

## GENERAL NOTES

- I. The energy absorbing system represented on this standard drawing is a proprietary design by SYRO Inc. and marketed under the trade name ADIEM 350. Any infringement on the rights of the designer shall be the sole responsibility of the user.
- 2. This standard drawing is produced by the Florida Department Of Transportation solely for use by the Department and its assignees. This standard drawing provides the general graphics and information necessary to field identify component parts of the ADIEM 350 and their incorporation into a whole system.
- 3. This standard drawing is sufficient for plan details for the ADIEM 350 installed in connection with permanent or temporary concrete barrier walls, and precludes the requirement for shop drawing submittals unless the plans otherwise call for such submittals.
- 4. The ADIEM 350 shall be assembled and installed in accordance with the manufacturer's detailed drawings, procedures and specifications.
- 5. The ADIEM 350 can be located on compacted base, asphalt or concrete. Driving of anchor pins into compacted base or soft asphalt will be permitted while drilling will be necessary for hard asphalt or concrete pavements. See schedule left for anchor pin requirements.
- 6. The ADIEM 350 is suitable for speeds ≤60 mph.
- 7. The ADIEM 350 shall be located parallel to the approach travel lane(s), on 1:10 or flatter cross slopes. Until there is further development in the application of the ADIEM 350, the system is not to be located in narrow medians, gores or locations where frequent side impacts can be expected.
- 8. All modules are alike in size and mass (interchangable).
- 9. Due to the overall unit height of 4', which exceeds the drivers height of eye, caution is to be exercised in locating the ADIEM 350 to avoid blockage of required sight distance.
- 10. Attach splice angle (connection bracket) to ADIEM 350 base with  $2 \cdot l \frac{1}{8}$ " dia. x 25" long HD hex bolts. Attach splice angle to barrier wall with 8 field drilled  $\frac{7}{8}$ " dia. x 6" long chemical anchors.
- II. A yellow Type I Object Marker shall be centered 3' in front of the nose of the ADIEM 350. Mounting hardware shall be in conformance with Index Nos. II860 and II865. The cost of the Object Marker shall be included in the cost of the ADIEM 350.
- 12. Temporary ADIEM 350 systems can be reused provided the bases have the structural integrity and surface qualities of new systems, and the modules are condition new. Refurbished systems can be made up of mixed new and used components. New and used systems can be purchased, leased, rented, on loan or shared between projects.
- 13. The permanent ADIEM 350 will be paid for under the contract unit price for Impact Attenuator Vehicular (ADIEM), EA; temporary units will be paid for under the contract unit price for Vehicular Impact Attenuator (Temporary) (ADIEM), LO, or when the ADIEM 350 is used as an option in accordance with Index No. 415, it will be paid for under the contract unit price for Vehicular Impact Attenuator (Temporary) (Redirective Option), LO.

## DESIGN AND MAINTENANCE NOTES AND GUIDELINES

- I. The ADIEM 350 is designed to cushion automobile end-on hits and to redirect automobiles from side hits within the length of need while shielding the ends of permanent or temporary concrete barrier walls.
- 2. The ADIEM 350 is a restorable system that is particularly suited to shielding concrete barrier wall ends. The I8' unit is applicable for speeds of 45 mph or less, the 30' unit is applicable for speeds of 50-60 mph.
- 3. The upstream half of the system (3 or 5 modules) is a gating design. Each module (cartridge) has a mass of 180 lbs. Care must be exercised in locating the system where debris scatter may pose a hazard. Upstream modules or their residual components must be removed to replace damaged downstream modules.
- 4. The ADIEM 350 will require close monitoring for damage that will open module encasement; immediate repair is essential to prevent moisture absorption into module core.
- 5. Currently the Department does not recognize other proprietary items as being equally suitable alternatives to the ADIEM 350, and until such alternatives are available, the ADIEM 350 need not be bid against other proprietary items. However, where the ADIEM 350 and other approved temporary redirective crash cushions meet or exceed the minimum requirements for a specific location, the approved crash cushions will be considered optional systems and paid for as described in General Note I3 above.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ADIEM 350

|             | Names | Dates | Approve                      | d By      | , ,       |
|-------------|-------|-------|------------------------------|-----------|-----------|
| Designed By | MFG   |       | State Boadway Design Enginee |           |           |
| Drawn By    | нкн   | 7/97  | Revision                     | Sheet No. | Index No. |
| Checked By  | JVG   | 7/97  | 00                           | l of l    | 436       |

GENERAL SYSTEM FEATURES AND GUIDELINES