



STAFF REPORT

DATE: 12/13/2022

DISCUSSION

TO: City Council
FROM: Molly Just, Planning Director
AGENDA ITEM: City Code Landscaping Ordinance – Provisions for Screening

INTRODUCTION:

As the City continues to develop and uses of different intensities develop side by side the City should review its standards for mitigating the impacts of a more intense use on a less intense use. One of the ways cities do this is through landscaping standards. At the September 13, 2022 workshop, the City Council directed staff to bring back to workshop screening standards that would:

- a. Include a requirement that this is the required size at planting
- b. Use the lot line as point of reference for standards
- c. Specificity about what the screening is to buffer
- d. Set a performance standard for minimum 8' tall and 90% opaque screen (this is in-lieu of creating more language around tighter spacing, trees on the less intense side of a fence, specific requirement for at least 2 rows of trees, minimum width of screening, etc.)
 - i. *Staff recollected that perhaps the minimum start at 6' and 8' would only be for major differences in land use intensity.*
- e. Standard must be met and maintained for the life of the project
- f. Plan must depict height and spread at planting and at maturity

Staff is seeking direction on any specific changes to bring forward for adoption. Draft revised ordinance language is attached for your consideration. In addition to revisions to address screening, the revisions are to address the City's interest in conserving potable water and reduce landscape maintenance. There are also previously identified revisions necessary to execute the ordinance.

ISSUES BEFORE COUNCIL:

Should the City Council adopt the subject changes to the City of Lake Elmo Code landscaping provisions?

PROPOSAL DETAILS/ANALYSIS:

City Code Article VIII Environmental Standards provides for the City's tree preservation and landscaping standards for new development. The purpose statement for this article is as follows:

“The purpose of this section is to provide regulations of general applicability for property throughout the city that are intended to protect or enhance natural resources and processes, and minimize conflicts between uses.”

Article VIII provides tree preservation standards, recently updated, that layout when a tree preservation plan is necessary, prioritizes preservation of healthy and significant trees, and lays out requirements for tree replacement and protective measures for preserved trees.

The second part of Article VIII lays out the City's landscape requirements. This section was to be updated with the tree preservation standards but changes did not move forward at that time. The landscape requirements lay out when a landscape plan is necessary, sets out minimum size standards for landscape

materials, and provides for where landscaping should be located. In regards to perimeter landscaping that can provide a transition between uses, landscaping is required in the setback areas, and to screen parking lots from public spaces and adjacent residential properties. In addition, screening is required to provide visual and noise separation of intensive uses from less intensive uses.

The City Council, Planning Commission, applicants and staff have identified the need to update this section.

RECOMMENDATION:

Staff recommends adoption of the draft revised standards.

FISCAL IMPACT:

Adoption of standards to reduce the demand for potable water would have a positive fiscal impact.

ATTACHMENT:

Draft Article VIII Environmental Performance Standards

Text in *Blue* font refers to updates to reduce maintenance and preserve potable water. Text in *Orange* font refers to screening updates based on Council direction. Other updates are depicted in *Black* font.

105.12.480 Landscape Requirements

All development sites shall be landscaped, as provided in this section, in order to [promote use of native and pollinator-friendly plantings and low irrigation water use](#), control erosion and runoff, moderate extremes of temperature and provide shade, aid in energy conservation, preserve habitat, provide visual softening of, especially, urban development, and generally enhance the quality of the physical environment within the city.

- (a) *Landscape plan required.* A landscaping plan is required for all new commercial, industrial, institutional, and multifamily development, all planned unit developments, and all subdivisions, with the exception of minor subdivisions for single-family detached development, as defined in this chapter. The landscape plan shall be prepared by a Minnesota licensed landscape architect, shall be drawn to a scale identified on the plan, and include the following:
- (1) The location, size, quantity, and species of all existing and proposed plant materials.
 - (2) The plant schedule shall depict the height and spread of each plant type at the time of planting and at the time of maturity.
 - (3) All existing and proposed features such as buildings, structures, parking areas, pervious and impervious pavements, signs, fences, walls, enclosures, natural features, grading, property lines, easements, utilities, and driveways shall be clearly shown on the plans.
 - (4) Seeding, sodding, ground cover materials [and required depth of topsoil.](#)
 - (5) Provisions for [supplemental watering source, automatic irrigation system](#), and other water supplies. [Anticipated water use calculations by hydrozone area per EPA WaterSense Water Budget Tool, latest edition shall be provided for all proposed landscape designs.](#)
 - (6) [Elevation view, cross-sections, and details](#) of all required screening.
 - (7) City standard plan notes and planting details, as well as any additional planting instructions and notes.
- (b) *Design considerations.* The following design concepts and requirements shall be considered when developing a landscape plan.
- (1) To the maximum extent possible, the landscape plan shall incorporate existing significant trees and other healthy, non-invasive vegetation on the site.
 - (2) [Topsoil. Grading shall be minimized to avoid disturbance. Topsoil shall be stockpiled onsite and covered to protect against wind and water erosion and shall be reapplied onsite during final grading. A minimum of 6-inches of topsoil shall be applied across all graded landscape areas.](#)
 - (3) [Promote the use of native and pollinator friendly landscape plantings and reduce irrigation water use demand.](#)
 - a. [For the proposed landscape design plan, submit a completed water budget tool calculation spreadsheet and hydrozone areas.](#)
 - b. [Incorporate sustainable and xeriscaping landscape design principles into the proposed landscape design.](#)
 - c. [The City of Lake Elmo does not require irrigation under this section.](#) Landscaped areas should be of adequate size to allow proper plant growth, protect plantings from vehicular and pedestrian traffic, and provide adequate areas for plant maintenance.

- (4) A variety of trees and shrubs should be used to provide visual interest year-round. No more than 50 percent of the required number of trees and shrubs may consist of any one species. A minimum of 25 percent of the required number of trees shall be deciduous shade trees, and a minimum of 25 percent shall be coniferous trees. Ornamental trees may be used when applied towards landscaping requirements however, the number of ornamental trees shall not exceed 15 percent of the required amount.
- (5) Final slopes 3:1 or greater will not be permitted without special treatment such as terracing, retaining walls, or vegetation for stabilization.
- (6) All plant materials shall meet the following minimum size standards in Table 6-1.

Table 6-1: Minimum Size Standards for Landscape Materials

<i>Plant Type</i>	<i>Minimum Size at Planting **</i>
Trees:	
Evergreen	6 feet in height
Deciduous--shade	2.5 inches caliper, measured six inches from base
Deciduous--ornamental	2 inches caliper, measured six inches from base
Shrubs:	
Evergreen	# five container*
Deciduous	# five container*
Shrubs used for screening (evergreen or deciduous)	# five container*
* Approximately five gallons.	
** See American Standards for Nursery Stock, ANSI Z60.1- latest edition.	

- (7) As an alternative to the minimum standards for landscape materials Table 6-1, a landscape plan prepared by a qualified professional certifying that said plan's landscape material minimum standards will meet the intent of this section may be submitted.
 - (8) As a general rule, trees should be planted 10-feet away from all utilities including light poles, water and sewer stubs unless approved by the city's landscape architect.
- (c) *Landscaping of setback areas.* All required setbacks not occupied by buildings, parking, paths, or plazas shall be landscaped with turf grass, native grass, trees, shrubs, vines, perennial flowering plants, and surrounding pervious ground cover.
- (1) A minimum of one tree shall be planted for every 50 feet of street frontage, or fraction thereof.
 - a. Trees adjacent to streets shall be planted within the front yard and may be arranged in a cluster or placed at regular intervals to best complement existing landscape design patterns in the area.
 - b. Salt tolerance, heat and drought tolerance, and root structure should be considered when selecting tree species adjacent to streets, sidewalks, and parking areas.

(2) In addition, a minimum of five trees shall be planted for every one acre of land that is disturbed by development activity. Such trees may be used for parking lot perimeter landscaping or screening as specified in subsections (d) and (e) of this section.

(d) *Interior parking lot landscaping.* The purpose of interior parking lot landscaping is to minimize the expansive appearance of parking lots and to reduce the heat island effect. Landscaping shall consist of planting islands and medians, comprising the required planting area specified under subsection (d)(1) of this section.

(1) At least five percent of the interior area of parking lots with more than 30 spaces shall be devoted to landscape planting areas. Areas may consist of islands and medians to break up expanses of parking and the heat generated by the uninterrupted impervious surface.

(2) Shade trees shall be provided within the interior of parking lots in accordance with the following table, in addition to the trees required in (c) (1) and (c) (2):

Table 6-2: Minimum Required Tree Planting for Parking Lots

<i>Number of Parking Spaces</i>	<i>Minimum Required Tree Planting</i>
0--30	None required
31--100	1 tree per 10 spaces or fraction thereof
101+	1 tree per 15 spaces or fraction thereof

(e) *Perimeter parking lot landscape and screening.* Parking areas, and especially vehicle headlights, shall be screened from public streets and sidewalks, public open space, and adjacent residential properties. Where an applicant can demonstrate that distance and/or finished grades would achieve this objective then the requirement may be waived by the Planning Director. The perimeter of parking areas shall be screened as follows:

(1) With the exception of VMX area, a landscaped frontage strip at least 5-feet wide shall be provided between parking areas and public streets, sidewalks, or paths. If a parking area contains over 100 spaces, the minimum frontage strip shall be increased to 8-feet in width.

a. Within the frontage strip, screening shall consist of either a masonry wall, fence, berm, or hedge or combination that forms a screen a minimum of 3-½-feet and a maximum of 4-feet in height, and not less than 50 percent opaque on a year-round basis.

b. Trees shall be planted at a minimum of one deciduous tree per 50 linear feet within the frontage strip.

(2) Along rear and side yard property lines abutting residential properties or districts, screening shall be provided, consisting of either a masonry wall, fence or berm in combination with landscape plantings that forms a screen a minimum of 4-feet in height, a maximum of 6-feet in height, and not less than 90 percent opaque on a year-round basis. Landscape material shall include trees, planted at a minimum of one deciduous or coniferous tree per 40 linear feet along the property line.

Figure A: Example cross section view of perimeter parking lot landscape screening.

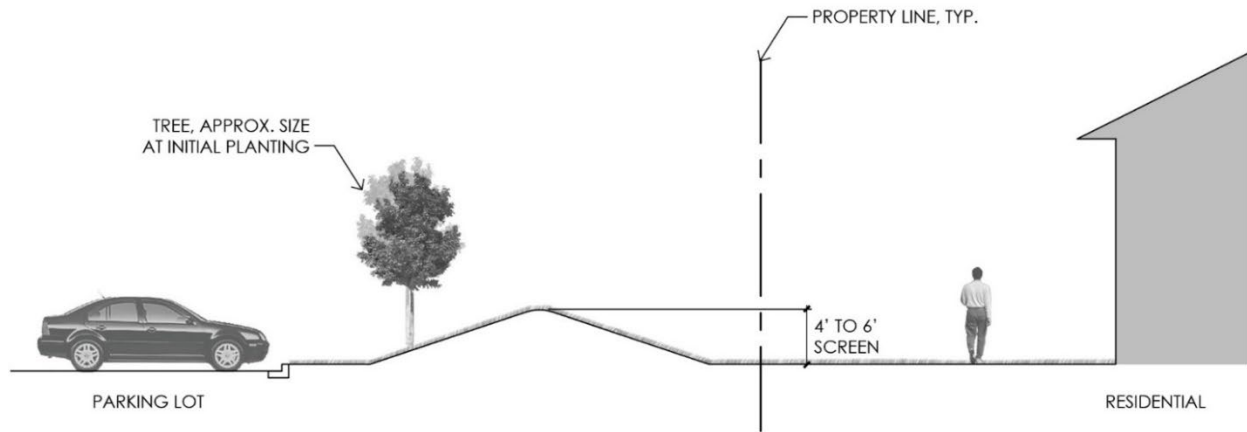
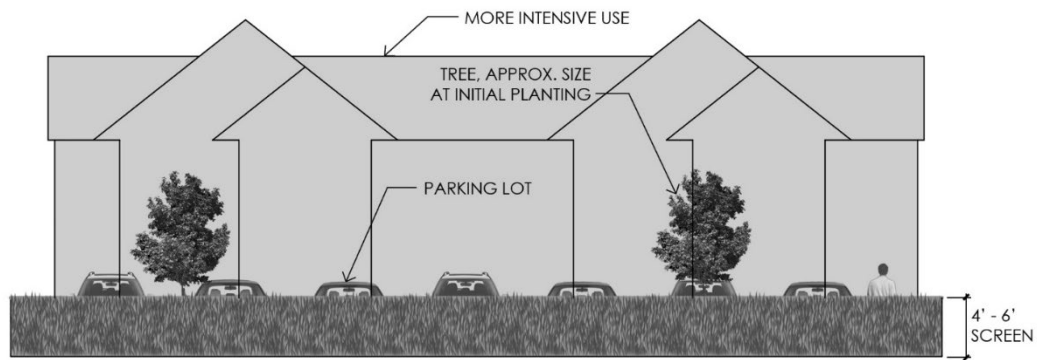


Figure B: Example elevation view of perimeter parking lot landscape screening.



- (f) *Screening*. Screening shall be used to provide visual and noise separation of **more** intensive uses from less intensive uses. Where screening is required in the city Code between uses or districts, it shall consist of either a masonry wall, fence **or berm** in combination with landscape material that forms a screen at least 6-feet in height, and not less than 90 percent opaque on a year-round basis. **Top of wall or fence shall be a minimum of 6-feet above the elevation along the property line(s) from which screening of the less intensive use is required.** The City may require screening at least 8-feet in height where the difference in intensity of uses is greater, such as between lots planned for or developed with single-family attached and detached residential development and certain service uses such as self-service storage and trade shops, automotive/vehicular uses, or industrial and extractive uses. Landscape material shall include trees, planted at a minimum of one deciduous or coniferous tree per 40 linear feet along the property line.

Figure C: Example cross section of screening between uses.

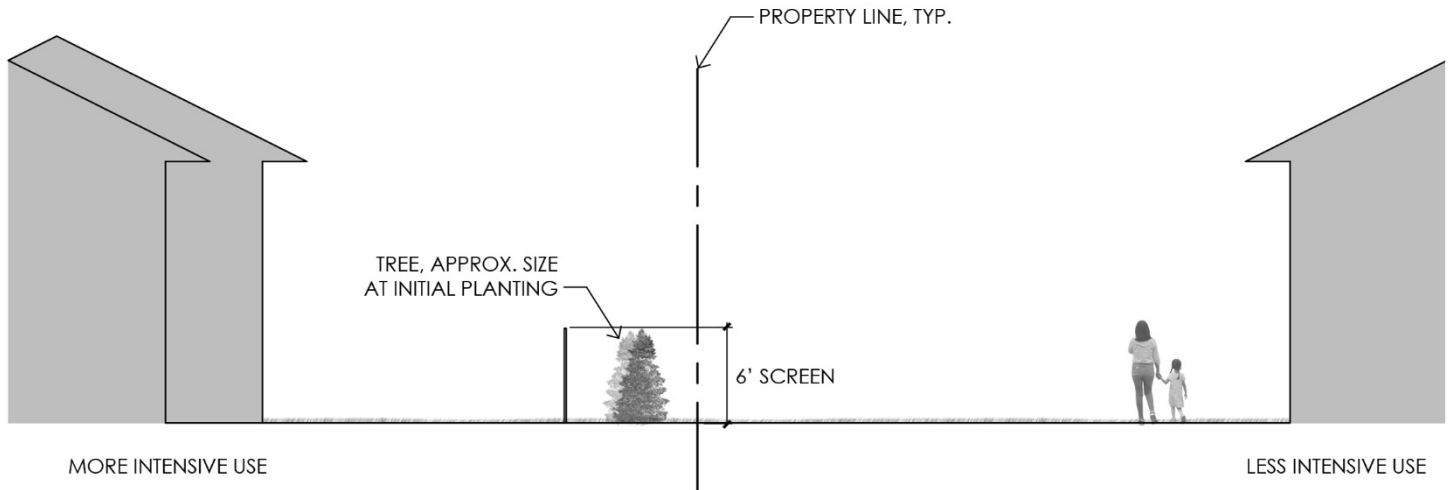
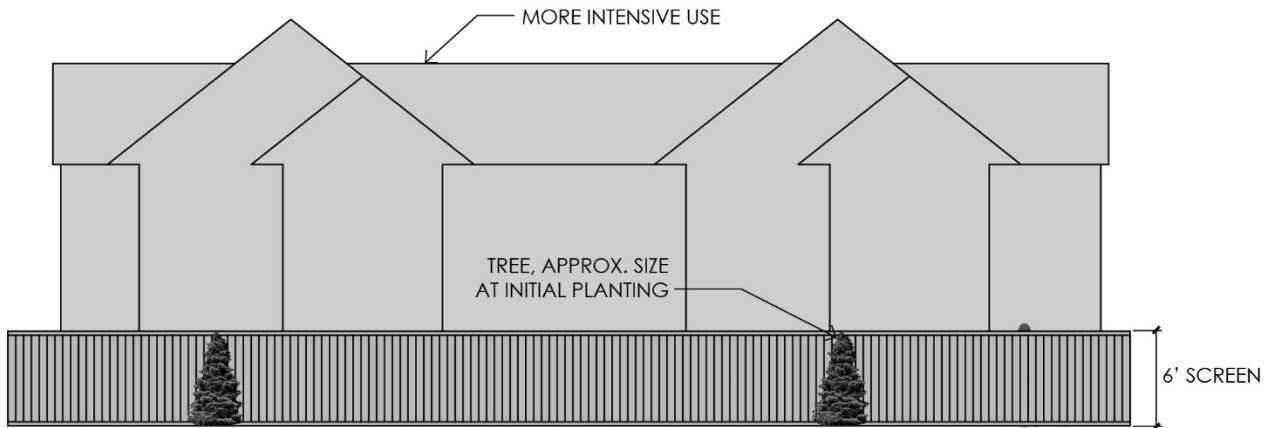


Figure D: Example elevation view of screening between land uses.



- (g) *Maintenance and installation of materials.* Installation and maintenance of all landscape materials shall comply with the following standards:
- (1) All landscape materials shall be installed per City standard details and to current industry standards.
 - (2) Irrigation or other water supply adequate to support the specified plant materials shall be provided.
 - (3) All required landscaping and screening features shall be kept free of refuse and debris.
 - (4) All landscape plantings, seed, and sodded areas shall be maintained to include weed management and establishment of native plantings.
 - (5) All landscape materials from the approved landscape plan shall be guaranteed for two years. Any landscape material that dies, its central leader dies or exhibits 30% or more crown death, is damaged by construction, or becomes diseased before the end of the second year after installation shall be replaced by the developer.
 - (6) Continuing maintenance of the approved landscape plan and replacement of landscape materials shall be the responsibility of the property owner, including after beyond the two years of initial installation. The landscape plan, including non-plant materials such as fencing, shall be

maintained for the life of the project for which the plan was required.

- (h) *Financial security.* The city will require that a financial security, in a form acceptable to the city, be provided as part of a development agreement or applicable permit to ensure compliance and performance of the landscape plan. The financial security will be released to the applicant upon verification by the city that the landscape plan was followed, and that all landscape materials are planted and in a reasonable state of health. The financial security may be used to replace any landscape materials that have become damaged or diseased after planting. Adequate security must be retained to ensure performance for at least two years after the installations have been completed.