

MEMORANDUM

To: Barry Moore, EMK Consultants, Inc.

From: Cassie Slade, PE, PTOE

Date: September 13, 2022

Project: Prairie Point (aka Kings Point) Filing No. 2 in Aurora, Colorado

Subject: Traffic Conformance Memo

The Fox Tuttle Transportation Group has completed a traffic analysis for the proposed development of Filing No. 2 of the Prairie Point (aka Kings Point) Development project in Aurora, Colorado. The project is located between Parker Road and Ireland Way and between future Aurora Parkway and Long Avenue as shown in **Figure 1**.

Filing No. 2 proposing to construct 305 dwelling units within five (5) Planning Areas (PA) including PA 20, PA 21, PA 22, PA 23, and PA 25. The existing and future roadways and intersections have been planned or built to support Prairie Point (aka Kings Point) traffic including the parcels in Filing No. 2. The master development includes extending Aurora Parkway from the current end point that is east of Ireland Way to Parker Road, midway between Longs Avenue and Cottonwood Drive. In addition, a new collector roadway (Kings Point Drive) will be constructed north of E-470 as a parallel east-west connection that will connect to Dry Creek Road. The purpose of this “traffic conformance memo” is to

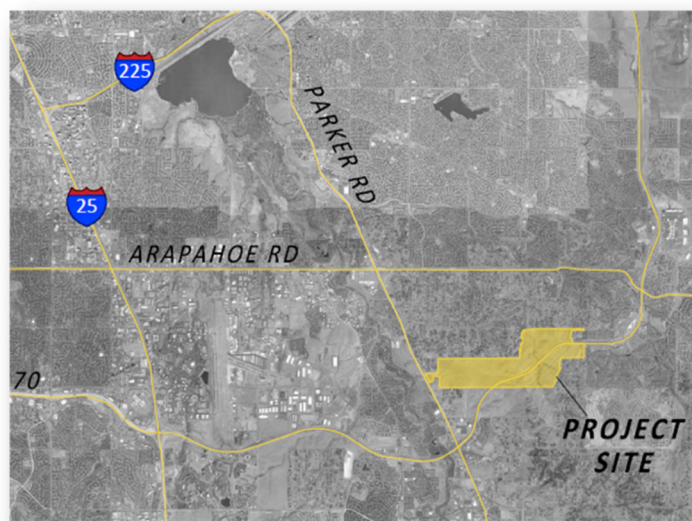


Figure 1. Vicinity Map

determine if the proposed Filing No. 2 project compares to the trip generation assumptions for Planning Areas 20, 21, 22, 23 and 25 as analyzed in the master traffic study and to determine if additional traffic analyses are necessary.

Comparison to the Master Traffic Study

A “Master” traffic impact study¹ (TIS) was previously prepared for the entire Prairie Point (aka Kings Point) development including the subject planning areas within Filing No. 2, as shown in **Figure 2**. The proposed roadways and intersections have been planned and will be built to support this full buildout traffic of Kings Point. A review of the Master TIS shows that PA 20, PA 21, PA 22, PA 23, and PA 25 included up to 303 single-family dwelling units. Filing No. 2 proposed to construct 305 single-family dwelling units, which is an increase of two (2) dwelling units (<1% increase). Access will remain the same along Aurora Parkway and Kings Point Drive as shown in **Figure 2** and as previously evaluated.

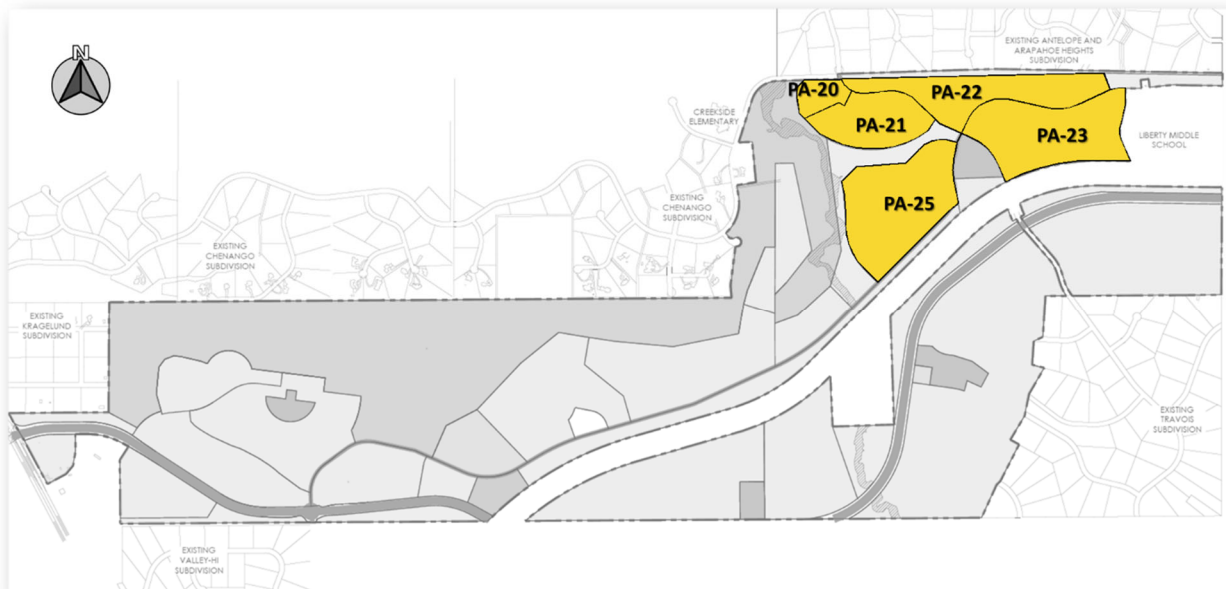


Figure 2. Proposed Filing No. 2 of Prairie Point (aka Kings Point) Map

¹ Kings Point Development Traffic Impact Study. Fox Tuttle Transportation Group, LLC. February 2022.

Trip Generation

To establish the volume of trips associated with the proposed Prairie Point (aka Kings Point) Filing No. 2, the data contained in the Institute of Transportation Engineers' (ITE) *Trip Generation Handbook and Manual* (11th Edition, Year 2021) was applied to the most applicable land use category. The proposed land use is estimated to mostly be new trips, known as 'primary trips', which is discussed below:

Primary Trips. These trips are made specifically to visit the site and are considered "new" trips. Primary trips would not have been made if the proposed project did not exist. Therefore, this is the only trip type that increases the number of trips made on a regional basis.

In the Master TIS, it was assumed that there will 10% internal capture/non-auto reduction with the mix of land uses and connectivity to multi-modal facilities. For comparison purposes, the same percentage was applied to Filing No. 2. The estimated trip generation is summarized in **Table 1** for weekday daily, weekday AM, and weekday PM periods.

Table 1. Trip Generation Estimate and Comparison

| Land Use | Size | Unit | Internal Capture & Non-Auto | Average Daily New Trips | | | | AM Peak Hour New Trips | | | | PM Peak Hour New Trips | | | |
|-------------------------------------------|------|------|-----------------------------|-------------------------|-------|------|------|------------------------|-------|----|-----|------------------------|-------|-----|-----|
| | | | | Rate | Total | In | Out | Rate | Total | In | Out | Rate | Total | In | Out |
| Master Traffic Study | | | | | | | | | | | | | | | |
| ITE 210 - Single-Family Detached Housing | 303 | DU | 10% | 9.44 | 2574 | 1287 | 1287 | 0.74 | 202 | 51 | 151 | 0.99 | 270 | 170 | 100 |
| Proposed Filing No. 2 | | | | | | | | | | | | | | | |
| ITE 210 - Single-Family Detached Housing | 305 | DU | 10% | 9.44 | 2591 | 1296 | 1295 | 0.74 | 203 | 51 | 152 | 0.99 | 272 | 171 | 101 |
| Change from Previous Land Use Assumptions | | | | | 17 | 9 | 8 | AM > | 1 | 0 | 1 | PM > | 2 | 1 | 1 |
| Percent Difference | | | | | 1% | | | 0% | | | | 1% | | | |

Based on the comparison to the Master TIS, **it was estimated that the trips associated with Filing No. 2 will have similar daily and peak hour traffic.** The daily traffic volume was estimated to be increased by 17 vehicles per day (vpd). The AM and PM peak hours were estimated to very similar to the Master TIS expectations. The increase is minimal (1% or less) and does not impact the recommendations or require additional improvements.

Conclusions

It is anticipated that the existing and proposed roadway network, intersections, and accesses can accommodate the Prairie Point (aka Kings Point) Filing No. 2 trips since these trips were estimated to be very similar to the Master TIS trip forecasts. Filing No. 2 does include two (2) additional units than the Master TIS anticipated. Please note, Filing No. 1 contained 65 fewer units than anticipated, therefore the gain in Filing No. 2 was accounted for in the Master TIS. As noted above, the **proposed land use is consistent with the trip generation assumptions of the Master TIS, and thus the findings and recommendations of that study are still valid.** No additional traffic analysis is necessary to support this project.

I hope that the contents of this memorandum are helpful to you. If you have any questions, please feel free to give me a call.

Sincerely,

FOX TUTTLE TRANSPORTATION GROUP, LLC



Mandy Ricks, EIT



Cassie Slade, P.E., PTOE
Principal

