

APPENDIX B

TRAFFIC DATA



DRAFT

Chuluota Road Roadway Conceptual Analysis (RCA) Supplemental Analysis for Schoolview Way & Corner School Drive (7 JUNE 2024)

(Luke Transportation Engineering Consulting Consultants, Inc. #20-3502)

Luke Transportation Engineering Consultants, Inc. (LTEC), as a sub-consultant to JMT, performed the existing design traffic analysis to determine the impacts and assess the need for future capacity improvements for Chuluota Road (CR 419) from Lake Pickett Road to East Colonial Drive (SR 50). This Design Traffic Technical Report documented the existing traffic conditions and need for widening Chuluota Road from a two-lane undivided roadway to a four-lane divided roadway, as well as associated intersection improvements.

Based on the evaluation of operating conditions for the design year 2048 Build Alternative, that study results supported the need for widening of Chuluota Road to the four-lane, divided cross section developed, from SR 50 to Lake Pickett Road to improve the traffic flow within the Chuluota Road RCA study limits.

To accommodate the re-alignment of Schoolview Way with Cypress Lake Glen Boulevard, including the addition of:

- Addition of a southbound auxiliary right-turn lane, add the westbound approach (left-turn lane and right-turn/through lane)
- Addition of a northbound auxiliary left-turn lane
- modification the right-turn lane to a right-turn/through lane at the Cypress Lake Glen Boulevard intersection as shown in **Figure 1- Current RCA Proposed Build Alternative Geometry**.

After completion of the Design Traffic Technical Report (DTTR), Orange County requested that JMT provide a supplemental analysis of alternative Scenarios for the Cypress Lake Glen Boulevard and Schoolview Way area. These alternative Scenarios included:

Scenario 1 (Chuluota Road Build Alternative/4 Lane)

Scenario 1 includes relocation of Schoolview Way to align with Cypress Lake Glen Boulevard signalized intersection with Chuluota Road (assumes closure/elimination of existing Schoolview Way segment). This Scenario is consistent with the current RCA.

Scenario 2 (Chuluota Road Build Alternative/4 Lane & No Build Alternative/2 Lane)

Scenario 2 maintains the existing Schoolview Way alignment, intersecting at Chuluota Road with full median opening and unsignalized (minor street STOP) control.

Scenario 3: Chuluota Road Build Alternative/4 Lane & No Build Alternative /2 Lane

Scenario 3 includes extending Cypress Lake Glen Boulevard west to Corner Lake Drive, from the signalized intersection with Chuluota Road. It also maintains the existing Schoolview Way (Corner Lake Drive to Chuluota Road), intersecting at Chuluota Road right in/out only configuration, with unsignalized (minor street STOP) control. Scenarios 1, 2 and 3 are provided in Figures 2 – 4.

Traffic Data Collection

To provide base conditions for the expanded study area (beyond the RCA study limits) for this supplemental analysis, six (6) hour weekday turning movement counts (AM peak hour and PM peak period- 2 - 6 pm) at Corner School Drive & Schoolview Way. The raw traffic data collected is included in the Attachment. This turning movement count was used to estimate distribution of DTTR traffic to this intersection.

Design Traffic Projections

Using the adopted growth rates from the Chuluota Road RCA DTTR, the design volume forecasts for Scenarios 1, 2 and 3, involving Schoolview Way, Corner Lake Drive, and extension of Cypress Glen Boulevard: were prepared.

Scenario 1 (Chuluota Road Build Alternative/4 Lane)

- Design hour traffic volumes for Corner Lake Dr & relocated Schoolview Way for Opening Year– 2028, Interim Year- 2038, Design Year– 2048 (Build Alternative).

These are provided in **Figures 2 – 4**, which depict the weekday AM peak hour, school dismissal (afternoon) peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

Scenario 2 (Chuluota Road Build Alternative/4 Lane & No Build Alternative/2 Lane)

- Design hour traffic volumes for Corner Lake Dr & Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on No Build Alternative (2 lane Chuluota Road)

These are provided in **Figures 5 -7**, which depict the weekday AM peak hour, school dismissal peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

- Design hour traffic volumes for Corner Lake Dr & Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on Build Alternative (4 lane Chuluota Road)

These are provided in **Figures 8 - 10**, which depict the weekday AM peak hour, school dismissal peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

Scenario 3: Chuluota Road Build Alternative/4 Lane & No Build Alternative /2 Lane

- Design hour traffic volumes for Corner Lake Drive & Cypress Lake Glen Boulevard (extended), and Corner Lake Drive & Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on Build Alternative (4 lane Chuluota Road)

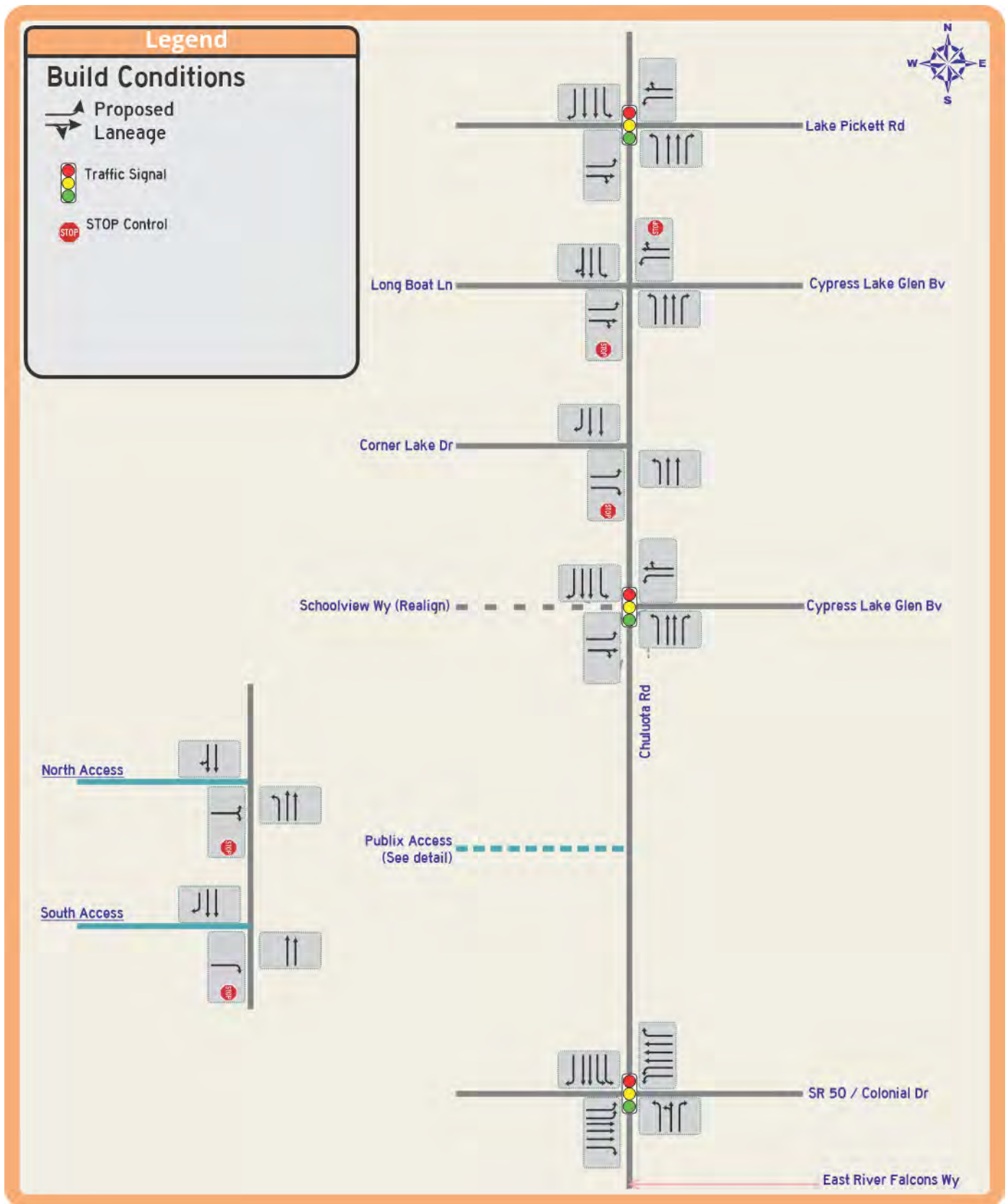
These are provided in **Figures 11 – 13**, which depict the weekday AM peak hour, school dismissal peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

- Design hour traffic volumes for Corner Lake Dr & Cypress Lake Glen Boulevard (extended), and Corner Lake Drive & Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on No Build Alternative (2 lane Chuluota Road)

These are provided in **Figures 14 - 16**, which depict the weekday AM peak hour, school dismissal peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

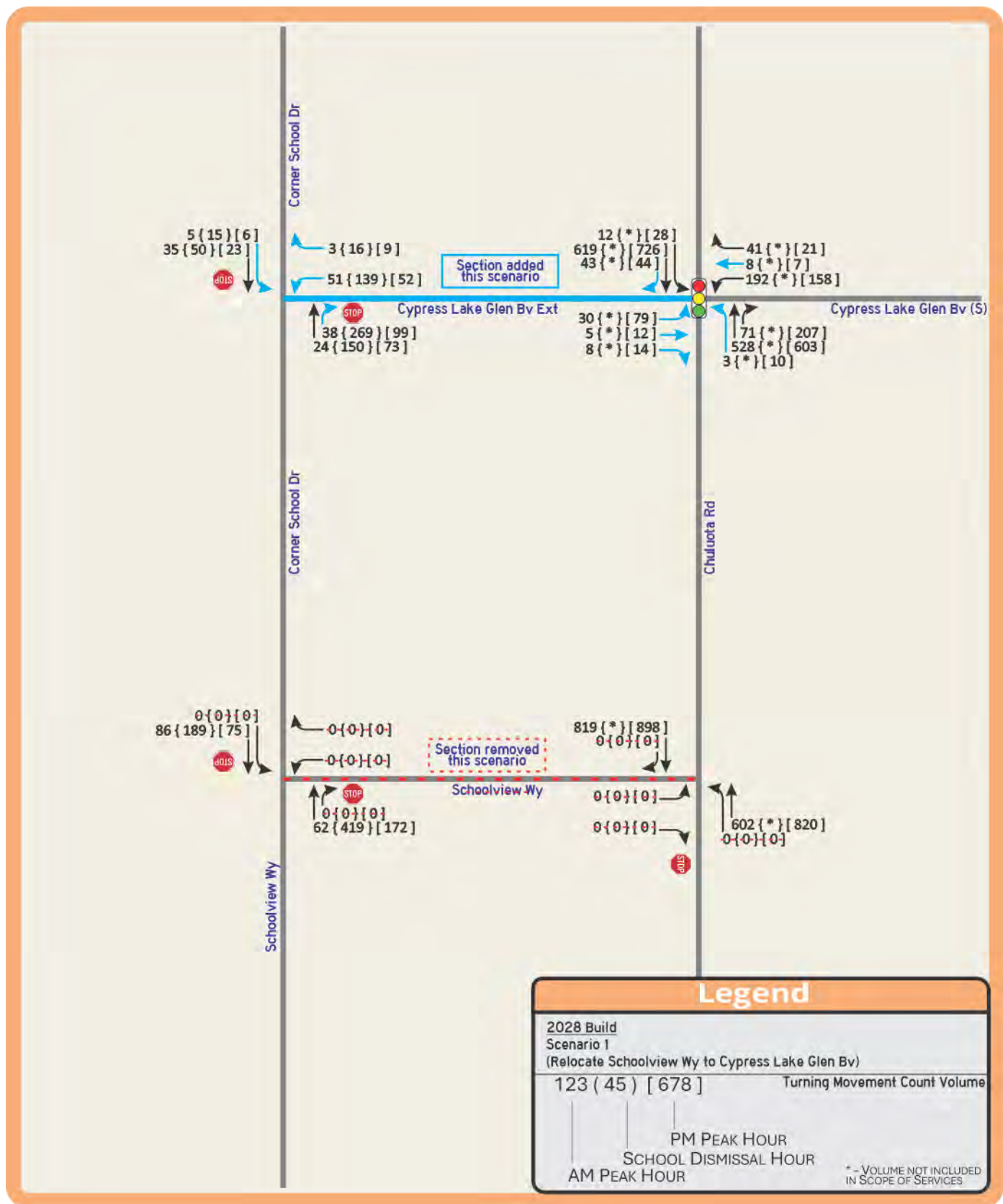
These future traffic volume forecasts are consistent with the AM and PM peak hour volume forecasts prepared for study intersections along Chuluota Road (including Schoolview Way/Cypress Lakes Glen Boulevard intersection) for the Build and No Build Alternatives as part of the Chuluota Road RCA DTTR prepared previously. Design hour volumes for the OCPS afternoon dismissal peak hour were prepared for both intersections, and peak hour volumes for correlating to the AM, PM, and the OCPS afternoon dismissal peak hour peak hours from the Chuluota Road RCA DTTM were prepared for the intersection of Corner School Drive at Schoolview Way.

The traffic projections for the additional study intersection were summarized as directional design hour volumes (DDHV)..



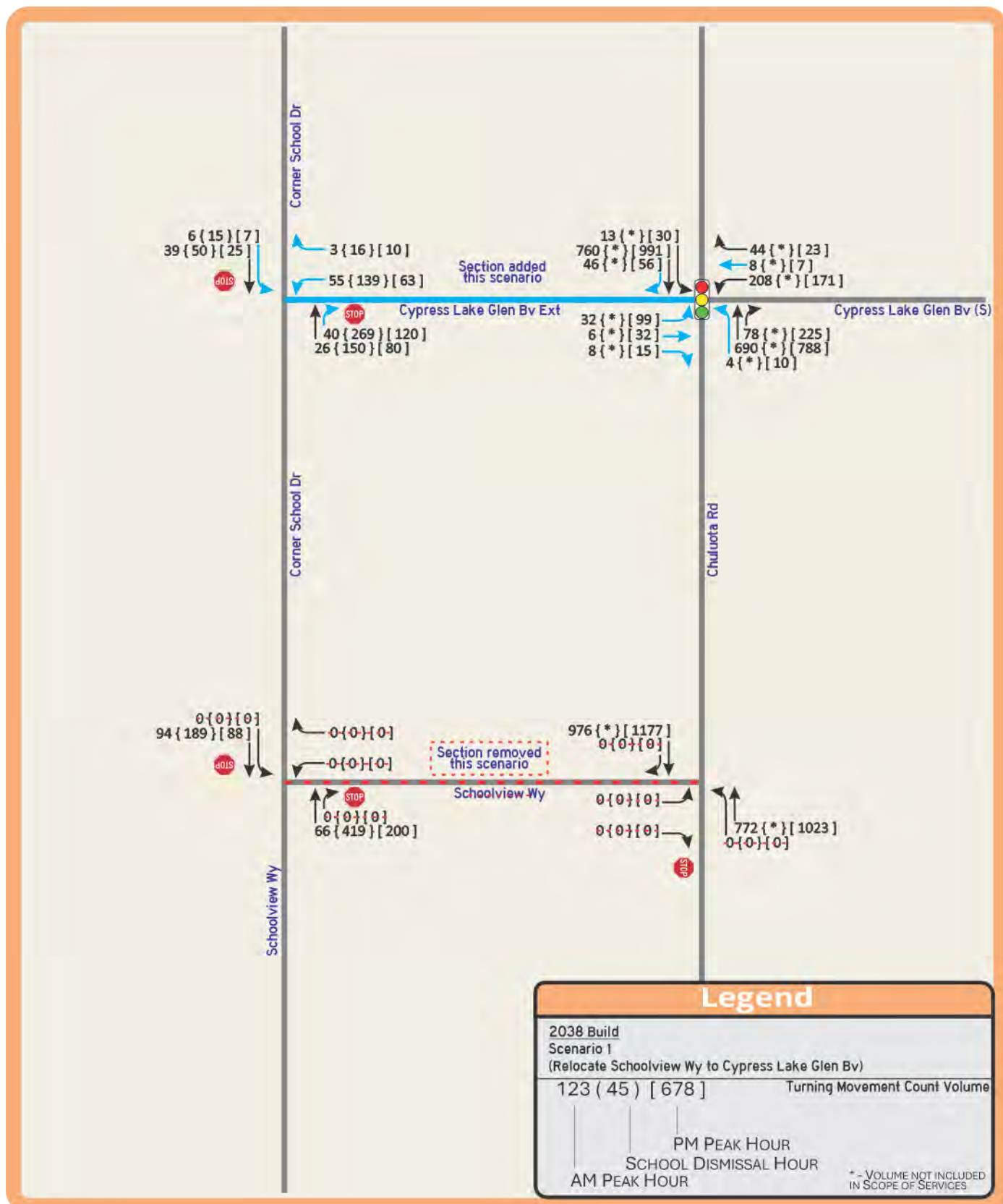
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 1
Build Geometry



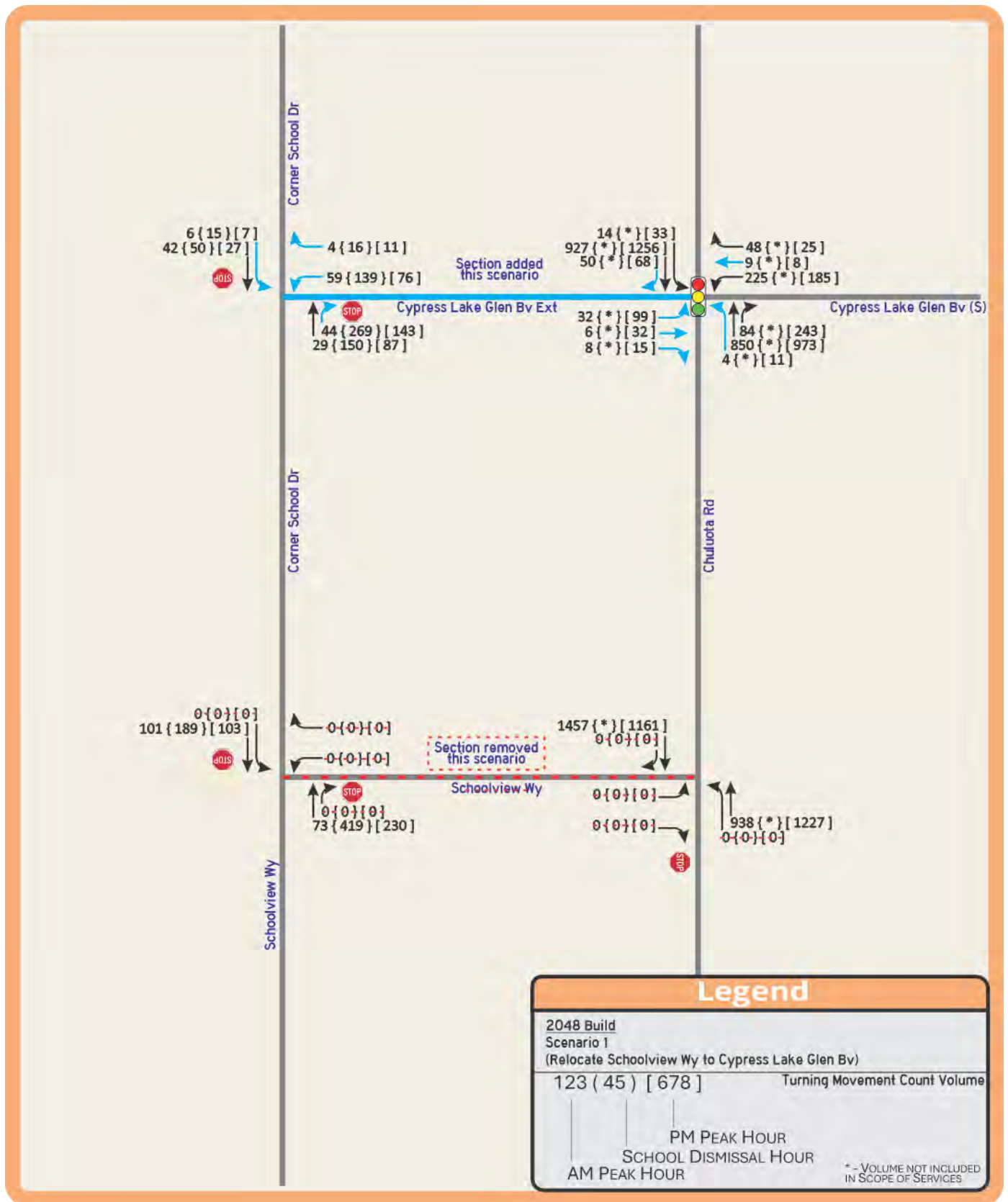
Chuluota Road from Lake Pickett Road to East Colonial Drive:
 RCA – Design Traffic Report

Figure 2
Scenario 1 – 2028 Build



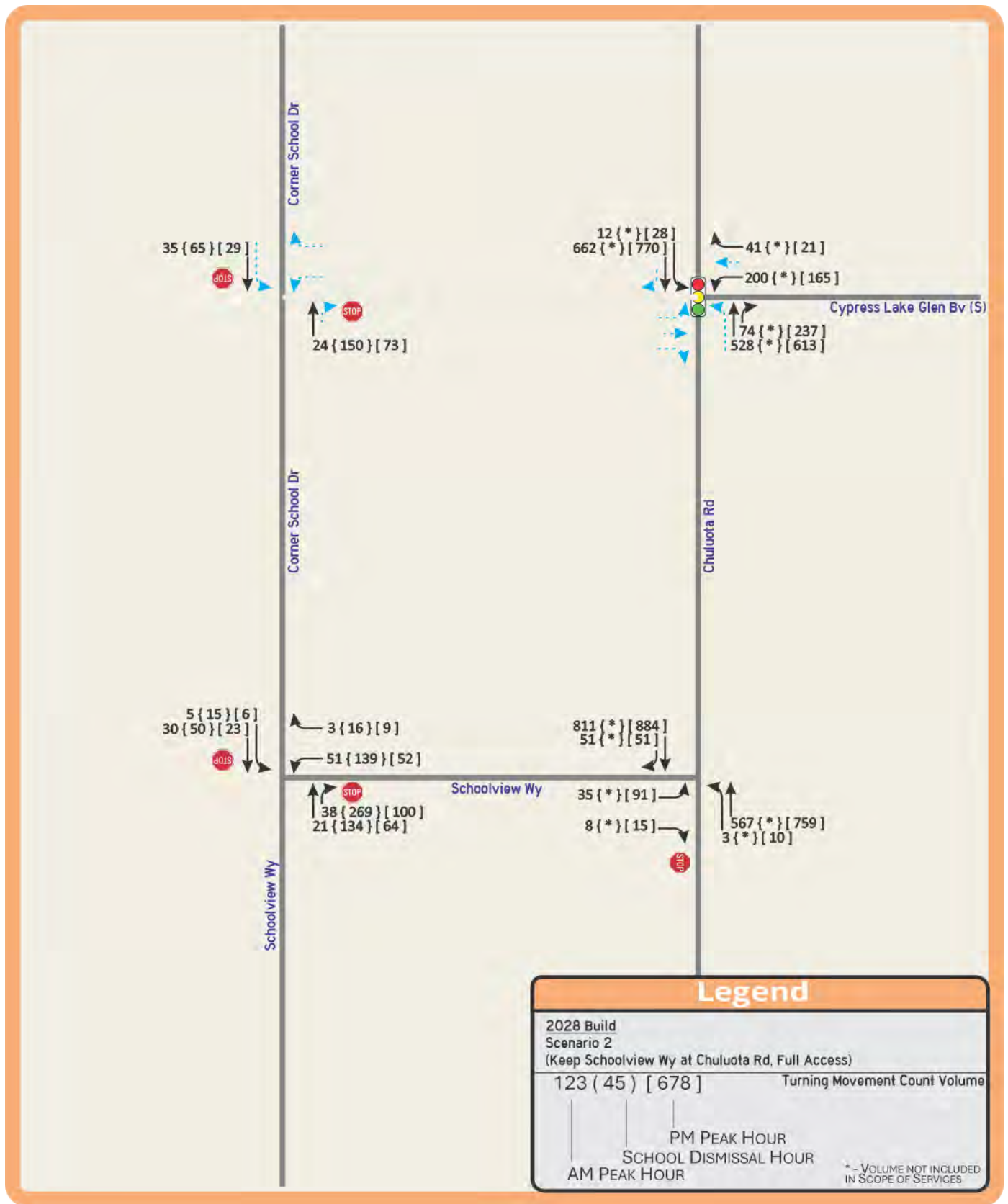
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 3
Scenario 1 – 2038 Build



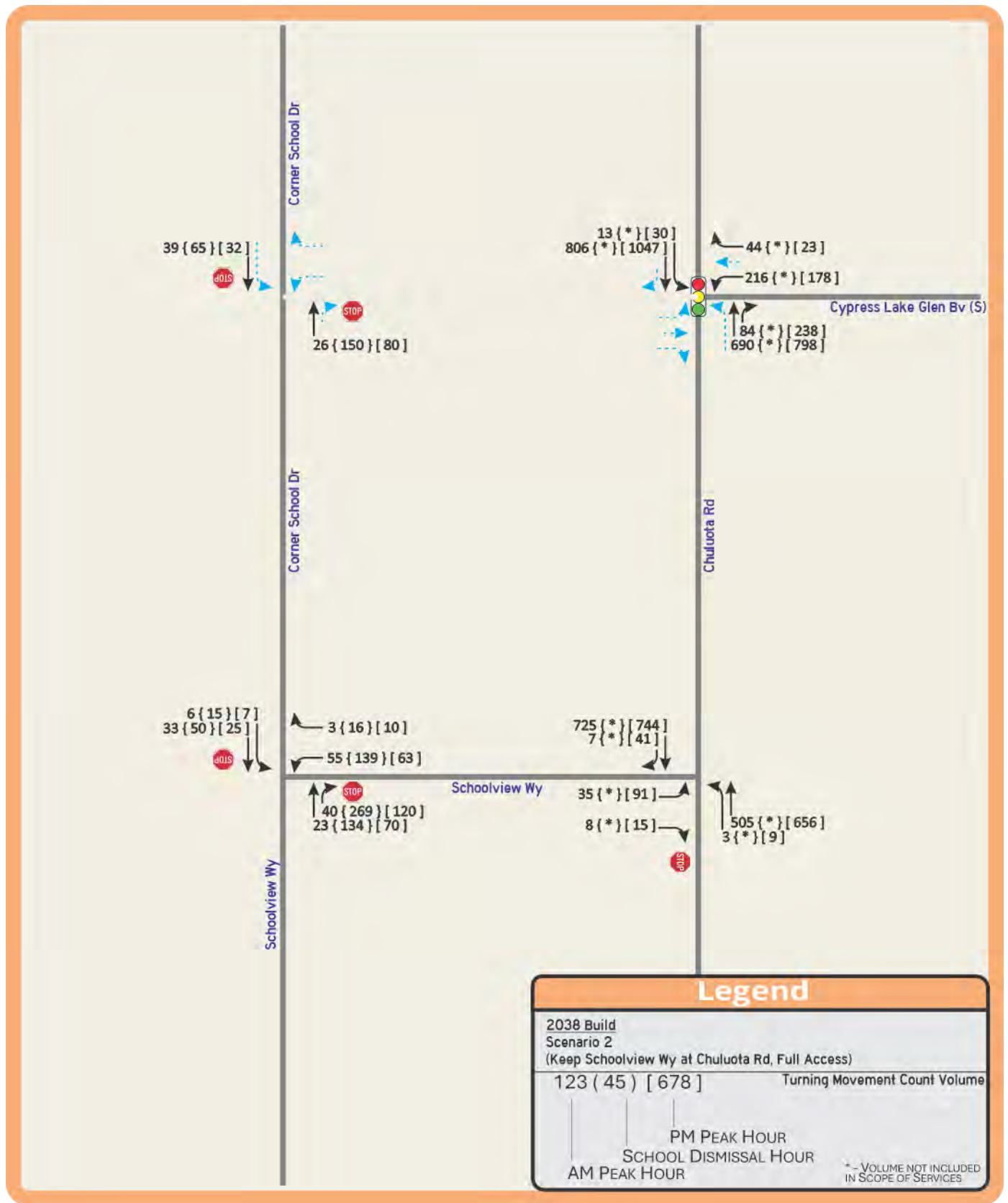
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 4
Scenario 1 – 2048 Build



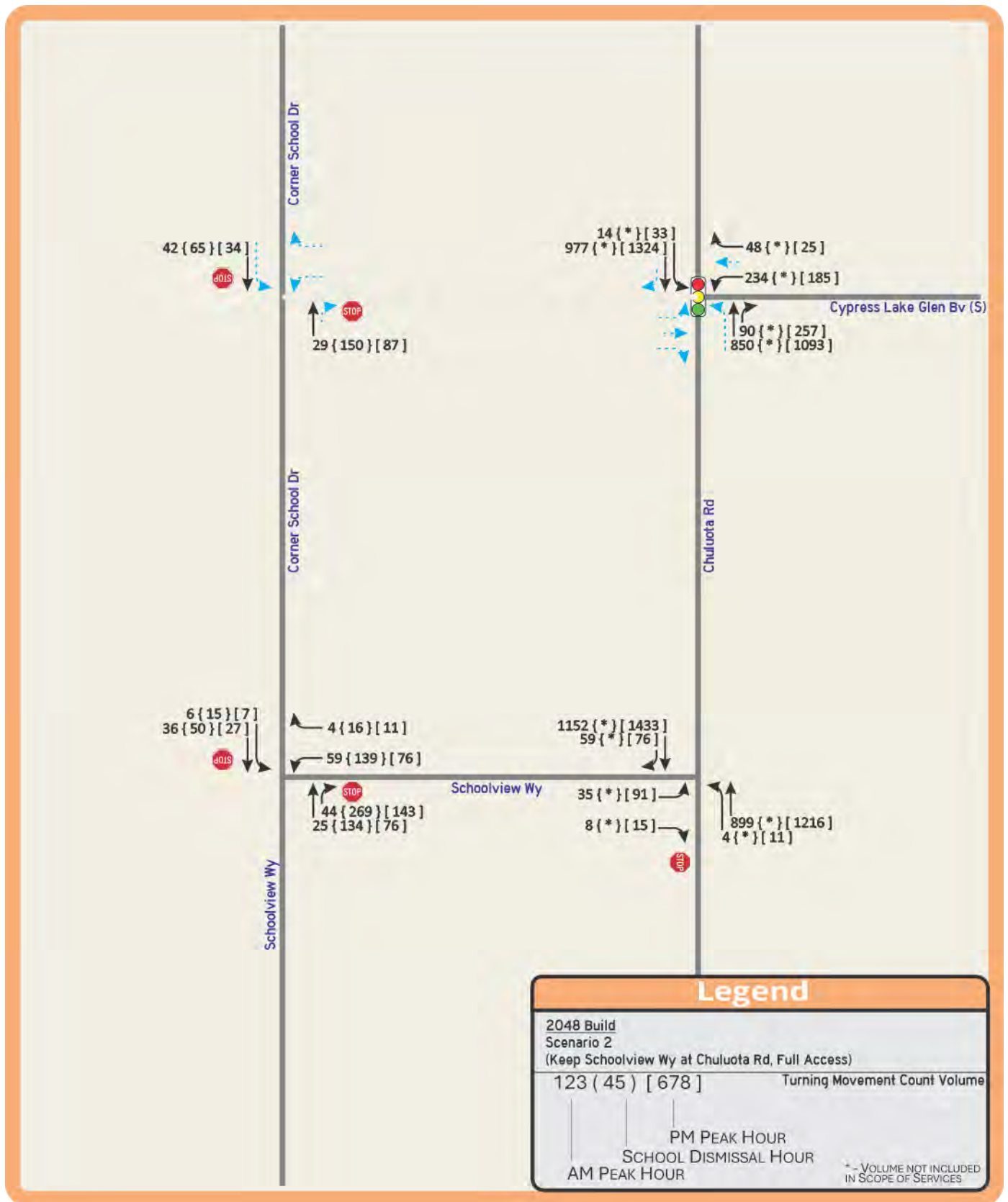
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 5
Scenario 2 – 2028 Build



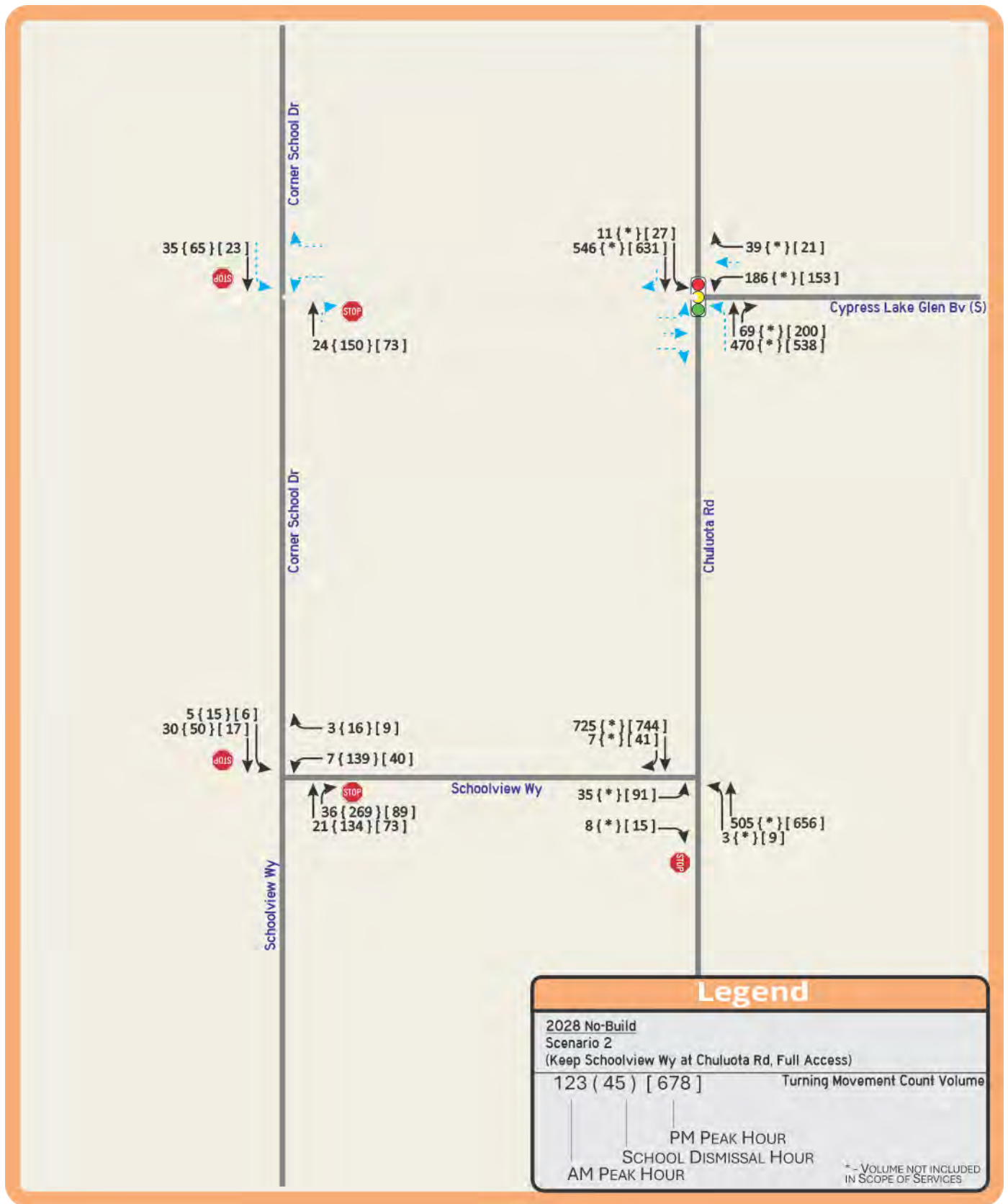
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 6
Scenario 2 – 2038 Build



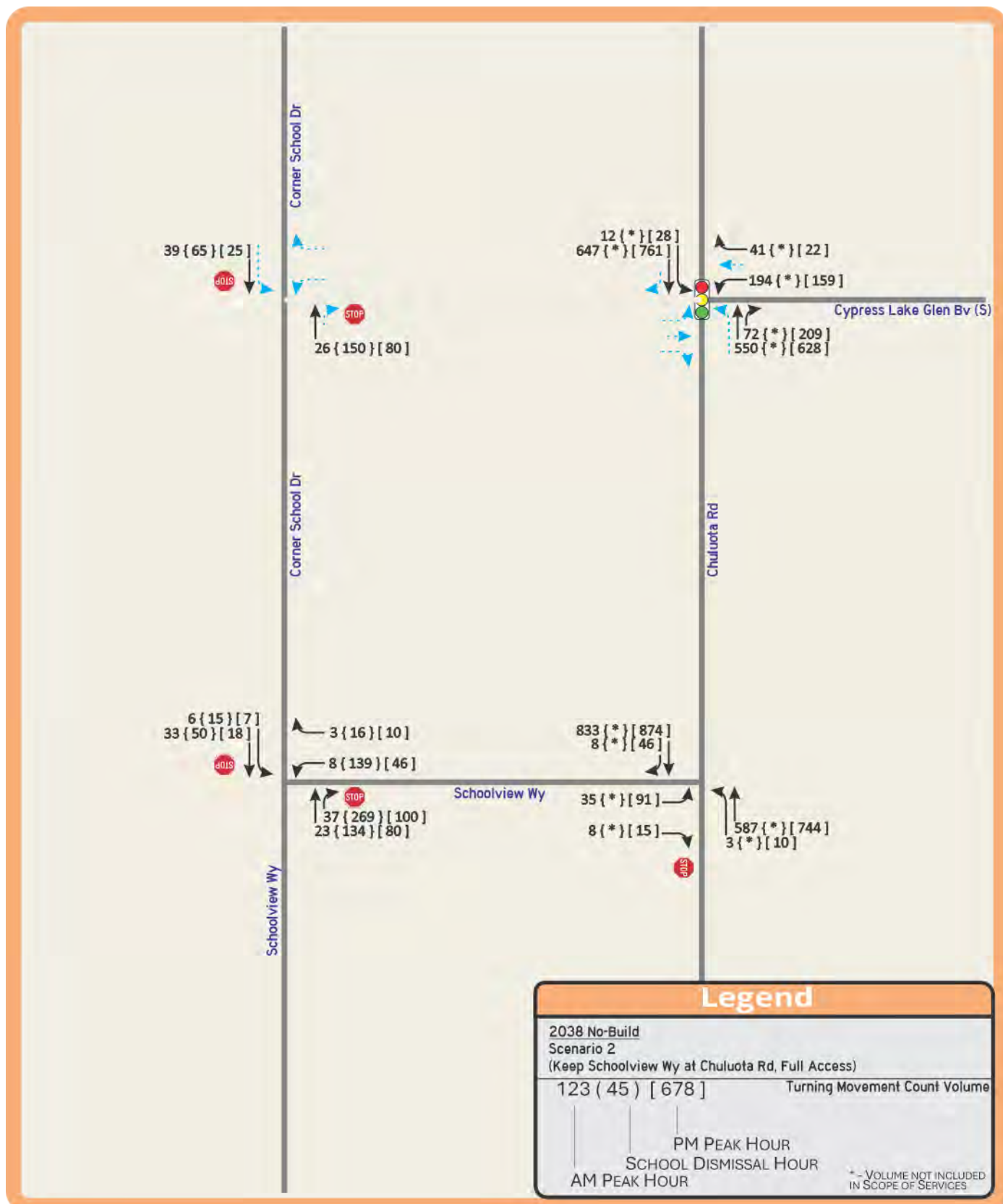
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 7
Scenario 2 – 2048 Build



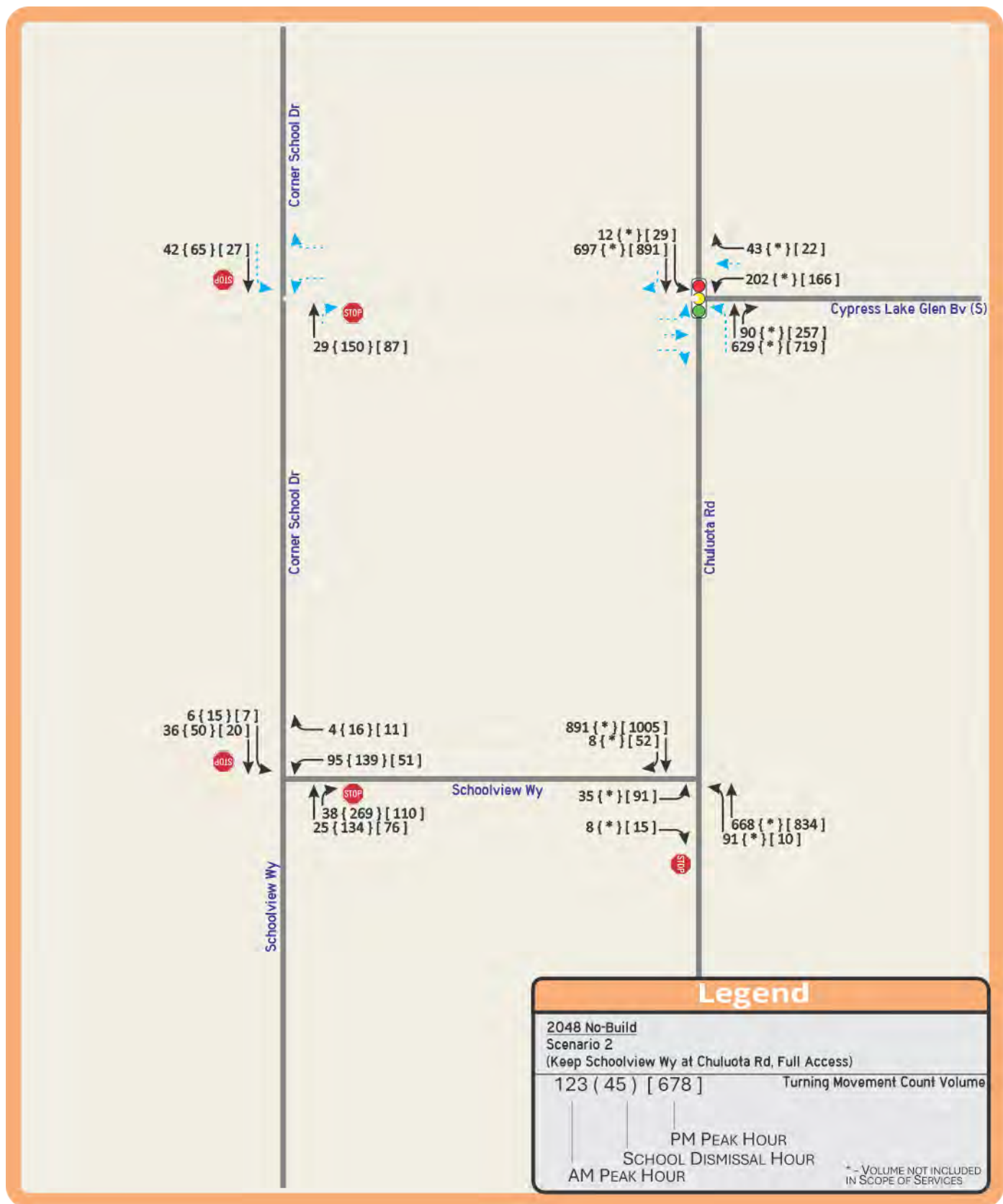
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 8
Scenario 2 – 2028 No-Build



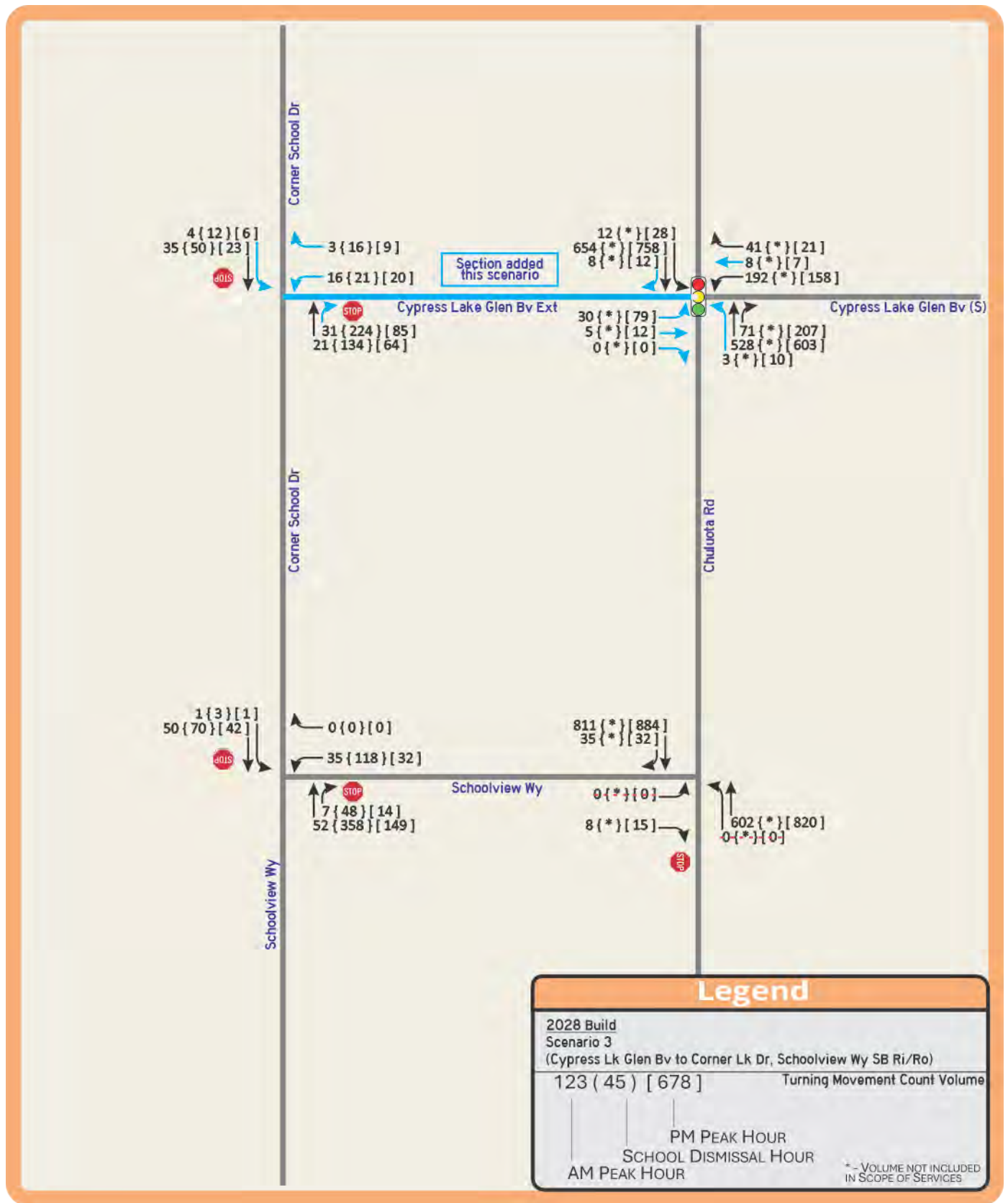
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 9
Scenario 2 – 2038 No-Build



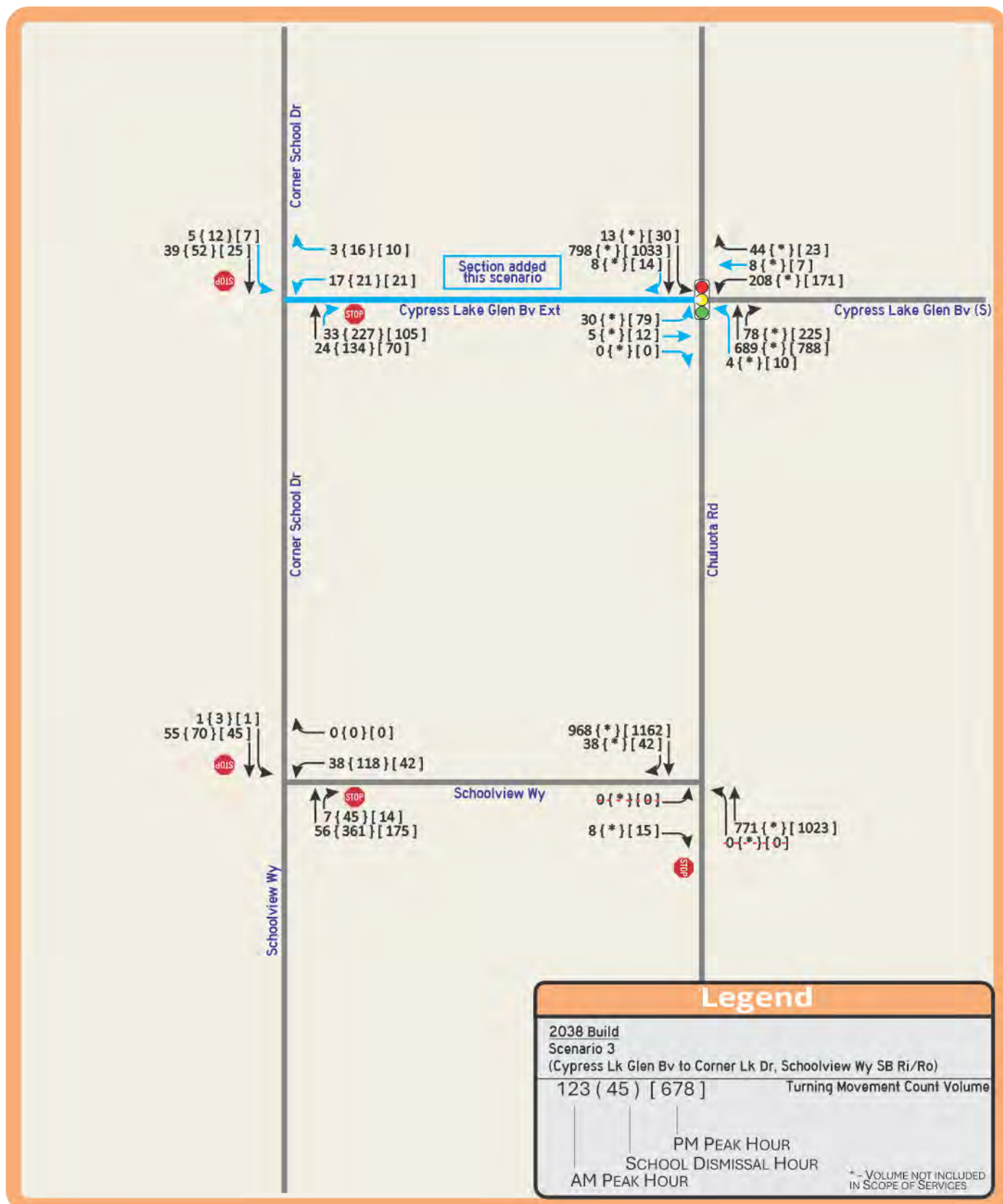
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 10
Scenario 2 – 2048 No-Build



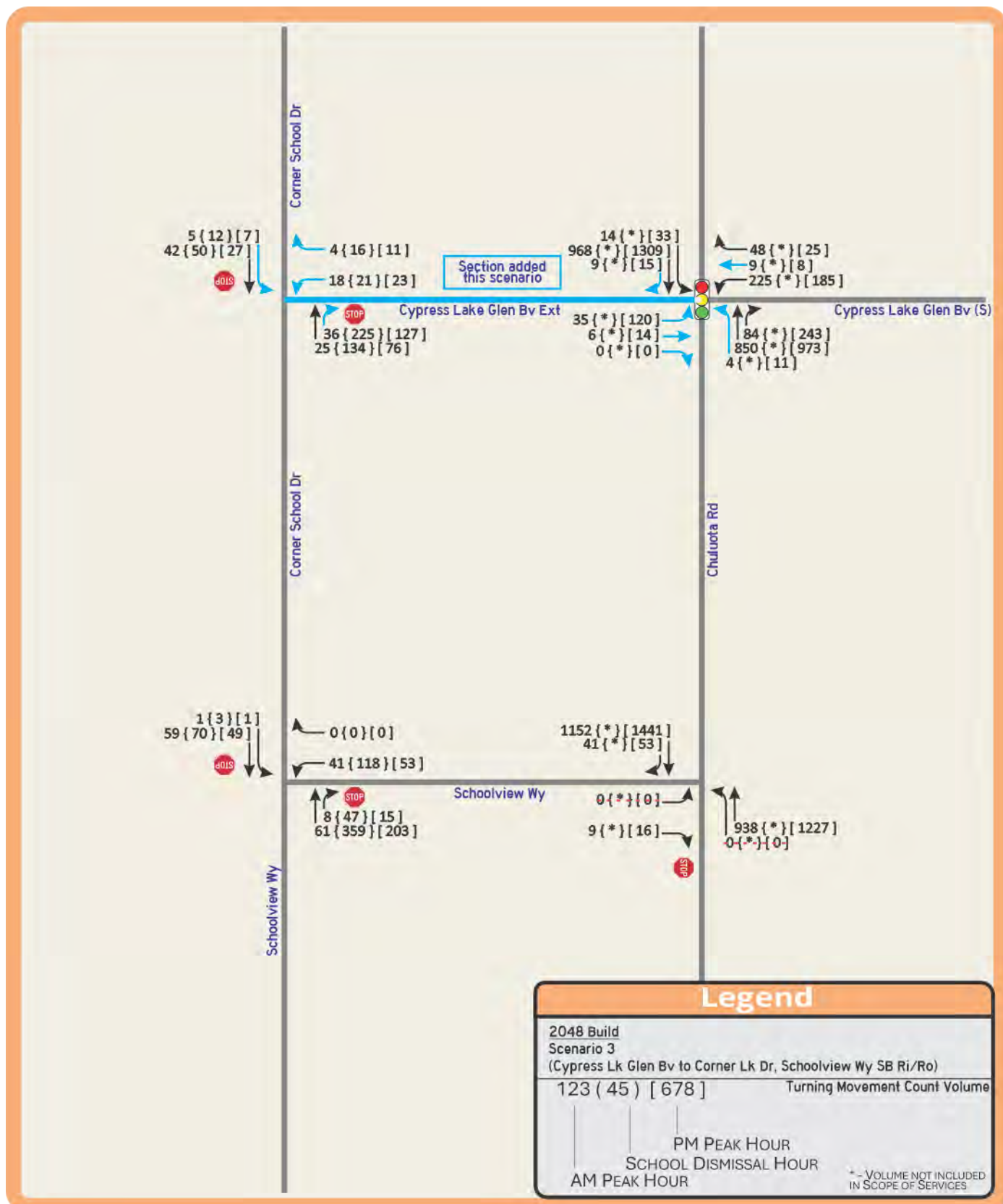
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 11
Scenario 3 – 2028 Build



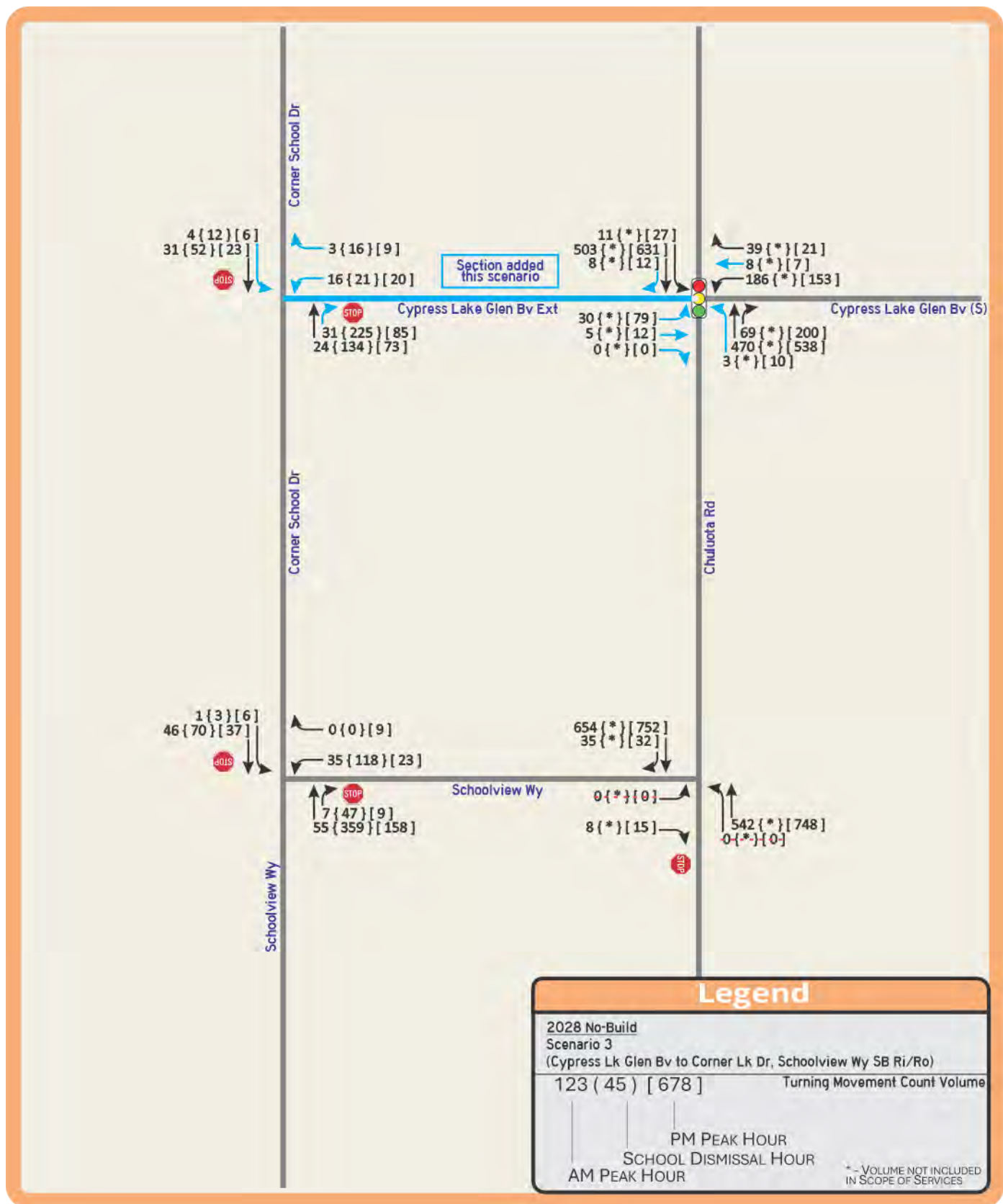
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 12
Scenario 3 – 2038 Build



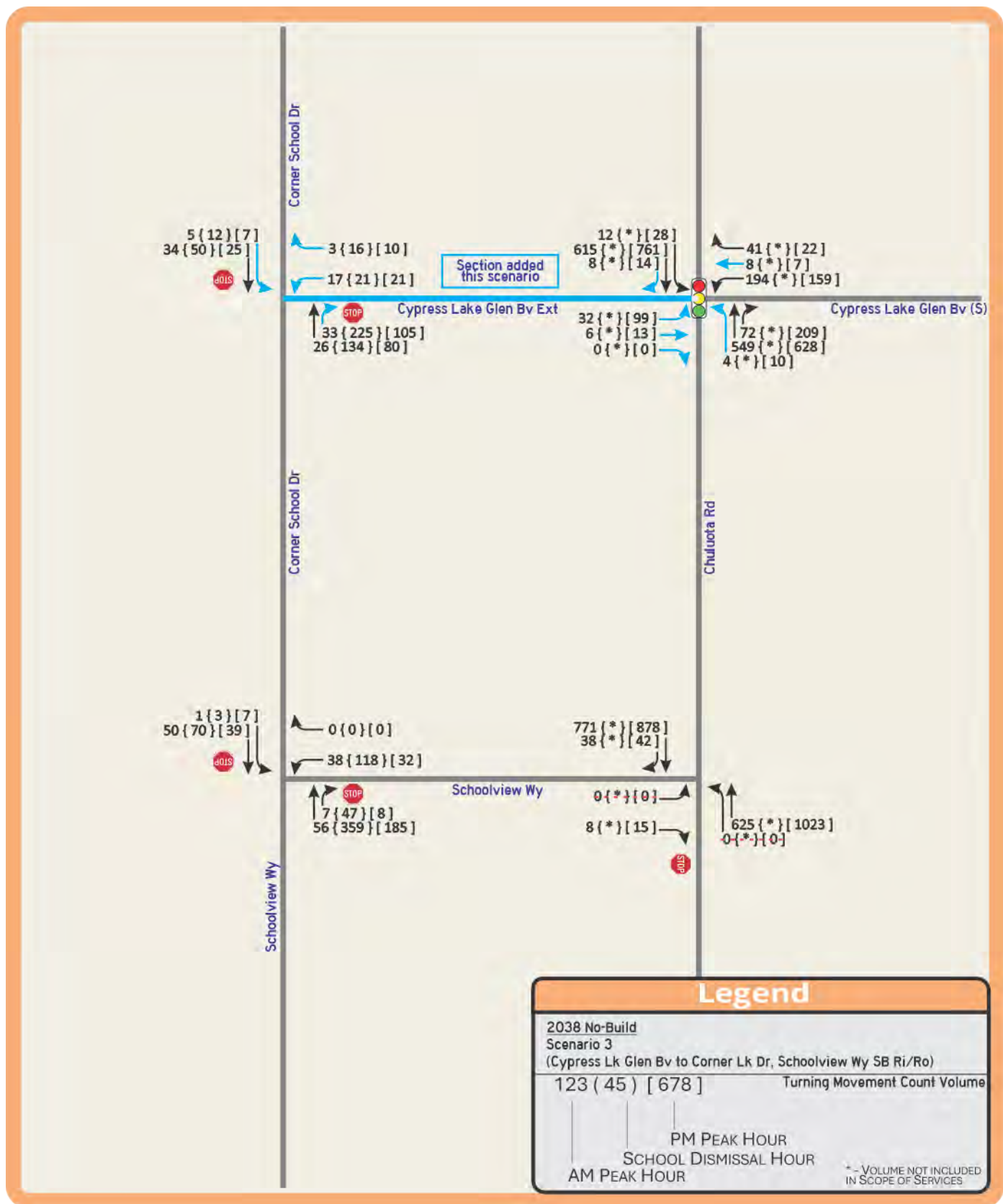
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 13
Scenario 3 – 2048 Build



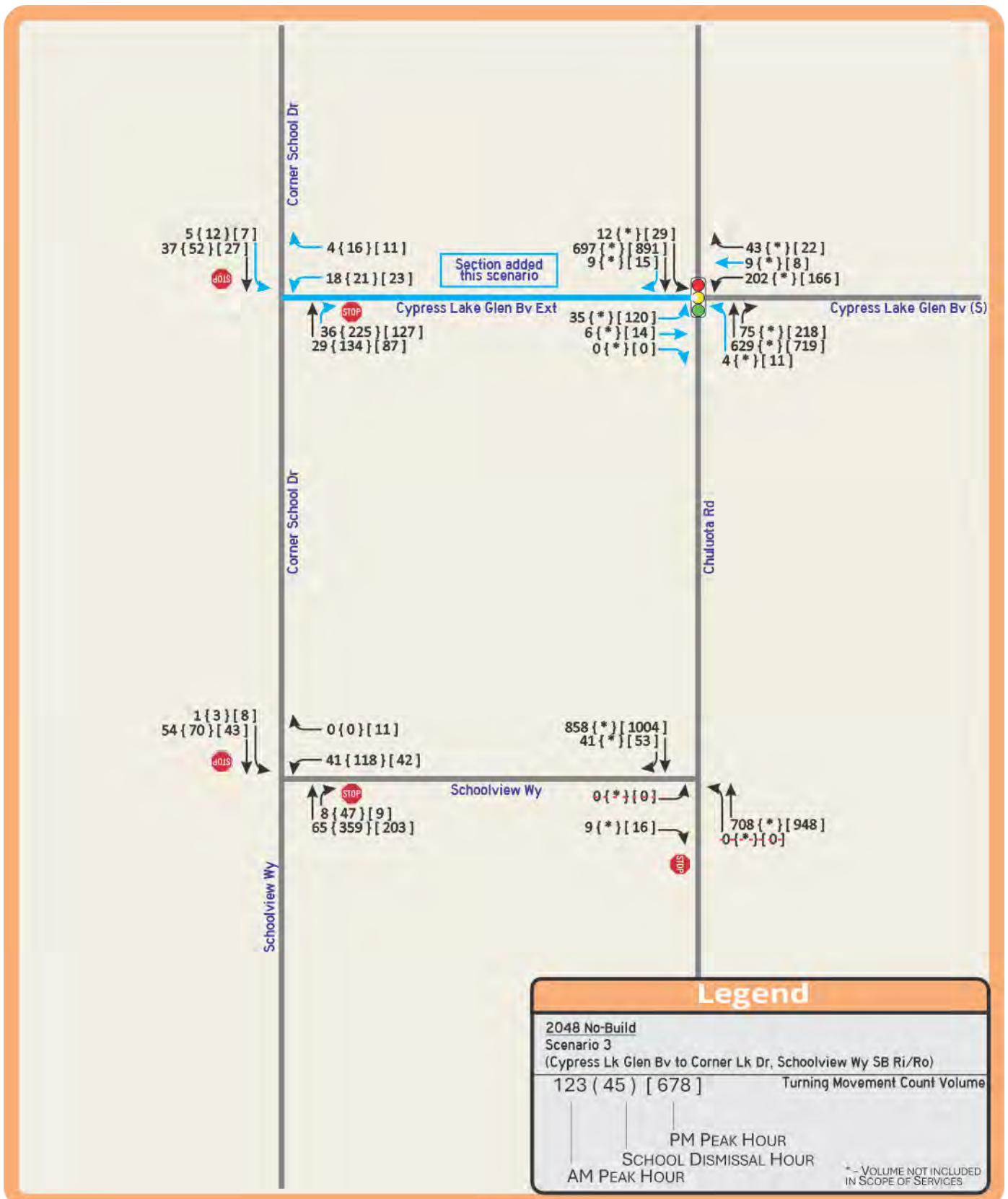
Chuluota Road from Lake Pickett Road to East
Colonial Drive:
RCA – Design Traffic Report

Figure 14
Scenario 3 – 2028 No-Build



Chuluota Road from Lake Pickett Road to East
Colonial Drive:
RCA – Design Traffic Report

Figure 15
Scenario 3 – 2038 NoBuild



Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 16
Scenario 3 – 2048 No-Build

ATTACHMENT

Raw Traffic Count for Corner School Drive and Schoolview Way

(Cars and Trucks)

LATITUDE: 0 _____

LONGITUDE: 0

Corner School Dr						Corner School Dr										Schoolview Wy							
TIME BEGIN	NORTHBOUND					SOUTHBOUND					N/S TOTAL	EASTBOUND				WESTBOUND				E/W TOTAL	GRAND TOTAL		
	L	T	R	U-turn	TOTAL	L	T	R	U-turn	TOTAL		L	T	R	U-turn	TOTAL	L	T	R			U-turn	TOTAL
07:00 AM	0	3	6	0	9	2	24	0	0	26	35	0	0	0	0	0	53	0	1	0	54	54	89
07:15 AM	0	2	5	0	7	0	19	0	0	19	26	0	0	0	0	0	20	0	4	0	24	24	50
07:30 AM	0	2	10	0	12	1	18	0	0	19	31	0	0	0	0	0	16	0	0	0	16	16	47
07:45 AM	0	5	10	0	15	0	6	0	0	6	21	0	0	0	0	0	12	0	0	0	12	12	33
TOTAL	0	12	31	0	43	3	67	0	0	70	113	0	0	0	0	0	101	0	5	0	106	106	219
08:00 AM	0	5	7	0	12	3	15	0	0	18	30	0	0	0	0	0	12	0	1	0	13	13	43
08:15 AM	0	9	11	0	20	1	10	0	0	11	31	0	0	0	0	0	18	0	1	0	19	19	50
08:30 AM	0	4	18	0	22	0	8	0	0	8	30	0	0	0	0	0	23	0	1	0	24	24	54
08:45 AM	0	6	25	0	31	2	7	0	0	9	40	0	0	0	0	0	37	0	1	0	38	38	78
TOTAL	0	24	61	0	85	6	40	0	0	46	131	0	0	0	0	0	90	0	4	0	94	94	225
02:00 PM	0	9	8	0	17	1	5	0	0	6	23	0	0	0	0	0	4	0	1	1	6	6	29
02:15 PM	0	10	8	0	18	2	4	0	0	6	24	0	0	0	0	0	6	0	1	0	7	7	31
02:30 PM	0	6	18	0	24	0	3	0	0	3	27	0	0	0	0	0	5	0	0	0	5	5	32
02:45 PM	0	17	17	0	34	2	5	0	0	7	41	0	0	0	0	0	7	0	0	0	7	7	48
TOTAL	0	42	51	0	93	5	17	0	0	22	115	0	0	0	0	0	22	0	2	1	25	25	140
03:00 PM	0	8	19	0	27	1	6	0	0	7	34	0	0	0	0	0	9	0	0	0	9	9	43
03:15 PM	0	12	25	0	37	0	3	0	0	3	40	0	0	0	0	0	22	0	1	0	23	23	63
03:30 PM	0	10	20	0	30	2	1	0	0	3	33	0	0	0	0	0	12	0	0	0	12	12	45
03:45 PM	0	8	9	0	17	2	6	0	0	8	25	0	0	0	0	0	17	0	4	2	23	23	48
TOTAL	0	38	73	0	111	5	16	0	0	21	132	0	0	0	0	0	60	0	5	2	67	67	199
04:00 PM	0	14	44	0	58	2	10	0	0	12	70	0	0	0	0	0	35	0	5	0	40	40	110
04:15 PM	0	19	55	0	74	2	5	0	0	7	81	0	0	0	0	0	12	0	2	0	14	14	95
04:30 PM	0	22	29	0	51	1	8	0	0	9	60	0	0	0	0	0	5	0	1	0	6	6	66
04:45 PM	0	17	37	0	54	2	3	0	0	5	59	0	0	0	0	0	9	0	2	1	12	12	71
TOTAL	0	72	165	0	237	7	26	0	0	33	270	0	0	0	0	0	61	0	10	1	72	72	342
05:00 PM	0	18	26	0	44	2	5	0	0	7	51	0	0	0	0	0	13	0	1	1	15	15	66
05:15 PM	0	19	39	0	58	1	9	0	0	10	68	0	0	0	0	0	11	0	2	0	13	13	81
05:30 PM	0	26	29	0	55	2	4	0	0	6	61	0	0	0	0	0	8	0	0	0	8	8	69
05:45 PM	0	17	38	0	55	2	8	0	0	10	65	0	0	0	0	0	6	0	2	0	8	8	73
TOTAL	0	80	132	0	212	7	26	0	0	33	245	0	0	0	0	0	38	0	5	1	44	44	289

(Trucks Only)

LATITUDE: 0

LONGITUDE: 0

Corner School Dr					Corner School Dr											Schoolview Wy								
TIME BEGIN	NORTHBOUND				SOUTHBOUND					N/S TOTAL	EASTBOUND				WESTBOUND				E/W TOTAL	GRAND TOTAL				
	L	T	R	U-turn	TOTAL	L	T	R	U-turn		TOTAL	L	T	R	U-turn	TOTAL	L	T			R	U-turn	TOTAL	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:30 AM	0	0	2	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2		
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL	0	0	2	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2		
08:00 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1		
08:15 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1	0	1	1	2		
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL	0	0	0	0	0	0	2	0	0	2	2	0	0	0	0	0	0	1	0	1	1	3		
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:15 PM	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1		
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1		
TOTAL	0	0	1	0	1	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	2		
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5	5		
04:15 PM	0	1	2	0	3	0	0	0	0	0	3	0	0	0	0	5	0	0	0	5	5	8		
04:30 PM	0	0	3	0	3	0	0	0	0	0	3	0	0	0	0	1	0	0	0	1	1	4		
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TOTAL	0	1	7	0	8	0	0	0	0	0	8	0	0	0	0	12	0	0	0	12	12	20		
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05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
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TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

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