



Memorandum

TO: Claudia and Eduardo Olague
Olague Farms Meat Packing, Inc

FROM: Stephen B. Corcoran, P.E., PTOE
Director of Traffic Engineering

DATE: March 12, 2025

RE: Meat Processing Plant
Traffic Analysis
15712 Nelson Road
McHenry County, Illinois

This memorandum summarizes a traffic analysis conducted for a proposed 8,974 square foot meat processing plant at 15712 Nelson Avenue in unincorporated McHenry County, Illinois. The purpose of the study was to estimate the amount of site traffic generated by the plant and to determine any traffic impacts or required roadway improvements.

Site Location

The existing 8.28 acres site is located at 15712 Nelson Avenue in unincorporated McHenry County, Illinois. It has a Woodstock mailing address. The site is occupied by a home and several support buildings with holding pens for cattle and sheep. Most of the property is used for farming alfalfa which will not change. It is used as a staging location for local farmers to deliver their cattle or sheep to the farm until the animals can be brought to an off-site meat processing plant. There is one full access drive that is shared with an adjacent landowner on Nelson Road. Uses around the site consist of agricultural land, the Hartland Township campus, and other rural homes and businesses.

Existing Roadways

Nelson Road is an east-west undivided arterial with one travel lane in each direction. The road has a 40-mph speed limit and under the jurisdiction of the McHenry Division of Transportation. Traffic counts by McHenry County from 2019 showed 2,033 Average Annual Daily Traffic (AADT) and the Illinois Department of Transportation's count database showed an AADT of 1,800 in 2021.

Trip Generation

The site traffic generated by the proposed plant was estimated from data in the Institute of Transportation Engineer's Trip Generation 11th Ed. manual which contains trip generation surveys of similar uses. The resulting site traffic volumes for the proposed use is shown in **Table 1**. Traffic volumes were calculated based on the size of the building and on the number of employees (15 max) with the higher volumes used. A copy of the trip generation calculations is attached. Overall, the volume of traffic is very low.

Table 1
Site Traffic Volume Comparison

Use and Size	ITE LUC	Morning Peak			Evening Peak		
		In	Out	Total	In	Out	Total
Light Industrial	110	9	1	10	1	6	7

The proposed will have minimal impact on traffic along Nelson Road with a maximum of 15 employees and about 30 vehicular visits per week, primarily farmers. These are vehicle types consistent with those currently visiting the property now, namely trucks with livestock trailers and an occasional livestock truck.

Truck traffic currently transporting animals to an off-site processing plant will be replaced by a similar volume of trucks picking up and delivering the plant's products.

Directional Distribution

The directional distribution of staff and delivery traffic was estimated based on the surrounding road network serving the site. Site traffic would be evenly distributed east and west of the site. Fifty percent would approach from the west and fifty percent from the east.

Turning Volumes

Based on the site trip generation and directional distribution analyses, the volume of traffic turning right or left into and out of the site would be range from 1 to 5 vehicles per hour per movement. These low levels of turning traffic would not warrant left- or right-turn lanes on Nelson Road.

Right-of-way Dedication

In front of the site, Nelson Road has 66 feet of right-of-way with 33 feet on either side of the centerline. According to the McHenry County Access Control and Right-of-Way Management Ordinance, Nelson Road is an arterial road that requires a 55-foot half right-of-way or 110 feet total right-of-way. The subject site will be required to dedicate an additional 22 feet of property to McHenry County Division of Transportation.

Conclusion

The proposed addition of a meat processing plan at 15712 Nelson Avenue in unincorporated McHenry County will generate low volumes of traffic throughout the week and during peak hours. No roadway improvements would be required on Nelson Road. However, a dedication of 22 feet of property along Nelson Road would be required.