

Hi Jess,

As per our conversation yesterday I am not writing up anything formal from my tree risk assessment at St. Edwards on Tuesday, but doing this in a long email instead. You may include the following findings and recommendations in our revisions to the SEPA checklist regarding impacts of the project to trees and feel free to cut, paste, chop, and mince my words. If asked, you should attribute these findings to a visual tree risk assessment performed on August 8th by myself, ISA Certified Arborist ID# PN-8291A. If at some point in the future you require something more formal or need maps or figures to accompany these findings I can produce them, but I am limiting my effort to just the narrative at this time.

It should be noted that any tree risk assessment represents the conditions of the trees assessed at the time of inspection and may not represent past conditions nor warrant against changes to the condition of any trees in the future. My assessment follows the arborist report by Tree Solutions, Inc. completed last March which inventoried and assessed trees in the same vicinity. When present, I used the existing three digit tree tags placed by Tree Solutions, Inc. I otherwise completed my assessment without prior knowledge of this report or the methods employed by this consultant.

I visually inspected all trees within striking distance of the proposed footprint to the ballfield project on the west, south, and east sides covering an area approximately 150 feet outside the clearing limits of the existing ballfield. I did not assess trees across the entrance road to the north that are within striking distance as no proposed development is likely to impact those trees. I used our agency's standard protocols for assessing tree risk outlined in our tree activity worksheet (form O-401). I only recorded findings on trees that exhibited conditions that would elevate their risk. Examples of such conditions are: structural defects, poor canopy architecture such as limbs extended beyond the canopy and canopy imbalance, decreased vigor or signs of stress, wounds, and insects and pathogens or their symptoms. In a few cases where a tree showed outward symptoms of having an internal column of decay (rot) a resistograph was used to measure the extent of decay inside the tree. A summary of my findings followed by a table of all the tree with elevated risk is below.

- Four trees have hazardous conditions that require emergency treatment at this time. One is standing dead and three are in need of immediate pruning for dead hanging branches.
- Five trees present conditions that I recommend treating before ballfield development. All five are cottonwoods - one leans heavily into the ballfield and should be removed and four have over extended branches that are at elevated risk for sudden branch drop and should be pruned.
- Two trees present conditions that should be monitored over time, but pose no imminent risk. One is a small Douglas-fir with a structural defect, the second is a large Douglas-fir with a 3" diameter cavity of rot in the middle that likely is infected with a forest pathogen *Phaeolus schweinitzii*. This tree is 41" with only a small amount of internal decay. Once a tree has less than 30% sound rind thickness we remove it, so this tree has years if not decades before it will reach that threshold.

Species	Tree Number (if any)	Diameter (inches)	Height (ft)	Recommended Action	Observed Hazard Condition
Douglas-fir	641	12	70	Monitor	Codominant stem at 25' with included bark.
Douglas-fir	--	41	140	Monitor	Swollen butt. 3" cavity measured with resistograph.
black cottonwood	583	17	150	Prune if over development	Large limb extending over ballfield. Weight reduction pruning recommended.
black cottonwood	572	34	150	Prune if over development	Large cottonwood in decline with dead limbs developing on back side. Remove dead wood and monitor.
black cottonwood	583	26	150	Prune if over development	Large limb extending over ballfield. Consider weight reduction pruning.
bigleaf maple	563	17	70	Remove	Standing dead.
black cottonwood	557	25	140	Prune	Dead limb over 4" diameter, already broken and hung up in canopy over ballfield.
black cottonwood	--	11	40	Consider removal.	Leaning at 55 degree angle over ballfield. Lean is self-correcting but severe enough that tree should be removed. Not likely to survive to maturity.
black cottonwood	(557)	27	150	Prune if over development	Next to tree 557. Large dead limb over ballfield.
black cottonwood	--	11	30	Prune	Dead limb over 4" diameter.
black cottonwood	535	14	55	Prune	Dead limb over 4" diameter.

You asked after I returned that I separately assess potential impacts of construction to trees. Though no trees are planned to be removed in the current project plans there is the potential for significant impact to tree root systems due to construction that may necessitate tree removals both during the project and afterward during monitoring. Our internal standard is that the critical root zone (CRZ) for trees is 1.25 feet per inch diameter and where construction impacts damage or remove 20% or more in a single action or greater than 50% over the life of the tree that we consider removal. The decision to remove or leave a tree is typically made by an arborist during construction when root loss can be monitored. We should ask the City to adopt our temporary tree protection standards into their contract during construction (see attached).

The site plans you sent were helpful in estimating how many trees would have impacts that exceed this standard, though they are not clear enough to know with certainty for any particular tree. Nonetheless, I can identify 8 trees in the grove on the westside of the ballfield that will have CRZ impacts from pavement and clearing that may exceed this standard. Along the edge of the proposed ballfield I cannot readily identify any trees that will exceed this standard, but the site plans are blurry for this detail and the trees are crowded so a conservative maximum would be a half dozen or so more. Small trees (trees less than 8") don't typically pose much risk and are more resilient to root impacts and so I don't anticipate their removal during construction to be necessary, though some may succumb later.

Overall the trees surrounding the ballfield are in good condition and I do not believe they pose unusual risk in their current state. The presence of mature cottonwoods on the boundary and their propensity toward sudden limb drop in the summer can be managed with proactive reduction pruning. Construction impacts on the CRZ of trees in the grove on the westside of the ballfield are the most concerning tree risk relevant to the project. Designing to reduce the amount of CRZ removals, tree protection zones during construction, and ongoing mulching the CRZ of trees after construction are all protective measures that should be taken. Preemptive tree removals to avoid creating high risk trees should also be considered if other options are unavailable.

As a final note, I did take a look at parking areas during my visit and these are identified on my ArcGIS online map, <http://arccg.is/jvPPG>. Not knowing which are attributable to this project vs the seminary building and not knowing the actual plans for parking my assessment was limited, though you can see some comments and photos in the

map. Speaking generally, there are a handful of trees very close to the existing pavement that I would anticipate needing to remove to accommodate expanded parking. The CRZ's of trees adjacent to parking where pavement is expanded will also need to be evaluated.

Hope this helps with the checklist and your upcoming meeting. Please let me know if I can provide anything further.

Best,

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