## MEMORANDUM



TO: Margaret L. Haynes, P.E. 11220 Assett Loop New Mexico of Transportation (NMDOT) Suite 202. Manassas, VA 20109 703-365-9262 Julie Luna WellsandAssociates.com **Bernalillo County** FROM: William F. Johnson, P.E., PTOE John F. Cavan IV, P.E., PTOE RE: Review of Albuquerque VA Cemetery TIA (Dated December 11, 2024) SUBJECT: **Response to Comments** DATE: May 21, 2024

The purpose of this memorandum is to respond to MNDOT's and Bernalillo County's comments transmitted on or about February 21, 2024, with regard to Traffic Impact Analysis (TIA) dated December 11, 2024, prepared by Wells + Associates, Inc. (W+A) on behalf of the proposed Albuquerque Veterans Affairs (VA) Cemetery ("Applicant"). Each comment along with our response to each is provided below:

### **MNDOT Comments**

- <u>Comment 1:</u> What about NMDOT procedures and guidelines? This study includes three jurisdictions.
- **Response 1:** The traffic study was based on the MNDOT District Three Traffic Study Requirements dated November 25, 2019.
- **<u>Comment 2:</u>** Please see attached TIA outline format. This report is missing the following:
  - Executive summary
  - Description of traffic signal system, phasing and detection for signalized study intersections
  - Signalized analysis per HCS (not Synchro HCS output)

It's helpful to follow the format.

This report does not follow NMDOT standard TIA outline. Many sections need additional information. I will provide a link to an example of what is expected for a TIA submittal.

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**Response 2:** Additional report sections have been added per NMDOT comments. Comment 3: Nice graphics starting on page 13. Can you add analysis year scenario to title? **<u>Response 3:</u>** The analysis years have been added to the report figures. Comment 4: Deceleration lane lengths are calculated as deceleration distance (shown in SAMM) plus 95th percentile queue generated by the development. **Response 4:** Acknowledged. The queue for the proposed left turn lane at the site driveway is anticipated to be negligible. Therefore, the deceleration distance was assumed as the requirement. <u>Comment 5:</u> I presume queue tables report in feet? **Response 5:** Queues are provided in units of feet and a note has been added to the table to clarify. Comment 6: Atrisco Vista has various jurisdictions. Atrisco Vista (NM 500) starts at Bluewater and goes south. Atrisco Vista north of Bluewater is the jurisdiction of the City of Albuquerque while surrounding properties within the area of influence are Bernalillo County. **Response 6:** Acknowledged. <u>Comment 7:</u> Can you please reference NMDOT or UP study for projected time to signalize I-40 EB offramp and Atrisco Vista. **Response 7:** A reference has been included on page 8 of the revised report. Comment 8: Any thoughts on mitigation of the EBL/T delay in the 2027 build scenario? Is the failing because of the thru or the left or both. Response 8: Signalization at this intersection is shown as a mitigation alternative in the revised report. Comment 9: Page 1 – Horizon year, 10-years from full build is required. I'm not sure how traffic volumes change as VA cemeteries build out. Please explain. **Response 9:** A 10-year from buildout horizon year was evaluated and included in the revised TIA report. The site generated trip assignments were assumed to be consistent between buildout and horizon year scenarios.

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#### <u>Comment 10:</u> Page 4 - Please clarify if this development is or is not a part of the UP TIA.

- **Response 10:** The development is not part of the Upper Petrographs TIA. A note has been added to page 5.
- <u>Comment 11:</u> Page 5 What year AADT.
- **Response 11:** The AADT is based on 2022 data and a note has been added on page 8.
- <u>Comment 12:</u> Page 5 UP has plans to signalize I-40 EB off-ramp and Atrisco Vista as well as Atrisco Vista and Bluewater when they are warranted.
- **Response 12:** Acknowledged. An analysis assuming signalization of this intersection was included as a mitigation alternative.
- <u>Comment 13:</u> Page 7 Can you add light or dark conditions, highlight if there are any bike/ped crashes.
- **Response 13:** Lighting conditions have been added to the table. No pedestrians or bicycles were involved in any of the reported crashes.
- <u>Comment 14:</u> Page 9 Synchro is not an acceptable software for signalized intersection analysis or 95<sup>th</sup> percentile queue calculation. This includes the HCM output from Synchro. Highway Capacity Software shall be used.
- **Response 14:** The analysis was revised utilizing Highway Capacity Software (HCS).
- <u>Comment 15:</u> Page 12 Need HCS queue calculations here.
- **Response 15:** The analysis was revised utilizing Highway Capacity Software (HCS).
- <u>Comment 16:</u> Page 29 "lane" wrong word.
- **Response 16:** The results are based on lane use, therefore the lane groups were described in the results summary.
- <u>Comment 17:</u> Page 30 What does "pedestrian timings were discounted" mean?
- **Response 17:** The text has been modified to clarify that pedestrian timings were not factored in the HCS analysis.

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<u>Comment 18:</u> Page 31 - Deceleration lanes per SAMM are not required by NMDOT at the site driveway

- Response 18: Acknowledged.
- Comment 19: Page 32 great table, makes my job easier
- Response 19: Comment noted.
- <u>Comment 20:</u> Potential off-site improvements: Signal detection (stop bar and advanced) equipment at the I-40 westbound off-ramp and Atrisco Vista
- **Response 20:** Potential improvements will be coordinated with Couty, City, and NMDOT staff.

#### **Bernalillo County Comments**

- <u>Comment 1:</u> TIA REQUIREMENT: Include language in the TIA that Intersection 10 will align with the future Las Estancias Parkway which meets the Road Access Control policy for Atrisco Vista Blvd.
- **Response 1:** A statement has been added to page 7 of the report.
- <u>Comment 2:</u> Intersection 10 Auxiliary Lanes a left turn only lane is required by Bernalillo County at Intersection 10. Although it does not meet BC's warrant (that is intended for more urban environments), the left-turn only lane is required for safety concerns. The site plan on page 8 (Figure 2-1) includes a right-turn-only lane, but on page 37, #5 states that none is required. BCPW Transportation Planning will not require a southbound right turn only lane.
- **Response 2:** Acknowledged.
- <u>Comment 3:</u> Site Frontage The adoption of the Upper Petroglyphs Sector Development Plan includes standard cross sections for frontages along public roads. Although development surrounding the cemetery is expected in later phases of the Upper Petroglyphs Plan, sidewalks along the site's frontage are required. A site further south along Atrisco Vista Blvd is developing and a draft cross-section has been provided. It is attached to these comments for information purposes. The sidewalk is required in ROW.
- **Response 3:** Comment noted. The design elements of the site frontage will be reflected on future site plan submissions.

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- <u>Comment 4:</u> Recommendation #8 on page 38 is very welcome concerning coordination for special events.
- **Response 4:** Comment noted.
- <u>Comment 5:</u> Page 12 Table 3-2, Page 19 Table 4-3 Provide units (ft) on the 95th percentile
- **<u>Response 5:</u>** Queues are provided in units of feet and a note has been added to the table to clarify.

We trust that the preceding responses as well as the enclosed revised TIA submission address the review comments. Any questions on the revised TIA or these responses should be addressed to John Cavan at <u>ifcavan@wellsandassociates.com</u> or at 703.917.6620.