

Maple Valley - Legacy Site

Comparative Analysis and Tree Survey

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Comparative Analysis of UW Spring 2017 Project with ULI Summer 2017 Report.

Category	UW Spring 2017	ULI Summer 2017 Report	Recommendations
Vision/Intent	- To identify the public needs in the City of Maple Valley and address the needs with a land use plan for the legacy site.	- A need exists to create a regional identity. - Identify how resources are connected by the regional trail. - Satisfaction of community goals through leveraging the value of the Legacy Site.	- Formulate a plan based upon the needs and desires of the city of maple valley which also helps to foster a sense of regional identity while leveraging the value of the legacy site in a way in which promotes local employment, and supports financial and community growth.
Land Use	- Multi-use with a heavy focus on community buildings, municipal buildings, and community open space. Large opportunity for retail.	- Heavily Residential with low, medium, and high density housing options. Mixed use office space in the NE corner of the Site, and small area for community center and related amenities. Space allotted for future transit needs of the Maple valley area.	- In accordance with the UW Spring 2017 report, the Land use should consist of multi-useage with a focus on a combination of municiple, community, recreational, and retail spaces into a singular campus.
Market	- Not Addressed - Community surveys conducted, but in depth analysis not performed.	- Not Addressed	Perform an extensive market analysis of the area. This work would include: Residential, Commercial, Mixed-use, Industrial, Hotel/Recreation.
Design	- Reconfiguration of area to create a municiple and retail center for Maple Valley, configured in the means of 4 differing proposals- Main Street Alternative, Munciple Campus, Urban Grid, and No Development.	- Village green concept with heavy focus on outdoor community gathering and park space.	Create a sustainable, community-oriented, practical, multi-use plan. This may include: Shared plaza , Resort facility , Municipal campus, Recreational facilities , Residential/ commercial/ industrial/ retail as appropriate. Pedestrian-oriented connectivity.
Fiscal/Economic	- In order to finance the development of various community assets, the city must sell land for development.	- Not Addressed	Recommendations that will include: Financial strategies that are both economically sustainable and viable. Public/ Private partnerships that leverage city assets.
Employment	- Not Addressed	- Not Addressed	Recommendations of policies that support family wage employment for the community.
Site Conditions	- Plan adjusted to topography and takes into consideration the natural slope of the site.	- Not Addressed	Evaluation of site constraints and opportunities: Ecological, topographic, geologic, hydrologic, infrastructure, and contextual View shed and other natural attributes.



Legacy Site Tree Survey: 11/10/2017 & 11/18/2017

Collaborating with students from the School of Environmental and Forest Sciences, 14, 1/20th acre plots were surveyed throughout the Legacy Site. Using state of the art technology to record tree height, circumference, and location, we were then able to extract useful information applicable to future development research.

Tree Measures:

- Species
- Height
- Circumference
- Location
- Surrounding Features






Topographic Map


Walking through the Legacy Site provides a first hand look of this diverse terrain. A network of pathways allow pedestrians to wander up hills, through plateaus, and around local habitats.

Natural Guiding Features

Forested Swales:

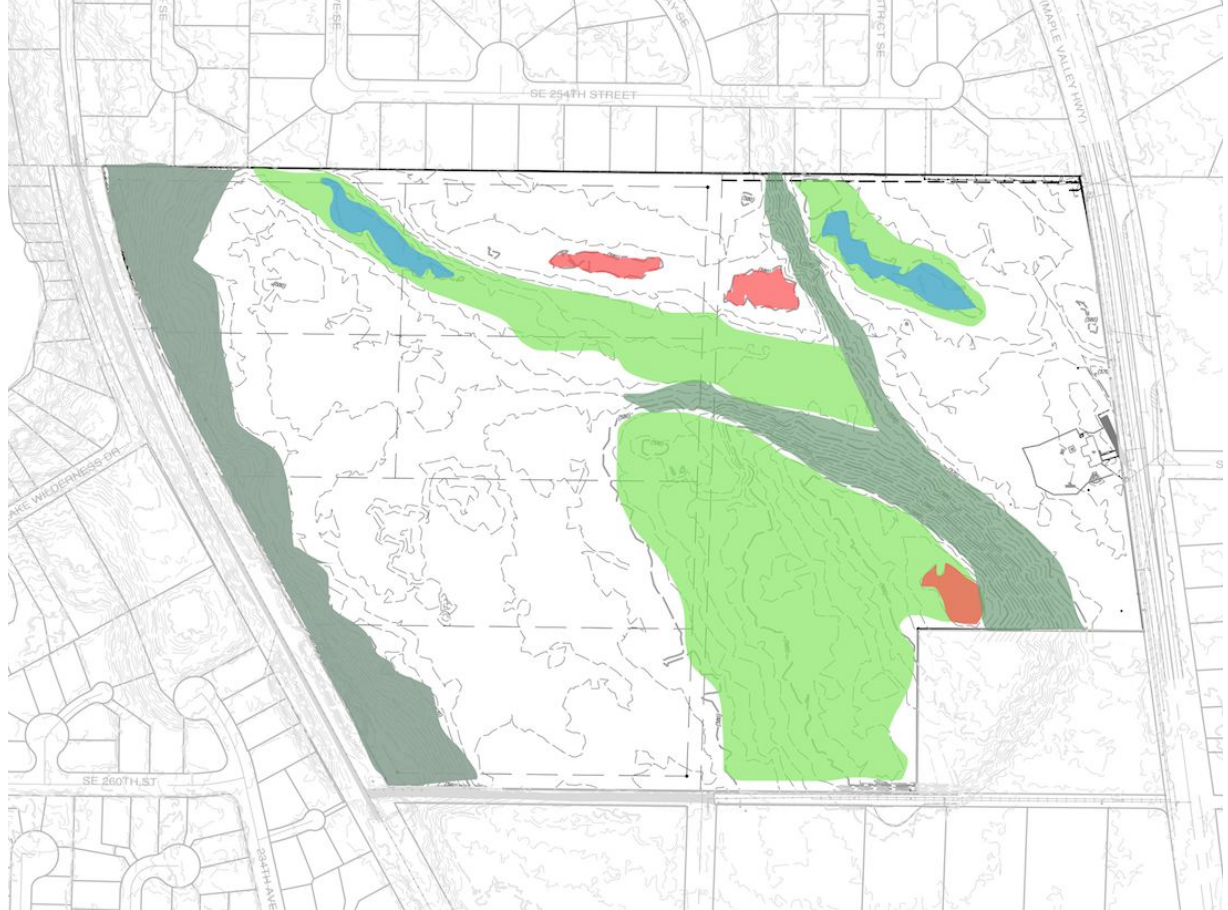
 Shallow, low-lying and intermittent drainage ways.

Forested Steep Slopes:

 Moderate and typically steep slopes (10% or greater)

 Local High Point

 Local Low Point



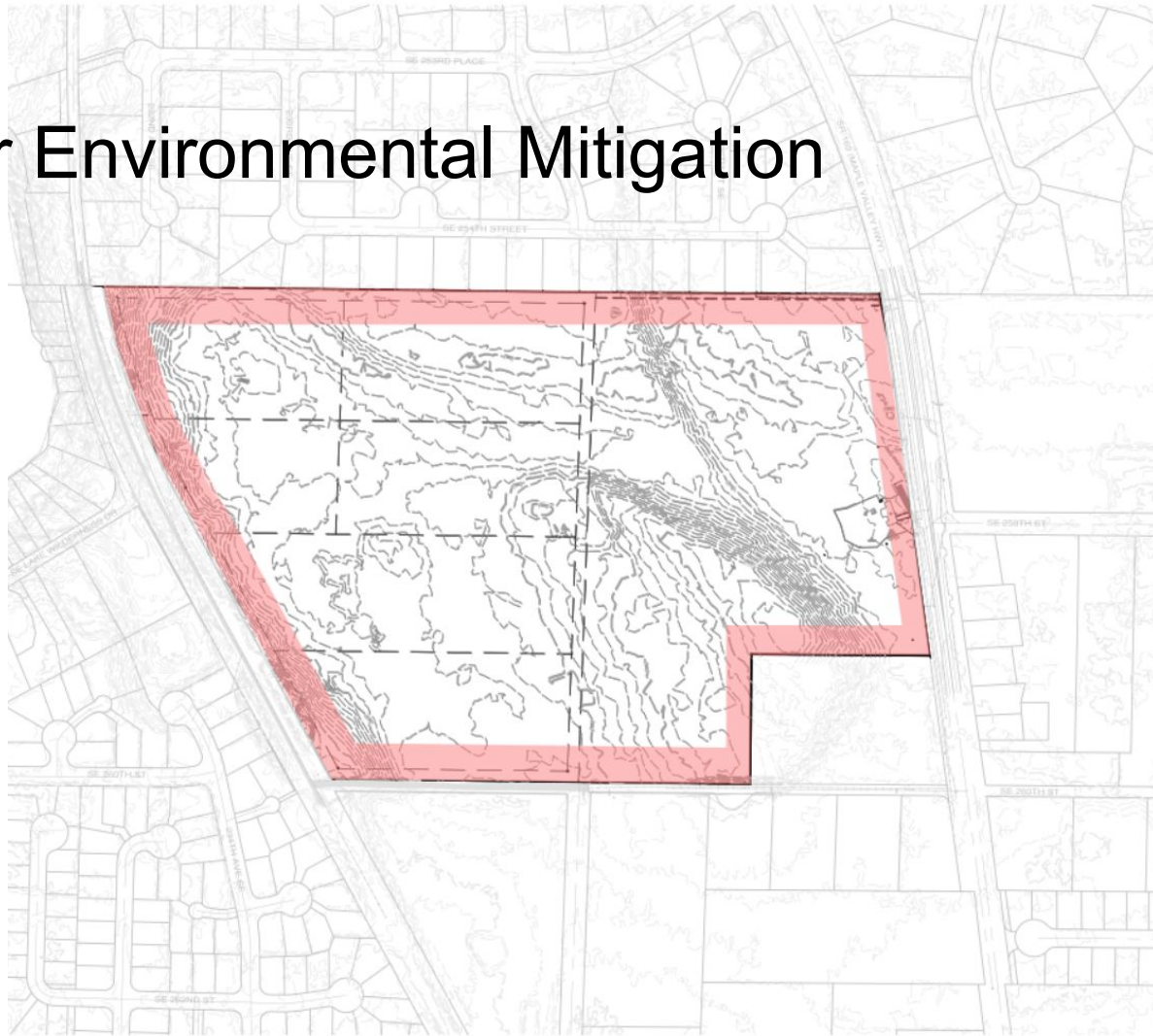


Proposed Buffer for Environmental Mitigation

Recommendation minimum of 50 ft.

Reasons for buffer zones:

- Protects tree development
- Maintain privacy
- Promotes ecology
- Provide safety
- Mitigate air and sound pollution.





Tree Cluster Map



 Minimum Recommended Vegetation Buffer
Approximately 50 Feet

 Western Red Cedar

 Big-Leaf Maple

 Douglas-Fir



Big- Leaf Maple



Western Red Cedar



Douglas-fir



Pacific tree frog found on Legacy Site

Next Steps for Winter Quarter 2018

Supply and Demand Market Analysis:

- Residential: Single family and multi-family.
- Commercial: Office and related.
- Retail: Stand alone and strip centers.
- Mixed-use: Residential/Commercial/Retail.
- Industrial/ Light Manufacturing: Including warehouse and distribution.

Site Analysis:

- Ecological
- Topographic
- Hydrologic and Infrastructure: CEE civil and environmental engineering





Lion's Mane Mushroom (*Hericium americanum*) on Legacy Site

Tree Survey Data 1

Count	Spp	DBH	Hgt (ft)	Hgt (m)	CC	Snag?	LCR	NOTES	1/20th acre plot	
1	PSME	33	170		D			60	Nothing below 4 DBH	
2	ACMA	16	85		CD			80		
3	ACMA	22.5	94		CD			50		
1	Root rot pocket									GAP
2	ACMA								Windthrow -down trees with root wads	
3	PSME								Cedar doing fine	
4	TSHE								ACMA doing fine	
									Really open, light environment	
									Some cascara	
									Vine maple	
2										
1	ACMA	24.5			CD					
2	PSME	46			38.8 CD			30		
3	PSME	25.5			48.3 D			30		
4	ACMA	31.5			24.3 I				Broken top	
5	ACMA	22			26.4 I				Leaning	
3										
1	PSME	9	38		S			50	Not healthy, next to dom	
2	PSME	34			42.9 D			50		
3	ACMA	16.5			27.2 I					
4	THPL	42			34.9 CD			90		
5	ACMA	9	35			Y				
6	ACMA	5.5	20			Y				
7	ACMA	17			I					
8	ACMA	19.5			I					
9	THPL	32			33.7 CD			90		

Count	Spp	DBH	Hgt (ft)	Hgt (m)	CC	Snag?	LCR	NOTES	1/20th acre plot
4									
1	ACMA	23			35.8 CD				
2	ACMA	10			21.1 I				
3	TSHE	33.5			42.3 D				
4	ACMA	21				CD			
5	ACMA	24.5			27 CD				Sweep
6	ACMA	26				CD			
7	ACMA					CD			
5									
1	ACMA	14			20.6 I				
2	ACMA	14			11.3 I				Broken top
3	TSHE	22			31.1 CD			20	
4	ACMA	14			I				
5	ACMA	23.5				CD			
5	ACMA	9	27			Y			
6	ACMA	16.5				CD			
7	TSHE	9.5	32			Y			
8	ACMA	24.9				CD			
6									
1	PSME	32.1			40.6 D			40	
2	ACMA	22			20.6 I				
3	ACMA	18			I				
4	ACMA	18	23			Y			
5	TSHE	19.5			24.8 CD			30	
6	ACMA	17				CD			
7	ACMA	8			I				Leaning
8	ACMA	17.5				CD			Broken top
9	ACMA	4.5			S				
10	PSME	9			S				Curved, but doing well
11	ACMA	4			S				
12	ACMA	30			27 CD				Bottom splits into two trees at ground level
13	ACMA	23				CD			"
7									
1	PSME	16							40
2	PSME	14.5							40
3	PSME	6	40				Yes		
4	PSME	7	51		15.6 S				
5	PSME	11.5							BROKEN TOP
6	PSME	7							
7	PSME	16							
8	PSME	8.5							
9	PSME	16.5	110		33.5 CD				
10	PSME	16							
11	PSME	12.5	87		26.5 I				
12	PSME	6.7							
13	PSME	17							
14	PSME	8.5							
15	PSME	6.5							
16	PSME	20.5	150		45.6 D				
17	PSME	20.5							
8									
1	PSME	27.2	121		36.8 CD				30
2	PSME	9.3	65		19.8 I				30
3	PSME	9.5							
4	PSME	29.3	140		42.6 D				30
5	PSME	12.5							
6	PSME	10.2	40				Yes		
7	PSME	6							
8	PSME	14.7							
9	PSME	20.5							Splits at 7 feet
10	PSME	4.6	36		11 S				25
11	PSME	7.3	15				Yes		

Tree Survey 2

Count	Spp	DBH	Hgt (ft)	Hgt (m)	CC	Snag?	LCR	NOTES	1/20th acre plot
9									
1	PSME		11.5	62	18.8 CD			40	
2	PSME		9.2	47	14.3 S			20	UNHEALTHY, bark covered in lumps, branches scarce
3	THPL		12.3	20		Yes			
4	PSME		14.6			Yes			Fallen, but supported by surrounding trees
5	PSME		16.9	100	30.6 D			45	
6	PSME		12.8	60		Yes			Bark falling off at top, has branches still
7	PSME		30.5	20					Big snag, lots of holes
8	PSME		10.3						
9	PSME		9.2						
10									
1	THPL		35.3	90	27.5 I			90	
2	PSME		31.1	136	41.4 D			40	
3	PSME?		17.6	65		Yes			
4	THPL		5.8	33	10.2 S			95	
11									
1	PSME		31.8	126	38.3 D				BIG
2	THPL		6.4	32	9.7 S			90	
3	THPL		10.7	15		YES			
4	THPL		29.4	105	32 CD				
5	THPL		10.8	70		YES			Recently dead
6	PSME		7.2	48	14.6 I			30	
7	ACMA		8.5						

Count	Spp	DBH	Hgt (ft)	Hgt (m)	CC	Snag?	LCR	NOTES	1/20th acre plot
13*									
1	PSME		9						
2	PSME		11.4						
3	PSME		17.6						
4	PSME		17.3						
5	THPL		6.6	40		Yes			
6	PSME		11						
7	THPL		7	35			Yes		
8	PSME		18.4	123	37.6 CD		30		
9	PSME		31.6	131	40 D		30		Curved at bottom
10	PSME		22.4						
12*									
1	THPL		18.7	85	26 D			40	
2	THPL		9	30		Yes			I like ur branches :)
3	THPL		6	71	21.5 CD			15	
4	THPL		11	62	19 I			35	Curved bottom
5	THPL		25.5	25		Yes			
14									
1	PSME		26.7	147	44.7 CD			30	Split below DBH
2	PSME		22.5						BROKEN TOP AROUND 70'
3	ACMA		8.5						
4	PSME		19						
5	PSME		5.2	29	8.8 S			20	
6	PSME		14.6						
7	PSME		17.4	113	34.5 I			25	
8	PSME		43.4	157	48.1 D			50	

Links

Video 1: https://youtu.be/c_ZRTBHccek

Video 2: <https://youtu.be/cOReQ7VLwAA>