Traffic Impact Study
Proposed Ecole Day Care Center

Arlington Heights, Illinois

Prepared For:

ECOLE 360
CHILD DEVELOPMENT CENTER

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

September 6, 2022

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed Ecole day care center to be located at 1515 W. Dundee Road in Arlington Heights, Illinois. The site is located on the south side of Wilke Road south of its intersection with Dundee Road and currently contains an existing building that was previously occupied by Amita Health and Huntington Bank. As proposed, the existing building will be remodeled and occupied by a day care center with a maximum enrollment of 130 children and 22 employees. As part of the redevelopment, the westerly portion of the parking lot, which currently contains the vacated bank drive-through lanes, will be converted into a fenced playground. 82 parking spaces will be provided within the existing parking lot.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed day care will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

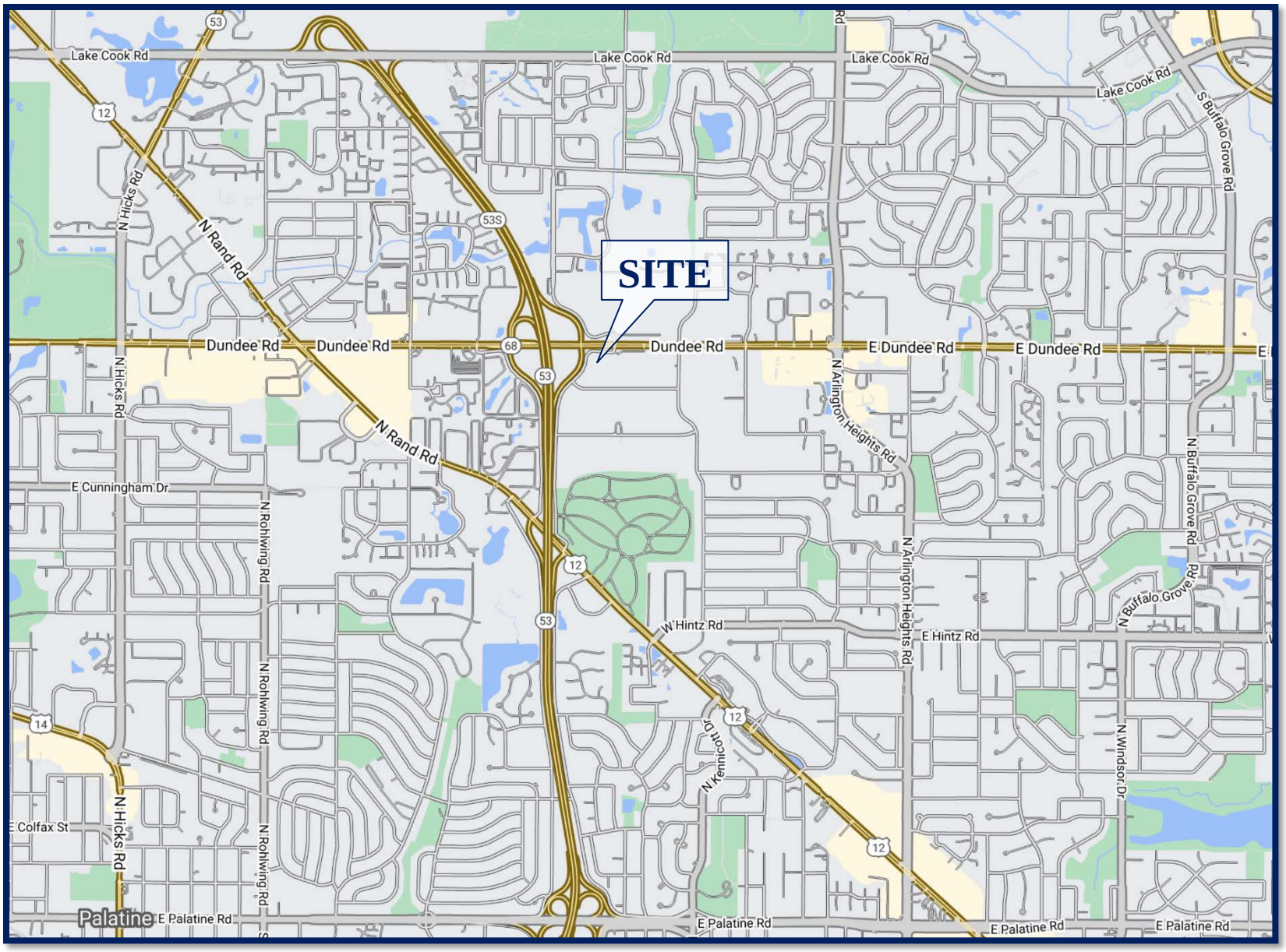
The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed day care
- Directional distribution of the day care traffic
- Vehicle trip generation for the day care
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning and evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system
- Evaluation of the adequacy of the parking supply

Traffic capacity analyses were conducted for the weekday morning and evening peak hours for the following conditions:

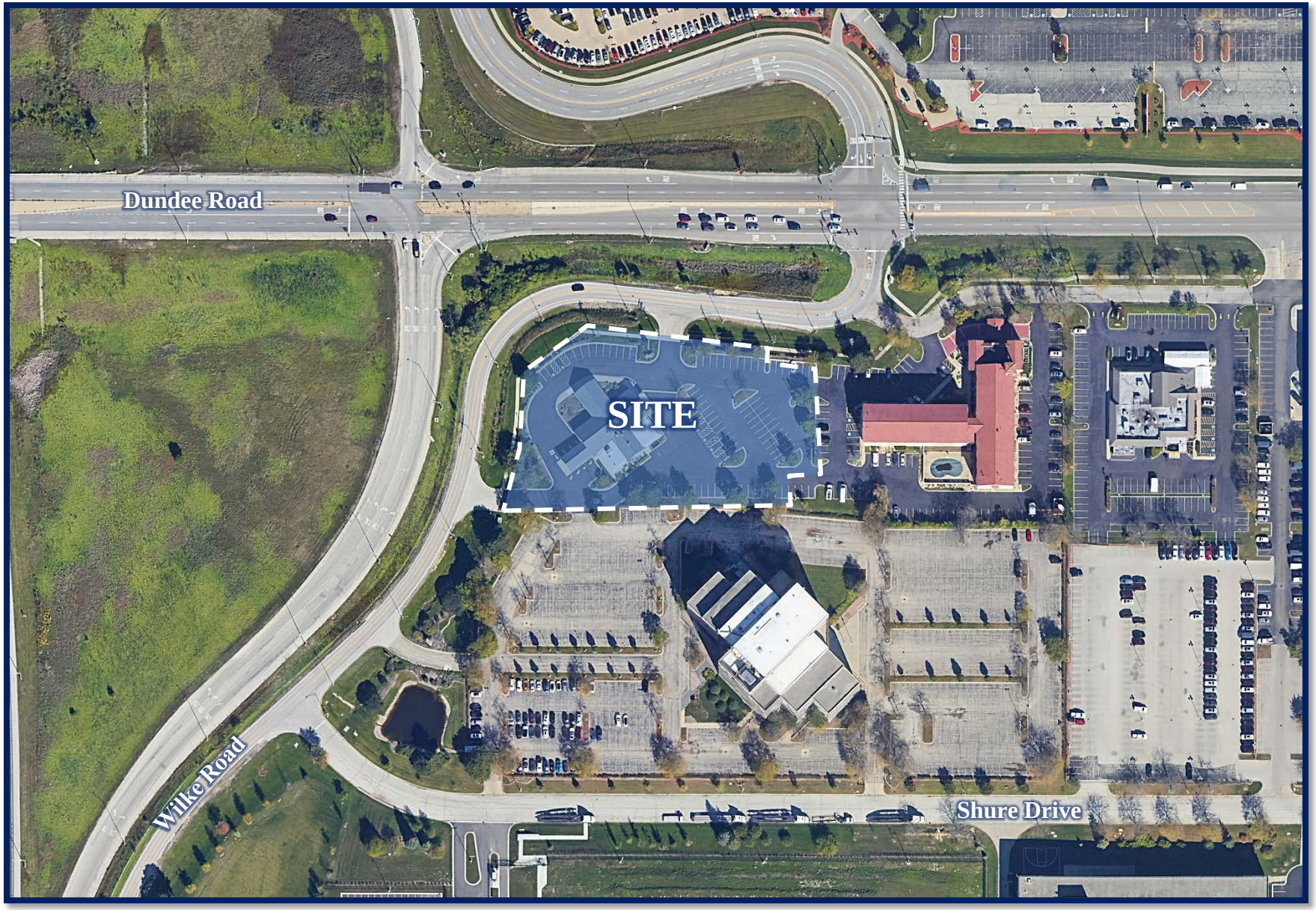
1. Year 2022 Base Conditions – Analyzes the capacity of the existing roadway system using peak hour traffic volumes conducted in 2017 and 2022 adjusted to reflect typical conditions.

2. Year 2028 Projected Conditions – Analyzes the capacity of the future roadway system using the traffic volumes that include the background traffic volumes and the traffic estimated to be generated by the proposed development.



Site Location **Figure 1**

Proposed Ecole Day Care
Arlington Heights, Illinois



Aerial View of Site

Figure 2

Proposed Ecole Day Care
Arlington Heights, Illinois

2. Existing Conditions

The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

The site is generally bounded by Wilke Road to the north and west, Days Inn & Suites to the east, and the One North Arlington Office building to the south. Land uses in the vicinity of the site are primarily commercial along Dundee Road and a mixture of office and light industrial to the south.

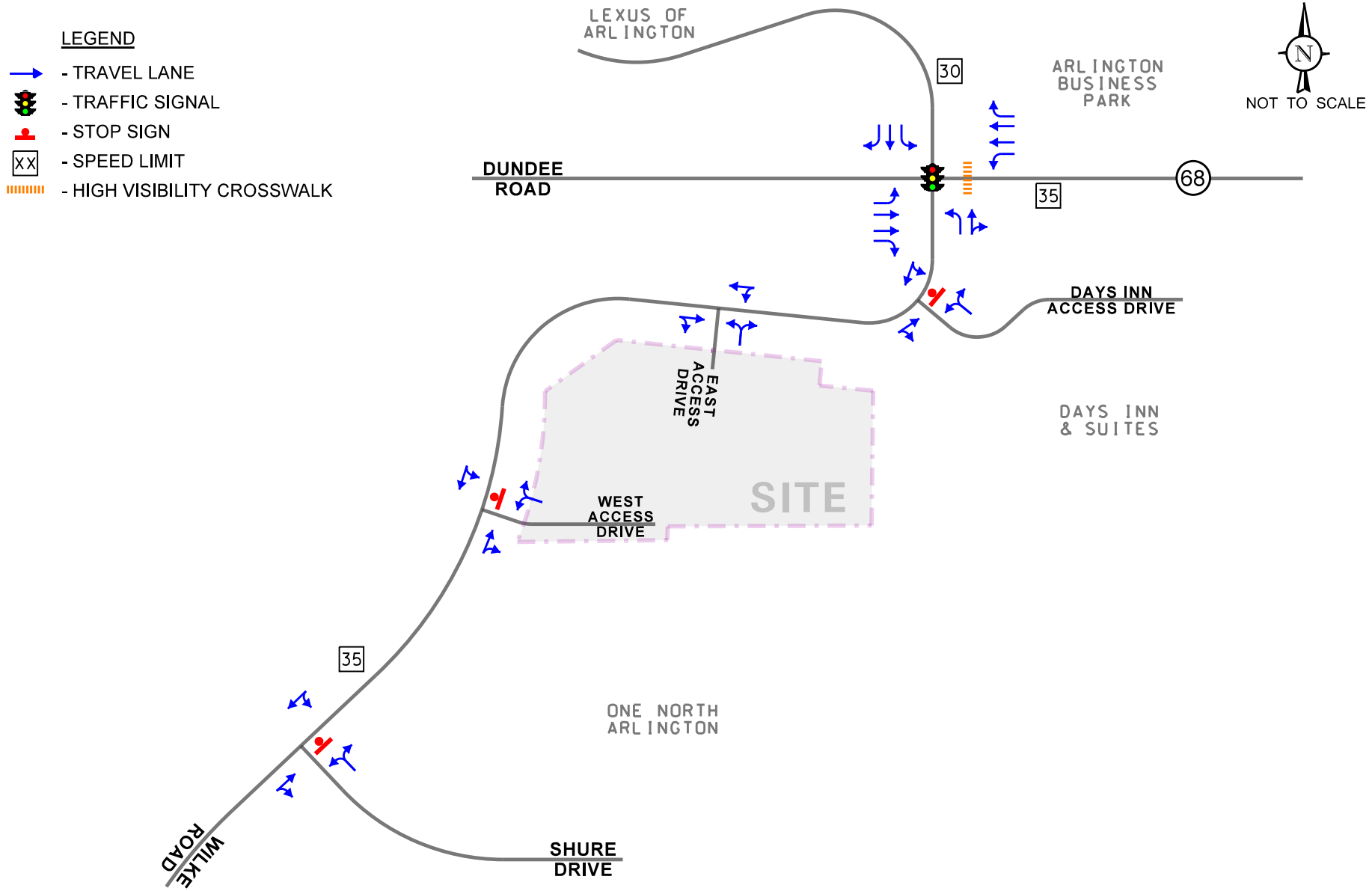
Existing Roadway System Characteristics

The characteristics of the existing roadways that surround the proposed location of the day care are illustrated in **Figure 3** and described below.

Dundee Road (IL Route 68) is an east-west other principal arterial roadway that in the vicinity of the site provides two lanes in each direction. At its signalized intersection with Wilke Road, Dundee Road provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the eastbound and westbound approaches. A high visibility crosswalk is provided on the eats leg of this intersection. Dundee Road is under the jurisdiction of the Illinois Department of Transportation (IDOT), carries an Annual Average Daily Traffic (AADT) volume of 26,300 (IDOT 2021), and has a posted speed limit of 35 miles per hour.

Wilke Road is a north-south frontage roadway that extends from Rand Road (US Route 12) to the south to Lake Cook Road to the north. In the vicinity of the site, Wilke Road provides one lane in each direction south of Dundee Road and two lanes in each direction north of Dundee Road. At its signalized intersection with Dundee Road, Wilke Road provides an exclusive left-turn lane and a shared through/right-turn lane on the northbound approach and an exclusive left-turn lane, a through lane, and an exclusive right-turn lane on the southbound approach. At its unsignalized intersections with Shure Drive, the Days Inn access drive, and the site access drives Wilke Road provides one lane in each direction and no exclusive turn lanes. Wilke Road is under the jurisdiction of the Village of Arlington Heights and has a posted speed limit of 35 miles per hour south of Dundee Road and 30 miles per hour north of Dundee Road.

Shure Drive is an east-west local roadway that extends from Wilke Road to the west to Kennicott Avenue to the east. Shure Drive provides one lane in each direction. At its unsignalized intersection with Wilke Road, Shure Drive provides one westbound lane under stop sign control. Shure Drive is under the jurisdiction of the Village of Arlington Heights.



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Existing Roadway Characteristics

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Figure: 3

Traffic Signal Interconnect

The intersection of Dundee Road with Wilke Road is part of a ten-signal interconnect system that is maintained by IDOT. The system runs along Dundee Road from Baldwin Lane to the west to Weidner Road/Crofton Lane to the east. The intersection of Dundee Road and Arlington Heights Road is the master controller. All the traffic signals operate at a 140-second cycle length during the weekday morning and evening peak periods.

Year 2022 Base Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period classification and traffic counts using Miovision Scout Video Collection Units on Thursday, June 16, 2022, during the weekday morning (7:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods at the following intersections:

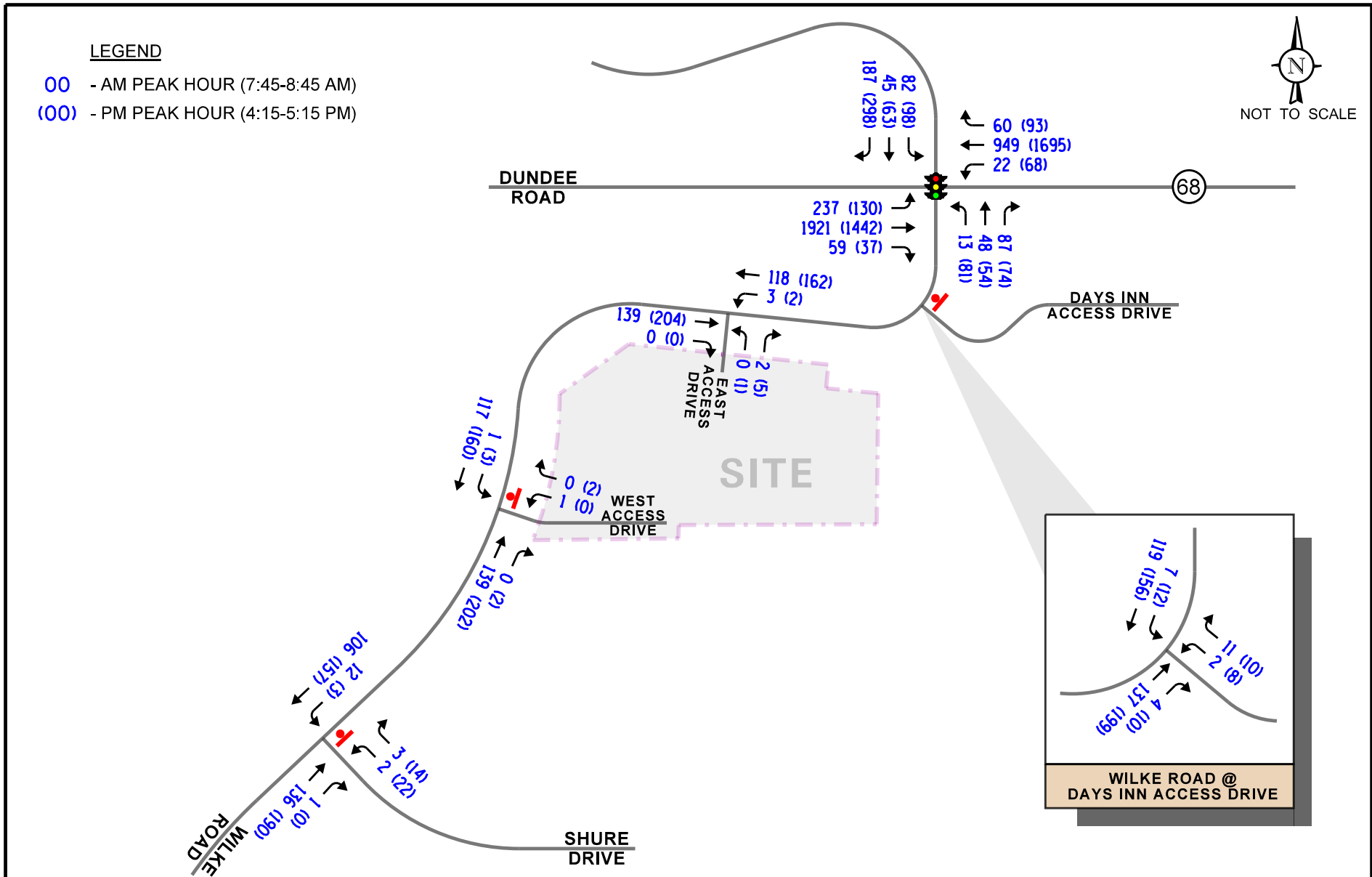
- Wilke Road with the Days Inn access drive
- Wilke Road with the site access drives
- Wilke Road with Shure Drive

The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:45 A.M. to 8:45 A.M. and the evening peak hour of traffic occurs from 4:15 P.M. to 5:15 P.M. In order to ensure the traffic counts reflect typical conditions, the 2022 counts were supplemented with counts previously conducted by KLOA, Inc. at the intersection of Dundee Road with Wilke Road in June 2017. The Year 2017 traffic volumes were increased by a regional growth factor, as discussed later, for five years to estimate Year 2022 traffic volumes. The through traffic volumes along Wilke Road were balanced to match the increased 2017 counts. The Year 2022 base traffic volumes are shown in **Figure 4.**

Crash Analysis

KLOA, Inc. obtained accident data[1] for the most recent available past five years (2017 to 2021) for the intersections of Wilke Road with Dundee Road, Shure Drive, and the site access drives. A review of the crash data revealed four crashes were reported at the intersection of Wilke Road with the east site access drive, one crash was reported at the intersection of Wilke Road with the west site access drive, and no crashes were reported at the intersection of Wilke Road with Shure Drive. Further, no fatalities were reported at any of the studied intersections during the review period. A summary of the crash data for the intersection of Dundee Road with Wilke Road is shown in **Table 1**.

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.



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Year 2022 Base Traffic Volumes

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Figure: 4

Table 1
DUNDEE ROAD WITH WILKE ROAD – CRASH SUMMARY

Year	Type of Accident Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2017	2	0	12	0	2	0	16
2018	0	1	10	2	3	0	16
2019	0	1	3	0	3	0	7
2020	0	0	2	0	3	0	5
2021	1	0	2	1	7	0	11
Total	**2**	**2**	**29**	**3**	**18**	0	**55**
Average/Year	**<1.0**	**<1.0**	**5.8**	**<1.0**	**3.6**	**--**	**11.0**

3. Traffic Characteristics of the Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Ecole Day Care Center

As proposed, the day care center will remodel and occupy the existing approximately 7,931 square-foot building on site. As part of the development, the west portion of the parking lot, which currently contains the vacant bank drive-through lanes, will be replaced with a fenced playground. 82 parking spaces will be provided within the existing parking lot.

The day care will be open weekdays from 6:30 A.M. to 6:00 P.M., will have a maximum student capacity of approximately 130 children (six weeks to six years old) and will have up to 22 total staff members. Students will primarily arrive at the site with their parents or other guardians, and most will arrive via personal vehicle. Typical of day care facilities, parents will park in the parking lot and walk their children into the day care center.

Site Access

Access to the proposed day care center will be provided as follows:

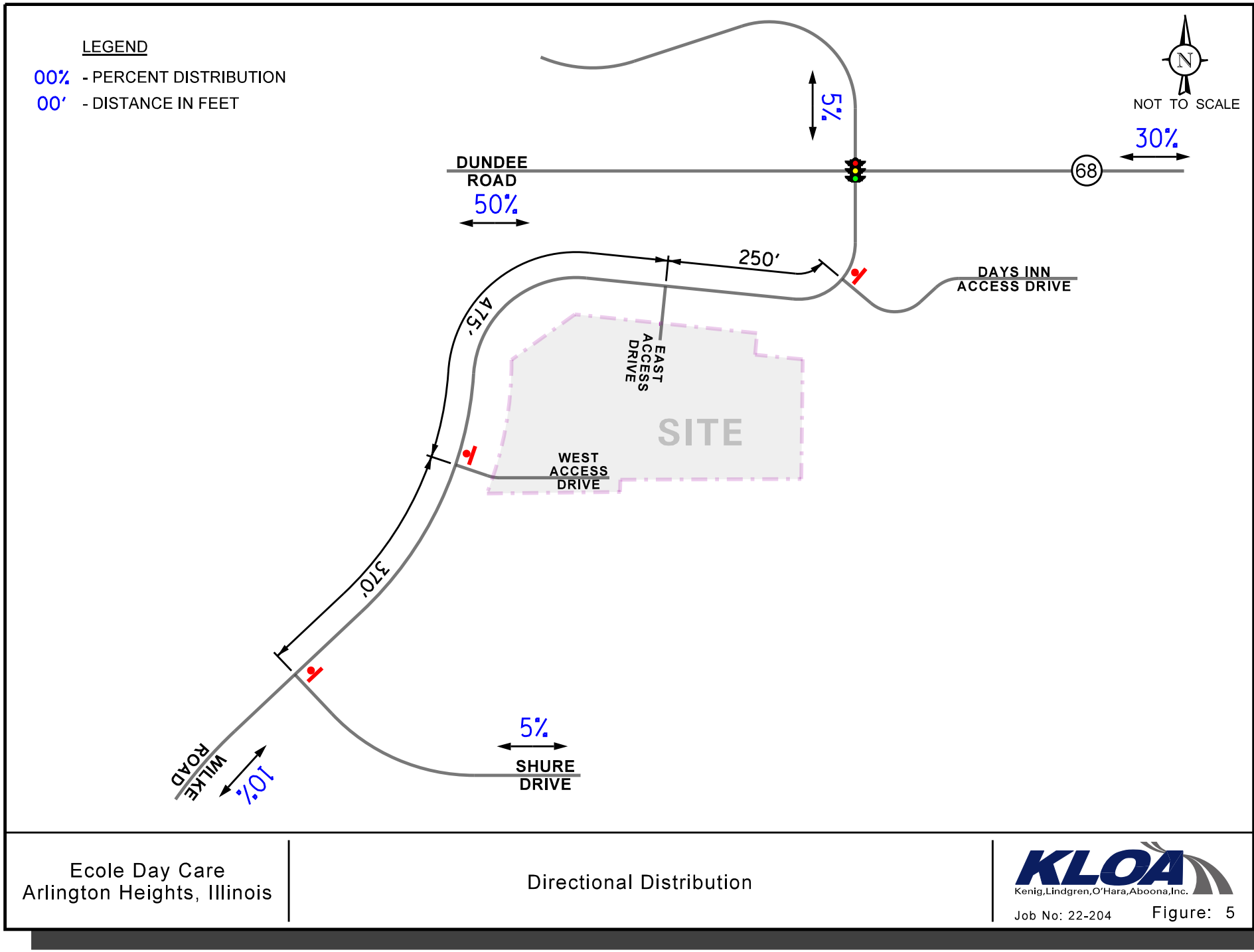
- The existing east site access drive which intersects Wilke Road approximately 380 feet southwest of Dundee Road. This access drive provides one inbound lane and one outbound lane. It is recommended that outbound movements from this access drive be placed under stop sign control.

- The existing west site access drive which intersects Wilke Road approximately 850 feet southwest of Dundee Road. This access drive provides one inbound lane and one outbound lane. It is recommended that outbound movements from this access drive be placed under stop sign control.

- The existing cross-access connection to Days Inn & Suites and the existing cross-access connection to One North Arlington.

Directional Distribution of Site Traffic

The directional distribution of how traffic will approach and depart the proposed day care center was based on the existing travel patterns, the existing roadway characteristics, and the traffic controls surrounding the site. **Figure 5** illustrates the estimated directional distribution for the proposed day care center traffic.



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Directional Distribution

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Figure: 5

Estimated Site-Generated Traffic

The estimate of traffic to be generated by the proposed day care center was based on trip generation information published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition. As previously indicated, the approximately 7,931 square-foot day care center will serve a maximum of 130 students. **Table 2** summarizes the estimated peak hour trip generation based on both variables using the 11th Edition. As can be seen from Table 2, the trips estimated to be generated based on both methodologies were consistent, with the trip generation based on students being the higher. As such, the trip generation based on the number of students was utilized for the purpose of this evaluation to be conservative in analysis.

Table 2
ESTIMATED TRIP GENERATION – PEAK HOUR AND DAILY

ITE Land Use	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Two-Way Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
565	Day Care (7,931 s.f.)	46	41	87	41	47	88	189	189	378
565	Day Care (130 Students)	50	44	94	43	49	92	266	266	532

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated peak hour traffic volumes that will be generated by the proposed day care were assigned to the roadway system in accordance with the previously described directional distribution. **Figure 6** illustrates the assignment of the traffic volumes estimated to be generated by the proposed development. It should be noted that to provide a conservative analysis, all site traffic was assumed to use the site access drives and not the cross-access connections. Further, given the cross-access connections, the existing traffic using the site access drives was not removed.

Background (No-Build) Traffic Conditions

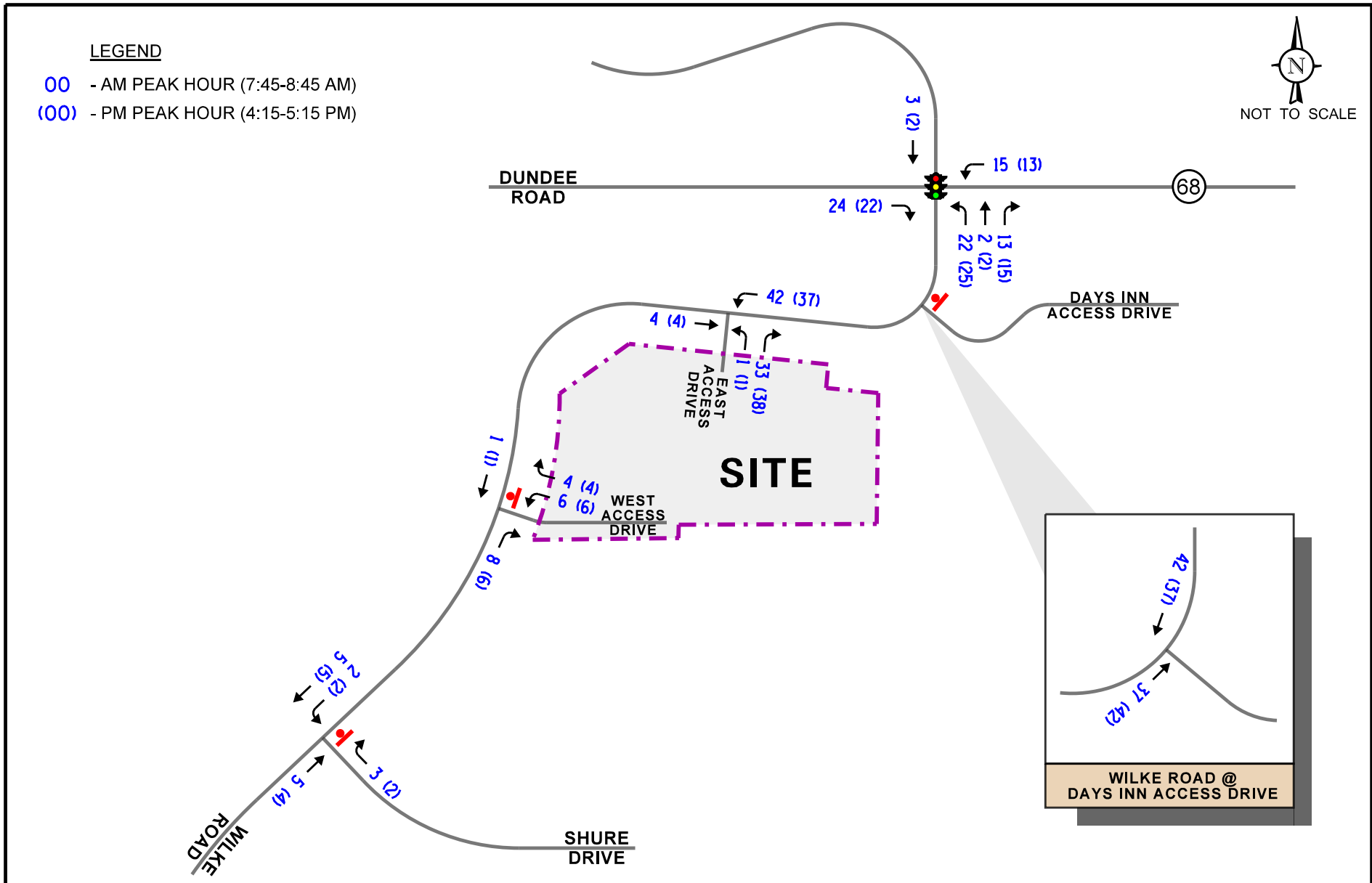
The Year 2022 base traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on ADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP), an increase of approximately 0.4 percent per year compounded annually is projected. As such, a total background growth of 2.4 percent (buildout year plus five years) was added to project Year 2028 conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

In addition, the traffic estimated to be generated by the proposed warehouse/distribution development to be located on the north side of Dundee Road east of the Lexus of Arlington dealership was added to the base traffic volumes. The traffic volumes estimated to be generated by the development were based on the KLOA, Inc. traffic study dated February 3, 2022.

Figure 7 illustrates the Year 2028 no-build traffic volumes, which include the base traffic volumes increased by the ambient growth factor and the traffic estimated to be generated by the warehouse development.

Total Projected Traffic Volumes

The development-generated traffic was added to the Year 2028 no-build traffic volumes to determine the Year 2028 total projected traffic volumes, as illustrated in **Figure 8**.



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Site-Generated Traffic Volumes

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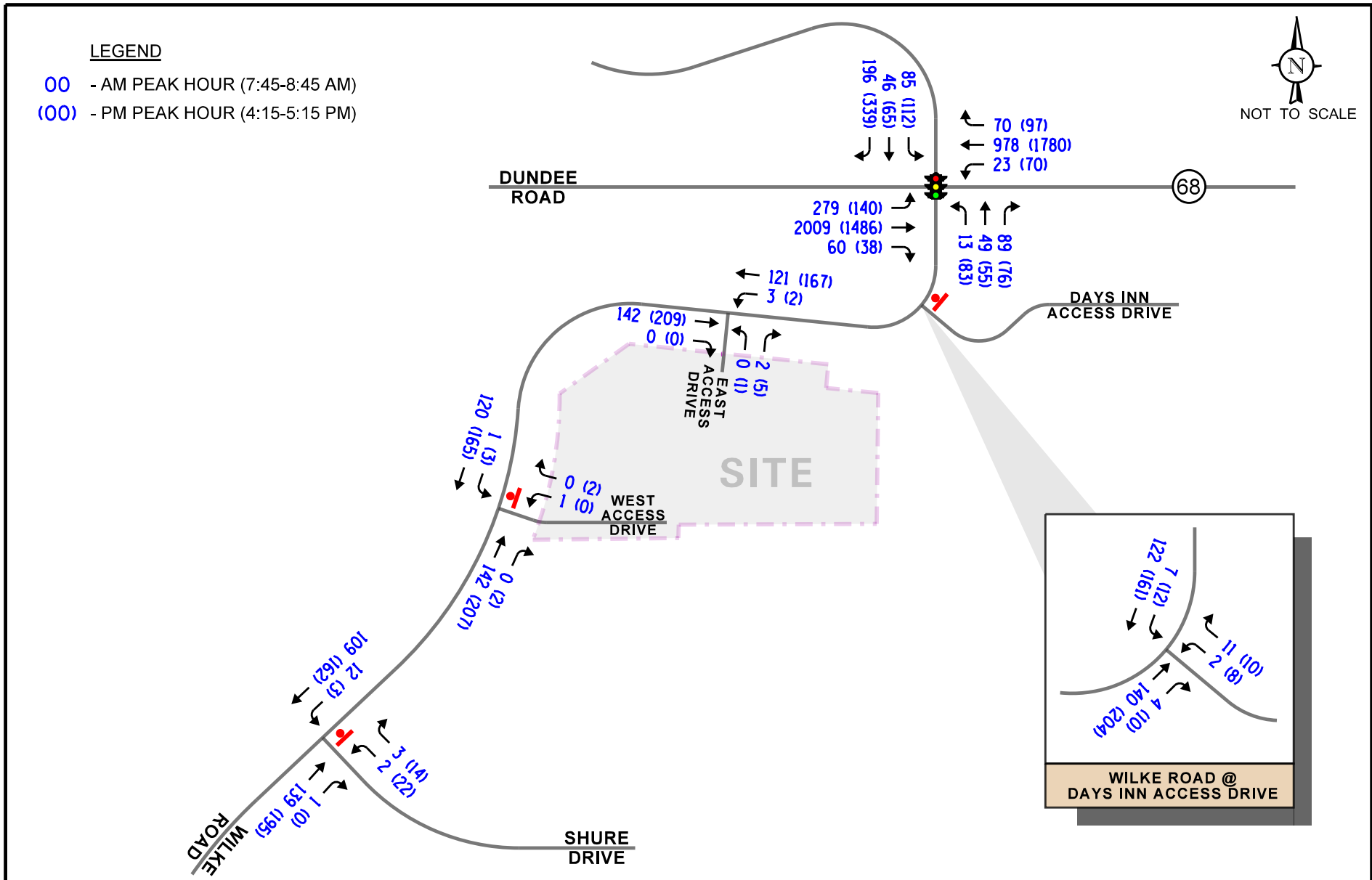

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Year 2028 No-Build Traffic Volumes

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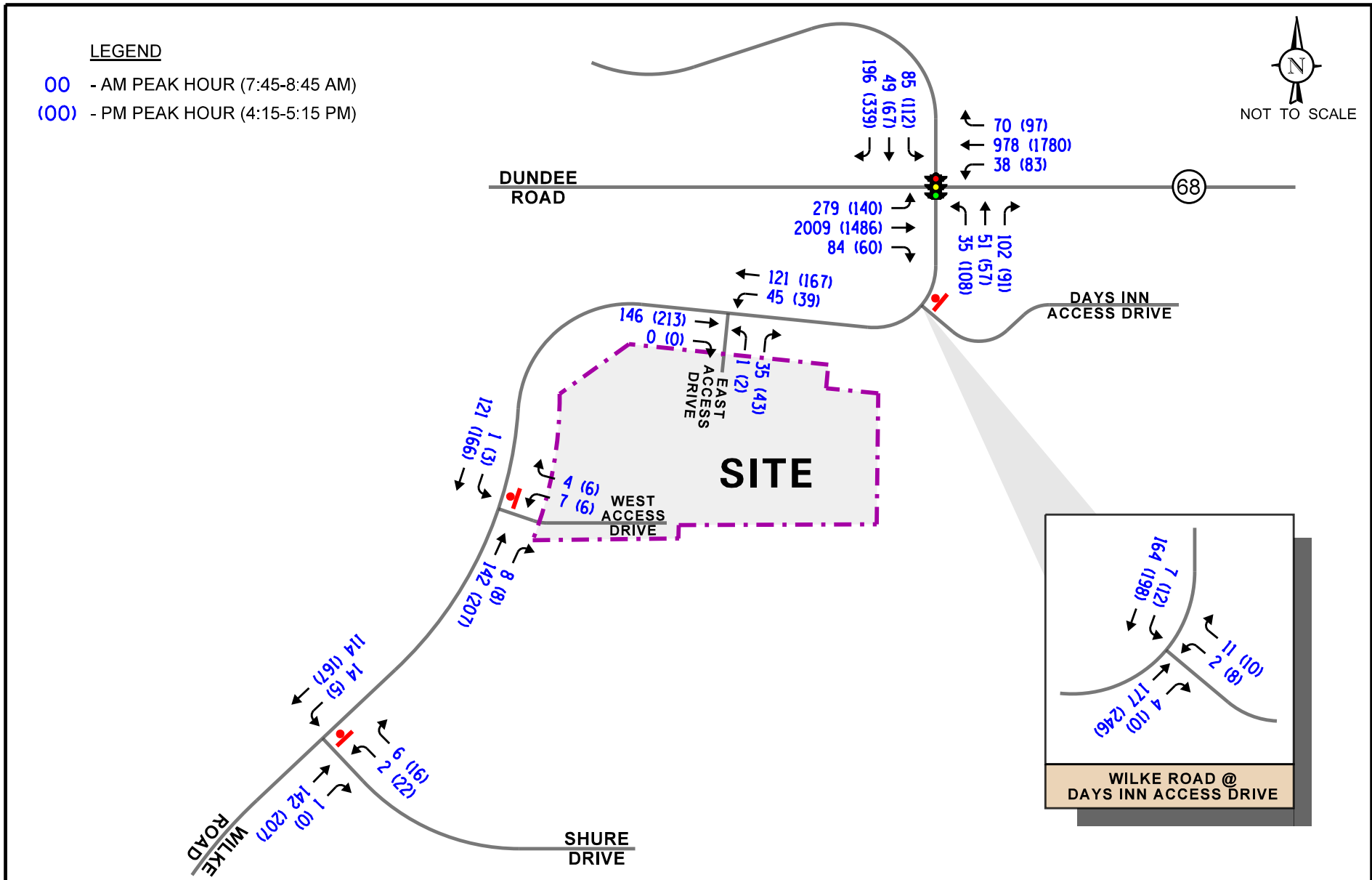

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Year 2028 Total Projected Traffic Volumes

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Figure: 8

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the Year 2022 base and year 2028 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6th Edition and analyzed using Synchro/SimTraffic 11 software.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the Year 2022 base and Year 2028 total projected conditions are presented in **Tables 3** through **5**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 3
CAPACITY ANALYSIS RESULTS – DUNDEE ROAD WITH WILKE ROAD – SIGNALIZED

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Year 2022 Base Conditions	Weekday Morning Peak Hour	B 11.7	B 17.9	A 2.8	B 12.6	B 14.0	A 0.6	D 41.0	D 53.9		D 48.8	D 53.3	A 7.3	B 18.0
		B – 16.9			B – 13.2			D – 52.8			C – 24.7			
	Weekday Evening Peak Hour	C 31.1	C 28.0	A 4.5	A 8.3	B 19.1	A 1.1	D 47.5	E 57.6		D 50.8	E 62.9	D 51.2	C 27.3
		C – 27.7			B – 17.8			D – 53.7			D – 52.7			
Year 2028 Total Projected Conditions	Weekday Morning Peak Hour	C 20.1	C 21.8	A 3.2	C 20.6	B 15.5	A 1.0	D 41.9	E 56.6		D 49.2	D 55.3	B 11.0	C 21.3
		C – 20.9			B – 14.8			D – 53.9			C – 27.4			
	Weekday Evening Peak Hour	C 29.7	C 30.4	A 5.8	B 11.6	D 38.4	A 1.2	D 49.0	E 59.6		D 52.9	E 62.6	E 57.5	D 36.8
		C – 29.4			D – 35.4			E – 55.1			E - 57.2			

L = Left R = Right
T = Through Delay is measured in seconds.

Table 4
CAPACITY ANALYSIS RESULTS – BASE CONDITIONS – UNSIGNALIZED

Location	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Wilke Road with the Days Inn Access Drive				
• Westbound Approach	A	9.2	B	10.3
• Southbound Left Turn	A	7.7	A	7.7
Wilke Road with the East Site Access Drive				
• Northbound Approach	A	9.0	A	9.8
• Westbound Left Turn	A	7.5	A	7.6
Wilke Road with the West Site Access Drive				
• Westbound Approach	B	10.3	A	9.3
• Southbound Left Turn	A	7.5	A	7.6
Wilke Road with Shure Drive				
• Westbound Approach	A	9.5	B	10.6
• Southbound Left Turn	A	7.5	A	7.6

LOS - Level of Service
Delay is measured in seconds.

Table 5
CAPACITY ANALYSES RESULTS – PROJECTED CONDITIONS – UNSIGNALIZED

Location	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Wilke Road with the Days Inn Access Drive				
• Westbound Approach	A	9.5	B	10.8
• Southbound Left Turn	A	7.8	A	7.8
Wilke Road with the East Site Access Drive				
• Northbound Approach	A	9.3	A	9.8
• Westbound Left Turn	A	7.6	A	7.7
Wilke Road with the West Site Access Drive				
• Westbound Approach	B	10.0	B	10.2
• Southbound Left Turn	A	7.6	A	7.7
Wilke Road with Shure Drive				
• Westbound Approach	A	9.5	B	10.7
• Southbound Left Turn	A	7.6	A	7.7

LOS - Level of Service
Delay is measured in seconds.

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements needed to accommodate the day care-generated traffic.

Dundee Road with Wilke Road

The results of the capacity analyses indicate that overall, this intersection currently operates at LOS B during the weekday morning peak hour and at LOS C during the weekday evening peak hour. Under Year 2028 total projected conditions, this intersection is projected to operate at LOS C during the weekday morning peak hour and LOS D during the weekday evening peak hour with increase in delay of approximately three and 10 seconds, respectively. In addition, all movements are projected to continue operating at LOS E or better during the peak hours.

This overall increase in delay is primarily due to the ambient increase in traffic and the proposed distribution development. This is evident in the fact that the northbound approach is projected to operate with an increase in delay of approximately one second during both peak hours. Further, the proposed development is projected to increase the volume of traffic traversing this intersection by approximately two percent during the peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed day care center and no roadway improvements or signal modifications will be required.

Wilke Road with the Days Inn Access Drive

The results of the capacity analyses indicate that all critical movements at this intersection currently operate at LOS B or better during the during the weekday morning and evening peak hours. Under Year 2028 total projected conditions, all critical movements are projected to continue to operate at the same LOS with increased in delay of less than one second. As such, the proposed day care center will have limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

Wilke Road with the East Site Access Drive

The results of the capacity analyses indicate that all critical movements at this intersection currently operate at LOS A during the during the weekday morning and evening peak hours. As proposed, this access drive will be maintained and will serve the proposed day care center. As previously mentioned, it is recommended that outbound movements from this access drive be placed under stop sign control. Under Year 2028 total projected conditions, outbound movements from the access drive are projected to operate at LOS A during the weekday morning and weekday evening peak hours. Further, the westbound left-turn inbound movement to the site is projected to operate at LOS A during both peak hours with 95th percentile queues of one to two vehicles, which will have a limited impact on the through traffic along Wilke Road. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed day care center and will ensure efficient and flexible access is provided.

Wilke Road with the West Site Access Drive

The results of the capacity analyses indicate that all critical movements at this intersection currently operate at LOS B or better during the during the weekday morning and weekday evening peak hours. As proposed, this access drive will be maintained and will serve the proposed day care center. As previously mentioned, it is recommended that outbound movements from this access drive be placed under stop sign control. Under Year 2028 total projected conditions, outbound movements from the access drive are projected to operate at LOS B during the weekday morning and weekday evening peak hours. Further, the southbound left-turn inbound movement to the site is projected to operate at LOS A during both peak hours with 95th percentile queues of one to two vehicles, which will have a limited impact on the through traffic along Wilke Road. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed day care center and will ensure efficient and flexible access is provided.

Wilke Road with Shure Drive

The results of the capacity analyses indicate that all critical movements at this intersection currently operate at LOS B or better during the during the weekday morning and evening peak hours. Under Year 2028 total projected conditions, all critical movements are projected to continue to operate at the same LOS with increased in delay of less than one second. As such, the proposed day care center will have limited impact on the operations of this intersection and no roadway or traffic control improvements will be required.

6. Parking and Circulation Evaluation

The following provides an evaluation of the proposed day care center parking supply and on-site circulation.

Parking Supply Evaluation

Parking for the day care center will be provided via 82 spaces within the existing parking lot.

Village of Arlington Heights Requirements

The Village of Arlington Heights Municipal Code requires a parking ratio of three spaces for every two employees Based on the village ordinance the development should provide parking as follows:

- 33 parking spaces for 22 employees (ratio of three spaces for every two employees)

Based on the above, the proposed development should provide 33 parking spaces resulting in a surplus of 49 parking spaces.

ITE Parking Generation Manual

In reviewing the survey data published in the Institute of Transportation Engineers' (ITE) 5th Edition of the *Parking Generation Manual*, the following average peak parking demand was determined based on Land Use Code 565 (Day Care):

- 34 parking spaces for 130 students (ratio of 0.24 spaces per student)

or

- 19 parking spaces for a 7,931 square-foot day care (ratio of 2.45 spaces per 1,000 square feet)

Based on the above, the proposed development should provide a total of 34 parking spaces to accommodate the peak parking demand, which results in a surplus of 48 parking spaces.

Parking Evaluation

The proposed day care center will exceed the Village of Arlington Heights parking requirements as well as the projected peak parking demand based on ITE. As such, the 82-space parking lot will adequately accommodate peak parking demands of the proposed day care center and will promote efficient pick-up and drop-off operations.

Pick-Up and Drop-Off Operations Evaluation

As previously indicated, children will arrive at the proposed day care center via personal vehicle, transported by their parents or other guardians. For the purposes of this evaluation, it was assumed that most children will be driven to the facility, the vehicle parked, and then the children walked into the building. Once dropped off, the driver will return to the vehicle and leave the site. At the end of the day, to depart, the children are assumed to be walked out of the facility by their respective parent or guardian to the parked vehicle.

The development will provide 82 parking spaces. The number of available parking spaces on site is projected to exceed the parking demand of the proposed development by over 40 parking spaces. This number of spaces exceeds the number of vehicles that will drop off or pick up students during either peak hour. As such, the proposed site will adequately accommodate drop-off and pick-up activities.

AutoTurns and Emergency Vehicle Circulation

KLOA, Inc. examined the ability of emergency vehicles to traverse the intersection of Dundee Road with Wilke Road, access the development site, and circulate internally. Specifically, AutoTurn software was used to show the ability of firetrucks to make the required turns to approach and circulate the site of the proposed day care center. The results indicated that emergency vehicles will be able to approach and circulate without conflict. The AutoTurn exhibits, **Figures A1** and **A2**, are included in the Appendix.

7. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The results of the capacity analysis indicate that the proposed day care center traffic will not have a significant impact on the area roadways.
- The existing access system serving the site will be adequate in accommodating the traffic projected to be generated by the proposed day care center.
- Outbound movements from the site access drives should be placed under stop sign control.
- The 82-space parking lot will surpass Village code as well as ITE peak parking rates and will be adequate in accommodating the projected parking demand.
- The drop-off/pick-up operations of the proposed day care center will be adequately accommodated on site.
- Emergency vehicles will be able to access and circulate the site without conflict.

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
ITE Trip Generation Worksheets
CMAP 2050 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets
AutoTurn Exhibits (Figure A1 and A2)

Traffic Count Summary Sheets

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Dundee and Wilke
Site Code:
Start Date: 06/24/2017

Turning Movement Data

Start Time	Dundee Eastbound						Dundee Westbound						Wilke Northbound						Wilke Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
12:00 PM	1	24	306	10	0	341	0	14	324	20	0	358	0	6	5	12	0	23	0	22	10	50	0	82	804
12:15 PM	1	29	316	6	0	352	1	5	342	16	0	364	0	8	7	15	0	30	0	16	11	37	0	64	810
12:30 PM	0	27	322	9	0	358	0	7	358	23	0	388	0	2	4	15	0	21	0	15	7	48	0	70	837
12:45 PM	2	34	311	3	0	350	0	6	330	15	0	351	0	7	5	10	0	22	0	12	15	35	0	62	785
Hourly Total	4	114	1255	28	0	1401	1	32	1354	74	0	1461	0	23	21	52	0	96	0	65	43	170	0	278	3236
1:00 PM	1	31	294	5	0	331	0	4	286	18	0	308	0	3	8	9	0	20	0	19	9	31	0	59	718
1:15 PM	2	25	274	4	0	305	1	16	293	18	0	328	0	2	12	11	0	25	0	14	4	44	0	62	720
1:30 PM	1	29	281	2	0	313	0	8	288	16	0	312	0	4	5	14	0	23	0	17	2	45	1	64	712
1:45 PM	0	36	291	6	0	333	0	8	267	17	0	292	0	5	6	13	0	24	0	13	4	32	0	49	698
Hourly Total	4	121	1140	17	0	1282	1	36	1134	69	0	1240	0	14	31	47	0	92	0	63	19	152	1	234	2848
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	24	443	13	0	480	0	5	239	9	1	253	0	5	8	11	0	24	0	18	8	42	0	68	825
7:15 AM	1	52	429	10	0	492	0	4	228	19	1	251	0	3	11	25	0	39	0	17	6	51	0	74	856
7:30 AM	0	45	509	11	0	565	0	5	258	11	0	274	0	6	13	26	0	45	0	24	16	43	0	83	967
7:45 AM	0	76	455	14	0	545	0	5	226	13	0	244	0	2	17	24	0	43	0	20	10	46	1	76	908
Hourly Total	1	197	1836	48	0	2082	0	19	951	52	2	1022	0	16	49	86	0	151	0	79	40	182	1	301	3556
8:00 AM	0	58	490	23	0	571	0	8	218	16	0	242	0	2	6	10	0	18	0	19	12	43	1	74	905
8:15 AM	0	38	449	20	0	507	0	8	211	14	1	233	0	6	12	25	0	43	0	11	6	37	0	54	837
8:30 AM	0	53	467	19	0	539	0	3	216	9	0	228	0	5	12	14	0	31	0	17	6	26	0	49	847
8:45 AM	0	50	450	18	0	518	0	7	208	19	0	234	0	9	6	22	0	37	1	15	7	28	1	51	840
Hourly Total	0	199	1856	80	0	2135	0	26	853	58	1	937	0	22	36	71	0	129	1	62	31	134	2	228	3429
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	40	292	7	0	339	0	11	410	15	0	436	0	20	10	13	0	43	0	20	14	69	0	103	921
4:15 PM	0	26	333	11	0	370	0	7	486	21	0	514	0	16	12	13	0	41	0	10	6	49	0	65	990
4:30 PM	0	39	316	5	0	360	0	21	408	22	0	451	0	21	15	14	0	50	0	28	14	65	0	107	968
4:45 PM	0	32	341	8	0	381	0	18	398	31	0	447	0	15	15	17	0	47	0	12	10	56	0	78	953
Hourly Total	0	137	1282	31	0	1450	0	57	1702	89	0	1848	0	72	52	57	0	181	0	70	44	239	0	353	3832
5:00 PM	0	25	351	5	0	381	0	14	384	23	0	421	0	32	17	15	0	64	0	41	18	99	0	158	1024
5:15 PM	0	30	368	13	0	411	0	13	421	13	0	447	0	15	10	25	0	50	0	27	18	89	0	134	1042
5:30 PM	0	40	354	10	0	404	0	22	459	24	0	505	0	17	11	16	0	44	0	16	16	48	0	80	1033
5:45 PM	0	38	378	5	0	421	0	12	353	24	0	389	0	24	13	19	0	56	0	23	11	43	0	77	943
Hourly Total	0	133	1451	33	0	1617	0	61	1617	84	0	1762	0	88	51	75	0	214	0	107	63	279	0	449	4042
Grand Total	9	901	8820	237	0	9967	2	231	7611	426	3	8270	0	235	240	388	0	863	1	446	240	1156	4	1843	20943
Approach %	0.1	9.0	88.5	2.4	-	-	0.0	2.8	92.0	5.2	-	-	0.0	27.2	27.8	45.0	-	-	0.1	24.2	13.0	62.7	-	-	-
Total %	0.0	4.3	42.1	1.1	-	47.6	0.0	1.1	36.3	2.0	-	39.5	0.0	1.1	1.1	1.9	-	4.1	0.0	2.1	1.1	5.5	-	8.8	-

Lights	8	886	8633	234	-	9761	2	229	7423	417	-	8071	0	232	237	388	-	857	1	442	238	1132	-	1813	20502
% Lights	88.9	98.3	97.9	98.7	-	97.9	100.0	99.1	97.5	97.9	-	97.6	-	98.7	98.8	100.0	-	99.3	100.0	99.1	99.2	97.9	-	98.4	97.9
Buses	0	0	15	0	-	15	0	0	8	3	-	11	0	0	1	0	-	1	0	0	1	8	-	9	36
% Buses	0.0	0.0	0.2	0.0	-	0.2	0.0	0.0	0.1	0.7	-	0.1	-	0.0	0.4	0.0	-	0.1	0.0	0.0	0.4	0.7	-	0.5	0.2
Single-Unit Trucks	1	11	110	1	-	123	0	2	115	6	-	123	0	3	1	0	-	4	0	4	0	11	-	15	265
% Single-Unit Trucks	11.1	1.2	1.2	0.4	-	1.2	0.0	0.9	1.5	1.4	-	1.5	-	1.3	0.4	0.0	-	0.5	0.0	0.9	0.0	1.0	-	0.8	1.3
Articulated Trucks	0	3	60	0	-	63	0	0	64	0	-	64	0	0	0	0	-	0	0	0	0	4	-	4	131
% Articulated Trucks	0.0	0.3	0.7	0.0	-	0.6	0.0	0.0	0.8	0.0	-	0.8	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.3	-	0.2	0.6
Bicycles on Road	0	1	2	2	-	5	0	0	1	0	-	1	0	0	1	0	-	1	0	0	1	1	-	2	9
% Bicycles on Road	0.0	0.1	0.0	0.8	-	0.1	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.4	0.0	-	0.1	0.0	0.0	0.4	0.1	-	0.1	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	4	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Dundee and Wilke
Site Code:
Start Date: 06/24/2017

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Dundee Eastbound						Dundee Westbound						Wilke Northbound						Wilke Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:15 AM	1	52	429	10	0	492	0	4	228	19	1	251	0	3	11	25	0	39	0	17	6	51	0	74	856
7:30 AM	0	45	509	11	0	565	0	5	258	11	0	274	0	6	13	26	0	45	0	24	16	43	0	83	967
7:45 AM	0	76	455	14	0	545	0	5	226	13	0	244	0	2	17	24	0	43	0	20	10	46	1	76	908
8:00 AM	0	58	490	23	0	571	0	8	218	16	0	242	0	2	6	10	0	18	0	19	12	43	1	74	905
Total	1	231	1883	58	0	2173	0	22	930	59	1	1011	0	13	47	85	0	145	0	80	44	183	2	307	3636
Approach %	0.0	10.6	86.7	2.7	-	-	0.0	2.2	92.0	5.8	-	-	0.0	9.0	32.4	58.6	-	-	0.0	26.1	14.3	59.6	-	-	-
Total %	0.0	6.4	51.8	1.6	-	59.8	0.0	0.6	25.6	1.6	-	27.8	0.0	0.4	1.3	2.3	-	4.0	0.0	2.2	1.2	5.0	-	8.4	-
PHF	0.250	0.760	0.925	0.630	-	0.951	0.000	0.688	0.901	0.776	-	0.922	0.000	0.542	0.691	0.817	-	0.806	0.000	0.833	0.688	0.897	-	0.925	0.940
Lights	1	228	1829	58	-	2116	0	22	879	58	-	959	0	13	45	85	-	143	0	78	43	172	-	293	3511
% Lights	100.0	98.7	97.1	100.0	-	97.4	-	100.0	94.5	98.3	-	94.9	-	100.0	95.7	100.0	-	98.6	-	97.5	97.7	94.0	-	95.4	96.6
Buses	0	0	5	0	-	5	0	0	1	1	-	2	0	0	1	0	-	1	0	0	1	5	-	6	14
% Buses	0.0	0.0	0.3	0.0	-	0.2	-	0.0	0.1	1.7	-	0.2	-	0.0	2.1	0.0	-	0.7	-	0.0	2.3	2.7	-	2.0	0.4
Single-Unit Trucks	0	2	34	0	-	36	0	0	30	0	-	30	0	0	0	0	-	0	0	2	0	5	-	7	73
% Single-Unit Trucks	0.0	0.9	1.8	0.0	-	1.7	-	0.0	3.2	0.0	-	3.0	-	0.0	0.0	0.0	-	0.0	-	2.5	0.0	2.7	-	2.3	2.0
Articulated Trucks	0	1	14	0	-	15	0	0	20	0	-	20	0	0	0	0	-	0	0	0	0	1	-	1	36
% Articulated Trucks	0.0	0.4	0.7	0.0	-	0.7	-	0.0	2.2	0.0	-	2.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.5	-	0.3	1.0
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.0	0.1	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	2.1	0.0	-	0.7	-	0.0	0.0	0.0	-	0.0	0.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Dundee and Wilke
Site Code:
Start Date: 06/24/2017

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Dundee Eastbound						Dundee Westbound						Wilke Northbound						Wilke Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:45 PM	0	32	341	8	0	381	0	18	398	31	0	447	0	15	15	17	0	47	0	12	10	56	0	78	953
5:00 PM	0	25	351	5	0	381	0	14	384	23	0	421	0	32	17	15	0	64	0	41	18	99	0	158	1024
5:15 PM	0	30	368	13	0	411	0	13	421	13	0	447	0	15	10	25	0	50	0	27	18	89	0	134	1042
5:30 PM	0	40	354	10	0	404	0	22	459	24	0	505	0	17	11	16	0	44	0	16	16	48	0	80	1033
Total	0	127	1414	36	0	1577	0	67	1662	91	0	1820	0	79	53	73	0	205	0	96	62	292	0	450	4052
Approach %	0.0	8.1	89.7	2.3	-	-	0.0	3.7	91.3	5.0	-	-	0.0	38.5	25.9	35.6	-	-	0.0	21.3	13.8	64.9	-	-	-
Total %	0.0	3.1	34.9	0.9	-	38.9	0.0	1.7	41.0	2.2	-	44.9	0.0	1.9	1.3	1.8	-	5.1	0.0	2.4	1.5	7.2	-	11.1	-
PHF	0.000	0.794	0.961	0.692	-	0.959	0.000	0.761	0.905	0.734	-	0.901	0.000	0.617	0.779	0.730	-	0.801	0.000	0.585	0.861	0.737	-	0.712	0.972
Lights	0	125	1397	36	-	1558	0	66	1637	89	-	1792	0	79	53	73	-	205	0	96	62	290	-	448	4003
% Lights	-	98.4	98.8	100.0	-	98.8	-	98.5	98.5	97.8	-	98.5	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	99.3	-	99.6	98.8
Buses	0	0	1	0	-	1	0	0	2	1	-	3	0	0	0	0	-	0	0	0	0	0	-	0	4
% Buses	-	0.0	0.1	0.0	-	0.1	-	0.0	0.1	1.1	-	0.2	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	1	11	0	-	12	0	1	12	1	-	14	0	0	0	0	-	0	0	0	0	2	-	2	28
% Single-Unit Trucks	-	0.8	0.8	0.0	-	0.8	-	1.5	0.7	1.1	-	0.8	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.7	-	0.4	0.7
Articulated Trucks	0	0	5	0	-	5	0	0	10	0	-	10	0	0	0	0	-	0	0	0	0	0	-	0	15
% Articulated Trucks	-	0.0	0.4	0.0	-	0.3	-	0.0	0.6	0.0	-	0.5	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Bicycles on Road	0	1	0	0	-	1	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	2
% Bicycles on Road	-	0.8	0.0	0.0	-	0.1	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: N Wilke Rd with E Access Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Data

Start Time	Wilke Rd Eastbound					Access Dr Westbound					Wilke Rd Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:00 AM	0	17	0	0	17	0	1	3	0	4	0	0	14	0	14	35
7:15 AM	0	29	2	0	31	0	0	3	1	3	0	1	16	0	17	51
7:30 AM	0	25	1	0	26	0	2	4	0	6	0	0	21	1	21	53
7:45 AM	0	31	0	0	31	0	1	4	0	5	0	1	23	0	24	60
Hourly Total	0	102	3	0	105	0	4	14	1	18	0	2	74	1	76	199
8:00 AM	0	29	0	0	29	0	0	1	0	1	0	3	23	0	26	56
8:15 AM	0	27	4	0	31	1	0	4	0	5	0	3	26	0	29	65
8:30 AM	0	32	0	0	32	0	0	2	0	2	0	0	27	0	27	61
8:45 AM	0	17	1	0	18	0	1	3	0	4	0	0	20	0	20	42
Hourly Total	0	105	5	0	110	1	1	10	0	12	0	6	96	0	102	224
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	36	3	0	39	0	0	4	2	4	0	3	24	0	27	70
4:15 PM	0	37	2	0	39	0	4	4	0	8	0	0	31	0	31	78
4:30 PM	0	32	2	0	34	0	1	1	0	2	0	4	31	0	35	71
4:45 PM	0	32	5	0	37	0	1	1	0	2	1	4	35	1	40	79
Hourly Total	0	137	12	0	149	0	6	10	2	16	1	11	121	1	133	298
5:00 PM	0	41	1	0	42	0	2	4	0	6	0	3	26	0	29	77
5:15 PM	0	33	2	1	35	0	3	5	0	8	0	3	33	0	36	79
5:30 PM	0	26	2	1	28	0	0	1	0	1	0	3	31	1	34	63
5:45 PM	0	36	1	1	37	0	2	2	0	4	0	5	19	1	24	65
Hourly Total	0	136	6	3	142	0	7	12	0	19	0	14	109	2	123	284
Grand Total	0	480	26	3	506	1	18	46	3	65	1	33	400	4	434	1005
Approach %	0.0	94.9	5.1	-	-	1.5	27.7	70.8	-	-	0.2	7.6	92.2	-	-	-
Total %	0.0	47.8	2.6	-	50.3	0.1	1.8	4.6	-	6.5	0.1	3.3	39.8	-	43.2	-
Lights	0	472	25	-	497	0	17	46	-	63	0	31	388	-	419	979
% Lights	-	98.3	96.2	-	98.2	0.0	94.4	100.0	-	96.9	0.0	93.9	97.0	-	96.5	97.4
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	6	0	-	6	0	0	0	-	0	1	0	3	-	4	10
% Single-Unit Trucks	-	1.3	0.0	-	1.2	0.0	0.0	0.0	-	0.0	100.0	0.0	0.8	-	0.9	1.0
Articulated Trucks	0	1	0	-	1	1	1	0	-	2	0	1	0	-	1	4
% Articulated Trucks	-	0.2	0.0	-	0.2	100.0	5.6	0.0	-	3.1	0.0	3.0	0.0	-	0.2	0.4
Bicycles on Road	0	1	1	-	2	0	0	0	-	0	0	1	9	-	10	12
% Bicycles on Road	-	0.2	3.8	-	0.4	0.0	0.0	0.0	-	0.0	0.0	3.0	2.3	-	2.3	1.2
Pedestrians	-	-	-	3	-	-	-	-	3	-	-	-	-	4	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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Count Name: N Wilke Rd with E Access Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Wilke Rd Eastbound					Access Dr Westbound					Wilke Rd Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:45 AM	0	31	0	0	31	0	1	4	0	5	0	1	23	0	24	60
8:00 AM	0	29	0	0	29	0	0	1	0	1	0	3	23	0	26	56
8:15 AM	0	27	4	0	31	1	0	4	0	5	0	3	26	0	29	65
8:30 AM	0	32	0	0	32	0	0	2	0	2	0	0	27	0	27	61
Total	0	119	4	0	123	1	1	11	0	13	0	7	99	0	106	242
Approach %	0.0	96.7	3.3	-	-	7.7	7.7	84.6	-	-	0.0	6.6	93.4	-	-	-
Total %	0.0	49.2	1.7	-	50.8	0.4	0.4	4.5	-	5.4	0.0	2.9	40.9	-	43.8	-
PHF	0.000	0.930	0.250	-	0.961	0.250	0.250	0.688	-	0.650	0.000	0.583	0.917	-	0.914	0.931
Lights	0	114	4	-	118	0	1	11	-	12	0	5	96	-	101	231
% Lights	-	95.8	100.0	-	95.9	0.0	100.0	100.0	-	92.3	-	71.4	97.0	-	95.3	95.5
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	4	0	-	4	0	0	0	-	0	0	0	1	-	1	5
% Single-Unit Trucks	-	3.4	0.0	-	3.3	0.0	0.0	0.0	-	0.0	-	0.0	1.0	-	0.9	2.1
Articulated Trucks	0	0	0	-	0	1	0	0	-	1	0	1	0	-	1	2
% Articulated Trucks	-	0.0	0.0	-	0.0	100.0	0.0	0.0	-	7.7	-	14.3	0.0	-	0.9	0.8
Bicycles on Road	0	1	0	-	1	0	0	0	-	0	0	1	2	-	3	4
% Bicycles on Road	-	0.8	0.0	-	0.8	0.0	0.0	0.0	-	0.0	-	14.3	2.0	-	2.8	1.7
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
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Count Name: N Wilke Rd with E Access Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Wilke Rd Eastbound					Access Dr Westbound					Wilke Rd Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:15 PM	0	37	2	0	39	0	4	4	0	8	0	0	31	0	31	78
4:30 PM	0	32	2	0	34	0	1	1	0	2	0	4	31	0	35	71
4:45 PM	0	32	5	0	37	0	1	1	0	2	1	4	35	1	40	79
5:00 PM	0	41	1	0	42	0	2	4	0	6	0	3	26	0	29	77
Total	0	142	10	0	152	0	8	10	0	18	1	11	123	1	135	305
Approach %	0.0	93.4	6.6	-	-	0.0	44.4	55.6	-	-	0.7	8.1	91.1	-	-	-
Total %	0.0	46.6	3.3	-	49.8	0.0	2.6	3.3	-	5.9	0.3	3.6	40.3	-	44.3	-
PHF	0.000	0.866	0.500	-	0.905	0.000	0.500	0.625	-	0.563	0.250	0.688	0.879	-	0.844	0.965
Lights	0	141	10	-	151	0	7	10	-	17	0	11	123	-	134	302
% Lights	-	99.3	100.0	-	99.3	-	87.5	100.0	-	94.4	0.0	100.0	100.0	-	99.3	99.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	1	0	-	1	0	0	0	-	0	1	0	0	-	1	2
% Single-Unit Trucks	-	0.7	0.0	-	0.7	-	0.0	0.0	-	0.0	100.0	0.0	0.0	-	0.7	0.7
Articulated Trucks	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Articulated Trucks	-	0.0	0.0	-	0.0	-	12.5	0.0	-	5.6	0.0	0.0	0.0	-	0.0	0.3
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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Count Name: N Wilke Rd with N Access Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Data

Start Time	Wilke Rd Eastbound					Wilke Rd Westbound					Access Dr Northbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:00 AM	0	15	0	0	15	0	1	14	0	15	0	1	0	0	1	31
7:15 AM	0	30	0	0	30	0	0	17	0	17	0	0	1	0	1	48
7:30 AM	0	26	0	0	26	0	0	23	0	23	0	0	0	0	0	49
7:45 AM	0	31	0	0	31	0	0	23	0	23	0	0	0	0	0	54
Hourly Total	0	102	0	0	102	0	1	77	0	78	0	1	1	0	2	182
8:00 AM	0	28	0	0	28	1	1	22	0	24	0	0	1	0	1	53
8:15 AM	0	30	0	0	30	0	0	27	0	27	0	0	0	0	0	57
8:30 AM	0	31	0	0	31	0	1	26	0	27	0	0	1	0	1	59
8:45 AM	0	19	0	0	19	0	1	20	0	21	0	0	0	0	0	40
Hourly Total	0	108	0	0	108	1	3	95	0	99	0	0	2	0	2	209
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	38	0	0	38	0	1	23	0	24	0	0	2	0	2	64
4:15 PM	0	39	0	0	39	0	1	34	0	35	0	0	0	0	0	74
4:30 PM	0	34	0	0	34	0	1	31	0	32	0	0	1	0	1	67
4:45 PM	0	35	0	0	35	0	0	36	0	36	0	0	2	0	2	73
Hourly Total	0	146	0	0	146	0	3	124	0	127	0	0	5	0	5	278
5:00 PM	0	42	0	0	42	0	0	28	0	28	0	1	2	0	3	73
5:15 PM	0	35	0	0	35	0	1	34	0	35	0	0	0	0	0	70
5:30 PM	0	27	0	0	27	1	1	28	0	30	0	0	0	0	0	57
5:45 PM	0	36	0	0	36	0	0	22	0	22	0	0	1	0	1	59
Hourly Total	0	140	0	0	140	1	2	112	0	115	0	1	3	0	4	259
Grand Total	0	496	0	0	496	2	9	408	0	419	0	2	11	0	13	928
Approach %	0.0	100.0	0.0	-	-	0.5	2.1	97.4	-	-	0.0	15.4	84.6	-	-	-
Total %	0.0	53.4	0.0	-	53.4	0.2	1.0	44.0	-	45.2	0.0	0.2	1.2	-	1.4	-
Lights	0	489	0	-	489	1	9	396	-	406	0	2	10	-	12	907
% Lights	-	98.6	-	-	98.6	50.0	100.0	97.1	-	96.9	-	100.0	90.9	-	92.3	97.7
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	4	0	-	4	1	0	2	-	3	0	0	1	-	1	8
% Single-Unit Trucks	-	0.8	-	-	0.8	50.0	0.0	0.5	-	0.7	-	0.0	9.1	-	7.7	0.9
Articulated Trucks	0	1	0	-	1	0	0	1	-	1	0	0	0	-	0	2
% Articulated Trucks	-	0.2	-	-	0.2	0.0	0.0	0.2	-	0.2	-	0.0	0.0	-	0.0	0.2
Bicycles on Road	0	2	0	-	2	0	0	9	-	9	0	0	0	-	0	11
% Bicycles on Road	-	0.4	-	-	0.4	0.0	0.0	2.2	-	2.1	-	0.0	0.0	-	0.0	1.2
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: N Wilke Rd with N Access Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Wilke Rd Eastbound					Wilke Rd Westbound					Access Dr Northbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:45 AM	0	31	0	0	31	0	0	23	0	23	0	0	0	0	0	54
8:00 AM	0	28	0	0	28	1	1	22	0	24	0	0	1	0	1	53
8:15 AM	0	30	0	0	30	0	0	27	0	27	0	0	0	0	0	57
8:30 AM	0	31	0	0	31	0	1	26	0	27	0	0	1	0	1	59
Total	0	120	0	0	120	1	2	98	0	101	0	0	2	0	2	223
Approach %	0.0	100.0	0.0	-	-	1.0	2.0	97.0	-	-	0.0	0.0	100.0	-	-	-
Total %	0.0	53.8	0.0	-	53.8	0.4	0.9	43.9	-	45.3	0.0	0.0	0.9	-	0.9	-
PHF	0.000	0.968	0.000	-	0.968	0.250	0.500	0.907	-	0.935	0.000	0.000	0.500	-	0.500	0.945
Lights	0	116	0	-	116	0	2	96	-	98	0	0	2	-	2	216
% Lights	-	96.7	-	-	96.7	0.0	100.0	98.0	-	97.0	-	-	100.0	-	100.0	96.9
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Single-Unit Trucks	0	3	0	-	3	1	0	0	-	1	0	0	0	-	0	4
% Single-Unit Trucks	-	2.5	-	-	2.5	100.0	0.0	0.0	-	1.0	-	-	0.0	-	0.0	1.8
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Bicycles on Road	0	1	0	-	1	0	0	2	-	2	0	0	0	-	0	3
% Bicycles on Road	-	0.8	-	-	0.8	0.0	0.0	2.0	-	2.0	-	-	0.0	-	0.0	1.3
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: N Wilke Rd with N Access Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Wilke Rd Eastbound					Wilke Rd Westbound					Access Dr Northbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:15 PM	0	39	0	0	39	0	1	34	0	35	0	0	0	0	0	74
4:30 PM	0	34	0	0	34	0	1	31	0	32	0	0	1	0	1	67
4:45 PM	0	35	0	0	35	0	0	36	0	36	0	0	2	0	2	73
5:00 PM	0	42	0	0	42	0	0	28	0	28	0	1	2	0	3	73
Total	0	150	0	0	150	0	2	129	0	131	0	1	5	0	6	287
Approach %	0.0	100.0	0.0	-	-	0.0	1.5	98.5	-	-	0.0	16.7	83.3	-	-	-
Total %	0.0	52.3	0.0	-	52.3	0.0	0.7	44.9	-	45.6	0.0	0.3	1.7	-	2.1	-
PHF	0.000	0.893	0.000	-	0.893	0.000	0.500	0.896	-	0.910	0.000	0.250	0.625	-	0.500	0.970
Lights	0	150	0	-	150	0	2	128	-	130	0	1	4	-	5	285
% Lights	-	100.0	-	-	100.0	-	100.0	99.2	-	99.2	-	100.0	80.0	-	83.3	99.3
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	1	-	1	1
% Single-Unit Trucks	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	-	0.0	20.0	-	16.7	0.3
Articulated Trucks	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Articulated Trucks	-	0.0	-	-	0.0	-	0.0	0.8	-	0.8	-	0.0	0.0	-	0.0	0.3
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: N Wilke Rd with Shure Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Data

Start Time	Shure Dr Westbound					Wilke Rd Northbound					Wilke Rd Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
7:00 AM	0	0	1	0	1	0	14	1	0	15	0	4	7	0	11	27
7:15 AM	0	0	0	0	0	0	35	0	0	35	0	2	14	0	16	51
7:30 AM	0	1	4	0	5	0	26	0	0	26	0	2	20	0	22	53
7:45 AM	0	1	3	0	4	0	24	1	0	25	0	6	17	0	23	52
Hourly Total	0	2	8	0	10	0	99	2	0	101	0	14	58	0	72	183
8:00 AM	0	1	0	0	1	0	28	0	0	28	0	0	21	0	21	50
8:15 AM	0	0	0	0	0	0	36	0	0	36	0	3	23	0	26	62
8:30 AM	0	0	0	0	0	0	28	0	0	28	0	3	24	0	27	55
8:45 AM	0	0	1	0	1	0	24	0	0	24	0	0	21	0	21	46
Hourly Total	0	1	1	0	2	0	116	0	0	116	0	6	89	0	95	213
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	5	5	0	10	0	32	0	0	32	0	1	28	0	29	71
4:15 PM	0	10	6	0	16	0	32	0	0	32	0	1	33	0	34	82
4:30 PM	0	5	3	0	8	0	34	0	0	34	0	1	29	0	30	72
4:45 PM	0	4	2	0	6	0	32	0	0	32	0	1	34	0	35	73
Hourly Total	0	24	16	0	40	0	130	0	0	130	0	4	124	0	128	298
5:00 PM	0	3	3	0	6	0	36	0	0	36	0	0	30	0	30	72
5:15 PM	0	0	2	0	2	0	33	0	0	33	0	0	35	0	35	70
5:30 PM	0	0	7	0	7	0	21	0	0	21	0	1	30	0	31	59
5:45 PM	0	4	2	0	6	0	38	0	0	38	0	0	20	0	20	64
Hourly Total	0	7	14	0	21	0	128	0	0	128	0	1	115	0	116	265
Grand Total	0	34	39	0	73	0	473	2	0	475	0	25	386	0	411	959
Approach %	0.0	46.6	53.4	-	-	0.0	99.6	0.4	-	-	0.0	6.1	93.9	-	-	-
Total %	0.0	3.5	4.1	-	7.6	0.0	49.3	0.2	-	49.5	0.0	2.6	40.3	-	42.9	-
Lights	0	34	38	-	72	0	466	1	-	467	0	25	380	-	405	944
% Lights	-	100.0	97.4	-	98.6	-	98.5	50.0	-	98.3	-	100.0	98.4	-	98.5	98.4
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	4	0	-	4	0	0	2	-	2	6
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.8	0.0	-	0.8	-	0.0	0.5	-	0.5	0.6
Articulated Trucks	0	0	0	-	0	0	1	1	-	2	0	0	1	-	1	3
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.2	50.0	-	0.4	-	0.0	0.3	-	0.2	0.3
Bicycles on Road	0	0	1	-	1	0	2	0	-	2	0	0	3	-	3	6
% Bicycles on Road	-	0.0	2.6	-	1.4	-	0.4	0.0	-	0.4	-	0.0	0.8	-	0.7	0.6
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: N Wilke Rd with Shure Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Shure Dr Westbound					Wilke Rd Northbound					Wilke Rd Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:45 AM	0	1	3	0	4	0	24	1	0	25	0	6	17	0	23	52
8:00 AM	0	1	0	0	1	0	28	0	0	28	0	0	21	0	21	50
8:15 AM	0	0	0	0	0	0	36	0	0	36	0	3	23	0	26	62
8:30 AM	0	0	0	0	0	0	28	0	0	28	0	3	24	0	27	55
Total	0	2	3	0	5	0	116	1	0	117	0	12	85	0	97	219
Approach %	0.0	40.0	60.0	-	-	0.0	99.1	0.9	-	-	0.0	12.4	87.6	-	-	-
Total %	0.0	0.9	1.4	-	2.3	0.0	53.0	0.5	-	53.4	0.0	5.5	38.8	-	44.3	-
PHF	0.000	0.500	0.250	-	0.313	0.000	0.806	0.250	-	0.813	0.000	0.500	0.885	-	0.898	0.883
Lights	0	2	3	-	5	0	111	1	-	112	0	12	84	-	96	213
% Lights	-	100.0	100.0	-	100.0	-	95.7	100.0	-	95.7	-	100.0	98.8	-	99.0	97.3
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	3	0	-	3	0	0	0	-	0	3
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	2.6	0.0	-	2.6	-	0.0	0.0	-	0.0	1.4
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	2	0	-	2	0	0	1	-	1	3
% Bicycles on Road	-	0.0	0.0	-	0.0	-	1.7	0.0	-	1.7	-	0.0	1.2	-	1.0	1.4
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: N Wilke Rd with Shure Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Shure Dr Westbound					Wilke Rd Northbound					Wilke Rd Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
4:15 PM	0	10	6	0	16	0	32	0	0	32	0	1	33	0	34	82
4:30 PM	0	5	3	0	8	0	34	0	0	34	0	1	29	0	30	72
4:45 PM	0	4	2	0	6	0	32	0	0	32	0	1	34	0	35	73
5:00 PM	0	3	3	0	6	0	36	0	0	36	0	0	30	0	30	72
Total	0	22	14	0	36	0	134	0	0	134	0	3	126	0	129	299
Approach %	0.0	61.1	38.9	-	-	0.0	100.0	0.0	-	-	0.0	2.3	97.7	-	-	-
Total %	0.0	7.4	4.7	-	12.0	0.0	44.8	0.0	-	44.8	0.0	1.0	42.1	-	43.1	-
PHF	0.000	0.550	0.583	-	0.563	0.000	0.931	0.000	-	0.931	0.000	0.750	0.926	-	0.921	0.912
Lights	0	22	14	-	36	0	134	0	-	134	0	3	125	-	128	298
% Lights	-	100.0	100.0	-	100.0	-	100.0	-	-	100.0	-	100.0	99.2	-	99.2	99.7
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	1	-	1	1
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	-	-	0.0	-	0.0	0.8	-	0.8	0.3
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: N Wilke Rd with W Access Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Data

Start Time	Access Dr Westbound					Wilke Rd Northbound					Wilke Rd Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
7:00 AM	0	0	0	0	0	0	19	0	0	19	0	0	18	0	18	37
7:15 AM	0	0	0	0	0	0	27	0	0	27	0	0	14	0	14	41
7:30 AM	0	0	0	0	0	0	32	0	0	32	0	2	25	0	27	59
7:45 AM	0	1	0	0	1	0	27	0	0	27	0	0	24	0	24	52
Hourly Total	0	1	0	0	1	0	105	0	0	105	0	2	81	0	83	189
8:00 AM	0	0	0	0	0	0	27	0	0	27	0	0	21	0	21	48
8:15 AM	0	0	0	0	0	0	34	0	0	34	0	1	28	0	29	63
8:30 AM	0	0	0	0	0	0	23	0	0	23	0	0	22	0	22	45
8:45 AM	0	0	0	0	0	0	20	2	0	22	0	1	20	0	21	43
Hourly Total	0	0	0	0	0	0	104	2	0	106	0	2	91	0	93	199
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	1	1	0	2	0	35	1	0	36	0	0	19	0	19	57
4:15 PM	0	0	0	0	0	0	36	1	0	37	0	2	32	0	34	71
4:30 PM	0	0	0	0	0	0	35	1	0	36	0	0	34	0	34	70
4:45 PM	0	0	2	0	2	0	35	0	0	35	0	1	31	0	32	69
Hourly Total	0	1	3	0	4	0	141	3	0	144	0	3	116	0	119	267
5:00 PM	0	0	0	0	0	0	42	0	0	42	0	0	32	0	32	74
5:15 PM	0	0	0	0	0	0	32	0	0	32	0	0	33	0	33	65
5:30 PM	0	1	0	0	1	0	32	1	0	33	0	0	27	0	27	61
5:45 PM	0	0	0	0	0	0	39	0	0	39	0	0	23	0	23	62
Hourly Total	0	1	0	0	1	0	145	1	0	146	0	0	115	0	115	262
Grand Total	0	3	3	0	6	0	495	6	0	501	0	7	403	0	410	917
Approach %	0.0	50.0	50.0	-	-	0.0	98.8	1.2	-	-	0.0	1.7	98.3	-	-	-
Total %	0.0	0.3	0.3	-	0.7	0.0	54.0	0.7	-	54.6	0.0	0.8	43.9	-	44.7	-
Lights	0	3	3	-	6	0	488	6	-	494	0	7	392	-	399	899
% Lights	-	100.0	100.0	-	100.0	-	98.6	100.0	-	98.6	-	100.0	97.3	-	97.3	98.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	4	0	-	4	0	0	2	-	2	6
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.8	0.0	-	0.8	-	0.0	0.5	-	0.5	0.7
Articulated Trucks	0	0	0	-	0	0	1	0	-	1	0	0	1	-	1	2
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.2	0.0	-	0.2	-	0.0	0.2	-	0.2	0.2
Bicycles on Road	0	0	0	-	0	0	2	0	-	2	0	0	8	-	8	10
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.4	0.0	-	0.4	-	0.0	2.0	-	2.0	1.1
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
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(847)518-9990 abowen@kloainc.com

Count Name: N Wilke Rd with W Access Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Access Dr Westbound					Wilke Rd Northbound					Wilke Rd Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:45 AM	0	1	0	0	1	0	27	0	0	27	0	0	24	0	24	52
8:00 AM	0	0	0	0	0	0	27	0	0	27	0	0	21	0	21	48
8:15 AM	0	0	0	0	0	0	34	0	0	34	0	1	28	0	29	63
8:30 AM	0	0	0	0	0	0	23	0	0	23	0	0	22	0	22	45
Total	0	1	0	0	1	0	111	0	0	111	0	1	95	0	96	208
Approach %	0.0	100.0	0.0	-	-	0.0	100.0	0.0	-	-	0.0	1.0	99.0	-	-	-
Total %	0.0	0.5	0.0	-	0.5	0.0	53.4	0.0	-	53.4	0.0	0.5	45.7	-	46.2	-
PHF	0.000	0.250	0.000	-	0.250	0.000	0.816	0.000	-	0.816	0.000	0.250	0.848	-	0.828	0.825
Lights	0	1	0	-	1	0	107	0	-	107	0	1	94	-	95	203
% Lights	-	100.0	-	-	100.0	-	96.4	-	-	96.4	-	100.0	98.9	-	99.0	97.6
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	3	0	-	3	0	0	0	-	0	3
% Single-Unit Trucks	-	0.0	-	-	0.0	-	2.7	-	-	2.7	-	0.0	0.0	-	0.0	1.4
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	1	0	-	1	0	0	1	-	1	2
% Bicycles on Road	-	0.0	-	-	0.0	-	0.9	-	-	0.9	-	0.0	1.1	-	1.0	1.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

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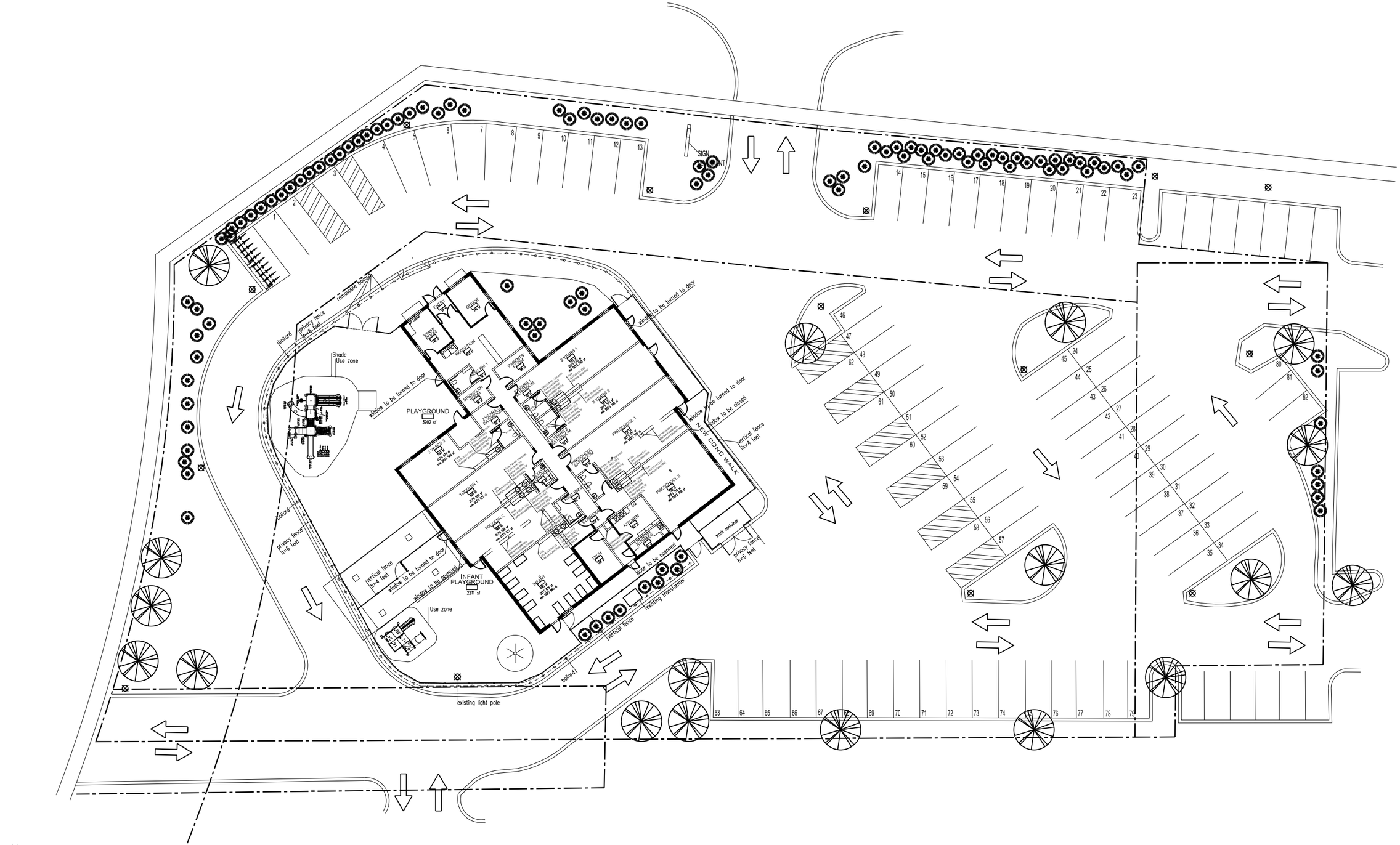
(847)518-9990 abowen@kloainc.com

Count Name: N Wilke Rd with W Access Dr
Site Code:
Start Date: 06/16/2022

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Access Dr Westbound					Wilke Rd Northbound					Wilke Rd Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
4:15 PM	0	0	0	0	0	0	36	1	0	37	0	2	32	0	34	71
4:30 PM	0	0	0	0	0	0	35	1	0	36	0	0	34	0	34	70
4:45 PM	0	0	2	0	2	0	35	0	0	35	0	1	31	0	32	69
5:00 PM	0	0	0	0	0	0	42	0	0	42	0	0	32	0	32	74
Total	0	0	2	0	2	0	148	2	0	150	0	3	129	0	132	284
Approach %	0.0	0.0	100.0	-	-	0.0	98.7	1.3	-	-	0.0	2.3	97.7	-	-	-
Total %	0.0	0.0	0.7	-	0.7	0.0	52.1	0.7	-	52.8	0.0	1.1	45.4	-	46.5	-
PHF	0.000	0.000	0.250	-	0.250	0.000	0.881	0.500	-	0.893	0.000	0.375	0.949	-	0.971	0.959
Lights	0	0	2	-	2	0	148	2	-	150	0	3	128	-	131	283
% Lights	-	-	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	99.2	-	99.2	99.6
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	1	-	1	1
% Articulated Trucks	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.8	-	0.8	0.4
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Preliminary Site Plan


SIGN
MONUMENT
renovation building
ballard
privacy fence
h=6 feet
Shade
Use zone
window to be turned to door
PLAYGROUND
3902 sf
CEDEC
STAFF
RECEPTION
DIRECTOR
PARENTS
2 YEARS 1
2 YEARS 2
3 YEARS 1
3 YEARS 2
PRESCHOOL 1
PRESCHOOL 2
TODDLER 1
TODDLER 2
KITCHEN
window to be closed
vertical fence
h=4 feet
NEW CONCRETE WALK
vertical fence
h=4 feet
INFANT
PLAYGROUND
2211 sf
door to be opened
trash container
existing transformer
existing light pole
GFL Building 7,931.0 sf
GFL Plot 79,094.0 sf

CMAP 2050 Projections Letter

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

March 8, 2021

Brendan S. May
Senior Consultant
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: ***Dundee Road -Kennicott Avenue - Lake-Cook Road***
IDOT

Dear Mr. May:

In response to a request made on your behalf and dated March 8, 2021, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current Volumes	Year 2050 ADT
Dundee Rd east of IL 53	25,700	28,700
Kennicott Ave, @ Dundee Rd	4,300	4,800
Lake Cook Rd east of IL 53	49,900	51,100

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2020 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
2021_CY_TrafficForecast\ArlingtonHeights\ck-30-21\ck-30-21.docx

ITE Trip Generation Worksheets

Day Care Center
(565)

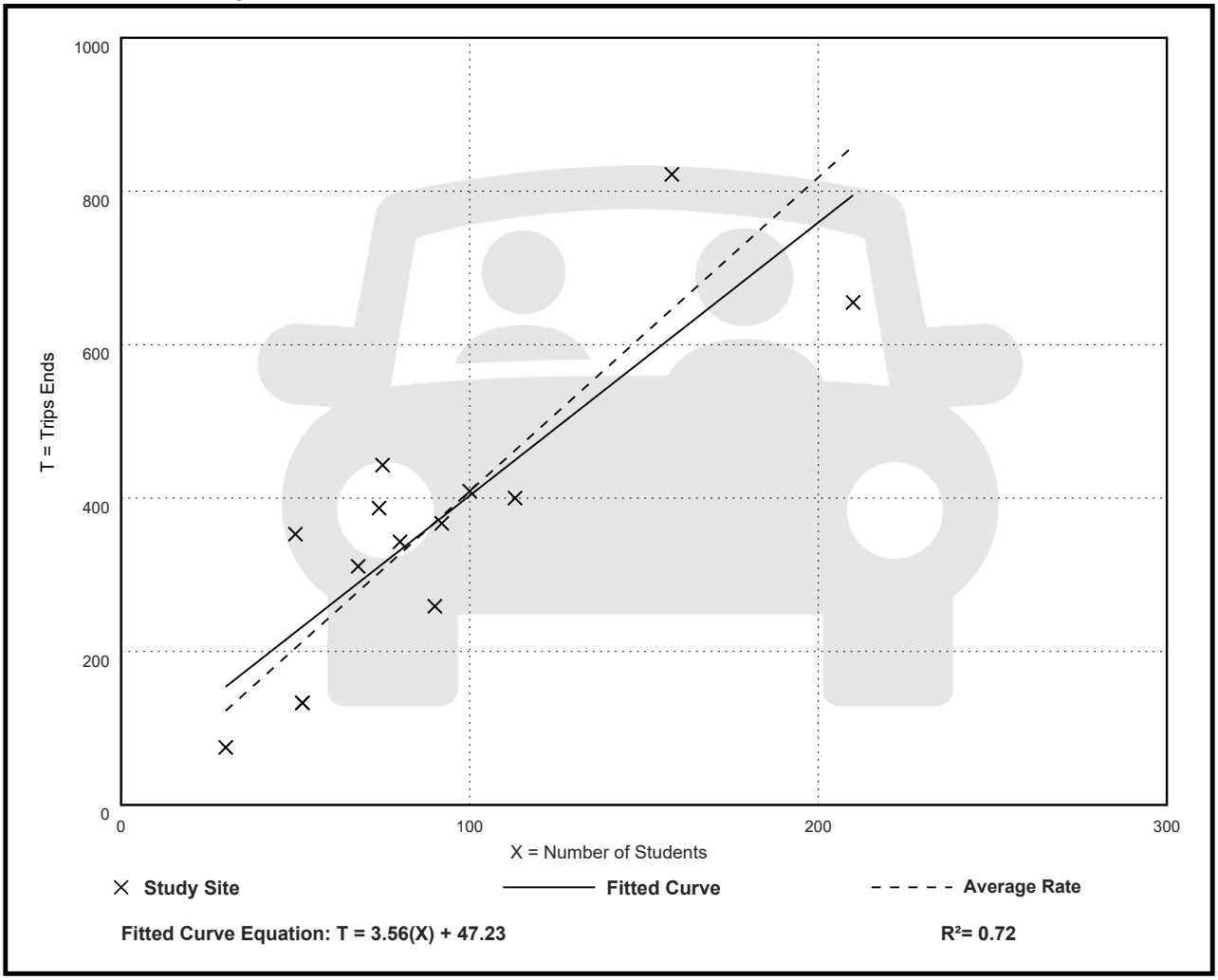
Vehicle Trip Ends vs: Students
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 14
Avg. Num. of Students: 89
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
4.09	2.50 - 7.06	1.21

Data Plot and Equation



Fitted Curve Equation: T = 3.56(X) + 47.23

R^2= 0.72

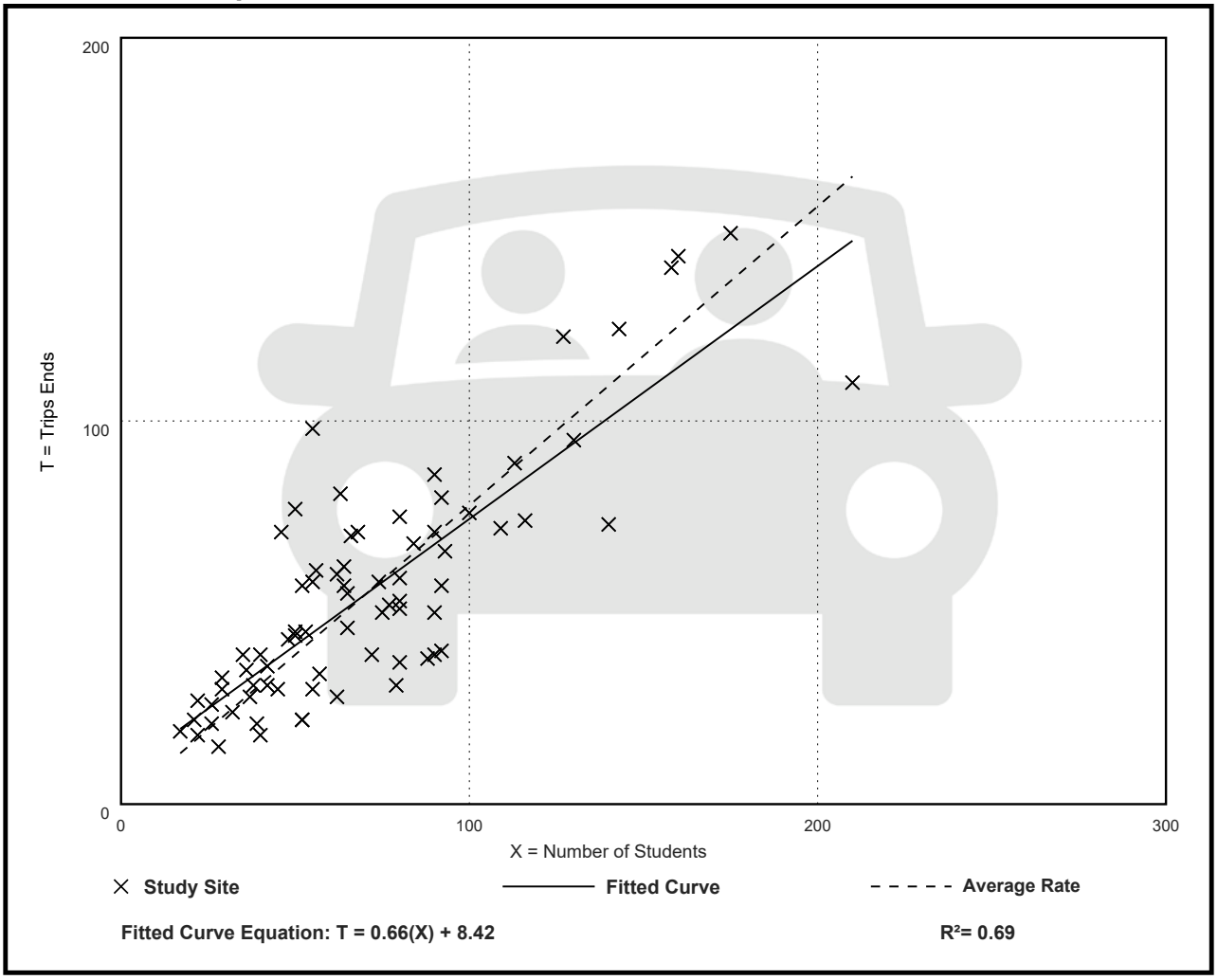
Day Care Center
(565)

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: 75
Avg. Num. of Students: 71
Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.78	0.39 - 1.78	0.25

Data Plot and Equation



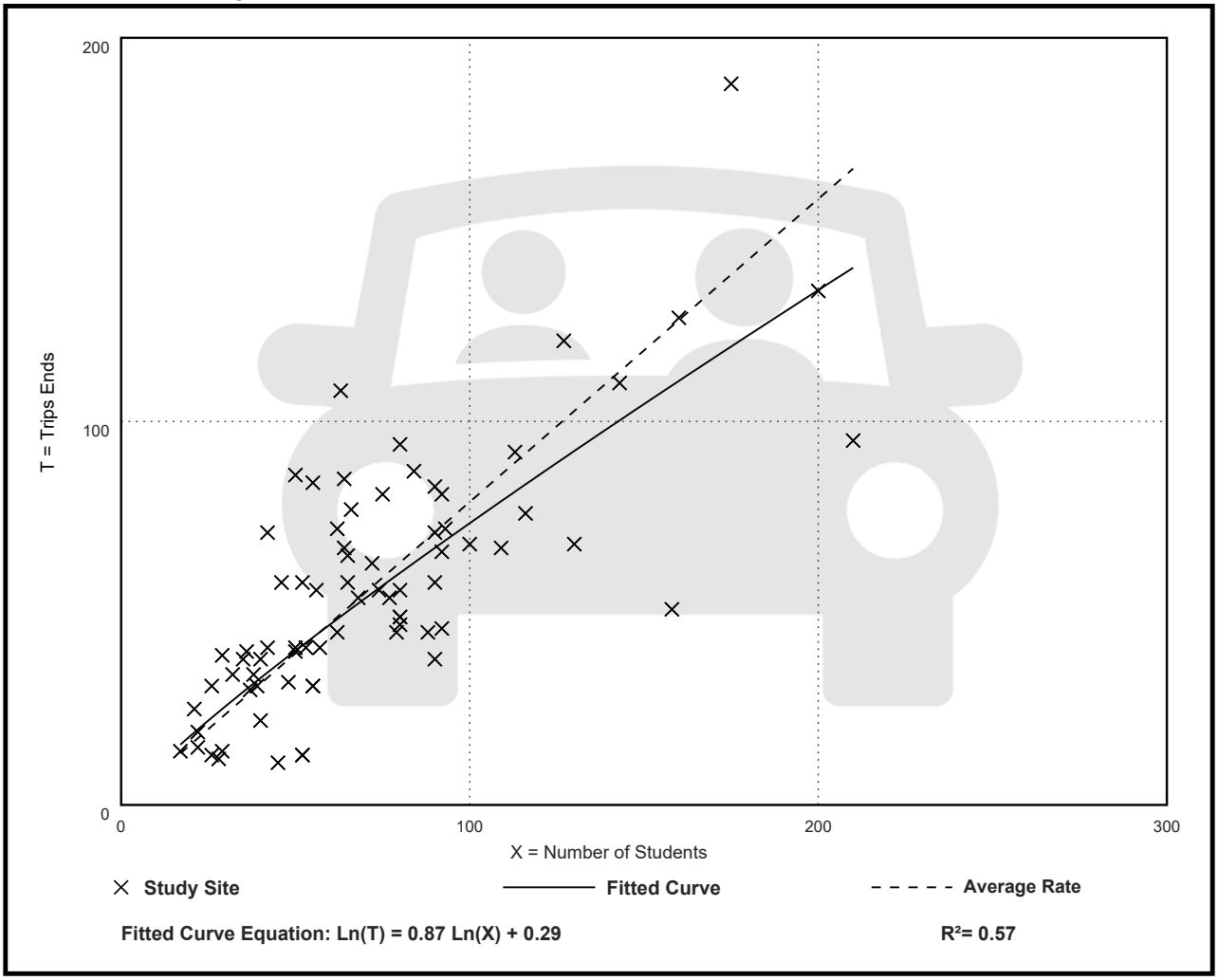
Day Care Center
(565)

Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 75
Avg. Num. of Students: 72
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.79	0.24 - 1.72	0.30

Data Plot and Equation



Level of Service Criteria

LEVEL OF SERVICE CRITERIA

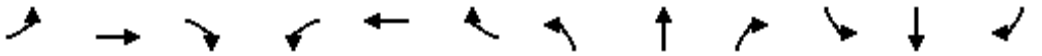
Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets

Year 2022 Base Weekday Morning Peak Hour Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	237	1921	59	22	949	60	13	48	87	82	45	187
Future Volume (vph)	237	1921	59	22	949	60	13	48	87	82	45	187
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	210		115	195		230	125		0	255		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	140			155			145			160		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.903				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3689	1615	1805	3619	1583	1745	1635	0	1711	1895	1473
Flt Permitted	0.216			0.048			0.726			0.354		
Satd. Flow (perm)	406	3689	1615	91	3619	1583	1333	1635	0	637	1895	1473
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			51			78		54				196
Link Speed (mph)		35			35			35			30	
Link Distance (ft)		623			1164			144			573	
Travel Time (s)		12.1			22.7			2.8			13.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	3%	0%	0%	5%	2%	0%	4%	0%	2%	2%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	252	2044	63	23	1010	64	14	144	0	87	48	199
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	6.0		3.0	6.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	25.0		6.5	12.0	6.5
Total Split (s)	22.0	86.0	14.0	14.0	78.0	15.0	14.0	25.0		15.0	26.0	22.0
Total Split (%)	15.7%	61.4%	10.0%	10.0%	55.7%	10.7%	10.0%	17.9%		10.7%	18.6%	15.7%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5		0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0		3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None		None	None	None
Act Effct Green (s)	102.8	94.4	106.8	93.3	84.8	101.2	22.8	13.8		30.2	19.6	37.6
Actuated g/C Ratio	0.73	0.67	0.76	0.67	0.61	0.72	0.16	0.10		0.22	0.14	0.27

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.61	0.82	0.05	0.17	0.46	0.05	0.06	0.69		0.40	0.18	0.37
Control Delay	11.7	17.5	2.8	12.6	14.0	0.6	41.0	53.9		48.7	53.3	7.3
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0		0.1	0.0	0.0
Total Delay	11.7	17.9	2.8	12.6	14.0	0.6	41.0	53.9		48.8	53.3	7.3
LOS	B	B	A	B	B	A	D	D		D	D	A
Approach Delay		16.9			13.2			52.8			24.7	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	65	465	6	5	213	0	10	80		65	39	2
Queue Length 95th (ft)	m102	932	m10	m19	258	5	28	151		110	72	70
Internal Link Dist (ft)		543			1084			64			493	
Turn Bay Length (ft)	210		115	195		230	125			255		
Base Capacity (vph)	480	2486	1289	192	2191	1177	286	268		225	282	598
Starvation Cap Reductn	0	122	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	8	0	0	35	0	0	1		4	0	1
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.53	0.86	0.05	0.12	0.47	0.05	0.05	0.54		0.39	0.17	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 55 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 18.0		Intersection LOS: B	
Intersection Capacity Utilization 82.9%		ICU Level of Service E	
Analysis Period (min) 15			

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

Splits and Phases: 1: Wilke Road & Dundee Road

Intersection	
Int Delay, s/veh	0.6

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	2	11	137	4	7	119
Future Vol, veh/h	2	11	137	4	7	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	3	0	14	1
Mvmt Flow	2	12	147	4	8	128

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	293	149	0	0	151	0
Stage 1	149	-	-	-	-	-
Stage 2	144	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.24	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.326	-
Pot Cap-1 Maneuver	702	903	-	-	1360	-
Stage 1	884	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	698	903	-	-	1360	-
Mov Cap-2 Maneuver	698	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	883	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	9.2	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	864	1360	-
HCM Lane V/C Ratio	-	-	0.016	0.006	-
HCM Control Delay (s)	-	-	9.2	7.7	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	139	0	3	118	0	2
Future Vol, veh/h	139	0	3	118	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	0	0	0	0	0
Mvmt Flow	146	0	3	124	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	146	0	276	146
Stage 1	-	-	-	-	146	-
Stage 2	-	-	-	-	130	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1448	-	718	906
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	901	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1448	-	717	906
Mov Cap-2 Maneuver	-	-	-	-	717	-
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	899	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	906	-	-	1448	-
HCM Lane V/C Ratio	0.002	-	-	0.002	-
HCM Control Delay (s)	9	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	139	0	1	117
Future Vol, veh/h	1	0	139	0	1	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	1	0	167	0	1	141

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	310	167	0	0	167	0
Stage 1	167	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	687	882	-	-	1423	-
Stage 1	867	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	686	882	-	-	1423	-
Mov Cap-2 Maneuver	686	-	-	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	888	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	686	1423	-
HCM Lane V/C Ratio	-	-	0.002	0.001	-
HCM Control Delay (s)	-	-	10.3	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	2	3	136	1	12	106
Future Vol, veh/h	2	3	136	1	12	106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	2	3	155	1	14	120

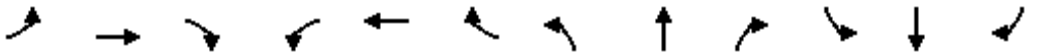
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	304	156	0	0	156	0
Stage 1	156	-	-	-	-	-
Stage 2	148	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	692	895	-	-	1436	-
Stage 1	877	-	-	-	-	-
Stage 2	884	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	685	895	-	-	1436	-
Mov Cap-2 Maneuver	685	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	875	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	9.5	0	0.8
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	797	1436	-
HCM Lane V/C Ratio	-	-	0.007	0.009	-
HCM Control Delay (s)	-	-	9.5	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Capacity Analysis Summary Sheets

Year 2022 Base Weekday Evening Peak Hour Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1442	37	68	1695	93	81	54	74	98	63	298
Future Volume (vph)	130	1442	37	68	1695	93	81	54	74	98	63	298
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	210		115	195		230	125		0	255		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	140			155			145			160		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.914				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3762	1615	1787	3762	1583	1745	1679	0	1745	1933	1546
Flt Permitted	0.046			0.123			0.570			0.621		
Satd. Flow (perm)	86	3762	1615	231	3762	1583	1047	1679	0	1141	1933	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			51			81		40				82
Link Speed (mph)		35			35			35			30	
Link Distance (ft)		623			1164			144			573	
Travel Time (s)		12.1			22.7			2.8			13.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	1%	0%	1%	1%	2%	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	134	1487	38	70	1747	96	84	132	0	101	65	307
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	6.0		3.0	6.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	12.0		6.5	12.0	6.5
Total Split (s)	20.0	88.0	15.0	14.0	82.0	14.0	15.0	24.0		14.0	23.0	20.0
Total Split (%)	14.3%	62.9%	10.7%	10.0%	58.6%	10.0%	10.7%	17.1%		10.0%	16.4%	14.3%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5		0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0		3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None		None	None	None
Act Effct Green (s)	103.0	92.1	111.9	93.7	84.2	100.2	27.2	13.6		23.8	13.2	29.7
Actuated g/C Ratio	0.74	0.66	0.80	0.67	0.60	0.72	0.19	0.10		0.17	0.09	0.21

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.61	0.60	0.03	0.30	0.77	0.08	0.31	0.66		0.43	0.36	0.78
Control Delay	31.1	27.5	4.5	8.3	17.5	1.1	47.5	57.6		50.8	62.9	51.0
Queue Delay	0.0	0.5	0.0	0.0	1.6	0.0	0.0	0.0		0.0	0.0	0.2
Total Delay	31.1	28.0	4.5	8.3	19.1	1.1	47.5	57.6		50.8	62.9	51.2
LOS	C	C	A	A	B	A	D	E		D	E	D
Approach Delay		27.7			17.8			53.7			52.7	
Approach LOS		C			B			D			D	
Queue Length 50th (ft)	56	667	4	11	288	1	63	81		77	56	195
Queue Length 95th (ft)	m92	m684	m12	m26	446	m3	109	150		103	104	305
Internal Link Dist (ft)		543			1084			64			493	
Turn Bay Length (ft)	210		115	195		230	125			255		
Base Capacity (vph)	261	2475	1307	277	2261	1161	275	250		243	234	427
Starvation Cap Reductn	0	502	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	319	0	0	0		0	0	6
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.51	0.75	0.03	0.25	0.90	0.08	0.31	0.53		0.42	0.28	0.73

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 60 (43%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 27.3		Intersection LOS: C	
Intersection Capacity Utilization 81.2%		ICU Level of Service D	
Analysis Period (min) 15			

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

Splits and Phases: 1: Wilke Road & Dundee Road

Intersection	
Int Delay, s/veh	0.7

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	8	10	199	10	12	156
Future Vol, veh/h	8	10	199	10	12	156
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	13	0	1	0	0	0
Mvmt Flow	8	10	205	10	12	161

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	395	210	0	0	215	0
Stage 1	210	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.53	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	589	835	-	-	1367	-
Stage 1	800	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	583	835	-	-	1367	-
Mov Cap-2 Maneuver	583	-	-	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	813	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	10.3	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	700	1367	-
HCM Lane V/C Ratio	-	-	0.027	0.009	-
HCM Control Delay (s)	-	-	10.3	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	204	0	2	162	1	5
Future Vol, veh/h	204	0	2	162	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	1	0	20
Mvmt Flow	210	0	2	167	1	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	210	0	381	210
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	171	-
Critical Hdwy	-	-	4.1	-	6.4	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.48
Pot Cap-1 Maneuver	-	-	1373	-	625	787
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1373	-	624	787
Mov Cap-2 Maneuver	-	-	-	-	624	-
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	862	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	754	-	-	1373	-
HCM Lane V/C Ratio	0.008	-	-	0.002	-
HCM Control Delay (s)	9.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	202	2	3	160
Future Vol, veh/h	0	2	202	2	3	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	0	2	210	2	3	167

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	384	211	0	0	212	0
Stage 1	211	-	-	-	-	-
Stage 2	173	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	623	834	-	-	1370	-
Stage 1	829	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	622	834	-	-	1370	-
Mov Cap-2 Maneuver	622	-	-	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	860	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	834	1370	-
HCM Lane V/C Ratio	-	-	0.002	0.002	-
HCM Control Delay (s)	-	-	9.3	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	1

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	22	14	190	0	3	157
Future Vol, veh/h	22	14	190	0	3	157
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	24	15	209	0	3	173

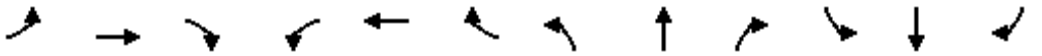
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	388	209	0	0	209	0
Stage 1	209	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	619	836	-	-	1374	-
Stage 1	831	-	-	-	-	-
Stage 2	857	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	618	836	-	-	1374	-
Mov Cap-2 Maneuver	618	-	-	-	-	-
Stage 1	831	-	-	-	-	-
Stage 2	855	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	10.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	688	1374	-
HCM Lane V/C Ratio	-	-	0.058	0.002	-
HCM Control Delay (s)	-	-	10.6	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Capacity Analysis Summary Sheets

2028 Projected Weekday Morning Peak Hour Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	279	2009	84	38	978	70	35	52	102	85	49	196
Future Volume (vph)	279	2009	84	38	978	70	35	52	102	85	49	196
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	210		115	195		230	125		0	255		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	140			155			145			160		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.900				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3689	1615	1805	3619	1583	1745	1631	0	1711	1895	1473
Flt Permitted	0.199			0.050			0.696			0.406		
Satd. Flow (perm)	374	3689	1615	95	3619	1583	1278	1631	0	731	1895	1473
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			51			78		59				172
Link Speed (mph)		35			35			35			30	
Link Distance (ft)		623			1164			144			573	
Travel Time (s)		12.1			22.7			2.8			13.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	3%	0%	0%	5%	2%	0%	4%	0%	2%	2%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	297	2137	89	40	1040	74	37	164	0	90	52	209
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	6.0		3.0	6.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	25.0		6.5	12.0	6.5
Total Split (s)	22.0	86.0	14.0	14.0	78.0	15.0	14.0	25.0		15.0	26.0	22.0
Total Split (%)	15.7%	61.4%	10.0%	10.0%	55.7%	10.7%	10.0%	17.9%		10.7%	18.6%	15.7%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5		0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0		3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None		None	None	None
Act Effct Green (s)	101.7	91.1	108.9	91.0	82.0	98.5	26.3	14.8		27.8	16.7	33.8
Actuated g/C Ratio	0.73	0.65	0.78	0.65	0.59	0.70	0.19	0.11		0.20	0.12	0.24

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.73	0.89	0.07	0.29	0.49	0.07	0.13	0.73		0.41	0.23	0.43
Control Delay	20.1	19.9	3.2	20.6	15.5	1.0	41.9	56.6		49.2	55.3	11.0
Queue Delay	0.0	1.8	0.0	0.0	0.1	0.0	0.0	0.0		0.1	0.0	0.0
Total Delay	20.1	21.8	3.2	20.6	15.5	1.0	41.9	56.6		49.2	55.3	11.0
LOS	C	C	A	C	B	A	D	E		D	E	B
Approach Delay		20.9			14.8			53.9			27.4	
Approach LOS		C			B			D			C	
Queue Length 50th (ft)	89	457	11	9	220	0	27	93		67	43	25
Queue Length 95th (ft)	m161	#1163	m15	40	270	8	56	171		113	77	85
Internal Link Dist (ft)		543			1084			64			493	
Turn Bay Length (ft)	210		115	195		230	125			255		
Base Capacity (vph)	458	2400	1286	192	2120	1148	298	272		229	274	531
Starvation Cap Reductn	0	139	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	49	0	0	193	0	0	1		4	0	9
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.65	0.95	0.07	0.21	0.54	0.06	0.12	0.61		0.40	0.19	0.40

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 55 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 21.3 Intersection LOS: C
Intersection Capacity Utilization 86.5% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Wilke Road & Dundee Road

Intersection	
Int Delay, s/veh	0.5

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	2	11	178	4	7	164
Future Vol, veh/h	2	11	178	4	7	164
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	3	0	14	1
Mvmt Flow	2	12	191	4	8	176

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	385	193	0	0	195	0
Stage 1	193	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.24	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.326	-
Pot Cap-1 Maneuver	622	854	-	-	1309	-
Stage 1	845	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	618	854	-	-	1309	-
Mov Cap-2 Maneuver	618	-	-	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	839	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	9.5	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	807	1309	-
HCM Lane V/C Ratio	-	-	0.017	0.006	-
HCM Control Delay (s)	-	-	9.5	7.8	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	146	0	45	121	1	36
Future Vol, veh/h	146	0	45	121	1	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	0	0	0	0	0
Mvmt Flow	154	0	47	127	1	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	154	0	375	154
Stage 1	-	-	-	-	154	-
Stage 2	-	-	-	-	221	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1439	-	630	897
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	821	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1439	-	608	897
Mov Cap-2 Maneuver	-	-	-	-	608	-
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	886	-	-	1439	-
HCM Lane V/C Ratio	0.044	-	-	0.033	-
HCM Control Delay (s)	9.3	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	4	142	8	1	121
Future Vol, veh/h	7	4	142	8	1	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	8	5	171	10	1	146

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	324	176	0	0	181	0
Stage 1	176	-	-	-	-	-
Stage 2	148	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	674	872	-	-	1407	-
Stage 1	859	-	-	-	-	-
Stage 2	884	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	673	872	-	-	1407	-
Mov Cap-2 Maneuver	673	-	-	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	883	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	734	1407	-
HCM Lane V/C Ratio	-	-	0.018	0.001	-
HCM Control Delay (s)	-	-	10	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	2	6	144	1	14	114
Future Vol, veh/h	2	6	144	1	14	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	2	7	164	1	16	130

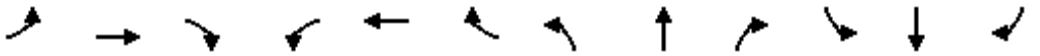
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	327	165	0	0	165	0
Stage 1	165	-	-	-	-	-
Stage 2	162	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	671	885	-	-	1426	-
Stage 1	869	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	663	885	-	-	1426	-
Mov Cap-2 Maneuver	663	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	862	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	9.5	0	0.8
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	817	1426	-
HCM Lane V/C Ratio	-	-	0.011	0.011	-
HCM Control Delay (s)	-	-	9.5	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Capacity Analysis Summary Sheets

2028 Projected Weekday Evening Peak Hour Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	1486	60	83	1780	97	108	57	91	112	67	339
Future Volume (vph)	140	1486	60	83	1780	97	108	57	91	112	67	339
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	210		115	195		230	125		0	255		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	140			155			145			160		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.908				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3762	1615	1787	3762	1583	1745	1668	0	1745	1933	1546
Flt Permitted	0.049			0.109			0.552			0.554		
Satd. Flow (perm)	91	3762	1615	205	3762	1583	1014	1668	0	1018	1933	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			51			80		47				65
Link Speed (mph)		35			35			35			30	
Link Distance (ft)		623			1164			144			573	
Travel Time (s)		12.1			22.7			2.8			13.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	1%	0%	1%	1%	2%	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	144	1532	62	86	1835	100	111	153	0	115	69	349
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	6.0		3.0	6.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	12.0		6.5	12.0	6.5
Total Split (s)	20.0	88.0	15.0	14.0	82.0	14.0	15.0	24.0		14.0	23.0	20.0
Total Split (%)	14.3%	62.9%	10.7%	10.0%	58.6%	10.0%	10.7%	17.1%		10.0%	16.4%	14.3%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5		0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0		3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None		None	None	None
Act Effct Green (s)	102.3	88.8	108.6	89.9	79.9	96.1	28.6	14.5		24.3	13.6	33.3
Actuated g/C Ratio	0.73	0.63	0.78	0.64	0.57	0.69	0.20	0.10		0.17	0.10	0.24

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.55	0.64	0.05	0.40	0.86	0.09	0.40	0.71		0.50	0.37	0.84
Control Delay	29.7	29.8	5.8	11.6	20.9	1.2	49.0	59.6		52.9	62.6	57.2
Queue Delay	0.0	0.6	0.0	0.0	17.5	0.0	0.0	0.0		0.0	0.0	0.4
Total Delay	29.7	30.4	5.8	11.6	38.4	1.2	49.0	59.6		52.9	62.6	57.5
LOS	C	C	A	B	D	A	D	E		D	E	E
Approach Delay		29.4			35.4			55.1			57.2	
Approach LOS		C			D			E			E	
Queue Length 50th (ft)	66	697	12	15	307	1	84	94		87	60	245
Queue Length 95th (ft)	m102	m713	m22	m30	460	m3	138	169		123	108	360
Internal Link Dist (ft)		543			1084			64			493	
Turn Bay Length (ft)	210		115	195		230	125			255		
Base Capacity (vph)	276	2386	1265	254	2146	1114	280	255		233	234	428
Starvation Cap Reductn	0	430	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	357	0	0	0		0	0	5
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.52	0.78	0.05	0.34	1.03	0.09	0.40	0.60		0.49	0.29	0.83

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 60 (43%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 36.8		Intersection LOS: D	
Intersection Capacity Utilization 86.0%		ICU Level of Service E	
Analysis Period (min) 15			

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

Splits and Phases: 1: Wilke Road & Dundee Road

Intersection	
Int Delay, s/veh	0.6

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	8	10	246	10	12	198
Future Vol, veh/h	8	10	246	10	12	198
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	13	0	1	0	0	0
Mvmt Flow	8	10	254	10	12	204

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	487	259	0	0	264	0
Stage 1	259	-	-	-	-	-
Stage 2	228	-	-	-	-	-
Critical Hdwy	6.53	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	520	785	-	-	1312	-
Stage 1	759	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	515	785	-	-	1312	-
Mov Cap-2 Maneuver	515	-	-	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	777	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	10.8	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	637	1312	-
HCM Lane V/C Ratio	-	-	0.029	0.009	-
HCM Control Delay (s)	-	-	10.8	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	213	0	39	167	2	43
Future Vol, veh/h	213	0	39	167	2	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	1	0	2
Mvmt Flow	220	0	40	172	2	44

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	220	0	472	220
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	252	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1361	-	554	820
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1361	-	536	820
Mov Cap-2 Maneuver	-	-	-	-	536	-
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	770	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	801	-	-	1361	-
HCM Lane V/C Ratio	0.058	-	-	0.03	-
HCM Control Delay (s)	9.8	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	6	207	8	3	166
Future Vol, veh/h	6	6	207	8	3	166
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	6	6	216	8	3	173

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	399	220	0	0	224	0
Stage 1	220	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	611	825	-	-	1357	-
Stage 1	821	-	-	-	-	-
Stage 2	857	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	610	825	-	-	1357	-
Mov Cap-2 Maneuver	610	-	-	-	-	-
Stage 1	821	-	-	-	-	-
Stage 2	855	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	701	1357	-
HCM Lane V/C Ratio	-	-	0.018	0.002	-
HCM Control Delay (s)	-	-	10.2	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	22	16	199	0	5	167
Future Vol, veh/h	22	16	199	0	5	167
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	24	18	219	0	5	184

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	413	219	0	0	219	0
Stage 1	219	-	-	-	-	-
Stage 2	194	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	599	826	-	-	1362	-
Stage 1	822	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	597	826	-	-	1362	-
Mov Cap-2 Maneuver	597	-	-	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	841	-	-	-	-	-

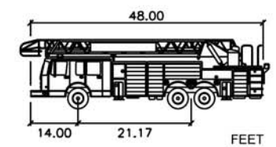
Approach	NW	NE	SW
HCM Control Delay, s	10.7	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	676	1362	-
HCM Lane V/C Ratio	-	-	0.062	0.004	-
HCM Control Delay (s)	-	-	10.7	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

AutoTurn Exhibits (Figure A1 and A2)

SCALE: 1" = 60'

ARLINGTON HTS FT TOWER 131



FEET

WIDTH	: 8.50
TRACK	: 8.00
LOCK TO LOCK TIME	: 6.00
STEERING ANGLE	: 40.0

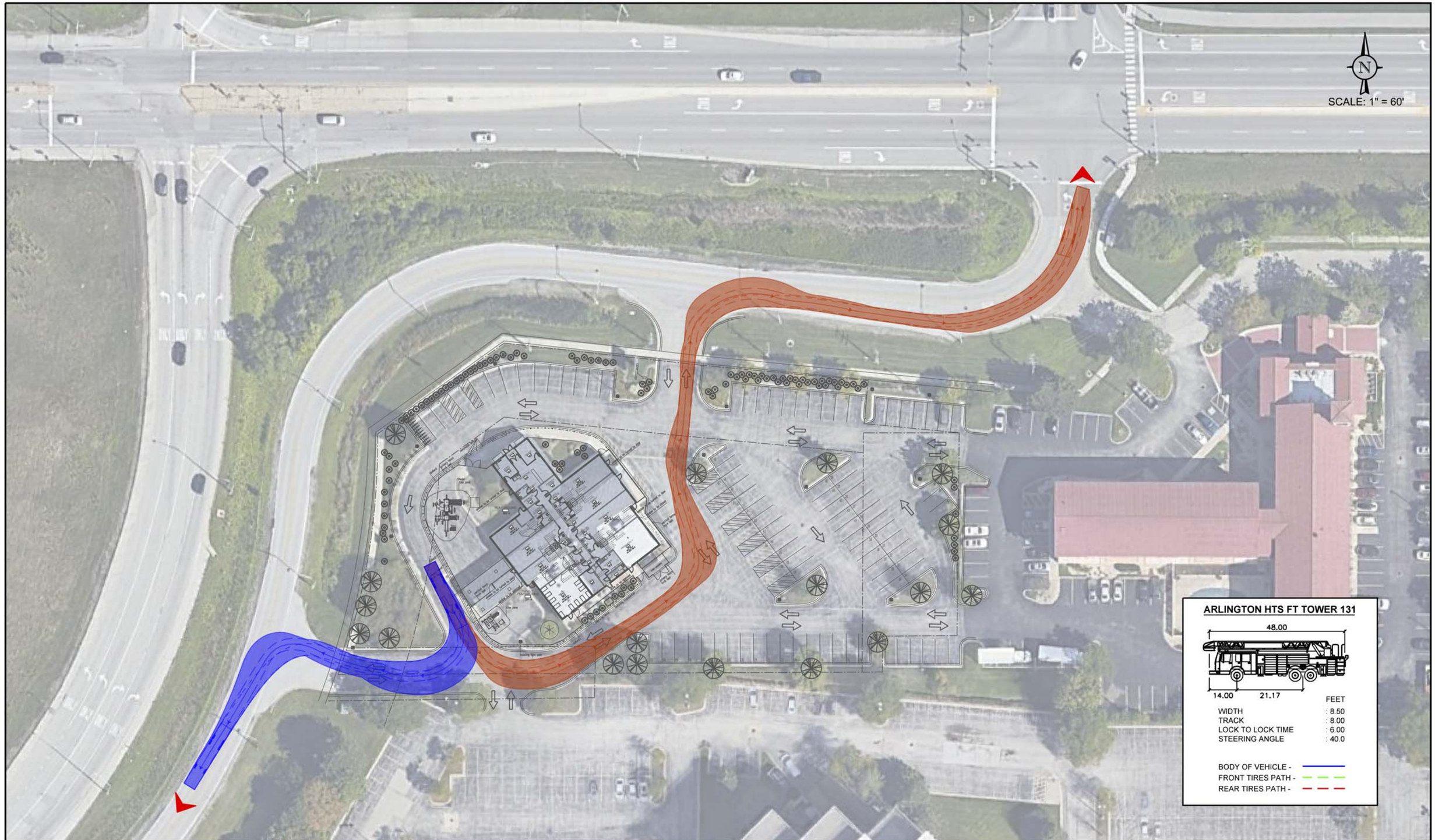
BODY OF VEHICLE -
FRONT TIRES PATH -
REAR TIRES PATH -

ECOLE DAY CARE
ARLINGTON HEIGHTS, ILLINOIS

FIRE TRUCK INBOUND MANEUVERS

DRAWN: MD CHECKED: JM
DATE: 06-22-22 REV: 09-14-22
PROJECT # 22-204
EXHIBIT: A1

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.



ECOLE DAY CARE
ARLINGTON HEIGHTS, ILLINOIS

FIRE TRUCK OUTBOUND MANEUVERS

DRAWN: MD
DATE: 06-22-22
PROJECT # 22-204
CHECKED: JM
REV: 09-14-22
EXHIBIT: A2

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.