIFIED BY THE SYSTEM MANUFACTURER.
   B. DO NOT BOLT RAIL ELEMENT AT POST 1.
   C. REFER TO MANUFACTURER'S SPECIFICATIONS FOR OTHER RAIL TO POST BOLT REQUIREMENTS.

6. COMPLETE SLOPE PREPARATION PRIOR TO INSTALLING SYSTEM.
   A. USE 10:1 OR FLATTER SLOPES IN APPROACH AREA.
   B. CONSTRUCT RECOVERY AREA SLOPES ACCORDING TO CC 8A WHEN CONDITIONS PERMIT.

7. CLEAR RECOVERY AND APPROACH AREAS OF ANY FIXED OBJECTS OR HAZARDS.
   A. DO NOT PLACE SIGNS, POSTS, OR OTHER HAZARDS IN APPROACH AREA.
   B. USE BREAKAWAY SIGNS OR POSTS WHEN IN ACRES IN RECOVERY AREA, AND MAINTAIN A MINIMUM 10 FT CLEARANCE TO THE SIDES AND REAR OF THE SYSTEM TO MITIGATE POTENTIAL HAZARDS IN RECOVERY AREA.

8. CONSTRUCT PLATFORM AS REQUIRED WHEN THE SPACE IS AVAILABLE EVEN IF THE PLATFORM EXTENDS BEYOND THE CLEAR ZONE REQUIREMENTS.

9. USE GRADE TRANSITION, 8A 4 SERIES STD DWG. WHEN ATTACHING SYSTEM TO CONCRETE BARRIER OR BRIDGE PARAPET.

10. INSTALL REQUIRED MARKINGS ACCORDING TO STD DWG CC 1

11. USE THE CURRENT EDITION, ROADSIDE DESIGN GUIDE TO ESTABLISH CLEAR ZONE REQUIREMENTS AND LENGTH OF NEED (LON) REQUIREMENTS.