



Department Source: Parks and Recreation

To: City Council

From: City Manager & Staff

Council Meeting Date: November 16, 2020

Re: Hazardous Tree Removal Report: Rock Bridge Park, Stephens Lake Park, Lake of the Woods Golf Course, and L.A. Nickell Golf Course

Executive Summary

Since 2009, Council has requested a report on the removal of any large trees in the parks and on other City property. The Parks & Recreation Department will need to remove hazardous trees located at Rock Bridge Park, L.A. Nickell Golf Course, Lake of the Woods Golf Course and Stephens Lake Park due to the current state of decline and the potential hazard for park users. The Department proposes to remove seven mature ash trees that qualify as large trees due to a diameter at breast height (DBH) of over 30 inches. Staff will remove the ash tree at Rock Bridge Park, located adjacent to the basketball court and playground, within the next 30 days due to the declining condition of the tree and location to active recreation uses. The ash trees located at the other parks will be monitored over the next 1-2 years and removed when the trees have less than 50% active canopy or pose an immediate threat to park patrons or property. Forestry staff has observed the decline of these trees over a number of years and monitored the potential damage from Emerald Ash Borer. The removal of the trees will eliminate future concerns related to falling branches, potential failure of the entire tree, and risk to park users. In anticipation of the loss of ash trees due to Emerald Ash Borer at Stephens Lake Park, forestry staff has planted a number of other trees in the vicinity of the trees proposed for removal. Staff will plant replacement trees at the golf courses, Paquin Park, and Rock Bridge Park after removals are completed at each location. Tree Hazard Evaluation Forms and photos are attached.

Discussion

In February of 2009, the Parks & Recreation Department was asked by the City Council to develop a report relating to the removal of larger trees within the park system that may be perceived as significant to the public and/or the use of the park. The report recommended a policy that outlined the procedures to be followed whenever large trees were to be removed due to either being a public safety hazard or due to park development. A link to the 2009 report is included in the legislative history section of this report; and in summary, the P&R tree removal procedure for hazardous trees now includes the following key elements:

1. Tree Risk Assessment Forms will be completed by the Department's certified International Society of Arboriculture Forester and staff.
2. Trees larger than 20-inch diameter at breast height (DBH), but smaller than 30-inch DBH must have the approval of the Park Development Superintendent and the Park Services Manager to be removed.
3. Trees larger than 30-inch DBH must have the approval of the P&R Director, who will notify Council that the tree or trees will be removed.



4. Any size tree that presents an immediate danger to the public shall be removed immediately.

Park staff is providing this report to alert the City Council about the need to remove seven ash trees located in the park system due to existing state of decline and current or anticipated damage from Emerald Ash Borer. Emerald ash borer (EAB) is an exotic beetle that was discovered in southeastern Michigan, near Detroit, in the summer of 2002. The adult beetle feeds on ash foliage but causes little damage. The larvae, however, feed on the inner bark of ash trees, disrupting the tree's ability to transport water and nutrients, which ultimately leads to the tree's death. EAB is native to Asia, and arrived in the United States around 1990 in solid wood packing material carried in cargo ships and airplanes. EAB has since spread over a large area of North America and has killed an estimated 50-100 million ash trees. In Missouri, EAB was initially discovered in 2008 near Lake Wappapello in Wayne County. In the last 5 years, EAB has been confirmed in many other Missouri counties, including Boone County in 2019.

A 2010 inventory lists approximately 475 open park ash trees in Columbia's park system and staff plans to complete an updated inventory in 2021 to coincide with anticipated pesticide treatments of quality ash trees and removals of declining ash trees. In 2019, park staff identified 109 ash trees from the 2010 inventory that exhibited good health, no presence of EAB and served as a location asset in a specific park. Forestry staff will focus efforts on preserving these ash trees with pesticide treatments to prevent infestation of EAB. The chemical treatments protect the tree for one to three years and will be completed by ISA certified arborists with a valid Missouri pesticide applicators license.

Park staff is proposing to remove seven ash trees in the park system that have shown annual signs of decline. The trees pose a threat to park users due to their current state of health and anticipated continuous decline:

1. Park staff is proposing to remove an ash tree at Rock Bridge Park, located adjacent to the playground and basketball court, due to the continued loss of tree canopy, falling branches, and early signs of infestation from EAB. The mature ash tree with a DBH of 35 inches is located adjacent to multiple park amenities visited by park patrons, shows multiple signs of decline and requires removal due to numerous factors that will eventually result in the falling of the tree. The tree has been monitored by our forestry staff over the past several years, and the tree canopy has now reached a point of 50% death. Several limbs have already fallen from the tree and staff has also noted the presence of borer insect damage. Forestry staff will replace this tree with a different species of tree adjacent to the new playground and basketball court once the project is completed.
2. Park staff is proposing to remove an ash tree at Stephens Lake Park located along the interior lake trail near the north entrance to the boardwalk. The mature ash tree with a DBH of 30 inches poses a threat to trail users due to proximity to the trail and potential for falling limbs and tree failure. The tree has had a history of falling branches, currently has a number of dead limbs in the canopy, signs of borer damage and visible rot at the root



City of Columbia

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crown of the tree. Due to the current health of the tree, it has not received any EAB preventative treatments and removal is inevitable. Forestry staff has already planted a sycamore tree in the vicinity of the ash tree as a replacement after removal of the ash tree. This tree will not be removed until staff determines 50% of the leaf canopy has been lost or it poses an immediate threat to park users.

3. Park staff is proposing to remove a green ash tree at Stephens Lake Park located along the ADA walkway near the south entrance to the boardwalk. The mature ash tree with a DBH of 34.5 inches poses a threat to park users due to proximity to the ADA walkway and potential for falling limbs and tree failure. The tree has lost approximately 20% of the leaf canopy, shows signs of decay and has a history of falling branches. Due to the current health of the tree, it has not received any EAB preventative treatments and removal is inevitable. Forestry staff has already planted a tree near this ash tree and will plant an additional tree in the same location once removal is completed. This tree will not be removed until staff determines 50% of the leaf canopy has been lost or it poses an immediate threat to park users.
4. Park staff is proposing to remove a green ash tree at Stephens Lake Park located along the ADA walkway near the Gordon Shelter playground. The mature ash tree with a DBH of 33 inches poses a threat to park users due to proximity to the ADA walkway on the south side of the park and the playground. The tree has a history of falling limbs and tree failure will continue due to decline related to age and EAB. The tree has lost approximately 15% of the leaf canopy. Due to the current health of the tree, it has not received any EAB preventative treatments and removal is inevitable. Forestry staff has already planted multiple trees near this ash tree as part of the arboretum. This tree will not be removed until staff determines 50% of the leaf canopy has been lost or it poses an immediate threat to park users.
5. Staff is proposing to remove a green ash tree at Stephens Lake Park located west of the Broadway entrance to the park. The mature ash tree with a DBH of 40 inches poses a threat to park users due to an increased amount of canopy dieback and limb loss. The tree has lost approximately 30% of the leaf canopy and has a history of falling branches. The tree also has multiple codominant trunks which could lead to faster failure of the different portions of the tree. Due to the current health of the tree, it has not received any EAB preventative treatments and removal is inevitable. Staff has already planted multiple trees near this ash tree. This tree will not be removed until staff determines 50% of the leaf canopy has been lost or it poses an immediate threat to park users.
6. Park staff is proposing to remove an ash tree located adjacent to hole #18 at L.A. Nickell Golf Course. The mature ash tree with a DBH of 35 inches and a total height of 50 feet poses a threat to golfers due to falling limbs and tree failure. The tree has lost approximately 15% of the leaf canopy, recently lost a large branch and shows signs of peeling bark. Inspection of the tree has revealed multiple boring insect cavity locations as well. Due to the current health of the tree, it has not received any EAB preventative treatments and removal is inevitable. Staff will determine if a new tree needs to be



planted after the removal of the ash tree. This tree will not be removed until staff determines 50% of the leaf canopy has been lost or it poses an immediate threat to park users.

- Park staff is proposing to remove an ash tree located adjacent to hole #1 and the entry drive at Lake of the Woods Golf Course. The mature ash tree with a DBH of 31 inches and a total height of 60 feet poses a threat to golfers and vehicles due to falling limbs and tree failure. The tree has lost approximately 15% of the leaf canopy and has a history of branch failure. The tree also has multiple codominant trunks which is a factor in tree failure. Due to the current health of the tree, it has not received any EAB preventative treatments and removal is inevitable. Staff will plant a new tree in the same location after the removal of the ash tree. This tree will not be removed until staff determines 50% of the leaf canopy has been lost or it poses an immediate threat to park users.

Fiscal Impact

Short-Term Impact: None

Long-Term Impact: None

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Not Applicable, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Not applicable, Tertiary Impact: Not Applicable

Legislative History

Date	Action
3/16/2009	2009 report to Council regarding the removal of hazardous trees in the park system: http://www.gocolumbiamo.com/Council/Bills/2009/mar16bills/ReportG.pdf

Suggested Council Action

Unless Council directs otherwise, park staff will proceed with the tree removals as outlined in this report.