Terry O. Brown P.E.

Civil / Transportation Engineering

Tuesday, April 19, 2022

Matt Grush, P.E., Senior Traffic Engineer Transportation Development Section City of Albuquerque Planning Department 600 Second St. NW Albuquerque, New Mexico 87102

Re: Oxbow Development / Coors Pavilion (St. Josephs Dr. / Coors Blvd.)

Dear Matt:

I will be resubmitting the Traffic Impact Study for the Referenced Oxbow Development / Coors Pavilion project in the future to address both the City's comments as well as the NM DOT comments. For the time being, I will address your comments to the best of my ability in this letter. Your comments were transmitted to me on March 8, 2022 in letter form attached to an e-mail. Below is a summary of your comments and my responses:

Regarding St. Joseph's Dr. / Coors Blvd. Intersection:

Comment: Right turn overlap can be a yielding concern because the right-of-way is not clear on who should yield with U-turning vehicles. Are U-turns allowed or prohibited on Coors and specifically at this intersection.

Response: As far as I know, U-Turns are not prohibited on Coors or at this intersection. However, if the City and / or the NM DOT has the option to prohibit U-Turns where they find it prudent to do so.

Comment: Provide a conceptual footprint to determine the available ROW and what unforeseen infrastructure impacts are anticipated i.e. traffic signal modifications / relocation ...

Response: Attached is a graphic conceptual roadway plan developed by Sheldon Greer, P.E. at RESPEC Engineering that demonstrated sufficient ROW available for the recommendations in the TIS.

Comment: What is the expected traffic signal cycle length. It will take a long time to clear queue lengths of 610 feet SB left, and the eastbound left of 280 feet and then accommodate the thru traffic. Will this work with a coordinated system along Coors Blvd. The Synchro model in the Appendix see A-277 is based on existing geometry.

Response: The signal system splits at individual intersections were optimized due to significant changes in volumes and intersection geometry. This project will construct trip eastbound left turn lanes and dual northbound and southbound left turn lanes on Coors Blvd. at St. Josephs Dr. The Synchro model in the TIS evaluated the existing geometry to demonstrate the impact on the existing system and then proceeded to evaluate the

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mitigated geometry to demonstrate mitigated conditions. For example, see Page 45 for implementation year analysis based on a) existing geometry and b) mitigated geometry. However, it is the case that the Implementation Year analysis for St. Josephs Dr. / Coors Blvd. associated with the development of Coors Pavilion only did utilize existing geometry. However, as the analysis progressed to include the Oxbow Development south of St. Josephs Dr., the mitigated geometry was recommended and analyzed.

Regarding St. Josephs Dr. from Atrisco Dr. to Coors Blvd.:

Comment: Add eastbound bicycle lane with buffer to the cross-section.

Response: We acknowledge that the developer will be required to construct St. Josephs Dr. from Atrisco Dr. to Coors Blvd. to meet all of the City of Albuquerque's Design Standards in the Development Process Manual including bicycle lanes.

Regarding Main Entrance on St. Josephs Dr.:

Comment: Provide a conceptual footprint of the main entrance to show that it will fit in the existing ROW. Add the eastbound bicycle lane with buffer.

Response: The attached graphical conceptual roadway plan demonstrates that the main entrance will fit in existing ROW and an eastbound bicycle lane is shown.

Comment: The traffic signal will need to be warranted. The traffic signal spacing is typically $\frac{1}{4}$ to $\frac{1}{2}$ mile. Inside the Activity Center the spacing may be reduced. Check the worst-case queuing at this intersection, and the approaches on St. Josephs Dr. and Coors.

Response: We acknowledge that the traffic signal will need to be warranted. The queuing calculations are all contained in the DRAFT Traffic Impact Study that was submitted in February 2022.

Comment: Describe the queue length in feet. In some cases, the QRS is > 1. Explain how these queues will impact the Main Entrance Traffic Signal operation.

Response: The FINAL TIS will include calculated queue lengths in feet as you have requested. I will prepare the FINAL TIS after receiving NM DOT comments so that I can address all comments from both reviewing agencies in the FINAL report. Regarding queuing calculations, Synchro reports queue lengths in terms of number queued vehicles pre lane. HCS7 reports queue lengths in terms of Queue Storage Ratio (QSR). The QSR for the eastbound triple left turn lanes is 1.42 for the projected horizon year (2036) PM Peak Hour Mitigated Conditions. This means that the queuing will exceed the left turn lane lengths by 42%. However, the HCS7 analysis in the Traffic Impact Study defined the lengths of the triple left turn lanes to be the same as that of the existing conditions (dual left turn lane, but will increase their lengths by about 50%. If other things do not change in the TIS, the QSR will be right at 1.0 for the eastbound triple left turn lanes. Thus, there may be an occasional queuing back through the main driveway during the 2036 PM Peak Hour, but only a minor backup that will not last long. There is only a 5% chance of this

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happening for the 2036 PM Peak Hour. The other time periods of the day should not be problematic.

I hope this will address your comments for the time being until the NM DOT comments have been submitted at which time I will address all comments collectively and submit the FINAL Traffic Impact Study for this project for review and approval.

Please call me if you have questions.

Best Regards,

Terry & Bra

Terry O. Brown, P.E.

cc: Jeanne Wolfenbarger, P.E., City of Albuquerque Transportation Development w/attachment Josh Skarsgard, Retail Southwest Development w/attachment Trish Kvern, Retail Southwest Development w/attachment Angela Williamson, Modulus Architects w/attachment Sheldon Greer, P.E., RESPEC Engineering w/attachment

attachment as noted



NAME: N:\Projects\W0007 Skarsgard\W0007.0004 Skarsgard Oxbow Center\3. CAD\Sheets\SIGNAGE AND STRIPING COORS AND ST JOSEPH.dwg PLOT DATE: Apr 15, 2022 9:06am LSB: Victoria.Everett