

THIS REPORT IS FOR THE USE OF THE DIVISION OF MOTOR VEHICLES. THE DATA IS COLLECTED FOR STATISTICAL ANALYSIS AND SUBSEQUENT HIGHWAY SAFETY PROGRAMMING. DETERMINATIONS OF "FAULT" ARE THE RESPONSIBILITY OF INSURERS OR OF THE STATE'S COURTS.

"DMV Certified Copy"

Julian Council, Assistant Director
Traffic Records

Do not write in these spaces

103962859

Date Received by DMV

01/28/2014

No. of Units Involved

Form 1 of 1

☐ Supplemental Report☐ Non-Reportable

Date

01/27/2014

mm/dd/yyyy

County

ORANGE

Time

00:19

(24 Hour Clock)

Local Use/Patrol Area

140127001DA/01

33 Relation to
Roadway Surface

2

Crash
occurred☒

In

Near

HILLSBOROUGH

Municipality

or 2.70

Miles

☐☒☐☐

outside municipality

N

S

E

W

on 40

Highway Number, or Highway, Street. (If ramp or service road, indicate on line)

☐Ramp or
Service Road

(R.R. Crossing #

) 00.10

Miles

ft.

N

S

E

W

(0 ft. Intersection)

☐☐☐☒

(If available)

Latitude

Longitude

Altitude

from

MILE 260

Use Highway Number, Street Name or Adjacent County or State Line

☐☐☐☒

toward

MILE 259

Use Highway Number, Street Name or Adjacent County or State Line

UNIT #1

☒

VEHICLE

☐

PEDESTRIAN

☐

HIT & RUN

☐

COMMERCIAL

20 VEHICLE

UNIT #

☐

VEHICLE

☐

PEDESTRIAN

☐

HIT & RUN

☐

OTHER

Driver

First

Middle

Last

Suffix

Address

City

State

Zip

Same Address on Driver's

License? ☐ Yes ☐ No

Driver's

Phone

H (

)

Numbers

W (

)

D.L. #

CDL License ☐

D.L.

Class

State

DOB

mm/dd/yyyy

34 Vision

Obstruction

35 Physical

Condition

36 D.L.

Restrictions

37 Alcohol/

Drugs Suspected

38 Alcohol/

Drugs Test

39 Results

(if known)

40 Vehicle

Seizure (DWI) ☐

Owner

Same as Driver? ☐

Address

Same Address as Driver? ☐

City

State

Zip

Plate #

Plate

State

Plate

Year

VIN

Vehicle

Make

Vehicle

Year

41 Vehicle

Style (Type)

42 Vehicle

Drivable ☐ Yes ☐ No

43 TAD

44 Estimated \$

Damage

Insurance

Company

Policy #

20 COMMERCIAL VEHICLE: Cargo, Carrier Name, Address, Source

Unit 45 Cargo Body Type

☐

Same Address as Owner?

Source:

☐ Truck☐ Shipping
papers☐ Driver

Carrier Identification Numbers, GVWR, Axles

US DOT#

ICC#

Axles on Vehicle

Including Trailers

State

State#

IFTA#

FEI#

Fleet#

Gross Vehicle

Weight Rating

21 22 23 24 25 26 27 28 29 30 31 32 Names and Addresses for All Persons (Unit 1/Unit 2 Drv, Ped, etc. - See Above); Use check blocks if address same as Driver

A	1	1	1	Unit1-Drv1, Ped1, etc. see above	W	M	2	2	3	2	1	2	see above	Veh#1 Towed To/By: PANCHO'S (ROTATION)/PANCHO'S (ROTATION)
B				Unit2-Drv2, Ped2, etc. see above									see above	Veh# Towed To/By:
C														
D														
E														
F														
G														
H														

46 Name of EMS

46 Name of EMS

47 Injured Taken


by EMS to

(Treatment Facility and City or Town)

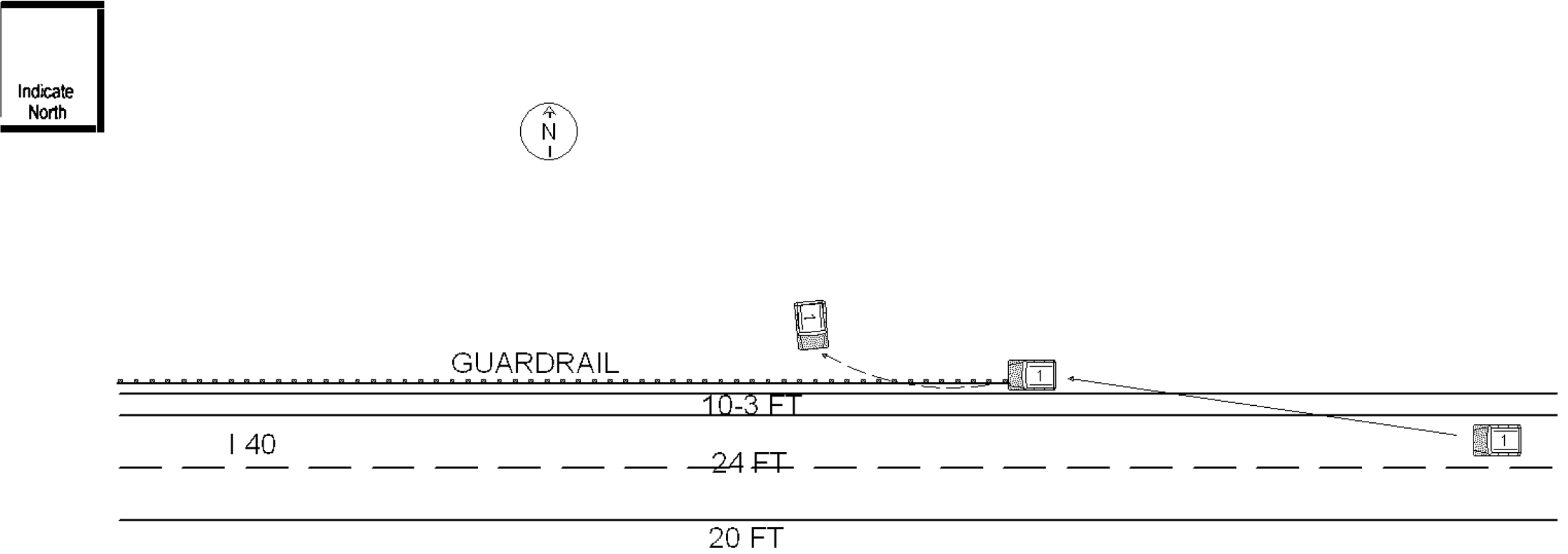
47 Injured Taken

by EMS to

(Treatment Facility and City or Town)

48 POINTS OF INITIAL CONTACT (Write in Codes) Unit# <u>1</u> <u>3</u> Unit# <u> </u> <u> </u>			VEHICLE INFO. Veh # <u>1</u> Veh.# <u> </u>		ROADWAY INFO.		WORK ZONE RELATED	
CRASH SEQUENCE (Unit Level) Unit# <u>1</u> Unit# <u> </u>			60 Authorized Speed Limit <u>65</u>		69 Road Feature <u>0</u>		78 Workzone Area <u>5</u>	
49 Vehicle Maneuver/Action <u>4</u>			61 Estimate of Original Traveling Speed <u>65</u>		70 Road Character <u>3</u>		79 Work Activity <u> </u>	
50 Non-Motorist Action <u> </u>			62 Estimate of Speed at Impact <u>65</u>		71 Road Classification <u>1</u>		80 Work Area Marked <u> </u>	
51 Non-Motorist Location Prior to Impact <u> </u>			63 Tire Impressions Before Impact (ft.) <u>0</u>		72 Road Surface Type <u>3</u>		81 Crash Location <u> </u>	
52 Crash Sequence - First Event for This Unit <u>1</u>			64 Distance Traveled After Impact (ft.) <u>62</u>		73 Road Configuration <u>4</u>		TRAILER INFO. Unit# <u>1</u> Unit# <u> </u>	
53 Crash Sequence - Second Event <u>41</u>			65 Emergency Vehicle Use <u> </u>		74 Access Control <u>2</u>		82 Trailer Type <u>00</u>	
54 Crash Sequence - Third Event <u> </u>			66 Post Crash Fire (if "Yes" check block) <input type="checkbox"/>		75 Number of Lanes <u>4</u>		1st Trailer No. Axles <u> </u>	
55 Crash Sequence - Fourth Event <u> </u>			67 School Bus - Contact Vehicle <input type="checkbox"/>		76 Traffic Control Type <u>0</u>		Width (inches) <u> </u>	
56 Most Harmful Event for This Unit <u>41</u>			68 School Bus - Noncontact Vehicle <input type="checkbox"/>		77 Traffic Control Oper <u> </u>		Length (feet) <u> </u>	
57 Distance/Direction to Object Struck <u>3</u>			COMMERCIAL VEHICLE: Hazardous Materials Involvement Unit <u> </u>		From Placard indicate: 		2nd Trailer No. Axles <u> </u>	
58 Vehicle Underride/Override <u> </u>			Haz Mat Placard <input type="checkbox"/> Yes <input type="checkbox"/> No		4-digit placard number or name from diamond or box <u> </u>		Width (inches) <u> </u>	
59 Vehicle Defects <u>0</u>			Hazardous Cargo <input type="checkbox"/> Yes <input type="checkbox"/> No		1-digit number from bottom of diamond <u> </u>		Length (feet) <u> </u>	
			Released (does not include fuel from fuel tank) <u> </u>				83 Unit# <u> </u> Overwidth Trailer and Overwidth Mobile Home <u> </u>	
			Carrying Haz Mat <input type="checkbox"/> Yes <input type="checkbox"/> No				Overwidth Permit # <u> </u>	

84 DIAGRAM



Unit# 1 was: ☒ Traveling ☐ Parked Facing on I 40

Unit# was: ☐ Traveling ☐ Parked Facing on

NARRATIVE (Include pertinent and unusual aspects)

86 Type/Owner GUARDRAIL-

Owner Address 2122 CLARENCE WALTERS RD, HILLSBOROUGH, NC 27278-9197
 Phone 32430

State Property? ☒ Estimated Damage \$3100

Name Address Phone No. ()

Name Address Phone No. ()

Name Charge(s)
 (Citation # optional)

Name Charge(s)

Officer Name
D L Metts JR

Officer Number
2912

Department
North Carolina State Highway P

Date of Report
01/27/2014

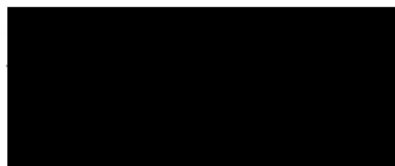


Reconstruction Report

May 2, 2014

*Caption
Involved Party*

DELTA [v] Client



Incident Date *January 27, 2014*
Incident Place *Hillsborough, NC*

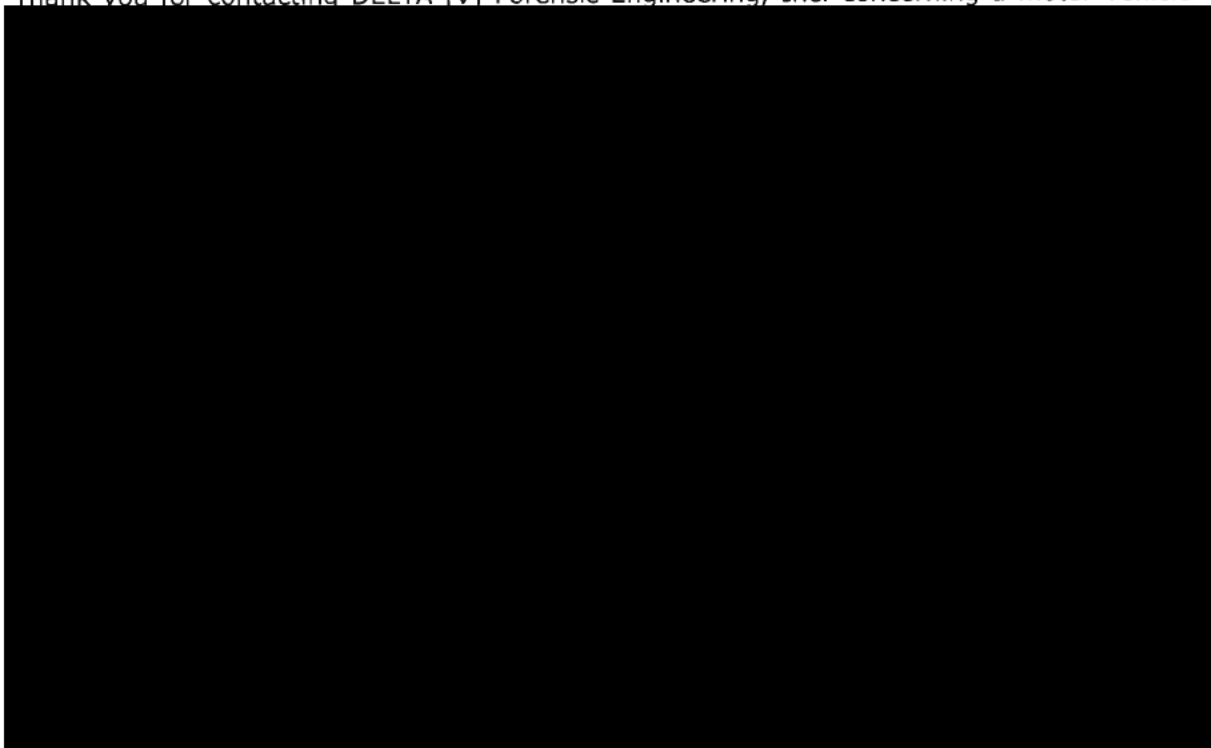
DELTA [v] File *J1442*
DELTA [v] Engineer *Tyler S. Black, M.S., P.E.*

WWW.DELTAVINC.COM - INFO@DELTAVINC.COM

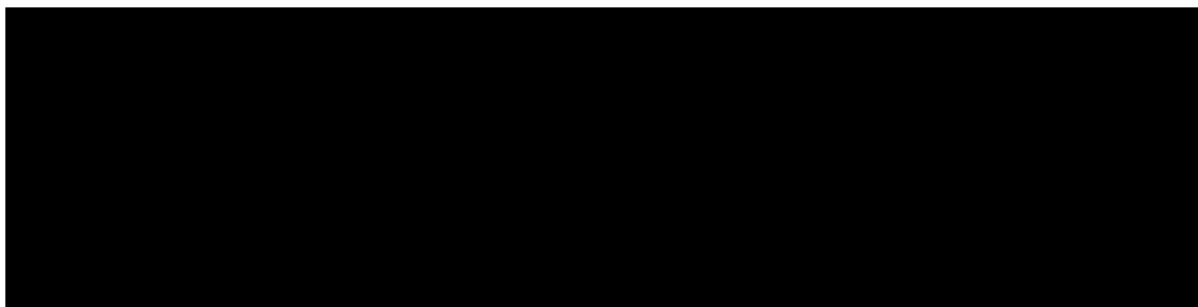


INTRODUCTION

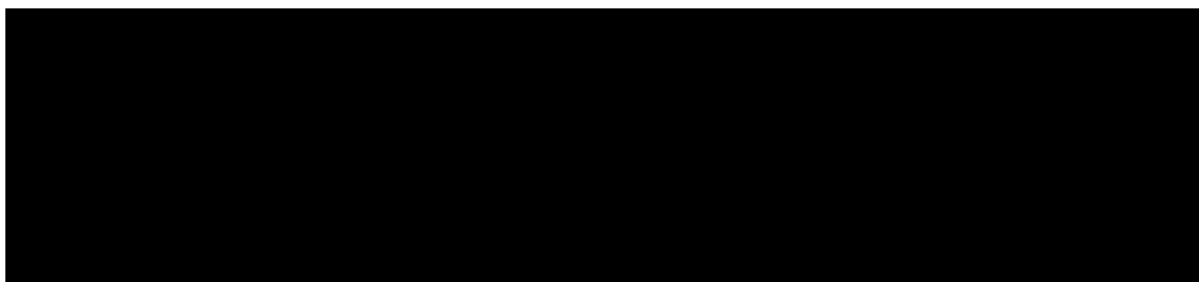
Thank you for contacting DELTA [v] Forensic Engineering, Inc. concerning a motor vehicle



REPORTED INFORMATION



FIELD WORK INVESTIGATION



The guardrail had not been repaired at the time of DELTA [v]'s inspection, and several columns had been separated from the guardrail (Figure 1). Approximately 15 feet of guardrail was bent away from the undamaged guardrail and the remainder was cut and removed from the scene. The end terminal was still located at the scene, and the cut end of the guardrail extended through the window of the end terminal (Figure 2). No pre-impact marks were found in the area leading up to the guardrail end terminal. DELTA [v] drawing J1442.01 of Appendix B shows the collision site during the inspection and shows where the guardrail and end terminal was installed prior to the collision.



Figure 1 – Collision Site



Figure 2 – Collision Site Detail



Figure 3 – Isuzu Trooper Passenger Side Front Corner



Figure 4 – Isuzu Trooper



Figure 5 – Isuzu Trooper Rear Cargo Door

Guardrail Section Inspection

A section of guardrail approximately 17 feet in length (Figure 6) was inspected on April 21, 2014 at America's Storage in Burlington, NC. One end was tapered to a point, and a piece of fabric was lodged in the rail near the pointed end. The other end appeared to be mechanically cut. Lengthwise abrasive marks were present along the length of the rail section. An overlap where two beam sections are bolted together was located from 11'3" to 12'3" from the tapered end of the section.



Figure 6 – Guardrail Section

Guardrail End Terminal Inspection

The guardrail end terminal (Figure 7) was inspected on April 21, 2014 at Burlington Construction in Oakboro, NC. The face plate measures approximately 15 inches wide. A rectangular indentation is located approximately 7-10 inches from the bottom of the plate and offset toward the left side of the plate. This mark is adjacent to a deformation in the leading edge of the plate. Approximately 11 feet of guardrail is extruded, and a section of rail continues through the sleeve and out of the end of the terminal. The rail section is fractured from the center ridge outward and along a length of the rail, forming a "V" shaped fracture in the rail (Figure 8). The sleeve is approximately four inches in width (Figure 9).



Figure 7 – End Terminal, Overall

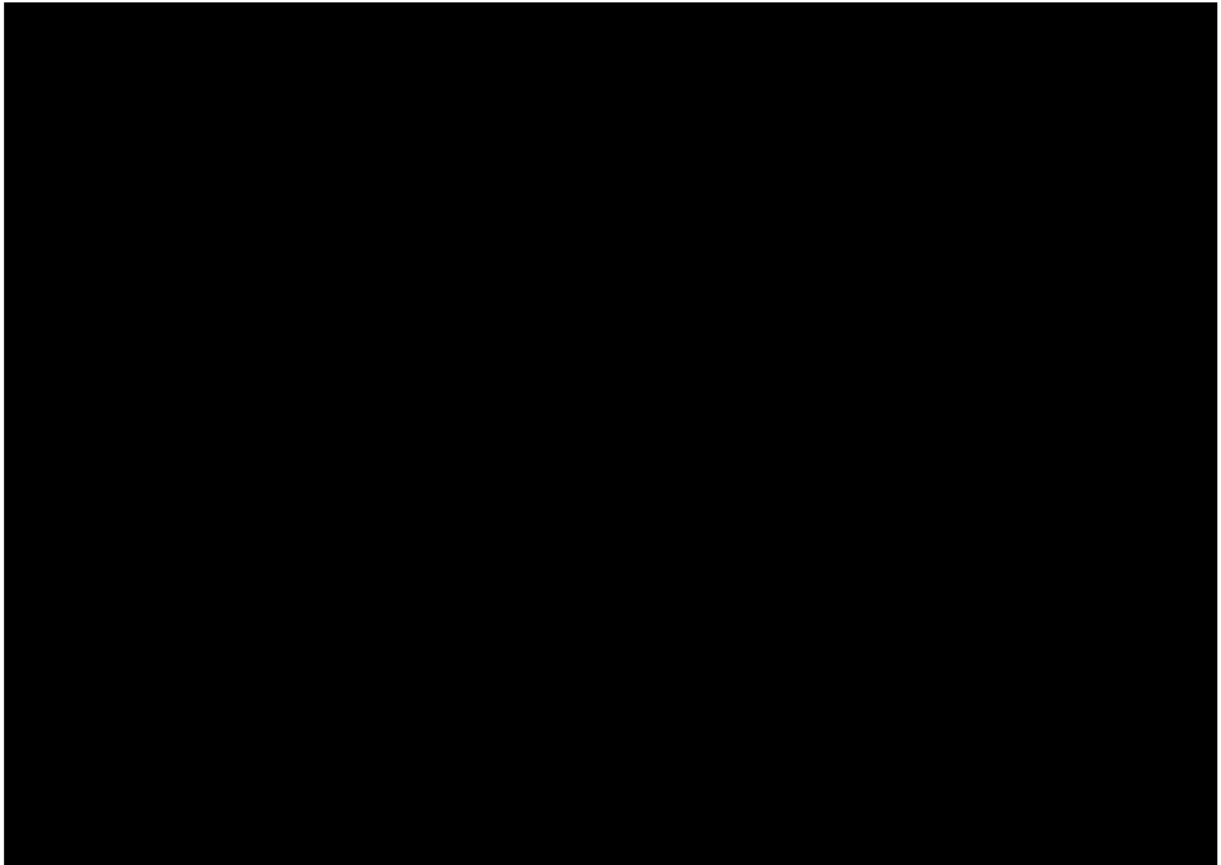


Figure 8 – End Terminal Detail



Figure 9 – End Terminal Sleeve Dimensions

RECONSTRUCTION ANALYSIS



CONCLUSIONS

Based upon the work completed to date, along with my experience, education, and training, it is my opinion with a reasonable degree of Mechanical Engineering certainty that:

2. The offset collision with the guardrail end terminal resulted in a clockwise rotation of the vehicle;
3. The guardrail extruded approximately 11 feet through the end terminal before fracturing and leaving the confines of the end terminal sleeve and passing through the side of the terminal sleeve window;
5. Considering the clockwise motion between the initial collision and guardrail penetration, the vehicle approach angle must have been less than 8° relative to the guardrail.

Should additional information become available, DELTA [v] reserves the right to add to or amend any opinions. I hope this information is useful in moving towards a resolution of the matter.



APPENDIX A
Provided Vehicle Photographs



Appendix A-1



Appendix A-2



APPENDIX B
DELTA [v] Drawing Set

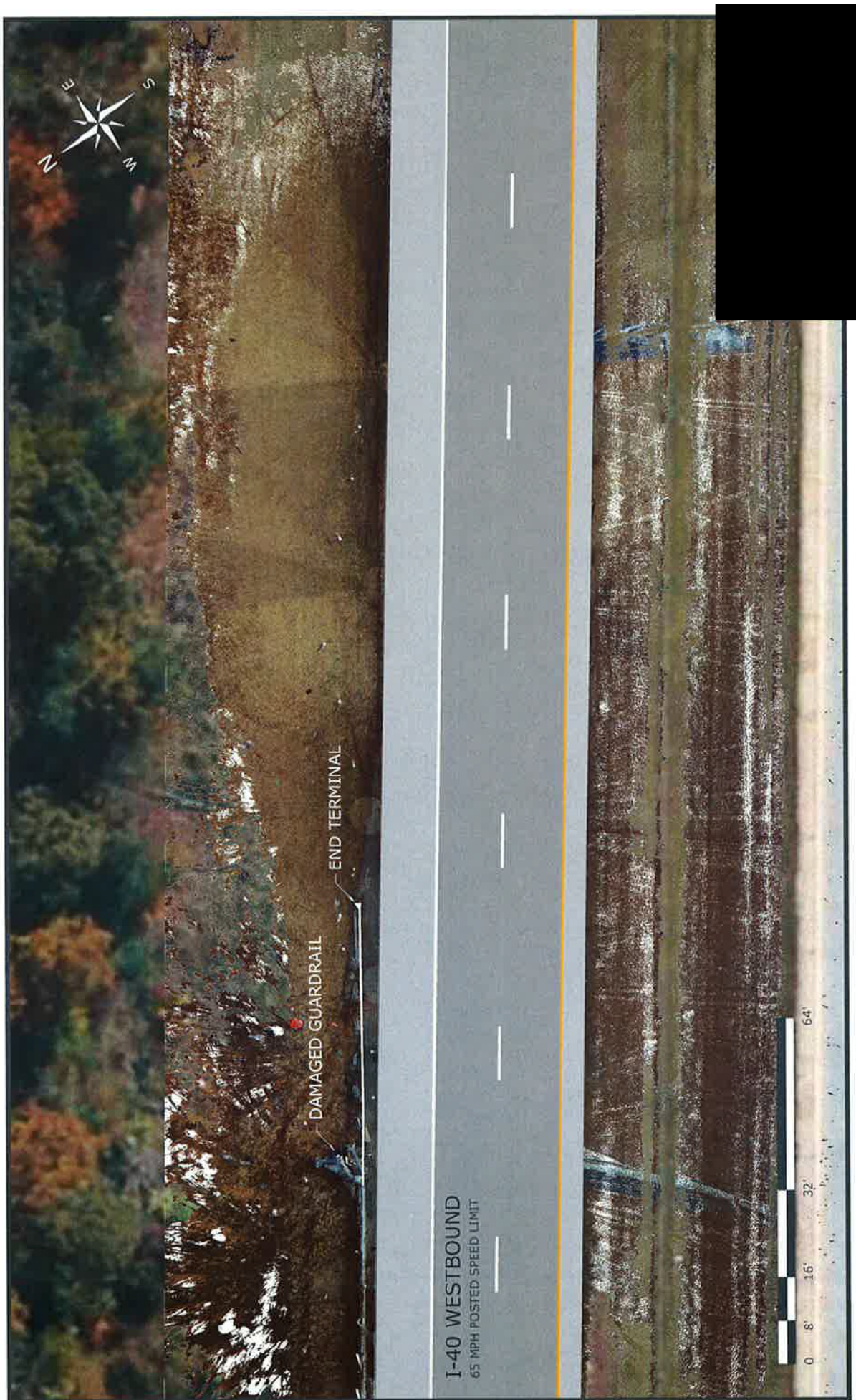






Exhibit 2