



TP07-14
Hilda ST

MEMORANDUM

Date: November 19, 2007 Project #: 8989.01
To: Yoram Ariel
Gregory Funding LLC
425 NW 10th Avenue #307
Portland, Oregon 97209
From: Dave Daly, Nicholas Badal, & Wayne Kittelson
Project: Hilda Street Subdivision
Subject: Transportation Analysis Letter

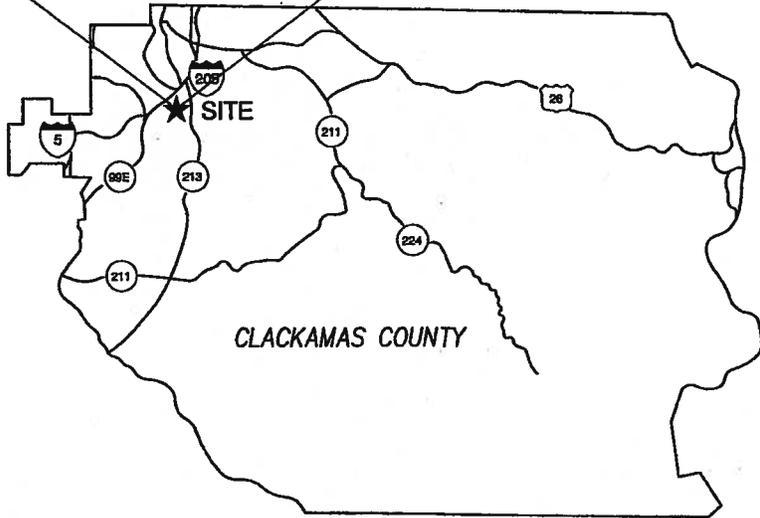
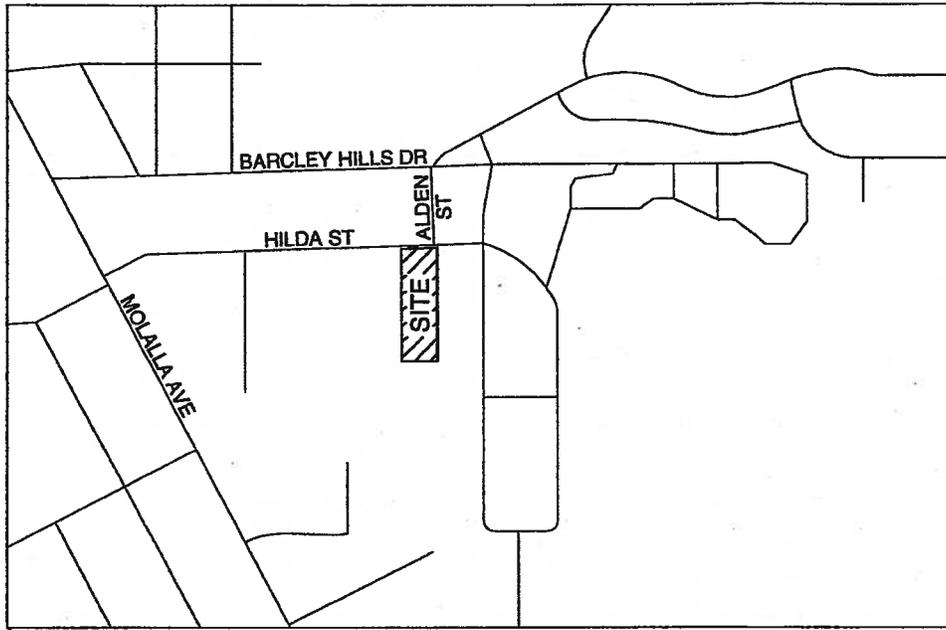
Per your request, Kittelson & Associates, Inc. has prepared this letter to address the transportation related impacts of the proposed subdivision on Hilda Street in Oregon City, Oregon. Information regarding the potential site trip generation, access sight distance, access spacing compliance, and property frontage requirements have been investigated and results are reported in this letter.

BACKGROUND

The proposed development plan calls for the construction of four new single family homes to be built on approximately one acre of land in Oregon City, Oregon. One house exists on the property and will remain as part of the proposed development. Access to the site will be provided via a public connection to Hilda Street opposite of Alden Street. Figure 1 illustrates the site vicinity. Figure 2 illustrates the proposed subdivision plan and access location.

The Oregon City's *Guidelines for Transportation Impact Analysis* Section 3.1 states the criteria for which a Traffic Analysis Letter (TAL) may be used in lieu of a Transportation Impact Study (TIS). The criteria are:

- A. *The development generates fewer than 24 peak hour trips during both the AM or PM peak hour and fewer than 250 daily trips.*
- B. *The development is not expected to impact intersections that currently fail to meet the City's level of service standards or intersections that are operating near the limits of the acceptable level of service thresholds during a peak operating hour.*
- C. *The development is not expected to significantly impact adjacent roadways and intersections that are high accident locations, areas that contain an identified safety concern, or high concentration of pedestrians or bicyclists such as school zones.*



**SITE VICINITY MAP
OREGON CITY, OREGON**

FIGURE
1

H:\projfile\88889 - Hilda Subdivision\dwg\figs\88889Fig1.dwg Nov 12, 2007 - 1:36pm - ddaly Layout Tab: Fig01

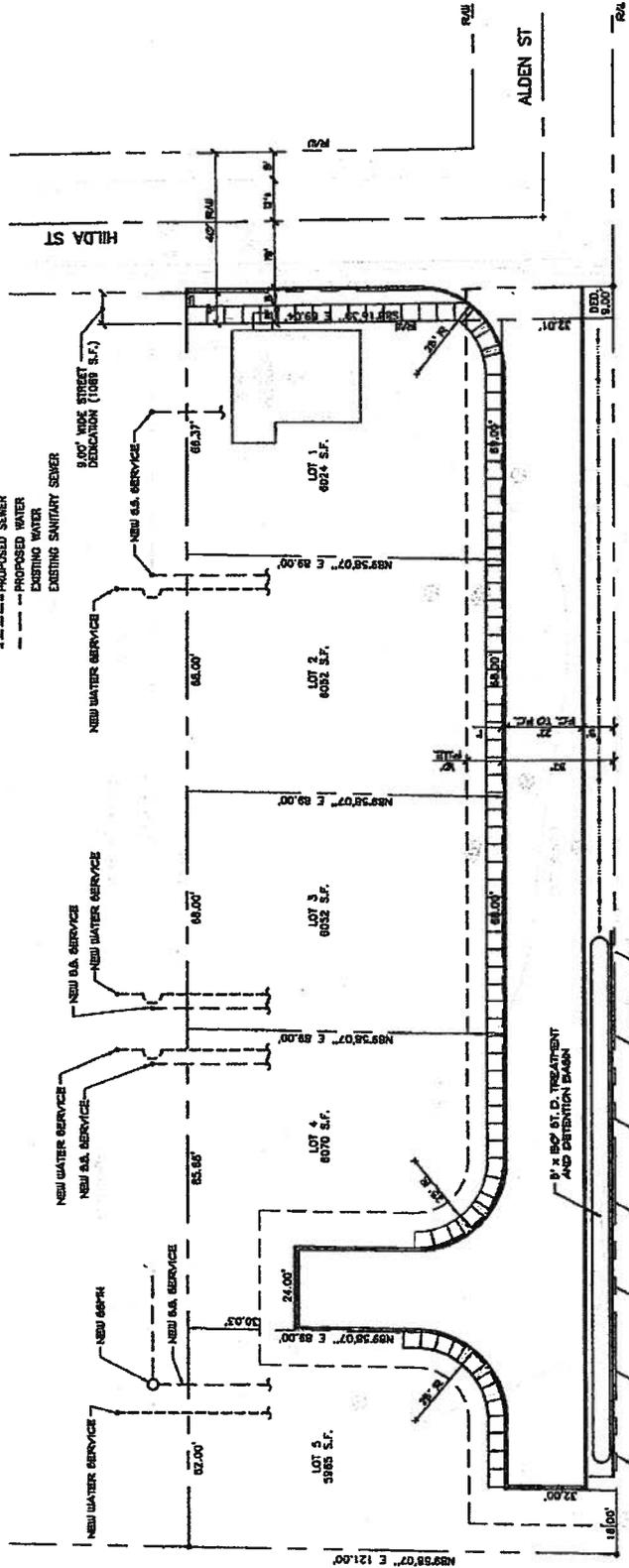


- LEGEND**
- SAN. MANHOLE
 - WATER METER
 - TREE DECIDUOUS
 - PROPOSED SEWER
 - PROPOSED WATER
 - EXISTING WATER
 - EXISTING SANITARY SEWER

SITE PLAN FOR
 478 HILDA STREET
 OREGON CITY, OREGON

CITY OF OREGON CITY,
 CLATSOP COUNTY, OREGON

CLATSOP COUNTY MAP 35-28-058A-02700



PROPOSED SUBDIVISION PLAN
OREGON CITY, OREGON

FIGURE

2

H:\proj\file\8989 - Hilda Subdivision\dwg\figs\8989Fig1.dwg Nov 19, 2007 - 4:17pm - ddaly Layout Tab: Fig02

Per these criteria, the proposed development is not subject to a Transportation Impact Study. As such, this letter will address the City of Oregon City requirements for a Transportation Analysis Letter as stated in section 5 of the *Guidelines for Transportation Impact Analysis*.

Trip Generation

Estimates of daily, weekday a.m. and p.m. peak hour vehicular trip ends for the proposed development were calculated from empirical observations at other similar development. These observations were obtained from the standard reference manual, *Trip Generation, 7th Edition*, published by the Institute of Transportation Engineers. Table 1 shows the estimated trip generation.

Table 1 Estimated Trip Generation

Land Use	ITE Code	Number of Units	Daily Trips	Weekday AM			Weekday PM		
				Total	In	Out	Total	In	Out
Single-Family Detached Housing	210	4	40						
				3	1	2	4	3	1

As shown in Table 1, the site is estimated to generate approximately 40 weekday daily trips, of which less than 5 will occur during the weekday a.m. peak hour and less than 5 will occur during the weekday p.m. peak hour.

City Street Intersection Spacing Standard

The Minimum City Street Intersection Spacing Standard for a local street onto a neighborhood collector (Hilda Street) is 200 feet per Table 5-7 of the City Transportation System Plan (TSP). The proposed access location for the residential development is located directly across from the existing Alden Street to create a 4-way intersection. This intersection spacing meets the 200 foot minimum standard.

Private Access Driveway Width Standard

The primary site access will be provided via a public street connection to Hilda Street opposite the Alden Street intersection. Any private driveway accesses are subject to the City of Oregon City Private Access Driveway Width Standard provided in Table 5-8 of the City's TSP. The driveway width for a single family residential may range between a minimum of 12 feet wide to a maximum of 25 feet wide. Private driveways onto the proposed public street must adhere to this standard.

Preliminary Sight Distance Measurement

Kittelson & Associates, Inc. visited the site in October 2007 to evaluate intersection sight distance at the proposed site access. Hilda Street has a posted speed limit of 25 mph. The guidebook, *Geometric Design of Highways and Streets, 2004, 5th Edition*, published by the American Association of State Highway and Transportation Officials (AASHTO) was used to determine the necessary intersection sight distance. Based on the posted speed of 25 mph, approximately 280 feet of sight distance is necessary at the intersection. To determine available sight distance, AASHTO dictates that measurements be based on an estimated driver eye height of 3.5 feet and an object height based on a vehicle height of 4.35 feet above the road; and is assumed to be 10 feet from the near edge of pavement to the front of a stopped vehicle. (Actual measurements are taken 15 feet from the edge of travel way).

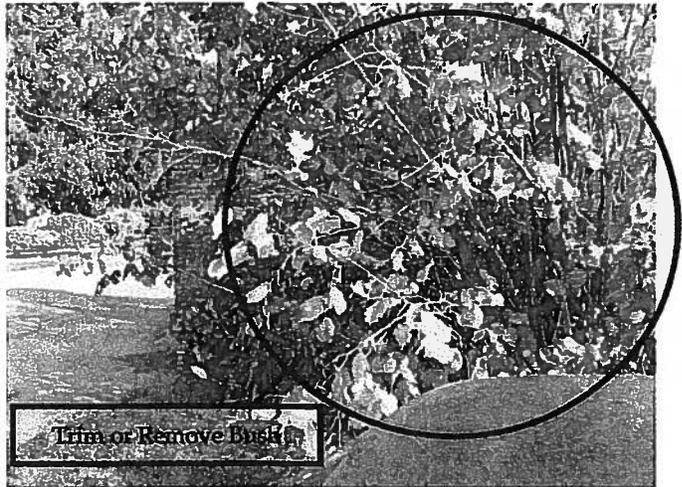
Photos were taken to show the sight distances from the proposed driveway location as follows in Exhibit 1.

Exhibit-1 Hilda Street

Site Driveway Looking West on Hilda Street



Site Driveway Looking East on Hilda Street



Currently, the proposed site access point has insufficient sight distance from fifteen feet back from the edge of travel way due to trees and shrubbery, not due to horizontal or vertical curves in the roadway. Therefore several existing trees and shrubs adjacent to the proposed access point should be trimmed or removed as shown in Exhibit 1.

To achieve the sight distance to the west on Hilda Street, the adjacent tree and bushes must be trimmed or removed. To achieve sight distance to the east on Hilda Street, the adjacent bush must be trimmed or removed, however it was noted that there is also a masonry column located behind the bush. This column serves as an entrance feature to the Mountain View Cemetery and partially obscures the sight distance in this direction. It is not necessary for outright removal of the column since it is a main support feature for the cemetery gate. Upon removal of the bush it is possible for a driver to see into the cemetery roadway to provide sufficient stopping sight

distance. It is also observed that the cemetery generates low volume of vehicle exiting the site and at low speeds. Under these low volume, low speed conditions an inherent safety concern is not presumed. However, other mitigations could be used to enhance the safety of the intersection such as a stop sign on the cemetery column on the eastbound approach, mirrors or advanced signage to warn drivers approaching the intersection..

Site Frontage

Hilda Street is classified as a neighborhood collector per the City of Oregon City TSP. The development will likely be responsible to provide half street improvement along the site frontage. From Oregon City's TSP, typical half-street improvements for neighborhood collectors comprise of the following elements:

- 1-foot utility strip
- 5-foot sidewalk
- 5-foot planter strip
- 8-foot parking
- 5-foot bike lane (optional)
- 11-foot travel lane

Oregon City's TSP also lists for planned curb, gutter, and sidewalk improvements along Hilda Street as well as bike route signage.

SUMMARY

In conclusion, the topics within this letter were addressed and satisfy the criteria for a Transportation Analysis Letter per Section 5 of the City of Oregon City *Guidelines for Transportation Impact Analysis*. Based on this review, the proposed residential development can be developed within the standards discussed presuming the necessary actions and recommendations as described in this letter are completed. If you have any questions please contact us at (503) 228-5230.

