

Completing Shanes Creek's Stream Restoration: Part 2

By Greg Sykes (greg@grsykes.com)

[Part 1](#) of this series examined some of the main features found in the newly restored sections of Shanes Creek. Let's start this installment with a look at the biggest artificial wetland in the project. The figure numbers resume where they last left off.



Figure 5. The planners dubbed the project's largest, multi-pooled artificial wetland, "Frog Disneyland" (A, during construction, and B, after). It is 900 feet east of Roberts Road. Instead of being fed by the creek's floods, Frog Disneyland's water comes from a large storm drain outfall—one that was a major source of pollutants entering Shanes Creek and the reason for so much work at this location. After exiting the outfall, water collects in front of a berm (C, arrow) that separates the pool from Shanes Creek before making a 90° turn into the wetland. The plant roots here, including this black willow (*Salix nigra*) sprouting from a livestake in the ground (D), filter pollutants and clean the effluent before it enters the creek. Reducing usage of pesticides and other chemicals that contaminate runoff will improve the environment even more! Frogs are breeding in these artificial depressions as they do in [vernal pools](#). Amphibian populations help gauge a habitat's health because they are [sensitive to environmental changes](#).

One of the most frequent community member complaints still stemming from this project is the tree loss. In fact, areas around streams should be open because they historically saw beaver activity and increased biodiversity around beaver ponds. Generations ago, local beavers were nearly trapped to extinction and today we forget how waterways should appear. There are gripes about spending the money and having construction disrupt the park. This project responded to a problem—poor water quality—and addressed the symptoms but not the root cause. The runoff from paved roads is hard to tackle with the current storm drain system. Actions that people, schools, and businesses can take to support waterways before they become too imperiled include replacing lawns with native gardens, having roof downspouts extend no more than 10 feet from the house (*i.e.*, not emptying water onto sidewalks or streets), and installing rain barrels, cisterns, or [rain gardens](#). When adding a deck, patio, driveway, or house expansion, have a water capture system or absorption bed to compensate for the additional runoff. Now is the time to act.

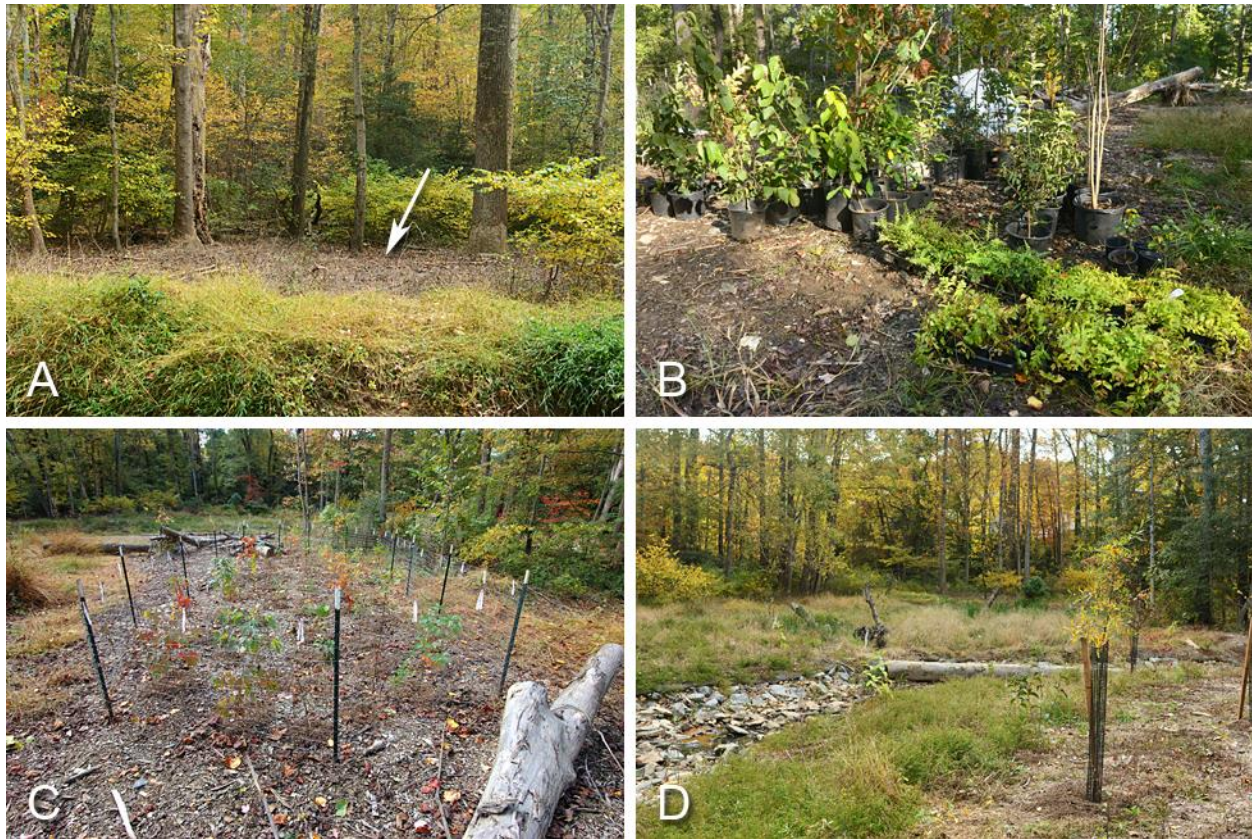


Figure 6. The final steps involve reestablishing Shanes Creek’s [riparian buffer](#). To aid native plant repopulation, a subcontractor first used power tools and herbicides to remove invasive plants within and 20 feet outside of the boundary fence. Treated areas might look like dead zones (A, arrow pointing to what was a [multiflora rose](#) patch). Invasive weeds love dug-up soil (one reason why no-till farming is gaining popularity) so the subcontractor’s work lowers invasive competition and improves native survival rates. In addition to livestaking branches near the waterways, other natives were added as seeds, plugs, or potted plants (B). The plant species lists are attached to the end of this article. Several places are still fenced (C). These areas are habitat restoration super clumps, aka “nucleated plantings.” These test sites will be closely monitored. Elsewhere, only the tallest saplings have tree cages (D). Some of the other plants are hard to spot and are easily trampled, so staying on the official trail is the best way to help the habitat heal.

Overall, Meadville Land Service, LLC, the primary contractor in this stream restoration, made the best out of a bad situation. The crews did a good, timely job at what they were hired to do and without cutting corners. Some of the subcontractors fell a bit short, but the managers at DPWES overseeing this restoration are making sure that those jobs get done right, too. Invasive species and native plant contractors will be present over the next year. County staff and volunteers will continue their stewardship, guiding this site to further recovery. For people and the environment, the Shanes Creek restoration is for a better future both here and downstream.

References and additional background:

- The official project page: <https://www.fairfaxcounty.gov/publicworks/stormwater/plans-projects/rabbit-branch-tributary-restoration-project-collingham-drive>
- DPWES’ post-construction presentation: https://www.fairfaxcounty.gov/publicworks/sites/public-works/files/assets/documents/projects/2023-11-09_rabbit-branch-at-collingham-dr.pdf
- Q/As About Shanes Creek and Royal Lake (April 2019). https://www.grsykes.com/pdf/eco-articles/90_2019-04.pdf
- “Shanes Creek” Is Official! (August 2020). https://www.grsykes.com/pdf/eco-articles/100_2020-08.pdf

Emergency Restoration to Rabbit Branch (September 2020). Discusses the stream restoration process and techniques. https://www.grsykes.com/pdf/eco-articles/101_2020-09.pdf
Quick Points About the Shanes Creek Restoration Project (June 2022).
https://www.grsykes.com/pdf/eco-articles/114a_2022-06.pdf

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Rabbit Branch at Collingham Drive Stream Restoration

Habitat Restoration Seed Mixes—Species Lists

RIPARIAN FOREST SEED MIX

| | |
|---------------------------------------------------------|-----------------------------------------------------------------|
| <i>Agrimonia parviflora</i> (harvestlice) | <i>Geum canadense</i> (white avens) |
| <i>Anemone virginiana</i> (thimbleweed) | <i>Helenium autumnale</i> (common sneezeweed) |
| <i>Bidens frondosa</i> (beggar ticks) | <i>Juncus tenuis</i> (path rush) |
| <i>Carex pensylvanica</i> (Pennsylvania sedge) | <i>Leersia oryzoides</i> (rice cutgrass) |
| <i>Carex squarrosa</i> (sugarrose sedge) | <i>Lolium perenne</i> spp. <i>multiflorum</i> (annual ryegrass) |
| <i>Chamaecrista nictitans</i> (sensitive partridge pea) | <i>Monarda fistulosa</i> (wild bergamot) |
| <i>Clematis virginiana</i> (virgin's bower) | <i>Parthenocissus quinquefolia</i> (Virginia creeper) |
| <i>Coleataenia anceps</i> (beaked panic grass) | <i>Penstemon digitalis</i> (penstemon) |
| <i>Desmodium glabellum</i> (Dillenius' tick-trefoil) | <i>Senna hebecarpa</i> (wild senna) |
| <i>Dichanthelium clandestinum</i> (deer tongue grass) | <i>Solidago rugosa</i> (wrinkleleaf goldenrod) |
| <i>Elymus riparius</i> (riverbank wild rye) | <i>Symphotrichum dumosum</i> (rice button aster) |
| <i>Elymus virginicus</i> (Virginia wild rye) | <i>Verbesina alternifolia</i> (wingstem) |
| <i>Eupatorium perfoliatum</i> (common boneset) | <i>Vernonia noveboracensis</i> (New York ironweed) |
| <i>Eurybia divaricata</i> (white wood aster) | |

WETLAND SEED MIX

| | |
|---------------------------------------------------------|-----------------------------------------------------------------|
| <i>Asclepias incarnata</i> (swamp milkweed) | <i>Leersia oryzoides</i> (rice cutgrass) |
| <i>Bidens cernua</i> (nodding beggar ticks) | <i>Lobelia cardinalis</i> (cardinal flower) |
| <i>Bidens frondosa</i> (beggar ticks) | <i>Lolium perenne</i> spp. <i>multiflorum</i> (annual ryegrass) |
| <i>Carex lurida</i> (shallow sedge) | <i>Ludwigia alternifolia</i> (seedbox) |
| <i>Carex pensylvanica</i> (Pennsylvania sedge) | <i>Mimulus ringens</i> (Alleghany monkeyflower) |
| <i>Carex scoparia</i> (blunt broom sedge) | <i>Panicum dichotomiflorum</i> (fall panic grass) |
| <i>Carex squarrosa</i> (sugarrose sedge) | <i>Penthorum sedoides</i> (ditch stonecrop) |
| <i>Carex vulpinoidea</i> (fox sedge) | <i>Phyla lanceolata</i> (lanceleaf frogfruit) |
| <i>Chamaecrista nictitans</i> (sensitive partridge pea) | <i>Polygonum pensylvanicum</i> (Pennsylvania smartweed) |
| <i>Chelone glabra</i> (white turtlehead) | <i>Senna hebecarpa</i> (wild senna) |
| <i>Coleataenia anceps</i> (beaked panic grass) | <i>Solidago rugosa</i> (wrinkled goldenrod) |
| <i>Dichanthelium clandestinum</i> (deer tongue grass) | <i>Symphotrichum puniceum</i> (purple-stemmed aster) |
| <i>Elymus riparius</i> (riverbank wild rye) | <i>Verbena hastata</i> (blue vervain) |
| <i>Elymus virginicus</i> (Virginia wild rye) | <i>Vernonia noveboracensis</i> (New York ironweed) |
| <i>Eupatorium fistulosum</i> | |
| <i>Impatiens capensis</i> (jewelweed) | |
| <i>Leersia virginica</i> (white grass) | |

TURF GRASS SEED MIX

-For use near entrances-

Improved Perennial Ryegrass
Kentucky 31 or Turf Type Tall Fescue
Kentucky Bluegrass

WSSC MBE, SBE # SB11-3517, City of Baltimore MWBOO, Federal WOSB/EDWOSB, VA DBE/WBE SWaM #691714, VDot DBE/WBE # 691714, MWAA LDBE, MWUCP/WMATA DBE # 1028, DC DOT, PG County DBE, Montgomery Cty LSBRP & MFD, Howard Cty MBE, Delaware DOT DBE #2077, DE WBE #DE19063253, DE SBE #SBF19061301,

MD Licensed Tree Experts (LTE), ISA, MD Professional Fertilizer Applicator (PFA), MD Pesticide #29275 (1-A) (2) (3-A) (3-C) (4) (5) (6), VA Pesticide #11286, DC Pesticide #119324, MD SHA E&S Responsible Person & Yellow Card, NGICP, NALP (LCA) CLT certified, Maryland Plant Dealer/Broker

FURNISH AS SUBMITTED
D. SETTE, LA III, SWPD 09-22-2023

Rabbits Branch Planting Submittals / Substitution Requests

Source of Supply

| Submittal Section | Description | Size | Bid Item Quantity | Supplier | Manufacturer | Acceptance Notes |
|-------------------|--------------------------------------------------|--------------|-------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| | Riparian Forest Planting: | | | | | |
| 1.3-A.1 | Quercus falcata | .75" Caliper | 15 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Clear Ridge Nursery, Inc 217 North Clear Ridge Road Union Bridge, MD 21791 Phone: 410.775.7700 Contact: Jessica | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus alba | .75" Caliper | 15 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytownne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus bicolor | .75" Caliper | 15 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytownne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus phellos | .75" Caliper | 15 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus rubra | .75" Caliper | 16 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytownne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus falcata | 1 Gallon | 40 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus alba | 1 Gallon | 40 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus bicolor | 1 Gallon | 41 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytownne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus phellos | 1 Gallon | 41 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus rubra | 1 Gallon | 41 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytownne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus falcata Sub Quercus palustris | Tubelings | 40 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus alba | Tubelings | 40 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |

| | | | | | | |
|---------|-------------------------------------------------------------|--------------|----|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1.3-A.1 | Quercus bicolor | Tubelings | 40 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus phellos | Tubelings | 41 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Fran | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus rubra | Tubelings | 41 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Fran | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Fagus grandifolia Sub: Spread to Celtis occidentalis | .75" Caliper | 0 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Jessica | Clear Ridge Nursery, Inc 217 North Clear Ridge Road Union Bridge, MD 21791 Phone: 410.775.7700 Contact: Jessica | Per Transmittal 4 Response |
| 1.3-A.1 | Diospyros virginiana | .75" Caliper | 9 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Brad Schott | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Celtis occidentalis | .75" Caliper | 11 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Brad Schott | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Per Transmittal 4 Response |
| 1.3-A.1 | Nyssa sylvatica | .75" Caliper | 9 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Platanus occidentalis | .75" Caliper | 9 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Fagus grandifolia | 1 Gallon | 5 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Diospyros virginiana | 1 Gallon | 21 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Celtis occidentalis | 1 Gallon | 21 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Nyssa sylvatica | 1 Gallon | 21 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Platanus occidentalis | 1 Gallon | 21 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Fagus grandifolia Sub: Acer rubrum | Tubelings | 5 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Per Transmittal 4 Response |
| 1.3-A.1 | Diospyros virginiana | Tubelings | 20 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Celtis occidentalis | Tubelings | 21 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Nyssa sylvatica | Tubelings | 21 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Fran | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Platanus occidentalis | Tubelings | 21 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |

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|---------|------------------------------------------------------|------------------|-----|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1.3-A.1 | <i>Carya cordiformis</i> Sub: <i>Carya tomentosa</i> | 18-24" Tubelings | 26 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Carpinus caroliniana</i> | .75" Caliper | 45 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Amelanchier canadensis</i> | .75" Caliper | 36 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Acer negundo</i> | .75" Caliper | 36 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Ilex opaca</i> | .75" Caliper | 9 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd, Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Robinia pseudoacacia</i> | .75" Caliper | 36 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Magnolia virginiana</i> | .75" Caliper | 9 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Carpinus caroliniana</i> | 1 Gallon | 119 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Ecotone, Inc. 129 Industry Lane Forest Hill, MD 21050 Phone: 410-841-5920 Contact: Scott McGill Sr. | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Amelanchier canadensis</i> | 1 Gallon | 96 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd, Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Acer negundo</i> Sub: <i>Acer rubrum</i> | 1 Gallon | 96 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Clear Ridge Nursery, Inc 217 North Clear Ridge Road Union Bridge, MD 21791 Phone: 410.775.7700 Contact: Jessica | Per Transmittal 4 Response |
| 1.3-A.1 | <i>Ilex opaca</i> | 1 Gallon | 25 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehores Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Robinia pseudoacacia</i> | 1 Gallon | 96 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd, Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Magnolia virginiana</i> | 1 Gallon | 25 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd, Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Carpinus caroliniana</i> | Tubelings | 120 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Amelanchier canadensis</i> | Tubelings | 96 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd, Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Acer negundo</i> | Tubelings | 96 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Ilex opaca</i> | Tubelings | 25 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd, Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Robinia pseudoacacia</i> | Tubelings | 96 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd, Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |

CERCIS CANADENSIS APPROVED

| | | | | | | |
|---------|-----------------------------------------------------------------------------------|------------------------------|-----|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 1.3-A.1 | Magnolia virginiana Sub: Cercis canadensis, or spread to other species | Tubelings | 25 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Sub Request - No Response Within Transmittal 4 |
| 1.3-A.1 | Corylus americana Sub to Physocarpus opulifolius | 1 Gallon | 60 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Lindera benzoin | 1 Gallon | 61 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehore Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Viburnum dentatum | 1 Gallon | 61 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Hamamelis virginiana | 1 Gallon | 61 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Viburnum prunifolium | 1 Gallon | 61 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | ARRC 12506 Susquehanna Trail S New Freedom, PA, 17349 Phone: 717-428-9368 Contact: | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Corylus americana | #3 | 30 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehore Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Lindera benzoin | #3 | 30 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehore Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Viburnum dentatum | #3 | 30 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehore Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Hamamelis virginiana | #3 | 31 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehore Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Viburnum prunifolium | #3 | 31 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehore Mill Road Taneytowne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| | Shrub Layer (Superclump Only): | | | | | |
| 1.3-A.1 | Vaccinium corymbosum | 1 Gallon | 49 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Sassafras albidum | 1 Gallon 3 Gallon | 49 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Per Transmittal 4 Response, only 3 gal available at Pinelands, Empire will provide in kind |
| | Fern Layer: | | | | | |
| 1.3-A.1 | Onoclea sensibilis | Quart | 150 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Babikow Greenhouses 7838 Babikow Road Baltimore, MD 21237 Phone: 800.835.7617 Contact: | Per Transmittal 4 Response |
| 1.3-A.1 | Thelypteris noveboracensis Sub: Spread to other Species | Quart | 0 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Babikow Greenhouses 7838 Babikow Road Baltimore, MD 21237 Phone: 800.835.7617 Contact: | Per Transmittal 4 Response |
| 1.3-A.1 | Osmunda regalis | Quart | 150 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Babikow Greenhouses 7838 Babikow Road Baltimore, MD 21237 Phone: 800.835.7617 Contact: | Per Transmittal 4 Response |

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|---------|---------------------------------------------------|----------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1.3-A.1 | Osmundastrum cinnamomeum | Quart | 150 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Babikow Greenhouses 7838 Babikow Road Baltimore, MD 21237 Phone: 800.835.7617 Contact: | Per Transmittal 4 Response |
| 1.3-A.1 | Polystichum acrostichoides | Quart | 150 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Babikow Greenhouses 7838 Babikow Road Baltimore, MD 21237 Phone: 800.835.7617 Contact: | Per Transmittal 4 Response |
| | Stream Bank: | | | | | |
| 1.3-A.1 | Alnus serrulata | 1 Gallon | 768 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd, Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Aronia arbutifolia | 1 Gallon | 768 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Schott Nurseries Inc. 2932 Basehore Mill Road Taney- towne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Cephalanthus occidentalis | 1 Gallon | 768 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Schott Nurseries Inc. 2932 Basehore Mill Road Taney- towne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Ilex verticillata | 1 Gallon | 768 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Schott Nurseries Inc. 2932 Basehore Mill Road Taney- towne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Viburnum dentatum | 1 Gallon | 768 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | American Native Plants 4812 East Joppa Rd, Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| | Stream Edge: Tubel- ings or Livestakes | | | | | |
| 1.3-A.1 | Alnus serrulata | 18-24" Livestake ½" to 1-½" Diam- eter | 1397 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | ARRC 12506 Susquehanna Trail S New Freedom, PA, 17349 Phone: 717-428-9368 Contact: | Per Transmittal 4 Response |
| 1.3-A.1 | Cephalanthus occidentalis | 18-24" Livestake ½" to 1-½" Diam- eter | 1397 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | ARRC 12506 Susquehanna Trail S New Freedom, PA, 17349 Phone: 717-428-9368 Contact: | Per Transmittal 4 Response |
| 1.3-A.1 | Cornus amomum | 18-24" Livestake ½" to 1-½" Diam- eter | 1383 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Ernst conservation Seed 8884 Mercer Pike Meadville, PA 16335 Phone: 1-800-873-3321 Contact: Nikki | Per Transmittal 4 Response |
| 1.3-A.1 | Sambucus canadensis | 18-24" Livestake ½" to 1-½" Diam- eter | 1398 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Ernst conservation Seed 8884 Mercer Pike Meadville, PA 16335 Phone: 1-800-873-3321 Contact: Nikki | Per Transmittal 4 Response |
| | Livestakes: | | | | | |
| 1.3-A.1 | Salix nigra (upstream) | 18-24" Livestake ½" to 1-½" Diam- eter | 173 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Per Transmittal 4 Response |
| 1.3-A.1 | Salix nigra (downstream) | 18-24" Livestake ½" to 1-½" Diam- eter | 1038 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Ernst conservation Seed 8884 Mercer Pike Meadville, PA 16335 Phone: 1-800-873-3321 Contact: Nikki | Per Transmittal 4 Response |
| | Wetland Planting: | | | | | |
| 1.3-A.1 | Quercus bicolor | Tubelings 1 Gallon | 448 100 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehore Mill Road Taney- towne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Per Transmittal 4 Response |

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|---------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------|---------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1.3-A.1 | <i>Quercus michauxii</i> Sub: <i>Q. palustris</i> , <i>Q. Phellos</i> , <i>Q. rubra</i> , <i>Q. bicolor</i> | Tubelings 1 Gallon | 148 100 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Per Transmittal 4 Response |
| 1.3-A.1 | <i>Quercus palustris</i> | Tubelings | 148 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Quercus phellos</i> | Tubelings 1 Gallon | 148 100 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Per Transmittal 4 Response |
| 1.3-A.1 | <i>Acer negundo</i> | Tubelings | 169 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Betula nigra</i> | Tubelings | 169 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Nyssa sylvatica</i> | Tubelings | 169 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Platanus occidentalis</i> | Tubelings | 169 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Ulmus americana</i> Sub: <i>Nyssa sylvatica</i> | Tubelings | 169 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Per Transmittal 4 Response |
| 1.3-A.1 | <i>Acer rubrum</i> | Tubelings | 53 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Amelanchier canadensis</i> | Tubelings | 53 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Asimina triloba</i> | Tubelings | 53 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Carpinus caroliniana</i> | Tubelings | 54 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Magnolia virginiana</i> | 1 Gallon | 6 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | American Native Plants 4812 East Joppa Rd. Perry Hall, MD 21128 Phone: 410-529-0552 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Salix nigra</i> | 18-24" Livestake ½" to 1-½" Diameter | 254 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: Mike | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Alnus serrulata</i> | Tubelings | 72 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Cephalanthus occidentalis</i> | Tubelings | 72 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Ilex verticillata</i> | Tubelings | 72 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | <i>Cornus amomum</i> | Tubelings | 72 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 |

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| 1.3-A.1 | Rosa palustris | Tubelings | 73 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Viburnum dentatum | Tubelings | 73 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Physocarpus opulifolius Sub: <i>Lindera benzoin</i> | Tubelings | 73 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Pinelands Nursery 323 Island Road Columbus, NJ 08022 Phone: 609.291.9486 Contact: Fran | Per Transmittal 4 Response | |
| | Plugs (Inside pool) | | | | | | |
| 1.3-A.1 | Saururus cernuus | DP50 Plug | 110 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Iris virginica | DP50 Plug | 108 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Juncus effusus | DP50 Plug | 108 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Scirpus cyperinus | DP50 Plug | 108 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Sagittaria latifolia | DP50 Plug | 108 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Hibiscus moscheutos | DP50 Plug | 108 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| | Plugs (Outside pool): | | | | | | |
| 1.3-A.1 | Carex lurida | DP50 Plug | 255 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Carex pensylvanica | DP50 Plug | 253 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Asclepias incarnata | DP50 Plug | 253 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Chelone glabra | DP50 Plug | 253 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 | |
| | Park Entrance Landscaping: | | | | | | |
| 1.3-A.1 | Cercis canadensis | 1.5" Caliper | 3 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Clear Ridge Nursery, Inc 217 North Clear Ridge Road Union Bridge, MD 21791 Phone: 410.775.7700 Contact: Jessica | Approved 9.21.2023 - Transmittal 4 | |
| 1.3-A.1 | Cornus florida | 1.5" Caliper | 3 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Clear Ridge Nursery, Inc 217 North Clear Ridge Road Union Bridge, MD 21791 Phone: 410.775.7700 Contact: Jessica | Approved 9.21.2023 - Transmittal 4 | |

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|---------|----------------------------|--------------|----|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1.3-A.1 | Nyssa sylvatica | 2.5" Caliper | 3 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Ingleside Plantation Nursery 5870 Leedstown Road Oak Grove, VA 22443 Phone: 804.224.7111 Contact: Brent Thomas | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Quercus phellos | 2.5" Caliper | 3 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Ingleside Plantation Nursery 5870 Leedstown Road Oak Grove, VA 22443 Phone: 804.224.7111 Contact: Brent Thomas | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Hydrangea quercifolia | 2 Gallon | 6 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | Schott Nurseries Inc. 2932 Basehore Mill Road Taney- towne, MD 21787 Phone: 410.756.9175 Contact: Brad Schott | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Clethra alnifolia | 2 Gallon | 6 | Empire Landscape, LLC 15717 New Hampshire Ave. Silver Spring, MD 20905 Phone: 301-775-8651 Contact: | ARRC 12506 Susquehanna Trail S New Freedom, PA, 17349 Phone: 717-428-9368 Contact: | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Itea virginica | 2 Gallon | 6 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Cavans Perennials, Inc. 6845 Sunshine Ave, Kingsville, MD 21087 Phone: 410.592.8077 Contact: Sales | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Polystichum acrostichoides | Quart | 15 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 |
| 1.3-A.1 | Asclepias tuberosa | Quart | 15 | Direct Nursery Sales, LLC P.O. Box 894 Burtonsville, MD 20866 Phone: 301-525-7261 Contact: Randy Adler | Wicklein's Native Plants 1820 Cromwell Bridge Road Baltimore, MD 21234 Phone: 410.823.1335 Contact: Erik Wicklein | Approved 9.21.2023 - Transmittal 4 |

15717 New Hampshire Avenue, Silver Spring MD 20905 Phone: (301) 509-8483 Fax: 1(888) 811-4481

WWW.EmpireLandscapeLLC.COM