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Margaret Haynes, P.E.
NMDOT Assistant District 3 Traffic Engineer

RE: Carlisle and Menaul Development North of I-40, northwest corner of Carlisle and Menaul

Albuquerque, New Mexico

Submittal Dated September 19, 2024 Via email cvermillion@bhinc.com

Dear Mrs. Haynes,

Bohannan Huston would like to thank you for reviewing and commenting on the submitted Carlisle and Menaul Traffic Impact Study. Please find the following responses from Bohannan Huston to the review comments dated December 6, 2024.

- 1. This site has 5 existing access points that it wishes to retain. Reduction of access points should be considered for the following reasons:
 - 1. There is a high rate of vehicle crashes along its frontage.
 - 2. There is a high rate of pedestrian crashes along Carlisle.
 - 3. Many of these access points are operating at a poor LOS.
 - 4. The entire site (aside from Starbucks) is getting demolished therefore site circulation is not defined by existing buildings and parking layouts. Provide site circulation layout.
 - 5. Strong Justification of increasing safety with the development has not been given. Stirpe is not a reliable barrier to manage access.

Bohannan Huston Response: The Carlisle and Access 4 intersection has no crash data tied directly to it for the 5 years of data. It is my professional opinion that removing left access out of Carlisle and Access 4 will have a negative effect on crash occurrence at either Carlisle and Claremont or Carlisle and Pheonix. If Carlisle and Access 4 is updated to a right in/right out/left in, the left out traffic (39 AM trips and 32 PM trips) would likely redistribute and be added to the Carlisle and Pheonix intersection or the Carlisle and Claremont intersection. Carlisle and Pheonix sees a total of 25 crashes in the 5 years of data collected and Carlisle and Claremont saw a total of 63 crashes in the same 5 year window. Therefore, Bohannan Huston recommends that Access 4 remain as is.

2. There is a high rate of pedestrian crashes along Carlisle north of Menaul. For that reason access to Carlisle via Accesss 4 and Access 4 should be limited to minimum RI/RO/LI only.

Bohannan Huston Response: The high rate of pedestrian crashes occur at the major intersections. 5 occurred at Carlisle and Menaul, 1 occurred at Carlisle and Phoenix, and 4 occurred at Carlisle and Claremont. No other locations indicated any crashes with pedestrians. Will add detailed information for each pedestrian and bicyclist involved incident. Based on the data, updating this access to a limited access with RI/RO/LI will not change the historic

pedestrian involved crash trends at this location. Therefore, Bohannan Huston recommends that Access 4 remain as is.

3. When a traffic signal is warranted the installation of a traffic signal OR other intersection configuration should be considered. A traffic signal should not be the default mitigation. How about a roundabout or limitation of access. Engineering judgement should consider all options based on the need, roadway connectivity and crash data.

Bohannan Huston Response: Because the intersection of Carlisle and Pheonix operates at LOS F in the PM peak hour of the existing conditions, mitigation efforts were not completed for build scenarios as this is an existing concern. Alternative intersection configurations should be evaluated by the City of Albuquerque in a larger study. Additional analysis of this intersection will not be completed as part of this study.

4. Include detailed summary of LOS tables in report.

Bohannan Huston Response: Will add

5. Add queue analysis to report.

Bohannan Huston Response: Will add

6. Page 4 – Widening access 4 should not be considered. How does that improve bike and pedestrian safety?

Bohannan Huston Response: Widening was just an effort to help delay although this negatively impacts pedestrian safety. Will state that this will not be considered due to VRU impacts.

7. Page 12 – Type in Menaul paragraph. Type in Claremont paragraph.

Bohannan Huston Response: Adjusted

8. Page 39 – It should be noted that signalizing an intersection does not eliminate crashes. What is the CMF for installation of a signal?

Bohannan Huston Response: Will add that note to the report. CMF for installation of a signal is 0.803 which will be added into the report as well.

9. Page 39 – Please pull full crash report for the bike and pedestrian crashes and elaborate on how that crash occurred.

Bohannan Huston Response: We will include information on each pedestrian crash and bike crash from the full crash reports and elaborate on the crashes that include VRUs.

10. Page 41 – With every new development compliance to today's planning documents are required. Please refer to MRCOG's LRBS map for what is proposed here. This development is generating trips that directly impact VRUs.

Bohannan Huston Response: The MRCOG's LRBS map has changed recently and Curtis Cherne shared that this update no longer includes bicycle lanes on Carlisle north of Menaul. Additionally, the existing sidewalk along Carlisle will remain in place to provide pedestrian space along Carlisle.

11. Page 41 – This is a large development that was been completely demolished to start new.

Bohannan Huston Response: Correct, aside from the Carlisle and Access 3 which is technically a part of the Starbucks property which we can not do anything about.

12. Page 46 – How will this development improve safety for VRUs?

Bohannan Huston Response: Sidewalks will be provided around the development site to connect to the parcels and development. Additionally, the existing sidewalk along Carlisle and Menaul will remain in place. Additionally, all access points will only have 1 lane entering and 1 lane exiting to minimize crossing distances for pedestrians.

13. Page 47 – No mitigation was proposed for the increase approach delay for the I-40 westbound right turn lane. This needs to be mitigated as a part of the TIA.

Bohannan Huston Response: As the existing movement delay sees LOS F at this movement and the development is only adding 7% in the AM (18 vehicles) and 5% in the PM (22 vehicles) onto the existing traffic, should the development really be responsible for this needed mitigation?

14. Page 47 – Stripe does not manage access effectively.

Bohannan Huston Response: Correct, We propose this access remain a full access. If left out access is removed, left turning vehicles will either go north to another access (Pheonix or Claremont) which will increase delay and congestion at these movements, or increase the volume of southbound U-turns at Menaul and Carlisle, which already sees the highest number of crashes per intersection of included intersections.

15. Page 47 – Are deceleration lanes warranted at the access points? Would that increase safety?

Bohannan Huston Response: An analysis of deceleration lanes has been conducted based on the City of Albuquerque standards and a right turn deceleration lane is warranted at Carlisle and Access 3 and Menaul and Access 2. These may decrease the probability of rear end collisions although it may also increase the time that pedestrians are in active traffic crossing these access points. The design at Carlisle and Access 3 can accommodate this right turn deceleration lane with minimal changes to the pedestrian crossing and is recommended, but the crossing at Menaul and Access 2 would have a skewed crossing, increasing the length of crossing. Additionally, there is an existing bus stop located just west of the Menaul and Carlisle intersection that may impact the deceleration lane design. The best location for the bus stop is to keep it where it is located today to keep pedestrians closer to the crosswalks at the intersection. Due to transit concerns, we recommend keeping the bus stop at it's present location and not adding a dedicated right turn lane at Menaul and Access 2. Since this area has a high rate of pedestrian issues, we want to be mindful of pedestrian crossings and bus stop locations in this area.

If you have any comments and/or questions, feel free to contact me at cvermillion@bhinc.com or 505-823-1000 to discuss further.

Sincerely,

Carl Vermillion, PE PTOE Senior Project Manager Bohannan Huston