

## **CITY OF NORMAN**

# **Development Review Form Transportation Impacts**

**DATE:** June 14, 2021 **STAFF REVIEW BY:** David R. Riesland, P.E. City Transportation Engineer

PROJECT NAME: Upland's Addition PROJECT TYPE: Office/Commercial/Residential

Owner: Uplands Development Co. LLC

Developer's Engineer: SMC
Developer's Traffic Engineer: TEC

#### **SURROUNDING ENVIRONMENT (Streets, Developments)**

Residential developments surround the project location with some floodplain land to the west. There are some commercial and institutional uses to the east. Indian Hills Road is the main east/west roadway, and the site is between 36<sup>th</sup> and 48<sup>th</sup> Avenues NW.

#### ALLOWABLE ACCESS:

Proposed access is in accordance with Section 4018 of the City's Engineering Design Criteria.

#### EXISTING STREET CHARACTERISTICS (Lanes, Speed Limits, Sight Distance, Medians)

<u>Indian Hills Road</u>: 2 lanes (existing) / 5 lanes (future). Speed Limit - 50 mph. No sight distance problems. No medians. 36<sup>th</sup> Avenue NW: 2 lanes (existing) / 4 lanes (future). Speed Limit - 50 mph. No sight distance problems. No medians.

### ACCESS MANAGEMENT CODE COMPLIANCE: YES NO

Proposed number of access points for the development is in compliance with what is allowed in the subdivision regulations.

#### TRIP GENERATION

Time Period	Total	In	Out
Weekday	12,845	6,422	6,423
A.M. Peak Hour	627	286	341
P.M. Peak Hour	1,298	656	642

TRANSPORTATION IM	PACT STUDY I	KEQU	JIRED?	Y	ES .	NO	Ш
Гraffic Impact Study prepar	red by Traffic Eng	gineer	ring Consulta	nts, Inc. of	Oklahoma	a City, Oklahoma.	
RECOMMENDATION:	APPROVAL		DENIAL	□ <b>N</b> /A		STIPULATIONS	

Recommendations for Approval refer only to the transportation impact and do not constitute an endorsement from City Staff.

Because of the development's size and traffic generation potential, the applicant was required to conduct a comprehensive traffic impact analysis. The study was completed by Traffic Engineering Consultants, Inc., and was submitted in May, 2011, along with the original, approved Preliminary Plat.

Improvement costs, excluding any costs of half-street widening to be paid by other developments, are expected to be \$500,000 at the intersection of Indian Hills Road with 48<sup>th</sup> Avenue NW, \$210,000 at the intersection of Indian Hills Road with 36<sup>th</sup> Avenue NW, \$210,000 at the intersection of Franklin Road with 48<sup>th</sup> Avenue NW, \$210,000 at the intersection of Franklin Road with 36<sup>th</sup> Avenue NW, and \$135,000 at the intersection of Tecumseh Road with 48<sup>th</sup> Avenue NW. The Upland's Addition proportionate share of the intersection improvement costs are summarized in the following table:

Intersection	Total PM Entering Traffic	Improvement Cost	Upland's Addition Traffic Volume	Cost Share (%)
Indian Hills at 48 <sup>th</sup> Avenue	3,927	\$500,000	365	9.295
Indian Hills at 36 <sup>th</sup> Avenue	4,577	\$210,000	773	16.889
Franklin at 48 <sup>th</sup> Avenue	2,488	\$210,000	73	2.934
Franklin at 36 <sup>th</sup> Avenue	2,669	\$210,000	284	10.641

Total cost to be spent per intersection is as follows: \$11,618 for the intersection of Indian Hills Road with 48<sup>th</sup> Avenue NW, \$21,111 for the intersection of Indian Hills Road with 36<sup>th</sup> Avenue NW, \$3,668 for the intersection of Franklin Road with 48<sup>th</sup> Avenue NW, and \$13,301 for the intersection of Franklin Road with 36<sup>th</sup> Avenue NW. The total to be paid for all four intersections is \$49,698. This equates to \$38.30 per PM peak hour trip to be collected in traffic impact fees with the filing of the final plat.

Collector roadways will be provided as part of this development. On the site plan accompanying this development, Street C traverses the site from east to west. It connects with 36<sup>th</sup> Avenue NW and eventually with 48<sup>th</sup> Avenue NW (through three adjacent developments to the west). Drive A connects Street C to Indian Hills Road. Discussion on the collector street criteria is found in Chapter 19 of the Subdivision Regulations. In Item E of Section 19-410 it states, "Collector streets shall be used in the subdivision wherever traffic is being collected from minor streets to provide access to a major street or community facility. Any street shall be deemed a collector street when it serves more than seventy-five (75) dwelling units." This equates to approximately 800 vehicles per day. The traffic impact analysis submitted for this project concluded that Street C will carry more than 2,600 vehicles per day and that Drive A will carry more than 1,300 vehicles per day between Street C and Indian Hills Road. As such, 60 feet of right-of-way should be provided along with appropriate collector street width for both roadways. Limits of No Access will be established as appropriate in accordance with the City's Engineering Design Criteria. In the event of hardship, a Variance to the established Limits of No Access could be filed with the Public Works Director.

The development of the Upland's Addition site will help to define the ultimate cross-section for Indian Hills Road. The roadway is currently planned as a four-lane roadway. However, the increased number of driveways and intersections in proximity to the Upland's Addition site suggest that a five-lane cross-section may be required. Staff feels that the mile of Indian Hills Road between 36<sup>th</sup> and 48<sup>th</sup> Avenues NW will be constructed, utilized leveraged federal funding, as a five-lane roadway. However, current policies restrict our ability to require the developer to pay for more than his/her half of a four-lane roadway. The costs associated with widening one half of Indian Hills Road to a four-lane roadway, along the development frontage, will be deferred.