



DEVELOPMENT REVIEW FORM
TRANSPORTATION IMPACT

DATE:	February 10, 2022	CONDUCTED BY:	Brad Cooley, PE
SUBMITTAL DATE:	December 6, 2021	PHONE:	816.969.1800
APPLICATION #:	2021450	EMAIL:	Brad.Cooley@cityofls.net
PROJECT NAME:	ANDERSON POINTE	PROJECT TYPE:	Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT (*Streets, Developments*)

The proposed development is generally located between I-470 and NE Anderson Drive, approximately one mile north of Lakewood Blvd. The development area is bound by NE Anderson Drive to the west, I-470 to the east, and existing single-family developments to the north and south. The surrounding neighborhoods to the subject property are; Oak Ridge Meadows, Oak Ridge Estates, and Lakewood Oaks to the north, west, and south, respectively.

ALLOWABLE ACCESS

The majority of traffic associated with this development is expected to enter and exit the area via Anderson Dr. towards the south considering Anderson Dr. intersects Lakewood Blvd./Bowlin Road and Lakewood Blvd./Bowlin Road has a grade separated interchange at I-470. The development is designed to be accessed by two drives/streets along Anderson Dr.; Drive (or Street) A approximately 400' north of Velie Rd., and Drive (or Street) B approximately 600' north of Drive (or Street) A. Both intersections extend from Anderson Drive east within the proposed development and terminate with a "T" intersection, approximately 450', at the proposed north/south street, Huron Drive. Individual lots will be accessed from the proposed local drives/streets within the development. No individual lot will have direct driveway access to Anderson Dr.

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 Lakewood Boulevard (west)/Bowlin Road (east) near the subject development are also owned and operated by MoDOT.

NE Lakewood Boulevard spans from I-470 (east) to Lee's Summit Road (west). Lakewood Blvd. is classified as a minor arterial with a 35-mph speed limit throughout. The cross-section changes from a four-lane, median-separate roadway, east of Pebble Beach St., to a two-lane undivided roadway west of Pebble Beach St. Pebble Beach St. is approximately 2,500-feet west of Anderson Drive. The NE Lakewood Boulevard and NE Anderson Drive intersection is traffic signal controlled with turn-lane accommodations.

NE Anderson Drive generally runs north/south from the traffic signal-controlled intersection at Lakewood Boulevard to a point approximately 500' north of Emerald Dr./north end of the proposed development. Anderson Drive then continues around a bend toward the west, ultimately terminating at a "T" intersection with Lee's Summit Road. Along the east/west portion of Anderson Drive there are several local road access points to multiple neighborhoods including

the Voy Spears Elementary School. NE Anderson Drive is classified as a residential collector throughout. North of Lakewood Blvd. to Velie Rd., Anderson Dr. is a two-lane roadway with a 45-mph speed limit. The typical section along this segment is approximately 24 feet with turf shoulders and/or open ditch storm water management. This section is generally characterized as an interim road standard without paved shoulders (not fully compliant with the current interim road standard). This section of road is also a planned bicycle route pending either paved shoulders or road widening. NE Anderson Drive, north of NE Velie Road and adjacent to the proposed development, is 32-foot wide with a 35-mph speed limit and existing bicycle accommodations in conformance with the Bicycle Transportation Plan. This portion of Anderson Drive is mostly built to an urban standard (e.g. curb and gutter, enclosed storm water management) with sidewalk along the west side. But for the absence of sidewalk adjacent to the subject development area, this section of Anderson Dr. would also meet all sidewalk requirements of a residential collector built to urban standards. The curb and gutter adjacent to the proposed development extends south of Velie Dr. approximately 250'. North of Emerald Dr. and continuing to Lee's Summit Rd., Anderson Dr. continues as a 32-foot wide roadway with a 35-mph speed limit and sidewalks on both sides. In addition to the posted speed limit signs, there are several warning signs of a winding road with an advisory speed of 30-mph.

Lee's Summit Road is owned and maintained by the City of Kansas City, Missouri (KCMO), at the intersection of Anderson Dr. KCMO is currently moving forward with the reconstruction of Lee's Summit Road. Lee's Summit Road extends from I-470 (becoming Douglas Street and continuing into downtown Lee's Summit) to I-70 and beyond northward. While the majority of traffic associated with the proposed development is expected to travel to and from Lakewood Blvd. via Anderson Dr., the completion of Lee's Summit Rd. will provide an additional improved route to the proposed development, existing nearby neighborhoods, and the Voy Spears Elementary School.

UNIMPROVED ROAD POLICY COMPLIANCE?

YES

NO

This development is subject to the Unimproved Road Policy (URP) considering the existing typical section and street classification of Anderson Dr. The URP adopted by City Council by resolution provides guidance for staff to use in consideration of development that impacts adjacent roadways which are not constructed to "urban standards". Per the URP, an unimproved road is narrow in width (< 22' of pavement) and consistent with a rural character. An interim standard is generally defined as a minimum of two 12-foot travel lanes with six-foot paved shoulders. Based on the definitions provided in the URP, the portion of Anderson Drive north of Lakewood Blvd. to Velie Dr. is most comparable to an unimproved road (or partial interim road). The portion of Anderson Dr. north of Velie Dr. is built mostly to an urban standard; absent sidewalk. While the portion south of Velie is wider than the required 22-feet, no paved shoulders are present. According to the URP, no residential subdivision shall be permitted on an unimproved roadway. Residential development may be permitted on an interim roadway subject to certain traffic volume thresholds (except that all new or reconstructed residential streets shall be built to an urban standard). If Anderson Dr. south of Velie Road were to have paved shoulders to meet the definition of interim road; the development would be permitted on the interim road without urban road improvements since the traffic volumes are well below the minimum improvement threshold.

Staff recommends paved shoulders (6') along Anderson Dr. from Velie Road to Lakewood Blvd. in compliance with the City Council adopted Unimproved Road Policy. The applicant has submitted an abbreviated traffic impact study which includes assessment and consideration of the URP. That study recognizes the URP and its applicability, but recommends City Council grant a waiver to the URP related shoulder improvements based on a position of excessive cost to benefit.

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	766	383	383
A.M. Peak Hour	56	14	42
P.M. Peak Hour	73	46	27

The trip generation shown above was estimated for the proposed development based ITE Land Use Codes (11th Edition): 210 - Single-Family Detached; 215 - Single-Family Attached (Duplex).

TRANSPORTATION IMPACT STUDY REQUIRED?Yes No

The proposed development likely not likely generate more than 100 peak hour trips; a minimum condition in the Access Management Code for Traffic Impact Studies. Commuter peak hours are referenced for traffic impact analysis since that is the period (generally 7-8 a.m. in the morning and 5-6 p.m. in the evening) when roadway and intersection capacity is most stressed or the greatest demand on capacity exists for identifying improvement needs and mitigations. At other times of the day, such as school arrival and departure or lunch times and shift changes, volumes increase but typically do not exceed the commuter peak hours. A 100 peak trip generation threshold for traffic impact study is a recommended and reasonable practice reflected in the Access Management Code for consistency in establishing development application requirements. This threshold considers daily and peak hour volume fluctuations by such margins that erode confidence in reliably measured and development attributed impacts a study may conclude.

Although no traffic impact study (TIS) is required, the applicant completed an abbreviated TIS in anticipation of possible resident questions regarding the traffic conditions along Anderson Drive; as well as in review of project related improvement needs pertaining to the Unimproved Road Policy. The abbreviated TIS has been prepared by TranSystems for this development titled "Lakewood Multifamily Traffic Impact Study" and dated August 2021.

The study submitted acknowledges the Unimproved Road Policy and has classified the adjacent roadways accurately. The study evaluated traffic volume(s) on the adjacent roadways in comparison to the guidelines in the URP. Development may be permitted on an interim roadway, provided the capacity is less than approximately 80% or 11,000 vehicles per day. Based on existing traffic counts (2018, pre-COVID and in excess of expected current recovering volumes) and the additional traffic expected with this development, Anderson Drive south of the proposed development is expected to have a volume of less than 7,000 vehicles per day. Considering this property is one of the last pieces of developable ground along Anderson Dr., the capacity of Anderson Dr. is not in jeopardy or need for additional lanes without an unexpected significant redevelopment of surrounding subdivisions in the area to higher density. In addition to low volumes, the traffic study identified a history of a low crash frequency. The study has requested a waiver to the URP, expressing that in considering; the low-crash frequency, volume capacity, and cost associated with the improvements, the benefits of shoulder widening are not likely to outweigh the cost associated with bring Anderson to an urban standard.

There are no existing or projected capacity concerns along Anderson Dr. or it immediately adjacent intersections effected by the proposed development. All level of service should remain adequate. Given the projected trip generation of the proposed development and Access Management Code criteria, no turn lanes are required along Anderson Dr.

The traffic study has recommended sidewalk be constructed along the east side of Anderson Drive adjacent to the subject development in accordance to the City's requirements. Applicant seeks a waiver to the Unimproved Road Policy by City Council. Staff recommends 6-foot paved shoulders along Anderson Dr. in compliance with the Unimproved Road Policy. There are no other transportation improvements recommended in association with the proposed development.

LEVEL OF SERVICE (Resolution 04-15)

COMPLIANT

EXCEPTIONS

There are no known existing capacity issues in conflict with the Level of Service Policy and as noted in the Traffic Impact Study section, there are no projected capacity issues either. Anderson Drive does not need to be 4/5 lanes wide based on existing volumes, projected development volumes or long-range thoroughfare plan volumes.

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 would occur if the Unimproved Road Policy is upheld. If the Unimproved Road Policy is waived as requested by Applicant, the absence of paved shoulders would create an exception to the Livable Streets Policy element related to Bicycle Transportation Plan, a part of the Comprehensive Plan, implementation. Paved shoulders along Anderson Dr. would satisfy the planned bike route accommodation described in the Bicycle Transportation Plan.

RECOMMENDATION:

APPROVAL

DENIAL

N/A

STIPULATIONS

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

The following improvements shall be substantially completed prior to the issuance of residential building permits within the project:

1. Sidewalk shall be constructed along the east side of Anderson Drive adjacent to the development site and connect to the existing sidewalk at Emerald Dr.
2. Six (6) foot wide paved shoulders shall be constructed on each side of Anderson Drive from Lakewood Blvd. to Velie Road in conformance with the Unimproved Road Policy; or Anderson Drive may be improved to Urban Standards consistent with the same general road section of Anderson Drive north and west of Velie Road between Velie Road and Lakewood Blvd.