

# TRAFFIC OPERATIONAL STUDY

For

**Interstate 4 Eastbound and Westbound Ramps**

**at Orange Camp Road**

**Section 89110: I-4 (MP 11.607)  
Volusia County**

**Prepared for:**

**FLORIDA DEPARTMENT OF TRANSPORTATION  
DISTRICT 5 TRAFFIC OPERATIONS**

**General Engineering Consultant Services Contract for District Five  
Financial Project Identification Number: 404734-1-32-02  
Work Order Number 126  
TEDS Contract Number 10122**

**Prepared by:**

*Traffic Engineering Data Solutions, Inc.*

**Traffic Engineering Data Solutions, Inc.  
27 S. US 17/92, Unit 2  
DeBary, Florida 32713**

**July 2009**

**Prepared by:**

**H. L. Wynn, Jr.**

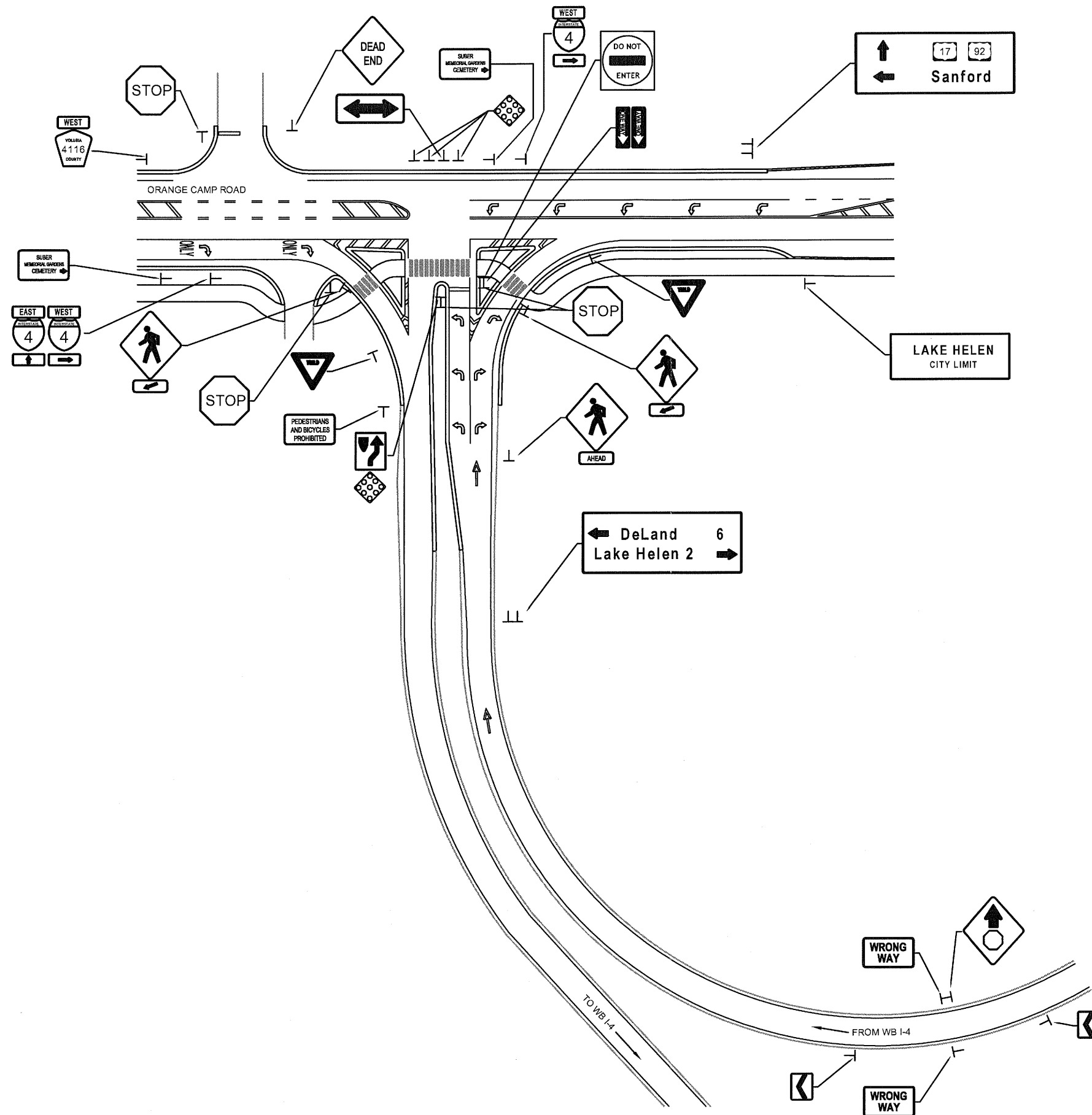
**79110 I4 AT ORANGE CAMP.TEDS**

**Professional Engineer:**



**Fred D. Ferrell, P.E.  
P.E. No. 41902**

*07.29.09*



SECTION: 79110 (MP 11.607)  
I-4 WESTBOUND OFF-RAMP AT  
ORANGE CAMP ROAD  
DELAND - VOLUSIA COUNTY - FLORIDA

- Utility Pole
- └ Traffic Sign
- + Street Name Sign

Symbols:

- ☒ Traffic Controller Cabinet
- ☐ Ditch Bottom Inlet

- Signal Pole
- Pedestrian Signal Pole
- ☐ Mitered End Section

Traffic Engineering Data Solutions, Inc.  
Phone 386.668.8387 27 South US Highway 17-92, Unit 2  
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STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

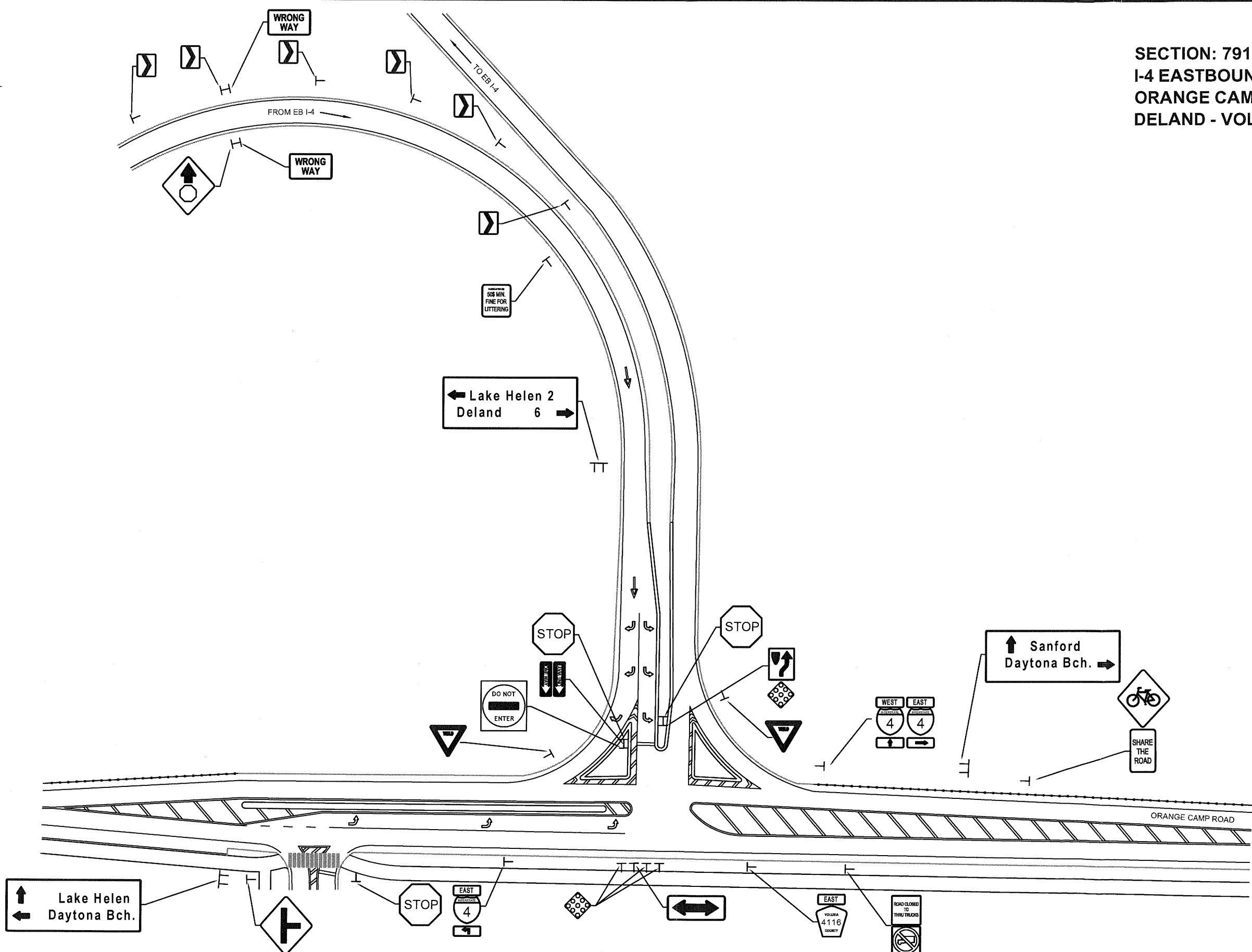
EXISTING CONDITION DIAGRAM

FIGURE  
NO.

2



SECTION: 79110 (MP 11.607)  
I-4 EASTBOUND OFF-RAMP AT  
ORANGE CAMP ROAD  
DELAND - VOLUSIA COUNTY - FLORIDA



- Symbols:
- Utility Pole
  - ⊢ Traffic Sign
  - + Street Name Sign
  - ☒ Traffic Controller Cabinet
  - ☐ Ditch Bottom Inlet
  - Signal Pole
  - Pedestrian Signal Pole
  - ▭ Mitred End Section

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STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITION DIAGRAM

FIGURE  
NO.

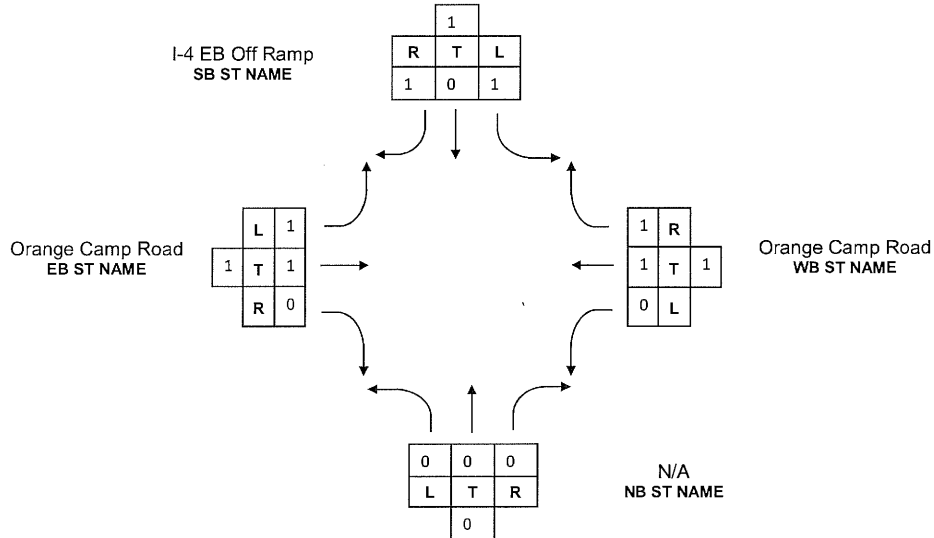
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FLORIDA DEPARTMENT OF TRANSPORTATION

SUMMARY OF VEHICLE MOVEMENTS

SECTION 79110 CITY Deland COUNTY Volusia  
 STATE ROUTE I-4 EB Ramps INTERSECTING ROUTE Orange Camp Road  
 OBSERVER CB DATE 6/18/2009 MILEPOST 11.607/11.885  
 WEATHER Sunny ROAD CONDITION Good  
 REMARKS TMC done on 6/18/09 from 8-9 a.m.

FORM COMPLETED BY CB DATE 6/22/2009



TIME	NORTHBOUND					SOUTHBOUND					TOTAL	EASTBOUND					WESTBOUND					TOTAL
BEGIN/END	L	T	R	U	TOT	L	T	R	U	TOT	N/S	L	T	R	U	TOT	L	T	R	U	TOT	E/W
4 - 5																						
5 - 6																						
6 - 7																						
7 - 8																						
8 - 9	0	0	0	0	0	23	0	129	0	152	152	75	84	0	0	159	0	199	26	0	225	384
9 - 10																						
10 - 11																						
11 - 12																						
12 - 1																						
1 - 2																						
2 - 3																						
3 - 4																						
4 - 5																						
5 - 6																						
6 - 7																						
7 - 8																						
8 - 9																						
9 - 10																						
10 - 11																						
11 - 12																						
TOTAL	0	0	0	0	0	23	0	129	0	152	152	75	84	0	0	159	0	199	26	0	225	384

## PEDESTRIAN MOVEMENT SUMMARY

**COUNTY** Volusia

<b>REMARKS</b>	TMC done on 6/18/09 from 8-9 a.m.
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FORM COMPLETED BY      CB      DATE      06/22/09

[illegible]

Percentage			
7-8	0	0	0
8-9	0	0	0
11-12	0	0	0
12-1	0	0	0
2-3	0	0	0
3-4	0	0	0
4-5	0	0	0
5-6	0	0	0
Total	0	0	0

Orange Camp Road  
EB ST NAME

7-8	0	0	0
8-9	0	0	0
11-12	0	0	0
12-1	0	0	0
2-3	0	0	0
3-4	0	0	0
4-5	0	0	0
5-6	0	0	0
Total	0	0	0

Orange Camp Road  
WB ST NAME

[illegible]

N/A  
NB ST NAME

# FDOT

## District V - Traffic Operations

Counter: T-3328

Counted By: CB

Weather:

TMC:

719 S. Woodland Blvd. File Name : i-4 eb @ orange camp 8-9

DeLand, Florida 32720 Site Code : 79110000

Start Date : 6/18/2009

Page No : 1

Groups Printed- TMC

	eastbound I-4 ramps Southbound				Orange Camp Westbound				Northbound				Orange Camp Eastbound				Int. Total
Start Time	Left	Thru	Right	U- turn	Left	Thru	Right	U- turn	Left	Thru	Right	U- turn	Left	Thru	Right	U- turn	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
08:00 AM	6	0	32	0	0	54	9	0	0	0	0	0	21	22	0	0	144
08:15 AM	5	0	27	0	0	64	8	0	0	0	0	0	21	20	0	0	145
08:30 AM	4	0	36	0	0	43	4	0	0	0	0	0	22	18	0	0	127
08:45 AM	8	0	34	0	0	38	5	0	0	0	0	0	11	24	0	0	120
Total	23	0	129	0	0	199	26	0	0	0	0	0	75	84	0	0	536
Grand Total	23	0	129	0	0	199	26	0	0	0	0	0	75	84	0	0	536
Apprch %	15.1	0.0	84.9	0.0	0.0	88.4	11.6	0.0	0.0	0.0	0.0	0.0	47.2	52.8	0.0	0.0	
Total %	4.3	0.0	24.1	0.0	0.0	37.1	4.9	0.0	0.0	0.0	0.0	0.0	14.0	15.7	0.0	0.0	

TIME: 8-9 a.m.  
EAST/WEST STREET: Orange Camp Road  
BY: CB

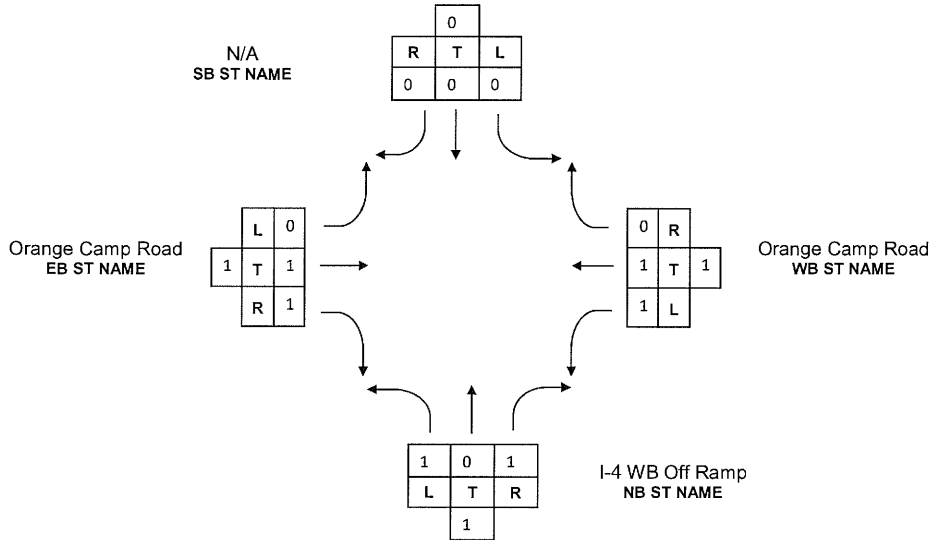
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FLORIDA DEPARTMENT OF TRANSPORTATION

SUMMARY OF VEHICLE MOVEMENTS

SECTION 79110 CITY Deland COUNTY Volusia  
 STATE ROUTE I-4 WB INTERSECTING ROUTE Orange Camp Road  
 OBSERVER CB DATE 6/18/2009 MILEPOST 11.607/11.361  
 WEATHER Sunny ROAD CONDITION Good  
 REMARKS TMC done on 6/18/09 from 7-8 a.m.

FORM COMPLETED BY CB DATE 6/22/2009



TIME	NORTHBOUND					SOUTHBOUND					TOTAL	EASTBOUND					WESTBOUND					TOTAL
BEGIN/END	L	T	R	U	TOT	L	T	R	U	TOT	N/S	L	T	R	U	TOT	L	T	R	U	TOT	E/W
4 - 5																						
5 - 6																						
6 - 7																						
7 - 8	43	0	8	0	51	0	0	0	0	0	51	0	200	244	0	444	77	265	0	0	342	786
8 - 9																						
9 - 10																						
10 - 11																						
11 - 12																						
12 - 1																						
1 - 2																						
2 - 3																						
3 - 4																						
4 - 5																						
5 - 6																						
6 - 7																						
7 - 8																						
8 - 9																						
9 - 10																						
10 - 11																						
11 - 12																						
TOTAL	43	0	8	0	51	0	0	0	0	0	51	0	200	244	0	444	77	265	0	0	342	786



FLORIDA DEPARTMENT OF TRANSPORTATION

PEDESTRIAN MOVEMENT SUMMARY

SECTION 79110  
 STATE ROUTE I-4 WB  
 OBSERVER CB

CITY Deland  
 INTERSECTING ROUTE Orange Camp Road  
 DATE 6/18/2009

COUNTY Volusia

REMARKS TMC done on 6/17/09 from 7-8 a.m.

FORM COMPLETED BY CB DATE 06/22/09

N/A  
 SB ST NAME

7-8	8-9	11-12	12-1	2-3	3-4	4-5	5-6	Total
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

7-8	0	0	0
8-9	0	0	0
11-12	0	0	0
12-1	0	0	0
2-3	0	0	0
3-4	0	0	0
4-5	0	0	0
5-6	0	0	0
Total	0	0	0

Orange Camp Road  
 EB ST NAME

7-8	0	0	0
8-9	0	0	0
11-12	0	0	0
12-1	0	0	0
2-3	0	0	0
3-4	0	0	0
4-5	0	0	0
5-6	0	0	0
Total	0	0	0

Orange Camp Road  
 WB ST NAME

7-8	8-9	11-12	12-1	2-3	3-4	4-5	5-6	Total
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

I-4 WB Off Ramp  
 NB ST NAME

# FDOT

## District V - Traffic Operations

Counter: T-3328

Counted By: CB

Weather:

TMC:

719 S. Woodland Blvd File Name : i-4 wb @ orange camp 7-8

DeLand, Florida 32720 Site Code : 79110000

Start Date : 6/18/2009

Page No : 1

Groups Printed- TMC

	Southbound				Orange Camp Westbound				westbound I-4 ramps Northbound				Orange Camp Eastbound				Int. Total
Start Time	Left	Thru	Right	U-turn	Left	Thru	Right	U-turn	Left	Thru	Right	U-turn	Left	Thru	Right	U-turn	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	0	0	0	22	39	0	0	8	0	1	0	0	42	61	0	173
07:15 AM	0	0	0	0	18	64	0	0	8	0	4	0	0	51	58	0	203
07:30 AM	0	0	0	0	18	91	0	0	10	0	1	0	0	57	69	0	246
07:45 AM	0	0	0	0	19	71	0	0	17	0	2	0	0	50	56	0	215
Total	0	0	0	0	77	265	0	0	43	0	8	0	0	200	244	0	837
Grand Total	0	0	0	0	77	265	0	0	43	0	8	0	0	200	244	0	837
Apprch %	0.0	0.0	0.0	0.0	22.5	77.5	0.0	0.0	84.3	0.0	15.7	0.0	0.0	45.0	55.0	0.0	
Total %	0.0	0.0	0.0	0.0	9.2	31.7	0.0	0.0	5.1	0.0	1.0	0.0	0.0	23.9	29.2	0.0	

TIME: 7-8 a.m.  
EAST/WEST STREET: Orange Camp Road  
BY: CB

[illegible]