

# Certified Test Report

## Object Marker High Visibility Median Separator

December 18, 2007

**IMPACT recovery**  
**SYSTEMS**

---

---

*"Impacting Today's Roads for a Safer Tomorrow"*

**Hori-Zone Concepts LLC**  
**Gregory R. Brinkmeyer, P.E.**

618 County Road 374 Taylor, Texas 76574  
(512) 365-5824 Office (512) 217-2580 Mobile  
E-mail: [gregory.brinkmeyer@worldnet.att.net](mailto:gregory.brinkmeyer@worldnet.att.net)

December 21, 2007

Mr. Chester Henson  
Florida Department of Transportation  
605 Suwannee Street, MS 32  
Tallahassee, Florida 32399-0450

Dear Mr. Henson :

This letter is to serve as independent certification that I, Gregory R. Brinkmeyer, P.E., have evaluated and observed testing of the High Visibility Median Separator Delineator manufactured by Impact Recovery Systems, Inc.

In my opinion, the High Visibility Median Delineator meets all requirements of the Federal Highway Administration's *2003 Manual on Uniform Traffic Control Devices*.

Furthermore, to certify compliance with Florida Department of Transportation Specification **Object Markers and Delineators"- High Visibility Median Separator Delineators (993-2.4)**; sections 993-2.4.2 "Post Base" and 993-2.4.5 "Impact Performance", a Certified Test Report- Object Markers by Impact Recovery Systems, Inc. - December 18, 2007 is attached for your review. The test matrix follows the requirements of both the Florida DOT Specification and the National Transportation Product Evaluation Program (NTPEP) Field Evaluation of Flexible Surface Mounted Delineator Posts.

As can be seen in both the report and submitted video, after 10 impacts, all post remain upright with no vertical or horizontal listing for both the perpendicular and 25 degree base alignments. The vertical supports had no splits, cracks, breaks or other forms of deformation or distress. Approximately 95 percent of the retroreflectORIZED sheeting on the object marker face remained intact. Only the top edge of the retroreflective panels show any signs of damage with a slight "curl" near the panel top. This deformation should not affect retroreflective performance of the object marker panel.

If you have any questions concerning my evaluation and certification of the High Visibility Median Separator Delineator, please contact me at (512)217-2580 or email me at [gregory.brinkmeyer@att.net](mailto:gregory.brinkmeyer@att.net).



Sincerely,

*Greg Brinkmeyer, P.E.*

Greg Brinkmeyer, P.E.

*Gregory R. Brinkmeyer*  
DECEMBER 21, 2007

# **OBJECT MARKERS**

## **MATERIAL AND INSTALLATION DETAILS**

Impact Recovery Systems' Object Markers consist of polyethylene post and polyethylene panel sheeted with 3M Yellow Hi Intensity sheeting mounted on a polyethylene base. The bases were held down with an anchor kit consisting of (4) 4" lag screws, (4) washers, and (4) plastic sleeves. Installation time averaged 1-1 ½ minutes per post. Four of the eight bases were installed straight forward while the remaining bases were installed at a 25 degree slant.

## **TESTING INFORMATION**

Tested was a set of eight Object Markers, as manufactured by Impact Recovery Systems, Inc. Tested models identified as follows:

(4) #229 8"x 24" Single Left Hazard Marker, with #101 Fixed Base

(4) #230 8"x 24" Single Right Hazard Marker, with #101 Fixed Base

Temperatures at the time of testing were approximately 80 degrees F. Eight Object Markers were impacted 10 times with the bumper and wheel of a standard automobile. The automobile was traveling at a speed of 55 mph, as measured by the vehicle speedometer, during each of the impacts.

A series of photographs were taken initially and then at 5 and 10 hits.

The test site was located in San Antonio, TX. The surface mounted posts were placed along an active paved lane of the roadway.

The impact vehicle used in the testing was a 1985 Chevy Cavalier. No alterations were made to the vehicle.

## **CONCLUSION**

The results of the test on Impact Recovery Systems's Object Marker exhibited no damage to vehicle, all Object Markers remained installed with no listing, 95% of sheeting remaining.

## PHOTOS



Photo #1  
#101 Fixed Bases, installed, depicting the second and fourth row of  
bases installed at a 25 degree slant.



Photo #2  
1985 Chevrolet Cavalier used for impact testing.

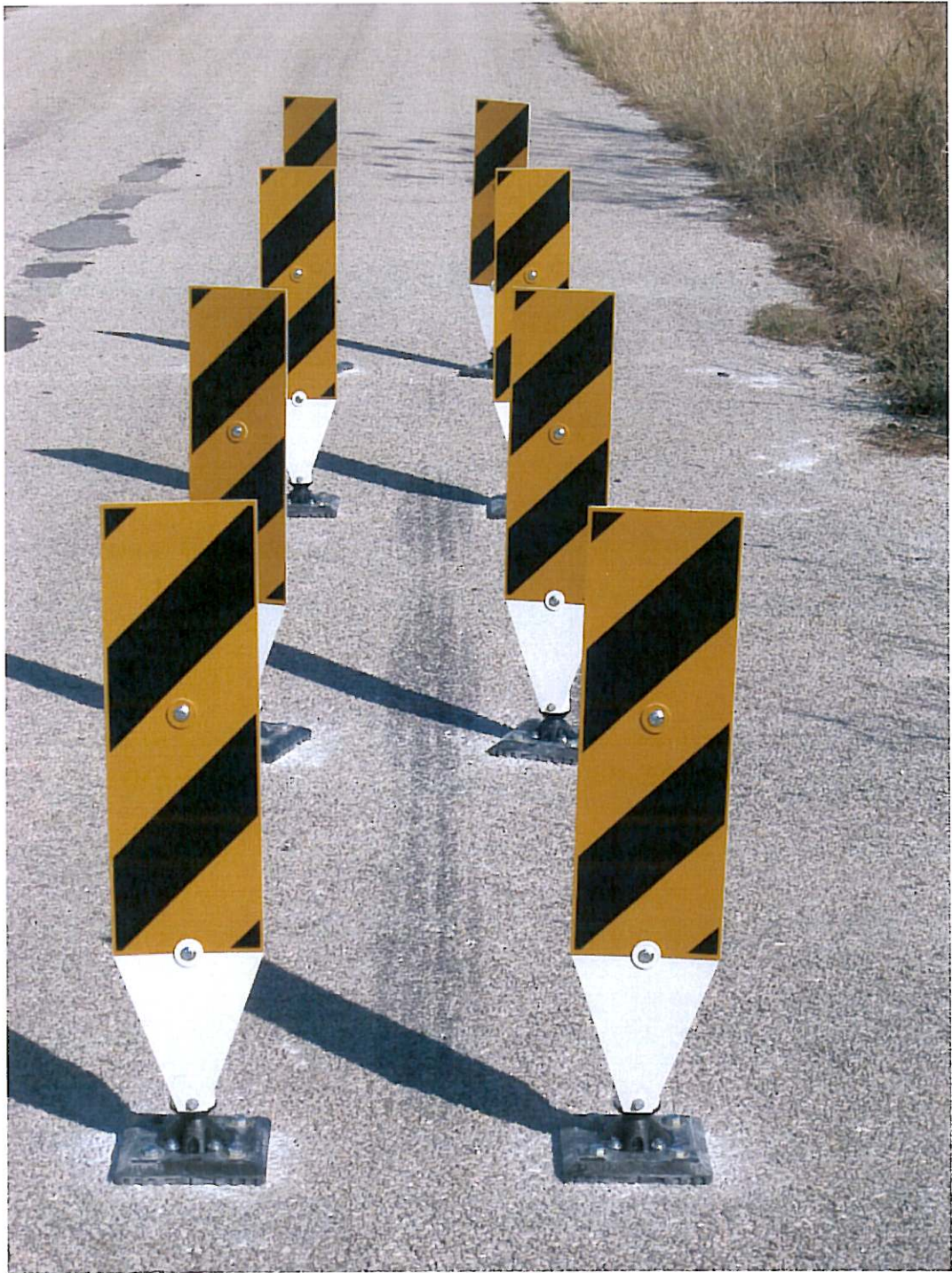


Photo #3  
Object Markers installed, no impacts.



Photo #4  
Object Markers installed, no impacts.



Photo #5  
Object Markers installed, no impacts.



Photo #6  
5 impacts completed. 8 Object Markers remaining. 95% of sheeting  
remains intact. No listing.





Photo #7

5 impacts completed. 8 Object Markers remaining. 95% of sheeting remains intact. No listing.



Photo #8

5 impacts completed. 8 Object Markers remaining. 95% of sheeting remains intact. No listing.



Photo #9

10 impacts completed. 8 Object Markers remaining. 95% of sheeting remains intact. No listing.



Photo #10

10 impacts completed. 8 Object Markers remaining. 95% of sheeting remains intact. No listing.



Photo #11

10 impacts completed. 8 Object Markers remaining. 95% of sheeting remains intact. No listing.



Photo #12  
10 impacts completed. 8 Object Markers remaining. 95% of sheeting  
remains intact. No listing.

**IMPACT recovery**  
**S Y S T E M S**

---

---

"Impacting Today's Roads for a Safer Tomorrow"

4955 Stout Dr.  
San Antonio, TX 78212  
210-736-4477 Phone  
210-734-6448 Fax  
800-736-5256 Toll Free