



DEVELOPMENT REVIEW FORM
TRANSPORTATION IMPACT

DATE:	March 29, 2022	CONDUCTED BY:	Brad Cooley, PE
SUBMITTAL DATE:	March 22, 2022	PHONE:	816.969.1800
APPLICATION #:	2022047	EMAIL:	Brad.Cooley@cityofls.net
PROJECT NAME:	K1 SPEED	PROJECT TYPE:	Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT (*Streets, Developments*)

The proposed development is located within the southeast quadrant of the NE Strother Road and NE Independence intersection, west of I-470. The property fronts NE Independence Ave north of Frontier Justice and south of Kansas City Facial & Oral Surgery. The subject property and properties to the north are zoned CP-2, the property to the south is zoned PMIX and the property across Independence is zoned PI.

ALLOWABLE ACCESS

The proposed development is designed to utilize the existing cross access from the property to the north and a second access along Independence Ave, near the south property line. The proposed second driveway is an existing curb cut as a planned access point.

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

I-470 is generally a north-south MoDOT facility adjacent to the subject development. This facility is a four-lane divided interstate highway with a 65-mph speed limit in the general vicinity, extending from I-70 in Independence south to Colbern Road, then turning west and continuing out of Lee's Summit into Kansas City. The intersections of I-470 and Strother Road near the subject development are also owned and operated by MoDOT.

NE Strother Road is a two-lane, median separated minor arterial with a 45-mph speed limit east of NE Independence and undivided roadway west. Strother Road is signal controlled with several turn lane accommodations for all directions at NE Independence Ave.

NE Independence Avenue is a two-lane, median separated commercial collector with a 35-mph speed limit with turn lane accommodations north of the subject property and an undivided roadway south.

ACCESS MANAGEMENT CODE COMPLIANCE? Yes No

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

TRIP GENERATION

Time Period	Total	In	Out
Weekday	N/A	N/A	N/A
A.M. Peak Hour	N/A	N/A	N/A
P.M. Peak Hour	70	34	36

Trip generation shown was estimated for the proposed development based on ITE Code 436 - Trampoline Park.

The City has adopted the use of the ITE Trip Generation Manual to estimate average trip rates based on nationwide studies. The specific use for the subject development (Indoor Go-Cart Facility) is not a specific use covered in the adopted manual. When this is encountered, City staff attempts to use best judgement in finding a comparable use in combination with information for similar use(s).

The applicant prepared and submitted a traffic memo, "Traffic Memo for 2911 NE Independence Ave, Lee's Summit, MO 64064" dated February 9, 2022, that provided information from another K1 facility in Carlsbad California from 2005. The traffic study for this location only presented a PM peak hour rate (0.472 trips/1000 sf) as these facilities do not operate prior to 11a., therefore no AM peak hour rate was provided.

Initially, multi-purpose recreational facility (MPRF) was considered as the manual's description covers go-carts. However, as the name suggests, this use is for a facility with multiple uses combined at one site. The MPRF use suggests a PM peak hour rate of 3.58. Since the subject development is a single and specific use, it did not seem reasonable to use the MPRF for estimated trip generation.

The ITE manual does provide several single-use facilities that are similar to the proposed development. Of those provided; rock climbing gym, trampoline park, and bowling alley were all considered with similar PM peak trip rates, 1.64, 1.5, and 1.16, respectively. Ultimately, the rate in the middle was determined to be used.

TRANSPORTATION IMPACT STUDY REQUIRED? YES NO

The proposed development likely will not generate more than 100 peak hour trips in excess of the previous PDP; a minimum condition in the Access Management Code for Traffic Impact Studies.

LIVABLE STREETS (Resolution 10-17) COMPLIANT EXCEPTIONS

The proposed development plan will provide required sidewalks and all elements otherwise required by ordinances and standards, including but not limited to property landscaping, lighting, parking, and ADA accessibility. No exceptions to the Livable Streets Policy adopted by Resolution 10-17 are requested.

RECOMMENDATION: APPROVAL DENIAL N/A STIPULATIONS

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

Staff recommends approval of the proposed development without any transportation improvement stipulations.