

## Department of Transportation Region 2 Tech Center

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**DATE:** May 23, 2022

TO: Dan Fricke

Senior Transportation Planner

FROM: Arielle Ferber, PE

Traffic Analysis Engineer

SUBJECT: Three Mile Lane Rezone (McMinnville) – Transportation Planning Rule

Sensitivity Analysis Review Comments

ODOT Region 2 Traffic has completed our review of the submitted sensitivity analysis (dated May 4, 2022) to address traffic impacts due to development on the southeast and southwest quadrants of the Salmon River Highway No. 39 and Cumulus Avenue intersection in the city of McMinnville, with respect to consistency and compliance with ODOT's Analysis Procedures Manual, Version 2 (APM). The APM was most recently updated in April 2022. The current version is published online at: <a href="http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx">http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx</a>. As a result, we submit the following comments for the City's consideration:

## Analysis items to note:

- In the Year 2041 Background Traffic Volumes and Conditions section (page 3) the memo notes that buildout of the industrial lane subject to the zone change could result in higher volumes than were included in the 3 MLAP and that additional industrial trips were assigned to the network to account for this. However, in Appendix E, some intersection turn movements have reduced volumes (3<sup>rd</sup> Street at Johnson Street, Three Mile Lane at 1<sup>st</sup> Street, and Three Mile Lane at Nehemiah Lane/Cumulus Avenue/Pacific Street). It is recommend additional discussion be added to explain the need for reduced volumes at these turn movements.
- During our review some minor typographical errors were noted as follows:
  - o Table 1:
    - Three Mile Lane at 1<sup>st</sup> Street critical movement should be EB not WB
    - Three Mile Lane at Nehemiah Ln/Cumulus Ave/Pacific St critical movement should be WB not EB
  - o Table 3:
    - Three Mile Lane at Nehemiah Ln/Cumulus Ave/Pacific St critical movement should be WB not EB

- Norton Lane at Stratus Avenue critical movement should be EB not WB
- o Table 4:
  - Three Mile Lane at 1<sup>st</sup> Street 2041 Background critical movement should be EB not WB
  - Three Mile Lane at Nehemiah Ln/Cumulus Ave/Pacific St 2041 Total critical movement should be WB not EB
  - Norton Lane at Stratus Avenue critical movement should be EB not WB
- When reporting the 95<sup>th</sup> percentile queues, it is recommended that queue lengths are consistently rounded up to the next 25 feet. This primarily impacts the northbound left turn movement at the OR 18 at Norton Lane intersection in the 2041 Total with Mitigation conditions. A queue length of 225 feet slightly exceeds the available queue storage, however, this is still an improvement over the 2041 Background condition.
- Appendix E Base Volume Adjustments
  - North Frontage Road Adjustments: It appears that the NBR and WBL volumes of 7 and 5, respectively, should instead be 5 and 7, respectively.

## Proposed mitigation comments:

- 1. ODOT maintains jurisdiction of the Salmon River Highway No. 39 (OR 18) and ODOT approval shall be required for all proposed mitigation measures to this facility.
- 2. Region 2 Traffic has the following comments regarding proposed mitigation measures:
  - OR 18 at Cumulus Avenue recommendations include protected/permissive left-turn phasing on all approaches. However, as OR 18 has a posted speed in excess of 45 MPH protected phasing is recommended for the left-turn phasing on the eastbound and westbound approaches (OR 18).
  - ODOT recommends installation of northbound and southbound left-turn pockets at the Three Mile Lane at Nehemiah Ln/Cumulus Ave/Pacific St intersection as opposed to the fee-in-lieu payments toward future relocation and signalization of the intersection.
  - Mitigation at the Three Mile Lane at 1<sup>st</sup> Street intersection includes signalization. While reported v/c values are shown to improve over the 2041 Background unsignalized operations (1.40 vs 1.05) it appears that the northbound left-turn movement is not served well with the analyzed signal timings. In particular, the movement is shown with an average delay of 805 seconds and an average queue length of 750 feet (approximately 30 vehicles). This queue length exceeds the available storage length of 400 feet and would have impacts to the northbound through movement. It is recommended that the exclusive eastbound right-turn lane as analyzed in the Year 2041 Further Mitigation be included as mitigation to ensure all movements are served appropriately.
- 3. All proposed intersection and/or signal modifications (new installations or changes to existing phasing or timing), changes to lane configuration, and additional turn or receiving lanes at ODOT jurisdiction intersections will require ODOT approval. Both the City and the applicant shall be aware no approval for any proposed mitigations have been issued at this time and proposed mitigations shall not be considered approved for installation until formal written approval has been issued. Approval request will need to be submitted to Region 2 Traffic and be accompanied by the appropriate analysis justifying such request. The approval process takes time and any approval could possibly have added features required to obtain such approval.

Thank you for the opportunity to review this traffic impact analysis. As the analysis software files were not provided, Region 2 Traffic has only reviewed the submitted report.

This traffic impact study has been, for the most part, prepared in accordance with ODOT analysis procedures and methodologies. If the City determines any of the above comments will merit the need for reanalysis, we would be willing and able to assist with a second round of review.

If there are any questions regarding these comments, please contact me at (971) 208-1290 or Arielle.Ferber@ODOT.state.or.us