

## 10. Road Modification

---

---



**BEND, OR**  
3052 NW Merchant Way, Suite 100  
Bend, OR 97003  
(503) 317-8429  
[www.aks-eng.com](http://www.aks-eng.com)

**KEIZER, OR**  
4300 Cherry Avenue NE  
Keizer, OR 97303  
(503) 400-6028

**TUALATIN, OR**  
12965 SW Herman Road, Suite 100  
Tualatin, OR 97062  
(503) 563-6151

**VANCOUVER, WA**  
9600 NE 126th Avenue, Suite 2520  
Vancouver, WA 98682  
(360) 882-0419

**Holley Park Subdivision  
Road Modification Narrative  
2018-02-PAC  
62965424, 209055-000, & 209059-000**

## Project Summary

The Holley Park Subdivision development proposes 39 detached single-family lots. The subject site is approximately 14.54 acres in size. Parcel 62965424 is located in the City of La Center and zoned Parks/Open Space. Parcel 209055-000 is located in Clark County and zoned Parks/Open Space. Parcel 209059-000 is located in Clark County and zoned Single Family Residential (R1-7.5). Both parcels located in Clark County are under review for annexation to the City of La Center and a zone change to make parcel 209059-000 LDR-7.5. Parcel 209055-000 will remain zoned Parks/Open Space once annexed. The site currently has access from E Ivy Avenue (a private road). With the development, access to the neighborhood will be gained with the extension of E 2<sup>nd</sup> Street on the site's east boundary and vehicle access to E Ivy Road will be restricted. The site also contains critical areas (streams and steep slopes) running east to west across the entire northern boundary and along most of the southern boundary and extending off site to the south. Due to these critical areas, no vehicle circulation is proposed to the north or south. A pedestrian path is proposed along the critical areas in Tract A. The path will connect to E Ivy Street to the west, Holley Park (Trail 11 on the City of La Center Trails and Pathways Plan in the City's 2016 Comprehensive Plan) to the north, and to the development at the intersection of E 3<sup>rd</sup> Street and E Knobcone Pine Avenue.

## Road Modification Request

1. The applicant is requesting a road modification to section 2.08(4) of the La Center Engineering Standards as allowed by LCMC 12.10.310, to allow the reduction of the horizontal centerline radius at the intersection of E Knobcone Pine Avenue and E 3<sup>rd</sup> Street to be 50 feet. The proposed 50-foot radius is at a 90-degree intersection of two streets, with an inside curb radius of 34 feet. The Applicant also proposes to install no parking signs along the intersection curve to maintain proper sight distance, clearance for turning movements, and safety. See Exhibit A included with the modification for more information.
2. The applicant is requesting a road modification to section 2.12(C) of the La Center Engineering Standards, as allowed by LCMC 12.10.310, to allow the reduction of the paved centerline radius and right-of-way centerline radius for the proposed cul-de-sacs on E Juniper Court and E Knobcone Pin Avenue. The application proposes each cul-de-sac be constructed with a paved centerline radius of 38.50 feet of asphalt, two feet of rolled curb, and 5.5 feet of reinforced sidewalk, with a right-of-way centerline radius of 46.00 feet. The rolled curb and reinforced sidewalk will allow for an emergency vehicle turnaround radius of 46.00 feet. The proposed paved centerline radius and right-of-way radius do not meet the required minimum of 45 feet and 54 feet respectively. However, with the rolled curb and reinforced sidewalk, the proposed cul-de-sac has a greater turnaround radius than the standard. The application also proposes to install fire sprinkler systems in all homes on the cul-de-sac streets, as well as no parking signs to ensure the turnaround radius remains unobstructed.
3. The applicant is requesting a road modification to section 2.14(E) of the La Center Engineering Standards, as allowed by La Center Municipal Code (LCMC) 12.10.310, to allow intersection spacing exceeding the maximum distance within the development. The applicant proposes intersection spacing greater than the 500-foot maximum intersection spacing as required per section 2.14(E). This application requests a modification to allow the increased intersection spacing due to critical areas restricting vehicular access to the north and south, thus restricting circulation from the development. Pedestrian circulation is proposed

from the intersection of E 3<sup>rd</sup> Street and E Knobcone Pine Road that will connect to a proposed trail running along the south side of Tract A and connecting to E Ivy Avenue to the west and Trail 11 in Holley Park to the north. See Exhibit B included with the modification request for the more information on the Proposed Development Plan.

## Approval Criteria

The approval criteria to allow a road modification from Section 12.10.210 of the LCMC are listed below.

*(4) The following criteria may be eligible for a road modification:*

- (a) Topography, right-of-way, existing construction or physical conditions, or other geographic conditions impose an unusual hardship on the applicant and an equivalent alternative which can accomplish the same design is available.*
- (b) A minor change to a specification or standard is required to address a specific design or construction problem which, if not enacted, will result in an unusual hardship.*
- (c) An alternative design is proposed which will provide a plan equal to or superior to these standards.*
- (d) Application of the standards of this chapter to the development would be grossly disproportional to the impacts created.*

## Road Modification Justification

### Justification for Request 1

The proposed modification to the centerline radius standard can be approved because the modification meets the approval criteria for Section 12.10.210 (4)(a), (4)(c), of the LCMC. Listed below is a further explanation of how the criteria are met.

- The topography (steep slopes) and other physical conditions (streams and neighboring development) impose an unusual hardship on the applicant. The stream and steep slopes prevent circulation to the north and the neighboring development requires E 3<sup>rd</sup> Street to jog south to align with E 2<sup>nd</sup> Street. These factors create a 90-degree intersection. This would be a standard 'T' intersection if the additional circulation was not restricted.
- The proposed design will be functionally equivalent to the standard. The proposed intersection centerline radius of 50 feet will allow for a 90-degree intersection, while providing for sufficient intersection spacing between E 2<sup>nd</sup> Street and E 3<sup>rd</sup> Street. The installation of no parking signage will maintain vision clearance and allow for safe turning movements through the intersection. The tighter radius will also be likely to naturally reduce travel speed and help increase overall safety in the neighborhood.

### Justification for Request 2

The proposed modification to the street standard can be approved because the modification meets the approval criteria for 12.10.210 (4)(a), (4)(b), (4)(c), and (4)(d) of the LCMC. Listed below is a further explanation of the how the criteria are met.

- The topography (steep slopes) and other physical conditions (streams) impose an unusual hardship on the applicant since the construction of a full radius cul-de-sac would not allow for development of enough lots that meet dimension and density requirements of the LCMC.
- The modification is a minor change, which if not enacted will not allow the development to proceed, creating an unusual hardship. The applicant is proposing cul-de-sacs with a reduced paved centerline

radius of 38.50 feet of asphalt, two feet of rolled curb, and 5.5 feet of reinforced sidewalk, and reduced right-of-way centerline radius of 46.00 feet. The rolled curb and reinforced sidewalk will allow for an emergency vehicle turnaround of 46.00 feet, which is one-foot greater than the standard. Without this modification the development could not construct enough lots that meet the dimension and density requirements of the LCMC.

- The proposed design will be functionally equivalent to the standard. The applicant is proposing cul-de-sacs with a reduced paved centerline radius of 38.50 feet of asphalt, two feet of rolled curb, and 5.5 feet of reinforced sidewalk, and reduced right-of-way centerline radius of 46.00 feet. The rolled curb and reinforced sidewalk will allow for an emergency vehicle turnaround of 46.00 feet, which is one-foot greater than the standard. Standard vehicles will be able to turn around in the reduced paved radius. Large vehicles, such as fire and garbage trucks, will be able to mount the curb and use the reinforced sidewalk to turn around as needed. No parking signs will be installed to ensure the turnaround radius is maintained.
- The application of the standard would be grossly disproportional to the impacts it would create. Construction a full radius cul-de-sac either cause the application to lose several lots or have greater impacts to the critical areas.

### Justification for Request 3

The proposed modification to the intersection spacing standard can be approved because the modification meets the approval criteria for Section 12.10.210 (4)(a), (4)(c), and (4)(d) of the LCMC. Listed below is a further explanation of the how the criteria are met.

- The topography (steep slopes) and other physical conditions (streams) impose an unusual hardship on the applicant since vehicular circulation cannot be provided to the north or south of the site. The location of the critical areas requires an increased intersection spacing to allow for the efficient layout of lots, while protecting the critical areas. A pedestrian connection from the development to the north is an equivalent alternative since as much circulation as is practicable will be provided.
- The proposed design will be functionally equivalent to the standard. The increased intersection spacing will not have a significant impact on pedestrian or vehicular circulation on the block. Pedestrian circulation is provided along the block connecting the development to Trail 11 in Holley Park to the north.
- The application of the standard would be grossly disproportional to the impacts it would create. Since circulation to the north and south is not feasible due to critical areas, the application of the block spacing maximum standard would not allow the application to be unable to move forward.

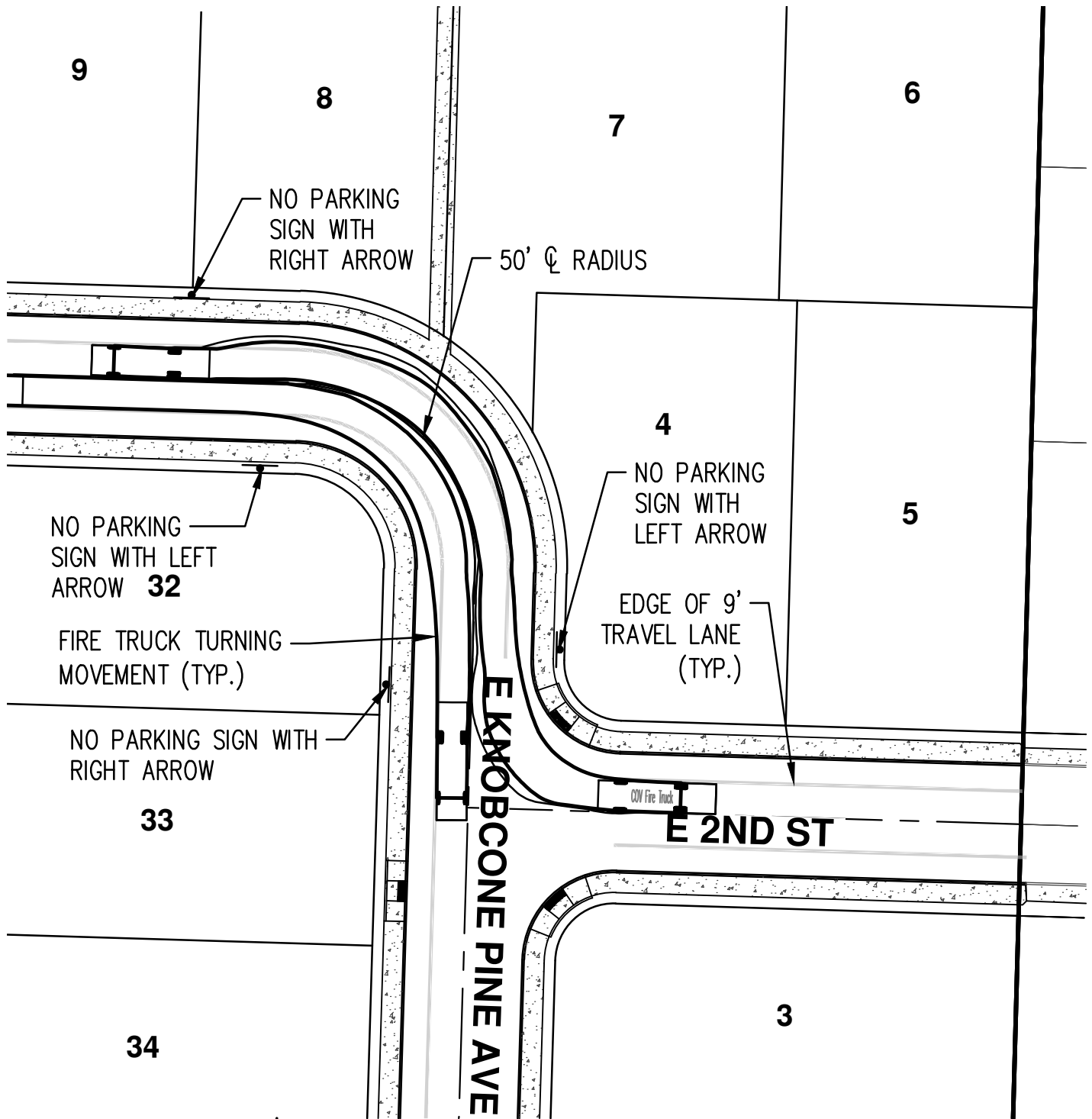
### **Supporting Maps/Documents**

Exhibit A – Turning Movement Exhibit  
Exhibit B – Circulation Exhibit



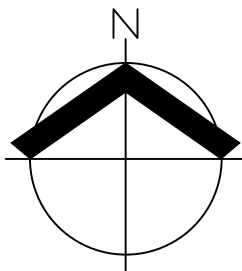
3/14/2019

# TURNING MOVEMENT EXHIBIT



**NOTE:**

TURNING MOVEMENTS SHOWN ARE A STANDARD CITY OF VANCOUVER FIRE TRUCK.



SCALE: 1" = 40 FEET



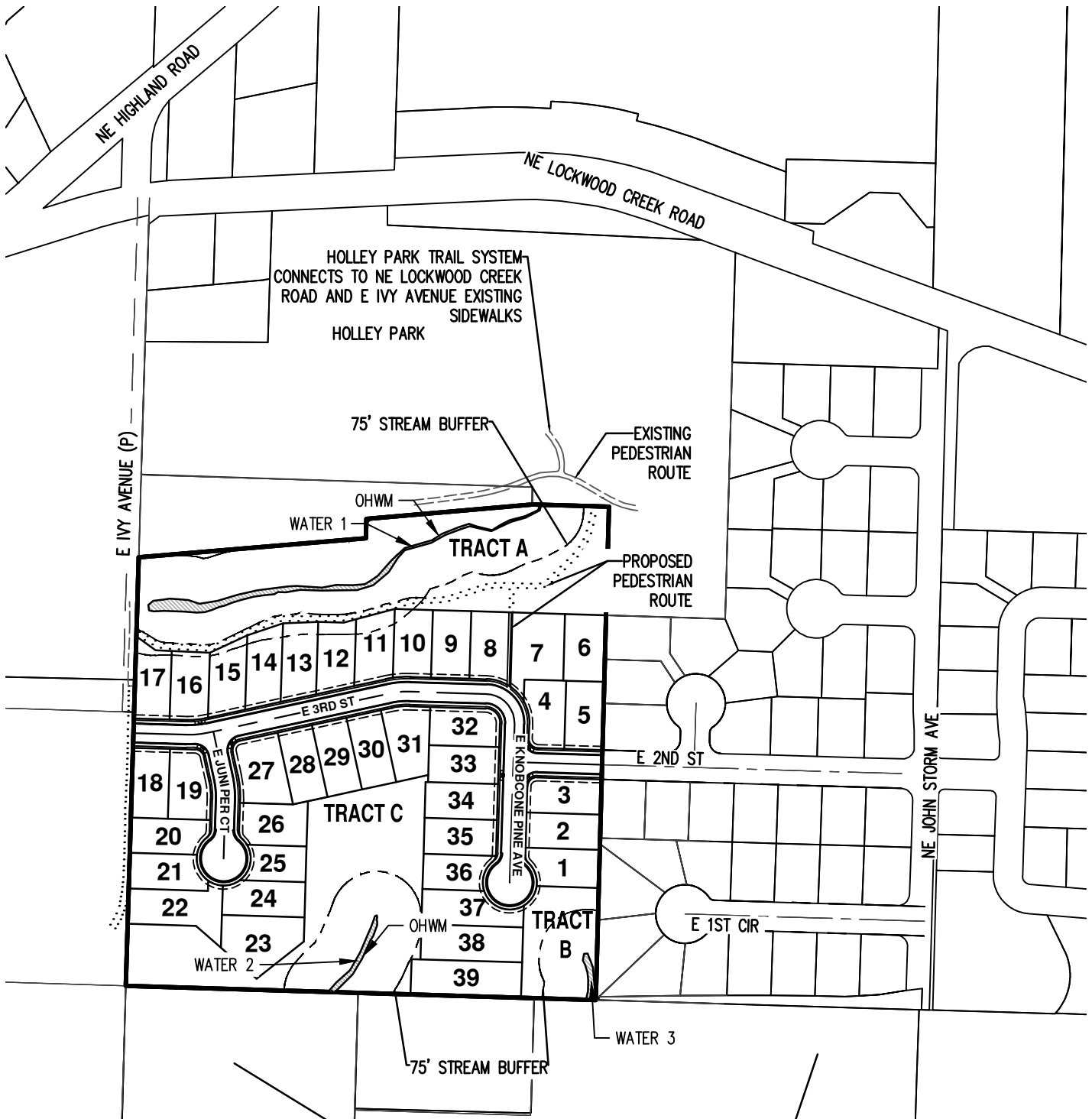
ORIGINAL PAGE SIZE: 8.5" X 11"

DATE: 3/13/2019

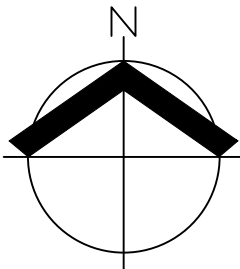
<b>TURNING MOVEMENT EXHIBIT</b>		<b>EXHIBIT A</b>
AKS ENGINEERING & FORESTRY, LLC 9600 NE 126TH AVE, STE 2520 VANCOUVER, WA 98682 P: 360.882.0419 F: 360.882.0426 aks-eng.com		DRWN: JRS CHKD: SMH AKS JOB: 6962



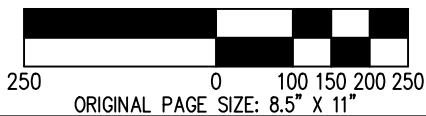
# CIRCULATION EXHIBIT



PARCELS TO THE SOUTH ZONED AG-20 AND  
ENCUMBERED BY LANDSLIDE HAZARD AREAS



SCALE: 1" = 250 FEET



DATE: 3/14/2019

## CIRCULATION EXHIBIT

AKS ENGINEERING & FORESTRY, LLC  
9600 NE 126TH AVE, STE 2520  
VANCOUVER, WA 98682  
P: 360.882.0419 F: 360.882.0426 aks-eng.com



EXHIBIT  
**B**

DRWN: JRS  
CHKD: SMH  
AKS JOB:  
6962