



LEE'S SUMMIT MISSOURI

DEVELOPMENT REVIEW FORM TRANSPORTATION IMPACT

DATE: July 6, 2022
CONDUCTED BY: Brad Cooley, PE
SUBMITTAL DATE: June 21, 2022
PHONE: 816.969.1800
APPLICATION #: PL2022195
EMAIL: Brad.Cooley@cityofls.net
PROJECT NAME: LP MART, OLDHAM PARKWAY
PROJECT TYPE: Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT (*Streets, Developments*)

The proposed development is generally located within the southeast quadrant of US-50 Highway and Route 291 north intersection. The development is bound by; Oldham Parkway to the north, Hamblen to the west, Home Depot to the east/southeast, and a vacant lot to the south. The proposed lot, Home Depot and the vacant lot south are all zoned PMIX. Further west and south are zoned Planned Industrial. Further north, between the proposed development and US-50, is zoned Planned Commercial.

ALLOWABLE ACCESS

The proposed development is planned to be accessed from two existing driveways. Both existing driveways are connected to Home Depot's parking lot with the development planning access points from both existing drives.

Driveway 1 (existing) is located along the south edge of the development site approximately 450 feet south of Oldham Parkway. Current conditions provide a 50-foot throat length due to an existing parking area south of the proposed development and approximately 200 feet to the first drive aisle along the north side. The proposed development has been designed to be accessed directly across the existing parking area to the south but will not provide adequate space for an appropriate throat length and should be relocated approximately 110 feet east to meet the AMC.

Driveway 2 (existing) is located to the northeast of the proposed development. The existing driveway is along Oldham Parkway approximately 450 feet east of Hamblen Road. Current conditions provide a 70-foot throat length from Oldham to the first drive aisle. The proposed access point from this area will be an extension of the drive aisle east-west.

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

Hamblen Road is a north-south four-lane divided minor arterial with a 35-mph speed limit. Hamblen Road borders the west side of the development project and is currently built with curb and gutter with a raised median to the north of Oldham Parkway. South of Oldham, the section of Hamblen becomes a three-lane street with a center two-way left-turn lane. There is currently no sidewalk along Hamblen but will be constructed with this project.

Oldham Parkway is an east-west four-lane commercial collector with a 40-mph speed limit. Oldham borders the north side of the development project and is median-separated west of Driveway 2. East of Driveway 2, the section of Oldham also has a center two-way left-turn lane. Currently Oldham has sidewalks along both sides adjacent to the development site as well as curb and gutter.

ACCESS MANAGEMENT CODE COMPLIANCE?Yes No

Driveway 1 (south side) meets the spacing requirements from Oldham. However, the spacing to the next driveway is only 275 feet south. Additionally, there are driveways on the west side of Hamblen that do not meet the spacing requirements, as presented in the AMC. Since all of the driveways in conflict with the AMC are existing without an appropriate solution to resolve, the proposed development will not be expected to modify.

The south access point along Driveway 1 does not provide adequate throat length and queue lengths are projected to block the access point in the PM peak hour conditions. It is recommended to shift the south access point approximately 110 feet to the east.

Driveway 2 (north side) meets the spacing requirements from Hamblen with the next driveway east being 285 feet. Both driveways were constructed prior to adoption of the AMC and spacing nearly meets the current requirements.

The existing throat length at Driveway 2 is 67 feet. Per the AMC, a minimum throat length is 100 feet for the conditions at this driveway. The queue length for this driveway with the proposed modifications is expected to be 70 feet, 3 feet more than provided throat length. Modifying the throat length for this driveway will significantly impact the adjacent development and the existing conditions provide alternate routes for vehicles to navigate traffic with little-to-no impact of the queue.

The AMC provides minimum requirements for right- and left-turn lanes based on traffic volumes for the adjacent street classification. A right-turn lane on a minor arterial is warranted when there are 60 or more right turns during the peak hour. The proposed development indicated 100 northbound right-turns at the Hamblen Road-Driveway 1 intersection. The existing space between Driveway 1 and the existing driveway south does not provide adequate space for a full-length turn lane. Per the TIS, a 100-foot turn lane with a 60-foot taper should be constructed.

Oldham Parkway provides adequate turn-lanes for Driveway 2, per the AMC.

TRIP GENERATION

Time Period	Total	In	Out
Weekday	5,532	2,766	2,766
A.M. Peak Hour	506	253	253
P.M. Peak Hour	430	215	215

Trip generation shown was estimated for the proposed development based on ITE Code 945 - Convenience Store / Gas Station.

TRANSPORTATION IMPACT STUDY REQUIRED?Yes No

The proposed development prepared a Transportation Impact Study titled "Traffic Impact Study Home Depot C-Store", dated May 2022.

LIVABLE STREETS (Resolution 10-17)COMPLIANT EXCEPTIONS

The proposed development will comply with all Livable Streets elements identified in the City's adopted Comprehensive Plan, associated Greenway Master Plan and Bicycle Transportation Plan attachments, and elements otherwise required by ordinances and standards, including but not

limited to sidewalk, landscaping, parking, and accessibility. No exceptions to the Livable Streets Policy adopted by Resolution 10-17 have been proposed.

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 preliminary development plan subject to the conditions noted below:

1. The proposed access point along the south side of the development should be shifted 110 feet east to provide adequate queue lengths at Driveway 1.
2. A right-turn lane should be constructed for Driveway 1. The right-turn lane should be modified to 100 feet in length with a 60-foot taper, as the space provided is not sufficient for a full-length turn lane.