

## Chapter 4.20

### DESIGN STANDARDS FOR LANDSCAPING STREETSCAPES, MEDIANS, BOULEVARDS, ROUNABOUTS AND MAJOR STREETS

*(Adopted by Resolution A-83782; March 20, 2006)*

*The Departments of Public Works and Parks and Recreation  
are assigned the responsibility of administration of these design standards.*

#### Section 1. GENERAL

##### 1.1 Intent

The Design Standards for Landscaping Streetscapes, Medians, Boulevards, Roundabouts and Major streets are intended to promote suitable site preparation and plant material selection, to improve public safety by minimizing sight obstructions, to indicate where design elements may or may not warrant additional plant material installation or maintenance costs, and to create a contiguous aesthetic image throughout the community.

##### 1.2 Scope

These Design Standards apply to streetscapes where specified and include the design, selection, site preparation, planting and maintenance of suitable landscaping plant materials within or upon designated medians, cul-de-sac circles, boulevards, roundabouts or major streets in the public right-of-way. The requirements of this chapter are in addition to and compliment those set forth in the “Design Standards for Street Trees” and the “Design Standards for Screening and Landscaping” in Titles 2 and 3 of the City of Lincoln Design Standards.

These standards shall not apply to a landscape planting installed and maintained by a neighboring property owner or resident within a sidewalk space, a median, a boulevard or a cul-de-sac circle that is above and beyond landscape screening standards established in Title 26 “Land Subdivision” or Title 27 “Zoning” of the Lincoln Municipal Code. These landscape plantings are regulated under provisions within Chapter 12.20, Chapter 14.44, and Chapter 14.80 of the Lincoln Municipal Code.

##### 1.3 Concept

The “**basic**” landscape design concept is a corridor framed by medium or large street trees with low-growing, drought-tolerant turf interspersed with groupings of small, medium and/or large trees in the center median. Site and soil conditions, the desired character of the landscaping and installation and maintenance costs should guide the selection of turf and tree species for this prototypical design. A concrete apron (i.e. “mow strip”) 2' in width/5" thick with a minimum slope of 0.6" per foot draining to the curb, is required around all medians, cul-de-sac circles, boulevards, and roundabouts, for both the “**basic**” and “**enhanced**” design concepts.

The “**enhanced**” landscape design concept includes more intensive landscaping of corridors or portions thereof, beyond the “basic” prototypical design of trees and drought-tolerant, low growing turf that requires minimal mowing. Additional groupings of ornamental grasses, shrubs, trees and/or perennial flowers in the center median would be components of an “enhanced” landscape design. The design, installation and maintenance of “enhanced” landscaped corridors would be implemented through a cooperative effort between a developer, neighborhood association and/or business organization and the City. Those desiring an “enhanced” landscape would be required to contribute financially by funding both installation and maintenance costs for installation and maintenance beyond those associated with the prototypical “basic” landscape design.

The process to apply for and receive approval for “Enhanced Landscaping” and or “Enhanced Streetscaping” within and along Public Right-of-Way Areas, including the purpose and intent, process, and design principals for implementation, is set forth in Resolution No. A-82058 adopted by the City Council on April 21, 2003.

#### **1.4 Reference Standards and Ordinances**

Where not specified in these Standards, the Director of Public Works and the Director of Parks and Recreation will specify City of Lincoln Design Standards, Lincoln Municipal Code, City of Lincoln Sight Distance Standards for Traffic Safety and City of Lincoln Standard Specifications for Municipal Construction to be applied to the requirements, design, construction and landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and major streets within the City of Lincoln public right-of-way.

#### **1.5 City Approval Required**

All work associated with the design, construction, and landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and major streets within or upon any City of Lincoln public right-of-way is subject to City of Lincoln approval as set forth in the City of Lincoln Municipal Code, City of Lincoln Design Standards, and City of Lincoln Standard Specifications for Municipal Construction. See Chapter 2.15, Design Standards for Urban and Public Streets; Chapter 2.35, Design Standards for Street Trees; and Chapter 3.50, Design Standards for Screening and Landscaping.

### **Section 2. LANDSCAPING PLAN**

#### **2.1 Landscaping Plan Required**

An applicant for development, redevelopment, zoning, rezoning, special use permit or construction approval involving a project or development where the landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and/or major streets are required or where prescribed by a City-adopted Community Unit Plan, Planned Unit Development, or special use permit, shall submit a Landscaping Plan for review and approval in compliance with these Standards and other applicable City of Lincoln Design

Standards for Land Subdivision Regulations, Zoning Regulations and Titles 12, 14, 26 and 27 of the Lincoln Municipal Code. Any construction activities or enhancements done by the City of Lincoln involving the landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and/or major streets shall also be required to have a Landscaping Plan which shall be reviewed and approved by appropriate City departments in compliance with these Standards and other applicable City of Lincoln Design Standards, Lincoln Municipal Code and Standard Specifications for Municipal Construction.

## **2.2 Landscaping Plan Requirements**

The Landscaping Plan shall include the following elements:

1. Location, type and size of all existing trees and landscaping materials proposed to remain and the construction activity controls, measures, provisions and restrictions recommended to ensure their proper protection.
2. Design location, type, number and size of all plant materials proposed to be planted, relocated or removed.
3. Botanical and common name/including cultivar of all plant materials listed on plan.
4. Location of existing and proposed utilities, streets, medians, cul-de-sac circles, boulevards, roundabouts and public right-of-way boundaries and easements.
5. Design specifications and notes for proposed landscaping plant materials, including without limitation, approved plant variety types, number and size of plants to be installed, type of planting stock (i.e. container, balled & burlap, sod, seed, plugs, etc.), location, and installation details illustrating proper planting, mulching, staking, establishment and maintenance techniques.
6. Topsoil specifications/qualities for backfill materials and backfill/finish grading specifications in areas to be landscaped.

## **Section 3. SITE PREPARATION**

### **3.1 Description**

Site preparation includes, without limitation, layout, existing tree and plant materials protection, demolition, clearing, excavation, fill and backfill, top soiling, and finished grading of areas to be landscaped.

### **3.2 Materials**

Imported fill for areas of constructed streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and major streets to be landscaped shall be clean, fertile, friable, silty clay loam topsoil that is free from turf, lime, ashes, debris, noxious weeds, plants or roots, stones over

1" in their largest dimension, lumps, clods, salts, soil sterilants or other materials that are detrimental to plant growth. Topsoil shall not be delivered or used while wet, frozen or in a muddy condition. Topsoil shall have an acidity range of pH 6.0 to 7.5 and contain not less than 3 to 5 percent organic matter. Topsoil shall be of a quality to support the growth of landscape plant materials.

### **3.3 Excavation**

Excavation of existing topsoil shall only be done if specifically required on the approved construction plans to a depth specified in the plans and stockpiled onsite or removed as indicated by the Project Inspector for the City. Excavated topsoil from onsite or that which is required to be hauled in must meet the materials specifications of this Standard for backfill used for constructed streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and major streets that are to be landscaped.

### **3.4 Fill and Backfill Operations**

The contractor shall be responsible for obtaining the Project Inspector's approval of the subgrade and finish grade before commencing soil preparation, top soiling, and finish grading or other subsequent operations. The following grading tolerances shall be applied:

1. Tolerances shall not exceed 0.1 feet above or below desired subgrade deviation in areas to be landscaped and no tolerance will be allowed on subgrades prepared for paving or site improvements, or subgrades immediately adjacent to curbs, medians, boulevards and/or roundabout pavements.
2. Settling of finish grade shall not exceed 0.1 feet.

The contractor shall complete all designated clearing operations before beginning any filling or backfilling.

If sufficient suitable fill or backfill material is not available on the project site, additional topsoil materials shall be furnished and installed in the quantities required and specified in these Standards for backfill used in landscaping constructed streetscape, medians, cul-de-sac circles, boulevards, roundabouts and major streets.

Placing fill and backfill in layers not to exceed 6 inches in compacted depth with the following compaction standards:

1. Each layer shall be compacted to the specified density. Landscaping fill and backfill shall be compacted to no less than 80 percent and no more than 85 percent density in areas to be planted.
2. Compaction shall not occur when soil is wet.

Contractor shall ensure that filling and backfilling shall provide adequate site drainage at all times. Fill or backfill shall not be placed on wet sub soil.

### **3.5 Finish Grading**

Finish grading shall consist of cutting, filling, shaping and fine grading work to be done according to the exact lines and elevations indicated on the approved landscaping plans and/or as directed by the Project Engineer/Inspection for the City.

The contractor is responsible for the following:

1. Completing all finish grading onsite. The top of the subgrade shall be the depth below the finished grade as required for pavements, walks, seeding, plugging, sodding, landscaping, mulches and other site improvements.
2. Protecting the finish grade areas and regrading to correct any irregularities caused by hauling materials or by other operations over the finished grade.
3. Repairing any soil erosion or other damage resulting from weathering action before final acceptance.
4. Finish and fine grade the project area to establish an even and well matched grade over the entire surface. Positive surface drainage shall be assured and there shall be no depressions, subsequent settling or irregularities in the finished grade.

Excavated and filled sections and adjacent transition areas shall be smooth, properly compacted and free from irregular surface changes, all lumps of soil shall be pulverized, raked out or removed. The degree of finish grading shall be that ordinarily obtained from either blade, grader, or scraper operations. Where finishing cannot be satisfactorily completed with power equipment, hand raked methods shall be used.

Unless otherwise indicated, the subgrade shall be evenly sloped to provide drainage away from site improvements or the centerline of medians. Swales shall be cut as shown on the plans, but shall not reduce the thickness of the topsoil specified.

Finish grading shall conform to the grade elevations shown on an approved landscaping plan and the area shall be in a smooth, even condition, free from debris and other materials that would be detrimental to the finished grade. Settling of any finish grade shall not be more than 0.1 feet, and if settling is greater, the contractor shall bring the grade to specified elevations.

## Section 4. PLANT SELECTION AND PLACEMENT

### 4.1 Plant Materials

1. Specific plant materials designated on the landscape plan to be planted in the public right-of-way shall be selected from the approved list established by the Parks and Recreation Department unless an alternate plant selection has been approved by said Department. The approved list will specifically list the size, method of handling, characteristics and design spread diameter of each plant material.
2. Plant selection and placement shall be designed and based upon the expected mature height and spread of the selected species, to prevent unnecessary competition or overcrowding of plants and to ensure that the selected plants remain within the median strip, cul-de-sac circles, planting strip, public easement, and/or roundabout width when mature without requiring excessive or frequent pruning.
3. Plant selection and placement shall be designed to avoid or minimize traffic sight obstructions and be in conformance with the City of Lincoln's Traffic Safety Sight Distance Standards where applicable and practical. Plantings for medians, cul-de-sac circles, major streets, and roundabouts must be designed to allow for visual access between vehicles and pedestrians in the vicinity of intersections and street access drives. Refer to Lincoln Municipal Code Chapter 12.20, Trees and Shrubbery, Section 12.20.070, Height and Spread Limitations for Landscape Plantings Within the Sidewalk Space; Special Assessment for Failure to Maintain. In addition, it is recommended that sufficient space be left between individual trees and/or clumps of trees as "windows" for motorists to monitor the locations of vehicles in other traffic lanes. Spacing of street trees planted between the curb and sidewalk/trail along major streets should be done according to the posted speed limit as noted in the city of Lincoln Sight Distance Standards for Traffic Safety.
4. Plant selection and placement shall be designed to avoid conflict with street lights, traffic lights, traffic signs, fire hydrants, crosswalks, intersections, sidewalks, bicycle/pedestrian trails, overhead utility wires, utility easements, and take into consideration the depth and location of underground utilities.
5. Plant selection and placement of landscape screens for **commercial areas/parking** lots along major streets would be for spaces five feet or wider between the parking lot and the private property lot line within the front yard setback. The expected mature height and spread of plant materials used for such landscape screens should remain within the width of the existing space between the parking lot and the private property line within the front yard setback without requiring excessive or frequent pruning. Such plantings **shall not encroach** onto any public sidewalk or bicycle/pedestrian trail and shall conform to the City of Lincoln's Sight Distance Standards for Traffic Safety for driveways or alleys adjacent to such areas.

6. Plant selection and placement of landscaping in the six (6) feet of green space located between the sidewalk and/or bicycle/pedestrian trail and the **right-of-way** line along major streets will be extremely restrictive due to space limitations and the location of the adjacent sidewalk and trail. Plant materials, when fully mature, should not encroach upon sidewalks and/or trails.

## **Section 5. PLANTING**

### **5.1 Description**

Planting includes, without limitation, the placement of specified plant materials, seed, sod and/or plugs, as shown on the approved landscape plan, the placement of materials to protect and enhance plant growth, and the methods applied in planting and maintaining landscape plants.

### **5.2 Specifications**

Specified sizes and types (i.e. container, balled & burlapped, etc.) of plant materials (i.e. nursery grown trees, shrubs, ornamental grasses, perennials, wildflower seed mixtures, turf-type seed, sod or plugs, etc.) shall be determined by the City prior to the design of landscaping plans. City of Lincoln Standard Specifications for **Landscape Work and Seeding and sodding** shall be used where applicable in the installation and maintenance of landscaping done on the City right-of-way.