



DOCKET ITEM #3
Updates to the Landscape Guidelines

Application	General Data	
Public hearing and consideration of the updates to the Landscape Guidelines of the City of Alexandria	Planning Commission Hearing:	February 7, 2019
	City Council Hearing:	February 23, 2019
Applicant: City of Alexandria Staff: Departments of Planning & Zoning and Recreation, Parks, and Cultural Activities.		
Purpose of Application		
To approve and enact the updates to the Landscape Guidelines of the City of Alexandria to replace outdated practices and policies and incorporate current best practices.		
Staff Recommendation: APPROVAL		
Staff Reviewers: <u>Planning and Zoning</u> Karl Moritz, Director, karl.moritz@alexandriava.gov Robert Kerns, Division Chief, Development, robert.kerns@alexandriava.gov Nathan Imm, Principal Planner, Development, nathan.imm@alexandriava.gov Stephanie Free, Urban Planner III, Development, stephanie.free@alexandriava.gov <u>Recreation, Parks and Cultural Activities</u> James Spengler, Director, james.spengler@alexandriava.gov Bob Williams, Division Chief, Natural Resources, bob.williams@alexandriava.gov Jack Browand, Division Chief, Park Planning, Design, Capital Development, jack.browand@alexandriava.gov Bethany Znidarsic, Principal Planner, Park Planning, Design + Capital Development, bethany.znidarsic@alexandriava.gov John Noelle, City Arborist, Natural Resources Division, john.noelle@alexandriava.gov Rod Simmons, Natural Resource Manager / Plant Ecologist, Natural Resources Division, rod.simmons@alexandriava.gov Suzanne Bouchard, City Horticulturalist, Natural Resources Division, suzanne.bouchard@alexandriava.gov <u>Transportation and Environmental Services</u> Jeffrey DuVal, Deputy Director of Operations, jeffrey.duval@alexandriava.gov Melanie Mason, Watershed Management Planner, melanie.mason@alexandriava.gov		

I. DISCUSSION

The Landscape Guidelines are enabled through the City of Alexandria's Zoning Ordinance (Section 11-410 (CC)) in order to ensure that developments provide "adequate minimum landscaping." The Landscape Guidelines (the "Guidelines") are made available to the public for the use of all applicants in the required preparation, submission for approval, execution and maintenance of landscape improvements.

The Planning Commission plays a fundamental role in the Landscape Guidelines, both in the review of updates of the Landscape Guidelines for appropriateness according to its authority through the Zoning Ordinance, and the implementation of the Guidelines through the review of Development Site Plans and Development Special Use Permits according to its standards and requirements.

In addition to projects reviewed by the Planning Commission, the Guidelines are utilized on projects submitted for City Staff review, particularly grading plans and administrative Special Use Permits.

A. BACKGROUND

The Landscape Guidelines were first adopted in 1997 as the designated mechanism to establish minimum standards for the performance of landscape plantings for new development projects as well as providing guidance to development applicants for the review process. The last update of the Landscape Guidelines was performed in 2007.

The purpose of the current update of the Landscape Guidelines is to replace outdated practices and policies, incorporate current best practices, and address evolving environmental considerations that have been raised through City public processes. The process of updating the Guidelines has been a collaborative effort between the Departments of Planning & Zoning and Recreation, Parks, and Cultural Activities as these departments have both the expertise in the topic material as well as the responsibility for the management of the implementation of the Guidelines. Additional City departments have provided input throughout the process.

B. OUTREACH

Internal

An internal working group of City Staff with expertise in landscape architecture, arboriculture, horticulture, natural resources management, installation and maintenance of landscape plantings, and other allied fields was assembled to review the working document for the Landscape Guidelines. This group was instrumental in informing the document through experience with the application of the 2007 Landscape Guidelines, and their knowledge of industry standards and best practices. Additionally, the working group reviewed the public input to determine the mechanisms for incorporation into the document.

Professional Stakeholders

The Department of Recreation, Parks, and Cultural Activities organized and hosted two discussion sessions to gain input from professional stakeholders on the performance of the 2007 version of the Landscape Guidelines and select topics that were proposed for inclusion in the updated Guidelines. The stakeholders were divided into two groups, the first including design professionals who may utilize the Landscape Guidelines in preparation of plan submissions to the City, such as Landscape Architects and allied professionals. The second group included nurseries and landscape contractors who may be responsible for implementing approved plans within the City. Through this process, concerns regarding changes to the Guidelines were discussed and the resulting document utilizes the input provided where appropriate. Any input from the professional stakeholders was incorporated prior to the public outreach so that the effect of such input was available for comment.

Public Outreach

City Staff met with the Park & Recreation Commission, Environmental Policy Commission and the Alexandria Beautification Commission in October and November of 2018 to discuss the revisions to the Landscape Guidelines and provide an opportunity for review and comment. The draft Guidelines were provided online with the ability to provide comments for a 30-day period. The feedback provided at the meetings and the online comments were predominantly supportive of the changes to the Guidelines.

Issues contained within this update that address public and stakeholder input include, but are not limited to the provision of native plant species, specification of plant diversity, enhancement of tree protection measures, alteration of above-structure landscape standards, and provision of soil criteria.

City Staff also met with NVBIA/NAIOP (Commercial Real Estate Development Association) who represent local and regional development professionals. The members distributed a draft of the Guidelines to their members, who provided input via the online comments available to the public.

II. REVIEW OF UPDATES

The updated Landscape Guidelines retain their core purpose and, to a large degree, their content. The alterations provided will significantly improve the function of the document and the quality of the landscape of the City of Alexandria.

Input received by City Staff from various boards and commissions informed several of these topics. Comments from the Environmental Policy Commission regarding native and invasive plant species, canopy cover, and others were received both prior to and during the Environmental Action Plan process and so were incorporated into the update process.

The following paragraphs offer a brief description of the major improvements and alterations to the document. Additional minor corrections have been made throughout the document as

needed.

Format

The overall format of the document has been altered to be more user friendly, specifically dividing the document into groupings according to the level of approvals and permits required for development projects. The introductory sections, particularly Chapter 2: Landscape Process, offers a brief explanation to development applicants who may be unfamiliar with the process to direct them to the relevant sections of the Guidelines. From this, minor cases such as grading plans can clearly identify the sections of the Guidelines that are necessary to comply with the requirements for these projects, and not have to review sections and information that are not relevant to their case.

The updated version of the Landscape Guidelines has been reformatted to remove select sections and references from the main body of the document to provide a more flexible platform. These sections were selected based on their expected rate of change or governance by organizations outside of the City of Alexandria. One area in particular that provides an example of the reasons for the reformatting is the invasive plant species discussed below.

The reference standards and invasive plant lists were relocated from the body of the Landscape Guidelines and placed in an online format as references on the City's website. In this regard, the organizations that oversee this material can continually update the information without the City having to amend or update the Landscape Guidelines. For example, invasive species of plants are monitored by a variety of state agencies and non-governmental organizations who regularly update the lists of what are considered invasive species. Over the span of ten years, a number of species may be added to such lists and utilizing the source listing as the reference allows the City to incorporate this new guidance without a full update.

The standard landscape details and notes, native plant lists, and canopy coverage allowances were removed from the body of the Landscape Guidelines and will be placed in an online library of resources for use and reference by project applicants. By utilizing this method, the City can correct or update this material to match current information or best practices without a full update of the Guidelines. The majority of the guidance text remains in the Guidelines similar to the preceding version, as can be seen in the description of select sections below.

Canopy Cover

A variety of minor changes have been made to the section on Canopy Cover that provide incentives to encourage a greater degree of compliance. These include a bonus percentage for the preservation of significant existing trees, a change in the allowance to fully account for trees planted on structure, and an increase in the canopy area associated with large shrubs.

The fee in lieu of providing the required canopy cover on a development site has been changed to better align with the total costs of planting a tree in an urban environment, including the construction costs of tree wells and associated infrastructure. With this revision, the fees are brought in line with fees of surrounding jurisdictions as well.

Invasive Plants Management

The 2007 Landscape Guidelines established that invasive plants may not be planted with development projects within the City of Alexandria. The updated Guidelines further this effort by recognizing that sites that contain significant populations of invasive plants negatively impact adjacent sites and resources and the City of Alexandria overall. In an effort to reduce these impacts, the updated Guidelines specify the provision of a survey of invasive species based on the density of invasives or proximity to important natural areas, and an invasive species removal and management plan should the project review deem it necessary.

Tree Protection

The tree protection section of the Landscape Guidelines has been updated to align with industry best practices and incorporate lessons from construction projects within the City of Alexandria. The updates also provide for a greater degree of documentation and coordination for the care and maintenance of protected trees and vegetation during the construction process. The fines for damage to trees designated to be protected has been altered to provide a sliding scale according to the size of the tree(s) damaged.

Plant Sizes and Sources

The required plant sizes have been averaged to a minimum caliper size of 2-3” for large shade trees, and 1 ½-1 ¾” for ornamental trees. The revised sizes are in line with current industry and scientific literature which finds that smaller sized plant material at planting results in greater health and survival of the plants.

A specification has also been added to limit the distance from the plant supply nursery to the project site. Experience within the City and supporting literature demonstrates that plants that have been produced in significantly different environments, including hardiness zones and latitudes, have a markedly different survival rates over both the short- and long-term.

Plant Species Diversity

As stated in the updated Landscape Guidelines, communities across the United States have suffered catastrophic losses of tree canopy cover due to new pests or diseases flourishing within plantings of limited diversity. The Biodiversity Standards contained in the new Guidelines seek to prevent such a situation from occurring in the City of Alexandria by ensuring that there is sufficient diversity of plants to slow the spread of such pests and/or reduce the impact. This is accomplished through standards that set a maximum percentage of the genus and species that can be planted on an individual development site. Exceptions have been provided for small plantings and other unique situations.

Native Plants and Diversity

An increasing body of research demonstrates that there are tangible benefits - ranging from ecosystem services to community benefits – that are associated with the installation and

maintenance of native plant species rather than the planting of exotic species. In addition to these benefits, the aesthetic benefit of enhancing community identity is appreciable, as seen by examples such as the live oak landscape of the American Southeast. The updates to the Landscape Guidelines incorporate the specification of a percentage of native plant species for new developments. Within this, a certain percentage is established for locally or regionally native species to further ensure the suitability of the plant selections.

The Guidelines have been graduated according to the plant types (trees, shrubs, vines, etc.) and environment (paved vs. softscape) to provide for the greatest amount of native species and their benefits, while recognizing that a combination of consumer demands and desires, plant availability, diversity, and the suitability of native plants for urban environments must be weighed in determining a realistic specification of the percentage of native species.

In meetings with landscape professionals and nurseries, the required use of native species was discussed and identified as a particular challenge to contractors and nurseries to provide the volume and diversity of species with immediacy. The discussion resulted in the practice outlined in the Landscape Guidelines where a phased implementation of the use of native species provides time for the nurseries to respond to the changes. The timelines allocated are largely based on the time required for the nursery stock to grow to saleable size.

Soils

Soil requirements in the 2007 Landscape Guidelines were primarily limited to requirements of a minimum volume or depth. In addition to updates of these standards, a new segment on soil composition has been added to address feedback from experts who expressed that soil quality is similarly critical to the long-term success of plantings.

Pertaining to soil volume and depth, the minimum depth of soil required above structure for tree plantings was revised to three feet. This change reconciles the maximum depth of on-grade soil that can be counted with the minimum above-structure depth. This also addresses feedback that the previous depth of four feet would require a significant increase in structural support, making the provision of trees on-structure untenable.

Soil composition specifications focus on the primary factors of organic matter and soil compaction, seeking to ensure that appropriate levels of either are provided and confirmed via testing. The majority of construction sites within the City of Alexandria contain soils with high clay content and low organic matter content which are highly susceptible to compaction. These conditions greatly limit the flow and availability of water, retention of nutrients, and root growth. The minimum specifications of the revised Guidelines will create a more advantageous soil environment and are expected to result in a much higher long-term success rate.

Above-Structure Landscape

While above-structure landscape is not highlighted in a dedicated section of the Landscape Guidelines, it is useful to note that a number of minor changes have been incorporated to encourage the planting of trees and other larger vegetation on structure. As development

projects implement their allowed density, above-structure landscape (whether at-grade or on rooftops) offer an opportunity to increase the attainment of greater canopy cover within the City. In offering such encouragements, the Guidelines also provide limitations to above-structure plantings to ensure the plantings achieve the environmental and aesthetic goals.

Summary

The updates to the Landscape Guidelines incorporate the input of a wealth of expertise and best practices. The revised format offers flexibility and responsiveness to changes within the standards, regulations and practices of landscape planting, making a more effective document. The revised Guidelines incorporate practices that are the leading edge of environmental management, fulfilling the stated goals of numerous citizen groups and commissions.

III. CONCLUSION

Staff recommends **approval** of the updated Landscape Guidelines of the City of Alexandria.