



September 18, 2019

W.B. Wells & Associates
Attn: Tim Young, Dir of Operations
6130 NE 78th Ct, #C-11
Portland, Oregon 97218

Dear Tim:

As you know Tanner Spring has received approval for a minor partition. We are moving forward with the development of the property to the west of our community and part of the conditions of approval are the widening and alignment of Weatherhill Road.

I understand that you are involved in the development across the street from our property. We are willing to participate in working together on a solution for the Weatherhill Road section that abuts Tanner Spring and the future subdivision being done by Weatherhill Subdivision, LLC.

Please contact me at your convenience with any questions.

Thank you,

A handwritten signature in black ink, appearing to read "Timothy J. Hazen", is written over the typed name.

Timothy J. Hazen
Vice President of Operations
thazen@tannerspringalf.com

MEMORANDUM

DATE: September 12, 2019
TO: Eric Evans, Emerio Design
FROM: Dana M. Beckwith, P.E. / P.T.O.E.
 Phoebe Kuo
 Richard Martin, EIT

SUBJECT: West Linn Weatherhill Subdivision Trip Generation and Safety Review P19-015-000

This memorandum summarizes the trip generation evaluation for the proposed 12-lot (2.57 acre) subdivision located at 22870 Weatherhill Road in the City of West Linn, Oregon. This memorandum also includes a review of existing roadway conditions to address safety concerns along Weatherhill Road in the site vicinity.

PROJECT DESCRIPTION

The proposed 12-lot subdivision at 22870 Weatherhill Road is located within an area of West Linn zoned as R-7 Single-Family Residential Detached and Attached. Figure 1 shows the detailed site plan. The proposed development is a conforming land use per the City of West Linn Municipal Code Section 12 and consists of 12 Single Family Dwelling Units.

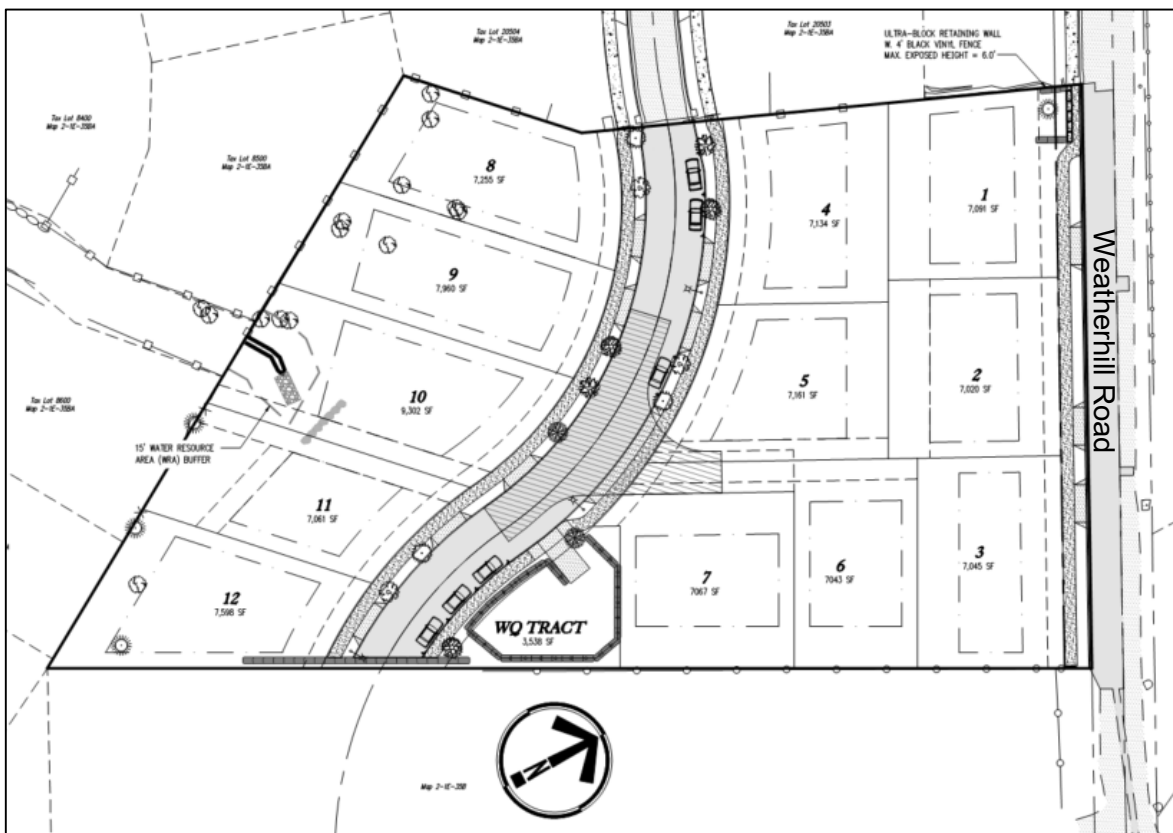


Figure 1 Site Plan

TRIP GENERATION

Trip rates presented in the Institute of Transportation Engineer’s (ITE) *Trip Generation Manual, Ninth Edition*, were utilized to estimate the number of vehicle trips per dwelling unit, that are anticipated to be generated by the site. The site’s trip generation is based on the ITE Single-Family Detached Housing land use (ITE Code 210) for weekdays during the peak hour of adjacent street traffic. Table 1 summarizes the estimated trip generation for the site.

Table 1: Trip Generation Summary

Land Use	Dwelling Units	Weekday						
		ADT ²	AM Peak Hour			PM Peak Hour		
			Total	Enter	Exit	Total	Enter	Exit
<i>Single-Family Detached Housing (ITE 210)</i>								
Generation Rate Per Dwelling Units ¹	12	9.52	0.75	25%	75%	1.00	63%	37%
New Site Trips		114	9	2	7	12	8	4

¹ Source: *Trip Generation Manual, ninth Edition*, ITE, 2012, average rates.

² Average Daily Trips

As summarized in Table 1, it is estimated that 114 daily trips including 9 AM peak hour trips and 12 PM peak hour trips will be added to the local street network due to the proposed development.

SAFETY REVIEW

Weatherhill Road is classified as a Local Road in the current City of West Linn Transportation System Plan. Although the roadway connects Salamo Road and Bland Circle, traffic will predominantly be local trips to new subdivisions, with little through traffic. With the added trips it is anticipated Weatherhill Road west of De Vries Way will have an ADT of approximately 220 vehicles.

At locations where development has not occurred, the Weatherhill Road is narrow with unimproved paved surfacing. At locations where development has occurred, half street improvements have been constructed. With the construction of the 12-lot subdivision, half street improvements will be constructed along the sub-division’s Weatherhill Road frontage as shown in Figure 1. This will leave a remnant portion of Weatherhill Road (approximately 50 feet) unimproved between the eastern subdivision boundary and the existing Weatherview Estates subdivision boundary with a cross-section of approximately 20 feet in width that narrows to a pinch point of approximately 16.5 feet at the east end where existing curb and gutter begins¹. With a City planned final lift of asphalt along Weatherhill Road planned for later this



Figure 2: Signing

¹ The existing 16.5 feet pinch point is due to the gutter portion of the curb and gutter on the south side of Weatherhill Road being approximately 1.5” above the asphalt. The final lift of asphalt creates a flush asphalt surface with the gutter.

construction season, the width of this pinch point will be increased to 18 feet of usable roadway surface.

The remnant section of Weatherhill Road is currently signed with “Road Narrows” (*Manual on Uniform Traffic Control Devices (W5-1)*) signing for westbound traffic as shown in Figure 2. To fully develop the roadway to City standards, right-of-way from properties that are not currently redeveloping will be required to be dedicated.

Reported crash data summarized by the State of Oregon for local roadways was reviewed for Weatherhill Road. Three years of data from January 1, 2016 to December 31, 2018 was reviewed, with no crashes reported, except one near its intersection with Salamo Road.

Field observations conducted on September 7, 2019 indicate that with the given roadway characteristics and signing, no reported crash history and low forecasted traffic volumes that will predominantly consist of local trips, the unimproved sections of Weatherhill Road operates at low speeds and does not appear to have accident causing safety deficiencies.

RECOMMENDATIONS

It is understood that with this development, there will be additional traffic added to Weatherhill Road. The following is recommended to supplement the existing traffic elements until such time the City is able obtain right-of-way dedication and develop the roadway to its full cross-section:

- Add additional “Road Narrows” (MUTCD W5-1) signing near the east end of the frontage improvements for eastbound traffic.
- Coordination has been initiated with the owners of the Tanner Springs Assisted Living facility to see if they are open to vegetation removal and possible slope adjustment along the Weatherhill Road frontage to improve sight lines around the corner. If this coordination is successful, implement improvements. See Figure 3.

CONCLUSION

With the planned development and recommended supplemental traffic elements, Weatherhill Road will continue to operate as a residential street, similar to today.

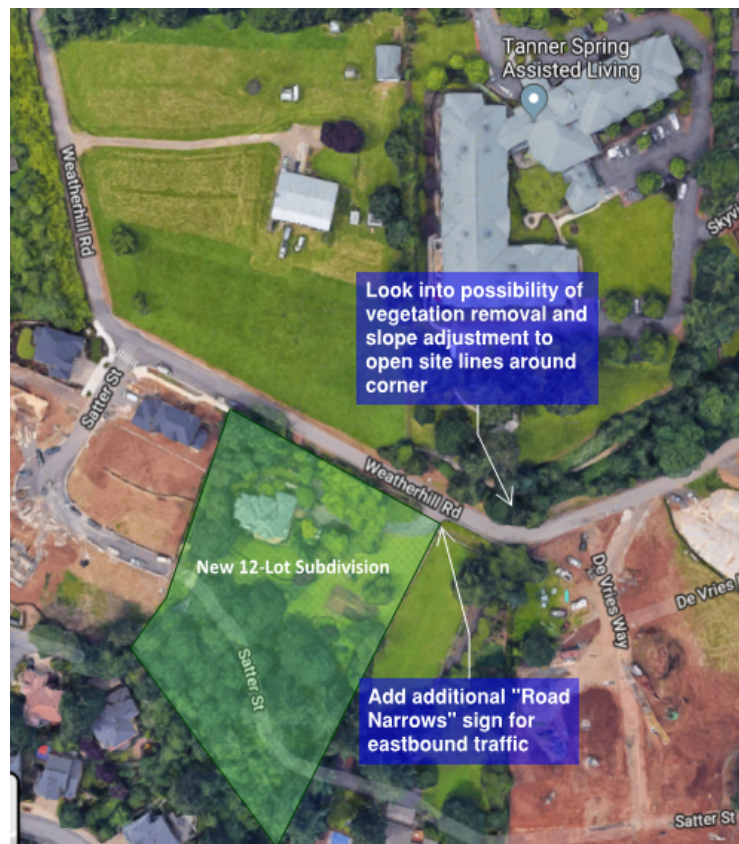


Figure 3: Recommended Safety Improvements