

The findings and recommendations provided in this document are provided for discussion purposes only. This document is not complete and the process of acquiring relevant data is still on-going.

ACCESS MANAGEMENT STUDY

DRAFT

State Road 867

From Cypress Lake Drive to Colby Drive (Section # 12040-000, M.P. 2.671 to M.P. 3.695)
Lee County

Prepared for:

FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 1 TRAFFIC OPERATIONS

P.O. Box 1249
801 North Broadway Avenue, MS 1-8
Bartow, Florida 33831-1249



Access Management Design Support
Financial Project Identification Number: 442582-1-32-01
Contract Number: C-AO82
TEDS Contract Number: 11145
Task Work Order: 14

Prepared by:

Traffic Engineering Data Solutions, Inc.
80 Spring Vista Drive
DeBary, Florida 32713

February 2020

Prepared by: Colleen T. Jarrell, P.E.

Professional Engineer:
Colleen T. Jarrell, P.E.
P.E. Number 60128

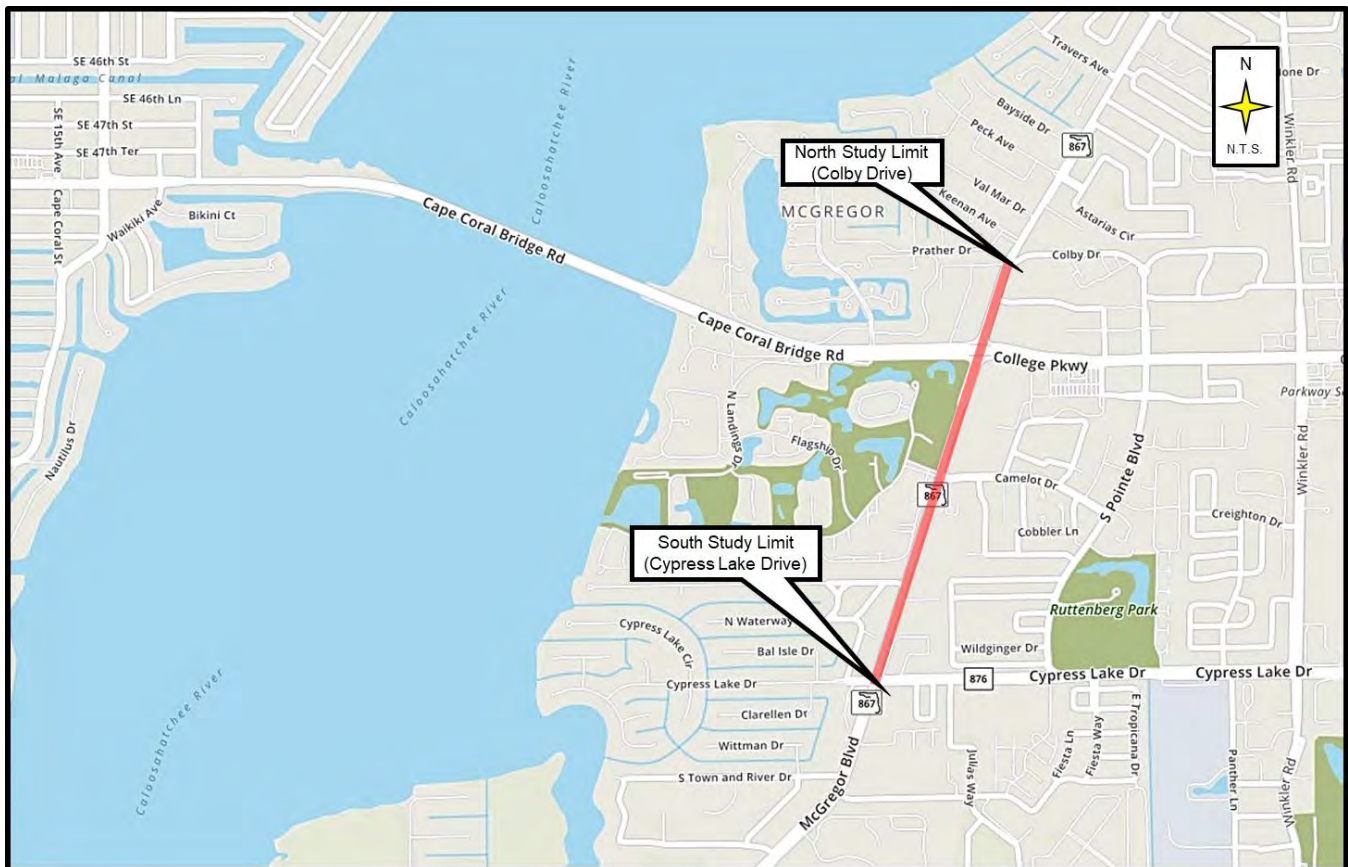
1

INTRODUCTION

Traffic Engineering Data Solutions, Inc. (TEDS) was retained on behalf of the Florida Department of Transportation (FDOT) to conduct an Access Management Study on State Road (S.R.) 867 from Cypress Lake Drive (M.P. 2.671) to Colby Drive (M.P. 3.695) in Fort Myers (Lee County), Florida. A location map of the study corridor is shown below in **Figure 1**.

The analysis methods used in completing this study are consistent with the Manual on Uniform Traffic Control Devices (MUTCD 2009), the Highway Safety Improvement Program Guidelines, the FDOT's 2019 Access Management Guidebook, FDOT Design Manual (January 2020), FDOT District 1 guidelines/procedures, Florida Administrative Code Chapter 14-97, and engineering judgment. This document includes existing conditions, crash analysis, a conceptual access management plan, and a benefit-to-cost analysis.

Figure 1
Corridor Location Map
S.R. 867 from Cypress Lake Drive to Colby Drive



Map Source: MapQuest

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EXISTING CONDITIONS

S.R. 867 is a north/south roadway extending from C.R. 865/867 to S.R. 82/U.S. 41 in Fort Myers. Within the study corridor, S.R. 867 is a four-lane undivided roadway with a two-way left-turn lane. Details of the study corridor and the surrounding area are summarized in **Table 1** and depicted in the Straight Line Diagram and Existing Conditions Diagram in **Appendix A**.

Table 1
Summary of Existing Conditions
S.R. 867 from Cypress Lake Drive to Colby Drive

Feature	Description
Main Street	<ul style="list-style-type: none"> • S.R. 867 from Cypress Lake Drive to Colby Drive.
Area Location	<ul style="list-style-type: none"> • Fort Myers (Lee County), Florida
Cross Section	<ul style="list-style-type: none"> • Four-lane undivided roadway with curb and gutter, no shoulders, and a continuous two-way left-turn lane • Sidewalk along both sides of the road throughout the corridor. • No overhead street lighting is provided along the road. • Overhead utility poles are located along the east side of the road.
AADT (2018)	<ul style="list-style-type: none"> • Study Corridor – 35,500 vehicles per day (vpd)
Regulatory Speed Limit (per RCI)	<ul style="list-style-type: none"> • Varies from 40 to 45 mph
Adjacent Land Uses	<ul style="list-style-type: none"> • Commercial/residential
Alignment	<ul style="list-style-type: none"> • Relatively straight and flat with a horizontal curve just north of W College Point Drive.
Context Classification	<ul style="list-style-type: none"> • C3C – Suburban Commercial (M.P. 2.671 to 3.462) • C3R – Suburban Residential (M.P. 3.462 to 3.603) • C3R – Suburban Residential (M.P. 3.603 to 3.695)
Access Class	<ul style="list-style-type: none"> • Access Class 6
Signalized Intersections	<ul style="list-style-type: none"> • Cypress Lake Drive (M.P. 2.671) • Camelot Drive (M.P. 3.176) • Cape Coral Bridge Drive (M.P. 3.465)

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COLLISION DATA

Crash data for the 48-month period between January 1, 2014 and December 31, 2017 was obtained from the FDOT's CARS database and the University of Florida's *Signal Four Analytics*. Additionally, the crash information from both databases for 2018 was used to verify crash trends and accuracy. Over the five-year period there were a total of 275 crashes that occurred on S.R. 867, consisting of the following crash types:

Table 2
Crash Type Summary
S.R. 867 from Cypress Lake Drive to Colby Drive

CRASH TYPE	2014	2015	2016	2017	2018	TOTAL	AVERAGE PER YEAR
Angle	6	4	4	2	3	19	3.2
Backed-Into	0	0	0	2	0	2	0.3
Bicycle	1	1	0	0	0	2	0.3
Fixed-Object	3	2	0	2	2	9	1.5
Head-On	0	0	1	0	1	2	0.3
Left-Turn	9	5	10	10	7	42	7.0
Pedestrian	0	1	0	0	0	1	0.2
Rear-End	37	23	28	33	30	151	25.2
Right-Turn	0	1	0	0	5	6	1.0
Rollover	0	1	0	0	0	1	0.2
Side-Swipe	6	8	7	10	8	39	6.5
Other	1	0	0	0	0	1	0.2
Total	63	46	50	59	56	275	45.8

- The crashes resulted in three (3) fatalities, 91 injuries, and \$1,267,691 in estimated property damage.
- 214 of the crashes (78%) occurred during the day and the remaining 61 crashes (22%) occurred during the night.
- 241 of the crashes (88%) occurred on dry pavement conditions, 32 crashes (12%) occurred on wet pavement conditions and two (2) crashes (<1%) occurred on unknown pavement conditions.
- Two (2) fatal left-turn crashes occurred at the Bridge Plaza Entrance and Cypress Lake Drive.
- The two (2) bicycle and one (1) pedestrian crash occurred at various locations throughout the corridor, without any noticeable concentration in any particular location.
- Based on a review of the crash data, angle and left-turn crashes along the corridor at unsignalized locations were noted to be dispersed throughout the corridor with a higher concentration of crashes noted at the following locations:
 - Seven (7) left-turn (including one (1) fatal) and two (2) angle crashes were noted at the Bridge Plaza Entrance.

- In reviewing the crash data, we identified a high number of left-turn crashes associated with the left-turn movements at the Cypress Lake Drive intersection (two (2) northbound and eight (8) southbound crashes in 5 years). **It is recommended that potential conversion to protected-only left-turn phasing for the southbound left-turn movement be evaluated.**

Detailed collision summaries and diagrams are provided in **Appendix B**.

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FDOT AND COUNTY ROADWAY IMPROVEMENTS

FDOT's Five (5) Year Work Program and Lee County's Long-Range Capital Improvement Plan were reviewed for any scheduled improvements along the S.R. 867 corridor. There are no planned projects along this corridor from either FDOT or Lee County.

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CONCEPTUAL ACCESS MANAGEMENT PLAN

A conceptual access management improvement plan was developed, consisting of full median openings at signalized intersections. Unsignalized full median openings and directional median openings are not provided in this plan due to the potential changes in corridor turning movements and crash trends between the time of this study effort and the design phase. The placement of additional median openings at unsignalized locations (full and directional) should be determined during the design and be based on turning movement volumes, type of land use, an operational evaluation of the corridor, field observations, collision data provided in this report, side street connectivity, public outreach, the FDOT Access Management Guidelines and engineering judgement. The intent of this plan is to provide the typical section with a raised median, along with probable costs and a benefit/cost analysis associated with the construction of a raised median. Recognizing that the location of median openings will be assessed in more detail during the design stages of the project, noted consideration should be given at such time towards re-evaluating and addressing the relatively high concentration of angle and left-turn crashes at the Bridge Plaza Entrance.

A critical component in developing an access management improvement plan is the FDOT context classification. The corridor was determined by FDOT to be C3C-Suburban Commercial from Cypress Lake Drive to just south of College Parkway and C3R-Suburban Residential from just south of College Parkway to Edinburgh Drive. Currently throughout the study corridor, S.R. 867 from Cypress Lake Drive to Edinburgh Drive has an access classification of 6, which is non-restrictive median type. Signalized full median openings are provided at Cypress Lake Drive, Camelot Drive/Landings Drive, and College Parkway. Bike lanes are not currently provided on the study segment or along the adjacent roadway segments.

The typical right-of-way width varies along the corridor from approximately 80 feet to 100 feet. The roadway width for the typical section is 67 feet (varying by one (1) to two (2) feet) and consists of four (4) 13-foot lanes, a 15-foot two-way left-turn lane and Type F curb and gutter on both sides of the road. Included in **Appendix C** is a typical section showing existing and proposed conditions. It is recommended to convert the existing continuous two-way left-turn lane to a 15-foot raised median that transitions to a 4-foot Type 1 Option 1 concrete traffic separator per FDOT index No. 520-020, with an auxiliary 11-foot left-turn lane at median openings. The proposed typical section was selected in order to avoid right-of-way acquisitions and significant construction impacts, but may require a design variation and/or exception for lane width (FDM Table 201.2.1) involving travel lanes and auxiliary lanes. For the purposes of this study, the design speed was assumed to be 5-mph above the posted speed limit.

Side street connectivity was reviewed and the surrounding street network appears to provide adequate alternate routes to access signalized intersections and to accommodate a more restrictive median along the corridor, however, there are many driveways along the corridor that will not benefit from a grid network. Thus, U-turn opportunities should be considered when recommending median openings along the corridor. The proposed typical section for S.R. 867 is a four-lane divided roadway and given the surrounding roadway grid, U-turn movements are anticipated to be low. However, given the roadway width, U-turn aprons are likely to be needed and should be evaluated during the design phase.

For the purposes of this effort, the lengths of the left-turn lanes at signalized intersections were

based on the existing turn-lane length. For locations where the existing turn-lane storage was less than the current criteria/standards contained in the FDM, the turn-lane length was increased to meet current standards for the roadway. During the design phase, the turning movement volumes, including additional volumes resulting from new U-turns, should be used to determine the required left-turn storage.

As shown in the typical section included in **Appendix C**, the recommended improvements will not add additional travel lanes or widen the existing roadway. The existing roadway is in an urban section with curb & gutter on the outside that collects runoff in a series of inlets, which is then conveyed in a series of pipe culverts. As shown in **Appendix C**, removal of existing pavement and installation of a sodded median in locations where it does not presently exist is expected to result in a net decrease of impervious area. Throughout most of the corridor, existing drainage patterns will be maintained. However, in areas of proposed left-turn lanes, overbuild is proposed to remove the existing crown of the road, such that runoff from all portions of the proposed turn-lane will be directed across the adjacent travel lanes to the outside curb line. Though no impacts to the existing outside curb & gutter are anticipated, spread calculations for existing inlets may need to be analyzed during design to ensure that additional inlets are not required as a result of these minor changes in existing drainage patterns.

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COST ESTIMATE

The overall improvement costs were estimated based on FDOT historical unit prices as shown in **Table 3**. The total cost of the improvements, including engineering and CEI, are estimated at approximately \$477,188. The cost estimate includes reasonable assumptions for the length of left-turn lanes and should be updated as part of the design phase. An Improvement Diagram is provided in **Appendix C**.

Table 3
Engineer's Estimate of Probable Costs
S.R. 867 from Cypress Lake Drive to Colby Drive

ENGINEER'S OPINION OF PROBABLE COSTS S.R. 867 from Cypress Lake to Colby Drive					
PAY ITEM	PAY ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	TOTAL
0660 2106	LOOP ASSEMBLY, F&I, TYPE F	AS	3	\$ 902.40	\$2,707.20
SIGNAL SUBTOTAL					\$2,707.20
0104 18	INLET PROTECTION SYSTEM	EA	24	\$ 102.23	\$2,453.52
0110 1 1	CLEARING & GRUBBING	AC	1.04	\$ 14,035.21	\$14,596.62
0327 70 1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	SY	1,377	\$ 2.19	\$3,015.63
0337 7 82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	TN	75.735	\$ 142.35	\$10,780.88
0520 2 2	CONCRETE CURB, TYPE B	LF	6,617	\$ 25.56	\$169,130.52
0520 5 11	TRAF SEP CONC-TYPE I, 4' WIDE	LF	870	\$ 42.11	\$36,635.70
0520 70	CONCRETE TRAFFIC SEPARATOR, SP- VAR WIDT	SY	39	\$ 73.86	\$2,880.54
0570 1 2	PERFORMANCE TURF, SOD	SY	4,650	\$ 2.57	\$11,950.50
ROADWAY SUBTOTAL					\$251,443.91
0711 14125	THERMOPLASTIC, PREFORM, WHITE, SOLID,24"	LF	45	\$ 16.63	\$748.35
0711 14170	THERMOPLASTIC, PREFORMED, WHITE, ARROW	EA	15	\$ 154.52	\$2,317.80
0711 15101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	GM	0.161	\$ 4,326.95	\$696.64
0711 15131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	GM	0.095	\$ 1,515.57	\$143.98
0711 15201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	GM	1.645	\$ 4,283.65	\$7,046.60
PAVEMENT MARKING SUBTOTAL					\$10,953.37
SUBTOTAL					\$265,104.48
0101 1	MOBILIZATION (10%)				\$26,510.45
0102 1	MAINTENANCE OF TRAFFIC (20%)				\$53,020.90
0999 25	CONTINGENCY (20%)				\$53,020.90
CONSTRUCTION TOTAL					\$397,656.72
ENGINEERING (20%)					\$53,020.90
CEI (10%)					\$26,510.45
PROJECT TOTAL					\$477,188.06

*Note: Milling and resurfacing restricted to left-turn lanes

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BENEFIT/COST ANALYSIS

A benefit cost analysis was conducted for the construction of a raised median to determine if the project is justified based on criteria outlined in the Highway Safety Improvement Program Manual. The benefit of the improvement is determined as the cost associated with any crash susceptible to correction by the improvement.

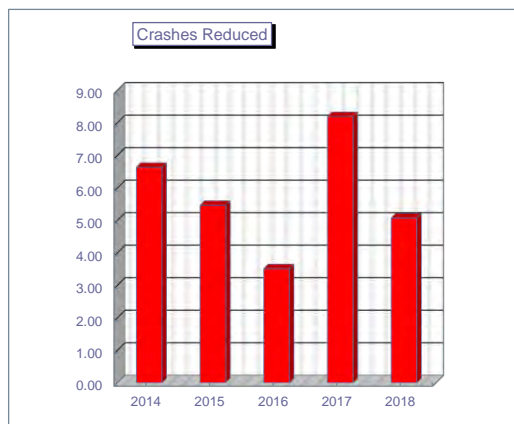
The Federal Highway Administration's (FHWA) CMF Clearinghouse identifies a Crash Modification Factor (CMF) of 0.61 for the installation of a raised median for a prior road condition with no raised median. This CMF was applied to all long form crashes within the study corridor minus crashes that occurred within the signalized intersections and rear-end crashes on approach to the signalized intersections. Crash modification factor information sheets are provided in **Appendix D**.

Based on the Benefit Cost Analysis spreadsheet shown as **Table 4**, upon applying the CMF factors to 74 long form crashes along the corridor, the improvements are projected to result in a reduction of 5.77 crashes per year. The cost per crash is \$207,971 as obtained from FDOT's CAR Segment Based Crash Rate Statistics (statewide suburban 4-5 lane 2-way undivided roadway). Therefore, the Benefit/Cost ratio of the proposed improvements is 31.73. The proposed improvements are justified as a candidate project for federal safety funding.

The Net Present Value (NPV) for the improvements is estimated at \$15,836,757. The NPV calculations are provided in **Appendix E**.

**Table 4
Benefit/Cost Analysis
S.R. 867 from Cypress Lake Drive to Colby Drive**

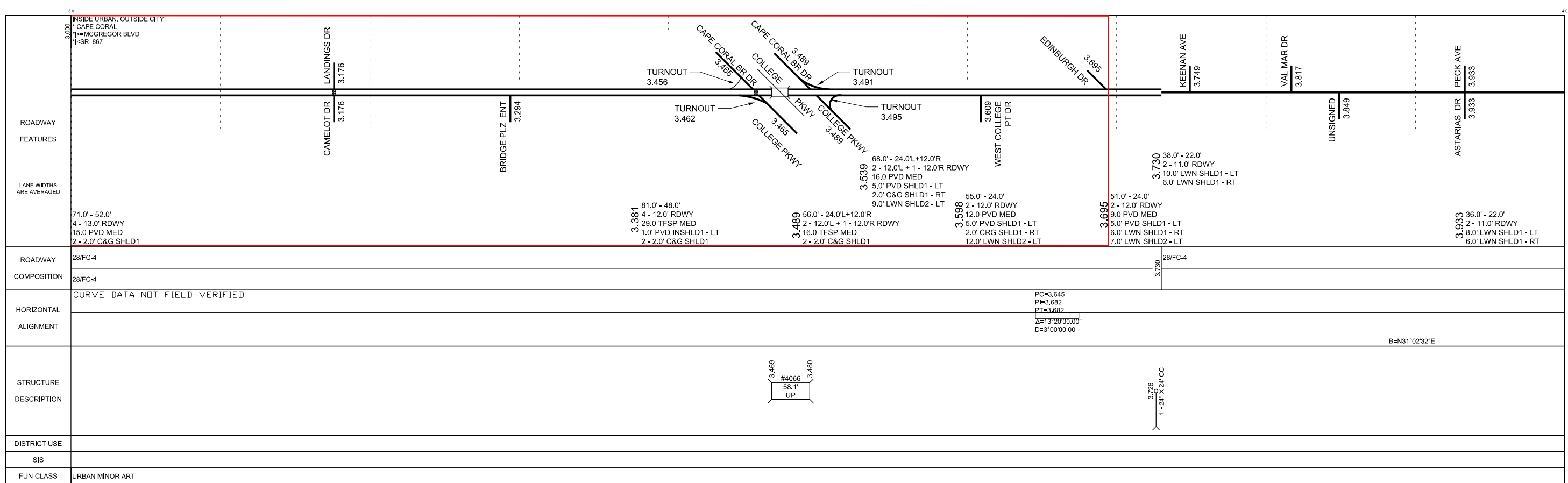
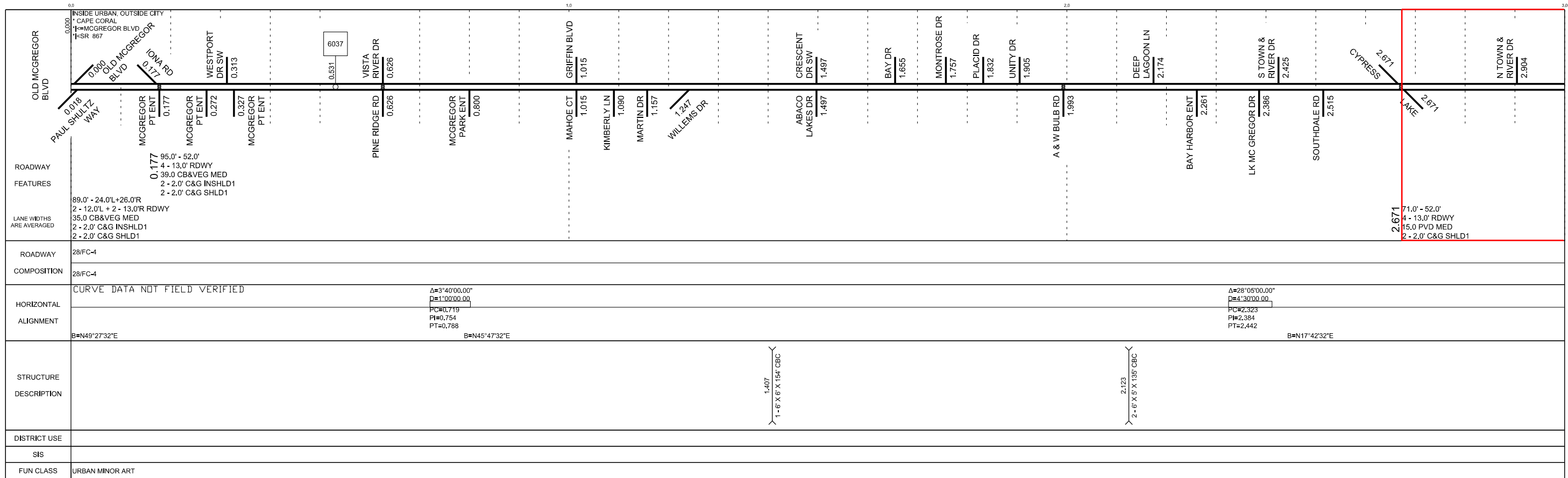
1. SUBMITTED BY <u>TEDS</u> FM # _____ 2. DATE SUBMITTED <u>1/30/2020</u> 3. PROJECT NO. _____ 4. ALTERNATIVE NO. <u>1</u>	5. SAFETY PRIORITY _____ ENV. STUDY _____ SKID (ID) _____ SN <u>12040</u> SPEED <u>40 to 45</u>																																																							
6. DISTRICT <u>1</u> COUNTY <u>Lee</u> SECTION <u>12040</u>	SR <u>867</u> U.S. ROAD <u>N/A</u>																																																							
7. BEGIN MILE POST <u>2.671</u> END MILE POST <u>3.695</u>	LENGTH <u>1.024</u> NODE <u>N/A</u>																																																							
10. PROPOSED IMPROVEMENTS (LIST AND DISCUSS): Install a raised median																																																								
11. YEAR	2014 2015 2016 2017 2018 AVG																																																							
12. Benefit: Install a Raised Median [CMF= 0.610]	NO. OF CRASHES 17 14 9 21 13 14.8 NO. CRASHES POTENTIALLY REDUCED BY PROJECT 6.63 5.46 3.51 8.19 5.07 5.77																																																							
14. CRASH INFORMATION FOR FACILITY COST/CRASH \$207,971.00 CRASH CLEANUP \$ -100.00 INTEREST RATE 4%																																																								
15. ANNUAL COST OF IMPROVEMENTS																																																								
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>TYPE</th> <th>COST</th> <th>LIFE</th> <th>CRF</th> <th>AN'L COST</th> </tr> </thead> <tbody> <tr> <td>A. R-O-W</td> <td>\$ -</td> <td>50</td> <td>0.0466</td> <td>\$0</td> </tr> <tr> <td>B. PECEI</td> <td>\$ 79,531.34</td> <td>20</td> <td>0.0736</td> <td>\$5,854</td> </tr> <tr> <td>C. STRUCTURAL</td> <td>\$ -</td> <td>50</td> <td>0.0466</td> <td>\$0</td> </tr> <tr> <td>D. SIGNAL</td> <td>\$ 4,060.80</td> <td>20</td> <td>0.0736</td> <td>\$299</td> </tr> <tr> <td>E. STRIPING</td> <td>\$ 16,430.06</td> <td>8</td> <td>0.1485</td> <td>\$2,440</td> </tr> <tr> <td>F. ROADWAY</td> <td>\$ 377,165.86</td> <td>20</td> <td>0.0736</td> <td>\$27,759</td> </tr> <tr> <td>G. SUBTOTAL</td> <td>\$ 477,188.06</td> <td></td> <td></td> <td>\$36,352</td> </tr> <tr> <td>H. LIGHTING</td> <td>\$ -</td> <td>15</td> <td>0.0899</td> <td>\$0</td> </tr> <tr> <td>I. CRASH CLEANUP</td> <td></td> <td></td> <td></td> <td>\$1,480</td> </tr> <tr> <td>J. TOTAL</td> <td></td> <td></td> <td></td> <td>\$37,832</td> </tr> </tbody> </table>		TYPE	COST	LIFE	CRF	AN'L COST	A. R-O-W	\$ -	50	0.0466	\$0	B. PECEI	\$ 79,531.34	20	0.0736	\$5,854	C. STRUCTURAL	\$ -	50	0.0466	\$0	D. SIGNAL	\$ 4,060.80	20	0.0736	\$299	E. STRIPING	\$ 16,430.06	8	0.1485	\$2,440	F. ROADWAY	\$ 377,165.86	20	0.0736	\$27,759	G. SUBTOTAL	\$ 477,188.06			\$36,352	H. LIGHTING	\$ -	15	0.0899	\$0	I. CRASH CLEANUP				\$1,480	J. TOTAL				\$37,832
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APPENDIX

APPENDIX A

STRAIGHT LINE DIAGRAM AND EXISTING CONDITION DIAGRAM





**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

MATCHLINE A

MATCHLINE A

MATCHLINE B

PROPERTY LABELS BASED ON STREETVIEW IMAGERY
AVAILABLE FROM MAY 2018

Traffic Engineering Data Solutions, Inc.
80 Spring Vista Drive Phone: 386.753.0558
DeBary, FL 32713 Fax: 386.753.0778

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITION DIAGRAM

PAGE NO.

MATCHLINE B



MATCHLINE C



**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

APPENDIX B

**COLLISION
SUMMARIES & DIAGRAMS**

FLORIDA DEPARTMENT OF TRANSPORTATION

COLLISION SUMMARY

Section: **12040** State Road: **867** County: **Lee**

Intersecting route: **Cypress Lake / Colby Drive** Milepost: **2.671 - 3.695** Data by: **SEN**

Study period: **1/1/2014 to 12/31/2014** Date: **1/16/2020**

NO.	DATE	DAY	TIME	FATAL	INJURY	INJURY SEVERITY	PROPERTY DAMAGE	HARMFUL EVENT	FORM	DUI	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	01/07/14	Tuesday	0:47	0	1	3-Non-Incapacitating	\$7,000	Left-Turn	Long	No	Night	Dry	Ran Red Light
2	01/08/14	Wednesday	12:56	0	0	1-None	\$10,000	Angle	Long	No	Day	Dry	Ran Red Light
3	01/11/14	Saturday	18:24	0	0	1-None	\$10,000	Rear-End	Short	No	Night	Dry	Careless Driving
4	01/15/14	Wednesday	23:47	0	0	1-None	\$0	Rear-End	Short	No	Night	?	Careless Driving
5	01/19/14	Sunday	2:02	0	0	1-None	\$5,000	Fixed-Object	Long	No	Night	Dry	DUI
6	01/25/14	Saturday	2:19	0	0	1-None	\$2,000	Fixed-Object	Long	Yes	Night	Dry	Careless Driving
7	01/30/14	Thursday	17:14	0	0	1-None	\$0	Rear-End	Short	No	Day	Wet	Careless Driving
8	02/07/14	Friday	10:19	0	0	1-None	\$4,000	Rear-End	Short	No	Day	?	Careless Driving
9	02/08/14	Saturday	20:22	0	1	4-Incapacitating	\$7,000	Left-Turn	Long	No	Night	Dry	FTYROW
10	02/13/14	Thursday	20:19	0	0	1-None	\$1,000	Rear-End	Short	No	Night	Dry	Careless Driving
11	02/18/14	Tuesday	18:58	0	0	1-None	\$14,000	Rear-End	Long	No	Night	Dry	Careless Driving
12	02/27/14	Thursday	7:24	0	0	1-None	\$0	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
13	02/27/14	Thursday	20:36	0	0	1-None	\$0	Rear-End	Short	No	Night	Wet	Careless Driving
14	02/28/14	Friday	23:05	0	1	2-Possible	\$17,000	Angle	Long	Yes	Night	Dry	DUI
15	03/24/14	Monday	21:58	0	0	1-None	\$5,000	Rear-End	Long	No	Night	Wet	Careless Driving
16	04/01/14	Tuesday	18:37	0	0	1-None	\$250	Side-Swipe	Long	No	Day	Dry	Improper Lane Change
17	04/08/14	Tuesday	15:31	0	0	1-None	\$0	Rear-End	Short	No	Day	Wet	Careless Driving
18	04/10/14	Thursday	16:05	0	0	1-None	\$11,500	Rear-End	Long	No	Day	Dry	Careless Driving
19	04/11/14	Friday	12:30	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
20	04/27/14	Sunday	10:30	0	0	1-None	\$2,000	Fixed-Object	Long	No	Day	Dry	Lost Control
21	05/02/14	Friday	16:22	0	0	1-None	\$10,000	Angle	Long	No	Day	Dry	FTYROW
22	05/05/14	Monday	17:50	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
23	05/07/14	Wednesday	20:48	0	0	1-None	\$1,750	Rear-End	Long	Yes	Night	Dry	Careless Driving
24	06/02/14	Monday	0:30	0	0	1-None	\$0	Side-Swipe	Short	No	Night	Dry	Improper Lane Change
25	06/09/14	Monday	14:59	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
26	06/10/14	Tuesday	21:07	0	0	1-None	\$2,000	Rear-End	Long	Yes	Night	Dry	DUI
27	06/17/14	Tuesday	17:40	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
28	06/19/14	Thursday	17:17	0	0	1-None	\$0	Rear-End	Long	No	Day	Dry	Careless Driving
29	06/22/14	Sunday	11:18	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
30	06/22/14	Sunday	18:13	0	1	2-Possible	\$10,000	Left-Turn	Long	Yes	Day	Dry	FTYROW
31	06/25/14	Wednesday	14:36	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
32	07/02/14	Wednesday	12:59	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
33	07/03/14	Thursday	15:38	0	0	1-None	\$13,000	Rear-End	Long	No	Day	Dry	Careless Driving
34	07/11/14	Friday	15:24	0	0	1-None	\$0	Rear-End	Short	No	Day	Wet	Lost Control
35	07/16/14	Wednesday	13:55	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
36	07/24/14	Thursday	8:29	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
37	07/25/14	Friday	16:38	0	0	1-None	\$15,000	Left-Turn	Short	No	Day	Dry	FTYROW
38	07/26/14	Saturday	14:05	0	0	1-None	\$0	Rear-End	Short	No	Day	Wet	Following Too Closely
39	08/06/14	Wednesday	17:30	0	1	2-Possible	\$16,100	Rear-End	Long	No	Day	Dry	Careless Driving
40	08/14/14	Thursday	14:52	0	0	1-None	\$0	Side-Swipe	Short	No	Day	Dry	Reckless Driving
41	08/21/14	Thursday	14:12	0	0	1-None	\$0	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
42	08/21/14	Thursday	17:50	0	0	1-None	\$0	Angle	Short	No	Day	Dry	FTYROW
43	09/02/14	Tuesday	16:09	0	0	1-None	\$0	Rear-End	Short	No	Day	Wet	Careless Driving
44	09/10/14	Wednesday	8:35	0	0	1-None	\$12,000	Rear-End	Short	No	Day	Dry	Careless Driving
45	09/13/14	Saturday	16:47	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
46	10/04/14	Saturday	0:14	0	0	1-None	\$3,000	Left-Turn	Long	No	Night	Wet	Ran Red Light
47	10/07/14	Tuesday	20:55	0	0	1-None	\$4,000	Left-Turn	Long	Yes	Night	Dry	FTYROW
48	10/13/14	Monday	14:54	0	1	3-Non-Incapacitating	\$500	Bicycle	Long	No	Day	Dry	FTYROW
49	10/20/14	Monday	18:13	0	0	1-None	\$900	Rear-End	Short	No	Day	Dry	Careless Driving

COLLISION SUMMARY

COLLISION SUMMARY														
Section: 12040				State Road: 867				County: Lee						
Intersecting route: Cypress Lake / Colby Drive				Milepost: 2.671 - 3.695				Data by: SEN						
Study period: 1/1/2014 to 12/31/2014				Date: 1/16/2020										
NO.	DATE	DAY	TIME	FATAL	INJURY	INJURY SEVERITY	PROPERTY DAMAGE	HARMFUL EVENT	FORM	DUI	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE	
50	10/21/14	Tuesday	11:34	0	0	1-None	\$4,000	Angle	Long	No	Day	Dry	FTYROW	
51	10/27/14	Monday	18:16	0	0	1-None	\$10,000	Rear-End	Long	No	Day	Dry	Careless Driving	
52	11/01/14	Saturday	11:53	0	0	1-None	\$1,600	Rear-End	Long	No	Day	Dry	Careless Driving	
53	11/04/14	Tuesday	14:10	0	2	2-Possible	\$4,000	Left-Turn	Long	No	Day	Dry	FTYROW	
54	11/09/14	Sunday	11:45	0	0	1-None	\$0	Rear-End	Short	No	Day	Wet	Careless Driving	
55	11/09/14	Sunday	18:23	0	1	2-Possible	\$5,000	Angle	Long	No	Night	Wet	FTYROW	
56	11/11/14	Tuesday	15:36	0	0	1-None	\$10,000	Other	Long	No	Day	Dry	Careless Driving	
57	11/14/14	Friday	18:00	0	0	1-None	\$3,500	Rear-End	Long	No	Day	Dry	Careless Driving	
58	11/19/14	Wednesday	19:04	0	0	1-None	\$6,000	Rear-End	Long	No	Day	Dry	Careless Driving	
59	12/03/14	Wednesday	16:00	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Distracted Driving	
60	12/10/14	Wednesday	8:41	0	0	1-None	\$3,000	Side-Swipe	Long	No	Day	Dry	Careless Driving	
61	12/16/14	Tuesday	16:53	0	1	3-Non-Incapacitating	\$22,500	Rear-End	Long	No	Day	Dry	Careless Driving	
62	12/19/14	Friday	14:34	0	0	1-None	\$0	Left-Turn	Short	No	Day	Dry	FTYROW	
63	12/31/14	Wednesday	11:14	0	0	1-None	\$6,000	Left-Turn	Long	No	Day	Wet	FTYROW	
TOTAL				0	10		\$259,600							
TOTAL NO.	Injury Severity				Rear-End	Side-Swipe	Fixed-Object	Left-Turn	Bicycle	Angle	Other			
	Property Damage Only	Injury	Fatality											
63	54	9	0	37	6	3	9	1	6	1	0	0	0	
Percent	86%	14%	0%	59%	10%	5%	14%	2%	10%	2%	0%	0%	0%	
CONTRIB CAUSE	Time of Day		Pavement Cond.			Improper Lane Change	Careless Driving	Following Too Closely	Distracted Driving	DUI	FTYROW	Lost Control	Reckless Driving	Ran Red Light
	Day	Night	Dry	Wet	?									
Total	46	17	50	11	0	4	36	1	1	3	12	2	1	3
Percent	73%	27%	79%	17%	0%	6%	57%	2%	2%	5%	19%	3%	2%	5%



MATCHLINE A



MATCHLINE A

MATCHLINE B

**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

SYMBOLS:			
	REAR END COLLISION		BICYCLE COLLISION
	FIXED OBJECT COLLISION		PEDESTRIAN COLLISION
	HEAD-ON COLLISION		RIGHT TURN COLLISION
	ALL OTHER COLLISION		LEFT TURN COLLISION

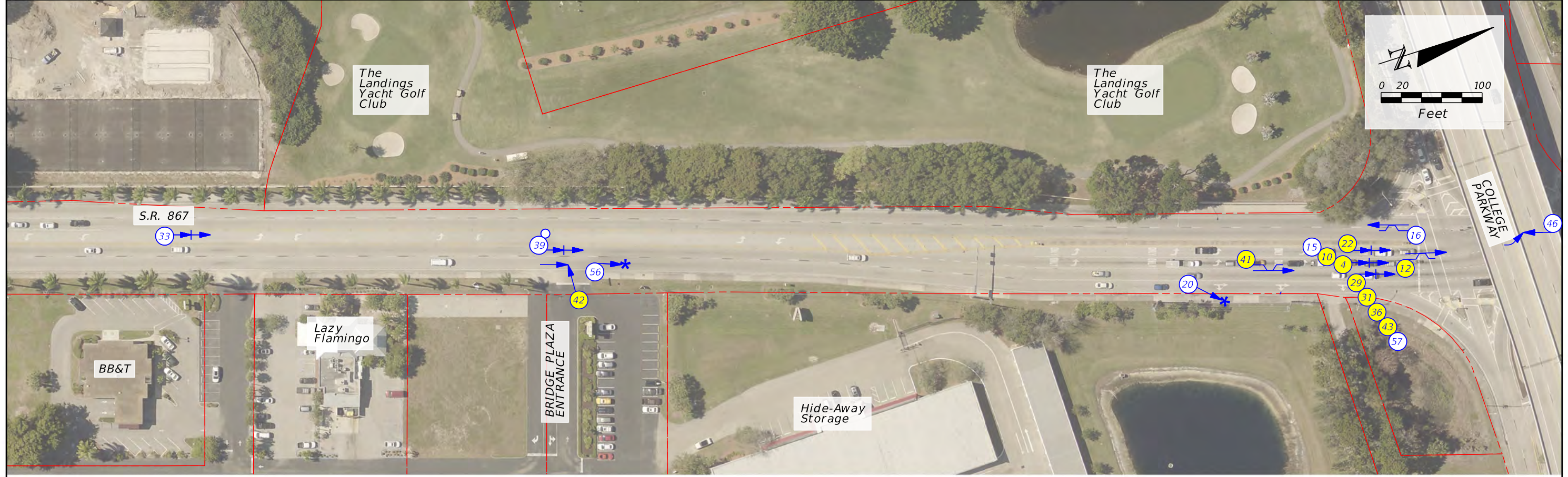
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

COLLISION DIAGRAM
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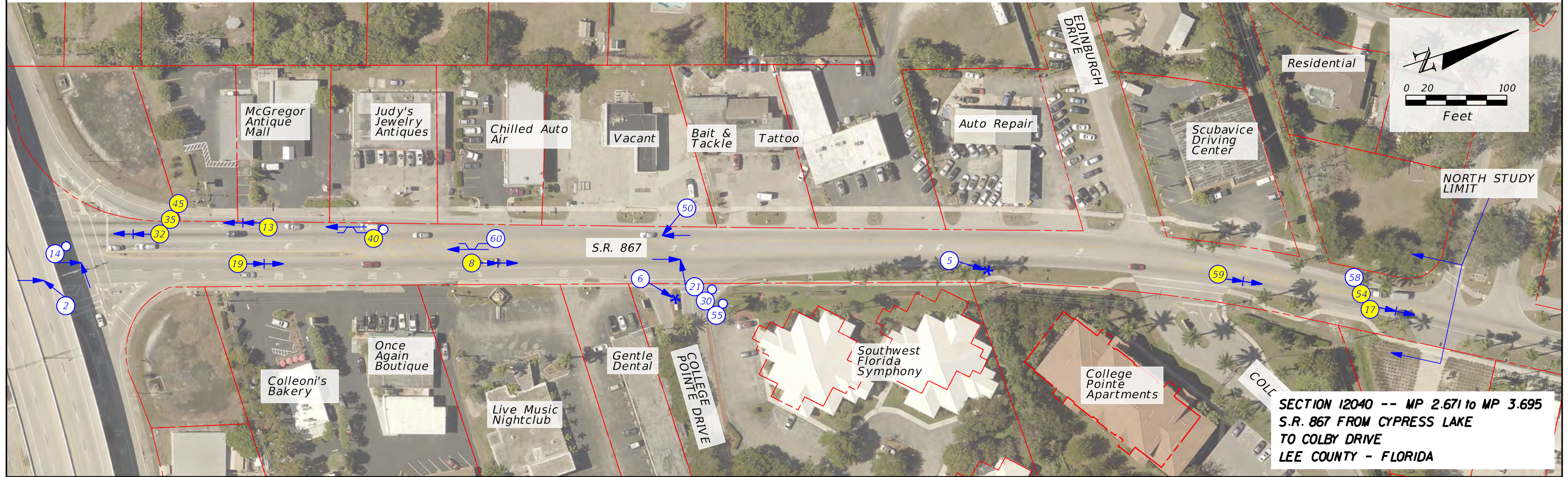
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MATCHLINE B



MATCHLINE C

MATCHLINE C



**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

SYMBOLS:			
	SHORT FORM		REAR END COLLISION
	LONG FORM		FIXED OBJECT COLLISION
	PERSONAL INJURY		HEAD-ON COLLISION
	FATALITY		ALL OTHER COLLISION
			BACKED INTO COLLISION
			OFFROAD COLLISION
			OVERTURNED VEHICLE
			BICYCLE COLLISION
			PEDESTRIAN COLLISION
			RIGHT TURN COLLISION
			LEFT TURN COLLISION
			SIDE SWIPE COLLISION

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COLLISION DIAGRAM
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FLORIDA DEPARTMENT OF TRANSPORTATION

COLLISION SUMMARY

Section: **12040** State Road: **867** County: **Lee**
 Intersecting route: **Cypress Lake / Colby Drive** Milepost: **2.671 - 3.695** Data by: **TSH**
 Study period: **1/1/2015** to **12/31/2015** Date: **1/16/2019**

NO.	DATE	DAY	TIME	FATAL	INJURY	INJURY SEVERITY	PROPERTY DAMAGE	HARMFUL EVENT	FORM	DUI	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	01/09/15	Friday	16:34	0	1	3-Non-Incapacitating	\$1,150	Bicycle	Long	No	Day	Dry	Bike-FTYROW
2	01/11/15	Sunday	19:45	0	0	1-None	\$30,000	Angle	Long	No	Night	Wet	Ran Red Light
3	01/14/15	Wednesday	13:18	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
4	01/16/15	Friday	20:50	0	0	1-None	\$0	Side-Swipe	Short	No	Night	Dry	FTYROW
5	01/19/15	Monday	10:20	0	0	1-None	\$0	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
6	01/20/15	Tuesday	23:15	0	2	2-Possible	\$11,000	Rear-End	Long	No	Night	Dry	Careless Driving
7	02/06/15	Friday	20:04	0	0	1-None	\$15,000	Angle	Long	No	Night	Dry	Ran Red Light
8	02/13/15	Friday	10:50	0	0	1-None	\$0	Side-Swipe	Short	No	Day	Dry	FTYROW
9	02/23/15	Monday	19:16	0	0	1-None	\$4,000	Rear-End	Long	No	Night	Dry	Careless Driving
10	02/27/15	Friday	14:16	0	1	3-Non-Incapacitating	\$2,000	Fixed-Object	Long	No	Day	Dry	Careless Driving
11	02/27/15	Friday	15:00	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Following Too Closely
12	03/09/15	Monday	16:00	0	0	1-None	\$0	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
13	03/12/15	Thursday	8:48	0	1	2-Possible	\$8,000	Rear-End	Long	No	Day	Dry	Careless Driving
14	03/13/15	Friday	2:16	0	1	2-Possible	\$2,000	Left-Turn	Long	No	Night	Dry	FTYROW
15	03/13/15	Friday	11:10	0	2	3-Non-Incapacitating	\$6,500	Angle	Long	No	Day	Dry	Disregarded Traffic Control
16	03/18/15	Wednesday	14:17	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
17	03/20/15	Friday	8:00	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
18	03/23/15	Monday	16:00	0	2	2-Possible	\$7,000	Rear-End	Long	No	Day	Dry	Careless Driving
19	03/27/15	Friday	15:10	0	0	1-None	\$3,500	Rear-End	Long	No	Day	Wet	Careless Driving
20	03/30/15	Monday	8:41	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Following Too Closely
21	04/05/15	Sunday	21:03	0	2	2-Possible	\$30,000	Angle	Long	Yes	Night	Dry	FTYROW
22	04/28/15	Tuesday	11:20	0	0	1-None	\$1,750	Rear-End	Short	No	Day	Dry	Careless Driving
23	05/13/15	Wednesday	17:35	2	2	5-Fatal	\$20,800	Left-Turn	Long	No	Day	Wet	FTYROW
24	05/13/15	Wednesday	18:03	0	0	1-None	\$6,500	Rear-End	Long	No	Day	Dry	Careless Driving
25	05/15/15	Friday	17:02	0	0	1-None	\$1,700	Rear-End	Short	No	Day	Dry	Careless Driving
26	05/31/15	Sunday	13:40	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
27	06/01/15	Monday	17:17	0	0	1-None	\$11,500	Rear-End	Long	No	Day	Dry	Following Too Closely
28	06/10/15	Wednesday	22:29	0	0	1-None	\$2,500	Fixed-Object	Long	No	Night	Wet	Mechanical
29	06/12/15	Friday	22:07	0	1	2-Possible	\$7,000	Side-Swipe	Long	Yes	Night	Dry	DUI
30	06/13/15	Saturday	17:06	0	0	1-None	\$1,000	Rear-End	Long	Yes	Day	Dry	DUI
31	06/24/15	Wednesday	15:58	0	0	1-None	\$1,000	Side-Swipe	Long	No	Day	Dry	Improper Passing
32	07/11/15	Saturday	21:09	0	0	1-None	\$0	Rear-End	Short	No	Night	Dry	Following Too Closely
33	07/21/15	Tuesday	15:48	0	0	1-None	\$2,500	Side-Swipe	Long	No	Day	Dry	Careless Driving
34	08/04/15	Tuesday	21:09	0	1	3-Non-Incapacitating	\$100	Pedestrian	Long	Yes	Night	Dry	Ped-FTYROW
35	08/05/15	Wednesday	12:24	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Following Too Closely
36	08/17/15	Monday	9:55	0	2	2-Possible	\$3,500	Right-Turn	Long	No	Day	Dry	FTYROW
37	10/06/15	Tuesday	17:09	0	0	1-None	\$6,000	Left-Turn	Long	No	Day	Dry	FTYROW
38	10/21/15	Wednesday	16:14	0	0	1-None	\$7,000	Left-Turn	Long	Yes	Day	Dry	DUI
39	12/01/15	Tuesday	6:43	0	0	1-None	\$2,190	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
40	12/12/15	Saturday	16:20	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
41	12/22/15	Tuesday	12:21	0	0	1-None	\$5,000	Rollover	Long	No	Day	Dry	Careless Driving
42	12/23/15	Wednesday	14:05	0	0	1-None	\$2,500	Rear-End	Long	No	Day	Dry	Following Too Closely
43	12/29/15	Tuesday	16:50	0	0	1-None	\$10,000	Rear-End	Long	No	Day	Dry	Following Too Closely
44	12/30/15	Wednesday	15:26	0	0	1-None	\$14,000	Rear-End	Long	No	Day	Dry	Following Too Closely
45	12/30/15	Wednesday	17:15	0	0	1-None	\$1,000	Rear-End	Short	No	Day	Dry	Careless Driving
46	12/30/15	Wednesday	18:29	0	3	2-Possible	\$6,000	Left-Turn	Long	No	Day	Dry	FTYROW
TOTAL				2	21		\$233,690						

TOTAL NO.	Injury Severity			Angle	Fixed-Object	Left-Turn	Right-Turn	Pedestrian	Rollover	Rear-End	Side-Swipe	Bicycle			
	Property Damage Only	Injury	Fatality												
46	33	12	1	4	2	5	1	1	1	23	8	1	0	0	
Percent	72%	26%	2%	9%	4%	11%	2%	2%	2%	50%	17%	2%	0%	0%	
CONTRIB-CAUSE	Time of Day		Pavement Cond.		DUI	Following Too Closely	Improper Lane Change	Improper Passing	Disregarded Traffic Control	Bike-FTYROW	FTYROW	Ped-FTYROW	Ran Red Light	Careless Driving	Mechanical
	Day	Night	Dry	Wet											
Total	35	11	42	4	3	8	3	1	1	1	8	1	2	17	1
Percent	76%	24%	91%	9%	7%	17%	7%	2%	2%	2%	17%	2%	4%	37%	2%



**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

SYMBOLS:			
	SHORT FORM		REAR END COLLISION
	LONG FORM		FIXED OBJECT COLLISION
	PERSONAL INJURY		HEAD-ON COLLISION
	FATALITY		ALL OTHER COLLISION
			BACKED INTO COLLISION
			OFFROAD COLLISION
			OVERTURNED VEHICLE
			SIDE SWIPE COLLISION
			BICYCLE COLLISION
			PEDESTRIAN COLLISION
			RIGHT TURN COLLISION
			LEFT TURN COLLISION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

COLLISION DIAGRAM
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MATCHLINE B



MATCHLINE C

MATCHLINE C



**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

SYMBOLS:	
	SHORT FORM
	LONG FORM
	PERSONAL INJURY
	FATALITY
	REAR END COLLISION
	FIXED OBJECT COLLISION
	HEAD-ON COLLISION
	ALL OTHER COLLISION
	BACKED INTO COLLISION
	OFFROAD COLLISION
	OVERTURNED VEHICLE
	SIDE SWIPE COLLISION
	BICYCLE COLLISION
	PEDESTRIAN COLLISION
	RIGHT TURN COLLISION
	LEFT TURN COLLISION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

COLLISION DIAGRAM
(1/01/2015 TO 12/31/2015)
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COLLISION SUMMARY

Section: 12040		State Road: 867				County: Lee								
Intersecting route: Cypress Lake / Colby Drive				Milepost: 2.671 - 3.695				Data by: TSH						
Study period: 1/1/2016 to 12/31/2016				Date: 1/16/2020										
NO.	DATE	DAY	TIME	FATAL	INJURY	INJURY SEVERITY	PROPERTY DAMAGE	HARMFUL EVENT	FORM	DUI	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE	
49	12/16/16	Friday	16:39	0	3	2-Possible	\$6,000	Rear-End	Long	No	Day	Dry	Careless Driving	
50	12/27/16	Tuesday	17:04	0	0	1-None	\$0	Rear-End	Long	No	Day	Dry	Careless Driving	
TOTAL				0	21		\$208,100							
TOTAL NO.	Injury Severity				Angle	Head-On	Left-Turn	Rear-End	Side-Swipe					
	Property Damage Only	Injury	Fatality											
50	38	12	0	4	1	10	28	7	0	0	0	0	0	0
Percent	76%	24%	0%	8%	2%	20%	56%	14%	0%	0%	0%	0%	0%	0%
CONTRIB-CAUSE	Time of Day		Pavement Cond.		DUI	Failed to Maintain Single Lane	Following Too Closely	Too Fast For Conditions	Improper Lane Change	Ran Red Light	FTYROW	Improper Turn	Careless Driving	
	Day	Night	Dry	Wet										
Total	37	13	41	9	1	1	10	1	3	8	5	2	19	0
Percent	74%	26%	82%	18%	2%	2%	20%	2%	6%	16%	10%	4%	38%	0%



MATCHLINE A



MATCHLINE A

MATCHLINE B

**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

SYMBOLS:			
	REAR END COLLISION		BICYCLE COLLISION
	FIXED OBJECT COLLISION		PEDESTRIAN COLLISION
	HEAD-ON COLLISION		RIGHT TURN COLLISION
	ALL OTHER COLLISION		LEFT TURN COLLISION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

COLLISION DIAGRAM
(1/01/2016 TO 12/31/2016)
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MATCHLINE B



MATCHLINE C

MATCHLINE C



**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

SYMBOLS:			
	SHORT FORM		REAR END COLLISION
	LONG FORM		FIXED OBJECT COLLISION
	PERSONAL INJURY		HEAD-ON COLLISION
	FATALITY		ALL OTHER COLLISION
			BACKED INTO COLLISION
			OFFROAD COLLISION
			OVERTURNED VEHICLE
			SIDE SWIPE COLLISION
			BICYCLE COLLISION
			PEDESTRIAN COLLISION
			RIGHT TURN COLLISION
			LEFT TURN COLLISION

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COLLISION DIAGRAM
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FLORIDA DEPARTMENT OF TRANSPORTATION

COLLISION SUMMARY

Section: 12040 **State Road:** 867 **County:** Lee
Intersecting route: Cypress Lake / Colby Drive **Milepost:** 2.671 - 3.695 **Data by:** SEN
Study period: 1/1/2017 to 12/31/2017 **Date:** 1/17/2020

NO.	DATE	DAY	TIME	FATAL	INJURY	INJURY SEVERITY	PROPERTY DAMAGE	HARMFUL EVENT	FORM	DUI	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	01/11/17	Wednesday	0:12	0	0	1-None	\$10,000	Fixed-Object	Long	Yes	Night	Dry	Lost Control
2	01/12/17	Thursday	13:25	0	0	1-None	\$6,000	Left-Turn	Long	No	Day	Dry	FTYROW
3	01/13/17	Friday	9:21	0	0	1-None	\$1,200	Rear-End	Long	No	Day	Wet	Following Too Closely
4	01/18/17	Wednesday	15:50	0	0	1-None	\$2,100	Rear-End	Short	No	Day	Dry	Careless Driving
5	01/19/17	Thursday	18:22	0	0	1-None	\$3,000	Left-Turn	Long	No	Day	Dry	FTYROW
6	01/27/17	Friday	14:25	0	0	1-None	\$1,000	Backed-Into	Long	No	Day	Dry	Improper Backing
7	02/01/17	Wednesday	11:59	0	0	1-None	\$3,000	Side-Swipe	Long	No	Day	Dry	Careless Driving
8	02/11/17	Saturday	19:15	0	0	1-None	\$2,000	Angle	Long	Yes	Night	Dry	DUI
9	02/11/17	Saturday	20:13	0	0	1-None	\$0	Rear-End	Short	No	Night	Dry	Following Too Closely
10	02/14/17	Tuesday	18:08	0	1	2-Possible	\$3,200	Rear-End	Long	No	Day	Dry	Careless Driving
11	02/17/17	Friday	15:23	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
12	02/20/17	Monday	14:23	0	0	1-None	\$1,000	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
13	03/06/17	Monday	6:22	0	0	1-None	\$0	Rear-End	Short	No	Night	Dry	Careless Driving
14	03/10/17	Friday	19:50	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
15	04/10/17	Monday	16:08	0	1	2-Possible	\$12,300	Left-Turn	Long	No	Day	Dry	FTYROW
16	04/16/17	Sunday	20:59	0	0	1-None	\$2,800	Rear-End	Long	Yes	Night	Dry	Careless Driving
17	04/17/17	Monday	16:43	0	0	1-None	\$6,300	Rear-End	Long	No	Day	Wet	Careless Driving
18	04/18/17	Tuesday	5:50	0	0	1-None	\$1,250	Rear-End	Short	No	Day	Dry	Careless Driving
19	04/19/17	Wednesday	11:18	0	0	1-None	\$3,000	Rear-End	Long	No	Day	Dry	Following Too Closely
20	04/21/17	Friday	21:15	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Following Too Closely
21	04/22/17	Saturday	22:24	0	0	1-None	\$2,000	Rear-End	Long	No	Night	Dry	Careless Driving
22	04/24/17	Monday	14:57	0	0	1-None	\$2,000	Side-Swipe	Long	No	Day	Dry	Improper Lane Change
23	04/27/17	Thursday	21:43	0	2	3-Non-Incapacitating	\$9,000	Rear-End	Long	No	Night	Dry	Careless Driving
24	05/03/17	Wednesday	21:50	0	0	1-None	\$2,500	Rear-End	Short	No	Night	Dry	Careless Driving
25	05/04/17	Thursday	12:19	0	0	1-None	\$6,200	Left-Turn	Long	No	Day	Dry	Ran Red Light
26	05/17/17	Wednesday	8:59	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Following Too Closely
27	05/23/17	Tuesday	14:23	0	0	1-None	\$500	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
28	05/24/17	Wednesday	14:40	0	2	2-Possible	\$2,000	Left-Turn	Long	Yes	Day	Dry	FTYROW
29	05/25/17	Thursday	13:46	0	0	1-None	\$500	Side-Swipe	Long	No	Day	Dry	Careless Driving
30	05/26/17	Friday	9:12	0	0	1-None	\$1,800	Rear-End	Long	No	Day	Dry	Careless Driving
31	05/30/17	Tuesday	8:58	0	0	1-None	\$500	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
32	07/07/17	Friday	15:30	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
33	07/17/17	Monday	17:30	0	0	1-None	\$6,000	Rear-End	Long	No	Day	Dry	Careless Driving
34	07/17/17	Monday	21:45	0	0	1-None	\$2,000	Backed-Into	Long	No	Night	Dry	Improper Backing
35	07/24/17	Monday	16:10	0	2	2-Possible	\$5,000	Left-Turn	Long	No	Day	Dry	FTYROW
36	07/25/17	Tuesday	15:43	0	0	1-None	\$6,000	Rear-End	Long	No	Day	Dry	Careless Driving
37	07/25/17	Tuesday	16:06	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
38	08/04/17	Friday	11:49	0	0	1-None	\$20,000	Rear-End	Long	No	Day	Dry	Careless Driving
39	08/04/17	Friday	12:15	0	0	1-None	\$0	Rear-End	Short	No	Day	Dry	Careless Driving
40	08/11/17	Friday	12:57	0	0	1-None	\$5,000	Fixed-Object	Long	No	Day	Dry	Careless Driving
41	08/12/17	Saturday	19:03	0	0	1-None	\$7,000	Left-Turn	Long	No	Day	Dry	Ran Red Light
42	08/14/17	Monday	19:07	0	1	2-Possible	\$7,500	Rear-End	Long	No	Day	Wet	Careless Driving
43	08/20/17	Sunday	12:50	0	0	1-None	\$10,000	Left-Turn	Long	No	Day	Dry	FTYROW
44	08/25/17	Friday	8:22	0	0	1-None	\$0	Rear-End	Long	No	Day	Wet	Careless Driving
45	08/30/17	Wednesday	20:25	0	0	1-None	\$4,000	Rear-End	Short	No	Night	Dry	Careless Driving
46	09/25/17	Monday	13:06	0	0	1-None	\$1,000	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
47	09/25/17	Monday	15:35	0	1	4-Incapacitating	\$15,000	Left-Turn	Long	No	Day	Dry	FTYROW
48	10/02/17	Monday	11:19	0	0	1-None	\$6,000	Angle	Long	No	Day	Dry	Ran Red Light
49	10/03/17	Tuesday	6:38	0	2	2-Possible	\$13,000	Left-Turn	Long	No	Day	Dry	Ran Red Light

COLLISION SUMMARY

Section: 12040		State Road: 867					County: Lee							
Intersecting route: Cypress Lake / Colby Drive				Milepost: 2.671 - 3.695				Data by: SEN						
Study period: 1/1/2017 to 12/31/2017		Date: 1/17/2020												
NO.	DATE	DAY	TIME	FATAL	INJURY	INJURY SEVERITY	PROPERTY DAMAGE	HARMFUL EVENT	FORM	DUI	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE	
50	10/25/17	Wednesday	13:40	0	0	1-None	\$750	Side-Swipe	Short	No	Day	Dry	Careless Driving	
51	11/03/17	Friday	19:18	0	1	2-Possible	\$12,000	Rear-End	Long	No	Day	Dry	Careless Driving	
52	11/07/17	Tuesday	14:11	0	0	1-None	\$5,200	Side-Swipe	Long	No	Day	Dry	Careless Driving	
53	11/21/17	Tuesday	16:56	0	0	1-None	\$15,000	Rear-End	Long	No	Day	Dry	Careless Driving	
54	11/22/17	Wednesday	14:58	0	0	1-None	\$16,000	Rear-End	Long	No	Day	Dry	Following Too Closely	
55	12/04/17	Monday	21:46	0	0	1-None	\$1,500	Rear-End	Short	No	Night	Dry	Careless Driving	
56	12/14/17	Thursday	16:41	0	0	1-None	\$5,000	Rear-End	Short	No	Day	Dry	Careless Driving	
57	12/15/17	Friday	21:05	0	1	2-Possible	\$1,100	Side-Swipe	Long	No	Night	Dry	Careless Driving	
58	12/18/17	Monday	17:09	0	0	1-None	\$1,500	Rear-End	Short	No	Day	Dry	Careless Driving	
59	12/26/17	Tuesday	9:20	0	0	1-None	\$15,000	Rear-End	Long	No	Day	Dry	Careless Driving	
TOTAL				0	14		\$265,700							
TOTAL NO.	Injury Severity			Angle	Side-Swipe	Backed-Into	Left-Turn	Fixed-Object	Rear-End					
	Property Damage Only	Injury	Fatality											
59	49	10	0	2	10	2	10	2	33	0	0	0	0	
Percent	83%	17%	0%	3%	17%	3%	17%	3%	56%	0%	0%	0%	0%	
CONTRIB CAUSE	Time of Day		Pavement Cond.		Careless Driving	Improper Lane Change	Following Too Closely	Improper Backing	Ran Red Light	Lost Control	DUI	FTYROW		
	Day	Night	Dry	Wet										
Total	47	12	55	4	33	5	6	2	4	1	1	7	0	0
Percent	80%	20%	93%	7%	56%	8%	10%	3%	7%	2%	2%	12%	0%	0%



**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

MATCHLINE A

MATCHLINE A

MATCHLINE B

SYMBOLS:			
	SHORT FORM		REAR END COLLISION
	LONG FORM		FIXED OBJECT COLLISION
	PERSONAL INJURY		HEAD-ON COLLISION
	FATALITY		ALL OTHER COLLISION
			BACKED INTO COLLISION
			OFFROAD COLLISION
			OVERTURNED VEHICLE
			SIDE SWIPE COLLISION
			BICYCLE COLLISION
			PEDESTRIAN COLLISION
			RIGHT TURN COLLISION
			LEFT TURN COLLISION

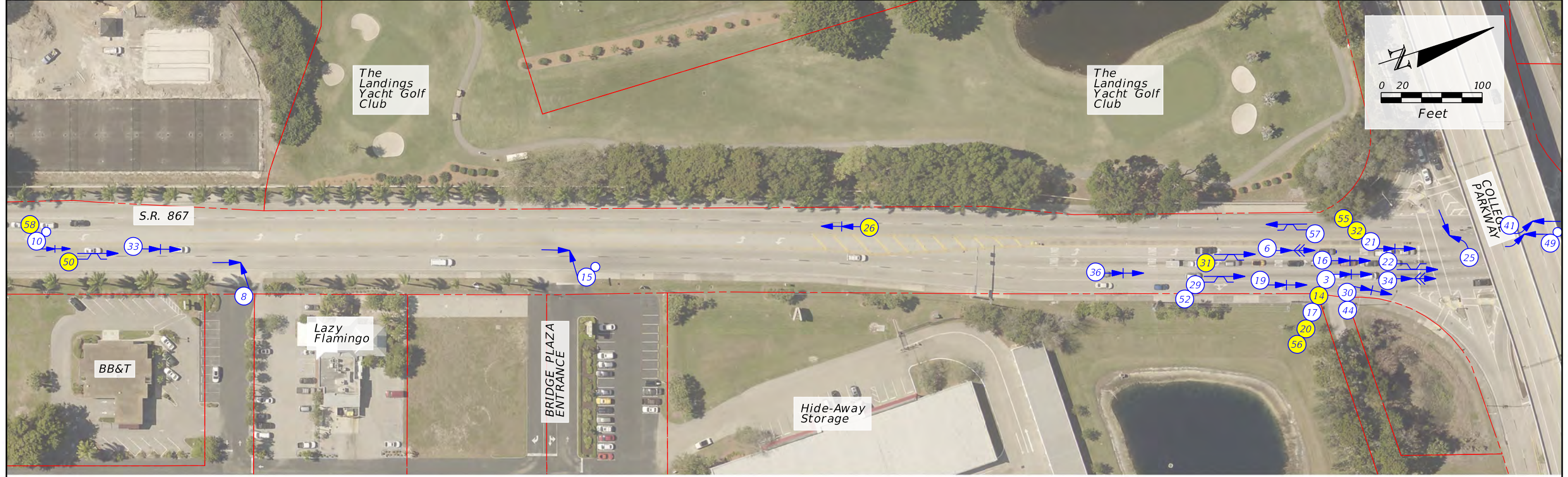
Traffic Engineering Data Solutions, Inc.
80 Spring Vista Drive DeBary, FL 32713
Phone: 386.753.0558 Fax: 386.753.0778

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

COLLISION DIAGRAM
(1/01/2017 TO 12/31/2017)
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MATCHLINE B



MATCHLINE C

MATCHLINE C



**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

SYMBOLS:			
	SHORT FORM		REAR END COLLISION
	LONG FORM		FIXED OBJECT COLLISION
	PERSONAL INJURY		HEAD-ON COLLISION
	FATALITY		ALL OTHER COLLISION
			BACKED INTO COLLISION
			OFFROAD COLLISION
			OVERTURNED VEHICLE
			SIDE SWIPE COLLISION
			BICYCLE COLLISION
			PEDESTRIAN COLLISION
			RIGHT TURN COLLISION
			LEFT TURN COLLISION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

COLLISION DIAGRAM
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FLORIDA DEPARTMENT OF TRANSPORTATION

COLLISION SUMMARY

 Section: **12040**

 State Road: **867**

 County: **Lee**

 Intersecting route: **Cypress Lake / Colby Drive**

 Milepost: **2.671 - 3.695**

 Data by: **TSH**

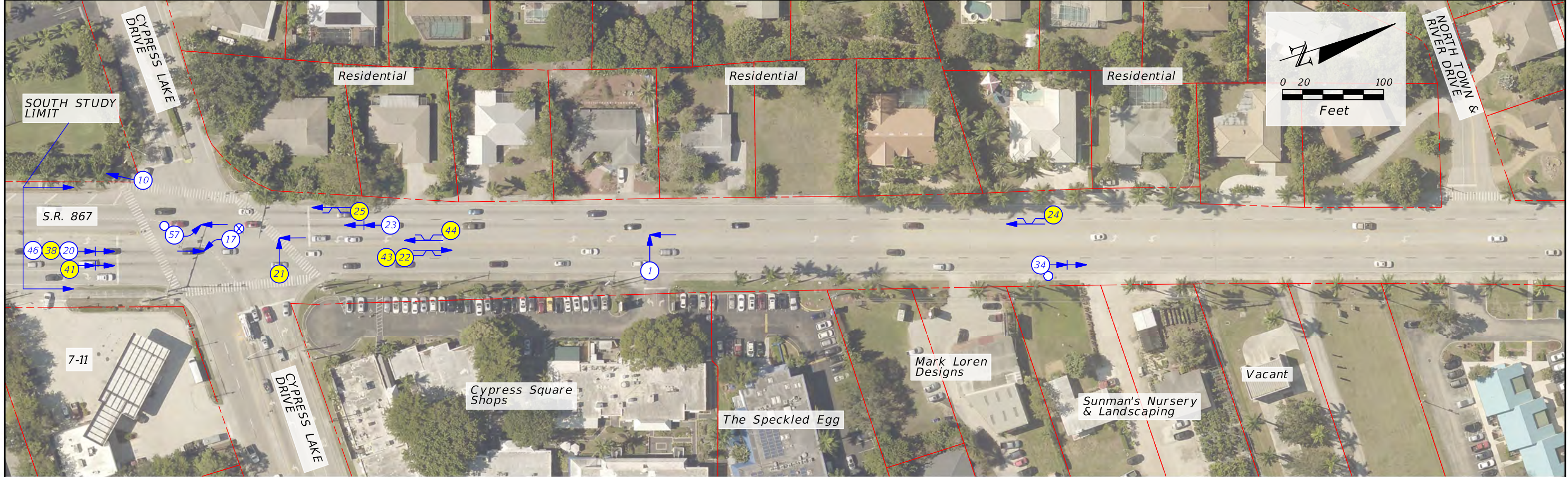
 Study period: **1/1/2018 to 12/31/2018**

 Date: **1/20/2019**

NO.	DATE	DAY	TIME	FATAL	INJURY	INJURY SEVERITY	PROPERTY DAMAGE	HARMFUL EVENT	FORM	DUI	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	01/03/18	Wednesday	15:14	0	0	1-None	\$4,500	Angle	Long	No	Day	Dry	FTYROW
2	01/16/18	Tuesday	14:47	0	0	1-None	\$5,000	Rear-End	Short	No	Day	Dry	Careless Driving
3	02/01/18	Thursday	6:50	0	0	1-None	\$2,500	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
4	02/01/18	Thursday	17:38	0	1	3-Non-Incapacitating	\$7,000	Left-Turn	Long	No	Day	Dry	FTYROW
5	02/09/18	Friday	12:28	0	0	1-None	\$6,000	Rear-End	Long	Yes	Day	Dry	Careless Driving
6	02/12/18	Monday	11:10	0	0	1-None	\$10,000	Rear-End	Long	No	Day	Dry	Careless Driving
7	02/22/18	Thursday	15:07	0	0	1-None	\$500	Rear-End	Long	No	Day	Dry	Careless Driving
8	02/26/18	Monday	15:25	0	0	1-None	\$3,000	Left-Turn	Short	No	Day	Dry	FTYROW
9	03/01/18	Thursday	16:00	0	0	1-None	\$800	Rear-End	Short	No	Day	Dry	Following Too Closely
10	03/11/18	Sunday	3:50	0	0	1-None	\$10,000	Fixed-Object	Long	No	Night	Wet	Lost Control
11	03/13/18	Tuesday	21:57	0	0	1-None	\$1,000	Left-Turn	Short	No	Night	Dry	FTYROW
12	03/14/18	Wednesday	18:00	0	0	1-None	\$10,000	Right-Turn	Short	No	Day	Dry	FTYROW
13	03/16/18	Friday	15:21	0	0	1-None	\$12,000	Rear-End	Long	No	Day	Dry	Careless Driving
14	03/16/18	Friday	15:38	0	0	1-None	\$2,500	Rear-End	Long	No	Day	Dry	Following Too Closely
15	03/19/18	Monday	14:30	0	1	2-Possible	\$6,500	Right-Turn	Long	No	Day	Dry	FTYROW
16	03/19/18	Monday	14:49	0	0	1-None	\$8,000	Right-Turn	Long	No	Day	Dry	FTYROW
17	03/24/18	Saturday	6:22	1	1	5-Fatal	\$7,000	Left-Turn	Long	No	Night	Dry	FTYROW
18	03/27/18	Tuesday	17:30	0	1	2-Possible	\$500	Rear-End	Long	No	Day	Dry	Careless Driving
19	03/28/18	Wednesday	10:25	0	0	1-None	\$1,000	Rear-End	Long	No	Day	Dry	Careless Driving
20	04/14/18	Saturday	11:03	0	0	1-None	\$14,000	Rear-End	Long	No	Day	Dry	Following Too Closely
21	04/14/18	Saturday	17:54	0	0	1-None	\$1,500	Angle	Short	No	Day	Dry	Failed to Maintain Single Lane
22	04/21/18	Saturday	14:10	0	0	1-None	\$2,000	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
23	04/23/18	Monday	8:42	0	3	3-Non-Incapacitating	\$34,000	Rear-End	Long	No	Day	Dry	Careless Driving
24	04/25/18	Wednesday	12:53	0	0	1-None	\$1,600	Side-Swipe	Short	No	Day	Dry	Improper Lane Change
25	04/29/18	Sunday	13:51	0	0	1-None	\$4,000	Side-Swipe	Short	No	Day	Dry	Failed to Maintain Single Lane
26	05/01/18	Tuesday	15:37	0	0	1-None	\$1,700	Rear-End	Short	No	Day	Dry	Following Too Closely
27	05/08/18	Tuesday	10:57	0	0	1-None	\$6,000	Rear-End	Long	No	Day	Dry	Following Too Closely
28	05/08/18	Tuesday	13:25	0	1	2-Possible	\$8,000	Rear-End	Long	No	Day	Dry	Following Too Closely
29	05/17/18	Thursday	7:15	0	0	1-None	\$5,000	Rear-End	Short	No	Day	Dry	Following Too Closely
30	05/22/18	Tuesday	17:15	0	6	3-Non-Incapacitating	\$10,000	Left-Turn	Long	No	Day	Dry	FTYROW
31	06/01/18	Friday	18:55	0	0	1-None	\$4,000	Rear-End	Short	No	Day	Wet	Following Too Closely
32	06/05/18	Tuesday	17:25	0	3	2-Possible	\$2,000	Rear-End	Long	No	Day	Dry	Careless Driving
33	06/11/18	Monday	14:25	0	0	1-None	\$3,000	Rear-End	Short	No	Day	Dry	Careless Driving
34	06/18/18	Monday	10:30	0	3	2-Possible	\$8,000	Rear-End	Long	No	Day	Dry	Careless Driving
35	06/21/18	Thursday	11:02	0	0	1-None	\$8,000	Angle	Long	No	Day	Dry	Ran Red Light
36	06/22/18	Friday	14:21	0	1	4-Incapacitating	\$10,000	Head-On	Long	No	Day	Dry	Careless Driving
37	06/29/18	Friday	10:05	0	1	2-Possible	\$300	Rear-End	Long	No	Day	Dry	Careless Driving
38	07/03/18	Tuesday	13:07	0	0	1-None	\$5,000	Rear-End	Short	No	Day	Dry	Following Too Closely
39	07/03/18	Tuesday	13:31	0	0	1-None	\$1,100	Rear-End	Short	No	Day	Dry	Following Too Closely
40	07/19/18	Thursday	16:08	0	0	1-None	\$3,500	Rear-End	Short	No	Day	Dry	Following Too Closely
41	07/20/18	Friday	11:37	0	0	1-None	\$1,000	Rear-End	Short	No	Day	Dry	Following Too Closely
42	07/31/18	Tuesday	11:27	0	0	1-None	\$1,500	Right-Turn	Short	No	Day	Dry	FTYROW
43	08/03/18	Friday	9:15	0	0	1-None	\$2,000	Side-Swipe	Short	No	Day	Dry	Failed to Maintain Single Lane
44	08/16/18	Thursday	8:40	0	0	1-None	\$400	Side-Swipe	Short	No	Day	Dry	Careless Driving
45	08/17/18	Friday	13:57	0	0	1-None	\$10,000	Left-Turn	Long	No	Day	Wet	FTYROW
46	08/22/18	Wednesday	17:57	0	0	1-None	\$2,501	Rear-End	Long	No	Day	Dry	Careless Driving
47	09/21/18	Friday	6:44	0	0	1-None	\$2,000	Side-Swipe	Short	No	Night	Dry	Careless Driving
48	10/31/18	Wednesday	20:54	0	1	3-Non-Incapacitating	\$7,000	Fixed-Object	Long	Yes	Night	Dry	DUI
49	11/06/18	Tuesday	18:13	0	0	1-None	\$2,500	Left-Turn	Short	No	Night	Dry	FTYROW

COLLISION SUMMARY

Section: 12040		State Road: 867					County: Lee							
Intersecting route: Cypress Lake / Colby Drive				Milepost: 2.671 - 3.695			Data by: TSH							
Study period: 1/1/2018 to 12/31/2018				Date: 1/20/2019										
NO.	DATE	DAY	TIME	FATAL	INJURY	INJURY SEVERITY	PROPERTY DAMAGE	HARMFUL EVENT	FORM	DUI	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE	
50	11/08/18	Thursday	19:26	0	0	1-None	\$0	Rear-End	Short	No	Night	Dry	Following Too Closely	
51	11/14/18	Wednesday	6:00	0	0	1-None	\$1,500	Right-Turn	Short	No	Night	Dry	FTYROW	
52	11/14/18	Wednesday	10:30	0	0	1-None	\$1,700	Rear-End	Long	No	Day	Dry	Following Too Closely	
53	11/14/18	Wednesday	12:37	0	0	1-None	\$5,000	Rear-End	Short	No	Day	Dry	Careless Driving	
54	11/15/18	Thursday	17:20	0	0	1-None	\$1,000	Rear-End	Short	No	Day	Dry	Careless Driving	
55	12/05/18	Wednesday	10:40	0	0	1-None	\$4,500	Rear-End	Long	No	Day	Dry	Following Too Closely	
56	12/20/18	Thursday	18:35	0	1	2-Possible	\$2,500	Side-Swipe	Long	No	Day	Wet	Improper Turn	
TOTAL				1	24		\$275,601							
TOTAL NO.	Injury Severity			Angle	Fixed-Object	Head-On	Left-Turn	Rear-End	Right-Turn	Side-Swipe				
	Property Damage Only	Injury	Fatality											
56	43	12	1	3	2	1	7	30	5	8	0	0	0	
Percent	77%	21%	2%	5%	4%	2%	13%	54%	9%	14%	0%	0%	0%	
CONTRIB CAUSE	Time of Day		Pavement Cond.		DUI	Failed to Maintain Single Lane	Following Too Closely	Improper Lane Change	Improper Turn	Ran Red Light	Lost Control	FTYROW	Careless Driving	
	Day	Night	Dry	Wet										
Total	48	8	52	4	1	3	15	3	1	1	1	13	18	0
Percent	86%	14%	93%	7%	2%	5%	27%	5%	2%	2%	2%	23%	32%	0%



**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

SYMBOLS:			
	SHORT FORM		REAR END COLLISION
	LONG FORM		FIXED OBJECT COLLISION
	PERSONAL INJURY		HEAD-ON COLLISION
	FATALITY		ALL OTHER COLLISION
			BACKED INTO COLLISION
			OFFROAD COLLISION
			OVERTURNED VEHICLE
			SIDE SWIPE COLLISION
			BICYCLE COLLISION
			PEDESTRIAN COLLISION
			RIGHT TURN COLLISION
			LEFT TURN COLLISION

Traffic Engineering Data Solutions, Inc.
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

COLLISION DIAGRAM
(1/01/2018 TO 12/31/2018)
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MATCHLINE B



MATCHLINE C

MATCHLINE C



**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

SYMBOLS:			
	SHORT FORM		REAR END COLLISION
	LONG FORM		FIXED OBJECT COLLISION
	PERSONAL INJURY		HEAD-ON COLLISION
	FATALITY		ALL OTHER COLLISION
			BACKED INTO COLLISION
			OFFROAD COLLISION
			OVERTURNED VEHICLE
			SIDE SWIPE COLLISION
			BICYCLE COLLISION
			PEDESTRIAN COLLISION
			RIGHT TURN COLLISION
			LEFT TURN COLLISION

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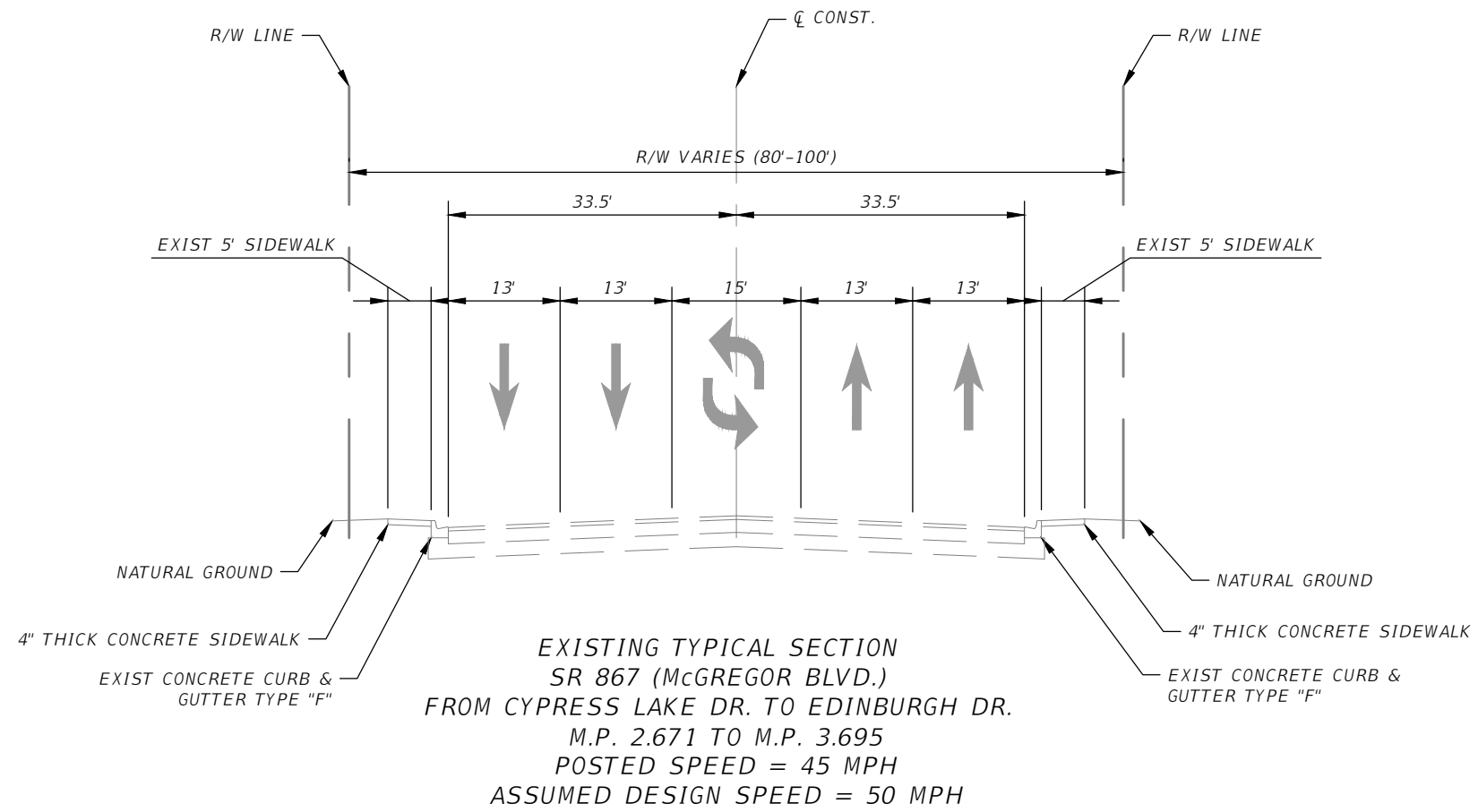
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

COLLISION DIAGRAM
(1/01/2018 TO 12/31/2018)
PAGE 2 OF 2

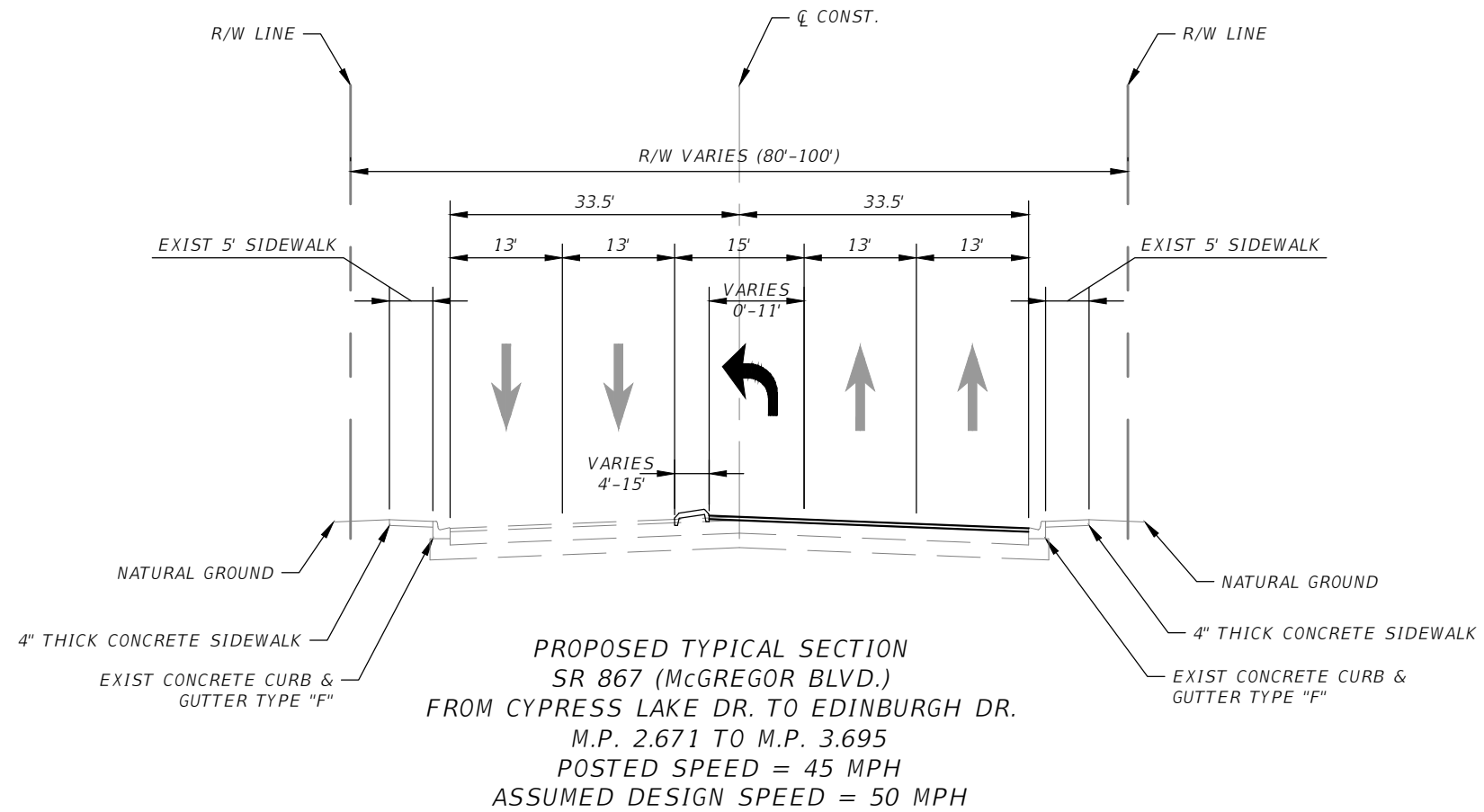
PAGE NO.

APPENDIX C

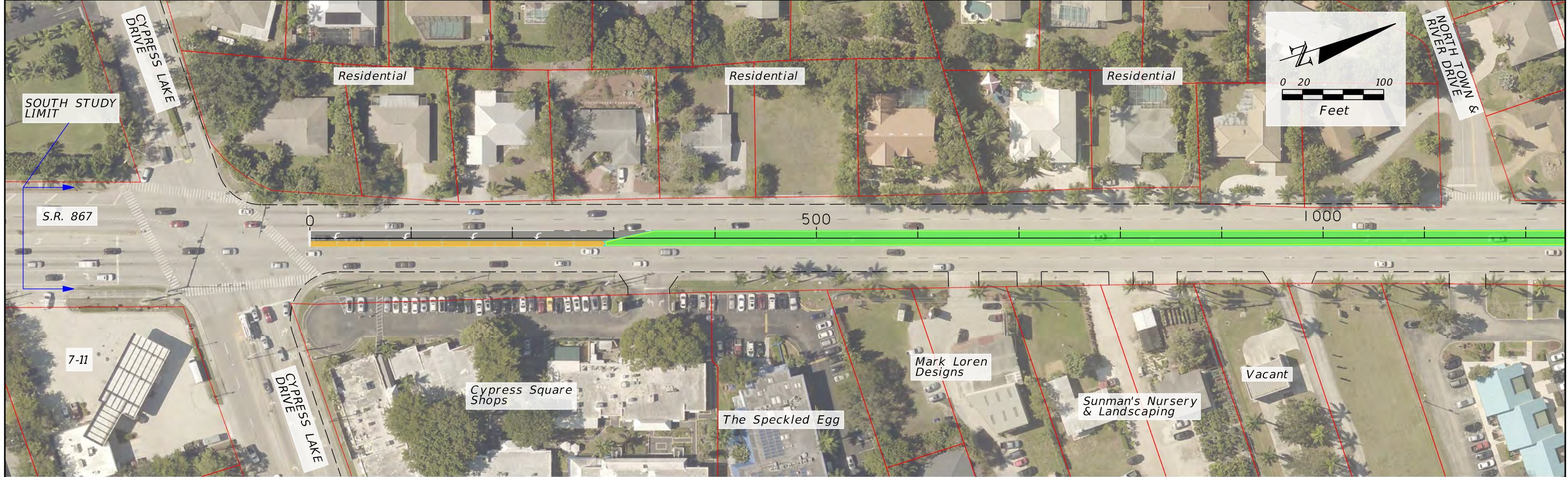
**TYPICAL SECTION
AND IMPROVEMENT DIAGRAM**







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 CONTEXT CLASS: C3C M.P. 2.671-3.462
 C3R M.P. 3.462-3.695



ACCESS CLASS: 6
 CONTEXT CLASS: C3C M.P. 2.671-3.462
 C3R M.P. 3.462-3.695

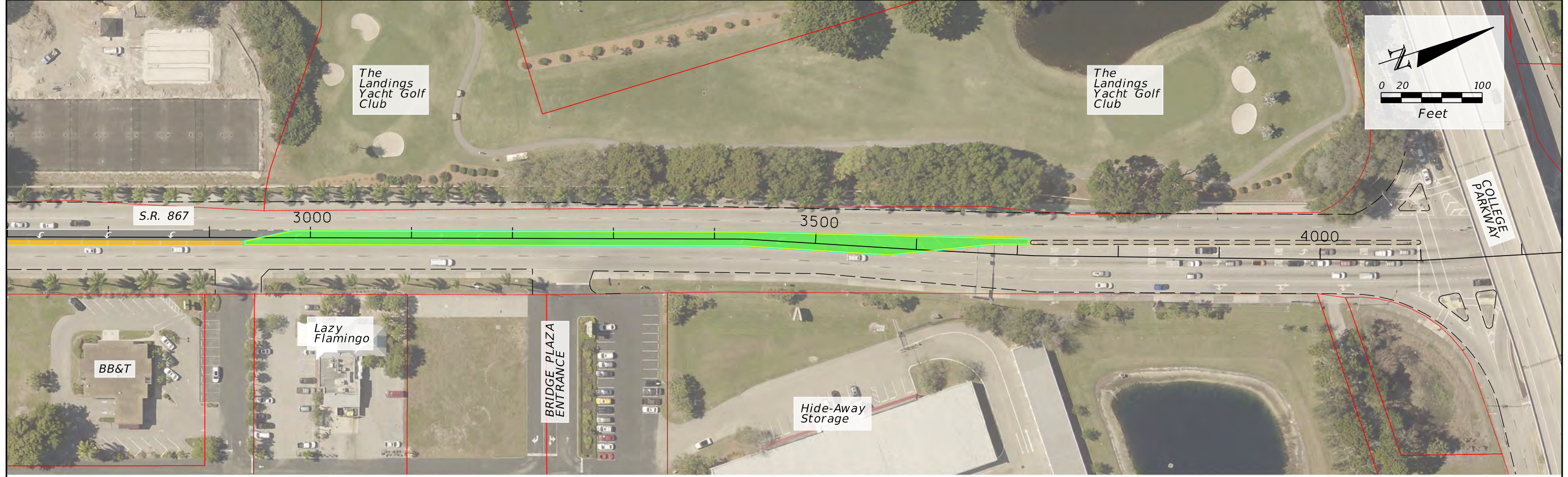


LEGEND

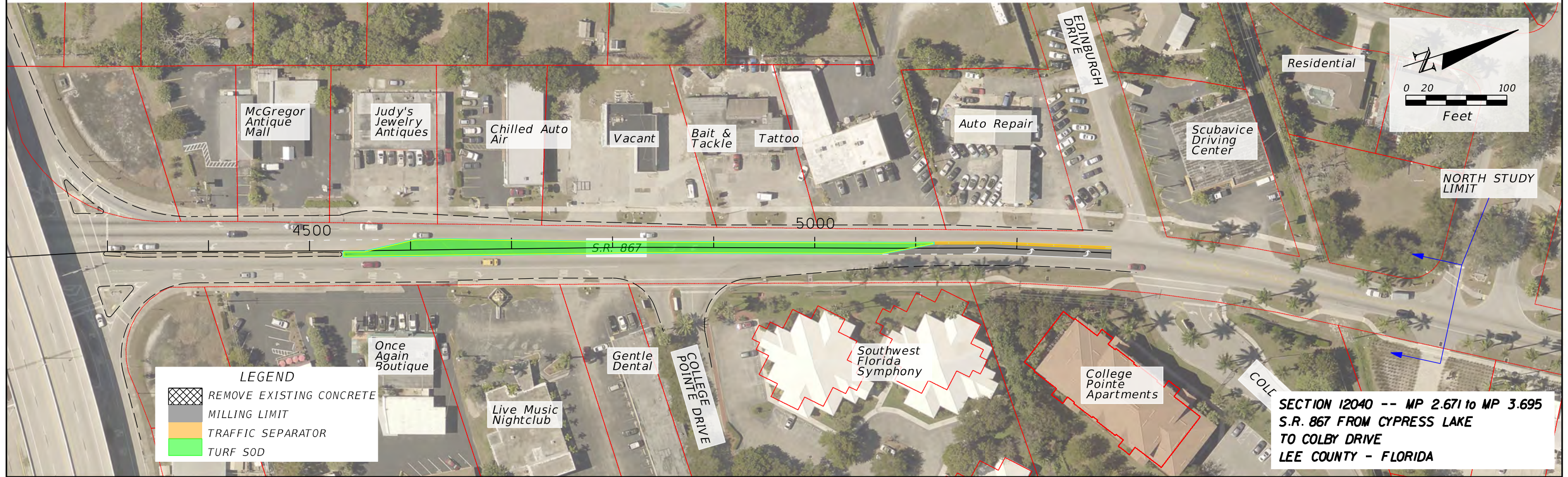
-  REMOVE EXISTING CONCRETE
-  MILLING LIMIT
-  TRAFFIC SEPARATOR
-  TURF SOD

SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA





MATCHLINE B



MATCHLINE C



LEGEND

-  REMOVE EXISTING CONCRETE
-  MILLING LIMIT
-  TRAFFIC SEPARATOR
-  TURF SOD

**SECTION 12040 -- MP 2.671 to MP 3.695
S.R. 867 FROM CYPRESS LAKE
TO COLBY DRIVE
LEE COUNTY - FLORIDA**

APPENDIX D

CRASH MODIFICATION FACTORS



CMF / CRF Details

CMF ID: 3034

Install raised median

Description:

Prior Condition: no raised median

Category: Access management

Study: [Analyzing Raised Median Safety Impacts Using Bayesian Methods, Schultz et al., 2011](#)

Star Quality Rating:



[\[View score details\]](#)

Crash Modification Factor (CMF)

Value: 0.61

Adjusted Standard Error:

Unadjusted Standard Error:

Crash Reduction Factor (CRF)

Value: 39 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error:

Applicability

Crash Type:

All

Crash Severity:

All

Roadway Types:

Not specified

Number of Lanes:

Road Division Type:

Divided by Median

Speed Limit:

Area Type:

Traffic Volume:

10000 to 55000 *Average Daily Traffic (ADT)*

Time of Day:

All

If countermeasure is intersection-based

Intersection Type:

Intersection Geometry:

Traffic Control:

Major Road Traffic Volume:

Minor Road Traffic Volume:

Development Details

Date Range of Data Used:

1998 to 2008

Municipality:

State:

UT

Country:	USA
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	Site-years
Before Sample Size Used:	32 Site-years
After Sample Size Used:	28 Site-years

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jul-15-2011
Comments:	

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APPENDIX E

NET PRESENT VALUE

Project Name	S.R. 544 AM	Year #	0	1	2
Current Year	2020	Calendar Year	2020	2021	2022
Project Completion	2021	Estimated Cost	477,188		
Project Life	20	Estimated Benefits		1,200,409	1,200,409
Project Category		Calculation			
Discount Rate	0.04	Discount Factor	1.000	0.962	0.925
Project Ends	2040	Discounted Cost	-477,188	0	0
		Discounted Benefits	0	1,154,239	1,109,845
		NPV		15,836,757	

3	4	5	6	7	8	9	10	11
2023	2024	2025	2026	2027	2028	2029	2030	2031
1,200,409	1,200,409	1,200,409	1,200,409	1,200,409	1,200,409	1,200,409	1,200,409	1,200,409
0.889	0.855	0.822	0.790	0.760	0.731	0.703	0.676	0.650
0	0	0	0	0	0	0	0	0
1,067,159	1,026,114	986,648	948,700	912,212	877,127	843,391	810,953	779,763

12	13	14	15	16	17	18	19	20
2032	2033	2034	2035	2036	2037	2038	2039	2040
1,200,409	1,200,409	1,200,409	1,200,409	1,200,409	1,200,409	1,200,409	1,200,409	1,200,409
0.625	0.601	0.577	0.555	0.534	0.513	0.494	0.475	0.456
0	0	0	0	0	0	0	0	0
749,772	720,934	693,206	666,544	640,908	616,258	592,555	569,765	547,851