

MEMORANDUM TO: Rob Snook
Snook Properties

FROM: Javier Millan
Principal

Luay R. Aboona, PE, PTOE
Principal

DATE: July 6, 2024

SUBJECT: Summary Traffic and Parking Evaluation
Proposed Aerial Lift Company
Naperville, Illinois

This memorandum presents the findings and recommendations of a summary traffic and parking evaluation conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed Aerial Lift Company to be located at 1880 County Farm Drive in Naperville, Illinois. The plans call for repurposing the existing building into an aerial lift rental facility providing 126,509 square feet of warehouse space and 36,229 square feet of office space (a total of 162,738 square feet) with 60 employees. As part of the proposed plan, the parking lot will be modified to provide a total supply of 99 spaces.

The purpose of this summary traffic and parking evaluation is to determine the amount of traffic the proposed facility will generate, compare it with the previous use on site and determine the adequacy of the parking supply in meeting the projected demand of the facility. **Figure 1** shows an aerial view of the site.

Proposed Operational Characteristics

Based on information provided by the operator, the following is a summary of the operational characteristics of the proposed facility.

- Number of full-time employees – 60
- Hours of operation – Monday through Friday 7:00 A.M. to 4:30 P.M.
- Type of rental equipment and services – Rental and sales of aerial work equipment and forklifts and minor repairs
- Daily deliveries – 20 semi trucks
- Approximately 98 percent of all the rentals and sales are made over the phone/online.



Aerial View of Site

Figure 1

Trip Generation Comparison

The existing 162,738 square-foot building was operated previously as a warehouse facility. As indicated, the plans call for repurposing the existing building into an aerial lift rental facility with 60 employees. It is important to note that approximately 98 percent of all the rentals and sales are made over the phone/online, thus generating very few customers trips.

The volume of traffic that was previously generated by the building was estimated based on trip rates published by the Institute of Transportation Engineers (ITE) in its 11th Edition of the *Trip Generation Manual* and for the proposed use based on its operational characteristics discussed earlier. **Table 1** shows the trip generation comparison.

Table 1

TRIP GENERATION COMPARISON – 162,738 S.F. BUILDING
WAREHOUSE COMPARED TO PROPOSED USES BY APPLICANT

ITE Land - Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
150	Warehousing (162,738 s.f.)	31	9	40	10	31	41	100	100	200
	<i>Trucks</i>	2	1	3	3	2	5	48	47	95
	Total	33	10	43	13	33	46	148	147	295
--	Aerial Lift Rental Facility ¹	40	1	41	2	40	42	65	65	130
	<i>Trucks</i>	1	0	1	1	0	1	10	10	20
	Total	41	1	42	3	40	43	75	75	150
	Difference	+8	-9	-1	-10	+7	-3	-73	-72	-145

1 – Assumes that 2/3 of the employees will arrive and depart during the peak hours

As can be seen from Table 1, the proposed facility will have a similar trip generation to the warehouse use during the peak hours. However, the proposed facility will generate fewer daily trips given that, as previously indicated, most of their rentals/sales of equipment are conducted over the phone/online, thus generating very few customer trips. As such, the proposed facility will not have a negative impact on traffic conditions on the adjacent area roadways.

Parking Evaluation

The parking demand of the proposed facility was determined based on the following:

- City of Naperville Parking Code
- Operational Characteristics of the Proposed Facility
- Parking Survey of Existing Facilities

Parking Requirements per City Code

Based on discussions with the City of Naperville staff, the aerial lift rental facility should provide one (1) parking space per 1,000 square feet of warehouse space and 3.3 parking spaces per 1,000 square feet of office space. Therefore, the proposed development should provide a total of 246 parking spaces. As such, the proposed development is short of meeting the City's parking requirement by 147 spaces.

Parking Requirements per Operational Characteristics

Based on the information provided to KLOA, Inc, assuming every employee drives a vehicle and given that the majority of the rentals and sales are made over the phone/online, the facility is expected to have a peak parking demand of approximately 65 vehicles.

Parking Requirements per Parking Surveys

It is our understanding that the proposed facility will consolidate three existing facilities located as follows:

- Illini Hi Reach – 13633 Main Street, Lemont, IL
- Time Savers Aerial Lifts – 725 Kimberly Drive, Carol Stream, IL
- Illini Hi Reach – 1940 N. Lafayette Court, Griffith, IN

In order to determine the existing parking demand of each facility, KLOA, Inc. conducted parking occupancy surveys on a weekday in March 2024 at the three existing facilities from 9:00 A.M. to 5:00 P.M. The results of the surveys for each individual facility are included in the Appendix. **Table 2** shows the combined passenger vehicle parking demand of all three existing facilities.

Table 2
 COMBINED PASSENGER VEHICLE PARKING OCCUPANCY RESULTS

Time	Lemont	Carol Stream	Griffith, Indiana	Total
9:00 AM	8	23	22	53
10:00 AM	8	23	23	54
11:00 AM	8	22	22	52
12:00 PM	8	19	22	49
1:00 PM	7	19	24	50
2:00 PM	7	17	25	49
3:00 PM	6	15	19	40
4:00 PM	7	14	18	39
5:00 PM	3	1	16	20

As can be seen from Table 2, the peak parking demand of the combined facilities will be 54 parked vehicles at 10:00 A.M. This peak parking demand can easily be accommodated by the proposed 99 parking spaces.

Conclusion

Based on the preceding evaluation, the proposed parking supply of 99 parking spaces is greater than the projected peak parking demand of the proposed facility based on its operational characteristics and the combined parking occupancy survey results. As such, the proposed 99-space parking capacity will adequately accommodate the parking demand of the proposed facility.

Appendix

Table A
 PARKING OCCUPANCY RESULTS – TUESDAY, MARCH 12, 2024
 ILLINI HI REACH – 13633 MAIN STREET, LEMONT, IL)

Time	Passenger Vehicles	Flatbed Trucks	Single-Unit Trucks	Total
9:00 AM	8	0	0	8
10:00 AM	8	1	0	9
11:00 AM	8	0	0	8
12:00 PM	8	2	0	10
1:00 PM	7	1	1	9
2:00 PM	7	1	0	8
3:00 PM	6	2	0	8
4:00 PM	7	2	0	9
5:00 PM	3	2	0	5

Table B
 PARKING OCCUPANCY RESULTS – WEDNESDAY, MARCH 13, 2024
 TIME SAVERS AERIAL LIFTS – 725 KIMBERLY DRIVE, CAROL STREAM, IL)

Time	Passenger Vehicles	Flatbed Trucks	Single-Unit Trucks	Total
9:00 AM	23	1	0	24
10:00 AM	23	2	1	26
11:00 AM	22	2	2	26
12:00 PM	19	1	0	20
1:00 PM	19	4	1	24
2:00 PM	17	2	1	20
3:00 PM	15	1	1	17
4:00 PM	14	1	1	16
5:00 PM	1	1	1	3

Table C
 PARKING OCCUPANCY RESULTS – WEDNESDAY, MARCH 13, 2024
 ILLINI HI REACH – 1940 N. LAFAYETTE COURT, GRIFFITH, IN)

Time	Passenger Vehicles	Flatbed Trucks	Single-Unit Trucks	Total
9:00 AM	22	1	9	32
10:00 AM	23	0	9	32
11:00 AM	22	1	9	32
12:00 PM	22	1	7	30
1:00 PM	24	1	8	33
2:00 PM	25	1	8	34
3:00 PM	19	0	8	27
4:00 PM	18	0	7	25
5:00 PM	16	1	8	25

Note: The flatbed and single-unit trucks will be stored internally within the storage area and loading docks and will not utilize or occupy any of the proposed parking spaces.