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DATE: November 3, 2023

TO: Brad Painter, Roads & Stormwater Maintenance Supervisor, City of Wilsonville

FROM: Morgan Holen, Consulting Arborist

RE: Charbonneau – Oak Tree Assessment for Signs & Symptoms of Mediterranean Oak Borer

MHA23038

At the request of the City of Wilsonville, I met with City staff in Charbonneau on October 6, 2023 to conduct a limited visual assessment[1] of oak trees along French Prairie Road to look for signs and symptoms of Mediterranean Oak Borer (MOB). This memorandum documents my observations and provides recommendations to remove nine oaks, which do not appear to have MOB but are unhealthy and therefore more susceptible to MOB infestation.

Prior to my site visit, Parks Maintenance Specialist and ISA Certified Arborist Christopher Delk had visually assessed oak trees along French Prairie Road to look for signs and symptoms of MOB such as large branch dieback, wood-colored boring dust and tiny entrance/exit holes. Chris identified eight trees with severe crown dieback and/or advanced trunk decay or the presence of root rot fungus, but no signs or symptoms of MOB were observed.

During my site visit, I met with Chris, as well as Roads and Stormwater Maintenance Supervisor Brad Painter, Asset Management Coordinator Andrew Sheehan, and Public Works Operations Manager Martin Montalvo. We drove the entire length of French Prairie Road slowly to look for large branch dieback or other obvious defects and stopped to visit the trees Chris had previously identified. I concur with Chris's findings and identified one additional tree with severe crown dieback and root decay fungus.

The crown decline appears natural, as the trees are mature, competing with one another for growing space, and located in relatively confined spaces with limited and compacted soil volume. Trunk decay and the presence of root rot fungus also appears natural, mainly the result of mechanical damage such as trunks being hit by vehicles in the past creating wounds for decay and roots being damaged by lawn mowers. Upon close examination, no wood-colored boring dust or tiny entrance/exit holes were observed at any of the nine trees that appear unhealthy and in decline, and MOB is not suspected.

The street trees in Charbonneau are predominately mature red oaks and pin oaks that were densely planted. To-date, MOB has only been positively identified in Oregon white oaks (*Quercus garryana*) in Wilsonville, not in the red oaks (*Quercus rubra*) or pin oaks (*Quercus palustris*) that are most common in Charbonneau. These other oak species are known to be susceptible, so managing the trees for health and good vigor and regular monitoring for signs and symptoms of MOB are critical to managing the threat of infestation.

[1] Limited visual assessment is defined as "a visual assessment from a specified perspective such as a foot, vehicle, or aerial patrol of an individual tree or population of trees near specified targets, to identify specified conditions or obvious defects" (Smiley et al., 2017). In this case, the assessment was limited to visual observations primarily from a slow-moving vehicle, with closer evaluation on foot when severe crown decline, trunk decay, or root rot fungus was observed.

Along French Prairie Road, the City conducts routine maintenance to remove dead and defective branches annually and removes dead and hazardous Charbonneau street trees when they are identified. As the trees continue to mature, more and more will show signs of progressive decline. With the arrival of MOB, more proactive management is recommended to remove declining trees before they are dead since declining trees are stressed and theoretically more susceptible to MOB infestation. Based on the limited visual assessment, nine declining trees are recommended for removal this year. These trees are described in the following table and their locations are identified on the enclosed site map prepared by Andy Sheehan.

Table 1. Nine Declining Trees Recommended for Removal – Charbonneau 10/6/2023.

Tree No.	Common Name	Scientific Name	DBH	Height	Comments
54877	red oak	*Quercus rubra*	30	85	Severe crown dieback
54954	pin oak	*Quercus palustris*	17	65	Basal decay with hollow
54982	pin oak	*Quercus palustris*	19	62	Crown dieback, history of branch failure
54983	pin oak	*Quercus palustris*	15	45	Crown dieback, history of branch failure
55062	red oak	*Quercus rubra*	24	70	Very low vigor, declining
55184	red oak	*Quercus rubra*	32	75	Severe crown dieback, decay fungi
55193	red oak	*Quercus rubra*	26	81	Crown dieback, basal decay, decay fungi
55239	red oak	*Quercus rubra*	21	85	Basal decay with hollow
55423	red oak	*Quercus rubra*	20	70	Severe cracking in trunk and structural branches

DBH is diameter at breast height measured 4.5-feet above ground level in inches. Height is approximate tree height in feet.

Other recommendations:

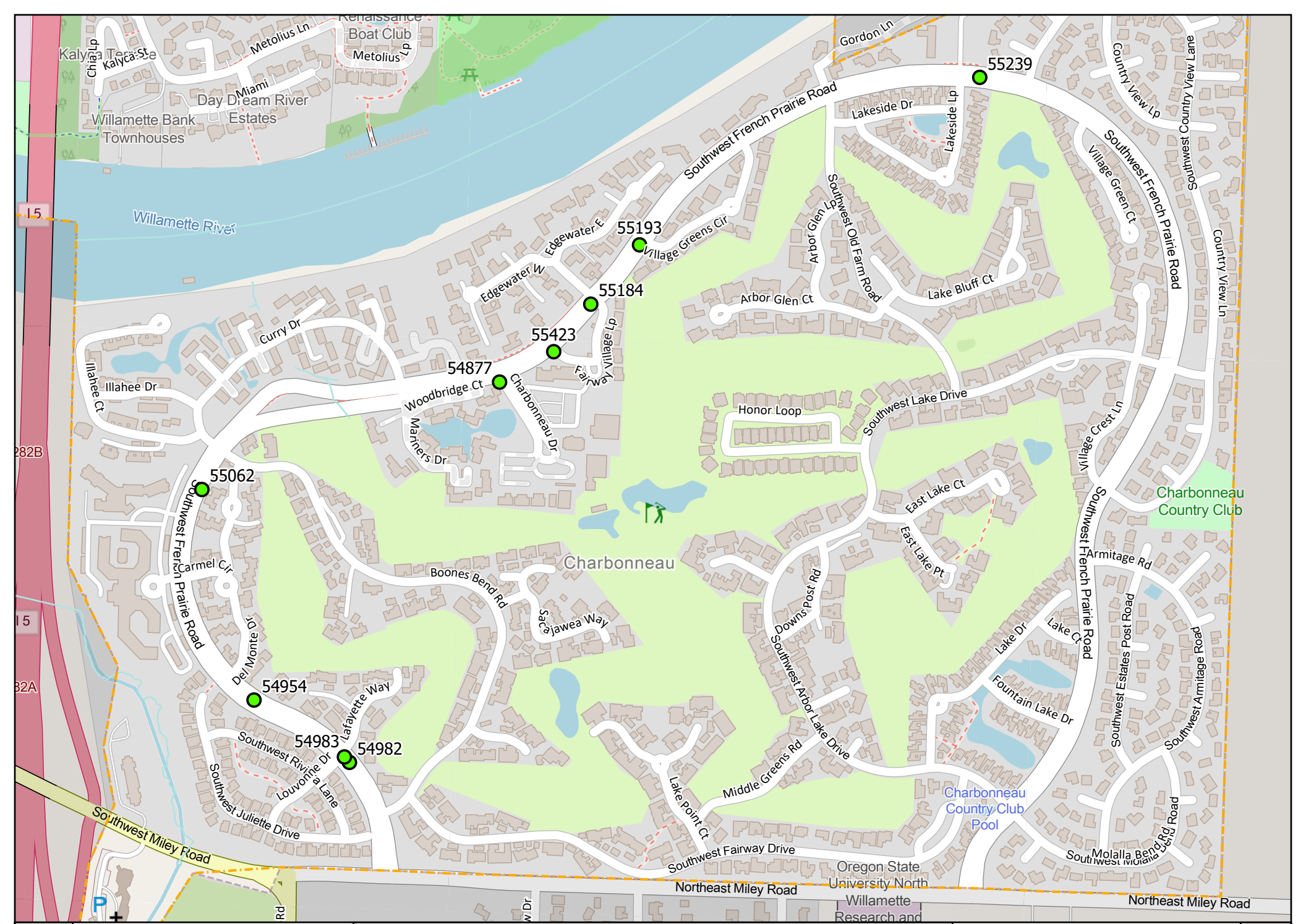
- Train the tree service crew that will conduct tree removal and annual dead wood pruning to look for signs and symptoms of MOB. Their contract with the City should specify that the crew will actively look for signs and symptoms of MOB and outline a process for reporting suspected infestations to City staff and a protocol for disposing infested wood.
- Perform a limited visual assessment annually to look for signs and symptoms of MOB infestation, document unhealthy declining oaks, and proactively remove them to maintain a healthy street tree population. Consider plant health care treatments such as root invigoration to support the long-term viability of the most high-valued trees.
- As trees are removed, look for opportunities to increase species and age class diversity by planting a variety of tree species on an on-going basis for more sustainable canopy cover.

The Client may choose to accept or disregard the recommendations contained herein or seek additional advice. Neither this author nor Morgan Holen & Associates, LLC, have assumed any responsibility for liability associated with the trees on or adjacent to this site.

Thank you,
Morgan Holen & Associates, LLC

Morgan E. Holen, Member
ISA Board Certified Master Arborist, PN-6145B
ISA Tree Risk Assessment Qualified

Enclosures: Charbonneau Tree Removal Site Map


55239
55193
55184
55423
54877
55062
54954
54983
54982
Willamette River
Southwest French Prairie Road
Southwest Lake Drive
Charbonneau
Charbonneau Country Club
Charbonneau Country Club Pool
Southwest Miley Road
Northeast Miley Road
Oregon State University North Willamette Research and
Boones Bend Rd
Middle Greens Rd
Southwest Fairway Drive
Southwest Juliette Drive
Southwest Armitage Rd
Southwest Estates Post Road
Fountain Lake Dr
Southwest Arbor Lake Drive
Downs Post Rd
East Lake Ct
East Lake Pt
Honor Loop
Village Crest Ln
Woodbridge Ct
Charbonneau Dr
Mariners Dr
Fairway Village Lp
Village Greens Cir
Edgewater E
Edgewater W
Arbor Glen Ct
Arbor Glen Lp
Southwest Old Farm Road
Lake Bluff Ct
Lakeside Dr
Lakeside Lp
Village Green Ct
Country View Lp
Southwest Country View Lane
Country View Ln
Gordon Ln
Curry Dr
Illahee Dr
Illahee Ct
Carmel Cir
Del Monte Dr
Lafayette Way
Sacajawea Way
Southwest Rivine Dr
Louvonia Lane
Lake Point Ct
Lake Dr
Lake Ct
Molalla Bend Rd
Kalyca Terra Ln
Kalyca St
Chiara Lp
Metolius Ln
Metolius Lp
Renaissance Boat Club
Miami Day Dream River Estates
Willamette Bank Townhouses
I5
282B
82A
Oaks to be Removed (9)
Charbonneau Oak Trees for Removal
0 250 500 1,000 Feet
N
WILSONVILLE OREGON