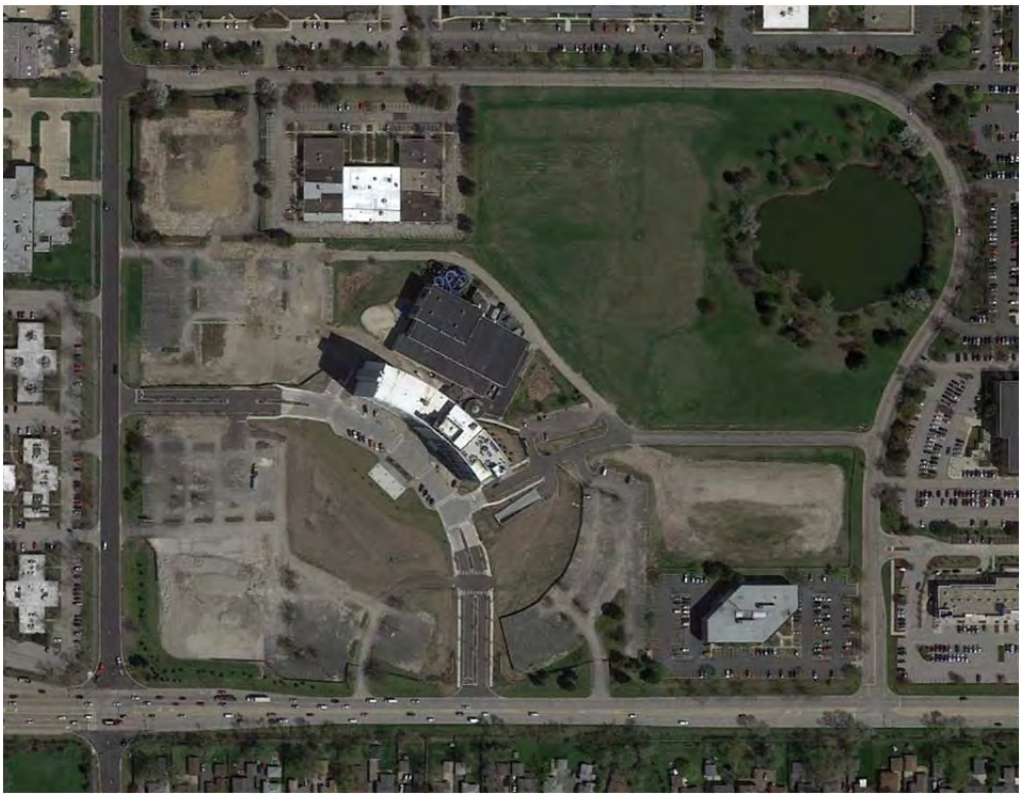
TRAFFIC IMPACT STUDY

REPORT FOR:

ChiArc



ARLINGTON DOWNS
EUCLID AVENUE AND ROHLWING ROAD
ARLINGTON HEIGHTS, ILLINOIS

PREPARED BY:

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V3 Project No. 15126

August 20, 2015

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I. INTRODUCTION

V3 Companies has been retained by ChiArc to conduct a traffic impact study for the Arlington Downs mixed-use development located at Euclid Avenue and Rohlwing Road in Arlington Heights, Illinois. The development is located west of the Arlington International Racecourse and is bounded by Euclid Avenue to the south, Rohlwing Road to the west, and Salt Creek Lane to the north and east. A location map is included as Figure 1.

The site, which has been undergoing redevelopment for several years, currently consists of a 214-unit high-rise apartment building that recently opened and is partially occupied. A 55,000 square foot indoor water park is attached to the apartment building but is currently no in operation. A 161-room hotel with a conference space has been approved and will be under construction soon. The proposed plan for the remaining portions of the site include re-opening the indoor water with an attached family entertainment center, a second residential tower with 442 units, and a mix of retail, restaurant, and medical office land uses. Table 1 provides a summary of the proposed land use plan for Arlington Downs. A conceptual site plan is included in Figure 2.

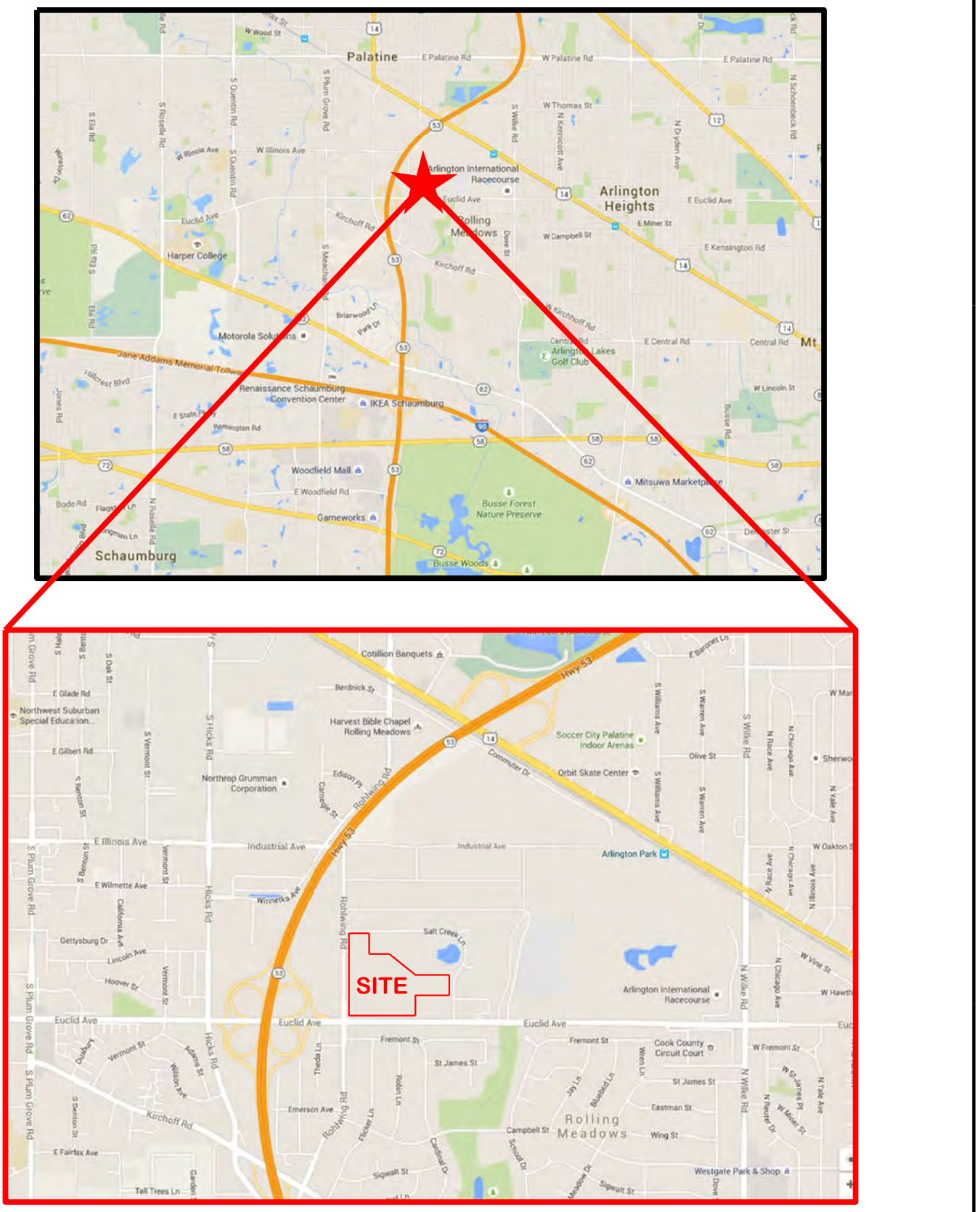
Table 1: Proposed Land Use Plan

LAND USE	SIZE
Apartment	656 units
Hotel	161 rooms
Day Care Center	90 students
Office (Medical)	21,600 sq. ft.
Shopping Center	21,065 sq. ft.
Hair Salon	1,610 sq. ft.
High-Turnover (Sit-Down) Restaurant	20,085 sq. ft.
Fast-Food Restaurant without Drive-Through Window	3,770 sq. ft.
Fast-Food Restaurant with Drive-Through Window	2,670 sq. ft.
Special Use - Water Park and Family Entertainment	1,160 occ.

The purpose of this traffic study is to evaluate the potential traffic impacts of Arlington Downs, which is expected to be fully built out by 2017. Traffic estimates are projected to 2022, which is five years beyond the projected build-out year of the project. The study area includes the following intersections:

- Euclid Avenue and Rohlwing Road
- Euclid Avenue and Arlington Downs Drive
- Euclid Avenue and Salt Creek Lane
- Salt Creek Lane and Site Driveway
- Rohlwing Road and Arlington Downs Drive
- Rohlwing Road and Salt Creek Lane

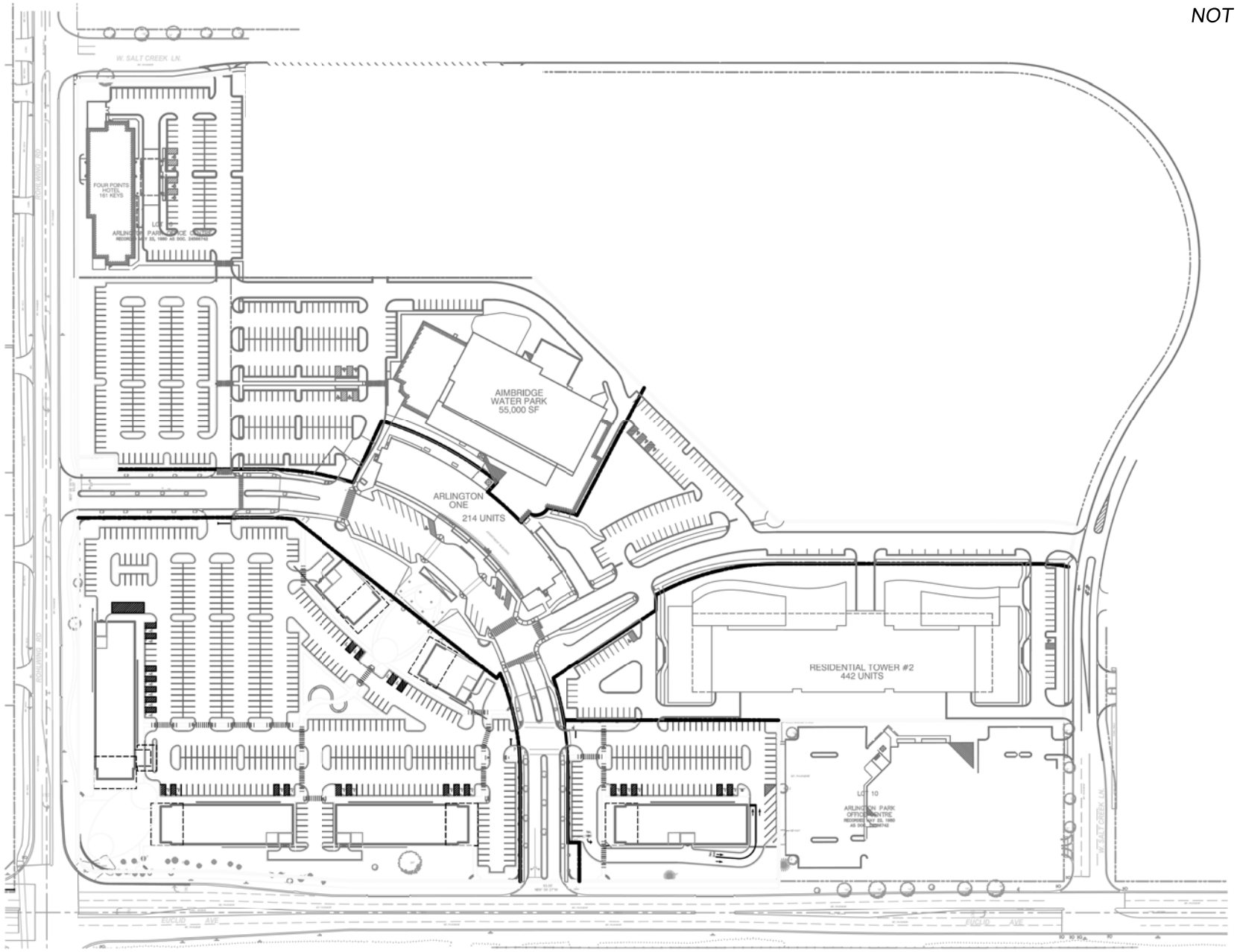
This report includes a description of existing conditions, data collection and capacity analysis, evaluation of data, and conclusions.



ARLINGTON DOWNS	*FIGURE 1* *LOCATION MAP* *ARLINGTON HEIGHTS* *ILLINOIS*	

Figure 1 - Site Location Plan.dgn 8/19/2015 11:41:30 AM

NOT TO SCALE



ARLINGTON DOWNS

FIGURE 2
CONCEPTUAL SITE PLAN

BARTLETT ILLINOIS

Figure 2 - Conceptual Site Plan.dgn 8/20/2015 5:35:10 PM

II. PROJECT CONDITIONS

Land Uses

A variety of land uses exist near the project site, including industrial, office, and residential uses. The surrounding land uses are illustrated in Figure 3.

Roadway System

The characteristics of the roadways in the vicinity of the site are presented below. The existing lane configuration in the study area is illustrated in Figure 4.

Euclid Avenue is an east-west collector roadway with two through lanes in each direction and a posted speed limit of 40 mph. Euclid Avenue widens to provide auxiliary turn lanes at the intersections of Rohlwing Road and Salt Creek Lane while a 6-foot median is provided between the intersections. At Rohlwing Road, the eastbound and westbound approaches on Euclid Avenue each consist of one left turn lane, two through lanes, and one right turn lane. At Salt Creek Lane, the eastbound approach includes a left turn lane. Euclid Avenue is a Cook County Department of Transportation and Highways (CCDOTH) roadway, County Route A59. There are no pedestrian facilities provided along Euclid Avenue adjacent to the proposed development.

Rohlwing Road is a north-south collector roadway with a posted speed limit of 40 mph to the north of Euclid Avenue and 30 mph to the south. Rohlwing Road typically consists of a three lane section with one through lane in each direction and a painted median that varies between dedicated left turn lanes and a two-way left turn lane. At the intersection with Euclid Avenue, the northbound and southbound approaches both consist of one left turn lane and one shared through/right turn lane. A dedicated left turn lane is also provided on the southbound approach to Arlington Downs Drive. There is a multi-use path along the west side of Rohlwing Road.

Salt Creek Lane is a local roadway that intersects Rohlwing Road in the west and curves to intersect Euclid Avenue to the south. There are a number of industrial/office driveways on Salt Creek Lane. Although there is no pavement marking along most of Salt Creek Lane, the 36-foot section allows for and typically operates as one travel lane in each direction with a two-way left turn lane. The southbound approach to Euclid Avenue widens to consist of one left turn lane, one right turn lane and two receiving lanes. The westbound approach to Rohlwing Road widens and operates as one left turn lane and one shared through/right turn lane. There are no pedestrian facilities along Salt Creek Lane with the exception of a sidewalk along the east side of the roadway for the office building just north of Euclid Avenue.

Arlington Downs Drive is an internal spine road that circulates traffic within the Arlington Downs development. Arlington Downs Drive consists of one 18 foot travel lane in each direction, typically separated by a landscaped median. There is no median in front of the existing residential tower, where angled parking is also provided. Arlington Downs Drive curves to

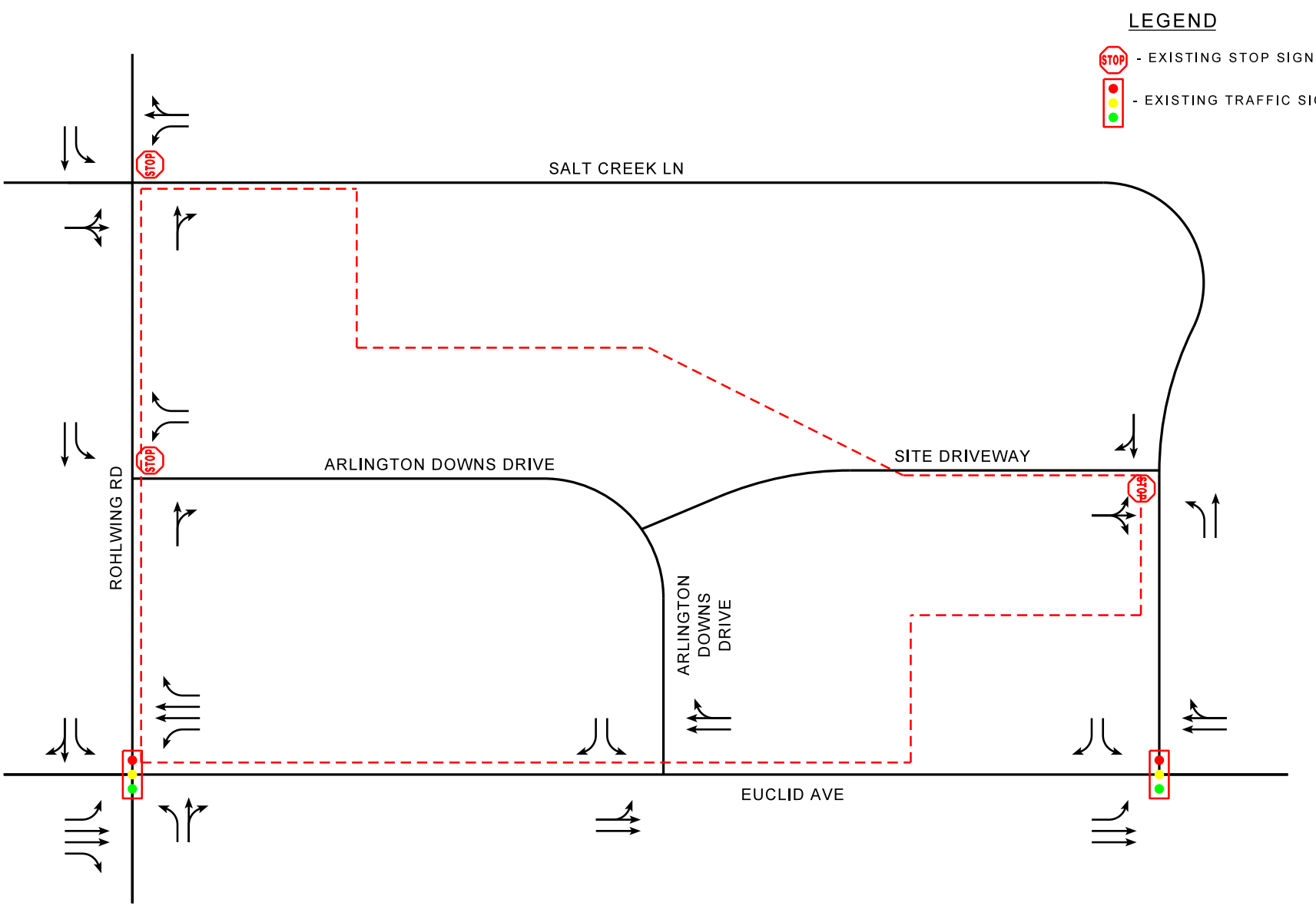
intersect both Euclid Avenue and Rohlwing Road, with the Arlington Downs Drive approaches consisting of one right turn lane and one left turn lane at both intersections. A two lane access road continues east from Arlington Downs Drive and intersects Salt Creek Lane. Sidewalks are generally provided along both sides of the roadway.

ARLINGTON DOWNS

FIGURE 3
LAND USE MAP

ARLINGTON HEIGHTS *ILLINOIS*

Figure 3 - Land Use Map.dgn 8/20/2015 4:58:14 PM



ARLINGTON DOWNS

FIGURE 4
EXISTING LANE CONFIGURATION

ARLINGTON HEIGHTS ILLINOIS

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Traffic Volumes

Existing traffic counts were collected on Saturday, June 20th, 2015 and Tuesday, June 23rd, 2015 at the six study area intersections. Weekday peak hour traffic counts were collected from 7:00 am to 9:00 am and 4:00 pm to 6:00 pm. The Saturday peak hour count occurred from 11:00 am to 1:00 pm. The time periods of the traffic counts were selected to coincide with the typical peak hours of the local roadways like Euclid Avenue.

The weekday am, weekday pm and Saturday midday peak hours occur between 7:30 am - 8:30 am, 4:30 pm – 5:30 pm, and 12:00 pm – 1:00 pm, respectively. The existing peak hour volumes at the study area intersections are illustrated in Figure 5. A summary of the traffic volumes collected in fifteen minute increments is provided in Appendix A.

Proposed Development

Land Use Development

The area surrounding the Arlington Downs development is mostly developed. However, it is anticipated that the existing office building adjacent to the proposed hotel will be redeveloped in the future. This potential redevelopment is not part of the Arlington Downs PUD and has not been included in this traffic study.

The Arlington Heights Park District is also planning to construct several soccer fields on the undeveloped land to the northeast of the Arlington Downs site. However, it is unknown whenthe soccer fields will be open; therefore, the traffic impacts have not been included in this traffic study.

There are no other known proposed land development projects in the vicinity of the site that will impact the study area intersections within the study time frame.

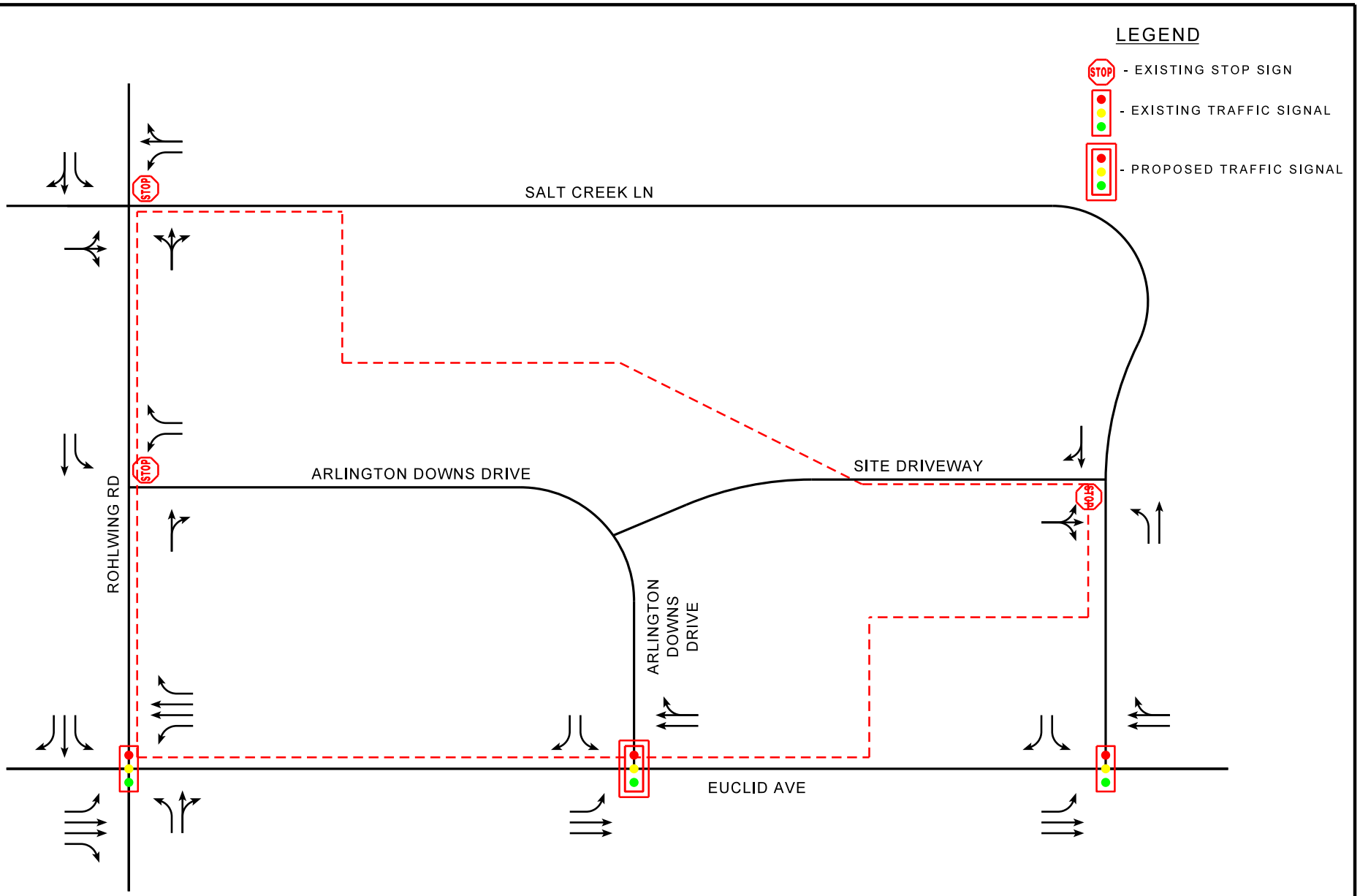
Roadway Development

There are no planned roadway improvements in the vicinity of the site that will impact the study area intersections. While the conceptual site plan does not include any new access points on Euclid Avenue, Rohlwing Road, or Salt Creek Lane, there are a several proposed modifications to the roadway network that are included with the Arlington Downs development.

Currently, Euclid Avenue consists of a four lane section at Arlington Downs Drive intersection, which widens to a five lane section at Rohlwing Road to the west and Salt Creek Lane to the east. As part of this development, Euclid Avenue will be widened to a consistent five lane section with two through lanes in each direction and a median. This will allow an eastbound left turn lane to be installed at Arlington Downs Drive. A traffic signal is warranted and proposed at Arlington Downs Drive, which is intended to be the primary access point to the site.

The PUD also includes constructing an exclusive southbound right turn lane on Rohlwing Road at Euclid Avenue. The existing lane configuration consists of a left turn lane and a shared through/right turn lane.

There are no other known roadway improvements in the area that will impact the study area intersections. The future lane configuration is illustrated in Figure 6.



ARLINGTON DOWNS

FIGURE 5
PROPOSED LANE CONFIGURATION

ARLINGTON HEIGHTS ILLINOIS

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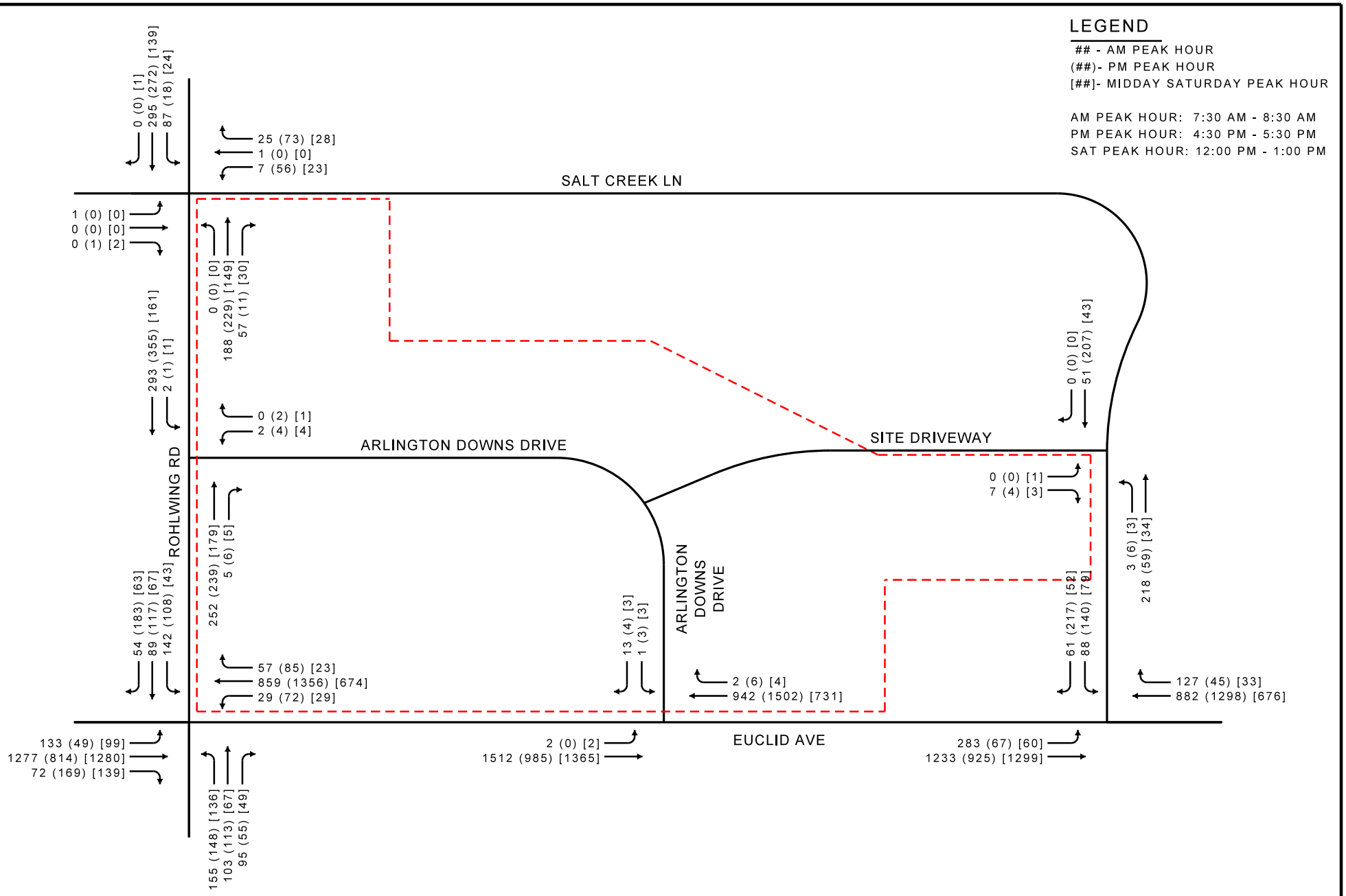


ARLINGTON DOWNS

FIGURE 6
EXISTING TRAFFIC VOLUME

ARLINGTON HEIGHTS ILLINOIS

E:\2015\15126\Drawings\Mstn\Exhibits\Figure 6 - Existing Traffic Volumes.dgn 8/20/2015 5:15:38 PM

III. TRAFFIC FORECASTS

Project Traffic Volumes

Trip Generation Estimation

The proposed development consists of a number of different land uses. Project traffic is estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition. The following land use categories are used to determine project traffic:

Apartment (220) – Apartments are rental dwelling units located within the same building with at least three other dwelling units, for example, quadraplexes and all types of apartment buildings.

Hotel (310) – Hotels are places of lodging that provide sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, limited recreational facilities (pool, fitness room), and/or other retail and service shops.

Day Care Center (595) – A day care center is a facility where care for pre-school age children is provided, normally during the daytime hours. Day care facilities generally include classrooms, offices, eating areas and playgrounds. Some centers also provide after-school care for school-age children.

Medical-Dental Office Building (720) – A medical-dental office building is a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility.

Shopping Center (820) – A shopping center is an integrated group of commercial establishments that is planned, developed, owned and managed as a unit. A shopping center's composition is related to its market area in terms of size, location and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands.

Hair Salon (918) – Hair salons are facilities that specialize in cosmetic and beauty services including hair cutting and styling, skin and nail care, and massage therapy. Hair salons may also contain spa facilities.

High-Turnover (Sit-Down) Restaurant – This land use consists of sit-down, full-service eating establishments with typical duration of stay of approximately one hour. This type of restaurant is usually moderately priced and frequently belongs to a restaurant chain. Generally, these restaurants serve lunch and dinner; they may also be open for breakfast and are sometimes open 24 hours per day. These restaurants typically

do not take reservations. Patrons commonly wait to be seated, are served by a waiter/waitress, order from menus and pay for their meal after they eat. Some facilities contained within this land use may also contain a bar area for serving food and alcoholic drinks.

Fast-Food Restaurant without Drive-Through Window (933) – This land use includes fast-food restaurants without drive-through windows. This type of restaurant is characterized by a large carry-out clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours per day) and high turnover rates for eat-in customers. These limited-service eating establishments do not provide table service. Patrons generally order at a cash register and pay before they eat.

Fast-Food Restaurant with Drive-Through Window (934) – This land use includes fast-food restaurants with drive-through windows. This type of restaurant is characterized by a large carry-out clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours per day) and high turnover rates for eat-in customers. These limited-service eating establishments do not provide table service. Patrons generally order at a cash register and pay before they eat.

ITE Trip Generation Manual assigns trip generation rates for each land use based on peak period and an independent variable. The variables are specific to each land use, and include measures such as dwelling units, rooms, students, occupants and gross floor area.

Trip Reduction – Internal Capture

In a mixed use development with complimentary land uses, it is reasonable to assume that trip interaction will occur between the uses. To account for this interaction, the methodology for estimating internally captured trips in ITE's Trip Generation Handbook is used. Internally captured trips are those made within a mixed-use development that do not access the public roadways. This results in a reduction of external trips for the site.

In the case of Arlington Downs, there are two major potential sources of internally captured trips. First, it is likely that capture will occur between the residences (apartments and hotel), shopping center, and restaurants. A second source of internally captured trips involves the waterpark. Trips between the hotel and waterpark are likely to occur, while trips between the water park and the apartments are less likely. Likewise, trips between the water park and the fast food restaurants are probable. While there may likely be interaction between the water park and the sit down restaurants and retail stores, it is harder to predict and has therefore not been included with this analysis. Therefore, the internal capture for the waterpark includes the waterpark, hotel rooms, and fast food restaurants.

The total of the internal capture excluding the water park and the internal capture including the water park represents the total trip capture of the site. The supporting internal capture trip tables for the site excluding the water park is found in Appendix B and internal capture trip tables for the water park is found in Appendix C.

Trip Reduction – Pass-by Trips

As documented in the ITE Trip Generation Manual, 9th Edition, some land uses do not typically generate all new traffic on the roadway system. The total traffic generation is a combination of pass-by trips, or traffic drawn directly from the passing traffic flow on the adjacent streets, and primary trips, which represent new traffic drawn to the roadway network. In order to assess the pass-by trips, the data published in the ITE Trip Generation Handbook was utilized to estimate the pass-by percentages for the applicable land uses. It should be noted that pass-by trip reductions do not reduce the total number of trips into and out of the site, but decreased the number of new trips on the road network.

The ITE Trip Generation Handbook provides peak hour pass-by rates for several land uses proposed in Arlington Downs, including the shopping center, high-turnover (sit-down) restaurant, and fast-food restaurant with drive-through window. It is likely that other land uses generate some pass-by trips, such as fast-food restaurant without drive-through window, and for certain time periods, such as the Saturday peak hour. However, since the Trip Generation Handbook does not publish pass-by rates for these uses and times, all other land uses and time periods are assigned as new trips.

Total Trip Generation

The total trip generation for the site consists of the ITE trip generation with the internal capture and pass-by trip reductions applied. The total trip generation of the Arlington Downs site is summarized in Table 2.

Table 2: Total Trip Generation

LUC	LAND USE	SIZE	AM			PM			SAT		
			In	Out	Total	In	Out	Total	In	Out	Total
220	**Apartment**	656 units	67	267	**334**	264	143	**407**	171	170	**341**
	Less Internal Capture:		*-18*	*-18*	*-36*	*-24*	*-24*	*-48*	*-17*	*-17*	*-34*
	Less Pass-By:		-	-	-	-	-	-	-	-	-
310	**Hotel**	161 rooms	45	33	**78**	40	41	**81**	51	50	**101**
	Less Internal Capture:		*-4*	*-4*	*-8*	*-4*	*-4*	*-8*	*-5*	*-5*	*-10*
	Less Pass-By:		-	-	-	-	-	-	-	-	-
565	**Day Care Center**	90 students	38	34	**72**	34	39	**73**	0	0	**0**
	Less Internal Capture:		-	-	-	-	-	-	-	-	-
	Less Pass-By:		-	-	-	-	-	-	-	-	-
720	**Office (Medical)**	21,600 sq. ft.	41	11	**52**	22	56	**78**	45	33	**78**
	Less Internal Capture:		-	-	-	-	-	-	-	-	-
	Less Pass-By:		-	-	-	-	-	-	-	-	-
820	**Shopping Center**	21,065 sq. ft.	11	8	**19**	37	41	**78**	53	48	**101**
	Less Internal Capture:		*-4*	*-4*	*-8*	*-12*	*-12*	*-24*	*-20*	*-20*	*-40*
	Less Pass-By:		-	-	-	*-9*	*-9*	*-18*	*-8*	*-8*	*-16*
918	**Hair Salon**	1,610 sq. ft.	2	0	**2**	0	2	**2**	3	5	**8**
	Less Internal Capture:		-	-	-	-	-	-	-	-	-
	Less Pass-By:		-	-	-	-	-	-	-	-	-
932	**High-Turnover (Sit-Down) Restaurant**	20,085 sq. ft.	102	84	**186**	99	68	**167**	77	68	**145**
	Less Internal Capture:		*-11*	*-11*	*-22*	*-19*	*-19*	*-38*	*-19*	*-19*	*-38*
	Less Pass-By:		-	-	-	*-28*	*-28*	*-56*	-	-	-
933	**Fast-Food Restaurant without Drive-Through Window**	3,770 sq. ft.	60	57	**117**	44	40	**84**	78	74	**152**
	Less Internal Capture:		*-7*	*-7*	*-14*	*-9*	*-9*	*-18*	*-19*	*-19*	*-38*
	Less Pass-By:		-	-	-	-	-	-	-	-	-
934	**Fast-Food Restaurant with Drive-Through Window**	2,670 sq. ft.	70	47	**117**	36	34	**70**	72	74	**146**
	Less Internal Capture:		*-6*	*-6*	*-12*	*-8*	*-8*	*-16*	*-19*	*-19*	*-38*
	Less Pass-By:		*-26*	*-26*	*-52*	*-14*	*-14*	*-28*	-	-	-
	Special Use - Water Park and Family Entertainment	1,160 occ.	0	0	**0**	120	40	**160**	93	93	**186**
	Less Internal Capture:		-	-	-	*-20*	*-20*	*-40*	*-34*	*-34*	*-68*
	Less Pass-By:		-	-	-	-	-	-	-	-	-
	Total Trip Generation:		**436**	**541**	**977**	**696**	**504**	**1200**	**643**	**615**	**1258**
	Less Internal Capture:		*-50*	*-50*	*-100*	*-96*	*-96*	*-192*	*-133*	*-133*	*-266*
	Total External Trips		***386***	***491***	***877***	***600***	***408***	***1008***	***510***	***482***	***992***
	Less Pass-By:		*-26*	*-26*	*-52*	*-51*	*-51*	*-102*	*-8*	*-8*	*-16*
	Total New Traffic Generated on Network:		**360**	**465**	**825**	**549**	**357**	**906**	**502**	**474**	**976**

Trip Distribution and Assignment

The direction from which traffic approaches and departs a site is a function of numerous variables, including location of residences, location of employment centers, location of commercial/retail centers, available roadway systems, location and number of access points, and level of congestion on adjacent road systems. The directional distribution of traffic generated by the site is split between new trips on the roadway network and pass-by trips, as these two categories are expected to exhibit substantial different distributions.

The directional distribution of new trips is assigned based on existing traffic patterns in the area. The highest percentage of new trips is assigned to Euclid Avenue, which is categorized as an arterial roadway. A larger proportion of trips are assigned to the west of Rohlwing Road, as many trips are expected to be drawn through the IL 53 interchange to the west. A small proportion of trips are assigned to Rohlwing Road. While some trips will originate from the residential neighborhoods to the south and the industrial area to the north, the percentage of trips will be much smaller than on Euclid Avenue. The directional distributions and assignment of new project trips is illustrated in Figure 7.

It is assumed that all pass-by trips will originate from Euclid Avenue, since this is an arterial roadway carrying largely commuter traffic. Pass-by trips are assigned evenly from the east and west. The directional distribution and assignment of pass-by trips is illustrated in Figure 8.

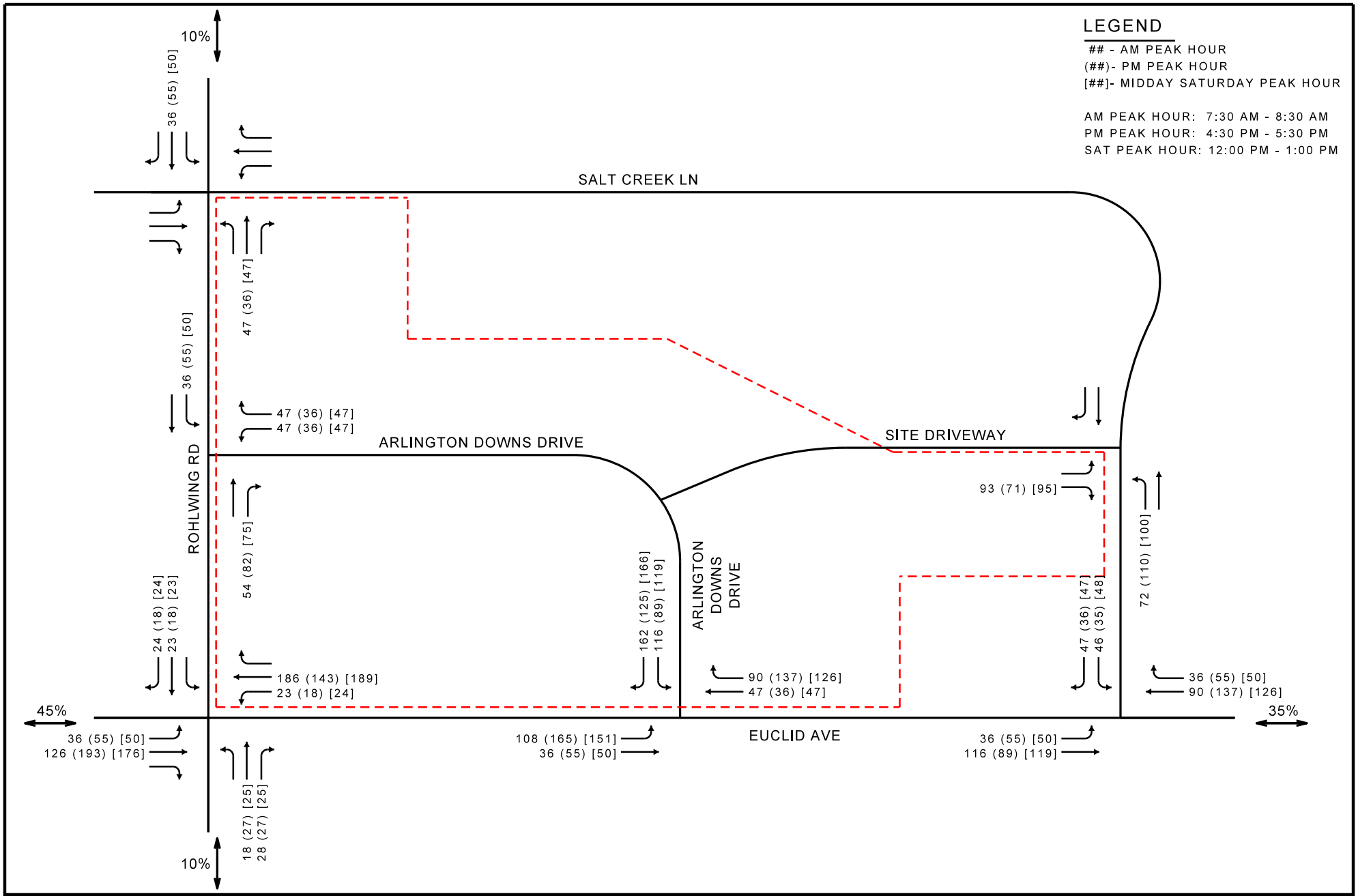
The assignments of new project trips and pass-by trips are totaled to achieve the total project trips, which is illustrated in Figure 9

Background Traffic Volumes

Background traffic volumes are estimated for the year 2022. These volumes account for future non-project related growth in the area. A growth rate of 1.0 percent per year is applied to the existing traffic volumes to estimate the future peak hour traffic. The background traffic volumes are illustrated in Figure 10.

Future Traffic Volumes

The total project trips are added to the background volume to obtain the future traffic volume for the study intersections. Future with project traffic volumes are depicted in Figure 11.



ARLINGTON DOWNS

FIGURE 7
NEW PROJECT TRIPS

ARLINGTON HEIGHTS ILLINOIS

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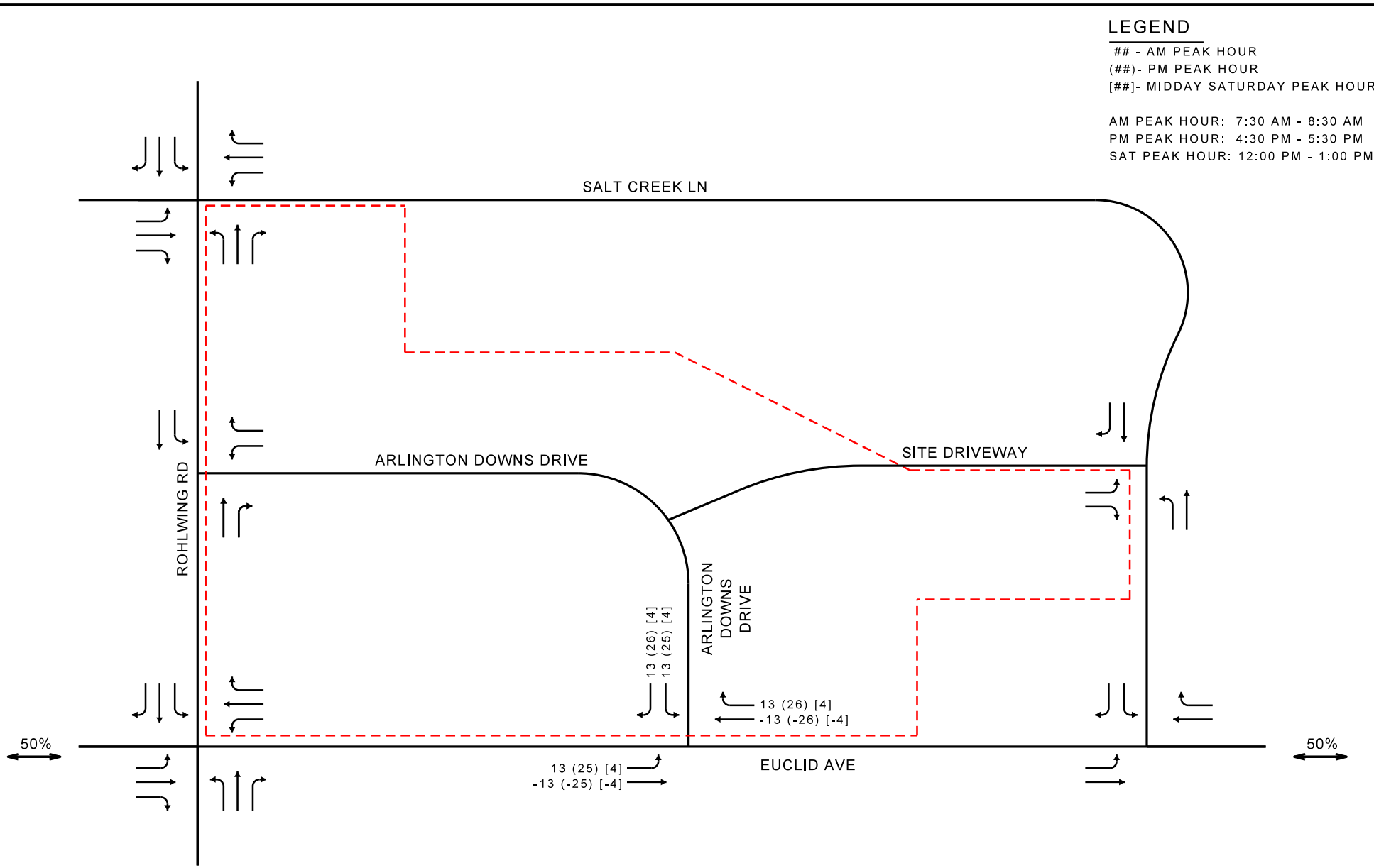

ARLINGTON DOWNS

FIGURE 8
PASS BY TRIPS

ARLINGTON HEIGHTS ILLINOIS

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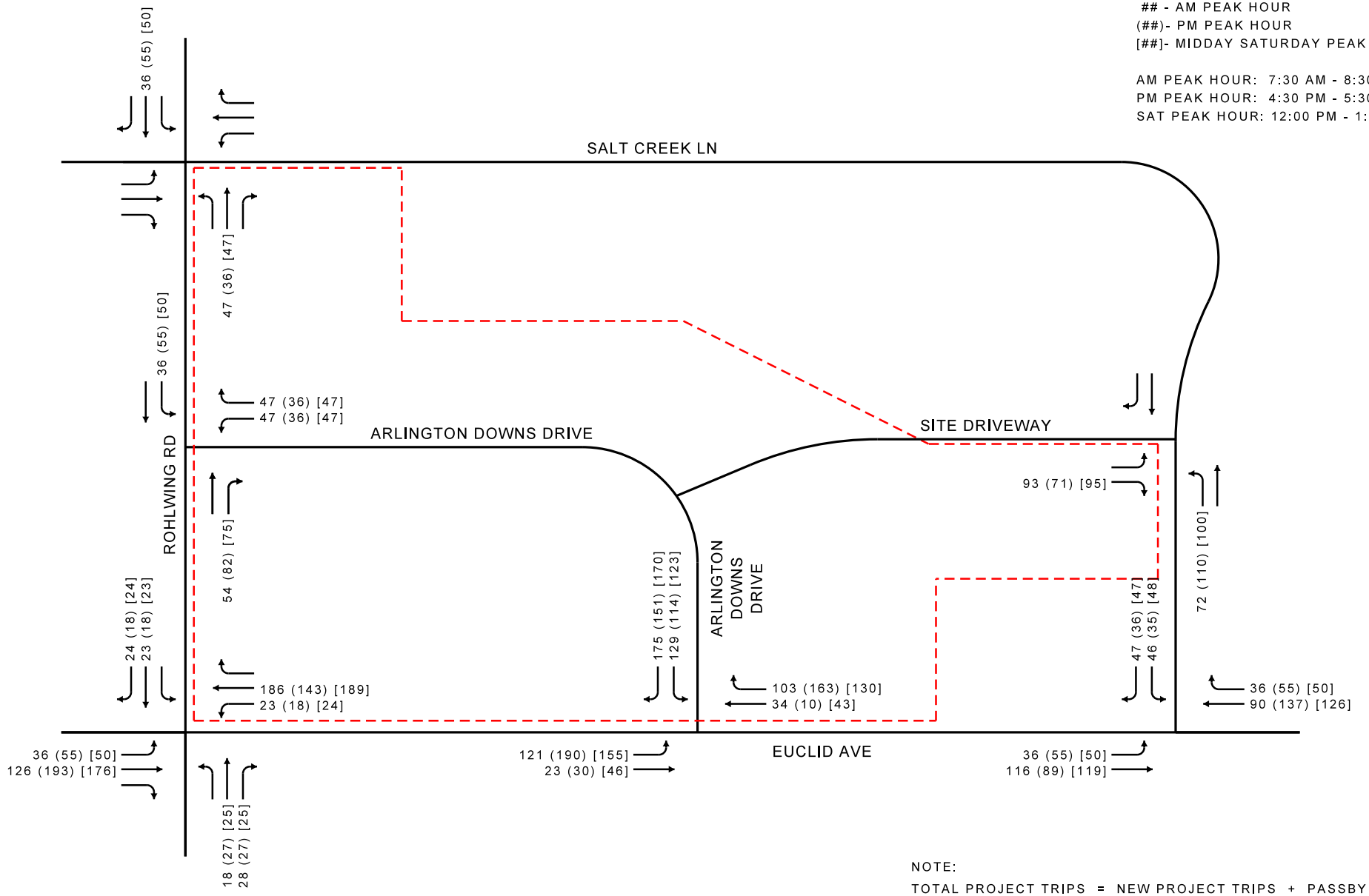

ARLINGTON DOWNS

FIGURE 9
TOTAL PROJECT TRIPS

ARLINGTON HEIGHTS ILLINOIS

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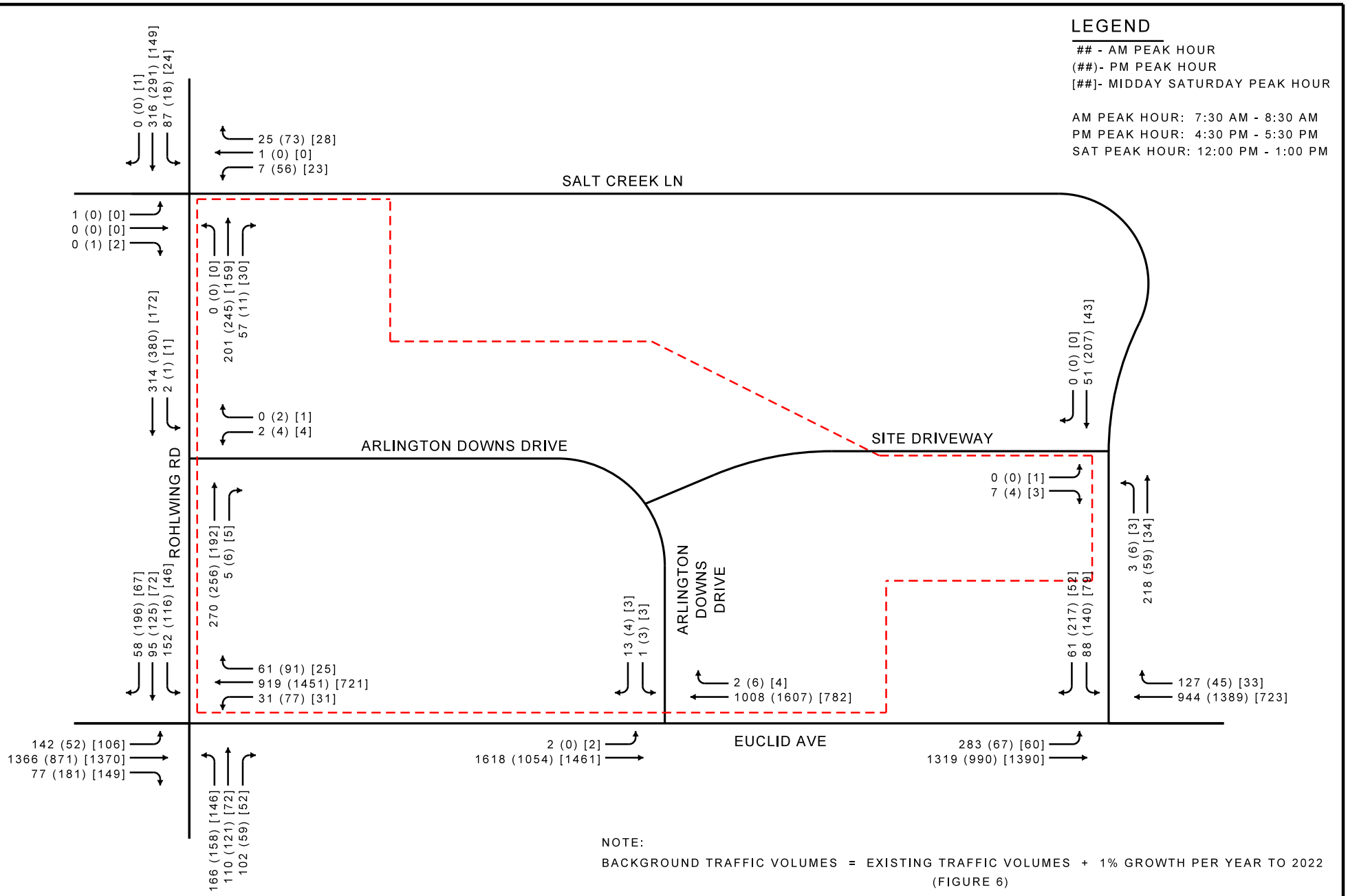

NOTE:
BACKGROUND TRAFFIC VOLUMES = EXISTING TRAFFIC VOLUMES + 1% GROWTH PER YEAR TO 2022 (FIGURE 6)

ARLINGTON DOWNS

FIGURE 10
BACKGROUND TRAFFIC VOLUME

ARLINGTON HEIGHTS ILLINOIS

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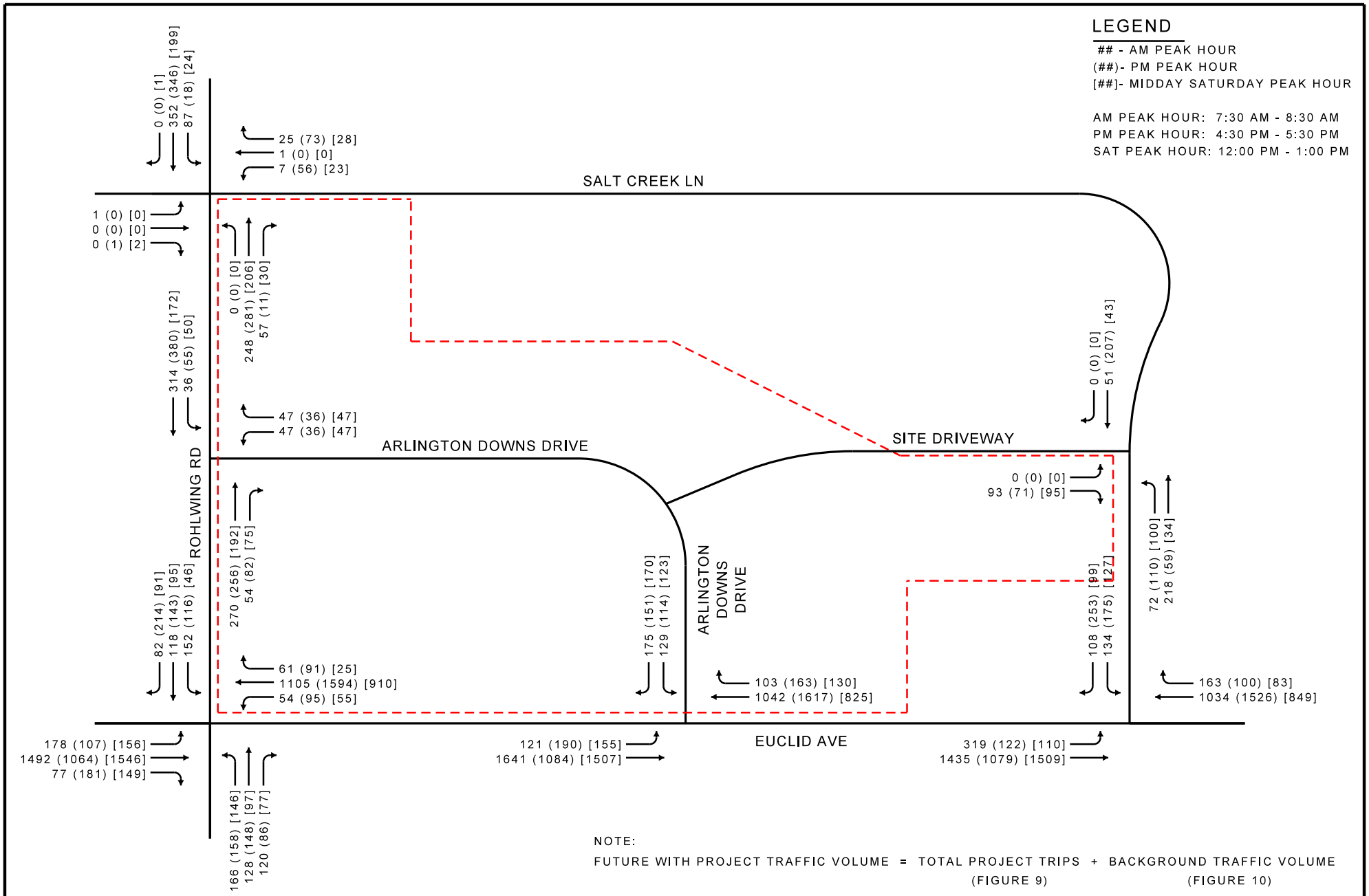


NOTE:

FUTURE WITH PROJECT TRAFFIC VOLUME = TOTAL PROJECT TRIPS (FIGURE 9) + BACKGROUND TRAFFIC VOLUME (FIGURE 10)

ARLINGTON DOWNS

FIGURE 11
FUTURE WITH PROJECT TRAFFIC VOLUME

ARLINGTON HEIGHTS ILLINOIS

E:\2015\15126\Drawings\Mstn\Exhibits\Figure 11 - Future Traffic Volumes.dgn 8/20/2015 5:15:40 PM

IV. TRAFFIC ANALYSIS

Traffic Signal Warrant Analysis

Based on the projected peak hour volumes at the intersection of Euclid Avenue at Arlington Downs Drive, a planning level traffic signal warrant analysis has been conducted. The warrant analysis follows the guidelines from the Manual on Uniform Traffic Control Devices (MUTCD) and the IDOT BDE Manual. IDOT typically requires that an intersection meet Warrant 1 – Eight Hour Vehicular Warrant to be considered for signalization. The IDOT procedure also requires a right turn reduction analysis to determine if right turn volumes should be decreased based on lane configuration and conflicting traffic volumes.

There are 265 southbound trips on Arlington Downs Drive during the future with project pm peak hour. Following the IDOT procedures for adjusting the right turn reduction results in a southbound volume of 190 vehicles per hour. The IDOT BDE Manual allows using a factor of 55 percent of the peak hour volumes to estimate the eighth highest hour of traffic, which results in a total major street volume of 1,680 and an adjusted minor street volume of 105. These projected volumes exceed the Warrant 1 – Condition B criteria. Therefore, a traffic signal meets warrants and is proposed at the intersection of Euclid Avenue and Arlington Downs Drive.

The supporting Signal Warrant Review Sheet and Right Turn Factorization Sheet are included in Appendix D.

Capacity Analysis

The operation of a facility is evaluated based on level of service (LOS) calculations obtained by analytical methods defined in the Transportation Research Board's Highway Capacity Manual (HCM), 2010 Edition. The concept of LOS is defined as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

There are six LOS letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst.

The LOS of an intersection is based on the average control delay per vehicle. For a signalized intersection, the delay is calculated for each lane group and then aggregated for each approach and for the intersection as a whole. Generally, the LOS is reported for the intersection as a whole. For an unsignalized intersection, the delay is only calculated and reported for each minor movement. An overall intersection LOS is not calculated.

There are different LOS criteria for signalized and unsignalized intersections primarily due to driver perceptions of transportation facilities. The perception is that a signalized intersection is expected to carry higher traffic volumes and experience a greater average delay than an

unsignalized intersection. The LOS criteria for signalized and unsignalized intersections are provided in Table 3.

Table 3: Level of Service Definitions for Signalized and Unsignalized Intersections

Level of Service	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)
A	≤ 10	≤ 10.0
B	> 10.0 and ≤ 20.0	> 10.0 and ≤ 15.0
C	> 20.0 and ≤ 35.0	> 15.0 and ≤ 25.0
D	> 35.0 and ≤ 55.0	> 25.0 and ≤ 35.0
E	> 55.0 and ≤ 80.0	> 35.0 and ≤ 50.0
F	> 80.0	> 50.0

Source: Transportation Research Board, *Highway Capacity Manual 2010*, National Research Council, 2010.

Typically, various state and local governments adopt operating standards varying between LOS C and LOS E, depending on the area's size and roadway characteristics. Based on our past experience in Arlington Heights, LOS D or better has been the accepted operating standard.

The study area consists of the currently signalized intersections of Euclid Avenue/Rohlwing Road and Euclid Avenue/Salt Creek Lane, and the unsignalized intersections of Euclid Avenue/ Arlington Downs Drive, Rohlwing Road/Arlington Downs Drive, Rohlwing Road/Salt Creek Lane, and Salt Creek Lane/Site Driveway. The intersection of Euclid Avenue at Arlington Downs Drive will also be signalized as part of this proposed development.

Capacity analysis is performed with Synchro 9 (build 902, revision 140), a macrosimulation tool based on methodologies found in the Highway Capacity Manual. Models are created for the weekday am, weekday pm, and Saturday midday peak hours for the existing, background, and future with project conditions. Results for the signalized intersections are summarized in Table 4. Results for the each unsignalized intersection are summarized in Tables 5 through 8. Supporting Synchro analysis worksheets for the existing, background and future with project traffic conditions are provided in Appendices E, F and G respectively.

Table 4: Signalized LOS

Time Period	Intersection	Scenario	Eastbound		Westbound		Northbound		Southbound		Intersection	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Weekday AM Peak Hour	Euclid Avenue at Rohlwing Road	Existing	23.1	C	26.8	C	41.4	D	32.1	C	27.2	C
		Background	24.3	C	25.4	C	42.5	D	32.2	C	27.5	C
		Future	31.1	C	31.9	C	43.3	D	27.3	C	32.3	C
	Euclid Avenue at Arlington Downs Drive	Existing	Unsignalized [1]		Unsignalized [1]		N/A [2]		Unsignalized [1]		Unsignalized [1]	
		Background										
		Future	4.1	A	2.5	A			38.9	D	6.8	A
	Euclid Avenue at Salt Creek Lane	Existing	4.7	A	10.7	B	N/A [2]		40.5	D	9.0	A
		Background	5.9	A	11.9	B			40.3	D	10.0	A
		Future	10.4	B	18.6	B			43.2	D	16.0	B
Weekday PM Peak Hour	Euclid Avenue at Rohlwing Road	Existing	18.9	B	19.2	B	44.5	D	39.1	D	24.0	C
		Background	19.9	B	22.7	C	47.0	D	39.8	D	26.3	C
		Future	24.3	C	25.4	C	42.8	D	21.8	C	26.3	C
	Euclid Avenue at Arlington Downs Drive	Existing	Unsignalized [1]		Unsignalized [1]		N/A [2]		Unsignalized [1]		Unsignalized [1]	
		Background										
		Future	11.3	B	11.5	B			45.5	D	14.1	B
	Euclid Avenue at Salt Creek Lane	Existing	7.2	A	12.5	B	N/A [2]		45.2	D	14.9	B
		Background	6.2	A	13.7	B			45.4	D	14.9	B
		Future	9.3	A	18.5	B			49.2	D	19.2	B
Saturday MD Peak Hour	Euclid Avenue at Rohlwing Road	Existing	17.7	B	15.1	B	37.5	D	32.8	C	19.8	B
		Background	18.1	B	16.3	B	38.8	D	33.8	C	20.6	C
		Future	22.4	C	16.6	B	38.0	D	26.7	C	22.5	C
	Euclid Avenue at Arlington Downs Drive	Existing	Unsignalized [1]		Unsignalized [1]		N/A [2]		Unsignalized [1]		Unsignalized [1]	
		Background										
		Future	5.3	A	9.1	A			34.6	C	9.5	A
	Euclid Avenue at Salt Creek Lane	Existing	2.8	A	5.8	A	N/A [2]		42.2	D	6.1	A
		Background	2.7	A	5.9	A			42.2	D	6.0	A
		Future	6.6	A	9.7	A			31.7	C	9.7	A

1. See Table 5 for unsignalized delays
2. No northbound approach (three-leg intersection)

The existing and background models use signal timings based on field observations. While similar signal timings can be used in the future with project condition, it is necessary to interconnect and coordinate the signal corridor due to the addition of the closely spaced signal at Euclid Avenue and Arlington Downs Drive.

Based on analysis of existing, background and future with project models, all signalized approaches operate at an acceptable level of service for the am, pm, and midday Saturday peak hour periods. The highest delays tend to occur on the northbound approach at Euclid Avenue and Rohlwing Road and the southbound approach at Euclid Avenue and Salt Creek Lane. Both of these approaches operate at LOS D under existing conditions. Delay increases slightly in both the background and future with project models, but the level of service remains the same.

The proposed signal on Euclid Avenue and Arlington Downs Drive also operates at an acceptable level of service in the future with project condition, with the eastbound and

westbound approaches operating at LOS C or better and the southbound approach operating at LOS D.

Table 5: Unsignalized LOS – Salt Creek Lane and Site Driveway

Time Period	Scenario	Eastbound Approach		Northbound Left	
		Delay	LOS	Delay	LOS
Weekday AM Peak Hour	Existing	8.6	A	7.3	A
	Background	8.6	A	7.3	A
	Future	8.9	A	7.4	A
Weekday PM Peak Hour	Existing	9.4	A	7.7	A
	Background	9.4	A	7.7	A
	Future	9.8	A	7.9	A
Saturday MD Peak Hour	Existing	8.6	A	7.3	A
	Background	8.6	A	7.3	A
	Future	8.9	A	7.5	A

Table 6: Unsignalized LOS – Euclid Avenue and Arlington Downs Drive

Time Period	Scenario	Eastbound Left		Southbound Left		Southbound Right	
		Delay	LOS	Delay	LOS	Delay	LOS
Weekday AM Peak Hour	Existing	10.2	B	57.2	F	12.1	B
	Background	10.5	B	70.5	F	12.5	B
	Future	To Be Signalized					
Weekday PM Peak Hour	Existing	0.0	A	93.1	F	16.0	C
	Background	0.0	A	117.8	F	17.0	C
	Future	To Be Signalized					
Saturday MD Peak Hour	Existing	9.3	A	37.8	E	10.9	B
	Background	9.5	A	44.2	E	11.2	B
	Future	To Be Signalized					

Table 7: Unsignalized LOS – Rohlwing Road and Arlington Downs Drive

Time Period	Scenario	Westbound Left		Westbound Right		Southbound Left	
		Delay	LOS	Delay	LOS	Delay	LOS
Weekday AM Peak Hour	Existing	12.6	B	0.0	A	7.8	A
	Background	13.1	B	0.0	A	7.8	A
	Future	15.8	C	10.3	B	8.1	A
Weekday PM Peak Hour	Existing	13.2	B	9.6	A	7.8	A
	Background	13.7	B	9.7	A	7.8	A
	Future	17.6	C	10.2	B	8.1	A
Saturday MD Peak Hour	Existing	10.7	B	9.2	A	7.6	A
	Background	10.9	B	9.3	A	7.6	A
	Future	13.2	B	9.8	A	7.9	A

Table 8: Unsignalized LOS – Rohlwing Road and Salt Creek Lane

Time Period	Scenario	Eastbound Approach		Westbound Left		Westbound Right		Southbound Left	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Weekday AM Peak Hour	Existing	16.8	C	16.4	C	9.9	A	8.0	A
	Background	17.5	C	17.1	C	10.0	A	8.0	A
	Future	19.4	C	18.9	C	10.3	B	8.1	A
Weekday PM Peak Hour	Existing	9.8	A	14.8	B	10.0	A	7.8	A
	Background	9.9	A	15.5	C	10.2	B	7.8	A
	Future	10.3	B	17.5	C	10.4	B	7.9	A
Saturday MD Peak Hour	Existing	9.0	A	11.5	B	9.3	A	7.6	A
	Background	9.1	A	11.7	B	9.3	A	7.7	A
	Future	9.3	A	13.0	B	9.6	A	7.8	A

In the existing condition, all minor movements at the unsignalized intersections operate at LOS C or better with the exception of the southbound approach of Arlington Downs Drive to Euclid Avenue, which operates at LOS F during the am and pm weekday peak hours and LOS E during the Saturday peak hour. This intersection meets traffic signal warrants and is proposed to be signalized. Generally, delay increases somewhat on all minor movements in the background and future with project conditions. This results in the level of service decreasing on several minor movements. However, all unsignalized approaches are maintained at LOS C or better.

Queue Length Analysis

The 95th percentile queue lengths have also been analyzed using the Synchro models. The left turn queue lengths for the am and pm peak hours are summarized in Table 8.

All left turn storage lengths where storage lanes are provided are adequate during the existing, background and future with project conditions, with the exception of the eastbound left turn on Euclid Avenue at Salt Creek Lane. The 264 foot queue that is expected in the future with project traffic scenario during the am peak hour exceeds the provided storage of 160 feet. It is recommended that this left turn lane is modified as part of the Euclid Avenue widening. The southbound approach at the same intersection also experiences a long queue with the future with project scenario during the weekday pm peak hour. The 213 foot queue may block the driveway which is approximately 190 feet from the stop bar. It may be necessary to install “Do Not Block Driveway” signs at this internal driveway.

Table 9: Left-Turn 95th Percentile Queue Lengths

Intersection	Scenario	Left Turn Queue by Approach, in Feet											
		Weekday am				Weekday pm				Saturday Midday			
		EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB
Euclid Avenue at Rohlwing Road	Existing	102	13	113	104	45	39	109	82	79	30	101	39
	Background	108	16	121	112	47	59	115	88	84	33	108	41
	Future	170	71	121	112	108	76	115	88	118	59	108	41
	Existing Storage	200	95	145	130	200	95	145	130	200	95	145	130
	Existing Taper	175	90	90	75	175	90	90	75	175	90	90	75
Euclid Avenue at Arlington Downs Drive	Existing	0	-	-	3	0	-	-	5	0	-	-	3
	Background	0	-	-	3	0	-	-	5	0	-	-	3
	Future	15	-	-	162	177	-	-	153	42	-	-	155
	Existing Storage	N/A [1]	-	-	190 [2]	N/A [1]	-	-	190 [2]	N/A [1]	-	-	190 [2]
	Existing Taper	N/A [1]	-	-	N/A [2]	N/A [1]	-	-	N/A [2]	N/A [1]	-	-	N/A [2]
Euclid Avenue at Salt Creek Lane	Existing	78	-	-	121	58	-	-	171	2	-	-	112
	Background	39	-	-	121	57	-	-	163	2	-	-	112
	Future	264	-	-	170	83	-	-	213	33	-	-	135
	Existing Storage	160	-	-	190 [2]	160	-	-	190 [2]	160	-	-	190 [2]
	Existing Taper	140	-	-	N/A [2]	140	-	-	N/A [2]	140	-	-	N/A [2]
Rohlwing Road at Arlington Downs Drive	Existing	-	0	-	0	-	0	-	0	-	0	-	0
	Background	-	0	-	0	-	0	-	0	-	0	-	0
	Future	-	10	-	3	-	10	-	5	-	8	-	3
	Existing Storage	-	190 [2]	-	N/A [3]	-	190 [2]	-	N/A [3]	-	190 [2]	-	N/A [3]
	Existing Taper	-	N/A [2]	-	N/A [3]	-	N/A [2]	-	N/A [3]	-	N/A [2]	-	N/A [3]
Rohlwing Road at Salt Creek Lane	Existing	0	3	0	5	0	13	0	0	0	3	0	3
	Background	0	3	0	5	0	13	0	0	0	3	0	3
	Future	0	3	0	5	0	15	0	0	0	5	0	3
	Existing Storage	-	N/A [4]	-	125	-	N/A [4]	-	125	-	N/A [4]	-	125
	Existing Taper	-	N/A [4]	-	120	-	N/A [4]	-	120	-	N/A [4]	-	120
Salt Creek Lane at Site Driveway	Existing	0	-	0	-	0	-	0	-	0	-	0	-
	Background	0	-	0	-	0	-	0	-	0	-	0	-
	Future	8	-	5	-	8	-	8	-	5	-	8	-
	Existing Storage	N/A [1]	-	N/A [4]	-	N/A [1]	-	N/A [4]	-	N/A [1]	-	N/A [4]	-
	Existing Taper	N/A [1]	-	N/A [4]	-	N/A [1]	-	N/A [4]	-	N/A [1]	-	N/A [4]	-

1. No turn lane provided.
2. 190 Feet of storage to first conflicting driveway
3. Currently a continuous two-way left turn lane.
4. No Lane Marking

V. CONCLUSIONS

The purpose of this study is to evaluate the traffic impacts of the proposed Arlington Downs mixed use development located near the intersection of Euclid Avenue and Rohlwing Road in Arlington Heights, Illinois. The site, which has been undergoing redevelopment for several years, currently consists of a 214-unit high-rise apartment building that recently opened and is partially occupied. A 55,000 square foot indoor water park is attached to the apartment building but is currently no in operation. A 161-room hotel with a conference space has been approved and will be under construction soon. The proposed plan for the remaining portions of the site include re-opening the indoor water with an attached family entertainment center, a second residential tower with 442 units, and a mix of retail, restaurant, and medical office land uses. The site will be accessed via the existing driveways on Euclid Avenue, Rohlwing Road, and Salt Creek Lane.

The study area consists of the signalized intersections of Euclid Avenue/Rohlwing Road and Euclid Avenue/Salt Creek Lane, and the unsignalized intersections of Euclid Avenue/Arlington Downs Drive, Rohlwing Road/ Arlington Downs Drive, Rohlwing Road/Salt Creek Lane, and Salt Creek Lane/Site Driveway. The development includes signalizing the intersection of Euclid Avenue and Arlington Downs Drive and widening Euclid Avenue to provide a five lane section between Rohlwing Road and Salt Creek Lane with an eastbound left turn lane at Arlington Downs Drive.

Capacity analysis was conducted using Synchro 9 for existing, background, and future with project conditions during the weekday am and pm, and Saturday midday peak hours. Traffic was estimated to the year 2022, which is five years beyond the anticipated opening date.

Results of the capacity analysis indicate all signalized intersections operate at an acceptable level of service in the existing condition. Delay increases somewhat in the background and future with project conditions, but all approaches continue to operate at LOS D or better. This includes the new traffic signal at Euclid Road and Arlington Downs Drive. The southbound approach operates at LOS D, which is a significant improvement over the unsignalized performance in the background condition.

With the exception of the southbound approach on Arlington Downs Drive at Euclid Avenue, which is proposed to be signalized, all other approaches at unsignalized intersections operate at LOS C or better.

All left turn queue storage lengths are adequate with the exception of the eastbound and southbound approaches at the intersection of Euclid Avenue and Salt Creek Lane. On the eastbound approach, the projected 264 foot queue during the future with project traffic scenario

am peak hour exceeds the provided storage of 160 feet. It is recommended that this left turn lane is modified as part of the Euclid Avenue widening. On the southbound approach the 213 foot queue may block the driveway which is approximately 190 feet from the stop bar. It may be necessary to install “Do Not Block Driveway” signs at this location.

APPENDIX A

EXISTING TRAFFIC COUNTS

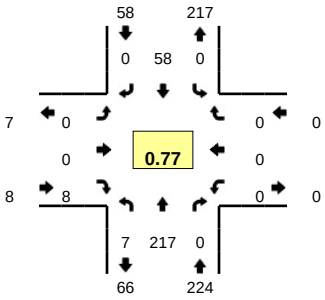
Type of peak hour being reported: Intersection Peak

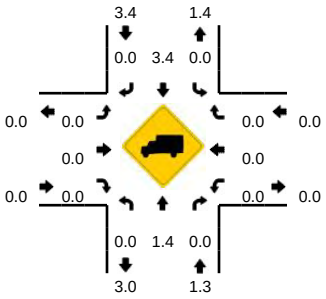
Method for determining peak hour: Total Entering Volume

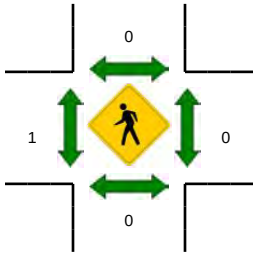
LOCATION: Salt Creek Ln -- Access Rd
CITY/STATE: Arlington Heights, IL

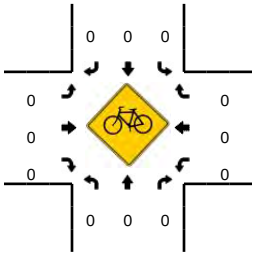
QC JOB #: 13424401
DATE: Tue, Jun 23 2015

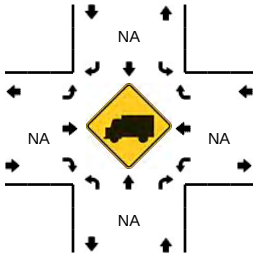
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

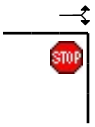


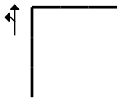


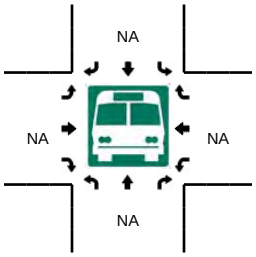












15-Min Count Period Beginning At	Salt Creek Ln (Northbound)				Salt Creek Ln (Southbound)				Access Rd (Eastbound)				Access Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	36	0	0	0	6	0	0	0	0	3	0	0	0	0	0	45	
7:15 AM	2	39	0	0	0	10	0	0	1	0	0	0	0	0	0	0	52	
7:30 AM	0	43	0	0	0	5	0	0	0	0	3	0	0	0	0	0	51	
7:45 AM	0	75	0	0	0	17	0	0	0	0	2	0	0	0	0	0	94	242
8:00 AM	0	56	0	0	0	14	0	0	0	0	2	0	0	0	0	0	72	269
8:15 AM	3	44	0	0	0	15	0	0	0	0	0	0	0	0	0	0	62	279
8:30 AM	4	42	0	0	0	12	0	0	0	0	4	0	0	0	0	0	62	290
8:45 AM	0	41	0	0	0	12	0	0	0	0	1	0	0	0	0	0	54	250

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	300	0	0	0	68	0	0	0	0	8	0	0	0	0	0	376
Heavy Trucks	0	8	0		0	4	0		0	0	0		0	0	0		12
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Salt Creek Ln -- Access Rd

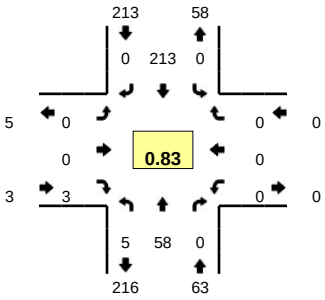
CITY/STATE: Arlington Heights, IL

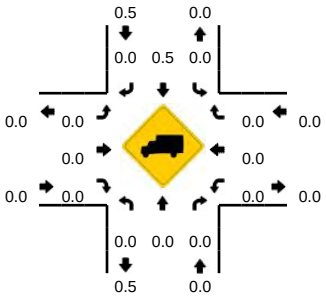
QC JOB #: 13424402

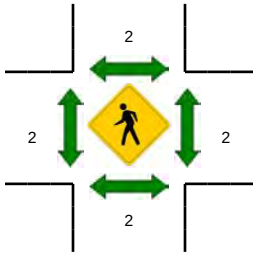
DATE: Tue, Jun 23 2015

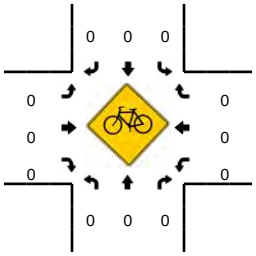
Peak-Hour: 4:15 PM -- 5:15 PM

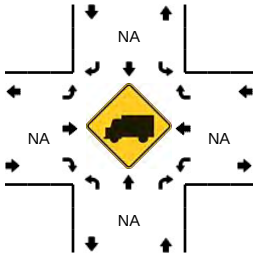
Peak 15-Min: 5:00 PM -- 5:15 PM

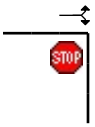


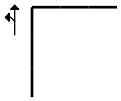


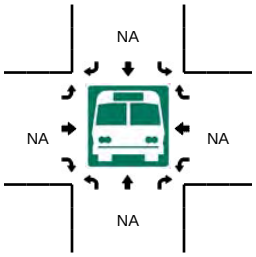












15-Min Count Period Beginning At	Salt Creek Ln (Northbound)				Salt Creek Ln (Southbound)				Access Rd (Eastbound)				Access Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	16	0	0	0	60	0	0	0	0	0	0	0	0	0	0	77	
4:15 PM	1	10	0	0	0	43	0	0	0	0	0	0	0	0	0	0	54	
4:30 PM	1	18	0	0	0	61	0	0	0	0	0	0	0	0	0	0	80	
4:45 PM	1	15	0	0	0	45	0	0	0	0	0	0	0	0	0	0	61	272
5:00 PM	2	15	0	0	0	64	0	0	0	0	3	0	0	0	0	0	84	279
5:15 PM	2	11	0	0	0	37	0	0	0	0	1	0	0	0	0	0	51	276
5:30 PM	2	5	0	0	0	34	0	0	0	0	1	0	0	0	0	0	42	238
5:45 PM	1	9	0	0	0	32	0	0	1	0	3	0	0	0	0	0	46	223

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	60	0	0	0	256	0	0	0	0	12	0	0	0	0	0	336
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Salt Creek Ln -- Access Rd

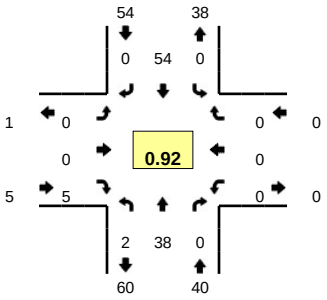
CITY/STATE: Arlington Heights, IL

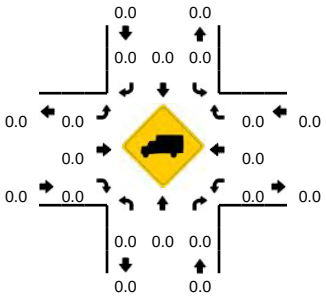
QC JOB #: 13424403

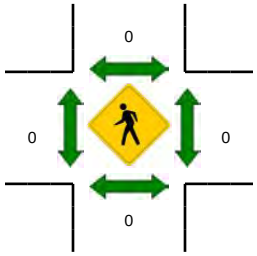
DATE: Sat, Jun 20 2015

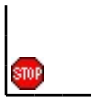
Peak-Hour: 11:30 AM -- 12:30 PM

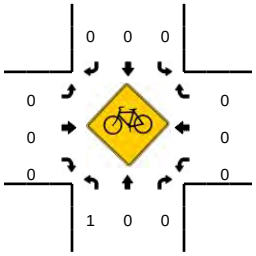
Peak 15-Min: 12:15 PM -- 12:30 PM

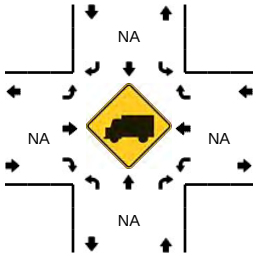


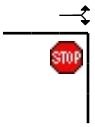


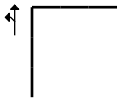


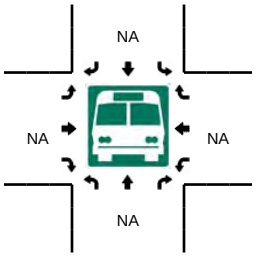












15-Min Count Period Beginning At	Salt Creek Ln (Northbound)				Salt Creek Ln (Southbound)				Access Rd (Eastbound)				Access Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	0	6	0	0	0	12	0	0	0	0	0	0	0	0	0	0	18	
11:15 AM	1	14	0	0	0	11	0	0	0	0	0	0	0	0	0	0	26	
11:30 AM	1	8	0	0	0	12	0	0	0	0	1	0	0	0	0	0	22	
11:45 AM	0	11	0	0	0	14	0	0	0	0	1	0	0	0	0	0	26	92
12:00 PM	0	10	0	0	0	12	0	0	0	0	2	0	0	0	0	0	24	98
12:15 PM	0	9	0	1	0	16	0	0	0	0	1	0	0	0	0	0	27	99
12:30 PM	0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	0	14	91
12:45 PM	3	9	0	0	0	7	0	0	1	0	0	0	0	0	0	0	20	85

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	36	0	4	0	64	0	0	0	0	4	0	0	0	0	0	108
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Pedestrians		0				0				0				0			0
Bicycles	1	0	0		0	0	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Salt Creek Ln -- Euclid Ave

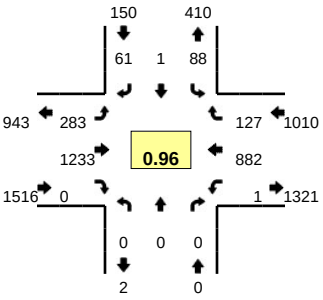
CITY/STATE: Rolling Meadows, IL

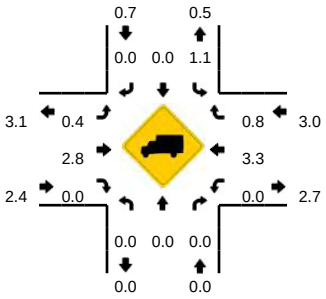
QC JOB #: 13424404

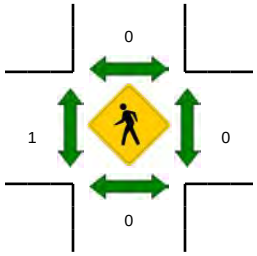
DATE: Tue, Jun 23 2015

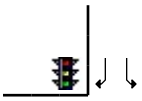
Peak-Hour: 7:30 AM -- 8:30 AM

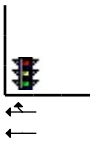
Peak 15-Min: 7:30 AM -- 7:45 AM

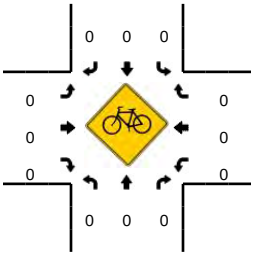


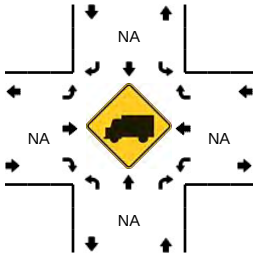


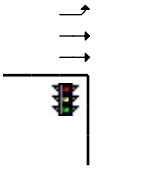


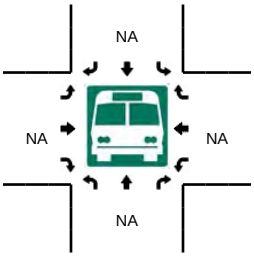












15-Min Count Period Beginning At	Salt Creek Ln (Northbound)				Salt Creek Ln (Southbound)				Euclid Ave (Eastbound)				Euclid Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	15	0	13	0	68	269	0	0	0	160	13	0	538	
7:15 AM	0	0	0	0	18	0	20	0	64	273	0	0	0	203	21	0	599	
7:30 AM	0	0	0	0	22	1	15	0	70	324	0	0	0	249	18	0	699	
7:45 AM	0	0	0	0	19	0	11	0	75	304	0	0	0	229	49	0	687	2523
8:00 AM	0	0	0	0	27	0	20	0	68	300	0	0	1	213	42	0	671	2656
8:15 AM	0	0	0	0	20	0	15	0	70	305	0	0	0	191	18	0	619	2676
8:30 AM	0	0	0	0	23	0	26	0	77	319	0	1	0	217	12	0	675	2652
8:45 AM	0	0	0	0	26	0	17	0	60	330	0	0	0	145	23	0	601	2566

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	88	4	60	0	280	1296	0	0	0	996	72	0	2796
Heavy Trucks	0	0	0		0	0	0		0	24	0		0	24	0		48
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Salt Creek Ln -- Euclid Ave

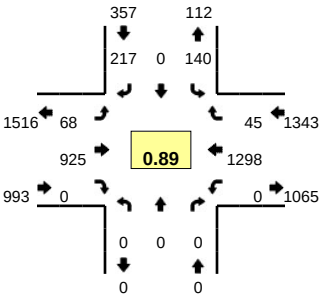
CITY/STATE: Rolling Meadows, IL

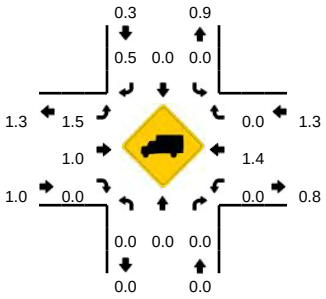
QC JOB #: 13424405

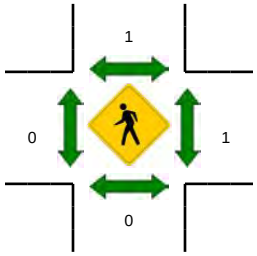
DATE: Tue, Jun 23 2015

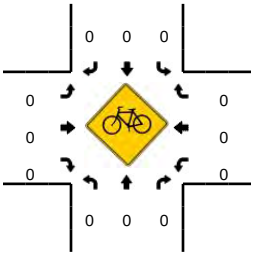
Peak-Hour: 4:30 PM -- 5:30 PM

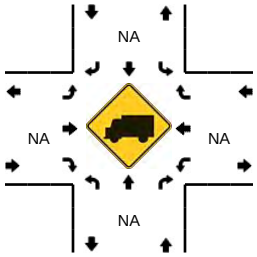
Peak 15-Min: 4:30 PM -- 4:45 PM

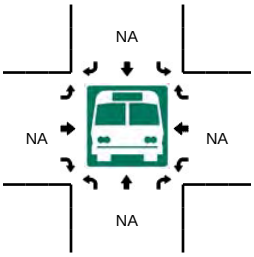












15-Min Count Period Beginning At	Salt Creek Ln (Northbound)				Salt Creek Ln (Southbound)				Euclid Ave (Eastbound)				Euclid Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	44	0	77	0	19	211	0	0	0	298	9	0	658	
4:15 PM	0	0	0	0	28	0	55	0	17	206	0	0	0	281	6	0	593	
4:30 PM	0	0	0	0	36	0	61	0	19	249	0	0	0	376	13	0	754	
4:45 PM	0	0	0	0	34	0	50	0	19	196	0	0	0	288	10	0	597	2602
5:00 PM	0	0	0	0	41	0	62	0	13	231	0	0	0	329	12	0	688	2632
5:15 PM	0	0	0	0	29	0	44	0	16	249	0	1	0	305	10	0	654	2693
5:30 PM	0	0	0	0	25	0	40	0	7	231	0	0	0	338	6	0	647	2586
5:45 PM	0	0	0	0	20	0	29	0	10	233	0	0	0	330	8	0	630	2619

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	144	0	244	0	76	996	0	0	0	1504	52	0	3016
Heavy Trucks	0	0	0		0	0	4		0	4	0		0	36	0		44
Pedestrians		0				4				0				4			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Salt Creek Ln -- Euclid Ave

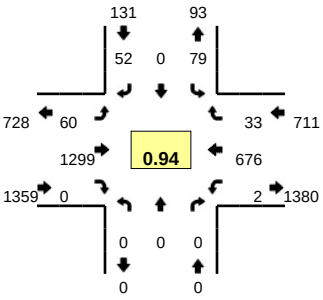
CITY/STATE: Rolling Meadows, IL

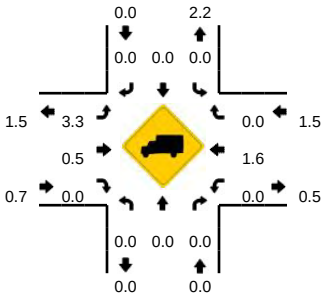
QC JOB #: 13424406

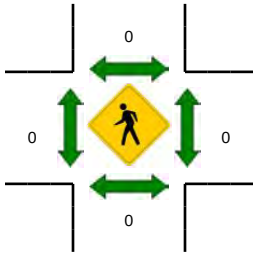
DATE: Sat, Jun 20 2015

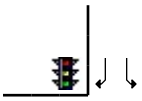
Peak-Hour: 12:00 PM -- 1:00 PM

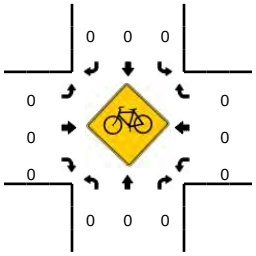
Peak 15-Min: 12:15 PM -- 12:30 PM

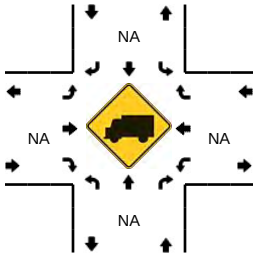


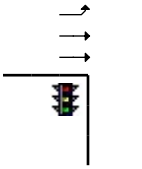


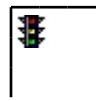


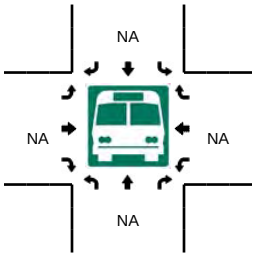












15-Min Count Period Beginning At	Salt Creek Ln (Northbound)				Salt Creek Ln (Southbound)				Euclid Ave (Eastbound)				Euclid Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	0	0	0	0	18	0	11	0	15	167	0	0	0	157	6	0	374	
11:15 AM	0	0	0	0	19	0	11	0	18	200	0	0	0	162	12	0	422	
11:30 AM	0	0	0	0	30	0	21	0	19	228	0	0	0	166	5	0	469	
11:45 AM	0	0	0	0	22	0	14	0	16	285	0	0	0	166	6	0	509	1774
12:00 PM	0	0	0	0	19	0	10	0	14	272	0	0	0	160	10	0	485	1885
12:15 PM	0	0	0	0	21	0	18	0	16	347	0	0	0	178	7	1	588	2051
12:30 PM	0	0	0	0	23	0	16	0	16	336	0	0	0	172	6	1	570	2152
12:45 PM	0	0	0	0	16	0	8	0	14	344	0	0	0	166	10	0	558	2201

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	84	0	72	0	64	1388	0	0	0	712	28	4	2352
Heavy Trucks	0	0	0		0	0	0		0	8	0		0	16	0		24
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

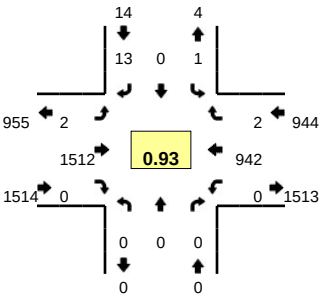
Type of peak hour being reported: Intersection Peak

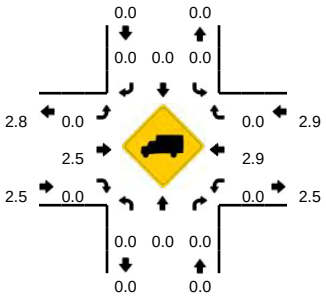
Method for determining peak hour: Total Entering Volume

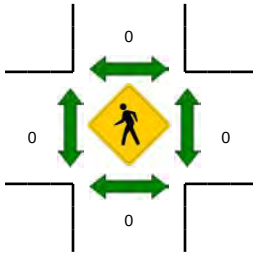
LOCATION: Access Rd -- Euclid Ave
CITY/STATE: Rolling Meadows, IL

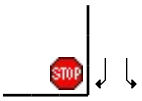
QC JOB #: 13424407
DATE: Tue, Jun 23 2015

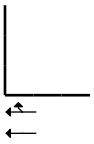
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

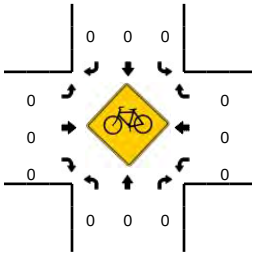


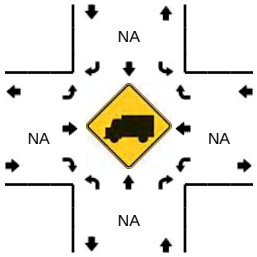


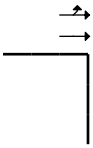


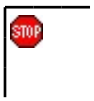


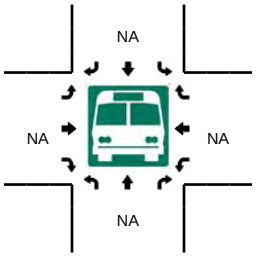












15-Min Count Period Beginning At	Access Rd (Northbound)				Access Rd (Southbound)				Euclid Ave (Eastbound)				Euclid Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	347	0	0	0	168	2	0	517	
7:15 AM	0	0	0	0	0	0	4	0	0	325	0	0	0	219	0	0	548	
7:30 AM	0	0	0	0	0	0	2	0	1	395	0	0	0	267	0	0	665	
7:45 AM	0	0	0	0	1	0	5	0	0	368	0	0	0	245	1	0	620	2350
8:00 AM	0	0	0	0	0	0	2	0	0	370	0	0	0	226	0	0	598	2431
8:15 AM	0	0	0	0	0	0	4	0	1	379	0	0	0	204	1	0	589	2472
8:30 AM	0	0	0	0	0	0	1	1	1	402	0	0	0	232	0	0	637	2444
8:45 AM	0	0	0	0	1	0	1	0	1	388	0	0	0	168	1	0	560	2384

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	8	0	4	1580	0	0	0	1068	0	0	2660
Heavy Trucks	0	0	0		0	0	0		0	28	0		0	20	0		48
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

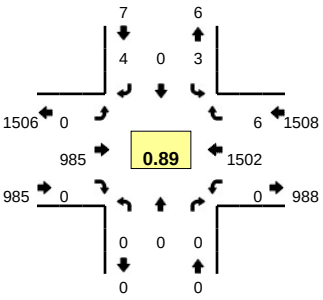
Type of peak hour being reported: Intersection Peak

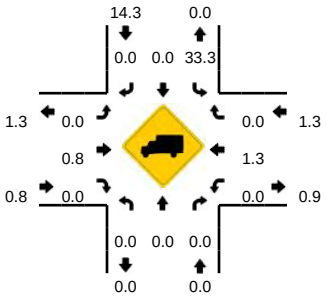
Method for determining peak hour: Total Entering Volume

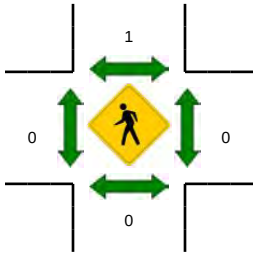
LOCATION: Access Rd -- Euclid Ave
CITY/STATE: Rolling Meadows, IL

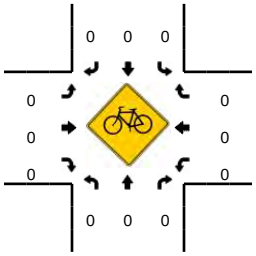
QC JOB #: 13424408
DATE: Tue, Jun 23 2015

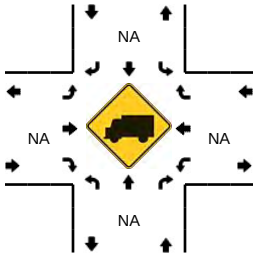
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

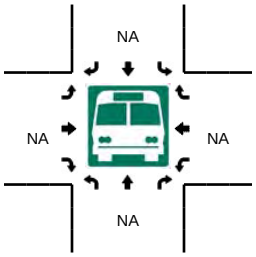












15-Min Count Period Beginning At	Access Rd (Northbound)				Access Rd (Southbound)				Euclid Ave (Eastbound)				Euclid Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	0	228	0	0	0	368	0	0	596	
4:15 PM	0	0	0	0	2	0	0	0	0	225	0	0	0	343	2	0	572	
4:30 PM	0	0	0	0	1	0	1	0	0	266	0	0	0	429	3	0	700	
4:45 PM	0	0	0	0	1	0	1	0	0	222	0	0	0	339	1	0	564	2432
5:00 PM	0	0	0	0	1	0	0	0	0	229	0	0	0	387	0	0	617	2453
5:15 PM	0	0	0	0	0	0	2	0	0	268	0	0	0	347	2	0	619	2500
5:30 PM	0	0	0	0	0	0	1	0	1	231	0	0	0	379	1	0	613	2413
5:45 PM	0	0	0	0	0	0	1	0	2	245	0	0	0	357	1	0	606	2455

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	4	0	4	0	0	1064	0	0	0	1716	12	0	2800
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	36	0		36
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

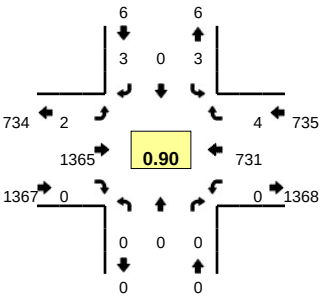
Type of peak hour being reported: Intersection Peak

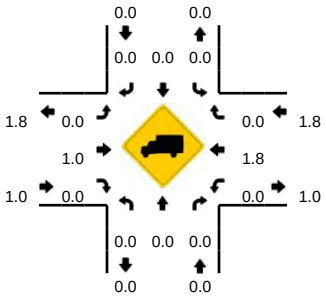
Method for determining peak hour: Total Entering Volume

LOCATION: Access Rd -- Euclid Ave
CITY/STATE: Rolling Meadows, IL

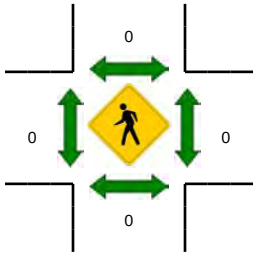
QC JOB #: 13424409
DATE: Sat, Jun 20 2015

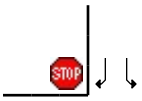
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:15 PM -- 12:30 PM

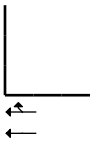


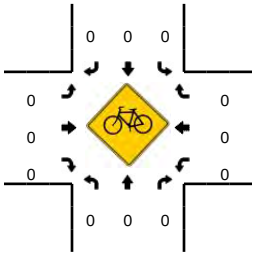


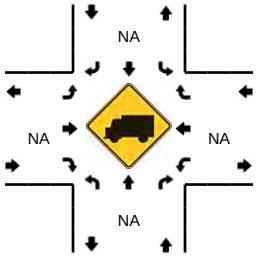
Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

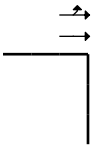


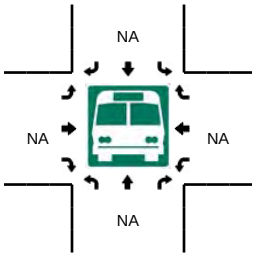












15-Min Count Period Beginning At	Access Rd (Northbound)				Access Rd (Southbound)				Euclid Ave (Eastbound)				Euclid Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	0	0	0	0	0	0	0	0	1	189	0	0	0	164	2	0	356	
11:15 AM	0	0	0	0	0	0	2	0	0	219	0	0	0	171	1	0	393	
11:30 AM	0	0	0	0	0	0	0	0	0	235	0	0	0	184	0	0	419	
11:45 AM	0	0	0	0	1	0	1	0	0	301	0	0	0	177	2	0	482	1650
12:00 PM	0	0	0	0	0	0	2	0	0	291	0	0	0	164	0	0	457	1751
12:15 PM	0	0	0	0	1	0	1	0	2	380	0	0	0	198	3	0	585	1943
12:30 PM	0	0	0	0	2	0	0	0	0	351	0	0	0	192	1	0	546	2070
12:45 PM	0	0	0	0	0	0	0	0	0	343	0	0	0	177	0	0	520	2108

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	4	0	4	0	8	1520	0	0	0	792	12	0	2340
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	24	0		36
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

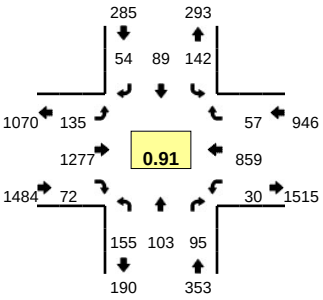
Type of peak hour being reported: Intersection Peak

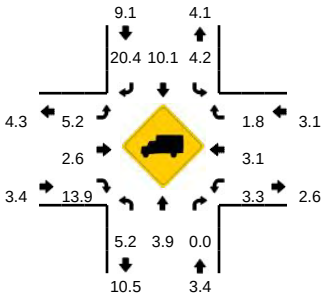
Method for determining peak hour: Total Entering Volume

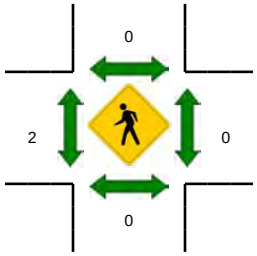
LOCATION: Rohlwing Rd -- Euclid Ave
CITY/STATE: Rolling Meadows, IL

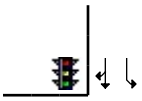
QC JOB #: 13424410
DATE: Tue, Jun 23 2015

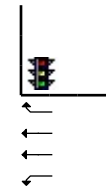
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

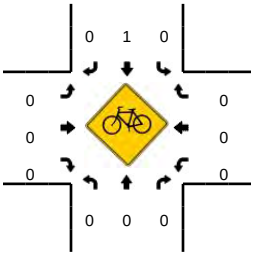


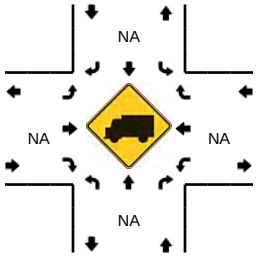


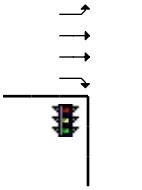


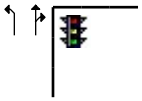


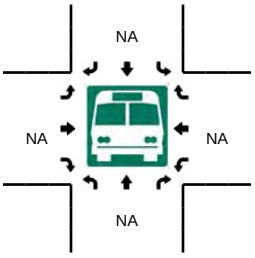












15-Min Count Period Beginning At	Rohlwing Rd (Northbound)				Rohlwing Rd (Southbound)				Euclid Ave (Eastbound)				Euclid Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	35	25	23	0	18	18	10	0	34	304	18	0	7	148	14	0	654	
7:15 AM	45	25	16	0	26	31	6	0	39	277	21	1	1	194	18	0	700	
7:30 AM	54	22	32	0	38	31	16	0	30	335	27	0	6	241	13	0	845	
7:45 AM	28	30	21	0	40	18	12	0	38	309	21	0	12	226	24	0	779	2978
8:00 AM	38	22	18	0	29	18	13	0	25	317	10	1	6	203	9	1	710	3034
8:15 AM	35	29	24	0	35	22	13	0	40	316	14	1	5	189	11	0	734	3068
8:30 AM	30	20	15	0	26	26	9	0	27	355	18	0	5	228	19	0	778	3001
8:45 AM	34	33	17	0	21	28	22	0	38	350	24	0	11	154	7	0	739	2961

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	216	88	128	0	152	124	64	0	120	1340	108	0	24	964	52	0	3380
Heavy Trucks	8	4	0		4	12	12		8	28	8		0	20	4		108
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

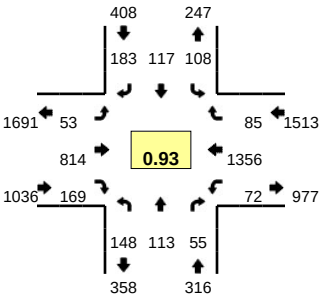
Type of peak hour being reported: Intersection Peak

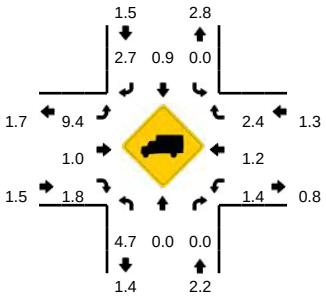
Method for determining peak hour: Total Entering Volume

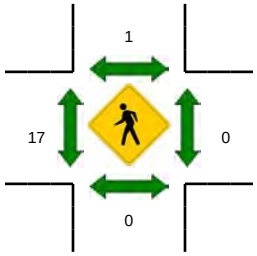
LOCATION: Rohlwing Rd -- Euclid Ave
CITY/STATE: Rolling Meadows, IL

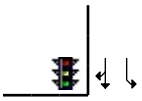
QC JOB #: 13424411
DATE: Tue, Jun 23 2015

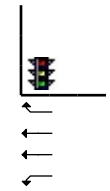
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

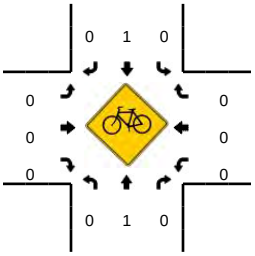


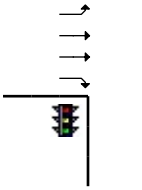


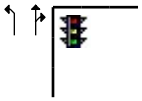


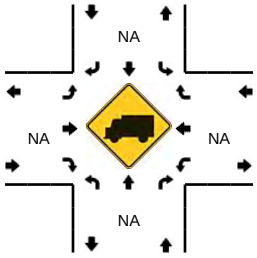


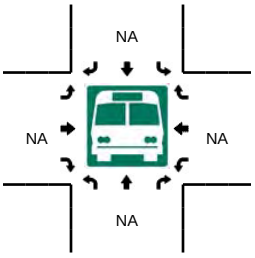












15-Min Count Period Beginning At	Rohlwing Rd (Northbound)				Rohlwing Rd (Southbound)				Euclid Ave (Eastbound)				Euclid Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	39	19	8	0	33	26	60	0	15	190	48	0	10	324	27	0	799	
4:15 PM	30	16	12	0	13	20	31	0	12	210	30	0	9	321	16	0	720	
4:30 PM	32	25	9	0	29	21	50	0	14	217	51	0	18	393	20	0	879	
4:45 PM	36	29	13	0	26	33	48	0	11	181	39	1	16	306	16	0	755	3153
5:00 PM	35	38	13	0	29	45	59	0	11	187	34	2	15	320	25	0	813	3167
5:15 PM	45	21	20	0	24	18	26	0	13	229	45	1	23	337	24	0	826	3273
5:30 PM	44	26	11	0	31	42	26	0	12	188	40	2	19	297	23	0	761	3155
5:45 PM	39	30	11	0	13	29	26	0	8	226	46	3	14	343	32	1	821	3221

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	100	36	0	116	84	200	0	56	868	204	0	72	1572	80	0	3516
Heavy Trucks	0	0	0		0	0	4		4	0	8		4	28	4		52
Pedestrians		0				4				4				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

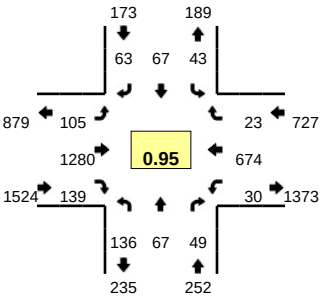
Type of peak hour being reported: Intersection Peak

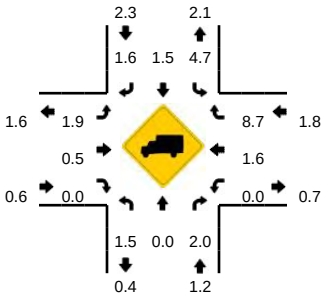
Method for determining peak hour: Total Entering Volume

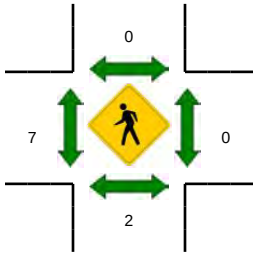
LOCATION: Rohlwing Rd -- Euclid Ave
CITY/STATE: Rolling Meadows, IL

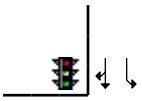
QC JOB #: 13424412
DATE: Sat, Jun 20 2015

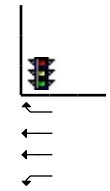
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:15 PM -- 12:30 PM

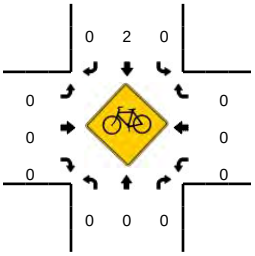


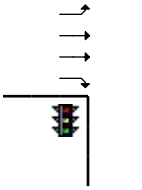


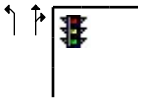


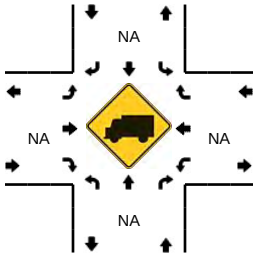


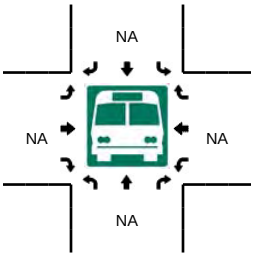












15-Min Count Period Beginning At	Rohlwing Rd (Northbound)				Rohlwing Rd (Southbound)				Euclid Ave (Eastbound)				Euclid Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	38	12	8	0	11	10	17	0	13	170	31	0	10	142	6	1	469	
11:15 AM	33	14	7	0	17	16	18	0	8	196	33	2	9	158	13	0	524	
11:30 AM	37	10	13	0	9	13	15	0	19	220	32	1	9	157	5	0	540	
11:45 AM	30	19	11	0	14	9	11	0	23	282	37	3	5	171	15	0	630	2163
12:00 PM	40	14	15	0	11	19	14	0	21	268	35	1	8	150	8	1	605	2299
12:15 PM	27	11	16	0	11	14	24	0	32	341	36	1	6	180	4	0	703	2478
12:30 PM	29	18	9	0	12	15	16	0	21	331	35	3	8	183	5	0	685	2623
12:45 PM	40	24	9	0	9	19	9	0	25	340	33	1	7	161	6	0	683	2676

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	108	44	64	0	44	56	96	0	128	1364	144	4	24	720	16	0	2812
Heavy Trucks	0	0	0		0	0	0		0	4	0		0	20	4		28
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Rohlwing Rd -- Access Rd

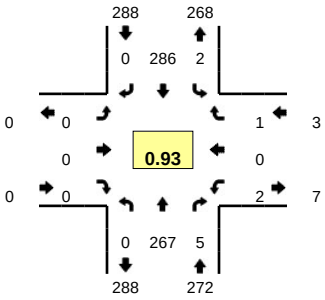
CITY/STATE: Rolling Meadows, IL

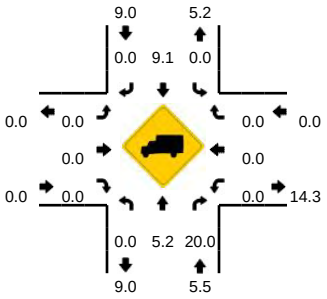
QC JOB #: 13424413

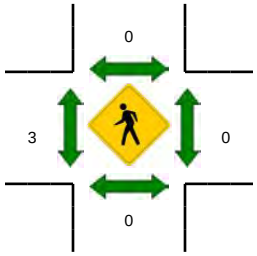
DATE: Tue, Jun 23 2015

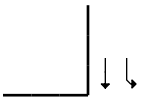
Peak-Hour: 7:15 AM -- 8:15 AM

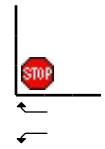
Peak 15-Min: 7:30 AM -- 7:45 AM

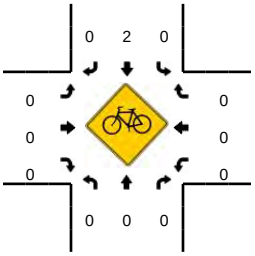


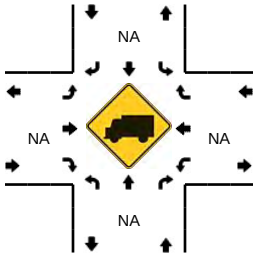


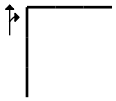


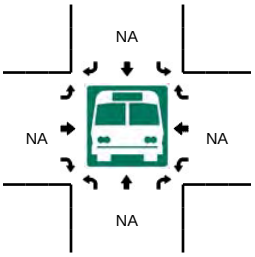












15-Min Count Period Beginning At	Rohlwing Rd (Northbound)				Rohlwing Rd (Southbound)				Access Rd (Eastbound)				Access Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	65	0	0	0	42	0	0	0	0	0	0	1	0	1	0	109	
7:15 AM	0	79	2	0	0	62	0	0	0	0	0	0	1	0	1	0	145	
7:30 AM	0	59	0	0	0	93	0	0	0	0	0	0	0	0	0	0	152	
7:45 AM	0	79	2	0	1	69	0	0	0	0	0	0	0	0	0	0	151	557
8:00 AM	0	50	1	0	1	62	0	0	0	0	0	0	1	0	0	0	115	563
8:15 AM	0	64	2	0	0	69	0	0	0	0	0	0	1	0	0	0	136	554
8:30 AM	0	57	2	0	0	69	0	0	0	0	0	0	2	0	2	0	132	534
8:45 AM	0	69	0	0	1	57	0	0	0	0	0	0	0	0	2	0	129	512

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	236	0	0	0	372	0	0	0	0	0	0	0	0	0	0	608
Heavy Trucks	0	12	0		0	24	0		0	0	0		0	0	0		36
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Rohlwing Rd -- Access Rd

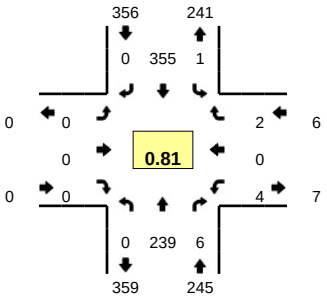
CITY/STATE: Rolling Meadows, IL

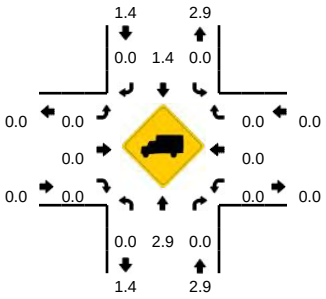
QC JOB #: 13424414

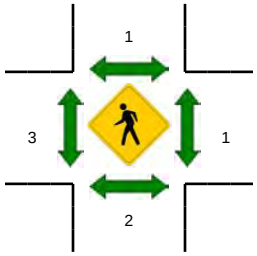
DATE: Tue, Jun 23 2015

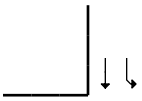
Peak-Hour: 4:30 PM -- 5:30 PM

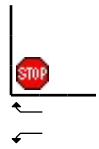
Peak 15-Min: 5:00 PM -- 5:15 PM

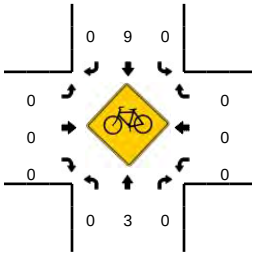


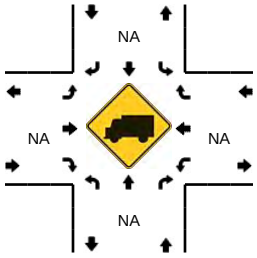


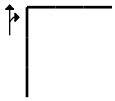


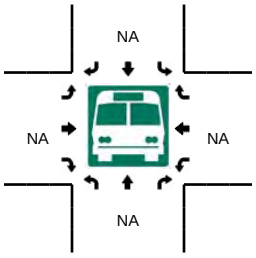












15-Min Count Period Beginning At	Rohlwing Rd (Northbound)				Rohlwing Rd (Southbound)				Access Rd (Eastbound)				Access Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	55	1	0	0	110	0	1	0	0	0	0	0	0	0	0	167	
4:15 PM	0	49	0	0	0	64	0	0	0	0	0	0	1	0	0	0	114	
4:30 PM	0	58	1	0	0	92	0	0	0	0	0	0	2	0	0	0	153	
4:45 PM	0	57	0	0	1	91	0	0	0	0	0	0	0	0	0	0	149	583
5:00 PM	0	72	3	0	0	113	0	0	0	0	0	0	0	0	0	0	188	604
5:15 PM	0	52	2	0	0	59	0	0	0	0	0	0	2	0	2	0	117	607
5:30 PM	0	53	3	0	0	92	0	0	0	0	0	0	0	0	0	0	148	602
5:45 PM	0	64	4	0	0	64	0	0	0	0	0	0	2	0	1	0	135	588

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	288	12	0	0	452	0	0	0	0	0	0	0	0	0	0	752
Heavy Trucks	0	12	0		0	4	0		0	0	0		0	0	0		16
Pedestrians		0				0				0				0			0
Bicycles	0	2	0		0	7	0		0	0	0		0	0	0		9
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Rohlwing Rd -- Access Rd

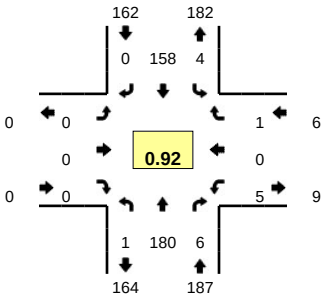
CITY/STATE: Rolling Meadows, IL

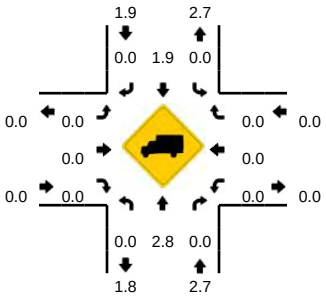
QC JOB #: 13424415

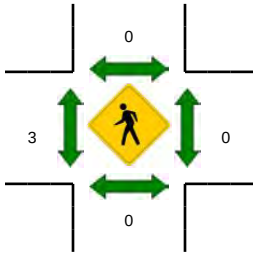
DATE: Sat, Jun 20 2015

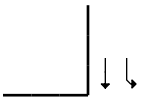
Peak-Hour: 11:45 AM -- 12:45 PM

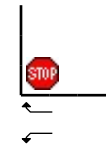
Peak 15-Min: 12:15 PM -- 12:30 PM

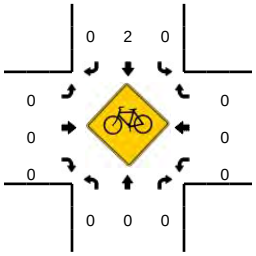


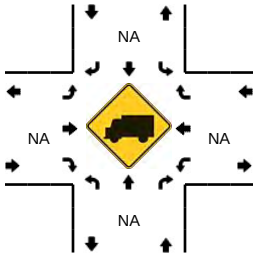


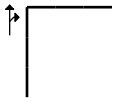


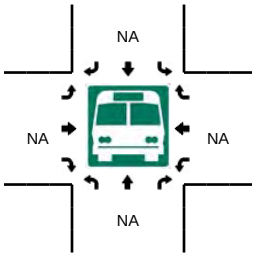












15-Min Count Period Beginning At	Rohlwing Rd (Northbound)				Rohlwing Rd (Southbound)				Access Rd (Eastbound)				Access Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	0	33	0	0	0	37	0	0	0	0	0	0	1	0	0	0	71	
11:15 AM	0	31	2	0	2	47	0	0	0	0	0	0	0	0	1	0	83	
11:30 AM	0	32	1	0	1	34	0	0	0	0	0	0	1	0	2	0	71	
11:45 AM	0	56	2	0	2	33	0	0	0	0	0	0	1	0	0	0	94	319
12:00 PM	0	41	0	0	0	42	0	0	0	0	0	0	0	0	0	0	83	331
12:15 PM	0	43	3	0	0	46	0	1	0	0	0	0	2	0	1	0	96	344
12:30 PM	0	40	1	1	1	37	0	0	0	0	0	0	2	0	0	0	82	355
12:45 PM	0	55	1	0	0	36	0	0	0	0	0	0	0	0	0	0	92	353

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	172	12	0	0	184	0	4	0	0	0	0	8	0	4	0	384
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

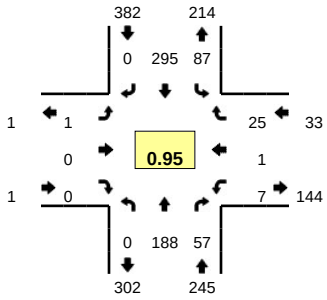
Type of peak hour being reported: Intersection Peak

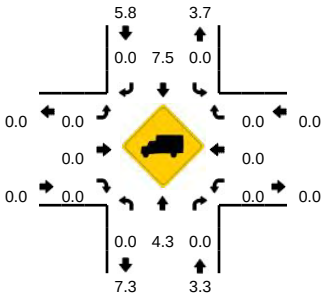
Method for determining peak hour: Total Entering Volume

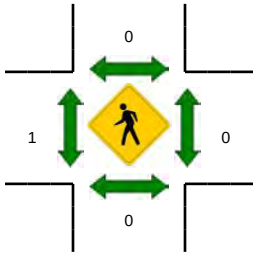
LOCATION: Rohlwing Rd -- Salt Creek Ln
CITY/STATE: Rolling Meadows, IL

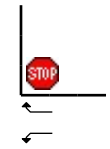
QC JOB #: 13424416
DATE: Tue, Jun 23 2015

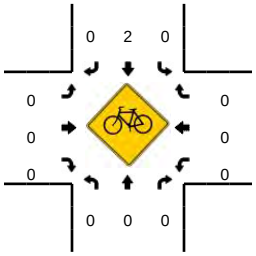
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

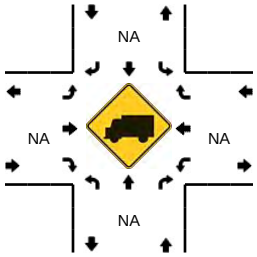


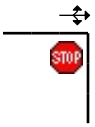


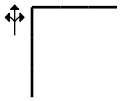


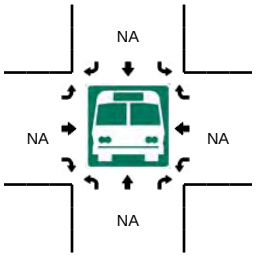












15-Min Count Period Beginning At	Rohlwing Rd (Northbound)				Rohlwing Rd (Southbound)				Salt Creek Ln (Eastbound)				Salt Creek Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	51	16	0	15	45	0	0	0	0	0	0	1	0	2	0	130	
7:15 AM	0	53	21	0	14	58	0	0	0	0	0	0	1	0	4	0	151	
7:30 AM	0	47	5	0	19	95	0	0	0	0	0	0	1	0	7	0	174	
7:45 AM	0	56	19	0	18	69	0	0	0	0	0	0	0	0	10	0	172	627
8:00 AM	0	39	13	0	25	58	0	0	0	0	0	0	4	0	8	0	147	644
8:15 AM	0	46	20	0	25	73	0	0	1	0	0	0	2	1	0	0	168	661
8:30 AM	0	46	9	0	15	71	0	0	0	0	0	0	3	0	1	0	145	632
8:45 AM	1	46	20	0	17	56	0	0	0	0	1	0	4	0	2	0	147	607

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	188	20	0	76	380	0	0	0	0	0	0	4	0	28	0	696
Heavy Trucks	0	12	0		0	24	0		0	0	0		0	0	0		36
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

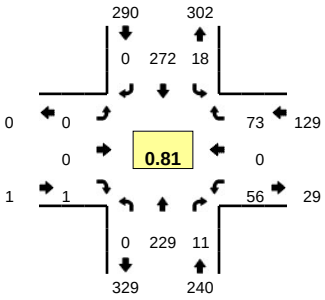
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

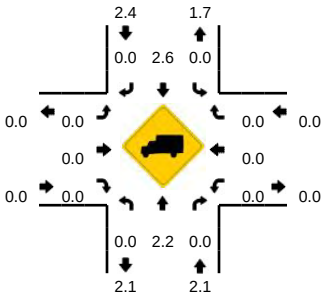
Method for determining peak hour: Total Entering Volume

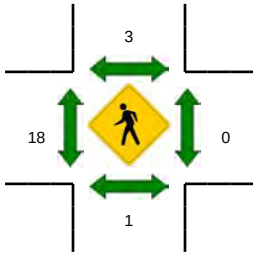
LOCATION: Rohlwing Rd -- Salt Creek Ln
CITY/STATE: Rolling Meadows, IL

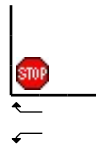
QC JOB #: 13424417
DATE: Tue, Jun 23 2015

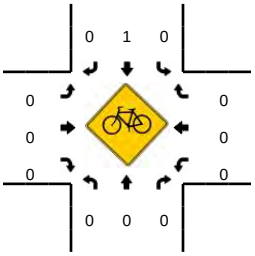


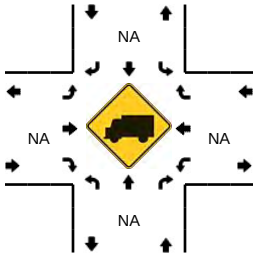
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

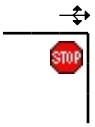


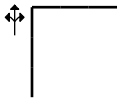


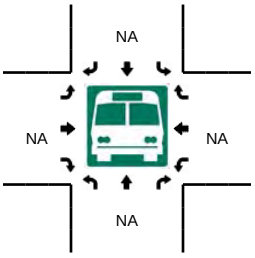












15-Min Count Period Beginning At	Rohlwing Rd (Northbound)				Rohlwing Rd (Southbound)				Salt Creek Ln (Eastbound)				Salt Creek Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	50	3	0	6	71	0	0	0	0	3	0	16	0	21	0	170	
4:15 PM	0	39	4	0	4	48	0	0	0	0	1	0	12	0	17	0	125	
4:30 PM	0	56	4	0	7	63	0	0	0	0	0	0	18	0	21	0	169	
4:45 PM	0	49	3	0	3	70	0	0	0	0	0	0	12	0	16	0	153	617
5:00 PM	0	72	2	0	4	87	0	0	0	0	0	0	16	0	22	0	203	650
5:15 PM	0	52	2	0	4	52	0	0	0	0	1	0	10	0	14	0	135	660
5:30 PM	0	49	3	0	4	69	0	0	0	0	0	0	6	0	12	0	143	634
5:45 PM	0	65	2	0	7	50	0	0	0	0	0	0	12	0	11	0	147	628

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	288	8	0	16	348	0	0	0	0	0	0	64	0	88	0	812
Heavy Trucks	0	8	0		0	4	0		0	0	0		0	0	0		12
Pedestrians		0				0				40				0			40
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

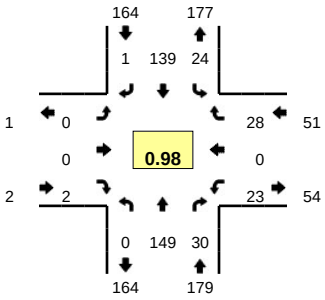
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

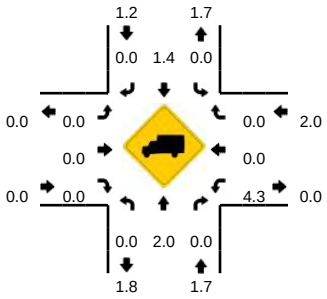
Method for determining peak hour: Total Entering Volume

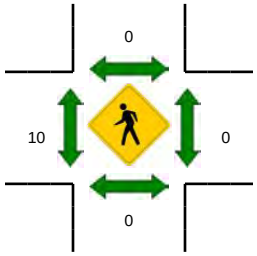
LOCATION: Rohlwing Rd -- Salt Creek Ln
CITY/STATE: Rolling Meadows, IL

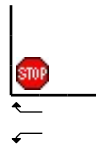
QC JOB #: 13424418
DATE: Sat, Jun 20 2015

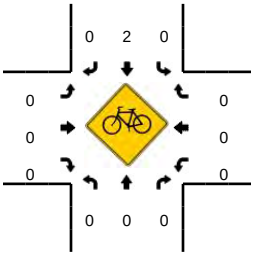


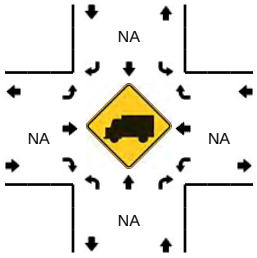
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:15 PM -- 12:30 PM

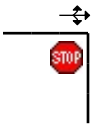


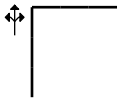


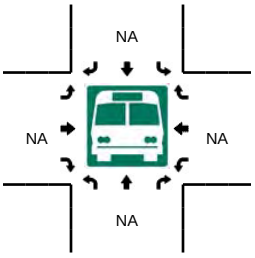












15-Min Count Period Beginning At	Rohlwing Rd (Northbound)				Rohlwing Rd (Southbound)				Salt Creek Ln (Eastbound)				Salt Creek Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:00 AM	0	28	3	0	6	30	0	0	0	0	0	0	6	0	8	0	81	
11:15 AM	0	26	6	0	6	36	0	0	0	0	1	0	9	0	8	0	92	
11:30 AM	0	23	9	0	6	24	0	0	0	0	0	0	11	0	3	0	76	
11:45 AM	1	46	7	0	5	28	0	0	0	0	2	0	3	0	8	0	100	349
12:00 PM	0	37	5	0	5	37	0	0	0	0	2	0	4	0	10	0	100	368
12:15 PM	0	36	8	0	9	36	0	0	0	0	0	0	9	0	3	0	101	377
12:30 PM	0	33	6	0	8	34	0	0	0	0	0	0	5	0	8	0	94	395
12:45 PM	0	43	11	0	2	32	1	0	0	0	0	0	5	0	7	0	101	396

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	144	32	0	36	144	0	0	0	0	0	0	36	0	12	0	404
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/30/2015 1:03 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

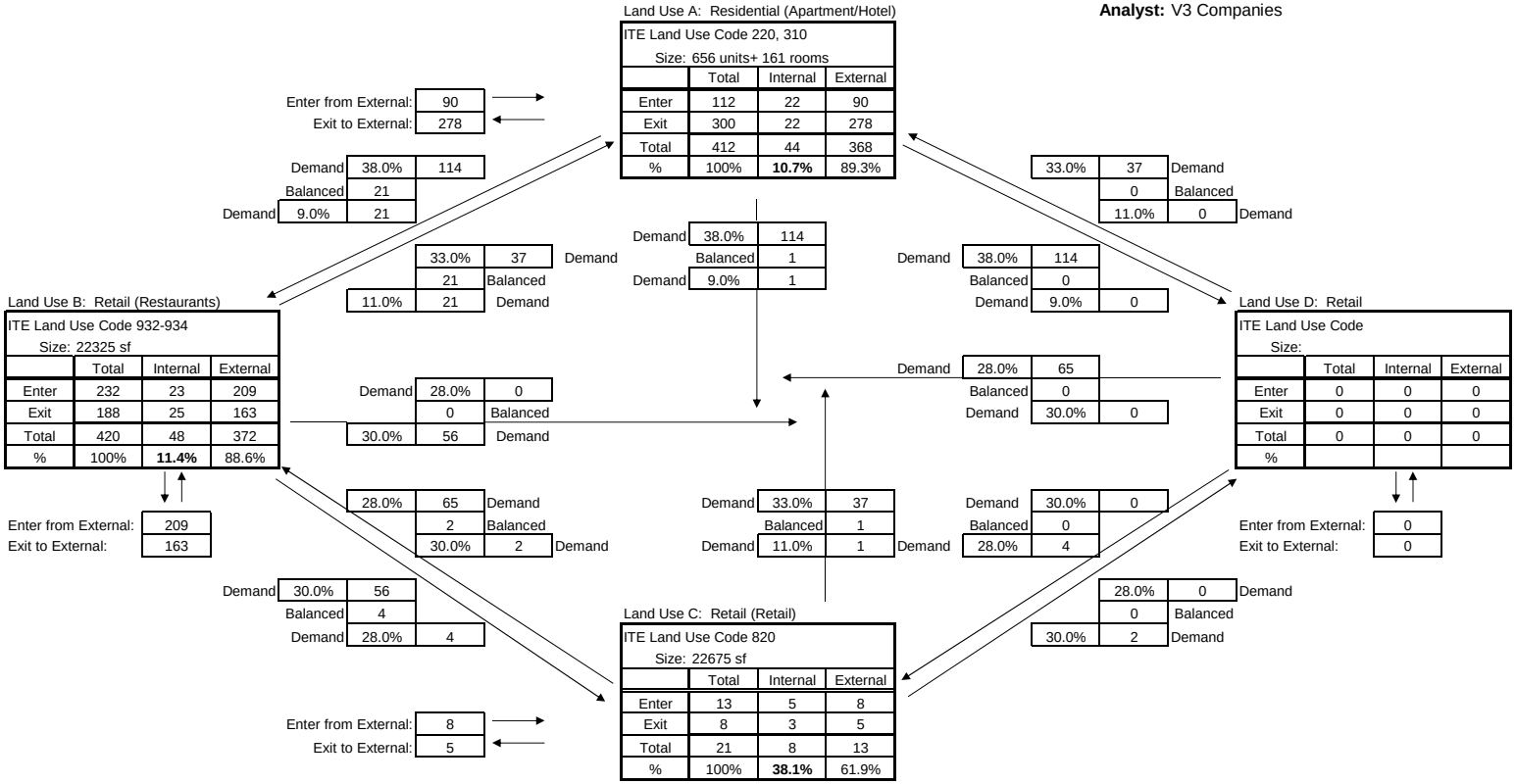
APPENDIX B

INTERNAL CAPTURE WORKSHEETS – EXCLUDING WATERPARK

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(Source: Chapter 7, ITE *Trip Generation Handbook*)

Project Number: 000015126
Project Name: Arlington Downs
Scenario: Internal Capture - Excluding Water Park
Analysis Period: AM Peak
Analyst: V3 Companies



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

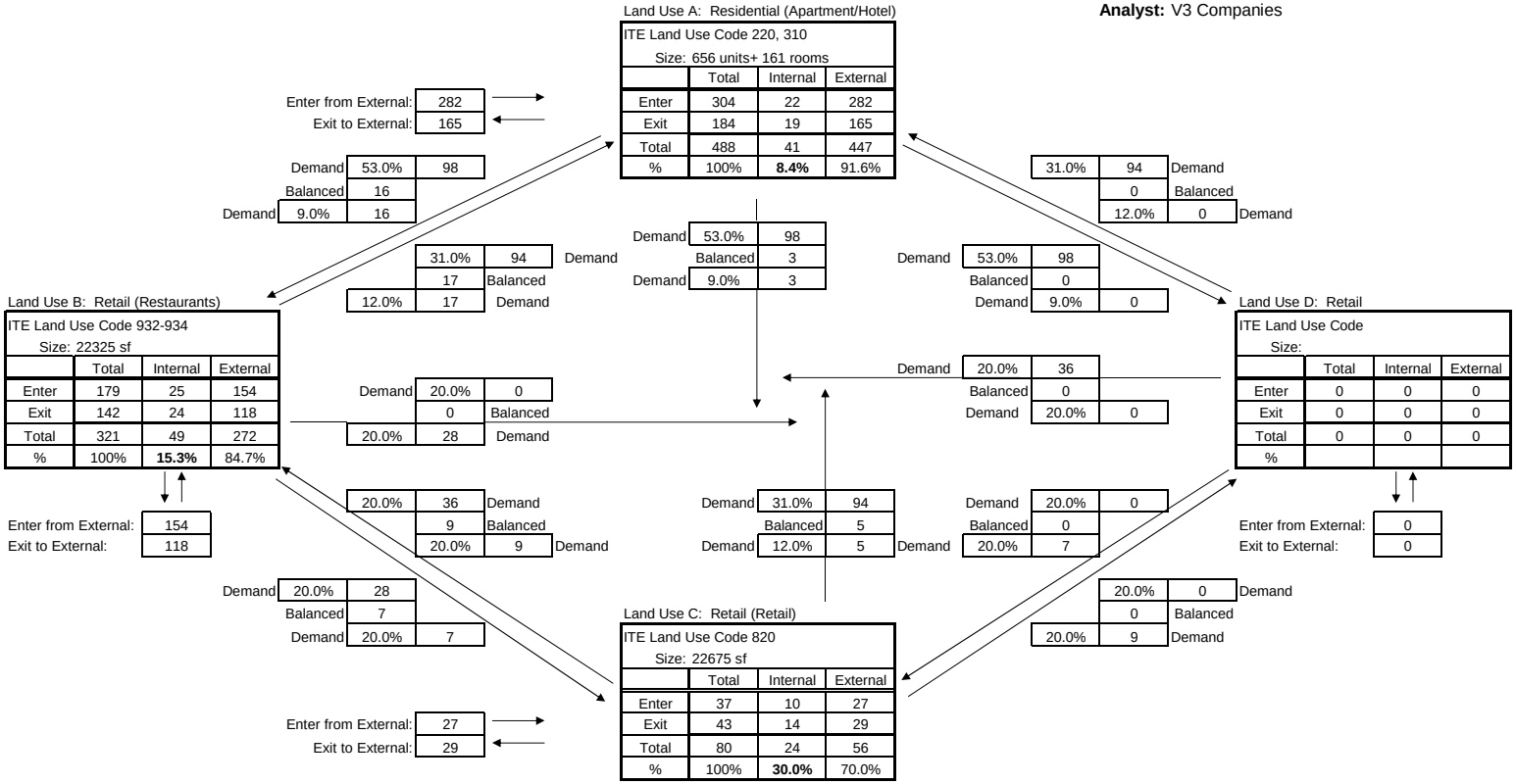
Category	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	90	209	8	0	307
Exit	278	163	5	0	446
Total	368	372	13	0	**753**
Single Use Trip Gen Estimate	412	420	21	0	**853**

Overall Internal Capture = **11.72%**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(Source: Chapter 7, ITE *Trip Generation Handbook*)

Project Number: 000015126
Project Name: Arlington Downs
Scenario: Internal Capture - Excluding Water Park
Analysis Period: PM Peak
Analyst: V3 Companies



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

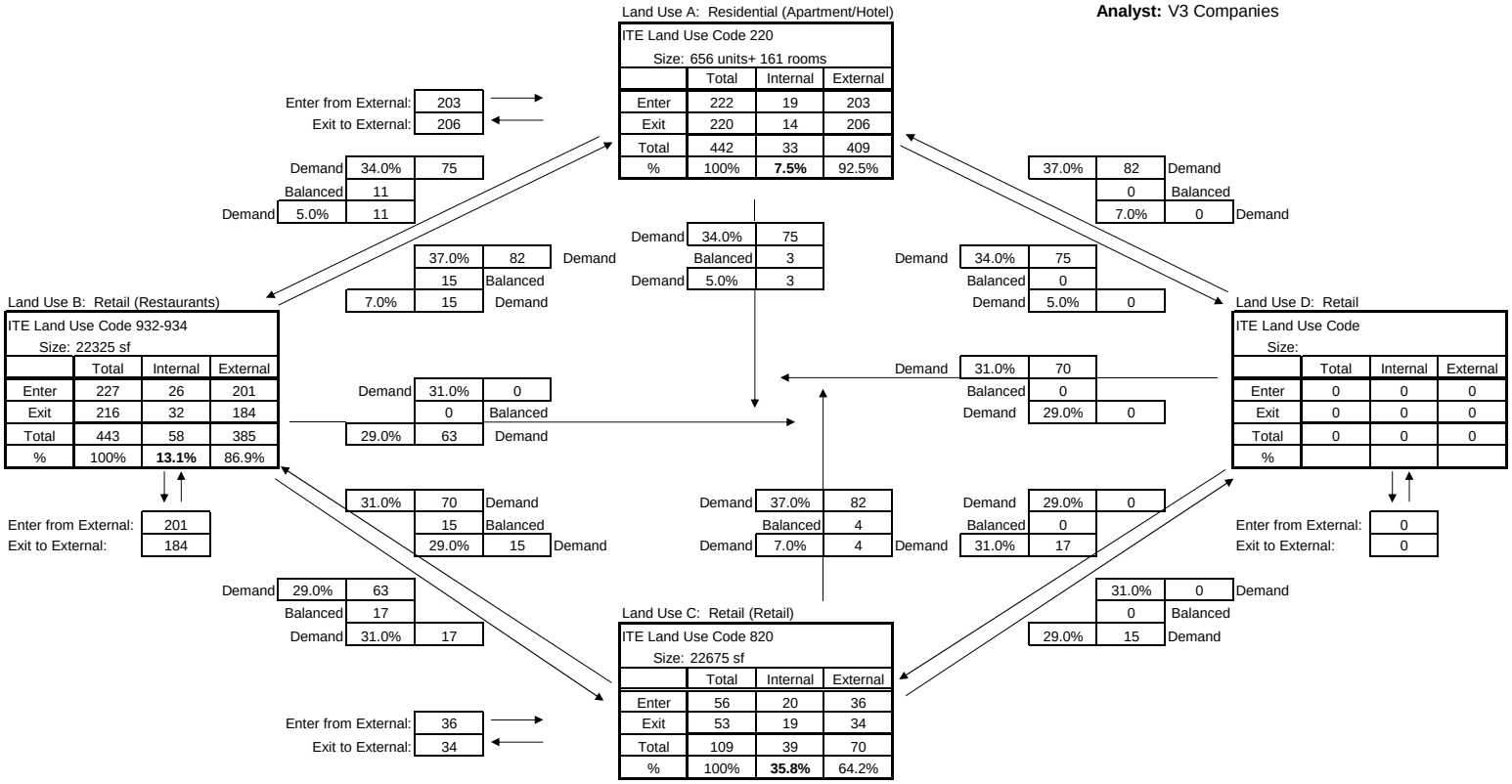
Category	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	282	154	27	0	463
Exit	165	118	29	0	312
Total	447	272	56	0	**775**
Single Use Trip Gen Estimate	488	321	80	0	**889**

Overall Internal Capture = **12.82%**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(Source: Chapter 7, ITE *Trip Generation Handbook*, June 2004)

Project Number: 000015126
Project Name: Arlington Downs
Scenario: Internal Capture - Excluding Water Park
Analysis Period: Saturday Peak
Analyst: V3 Companies



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A	B	C	D	Total
Enter	203	201	36	0	440
Exit	206	184	34	0	424
Total	409	385	70	0	**864**
Single Use Trip Gen Estimate	442	443	109	0	**994**

Overall Internal Capture = **13.08%**

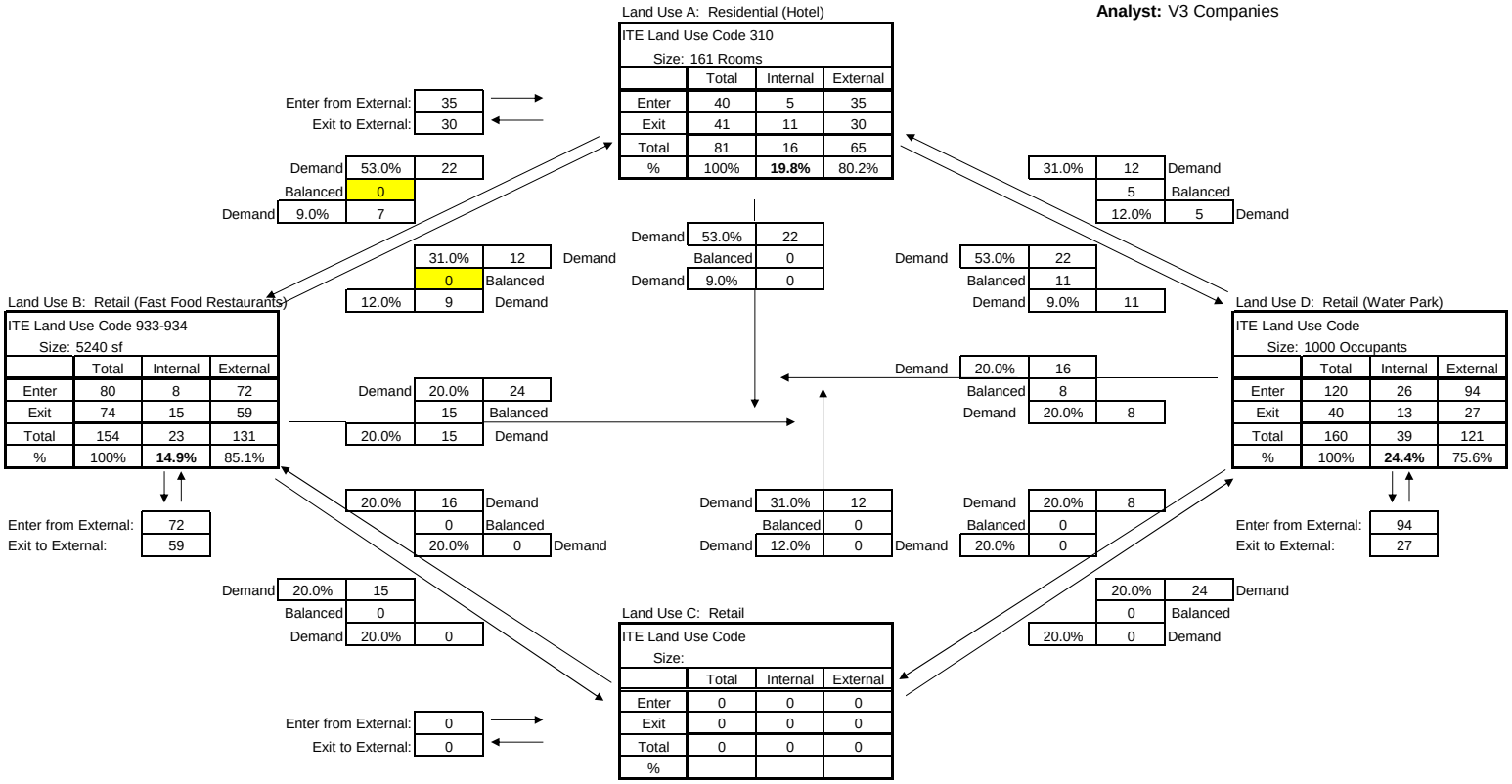
APPENDIX C

INTERNAL CAPTURE WORKSHEETS – INCLUDING WATERPARK

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(Source: Chapter 7, ITE *Trip Generation Handbook*)

Project Number: 000015126
Project Name: Arlington Downs
Scenario: Internal Capture - Water Park
Analysis Period: PM Peak
Analyst: V3 Companies



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

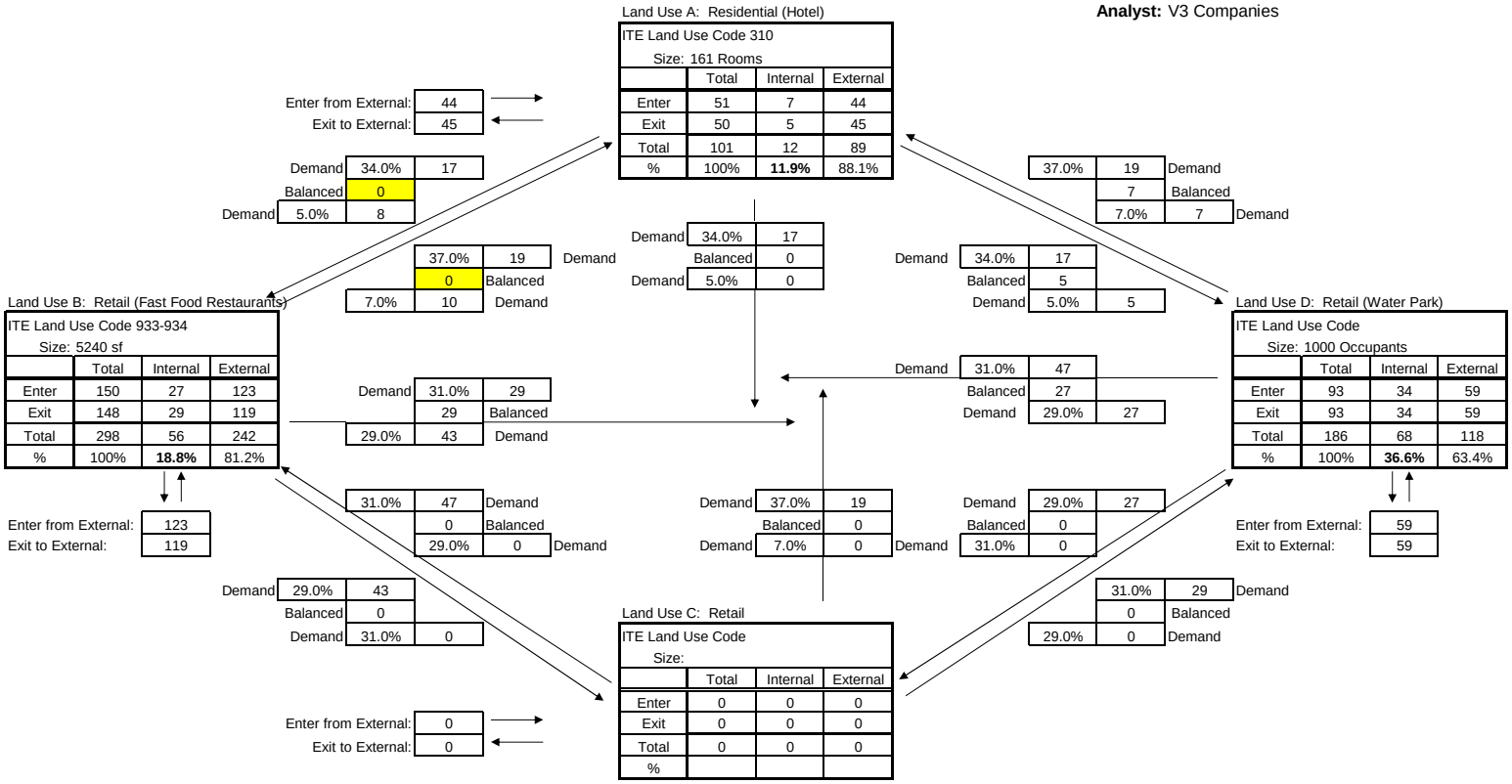
Category	Land Use A	B	C	D	Total
Enter	35	72	0	94	201
Exit	30	59	0	27	116
Total	65	131	0	121	**317**
Single Use Trip Gen Estimate	81	154	0	160	**395**

Overall Internal Capture = **19.75%**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(Source: Chapter 7, ITE *Trip Generation Handbook*, June 2004)

Project Number: 000015126
Project Name: Arlington Downs
Scenario: Internal Capture - Water Park
Analysis Period: Saturday Peak
Analyst: V3 Companies



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A	B	C	D	Total
Enter	44	123	0	59	226
Exit	45	119	0	59	223
Total	89	242	0	118	**449**
Single Use Trip Gen Estimate	101	298	0	186	**585**

Overall Internal Capture = **23.25%**

APPENDIX D

TRAFFIC SIGNAL WARRANT WORKSHEETS

SIGNAL WARRANT REVIEW SHEET

District #1

SRA: _____ YES (NO)

INTERSECTION: Euclid Avenue and Arlington Downs Drive
MUNCIPALITY: Arlington Heights, Illinois
COUNTY: Lake

Speed Limit of Major Route 40
Number of Lanes of Major Approach 2
Isolated Community with Population< 10,000 No
Number of Lanes of Minor Approach 2

HOUR BEGIN	MAJOR STREET VOLUME (both approaches)	ADJ. MINOR STREET VOLUME (higher volume approaches)	Check any hours which meet the following Warrants: WARRANT 1 A 100%	WARRANT 1 B 100%	WARRANT 1: 8 hrs of one of the Following — WARRANT 1 A/B: 8 hrs of both — 80% of A	80% of B	80% of Warrant 4
AM Peak Hour	2,907	190		X	X	X	
PM Peak Hour	3,054	190		X	X	X	
Sat MD Peak Hour	2,617	174		X	X	X	
8th Max. Hour*	1,680	105		X			

*Estimated by IDOT BDE Manual Method (55% of PM Peak Hour)

Hours Met:			8th Hour		
Volume Requirements:	MAJOR:	600	900	480	720
	MINOR:	200	100	160	80

REVIEW INFORMATION

COUNTS USED: V3
COUNT DATE(S): 6/20/2015 & 6/23/2015
DATE REVIEWED: 8/20/2015
REVIEWED BY: CAS

Comments

The intersection of Euclid Avenue and South Arlington Downs Driveway meets Warrant 1 for the assumed eighth hour volumes.

WARRANT 1 YES NO N/A
Warrant 1 is met if any of the following Conditions are met:

- CONDITION A — Minmum Vehicular Volume — YES (NO) N/A
- CONDITION B — Interruption of Continuous Traffic — (YES) NO N/A
- CONDITION A/B — Combination of Warranrts — YES (NO) N/A

WARRANT 2 — Four Hour Volume — YES NO (N/A)

WARRANT 3 — Peak Hour Volume — YES NO (N/A)

WARRANT 4 — Pedestrian Volume — YES NO (N/A)

WARRANT 5 — School Crossing — YES NO (N/A)

WARRANT 6 — Coordinated Signal System — YES NO (N/A)

WARRANT 7 — Accidents Experience — YES NO (N/A)

WARRANT 8 — Roadway Network — YES NO (N/A)

WARRANT 9 — Intersection Near a Grade Crossing — YES NO (N/A)

RIGHT TURN FACTORIZATION SHEET

INTERSECTION: Euclid Avenue and Arlington Downs Drive
MUNCIPALITY: Arlington Heights COUNTY: Cook

DIR	HOUR BEGIN	MINOR STREET STREET NAME Fisher Dr CONFIG. # 3 VOLUMES L LEFT	T THROUGH	R RIGHT	A TOTAL	CRITICAL MAINLINE APPROACH VOLUME PER LANE	BASE RIGHT TURN REDUCTION %	MAINLINE CONGESTION FACTOR %	ADJUSTED RIGHT TURN REDUCTION %	ADJUSTED RIGHT TURNS	ADJUSTED MINOR STREET VOLUME
SB	AM	129	0	175	304	572	75%	10%	65%	61	190
SB	PM	114	0	151	265	890	75%	25%	50%	76	190
SB	Sat MD	123	0	170	293	478	75%	5%	70%	51	174

MAINLINE CONGESTION FACTORS	
VOLUMES	FACTOR %
0-399	0
400-499	5
500-599	10
600-699	15
700-799	20
800-899	25
900-999	30
1000-1099	35
1100-1199	40
1200-1299	45
1300-1399	50
1400-1499	55

REVIEW INFORMATION

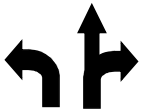
COUNTS USED: V3
COUNT DATE(S): 6/20/2015 & 6/23/2015
DATE REVIEWED: 8/20/2015
REVIEWED BY: CAS

RIGHT TURN FACTORIZATION SHEET (CONT.)

LANE CONFIGURATIONS

1

2



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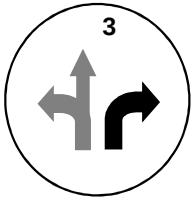
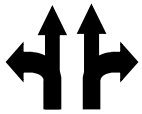


Any configuration with an exclusive right turn lane (usually up to 600 ft. long)

4

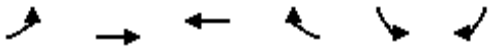


5

LEFT	THROUGH	RIGHT	TOTAL (A)	0.7A	0.35A	3T	T/3	(T+L)	(T+R)	3R	3L	T/2	T/4	BASE REDUCTION
129	0	175	304	213	106	0	0	129	175	525	387	0	0	75%
114	0	151	265	186	93	0	0	114	151	453	342	0	0	75%
123	0	170	293	205	103	0	0	123	170	510	369	0	0	75%

APPENDIX E

CAPACITY ANALYSIS WORKSHEETS
EXISTING

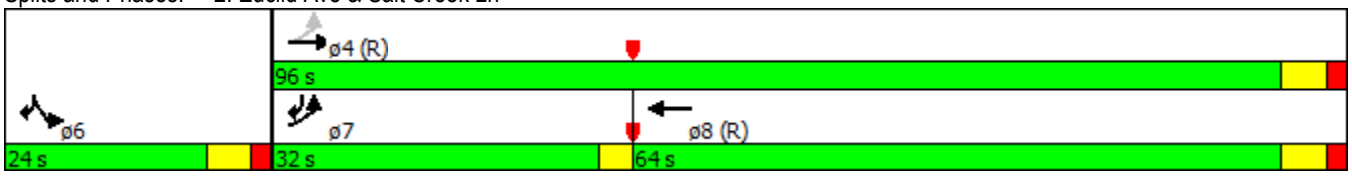


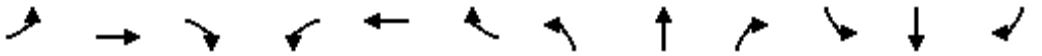
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	283	1233	882	127	88	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	200	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.981			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3472	0	1770	1583
Flt Permitted	0.224				0.950	
Satd. Flow (perm)	417	3539	3472	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			18			64
Link Speed (mph)		40	40		30	
Link Distance (ft)		842	459		580	
Travel Time (s)		14.4	7.8		13.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	298	1298	928	134	93	64
Shared Lane Traffic (%)						
Lane Group Flow (vph)	298	1298	1062	0	93	64
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	6 7
Permitted Phases	4					
Detector Phase	7	4	8		6	6 7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	9.5	24.0	35.0		24.0	
Total Split (s)	32.0	96.0	64.0		24.0	
Total Split (%)	26.7%	80.0%	53.3%		20.0%	
Maximum Green (s)	29.0	90.0	58.0		18.0	
Yellow Time (s)	3.0	4.0	4.0		4.0	
All-Red Time (s)	0.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	3.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Act Effct Green (s)	99.4	96.4	81.3		11.6	26.7
Actuated g/C Ratio	0.83	0.80	0.68		0.10	0.22

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.62	0.46	0.45		0.54	0.16
Control Delay	9.4	3.6	10.7		62.8	8.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	9.4	3.6	10.7		62.8	8.2
LOS	A	A	B		E	A
Approach Delay		4.7	10.7		40.5	
Approach LOS		A	B		D	
90th %ile Green (s)	20.5	91.9	68.4		16.1	
90th %ile Term Code	Gap	Coord	Coord		Gap	
70th %ile Green (s)	14.2	94.5	77.3		13.5	
70th %ile Term Code	Gap	Coord	Coord		Gap	
50th %ile Green (s)	9.8	96.4	83.6		11.6	
50th %ile Term Code	Gap	Coord	Coord		Gap	
30th %ile Green (s)	8.5	98.2	86.7		9.8	
30th %ile Term Code	Gap	Coord	Coord		Gap	
10th %ile Green (s)	7.2	100.9	90.7		7.1	
10th %ile Term Code	Gap	Coord	Coord		Gap	
Queue Length 50th (ft)	29	6	166		70	0
Queue Length 95th (ft)	78	10	308		121	31
Internal Link Dist (ft)		762	379		500	
Turn Bay Length (ft)	150				200	
Base Capacity (vph)	672	2842	2359		265	601
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.44	0.46	0.45		0.35	0.11

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 80 (67%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 9.0		Intersection LOS: A	
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Euclid Ave & Salt Creek Ln





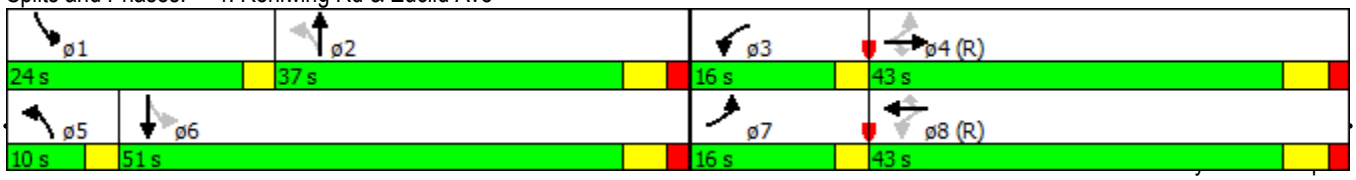
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	133	1277	72	29	859	57	155	103	95	142	89	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		225	100		200	145		0	130		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.928			0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1729	0	1770	1757	0
Flt Permitted	0.222			0.120			0.661			0.353		
Satd. Flow (perm)	414	3539	1583	224	3539	1583	1231	1729	0	658	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109			109		37			29	
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		735			790			441			644	
Travel Time (s)		12.5			13.5			10.0			11.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	140	1344	76	31	904	60	163	108	100	149	94	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	1344	76	31	904	60	163	208	0	149	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	24.0	24.0	9.5	24.0	24.0	9.5	24.0		9.5	51.0	
Total Split (s)	16.0	43.0	43.0	16.0	43.0	43.0	10.0	37.0		24.0	51.0	
Total Split (%)	13.3%	35.8%	35.8%	13.3%	35.8%	35.8%	8.3%	30.8%		20.0%	42.5%	
Maximum Green (s)	13.0	37.0	37.0	13.0	37.0	37.0	7.0	31.0		21.0	45.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0		3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	Min		None	Min	
Walk Time (s)											7.0	
Flash Dont Walk (s)											38.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)											1	
Act Effct Green (s)	75.2	66.2	66.2	69.2	59.8	59.8	30.0	20.0		38.6	25.8	
Actuated g/C Ratio	0.63	0.55	0.55	0.58	0.50	0.50	0.25	0.17		0.32	0.22	
v/c Ratio	0.38	0.69	0.08	0.15	0.51	0.07	0.48	0.65		0.45	0.38	
Control Delay	14.8	25.2	2.1	11.3	28.7	6.9	35.1	46.4		32.1	32.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	14.8	25.2	2.1	11.3	28.7	6.9	35.1	46.4		32.1	32.2	
LOS	B	C	A	B	C	A	D	D		C	C	
Approach Delay		23.1			26.9			41.4			32.1	
Approach LOS		C			C			D			C	
90th %ile Green (s)	13.0	41.9	41.9	8.1	37.0	37.0	7.0	37.1		14.9	45.0	
90th %ile Term Code	Max	Coord	Coord	Gap	Coord	Coord	Max	Hold		Gap	Ped	
70th %ile Green (s)	10.6	59.9	59.9	6.7	56.0	56.0	7.0	20.3		15.1	28.4	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	
50th %ile Green (s)	9.1	64.8	64.8	6.2	61.9	61.9	7.0	17.5		13.5	24.0	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	
30th %ile Green (s)	7.9	78.7	78.7	0.0	67.8	67.8	7.0	14.6		11.7	19.3	
30th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Gap		Gap	Hold	
10th %ile Green (s)	6.5	85.7	85.7	0.0	76.2	76.2	7.0	10.3		9.0	12.3	
10th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Gap		Gap	Hold	
Queue Length 50th (ft)	39	390	0	13	330	5	96	129		87	82	
Queue Length 95th (ft)	102	#754	16	m25	456	39	113	171		104	113	
Internal Link Dist (ft)		655			710			361			564	
Turn Bay Length (ft)	200		225	100		200	145			130		
Base Capacity (vph)	406	1952	921	306	1763	843	338	491		407	677	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.34	0.69	0.08	0.10	0.51	0.07	0.48	0.42		0.37	0.22	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green, Master Intersection
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 27.2 Intersection LOS: C
Intersection Capacity Utilization 75.2% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Rohlwing Rd & Euclid Ave



Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	7	3	218	51	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	3	229	54	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	290	54	54	0	-	0
Stage 1	54	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	701	1013	1551	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	700	1013	1551	-	-	-
Mov Cap-2 Maneuver	700	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1551	-	1013	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	1512	942	2	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1592	992	2	1	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	994	0	-	0	1793	497
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	800	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	692	-	-	-	72	519
Stage 1	-	-	-	-	319	-
Stage 2	-	-	-	-	403	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	692	-	-	-	70	519
Mov Cap-2 Maneuver	-	-	-	-	70	-
Stage 1	-	-	-	-	319	-
Stage 2	-	-	-	-	393	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	15.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	692	-	-	-	70	519
HCM Lane V/C Ratio	0.003	-	-	-	0.015	0.026
HCM Control Delay (s)	10.2	0.1	-	-	57.2	12.1
HCM Lane LOS	B	A	-	-	F	B
HCM 95th %tile Q(veh)	0	-	-	-	0	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	0	252	5	2	293
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	0	265	5	2	308

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	581	268	0	0	271	0
Stage 1	268	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	476	771	-	-	1292	-
Stage 1	777	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	475	771	-	-	1292	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	740	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	475	-	1292	-
HCM Lane V/C Ratio	-	-	0.004	-	0.002	-
HCM Control Delay (s)	-	-	12.6	0	7.8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	-	0	-

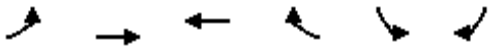
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	0	0	7	1	25	0	188	57	87	295	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	175	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	7	1	26	0	198	60	92	311	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	736	752	311	722	722	228	311	0	0	258	0	0
Stage 1	494	494	-	228	228	-	-	-	-	-	-	-
Stage 2	242	258	-	494	494	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	335	339	729	342	353	811	1249	-	-	1307	-	-
Stage 1	557	546	-	775	715	-	-	-	-	-	-	-
Stage 2	762	694	-	557	546	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	306	315	729	324	328	811	1249	-	-	1307	-	-
Mov Cap-2 Maneuver	306	315	-	324	328	-	-	-	-	-	-	-
Stage 1	557	508	-	775	715	-	-	-	-	-	-	-
Stage 2	736	694	-	518	508	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.8	11.3	0	1.8
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1249	-	-	306	324	768	1307	-	-
HCM Lane V/C Ratio	-	-	-	0.003	0.023	0.036	0.07	-	-
HCM Control Delay (s)	0	-	-	16.8	16.4	9.9	8	-	-
HCM Lane LOS	A	-	-	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	0.2	-	-

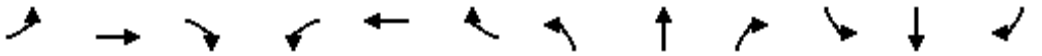


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	67	925	1298	45	140	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	200	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.995			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3522	0	1770	1583
Flt Permitted	0.135				0.950	
Satd. Flow (perm)	251	3539	3522	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			5			51
Link Speed (mph)		40	40		30	
Link Distance (ft)		842	459		580	
Travel Time (s)		14.4	7.8		13.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	71	974	1366	47	147	228
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	974	1413	0	147	228
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	6 7
Permitted Phases	4					
Detector Phase	7	4	8		6	6 7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	9.5	24.0	35.0		24.0	
Total Split (s)	16.0	94.0	78.0		26.0	
Total Split (%)	13.3%	78.3%	65.0%		21.7%	
Maximum Green (s)	13.0	88.0	72.0		20.0	
Yellow Time (s)	3.0	4.0	4.0		4.0	
All-Red Time (s)	0.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	3.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Act Effct Green (s)	94.2	91.2	81.5		16.8	26.5
Actuated g/C Ratio	0.78	0.76	0.68		0.14	0.22

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.25	0.36	0.59		0.59	0.59
Control Delay	10.1	7.0	12.5		57.3	37.4
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	10.1	7.0	12.5		57.3	37.4
LOS	B	A	B		E	D
Approach Delay		7.2	12.5		45.2	
Approach LOS		A	B		D	
90th %ile Green (s)	8.1	83.4	72.3		24.6	
90th %ile Term Code	Gap	Coord	Coord		Gap	
70th %ile Green (s)	7.1	88.6	78.5		19.4	
70th %ile Term Code	Gap	Coord	Coord		Gap	
50th %ile Green (s)	6.5	91.6	82.1		16.4	
50th %ile Term Code	Gap	Coord	Coord		Gap	
30th %ile Green (s)	6.1	94.2	85.1		13.8	
30th %ile Term Code	Gap	Coord	Coord		Gap	
10th %ile Green (s)	5.7	98.1	89.4		9.9	
10th %ile Term Code	Gap	Coord	Coord		Gap	
Queue Length 50th (ft)	8	87	274		109	124
Queue Length 95th (ft)	61	254	434		164	188
Internal Link Dist (ft)		762	379		500	
Turn Bay Length (ft)	150				200	
Base Capacity (vph)	361	2716	2393		308	450
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.20	0.36	0.59		0.48	0.51

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 109 (91%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 14.9		Intersection LOS: B	
Intersection Capacity Utilization 62.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Euclid Ave & Salt Creek Ln



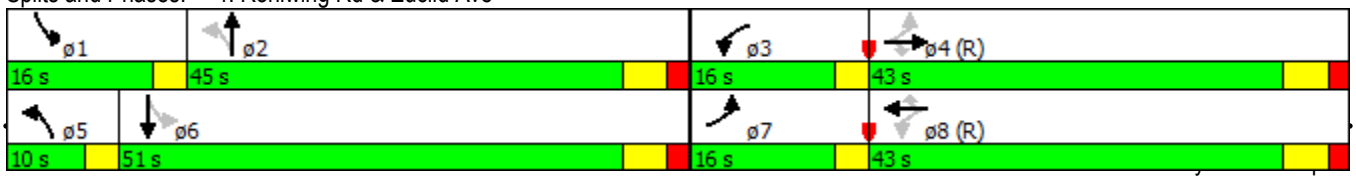
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	814	169	72	1356	85	148	113	55	108	117	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		225	100		200	145		0	130		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.951			0.908	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1771	0	1770	1691	0
Flt Permitted	0.085			0.257			0.310			0.447		
Satd. Flow (perm)	158	3539	1583	479	3539	1583	577	1771	0	833	1691	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			171			109		22			75	
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		735			790			441			644	
Travel Time (s)		12.5			13.5			10.0			11.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	857	178	76	1427	89	156	119	58	114	123	193
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	857	178	76	1427	89	156	177	0	114	316	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	24.0	24.0	9.5	24.0	24.0	9.5	24.0		9.5	51.0	
Total Split (s)	16.0	43.0	43.0	16.0	43.0	43.0	10.0	45.0		16.0	51.0	
Total Split (%)	13.3%	35.8%	35.8%	13.3%	35.8%	35.8%	8.3%	37.5%		13.3%	42.5%	
Maximum Green (s)	13.0	37.0	37.0	13.0	37.0	37.0	7.0	39.0		13.0	45.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0		3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	Min		None	Min	
Walk Time (s)											7.0	
Flash Dont Walk (s)											38.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)											2	
Act Effct Green (s)	72.0	63.0	63.0	73.3	63.7	63.7	32.0	22.0		38.5	26.0	
Actuated g/C Ratio	0.60	0.52	0.52	0.61	0.53	0.53	0.27	0.18		0.32	0.22	
v/c Ratio	0.28	0.46	0.20	0.20	0.76	0.10	0.70	0.52		0.32	0.75	
Control Delay	15.9	22.0	4.7	11.6	22.2	2.8	47.1	42.2		29.2	42.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	15.9	22.0	4.7	11.6	22.2	2.8	47.1	42.2		29.2	42.7	
LOS	B	C	A	B	C	A	D	D		C	D	
Approach Delay		18.9			20.6			44.5			39.1	
Approach LOS		B			C			D			D	
90th %ile Green (s)	9.4	39.2	39.2	10.8	40.6	40.6	7.0	39.1		12.9	45.0	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Gap	Ped	
70th %ile Green (s)	7.5	59.2	59.2	8.3	60.0	60.0	7.0	21.5		13.0	27.5	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Gap	
50th %ile Green (s)	6.7	64.0	64.0	7.4	64.7	64.7	7.0	19.1		11.5	23.6	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Gap	Gap	
30th %ile Green (s)	6.1	68.7	68.7	6.6	69.2	69.2	7.0	16.8		9.9	19.7	
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Gap	Gap	
10th %ile Green (s)	0.0	84.0	84.0	0.0	84.0	84.0	7.0	13.4		7.6	14.0	
10th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Max	Hold		Gap	Gap	
Queue Length 50th (ft)	14	206	2	16	284	0	92	113		66	182	
Queue Length 95th (ft)	45	385	54	m47	#828	m16	109	149		82	222	
Internal Link Dist (ft)		655			710			361			564	
Turn Bay Length (ft)	200		225	100		200	145			130		
Base Capacity (vph)	273	1858	912	439	1878	891	223	590		371	681	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.19	0.46	0.20	0.17	0.76	0.10	0.70	0.30		0.31	0.46	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green, Master Intersection
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 24.7 Intersection LOS: C
Intersection Capacity Utilization 83.9% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Rohlwing Rd & Euclid Ave



Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	4	6	59	207	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	6	62	218	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	293	218	218	0	-	0
Stage 1	218	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	698	822	1352	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	695	822	1352	-	-	-
Mov Cap-2 Maneuver	695	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	822	-	-
HCM Lane V/C Ratio	0.005	-	0.005	-	-
HCM Control Delay (s)	7.7	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	985	1502	6	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1037	1581	6	3	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1587	0	-	0	2102	794
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	518	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	410	-	-	-	44	331
Stage 1	-	-	-	-	154	-
Stage 2	-	-	-	-	563	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	410	-	-	-	44	331
Mov Cap-2 Maneuver	-	-	-	-	44	-
Stage 1	-	-	-	-	154	-
Stage 2	-	-	-	-	563	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	49
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	410	-	-	-	44	331
HCM Lane V/C Ratio	-	-	-	-	0.072	0.013
HCM Control Delay (s)	0	-	-	-	93.1	16
HCM Lane LOS	A	-	-	-	F	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	4	2	239	6	1	355
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	2	252	6	1	374

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	631	255	0	0	258	0
Stage 1	255	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	445	784	-	-	1307	-
Stage 1	788	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	445	784	-	-	1307	-
Mov Cap-2 Maneuver	445	-	-	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	445	784	1307	-
HCM Lane V/C Ratio	-	-	0.009	0.003	0.001	-
HCM Control Delay (s)	-	-	13.2	9.6	7.8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-

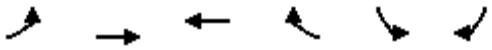
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	1	56	0	73	0	229	11	18	272	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	175	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	59	0	77	0	241	12	19	286	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	609	577	286	572	571	247	286	0	0	253	0	0
Stage 1	324	324	-	247	247	-	-	-	-	-	-	-
Stage 2	285	253	-	325	324	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	407	427	753	431	431	792	1276	-	-	1312	-	-
Stage 1	688	650	-	757	702	-	-	-	-	-	-	-
Stage 2	722	698	-	687	650	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	363	421	753	426	425	792	1276	-	-	1312	-	-
Mov Cap-2 Maneuver	363	421	-	426	425	-	-	-	-	-	-	-
Stage 1	688	641	-	757	702	-	-	-	-	-	-	-
Stage 2	652	698	-	676	641	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	12.1	0	0.5
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1276	-	-	753	426	792	1312	-	-
HCM Lane V/C Ratio	-	-	-	0.001	0.138	0.097	0.014	-	-
HCM Control Delay (s)	0	-	-	9.8	14.8	10	7.8	-	-
HCM Lane LOS	A	-	-	A	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0.3	0	-	-



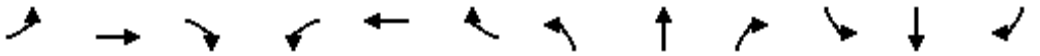
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	60	1299	676	33	79	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	200	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.993			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3514	0	1770	1583
Flt Permitted	0.345				0.950	
Satd. Flow (perm)	643	3539	3514	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			7			55
Link Speed (mph)		40	40		30	
Link Distance (ft)		842	459		580	
Travel Time (s)		14.4	7.8		13.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	1367	712	35	83	55
Shared Lane Traffic (%)						
Lane Group Flow (vph)	63	1367	747	0	83	55
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	6 7
Permitted Phases	4					
Detector Phase	7	4	8		6	6 7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	9.5	24.0	35.0		24.0	
Total Split (s)	14.0	92.0	78.0		28.0	
Total Split (%)	11.7%	76.7%	65.0%		23.3%	
Maximum Green (s)	11.0	86.0	72.0		22.0	
Yellow Time (s)	3.0	4.0	4.0		4.0	
All-Red Time (s)	0.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	3.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Act Effct Green (s)	100.0	97.0	89.5		11.0	20.2
Actuated g/C Ratio	0.83	0.81	0.75		0.09	0.17

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.11	0.48	0.29		0.52	0.18
Control Delay	0.8	2.9	5.8		62.5	11.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	0.8	2.9	5.8		62.5	11.6
LOS	A	A	A		E	B
Approach Delay		2.8	5.8		42.2	
Approach LOS		A	A		D	
90th %ile Green (s)	7.2	92.8	82.6		15.2	
90th %ile Term Code	Gap	Coord	Coord		Gap	
70th %ile Green (s)	6.6	95.3	85.7		12.7	
70th %ile Term Code	Gap	Coord	Coord		Gap	
50th %ile Green (s)	6.2	97.0	87.8		11.0	
50th %ile Term Code	Gap	Coord	Coord		Gap	
30th %ile Green (s)	5.9	98.8	89.9		9.2	
30th %ile Term Code	Gap	Coord	Coord		Gap	
10th %ile Green (s)	0.0	101.3	101.3		6.7	
10th %ile Term Code	Skip	Coord	Coord		Gap	
Queue Length 50th (ft)	2	33	90		62	0
Queue Length 95th (ft)	m2	85	136		112	35
Internal Link Dist (ft)		762	379		500	
Turn Bay Length (ft)	150				200	
Base Capacity (vph)	639	2861	2621		324	376
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.10	0.48	0.29		0.26	0.15

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 50 (42%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Euclid Ave & Salt Creek Ln



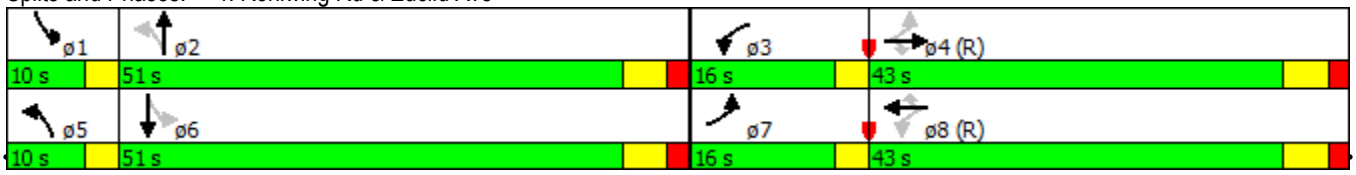
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	1280	139	29	674	23	136	67	49	43	67	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		225	100		200	145		0	130		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.937			0.928	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1745	0	1770	1729	0
Flt Permitted	0.327			0.142			0.538			0.678		
Satd. Flow (perm)	609	3539	1583	265	3539	1583	1002	1745	0	1263	1729	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89			82		35			45	
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		735			790			441			644	
Travel Time (s)		12.5			13.5			10.0			11.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	104	1347	146	31	709	24	143	71	52	45	71	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	1347	146	31	709	24	143	123	0	45	137	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	24.0	24.0	9.5	24.0	24.0	9.5	24.0		9.5	51.0	
Total Split (s)	16.0	43.0	43.0	16.0	43.0	43.0	10.0	51.0		10.0	51.0	
Total Split (%)	13.3%	35.8%	35.8%	13.3%	35.8%	35.8%	8.3%	42.5%		8.3%	42.5%	
Maximum Green (s)	13.0	37.0	37.0	13.0	37.0	37.0	7.0	45.0		7.0	45.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0		3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	Min		None	Min	
Walk Time (s)											7.0	
Flash Dont Walk (s)											38.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)											2	
Act Effct Green (s)	83.0	74.7	74.7	78.8	69.5	69.5	28.0	19.4		27.1	17.4	
Actuated g/C Ratio	0.69	0.62	0.62	0.66	0.58	0.58	0.23	0.16		0.23	0.14	
v/c Ratio	0.21	0.61	0.14	0.12	0.35	0.03	0.51	0.40		0.14	0.47	
Control Delay	10.2	19.4	7.7	11.1	15.8	0.0	41.2	33.3		30.5	33.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	10.2	19.4	7.7	11.1	15.8	0.0	41.2	33.3		30.5	33.5	
LOS	B	B	A	B	B	A	D	C		C	C	
Approach Delay		17.7			15.1			37.5			32.8	
Approach LOS		B			B			D			C	
90th %ile Green (s)	12.5	41.9	41.9	8.1	37.5	37.5	7.0	45.0		7.0	45.0	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Ped	
70th %ile Green (s)	8.2	74.2	74.2	6.4	72.4	72.4	7.0	14.4		7.0	14.4	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Gap	
50th %ile Green (s)	7.4	77.0	77.0	6.0	75.6	75.6	7.0	12.0		7.0	12.0	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Gap	
30th %ile Green (s)	6.7	88.5	88.5	0.0	78.8	78.8	7.0	9.6		6.9	9.5	
30th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Hold		Gap	Gap	
10th %ile Green (s)	5.9	91.9	91.9	0.0	83.0	83.0	7.0	16.1		0.0	6.1	
10th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Hold		Skip	Gap	
Queue Length 50th (ft)	19	294	15	5	124	0	96	66		29	69	
Queue Length 95th (ft)	79	#756	78	30	222	0	101	88		39	93	
Internal Link Dist (ft)		655			710			361			564	
Turn Bay Length (ft)	200		225	100		200	145			130		
Base Capacity (vph)	550	2203	1018	346	2048	950	278	676		318	676	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.19	0.61	0.14	0.09	0.35	0.03	0.51	0.18		0.14	0.20	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green, Master Intersection
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 19.8 Intersection LOS: B
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Rohlwing Rd & Euclid Ave



Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	3	3	34	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	3	36	45	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	87	45	45	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	914	1025	1563	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	980	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	912	1025	1563	-	-	-
Mov Cap-2 Maneuver	912	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	978	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1563	-	994	-	-
HCM Lane V/C Ratio	0.002	-	0.004	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	1365	731	4	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1437	769	4	3	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	774	0	-	0	1495	387
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	723	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	837	-	-	-	114	611
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	441	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	837	-	-	-	113	611
Mov Cap-2 Maneuver	-	-	-	-	113	-
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	436	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	24.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	837	-	-	-	113	611
HCM Lane V/C Ratio	0.003	-	-	-	0.028	0.005
HCM Control Delay (s)	9.3	0.1	-	-	37.8	10.9
HCM Lane LOS	A	A	-	-	E	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	4	1	179	5	1	161
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	188	5	1	169

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	363	191	0	0	194	0
Stage 1	191	-	-	-	-	-
Stage 2	172	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	636	851	-	-	1379	-
Stage 1	841	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	636	851	-	-	1379	-
Mov Cap-2 Maneuver	636	-	-	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	857	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	636	851	1379	-
HCM Lane V/C Ratio	-	-	0.007	0.001	0.001	-
HCM Control Delay (s)	-	-	10.7	9.2	7.6	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	2	23	0	28	0	149	30	24	139	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	175	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	2	24	0	29	0	157	32	25	146	1

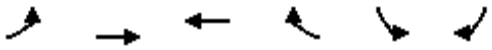
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	384	385	147	371	371	173	147	0	0	188	0	0
Stage 1	197	197	-	173	173	-	-	-	-	-	-	-
Stage 2	187	188	-	198	198	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	574	549	900	586	559	871	1435	-	-	1386	-	-
Stage 1	805	738	-	829	756	-	-	-	-	-	-	-
Stage 2	815	745	-	804	737	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	547	539	900	577	549	871	1435	-	-	1386	-	-
Mov Cap-2 Maneuver	547	539	-	577	549	-	-	-	-	-	-	-
Stage 1	805	725	-	829	756	-	-	-	-	-	-	-
Stage 2	787	745	-	788	724	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.3	0	1.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1435	-	-	900	577	871	1386	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.042	0.034	0.018	-	-
HCM Control Delay (s)	0	-	-	9	11.5	9.3	7.6	-	-
HCM Lane LOS	A	-	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	0.1	-	-

APPENDIX F

CAPACITY ANALYSIS WORKSHEETS BACKGROUND

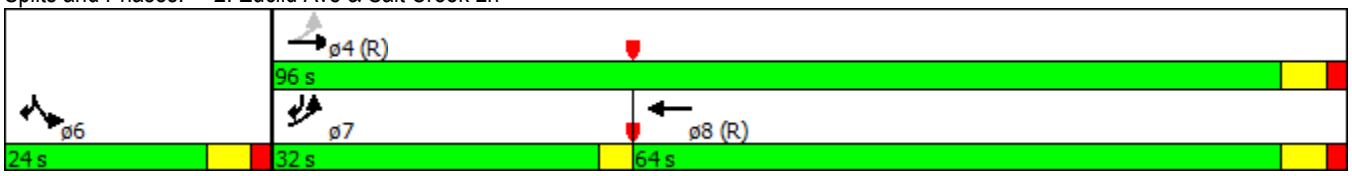


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	283	1319	944	127	88	61
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900
Storage Length (ft)	150			0	200	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.982			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3725	3476	0	1770	1583
Flt Permitted	0.202				0.950	
Satd. Flow (perm)	376	3725	3476	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			17			64
Link Speed (mph)		40	40		30	
Link Distance (ft)		842	459		580	
Travel Time (s)		14.4	7.8		13.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	298	1388	994	134	93	64
Shared Lane Traffic (%)						
Lane Group Flow (vph)	298	1388	1128	0	93	64
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane					Yes	
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	6 7
Permitted Phases	4					
Detector Phase	7	4	8		6	6 7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	9.5	24.0	24.0		24.0	
Total Split (s)	32.0	96.0	64.0		24.0	
Total Split (%)	26.7%	80.0%	53.3%		20.0%	
Maximum Green (s)	29.0	90.0	58.0		18.0	
Yellow Time (s)	3.0	4.0	4.0		4.0	
All-Red Time (s)	0.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	3.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Act Effct Green (s)	99.4	96.4	80.0		11.6	28.0
Actuated g/C Ratio	0.83	0.80	0.67		0.10	0.23

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.64	0.46	0.49		0.54	0.15
Control Delay	9.3	5.1	11.9		62.8	7.7
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	9.3	5.1	11.9		62.8	7.7
LOS	A	A	B		E	A
Approach Delay		5.9	11.9		40.3	
Approach LOS		A	B		D	
90th %ile Green (s)	22.4	91.9	66.5		16.1	
90th %ile Term Code	Gap	Coord	Coord		Gap	
70th %ile Green (s)	16.5	94.5	75.0		13.5	
70th %ile Term Code	Gap	Coord	Coord		Gap	
50th %ile Green (s)	12.2	96.4	81.2		11.6	
50th %ile Term Code	Gap	Coord	Coord		Gap	
30th %ile Green (s)	8.5	98.2	86.7		9.8	
30th %ile Term Code	Gap	Coord	Coord		Gap	
10th %ile Green (s)	7.2	100.9	90.7		7.1	
10th %ile Term Code	Gap	Coord	Coord		Gap	
Queue Length 50th (ft)	30	5	196		70	0
Queue Length 95th (ft)	39	581	350		121	30
Internal Link Dist (ft)		762	379		500	
Turn Bay Length (ft)	150				200	
Base Capacity (vph)	648	2991	2323		265	601
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.46	0.46	0.49		0.35	0.11

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 80 (67%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 10.0		Intersection LOS: A	
Intersection Capacity Utilization 64.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Euclid Ave & Salt Creek Ln



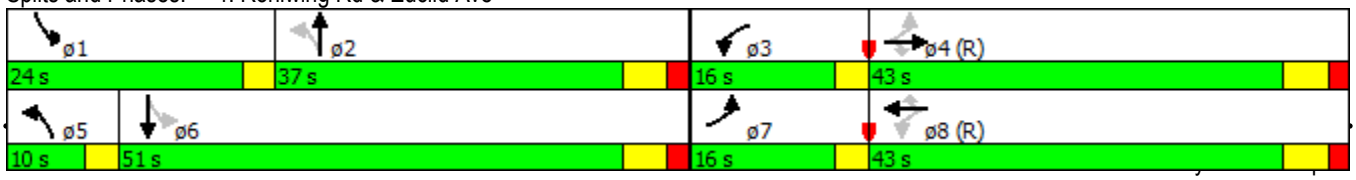
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	1366	77	31	919	61	166	110	102	152	95	58
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		225	100		200	145		0	130		130
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.928			0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3725	1583	1770	3725	1583	1770	1729	0	1770	1757	0
Flt Permitted	0.193			0.091			0.655			0.329		
Satd. Flow (perm)	360	3725	1583	170	3725	1583	1220	1729	0	613	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109			109		37			29	
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		735			790			441			644	
Travel Time (s)		12.5			13.5			10.0			11.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	149	1438	81	33	967	64	175	116	107	160	100	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	149	1438	81	33	967	64	175	223	0	160	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	24.0	24.0	9.5	24.0	24.0	9.5	24.0		9.5	51.0	
Total Split (s)	16.0	43.0	43.0	16.0	43.0	43.0	10.0	37.0		24.0	51.0	
Total Split (%)	13.3%	35.8%	35.8%	13.3%	35.8%	35.8%	8.3%	30.8%		20.0%	42.5%	
Maximum Green (s)	13.0	37.0	37.0	13.0	37.0	37.0	7.0	31.0		21.0	45.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0		3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	Min		None	Min	
Walk Time (s)											7.0	
Flash Dont Walk (s)											38.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)											1	
Act Effct Green (s)	74.0	65.0	65.0	67.9	58.3	58.3	30.6	20.6		39.9	27.0	
Actuated g/C Ratio	0.62	0.54	0.54	0.57	0.49	0.49	0.26	0.17		0.33	0.22	
v/c Ratio	0.44	0.71	0.09	0.18	0.53	0.08	0.51	0.68		0.48	0.39	
Control Delay	16.4	26.3	2.5	10.5	27.2	5.8	35.6	47.9		32.2	32.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	16.4	26.3	2.5	10.5	27.2	5.8	35.6	47.9		32.2	32.2	
LOS	B	C	A	B	C	A	D	D		C	C	
Approach Delay		24.3			25.4			42.5			32.2	
Approach LOS		C			C			D			C	
90th %ile Green (s)	13.0	41.8	41.8	8.2	37.0	37.0	7.0	36.4		15.6	45.0	
90th %ile Term Code	Max	Coord	Coord	Gap	Coord	Coord	Max	Hold		Gap	Ped	
70th %ile Green (s)	11.1	58.1	58.1	6.9	53.9	53.9	7.0	21.5		15.5	30.0	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	
50th %ile Green (s)	9.5	63.2	63.2	6.3	60.0	60.0	7.0	18.5		14.0	25.5	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	
30th %ile Green (s)	8.2	77.3	77.3	0.0	66.1	66.1	7.0	15.5		12.2	20.7	
30th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Gap		Gap	Hold	
10th %ile Green (s)	6.7	84.4	84.4	0.0	74.7	74.7	7.0	11.1		9.5	13.6	
10th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Gap		Gap	Hold	
Queue Length 50th (ft)	44	434	0	14	353	7	102	140		92	88	
Queue Length 95th (ft)	108	#808	19	m16	466	37	121	187		112	121	
Internal Link Dist (ft)		655			710			361			564	
Turn Bay Length (ft)	200		225	100		200	145			130		
Base Capacity (vph)	374	2016	906	277	1810	825	343	489		406	677	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.40	0.71	0.09	0.12	0.53	0.08	0.51	0.46		0.39	0.24	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green, Master Intersection
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 27.5 Intersection LOS: C
Intersection Capacity Utilization 77.2% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Rohlwing Rd & Euclid Ave



Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	7	3	218	51	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	3	229	54	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	290	54	54	0	-	0
Stage 1	54	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	701	1013	1551	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	700	1013	1551	-	-	-
Mov Cap-2 Maneuver	700	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1551	-	1013	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	1618	1008	2	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1703	1061	2	1	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1063	0	-	0	1918	532
Stage 1	-	-	-	-	1062	-
Stage 2	-	-	-	-	856	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	651	-	-	-	59	492
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	377	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	651	-	-	-	56	492
Mov Cap-2 Maneuver	-	-	-	-	56	-
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	356	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	16.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	651	-	-	-	56	492
HCM Lane V/C Ratio	0.003	-	-	-	0.019	0.028
HCM Control Delay (s)	10.5	0.3	-	-	70.5	12.5
HCM Lane LOS	B	A	-	-	F	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	0	270	5	2	314
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	0	284	5	2	331

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	622	287	0	0	289	0
Stage 1	287	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	450	752	-	-	1273	-
Stage 1	762	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	449	752	-	-	1273	-
Mov Cap-2 Maneuver	449	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	724	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	449	-	1273	-
HCM Lane V/C Ratio	-	-	0.005	-	0.002	-
HCM Control Delay (s)	-	-	13.1	0	7.8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	-	0	-

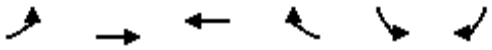
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	0	0	7	1	25	0	201	57	87	316	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	175	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	7	1	26	0	212	60	92	333	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	771	788	333	758	758	242	333	0	0	272	0	0
Stage 1	516	516	-	242	242	-	-	-	-	-	-	-
Stage 2	255	272	-	516	516	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	317	323	709	324	336	797	1226	-	-	1291	-	-
Stage 1	542	534	-	762	705	-	-	-	-	-	-	-
Stage 2	749	685	-	542	534	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	289	300	709	306	312	797	1226	-	-	1291	-	-
Mov Cap-2 Maneuver	289	300	-	306	312	-	-	-	-	-	-	-
Stage 1	542	496	-	762	705	-	-	-	-	-	-	-
Stage 2	723	685	-	503	496	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.5	11.5	0	1.7
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1226	-	-	289	306	752	1291	-	-
HCM Lane V/C Ratio	-	-	-	0.004	0.024	0.036	0.071	-	-
HCM Control Delay (s)	0	-	-	17.5	17.1	10	8	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	0.2	-	-

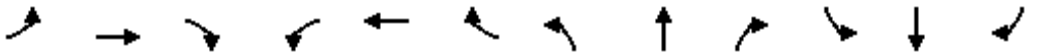


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	67	990	1389	45	140	217
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900
Storage Length (ft)	150			0	200	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.995			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3725	3522	0	1770	1583
Flt Permitted	0.114				0.950	
Satd. Flow (perm)	212	3725	3522	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			5			41
Link Speed (mph)		40	40		30	
Link Distance (ft)		842	459		580	
Travel Time (s)		14.4	7.8		13.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	71	1042	1462	47	147	228
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	1042	1509	0	147	228
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane					Yes	
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	6 7
Permitted Phases	4					
Detector Phase	7	4	8		6	6 7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	9.5	24.0	24.0		24.0	
Total Split (s)	16.0	94.0	78.0		26.0	
Total Split (%)	13.3%	78.3%	65.0%		21.7%	
Maximum Green (s)	13.0	88.0	72.0		20.0	
Yellow Time (s)	3.0	4.0	4.0		4.0	
All-Red Time (s)	0.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	3.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Act Effct Green (s)	93.5	90.5	80.8		17.5	27.2
Actuated g/C Ratio	0.78	0.75	0.67		0.15	0.23

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.28	0.37	0.64		0.57	0.58
Control Delay	12.7	5.8	13.7		55.6	38.8
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	12.7	5.8	13.7		55.6	38.8
LOS	B	A	B		E	D
Approach Delay		6.2	13.7		45.4	
Approach LOS		A	B		D	
90th %ile Green (s)	8.2	82.8	71.6		25.2	
90th %ile Term Code	Gap	Coord	Coord		Gap	
70th %ile Green (s)	7.1	87.7	77.6		20.3	
70th %ile Term Code	Gap	Coord	Coord		Gap	
50th %ile Green (s)	6.5	91.0	81.5		17.0	
50th %ile Term Code	Gap	Coord	Coord		Gap	
30th %ile Green (s)	6.1	93.7	84.6		14.3	
30th %ile Term Code	Gap	Coord	Coord		Gap	
10th %ile Green (s)	5.8	97.5	88.7		10.5	
10th %ile Term Code	Gap	Coord	Coord		Gap	
Queue Length 50th (ft)	9	90	312		108	131
Queue Length 95th (ft)	57	193	492		163	193
Internal Link Dist (ft)		762	379		500	
Turn Bay Length (ft)	150				200	
Base Capacity (vph)	334	2844	2375		311	462
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.21	0.37	0.64		0.47	0.49

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 109 (91%), Referenced to phase 4:EBTL and 8:WBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 14.9	Intersection LOS: B
Intersection Capacity Utilization 65.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: Euclid Ave & Salt Creek Ln



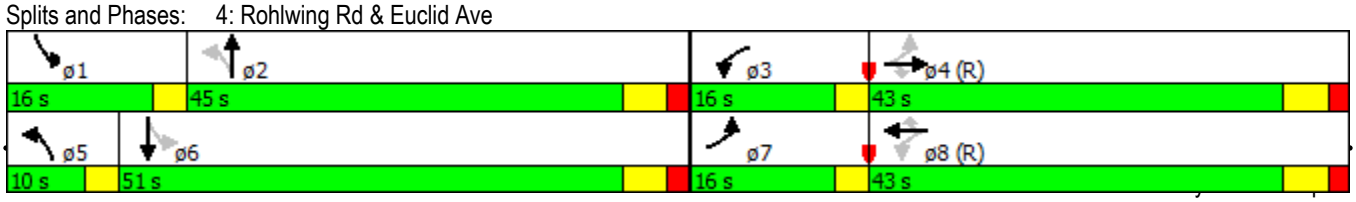
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	871	181	77	1451	91	158	121	59	116	125	196
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		225	100		200	145		0	130		130
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.951			0.909	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3725	1583	1770	3725	1583	1770	1771	0	1770	1693	0
Flt Permitted	0.066			0.229			0.285			0.433		
Satd. Flow (perm)	123	3725	1583	427	3725	1583	531	1771	0	807	1693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			172			109		22			75	
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		735			790			441			644	
Travel Time (s)		12.5			13.5			10.0			11.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	55	917	191	81	1527	96	166	127	62	122	132	206
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	917	191	81	1527	96	166	189	0	122	338	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	24.0	24.0	9.5	24.0	24.0	9.5	24.0		9.5	51.0	
Total Split (s)	16.0	43.0	43.0	16.0	43.0	43.0	10.0	45.0		16.0	51.0	
Total Split (%)	13.3%	35.8%	35.8%	13.3%	35.8%	35.8%	8.3%	37.5%		13.3%	42.5%	
Maximum Green (s)	13.0	37.0	37.0	13.0	37.0	37.0	7.0	39.0		13.0	45.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0		3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	Min		None	Min	
Walk Time (s)											7.0	
Flash Dont Walk (s)											38.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)											2	
Act Effct Green (s)	70.6	61.6	61.6	72.1	62.3	62.3	33.0	23.0		39.8	27.2	
Actuated g/C Ratio	0.59	0.51	0.51	0.60	0.52	0.52	0.28	0.19		0.33	0.23	
v/c Ratio	0.32	0.48	0.21	0.23	0.79	0.11	0.76	0.53		0.34	0.77	
Control Delay	17.8	23.0	5.5	14.3	24.2	5.6	52.4	42.2		28.8	43.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	17.8	23.0	5.5	14.3	24.2	5.6	52.4	42.2		28.8	43.8	
LOS	B	C	A	B	C	A	D	D		C	D	
Approach Delay		19.9			22.7			47.0			39.8	
Approach LOS		B			C			D			D	
90th %ile Green (s)	9.6	38.9	38.9	11.1	40.4	40.4	7.0	39.0		13.0	45.0	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Ped	
70th %ile Green (s)	7.6	57.1	57.1	8.6	58.1	58.1	7.0	23.3		13.0	29.3	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Gap	
50th %ile Green (s)	6.9	62.2	62.2	7.6	62.9	62.9	7.0	20.3		11.9	25.2	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Gap	Gap	
30th %ile Green (s)	6.2	67.1	67.1	6.7	67.6	67.6	7.0	17.9		10.3	21.2	
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Gap	Gap	
10th %ile Green (s)	0.0	82.6	82.6	0.0	82.6	82.6	7.0	14.5		7.9	15.4	
10th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Max	Hold		Gap	Gap	
Queue Length 50th (ft)	15	230	7	17	241	0	96	121		69	199	
Queue Length 95th (ft)	47	412	63	m59	#892	m30	115	160		88	244	
Internal Link Dist (ft)		655			710			361			564	
Turn Bay Length (ft)	200		225	100		200	145			130		
Base Capacity (vph)	253	1911	896	408	1934	874	218	590		374	681	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.22	0.48	0.21	0.20	0.79	0.11	0.76	0.32		0.33	0.50	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green, Master Intersection
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 26.3 Intersection LOS: C
Intersection Capacity Utilization 86.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Rohlwing Rd & Euclid Ave



Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	4	6	59	207	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	6	62	218	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	293	218	218	0	-	0
Stage 1	218	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	698	822	1352	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	695	822	1352	-	-	-
Mov Cap-2 Maneuver	695	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	822	-	-
HCM Lane V/C Ratio	0.005	-	0.005	-	-
HCM Control Delay (s)	7.7	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1054	1607	6	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1109	1692	6	3	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1698	0	-	0	2250	849
Stage 1	-	-	-	-	1695	-
Stage 2	-	-	-	-	555	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	371	-	-	-	35	304
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	539	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	371	-	-	-	35	304
Mov Cap-2 Maneuver	-	-	-	-	35	-
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	60.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	371	-	-	-	35	304
HCM Lane V/C Ratio	-	-	-	-	0.09	0.014
HCM Control Delay (s)	0	-	-	-	117.8	17
HCM Lane LOS	A	-	-	-	F	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	4	2	256	6	1	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	2	269	6	1	400

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	675	273	0	0	276	0
Stage 1	273	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	419	766	-	-	1287	-
Stage 1	773	-	-	-	-	-
Stage 2	676	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	419	766	-	-	1287	-
Mov Cap-2 Maneuver	419	-	-	-	-	-
Stage 1	773	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	419	766	1287	-
HCM Lane V/C Ratio	-	-	0.01	0.003	0.001	-
HCM Control Delay (s)	-	-	13.7	9.7	7.8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-

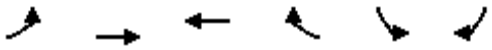
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	1	56	0	73	0	245	11	18	291	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	175	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	59	0	77	0	258	12	19	306	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	646	613	306	609	608	264	306	0	0	269	0	0
Stage 1	344	344	-	264	264	-	-	-	-	-	-	-
Stage 2	302	269	-	345	344	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	385	408	734	407	410	775	1255	-	-	1295	-	-
Stage 1	671	637	-	741	690	-	-	-	-	-	-	-
Stage 2	707	687	-	671	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	343	402	734	402	404	775	1255	-	-	1295	-	-
Mov Cap-2 Maneuver	343	402	-	402	404	-	-	-	-	-	-	-
Stage 1	671	628	-	741	690	-	-	-	-	-	-	-
Stage 2	637	687	-	660	628	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	12.5	0	0.5
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1255	-	-	734	402	775	1295	-	-
HCM Lane V/C Ratio	-	-	-	0.001	0.147	0.099	0.015	-	-
HCM Control Delay (s)	0	-	-	9.9	15.5	10.2	7.8	-	-
HCM Lane LOS	A	-	-	A	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0.3	0	-	-



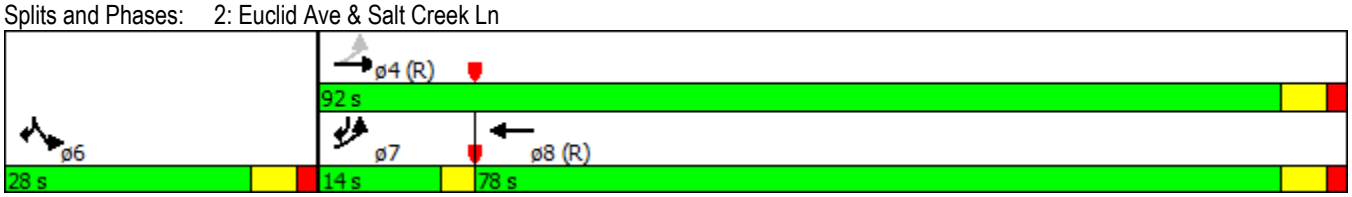
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	60	1390	723	33	79	52
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900
Storage Length (ft)	150			0	200	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.993			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3725	3514	0	1770	1583
Flt Permitted	0.326				0.950	
Satd. Flow (perm)	607	3725	3514	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			7			55
Link Speed (mph)		40	40		30	
Link Distance (ft)		842	459		580	
Travel Time (s)		14.4	7.8		13.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	1463	761	35	83	55
Shared Lane Traffic (%)						
Lane Group Flow (vph)	63	1463	796	0	83	55
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane					Yes	
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	6 7
Permitted Phases	4					
Detector Phase	7	4	8		6	6 7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	9.5	24.0	24.0		24.0	
Total Split (s)	14.0	92.0	78.0		28.0	
Total Split (%)	11.7%	76.7%	65.0%		23.3%	
Maximum Green (s)	11.0	86.0	72.0		22.0	
Yellow Time (s)	3.0	4.0	4.0		4.0	
All-Red Time (s)	0.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	3.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Act Effct Green (s)	100.0	97.0	89.5		11.0	20.2
Actuated g/C Ratio	0.83	0.81	0.75		0.09	0.17

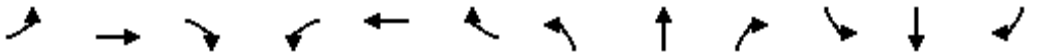
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.11	0.49	0.30		0.52	0.18
Control Delay	0.8	2.8	5.9		62.5	11.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	0.8	2.8	5.9		62.5	11.6
LOS	A	A	A		E	B
Approach Delay		2.7	5.9		42.2	
Approach LOS		A	A		D	
90th %ile Green (s)	7.2	92.8	82.6		15.2	
90th %ile Term Code	Gap	Coord	Coord		Gap	
70th %ile Green (s)	6.6	95.3	85.7		12.7	
70th %ile Term Code	Gap	Coord	Coord		Gap	
50th %ile Green (s)	6.2	97.0	87.8		11.0	
50th %ile Term Code	Gap	Coord	Coord		Gap	
30th %ile Green (s)	5.9	98.8	89.9		9.2	
30th %ile Term Code	Gap	Coord	Coord		Gap	
10th %ile Green (s)	0.0	101.3	101.3		6.7	
10th %ile Term Code	Skip	Coord	Coord		Gap	
Queue Length 50th (ft)	2	33	97		62	0
Queue Length 95th (ft)	m2	97	146		112	35
Internal Link Dist (ft)		762	379		500	
Turn Bay Length (ft)	150				200	
Base Capacity (vph)	612	3012	2621		324	376
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.10	0.49	0.30		0.26	0.15

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 50 (42%), Referenced to phase 4:EBTL and 8:WBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 6.0 Intersection LOS: A
Intersection Capacity Utilization 50.9% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Euclid Ave & Salt Creek Ln



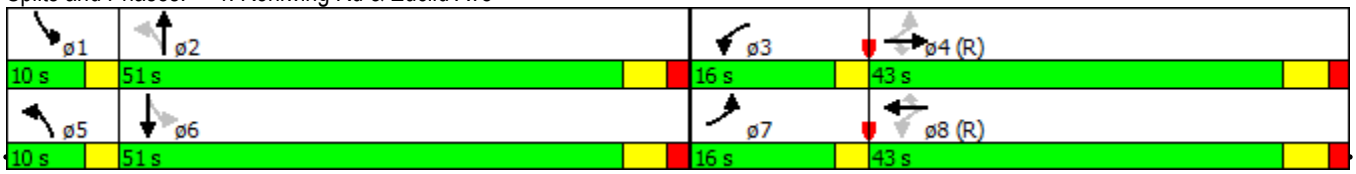


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	1370	149	31	721	25	146	72	52	46	72	67
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		225	100		200	145		0	130		130
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.937			0.928	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3725	1583	1770	3725	1583	1770	1745	0	1770	1729	0
Flt Permitted	0.303			0.118			0.516			0.657		
Satd. Flow (perm)	564	3725	1583	220	3725	1583	961	1745	0	1224	1729	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90			82		35			45	
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		735			790			441			644	
Travel Time (s)		12.5			13.5			10.0			11.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	1442	157	33	759	26	154	76	55	48	76	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	1442	157	33	759	26	154	131	0	48	147	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	24.0	24.0	9.5	24.0	24.0	9.5	24.0		9.5	51.0	
Total Split (s)	16.0	43.0	43.0	16.0	43.0	43.0	10.0	51.0		10.0	51.0	
Total Split (%)	13.3%	35.8%	35.8%	13.3%	35.8%	35.8%	8.3%	42.5%		8.3%	42.5%	
Maximum Green (s)	13.0	37.0	37.0	13.0	37.0	37.0	7.0	45.0		7.0	45.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0		3.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	Min		None	Min	
Walk Time (s)											7.0	
Flash Dont Walk (s)											38.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)											2	
Act Effct Green (s)	82.6	74.1	74.1	78.1	68.7	68.7	28.5	19.9		27.6	17.9	
Actuated g/C Ratio	0.69	0.62	0.62	0.65	0.57	0.57	0.24	0.17		0.23	0.15	
v/c Ratio	0.24	0.63	0.16	0.15	0.36	0.03	0.56	0.41		0.15	0.50	
Control Delay	10.5	19.8	8.1	11.9	17.1	0.1	42.7	34.2		30.4	34.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	10.5	19.8	8.1	11.9	17.1	0.1	42.7	34.2		30.4	34.9	
LOS	B	B	A	B	B	A	D	C		C	C	
Approach Delay		18.1			16.3			38.8			33.8	
Approach LOS		B			B			D			C	
90th %ile Green (s)	13.0	41.8	41.8	8.2	37.0	37.0	7.0	45.0		7.0	45.0	
90th %ile Term Code	Max	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Ped	
70th %ile Green (s)	8.4	73.4	73.4	6.4	71.4	71.4	7.0	15.2		7.0	15.2	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Gap	
50th %ile Green (s)	7.6	76.2	76.2	6.1	74.7	74.7	7.0	12.7		7.0	12.7	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Gap	
30th %ile Green (s)	6.9	87.8	87.8	0.0	77.9	77.9	7.0	10.2		7.0	10.2	
30th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Hold		Max	Gap	
10th %ile Green (s)	6.0	91.4	91.4	0.0	82.4	82.4	7.0	16.6		0.0	6.6	
10th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Hold		Skip	Gap	
Queue Length 50th (ft)	21	324	18	6	137	0	103	71		30	77	
Queue Length 95th (ft)	84	#812	86	33	253	0	108	94		41	100	
Internal Link Dist (ft)		655			710			361			564	
Turn Bay Length (ft)	200		225	100		200	145			130		
Base Capacity (vph)	520	2300	1012	319	2131	941	275	676		316	676	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.22	0.63	0.16	0.10	0.36	0.03	0.56	0.19		0.15	0.22	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green, Master Intersection			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 20.6		Intersection LOS: C	
Intersection Capacity Utilization 72.8%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: Rohlwing Rd & Euclid Ave



Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	3	3	34	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	3	36	45	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	87	45	45	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	914	1025	1563	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	980	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	912	1025	1563	-	-	-
Mov Cap-2 Maneuver	912	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	978	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1563	-	994	-	-
HCM Lane V/C Ratio	0.002	-	0.004	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	1461	782	4	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1538	823	4	3	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	827	0	-	0	1598	414
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	773	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	800	-	-	-	97	587
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	416	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	800	-	-	-	95	587
Mov Cap-2 Maneuver	-	-	-	-	95	-
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	409	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	27.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	800	-	-	-	95	587
HCM Lane V/C Ratio	0.003	-	-	-	0.033	0.005
HCM Control Delay (s)	9.5	0.1	-	-	44.2	11.2
HCM Lane LOS	A	A	-	-	E	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	4	1	192	5	1	172
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	202	5	1	181

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	388	205	0	0	207	0
Stage 1	205	-	-	-	-	-
Stage 2	183	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	616	836	-	-	1364	-
Stage 1	829	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	616	836	-	-	1364	-
Mov Cap-2 Maneuver	616	-	-	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	616	836	1364	-
HCM Lane V/C Ratio	-	-	0.007	0.001	0.001	-
HCM Control Delay (s)	-	-	10.9	9.3	7.6	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	2	23	0	28	0	159	30	24	149	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	175	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	2	24	0	29	0	167	32	25	157	1

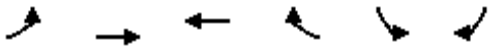
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	406	407	157	392	391	183	158	0	0	199	0	0
Stage 1	208	208	-	183	183	-	-	-	-	-	-	-
Stage 2	198	199	-	209	208	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	555	533	889	567	545	859	1422	-	-	1373	-	-
Stage 1	794	730	-	819	748	-	-	-	-	-	-	-
Stage 2	804	736	-	793	730	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	529	523	889	558	535	859	1422	-	-	1373	-	-
Mov Cap-2 Maneuver	529	523	-	558	535	-	-	-	-	-	-	-
Stage 1	794	717	-	819	748	-	-	-	-	-	-	-
Stage 2	776	736	-	777	717	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	10.4	0	1.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1422	-	-	889	558	859	1373	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.043	0.034	0.018	-	-
HCM Control Delay (s)	0	-	-	9.1	11.7	9.3	7.7	-	-
HCM Lane LOS	A	-	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	0.1	-	-

APPENDIX G

CAPACITY ANALYSIS WORKSHEETS
FUTURE WITH PROJECT

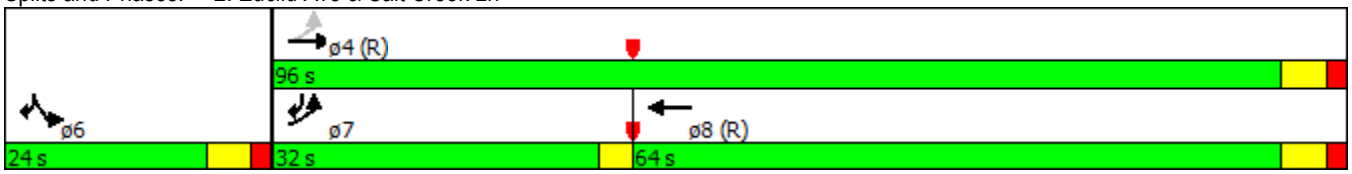


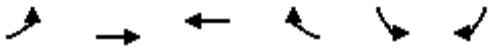
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	319	1435	1034	163	134	108
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900
Storage Length (ft)	150			0	200	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.980			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3725	3468	0	1770	1583
Flt Permitted	0.146				0.950	
Satd. Flow (perm)	272	3725	3468	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			20			53
Link Speed (mph)		40	40		30	
Link Distance (ft)		842	459		580	
Travel Time (s)		14.4	7.8		13.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	336	1511	1088	172	141	114
Shared Lane Traffic (%)						
Lane Group Flow (vph)	336	1511	1260	0	141	114
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane					Yes	
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	6 7
Permitted Phases	4					
Detector Phase	7	4	8		6	6 7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		4.0	
Minimum Split (s)	9.5	24.0	35.0		24.0	
Total Split (s)	32.0	96.0	64.0		24.0	
Total Split (%)	26.7%	80.0%	53.3%		20.0%	
Maximum Green (s)	29.0	90.0	58.0		18.0	
Yellow Time (s)	3.0	4.0	4.0		4.0	
All-Red Time (s)	0.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	3.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Max	C-Max		Min	
Walk Time (s)			7.0			
Flash Dont Walk (s)			22.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)	96.7	93.7	71.5		14.3	36.5
Actuated g/C Ratio	0.81	0.78	0.60		0.12	0.30
v/c Ratio	0.73	0.52	0.61		0.67	0.22
Control Delay	26.9	8.8	18.6		65.7	15.5
Queue Delay	0.0	0.1	0.0		0.0	0.0
Total Delay	26.9	8.8	18.6		65.7	15.5
LOS	C	A	B		E	B
Approach Delay		12.1	18.6		43.2	
Approach LOS		B	B		D	
90th %ile Green (s)	29.0	90.0	58.0		18.0	
90th %ile Term Code	Max	Coord	Coord		Max	
70th %ile Green (s)	23.5	91.0	64.5		17.0	
70th %ile Term Code	Gap	Coord	Coord		Gap	
50th %ile Green (s)	19.3	93.2	70.9		14.8	
50th %ile Term Code	Gap	Coord	Coord		Gap	
30th %ile Green (s)	15.1	95.5	77.4		12.5	
30th %ile Term Code	Gap	Coord	Coord		Gap	
10th %ile Green (s)	9.0	98.7	86.7		9.3	
10th %ile Term Code	Gap	Coord	Coord		Gap	
Queue Length 50th (ft)	153	183	306		106	34
Queue Length 95th (ft)	265	475	485		170	66
Internal Link Dist (ft)		762	379		500	
Turn Bay Length (ft)	150				200	
Base Capacity (vph)	581	2907	2074		265	622
Starvation Cap Reductn	0	197	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.58	0.56	0.61		0.53	0.18

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 106 (88%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 72.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Euclid Ave & Salt Creek Ln



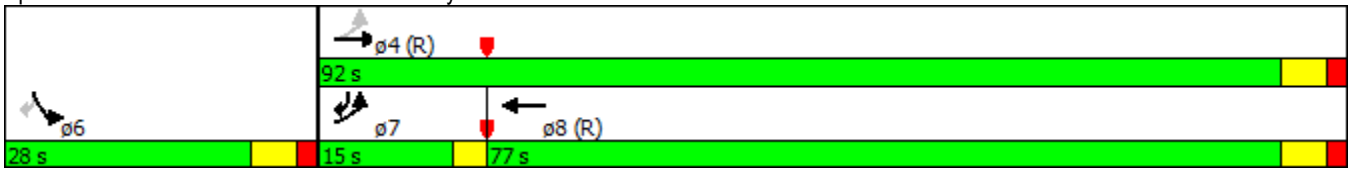


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	121	1641	1043	102	129	174
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.987			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3725	3493	0	1770	1583
Flt Permitted	0.187				0.950	
Satd. Flow (perm)	348	3725	3493	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			15			93
Link Speed (mph)		30	40		40	
Link Distance (ft)		790	842		369	
Travel Time (s)		18.0	14.4		6.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	127	1727	1098	107	136	183
Shared Lane Traffic (%)						
Lane Group Flow (vph)	127	1727	1205	0	136	183
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases	4					6
Detector Phase	7	4	8		6	7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	9.5	24.0	24.0		24.0	9.5
Total Split (s)	15.0	92.0	77.0		28.0	15.0
Total Split (%)	12.5%	76.7%	64.2%		23.3%	12.5%
Maximum Green (s)	12.0	86.0	71.0		22.0	12.0
Yellow Time (s)	3.0	4.0	4.0		4.0	3.0
All-Red Time (s)	0.0	2.0	2.0		2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	3.0	6.0	6.0		6.0	3.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	C-Max	C-Max		Min	None
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)	96.5	93.5	83.1		14.5	27.9
Actuated g/C Ratio	0.80	0.78	0.69		0.12	0.23
v/c Ratio	0.35	0.59	0.50		0.64	0.42
Control Delay	6.1	3.7	2.1		63.3	20.8
Queue Delay	0.0	0.2	0.0		0.0	0.0
Total Delay	6.1	3.9	2.1		63.3	20.8
LOS	A	A	A		E	C
Approach Delay		4.1	2.1		38.9	
Approach LOS		A	A		D	
90th %ile Green (s)	9.3	88.1	75.8		19.9	9.3
90th %ile Term Code	Gap	Coord	Coord		Gap	Gap
70th %ile Green (s)	8.0	91.2	80.2		16.8	8.0
70th %ile Term Code	Gap	Coord	Coord		Gap	Gap
50th %ile Green (s)	7.3	93.5	83.2		14.5	7.3
50th %ile Term Code	Gap	Coord	Coord		Gap	Gap
30th %ile Green (s)	6.7	95.8	86.1		12.2	6.7
30th %ile Term Code	Gap	Coord	Coord		Gap	Gap
10th %ile Green (s)	6.0	99.0	90.0		9.0	6.0
10th %ile Term Code	Gap	Coord	Coord		Gap	Gap
Queue Length 50th (ft)	7	57	13		102	57
Queue Length 95th (ft)	m15	155	20		162	116
Internal Link Dist (ft)		710	762		289	
Turn Bay Length (ft)	250					
Base Capacity (vph)	422	2903	2422		324	496
Starvation Cap Reductn	0	405	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.30	0.69	0.50		0.42	0.37

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 6.7		Intersection LOS: A	
Intersection Capacity Utilization 60.2%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Euclid Ave & Driveway

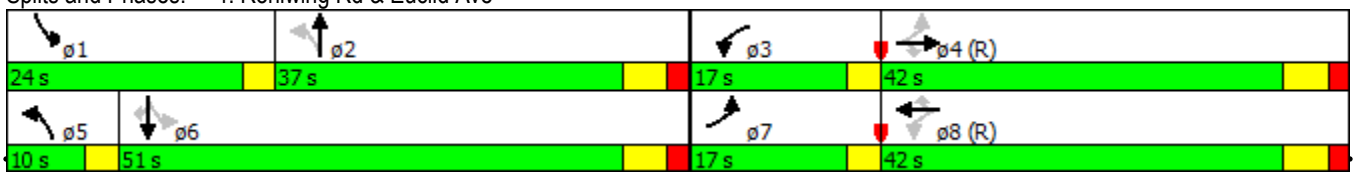


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	178	1492	77	54	1105	61	166	128	120	152	118	82
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		225	100		200	145		0	130		130
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.928				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3725	1583	1770	3725	1583	1770	1729	0	1770	1863	1583
Flt Permitted	0.116			0.073			0.677			0.282		
Satd. Flow (perm)	216	3725	1583	136	3725	1583	1261	1729	0	525	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109			109		38				86
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		735			790			441			644	
Travel Time (s)		12.5			13.5			10.0			11.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	187	1571	81	57	1163	64	175	135	126	160	124	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	1571	81	57	1163	64	175	261	0	160	124	86
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Detector Phase	7	4	4	3	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	24.0	24.0	9.5	35.0	35.0	9.5	24.0		9.5	51.0	51.0
Total Split (s)	17.0	42.0	42.0	17.0	42.0	42.0	10.0	37.0		24.0	51.0	51.0
Total Split (%)	14.2%	35.0%	35.0%	14.2%	35.0%	35.0%	8.3%	30.8%		20.0%	42.5%	42.5%
Maximum Green (s)	14.0	36.0	36.0	14.0	36.0	36.0	7.0	31.0		21.0	45.0	45.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0		0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0		3.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min		None	Min	Min
Walk Time (s)					7.0	7.0					7.0	7.0
Flash Dont Walk (s)					22.0	22.0					38.0	38.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)					1	1					1	1
Act Effct Green (s)	72.2	60.6	60.6	65.3	55.0	55.0	32.6	22.6		41.7	28.8	28.8
Actuated g/C Ratio	0.60	0.50	0.50	0.54	0.46	0.46	0.27	0.19		0.35	0.24	0.24
v/c Ratio	0.68	0.83	0.09	0.33	0.68	0.08	0.47	0.73		0.50	0.28	0.19
Control Delay	28.7	32.8	2.6	24.8	25.7	3.2	33.0	50.2		31.6	36.0	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	28.7	32.8	2.6	24.8	25.7	3.2	33.0	50.2		31.6	36.0	6.7
LOS	C	C	A	C	C	A	C	D		C	D	A
Approach Delay		31.1			24.5			43.3			27.3	
Approach LOS		C			C			D			C	
90th %ile Green (s)	14.0	40.3	40.3	9.7	36.0	36.0	7.0	36.4		15.6	45.0	45.0
90th %ile Term Code	Max	Coord	Coord	Gap	Coord	Coord	Max	Hold		Gap	Ped	Ped
70th %ile Green (s)	13.9	54.6	54.6	7.9	48.6	48.6	7.0	24.3		15.2	32.5	32.5
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	Hold
50th %ile Green (s)	11.2	60.2	60.2	7.0	56.0	56.0	7.0	21.1		13.7	27.8	27.8
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	Hold
30th %ile Green (s)	9.5	65.7	65.7	6.3	62.5	62.5	7.0	17.9		12.1	23.0	23.0
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	Hold
10th %ile Green (s)	7.5	82.4	82.4	0.0	71.9	71.9	7.0	13.2		9.4	15.6	15.6
10th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Gap		Gap	Hold	Hold
Queue Length 50th (ft)	59	534	0	13	194	0	99	168		89	80	0
Queue Length 95th (ft)	155	#941	19	62	#635	15	121	222		112	109	34
Internal Link Dist (ft)		655			710			361			564	
Turn Bay Length (ft)	200		225	100		200	145			130		130
Base Capacity (vph)	311	1882	854	271	1707	784	372	489		400	698	647
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.60	0.83	0.09	0.21	0.68	0.08	0.47	0.53		0.40	0.18	0.13

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 2 (2%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 29.9		Intersection LOS: C	
Intersection Capacity Utilization 82.5%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: Rohlwing Rd & Euclid Ave



Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	93	72	218	51	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	98	76	229	54	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	435	54	54	0	-	0
Stage 1	54	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	578	1013	1551	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	546	1013	1551	-	-	-
Mov Cap-2 Maneuver	546	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	652	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1551	-	1013	-	-
HCM Lane V/C Ratio	0.049	-	0.097	-	-
HCM Control Delay (s)	7.4	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	47	47	270	54	36	314
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	49	284	57	38	331

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	719	313	0	0	341	0
Stage 1	313	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	395	727	-	-	1218	-
Stage 1	741	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	383	727	-	-	1218	-
Mov Cap-2 Maneuver	383	-	-	-	-	-
Stage 1	741	-	-	-	-	-
Stage 2	652	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	383	727	1218	-
HCM Lane V/C Ratio	-	-	0.129	0.068	0.031	-
HCM Control Delay (s)	-	-	15.8	10.3	8.1	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.2	0.1	-

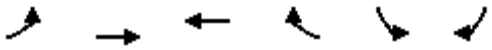
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	0	0	7	1	25	0	248	57	87	352	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	175	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	7	1	26	0	261	60	92	371	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	859	875	371	845	845	291	371	0	0	321	0	0
Stage 1	554	554	-	291	291	-	-	-	-	-	-	-
Stage 2	305	321	-	554	554	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	277	288	675	283	300	748	1188	-	-	1239	-	-
Stage 1	517	514	-	717	672	-	-	-	-	-	-	-
Stage 2	705	652	-	517	514	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	251	267	675	267	278	748	1188	-	-	1239	-	-
Mov Cap-2 Maneuver	251	267	-	267	278	-	-	-	-	-	-	-
Stage 1	517	476	-	717	672	-	-	-	-	-	-	-
Stage 2	679	652	-	479	476	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.4	12.1	0	1.6
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1188	-	-	251	267	702	1239	-	-
HCM Lane V/C Ratio	-	-	-	0.004	0.028	0.039	0.074	-	-
HCM Control Delay (s)	0	-	-	19.4	18.9	10.3	8.1	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	0.2	-	-

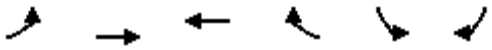


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	122	1079	1526	100	175	253
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900
Storage Length (ft)	150			0	200	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.991			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3725	3507	0	1770	1583
Flt Permitted	0.071				0.950	
Satd. Flow (perm)	132	3725	3507	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			10			29
Link Speed (mph)		40	40		30	
Link Distance (ft)		842	459		580	
Travel Time (s)		14.4	7.8		13.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	128	1136	1606	105	184	266
Shared Lane Traffic (%)						
Lane Group Flow (vph)	128	1136	1711	0	184	266
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane					Yes	
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	6 7
Permitted Phases	4					
Detector Phase	7	4	8		6	6 7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	9.5	24.0	35.0		24.0	
Total Split (s)	16.0	94.0	78.0		26.0	
Total Split (%)	13.3%	78.3%	65.0%		21.7%	
Maximum Green (s)	13.0	88.0	72.0		20.0	
Yellow Time (s)	3.0	4.0	4.0		4.0	
All-Red Time (s)	0.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	3.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Max	C-Max		Min	
Walk Time (s)			7.0			
Flash Dont Walk (s)			22.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Pedestrian Calls (#/hr)			2			
Act Effct Green (s)	92.6	89.6	77.3		18.4	30.7
Actuated g/C Ratio	0.77	0.75	0.64		0.15	0.26
v/c Ratio	0.56	0.41	0.76		0.68	0.62
Control Delay	28.2	7.2	18.4		60.8	41.2
Queue Delay	0.0	0.0	0.2		0.0	0.0
Total Delay	28.2	7.2	18.5		60.8	41.2
LOS	C	A	B		E	D
Approach Delay		9.3	18.5		49.2	
Approach LOS		A	B		D	
90th %ile Green (s)	13.0	88.0	72.0		20.0	
90th %ile Term Code	Max	Coord	Coord		Max	
70th %ile Green (s)	11.3	88.0	73.7		20.0	
70th %ile Term Code	Gap	Coord	Coord		Max	
50th %ile Green (s)	8.9	88.0	76.1		20.0	
50th %ile Term Code	Gap	Coord	Coord		Max	
30th %ile Green (s)	7.0	89.6	79.6		18.4	
30th %ile Term Code	Gap	Coord	Coord		Gap	
10th %ile Green (s)	6.1	94.2	85.1		13.8	
10th %ile Term Code	Gap	Coord	Coord		Gap	
Queue Length 50th (ft)	48	108	460		134	161
Queue Length 95th (ft)	99	276	616		213	241
Internal Link Dist (ft)		762	379		500	
Turn Bay Length (ft)	150				200	
Base Capacity (vph)	279	2780	2262		295	463
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	89		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.46	0.41	0.79		0.62	0.57

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 4:EBTL and 8:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 19.2	Intersection LOS: B
Intersection Capacity Utilization 75.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Euclid Ave & Salt Creek Ln

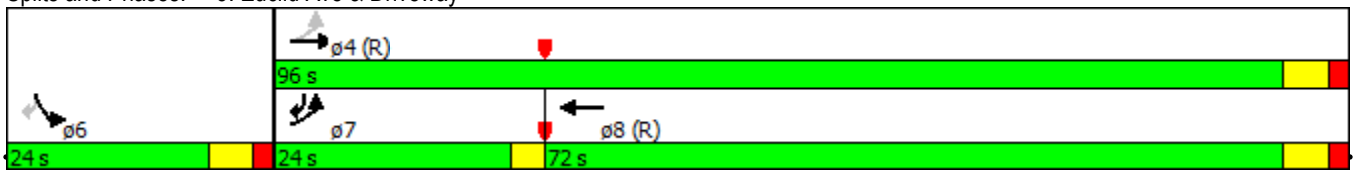


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	191	1083	1617	163	115	151
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.986			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3725	3490	0	1770	1583
Flt Permitted	0.049				0.950	
Satd. Flow (perm)	91	3725	3490	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			14			16
Link Speed (mph)		30	40		40	
Link Distance (ft)		790	842		369	
Travel Time (s)		18.0	14.4		6.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	201	1140	1702	172	121	159
Shared Lane Traffic (%)						
Lane Group Flow (vph)	201	1140	1874	0	121	159
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases	4					6
Detector Phase	7	4	8		6	7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	9.5	24.0	35.0		24.0	9.5
Total Split (s)	24.0	96.0	72.0		24.0	24.0
Total Split (%)	20.0%	80.0%	60.0%		20.0%	20.0%
Maximum Green (s)	21.0	90.0	66.0		18.0	21.0
Yellow Time (s)	3.0	4.0	4.0		4.0	3.0
All-Red Time (s)	0.0	2.0	2.0		2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	3.0	6.0	6.0		6.0	3.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	C-Max	C-Max		Min	None
Walk Time (s)			7.0			
Flash Dont Walk (s)			22.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Pedestrian Calls (#/hr)			2			
Act Effct Green (s)	97.6	94.6	78.1		13.4	32.9
Actuated g/C Ratio	0.81	0.79	0.65		0.11	0.27
v/c Ratio	0.76	0.39	0.82		0.61	0.36
Control Delay	54.1	3.7	11.4		63.7	31.6
Queue Delay	0.0	0.0	0.1		0.0	0.0
Total Delay	54.1	3.7	11.5		63.7	31.6
LOS	D	A	B		E	C
Approach Delay		11.3	11.5		45.5	
Approach LOS		B	B		D	
90th %ile Green (s)	20.8	90.0	66.2		18.0	20.8
90th %ile Term Code	Gap	Coord	Coord		Max	Gap
70th %ile Green (s)	16.5	92.4	72.9		15.6	16.5
70th %ile Term Code	Gap	Coord	Coord		Gap	Gap
50th %ile Green (s)	13.5	94.5	78.0		13.5	13.5
50th %ile Term Code	Gap	Coord	Coord		Gap	Gap
30th %ile Green (s)	10.4	96.6	83.2		11.4	10.4
30th %ile Term Code	Gap	Coord	Coord		Gap	Gap
10th %ile Green (s)	6.5	99.6	90.1		8.4	6.5
10th %ile Term Code	Gap	Coord	Coord		Gap	Gap
Queue Length 50th (ft)	118	67	164		91	89
Queue Length 95th (ft)	211	157	#893		149	130
Internal Link Dist (ft)		710	762		289	
Turn Bay Length (ft)	250					
Base Capacity (vph)	367	2937	2275		265	543
Starvation Cap Reductn	0	0	17		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.55	0.39	0.83		0.46	0.29

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 4:EBTL and 8:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 14.1	Intersection LOS: B
Intersection Capacity Utilization 80.2%	ICU Level of Service D
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Euclid Ave & Driveway

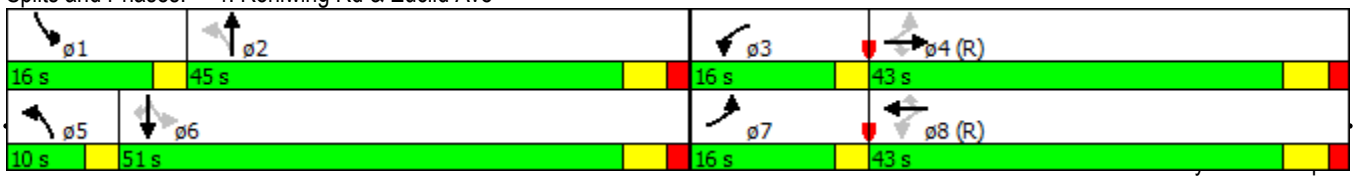


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	107	1064	181	95	1594	91	158	148	86	116	143	214
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Storage Length (ft)	200		225	100		200	145		0	130		130
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.945				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3725	1583	1770	3725	1583	1770	1760	0	1770	1961	1583
Flt Permitted	0.067			0.154			0.661			0.315		
Satd. Flow (perm)	125	3725	1583	287	3725	1583	1231	1760	0	587	1961	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			141			109		26				225
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		735			790			441			644	
Travel Time (s)		12.5			13.5			10.0			11.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	113	1120	191	100	1678	96	166	156	91	122	151	225
Shared Lane Traffic (%)												
Lane Group Flow (vph)	113	1120	191	100	1678	96	166	247	0	122	151	225
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Detector Phase	7	4	4	3	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	24.0	24.0	9.5	35.0	35.0	9.5	24.0		9.5	51.0	51.0
Total Split (s)	16.0	43.0	43.0	16.0	43.0	43.0	10.0	45.0		16.0	51.0	51.0
Total Split (%)	13.3%	35.8%	35.8%	13.3%	35.8%	35.8%	8.3%	37.5%		13.3%	42.5%	42.5%
Maximum Green (s)	13.0	37.0	37.0	13.0	37.0	37.0	7.0	39.0		13.0	45.0	45.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0		0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0		3.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min		None	Min	Min
Walk Time (s)					7.0	7.0					7.0	7.0
Flash Dont Walk (s)					22.0	22.0					38.0	38.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)					2	2					2	2
Act Effct Green (s)	71.3	59.3	59.3	70.5	58.9	58.9	32.9	22.9		39.7	27.1	27.1
Actuated g/C Ratio	0.59	0.49	0.49	0.59	0.49	0.49	0.27	0.19		0.33	0.23	0.23
v/c Ratio	0.57	0.61	0.22	0.36	0.92	0.12	0.45	0.69		0.40	0.34	0.42
Control Delay	30.1	26.4	8.1	14.4	27.4	3.2	33.0	49.4		30.1	38.6	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	30.1	26.4	8.1	14.4	27.4	3.2	33.0	49.4		30.1	38.6	6.2
LOS	C	C	A	B	C	A	C	D		C	D	A
Approach Delay		24.3			25.4			42.8			21.8	
Approach LOS		C			C			D			C	
90th %ile Green (s)	13.0	37.7	37.7	12.3	37.0	37.0	7.0	39.0		13.0	45.0	45.0
90th %ile Term Code	Max	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Ped	Ped
70th %ile Green (s)	9.8	55.6	55.6	9.5	55.3	55.3	7.0	23.9		13.0	29.9	29.9
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Max	Hold	Hold
50th %ile Green (s)	8.5	61.3	61.3	8.1	60.9	60.9	7.0	20.8		11.8	25.6	25.6
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	Hold
30th %ile Green (s)	7.4	67.0	67.0	7.1	66.7	66.7	7.0	17.6		10.3	20.9	20.9
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	Hold
10th %ile Green (s)	6.2	75.0	75.0	6.0	74.8	74.8	7.0	13.1		7.9	14.0	14.0
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Gap	Hold	Hold
Queue Length 50th (ft)	32	308	19	17	239	0	96	165		69	100	0
Queue Length 95th (ft)	108	#589	85	m37	#1068	m11	115	209		88	129	51
Internal Link Dist (ft)		655			710			361			564	
Turn Bay Length (ft)	200		225	100		200	145			130		130
Base Capacity (vph)	254	1841	854	335	1829	833	368	589		324	735	734
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.44	0.61	0.22	0.30	0.92	0.12	0.45	0.42		0.38	0.21	0.31

Intersection Summary		
Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green, Master Intersection		
Natural Cycle: 135		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.92		
Intersection Signal Delay: 26.3	Intersection LOS: C	
Intersection Capacity Utilization 83.9%	ICU Level of Service E	
Analysis Period (min) 15		
# 95th percentile volume exceeds capacity, queue may be longer.		
Queue shown is maximum after two cycles.		
m Volume for 95th percentile queue is metered by upstream signal.		

Splits and Phases: 4: Rohlwing Rd & Euclid Ave



Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	71	110	59	207	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	75	116	62	218	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	512	218	218	0	-	0
Stage 1	218	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	522	822	1352	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	756	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	476	822	1352	-	-	-
Mov Cap-2 Maneuver	476	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	689	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	5.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	822	-	-
HCM Lane V/C Ratio	0.086	-	0.091	-	-
HCM Control Delay (s)	7.9	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	36	36	256	82	55	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	38	269	86	58	400

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	829	313	0	0	356	0
Stage 1	313	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	340	727	-	-	1203	-
Stage 1	741	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	324	727	-	-	1203	-
Mov Cap-2 Maneuver	324	-	-	-	-	-
Stage 1	741	-	-	-	-	-
Stage 2	570	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.9	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	324	727	1203	-
HCM Lane V/C Ratio	-	-	0.117	0.052	0.048	-
HCM Control Delay (s)	-	-	17.6	10.2	8.1	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.2	0.2	-

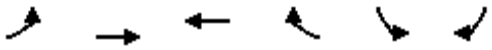
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	1	56	0	73	0	281	11	18	346	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	175	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	59	0	77	0	296	12	19	364	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	742	709	364	705	704	302	364	0	0	307	0	0
Stage 1	402	402	-	302	302	-	-	-	-	-	-	-
Stage 2	340	307	-	403	402	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	332	359	681	351	361	738	1195	-	-	1254	-	-
Stage 1	625	600	-	707	664	-	-	-	-	-	-	-
Stage 2	675	661	-	624	600	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	294	354	681	346	356	738	1195	-	-	1254	-	-
Mov Cap-2 Maneuver	294	354	-	346	356	-	-	-	-	-	-	-
Stage 1	625	591	-	707	664	-	-	-	-	-	-	-
Stage 2	605	661	-	614	591	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	13.5	0	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1195	-	-	681	346	738	1254	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.17	0.104	0.015	-	-
HCM Control Delay (s)	0	-	-	10.3	17.5	10.4	7.9	-	-
HCM Lane LOS	A	-	-	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.6	0.3	0	-	-



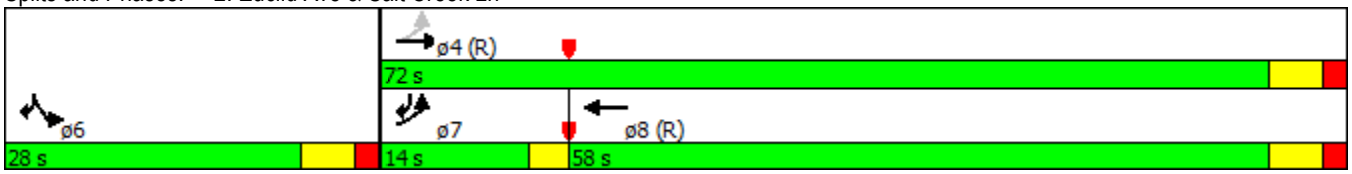
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	110	1509	849	83	127	99
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900
Storage Length (ft)	150			0	200	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.987			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3725	3493	0	1770	1583
Flt Permitted	0.244				0.950	
Satd. Flow (perm)	455	3725	3493	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			15			104
Link Speed (mph)		40	40		30	
Link Distance (ft)		842	459		580	
Travel Time (s)		14.4	7.8		13.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	1588	894	87	134	104
Shared Lane Traffic (%)						
Lane Group Flow (vph)	116	1588	981	0	134	104
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane					Yes	
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	7	4	8		6	6 7
Permitted Phases	4					
Detector Phase	7	4	8		6	6 7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	9.5	24.0	35.0		24.0	
Total Split (s)	14.0	72.0	58.0		28.0	
Total Split (%)	14.0%	72.0%	58.0%		28.0%	
Maximum Green (s)	11.0	66.0	52.0		22.0	
Yellow Time (s)	3.0	4.0	4.0		4.0	
All-Red Time (s)	0.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	3.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Max	C-Max		Min	
Walk Time (s)			7.0			
Flash Dont Walk (s)			22.0			

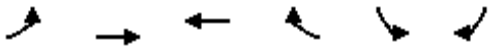
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Pedestrian Calls (#/hr)			2			
Act Effct Green (s)	78.1	75.1	65.0		12.9	23.0
Actuated g/C Ratio	0.78	0.75	0.65		0.13	0.23
v/c Ratio	0.26	0.57	0.43		0.59	0.23
Control Delay	4.5	6.8	9.7		51.0	6.9
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	4.5	6.8	9.7		51.0	6.9
LOS	A	A	A		D	A
Approach Delay		6.6	9.7		31.7	
Approach LOS		A	A		C	
90th %ile Green (s)	8.8	70.2	58.4		17.8	
90th %ile Term Code	Gap	Coord	Coord		Gap	
70th %ile Green (s)	7.7	73.1	62.4		14.9	
70th %ile Term Code	Gap	Coord	Coord		Gap	
50th %ile Green (s)	7.0	75.1	65.1		12.9	
50th %ile Term Code	Gap	Coord	Coord		Gap	
30th %ile Green (s)	6.4	77.1	67.7		10.9	
30th %ile Term Code	Gap	Coord	Coord		Gap	
10th %ile Green (s)	5.8	80.1	71.3		7.9	
10th %ile Term Code	Gap	Coord	Coord		Gap	
Queue Length 50th (ft)	14	192	141		82	0
Queue Length 95th (ft)	33	297	223		135	38
Internal Link Dist (ft)		762	379		500	
Turn Bay Length (ft)	150				200	
Base Capacity (vph)	500	2797	2275		389	496
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.23	0.57	0.43		0.34	0.21

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59
Intersection Signal Delay: 9.7 Intersection LOS: A
Intersection Capacity Utilization 56.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: Euclid Ave & Salt Creek Ln



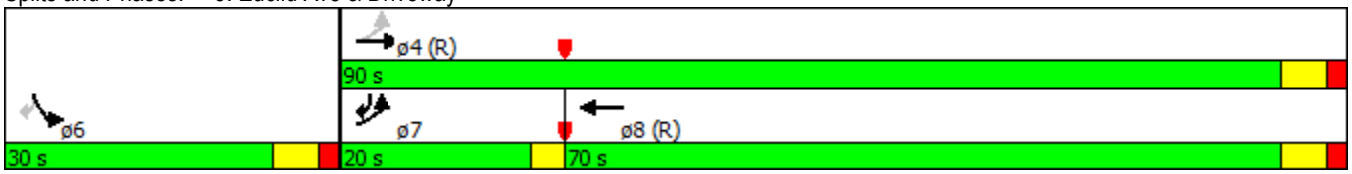


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	155	1507	825	130	123	170
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.980			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3725	3468	0	1770	1583
Flt Permitted	0.244				0.950	
Satd. Flow (perm)	455	3725	3468	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			22			127
Link Speed (mph)		30	40		40	
Link Distance (ft)		790	842		369	
Travel Time (s)		18.0	14.4		6.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	163	1586	868	137	129	179
Shared Lane Traffic (%)						
Lane Group Flow (vph)	163	1586	1005	0	129	179
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt	NA	NA		Prot	pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases	4					6
Detector Phase	7	4	8		6	7
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	9.5	24.0	35.0		24.0	9.5
Total Split (s)	20.0	90.0	70.0		30.0	20.0
Total Split (%)	16.7%	75.0%	58.3%		25.0%	16.7%
Maximum Green (s)	17.0	84.0	64.0		24.0	17.0
Yellow Time (s)	3.0	4.0	4.0		4.0	3.0
All-Red Time (s)	0.0	2.0	2.0		2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	3.0	6.0	6.0		6.0	3.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	C-Max	C-Max		Min	None
Walk Time (s)			7.0			
Flash Dont Walk (s)			22.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Pedestrian Calls (#/hr)			2			
Act Effct Green (s)	97.0	94.0	83.0		14.0	28.0
Actuated g/C Ratio	0.81	0.78	0.69		0.12	0.23
v/c Ratio	0.36	0.54	0.42		0.63	0.38
Control Delay	7.3	5.0	9.1		63.2	14.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	7.3	5.1	9.1		63.2	14.0
LOS	A	A	A		E	B
Approach Delay		5.3	9.1		34.6	
Approach LOS		A	A		C	
90th %ile Green (s)	10.2	88.6	75.4		19.4	10.2
90th %ile Term Code	Gap	Coord	Coord		Gap	Gap
70th %ile Green (s)	8.7	91.8	80.1		16.2	8.7
70th %ile Term Code	Gap	Coord	Coord		Gap	Gap
50th %ile Green (s)	7.8	94.0	83.2		14.0	7.8
50th %ile Term Code	Gap	Coord	Coord		Gap	Gap
30th %ile Green (s)	7.0	96.2	86.2		11.8	7.0
30th %ile Term Code	Gap	Coord	Coord		Gap	Gap
10th %ile Green (s)	6.2	99.3	90.1		8.7	6.2
10th %ile Term Code	Gap	Coord	Coord		Gap	Gap
Queue Length 50th (ft)	6	35	155		97	32
Queue Length 95th (ft)	m42	208	241		155	87
Internal Link Dist (ft)		710	762		289	
Turn Bay Length (ft)	250					
Base Capacity (vph)	554	2917	2405		354	576
Starvation Cap Reductn	0	109	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.29	0.56	0.42		0.36	0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 111 (93%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 56.4%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Euclid Ave & Driveway

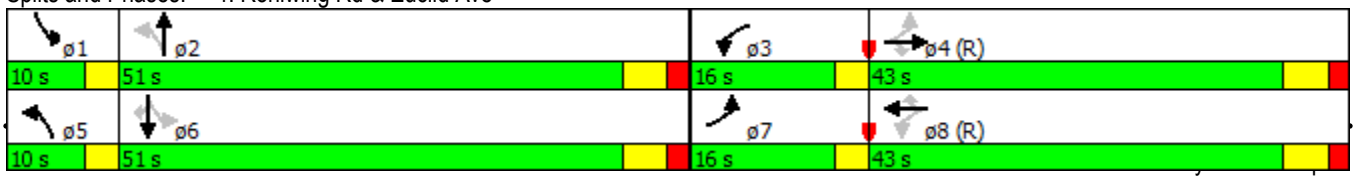


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	156	1546	149	55	910	25	146	97	77	46	95	91
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		225	100		200	145		0	130		130
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.934				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3725	1583	1770	3725	1583	1770	1740	0	1770	1863	1583
Flt Permitted	0.218			0.065			0.648			0.526		
Satd. Flow (perm)	406	3725	1583	121	3725	1583	1207	1740	0	980	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			82		38				96
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		735			790			441			644	
Travel Time (s)		12.5			13.5			10.0			11.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	164	1627	157	58	958	26	154	102	81	48	100	96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	164	1627	157	58	958	26	154	183	0	48	100	96
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Detector Phase	7	4	4	3	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	24.0	24.0	9.5	35.0	35.0	9.5	24.0		9.5	51.0	51.0
Total Split (s)	16.0	43.0	43.0	16.0	43.0	43.0	10.0	51.0		10.0	51.0	51.0
Total Split (%)	13.3%	35.8%	35.8%	13.3%	35.8%	35.8%	8.3%	42.5%		8.3%	42.5%	42.5%
Maximum Green (s)	13.0	37.0	37.0	13.0	37.0	37.0	7.0	45.0		7.0	45.0	45.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0		0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0		3.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min		None	Min	Min
Walk Time (s)					7.0	7.0					7.0	7.0
Flash Dont Walk (s)					22.0	22.0					38.0	38.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)					2	2					2	2
Act Effct Green (s)	80.8	69.8	69.8	75.8	65.8	65.8	30.5	21.9		29.6	19.9	19.9
Actuated g/C Ratio	0.67	0.58	0.58	0.63	0.55	0.55	0.25	0.18		0.25	0.17	0.17
v/c Ratio	0.43	0.75	0.16	0.34	0.47	0.03	0.45	0.53		0.17	0.32	0.28
Control Delay	13.4	24.5	9.5	26.7	16.4	0.2	37.2	38.7		29.2	43.3	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	13.4	24.5	9.5	26.7	16.4	0.2	37.2	38.7		29.2	43.3	8.1
LOS	B	C	A	C	B	A	D	D		C	D	A
Approach Delay		22.4			16.6			38.0			26.7	
Approach LOS		C			B			D			C	
90th %ile Green (s)	13.0	40.3	40.3	9.7	37.0	37.0	7.0	45.0		7.0	45.0	45.0
90th %ile Term Code	Max	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Ped	Ped
70th %ile Green (s)	10.3	69.3	69.3	7.2	66.2	66.2	7.0	18.5		7.0	18.5	18.5
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Max	Hold	Hold
50th %ile Green (s)	9.0	72.7	72.7	6.6	70.3	70.3	7.0	15.7		7.0	15.7	15.7
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Max	Hold	Hold
30th %ile Green (s)	7.9	76.0	76.0	6.1	74.2	74.2	7.0	12.9		7.0	12.9	12.9
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap		Max	Hold	Hold
10th %ile Green (s)	6.6	90.7	90.7	0.0	81.1	81.1	7.0	17.3		0.0	7.3	7.3
10th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Max	Hold		Skip	Gap	Gap
Queue Length 50th (ft)	36	436	23	11	134	0	100	109		29	72	0
Queue Length 95th (ft)	118	#988	93	59	452	m1	108	133		41	90	35
Internal Link Dist (ft)		655			710			361			564	
Turn Bay Length (ft)	200		225	100		200	145			130		130
Base Capacity (vph)	422	2166	955	259	2041	904	339	676		290	698	653
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.39	0.75	0.16	0.22	0.47	0.03	0.45	0.27		0.17	0.14	0.15

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 22.5		Intersection LOS: C	
Intersection Capacity Utilization 75.4%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Rohlwing Rd & Euclid Ave



Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	95	100	34	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	100	105	36	45	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	291	45	45	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	246	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	700	1025	1563	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	652	1025	1563	-	-	-
Mov Cap-2 Maneuver	652	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	740	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	5.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1563	-	1025	-	-
HCM Lane V/C Ratio	0.067	-	0.098	-	-
HCM Control Delay (s)	7.5	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	47	47	192	75	50	172
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	49	202	79	53	181

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	528	242	0	0	281	0
Stage 1	242	-	-	-	-	-
Stage 2	286	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	511	797	-	-	1282	-
Stage 1	798	-	-	-	-	-
Stage 2	763	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	490	797	-	-	1282	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	731	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	1.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	490	797	1282	-
HCM Lane V/C Ratio	-	-	0.101	0.062	0.041	-
HCM Control Delay (s)	-	-	13.2	9.8	7.9	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.2	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	2	23	0	28	0	206	30	24	199	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	175	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	2	24	0	29	0	217	32	25	209	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	508	509	210	495	494	233	211	0	0	248	0	0
Stage 1	261	261	-	233	233	-	-	-	-	-	-	-
Stage 2	247	248	-	262	261	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	475	467	830	485	476	806	1360	-	-	1318	-	-
Stage 1	744	692	-	770	712	-	-	-	-	-	-	-
Stage 2	757	701	-	743	692	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	451	458	830	477	467	806	1360	-	-	1318	-	-
Mov Cap-2 Maneuver	451	458	-	477	467	-	-	-	-	-	-	-
Stage 1	744	679	-	770	712	-	-	-	-	-	-	-
Stage 2	729	701	-	727	679	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	11.1	0	0.8
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1360	-	-	830	477	806	1318	-	-
HCM Lane V/C Ratio	-	-	-	0.003	0.051	0.037	0.019	-	-
HCM Control Delay (s)	0	-	-	9.3	13	9.6	7.8	-	-
HCM Lane LOS	A	-	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	0.1	-	-