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July 31, 2023

Anthony Echelle, P.E.
District 2 Engineer
Oklahoma Department of Transportation
P.O. Drawer 628
Antlers, OK 74523

Re: Cover Letter for US-259 from 6.25 Miles North of SH-3 Junction Extending North 6 Miles; State Job Piece Number JP 34333(04), McCurtain County

Dear Mr. Echelle:

Freese and Nichols, Inc. (FNI) has a recommendation for the final alternative for the improvements to US-259 from 6.25 Miles North of SH-3 Junction Extending North 6 Miles; McCurtain County. We know that the state highway system in and around the Broken Bow/Hochatown area is not functioning in a way that serves the current needs, and especially, the future needs of an ever-changing area. Existing US-259 consists primarily of 2-travel lanes and variable shoulders with pavement conditions starting to show signs of deterioration. Additionally, the current Average Daily Traffic (ADT) volumes on US-259 show the current facility often exceeds capacity, with the future traffic projections showing that the current two-lane highway cannot adequately handle the traffic growth that is being driven by the development and tourism in the area. Given the purpose and intent of this project, we believe it is pivotal to add capacity to this corridor to enhance safety and increase the operational efficiency of the highway, as well as provide vitally needed safe pedestrian connectivity, that does not exist today.

The study of this highway has been ongoing for several years through which ODOT has performed traffic engineering studies and roadway configuration evaluations. Additionally, as part of the planning and development stage, ODOT has worked to accommodate the needs and goals of the local community and has made every effort to capture that impact through community input and coordination. ODOT has enlisted assistance from the public through meetings with the appointed advisory committee, individual stakeholder meetings of those along the corridor and through two (2) public involvement meetings. A community outreach event was held in Broken Bow on October 27, 2022, and a public meeting was held in Hochatown on May 16, 2023. At these meetings, ODOT presented an alternative for a 3-lane configuration (two lane highway with a center turn lane) and an alternative for a 5-lane configuration (four lane highway with a center turn lane) for the 6-mile corridor. To better facilitate the public engagement portion, the corridor was split into 3 segments that represent the North, Middle and South segments. The South Segment begins at SH-259A South and extends north to SH-259A North, the Middle Segment extends from SH-259A North to just north of Stevens Gap Road, and the North Segment extends from just north of Stevens Gap Road to Golf Course Road. Comments were received from the public at the public meeting and during the public comment period from May 16, 2023 to May 31, 2023, and a survey was completed by participants in the May 16, 2023 public meeting. In addition, comments were received from letter notifications sent to state and federal agencies.

Derived from our discussions with stakeholders, general public, advisory committee members and ODOT, four (4) attributes have been identified as key criteria when comparing the 3-lane and 5-lane corridor alternatives through each of the segments. Below is a summary matrix table that shows the comparisons of each attribute, along with their associated descriptions below.

Segment #1: SH-259A South to SH-259A North		
Criteria	**3-Lane**	**5-lane**
Safety	Safer	Safest
Traffic Flow (2043)	LOS F	LOS D
Public Support	15% for	85% for
Cost	Less Expensive	Most Expensive
Segment #2: SH-259A North to Stevens Gap		
Criteria	**3-Lane**	**5-lane**
Safety	Safer	Safest
Traffic Flow (2043)	LOS F	LOS D
Public Support	30% for	70% for
Cost	Less Expensive	Most Expensive
Segment #3: Stevens Gap to Golf Course Rd		
Criteria	**3-Lane**	**5-lane**
Safety	Safer	Safest
Traffic Flow (2043)	LOS F	LOS D
Public Support	20% for	80% for
Cost	Less Expensive	Most Expensive

- Safety (Highway & Pedestrian) – This is a comparison of safety between the alternatives regarding vehicular travel in the driving and turn lanes. Additional lanes provide more efficient traffic flow, allow more opportunities for access from connecting roads and driveways and provide greatly improved passage opportunities for emergency responders as they traverse their way through traffic to provide time sensitive services. Emergencies tend to be more common in a highly active lake and forested area and some of the locations can be in difficult areas to access. Additionally as part of this project, regardless of the selected alternative, pedestrian traffic will be addressed as a priority to assure safe connectivity throughout a growing business district.
- Traffic Flow – This is a measurement that traffic and transportation engineers use to analyze and classify operational efficiency along roadways. Level of Service (LOS) assigns different quality levels (A thru F) of traffic based on vehicle speed, density, and congestion.
    - For example, LOS A is equivalent to free flow speed with vehicles able to maneuver with almost no obstructions. At LOS F, there is a breakdown of traffic and unstable flow with vehicles unable to maneuver freely and with substantial delays.
- Public Support – The percentages shown reflect the responses from the May 16th Public Stakeholder Meeting. Responses came in the form of paper surveys, online surveys, comment cards, emails and voicemails.
- Construction Cost – The total cost estimates for the project have not been broken down per segment. Overall, 5 lanes would be more expensive to construct.

Based on the analysis of the attributes mentioned above, Freese and Nichols recommends the 5-lane alternative for the entire length of the subject project. Additionally, while the 5-lane shows to satisfy the

corridor and community objectives the best given the above criteria, additional considerations include constructability, community impact and safety during construction. The 5-lane alternative would be easier to construct with less pavement waste and more separation of traffic movements, provide better access to local businesses during the construction process, and provide a safer work zone for both vehicular traffic and construction workers. This alternative is anticipated to provide the most safety benefit, while still providing operational efficiency now and into the future.

Sincerely,

Brandon Huxford, P.E.
Freese and Nichols, Inc.

cc: Anjie King, Paul Green, Cort Westphal and Eric Waggoner