

LEE'S SUMMIT

DEVELOPMENT REVIEW FORM TRANSPORTATION IMPACT

DATE: September 2, 2021 CONDUCTED BY: Brad Cooley, PE
SUBMITTAL DATE: August 8, 2021 PHONE: 816.969.1800

APPLICATION #: 2021255 EMAIL: Brad.Cooley@cityofls.net

PROJECT NAME: LEE'S SUMMIT LOGISTICS PROJECT TYPE: Prel Plat

SURROUNDING ENVIRONMENT (Streets, Developments)

The proposed development is located north of Tudor between the railroad tracks and Sloan with existing Main Street dividing the property. The surrounding property is a mix of existing and planned Industrial to the north and existing mixed use (PMIX) to the south (across Tudor). PMIX is also developing to the west of the railroad tracks (e.g. Summit Technology Campus/Summit Fair), and Planned Office, Medi-High Density Residential and Commercial is to the east-southeast where not already developed as the Lee's Summit Police Station/Municipal Court Facility.

ALLOWABLE ACCESS

The proposed development will be accessed by NW Tudor Road and a realigned NW Main Street. Main Street is planned to curve east then south from the north property line through the project site and align with existing Sloan, becoming Main St. at the intersection of Tudor Road/Commerce Drive where full access and future traffic signal control has been planned. The alignment of Main Street proposed with this development is consistent with concepts shown in the Thoroughfare Master Plan. Sloan will be reconstructed as a T-intersection where relocated Main aligns into existing Sloan.

The site is planned to have 5 access points along realigned Main Street. Working north-to-south, Access Drive 1 will be located 200' south of the north property line with a driveway on both sides of Main Street. Access Drive 2 will be located 370' south of Access Drive 1 with driveways on both sides of Main Street. Access Drive 3 will be located 350' south of Access Drive 2 with a driveway on the south side. Access Drive 4 will be 1000' from Access Drive 3 with a driveway on the south side. Access Drive 5 will be 900' from Access Drive 4 with an entrance on the west side of Main Street.

There is no direct access shown to Tudor Road and the existing Main Street full access intersection along Tudor will be removed in compliance with the Access Management Code to improve safety and operations. There is no physical opportunity to provide left-turn lanes on Tudor for the existing Main Street intersection due to its close proximity to the four lane Tudor Road bridge.

EXISTING STREET CHARACTERISTICS (Lanes, Speed limits, Sight Distance, Medians)

Tudor Road is a four-lane median separated minor arterial with a 35-mph speed limit. Main Street, north of Tudor Road, is a two-lane undivided commercial collector with a 35-mph speed limit. Sloan is a two-lane undivided commercial local road with a 25-mph speed limit. All roads except Main Street have been constructed to urban standards with curb, sidewalks, etc. Main Street is an unimproved roadway. The development will relocate and reconstruct Main Street north of Tudor

Road. The reconstructed Main Street will have an urban section in compliance with the Unimproved Road Policy. The intersection of Sloan/Commerce at Tudor Road is full access with two-way stop control on Sloan/Commerce. Sloan also provides access to Sycamore, which has traffic signal control at Douglas. The intersections of Tudor Road at Douglas and at Ward Road to the west are also traffic signal controlled.

Access Management Code Compliance?	YES 🔀	No l

All intersection spacing, turn lanes and other applicable criteria required by the Access Management Code have been satisfied as depicted on the development plans.

TRIP GENERATION

Time Period	Total	In	Out
Weekday	2,762	1381	1381
A.M. Peak Hour	320	259	61
P.M. Peak Hour	320	67	253

Trip generation shown above is for the proposed use (Industrial Park).

ES 🔀	No 🖂
E	:s 🔀

A traffic impact study was completed for the preliminary plat by Olsson, dated July 8, 2021. The traffic study considered the traffic impact of the proposed development, a total of 795,960 s.f. Industrial Park during the A.M. and P.M. peak hour of adjacent street traffic at each intersection surrounding the development and accessing the development; including the intersections of Tudor Road/Commerce/Sloan and Douglas/Sycamore.

The submitted study considered this development in two phases; "Phase 1" - the construction of one building, and "Phase 2" (full build) - the full site build-out including the other two buildings, as planned.

The traffic study identified several improvements for Phase 1 within the study area based on capacity analysis and peak hour traffic. The improvements recommended with Phase 1 development include the reconstruction of Main Street, modifications to the existing median at the existing Tudor and Main street intersection, and turn lane upgrades along Main at Site Drive 1 and Site Drive 2.

Additionally, Phase 2 has recognized improvements with full build-out. The improvements recommended with Phase 2 include turn lane upgrades along Main at Sloan and Tudor.

LIVABLE STREETS (Resolution 10-17)	COMPLIANT 🔀	EXCEPTIONS
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The proposed development plan will provide all required sidewalks and bikeways, where shown in the Bicycle Transportation Plan, along adjacent roads and reconstructed Main Street. All elements otherwise required by ordinances and standards, including but not limited to property landscaping, lighting, parking, and ADA accessibility have been proposed. No exceptions to the Livable Streets Policy adopted by Resolution 10-17 are requested.

RECOMMENDATION:	APPROVAL X	DENIAL	N/A 🗌	STIPULATIONS
Recommendations for App	proval refer only to the tro	ansportation impact d	and do not constitute an	endorsement from
City Staff.				

Staff recommends approval of the proposed Preliminary Plat subject to the following conditions:

Prior to the issuance of occupancy for any building within the development these improvements shall be substantially completed:

- 1. Reconstruct Main Street from the north property line to the intersection of Tudor Road at Sloan Street/Commerce Drive, generally as depicted on the Preliminary Plat. Sloan Street shall become a 'T'-intersection with Main Street and Sloan Street shall be stop controlled with Main Street uncontrolled. The reconfiguration of Sloan Street at Main Street will require some reconstruction of Sloan Street. Main Street shall have a typical section that accommodates required turn lanes, thru lanes, sidewalks, and bicycle facilities as identified in the Bicycle Transportation Plan.
- 2. The existing median opening at Tudor Road and the current Main Street intersection should be closed with a similar design consistent with the median along Tudor Road.

Prior to the issuance of occupancy for any building within the development exceeding Phase 1, as Phase 1 is described by building area in the Traffic Impact Study, these improvements shall be substantially completed:

- 3. Provide a 150-foot plus taper northbound left-turn lane along Main Street at Drive 1.
- 4. Provide a 150-foot plus taper westbound left-turn lane along Main Street at Drive 2.
- 5. Provide a 150-foot plus taper southbound left-turn lane along Main Street at Sloan Street.
- 6. Provide a 150-foot plus taper southbound right-turn lane along Main Street and Tudor Road.
- 7. Construct a median along Main Street to restrict the adjacent development's (e.g. Douglas Station) southernmost drive entrance to right-in-right-out.