
Arlington Downs Traffic Study Arlington Hts., Illinois

Prepared For:

OKW Architects

Prepared by:

Eriksson Engineering Associates, Ltd.



145 Commerce Drive, Ste A, Grayslake, IL 60030

847.223.8404

www.eea-ltd.com

1 – INTRODUCTION

This traffic report summarizes an analysis of the traffic conditions relating to proposed modifications to the Arlington Downs Planned Unit Development (PUD) in Arlington Heights, Illinois. It is located in the northeast quadrant of the signalized intersection of Euclid Avenue and Rohlwing Road. The site was originally occupied by the Arlington Sheraton full-service hotel with restaurants, meeting rooms, a water park and banquet facilities.

The purpose of the study was to observe the existing traffic patterns in the area, to determine the traffic characteristics of the development, and to analyze the future traffic conditions and access needs. The following sections of this report present a detailed description of the proposed site, transportation conditions, land-uses, and the proposed development's traffic characteristics.

Based on the following analyses, the following conclusions were developed:

1. The revised Arlington Downs PUD proposal will generate between 563 and 777 total vehicle trips during the peak-hours. This volume of site traffic is less than prior PUD proposals.
2. The overall road network and site access system can accommodate the projected site and regional traffic growth through the Year 2023 with excess capacity still available.
3. The intersection of Euclid Avenue and Rohlwing Road will need a southbound right-turn lane at Euclid Avenue.
4. The Stonegate Boulevard intersection on Euclid Avenue requires an eastbound left-turn lane for turns into the site.
5. A new access drive is proposed on the northern section of Salt Creek Lane with one inbound and one out bound lane.
6. No additional site access is proposed.

2 – EXISTING TRANSPORTATION NETWORK

Site Location and Area Land-Use

The site is located on the northeast corner of Euclid Avenue and Rohlwing Road in Arlington Heights, Illinois. It was previously occupied by the Arlington Sheraton hotel and conference center with an indoor water park. ONE Arlington apartments with 25N Coworking office space currently occupies the property. Access to the site is provided by one full-access drive on Euclid Avenue, one full-access drive on Rohlwing Road, and one full access drove on West Salt Creek Lane. A second access point is proposed on Salt Creek Lane.

Land-uses near the site consist of industrial/business uses to the west across Rohlwing Road and to the north and east along Salt Creek Lane. Further to the northeast is Arlington Race Track and its support facilities. To the south, across Euclid Avenue, there are single-family homes in Rolling Meadows. A park, South Park, operated by the Salt Creek Park District is located to the southwest. **Figure 1** illustrates the site location and the adjacent roadways.

Roadway Characteristics

A description of the area roadways providing access to the site is provided below:

Euclid Avenue is an east-west, major arterial roadway extending east from the Lake Michigan lakefront (as Lake Avenue) to Roselle Road. It has two through lanes in each direction. Along the site frontage, no left-turn median exists. Near the site, Euclid Avenue has signalized intersections at Rohlwing Road and at West Salt Creek Lane with center left-turn lanes. Euclid Avenue is under the jurisdiction of the Cook County Department of Transportation and Highways (CCDOTH) and has a posted speed limit of 40 miles per hour (mph).

Rohlwing Road is a two-lane north-south arterial road extending north from Kirchoff Road to Lenox Lane in Palatine. At its signalized intersection with Euclid Avenue, each approach provides a shared right-turn/through lane, and a left-turn lane. Rohlwing Road is under the jurisdiction of the Villages of Arlington Heights, and Rolling Meadows with a 40 mph speed limit.

Salt Creek Lane is a two lane industrial collector road serving an existing business park. It extends east of Rohlwing Road and then swings south to Euclid Avenue. At its stop sign controlled intersection with Rohlwing Road, it has separate right and left-turn lanes. Salt Creek Lane has a traffic signal at Euclid Avenue with separate right and left-turn lanes. The speed limit is posted at 25 mph and is under the jurisdiction of the Village of Arlington Heights.

Stonegate Boulevard is an internal spine road that circulates traffic within the Arlington Downs development. It consists of one 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. Stonegate Boulevard curves to intersect both Euclid Avenue and Rohlwing Road. It has one right turn lane and one left turn lane at both intersections. A two lane access road continues east from Stonegate Boulevard and intersects Salt Creek Lane. Sidewalks are generally provided along both sides of the roadway.

Figure 2 illustrates the existing roadway geometrics.

Public Transportation

The site is near the Arlington Park rail station on the Metra Union Pacific Northwest line offering service between Harvard and downtown Chicago.

PACE Route 696 is located approximately one mile to the east at the intersection of New Wilke Road and Euclid Avenue. This route runs from Randhurst Mall in Mount Prospect thru Arlington Heights, Rolling Meadows, and Schaumburg to Harper College in Palatine.

Bike Routes

Bike routes are adjacent to the site along the west side of Rohlwing Road and south of Euclid Avenue, east of Salt Creek, in the City of Rolling Meadows. These bike paths provide connections to the Villages of Arlington Heights and Palatine bike systems. A bike path is proposed on the north side of Euclid Avenue along the site frontage to be constructed in 2018.

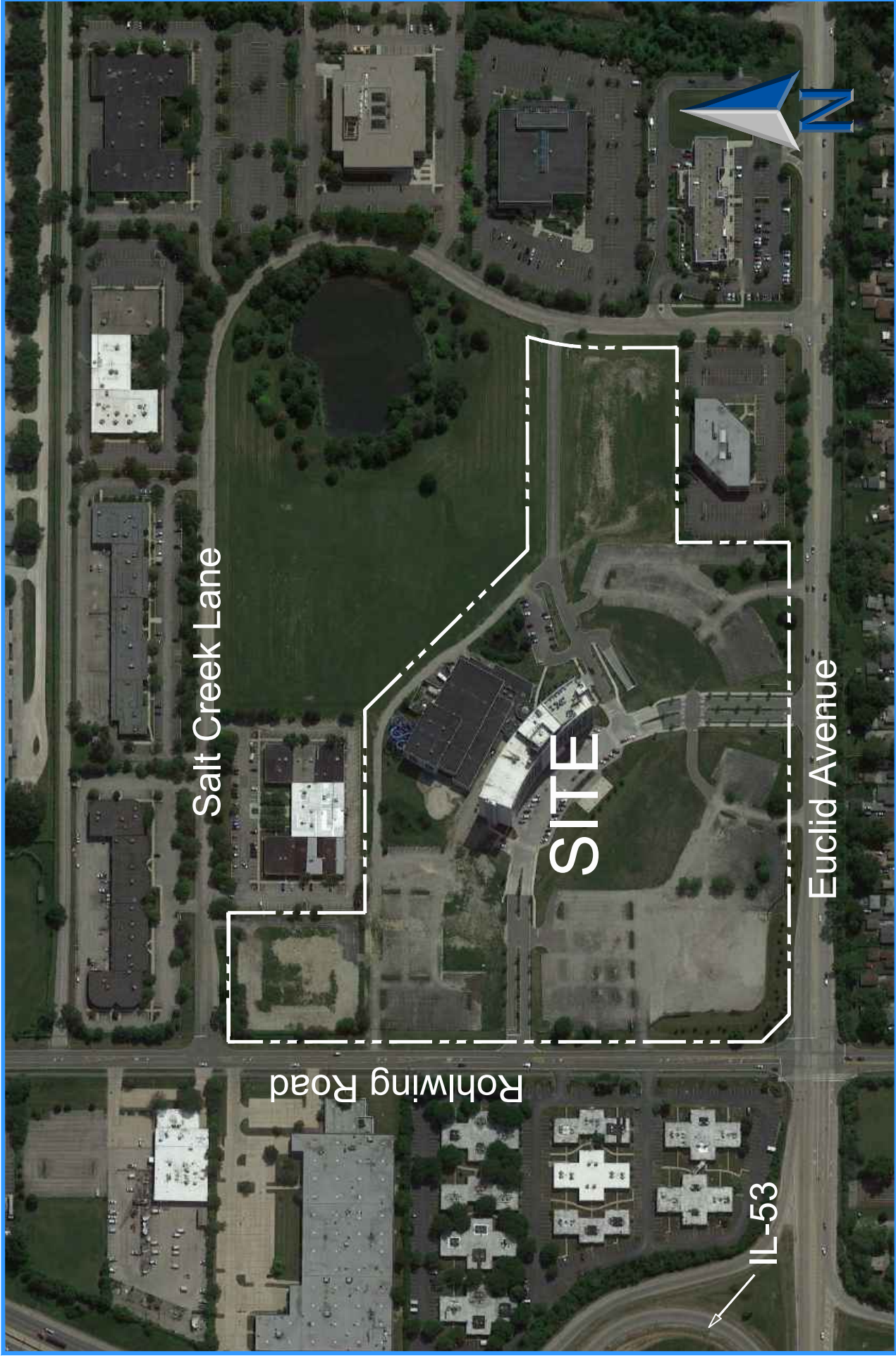
Existing Traffic Volumes

Weekday morning (7:00 to 9:00 AM) and afternoon (4:00 to 6:00 PM) manual traffic counts were conducted at the following study area intersections:

- Euclid Avenue at Rohlwing Road
- Euclid Avenue at Stonegate Boulevard
- Euclid Avenue at West Salt Creek Lane
- Rohlwing Road at West Salt Creek Lane
- Rohlwing Road at Stonegate Boulevard
- West Salt Creek Lane at Arlington Downs Access Road

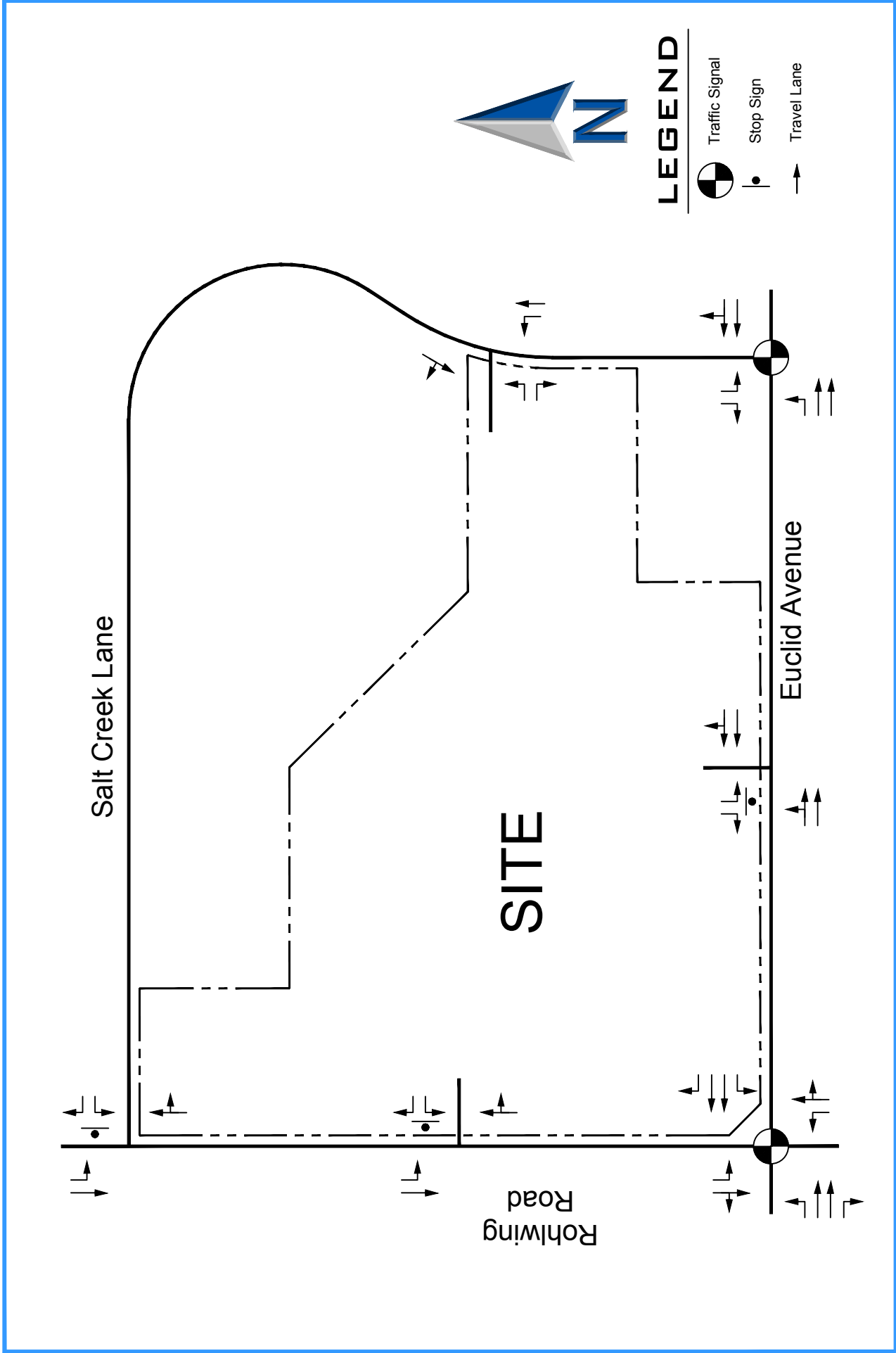
These counts showed the peak-hours of traffic occurring from 7:15 to 8:15 AM and 4:45 to 5:45 PM on a weekday. Euclid Avenue carries two-way traffic volumes ranging from 2,369 to 2,414 vehicles per hour (vph) in front of the site. Rohlwing Road carries significantly less traffic (630 - 644 vph). The existing traffic volumes are shown in **Figure 3** and included in the **Appendix**.

Saturday traffic counts were completed at the intersection of Euclid Avenue at Rohlwing Road with the peak-hour occurring from 11:15 AM to 12:15 PM. The intersection volumes were one third less than the weekday volumes which are approximately 1,100 vehicles per hour lower.



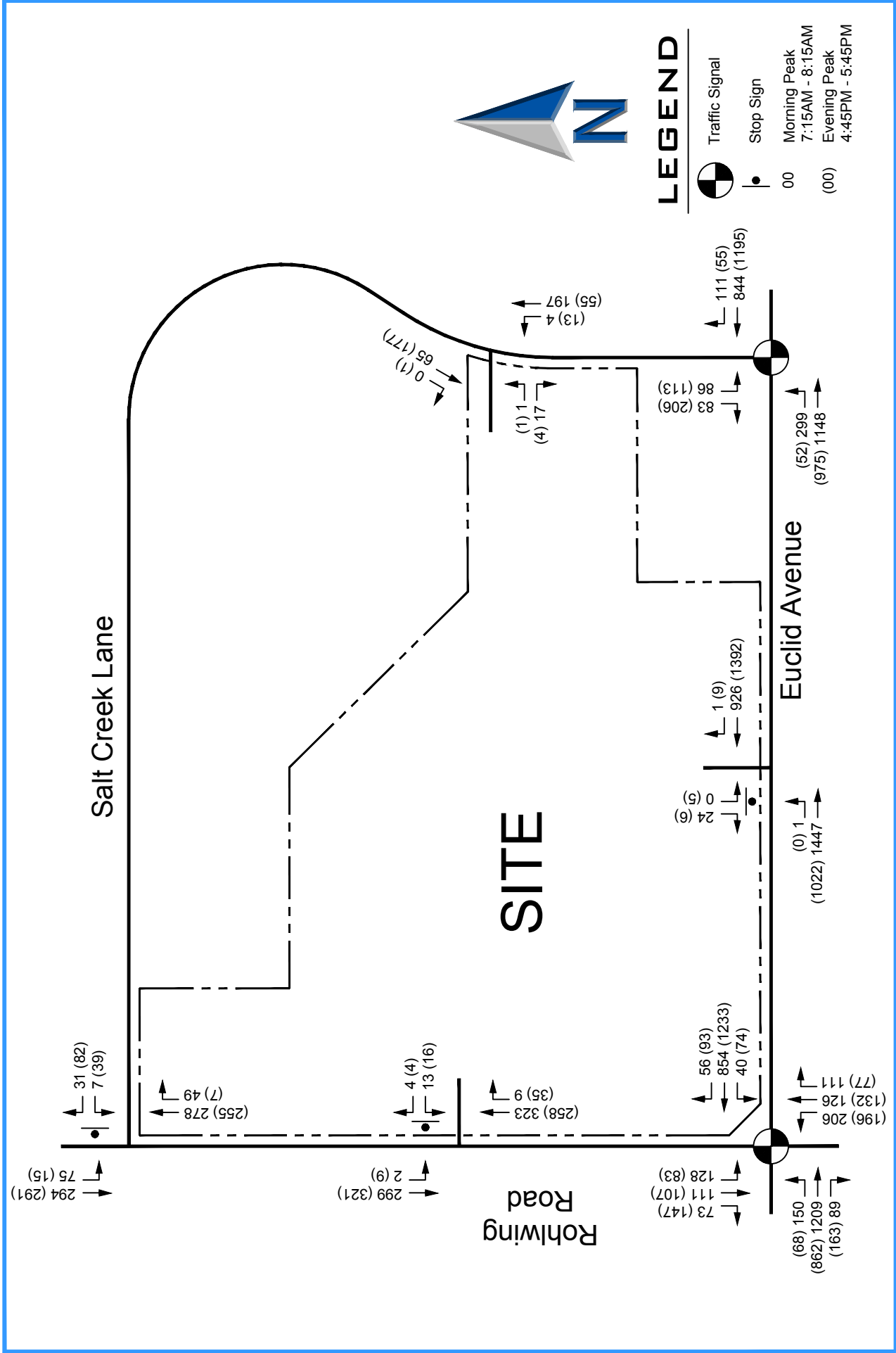
Site Location & Area Roadways

Figure 1



Existing Roadway Geometrics

Figure 2



Existing Traffic Volumes

Figure 3

3 – SITE TRANSPORTATION CHARACTERISTICS

The site was originally occupied by a hotel/convention center/water park. Access to the site was provided by two full-access drives on Euclid Avenue, three full-access drives on Rohlwing Road, and one full access drive on West Salt Creek Lane. Since the initial development approvals, an apartment tower with lower level office space has been built and occupied on the site.

Access is provided by one full access drive on each of Euclid Avenue, Rohlwing Road, and Salt Creek Lane. The ONE Arlington tower contains 214 apartments and 11,722 square feet of co-working office space (25N Coworking). The updated land plan calls for the redevelopment of the site with a combination of apartments, hotel rooms, retail, restaurants, a climbing gym, and a family entertainment area. A second access point is proposed on Salt Creek Lane.

Site Trip Generation

Traffic estimates were made for the apartments, retail, restaurants, and hotel rooms using data provided by the Institute of Transportation Engineer's Trip Generation 10th Ed. manual which contains trip generation surveys of similar land-uses. It serves as the most widely accepted reference guide for establishing vehicle trip generation. Actual traffic counts were used for the trip generation of the existing apartment tower and office space on Lot 1A/2A.

Lot 4 consists of a 116 room hotel and four commercial buildings that could be developed as retail or restaurant uses. For trip generation purposes, all retail and all restaurant scenarios were calculated. A conservative traffic analysis was conducted based on the higher all restaurant scenario because it generates significantly higher volumes than the all retail plan. Most likely, the final development plan will consist of both retail and restaurant uses. The updated plan calls for a maximum of 20,000 square feet of restaurant building area on Lot 4 so the trip estimates are higher than would be expected. **Table 1** summarizes the results for the site traffic calculations.

Traffic studies for previous Arlington Downs PUD proposals included more restaurant, retail, and entertainment uses than the current proposal which resulted in higher overall site generated traffic volumes. **Table 2** provides a comparison of the traffic generated by the current proposal and the 2014 and 2016 PUD plans. Overall the current plan generates less traffic than before. During the PM and Saturday peak periods, the 2014 traffic analysis was based on 75% more traffic than the current proposal.

**Table 1
Arlington Downs Trip Generation Estimates**

Lot	Land Use	ITE LUC	Size	AM Peak Hour			PM Peak Hour			Saturday Peak		
				In	Out	Total	In	Out	Total	In	Out	Total
Existing Uses (ONE Arlington and 25N Coworking)												
1A/2A	Apartments	222	214 units	17	59	76	67	36	103	50	50	100
	Office	710	11,722 sq. ft.									
Proposed Uses												
5/16/2B	Apartments	221	623 units	58	166	224	167	107	274	137	137	274
3	Senior Living	252	180 units	12	24	36	26	21	47	38	23	61
4A	Hotel	312	116 rooms	35	30	65	29	23	52	15	12	27
1A/2A	First Ascent	434	34,082 sq. ft.	15	33	48	32	24	56	44	44	88
1A/2A	Funtopia	435	19,218 sq. ft.	-	-	-	35	35	70	60	60	120
Subtotal Residential/Lodging/Entertainment				120	253	373	289	210	499	294	276	570
Lot 4A Options – All Retail or All Restaurants												
4A	Retail	820	30,300	17	10	27	55	55	110	65	65	130
4A	Quality Restaurant	931	15,150 sq. ft.	5	5	10	76	37	113	93	62	155
4A	Family Restaurant	932	15,150 sq. ft.	79	65	144	88	54	142	81	81	162
Restaurant Totals				84	70	154	164	91	255	174	143	317
Total New Trips (without ONE Arlington and 25N Coworking)												
Assuming All Restaurants on Lot 4A				204	323	527	453	301	754	468	419	887
Internal Interaction/Public Transportation				-20	-20	-40	-40	-40	-80	-40	-40	-80
Net New Traffic on Roadway System				184	303	487	413	261	674	428	379	807
Total Arlington Downs Trip Generation (Existing and Proposed)												
Total Site Trip Generation				201	362	563	480	297	777	478	429	907

Table 2
Comparison of Previous PUD Proposals

Use	Morning Peak			Evening Peak			Saturday Peak		
	In	Out	Total	In	Out	Total	In	Out	Total
2018 PUD Proposal	201	362	563	480	297	777	478	429	907
2016 V3 Plan	360	465	825	549	357	906	502	474	976
2014 EEA Plan	296	337	633	765	587	1,352	832	781	1,613

Directional Distribution

The trip distribution for the development is based on a combination of the existing traffic volumes going by the site, the existing road system and the distribution of residents in the area,. The trip distribution for the site is shown on **Table 3** and **Figure 4**.

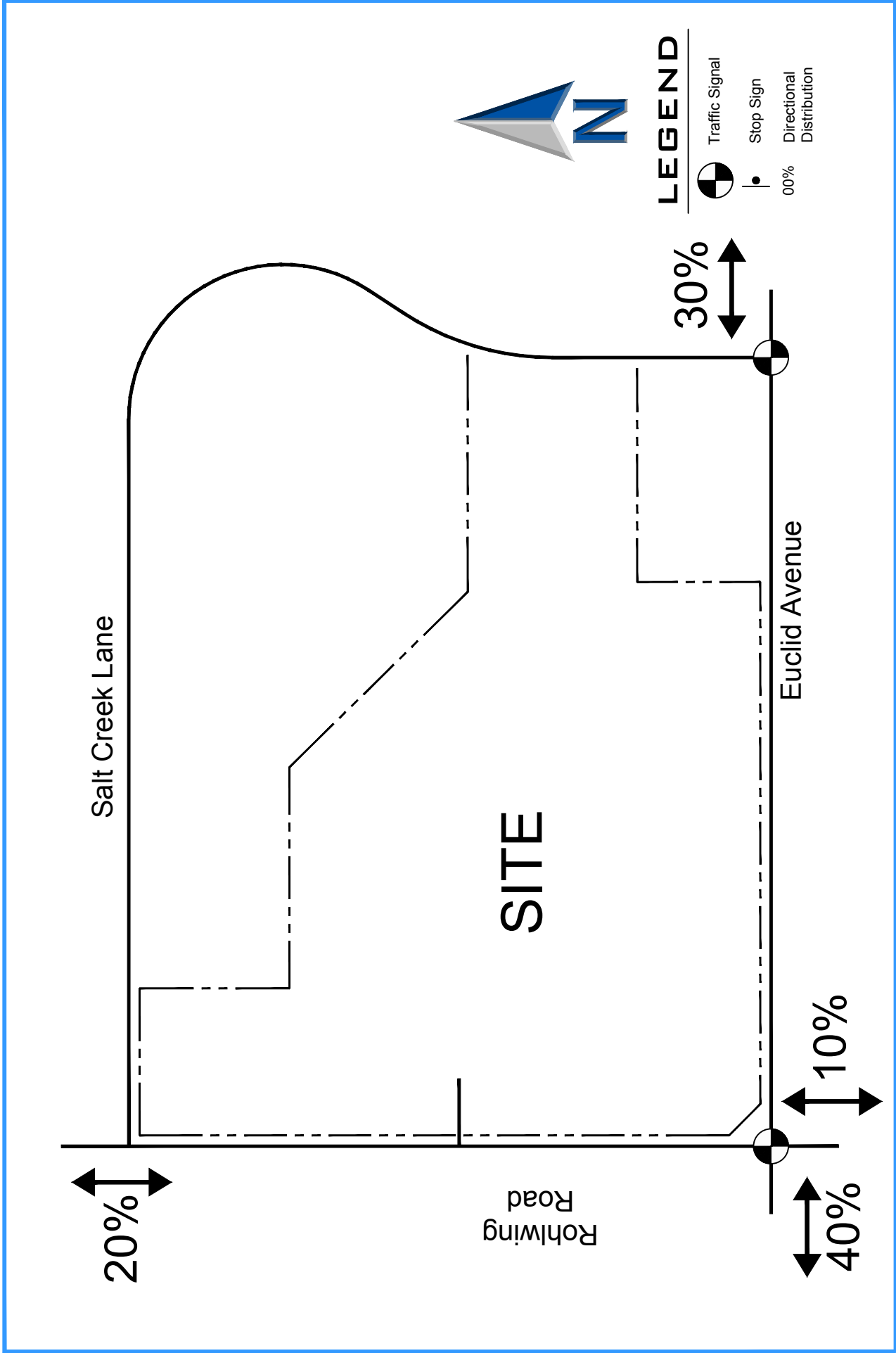
Table 3
Directional Distribution on Adjacent Roadways

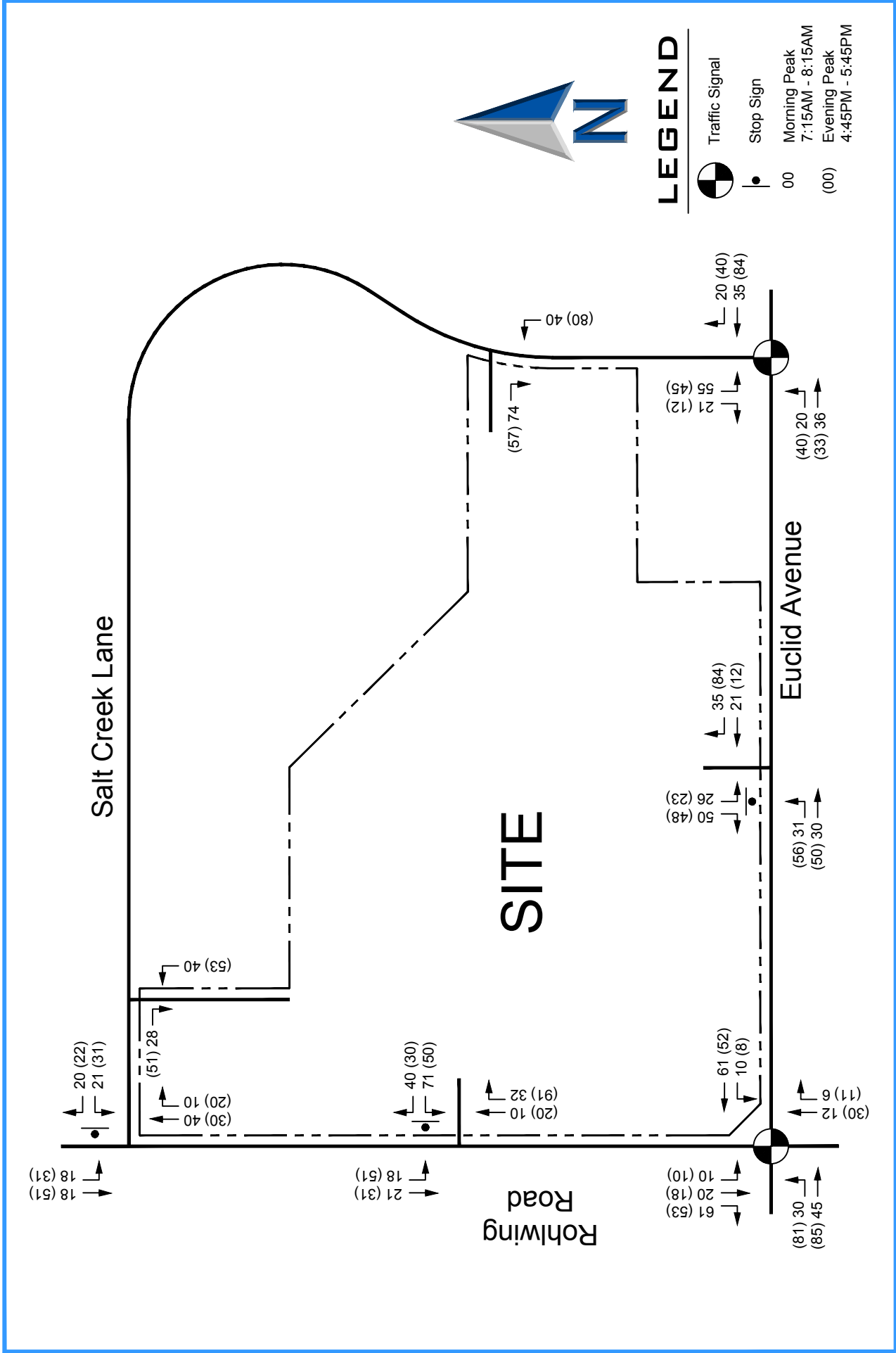
Direction	Distribution
North on Rohlwing Road	20%
East on Euclid Avenue	30%
West on Euclid Avenue	40%
South on Rohlwing Road	10%
Total	100%

Site Traffic and Total Traffic Volumes

Development traffic was assigned to the road system and access drives based on the directional distribution from **Table 3** and the worst case trip generation assumption of all restaurants on Lot 4. **Figure 5** illustrates the development turning movements at each intersection or driveway.

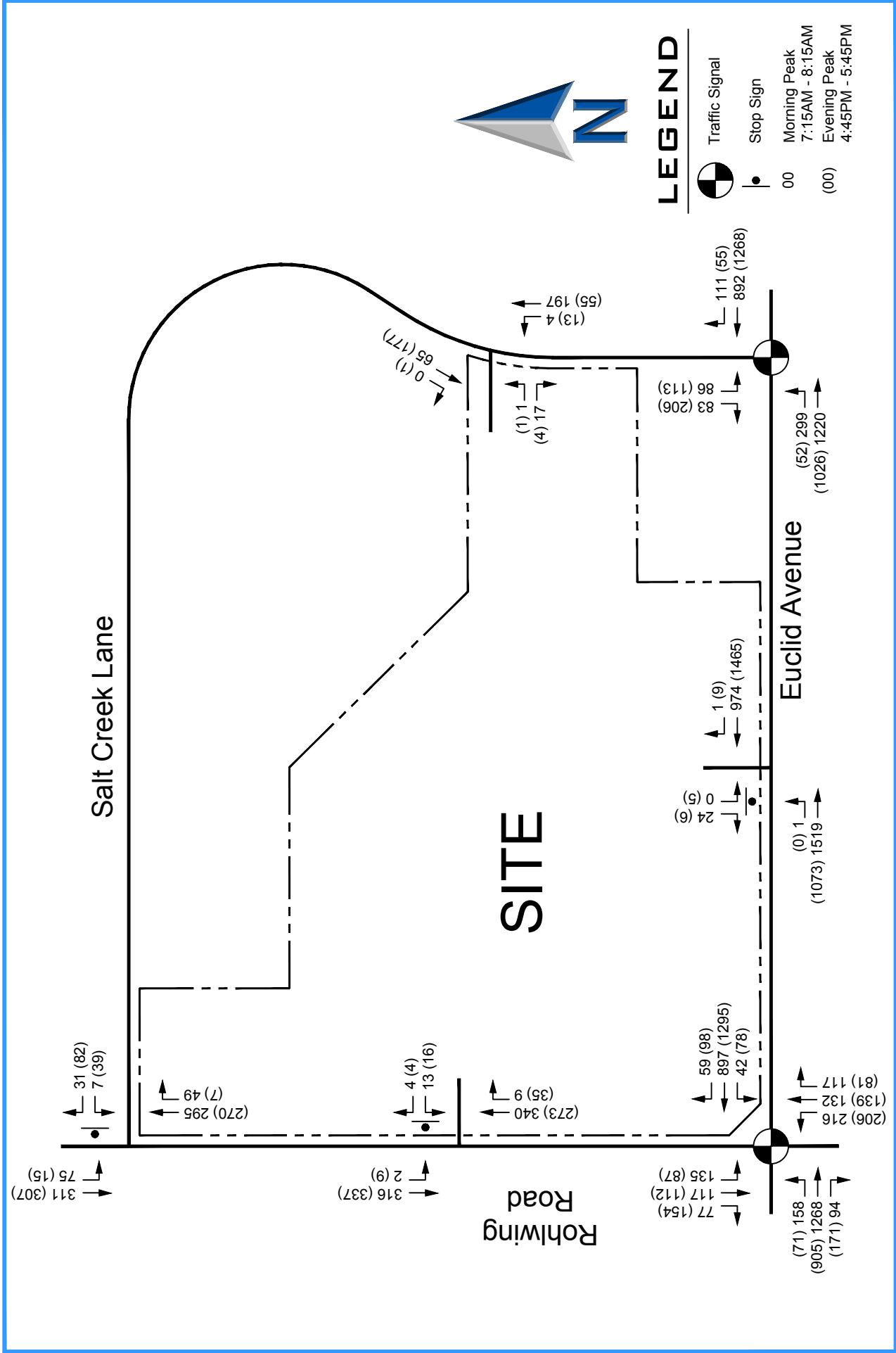
Total traffic volumes are a combination of the existing traffic volumes, projected non-site growth in those volumes, and the site related traffic. Traffic projections were estimated for a period five years in the future (Year 2023). A regional growth rate of 1% per year was applied to the existing traffic volumes to obtain the base 2023 volumes (see **Figure 6**). The volumes from Figure 6 were combined with the site traffic volumes (Figure 5) to generate the Year 2023 total traffic volumes with full Arlington Downs development and are shown on **Figure 7**.





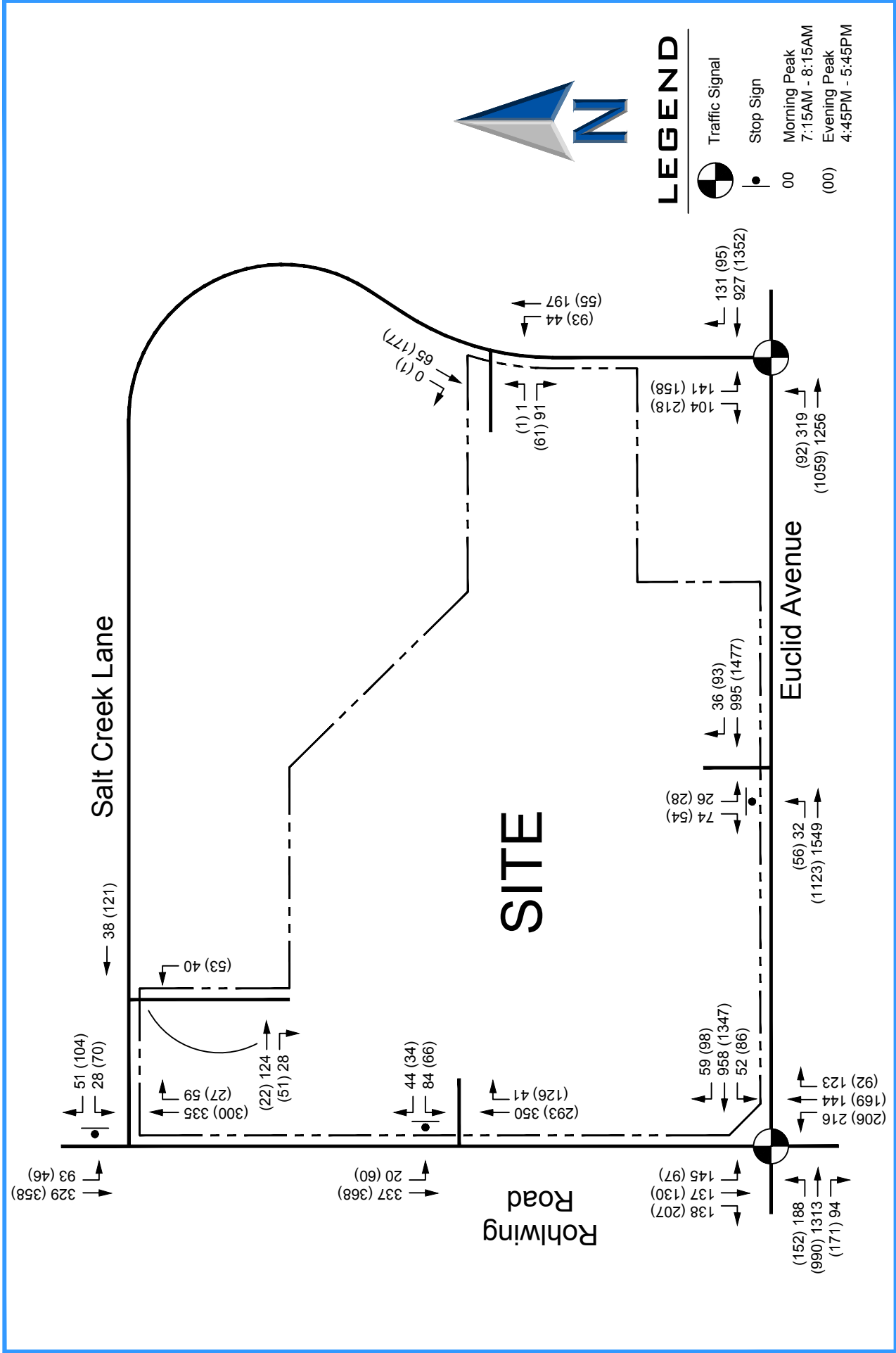
Site Traffic Assignment

Figure 5



2023 Base Traffic Volumes

Figure 6



2023 Total Traffic Volumes

Figure 7

4 – ANALYSES

Intersection Capacity Analyses

In order to determine the operation of the study area intersections and the access drives, intersection capacity analyses were conducted for the existing and projected traffic volumes. An intersection’s ability to accommodate traffic flow is based on the average control delay experienced by vehicles passing through the intersection. The intersection and individual traffic movements are assigned a level of service (LOS), ranging from A to F based on the control delay created by a traffic signal or stop sign. Control delay consists of the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS A has the best traffic flow and least delay. LOS E represents saturated or at capacity conditions. LOS F experiences oversaturated conditions and extensive delays. The Highway Capacity Manual definitions for levels of service and the corresponding control delay for both signalized and unsignalized intersections are shown in **Table 4**.

Table 4
Level of Service Criteria for Intersections

Level of Service	Description	Control Delay (seconds/vehicle)	
		Signals	Stop Signs
A	Minimal delay and few stops	<10	<10
B	Low delay with more stops	>10-20	>10-15
C	Light congestion	>20-35	>15-25
D	Congestion is more noticeable with longer delays	>35-55	>25-35
E	High delays and number of stops	>55-80	>35-50
F	Unacceptable delays and over capacity	>80	>50

Source: Highway Capacity Manual

Capacity analyses were conducted for each intersection using the Highway Capacity Software (version 7.5) to determine the existing and future operations of the road network and access system. These analyses were performed for the weekday peak-hours. The capacity analyses are summarized in **Table 5 and 6** and are included in the **Appendix**.

Rohlwing Road and Euclid Avenue

The traffic signal at the intersection of Rohlwing Road and Euclid Avenue will continue to operate at an acceptable level of service with the growth in regional and site traffic. A southbound right-turn lane is proposed on Rohlwing Road at Euclid Avenue to help manage the existing and proposed traffic queueing on Rohlwing Road.

Salt Creek Lane at Euclid Avenue

This signalized intersection will experience additional turning traffic from the development onto Salt Creek Lane. No additional improvements are needed.

Salt Creek Lane at Rohlwing Road

With the proposed site access drive on Salt Creek Lane to the east, there will be additional traffic volumes turning onto Rohlwing Road. The left-turn onto Rohlwing Road in the evening peak hour will operate at LOS C as employees exit the industrial park and patrons exit Arlington Downs. No additional improvements are recommended.

**Table 5
External Intersection Level of Service**

Intersection	Approach	Morning Peak		Evening Peak	
		2017	2023	2017	2023
Euclid Avenue at Rohlwing Road (Traffic Signal)	Intersection	LOS C (21.3 sec)	LOS C (23.7 sec)	LOS C (20.2 sec)	LOS C (19.8 sec)
Euclid Avenue at Salt Creek Lane (Traffic Signal)	Intersection	LOS A (5.5 sec)	LOS A (8.1 sec)	LOS A (8.1 sec)	LOS A (9.5 sec)
Rohlwing Road at Salt Creek Lane (Stop Controlled)	SB Left	LOS A	LOS A	LOS A	LOS A
	WB Left	LOS B	LOS B	LOS C	LOS C
	WB Right	LOS B	LOS B	LOS B	LOS B

**Table 6
Site Access Level of Service**

Intersection	Approach	Morning Peak		Evening Peak	
		2017	2023	2017	2023
Arlington Downs North Access on Salt Creek Lane (Stop Controlled)	WB Left		LOS A		LOS A
	NB Left/Right		LOS A		LOS A
Rohlwing Road at Stonegate Boulevard (Stop Controlled)	SB Left	LOS A	LOS A	LOS A	LOS A
	WB Left	LOS B	LOS B	LOS B	LOS C
	WB Right	LOS B	LOS B	LOS A	LOS B
Euclid Avenue at Stonegate Boulevard (Stop Controlled)	EB Left	LOS B	LOS B	LOS B	LOS C
	SB Left	LOS F	LOS F	LOS F	LOS F
	SB Right	LOS B	LOS B	LOS C	LOS C
Arlington Downs South Access on Salt Creek Lane (Stop Controlled)	NB Left	LOS A	LOS A	LOS A	LOS A
	EB Left	LOS B	LOS B	LOS B	LOS B
	EB Right	LOS A	LOS A	LOS A	LOS A

South Salt Creek Lane Access

The existing full access point on Salt Creek Lane is located approximately 560 feet north of Euclid Avenue. It will remain under stop sign control. A northbound left-turn lane should be striped within the existing cross-section of Salt Creek Lane so that left-turns into the site will not block through traffic continuing to the business park. The northbound left-turn lane should provide 115 feet of storage. For exiting traffic, separate left- and right-turn lanes should be provided which would require the entrance road to be widened approximately seven feet. This will allow the right-turns to turn without being blocked by left-turning vehicles. The eastbound left-turn lane should provide 115 feet of storage.

North Salt Creek Lane Access

A new full access point on Salt Creek Lane is proposed approximately 300 feet east of Euclid Avenue. That location was previously a driveway to a small industrial building. It will have one inbound and one outbound lane with exiting traffic under stop sign control. No improvements are proposed on Salt Creek Lane.

Euclid Avenue at Stonegate Boulevard

Stonegate Boulevard has been constructed with two inbound lanes and two outbound lanes (left and right). Left-turns from Euclid Avenue into the site are prohibited during peak time of the day. A left-turn lane will be needed on Euclid Avenue for traffic turning into the site so it does not block thru traffic on Euclid Avenue. Euclid Avenue will be widened to five lanes between the signalized intersections at Rohlwing Road and Salt Creek Lane.

Rohlwing Road at Stonegate Boulevard

Stonegate Boulevard has been constructed with two inbound lanes and two outbound lanes (left and right). It will be under stop sign control. The center median on Rohlwing Road has been stripped with a southbound left-turn lane.

5 - CONCLUSIONS

Based on the analysis of the existing and projected traffic conditions for the revised Arlington Downs PUD, the following conclusions were developed:

1. The revised Arlington Downs PUD proposal will generate between 563 and 777 total vehicle trips during the peak-hours. This volume of site traffic is less than prior PUD proposals.
2. The overall road network and site access system can accommodate the projected site and regional traffic growth through the Year 2023 with excess capacity available.
3. The intersection of Euclid Avenue and Rohlwing Road will need a southbound right-turn lane at Euclid Avenue.
4. The Stonegate Boulevard intersection on Euclid Avenue requires an eastbound left-turn lane for turns into the site.
5. A new access drive is proposed on the northern section of Salt Creek Lane with one inbound and one out bound lane.
6. No additional site access is proposed.



APPENDIX

- **Existing Traffic Counts**
- **Intersection Capacity Analyses**



Euclid Avenue at Rohlwing Road

Arlington Heights, IL															
Begin Time	Rohlwing Road Southbound			Euclid Avenue Westbound			Rohlwing Road Northbound			Euclid Avenue Eastbound			15 Minute Totals	60 Minute Totals	Peak Hour Factor
	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn			
Thursday April 20, 2017															
7:00 AM	15	17	16	10	155	4	20	23	45	23	277	40	645	3069	0.88
7:15 AM	14	23	25	9	214	13	20	42	43	21	287	40	751	3117	0.89
7:30 AM	10	30	34	13	195	4	26	28	51	23	342	41	797	3084	0.88
7:45 AM	20	30	37	20	231	10	40	35	69	24	325	35	876	3021	0.86
8:00 AM	27	25	29	14	186	13	25	21	43	21	255	34	693	2838	0.97
8:15 AM	17	20	23	15	199	14	28	19	40	27	277	39	718		
8:30 AM	24	26	23	14	189	14	35	33	49	28	279	20	734		
8:45 AM	12	25	18	13	170	12	27	20	35	25	306	30	693		
Total	139	196	205	108	1539	84	221	221	375	192	2348	279			
7:15-8:15 AM	71	108	125	56	826	40	111	126	206	89	1209	150	3117		
Thursday April 20, 2017															
4:00 PM	60	28	18	21	282	15	16	23	45	43	183	10	744	3043	0.93
4:15 PM	45	26	9	22	284	21	9	21	39	33	188	27	724	3117	0.95
4:30 PM	51	34	26	15	288	10	15	26	42	45	189	18	759	3226	0.97
4:45 PM	34	29	22	16	315	24	21	39	51	46	201	18	816	3233	0.97
5:00 PM	54	30	22	25	312	17	16	34	48	35	216	9	818	3191	0.96
5:15 PM	30	24	26	28	315	16	18	27	51	40	238	20	833		
5:30 PM	29	23	13	24	291	17	22	31	46	42	207	21	766		
5:45 PM	27	27	14	16	307	12	22	29	46	47	212	15	774		
Total	330	221	150	167	2394	132	139	230	368	331	1634	138			
4:45-5:45 PM	147	106	83	93	1233	74	77	131	196	163	862	68	3233		
Saturday April 22, 2017															
12:00 AM	20	10	11	9	165	8	7	9	37	21	165	8	470	2037	0.94
11:15 AM	12	13	13	5	153	10	5	12	41	27	197	13	501	2106	0.98
11:30 AM	11	18	9	7	176	13	12	21	46	39	177	11	540	2096	0.97
11:45 AM	15	26	5	7	153	13	15	22	42	38	181	9	526	2031	0.94
12:00 PM	15	13	8	13	180	11	15	18	44	35	177	10	539	1990	0.92
12:15 PM	15	17	4	9	144	11	8	13	43	35	170	22	491		
12:30 PM	4	7	9	4	156	14	11	16	41	29	174	10	475		
12:45 PM	14	19	11	3	152	8	14	15	42	24	169	14	485		
Total	106	123	70	57	1279	88	87	126	336	248	1410	97			
11:15AM-12:15PM	53	70	35	32	662	47	47	73	173	139	732	43	2106		



Euclid Avenue at Stonegate Boulevard

Arlington Heights, IL												
Begin Time	Stonegate Blvd. Southbound			Euclid Avenue Westbound			Euclid Avenue Eastbound			15 Minute Totals	60 Minute Totals	Peak Hour Factor
	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Through	Left Turn				
Thursday April 20, 2017												
7:00 AM	4	0	223	0	0	340	0	0	567	2348	0.90	
7:15 AM	6	0	203	0	0	354	0	0	563	2271	0.87	
7:30 AM	9	0	187	0	0	371	0	0	567	2243	0.86	
7:45 AM	4	0	270	0	0	377	0	0	651	2225	0.85	
8:00 AM	5	0	201	1	1	282	1	1	490	2131	0.96	
8:15 AM	5	1	218	2	2	309	0	0	535			
8:30 AM	3	0	219	1	1	326	0	0	549			
8:45 AM	1	2	203	1	1	348	2	2	557			
Total	37	3	1724	5	5	2707	3	3				
7:15-8:15 AM	24	0	861	1	1	1384	1	1	2271			
Thursday April 20, 2017												
4:00 PM	2	0	358	0	0	207	1	1	568	2247	0.94	
4:15 PM	1	0	321	1	1	198	0	0	521	2306	0.92	
4:30 PM	0	1	334	0	0	228	0	0	563	2417	0.96	
4:45 PM	1	1	339	2	2	252	0	0	595	2426	0.96	
5:00 PM	0	0	363	3	3	261	0	0	627	2377	0.94	
5:15 PM	3	1	353	2	2	273	0	0	632			
5:30 PM	2	3	337	2	2	228	0	0	572			
5:45 PM	2	0	292	0	0	252	0	0	546			
Total	11	6	2697	10	10	1899	1	1				
4:45-5:45 PM	6	5	1392	9	9	1014	0	0	2426			



Euclid Avenue at Salt Creek Lane

Arlington Heights, IL												
Begin Time	Salt Creek Lane Southbound			Euclid Avenue Westbound			Euclid Avenue Eastbound			15 Minute Totals	60 Minute Totals	Peak Hour Factor
	Right Turn	Left Turn	Through	Right Turn	Left Turn	Through	Through	Left Turn				
Wednesday April 19, 2017												
7:00 AM	10	11	157	18	18	157	262	64	64	522	2418	0.88
7:15 AM	18	19	190	23	23	190	264	64	64	578	2505	0.91
7:30 AM	25	23	239	16	16	239	309	73	73	685	2488	0.91
7:45 AM	18	25	219	37	37	219	253	81	81	633	2356	0.93
8:00 AM	22	19	196	35	35	196	256	81	81	609	2267	0.93
8:15 AM	14	29	178	28	28	178	246	66	66	561		
8:30 AM	9	29	176	24	24	176	246	69	69	553		
8:45 AM	15	30	168	29	29	168	240	62	62	544		
Total	131	185	1523	210	210	1523	2076	560	560	2505		
7:15-8:15 AM	83	86	844	111	111	844	1082	299	299			
Wednesday April 19, 2017												
4:00 PM	61	29	305	4	4	305	210	18	18	627	2425	0.97
4:15 PM	58	30	254	9	9	254	221	13	13	585	2421	0.97
4:30 PM	55	29	289	12	12	289	213	16	16	614	2408	0.97
4:45 PM	42	30	271	23	23	271	219	14	14	599	2446	0.94
5:00 PM	75	31	279	8	8	279	221	9	9	623	2412	0.92
5:15 PM	51	26	259	10	10	259	215	11	11	572		
5:30 PM	38	26	329	14	14	329	227	18	18	652		
5:45 PM	33	18	266	6	6	266	221	21	21	565		
Total	413	219	2252	86	86	2252	1747	120	120	2446		
4:45-5:45 PM	206	113	1138	55	55	1138	882	52	52			



Salt Creek Lane at 1 Arlington Access Drive

Arlington Heights, IL												
Begin Time	Salt Creek Lane Southbound			Salt Creek Lane Northbound			1 Arlington Access Eastbound			15 Minute Totals	60 Minute Totals	Peak Hour Factor
	Right Turn	Through	Left Turn	Through	Left Turn	Right Turn	Left Turn					
Wednesday April 19, 2017												
7:00 AM	0	9	0	30	0	2	0	0	41	240	0.67	
7:15 AM	0	13	0	42	0	4	0	0	59	284	0.80	
7:30 AM	0	11	0	35	0	5	0	0	51	297	0.83	
7:45 AM	0	19	0	63	2	5	0	0	89	310	0.87	
8:00 AM	0	22	0	57	2	3	1	1	85	287	0.84	
8:15 AM	0	12	0	54	1	4	1	1	72			
8:30 AM	0	11	0	51	0	1	1	1	64			
8:45 AM	0	15	0	49	1	1	0	0	66			
Total	0	112	6	381	6	25	3					
7:15-8:15 AM	0	65	4	197	4	17	1		284			
Wednesday April 19, 2017												
4:00 PM	0	56	2	10	2	2	0	0	70	271	0.87	
4:15 PM	1	42	0	10	0	0	1	1	54	271	0.87	
4:30 PM	0	54	2	20	2	2	0	0	78	273	0.88	
4:45 PM	0	42	3	22	3	2	0	0	69	251	0.90	
5:00 PM	0	55	2	12	2	1	0	0	70	227	0.81	
5:15 PM	0	40	4	11	4	0	1	1	56			
5:30 PM	1	40	4	10	4	1	0	0	56			
5:45 PM	0	31	1	12	1	1	0	0	45			
Total	2	360	18	107	18	9	2					
4:45-5:45 PM	1	177	13	55	13	4	1		251			



Rohlwing Road at Stonegate Boulevard

Arlington Heights, IL											
Begin Time	Rohlwing Road Southbound		Stonegate Blvd. Westbound		Rohlwing Road Northbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor		
	Through	Left Turn	Right Turn	Left Turn	Right Turn	Through					
Thursday April 20, 2017											
7:00 AM	46	0	1	3	2	87	139	622	0.91		
7:15 AM	65	0	0	1	2	79	147	623	0.91		
7:30 AM	85	1	2	3	1	79	171	607	0.89		
7:45 AM	76	0	1	5	2	81	165	570	0.86		
8:00 AM	72	1	1	4	4	58	140	504	0.90		
8:15 AM	63	0	0	1	1	66	131				
8:30 AM	64	1	2	3	2	62	134				
8:45 AM	48	3	0	2	2	44	99				
Total	519	6	7	22	16	556					
7:15-8:15 AM	298	2	4	13	9	297	623				
Thursday April 20, 2017											
4:00 PM	90	2	1	4	4	53	154	608	0.99		
4:15 PM	84	1	0	2	4	61	152	632	0.89		
4:30 PM	91	0	0	2	6	55	154	649	0.91		
4:45 PM	79	3	0	2	4	60	148	640	0.90		
5:00 PM	91	1	4	5	7	70	178	601	0.84		
5:15 PM	89	5	0	5	12	58	169				
5:30 PM	62	0	0	4	12	67	145				
5:45 PM	55	1	2	2	5	44	109				
Total	641	13	7	26	54	468					
4:45-5:45 PM	321	9	4	16	35	255	640				

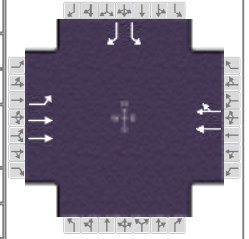


Rohlwing Road at Salt Creek Lane

Arlington Heights, IL											
Begin Time	Rohlwing Road Southbound		Salt Creek Lane Westbound		Rohlwing Road Northbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor		
	Through	Left Turn	Right Turn	Left Turn	Right Turn	Through					
Thursday April 20, 2017											
7:00 AM	42	15	5	2	17	63	144	679	0.87		
7:15 AM	61	14	10	2	10	63	160	699	0.90		
7:30 AM	83	19	7	2	11	73	195	698	0.89		
7:45 AM	75	22	8	1	13	61	180	650	0.90		
8:00 AM	75	20	6	2	15	46	164	580	0.88		
8:15 AM	65	21	7	2	9	55	159				
8:30 AM	64	14	5	2	9	53	147				
8:45 AM	56	6	3	2	11	32	110				
Total	521	131	51	15	95	446					
7:15-8:15 AM	294	75	31	7	49	243	699				
Thursday April 20, 2017											
4:00 PM	73	5	17	13	1	61	170	681	0.92		
4:15 PM	61	3	14	14	4	50	146	688	0.92		
4:30 PM	78	4	23	10	2	62	179	709	0.95		
4:45 PM	66	3	38	15	2	62	186	672	0.90		
5:00 PM	77	4	18	8	2	68	177	611	0.86		
5:15 PM	78	4	17	10	1	57	167				
5:30 PM	53	4	9	6	2	68	142				
5:45 PM	54	6	14	6	0	45	125				
Total	540	33	150	82	14	473					
4:45-5:45 PM	274	15	82	39	7	255	672				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	EEA			Duration, h	0.25
Analyst	AJB	Analysis Date	May 1, 2017	Area Type	Other
Jurisdiction	Arlington Heights/ CCDOTH	Time Period	7:15 - 8:15 AM	PHF	0.91
Urban Street	Euclid Avenue	Analysis Year	2017	Analysis Period	1 > 7:15
Intersection	Euclid Ave/Salt Creek Ln	File Name	Euclid-Salt Creek AM Exst.xus		
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	299	1148			844	111					86	83

Signal Information				Signal Timing (s)								Signal Phases							
Cycle, s	120.0	Reference Phase	2	Green	10.0	86.4	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Offset, s	0	Reference Point	End	Yellow	3.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Uncoordinated	No	Simult. Gap E/W	On	Red	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On																

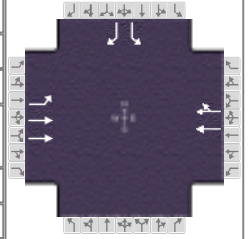
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6				4
Case Number	1.0	4.0		8.3				9.0
Phase Duration, s	13.0	105.4		92.4				14.6
Change Period, (Y+R _c), s	3.0	6.0		6.0				6.0
Max Allow Headway (MAH), s	3.1	0.0		0.0				3.2
Queue Clearance Time (g _s), s	7.3							8.4
Green Extension Time (g _e), s	0.6	0.0		0.0				0.2
Phase Call Probability	1.00							1.00
Max Out Probability	0.00							0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2			6	16				7		14
Adjusted Flow Rate (v), veh/h	329	1262			536	514				95		91
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1830			1826	1751				1739		1547
Queue Service Time (g _s), s	5.3	0.0			25.6	2.3				6.4		6.4
Cycle Queue Clearance Time (g _c), s	5.3	0.0			25.6	2.3				6.4		6.4
Green Ratio (g/C)	0.82	0.83			0.72	0.72				0.07		0.16
Capacity (c), veh/h	471	3031			1314	1261				125		240
Volume-to-Capacity Ratio (X)	0.698	0.416			0.407	0.408				0.757		0.380
Back of Queue (Q), ft/ln (95 th percentile)	169.2	8.3			38.5	36.1				134.7		113.6
Back of Queue (Q), veh/ln (95 th percentile)	6.5	0.3			1.5	1.4				5.2		4.4
Queue Storage Ratio (RQ) (95 th percentile)	1.13	0.00			0.00	0.00				0.00		0.00
Uniform Delay (d ₁), s/veh	10.2	0.0			0.7	0.7				54.7		45.5
Incremental Delay (d ₂), s/veh	0.7	0.4			0.9	1.0				3.5		0.4
Initial Queue Delay (d ₃), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (d), s/veh	10.9	0.4			1.7	1.7				58.2		45.9
Level of Service (LOS)	B	A			A	A				E		D
Approach Delay, s/veh / LOS	2.6	A		1.7	A		0.0			52.1		D
Intersection Delay, s/veh / LOS	5.5						A					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	0.62	A		1.86	B		2.16	B		2.33	B	
Bicycle LOS Score / LOS	1.80	B		1.35	A							F

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	EEA			Duration, h	0.25
Analyst	AJB	Analysis Date	May 1, 2017	Area Type	Other
Jurisdiction	Arlington Heights/ CCDOH	Time Period	4:45 - 5:45 pM	PHF	0.94
Urban Street	Euclid Avenue	Analysis Year	2017	Analysis Period	1 > 16:45
Intersection	Euclid Ave/Salt Creek Ln	File Name	Euclid-Salt Creek PM Exst.xus		
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	52	975			1195	55				113		206

Signal Information				Signal Timing (s)									
Cycle, s	120.0	Reference Phase	2	Green	8.4	79.5	17.1	0.0	0.0	0.0	0.0	0.0	0.0
Offset, s	0	Reference Point	End	Yellow	3.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Red	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On										

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6				4
Case Number	1.0	4.0		8.3				9.0
Phase Duration, s	11.4	96.9		85.5				23.1
Change Period, (Y+R _c), s	3.0	6.0		6.0				6.0
Max Allow Headway (MAH), s	3.1	0.0		0.0				3.2
Queue Clearance Time (g _s), s	2.9							16.9
Green Extension Time (g _e), s	0.0	0.0		0.0				0.2
Phase Call Probability	0.84							1.00
Max Out Probability	0.00							1.00

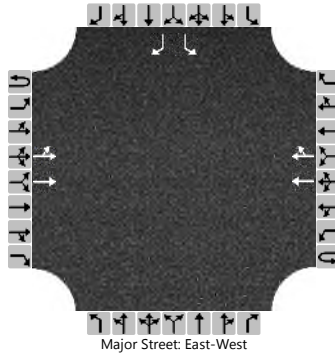
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2			6	16				7		14
Adjusted Flow Rate (v), veh/h	55	1037			669	660				120		219
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1904			1900	1870				1810		1610
Queue Service Time (g _s), s	0.9	0.0			26.1	9.4				7.3		14.9
Cycle Queue Clearance Time (g _c), s	0.9	0.0			26.1	9.4				7.3		14.9
Green Ratio (g/C)	0.75	0.76			0.66	0.66				0.14		0.21
Capacity (c), veh/h	373	2884			1258	1238				258		343
Volume-to-Capacity Ratio (X)	0.148	0.360			0.532	0.533				0.466		0.639
Back of Queue (Q), ft/ln (95 th percentile)	12.8	6.3			119.4	118.2				147.8		250.3
Back of Queue (Q), veh/ln (95 th percentile)	0.5	0.3			4.8	4.7				5.9		10.0
Queue Storage Ratio (RQ) (95 th percentile)	0.09	0.00			0.00	0.00				0.00		0.00
Uniform Delay (d ₁), s/veh	7.5	0.0			2.9	2.9				47.2		43.0
Incremental Delay (d ₂), s/veh	0.1	0.4			1.6	1.6				0.5		2.0
Initial Queue Delay (d ₃), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (d), s/veh	7.6	0.4			4.5	4.6				47.7		45.0
Level of Service (LOS)	A	A			A	A				D		D
Approach Delay, s/veh / LOS	0.7		A	4.6		A	0.0			46.0		D
Intersection Delay, s/veh / LOS	8.1						A					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	0.65		A	1.87		B	2.16		B	2.33		B
Bicycle LOS Score / LOS	1.39		A	1.58		B						F

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Euclid Ave/Stonegate Blvd		
Agency/Co.	EEA			Jurisdiction	CCDOTH		
Date Performed	5/1/2017			East/West Street	Euclid Avenue		
Analysis Year	2017			North/South Street	Stonegate Boulevard		
Time Analyzed	7:15 - 8:15 AM			Peak Hour Factor	0.87		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Existing Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	0		1	0	1
Configuration		LT	T				T	TR						L		R
Volume (veh/h)		1	1447				926	1						0		24
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

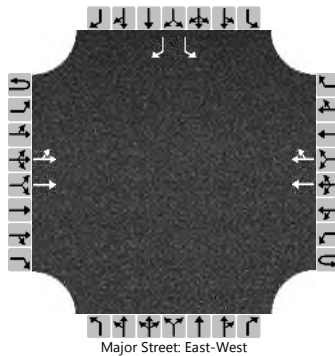
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1												0		28
Capacity, c (veh/h)		644												60		489
v/c Ratio		0.00												0.00		0.06
95% Queue Length, Q ₉₅ (veh)		0.0												0.0		0.2
Control Delay (s/veh)		10.6												64.8		12.8
Level of Service (LOS)		B												F		B
Approach Delay (s/veh)		0.1												12.8		
Approach LOS														B		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Euclid Ave/Stonegate Blvd		
Agency/Co.	EEA			Jurisdiction	CCDOTH		
Date Performed	5/1/2017			East/West Street	Euclid Avenue		
Analysis Year	2017			North/South Street	Stonegate Boulevard		
Time Analyzed	4:45 - 5:45 AM			Peak Hour Factor	0.96		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Existing Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	0		1	0	1
Configuration		LT	T				T	TR						L		R
Volume (veh/h)		0	1022				1392	9						5		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

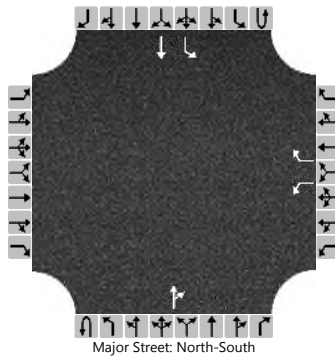
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0												5		6
Capacity, c (veh/h)		454												53		363
v/c Ratio		0.00												0.10		0.02
95% Queue Length, Q ₉₅ (veh)		0.0												0.3		0.1
Control Delay (s/veh)		12.9												80.9		15.1
Level of Service (LOS)		B												F		C
Approach Delay (s/veh)		0.0												45.0		
Approach LOS														E		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Rohlwing Rd/Salt Creek Ln		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	5/1/2017			East/West Street	Salt Creek Lane		
Analysis Year	2017			North/South Street	Rohlwing Road		
Time Analyzed	7:15 - 8:15 AM			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Existing Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0	
Configuration						L		R				TR		L	T		
Volume (veh/h)						7		31			278	49		75	294		
Percent Heavy Vehicles (%)						3		3						3			
Proportion Time Blocked																	
Percent Grade (%)						0											
Right Turn Channelized						No											
Median Type Storage						Left Only								1			

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.43		6.23							4.13		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.53		3.33							2.23		

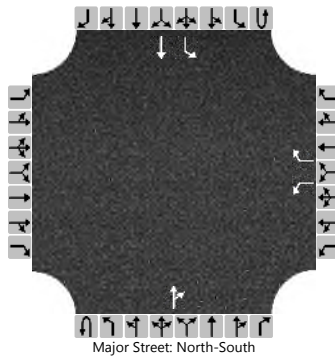
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						8		34							83		
Capacity, c (veh/h)						430		703							1188		
v/c Ratio						0.02		0.05							0.07		
95% Queue Length, Q ₉₅ (veh)						0.1		0.2							0.2		
Control Delay (s/veh)						13.5		10.4							8.3		
Level of Service (LOS)						B		B							A		
Approach Delay (s/veh)						11.0								1.7			
Approach LOS						B								A			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Rohlwing Rd/Salt Creek Ln		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	5/1/2017			East/West Street	Salt Creek Lane		
Analysis Year	2017			North/South Street	Rohlwing Road		
Time Analyzed	4:45 - 5:45 PM			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Existing Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0	
Configuration						L		R				TR		L	T		
Volume (veh/h)						39		82			255	7		15	291		
Percent Heavy Vehicles (%)						3		3						3			
Proportion Time Blocked																	
Percent Grade (%)						0											
Right Turn Channelized						No											
Median Type Storage						Left Only								1			

Critical and Follow-up Headways

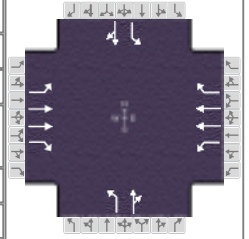
Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.43		6.23							4.13		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.53		3.33							2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						43		91							17		
Capacity, c (veh/h)						527		749							1263		
v/c Ratio						0.08		0.12							0.01		
95% Queue Length, Q ₉₅ (veh)						0.3		0.4							0.0		
Control Delay (s/veh)						12.4		10.5							7.9		
Level of Service (LOS)						B		B							A		
Approach Delay (s/veh)						11.1								0.4			
Approach LOS						B											

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	EEA			Duration, h	0.25
Analyst	SBC	Analysis Date	Apr 4, 2018	Area Type	Other
Jurisdiction	Arlington Heights/ CCDOTH	Time Period	7:15 - 8:15 AM	PHF	0.89
Urban Street	Euclid Avenue	Analysis Year	2017	Analysis Period	1 > 7:15
Intersection	Euclid Ave/Rohlwing Rd	File Name	Euclid-Rohlwing AM Exst.xus		
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	150	1209	89	40	854	56	206	126	111	128	111	73

Signal Information				Signal Timing (s)								Signal Phases			
Cycle, s	120.0	Reference Phase	2	Green	2.7	1.6	63.3	10.1	1.9	19.4	1	2	3	4	
Offset, s	0	Reference Point	End	Yellow	3.0	3.0	4.0	3.0	0.0	4.0	5	6	7	8	
Uncoordinated	No	Simult. Gap E/W	On	Red	0.0	0.0	2.0	0.0	0.0	2.0					
Force Mode	Fixed	Simult. Gap N/S	On												

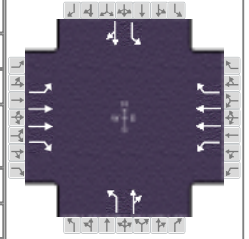
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.3	73.9	5.7	69.3	15.0	27.3	13.1	25.4
Change Period, (Y+R _c), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (MAH), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	7.1		3.4		14.0	20.5	10.2	15.9
Green Extension Time (g _e), s	0.2	0.0	0.0	0.0	0.0	0.7	0.0	0.8
Phase Call Probability	1.00		0.78		1.00	1.00	0.99	1.00
Max Out Probability	0.00		0.00		1.00	0.01	1.00	0.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	169	1358	100	45	960	63	231	266		144	207	
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1830	1547	1739	1830	1547	1739	1684		1739	1704	
Queue Service Time (g _s), s	5.1	21.6	3.6	1.4	14.3	2.4	12.0	18.5		8.2	13.9	
Cycle Queue Clearance Time (g _c), s	5.1	21.6	3.6	1.4	14.3	2.4	12.0	18.5		8.2	13.9	
Green Ratio (g/C)	0.61	0.57	0.57	0.55	0.53	0.53	0.27	0.18		0.25	0.16	
Capacity (c), veh/h	399	2071	876	243	1931	816	286	299		213	275	
Volume-to-Capacity Ratio (X)	0.423	0.656	0.114	0.185	0.497	0.077	0.808	0.892		0.675	0.751	
Back of Queue (Q), ft/ln (95 th percentile)	86.8	255.9	58.5	25.5	215.1	39.9	287	348.4		171.9	257.6	
Back of Queue (Q), veh/ln (95 th percentile)	3.3	9.8	2.3	1.0	8.3	1.5	11.0	13.4		6.6	9.9	
Queue Storage Ratio (RQ) (95 th percentile)	0.43	0.00	0.00	0.27	0.00	0.00	1.91	0.00		1.43	0.00	
Uniform Delay (d ₁), s/veh	11.9	9.0	12.1	14.2	10.5	14.0	39.6	48.2		38.7	48.0	
Incremental Delay (d ₂), s/veh	0.3	1.6	0.3	0.1	0.9	0.2	14.6	11.7		4.4	1.6	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	12.2	10.7	12.4	14.3	11.4	14.1	54.3	59.9		43.2	49.6	
Level of Service (LOS)	B	B	B	B	B	B	D	E		D	D	
Approach Delay, s/veh / LOS	10.9		B	11.7		B	57.3		E	47.0		D
Intersection Delay, s/veh / LOS	21.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.89	B	1.90	B	2.46	B	2.46	B
Bicycle LOS Score / LOS	1.83	B	1.37	A	1.31	A	1.07	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	EEA			Duration, h	0.25		
Analyst	SBC		Analysis Date	Apr 4, 2018		Area Type	Other
Jurisdiction	Arlington Heights/CCDOTH		Time Period	4:45 - 5:45 PM		PHF	0.97
Urban Street	Euclid Avenue		Analysis Year	2017		Analysis Period	1 > 16:45
Intersection	Euclid Ave/Rohlwing Rd		File Name	Euclid-Rohlwing PM Exst.xus			
Project Description	Existing Conditions						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	68	862	163	74	1233	93	196	132	77	83	107	146

Signal Information				Signal Timing (s)								Signal Phases			
Cycle, s	120.0	Reference Phase	2	Green	3.8	0.3	64.6	6.4	2.6	21.3	1	2	3	4	
Offset, s	0	Reference Point	End	Yellow	3.0	0.0	4.0	3.0	3.0	4.0	5	6	7	8	
Uncoordinated	No	Simult. Gap E/W	On	Red	0.0	0.0	2.0	0.0	0.0	2.0					
Force Mode	Fixed	Simult. Gap N/S	On												

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phase Duration, s	6.8	70.6	7.1	70.9	15.0	32.9	9.4	27.3
Change Period, (Y+R _c), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (MAH), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	4.2		4.4		13.1	15.4	6.8	20.5
Green Extension Time (g _e), s	0.1	0.0	0.1	0.0	0.0	0.9	0.0	0.8
Phase Call Probability	0.90		0.92		1.00	1.00	0.94	1.00
Max Out Probability	0.00		0.00		1.00	0.00	0.05	0.00

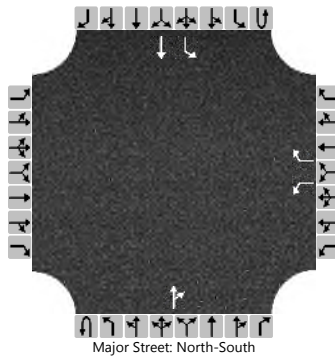
Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	70	889	168	76	1271	96	202	215		86	261	
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1830	1547	1739	1830	1547	1739	1712		1739	1654	
Queue Service Time (g _s), s	2.2	12.2	6.7	2.4	21.7	3.6	11.1	13.4		4.8	18.5	
Cycle Queue Clearance Time (g _c), s	2.2	12.2	6.7	2.4	21.7	3.6	11.1	13.4		4.8	18.5	
Green Ratio (g/C)	0.57	0.54	0.54	0.57	0.54	0.54	0.29	0.22		0.23	0.18	
Capacity (c), veh/h	262	1970	833	386	1978	836	260	383		262	293	
Volume-to-Capacity Ratio (X)	0.268	0.451	0.202	0.197	0.643	0.115	0.779	0.562		0.327	0.889	
Back of Queue (Q), ft/ln (95 th percentile)	38.1	188.9	111.9	40.9	271	60.2	244.3	246.7		94.7	331.9	
Back of Queue (Q), veh/ln (95 th percentile)	1.5	7.3	4.3	1.6	10.4	2.3	9.4	9.5		3.6	12.8	
Queue Storage Ratio (RQ) (95 th percentile)	0.19	0.00	0.00	0.43	0.00	0.00	1.63	0.00		0.79	0.00	
Uniform Delay (d ₁), s/veh	14.3	9.5	14.3	12.2	10.7	13.5	35.9	41.3		37.8	48.2	
Incremental Delay (d ₂), s/veh	0.2	0.7	0.5	0.1	1.6	0.3	12.8	0.5		0.3	7.8	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	14.5	10.3	14.9	12.3	12.3	13.8	48.7	41.8		38.0	56.0	
Level of Service (LOS)	B	B	B	B	B	B	D	D		D	E	
Approach Delay, s/veh / LOS	11.2		B	12.4		B	45.2		D	51.6		D
Intersection Delay, s/veh / LOS	20.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	1.90	B	2.45	B	2.46	B
Bicycle LOS Score / LOS	1.42	A	1.68	B	1.18	A	1.06	A

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Rohlwing Rd/Stonegate Blv		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	5/1/2017			East/West Street	Stonegate Boulevard		
Analysis Year	2017			North/South Street	Rohlwing Road		
Time Analyzed	7:15 - 8:15 AM			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Existing Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0
Configuration						L		R				TR		L	T	
Volume (veh/h)						13		4			323	9		2	299	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.43		6.23							4.13		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.53		3.33							2.23		

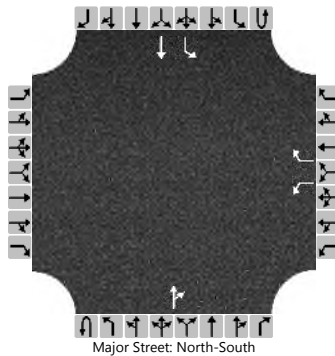
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						14		4							2		
Capacity, c (veh/h)						511		682							1187		
v/c Ratio						0.03		0.01							0.00		
95% Queue Length, Q ₉₅ (veh)						0.1		0.0							0.0		
Control Delay (s/veh)						12.2		10.3							8.0		
Level of Service (LOS)						B		B							A		
Approach Delay (s/veh)	11.8								0.1								
Approach LOS	B																

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Rohlwing Rd/Stonegate Blv		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	5/1/2017			East/West Street	Stonegate Boulevard		
Analysis Year	2017			North/South Street	Rohlwing Road		
Time Analyzed	4:45 - 5:45 PM			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Existing Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0
Configuration						L		R				TR		L	T	
Volume (veh/h)						16		4			258	35		9	321	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage					Left Only								1			

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.43		6.23							4.13		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.53		3.33							2.23		

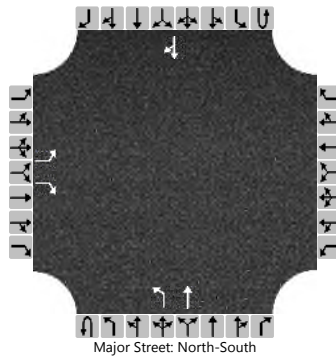
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						18		4							10		
Capacity, c (veh/h)						512		731							1227		
v/c Ratio						0.03		0.01							0.01		
95% Queue Length, Q ₉₅ (veh)						0.1		0.0							0.0		
Control Delay (s/veh)						12.3		10.0							8.0		
Level of Service (LOS)						B		A							A		
Approach Delay (s/veh)					11.8								0.2				
Approach LOS					B												

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Salt Creek Ln/1 Arlington		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	5/1/2017			East/West Street	1 Arlington Access Drive		
Analysis Year	2017			North/South Street	Salt Creek Lane		
Time Analyzed	7:15 - 8:15 AM			Peak Hour Factor	0.80		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Existing Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T					TR
Volume (veh/h)		1		17						4	197				65	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		7.13		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

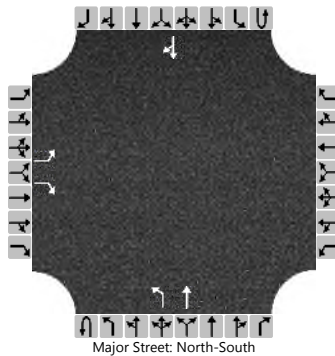
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1		21						5						
Capacity, c (veh/h)		612		975						1508						
v/c Ratio		0.00		0.02						0.00						
95% Queue Length, Q ₉₅ (veh)		0.0		0.1						0.0						
Control Delay (s/veh)		10.9		8.8						7.4						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)	8.9								0.1							
Approach LOS	A															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Salt Creek Ln/1 Arlington		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	5/1/2017			East/West Street	1 Arlington Access Drive		
Analysis Year	2017			North/South Street	Salt Creek Lane		
Time Analyzed	4:45 - 5:45 PM			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Existing Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T					TR
Volume (veh/h)		1		4						13	55				177	1
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type Storage		Undivided														

Critical and Follow-up Headways

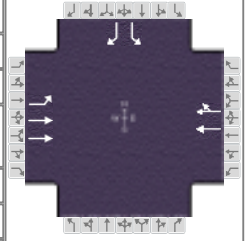
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		7.13		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1		4						14						
Capacity, c (veh/h)		656		841						1367						
v/c Ratio		0.00		0.01						0.01						
95% Queue Length, Q ₉₅ (veh)		0.0		0.0						0.0						
Control Delay (s/veh)		10.5		9.3						7.7						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)		9.5								1.5						
Approach LOS		A														

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	EEA			Duration, h	0.25
Analyst	SBC	Analysis Date	Apr 3, 2018	Area Type	Other
Jurisdiction	Arlington Heights/ CCDOTH	Time Period	7:15 - 8:15 AM	PHF	0.91
Urban Street	Euclid Avenue	Analysis Year	2023	Analysis Period	1 > 7:15
Intersection	Euclid Ave/Salt Creek Ln	File Name	Euclid-Salt Creek AM Total.xus		
Project Description	Total Conditions				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	319	1256			927	131					141	104

Signal Information													
Cycle, s	120.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	10.1	79.9	15.0	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	4.0	4.0	0.0	0.0	0.0			
				Red	0.0	2.0	2.0	0.0	0.0	0.0			

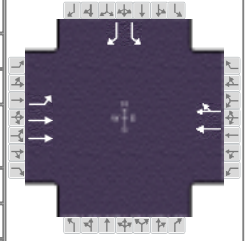
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6				4
Case Number	1.0	4.0		8.3				9.0
Phase Duration, s	13.1	99.0		85.9				21.0
Change Period, (Y+R _c), s	3.0	6.0		6.0				6.0
Max Allow Headway (MAH), s	3.1	0.0		0.0				3.2
Queue Clearance Time (g _s), s	9.5							12.3
Green Extension Time (g _e), s	0.6	0.0		0.0				0.3
Phase Call Probability	1.00							1.00
Max Out Probability	0.00							0.11

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2			6	16				7		14
Adjusted Flow Rate (v), veh/h	351	1380			594	569				155		114
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1830			1826	1746				1739		1547
Queue Service Time (g _s), s	7.5	0.0			29.8	7.8				10.3		7.6
Cycle Queue Clearance Time (g _c), s	7.5	0.0			29.8	7.8				10.3		7.6
Green Ratio (g/C)	0.77	0.78			0.67	0.67				0.12		0.21
Capacity (c), veh/h	403	2836			1216	1163				217		324
Volume-to-Capacity Ratio (X)	0.869	0.487			0.488	0.489				0.713		0.353
Back of Queue (Q), ft/ln (95 th percentile)	289.5	11.1			103.9	96.7				214.7		134
Back of Queue (Q), veh/ln (95 th percentile)	11.1	0.4			4.0	3.9				8.3		5.2
Queue Storage Ratio (RQ) (95 th percentile)	1.93	0.00			0.00	0.00				0.00		0.00
Uniform Delay (d ₁), s/veh	17.0	0.0			2.7	2.7				50.4		40.5
Incremental Delay (d ₂), s/veh	2.3	0.6			1.4	1.5				5.0		0.2
Initial Queue Delay (d ₃), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (d), s/veh	19.3	0.6			4.1	4.2				55.4		40.8
Level of Service (LOS)	B	A			A	A				E		D
Approach Delay, s/veh / LOS	4.4	A		4.1	A		0.0			49.2		D
Intersection Delay, s/veh / LOS	8.1						A					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	0.64	A		1.87	B		2.16	B		2.33	B	
Bicycle LOS Score / LOS	1.92	B		1.45	A							F

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	EEA			Duration, h	0.25
Analyst	SBC	Analysis Date	Apr 3, 2018	Area Type	Other
Jurisdiction	Arlington Heights/ CCDOH	Time Period	4:45 - 5:45 pM	PHF	0.94
Urban Street	Euclid Avenue	Analysis Year	2023	Analysis Period	1 > 16:45
Intersection	Euclid Ave/Salt Creek Ln	File Name	Euclid-Salt Creek PM Total.xus		
Project Description	Existing Conditions				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	92	1059			1352	95					158	218

Signal Information				Signal Timing (s)										
Cycle, s	120.0	Reference Phase	2	Green	9.6	77.6	17.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Offset, s	0	Reference Point	End	Yellow	3.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Red	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On											

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6				4
Case Number	1.0	4.0		8.3				9.0
Phase Duration, s	12.6	96.2		83.6				23.8
Change Period, (Y+R _c), s	3.0	6.0		6.0				6.0
Max Allow Headway (MAH), s	3.1	0.0		0.0				3.2
Queue Clearance Time (g _s), s	3.7							17.6
Green Extension Time (g _e), s	0.1	0.0		0.0				0.2
Phase Call Probability	0.96							1.00
Max Out Probability	0.00							1.00

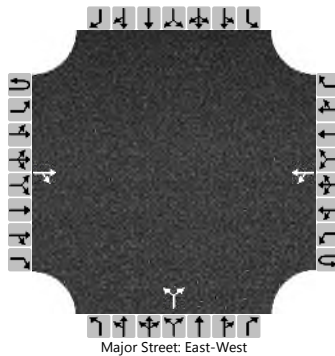
Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2			6	16				7		14
Adjusted Flow Rate (v), veh/h	98	1127			776	764				168		232
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1904			1900	1856				1810		1610
Queue Service Time (g _s), s	1.7	0.0			33.3	15.1				10.5		15.6
Cycle Queue Clearance Time (g _c), s	1.7	0.0			33.3	15.1				10.5		15.6
Green Ratio (g/C)	0.74	0.75			0.65	0.65				0.15		0.23
Capacity (c), veh/h	331	2862			1228	1200				269		368
Volume-to-Capacity Ratio (X)	0.295	0.394			0.632	0.637				0.625		0.630
Back of Queue (Q), ft/ln (95 th percentile)	38.9	7.3			174.8	173.8				209.5		259
Back of Queue (Q), veh/ln (95 th percentile)	1.6	0.3			7.0	7.0				8.4		10.4
Queue Storage Ratio (RQ) (95 th percentile)	0.26	0.00			0.00	0.00				0.00		0.00
Uniform Delay (d ₁), s/veh	11.0	0.0			4.0	4.0				48.0		41.7
Incremental Delay (d ₂), s/veh	0.2	0.4			2.5	2.6				2.1		1.9
Initial Queue Delay (d ₃), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (d), s/veh	11.2	0.4			6.4	6.6				50.0		43.6
Level of Service (LOS)	B	A			A	A				D		D
Approach Delay, s/veh / LOS	1.3	A		6.5	A		0.0			46.3		D
Intersection Delay, s/veh / LOS	9.5						A					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	0.65	A		1.88	B		2.16	B		2.33	B	
Bicycle LOS Score / LOS	1.50	A		1.76	B							F

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SBC			Intersection	AD N Access on Salt Creek		
Agency/Co.	EEA			Jurisdiction	Arlington Hts		
Date Performed	4/3/2018			East/West Street	Salt Creek Lane		
Analysis Year	2023			North/South Street	AD Access		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Total Traffic						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			124	28		1	38			40		1				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.23					3.53		3.33			

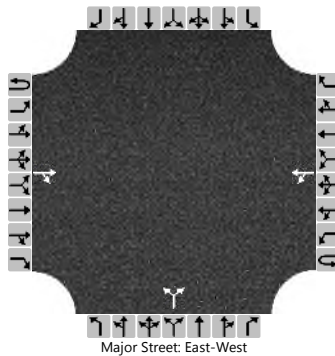
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1						46				
Capacity, c (veh/h)						1403						790				
v/c Ratio						0.00						0.06				
95% Queue Length, Q ₉₅ (veh)						0.0						0.2				
Control Delay (s/veh)						7.6						9.8				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					0.2				9.8							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SBC			Intersection	AD N Access on Salt Creek		
Agency/Co.	EEA			Jurisdiction	Arlington Hts		
Date Performed	4/3/2018			East/West Street	Salt Creek Lane		
Analysis Year	2023			North/South Street	AD Access		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Total Traffic						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Configuration				TR		LT					LR					
Volume (veh/h)			22	51		1	121			53		1				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

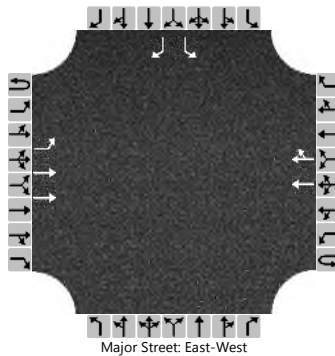
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1						60				
Capacity, c (veh/h)						1510						800				
v/c Ratio						0.00						0.08				
95% Queue Length, Q ₉₅ (veh)						0.0						0.2				
Control Delay (s/veh)						7.4						9.9				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					0.1				9.9							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SBC			Intersection	Euclid Ave/Stonegate Blvd		
Agency/Co.	EEA			Jurisdiction	CCDOTH		
Date Performed	4/3/2018			East/West Street	Euclid Avenue		
Analysis Year	2023			North/South Street	Stonegate Boulevard		
Time Analyzed	7:15 - 8:15 AM			Peak Hour Factor	0.87		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Total Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		1	0	1
Configuration		L	T				T	TR						L		R
Volume (veh/h)	0	32	1549				995	36						26		74
Percent Heavy Vehicles (%)	3	3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

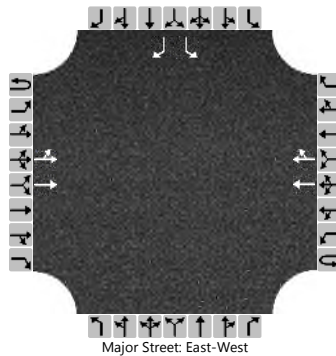
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		37												30		85	
Capacity, c (veh/h)		579												39		447	
v/c Ratio		0.06												0.76		0.19	
95% Queue Length, Q ₉₅ (veh)		0.2												2.8		0.7	
Control Delay (s/veh)		11.6												226.5		14.9	
Level of Service (LOS)		B												F		B	
Approach Delay (s/veh)		0.2												69.9			
Approach LOS														F			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SBC			Intersection	Euclid Ave/Stonegate Blvd		
Agency/Co.	EEA			Jurisdiction	CCDOTH		
Date Performed	4/3/2018			East/West Street	Euclid Avenue		
Analysis Year	2023			North/South Street	Stonegate Boulevard		
Time Analyzed	4:45 - 5:45 AM			Peak Hour Factor	0.96		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	Total Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	0		1	0	1
Configuration		LT	T				T	TR						L		R
Volume (veh/h)		56	1123				1477	93						28		54
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type Storage	Undivided															

Critical and Follow-up Headways

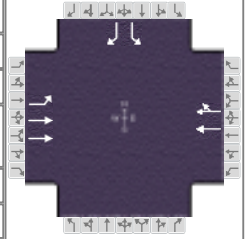
Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		58												29		56
Capacity, c (veh/h)		388												28		317
v/c Ratio		0.15												1.05		0.18
95% Queue Length, Q ₉₅ (veh)		0.5												3.4		0.6
Control Delay (s/veh)		15.9												393.8		18.8
Level of Service (LOS)		C												F		C
Approach Delay (s/veh)		3.7												146.8		
Approach LOS														F		

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	EEA			Duration, h	0.25
Analyst	SBC	Analysis Date	Apr 3, 2018	Area Type	Other
Jurisdiction	Arlington Heights/ CCDOTH	Time Period	7:15 - 8:15 AM	PHF	0.91
Urban Street	Euclid Avenue	Analysis Year	2023	Analysis Period	1 > 7:15
Intersection	Euclid Ave/Salt Creek Ln	File Name	Euclid-Salt Creek AM Total.xus		
Project Description	Total Conditions				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	319	1256			927	131					141	104

Signal Information				Signal Phases									
Cycle, s	120.0	Reference Phase	2	←	→	←	→	←	→	←	→	←	→
Offset, s	0	Reference Point	End	Green	10.1	79.9	15.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6				4
Case Number	1.0	4.0		8.3				9.0
Phase Duration, s	13.1	99.0		85.9				21.0
Change Period, (Y+R _c), s	3.0	6.0		6.0				6.0
Max Allow Headway (MAH), s	3.1	0.0		0.0				3.2
Queue Clearance Time (g _s), s	9.5							12.3
Green Extension Time (g _e), s	0.6	0.0		0.0				0.3
Phase Call Probability	1.00							1.00
Max Out Probability	0.00							0.11

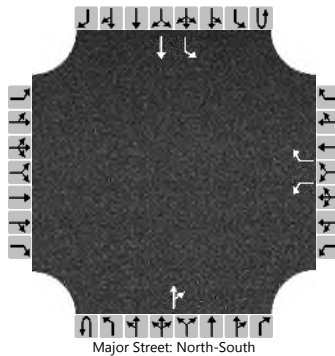
Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2			6	16				7		14
Adjusted Flow Rate (v), veh/h	351	1380			594	569				155		114
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1830			1826	1746				1739		1547
Queue Service Time (g _s), s	7.5	0.0			29.8	7.8				10.3		7.6
Cycle Queue Clearance Time (g _c), s	7.5	0.0			29.8	7.8				10.3		7.6
Green Ratio (g/C)	0.77	0.78			0.67	0.67				0.12		0.21
Capacity (c), veh/h	403	2836			1216	1163				217		324
Volume-to-Capacity Ratio (X)	0.869	0.487			0.488	0.489				0.713		0.353
Back of Queue (Q), ft/ln (95 th percentile)	289.5	11.1			103.9	96.7				214.7		134
Back of Queue (Q), veh/ln (95 th percentile)	11.1	0.4			4.0	3.9				8.3		5.2
Queue Storage Ratio (RQ) (95 th percentile)	1.93	0.00			0.00	0.00				0.00		0.00
Uniform Delay (d ₁), s/veh	17.0	0.0			2.7	2.7				50.4		40.5
Incremental Delay (d ₂), s/veh	2.3	0.6			1.4	1.5				5.0		0.2
Initial Queue Delay (d ₃), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (d), s/veh	19.3	0.6			4.1	4.2				55.4		40.8
Level of Service (LOS)	B	A			A	A				E		D
Approach Delay, s/veh / LOS	4.4	A		4.1	A		0.0			49.2		D
Intersection Delay, s/veh / LOS	8.1						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.64	A	1.87	B	2.16	B	2.33	B
Bicycle LOS Score / LOS	1.92	B	1.45	A				F

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SBC			Intersection	Rohlwing Rd/Salt Creek Ln		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	4/3/2018			East/West Street	Salt Creek Lane		
Analysis Year	2023			North/South Street	Rohlwing Road		
Time Analyzed	7:15 - 8:15 AM			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Total Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0	
Configuration						L		R				TR		L	T		
Volume (veh/h)						28		51			335	59		93	329		
Percent Heavy Vehicles (%)						3		3						3			
Proportion Time Blocked																	
Percent Grade (%)						0											
Right Turn Channelized						No											
Median Type Storage						Left Only								1			

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.43		6.23							4.13		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.53		3.33							2.23		

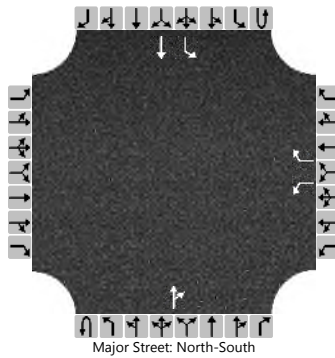
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						31		57							103		
Capacity, c (veh/h)						375		643							1115		
v/c Ratio						0.08		0.09							0.09		
95% Queue Length, Q ₉₅ (veh)						0.3		0.3							0.3		
Control Delay (s/veh)						15.5		11.1							8.6		
Level of Service (LOS)						C		B							A		
Approach Delay (s/veh)						12.7								1.9			
Approach LOS						B											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Rohlwing Rd/Salt Creek Ln		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	4/3/2018			East/West Street	Salt Creek Lane		
Analysis Year	2023			North/South Street	Rohlwing Road		
Time Analyzed	4:45 - 5:45 PM			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Total Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0
Configuration						L		R				TR		L	T	
Volume (veh/h)						70		104			300	27		46	358	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Left Only								1							

Critical and Follow-up Headways

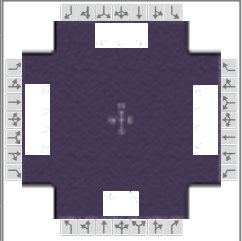
Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.43		6.23							4.13		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.53		3.33							2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						78		116							51		
Capacity, c (veh/h)						433		692							1188		
v/c Ratio						0.18		0.17							0.04		
95% Queue Length, Q ₉₅ (veh)						0.6		0.6							0.1		
Control Delay (s/veh)						15.1		11.2							8.2		
Level of Service (LOS)						C		B							A		
Approach Delay (s/veh)	12.8								0.9								
Approach LOS	B																

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	EEA			Duration, h	0.25		
Analyst	SBC		Analysis Date	Apr 4, 2018		Area Type	Other
Jurisdiction	Arlington Heights/CCDOTH		Time Period	7:15 - 8:15 AM		PHF	0.89
Urban Street	Euclid Avenue		Analysis Year	2017		Analysis Period	1 > 7:15
Intersection	Euclid Ave/Rohlwing Rd		File Name	Euclid-Rohlwing AM Total.xus			
Project Description	Total Conditions						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	188	1313	94	52	958	59	206	144	123	145	137	138

Signal Information				Signal Timing (s)								Signal Phases			
Cycle, s	120.0	Reference Phase	2	Green	3.5	2.8	58.1	10.9	1.1	22.6	1	2	3	4	
Offset, s	0	Reference Point	End	Yellow	3.0	3.0	4.0	3.0	0.0	4.0	5	6	7	8	
Uncoordinated	No	Simult. Gap E/W	On	Red	0.0	0.0	2.0	0.0	0.0	2.0					
Force Mode	Fixed	Simult. Gap N/S	On												

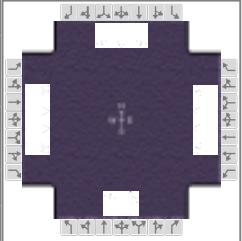
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	12.3	69.9	6.5	64.1	15.0	29.7	13.9	28.6
Change Period, (Y+R _c), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (MAH), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	9.0		4.0		14.0	22.8	10.9	11.8
Green Extension Time (g _e), s	0.3	0.0	0.1	0.0	0.0	0.8	0.0	1.1
Phase Call Probability	1.00		0.86		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.12	1.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	211	1475	106	58	1076	66	231	300		163	154	155
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1830	1547	1739	1830	1547	1739	1686		1739	1826	1547
Queue Service Time (g _s), s	7.0	30.3	4.1	2.0	20.6	2.8	12.0	20.8		8.9	9.0	9.8
Cycle Queue Clearance Time (g _c), s	7.0	30.3	4.1	2.0	20.6	2.8	12.0	20.8		8.9	9.0	9.8
Green Ratio (g/C)	0.58	0.53	0.53	0.51	0.48	0.48	0.29	0.20		0.28	0.19	0.27
Capacity (c), veh/h	354	1948	824	203	1773	750	371	333		226	344	411
Volume-to-Capacity Ratio (X)	0.596	0.757	0.128	0.288	0.607	0.088	0.624	0.901		0.722	0.448	0.377
Back of Queue (Q), ft/ln (95 th percentile)	123	365	68.4	37.1	291	47.1	249.3	398		196.5	188	171.6
Back of Queue (Q), veh/ln (95 th percentile)	4.7	14.0	2.6	1.4	11.2	1.8	9.6	15.3		7.6	7.2	6.6
Queue Storage Ratio (RQ) (95 th percentile)	0.62	0.00	0.00	0.39	0.00	0.00	1.66	0.00		1.64	0.00	1.72
Uniform Delay (d ₁), s/veh	15.8	12.5	14.1	18.2	14.6	16.7	36.1	47.0		36.5	43.2	36.0
Incremental Delay (d ₂), s/veh	0.6	2.8	0.3	0.3	1.6	0.2	2.5	16.7		7.9	0.3	0.2
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	16.4	15.3	14.4	18.5	16.1	16.9	38.6	63.8		44.3	43.5	36.2
Level of Service (LOS)	B	B	B	B	B	B	D	E		D	D	D
Approach Delay, s/veh / LOS	15.4	B		16.3	B		52.8	D		41.4	D	
Intersection Delay, s/veh / LOS	23.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	2.10	B	2.46	B	2.46	B
Bicycle LOS Score / LOS	1.97	B	1.48	A	1.36	A	1.27	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	EEA			Duration, h	0.25		
Analyst	AJB	Analysis Date	May 1, 2017	Area Type	Other		
Jurisdiction	Arlington Heights/ CCDOTH	Time Period	4:45 - 5:45 PM	PHF	0.97		
Urban Street	Euclid Avenue	Analysis Year	2017	Analysis Period	1 > 16:45		
Intersection	Euclid Ave/Rohlwing Rd		File Name	Euclid-Rohlwing PM Total.xus			
Project Description	Existing Conditions						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	152	990	171	86	1347	98	206	169	92	97	130	207

Signal Information				Signal Timing (s)								Signal Phases			
Cycle, s	120.0	Reference Phase	2	Green	4.6	2.3	65.5	7.5	1.5	17.7	1	2	3	4	
Offset, s	0	Reference Point	End	Yellow	3.0	0.0	4.0	3.0	3.0	4.0	5	6	7	8	
Uncoordinated	No	Simult. Gap E/W	On	Red	0.0	0.0	2.0	0.0	0.0	2.0					
Force Mode	Fixed	Simult. Gap N/S	On												

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	9.8	73.7	7.6	71.5	15.0	28.2	10.5	23.7
Change Period, (Y+R _c), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Allow Headway (MAH), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	6.6		4.7		14.0	20.2	7.8	16.6
Green Extension Time (g _e), s	0.2	0.0	0.1	0.0	0.0	1.1	0.0	1.1
Phase Call Probability	0.99		0.95		1.00	1.00	0.96	1.00
Max Out Probability	0.00		0.00		1.00	0.00	0.21	0.00

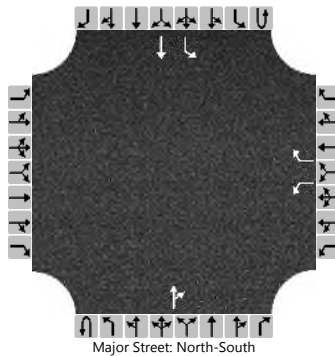
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	157	1021	176	89	1389	101	212	269		100	134	213
Adjusted Saturation Flow Rate (s), veh/h/ln	1739	1830	1547	1739	1830	1547	1739	1717		1739	1826	1610
Queue Service Time (g _s), s	4.6	13.2	6.7	2.7	25.1	3.8	12.0	18.2		5.8	8.1	14.6
Cycle Queue Clearance Time (g _c), s	4.6	13.2	6.7	2.7	25.1	3.8	12.0	18.2		5.8	8.1	14.6
Green Ratio (g/C)	0.61	0.56	0.56	0.58	0.55	0.55	0.26	0.18		0.21	0.15	0.20
Capacity (c), veh/h	286	2065	873	362	1997	844	332	317		187	270	329
Volume-to-Capacity Ratio (X)	0.547	0.494	0.202	0.245	0.696	0.120	0.639	0.848		0.534	0.497	0.648
Back of Queue (Q), ft/ln (95 th percentile)	78.9	191.2	109.7	46.6	297.3	62.8	239.5	322.7		116	171.4	242.9
Back of Queue (Q), veh/ln (95 th percentile)	3.0	7.4	4.2	1.8	11.4	2.4	9.2	12.4		4.5	6.6	9.7
Queue Storage Ratio (RQ) (95 th percentile)	0.39	0.00	0.00	0.49	0.00	0.00	1.60	0.00		0.97	0.00	2.43
Uniform Delay (d ₁), s/veh	14.8	8.1	12.9	11.8	10.9	13.3	37.7	47.3		40.8	47.0	43.8
Incremental Delay (d ₂), s/veh	0.6	0.8	0.5	0.1	2.0	0.3	3.2	2.5		0.9	0.5	0.8
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	15.4	9.0	13.4	11.9	12.9	13.5	40.9	49.7		41.7	47.6	44.6
Level of Service (LOS)	B	A	B	B	B	B	D	D		D	D	D
Approach Delay, s/veh / LOS	10.3	B		12.9	B		45.8	D		44.8	D	
Intersection Delay, s/veh / LOS	19.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	2.09	B	2.46	B	2.46	B
Bicycle LOS Score / LOS	1.60	B	1.79	B	1.28	A	1.23	A

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SBC			Intersection	Rohlwing Rd/Stonegate Blv		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	4/3/2018			East/West Street	Stonegate Boulevard		
Analysis Year	2023			North/South Street	Rohlwing Road		
Time Analyzed	7:15 - 8:15 AM			Peak Hour Factor	0.91		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Total Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0
Configuration						L		R				TR		L	T	
Volume (veh/h)						84		44			350	41		20	337	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.43		6.23							4.13		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.53		3.33							2.23		

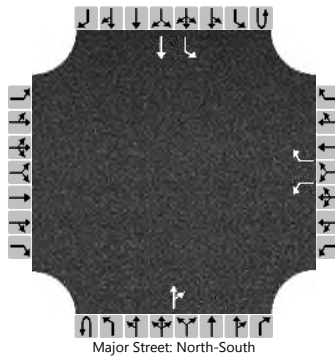
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						92		48							22		
Capacity, c (veh/h)						454		641							1123		
v/c Ratio						0.20		0.08							0.02		
95% Queue Length, Q ₉₅ (veh)						0.8		0.2							0.1		
Control Delay (s/veh)						14.9		11.1							8.3		
Level of Service (LOS)						B		B							A		
Approach Delay (s/veh)	13.6								0.5								
Approach LOS	B																

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SBC			Intersection	Rohlwing Rd/Stonegate Blv		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	4/3/2018			East/West Street	Stonegate Boulevard		
Analysis Year	2023			North/South Street	Rohlwing Road		
Time Analyzed	4:45 - 5:45 PM			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Total Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0	
Configuration						L		R				TR		L	T		
Volume (veh/h)						66		34			126	293		60	368		
Percent Heavy Vehicles (%)						3		3						3			
Proportion Time Blocked																	
Percent Grade (%)						0											
Right Turn Channelized						No											
Median Type Storage						Left Only								1			

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.43		6.23							4.13		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.53		3.33							2.23		

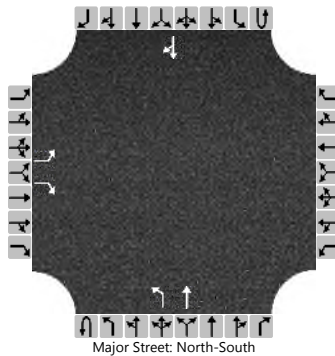
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						73		38							67		
Capacity, c (veh/h)						423		734							1089		
v/c Ratio						0.17		0.05							0.06		
95% Queue Length, Q ₉₅ (veh)						0.6		0.2							0.2		
Control Delay (s/veh)						15.3		10.2							8.5		
Level of Service (LOS)						C		B							A		
Approach Delay (s/veh)						13.5								1.2			
Approach LOS						B											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Salt Creek Ln/1 Arlington		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	5/1/2017			East/West Street	1 Arlington Access Drive		
Analysis Year	2023			North/South Street	Salt Creek Lane		
Time Analyzed	7:15 - 8:15 AM			Peak Hour Factor	0.80		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Total Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T					TR
Volume (veh/h)		1		91						44	197				65	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		7.13		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

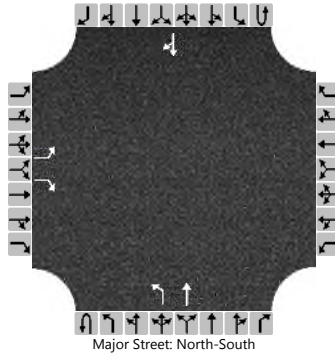
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1		114						55						
Capacity, c (veh/h)		508		975						1508						
v/c Ratio		0.00		0.12						0.04						
95% Queue Length, Q ₉₅ (veh)		0.0		0.4						0.1						
Control Delay (s/veh)		12.1		9.2						7.5						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)		9.2								1.4						
Approach LOS		A														

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	AJB			Intersection	Salt Creek Ln/1 Arlington		
Agency/Co.	EEA			Jurisdiction	Arlington Heights		
Date Performed	5/1/2017			East/West Street	1 Arlington Access Drive		
Analysis Year	2023			North/South Street	Salt Creek Lane		
Time Analyzed	4:45 - 5:45 PM			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	Total Conditions						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	1	0	0	0	1	0
Configuration		L		R						L	T					TR
Volume (veh/h)		1		61						93	55				177	1
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		7.13		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1		68						103						
Capacity, c (veh/h)		467		841						1367						
v/c Ratio		0.00		0.08						0.08						
95% Queue Length, Q ₉₅ (veh)		0.0		0.3						0.2						
Control Delay (s/veh)		12.7		9.7						7.8						
Level of Service (LOS)		B		A						A						
Approach Delay (s/veh)		9.7								4.9						
Approach LOS		A														