

MEMORANDUM TO: William L. Bohne, P.E.
Jacob & Hefner Associates, Inc.

FROM: Michael A. Werthmann, PE, PTOE
Principal

DATE: September 25, 2025

SUBJECT: Addendum to Traffic Study
Revised Development Plan
Proposed Data Center
Naperville, Illinois

This memorandum is an addendum to the traffic study dated August 26, 2025 prepared by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed data center to be located in Naperville, Illinois. The site of the data center, which contained the former Lucent office complex, is located in the northwest quadrant of the intersection of Naperville Road with Warrenville Road. As proposed, the original development plan was to consist of two data center buildings totaling approximately 422,500 square feet with approximately 120 surface parking spaces and 114 landbanked parking spaces for a total of 234 parking spaces. Access to the development under the original development plan was to be provided via one full-movement access drive and one emergency access drive on Lucent Lane and one emergency access drive on Weatherbee Lane.

Since the August 26, 2025 traffic study was completed, the development plan has been revised and is proposed to contain a single approximately 144,750 square-foot building with a proposed approximately 64,650 square-foot expansion for a total of approximately 209,400 square feet. As proposed, the revised development plan is to have a total of 60 parking spaces and 114 landbanked parking spaces for a total of 174 parking spaces. Access to the development under the revised development plan is to be provided via one full-movement access drive and one emergency access drive on Lucent Lane only. **Table 1** provides a comparison between the original and revised development plans. A copy of the revised site plan is located in the Appendix.

Table 1
COMPARISON OF THE ORIGINAL AND REVISED DEVELOPMENT PLANS

Characteristics	Original Development Plan	Revised Development Plan
Number of Buildings	Two	One
Total Square Footage	422,500 square feet	209,400 square feet
Parking Spaces	120 spaces 114 landbanked spaces	60 spaces 114 landbanked spaces
Development Access	Full drive on Lucent Ln Emergency drive on Lucent Ln Emergency drive on Weatherbee Ln	Full drive on Lucent Ln Emergency drive on Lucent Ln

The purpose of this addendum was to evaluate if the revised development plan has any impact on the overall findings and recommendations of the traffic study.

Trip Generation

With the reduction in the amount of data center square footage, the volume of traffic to be generated by the data center proposed as part of the revised development plan will be reduced compared to the data center proposed as part of the original development plan. **Table 2** shows the weekday morning and evening peak hour traffic estimated to be generated by the data center assuming the original and revised development plans. From the table it can be seen that the data center proposed under the revised development plan is estimated to generate approximately one half the volume of traffic that was projected to be generated by the data center assuming the original development plan.

Table 2
TRIP GENERATION ESTIMATES – DATA CENTER

	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	In	Out	Total	In	Out	Total
Original Development Plan (422,000 square feet)	50	15	65	15	70	85
Revised Development Plan (209,400 square feet)	25	8	33	8	35	43

Conclusions

Given that the revised development plan is estimated to generate approximately 50 percent less traffic than the original development plan, the impact of the revised development will be less than that projected for the original development plan. As such, the overall findings and recommendations of the original traffic study are still valid and are summarized below:

- A trip generation comparison showed that the former office building generated approximately 7.5 to 10 times more peak hour traffic than that estimated to be generated by the proposed data center. As such, it can be seen that the proposed data center is a far less traffic-generating land use than the previous office building.
- The proposed data center is projected to generate a low volume of traffic, especially when compared to the previous use of the site as a multi-story office building.

- Access to the development will be provided via the following three access drives:
 - Vehicle access to the development is proposed via an access drive located on the east side of Lucent Lane located opposite Barkei Lane at the location of the former Lucent access road. This access drive will be constructed as part of Phase I and will provide one inbound lane and one outbound lane with the outbound movements under stop sign control. In addition, this access drive will be gated with the inbound and outbound gates located approximately 320 feet east of Lucent Lane. As such, the inbound gates will be located to accommodate approximately 13 to 16 vehicles without stacking onto Lucent Lane.
 - Emergency access only to the development is proposed via an access drive located on the east side of Lucent Lane approximately 390 feet north of Barkei Lane. This access drive will be constructed as part of Phase I and will provide one inbound lane and one outbound lane with the outbound movements under stop sign control. The access drive will be gated for emergency access only.
- The proposed access system will adequately accommodate site-generated traffic.
- The roadway system generally has sufficient reserve capacity to accommodate the traffic generated by the proposed development and no roadway improvements and/or traffic control modifications are required.
- Based on the operation of the data center as provided by the project team, the 60 parking spaces to be provided by the data center building and the 114 landbanked parking spaces will be sufficient to meet its peak parking demand.

Appendix

