

INTRODUCTION

Traffic Engineering Consultants, Inc. (TEC) was retained to conduct a traffic impact review of a proposed restaurant to be constructed on the northeast corner of Lindsey Street and Berry Road in Norman, Oklahoma as shown in **Figure 1** in **Attachment A**.

The proposed restaurant would be approximately 4,200 square feet and would have one fullaccess driveway on Berry Road and one right-in/right-out driveway on Lindsey Street as shown in **Figure 2** in **Attachment A**. Lindsey Street is a four-lane divided east/west principal urban arterial west of Berry Road and a two-lane minor urban arterial east of Berry Road. It has a posted speed limit of 30 mph and carries an approximate average daily traffic (ADT) of 21,650 vehicles per day (vpd) west of Berry Road and a posted speed limit of 25 mph and carried an approximate ADT of 18,100 vpd east of Berry Road. Berry Road is a two-lane north/south minor urban arterial. It has a posted speed limit of 30 mph and carries an approximate ADT of 8,400 vpd north of Lindsey Street and 4,200 vpd south of Lindsey Street.

SITE GENERATED TRIPS

To determine the effects a new development will have on an existing street system, new or additional trips must be projected. The latest edition of the *Trip Generation Manual*, published by the Institute of Transportation Engineers, was used to determine the amount of trips the development is expected to generate. The report is a nationally accepted reference which provides trip rates for determining the trips expected to be generated by different land use types.

Available information was utilized regarding the anticipated land use to determine the site generated trips. The *High-Turnover Sit-Down Restaurant* category was selected to determine the trip generation of the proposed residential development. The resulting traffic volumes projected to be generated by the proposed development are indicated in **Table 1**.

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			Average Weekday Vehicle Trips										
De llatte e Trans	ITE	Approximate Gross Floor le Area or Other	Per Day	Per Peak Hour of Adjacent Street Traffic		Average AM Peak Hour		Average AM Peak Hour		Average PM Peak Hour		Average PM Peak Hour	
Building Type (Land Use)	Land			One Hour Between	One Hour Between	tween Distribution		Directional Trips (vph)		Directional Distribution		Directional Trips (vph)	
				7am & 9am	4pm & 6pm								
			(vpd)	(vph)	(vph)	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Trip Rate*		(Sq. Ft. GFA)	107.20	9.57	9.05	55% 45%							
High-Turnove	r 932						22	18	61%	39%	23	15	
Sit-Down Restau	rant	4,200	450	40	38								

 TABLE 1

 Projected Site Generated Trips

* Trip Rates from "TRIP GENERATION MANUAL", 11th Ed., Institute of Transportation Engineers.

The proposed development would be expected to generate 450 vehicle trips per day with 40 trips occurring during the a.m. peak hour and 38 trips occurring during the p.m. peak hour. The proposed development would be expected to generate less than half of the 100 vehicle trips per hour during the a.m. and p.m. peak hours required by the City of Norman to require a full traffic impact analysis.

DRIVEWAY SPACING

In accordance with *"City of Norman Engineering Design Criteria", February 28, 2023,* the following types of driveway criteria were evaluated:

- 1) Minimum spacing requirements for driveways along arterial roadways.
- 2) Corner clearance for driveways next to public road intersections.

According to the above-mentioned publication, the minimum spacing requirements for a driveway along an arterial roadway is based on the amount of traffic the development is expected to generate and the posted speed limit on the adjacent roadway which the driveways intersect. The proposed development is considered a small generator (0 to 100 peak hour trips) and Lindsey Street and Berry Road both have posted speed limits less than 40 mph. Based on these criteria, the minimum spacing between driveways is 220 feet centerline to centerline.

The full-access driveway on Berry Road has three private residential driveways within 220 feet. One driveway is the secondary access to the rear of a single-family residence and the other two driveways form a circular drive for one single-family residence. The right-in/right-out driveway on Lindsey Street has two driveways spaced within 220 feet. One of the driveways is an exit-only driveway for Penny Hill Deli and the other driveway accesses a single-family residence. Due to the specific types of the existing driveways, traffic operational issues would not be anticipated as a result of the close driveway spacing.

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According to the above-mentioned publication, the corner clearance for a driveway next to a public road intersection is based on the posted speed limit of the adjacent street which the driveway intersects and the traffic control at the intersection. The intersection of Lindsey Street and Berry Road is signalized and the posted speed limit on Lindsey Street and Berry Road is less than 40 miles per hour. Based on these criteria, the minimum required corner clearance from the edge of pavement of the intersecting street to the centerline of driveway 175 feet on Lindsey Street and Berry Road.

The centerline of the driveway on Berry Road is proposed to be constructed approximately 250 feet north of the edge of road of Lindsey Street. The centerline of the driveway on Lindsey Street is proposed to be constructed approximately 180 feet east of the edge of road of Berry Road. Therefore, both development driveways satisfy the City's minimum corner clearance requirement.

SUMMARY

The proposed restaurant is expected to generate less than half of the 100 vehicles per hour required for a full traffic impact analysis by the City of Norman. It is estimated that the development would add approximately 270 vehicle trips to Berry Road throughout the day and 180 vehicle trips to Lindsey Street. This equates to approximately 3% additional traffic on Berry Road and 1% additional traffic on Lindsey Street. The small amount of traffic generated by the proposed development would have minimal effects on the surrounding intersections and roadways and no traffic related issues are anticipated.

Should you have any questions or require additional information regarding these findings, please let me know.

ATTACHMENT A

FIGURES



