



The Transportation Solution Experts

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Date: August 14, 2016

Mr. Darren Wyss, Associate Planner  
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## **RE: 1943 and 1983 13<sup>th</sup> Street, West Linn, Oregon Zoning Changes**

This letter summarizes our findings of the traffic analysis for the proposed zone changes for the properties located at 1943 and 1983 13<sup>th</sup> Street, West Linn, Oregon. The purpose of the traffic analysis is to address the proposal's compliance with the City of West Linn's Transportation Planning Rule noted in the City's Community Development Code (CDC) 105.050(D).

Per our August 1, 2016 conversation, the traffic analysis is performed qualitatively. The City of West Linn's guidelines does not require quantitative traffic analysis for developments projected to generate less than 1000 vehicles per weekday.

**Project Description:** The project proposes to change the subject properties zoning from R-10 (lot size 10,000 square feet) to R-7 (lot size 7,000 square feet). The purpose of the proposed zoning change is:

1. To correct a zoning mistake, a lack of a buffer zone, between the Willamette residential neighborhood and the neighboring mixed use property. The properties are located on the edge of an R-10 neighborhood and are part of a transition zone (R-7 properties) between the larger R-10 residential neighborhood and MU (mixed use) properties.
2. To allow partition of the oversized property (approximately 14, 374 square feet) located at 1943 13<sup>th</sup> Street into two parcels. The property located at 1983 13<sup>th</sup> Street is indivisible because of the small lot size (approximately 10,000 square feet).

The proposed project will result on one additional single family residential house. The existing single family residence is to remain. On-site parking space for the single-family house will be provided.

**Project Location:** The subject properties are located on the eastside of 13<sup>th</sup> Street at its intersection with Timothy Lane. At this location, 13<sup>th</sup> Street and Timothy Lane are local streets. Attached is the site vicinity map for your reference.

Timothy Lane at this intersection is 34 feet wide paved roadway with sidewalks on both sides of the street. This street can accommodate curb parking on both sides of Timothy Lane. The roadway width for 13<sup>th</sup> Street

at this intersection is approximately 30 feet wide. The roadway width can accommodate parking on one side of the roadway. There are no sidewalks along 13<sup>th</sup> Street.

Timothy Lane and 13<sup>th</sup> Street at this intersection provide access to 18 single family residential development (eleven single family houses on Timothy Lane and seven single family houses on 13<sup>th</sup> Street). The intersection of 13<sup>th</sup> Street/Timothy Lane is an uncontrolled intersection. Both streets consist of one lane approach for each direction. There are no pavement markings on either 13<sup>th</sup> Street or Timothy Lane. The statutory speed limit on these streets is 25 miles per hour (mph).

**Transportation Planning Rule:** This approval criterion requires that a development application that includes a proposed comprehensive plan amendment, zone change or land use regulation change, the proposal shall be reviewed to determine whether it significantly affects a transportation facility, in accordance with Oregon Administrative Rule (OAR) 660-012-0060 (the Transportation Planning Rule: "TPR").

## Findings:

- **Existing Condition:** Review of the transportation system near the project site vicinity include:
  - **Traffic Volume:** Traffic volumes generated by the existing single-family houses were estimated using trip rates from the Trip Generation Manual, 9<sup>th</sup> Edition published by the Institute of Transportation Engineers. Land-use code #210 (Single-Family Detached Housing) trip rates in this manual were used to estimate the trips. Table 1 below summarizes the trip rates information obtained from this manual.

Trip generation calculations for the existing housing development served by the intersection of 13<sup>th</sup> Street/Timothy Lane show that this intersection services a total of 180 vehicles per day. Refer to Table 1 for more details.

**Table. 1: 13<sup>th</sup> Street/Timothy Lane Existing Trip Calculations**

Morning Peak Hour			Afternoon Peak Hour			Weekday
In	Out	Total	In	Out	Total	Total
18*0.25=5	18*0.75=14	18	18*0.63=11	18.0*0.37=7	18	18*9.97=180

- **Street Capacity and Level-of-Services:** Based on analysis of the traffic volumes served by the intersection at 13<sup>th</sup> Street/Timothy Lane, it is reasonable to assume the existing transportation system near the project site currently operates at a level-of-service (LOS) A. The City of West Linn operational standards for un-signalized intersections is LOS E or better.
- **Safety for all modes:** Review of the transportation system near the project site did not reveal any apparent safety deficiencies. Pedestrian and bicycle traffic safely and comfortably share the streets with vehicular traffic as traffic volume and speed on the roadways near the project site are low.
- **Future Condition:** Trips generated by the additional single family house were estimated to determine the impact of the proposed land division on the existing transportation system.

- **Trips:** Trip rates from the Trip Generation Manual noted above was used to estimate the trips generated by the additional single family house. Land-use code #210 (Single-Family Detached Housing) trip rates were used to estimate the trips. The trip generation calculations in Table 2 show that the proposed single-family house is likely to increase the morning and afternoon peak hour trips by approximately one vehicle per hour and a total of ten vehicles per weekday.

**Table. 2: Trip rate estimates and calculations**

Morning Peak Hour			Afternoon Peak Hour			Weekday
In	Out	Total	In	Out	Total	Total
(1)*0.25=0.25	(1)*0.75=0.75	1	(1.0)*0.63=0.63	(1.0)*0.37=0.37	1.0	(1)9.97=10

- **Street Capacity and Level-of-Services:** Impacts to the immediate and adjacent neighborhoods is anticipated to be minimal. The existing transportation system has sufficient capacity to adequately and safely accommodate one additional vehicle during peak hour or a total of 10 vehicles per day.
- **Safety for all modes:** The additional single family house is not likely to have an adverse impact on pedestrian and bicycle traffic safety.
- **Transportation Rule Analysis:** In accordance with Oregon Administrative Rule (OAR) 660-012-0060 (the Transportation Planning Rule: "TPR"). "*Significant*" means the proposal would:
  - a. *Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);*  
  
**Response:** The proposed land use change will not require or result in any changes to the functional classification of any transportation facility in the vicinity of the site.
  - b. *Change standards implementing a functional classification system; or*  
  
**Response:** The proposed land use change will not require or result in any changes to standards implementing a functional classification system.
  - c. *As measured at the end of the planning period identified in the adopted transportation system plan:*
    - 1) *Allow land uses or levels of development that would result in types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;*  
  
**Response:** The proposed land use change is consistent with the intended use of the functional classification of the surrounding local streets use.
    - 2) *Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or comprehensive plan; or*

**Response:** The proposed land use change will not reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or Comprehensive plan. The transportation system near the project site is expected to continue to operate at LOS A through the City's planning horizon year (year 2040)

3) *Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan.*

**Response:** The proposed land use change will not worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan. The surrounding transportation system has sufficient capacity through the City's planning horizon year 2040.

**Recommendation:** As noted in the City of West Linn Public Works Standards Section 5 requirements, new sidewalks with curbs along 13<sup>th</sup> Street should be constructed as the properties develop.

**Conclusion:** The results of the traffic analysis indicate that the proposed one additional single family housing will not adversely impact the immediate area nor will the project have a measurable impact to the existing transportation system. With the recommended mitigation measure, the transportation system is capable of safely supporting the proposed development in addition to the existing uses in the area.

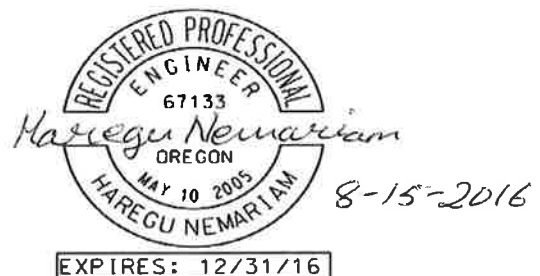
Based on our analysis of the evaluation factors noted above, we believe the proposed project is in compliance with the City of West Linn's Transportation Planning Rule noted in the City's Community Development Code 105.050(D).

Should you have any comments, please do not hesitate to contact me at the address noted below.

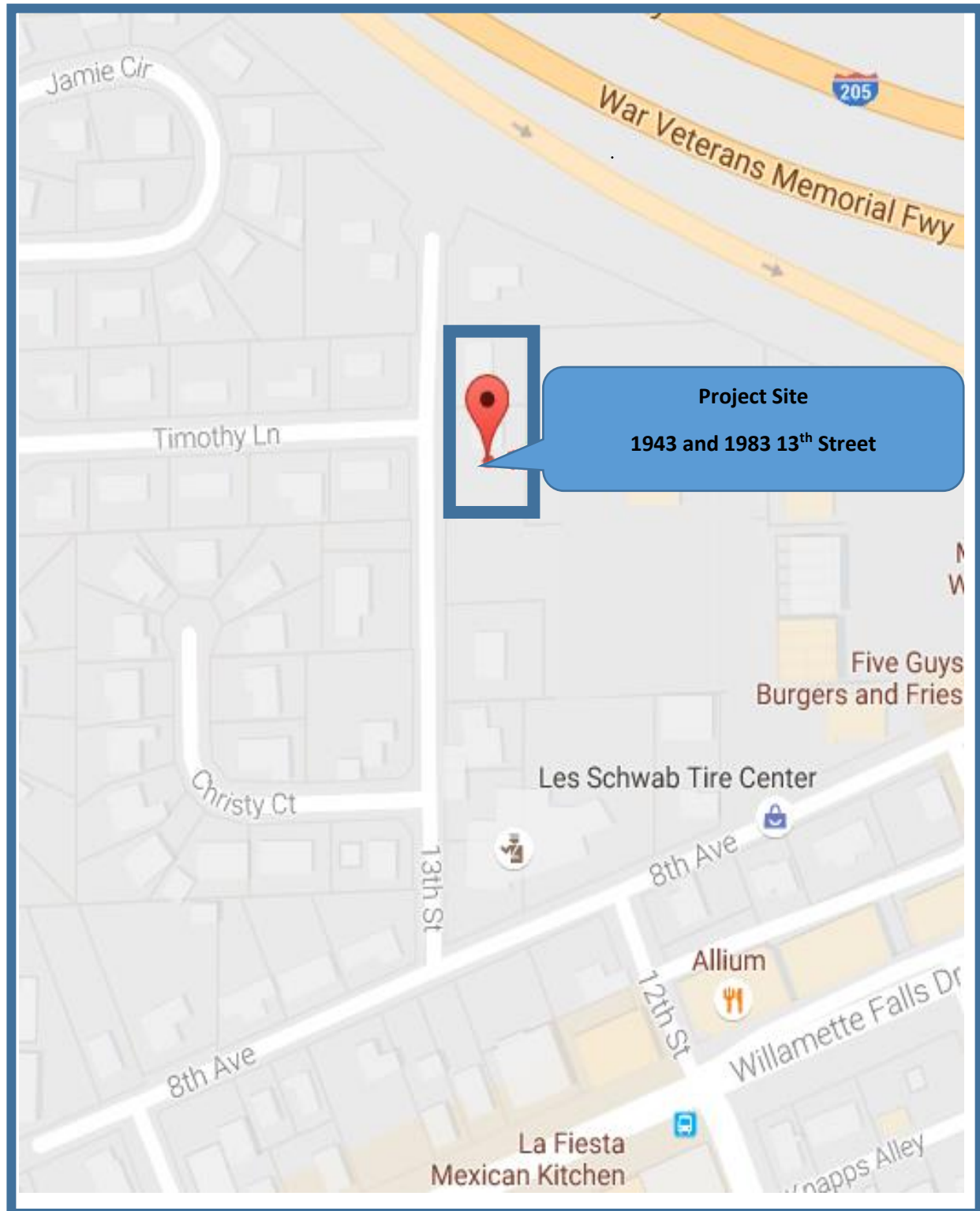
Best Regards,

Haregu Nemariam, PE, Principal Engineer

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# SITE VICINITY MAP



Google map