

#### **Public Works Division**

**Transportation Planning** 

415 Silver Ave. SW Albuquerque, NM 87102 (505) 377-7136 jaluna@bernco.gov www.bernco.gov

July 15, 2025

Jonathon Kruse, PE, PTOE Lee Engineering 8220 San Pedro Dr. NE Suite 150 Albuquerque, NM 87113

Subject: Mesa del Sol Artiste Residential Subdivision Traffic Impact Study (TIS) FINAL

Dear Jon,

Bernalillo County Public Works Division (BCPWD) Transportation Planning has completed the review of the subject TIS, ESD 5/1/2025. A project site plan is provided in Attachment "A" as three different exhibits.

The final traffic impact study and responses to draft comments help address Bernalillo County concerns and questions. BC Transportation Planning accepts the recommendations found in the Executive Summary in Attachment "B".

For information purposes, there are currently two adjacent Bobby Foster Rd alignments that are not integrated. This traffic study treated Bobby Foster as a single road. Bernalillo County is working towards the future integration of these two alignments, but no design plans have been completed at this time.

Please contact me with any questions at 505-377-7136 or jaluna@bernco.gov.

Thank you,

Julie Luna

Bernalillo County Transportation Planner

Copies:

Richard Meadows, Bernalillo County Ernest Armijo, City of Albuquerque

Attachments:

Attachment "A" - Site Plan

Attachment "B" - Executive Summary with Recommendations

# BACKGROUND INFORMATION

# PROJECT LOCATION & SITE PLAN

The single-family development will be located on Bobby Foster Rd, southwest of University Blvd. Figure 1 shows the proposed site plan and Figure 2 shows the site location, study intersections, and the surrounding area. Nearby intersections include the following:

- 1) University Blvd/ Old Bobby Foster Rd
- 2) University Blvd/ Bobby Foster Rd/ Eastman Crossing SE
- 3) Bobby Foster Rd and Site Local Street A
- 4) Bobby Foster Rd and Site Local Street B
- 5) Bobby Foster Rd and Collector C (Street 2)
- 6) Bobby Foster Rd and Collector D (Street 1)
- 7) Bobby Foster Rd and Site Local Street E
- 8) Bobby Foster Rd and Site Local Street F

The proposed development would convert around 70 acres of vacant land into a residential area. For the purposes of this analysis, the development is anticipated to include 688 single-family detached housing units completed by 2029. Proposed access points include four local roads and two collector street connections on Bobby Foster Rd. The development Site Plan is presented in Figure 1, and the Vicinity Map, which includes the study area and intersections, is presented in Figure 2. The site plan shown below, as well as a site plan showing the development's connections to local roadways, is included in Appendix A.

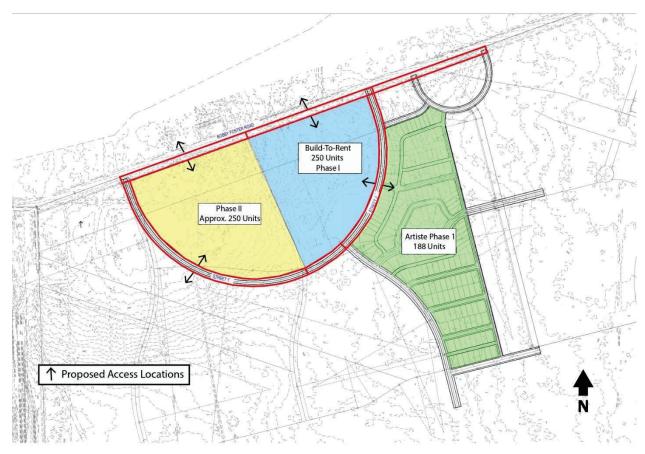


Figure 1: Site Plan





Figure 2: Vicinity Map

# STUDY AREA LAND USE, AND STREETS NARRATIVE SUMMARY

The study area is defined as the area within the Mesa del Sol community, including University Blvd near Bobby Foster Rd, and southwest along Bobby Foster Rd east of I-25 (Pan American Freeway). The following intersections were identified for analysis during the scoping meeting:

- University Blvd/ Old Bobby Foster Rd
- University Blvd/ Bobby Foster Rd/ Eastman Crossing SE

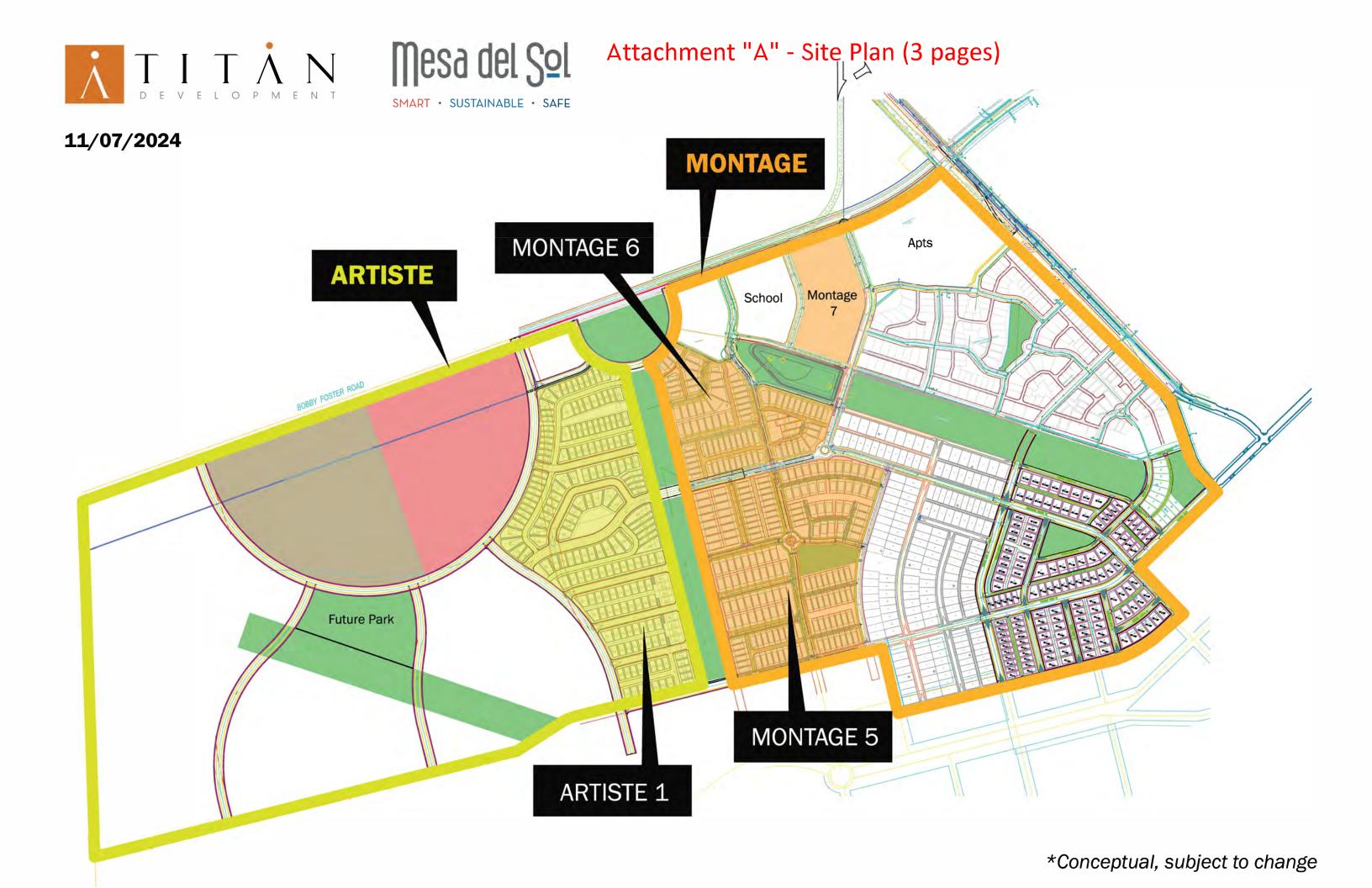
#### AREA LAND USE

As described, the development is to be located south of Bobby Foster Rd beginning approximately a half mile west of the Bobby Foster Rd and University Boulevard SE intersection in Mesa Del Sol. The study area is an urban, developing area, south of downtown Albuquerque, NM. Adjacent to and surrounding the project site are land uses consisting of the following:

- Commercial and Business: East of the proposed development, within Mesa Del Sol, is the Netflix Campus and a town center with restaurant and retail options.
- Residential: Much of the land southeast the proposed development is a growing residential area with a mix of single-family and multi-family homes.
- Undeveloped: Southwest and north of the site is primarily undeveloped.
- Future Development: The Montage Unit Development located just east of the site and the
  construction of Bernalillo Country Regional Outdoor Sports Complex to the north of the proposed
  development are both currently underway.

The development and connecting street network has been planned in coordination with the latest MDS Community Master Plan. The proposed roadway network will connect to the existing neighborhood located east of the proposed site via two connections, including a connection to the planned roundabout at DeKooning Avenue Southeast. The site plan summarizes two east/west local road connections to the





## **EXECUTIVE SUMMARY**

The following contains a Traffic Impact Study (TIS) for Mesa Del Sol Artiste single-family housing to be developed south of Boby Foster Road beginning approximately a half mile west of the Bobby Foster Road and University Boulevard SE intersection in Mesa Del Sol, Albuquerque, New Mexico. Lee Engineering has completed this report for Titan Development. All analyses and items contained herein conform to scoping requirements set forth in a scoping meeting held on September 10<sup>th</sup>, 2024, with Titan Development, Brown Team ABQ, and the City of Albuquerque (CABQ).

## BACKGROUND

The proposed development is to construct single-family housing units south of Bobby Foster Rd beginning approximately a half mile west of the Bobby Foster Rd and University Blvd SE intersection in the Mesa Del Sol community. Upon completion, the site is expected to generate 124 ingress and 351 egress trips during the AM peak hour, and 409 ingress and 241 egress trips during the PM peak hour. The number of vehicle trips generated by the proposed development was based on the trip generation rates and equations provided in the Trip Generation Manual, 11th Edition, by the Institute of Transportation Engineers (ITE) 210 – Single-Family Detached Housing.

Primary site access is to be provided via four local streets and two collector streets proposed along Bobby Foster Rd. Additional access will also be provided via internal neighborhood roadways proposed as connecting to the existing neighborhood east of the site. The primary access points are shown in Figure 1.

Study intersections include:

- University Blvd/ Old Bobby Foster Rd
- University Blvd/ Bobby Foster Rd/ Eastman Crossing SE

The development is assumed to reach full completion by 2029 and to be constructed in one phase for the purposes of this analysis.

Analysis scenarios for this study include:

- Existing 2024 Existing traffic volumes
- Build-Out Year 2029 Background 2029 traffic volumes projected from the Existing traffic volumes via the application of a growth factor consistent with the Montage Units Traffic Impact Analysis (TIA) plus background site traffic for the Montage Unit development.
- Build-Out Year 2029 Total 2029 background volumes plus trips generated by the proposed development.
- Horizon Year 2039 Background 2039 traffic volumes projected from the Existing traffic volumes via the application of a growth factor consistent with the Montage Units Traffic Impact Analysis (TIA) plus background site traffic for the Montage Unit development.
- Horizon Year 2039 Total 2039 background volumes plus trips generated by the proposed development.

Existing turning movement counts were collected on November 7<sup>th</sup>, 2024, for the following study intersections:

- University Blvd/ Old Bobby Foster Rd
- University Blvd/ Bobby Foster Rd/ Eastman Crossing SE



#### ATTCHMENT "B" - Executive Summary with Recommendations (3 pages)

These volumes were analyzed unaltered with minor adjustments for volume balancing in the Existing scenario of the Level of Service (LOS) and Queueing Analysis section. Volumes for the proposed roadways were balanced using existing counts from surrounding intersections. Site trips for the development site were generated based on ITE 210 – Single-Family Detached Housing, Peak Hour Generator. Proposed development-generated trips were used to analyze Build-Out Year and Horizon Year Total volumes.

## SUMMARY OF TRAFFIC ANALYSIS AND RECOMMENDATIONS

The following presents a summary of the traffic analysis and recommendations included in this report.

### CONCLUSIONS

Traffic operation conclusions for the intersection of Old Bobby Foster Rd and University Blvd are summarized as follows:

 All movements with HCM results are expected to experience acceptable levels of service (LOS) and have adequate storage to accommodate the 95<sup>th</sup> percentile queue lengths under all analyzed scenarios.

Traffic operation conclusions for the intersection of Bobby Foster Rd / Eastman Crossing SE and University Blvd are summarized as follows:

All movements with HCM results are expected to experience acceptable delays during the AM and PM peak hours and have adequate storage to accommodate the 95<sup>th</sup> percentile queue lengths for the Existing Year, Build Out Background, Build Out Full Build, Horizon Background, and Horizon Full Build scenarios.

#### SITE RECOMMENDATIONS

Recommendations for study intersections directly serving and primarily impacted by the proposed development are provided as follows:

- Proposed Access Points and Locations:
  - O All six proposed roads were evaluated as having full access along Bobby Foster Rd. The DPM mandates a block length of under 600 feet and major roads to be spaced at no more than ½ mile apart. All proposed local and collector streets meet the required block length except between Site Local St. E and Site Local St. F, which exceeds the 600-foot maximum by approximately 145 feet. Furthermore, according to section 3.3.2 Access Control Policy in the Mesa Del Sol Community Master Plan, median openings for full movement intersections will be allowed within every 1,000 feet of roadway, but median openings will not be spaced any closer than 400 feet from centerline to centerline of opening. Currently, three of the proposed median openings are placed less than 400 feet from one another.
- Auxiliary Lane Analysis:
  - Left turn lanes are warranted at Collector C and Site Local St. F per auxiliary lane provisions detailed in the CABQ DPM.
- Sight Distance:
  - All development driveways are recommended to adhere to the sight distance provisions detailed in the AASHTO "Green Book," and CABQ DPM Section 7-4(I)(5)(iii), and summarized in Table 5.



#### OFF-SITE INTERSECTION RECOMMENDATIONS

Recommendations for intersections within the study area that do not directly serve the proposed development and are impacted by multiple developments in the area are provided as follows:

- Bobby Foster Rd / Eastman Crossing Se and University Blvd
  - The eastbound left-turn movement is anticipated to degrade to LOS D during the PM peak hour. If more development and traffic is anticipated in the Mesa Del Sol area specifically west along Bobby Foster Rd, a dedicated eastbound left-turn lane may be warranted in the future.
  - O As a result of this analysis, the intersection configuration of Bobby Foster Rd / Eastman Crossing SE and University Blvd (assuming the 4-lane divided reconstruction of Bobby Foster Rd / Eastman Crossing SE) should comprise of one shared left/through lane, one through lane, and a dedicated right-turn lane on the eastbound approach; a dedicated left-turn lane, one through lane and a shared through/right-turn lane on the westbound approach; a dedicated left-turn lane, one through lane and shared through/right-turn lane on the northbound approach; and a dedicated left-turn and dedicated right-turn lane, and through lanes on the southbound approach. Under the future year 2039 analysis, a two-way stop-controlled intersection functions acceptably at Bobby Foster Rd / Eastman Crossing SE and University Blvd.

