



Professional Forestry Services, Inc.

100 Ruby St. SE, Suite B
Tumwater, WA 98501

Phone (360) 943-1470
Fax (360) 943-1471

September 20, 2018

Chul M. Kim, Ph.D., P.E.
Sunrise Hills LLC
50 Lascascadas Road
Orinda, CA 94563

Re: Tree Plan for Sunrise Hill off Woodland Drive,
Tumwater, Washington

Dear Dr. Kim:

As you authorized, Professional Forestry Services, Inc. has inspected the trees on the site where the proposed project is to take place. The following information should satisfy your requirement for a tree plan, as needed for submission before land clearing begins.

1. LOCATION

All trees involved are within parcel #12827330000, on a portion of the SW¼ SW¼ of Section 27, T18N, R2W, W.M. (Net Acres = 9.286)

2. TREES ON-SITE

There are a total of 353 trees on this site. The estimated numbers of trees are listed below:

Species	Number Trees	DBH* Range	Comments
Douglas-fir	81	12-32"	Healthy Trees**
Bigleaf Maple	168	12-38"	Healthy Trees
Red Alder	37	6-18"	Healthy Trees
Western Redcedar	49	12-24"	Healthy Trees
Western Hemlock	18	18-30"	Healthy Trees
TOTAL TREES	353		
<p>*DBH = Diameter @ 4½' above ground. **Laminated root rot noticed in one area of site.</p>			

3. TREES OFF SITE

Adjacent properties are developed. Two trees along west property line will need to be protected during land clearing.

4. TREES TO BE RETAINED

As outlined in Chapter 16.08.070R of the Tumwater Tree Ordinance, at least 20% of the trees on the site shall be retained or 12 trees per acre whichever is greater.

On this site, 20% (353 x .20) equals 71 trees. Since 12 trees x 9.286 acres equals 112 trees, the city will require retention of 112 trees to meet the requirements of the tree ordinance. Once the open space and property boundaries are staked, Professional Forestry Services, Inc. will ribbon the tree protection areas. Currently using the proposed development plan, the following is required:

Total Trees Required to be Retained =	112
<u>Trees Being Retained on Lots and Other Open Space =</u>	<u>167</u>
TOTAL TREES UNDER RETENTION REQUIREMENT =	-0-

Save trees are on this project are on open space and back of lots.

5. PROTECTION OF TREES BEING RETAINED

The tree protection fence and land clearing boundary would be the same boundary. In our opinion, a four-foot high protection fence would protect the "Tree Protection Areas" from any entry by equipment. Six-foot steel fence posts need to be placed at six to eight-foot intervals along the fence to keep the fence erect during land clearing. If silt fencing is required along this boundary, it could take the place of the four-foot high tree protection fence.

6. STREET TREES

All street trees and landscape vegetation will be addressed in the landscape plan to be completed by the landscape architect contracted by the developer.

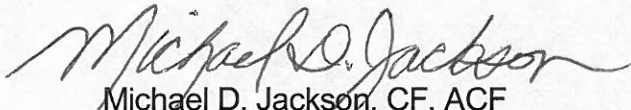
7. LAND CLEARING PERMIT

The City of Tumwater will approve the permit needed to remove trees from the project area.

Once the land clearing permit is approved by the City of Tumwater and before land clearing begins, PFSI will meet on-site with the owner or owner's representative to make sure, there is ample protection for all trees to be protected.

If further information is needed in regard to the trees on this site, please contact us.

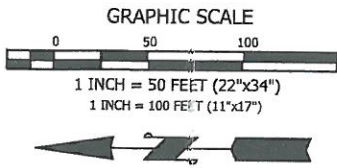
Sincerely,



Michael D. Jackson, CF, ACF
Professional Forester

Enclosure: Map Exhibit

MDJ:dkd



DENSITY CALC

GROSS SITE AREA = 466,967 SQ FT (10.72 ACRES)
ROAD A = 35,659 SQ FT
ROAD B = 26,803 SQ FT

NET USEABLE AREA = GROSS AREA - ROAD AREA
466,967 SQ FT - (35,659 SQ FT + 26,803 SQ FT)
TOTAL NET USEABLE AREA = 404,505 SQ FT (9.286 ACRES)

DENSITY 4 UNITS PER NET USEABLE ACRE = 37.14 UNITS

PROJECT INFORMATION

PARCEL#: 12127330000
ZONING: RS-2 (SINGLE-FAMILY)
MINIMUM LOT SIZE: 9,500 SQ. FT.
BUILDING SETBACKS:

FRONT: 20 FEET
REAR: 20 FEET
SIDE: 10 FEET
WATER PROVIDER: CITY OF TUMWATER
SEWER PROVIDER: CITY OF TUMWATER
PARKING SPACES: 4
IMPERVIOUS SURFACE: 30% COVERAGE

SUNRISE HILL PLAT

A PORTION SW 1/4 OF THE SW 1/4 OF SECTION 27, TOWNSHIP 18 NORTH, RANGE 2 WEST, W.M.,
CITY OF TUMWATER, THURSTON COUNTY, WASHINGTON
PRELIMINARY SITE PLAN

LEGEND

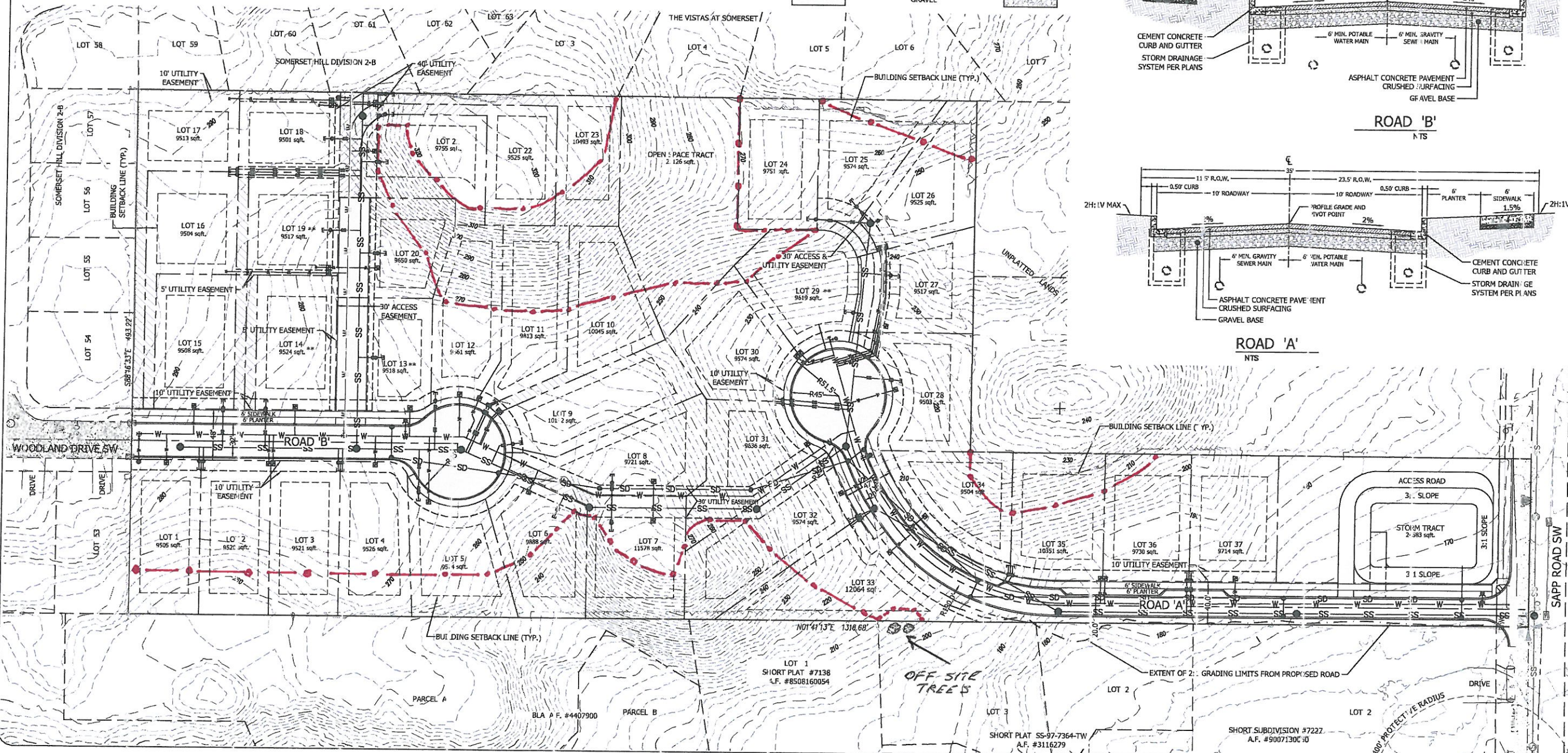
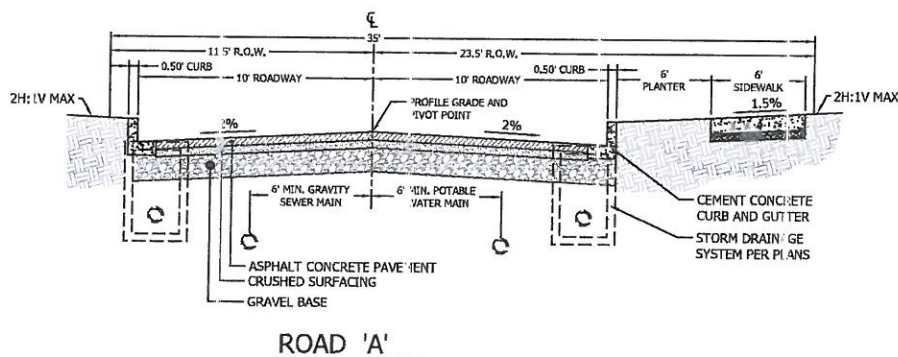
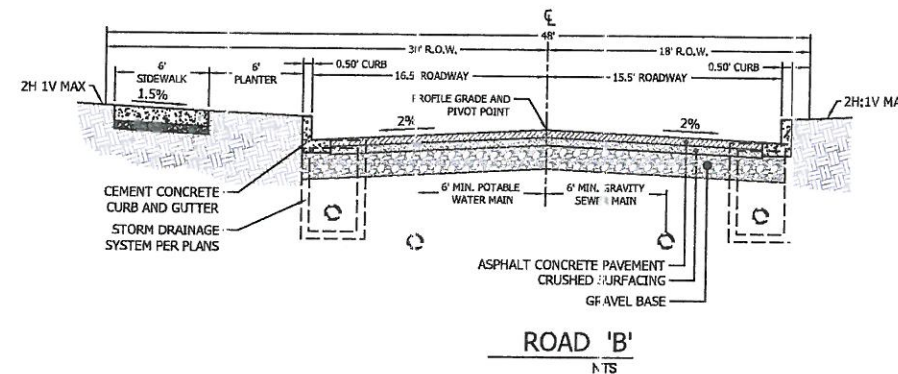
SURVEY	PROPOSED	SURVEY	PROPOSED
CONTOURS		GAS LINE	
PROPERTY LINE/RIGHT-OF-WAY		WATER LINE	
RIGHT-OF-WAY DEDICATION		TYPE 2 CATCHBASIN	
RIGHT-OF-WAY CENTERLINE		TYPE 1/TYPE 1L CATCHBASIN	
EASEMENT		STORM DRAIN CLEANOUT (SDCO)	
BUILDING SETBACK		SAITARY SEWER MAINHOLE	
STORM DRAIN LINE		SANITARY SEWER CLEANOUT (SSCO)	
SANITARY SEWER LINE		HYDRANT	
ROOF DRAIN LINE		WATER VALVE	
SANITARY SEWER FORCE MAIN LINE		WATER METER	
COMMON UTILITY TRENCH		ASPHALT	
OVERHEAD POWER LINE		CONCRETE	
UNDERGROUND POWER LINE		GRAVEL	

TREE PROTECTION FENCE



VICINITY MAP

NOT TO SCALE



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Physical Address: 4706 97th Street NW, Suite 100, Gig Harbor, WA 98332

PRELIMINARY SITE PLAN

SHEET TITLE: PRELIMINARY SITE PLAN

CLIENT: CHUL M. KIM
454 SW 29TH STREET
FEDERAL WAY, WA 98023

CONTACT: CHUL M. KIM
PHONE: (206) 835-6300

DESIGNER: J. JACOBY
ENGINEER: B. ALLEN
DRAWN: J. JACOBY
DATE: 2018-07-24
REVISION: 17-226
PROJECT: 17-226
DWG NAME: 17-226-A

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