Dryden Elementary School
Traffic and Parking Study
Arlington Heights, Illinois

Prepared For:

Arlington Heights
School District 25

Prepared by:

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INTRODUCTION

Eriksson Engineering Associates, Ltd. (EEA) was retained by Arlington Heights School District 25 (AHSD 25) to conduct a traffic and parking study for the proposed addition of all-day Kindergarten classes at Dryden School in Arlington Heights, Illinois. The purpose of the study was to observe the existing traffic patterns around the school, to determine the traffic characteristics of the existing and expanded school, to review the parking needs, and to develop roadway and parking recommendations.

EXISTING CONDITIONS

Site Location and Area Land-Uses

Dryden School is located at 722 S. Dryden Place in Arlington Heights, Illinois. The site is bounded by residential homes to the north and west, Dryden Place to the east and Southminster Presbyterian Church to the south. It is located within a single-family residential neighborhood. **Figure 1** illustrates the site location and the surrounding land-uses and roads.

Bicycle and Pedestrian Routes

Lincoln Lane north of Rockwell Street and Rockwell Street west of Lincoln Lane are a designated bike routes. There is a designated off-street bike route north of Rockwell Street. Public sidewalks are located on both sides of the neighborhood streets on the south and east sides of the school.

The All-Way Stop Controlled (AWSC) intersection of Lincoln Lane and Rockwell Street has crosswalks on the north and east legs. The AWSC intersection of Dryden Place and Rockwell Street has crosswalks on the south and east legs. The intersection of Dryden Place and Orchard Street has crosswalks on the north and east legs. During the school's arrival and dismissal periods, a crossing guard is at the intersection of Dryden Place and Rockwell Street.

Roadway Characteristics

The roads surrounding the school are under the jurisdiction of the Village of Arlington Heights. A description of the area roadways accessing the school is provided below:

Dryden Place is a north-south local residential roadway with one travel lane in each direction. It has a 25-mph speed limit with a 20-mph school speed limit approaching the school. An All-Way-Stop-Controlled intersections is provided at Rockwell Street. Parking is not permitted on the west side of the street south of Orchard Street. Parking is not permitted during school drop-off and pick-up hours on the west side of the street from Rockwell Street to the southeast entrance of the school. Parking is permitted south of the school's property on the east side of the street.

Rockwell Street is an east-west local residential roadway with one travel lane in each direction. It has a 25-mph speed limit with a 20-mph school speed limit approaching the school. Parking is permitted on both sides of the street.

Orchard Street is an east-west local residential roadway with one travel lane in each direction. It has a 25-mph speed limit. Parking is permitted on both sides of the street.

Central Road is an east-west collector with two travel lanes in each direction. It has a speed limit of 40-mph. It extends east of Illinois Route 53 to west of Illinois Route 43.

A copy of the school signage plan is provided in the **Appendix** as prepared by the Village of Arlington Heights.

Existing Traffic Volumes

Weekday morning arrival (8:00-9:15 AM) and afternoon dismissal (2:30-3:45 PM) manual traffic counts were conducted along Rockwell Street and Dryden Place. Peak-hours of school traffic occurred from 8:15 to 9:15 AM and 3:00 to 4:00 PM on a school weekday which coincides with the school's 9:00 AM start and 3:35 PM dismissal times. The existing traffic volumes are shown on Figure 3A and included in the **Appendix**. EEA separated the

school traffic from the background traffic in **Figures 3B** and **3C**. **Figure 4** summarizes the existing pedestrian and bicycle volumes observed.

School Observations

The start and dismissal times for 1st thru 5th Grades are from 9:05 AM to 3:35 PM. The half-day Kindergarten program runs from 9:05 to 11:50 AM and from 12:50 PM to 3:35 PM. Four school buses serve 152 students or 31% of the student population. No taxis are scheduled at this school.

In the morning, school buses and parents unload their students in the south parking lot and along Dryden Place. During the morning arrival period, traffic worked smoothly with little congestion as shown in **Exhibit 1.**

Exhibit 1
Dryden School Arrival
Thursday September 13, 2022 9:01 AM

In the afternoon, the school buses use the parking lot loading area and parents line up along Dryden Place and queue north near but not into Rockwell Street. Exhibit 2 shows the south lot's operation.

Exhibit 2
Dryden School Dismissal
Thursday September 13, 2022 3:31 PM

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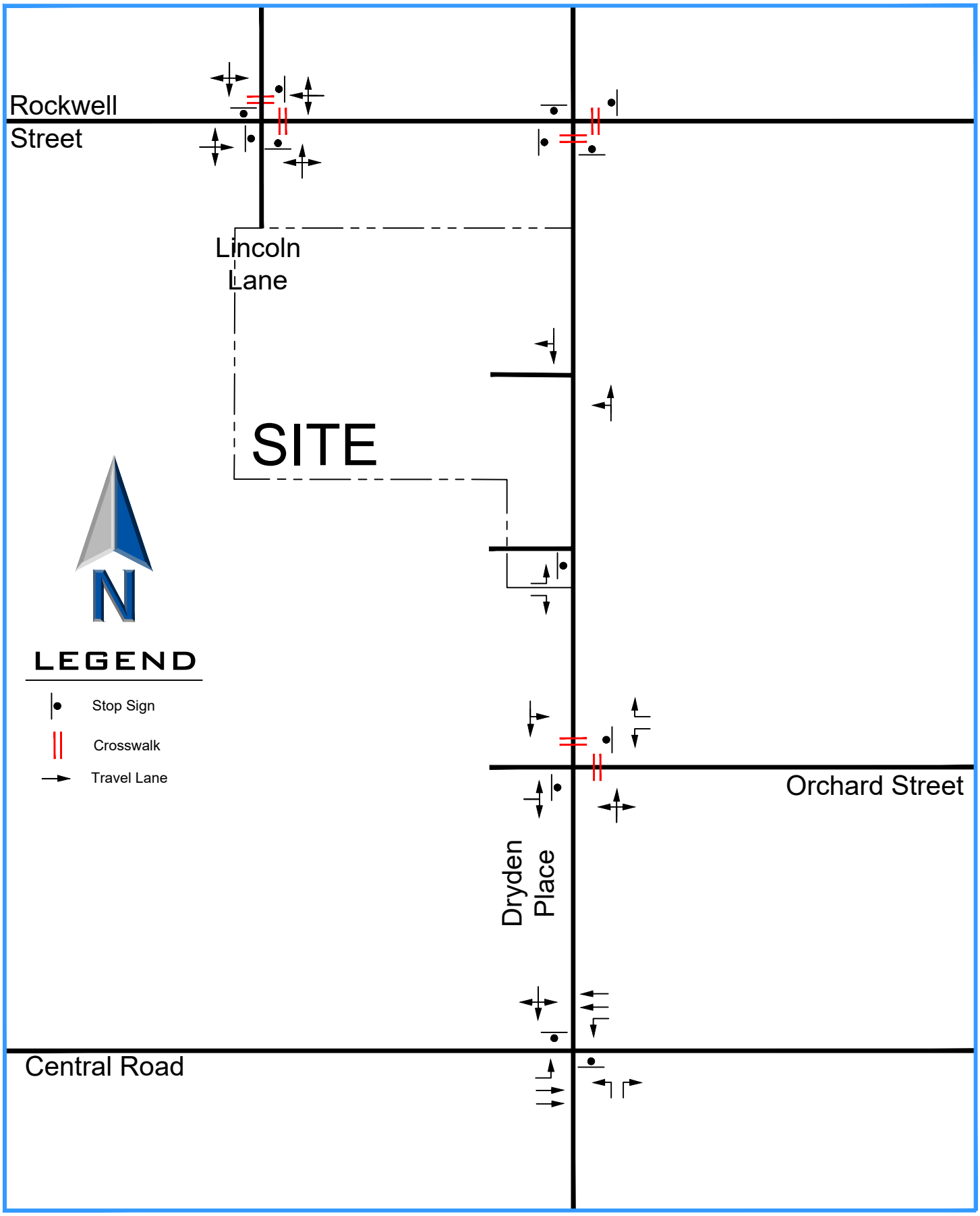
Site Location & Area Roadways

Figure 1



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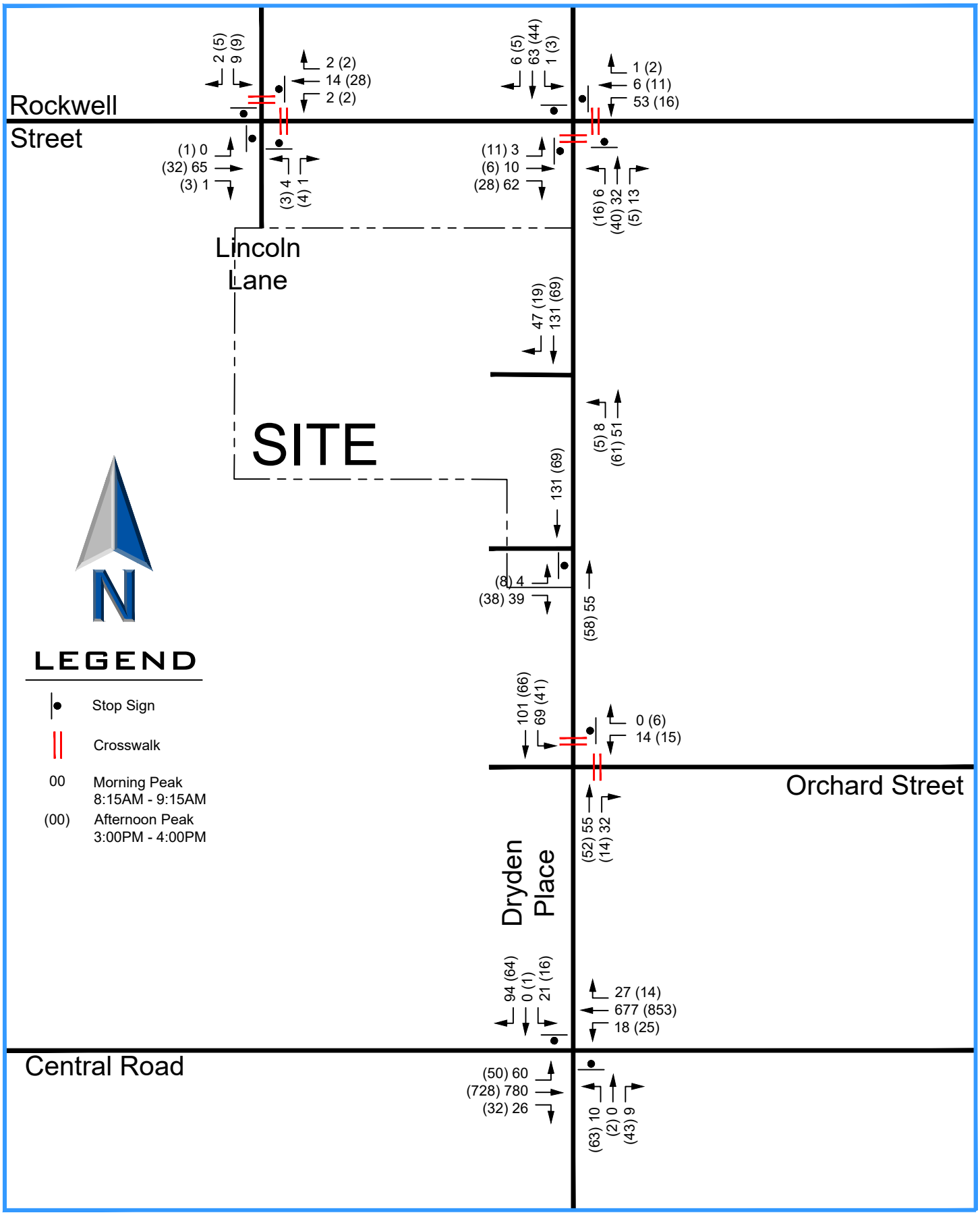
Existing Roadway Geometrics

Figure 2



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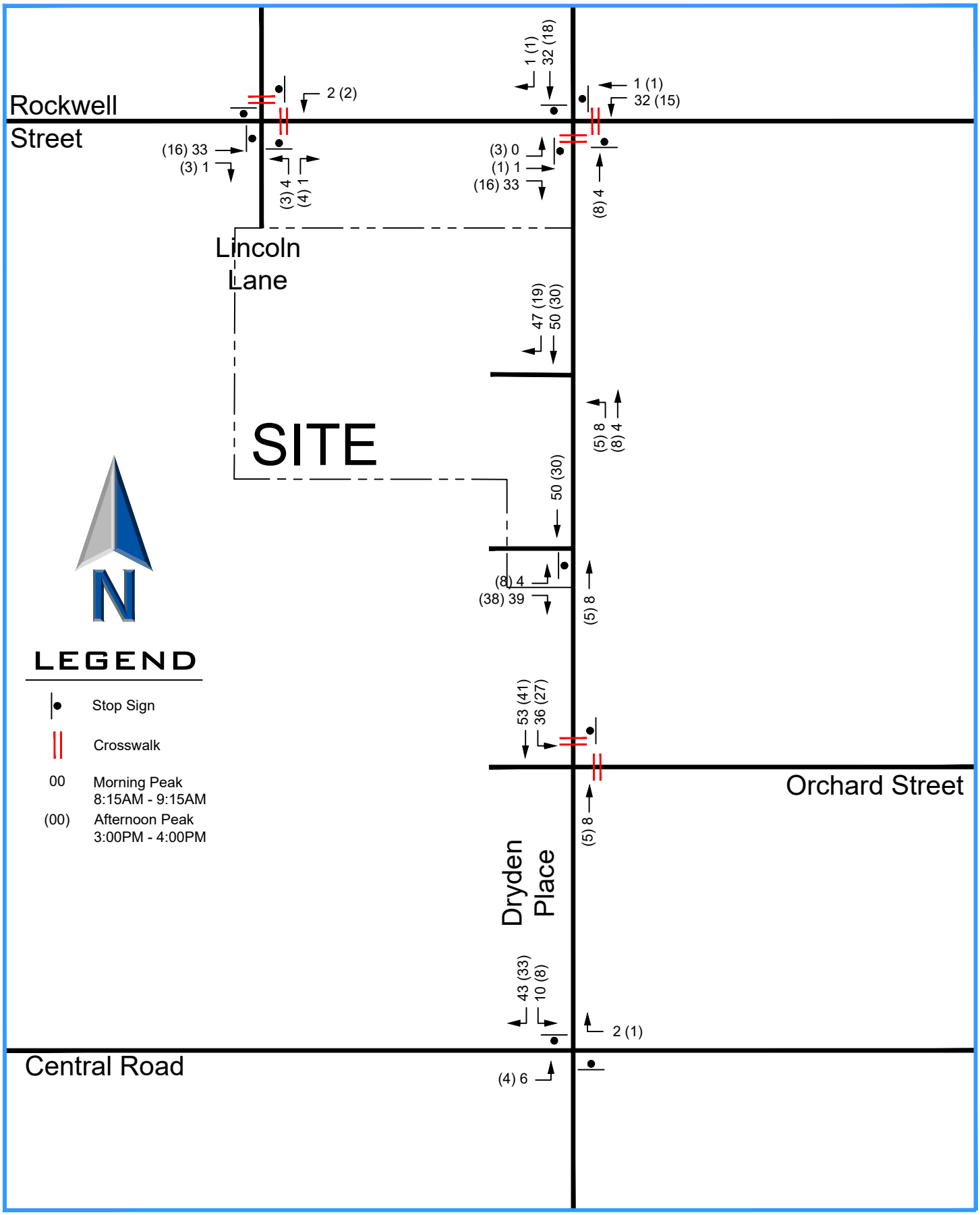
Existing Traffic Volumes

Figure 3A



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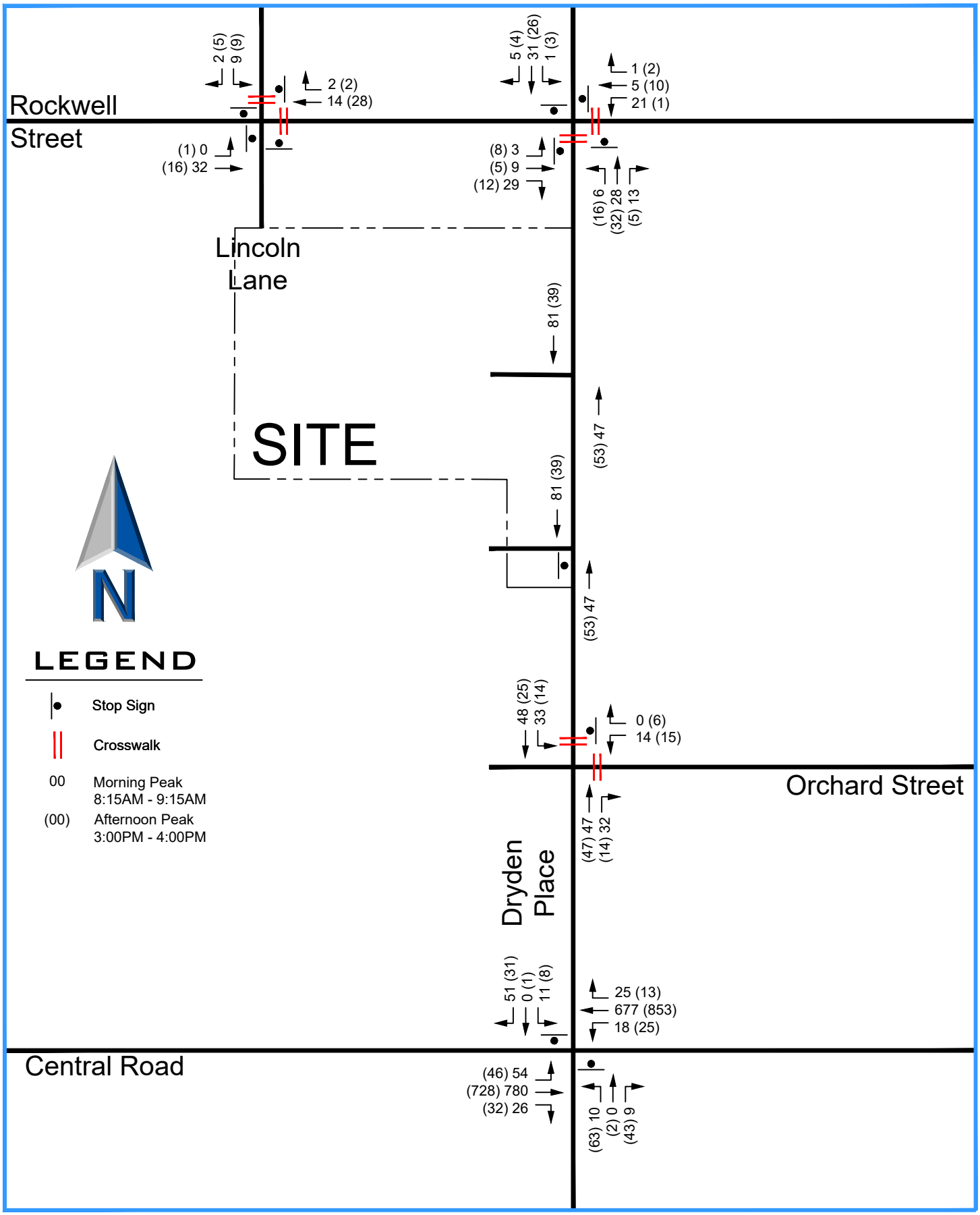
Existing School Traffic Volumes

Figure 3B



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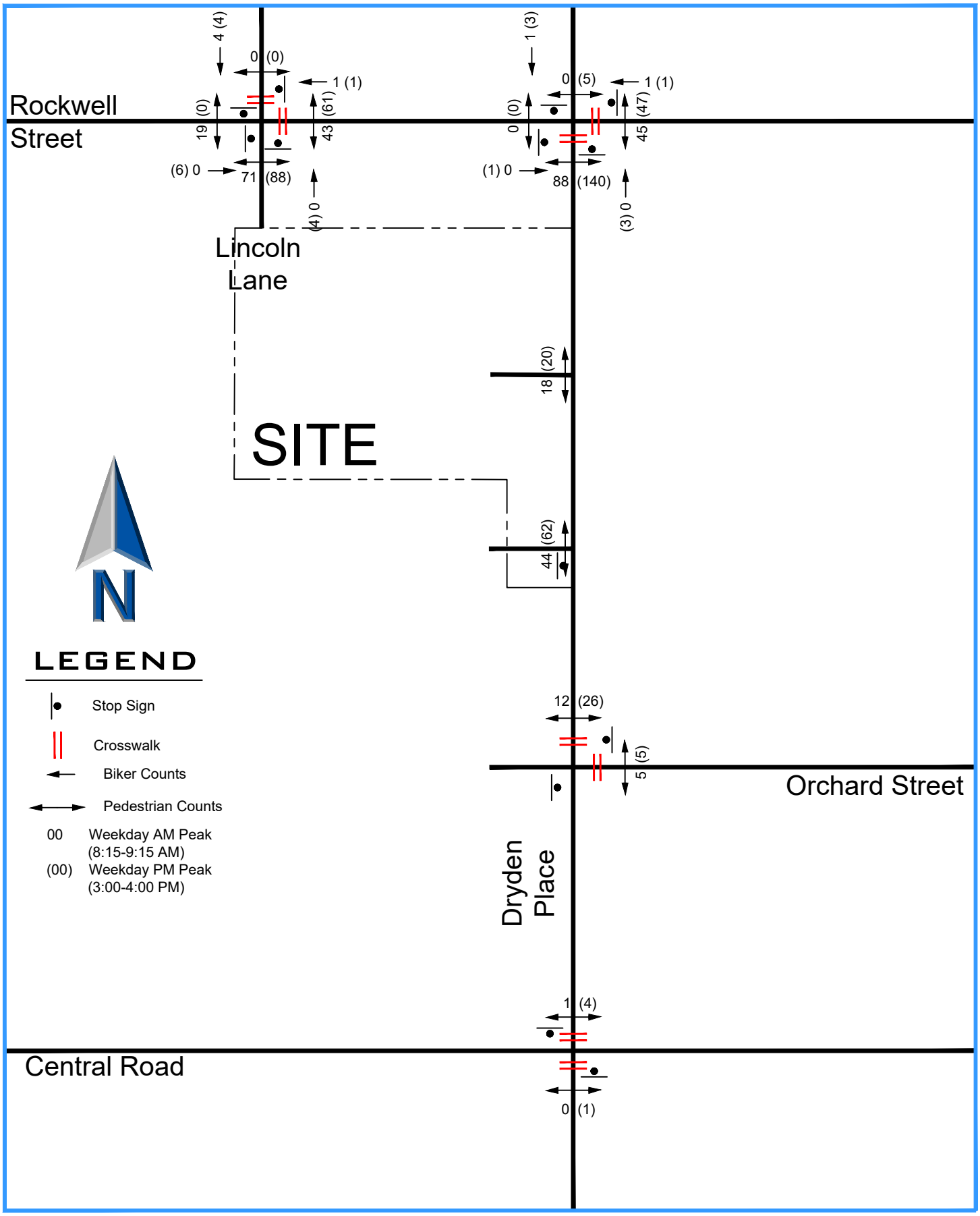
Existing Non-School Traffic Volumes

Figure 3C



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Year 2022 Pedestrian and Bike Volumes

Figure 4

SITE TRAFFIC CHARACTERISTICS

Site Plan

The school currently serves 478 children with 56 staff. A building addition is proposed to add four classrooms for a total of 28 classrooms. Student population is expected to grow by 48 students to 526 students (+18%) over the next five years. The number of staff is expected to grow from 56 to 61 persons. Four school bus will accommodate the existing and projected number of bused students.

School Trip Generation and Distribution

Traffic estimates were made for the additional students using the traffic counts at the current school and adjusted for the increase in student population. The trip generation rates for the school are higher than the data provided by the Institute of Transportation Engineer's Trip Generation, 11th Ed. manual for elementary schools due to a higher percentage of automobile usage and minimal busing. The rate of vehicle trip generation was applied to the proposed increase in students with the results shown in **Table 1.**

Table 1
School Expansion Traffic Volumes

Scenario	Morning Arrival			Afternoon Dismissal		
	In	Out	Total	In	Out	Total
Trip Generation Based on Existing Traffic Volumes						
Existing 478 Students	108	98	206	59	83	142
Total 526 Students	127	117	244	70	99	169
Net Additional Traffic	**+19**	**+19**	**+38**	**+11**	**+16**	**+27**
ITE Trip Generation Comparison(1)						
Existing 478 Students	191	163	354	99	116	215
Total 526 Students	210	179	389	109	128	237
Net Additional Traffic(2)	**+19**	**+16**	**+35**	**+10**	**+12**	**+22**

(1) ITE Trip Generation Manual, 11th Edition – Land Use Code 520 (Elementary School)
(2) For comparison only – Not used for analyses

The directional distribution for school traffic is based on the existing school traffic counts and is shown in **Table 2** and on **Figure 5**.

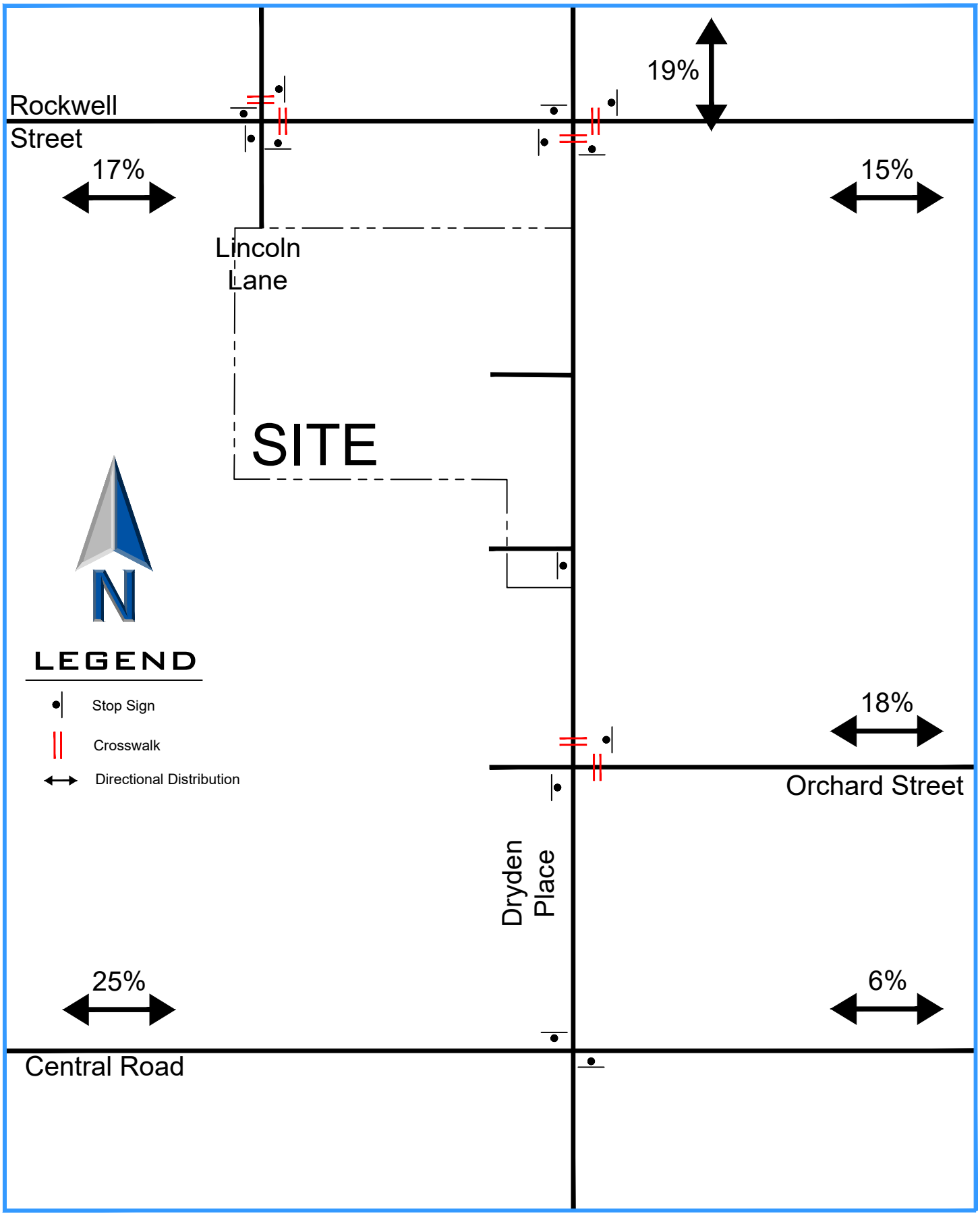
Table 2
Existing Directional Distribution

Direction	Percentage
West on Rockwell Street	17%
East on Rockwell Street	15%
North on Dryden Place	19%
East on Orchard Street	18%
West on Central Road	25%
East on Central Road	6%
Total	**100%**

Trip Assignment

The future vehicular trips that are generated by the school were distributed to the area roadways based on the site plan, projected school volumes, and the directional distribution analysis. **Figure 6** illustrates the total traffic generated by the school (existing and expansion) and its assignment on the road system.

Figure 7 shows the total traffic volumes which a combination of Figure 3C (Non-School traffic) and Figure 5 (Projected School Volumes).



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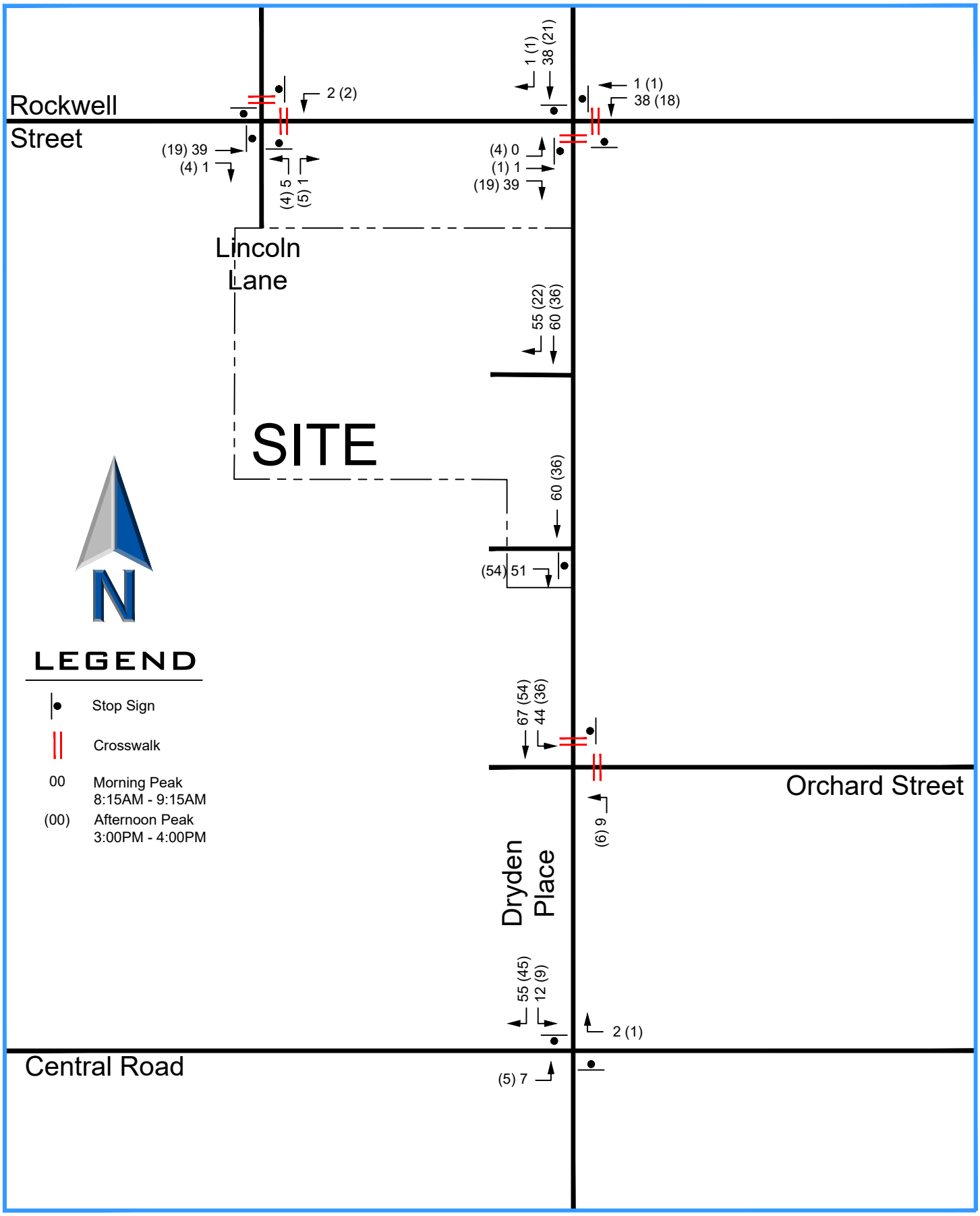
Directional Distribution

Figure 5



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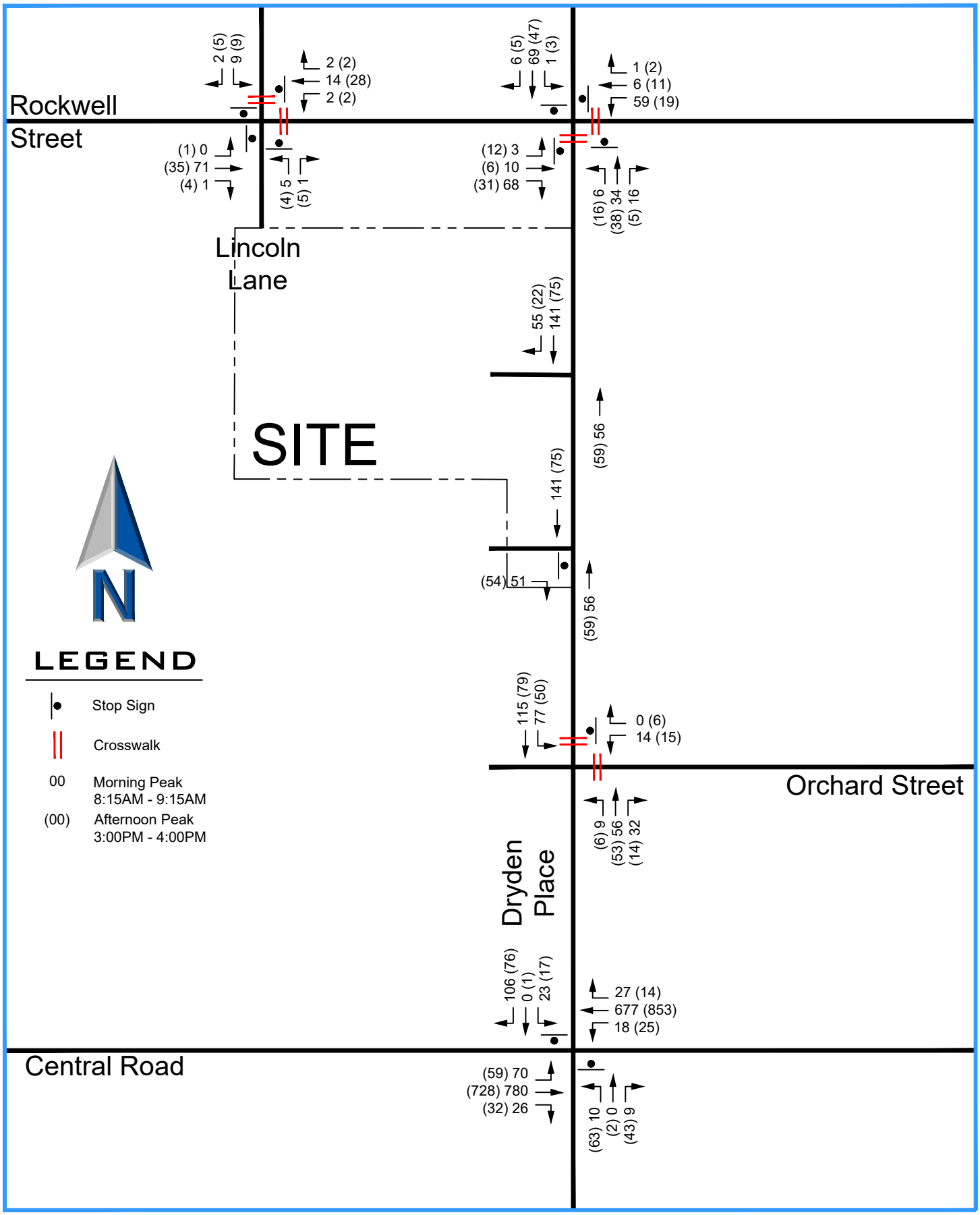
Projected School Traffic Volumes

Figure 6



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Projected Traffic Volumes

Figure 7

ANALYSES

Intersection Capacity Analyses

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 3**.

Table 3
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 2010

Capacity analyses were conducted for each intersection using the computer program Highway Capacity Software (HCS) to determine the existing operating conditions of the access system. These analyses were performed for the school's peak arrival and dismissal periods. **Table 4** shows the existing and future level of service results for each intersection. Copies of the capacity analysis summaries are included in the **Appendix**.

Dryden Place at Central Road

The two-way-stop intersection south of the school will continue to operate at an acceptable level of service except for the northbound left-turn/thru lane which works at a Level of Service F. This is due to a combination of the left-turn volume exiting The Moorings development and the thru volumes along Central Road. It is not impacted by the school related traffic volumes.

Dryden Place at South Lot Entrance and Exit

The south parking lot will operate well with the additional school traffic. The northbound left-turn and eastbound left-turn prohibition from northbound Dryden Place and the eastbound exit will need be reinforced with additional communications reminding the parents that the left-turn is prohibited during arrival and dismissal, potential enforcement by staff, and traffic cones placed to restrict the left-turn.

Dryden Place at Orchard Street

The two-way-stop intersection south of the school will continue to operate at an acceptable level of service and no improvements are needed.

Dryden Place at Rockwell Street

The all-way-stop intersection north of the school will continue to operate at an acceptable level of service and no improvements are needed.

Rockwell Street at Lincoln Lane

The all-way-stop intersection northwest of the school will continue to operate at an acceptable level of service and no improvements are needed.

Table 4
Intersection Level of Service and Delay

Intersection	Movement	AM Arrival		PM Dismissal	
		2022	2028	2022	2028
Dryden Place at Central Road (Two-Way Stop)	**EB Lt**	A-9.7	A-9.7	B-10.5	B-10.6
	WB Lt	A-9.9	A-9.9	A-9.7	A-9.7
	NB Lt/Th	F-61.4	F-66.7	F-100+	F-100+
	NB Rt	B-11.4	B-11.4	B-11.7	B-11.7
	SB Approach	C-24.1	D-26.3	E-35.9	E-35.9
Dryden Place at Circle Lot Entrance (Two-Way Stop)	**NB Lt[(1)]/Th**	A-7.9	-	A-7.5	-
Dryden Place at Circle Lot Exit (Two-Way Stop)	**EB Lt/Rt**	B-10.1	B-10.2	A-9.7	A-9.5
Dryden Place at Orchard Street (Two-Way Stop)	**WB Approach**	C-20.4	D-25.3	B-11.6	B-12.7
	SB Lt	A-8.0	A-8.1	A-7.6	A-7.7
Dryden Place at Rockwell Street	**All-Way Stop**	A-8.5	A-9.0	A-7.4	A-7.5
Rockwell Street at Lincoln Lane	**All-Way Stop**	A-7.6	A-7.7	A-7.1	A-7.1

Parking

The existing school on-site parking supply provides a total of 58 parking spaces including two accessible spaces. A shared parking agreement with the church to the south allows the school district to use 130 parking spaces for school purposes. Parking counts were conducted in September, 2022 after the morning arrival period which found the north lot over parked with three vehicles in an unmarked area and four vehicles in the adjacent park district lot. There was a total of 49 vehicles parked in 188 spaces **Table 5** summarizes the parking inventory and survey by lot. The north lot capacity is exceeded by several staff parking in unmarked areas or the park district lot. They should be directed to park in the south lot.

Table 5
Dryden School Parking Inventory and Survey

Lot	Parking Inventory			Parking Survey (9/13/2022)	
	Standard	Accessible	Total	Vehicles	Occupancy
North-School (E)	8	0	8	15(1)	188%
South	48	2	50	33	66%
Church	126	4	130	1	1%
Total	**182**	**6**	**188**	**49**	**26%**

(1) Includes vehicles parked in unmarked or park district spaces.

The Village of Arlington Heights Zoning Ordinance requires elementary schools to provide one parking space per each employee (61 staff) and one per every five classrooms (28 rooms) for a total of 67 spaces. Three accessible stalls are required and two spaces provided. Restriping the south lot also picked up an additional space for a total of 52spaces in the south lot. Two striped spaces were added in the north lot that currently used for parking. The total parking supply will be 10 spaces in the north lot and 52 in the south lot or 62 spaces in total. A parking variation of 5 spaces would be required.

National parking data is available from the Institute of Transportation Engineers (ITE) in their publication *Parking Generation*, 4th Edition for elementary schools (Land Use Code 520). The peak demand in the ITE data was 0.13 spaces per student (526 students) or 69 spaces.

With 61 staff members, the total school demand would be 54 vehicles based on the school parking surveys. Based on the school parking data, the proposed 62 parking spaces will adequately serve the school's needs. A parking variation of 5 parking spaces is justified with the option to use the church parking lot. Parking for special events at the school can be accommodated by a combination of the off-street and on-street parking by the school.

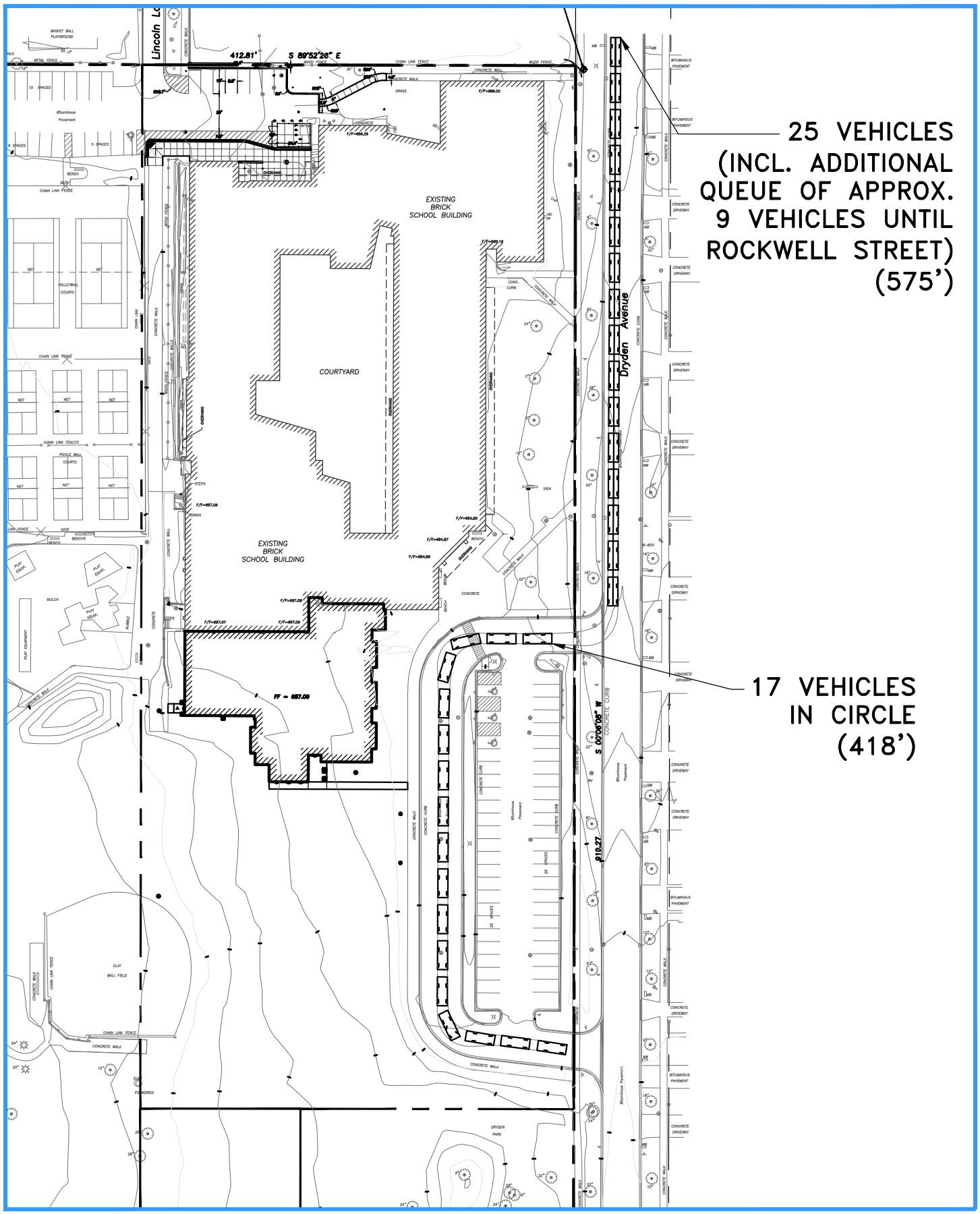
Stacking

Figures 8 and 9 illustrate the existing on-site and on-street stacking available to use at Dryden School. The south lot has room for 17 vehicles and 25 spaces on-street during the morning arrival period. The observed back-up in was less than 42 vehicles. During the afternoon dismissal, the south lot is reserved for buses and additional on-street queuing occurs on- street totaling 44 vehicles. There are 130 parking space available in the church lot for parent to park and get their student.

SUMMARY

This report summarizes the results of traffic and parking study for the expansion of Dryden School in Arlington Heights, Illinois. The following recommendations were developed:

1. The proposed expansion of Dryden School from 478 to 526 students will add 27 to 38 trips during the peak school hours will not adversely impact the level-of-service of study area intersections.
2. Queuing for parents is provided in the south lot which has room for 17 vehicles and 25 vehicles on-street during the morning arrival period. The observed back-up in was less than 42 vehicles. During the afternoon dismissal, the south lot is reserved for buses and additional on-street queuing occurs on- street totaling 44 vehicles. There are 130 parking space available in the church lot for parent to park and get their student.
3. Four spaces will be added to the existing parking supply by restriping both lots to add two spaces in the north lot and two spaces in the south lot for a total of 62 spaces.
4. The Village zoning requirement is 67 parking spaces which exceeds the proposed supply by 5 spaces. A parking variation of 5 spaces is needed. Additional parking is available to the school within the church lot.
5. Parking counts at the school with the expansion, 54 vehicles, show that the 62 proposed parking spaces will serve the school's needs.



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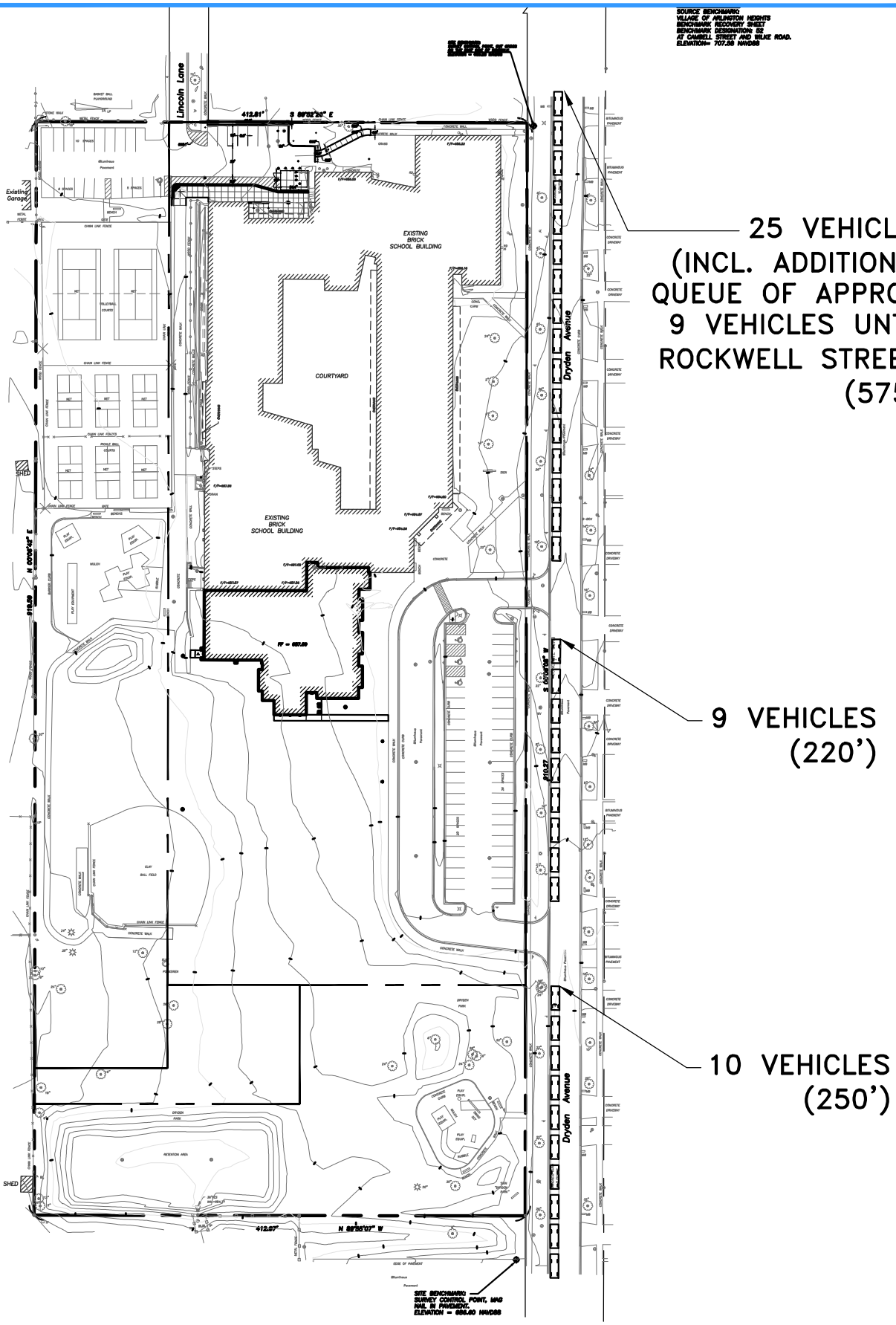
Parent On-Site Stacking for Drop-Off

Figure 8



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Parent On-site Stacking for Pick-Up

Figure 9

Appendix

- Existing 2022 Traffic Counts
- Arlington Heights Signage
- Arlington Heights Bike Map
- School Info
    - Bussing Schedule
    - Taxi Data
    - Crossing Guard Locations
    - School Boundary Map
    - Traffic Plan
- ITE Traffic and Parking Calculations
- Intersection Capacity Analyses
    - 2022 Existing Conditions
    - 2028 Total Traffic Volumes

Rockwell Street and Lincoln Lane

Arlington Heights, IL															
	Lincoln Lane Southbound			Rockwell Street Westbound			Lincoln Lane Northbound			Rockwell Street Eastbound			15	60	Peak
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Minute Totals	Minute Totals	Hour Factor
	Monday October 3, 2022														
8:00 AM	2	2	0	0	3	4	2	0	0	2	12	1	28	101	0.54
8:15 AM	0	0	0	0	2	0	0	0	2	1	8	0	13	**84**	**0.45**
8:30 AM	0	0	1	1	3	0	0	0	1	0	7	0	13	76	0.40
8:45 AM	0	0	6	0	1	1	1	0	0	0	38	0	47		
9:00 AM	2	0	1	1	4	1	0	0	1	0	1	0	11		
9:15 AM	0	0	1	1	2	0	0	0	0	1	0	0	5		
Total	4	2	9	3	15	6	3	0	4	4	66	1			
8:15-9:15 AM	**2**	**0**	**8**	**2**	**10**	**2**	**1**	**0**	**4**	**1**	**54**	**0**	**84**		
	Monday August 29, 2022														
2:30 PM	2	0	1	2	2	0	0	0	0	0	3	0	10	73	0.83
2:45 PM	1	0	2	0	4	0	1	1	1	1	10	0	21	88	0.88
3:00 PM	3	0	1	0	5	0	0	0	1	0	9	1	20	**85**	**0.85**
3:15 PM	1	0	5	0	2	0	0	0	0	0	14	0	22		
3:30 PM	1	0	3	2	4	2	2	0	0	2	9	0	25		
3:45 PM	0	0	0	0	13	0	2	0	2	1	0	0	18		
Total	8	0	12	4	30	2	5	1	4	4	45	1			
3:00-4:00 PM	**5**	**0**	**9**	**2**	**24**	**2**	**4**	**0**	**3**	**3**	**32**	**1**	**85**		

Central Road and Dryden Place

Arlington Heights, IL															
	Dryden Place Southbound			Central Road Westbound			Dryden Place Northbound			Central Road Eastbound			15 Minute Totals	60 Minute Totals	Peak Hour Factor
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn			
	Tuesday September 27, 2022														
8:00 AM	10	0	6	3	208	1	4	0	5	9	201	11	458	1793	0.96
8:15 AM	5	0	0	4	195	5	2	0	4	8	233	12	468	**1720**	**0.92**
8:30 AM	9	0	1	6	167	3	1	0	1	7	205	11	411	1575	0.86
8:45 AM	39	0	7	14	177	5	1	0	2	6	175	30	456		
9:00 AM	39	0	13	3	138	5	5	0	3	5	167	7	385		
9:15 AM	1	0	1	2	168	5	3	0	3	9	128	3	323		
Total	103	0	28	32	1053	24	16	0	18	44	1109	74			
8:15-9:15 AM	**92**	**0**	**21**	**27**	**677**	**18**	**9**	**0**	**10**	**26**	**780**	**60**	**1720**		
	Tuesday September 27, 2022														
2:30 PM	2	0	3	3	232	5	5	0	10	14	182	5	461	1787	0.92
2:45 PM	6	0	0	7	169	5	13	0	20	11	187	4	422	1847	0.89
3:00 PM	11	0	4	3	180	4	13	1	17	5	168	12	418	**1891**	**0.91**
3:15 PM	5	0	1	4	216	7	16	0	18	13	188	18	486		
3:30 PM	31	0	8	3	235	7	9	0	18	8	195	7	521		
3:45 PM	17	1	3	4	222	7	5	1	10	6	177	13	466		
Total	72	1	19	24	1254	35	61	2	93	57	1097	59			
3:00-4:00 PM	**64**	**1**	**16**	**14**	**853**	**25**	**43**	**2**	**63**	**32**	**728**	**50**	**1891**		

Rockwell Street and Dryden Place

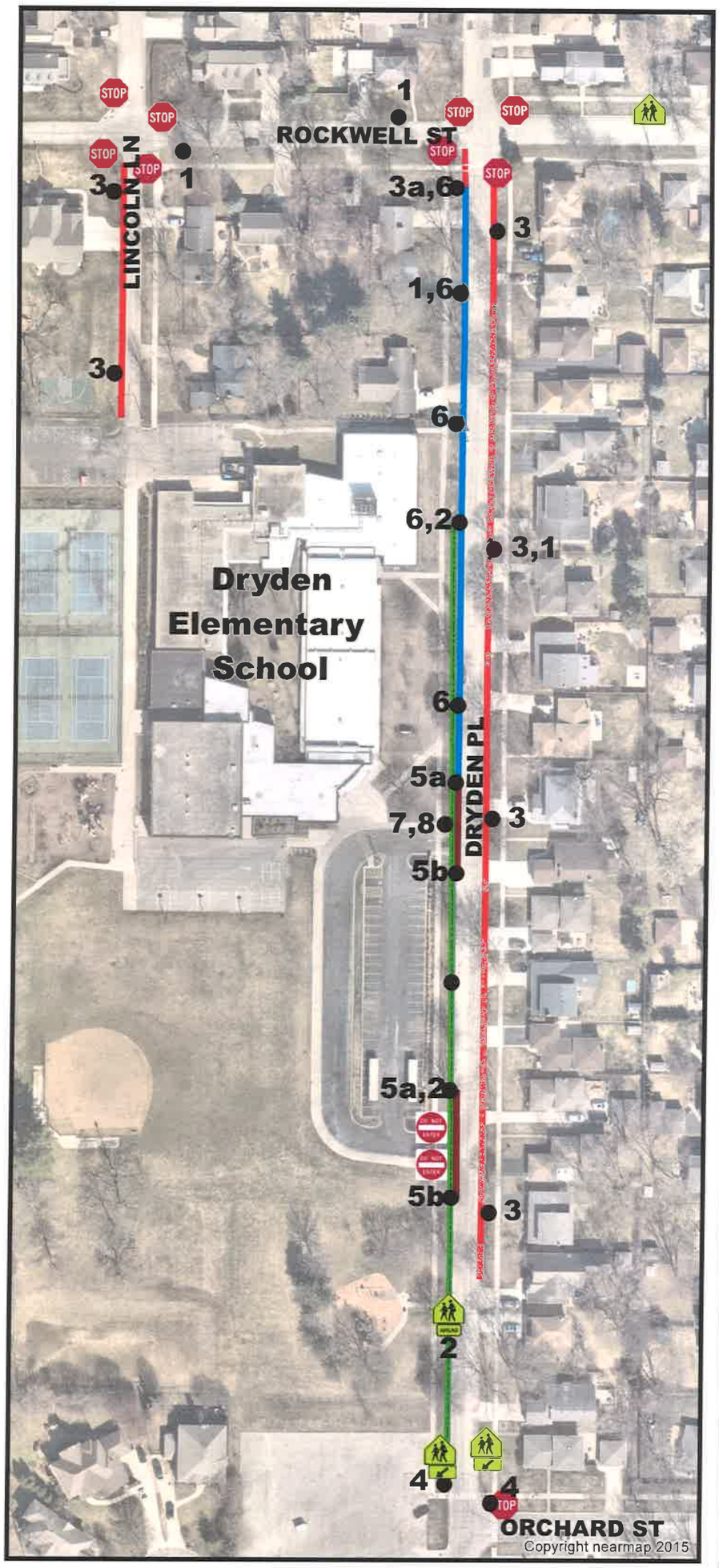
Arlington Heights, IL															
	Dryden Place Southbound			Rockwell Street Westbound			Dryden Place Northbound			Rockwell Street Eastbound			15 Minute Totals	60 Minute Totals	Peak Hour Factor
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn			
	Monday October 3, 2022														
8:00 AM	4	5	0	0	2	1	1	9	1	6	6	2	37	205	0.47
8:15 AM	0	7	1	0	2	3	1	1	0	4	3	1	23	**183**	**0.42**
8:30 AM	2	13	0	0	1	7	0	4	1	6	3	0	37	174	0.40
8:45 AM	2	27	0	1	1	31	1	2	0	37	4	2	108		
9:00 AM	2	4	0	0	2	0	2	2	1	2	0	0	15		
9:15 AM	1	4	0	0	1	2	1	3	1	0	1	0	14		
Total	11	60	1	1	9	44	6	21	4	55	17	5			
8:15-9:15 AM	**6**	**51**	**1**	**1**	**6**	**41**	**4**	**9**	**2**	**49**	**10**	**3**	**183**		
	Monday October 3, 2022														
2:30 PM	1	1	0	0	1	2	3	1	3	2	1	1	16	121	0.61
2:45 PM	1	4	0	0	3	1	2	3	0	4	6	3	27	153	0.77
3:00 PM	1	4	0	0	2	6	0	3	3	8	1	0	28	**158**	**0.79**
3:15 PM	0	16	2	1	1	3	2	7	0	13	2	3	50		
3:30 PM	2	15	1	1	2	2	1	6	4	6	2	6	48		
3:45 PM	2	5	0	0	6	2	1	8	5	0	1	2	32		
Total	7	45	3	2	15	16	9	28	15	33	13	15			
3:00-4:00 PM	**5**	**40**	**3**	**2**	**11**	**13**	**4**	**24**	**12**	**27**	**6**	**11**	**158**		

Dryden Place and Orchard Street

Arlington Heights, IL															
	Dryden Place Southbound			**Orchard Street Westbound**			**Dryden Place Northbound**			**Orchard Street Eastbound**			**15 Minute Totals**	**60 Minute Totals**	**Peak Hour Factor**
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn			
	Thursday September 29, 2022														
8:00 AM	0	12	0	1	0	2	1	12	0	0	0	0	28	225	0.39
8:15 AM	0	6	0	0	0	4	0	12	0	0	0	0	22	**236**	**0.40**
8:30 AM	0	11	1	0	0	3	6	8	0	0	0	0	29	226	0.39
8:45 AM	0	67	59	0	0	6	8	6	0	0	0	0	146		
9:00 AM	0	17	9	0	0	1	5	7	0	0	0	0	39		
9:15 AM	0	5	0	0	0	1	2	4	0	0	0	0	12		
Total	0	118	69	1	0	17	22	49	0	0	0	0			
8:15-9:15 AM	**0**	**101**	**69**	**0**	**0**	**14**	**19**	**33**	**0**	**0**	**0**	**0**	**236**		
	Thursday September 29, 2022														
2:30 PM	0	2	1	1	0	2	5	5	0	0	0	0	16	85	0.79
2:45 PM	0	3	3	0	0	2	3	5	0	0	0	0	16	153	0.46
3:00 PM	0	6	0	3	0	6	2	9	0	0	0	0	26	**163**	**0.49**
3:15 PM	0	1	3	2	0	3	4	14	0	0	0	0	27		
3:30 PM	0	31	35	1	0	2	4	11	0	0	0	0	84		
3:45 PM	0	13	3	0	0	1	1	8	0	0	0	0	26		
Total	0	56	45	7	0	16	19	52	0	0	0	0			
3:00-4:00 PM	**0**	**51**	**41**	**6**	**0**	**12**	**11**	**42**	**0**	**0**	**0**	**0**	**163**		

Dryden Place and Circle Lot

Arlington Heights, IL												
	Dryden Place Southbound			Dryden Place Northbound			Circle Lot Eastbound			15 Minute Totals	60 Minute Totals	Peak Hour Factor
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn			
	Thursday September 29, 2022											
8:00 AM	8	0	0	0	0	4	4	0	1	17	96	0.59
8:15 AM	10	0	0	0	0	3	4	0	0	17	**98**	**0.60**
8:30 AM	11	0	0	0	0	3	7	0	0	21	87	0.53
8:45 AM	19	0	0	0	0	2	19	0	1	41		
9:00 AM	7	0	0	0	0	0	9	0	3	19		
9:15 AM	2	0	0	0	0	1	2	0	1	6		
Total	57	0	0	0	0	13	45	0	6			
8:15-9:15 AM	**47**	**0**	**0**	**0**	**0**	**8**	**39**	**0**	**4**	**98**		
	Thursday September 29, 2022											
2:30 PM	2	0	0	0	0	0	0	0	0	2	24	0.55
2:45 PM	1	0	0	0	0	1	2	0	0	4	52	0.43
3:00 PM	3	0	0	0	0	3	1	0	0	7	**70**	**0.58**
3:15 PM	9	0	0	0	0	0	2	0	0	11		
3:30 PM	4	0	0	0	0	2	21	0	3	30		
3:45 PM	3	0	0	0	0	0	14	0	5	22		
Total	22	0	0	0	0	6	40	0	8			
3:00-4:00 PM	**19**	**0**	**0**	**0**	**0**	**5**	**38**	**0**	**8**	**70**		



Legend

SIGNS

STOP

1 SCHOOL SPEED LIMIT 20 ON SCHOOL DAYS WHEN CHILDREN ARE PRESENT

2 IDLE FREE ZONE Breathe Easy

3 NO PARKING

3a NO PARKING HERE TO CORNER

4 STOP FOR PEDESTRIANS IN CROSSWALK

5a BEGIN NO PARKING STOPPING STANDING BETWEEN SIGNS

5b END NO PARKING STOPPING STANDING BETWEEN SIGNS

6 STUDENT DROP-OFF AND PICK-UP NO PARKING 8AM - 9AM 3PM - 4PM SCHOOL DAYS

7 ENTRANCE

8 Firearms Prohibited By Law

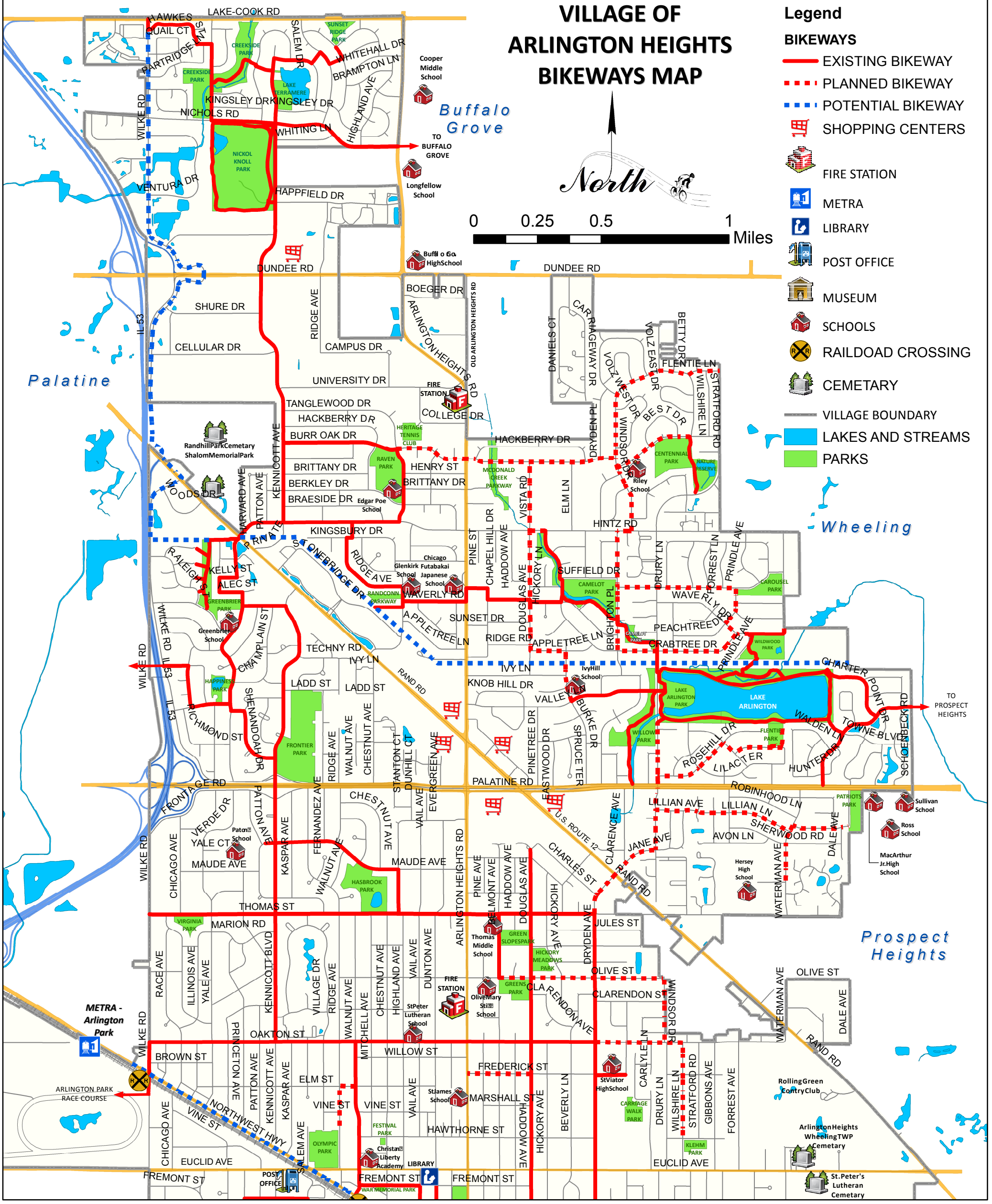
DRYDEN ELEMENTARY SCHOOL				
SCHOOL SITE MAP				
VILLAGE OF ARLINGTON HEIGHTS PUBLIC WORKS DEPARTMENT				
DRAWN: TLS	V.MNGR:		ORD. NO. 1994-063	
CHECKED: MH	V. ENG:		DIR FAC 25:	
DATE: 09/2019	POLICE:			
REVISION/DATE:	06/26/2020	01/22/2021	12/2021	

0 50 100 200 300 400 Feet

N W E S

MAP PREPARED BY:
VILLAGE OF ARLINGTON HEIGHTS
PUBLIC WORKS DEPARTMENT
TIFFANY SCHMOKER
33 S. ARLINGTON HTS. RD.
ARLINGTON HEIGHTS, IL 60005
(847) 368-5250
http://www.vah.com

VILLAGE OF ARLINGTON HEIGHTS BIKEWAYS MAP



BICYCLE SAFETY RULES

1. Always ride your bike in single file, in the same direction as traffic. Stay close to the right edge of the road.
2. Helmets are highly recommended for all bicyclists.
3. Bicycle riders are expected to know and obey all traffic regulations (signs, signals, pavement markings, etc.).
4. Riding on sidewalks is legal except in the Central Business District.
5. Indicate your intention to slow down, stop, turn or change lanes by using arm signals. This will prevent being cutoff.
6. Be extra careful at intersections and railroad crossings and when emerging from driveways, alleys or from behind parked cars. Establish eye contact with motorists who may not be looking for a cyclist.
7. Look out for motorists pulling into traffic. Keep a close watch for car doors opening suddenly in your path causing you to veer into traffic.
8. Maintain your bicycle in sake working order. Check brakes, tires and wheels.
9. Wear bright colored and reflective clothing when riding after dark. Make sure your bike has proper lights and reflectors before riding at night.
10. Stop before reaching a school bus which has s topped to load or unload passengers.
11. Be ready to yield the right-of-way to other moving vehicles.
12. Keep at least one hand on the handlebars at all times for control of the bicycle. Carry books, packages, or other items in a back pack or carrier.
13. Watch for poor road surfaces including drainage grates (tires may fall through grooves), pot holes, loose gravel, and unsafe shoulders.
14. Make sure that the bike you ride is the right size for you.
15. Right turns on red are permissible, after coming to complete stop, except where a sign is posted prohibiting such a turn. You must yield the right-of-way to other traffic lawfully using the intersection and to pedestrians.
16. Only one person should ride on a bicycle except on a tandem bicycle or with an attached child's seat if available.
17. Never hitch a ride with any motorized vehicle.
18. Do not wear headphones when riding a bicycle.

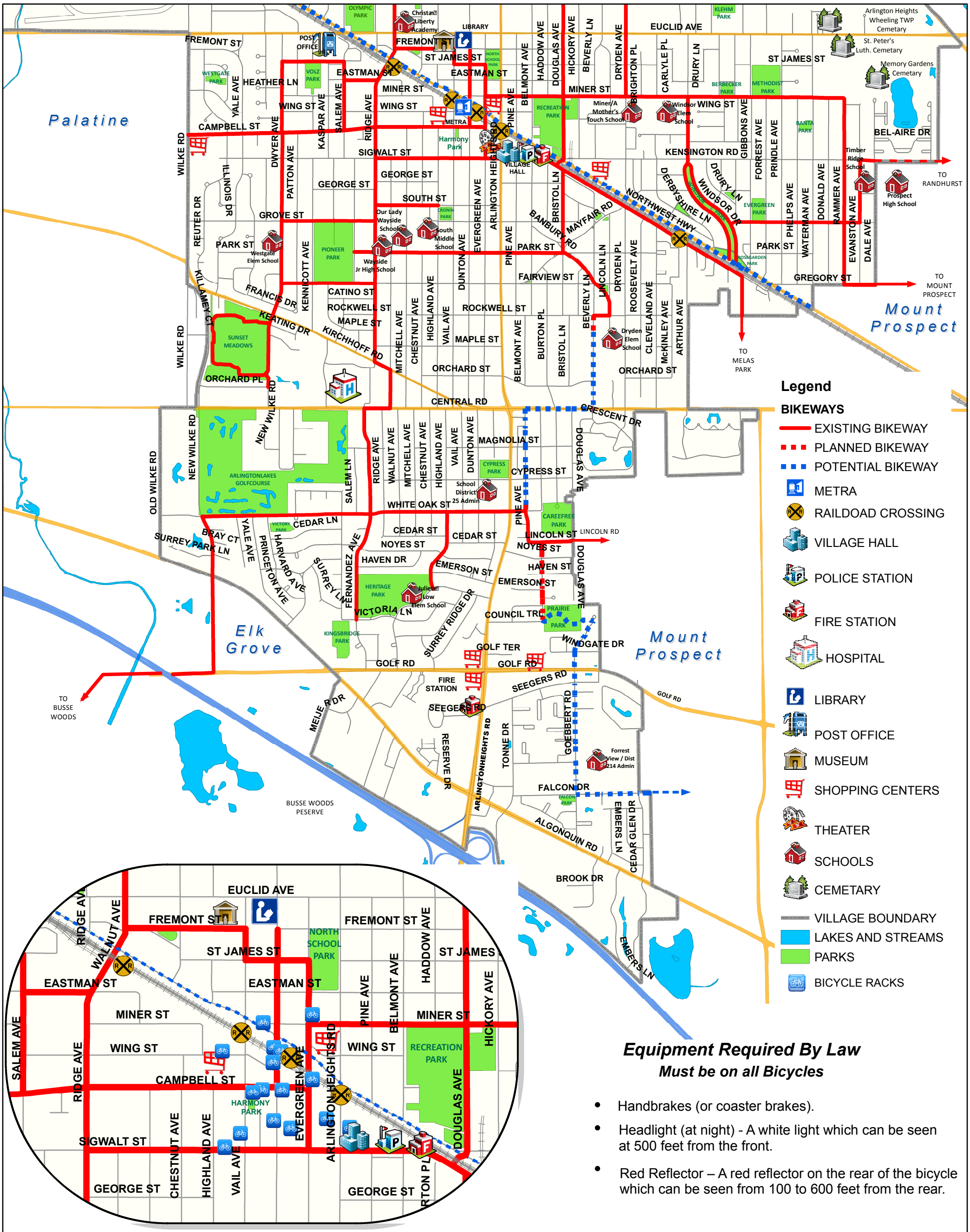
Source:

Portions of this list were excerpts from **Illinois Bicycle Rules of The Road.** Copies are available from the Arlington Heights Police Department, Village Hall, or Illinois Secretary of State, Woodfield Commons, Schaumburg, IL.

Prepared by the Village of Arlington Heights Engineering Department.

June, 2014

VILLAGE OF ARLINGTON HEIGHTS BIKEWAYS MAP



DOWNTOWN

Equipment Required By Law

Must be on all Bicycles

- Handbrakes (or coaster brakes).
- Headlight (at night) - A white light which can be seen at 500 feet from the front.
- Red Reflector – A red reflector on the rear of the bicycle which can be seen from 100 to 600 feet from the rear.

Village of Arlington Heights

Thomas W. Hayes, Mayor
33 South Arlington Heights Rd
Arlington Heights, IL 60005
(847) 368-5100

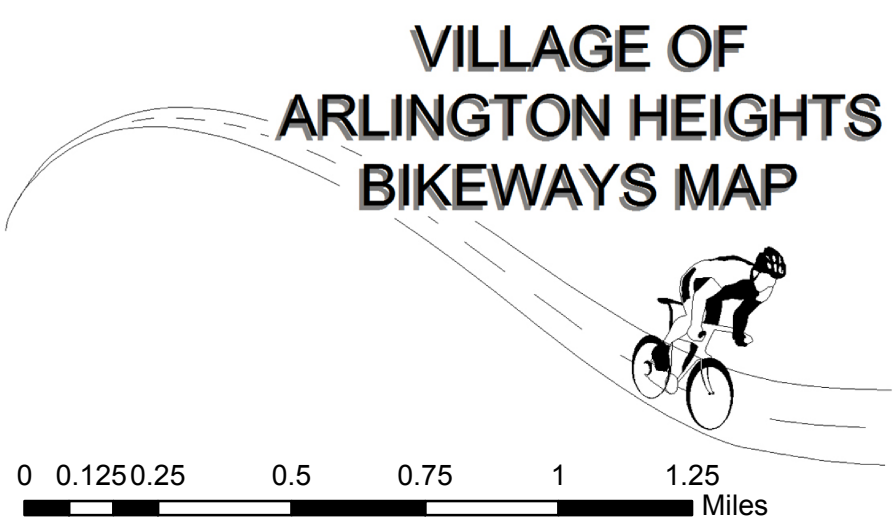
Reporting Bicycle Accidents

Police Department (847) 368-5300
Emergency 911

Bicycle Advisory Commission

Peter Szabo, Chairman
James K. Daley
Paul Danko
Janet Harlow
Alan Medsker
Mitchell D. Polonsky
Michael Walczak

Bike Map Information
(847) 368-5250



AM ROUTE THOMAS - IVY HILL - OLIVE - GREENBRIER SOUTH - WESTGATE - DRYDEN - PIONEER - OLIVE - REC PARK

1ST ROUTE 7:05-7:20AM		DRIVER	DRIVER SUB	X	BUS	BUS SUB	2ND ROUTE 8:20-8:40AM		DRIVER SUB	BUS SUB
THOMAS A	7:10				8		IVY HILL A	8:30		
THOMAS B	7:10				11		IVY HILL D (600, 700)	8:40		
THOMAS C	7:10				19		GREENBRIER A	8:35		
THOMAS D	7:10				22		IVY HILL E (800,900)	8:40		
THOMAS E	7:05				1909					
THOMAS F	7:05				5		IVY HILL B	8:35		
THOMAS G	7:15				21		IVY HILL C-(400, 500)			
THOMAS H	7:10				7GPT		OLIVE A	8:20		
THOMAS I	7:10				3		OLIVE-REC	8:40		
THOMAS J	7:10				9		DRYDEN C	8:15		
THOMAS K	7:20				1908					
THOMAS L	7:10				6GPT					

1ST ROUTE 7:05-7:20AM		DRIVER	DRIVER SUB	X	BUS	BUS SUB	2ND ROUTE 8:15-8:40AM		DRIVER SUB	BUS SUB
SOUTH A	7:10				16					
SOUTH B	7:15				4		DRYDEN B	8:15		
SOUTH C	7:10				58					
SOUTH D	7:20				24					
SOUTH E	7:20				1					
SOUTH F	7:05				2		WESTGATE A	8:20		
SOUTH G	7:15				20					
SOUTH H	7:15				1915					
SOUTH I	7:15				59		DRYDEN A	8:35		
SOUTH J	7:10				173		DRYDEN D	8:15		
SOUTH K	7:15				12		WESTGATE-PIONEER	8:35		

PM ROUTE THOMAS - IVY HILL - OLIVE **5/31/2022**

1ST ROUTE 2:45 PM		DRIVER	DRIVER SUB	X	BUS	BUS SUB	2ND ROUTE 3:35 PM	DRIVER SUB	BUS SUB
THOMAS A	2:40				8		IVY HILL A		
THOMAS B	2:40				11		IVY HILL D (600, 700)		
THOMAS C	2:40				19		GREENBRIER A		
THOMAS D	2:40				22		IVY HILL E (800,900)		
THOMAS E	2:40				1909				
THOMAS F	2:40				5		IVY HILL B		
THOMAS G	2:40				21		IVY HILL C (400,500)		
THOMAS H	2:40				7GPT		OLIVE A		
THOMAS I	2:40				3		OLIVE-REC 3:45		
THOMAS J	2:40				9		DRYDEN C		
THOMAS K	2:40				1908		ACTIVITY EAST THOMAS		
THOMAS L	2:40				6GPT		ACTIVITY WEST		

PM ROUTE SOUTH - WESTGATE - DRYDEN - PIONEER - OLIVE - REC-PARK

PUNCH	1ST ROUTE 2:45 PM		DRIVER	DRIVER SUB	X	BUS	BUS SUB	2ND ROUTE 3:35 PM	DRIVER SUB	BUS SUB
	SOUTH A	2:40				16		ACTIVITY SOUTH		
	SOUTH B	2:40				4		DRYDEN B		
	SOUTH C	2:40				58				
	SOUTH D	2:40				24		ACTIVITY NORTH		
	SOUTH E	2:40				1		ACTIVITY NORTHEAST		
	SOUTH F	2:40				2		WESTGATE A		
	SOUTH G	2:40				20				
	SOUTH H	2:40				1915				
	SOUTH I	2:40				59		DRYDEN A		
	SOUTH J	2:40				173		DRYDEN D		
	SOUTH K	2:40				12		WESTGATE-PIONEER 3:50		

MIDDAY ROUTE DRYDEN - IVY HILL - OLIVE - WESTGATE - DATE: **5/31/2022**

PUNCH	K ROUTE 11:45 AM		DRIVER	DRIVER SUB	X	BUS	BUS SUB	L ROUTE 12:20 - 12:40 PM		DRIVER SUB	BUS SUB
11:15 AM	DRYDEN	K2-31				21		DRYDEN 31L	12:20		
11:15 AM	DRYDEN	K31				1909					
11:15 AM	IVY HILL	K37				11		IVY HILL 37L	12:30		
11:15 AM	OLIVE	K34				8		OLIVE 34L	12:40		
11:15 AM						22		WESTGATE 32L	12:40		

NOTES.-

Taxi at Schools 21-22	AM	MID-DAY	PM
Dryden Elementary School	-	-	-
Greenbrier Elementary School	6	11	6
Ivy Hill Elementary School	1		1
Olive Mary Stitt Elementary School	-	-	-
Westgate Elementary School	8	3	8
Windsor Elementary School	6	1	6
Thomas Middle School	6	1	5
South Middle School	4	1	4
Total	31	17	30

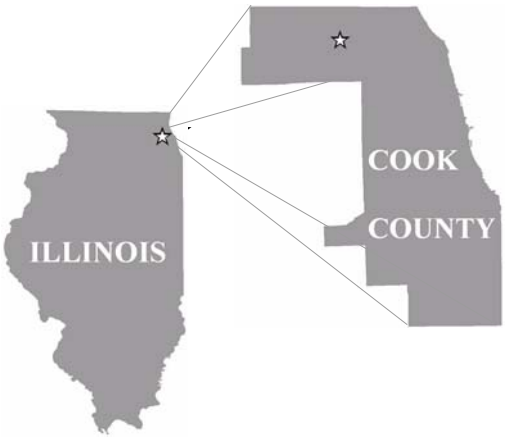
Crossing Guard Locations

Location	AM	PM	K-5	Middle School	Parochial
Arlington & Olive	7:15-9:00	2:25-4:10	Olive		St. Peters
Arlington & Park	7:10-8:25	2:45-3:30		South	OLW
Arlington & Thomas	7:15-7:45	2:45-3:15		Thomas	
Arlington @ St. James	7:45-8:30	3:15-4:00			St. James
Belmont & Thomas	7:15-7:45	2:30-4:00	Olive	Thomas	St. James, St. Peter
	8:15-9:00				
Dryden & Miner	8:05-9:05	3:40-4:10	Windsor		St. James
Dryden & Rockwell	8:35-9:05	3:35-4:05	Dryden		
Dwyer & Grove	8:35-9:05	3:35-4:05	Westgate		
Dwyer & Harvard	8:35-9:05	3:35-4:05	Westgate		
Kennicott & Maude	8:35-9:05	3:35-4:05	Patton		
Maude & Patton	8:35-9:05	3:35-4:05	Patton		
Olive & Belmont	8:35-9:05	3:35-4:05	Olive		
Olive & Douglas	8:35-9:05	3:35-4:05	Olive		
Park & Highland	7:15-7:45	2:45-3:15		South	
Ridge & Park	7:55-8:25	2:55-3:25			OLW
Thomas & Harvard	8:35-9:05	3:35-4:05	Patton		
Windsor & Kensington	8:25-9:10	3:30-4:15	Windsor		
Windsor & Miner	8:20-9:05	3:35-4:05	Windsor		

ELEMENTARY SCHOOL DISTRICTS

Village of Arlington Heights

Cook County - Illinois



Legend

VAH Elementary Schools

ELEMENTARY SCHOOL DISTRICTS

- Dryden School
- Fairview School
- Forest View School
- Greenbrier School
- Ivy Hill School
- Juliette Low School
- Lake Louise School
- Longfellow School
- Olive Mary Stitt School
- Patton School
- Poe School
- Riley School
- Sullivan School
- Westgate School
- Willow Bend School
- Windsor School
- Winston School

ELEMENTARY SCHOOL BOUNDARIES 2008

STREETS

Feature Class Type

- Interstate Highway
- US and State Highway
- Major Streets
- Local City Streets

N

Scale 1:52,300

1 inch equals 0.83 miles

Miles 0 0.35 0.7 1.4

Feet 0 1,750 3,500 7,000

Data Sources:
1. Planimetric Data - Cook County, IL (2001) - VAH GIS Div. (rev. 2004)
2. Annotation - VAH GIS Div. (2004)

Projection: State Plane Coordinate System (Illinois East)
Datum: NAD83 Map Units: feet

MAP PREPARED BY:
VILLAGE OF ARLINGTON HEIGHTS
GEOGRAPHIC INFORMATION SYSTEMS DIVISION
33 S. ARLINGTON HTS. RD.
ARLINGTON HEIGHTS, IL 60005
(847) 368-5726
http://www.vah.com

APRIL 2008

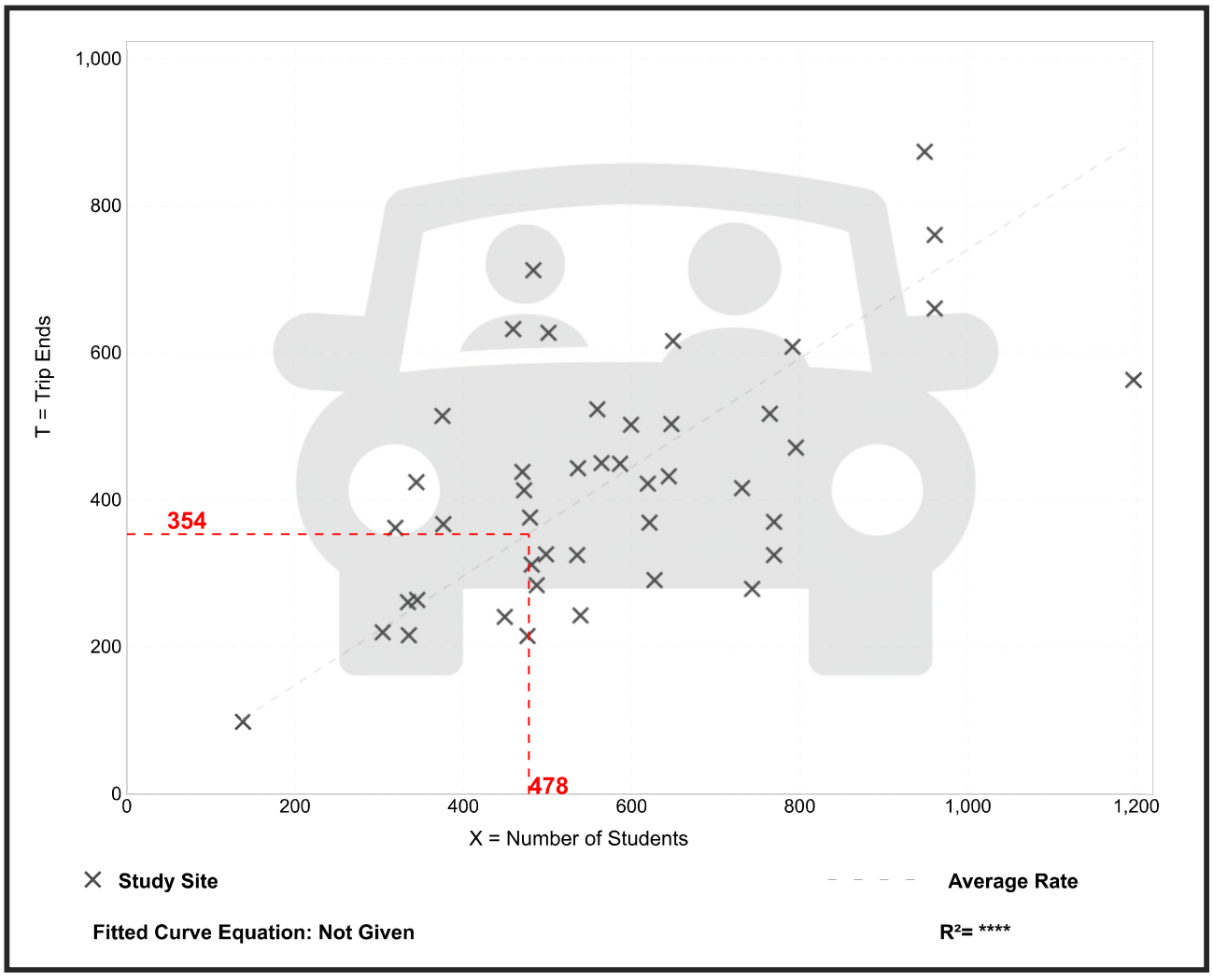
Elementary School
(520)

Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 44
Avg. Num. of Students: 575
Directional Distribution: 54% entering, 46% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.74	0.38 - 1.47	0.25

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Elementary School
(520)

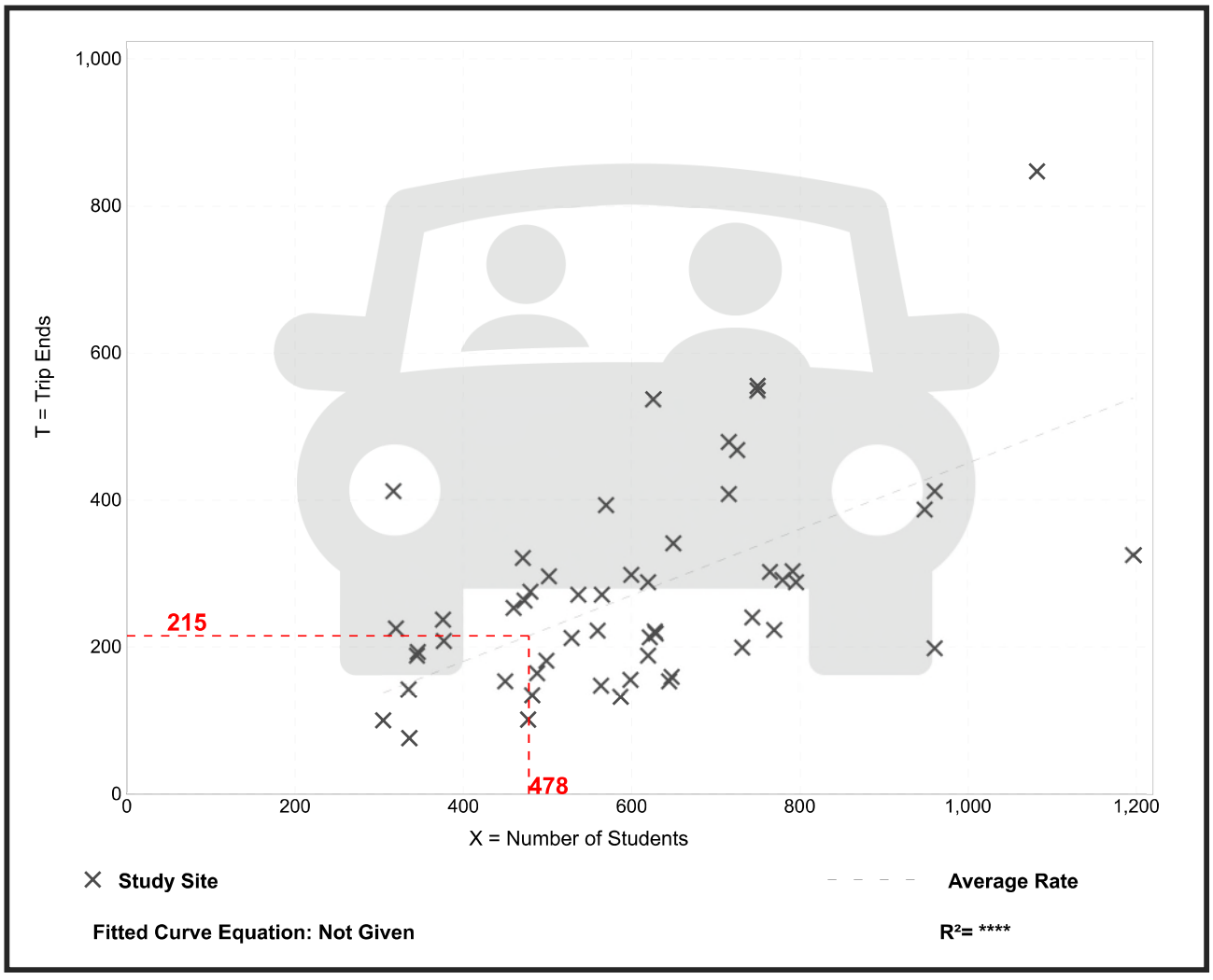
Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 54
Avg. Num. of Students: 608
Directional Distribution: 46% entering, 54% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.45	0.21 - 1.30	0.19

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Elementary School
(520)

Vehicle Trip Ends vs: **Students**
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One Hour Between 7 and 9 a.m.
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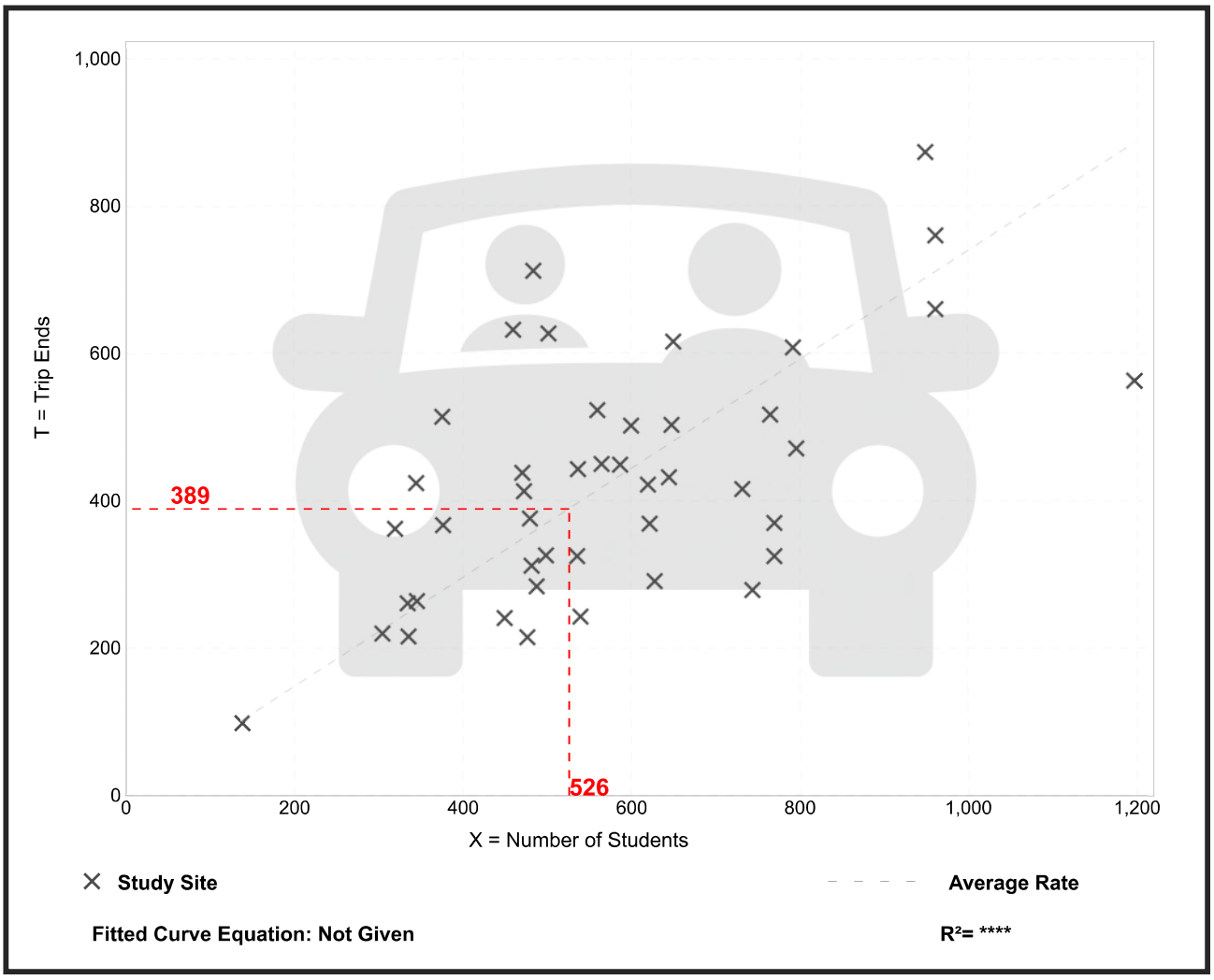

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Elementary School
(520)

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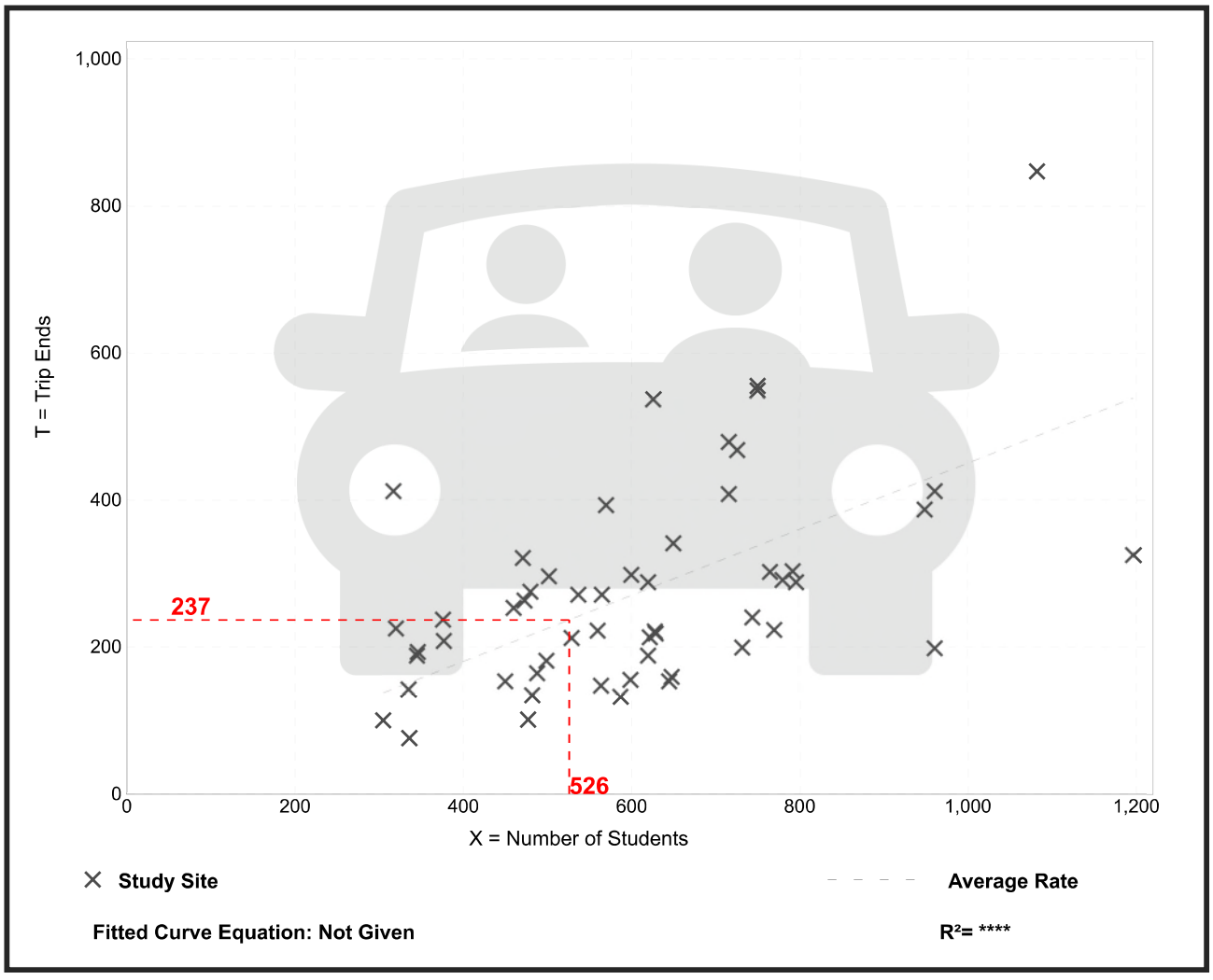


Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

HCS Two-Way Stop-Control Report

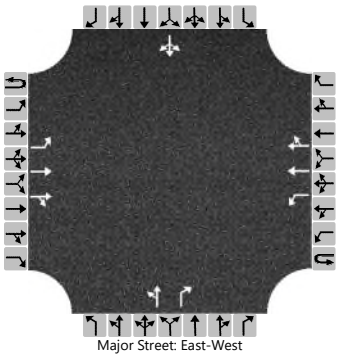
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Central Road
Jurisdiction	Arlington Heights
East/West Street	Central Road
North/South Street	Dryden Place
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	1		0	1	0
Configuration		L	T	TR		L	T	TR		LT		R			LTR	
Volume (veh/h)	0	60	780	26	0	18	677	27		10	0	9		21	0	94
Percent Heavy Vehicles (%)	3	3			3	3				0	3	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No						
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.50	6.56	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.50	4.03	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		65				20				11		10			125	
Capacity, c (veh/h)		837				760				74		572			312	
v/c Ratio		0.08				0.03				0.15		0.02			0.40	
95% Queue Length, Q_{95} (veh)		0.3				0.1				0.5		0.1			1.9	
Control Delay (s/veh)		9.7				9.9				61.4		11.4			24.1	
Level of Service (LOS)		A				A				F		B			C	
Approach Delay (s/veh)	0.7				0.2				37.7				24.1			
Approach LOS	A				A				E				C			

HCS Two-Way Stop-Control Report

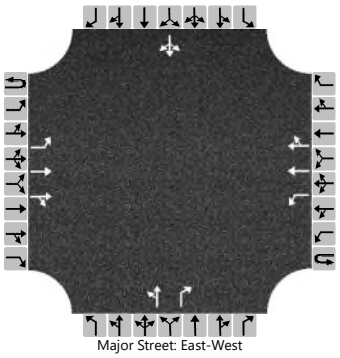
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	10/17/2022
Analysis Year	2028
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Central Road
Jurisdiction	Arlington Heights
East/West Street	Central Road
North/South Street	Dryden Place
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	1		0	1	0
Configuration		L	T	TR		L	T	TR		LT		R			LTR	
Volume (veh/h)	0	70	780	26	0	18	677	27		10	0	9		23	0	106
Percent Heavy Vehicles (%)	3	3			3	3				0	3	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No						
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.50	6.56	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.50	4.03	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		76				20				11		10			140	
Capacity, c (veh/h)		837				760				69		572			306	
v/c Ratio		0.09				0.03				0.16		0.02			0.46	
95% Queue Length, Q_{95} (veh)		0.3				0.1				0.5		0.1			2.3	
Control Delay (s/veh)		9.7				9.9				66.7		11.4			26.3	
Level of Service (LOS)		A				A				F		B			D	
Approach Delay (s/veh)	0.8				0.2				40.5				26.3			
Approach LOS	A				A				E				D			

HCS Two-Way Stop-Control Report

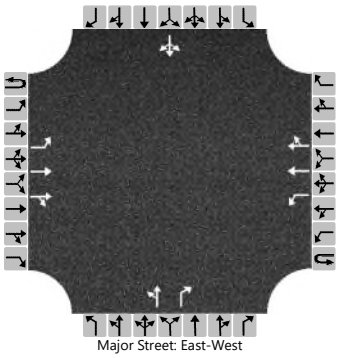
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Central Road
Jurisdiction	Arlington Heights
East/West Street	Central Road
North/South Street	Dryden Place
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	1		0	1	0
Configuration		L	T	TR		L	T	TR		LT		R			LTR	
Volume (veh/h)	0	50	728	32	0	25	853	14		63	2	43		16	1	64
Percent Heavy Vehicles (%)	3	3			3	3				0	3	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.50	6.56	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.50	4.03	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		55				27				71		47			89	
Capacity, c (veh/h)		711				788				69		584			210	
v/c Ratio		0.08				0.03				1.03		0.08			0.42	
95% Queue Length, Q_{95} (veh)		0.3				0.1				5.3		0.3			2.0	
Control Delay (s/veh)		10.5				9.7				218.0		11.7			34.1	
Level of Service (LOS)		B				A				F		B			D	
Approach Delay (s/veh)	0.6				0.3				135.8				34.1			
Approach LOS	A				A				F				D			

HCS Two-Way Stop-Control Report

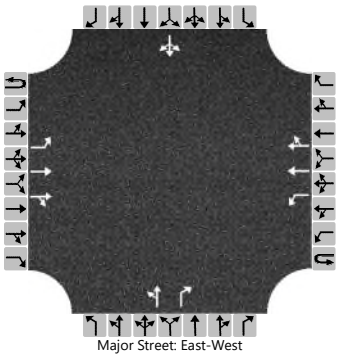
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Central Road
Jurisdiction	Arlington Heights
East/West Street	Central Road
North/South Street	Dryden Place
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	1		0	1	0
Configuration		L	T	TR		L	T	TR		LT		R			LTR	
Volume (veh/h)	0	57	728	32	0	25	853	14		63	2	43		17	1	76
Percent Heavy Vehicles (%)	3	3			3	3				0	3	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.50	6.56	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.50	4.03	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		63				27				71		47			103	
Capacity, c (veh/h)		711				788				65		584			217	
v/c Ratio		0.09				0.03				1.10		0.08			0.48	
95% Queue Length, Q_{95} (veh)		0.3				0.1				5.6		0.3			2.3	
Control Delay (s/veh)		10.6				9.7				249.1		11.7			35.9	
Level of Service (LOS)		B				A				F		B			E	
Approach Delay (s/veh)	0.7				0.3				154.6				35.9			
Approach LOS	A				A				F				E			

HCS Two-Way Stop-Control Report

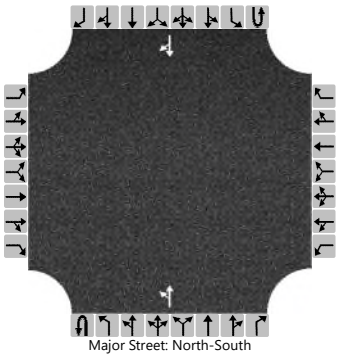
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Circle Lot Enter
Jurisdiction	Arlington Heights
East/West Street	Circle Lot
North/South Street	Dryden Place
Peak Hour Factor	0.60
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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		0	0	0	0	0	1	0	0	0	1	0
Configuration										LT						TR
Volume (veh/h)										8	51				131	47
Percent Heavy Vehicles (%)										0						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										4.1						
Critical Headway (sec)										4.10						
Base Follow-Up Headway (sec)										2.2						
Follow-Up Headway (sec)										2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										13						
Capacity, c (veh/h)										1276						
v/c Ratio										0.01						
95% Queue Length, Q_{95} (veh)										0.0						
Control Delay (s/veh)										7.9	0.1					
Level of Service (LOS)										A	A					
Approach Delay (s/veh)									1.1							
Approach LOS									A							

HCS Two-Way Stop-Control Report

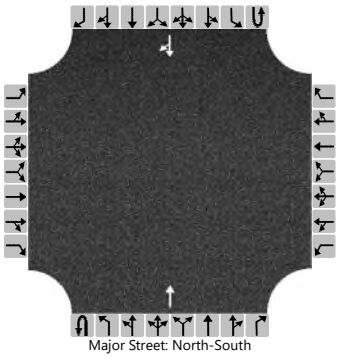
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Circle Lot Enter
Jurisdiction	Arlington Heights
East/West Street	Circle Lot
North/South Street	Dryden Place
Peak Hour Factor	0.60
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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		0	0	0	0	0	1	0	0	0	1	0
Configuration											T					TR
Volume (veh/h)											56				141	55
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

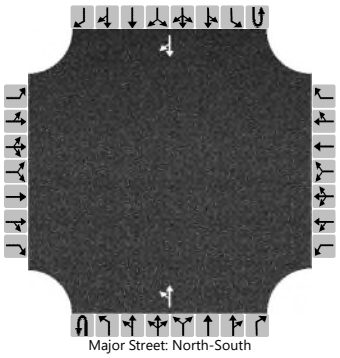
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Circle Lot Enter
Jurisdiction	Arlington Heights
East/West Street	Circle Lot
North/South Street	Dryden Place
Peak Hour Factor	0.58
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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		0	0	0	0	0	1	0	0	0	1	0
Configuration										LT						TR
Volume (veh/h)										5	61				69	19
Percent Heavy Vehicles (%)										0						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										4.1						
Critical Headway (sec)										4.10						
Base Follow-Up Headway (sec)										2.2						
Follow-Up Headway (sec)										2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										9						
Capacity, c (veh/h)										1441						
v/c Ratio										0.01						
95% Queue Length, Q_{95} (veh)										0.0						
Control Delay (s/veh)										7.5	0.0					
Level of Service (LOS)										A	A					
Approach Delay (s/veh)									0.6							
Approach LOS									A							

HCS Two-Way Stop-Control Report

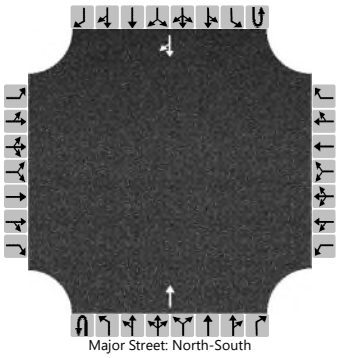
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Circle Lot Entrance
Jurisdiction	Arlington Heights
East/West Street	Circle Lot
North/South Street	Dryden Place
Peak Hour Factor	0.58
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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		0	0	0	0	0	1	0	0	0	1	0
Configuration											T					TR
Volume (veh/h)											59				75	22
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q_{95} (veh)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

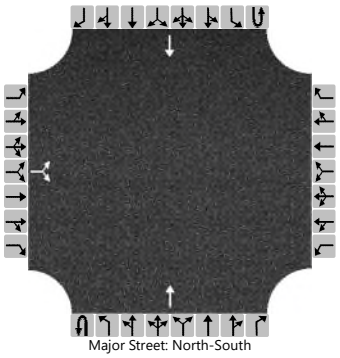
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Circle Lot Exit
Jurisdiction	Arlington Heights
East/West Street	Circle Lot
North/South Street	Dryden Place
Peak Hour Factor	0.60
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR								T				T	
Volume (veh/h)		4		39							55				131	
Percent Heavy Vehicles (%)		0		0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2												
Critical Headway (sec)		6.40		6.20												
Base Follow-Up Headway (sec)		3.5		3.3												
Follow-Up Headway (sec)		3.50		3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			72													
Capacity, c (veh/h)			774													
v/c Ratio			0.09													
95% Queue Length, Q_{95} (veh)			0.3													
Control Delay (s/veh)			10.1													
Level of Service (LOS)			B													
Approach Delay (s/veh)		10.1														
Approach LOS		B														

HCS Two-Way Stop-Control Report

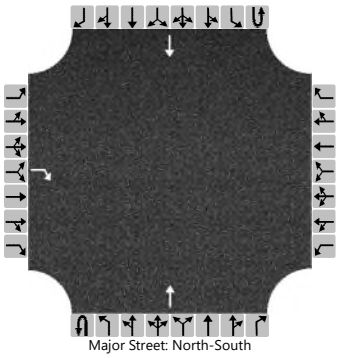
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Circle Lot Exit
Jurisdiction	Arlington Heights
East/West Street	Circle Lot
North/South Street	Dryden Place
Peak Hour Factor	0.60
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R							T				T	
Volume (veh/h)				51							56				141	
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				6.2												
Critical Headway (sec)				6.20												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				85												
Capacity, c (veh/h)				777												
v/c Ratio				0.11												
95% Queue Length, Q_{95} (veh)				0.4												
Control Delay (s/veh)				10.2												
Level of Service (LOS)				B												
Approach Delay (s/veh)	10.2															
Approach LOS	B															

HCS Two-Way Stop-Control Report

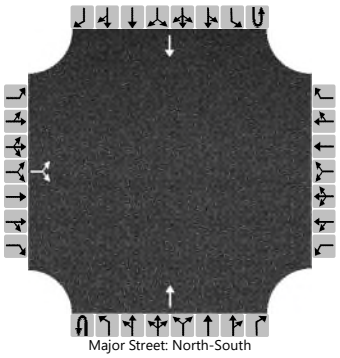
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Circle Lot Exit
Jurisdiction	Arlington Heights
East/West Street	Circle Lot
North/South Street	Dryden Place
Peak Hour Factor	0.58
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR								T				T	
Volume (veh/h)		8		38							58				69	
Percent Heavy Vehicles (%)		0		0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2												
Critical Headway (sec)		6.40		6.20												
Base Follow-Up Headway (sec)		3.5		3.3												
Follow-Up Headway (sec)		3.50		3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			79													
Capacity, c (veh/h)			848													
v/c Ratio			0.09													
95% Queue Length, Q_{95} (veh)			0.3													
Control Delay (s/veh)			9.7													
Level of Service (LOS)			A													
Approach Delay (s/veh)		9.7														
Approach LOS		A														

HCS Two-Way Stop-Control Report

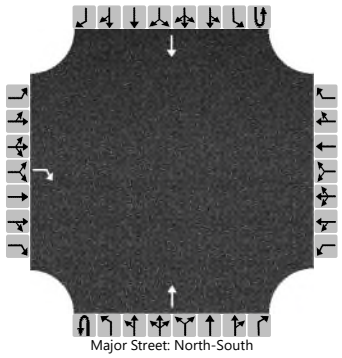
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Circle Lot Exit
Jurisdiction	Arlington Heights
East/West Street	Circle Lot
North/South Street	Dryden Place
Peak Hour Factor	0.58
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R							T				T	
Volume (veh/h)				54							59				75	
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.2												
Critical Headway (sec)				6.20												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				93												
Capacity, c (veh/h)				885												
v/c Ratio				0.11												
95% Queue Length, Q_{95} (veh)				0.4												
Control Delay (s/veh)				9.5												
Level of Service (LOS)				A												
Approach Delay (s/veh)		9.5														
Approach LOS		A														

HCS Two-Way Stop-Control Report

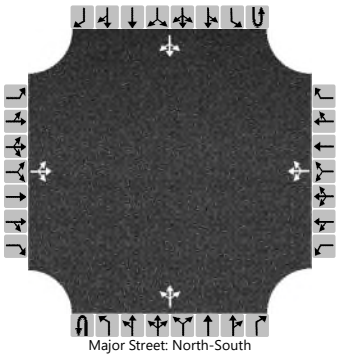
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Orchard Street
Jurisdiction	Arlington Heights
East/West Street	Orchard Street
North/South Street	Dryden Place
Peak Hour Factor	0.40
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	0		14	0	0		0	55	32		69	101	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0				35			0				173		
Capacity, c (veh/h)			0				269			1296				1364		
v/c Ratio							0.13			0.00				0.13		
95% Queue Length, Q_{95} (veh)							0.4			0.0				0.4		
Control Delay (s/veh)							20.4			7.8	0.0	0.0		8.0	1.2	1.2
Level of Service (LOS)							C			A	A	A		A	A	A
Approach Delay (s/veh)					20.4				0.0				4.0			
Approach LOS					C				A				A			

HCS Two-Way Stop-Control Report

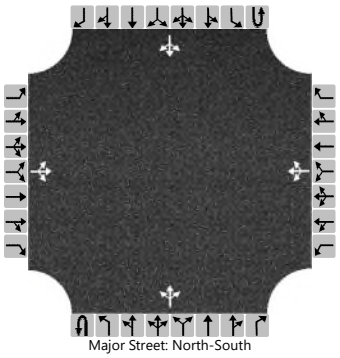
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Orchard Street
Jurisdiction	Arlington Heights
East/West Street	Orchard Street
North/South Street	Dryden Place
Peak Hour Factor	0.40
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	0		14	0	0		9	56	32		77	115	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0				35			23				193		
Capacity, c (veh/h)			0				212			1259				1361		
v/c Ratio							0.16			0.02				0.14		
95% Queue Length, Q_{95} (veh)							0.6			0.1				0.5		
Control Delay (s/veh)							25.3			7.9	0.2	0.2		8.1	1.4	1.4
Level of Service (LOS)							D			A	A	A		A	A	A
Approach Delay (s/veh)					25.3				0.9				4.1			
Approach LOS					D				A				A			

HCS Two-Way Stop-Control Report

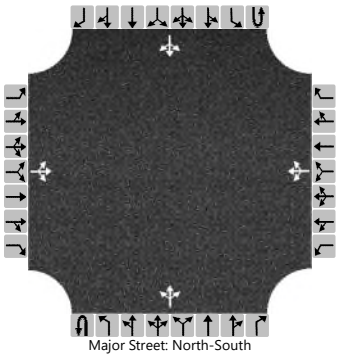
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Time Analyzed	PM 2022
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Orchard Street
Jurisdiction	Arlington Heights
East/West Street	Orchard Street
North/South Street	Dryden Place
Peak Hour Factor	0.49
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	0		15	0	6		0	52	14		41	66	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0				43			0				84		
Capacity, c (veh/h)			0				586			1395				1462		
v/c Ratio							0.07			0.00				0.06		
95% Queue Length, Q_{95} (veh)							0.2			0.0				0.2		
Control Delay (s/veh)							11.6			7.6	0.0	0.0		7.6	0.5	0.5
Level of Service (LOS)							B			A	A	A		A	A	A
Approach Delay (s/veh)						11.6				0.0				3.2		
Approach LOS						B				A				A		

HCS Two-Way Stop-Control Report

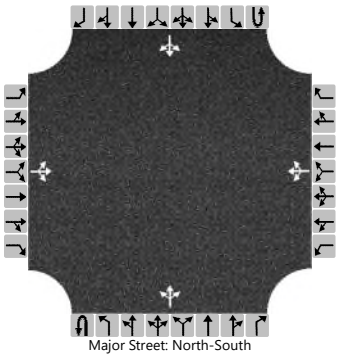
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	Dryden School

Site Information

Intersection	Dryden Place and Orchard Street
Jurisdiction	Arlington Heights
East/West Street	Orchard Street
North/South Street	Dryden Place
Peak Hour Factor	0.49
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	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	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	0		15	0	6		6	53	14		50	79	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

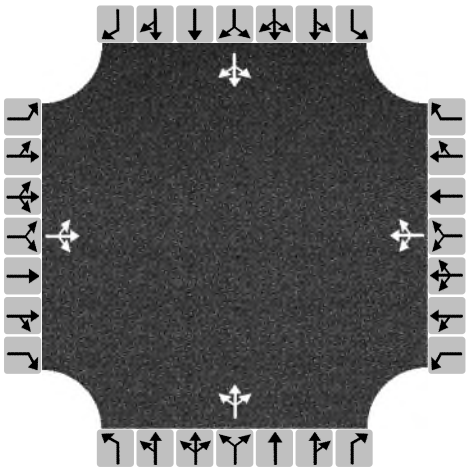
Flow Rate, v (veh/h)			0				43			12				102		
Capacity, c (veh/h)			0				512			1365				1460		
v/c Ratio							0.08			0.01				0.07		
95% Queue Length, Q_{95} (veh)							0.3			0.0				0.2		
Control Delay (s/veh)							12.7			7.7	0.1	0.1		7.7	0.6	0.6
Level of Service (LOS)							B			A	A	A		A	A	A
Approach Delay (s/veh)					12.7				0.7				3.3			
Approach LOS					B				A				A			

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Dryden School
Intersection	Dryden Place and Rockwell Street
Jurisdiction	Arlington Heights
East/West Street	Rockwell Street
North/South Street	Dryden Place
Peak Hour Factor	0.42

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	3	10	62	53	6	1	6	32	13	1	63	6
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	179			143			121			167		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.159			0.127			0.108			0.148		
Final Departure Headway, h_d (s)	4.32			5.00			4.76			4.78		
Final Degree of Utilization, x	0.214			0.198			0.161			0.221		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.32			3.00			2.76			2.78		

Capacity, Delay and Level of Service

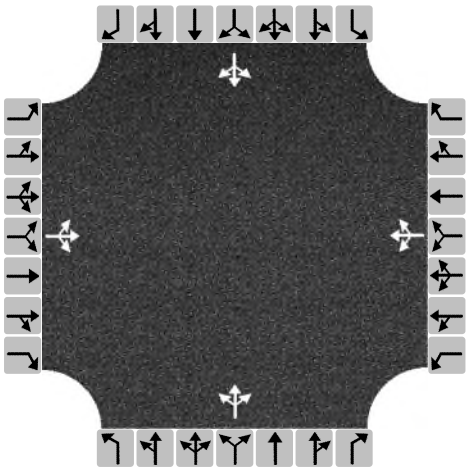
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	179			143			121			167		
Capacity (veh/h)	833			721			756			753		
95% Queue Length, Q_{95} (veh)	0.8			0.7			0.6			0.8		
Control Delay (s/veh)	8.5			9.2			8.7			9.1		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.5	A		9.2	A		8.7	A		9.1	A	
Intersection Delay (s/veh) | LOS	8.9						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Dryden School
Intersection	Dryden Place and Rockwell Street
Jurisdiction	Arlington Heights
East/West Street	Rockwell Street
North/South Street	Dryden Place
Peak Hour Factor	0.42

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	3	10	68	59	6	1	6	34	16	1	59	6
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	193			157			133			157		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.171			0.140			0.119			0.140		
Final Departure Headway, h_d (s)	4.35			5.03			4.81			4.87		
Final Degree of Utilization, x	0.233			0.220			0.178			0.213		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.35			3.03			2.81			2.87		

Capacity, Delay and Level of Service

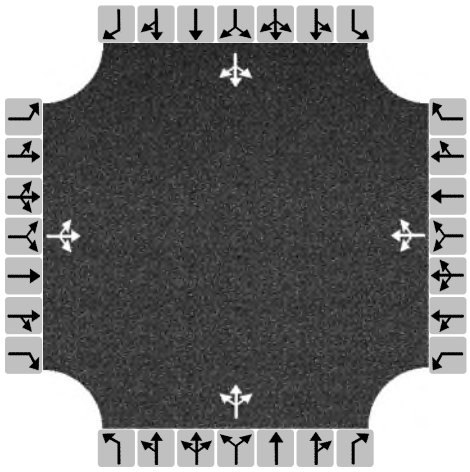
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	193			157			133			157		
Capacity (veh/h)	828			715			749			739		
95% Queue Length, Q_{95} (veh)	0.9			0.8			0.6			0.8		
Control Delay (s/veh)	8.7			9.4			8.8			9.2		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.7	A		9.4	A		8.8	A		9.2	A	
Intersection Delay (s/veh) | LOS	9.0						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	Dryden School
Intersection	Dryden Place and Rockwell Street
Jurisdiction	Arlington Heights
East/West Street	Rockwell Street
North/South Street	Dryden Place
Peak Hour Factor	0.79

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	11	6	28	16	11	2	16	40	5	3	44	5
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	57			37			77			66		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.051			0.033			0.069			0.059		
Final Departure Headway, h_d (s)	3.92			4.33			4.17			4.13		
Final Degree of Utilization, x	0.062			0.044			0.089			0.076		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	1.92			2.33			2.17			2.13		

Capacity, Delay and Level of Service

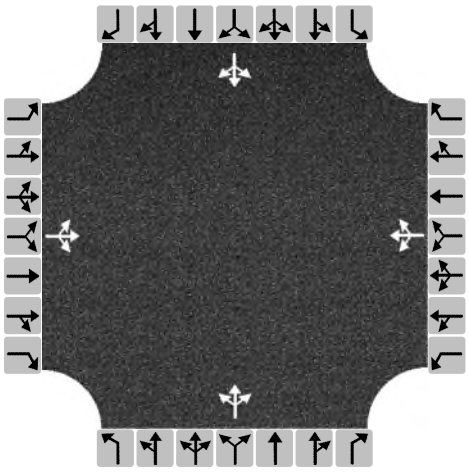
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	57			37			77			66		
Capacity (veh/h)	917			830			864			871		
95% Queue Length, Q_{95} (veh)	0.2			0.1			0.3			0.2		
Control Delay (s/veh)	7.2			7.5			7.6			7.5		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.2	A		7.5	A		7.6	A		7.5	A	
Intersection Delay (s/veh) | LOS	7.4						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	Dryden School
Intersection	Dryden Place and Rockwell Street
Jurisdiction	Arlington Heights
East/West Street	Rockwell Street
North/South Street	Dryden Place
Peak Hour Factor	0.79

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	12	6	31	19	11	2	16	38	5	3	47	5
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	62			41			75			70		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.055			0.036			0.066			0.062		
Final Departure Headway, h_d (s)	3.93			4.36			4.19			4.15		
Final Degree of Utilization, x	0.068			0.049			0.087			0.080		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	1.93			2.36			2.19			2.15		

Capacity, Delay and Level of Service

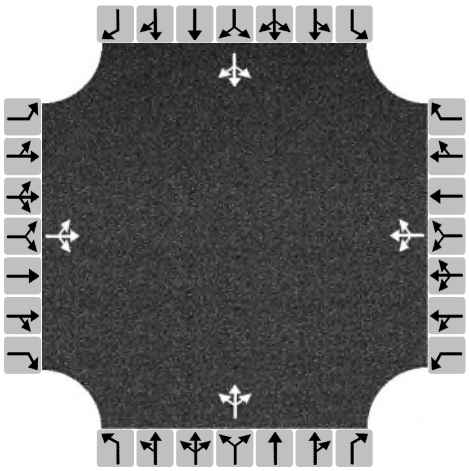
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	62			41			75			70		
Capacity (veh/h)	917			826			859			867		
95% Queue Length, Q_{95} (veh)	0.2			0.2			0.3			0.3		
Control Delay (s/veh)	7.2			7.6			7.6			7.5		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.2	A		7.6	A		7.6	A		7.5	A	
Intersection Delay (s/veh) | LOS	7.5						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Dryden School
Intersection	Rockwell Street and Lincoln Lane
Jurisdiction	Arlington Heights
East/West Street	Rockwell Street
North/South Street	Lincoln Lane
Peak Hour Factor	0.45

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	0	65	1	2	14	2	4	0	1	9	0	2
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	147			40			11			24		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.130			0.036			0.010			0.022		
Final Departure Headway, h_d (s)	4.01			4.07			4.36			4.36		
Final Degree of Utilization, x	0.163			0.045			0.013			0.030		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.01			2.07			2.36			2.36		

Capacity, Delay and Level of Service

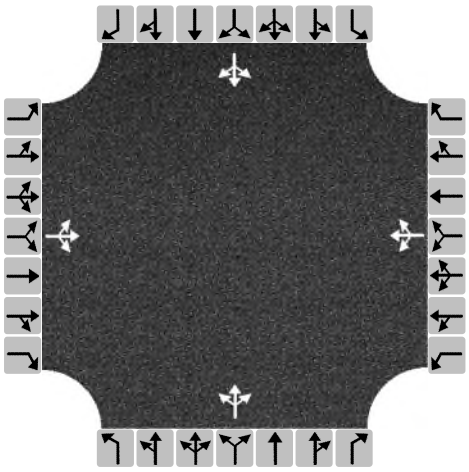
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	147			40			11			24		
Capacity (veh/h)	898			884			825			825		
95% Queue Length, Q_{95} (veh)	0.6			0.1			0.0			0.1		
Control Delay (s/veh)	7.8			7.3			7.4			7.5		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.8	A		7.3	A		7.4	A		7.5	A	
Intersection Delay (s/veh) | LOS	7.6						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Dryden School
Intersection	Rockwell Street and Lincoln Lane
Jurisdiction	Arlington Heights
East/West Street	Rockwell Street
North/South Street	Lincoln Lane
Peak Hour Factor	0.45

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	0	71	1	2	14	2	5	0	1	9	0	2
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	160			40			13			24		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.142			0.036			0.012			0.022		
Final Departure Headway, h_d (s)	4.02			4.09			4.42			4.39		
Final Degree of Utilization, x	0.179			0.045			0.016			0.030		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.02			2.09			2.42			2.39		

Capacity, Delay and Level of Service

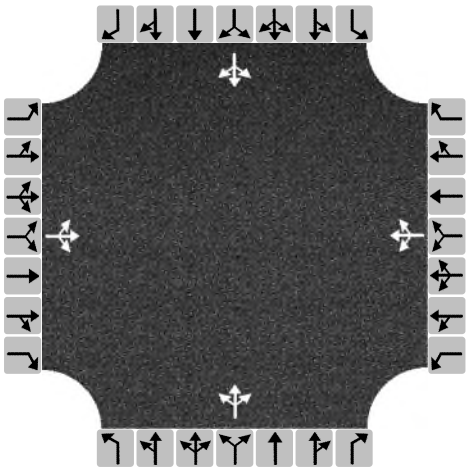
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	160			40			13			24		
Capacity (veh/h)	896			880			815			819		
95% Queue Length, Q_{95} (veh)	0.6			0.1			0.0			0.1		
Control Delay (s/veh)	7.9			7.3			7.5			7.5		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.9	A		7.3	A		7.5	A		7.5	A	
Intersection Delay (s/veh) | LOS	7.7						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	Dryden School
Intersection	Rockwell Street and Lincoln Lane
Jurisdiction	Arlington Heights
East/West Street	Rockwell Street
North/South Street	Lincoln Lane
Peak Hour Factor	0.85

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	1	32	3	2	28	2	3	0	4	9	0	5
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	42			38			8			16		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.038			0.033			0.007			0.015		
Final Departure Headway, h_d (s)	3.94			3.97			3.83			3.99		
Final Degree of Utilization, x	0.046			0.041			0.009			0.018		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	1.94			1.97			1.83			1.99		

Capacity, Delay and Level of Service

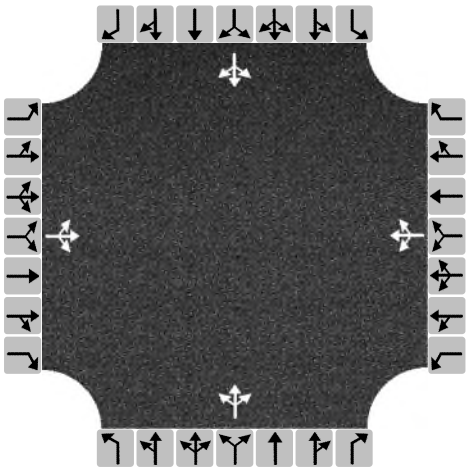
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	42			38			8			16		
Capacity (veh/h)	913			908			941			902		
95% Queue Length, Q_{95} (veh)	0.1			0.1			0.0			0.1		
Control Delay (s/veh)	7.1			7.1			6.9			7.1		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.1	A		7.1	A		6.9	A		7.1	A	
Intersection Delay (s/veh) | LOS	7.1						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/9/2022
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	Dryden School
Intersection	Rockwell Street and Lincoln Lane
Jurisdiction	Arlington Heights
East/West Street	Rockwell Street
North/South Street	Lincoln Lane
Peak Hour Factor	0.85

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	1	35	4	2	28	2	4	0	5	9	0	5
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	47			38			11			16		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.042			0.033			0.009			0.015		
Final Departure Headway, h_d (s)	3.94			3.97			3.85			4.00		
Final Degree of Utilization, x	0.051			0.042			0.011			0.018		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	1.94			1.97			1.85			2.00		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	47			38			11			16		
Capacity (veh/h)	915			906			935			900		
95% Queue Length, Q_{95} (veh)	0.2			0.1			0.0			0.1		
Control Delay (s/veh)	7.1			7.1			6.9			7.1		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.1	A		7.1	A		6.9	A		7.1	A	
Intersection Delay (s/veh) | LOS	7.1						A					