

East Lake Sammamish Trail Inglewood Hill Road Parking Lot Project

Tree Inventory/Assessment Report

Prepared for:

Parametrix



6/17/2017 Updated 7/7/17

Table of Contents

1. Summary	1
2. Client	
3. Assignment	
4. Purpose and Use of Report	
5. Limits of Assignment	
6. Methodology	
7. Observations/Discussion	2
8. Analysis and Testing	
9. Conclusions	

Site Photos - pages 4 and 5

Attachments

- Tree Summary Table Project Area Map ١.
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1. Summary

An assessment of significant trees within the Inglewood Hill Parking Lot Project area was conducted. The subject area is south of Kokomo Drive from Station 473+00 to 467+50, and as shown on the attached map. As defined in the Sammamish Municipal Code, significant trees are coniferous trees with a DBH (diameter at breast height, 4 ½ above ground) of 8 inches or greater and deciduous trees with a DBH of 12 inches or greater. The assessment included (1) a general inventory of significant trees within the proposed clearing and grubbing (C&G) limits and (2) a more detailed evaluation of significant trees just beyond the clearing and grading limits that may be adversely impacted by parking lot improvements.

Data for significant trees can be found in the attached Tree Summary Table. Detailed evaluations were completed for 14 significant trees within the C&G limits. An additional 10 trees were assessed outside of the C&G limits.

Of the 14 trees existing within the proposed C&G limits, 13 of these are in 'poor' condition and considered non-viable. 12 of these were topped in the recent past and the other is in vast decline and over 90% dead.

Of the 10 trees assessed outside of the C&G limits, two are in poor condition and 'high' risk. These are recommended for removal to maintain risks at acceptable levels.

Significant Tree data is summarized as follows.

Total Trees Assessed Inside C&G Limits							
# of Healthy/Viable Trees	1						
# of Unhealthy/Non-viable Trees							
Total Trees Assessed Outside C&G Limits							
# of Healthy/Viable Trees	8						
# of Unhealthy/Non-viable Trees							
Total Trees							
Total # of Viable Trees to be Removed	1						
Total # of Non-Viable trees to be removed							
Total # of Trees Saved							

Recommended pruning shall be performed prior to construction to avoid unnecessary damage to trees to be retained and for worker safety. Pruning recommendations are identified in the Tree Summary Table.

2. Client

Parametrix 719 2nd Avenue, Suite 200 Seattle, WA 98104

3. Assignment

The assignment is to conduct a condition assessment of all significant trees within the project area as shown on the attached map, and to report on those findings.

4. Purpose and Use of Report

The purpose of this report is to provide Parametrix with baseline data for trees within the project area and those potentially affected by the planned improvements. This data will aid the client in determining which trees can be saved or preserved and which ones represent risk that should be abated where appropriate.

5. Limits of Assignment

The assignment is limited to the information gathered during the site visit in June of 2017 and references noted in this report. No invasive methods were used to assess tree condition unless fully described in the "Analysis and Testing" section of this report. Information from published sources cited herein is assumed to be reliable. Impacts and the long-term viability of trees were judged by evaluating tree conditions and proposed improvements. No staking of improvements was done prior to the assessment, so the assessment is limited to interpretation of site plans. No final elevations are provided on site plans, which further limit the evaluation of the depth of cuts and fills adjacent to subject trees.

6. Methodology

Each tree in the assignment was visually examined for outward defects and indications of decline. Tree diameters (diameter at breast height, 4.5' above ground level) were measured by tape or estimated. The tree heights were measured using a Spiegel Relaskop or estimated. Crown width in four cardinal directions was measured by tape or estimated. The tree assessment procedure involves the examination of many factors:

- The crown of the tree is examined for current vigor. This is comprised of inspecting the crown (foliage, buds and branches) for color, density, form, and annual shoot growth, limb dieback and disease. The percentage of live crown is estimated for coniferous species only and scored appropriately.
- The bole or main stem of the tree is inspected for decay, which includes cavities, wounds, fruiting bodies of decay (conks or mushrooms), seams, insects, bleeding, callus development, broken or dead tops, structural defects and unnatural leans. Structural defects include crooks, forks with V-shaped crotches, multiple attachments, and excessive sweep.
- The root collar and roots are inspected for the presence of decay, insects and/or damage, as well as if they have been injured, undermined or exposed, or original grade has been altered.

Information for the trees subject to this report can be found on the attached Tree Summary Table.

7. Observations/Discussion

There are few significant trees of high retention value within the project area. A total of 24 trees were assessed. These are comprised of native species of Pacific madrone, bitter cherry, big leaf maple, black cottonwood and Oregon ash. All of these are commonly found up and down the trail corridor.

Tree #8044 as shown on the plan no longer exists. This tree has been removed.

12 of the subject trees have been recently topped, likely to remove dead and or dying tops and to reduce hazard potential. These include #6000, #6001, #6002, #8035, #8036, #8037, #8038, #8039, #8040, #8041, #8042 and #8043. Topped heights range between 20' and 40'. These will never develop a structurally sound form and are therefore rated as 'poor' condition

All of the subject Pacific madrone trees are diseased, infected with Madrone canker. These range from over 90% dead to incipient decline. The Pacific madrone has been in general decline across the Puget Sound Region for the past several years. This decline is mostly associated with the fungal diseases *Natrassia* and Madrone canker. Subject trees #8050, #8054 and #17508 are in the advanced stages of decline and have almost succumb to complete mortality.

Only one tree was found to be in 'good' condition. This is the semi-mature Oregon ash (#8880) at the north end of the project area. This tree is located next to the finished trail section and is not expected to be adversely impacted by this proposal.

8. Analysis and Testing

No laboratory testing was initiated as part of this assignment.

Tree Assessment Report - Inglewood Hill Road Parking Lot

9. Conclusions

A total of 14 significant trees existing within the proposed C&G limits will need to be removed to make way for parking lot improvements. 13 of these are in 'poor' condition and considered non-viable.

An additional 10 trees were assessed outside of the C&G limits. Two of these are in poor condition and rated as 'high' risk. Removal is warranted to maintain risk at acceptable levels. The other eight trees can be feasibly retained.

The recommended actions for subject trees are provided on the attached Tree Summary Table. There are a few pruning recommendations to reduce current 'moderate' risk conditions, primarily crown-cleaning to remove deadwood.

Once grade stakes and clearing limits are established on site, the assignment area shall be evaluated by the project arborist to ensure concurrence with the initial condition assessment and recommendations of this report. Cuts and fills shall be limited to the extent necessary for construction activities, and existing grades shall be left undisturbed where feasible to achieve the design standards of the improvements.

There is no warranty suggested for any of the trees subject to this report. Weather, latent tree conditions, and future man-caused activities could cause physiologic changes and deteriorating tree condition. Over time, deteriorating tree conditions may appear and there may be conditions, which are not now visible which, could cause tree failure. This report or the verbal comments made at the site in no way warrant the structural stability or long term condition of any tree, but represent my opinion based on the observations made.

Please call if you have any questions or if we can be of further assistance.

Sincerely,

Bob Layton

ISA Certified Arborist #PN-2714A ISA Tree Risk Assessment Qualified

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Subject Area - Trees #6000, #6001 and #6002 on right; Tree #8035 on left







Tree #17508 - over 90% dead



Recently topped trees #8042 and #8043



INGLEWOOD HILL ROAD PARKING LOT PROJECT TREE SUMMARY TABLE

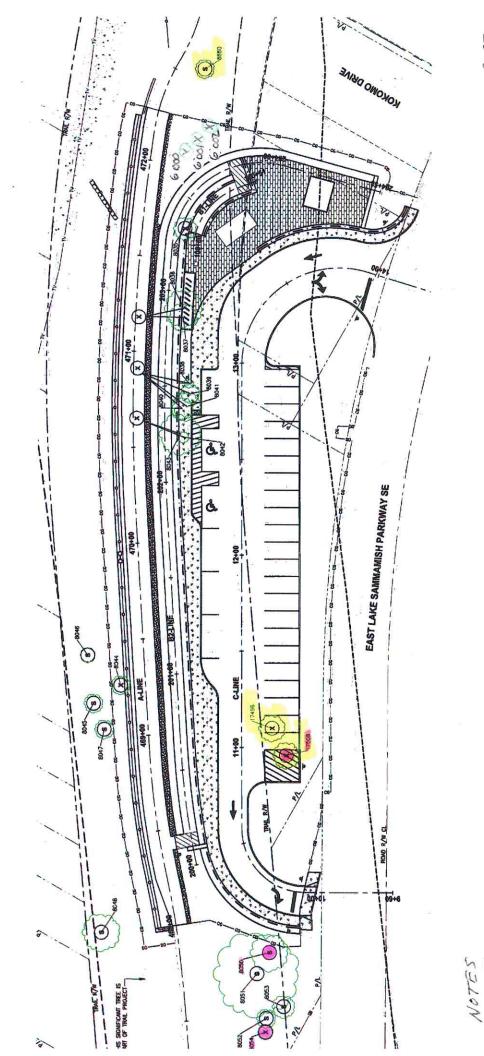
AMERICAN FOREST MANAGEMENT, INC

Drip-line Measurements (feet)

	ļ							1																		
	Recommendation	Remove	Save	Save	Save	Save	Hazard - Remove	Save - Crown Clean	Save - Crown Clean	Save - Crown Clean	Hazard - Remove	Save	Remove	Hazard - Remove	Ì											
	Prune													no	ou	ou	ou		yes	yes	yes		no			
	Risk	moderate	moderate	moderate	low	low	wol	wol	low	low	wol	low	low	moderate	moderate	moderate	moderate	high	moderate	moderate	low	high	low	moderate	high	
	Condition	poor	fair	fair	fair	fair	poor	fair	fair	fair	poor	poob	fair	dead												
	Comments	topped in recent past	forks at 1', trunk decay	poor trunk taper	decay, some top dieback/decline	forks at 5'	major decline-diseased, 80% dead	significant deadwood in crown	dead codom stem, decline	typical form, moderate deadwood	leans west over trail	no concerning defects	diseased, heavy lean north	99% dead												
	W	8	4	4	×	×	×	×	×	×	×	×	×	na	na	na	na	12	29	13	18	×	10	×	×	
nts (feet)	Е	2	4	4	×	×	×	×	×	×	×	×	×	6	9	22	8	0	12	0	12	×	14	×	×	
easureme	S	4	4	4	×	×	×	×	×	×	×	×	×	8	2	10	13	0	12	0	10	×	12	×	×	
Urip-line Measurements (reet)	Z	10	4	9	×	×	×	×	×	×	×	×	×	15	10	8	6	25	26	0	15	×	18	×	×	
	Height	36	42	44	30	30	22	20	30	20	20	20	20	88	62	94	22	92	06	98	88	13	52	46	09	pul
	DBH	8,9 (12)	10,8 (13)	11,9 (14)	16	26	11,16 (19)	13	19	18	24	13	18	15,7,14,14 (26)	10,8,8 (15)	11,15,21 (28)	29	33, 22	30,42,35	20,11 (23)	21	17	17	20	38	4 1/2' above aro
	Species	bitter cherry	bitter cherry	bitter cherry	bitter cherry	Pacific madrone	big leaf maple	big leaf maple	big leaf maple	black cottonwood	Pacific madrone	big leaf maple	Pacific madrone	big leaf maple	Pacific madrone	Oregon ash	Pacific madrone	Pacific madrone	DBH = diamter at breast beinht 4 1/2' above oround							
	Tree #	0009	6001	6002	8035	9803	8037	8038	8039	8040	8041	8042	8043	8045	8046	8047	8048	8050	8051	8052	8053	8054	8880	17496	17508	DRH = diar

DBH = diamter at breast height, 4 1/2' above ground DBH for multiple trunk trees calcualted by taking the square root of all stems squared

INGLEWOOD HILL ROAD - PARKING LOT PROTECT SIGNIFICANT TREE ASSESSMENT



#6000, 6001, 6002, 8035, 8036, 8037, 8038, 8039, 8040, 8041, 8042, 8043-ALL TOPPED IN RECENT PAST #8044 HAS BEEN REMOVED - NO LONGER EXISTS

- INDICATES HAZARD TREE