



Tree Health Assessment Report
Kennedy Schoolyard

Somerville Parks Tree Health Program

IFB 25-26

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February 8, 2025

Overview:

Kennedy Schoolyard is an active, public school site with a playground, parking lots, and basketball courts. The property contains approximately 40 trees, mostly small to medium deciduous shade trees in various stages of development. There is also (1) mature Mulberry in a poor location on the northeast border of the property we will mention. Finally, there are several volunteers growing in/around the fences bordering the east side of the property that we will propose either removing or pruning to prevent interference with active schoolyard or parking areas. Work cannot commence while school is in session.

General Tree Health

Most trees here are in fair to good condition needing canopy-cleaning, structural improvements, and/or raising for clearance. There are (7) trees/volunteers either in poor locations, with some significant stem decay, or that are already dead that we will recommend removing. Reflected heat from asphalt/concrete, compaction where there is heavy foot traffic, and crowding from unmaintained volunteers are the main stress factors on this site.

Soil Health

Most trees on this site are in planting beds or their own beds within lawns that are not heavily trafficked so soil compaction is not as much of a factor as other parks. We could get our soil sample probe in 4-8 inches in our sample locations. However, the row of Cherry Trees located in the southeastern schoolyard see more foot traffic over their root zones and our probe would only submerge approx. 3-5 inches here. The soils looked relatively healthy, dark gray in appearance with some organic matter present that allowed the soil to stick together in our hands when squeezed. No odor was detected in these soils. The soil test results did show slightly low Phosphorus levels, enough to monitor in the future but not enough to recommend corrective measures at this time. It also showed elevated levels of Manganese, Zinc, and Iron; none of which are concerning at this time.

There are (14) trees that we recommend applying a liquid bio-stimulant to as a soil amendment. These are key landscape plants, such as establishing shade trees around the western parking lot or the row of Cherries that are shading the southeastern schoolyard. This liquid blend of humic acids, kelp extract and natural compounds will enhance soil structure, microbial activity and nutrient availability to these feature trees.

Pests and Diseases

None were noted at time of report, however we will mention some species that are susceptible to fungal diseases and a potentially damaging insect pest. There are (2) Crabapples, both located in a grouping of trees near a building in the southern portion of the property near Elm Street, that are highly susceptible to foliar fungal diseases such as scab and rust. And there are (3) Callery Pears, located on the western and southern borders, that are also susceptible to these foliar diseases. Because this is a school property, and spraying prophylactic fungicides is not practical,

we recommend properly thinning these trees to promote sufficient air flow in the canopy to lessen the incidence of these opportunistic fungi. We suggest monitoring for these conditions over the years.

There is also an *Ailanthus* tree 40229, labeled in red on the Tree ID Map, and several unlisted *Ailanthus* volunteers, located on the eastern border by a play area, that are growing through a fence. This invasive plant species is a preferred host of a recently introduced invasive insect pest known as Spotted Lanternfly (SLF). SLF populations have been increasing and encroaching into this area with the potential to infest trees and cause damage to surrounding structures. This is because they secrete a substance called honeydew while feeding which can subsequently produce sooty mold that can cover anything below the tree. The honeydew also attracts stinging insects. We recommend removing all *Ailanthus* specimens, 40229 and the adjacent volunteers, to help stop the spread of these invasive pests and prevent potential sooty mold or stinging insects from this active schoolyard.



Invasive Ailanthus 40229, dead Elm, and volunteer Sycamore Maples growing through fence near southeast Schoolyard

Other Corrections of Adverse Conditions

There are (2) trees listed as Littleleaf Lindens (40196 and 40207), labeled in brown on the Tree ID Map), both located in the northern portion of the site along Cherry Street, that have been removed and need to be updated in the inventory. We recommend grinding the stumps that remain of these trees to remove a tripping hazard and make room for new plantings. We will also recommend grinding the stump of the declining Mulberry 40148 in the northeast portion of the property after removal.

Removal Needs

There is a Mulberry 40148, labeled in red on the Tree ID Map, located in the northeastern portion of the property growing against one of the school buildings. See photo at right. Due to poor structure, an extensive trunk wound with significant decay, and its proximity to the building we recommend removing this tree to make way for a healthier plant.



We recommend removing this Mulberry 40148

There is also a Black Locust, labeled in red on the Tree ID Map as 40093, located against a school building in a crowded grouping of trees on the southern portion of the site along Elm Street. We recommend removing this likely volunteer specimen to open up space for current plantings and because of its close proximity to the building. See photo below.



Overcrowded grouping of trees near southern border. The Black Locust 40093 volunteer can be seen as the tallest tree growing against the white wall of the school building.

There is a small Callery Pear 40235 located in the western parking lot area that is dead and requires removal and potential replacement.

Finally, as mentioned above in the Pests and Disease section, we recommend removing the *Ailanthus* tree 40229 and adjacent *Ailanthus* volunteers growing through the southeast chain-link fence. In this same location, there is a dead Elm and (2) invasive Sycamore Maples that are not identified on the Tree Inventory that we recommend removing as they are interfering with the fence and may create potentially hazardous situations to children utilizing the play area below.

Pruning Needs

We recommend canopy-cleaning and pruning to provide clearance from school structures and pathways for most trees under this work order. There are (3) Pears (40216, 40103, & 40094), (1) Hedge Maple 40128, and (1) Linden 40226 all located on the western portion of the property that are in need of a structural prune.

There are (6) Cherry Trees near the schoolyard located in the southeastern portion of the site (row of 40173-40217 on Tree ID map) that we recommend receive crown-cleaning and pruning to reduce their spread over the play area. We also recommend raising the volunteers growing out of the border fence in this area 8-10' for clearance in the play area. Cherry Tree 40173 also has an exposed girdling root that we recommend pruning out.



Cherry 40173 with exposed, girdling root



There is a row of mature volunteer Sycamore Maples that are on neighboring private property growing along the southeastern fence-line. These trees have extensive deadwood and hangers in their canopy that pose a threat to targets below. We recommend removing the deadwood/hangers and pruning to raise these canopies 12-14' off of the playground structures and the Cherry Trees below.

Neighboring Sycamore Maples needing canopy-cleaning and raising

Finally, White Mulberry 40168 is a mature 27" DBH tree growing in a poor location behind a fence along the northeastern border adjacent to an employee parking lot. We recommend pruning this tree to remove deadwood, any diseased or broken branches, and any crossing/rubbing limbs. We also recommend raising this tree and the volunteers next to it 10-12' to make clearance for vehicle traffic in the parking lot.

2025 Priorities:

- Pruning: Canopy cleaning, raising, thinning, structure
- Root pruning one Cherry
- Removing Mulberry, Black Locust, *Ailanthus*, Pear, dead Elm, and volunteers
- Stump grinding (3) recently removed trees

5-10 Year Priorities:

- Monitoring fruit trees for fungal disease incidence
- Replacement plantings for removed trees
- Biostimulant to key trees to improve soil structure and increase longevity
- Regular pruning on a 3-5 year cycle to maintain clearances, structure and and clean canopy



Accredited Tree Care by Certified Arborists

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Job Site: 36
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Tree and Shrub Care Recommendations on 2/8/2025

Description of Services

- Work Plan for Kennedy Schoolyard and Playground Pruning/Plant healthcare April 23-24, 2025.

All Work will be performed during School vacation week of April 23-24, 2025. Playground/Schoolyard /parking areas will need to be closed from 7AM- 4PM for 2 business day for the pruning work April 23-24 We will post permits and arrange for sidewalk closing and police detail as needed on public streets. Equipment access will be limited to sidewalk /street and parking lots. Parking areas off both Cherry street and rear parking/driveway of of Sartwell Ave need to be clear of cars to at least 30' off all trees. Trees within park will all be accessed by climbers if nor reachable from the street. No equipment will drive on the playing surface. No material/equipment/debris will be staged overnight.



This proposal is valid for 45 days, assuming there are no changes to the site (driveway, plantings, buildings etc. remain unchanged).
All work performed in accordance with ANSI A300 Standards.



Tree and Shrub Care Recommendations on 2/8/2025

Description of Services

- **Pruning on Young-Mature deciduous shade trees throughout the park. Individual tree specs listed on the attached spreadsheet.**

Structural Pruning - Selective pruning to improve branch architecture; select, develop and maintain strong, properly spaced scaffold branches by reducing or removing interfering, overextended, defective and poorly attached limbs as specified

Canopy Cleaning - Selective pruning to remove declining, dead and broken branches as specified

Canopy Raising - Selective pruning to provide and envelope of clearance of walkways, roadways, utilities, structures, as specified.

- **13" diameter Tree-of Heaven (#40229) and non-inventory 12" diameter Tree-of-Heaven growing out of the chainlink fence over the driveway and playground behind school :**

Tree Removal - Take down and cut stump low to grade as equipment allows, dispose of brush, logs and chipped debris generated from removal operations. (portions of trunk growing close to chainlink may not be accessible with stump grinder unless fence is removed)

- **6.2" diameter Mulberry (#40148) growing close to building on Sartwell and 8" Dead Elm growing through chainlink behind playground.**

Tree Removal & Stump Grinding - Take down, dispose of brush, logs and chipped debris generated from removal operations. Grind stump and exposed flare deep for replant grade; backfill with topsoil and remove excess grinding debris. (portions of trunk growing close to chainlink may not be accessible with stump grinder unless fence is removed)

- **5" diameter invasive Black Locust (#40093) off Elm Street**

Tree Removal & Stump Grinding - Take down, dispose of brush, logs and chipped debris generated from removal operations. Grind stump and exposed flare deep for replant grade; backfill with topsoil and remove excess grinding debris.

- **(2) 2" diameter Volunteer Sycamore Maples growing through the chainlink fence over the playground and (1) 2" dead Pear in the parking lot (#40235)**

Tree Removal - Take down and cut stump low to grade as equipment allows, dispose of brush, logs and chipped debris generated from removal operations.



This proposal is valid for 45 days, assuming there are no changes to the site (driveway, plantings, buildings etc. remain unchanged).
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Tree and Shrub Care Recommendations on 2/8/2025

Description of Services

- 6" diameter Flowering Cherry in rear playground (#40173):

Prune to Sever/remove girdling surface roots

- Bio-stimulant Application - Early season. Treat soils within the critical root zone (typically within the dripline) of select trees detailed in park list with an organic liquid blend of humic acids, kelp extract and natural compounds to enhance soil structure, microbial activity and nutrient availability.

- Debris Disposal: Costs include removal and disposal of brush, logs and chipped debris generated from tree care operations.

Thank you for considering Barrett Tree Service East, Inc. Sincerely,

Alden Johnson
Certified Arborist



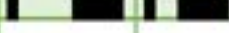
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Kennedy Schoolyard Tree List

Site ID	Species	DBH	Recommendations	Condition	TRAQ-Ris	Pruning	PHC
40078	honeylocust: thornless (Gleditsia triacanthos inermis)	8.4	Prune to remove deadwood greater than 1.5" diameter.	Good	Low		
40083	honeylocust: thornless (Gleditsia triacanthos inermis)	7.2	Prune to remove deadwood greater than 1.5" diameter.	Good	Low		
40086	honeylocust: thornless (Gleditsia triacanthos inermis)	10.8	Prune to remove deadwood greater than 1.5" diameter, remove large 4" hanger, then raise to provide 8-10' clearance off building, 6-8' off Arborvitae.	Good	Low		
40094	pear: callery (Pyrus calleryana)	6.1	removing crossing, redundant branches and branches interfering with sidewalk, roadway and signs.	Fair	Low		
40103	pear: callery (Pyrus calleryana)	8.5	Prune to remove deadwood, improve structure by removing crossing, redundant branches and branches interfering with sidewalk, roadway and signs. Biostim	Fair	Low		
40111	pear: callery (Pyrus calleryana)	2.2	Biostim	Good	Low		
40128	maple: hedge (Acer campestre)	6	Prune to remove deadwood, improve structure by removing crossing, redundant branches and branches interfering with sidewalk, roadway and signs. biostim	Good	Low		
40145	arborvitae: eastern (Thuja occidentalis)	1.5	none	Fair	Low		
40156	crabapple: flowering (Malus spp.)	8.3	Prune to remove deadwood greater than 1.5" diameter, reduce overall canopy spread by 4-6' through a series of 2-4" cuts then raise to provide 3-4' clearance off building, 8-10' off Arborvitae.	Good	Low		
40164	arborvitae: eastern (Thuja occidentalis)	2.4	none	Fair	Low		
40239	honeylocust: thornless (Gleditsia triacanthos inermis)	9.2	Prune to remove deadwood greater than 1.5" diameter, remove 2.5" limb over the playground	Good	Low		
40243	pear: callery (Pyrus calleryana)	2.3	Stunted. No pruning	Good	Low		
40251	honeylocust: thornless (Gleditsia triacanthos inermis)	8.3	Prune to remove deadwood greater than 1.5" diameter, remove 2.5" limb over the the bench	Good	Low		
40258	pear: callery (Pyrus calleryana)	2	Stunted. No pruning	Good	Low		
40263	pear: callery (Pyrus calleryana)	2.1	Stunted. No pruning	Good	Low		
40138	serviceberry: spp. (Amelanchier spp.)	1.5	Stunted. No pruning	Fair	Low		
40148	mulberry: white (Morus alba)	6.2	Remove, grind stump	Good	Low		
40159	serviceberry: spp. (Amelanchier spp.)	1.9	Stunted. No pruning. Biostim	Fair	Low		
40168	mulberry: white (Morus alba)	27	Prune to remove deadwood greater than 2" diameter over the parking area, raise 14-16' above the parking area, limit spread over parking area by 4-6'.	Fair	low-mod		

Kennedy Schoolyard Tree List

40173	cherry/plum: spp. (Prunus spp.)	6	Root prune. Prune to remove deadwood greater than 1" in diameter. Prune to limit spread on downhill side by 2-5' through a series of 1-2" reduction cuts bios	Fair	Low	
40177	maple: Norway (Acer platanoides)	7	diameter over the parking area, raise 14-16' above the parking area, limit spread over parking area by 4-6'.	Poor	Low	
40181	cherry/plum: spp. (Prunus spp.)	7.4	Prune to remove deadwood greater than 1" in diameter. Prune to limit spread on downhill side by 2-5' through a series of 1-3" reduction cuts. Biostim	Good	Low	
40189	maple: sycamore (Acer pseudoplatanus)	7	Prune to remove deadwood greater than 2" diameter over the parking area, raise 14-16' above the parking area, limit spread over parking area by 4-6'.	Fair	Low	
40190	cherry/plum: spp. (Prunus spp.)	4.6	Prune to remove deadwood greater than 1" in diameter. Prune to limit spread on downhill side by 2-5' through a series of 1-3" reduction cuts. Biostim	Fair	Low	
40198	Ulmus	11	Misidentified in inventory as an Linden. Prune to remove deadwood greater than 2" diameter over the parking area, raise by removing 8" leader rubbing against the lightpost.	Good	Low	
40202	cherry/plum: spp. (Prunus spp.)	6.7	Prune to remove deadwood greater than 1" in diameter. Prune to limit spread on downhill side by 2-5' through a series of 1-3" reduction cuts. Biostim	Good	Low	
40209	cherry/plum: spp. (Prunus spp.)	4.6	Prune to remove deadwood greater than 1" in diameter. Prune to limit spread on downhill side by 2-5' through a series of 1-3" reduction cuts. Biostim	Fair	Low	
40217	cherry/plum: spp. (Prunus spp.)	3.8	Prune to remove deadwood greater than 1" in diameter. Prune to limit spread on downhill side by 2-5' through a series of 1-3" reduction cuts. bios	Fair	Low	
40229	tree-of-heaven (Ailanthus altissima)	13	Remove-invasive	Fair	Low	
40079	arborvitae: eastern (Thuja occidentalis)	4.1	none	Good	Low	
40081	crabapple: flowering (Malus spp.)	7.7	Prune to remove deadwood greater than 1.5" diameter, reduce overall canopy spread by 4-6' through a series of 2-4" cuts then raise to provide 3-4' clearance off building, 8-10' off Arborvitae. Biostim	Good	Low	
40088	arborvitae: eastern (Thuja occidentalis)	4.4	none	Good	Low	
40093	locust: black (Robinia)	5	Remove-invasive	good	Low	
40102	arborvitae: eastern (Thuja occidentalis)	2	none	Fair	Low	
40110	dogwood: Kousa (Cornus kousa)	5.2	Prune to contain 1-2', improve structure. Biostim	Good	Low	
40121	arborvitae: eastern (Thuja occidentalis)	5.6	none	Fair	Low	
40137	arborvitae: eastern (Thuja occidentalis)	2.9	none	Good	NA	

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40196	linden: littleleaf (Tilia cordata)	7.7	gone	Poor	NA		
40207	linden: littleleaf (Tilia cordata)	7.2	gone	Dead	NA		
40216	pear: callery (Pyrus calleryana)	4	Prune to remove deadwood, improve structure by removing crossing, redundant branches and branches interfering with sidewalk, fence, biostim	Good	Low		
40226	linden: littleleaf (Tilia cordata)	6.7	Stunted, some decline. Prune to remove deadwood, improve structure by removing crossing, redundant branches and branches interfering with sidewalk, fence, biostim	Fair	Low		
40235	pear: callery (Pyrus calleryana)	1.9	Dead. Remove	Dead	Low		
Misc	Sycamore Maples	NA	Row of volunteer sycamore maples growing along the southeastern fence line, going over the playground from private property: Prune to remove extensive deadwood, hangers, prune to raise 12-14' over the playground and Cherries.	Poor	Mod		
Misc	tree-of-heaven (Allanhus altissima)	12	Remove. Invasive. Growing through southwest chain	fair	low		
Misc	Elm	8	Dead. Remove	dead	Mod		
Misc	Sycamore Maples	2	Remove 2 invasives growing through southwest chain	fair	low		

Kennedy Schoolyard Tree Map

