

## City Engineer Recommended Conditions of Approval

**October 20<sup>th</sup>, 2023**

**Project:** Ridgeview Subdivision  
**Owner:** Tim Wenger  
**Zoning:** R2  
**Tax Lot:** 500

**Client:** City of Willamina

The following comments are recommended conditions of approval for the Ridgeview Subdivision:

- General
  - All public development and utility improvements shall comply with section 2.2 – General Development Standards of the Willamina Development Code (WDC) and shall be prepared by an Oregon registered Professional Engineer submitted to the City for review by the Public Works Director and City Engineer.
  - Adhere to City of Salem Design Standards where WDC does not address the issue.
- Traffic
  - Correct “Ridgefield” to “Ridgeview” on the cover and throughout the document.
  - Finalize and stamp TIA and provide to City.
- Storm - 2.204
  - Stormwater quality and quantity management will be required.
  - Stormwater report required prior to plan approval.
- Water - 2.205.02
  - Continue collaboration to obtain city engineer approval on raw water pipeline replacement. The most current version shows the development dedicating a portion of the property to the city and locating the new raw water pipeline in right-of-way the remainder of the alignment.
  - Water sheets: Show waterline profile and identify potable/nonpotable crossings.
- Sewer - 2.205.02
  - Utility Sheets: Reduce slopes to less than 10% and add inside drops if necessary.
- Streets and Frontage Improvements - 2.202
  - Sheet ST-1: Sidewalks shall be on both sides of street.



# Oregon

Tina Kotek, Governor

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**DATE:** September 15, 2023

**TO:** Casey Knecht, PE  
Development Review Coordinator

Arielle S. Ferber <sup>2023.09.15</sup>  
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**FROM:** Arielle Ferber, PE  
Traffic Analysis Engineer

**SUBJECT:** Willamina Ridgeview Estates Development (Willamina, OR) – Outright Use  
TIA Review Comments

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ODOT Region 2 Traffic has completed our review of the submitted traffic impact analysis (dated May 2023) to address traffic impacts due to development northeast of NW Highlands Loop and NW Sixth Street in the city of Willamina, with respect to consistency and compliance with ODOT's Analysis Procedures Manual, Version 2 (APM). The APM was most recently updated in August 2023. The current version is published online at: <http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx>. As a result, we submit the following comments for the City's consideration:

Analysis items to note:

- This study does not contain a simulation-based queuing analysis. Such analysis would have been scoped if this study had been required under ODOT's authority.
- The study notes project K22556 as a funded ODOT project rebuilding ADA ramps along OR 18B and evaluating the safety of intersections along those segments including the Main Street Triangle. However, it should be noted that ADA projects typically do not evaluate intersection safety and additionally the Main Street Triangle is not currently included in the K22556 project for ADA ramp improvements.

Recommended analysis items to be addressed:

1. The study assigned 10% of site related trips to/from NW Oaken Hills Drive. Due to the nature of the development (residential) and existing traffic patterns it's possible that a higher percentage of trips would be traveling to/from NW Oaken Hills Drive (i.e. the elementary, middle, and high school). Assigning more trips to/from NW Oaken Hills Drive would not impact the operations significantly enough to change the conclusions of the analysis. However, the development would add more trips to the eastbound left-turn movement (OR 18B onto NW Oaken Hills Drive), which already meets left-turn lane volumes warrants. Adding this exclusive left-turn lane would improve operations for

eastbound through vehicles and increase safety as left-turning vehicles feel less pressure to take insufficient gaps when they have their own lane to wait in.

2. Typically, ODOT will not run analyses with zero vehicles making available permitted movements. Rather, if count data does not identify any vehicles within the peak hour making a movement, we recommend assuming a low volume (1 or 2) rather than zero. The algorithms within Synchro utilize different formulas if there are zero conflicting vehicles.
3. There is a limitation within Synchro of the HCM unsignalized intersection methodology for shared left-turn approaches. Major street left turns are always treated as exclusive turn lanes regardless of how they are coded. Mainline v/c ratios on shared lane approaches should include traffic volumes from all movements. See Section 12 of the APM (Example 12-3) for further guidance. This will affect the operational results but not the conclusions of the study as none of the mainline operations are close to exceeding their respective mobility targets.
4. Raw traffic counts for the NW Willamina Drive at NW B Street intersection were not included in the Appendix, therefore, traffic volumes at the intersection could not be confirmed.

Proposed mitigation comments:

5. ODOT maintains jurisdiction of the Willamina-Sheridan Highway No. 157 (OR 18B) and ODOT approval shall be required for all proposed mitigation measures to this facility.
6. No mitigation measures have been proposed. However, Region 2 Traffic recommends consideration of installing an eastbound left-turn lane at the Main Street (OR 18B) at Oaken Hills Drive intersection, and improvement consistent with Willamina TSP Project R-5 (restripe to add a dedicated left-turn lane on NE Main Street to Oaken Hills Drive). This left-turn movement currently meets left-turn lane warrants, and the proposed development would add trips to the eastbound left-turn movement.

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](mailto:Arielle.Ferber@ODOT.state.or.us)