

# Landscape Reference Manual 

Revised April 2016
By City of Aurora, Planning Department

# City of Aurora 

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Included in this reference manual:

- Appendix of Landscape Plan Information

This document is available on our web site. Go to www. Auroragov.org:

City of Aurora
Landscape Reference Manual

## Table of Contents

Introduction ..... Page 3

1. Landscape Plans Page 4
1.1 Landscape Plan Requirements ..... Page 4
2. Appendix ..... Page 9
A. Recommended Xeriscape and No Water (Z) Plant List ..... Page 10
B. City of Aurora Policy On Preservation of Existing Trees ..... Page 21
C. Custom Home Landscape and Tree Mitigation Form ..... Page 25
D. Sample Landscape Tables ..... Page 26
E. Legends, Plant Lists, Index Maps ..... Page 30
F. Street Frontage and Perimeter Buffer Calculations ..... Page 32
G. Front Yard Landscapes ..... Page 34
H. Front Yard Xeriscape Landscapes ..... Page 44
I. Artificial Turf ..... Page 52
J. Revegetation Plan Check List ..... Page 56
K. Development Review Staff List ..... Page 57
L. Landscape Material Placement Criteria ..... Page 58

## Introduction

## Changes to City of Aurora landscape plans and submittal requirements.

The City of Aurora no longer requires the submittal of final landscape plans. The preliminary landscape plan (Section 1.1) will be the only plan required and is submitted concurrent with the site plan during development review.

The appendix has pertinent information for preparing preliminary plans and also includes the city's Recommended Xeriscape Plant List and the Policy On The Preservation of Existing Trees, single-family detached landscaping information, artificial turf requirements, and more.

City of Aurora Planning Department
1.0. Landscape Plans. The landscape plan is a legal document that is binding on the developer or owner, their successors and assigns. The landscape plan is a commitment to quality and is a long-term maintenance agreement therefore, the plans must be complete and legible and will not be accepted if they are unclean or information is illegible or missing.

The landscape plan is submitted concurrent with the Development (DA) application and will be reviewed for compliance with the landscape code during development review.
1.1 Landscape Plan Requirements. The following bullet points describe the landscape plan and the information that shall be provided on the plan:

- Sheet Size. 24 "X36" sheet size. Each sheet shall include a title block, north arrow, graphic scale, and key map. The plans are to be drawn at a minimum scale of 1 " $=40^{\prime}$ 0 " and shall include all pertinent information as further described in the bullet points that follow.
- Title Block. Show project name, developer name, consultant name, revisions table, sheet description, and sheet number.
- Key Map. To facilitate reviewing sets of plans consisting of two or more sheets, staff recommends providing a key map that shows the overall site and the area covered by each sheet.
- North Arrow/Graphic Scale. Show a numeric and graphic scale for all plans and details, and include a north arrow.

Not For Construction. Label each sheet in the landscape plan set "NOT FOR CONSTRUCTION".

- Phase Lines. Phase lines are required on all phased development. Include phase lines in the symbol legend. Buffers next to residential development, arterial and collector street frontages and perimeter buffers, should be included in phase one construction whenever feasible.
- Proposed Waivers List. All landscape waivers should be listed on the landscape plan. Discuss required language with Case Manager.
- Standard Landscape Notes. The following notes are required on all landscape plans. Statements should describe the information requested and notes shown in quotation marks "" should be provided as written without revisions or additions. Modified statements and notes will be rejected unless previously approved.
- Provide a statement committing to soil preparation, listing type and quantity of amendment(s) to be applied. Four cubic yards of organic material per 1,000 SF of area is the minimum amount currently required to obtain a lawn permit.
- Provide a statement generally describing any freestanding lights.
- Provide a statement generally describing the surface material of walks, vehicular drives, parking lots, plazas, etc.
- Show this note, "All utility easement shall remain unobstructed and fully accessible along their entire length for maintenance equipment entry."
- Show this note, "The developer, his successors and assigns, shall be responsible for installation, maintenance and replacement of all landscaping materials shown or indicated on the approved site plan or landscape plan on file in the planning department. All landscaping will be installed as delineated on the plan, prior to issuance of certificates of occupancy."
- Show this note, "All landscaped areas and plant material, except for non-irrigated native, restorative, and dryland grass areas that comply with requirements found in Sec. 146-1429 and/or Sec. 146-1435 must be watered by an automatic underground irrigation system. Irrigation system design, installation, operation, and maintenance shall conform to requirements found in the City of Aurora Irrigation Ordinance."
- General Landscape Notes. In addition to the required standard landscape notes to be provided above, the applicant may include notes that describe landscape materials such as mulches, pavers, and decorative pavement. Notes that describe tree lawn and residential single-family detached lot landscape responsibilities may be included. Notes giving contractors freedom to make substitutions and field changes without prior city approval are not permitted.
- Landscape Plan Legend. Show property lines; utilities; lighting fixtures; fire hydrants; fences; walls; curb and gutter; concrete and asphalt pavement; decorative pavement; existing and proposed contours and elevations, and T.O.W and B.O.W. elevations; 100 year flood plain boundaries; and all other site improvements that are shown on the site plan should match those shown on the landscape plan and be included in the legend.
- Utility Easements \& Utility Hardware Locations - Show and label all existing and proposed utility easements and utility hardware such as fire hydrants, stand pipes, transformers, enclosures, etc. since they will impact plant material locations. Be sure to show these items in a legend.
- Plant Material Symbol Legend: Include a separate legend showing deciduous, evergreen and ornamental trees, plant beds; irrigated cool and warm season sod or seed; irrigated and non-irrigated native, restorative, and dryland grasses. Show required sizes at time of installation.
- Plan Layout Plant Material Symbol Scale. Draw all plant material at the corresponding sizes.
- Deciduous shade and street tree species. 25 ' diameter.
- Deciduous ornamental trees. $12^{\prime}$ to $15^{\prime}$ diameter.
- Evergreen trees. 10' diameter.
- Large shrubs*/Small trees. 6' to 8' diameter.
- Medium shrubs*. 4'-5' diameter.
- Small shrubs*, perennials, and ornamental grasses. 3' to 4' diameter.
- Annuals and Groundcovers. Cross-hatching, stippling, and shading are acceptable when accompanied by spacing and planting pattern notations. e.g. (Annuals 8 " o.c. triangular spacing.)
- Existing Plant Material. Special symbols should be provided for existing trees, shrubs, and plant beds that will be protected in place, or when existing trees will be relocated. Also, provide special symbols for all plant species such as Cottonwoods and Yucca that may be prohibited or hazardous to the public's health, welfare, and safety.
- Water Zones - Show water usage requirements for each turf and plant species listed in the Plant List. Usage requirements should be shown as follows:
- Non-water conserving means any turf or plant using high amounts of water (greater than 15 inches per year) through automatic irrigation connected to a permanent tap to survive in normal weather conditions
- Water conserving means any turf or plant using low or moderate amounts of water (less than 15 inches per year) through automatic irrigation connected to a permanent tap to survive in normal weather conditions.
- Non-water $(Z)$ using means any turf or plant species needing no water through automatic irrigation connected to a permanent tap to survive or needing only water by a temporary tap for re-establishment in normal weather conditions.
- Detailed Plant List. Provide a plant list including representative plant symbols, labels, quantities, sizes, common and botanical names, special notes/or planting requirements i.e. spacing and water usage requirements for each species.
- Contours. Show existing and proposed one or two foot contours and label.
- 404 Permit. Provide a copy of Wetlands application and mitigation plan when necessary.
- Existing Trees, Shrubs, and Natural Areas. Show trees, plants, existing landscaped areas, natural areas that are to remain and be protected in place.
- Detention, Retention, and Water Quality Ponds. Show pond type, area boundary, 100 year flood line, maximum depth below 100 yr. flood line, and show retaining walls and details if applicable.
- Distinctive Landscape Treatments. Required at site and neighborhood entrances and at each collector or arterial street intersection.
- Surface Treatments. Including each turf type, decorative pavement, concrete, asphalt, pavers, concrete curb and gutter, and include details,
- Fences, Walls and Retaining Walls. Retaining walls and fence materials, height, and placement are regulated by code and therefore, always provide design details including dimensions, materials, finishes, color and top and bottom of wall elevations. Graphically show the location of each fence style. It should be very clear where each fence begins
and ends. The city will not issue fence or wall permits if this information is not shown on the plans or if it is incomplete. Also for more information, please see Article 17 Fence, Wall, and Awning Standards. Include cross sections as requested showing relationship to adjacent infrastructure and structures with grades at top and bottom of wall/fence at critical locations as addressed during development review.
- Monumentation Signs and Community Design Elements. Show the locations of proposed or existing monuments and signs. Include design details with dimensions, materials, finishes, and colors. Reference all details.
- Parking Lot Landscaping. Include all islands and screening.
- Service Areas and Trash Enclosures. Show location, label and Include design details. Show dimensions, materials, finishes, and colors.
- Standard Tables. Standard tables shall be provided on all landscape plan submissions to demonstrate compliance with landscape code requirements. Provide tables for standard rights-of-way, street and non-street buffer and building perimeter landscaping and tree mitigation. Sample tables are included below for reference only and may be modified, but at a minimum should include the information as shown below.
- Standard Rights-of Way Table - Provide a table listing each street individually and the required street tree requirements. Street trees are required at a ratio of 1 tree per 40 linear feet. Have columns for required versus provided street trees.
- Street Perimeter Buffer Table - Provide a table listing each street individually and the required buffer requirements i.e. buffer width required, buffer width provided, trees and shrubs required versus provided trees and shrubs. If incentive features are used, identify the incentive feature at the bottom of the table for the given street. Buffer areas are measured inward from back of walk or from the R.O.W. when a walk is not present. Landscaping shall consist of one tree and 10 shrubs per 40 linear feet of frontage length and is in addition to standard rights-of-way frontage requirements.
- Non Street Buffer Table - Provide a table for all non-street frontage buffers. Label the buffers on the plan and in the table A, B, C, etc. and list the required versus provided landscape requirements i.e. trees, shrubs, widths etc. If using incentive features to reduce the buffer width, provide a note at the bottom of the table explaining the buffer reduction feature.
- Special Landscape Buffer Table - Provide a table for Special Landscape Buffers that occur next to city owned open space, parks, trails or the E-470, I-225 or I-70 corridors. Provide columns for required and provided widths, required and provided trees and shrubs. Reductions in buffer widths are not permitted next to city owned parks, trails or open space. Reductions in buffers adjacent to E-470, I-225 or I-70 shall be denoted at the bottom of the chart with an explanation of the buffer reduction feature utilized.
- Building Landscaping Table - Provide a building perimeter landscape table showing each elevation facing public rights of way, residential neighborhoods,
public open space or parks, or elevations having and entrance door. Label each elevation (A, B. C, etc.) and show their locations on the plans.
- Tree Preservation Table -The tree preservation table shall be shown on the Landscape Plan whenever tree mitigation is required. Show the total caliper inches of trees that will be removed, relocated, or mitigated. The Forestry Division following their site inspection will forward a report of their findings to the case manager. The report will show species, diameter, condition, location factors, and mitigation requirements in caliper inches and assessed dollar value. Mitigation values are based on International Society of Arboriculture's Guide to Plant Appraisal criteria. A copy of the city's Policy on Preservation of Existing
- Water Usage Table - A water usage table is required whenever common area landscape tracts are proposed. The table should include the square footage of each tract, and the water usage categories within each tract as follows:
- Non-water conserving means any turf or plant using high amounts of water through automatic irrigation connected to a permanent tap to survive in normal weather conditions. Any area that will include plant material requiring 15 inches or more of supplemental water in an average year will be considered a non-water conserving area.
- Water conserving means any turf or plant using low or moderate amounts of water through automatic irrigation connected to a permanent tap to survive in normal weather conditions. Any area that requires less than 15 inches of supplemental water in an average year will be considered a water conserving area.
- Non-water (Z) using means any turf or plant species needing no water through automatic irrigation connected to a permanent tap to survive or needing only water by a temporary tap for re-establishment in normal weather conditions. This includes hardscaped, mulched (organic and inorganic) and artificial turf areas not containing plant material.
- Irrigation Plans. Following approval of the final landscape plan, Irrigation plans may be submitted to Aurora Water per the department's requirements. Approved Landscape Plans will be required as part of the irrigation plan submittal documents with the irrigation plan submittal.
- Tree Protection Plan (TPP). Whenever, Black Forest tree species such as Ponderosa Pine and Gambel Oak are present on site or maybe impacted by off-site construction such as roads, grading, or utilities that are required for that development, a final tree protection plan signed by the City Forester shall be included with the landscape plan set. TPP requirements may be found in ACC, Chapter 146, Building and Zoning Code, Article 14 Landscaping, Division 6. Black Forest.


## 2.0

APPENDIX


City of Aurora
Parks and Open Space Department
March 2016
Attached are lists of xeriscape plants recommended for planting in Aurora. These lists were developed by compiling information from the following sources:

- X-Rated Plant List from the Garden Centers of Colorado
- Xeric Plant List from watersaver.org
- Xeriscape Plant Guide by Denver Water
- Plant Select Program at Colorado State University
- Fact Sheets \#7.229, 7.230, 7.231, 7.234 from CSU Cooperative Extension
- Xeriscape Garden Brochures from City of Aurora Utilities Department

Indications of water usage for various plants were determined by utilizing the recommendation from the Garden Centers of Colorado, as follows:

X-rated= Plants need 1" of water per week
XX-rated= Plants need $1 / 2$ " of water per week
XXX-rated= Plants need $1 / 2$ " of water every two weeks
These watering recommendations are for plants that have been established for at least one growing season. Newly installed plants will require more water than indicated on the following lists.

| City of Aurora |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Parks and Open Space Department |  |  |  |  |
| 2003 XERISCAPE PLANT LIST |  |  |  |  |
| Trees and Evergreens |  |  |  |  |
|  |  | Garden Centers of Colorado Rating |  |  |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Acer ginnala (all cultivars) | Amur Maple |  |  |  |
| Acer grandidentatum | Bigtooth Maple |  |  |  |
| Acer tataricum | Tatarian Maple |  |  |  |
| Aesculus glabra | Ohio Buckeye |  |  |  |
| Aesculus pavia | Red Buckeye |  |  |  |
| Aescuclus hippocastanum | Horsechestnut |  |  |  |
| Amelanchier sp. | Serviceberry |  |  |  |
| Examples: Amelanchier alnifolia | Saskatoon Serviceberry |  |  |  |
| Amelanchier alnifolia 'Regent' | Regent Serviceberry |  |  |  |
| Amelanchier 'Autumn Brilliance' | Autumn Brilliance Serviceberry |  |  |  |
| Amelanchier canadensis | Shadblow Serviceberry |  |  |  |
| Catalpa speciosa | Western Catalpa |  |  |  |
| Celtis occidentalis | Hackberry |  |  |  |
| Cercis sp. | Redbud |  |  |  |
| Crataegus sp. | Hawthorn |  |  |  |
| Examples: Crataegus ambigua | Russian Hawthorn |  |  |  |
| Crataegus arnoldiana | Arnold's Hawthorn |  |  |  |
| Crataegus crus-galli | Cockspur Hawthorn |  |  |  |
| Crataegus crus-galli var. inermis | Thornless Cockspur Hawthorn |  |  |  |
| Crataegus douglasii | River Hawthorn |  |  |  |
| Crataegus mollis | Downy Hawthorn |  |  |  |
| Crataegus phaenopyrum | Washington Hawthorn |  |  |  |
| Crataegus succulenta | Fleshy Hawthorn |  |  |  |
| Crataegus virdia 'Winter King' | Winter King Hawthorn |  |  |  |
| Examples: Gleditsia triacanthos inermis 'Imperial" | Imperial Honeylocust |  |  |  |
| Gleditsia triacanthos inermis 'Shademaster' | Shademaster Honeylocust |  |  |  |
| Gleditsia triacanthos inermis 'Skyline' | Skyline Honeylocust |  |  |  |
| Gleditsia triacanthos 'Sunburst' | Sunburst Honeylocust |  |  |  |
| Gymnocladus dioica | Kentucky Coffeetree |  |  |  |
| Juglans nigra | Black Walnut |  |  |  |
| Juniperus sp. | Juniper (all types) |  |  |  |
| Koelreuteria paniculata | Goldenrain Tree |  |  |  |
| Malus sp. | Apple and Crabapple (all types) |  |  |  |
| Phellodendron amurense | Amur Corktree |  |  |  |
| Pinus sp. | Pine |  |  |  |
| Examples: Pinus aristata | Bristlecone pine |  |  |  |
| Pinus cembroides edulis | Pinyon Pine |  |  |  |
| Pinus flexilia | Limber Pine |  |  |  |
| Pinus nigra | Austrian Pine |  |  |  |
| Pinus ponderosa | Ponderosa Pine |  |  |  |
| Pinus strobiformis | Southwestern White Pine |  |  |  |
| Pinus sys/vestris | Scotch Pine |  |  |  |


|  |  | Garden Centers of Colorado Rating |  |  |
| :---: | :---: | :---: | :---: | :---: |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Prunus sp. | Cherries/Plums/Chockcherries |  |  |  |
| Pyrus sp. | Pear (ornamental) |  |  |  |
| Examples: Pyrus calleryana 'Aristocrat' | Aristocrat Pear |  |  |  |
| Pyrus calleryana 'Chanticleer' | Chanticleer Pear |  |  |  |
| Pyrus calleryana 'Stone Hill' | Stone Hill Pear |  |  |  |
| Pyrus fauriei | Fauriei Pear |  |  |  |
| Pyrus fauriei 'Korean Sun' | Korean Sun Pear |  |  |  |
| Pyrus ussuriensis | Ussurian Pear |  |  |  |
| Pyrus ussuriensis ' Prairie Gem' | Prairie Gem pear |  |  |  |
| Quercus sp. | Oak |  |  |  |
| Examples: Quercus alba | White Oak |  |  |  |
| Quercus bicolor | Swamp White Oak |  |  |  |
| Quercus gambelii | Gambel Oak |  |  |  |
| Quercus imbricaria | Shingle/Laurel Oak |  |  |  |
| Quercus macrocarpa | Bur Oak |  |  |  |
| Quercus prinus | Chestnut Oak |  |  |  |
| Quercus robur | English Oak |  |  |  |
| Quercus robur 'Fastigiata' | Columnar English Oak |  |  |  |
| Quercus undulata | Wavy Leaf Oak |  |  |  |
| Robinia pseudoacacia | Black Locust |  |  |  |
| Sophora japonica | Japanese Pagoda Tree |  |  |  |
| Syringa pekinensis | Peking Lilac |  |  |  |
| Syringa reticulata | Japanese Tree Lilac |  |  |  |
| Ulmus sp. | Elm |  |  |  |
| Examples: Ulmus Frontier | Frontier Elm |  |  |  |
| Ulmus George Washington | George Washington Elm |  |  |  |
| Ulmus Triumph | Triumph Elm |  |  |  |
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| City of Aurora |  |  |  |  |
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| Parks and Open Space Department |  |  |  |  |
| 2003 XERISCAPE PLANT LIST |  |  |  |  |
| Shrubs |  |  |  |  |
|  |  | Garden Centers of Colorado Rating |  |  |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Acer ginnala | Amur Maple |  |  |  |
| Examples: Acer ginnala 'Bailey Compact' | Bailey Compacy Amur Maple |  |  |  |
| Acer ginnala 'Compactum' | Compact Amur Maple |  |  |  |
| Acer ginnala 'Emerald Elf' | Emerald Elf Amur Maple |  |  |  |
| Acer ginnala 'Flame' | Flame Amur Maple |  |  |  |
| Acer tataricum | Tatarian Maple |  |  |  |
| Amorpha canescens | Leadplant |  |  |  |
| Amelanchier sp. | Serviceberry |  |  |  |
| Examples: Amelanchier alnifolia | Saskatoon Serviceberry |  |  |  |
| Amelanchier alnifolia 'Regent' | Regent Serviceberry |  |  |  |
| Amelanchieralnifloia 'Autumn Brilliance' | Autumn Brilliance Serviceberry |  |  |  |
| Amelanchier canadensis | Shadblow Serviceberry |  |  |  |
| Aronia sp. | Chokeberry |  |  |  |
| Artemisia sp. | Sage |  |  |  |
| Examples: Artemisia cana | Silver Sagebrush |  |  |  |
| Artemisia tridentata | Tall Western Sagebrush |  |  |  |
| Atriplex canescens | Four-wing Saltbrush |  |  |  |
| Berberis sp. | Barberry |  |  |  |
| Examples: Berberis mentorensis | Mentor Barberry |  |  |  |



|  |  | Garden Centers of Colorado Rating |  |  |
| :---: | :---: | :---: | :---: | :---: |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Cytisus sp. | Broom |  |  |  |
| Examples: Cytisus scoparius 'Moonlight' | Moonlight Broom |  |  |  |
| Cytisus purgans 'Spanish Gold' | Spanish Gold Broom |  |  |  |
| Daphne sp. | Daphne |  |  |  |
| Euonymus sp. | Euonymus |  |  |  |
| Fallugia paradoxa | Apache Plume |  |  |  |
| Forestiera neomexicana | New Mexican Privet |  |  |  |
| Hippophae rhamnoides | Sea Buckthorn |  |  |  |
| Holodiscuc dumosus | Rock Spirea |  |  |  |
| Juniperus sp. | Juniper |  |  |  |
| Kolkwitzia amabilis | Beautybush |  |  |  |
| Ligustrum sp. | Privet |  |  |  |
| Examples: Ligustrum obtusifolium var. regalianum | Regal Privet |  |  |  |
| Ligustrum vulgare 'Cheyenne' | Cheyenne Privet |  |  |  |
| Ligustrum vulgare 'Densiflorum' | Upright Privet |  |  |  |
| Ligustrum vulgare 'Lodense' | Lodense Privet |  |  |  |
| Lonicera sp. | Honeysuckle |  |  |  |
| Examples: Lonicera 'Honeyrose' | Honeyrose Honeysuckle |  |  |  |
| Lonicera korolkowii var. floribunda 'Blue Velvet' | Blue Velvet Honeysuckle |  |  |  |
| Lonicera syringantha var. wolfii | Lilac-flowering dwarf Honeysuckle |  |  |  |
| Lonicera tatarica 'Arnold Red' | Arnold Red Honeysuckle |  |  |  |
| Lonicera xylosteoides 'Clavey's Dwarf' | Clavey's Dwarf Honeysuckle |  |  |  |
| Lonicera xylosteoides 'Miniglobe' | Miniglobe Honeysuckle |  |  |  |
| Mahonia repens | Creeping Grape Holly |  |  |  |
| Perovskia atriplicifolia | Russian-Sage |  |  |  |
| Philadelphus sp. | Mockorange |  |  |  |


| Examples: Philadelphus lewisii | Lewis Mockorange |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Philadelphus microphyllus | Littleleaf Mockorange |  |  |  |
| Physocarpus sp. | Ninebark |  |  |  |
| Examples: Physocarpus monogynus | Mountain Ninebark |  |  |  |
| Physocarpus opulifolius \& cultivars | Ninebark |  |  |  |
| Pinus mugo | Mugo pine |  |  |  |
| Potentilla sp. | Potentilla |  |  |  |
| Prunus sp. | Cherries/Plums/Chokecherries |  |  |  |
| Examples: Prunus besseyi | Western Sand Cherry |  |  |  |
| Prunus fruiticosa | Ground Cherry |  |  |  |
| Prunus tomentosa | Nanking Cherry |  |  |  |
| Prunus virginiana | Native Chokecherry |  |  |  |
| Quercus gambelii | Gambel Oak |  |  |  |
| Rhamnus sp. | Buckthorn |  |  |  |
| Examples: Rhamnus frangula 'Asplenifolia' | Fern-leaf Buckthorn |  |  |  |
| Rhamnus frangula 'Columnaris' | Columnar Buckthorn |  |  |  |
|  | Smith Buckthorn |  |  |  |
| Rhus sp. | Sumac |  |  |  |
| Example: Rhus aromatica | Fragrant Sumac |  |  |  |
| Rhus aromatica 'Gro-Low' | Gro-Low Sumac |  |  |  |
| Rhus glabra | Smooth Sumac |  |  |  |
| Rhus glabra var. cismontana | Rocky Mountain Sumac |  |  |  |
| Rhus trilobata | Threeleaf Sumac |  |  |  |
| Rhus typhina | Staghorn Sumac |  |  |  |
| Rhus typhina 'Lacinata' | Cutleaf Sumac |  |  |  |


|  |  | Garden Centers of Colorado Rating |  |  |
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| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Ribes sp. | Gooseberry/Currant |  |  |  |
| Examples: Ribes alpinum | Alpine Currant |  |  |  |
| Ribes alpinum 'Green Mound' | Green Mound Currant |  |  |  |
| Ribes aureum | Golden Currant |  |  |  |
| Ribes cereum | Wax Currant |  |  |  |
| Ribes 'Red Lake' | Red Lake Currant |  |  |  |
| Ribes 'Pixwell' | Pixwell Currant |  |  |  |
| Rosa sp. | Shrub Roses |  |  |  |
| Robinia pseudoacacia | New Mexico Locust |  |  |  |
| Rubus x tridel 'Beneden' | Beneden Thimbleberry |  |  |  |
| Shepherdia sp. | Buffaloberry |  |  |  |
| Spiraea sp. | Spirea |  |  |  |
| Symphoricarpus sp. | Snowberry |  |  |  |
| Examples: Symphoricarpus albus | White Snowberry |  |  |  |
| Symphoricarpus chenaultii 'Hancock' | Hancock Coralberry |  |  |  |
| Symphoricarpus doorenbosii 'Magic Berry' | Magic Berry Coralberry |  |  |  |
| Symphoricarpus doorenbosii 'White Hedge' | White Hedge Snowberry |  |  |  |
| Symphoricarpus occidentalis | Western Snowberry |  |  |  |
| Symphoricarpus orbiculatus | Red Coralberry |  |  |  |
| Symphoricarpus oreophilus | Mountain Snowberry |  |  |  |
| Syringa sp. | Lilac |  |  |  |
| Examples: Syringa hyancinthiflora (all cultivars) | Early Lilac |  |  |  |
| Syringa prestoniae (all cultivars) | Late Lilac |  |  |  |
| Syringa vulgaris (all cultivars) | Common \& French Lilac |  |  |  |
| Viburnum sp. | Viburnum |  |  |  |
| Examples: Viburnum lantana | Wayfaringtree |  |  |  |
| Viburnum lantana 'Mohican' | Mohican Viburnum |  |  |  |
| Viburnum lentago | Nannyberry |  |  |  |
| Viburnum rhytidophylloides 'Alleghany' | Alleghany Leatherleaf Viburnum |  |  |  |
| Yucca sp. | Yucca |  |  |  |


| City of Aurora |  |  |  |  |
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| Parks and Open Space Department |  |  |  |  |
| 2003 XERISCAPE PLANT LIST |  |  |  |  |
| Perennials |  |  |  |  |
|  |  | Garden Centers of Colorado Rating |  |  |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Achillea sp. | Yarrow |  |  |  |
| Agastache sp. | Hyssop |  |  |  |
| Ajuga reptans | Bugleweed |  |  |  |
| Alcea sp. | Hollyhock |  |  |  |
| Alchemilla mollis | Lady's Mantle |  |  |  |
| Allium sp. | Ornamental Onion |  |  |  |
| Alyssoides utriculata | Bladderpod |  |  |  |
| Alyssum montanum | Mountain Gold |  |  |  |
| Alchemilla mollis | Lady's Mantle |  |  |  |
| Amsonia hubrichtii | Blue Star |  |  |  |
| Anacyclus depressus | Mt. Atlas Daisy |  |  |  |
| Anchusa sp. | Bogloss |  |  |  |
| Anemone sp. | Windflower |  |  |  |
| Antennaria sp. | Pussytoes |  |  |  |
| Anthemis tinctoria | Chamomile |  |  |  |
| Aquilegia sp. | Columbine |  |  |  |
| Arabis caucasica | Rock Cress |  |  |  |
| Arctostaphylos santii | Emerald Queen Manzanita |  |  |  |
| Arctostaphylos uva-ursi | Kinnikinnick |  |  |  |
| Arenaria sp. | Sandwort |  |  |  |
| Armeria maritima | Sea Pinks |  |  |  |
| Artemisia frigida | Fringed Sage |  |  |  |
| Artemisia sp. | Sage |  |  |  |
| Asclepis tuberosa | Butterfly Weed |  |  |  |
| Aster sp. | Aster |  |  |  |
| Aurinia saxatalis | Basket-of-gold |  |  |  |
| Baptisia australis | False Indigo |  |  |  |
| Belamcanda chinensis | Blackberry Lily |  |  |  |
| Bergenia cordifolia | Pigsqueak |  |  |  |
| Berlandiera lyrata | Chocolate Flower |  |  |  |
| Boltonia asteroides | Starflower |  |  |  |
| Brunnera macrophylla | Siberian Forget-Me-Not |  |  |  |
| Callirhoe involucrata | Poppy Mallow |  |  |  |
| Calylophus serrulatus | Sundrops |  |  |  |
| Calamintha grandiflora | Beautiful Mint |  |  |  |
| Campanula sp. | Bellflower |  |  |  |
| Centaurea montana | Hardy Bachelor Button |  |  |  |
| Centranthus ruber | Jupiter's Beard |  |  |  |
| Cerastium tomentosum | Snow-In-Summer |  |  |  |
| Ceratostigma plumbaginoides | Leadwort/Plumbago |  |  |  |
| Chrysanthemum x morifolium | Garden Mum |  |  |  |
| Coreopsis sp. | Tickseed |  |  |  |
| Cytisus x 'Lena' | Lena Broom |  |  |  |
| Delosperma sp. | Ice Plant |  |  |  |
| Delphinium sp. | Delphinium |  |  |  |
| Dianthus sp. | Pinks |  |  |  |
| Diascia intergerrima 'Coral Canyon' | Twinspur 'Coral Canyon' |  |  |  |
| Digitalis sp. | Foxglove |  |  |  |
| Echinacea purpurea | Purple Coneflower |  |  |  |


|  |  | Garden Centers of Colorado Rating |  |  |
| :---: | :---: | :---: | :---: | :---: |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Echinops ritrp | Globe Thistle |  |  |  |
| Epilobium sp. | Fireweed |  |  |  |
| Erigeron sp. | Daisy Fleabane |  |  |  |
| Eriogonum umbellatum | Sulphur Flower |  |  |  |
| Eryngium amethystinum | Sea Holly |  |  |  |
| Euonymus fortunei 'Coloratus' | Purple-leaved Wintercreeper |  |  |  |
| Eupatorium greggii | West Texas Mist Flower |  |  |  |
| Euphorbia epithymoides | Cushion Spurge |  |  |  |
| Gaillardia aristata/grandiflora | Blanketflower |  |  |  |
| Galium odoratum | Sweet Wodruff |  |  |  |
| Gaura lindheimeri | Whirling Butterflies |  |  |  |
| Gazania sp. | Hardy Gazania |  |  |  |
| Geranium sp. | Hardy Granium |  |  |  |
| Geum sp. | Geum |  |  |  |
| Goniolimon/limonium sp. | Statice |  |  |  |
| Gutierrezia sarothrae | Snakeweed |  |  |  |
| Gypsophila sp. | Hardy Baby's Breath |  |  |  |
| Hedera helix | English Ivy |  |  |  |
| Helenium autumnale | Sneezeweed/Helen's flower |  |  |  |
| Helianthemum nummularium | Sun Rose |  |  |  |
| Heliopsis helianthoides | False Sunflower |  |  |  |
| Helleborus sp. | Lenten Rose |  |  |  |
| Hemerocallis sp. | Daylily |  |  |  |
| Heuchera sanguinea | Coral Bells |  |  |  |
| Hosta sp. | Plaintain Lily |  |  |  |
| Hypericum calycinum | St. John's Wort |  |  |  |
| Iberis sempervirens | Candytuft |  |  |  |
| Iris germanica (hybrid) | Bearded Iris |  |  |  |
| Knautia macedonica | Red Pincushion |  |  |  |
| Kniphofia uvaria | Red Hot Poker |  |  |  |
| Lamiastrum galeobdolon | Yellow Archangel |  |  |  |
| Lamium maculatum | Dead Nettle |  |  |  |
| Lavandula sp. | Lavender |  |  |  |
| Lavatera thuringiaca | Tree Mallow |  |  |  |
| Leontopodium alpinum | Edelweiss |  |  |  |
| Leucanthemum x superbum | Shasta Daisy |  |  |  |
| Liatris sp. | Gayfeather |  |  |  |
| Linum perenne | Blue Flax |  |  |  |
| Lychnis chalcedonica | Maltese Cross |  |  |  |
| Lychnis coronaria | Rose Campion |  |  |  |
| Mahonia repens | Creeping Grape Holly |  |  |  |
| Malva alcea | Rose Mallow |  |  |  |
| Mirabilis multiflora | Hardy Four-O-Clock |  |  |  |
| Mondard fistulosa menthaefolia | Native Lavender Bee Balm |  |  |  |
| Nepeta x faassenii | Catmint |  |  |  |
| Oenothera sp. | Evening Primrose |  |  |  |
| Origanum sp. | Oregano/Marjoram |  |  |  |
| Osteospermum sp. | Sun Daisy |  |  |  |
| Paeonia lactiflora | Peony |  |  |  |
| Papavar sp. | Poppies |  |  |  |
| Penstemon sp. | Beardtongue/Penstemon |  |  |  |
| Perovskia atriplicifolia | Russian Sage |  |  |  |
| Persicaria affinis | Himalayan Border Jewel |  |  |  |
| Phlomis cashmeriana | Jerusalem Sage |  |  |  |
| Phlox subulata | Creeping Phlox |  |  |  |


|  |  | Garden Centers of Colorado Rating |  |  |
| :---: | :---: | :---: | :---: | :---: |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Platycodon grandiflorus | Ballon Flower |  |  |  |
| Polemonium caeruleum | Jacob's Ladder |  |  |  |
| Potentilla sp. | Cinquefoil/Potentilla |  |  |  |
| Prunella laciniata | Self Heal |  |  |  |
| Pulmonaria sp. | Lungwort |  |  |  |
| Pulsatilla vulgaris | Pasque Flower |  |  |  |
| Ratibida columnifera | Prairie Coneflower |  |  |  |
| Rosmarinus officianalis 'Arp' | Lemon Rosemary |  |  |  |
| Rudbeckia sp. | Black-eyed Susan |  |  |  |
| Salvia sp. | Silver Sage |  |  |  |
| Salvia officinalis | Garden Sage |  |  |  |
| Santolina sp. | Lavender Cotton |  |  |  |
| Saponaria sp. | Soapwort |  |  |  |
| Scabiosa sp. | Pincushion |  |  |  |
| Sedum sp. | Sedum/Stonecrop |  |  |  |
| Sempervivum sp. | Hen and Chicks |  |  |  |
| Solidago sp. | Goldenrod |  |  |  |
| Stachys lanata (S. byzantina) | Lamb's Ear |  |  |  |
| Stanleya pinnata | Prince's Plume |  |  |  |
| Tanacetum coccineum | Painted Daisy |  |  |  |
| Tanacetum densum amani | Partridge Feather |  |  |  |
| Tanacetum niveum | Snow Daisy |  |  |  |
| Thymus sp. | Creeping Thyme |  |  |  |
| Tradescantia sp. | Spiderwort |  |  |  |
| Verbena canadensis | Verbena |  |  |  |
| Veronica sp. | Speedwell/Veronica |  |  |  |
| Vinca sp. | Myrtle/Periwinkle/Vinca |  |  |  |
| Viola corsica | Corsican Violet |  |  |  |
| Waldsteinia ternata | Barren Strawberry |  |  |  |
| Zauschneria arizonica | Hummingbird Trumpet |  |  |  |
| Zauschneria garrettii | California Fuschia |  |  |  |
| Zinnia grandiflora | Golden Paper Flower |  |  |  |


| City of Aurora |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Parks and Open Space Department |  |  |  |  |
| 2003 XERISCAPE PLANT LIST |  |  |  |  |
| Vines |  |  |  |  |
|  |  | C | lora |  |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Campsis radicans | Trumpet Vine |  |  |  |
| Celastrus scandens | Bittersweet |  |  |  |
| Clematis sp. | Clematis |  |  |  |
| Lonicera japonica | Honeysuckle Vine |  |  |  |
| Fallopia (Polygonum) aubertii | Silver Lace Vine |  |  |  |
| Parthenocissus quinquefolia | Virginia Creeper |  |  |  |


| City of Aurora |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Parks and Open Space Department |  |  |  |  |
| 2003 XERISCAPE PLANT LIST |  |  |  |  |
| Ornamental Grasses |  |  |  |  |
|  |  | en | Co | Rating |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Agropyron cristatum | Crested Wheatgrass |  |  |  |


| Andropogon gerardii | Big Bluestem |  |  |
| :--- | :--- | :--- | :--- |
| Bouteloua curtipendula | Sideoats Gramma Grass |  |  |
| Bouteloua gracilis | Blue Gramma Grass |  |  |
| Buchloe dactyloides | Buffalo grass |  |  |
| Calamagrostis acutiflora | Feather Reed Grass |  |  |
| Chasmanthium latifolium | Northern Sea Oats |  |  |
| Deschampsia caespitosa | Hairgrass |  |  |
| Erianthus (Sacharrum) ravennae | Hardy Plume Grass |  |  |
| Festuca arundinacea | Tall Fescue |  |  |
| Festuca ovina glauca | Blue Fescue |  |  |
| Helictotrichon sempervirens | Blue Oat Grass |  |  |
| Imperata cylindrica 'Red Baron' | Japanese Blood Grass |  |  |
| Miscanthus sinensis | Maiden Hair Grass |  |  |
| Oryzopsis hymenoides | Indian Ricegrass |  |  |
| Panicum virgatum | Switch Grass |  |  |
| Pascopyrum smithii | Western Wheatgrass |  |  |
| Pennisetum alopecuroides | Fountain Grass |  |  |
| Pennisetum setaceum 'Rubrum' | Purple Fountain Grass |  |  |
| Phalaris arundinacea 'Picta' | Ribbon Grass |  |  |
| Schizachyrium scoparium | Little Bluestem |  |  |
| Sorghastrum nutans | Indian Grass |  |  |
| Spartina pectinata | Prairie Cordgrass |  |  |
| Sporobolus heterolepsis | Prairie Dropseed |  |  |
| Stipa Sp. | Feather/Needle Grass |  |  |


| City of Aurora |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Parks and Open Space Department |  |  |  |  |
| 2003 XERISCAPE PLANT LIST |  |  |  |  |
| Ground Covers |  |  |  |  |
|  |  | Garden | Col | Rating |
| BOTANIC NAME | COMMON NAME | X | XX | XXX |
| Antennaria rosea | Pink Pussytoes |  |  |  |
| Cerastium tomentosum | Snow-in-Summer |  |  |  |
| Delosperma sp. | Hardy Ice Plant |  |  |  |
| Santolina chamaecyparissus | Lavender Cotton |  |  |  |
| Polygonum affine | Himalayan Fleeceflower |  |  |  |
| Sedum spectabile | Showy Stonecrop |  |  |  |
| Sempervirens sp. | Hens and Chicks |  |  |  |
| Thymus pseudolanuginosus | Wooly Thyme |  |  |  |
| Veronica pectinata | Blue Wooly Speedwell |  |  |  |
| Zinnia grandiflora | Paper Flower |  |  |  |

## Recommended "No-Water" Plant <br> List - Z-rated Plants - February, 2014

## Shrubs

Ephedra equisetina/viridis
Ericameria nauseosa ssp. nauseosa var. glabrata/speciosa/nauseosa
Genista lydia
Amelanchier alnifolia 'Regent'
Arctostaphylus uva ursi
Arctostaphylus x coloradoensis
Arctostaphylus x coloradoensis 'Chieftain'/'Coloradoensis'
Cercocarpus montanus
Chamaebatiaria millefolium
Chilopsis linearis
Fallugia paradoxa
Hesperaloe parviflora
Mahonia fremontii
Mahonia repens
Prunus besseyi ‘Pawnee Buttes’
Redleaf Rose (Rosa glauca, Rosa rubrifolia)
Rhus aromatica 'Grow Low'
Yucca baccata/filamentosa

## Perennials

Baptisia australis
Lavandula angustifolia
Marrubium rotundifolium
Pulsatilla vulgaris
Agastache cana 'Sinning'
Agastache rupestris
Amsonia jonesii
Anthemis marschalliana
Argenome Great plant, but may be considered weedy
Artemisia cana
Artemisia filifolia
Artemisia ludoviciana
Calyophus serrulatus 'Prairie Lode'
Delosperma dyeri ‘Psdold’
Echium amoenum
Eriogonum jamesii/umbellatum

Eriogonum wrightii var. wrightii<br>Kniphofia caulescens<br>Liatris spicata<br>Nepeta 'Psfike'<br>Oenothera caespitosa<br>Penstemon x mexicali 'Psmyers'<br>Penstemon rostriflorus<br>Penstemon strictus<br>Rhatibida columnifera<br>Salvia pachyphylla<br>Sedum lanceolatum<br>Sedum rupestre 'Angelina'<br>Sedum sediforme<br>Sedum 'Blue Spruce’<br>Veronica lewanensis<br>Antennaria parvifolia<br>Iris x germanica<br>Lavandula angustiflora<br>Ratibida columnifera<br>Veronica liwanensis<br>\section*{Grass}<br>Schizacharium scoparium

# B. <br> City of Aurora Tree Preservation Policy 



## CITY OF AURORA

## POLICY ON PRESERVATION OF EXISTING TREES

## I. Policy:

This document represents the policy of the City of Aurora that existing trees within the City, which are alive and in good health, shall remain in their present location and shall be safeguarded from damage that may result from the development process. Therefore, existing healthy trees, with a caliper greater than or equal to 4 inches, as measured four and one-half ( $41 / 2$ ) feet above the ground, shall be preserved or protected during the development process.

This policy shall be incorporated into the Planning Department Landscape Review Procedures for site plan approval. In addition, this policy shall also be applied to properties or sites not required to provide a site plan.

## II. Scope:

This policy shall apply to all residential and non-residential development projects within the City of Aurora, including City projects on City-owned or managed properties. Exempted from this policy are single-family detached residential properties where additions or modifications to existing buildings, or improvements to the lot, are proposed.

## III. Definitions:

For the purposes of implementing this policy, the following terms are hereby defined:

- Development process - the intent to construct upon, improve, or modify any property within the City of Aurora, whether governed by a Site Plan or not.
- Intent - having the mind, attention, or will to develop, modify, construct or improve real property within the City of Aurora.
- Mitigation - the replacement of trees removed from a site due to the development process. Replacement may include relocation of existing trees, the planting of caliper inches lost or cash payments to the Tree Planting Fund.
- Preservation - the act of keeping existing trees safe from injury, harm or destruction during the development process.
- Relocation - the practice of moving an existing tree to another site or other location within the same site.
- Tree protection zone - generally, an area encompassing one linear foot in radius around the tree per inch of trunk diameter. For example: a tree 12 inches in diameter (measured at 4.5 feet from the ground) should have a disturbance free zone with a 12 -foot radius around the tree, as measured from the tree trunk.


## IV. Properties Affected:

## A. Properties Governed by a Site Plan:

Applicability: Generally includes residential and non-residential properties within the City of Aurora, except as noted in section IV, subsection D: "Properties Not included in this Policy".

Requirements: Properties in this category must comply with the following items:

1. Preservation: Site designers shall make all feasible attempts to accommodate existing trees within their design.
2. Relocation: If tree relocation within the site is attempted, it shall be performed by a professional forester or nurseryman. All available measures shall be taken to ensure the life and good health of the tree(s).
3. Mitigation:
a. A tree mitigation plan shall be specified. Mitigation plans shall consist of an equal replacement of tree caliper inches lost on site. These plans shall indicate the trees that are proposed to comply with mitigation requirements, including the location of replacement trees and the location of trees that are proposed for relocation. No tree for mitigation shall be less than two inches in caliper and shall be of no less quality species than the tree removed, as determined by the Tree Appraisal Guidelines published by the International Society of Arboriculture (ISA), as amended.

For example: two ten-inch caliper trees are removed because of site constraints; the caliper inches lost equals 20 inches. These inches can be replaced by planting five four-inch caliper trees or four five-inch caliper trees. If the trees removed are blue spruce, they could not be replaced with an upright juniper or other tree species that is considered of lesser quality by the ISA Guidelines.
b. Should on-site tree replacement and/or relocation not be possible, tree replacement and/or relocation shall take place through any or all of the following methods:

1. Replacement of equal caliper lost on another site.
2. Replacement of equal caliper lost on public lands.
3. Relocation of trees to public lands.
4. Payment of value of caliper lost to the Tree Planting Fund.
c. Mitigation shall be in addition to standard landscape requirements established by the Planning Department. Trees planted to comply with standard landscape requirements may not be counted as satisfying tree mitigation requirements. In the case of tree removals, the location, species, and caliper of trees to be removed and their replacements shall be included on the landscape/site plan. In the case of tree relocations on site, the placement of the relocated trees shall be included on the landscape/site plan.

## B. Properties Not Governed by a Site Plan

Applicability: Generally includes properties that were developed before existing Site Plan requirements were in place or were not required to provide a Site Plan.

Examples of this type of property include:

- Non-residential properties that were developed before existing Site Plan requirements.
- Single-family detached residential infill or single-family detached lot division projects.
- Multi-family and single-family attached residential properties.

Requirements: Properties in this category shall comply with the same rules and guidelines set forth for properties governed by a site plan.

## C. Projects on City Property

Healthy trees within City-owned properties, City-owned or designated street rights-of-way, City-managed properties and easements or City-managed projects, shall not be removed or damaged during construction or development projects, except as a last alternative or to preserve public health and safety. Future planning or alteration of existing City properties, projects or rights-of-way shall make provisions for the preservation of existing trees. If preserving existing trees is not feasible, City Departments shall follow the same rules and guidelines set forth in section IV, subsection A of this policy.

## D. Properties Not Included in this Policy

Single family or two family developed residential properties.

## V. Procedures:

## A. Protection of Existing Trees During the Construction Process

Site construction shall take into account the life and good health of trees preserved on the site. The following guidelines shall be followed for tree protection. If these guidelines are not followed, the full value of the tree will be used in calculations to determine mitigation requirements.

1. Protective fencing shall be set up to visibly show the tree protection zone.
2. All equipment, including foot traffic shall remain outside of the tree protection zone.
3. If roots greater than 1 -inch in diameter require removal, a clean cut shall be accomplished using a sharp hand tool. A maximum of two 3-inch diameter roots per tree are permitted for removal. The removal of additional roots 3 -inches or greater in diameter requires approval of the City Forester or designee.
4. Limb removal shall be accomplished before construction begins. A professional company that is licensed by the City of Aurora Forestry Division shall complete all pruning.
5. Designate concrete washout areas. These areas shall not flow into or across the tree protection zone.
6. No stockpiling of soil is permitted within the tree protection zone.
7. No vehicle parking is permitted within the tree protection zone.
8. The soil shall not be compacted within the tree protection zone.
9. Existing trees damaged through the construction process shall be immediately repaired and if damaged beyond repair, replaced per the mitigation specifications outlined in section IV, subsection A, item 3. The restoration plan for these trees shall follow that approved through the site plan submittal.

## B. Interruption and Maintenance of Drainageways

1. Drainage plans for individual sites shall not alter the supply of water to existing stands of trees if the longevity of those trees is dependent upon the flows. If the drainage of the site requires altering the existing supply of water, some alternative form through the use of irrigation shall be available from the time the existing watering source is eliminated.
2. This policy shall not preclude standard maintenance of drainageways necessary to ensure the free flow of storm water. It will, however, protect those trees that do not interfere with the flow of storm drainage. Drainageways shall be maintained at the density of trees for which they were designed and future drainageways shall be designed, as far as economically feasible, to consider preservation of mature stands of trees. If preservation is not possible, mitigation and/or replacement shall be accomplished, as outlined in section IV, subsection A, item 3.

## C. Timing for Tree Mitigation Activities

Tree preservation and/or mitigation may be accomplished at any time during the development process. The timing of these activities is especially critical when moving trees from one location to another. The City Forester, or designee, shall determine the conditions that will ensure the optimal success for tree relocation, preservation or mitigation.

When feasible, the decision to relocate trees will be made after all Planning process requirements are completed. In cases where conditions necessitate the relocation of trees before all Planning processes are complete, the Developer and adjoining property owners shall be notified that these activities do not guarantee project approval and that these activities are undertaken at the Developer's risk.

# C. <br> Custom Home Landscape and Tree Mitigation Form 



City of Aurora Planning Department 15151 E. Alameda Pkwy, $2^{\text {nd }}$ Floor
Aurora, Colorado 80012
303 739-7250
Case Mgr
Case Number
Quarter Section
Row ID

CUSTOM HOME LANDSCAPE AND TREE MITIGATION REQUIREMENTS FORM

## Applicant

## Information

Enter information for the person who will answer any questions regarding the application.

Name

| Address |  |
| :--- | :--- |
|  |  |
| Phone |  |
| Email |  |
|  |  |

Residence
Address
Lot Area sf


## D.

## Sample Landscape Tables

Landscape tables when properly prepared provide staff, citizens, Planning Commission, and City Council with an important tool when determining compliance with standards, assessing quality, justifying waivers, or comparing similar developments. Sample tables have been shown to assist with their completion. Included are:

- Site Date Table
- Street Frontage, Street Perimeter Buffer, Non-street Frontage Buffer, and Special Buffer Table
- Non-residential Building Landscaping Table
- Multi-Family and Single-Family Attached Building Landscaping Table


## Site Date Table.

| Site Data | Area in SF | $\%$ |
| :--- | :---: | :---: |
| Total Site Area: $(7.5 \mathrm{ac})$ | $326,700 \mathrm{SF}$ | $100 \%$ |
| Building Coverage: | $81,675 \mathrm{SF}$ | $25 \%$ |
| Hard Surface Area: | $173,151 \mathrm{SF}$ | $53 \%$ |
| Landscape Area: | $71,874 \mathrm{SF}$ | $22 \%$ |
| Maximum \% of cool season grasses allowed: | $32,388 \mathrm{SF}$ | $33 \%$ |
| \% of cool season grasses provided: | $31,665 \mathrm{SF}$ | $44 \%$ |

At $44 \%$ the amount of cool season grasses provided is more than the maximum $33 \%$ that is allowed. Therefore, the landscape plan does not comply with Sec. 1427 Turf Regulations. To bring the plan into compliance a minimum amount of Blue Grass totaling at least $11 \%$ of the proposed cool season grasses must be converted to alternative grasses or additional plant beds.

Landscaped area coverage:

- $50 \%$ max. * - Non-living materials including river rock, crushed rock, organic mulches such as shredded bark, pole shaving, pine needles, etc., gravel, aggregate, cobbles, walks, decorative pavement, and artificial turf or other non-living materials.
- $50 \% \mathrm{~min}$. Living materials including shrubs, perennials, ornamental grasses, groundcover plants, and turf grasses. The total coverage of cool season grasses (Blue Grass sod) may not exceed $33 \%$ of a sites landscape area.

When replacing Blue Grass with xeriscape plant beds refer to Section 146-1431 Living Material Requirements, item (B) Coverage Requirements to determine the number of plants required at installation.
*NOTE: Section 146-1431 cannot be used to replace tree lawn, parking lot island, buffer, or building perimeter landscape requirements. Section 146-1431 has been rewritten to assist those who intend to remove areas of Blue Grass or who will convert their traditional high water landscapes to water conserving sustainable landscapes.

Standard Rights-of Way:

| Standard Rights-of-Way* - List each Separately |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Description | Length | Notes | Trees <br> Req. <br> $\left(1 / 40^{\prime}\right)$ | Trees <br> Provided |  |
| A | Aurora Pkwy | 320 LF | $30^{\prime}$ Dr. excluded | 8 | 8 |  |

Buffer Table for street perimeter, non-street frontage, and special buffers:

| STREET PERIMETER**, NON-STREET FRONTAGE BUFFERS, SPECIAL BUFFERS *** |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

**Buffers may be reduced when features are provided. See the appropriate table, namely, Tables 14.1, 14.4, 14.5, or 14.5 Standard Buffer Widths and Allowed Reductions, for the appropriate buffer reduction and incentive feature requirements.

Please note in this example:

1. Street frontage ( $\mathrm{TL}=$ Tree Lawn) A calculations. Two 30 -foot wide entrance/egress drives $\left(30^{\prime}+30^{\prime}=60^{\prime}\right.$ ) were deducted from a 1,260' tree lawn and street perimeter buffer. ( $1,260^{\prime}-60^{\prime}=1,120^{\prime}$ ).
2. Street Perimeter Buffer A. Sixteen trees were converted to 160 shrub equivalents for use in distinctive entry features. The buffer landscaping also satisfies parking lot screening requirements.
3. Non-Residential Buffer B. The applicant took advantage of the 4' buffer reduction incentive for xeriscaping and therefore did not require a waiver to reduce the buffer to 6 feet.
4. Residential Buffer C. The applicant has agreed to install a decorative masonry wall in exchange for a 10 -foot buffer width reduction. Landscaping will comply with residential landscape buffer requirements and a waiver for the buffer reduction is unnecessary.
5. Special Buffer D. The applicant has negotiated with Parks Recreation and Open Space Department to exchange 40 shrub for 4 trees.

## Measuring Tips:

- When measuring street frontages and street perimeter buffers measure from property line to property line, curb return to curb return, or curb return to property line.
- Subtract entrance and egress drives from street frontage and street perimeter buffer measurements.
- Use the plat when determining street frontage, street perimeter buffer, and non-street frontage buffer measurements will increase accuracy and save time.
- Include all curve lengths and tangent lengths in your measurements.


## Calculating Plant Quantity Tips:

- Landscaping that falls within intersecting buffers may be counted toward each buffer.
- Buffer landscape requirements are not transferable.
- Buffer landscape requirements may be counted toward detention, retention, and water quality pond landscape requirements. The stricter shall apply.


## Building Perimeter Landscape Table

1. Non-Residential Development:

The sample table is for a retail building 40 ft . by 120 ft . The south and east elevations face public rights or way and the north elevation faces a residential neighborhood.

Non-residential Building Elevation Landscaping Information*

| Elevation <br> (direction facing) | Elevation length | Tree Equivalent <br> required (1 tree <br> equivalent per 40 <br> LF) | Trees provided | Shrubs provided <br> (10 shrubs per <br> tree equivalent). |
| :---: | :---: | :---: | :---: | :---: |
| South-ROW <br> (1\#) | 120 ft. | 3 | 3 | N/A |
| East-ROW <br> $(\# 2)$ | 40 ft. | 1 | N/A | 10 shrubs |
| North-Resid <br> $(\# 3)$ | 120 ft. | 3 | 2 | 10 shrubs |

*Non-residential Development - Provide the information shown in the table for each elevation facing public streets, transportation corridors, public open space or parks, or residential neighborhoods.

The above example demonstrated how tree equivalents allow for flexibility when meeting building landscaping requirements.

1. South-R.O.W. Three trees in tree gates were provided. The developer could have provided 30 shrubs in raised planters or plant containers to satisfy this requirement.
2. East-R.O.W. The east elevation was planted in a plant bed consisting of a mixture of shrubs and ornamental grasses. (Note: 3-one-gallon ornamental grasses equal one five-gallon shrub.)
3. North-Resid. The developer negotiated a building planting consisting of a plant bed with 10 flowering shrubs and two evergreen trees.

Non-residential Building Landscaping Tips:

- Parking lot island landscaping may be counted toward building landscaping whenever any portion of the island is within 20 feet of a building elevation.
- If a site contains expansive soils building landscaping will be required but it must be planed for. In such instances, landscaping may be separated from the building by an impervious surface sloped away from the building to allow drainage. In extreme cases, remove expansive soils from under the slab and from areas near the building that are required to be landscaped as building perimeter landscaping. Replace expansive soils with non-expansive soils. Waterproof containers with individual irrigation and drainage systems may also apply.
- Parking lot screening and building landscaping that falls within a street perimeter buffer may be counted toward buffer requirements. The stricter requirement shall apply.

Multi-family and Single-Family Attached Residential Building Landscaping
Requirements per Unit Type*

| Building Type | Building <br> perimeter / <br> Total \# plants | \# trees <br> required/provided | \# Tall Shrubs <br> required/provided | \# Other shrubs <br> required/provided |
| :---: | :---: | :---: | :---: | :---: |
| Building \#1 | 440 LF /110 | 6 | 16 | 88 |

*Provide the following information (see table) for each unit including accessory buildings:
2. Multi-Family, Single-Family Attached Residential Development:

In this example, a residential unit has a perimeter length of 440 LF. Garages are shown on one elevation and comprise two thirds of that elevation's length. The following table and calculations show the total landscape requirement and the breakdown of trees, tall shrubs, and other shrubs. A possible substitution from shrubs to perennials and/or ornamental grasses is also discussed.

## Calculations:

Building Perimeter (360 degrees) $=440$ LF
Plant material requirement $=1.25$ plant per each 5 LF of perimeter
$(440 / 5) \times 1.25=110$ plants

## Plant material breakdown:

- $5 \%$ Trees $=6$
- $15 \%$ Tall Shrubs $=16$
- $80 \%$ Other Shrubs $=\underline{88}$

Total 110 plants
Tree Mitigation Table

| Caliper* Inches Removed | Caliper Inches Relocated | Caliper Inches Replaced for <br> Mitigation and /or Amount Paid to <br> "Tree Planting Fund" |
| :---: | :---: | :--- |

*Caliper is the diameter of the tree trunk measured at a height of 4.5 feet or at breast height. Also known as DBH which stands for diameter at breast height. (Evergreen tree height may be converted to caliper inches by dividing each tree's height by two. For example, a six-foot tall evergreen tree would be three caliper inches).

## E.

## Legends, Plant Lists, Index Maps

Far too many unnecessary comments are generated because legends, plant lists, and index maps are either missing, incomplete, or inconsistent with the site plan or plat. We believe $100 \%$ of these comments can be eliminated.

## TIPS FOR PREPARING SITE IMPROVEMENT AND LANDSCAPE MATERIALS LEGENDS.

1. Complete lists and legends will eliminate guess work and reduce comments.
2. Symbols shown on the landscape plan should match on the site plan or in the plant list.
3. A brief description following a symbol can be very beneficial and save everyone time and money. For instance, indicating if native turf is irrigated or not will save the time of having to respond to comments. For instance, is that a R.O.W., flow line, or utility service line?
4. Whenever possible legends, index maps, and in some cases plant lists should be shown on each sheet.

## PLANT LISTS.

Plant Lists - General. The following information is required for all plant lists:

- Symbols. Provide distinctive symbols when proposed, existing and potentially prohibited species such as Cottonwoods and Aspens, or thorny or spiky species are proposed.
- Quantities. Are required for each species when non-xeric plants are proposed.
- Common Name. Include.
- Botanic Name. Include.
- Size. At installation. Minimum plant material sizes including caliper, height and container size are regulated by code.
- Description. Show when applicable.
- Water Usage. Include either high, medium, low designations, or $\mathrm{X}, \mathrm{XX}, \mathrm{XXX}$ ratings per City of Aurora Recommended Xeriscape Plant List.

Typical Plant List Format:

| Symbol | Quantity | Common Name | Botanical Name | Size | Description | Water Usage |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Typical plant material categories should include:

- Deciduous Canopy Trees - Highlight (*) Recommended Street Trees
- Evergreen Trees
- Ornamental Trees
- Low Spreading Evergreen Shrubs
- Medium Evergreen Shrubs
- Tall Evergreen Shrubs
- Low Spreading Deciduous Shrubs
- Medium Deciduous Shrubs
- Tall Deciduous Shrubs
- Perennials
- Ornamental grasses
- Vines
- Groundcovers
- Seed Mixes, show grass species and note if irrigated or not irrigated
- Sod, show grass species


## INDEX MAPS

Index Maps - General. The following information should be included on all index maps:

- Scale and North Arrow
- Current sheet highlighted and numbered, match sheet numbers
- Tract Labels, be consistent
- Collector and Arterial street names

How many street trees or trees and shrubs are required for the tree lawn or adjacent street edge buffer? To get it right the first time, follow the recommendations provided below.

## Street Frontage Measurements for Street Trees within a Tree Lawn. See Fig. 1.

- Public Works Standards requires that detached walks transition from a parallel alignment with the street toward a diagonal curb ramp at all intersecting streets and in some cases at ingress and egress drives. (See Publics Works Detail, Layout of Detached Sidewalks To Ramps at Street Corners, Curb Ramps, S9.8) To determine how many street trees are required measurements should be taken between tangent points or between a tangent point and an intersecting property line. The resulting distance is divided by 40 (street trees are required 40 feet on center) to determine the required number of street trees. Street trees should not be placed in the "triangular" area formed by this transition. The tangent point may be determined by measuring from the flowline of the intersecting street a distance equal to the radius of the curb return at flowline (FL) plus the tangent length. The tangent point distances provided in the table below were taken from Detail S9.8.

|  | R@FL* | Tangent Distance** | Distance from FL to tangent point |
| :---: | :---: | :---: | :---: |
| Local Type 1, 2, \& 3 | 15' | 39' | $54^{\prime}$ |
| Collector | 20' | 48' | 68' |
| 6 Lane Arterial | 25 | 62' | 87' |
|  |  |  |  |

*R@FL = Radius at flowline; Public Works Detail S9.8.


Fig. 1. Street Tree Measurements.

Street perimeter buffer lengths are measured between curb returns at flowline or between a curb return and intersecting property line. See Fig. 2.


Fig. 2. Street Perimeter Buffer Length Measurements.

## G.

## Front Yard Landscapes.

Requirements for residential landscapes range from "no standards" to current standards found in the Building and Zoning Code, Article 14 Landscaping. Front yard landscape standards first became effective in February 1996 and were revised in December of 2003 and again in October of 2004 as a result of drought and changing home building practices. Many of Aurora's residents whose homes were landscaped before these standards went into effect are "grandfathered" from standards found in zoning code. However, they are subject to landscape maintenance requirements that are currently enforced per Section 142-75 Duty to provide and Maintain Landscaping. Also, an existing Home Owners Association may have requirements for landscaping review and approval of landscape plans. See table below and Fig. 1 in this section.

Other homeowners may be subject to site plan requirements that were approved for their subdivision even though their homes may have been built before standards were codified. Also, as previously noted, landscaping in many neighborhoods is subject to Homeowners Association rules and regulations that may be in addition to city regulations. Always check with the Homeowner's Association or the city before making changes to residential lot landscaping.

The table below shows applicable requirements for homes built at certain points in time.

| Landscaping was in-place: | Applicable Code and Requirements |
| :---: | :---: |
| Before February, 1996 <br> Contact your Code Enforcement Officer in Neighborhood Services for additional information concerning interpretation of code requirements at 303 739-7280. <br> Check with the Planning Department to determine if a site plan governs your development. <br> Contact your Homeowner Association HOA, if applicable, to determine what landscape requirements may apply to you. | No site Plan: <br> Sec. 142-75 Duty to provide and maintain landscaping. <br> (g) Subject to the provisions contained in section 138-191of this code, any and all landscaping required to be installed or otherwise provided by this section shall consist of not less than 50 percent of longlive organic materials such as sod, turf, shrubs, trees, and other similar materials. <br> Note: Other similar materials may include flowerbeds, hedges, and plants in containers whenever they make a substantial visual impact. <br> Existing Site Plan: <br> Comply with the plan or contact the HOA to discuss changing your landscaping to something else such as xeriscape. <br> See Fig. 1. |


| Landscaping in Place | Applicable Code and Requirements |
| :---: | :---: |
| After February, 1996 but before <br> December 5, 2003: <br> Contact Planning Department for additional information or if you live in a neighborhood that has an existing site plan and landscape plan. 303 739-7250. | Existing Site Plan: <br> When applicable requirements found on the site plan and/or landscape plan on file in the Planning Department shall rule with the exception of turf requirements. $50 \%$ turf no longer applies. $40 \%$ turf is the average maximum amount allowed. * <br> No Site Plan: <br> Restore landscape to Section 142-75 (see above) standards. <br> Site Plan: <br> Comply with landscape plan or contact the HOA to request changing the landscaping. The minimum standard following February, 1996 was: <br> - Minimum $50 / 75 \%$ turf ( $40 \%$ turf is the maximum allow following the drought of 2003).* <br> - 5 shrubs <br> - Two trees <br> *Current percentage of turf allowed in order to obtain a Lawn Permit. <br> See Fig. 2. |
| New Construction after December 5, 2003 <br> to Present: <br> Contact Planning Department for additional information. 303 739-7250. | All development with or without a site plan: <br> Comply with Sec. 146-1450 Additional landscape requirements for Residential Development and Tables 14.3a or 14.3b. <br> See Fig. 3 and 4. |

Re-landscaping Recommendations. To assist the homeowner staff has provide the following recommendations and information:

- Residents without a site plan or HOA. These residents are not bound by a site plan or landscape requirements enforced by a Home Owner Association (HOA). They have two choices. First, they may choose to comply with Section 142-75 Duty to provide and maintain landscaping. They must provide $50 \%$ long lived organic materials. Second, residents may also chose to comply with the city's current landscape standards found in Article 14 Landscaping, Section 146-1450, Table 14.3a Turf Option, or Table 14.3b Xeric Option. Tables may be found in SECTION VI and VIII, respectively, in the appendix.
- Residents with a site plan and HOA. These residents may comply with landscape requirements shown on the site plan, or they may with permission of the HOA landscape according to current city landscape standards found in Article 14 Landscaping, Section 146-1450, Table 14.3a Turf Option, or Table 14.3b Xeric Option. Tables may be found in SECTION VI and VIII, respectively, in the appendix. Residents should always consult with their HOA before beginning a landscape project. The landscaping shown in Fig. 1 complies with Sec. 142-75. Duty to Provide and Maintain Landscaping. Per code, landscaping shall consist of not less than 50\% long-lived organic materials such as sod, turf, shrubs, trees, and other similar material. The landscaping is applicable for landscapes in place before February 1996. Also see SECTION XIV.

Fig. 1 Plan View


STREET

## LEGEND:

ENTRANCE


MULCH

40\% LAWN AS REQUIRED FOR A PERMIT* PLUS 10\% IN SHRUBS EQUALS 50\% LONG LIVED ORGANIC MATERIALS.
*LAWN PERMITS ARE REQUIRED FOR ANYONE INSTALLING SOD OR SEED. CONTACT AURORA WATER.

Figure 2 shows a front yard landscape that complies with standards that became effective in February 1996. Known at that time as Sec. 146-215 Design Standards for SingleFamily Detached Residential this standard no longer exists and was replaced by standards that are in place today. Today's standards may be found in Sec. 146-1450 and Tables 14.3a.and 14.3b. See Figure 3.

Fig. 2 Plan View


## LEGEND:

ENTRANCE


MULCH

LAWN, 40\% MINIMUM*
*LAWN PERMITS ARE REQUIRED FOR ANYONE INSTALLING SOD OR SEED AND 40\% IS THE CURRENT MAXIMUM AMOUNT ALLOWED FOR A PERMIT. CONTACT AURORA WATER.

STREET

Figure 3 graphically shows front, side, and rear yard landscape standards that became effective on December 6, 2003 and may now be found in Sec. 146-1450 Additional Landscape Requirements for Residential Development and in Tables 14.3a and 14.3b.

Fig. 3 Plan View


STREET

## LEGEND:

## ENTRANCE



MULCH


30 TO 40\% LAWN AS REQUIRED FOR A PERMIT* or AS REQUIRED PER TABLE 14.3A. $45 \%$ MAX. IN REAR YARD.
*LAWN PERMITS ARE REQUIRED FOR ANYONE INSTALLING SOD OR SEED. CONTACT AURORA WATER.

STANDARD REQUIREMENT (Fig. 4, TABLE 14.3A.):

- 2 TREES - ALL LOTS

8 SHRUBS - SMALL LOTS

- 16 SHRUBS - STANDARD LOTS
- 26 SHRUBS - LARGE LOTS
- 32 SHRUBS - ESTATE LOTS
- 40 - 50\% TURF - SMALL LOTS
- 30 - 40\% TURF - STANDARDS LOTS
- 25 - 40 \% TURF - LARGE LOTS
- 25 - 40\% TURF - ESTATE LOTS

Figure 4 Turf Option Table.

| Table 14.3A Home Yard Landscaping-Turf option <br> Front, Side, and Rear Yard Landscaping Requirements for Single-Family Detached, Two-Family, and Single-Family Attached Duplex Homes. |  |  |
| :---: | :---: | :---: |
| FRONT YARD |  |  |
|  | (A) <br> Plant Quality and Type | (B) <br> Requirements |
| 1. | Turf. (At corner lots with a side yard visible to public view, turf areas shall include both front and side yard areas) | Minimum and Maximum Turf per Lot Size: (See Note 2) <br> Small - $40 \%$ Min. and 50\% Max. <br> Standard - 30\% Min and 40\% Max. <br> Large - 25\% Min. and 40\% Max. <br> Estate-25\% Min. and 40\% Max. |
| 2. | 1 Shade Tree, and either | $21 / 2$ inch caliper |
|  | 1 Ornamental Tree | 2 inch caliper |
|  | Or 1 Evergreen Tree | 6 foot height |
| 3. | Front yard shrubs per lot size: <br> Small - 8 <br> Standard - 16 <br> Large - 26 <br> Estate-36 | Shrubs - 5 gallon container Min. - Plant material shall conform with American Standard for Nursery Stock, Ansi Z60.1, current addition. <br> Fabric may be omitted under annuals, perennials and groundcovers. <br> Use a variety of shrubs and plant materials that will provide visual interest during all seasons. |
| SIDE YARDS |  |  |
|  | Internal side yard, not exposed to public view - No plant material is required but mulches are required for soil stability. <br> External side yards on corner lots exposed to public view - Shall be landscaped with turf, and shrubs and trees at the rate of one tree and 10 shrubs per 40 linear feet of side yard. |  |
| REAR YARDS |  |  |
|  | Turf or xeric landscaping is not required. In rear yards the use of natural turf shall be limited to not more than $45 \%$ of the area to be landscaped. No maximum restriction shall apply to the use of artificial turf. Rear yards at corner lots exposed to public view shall be landscaped with turf or xeric landscaping. |  |
| NOTE 1: Perennials and ornamental grasses may be substituted for shrubs at 3 one-gallon perennial or ornamental grass species per one five-gallon shrub. |  |  |
| NOTE 2: Lot sizes: Small 3,700sf - 5,999sf; Standard 6,000sf - 8,999sf; Large 9,000sf - 14,999sf Estate 15,000 sf and greater. |  |  |

## Single-Family Detached Residential Corner Lot Side Yard Landscape Requirements.

This section was developed to provide current information that should lead to consistent answers to questions that may arise during code enforcement, development, and landscaping of corner lots. The table show below is a chronological summary of landscape requirements that currently regulate landscaping of single-family detached residential lots. The table is accompanied by Fig. 1, Table 14.3a a table of current landscape standards and Fig. 2 a graphic representation of corner lot landscape standards.

Re-landscaping is addressed at the end of this section. See SECTION VI.
Table VII. Chronological Summary of Single-family detached residential lot landscape Requirements.

|  | Residential Lot Landscape Requirements |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Landscape Requirement/s ${ }^{1}$ | Turf | Shrubs | Trees | Side Yard ${ }^{2}$ <br> (See Fig. 1) |
| Pre-February, <br> 1996 <br> Landscape <br> Review <br> Procedures <br> Handbook <br> 1-Jan 1989 | No existing standards exist prior to February, 1996. Landscaping before then was at the discretion of the developer or homebuilder as provided on an approved site plan, landscape plan or preliminary development plan ( PDP). See plans for typical lot landscape details or written description of landscape requirements. <br> These plans are still enforceable to this day and are currently enforced by Home Owner Associations and the City. <br> Howe Owners are exempt from current landscape standards but must comply with Sec. 172-75 Duty to provide and maintain landscaping. See Section VI. |  |  |  |
| Handbook Rev. 5/94 |  |  |  |  |
| $\begin{aligned} & 1996-2001 \\ & 146-215 \end{aligned}$ | Minimum 50\% turf <br> $75 \%$ minimum turf in corner lots with side yards | 5 shrubs - 5gallon container | One $2^{1 / 2}$ inch caliper shade tree and one 2 inch caliper ornamental tree Or one 6 feet tall evergreen tree | Landscape required when side yard faces public R.O.W. or other public space <br> L/S Options: <br> -Sod <br> Plant bed w/ 50\% coverage. (See Fig. 2.) |
| 2001-2003 <br> Ord. No. 2001-13 <br> Effective 04-2801. | References Sec. 146-215 Design Standards for Single-Family Detached Residential. (See above.) |  |  |  |

[^0]| After December <br> 5, 2003 to <br> Present | Front, side, and rear yard landscapes per Art. 14. Table <br> New front, side, <br> and rear yard <br> landscape <br> standards <br> became effective <br> 12-05-03. |  |
| :--- | :--- | :--- |

Re-Landscaping. Residents with corner lots who choose to re-landscape or must relandscape because of a code violation should follow recommendations provided in SECTION VI.

Figure 1 Turf Option Table

| Table 14.3A Home Yard Landscaping-Turf option <br> Front, Side, and Rear Yard Landscaping Requirements for Single-Family Detached, Two-Family, and Single-Family Attached Duplex Homes. |  |  |
| :---: | :---: | :---: |
| FRONT YARD |  |  |
|  | (A) <br> Plant Quality and Type | (B) <br> Requirements |
| 1. | Turf. (At corner lots with a side yard visible to public view, turf areas shall include both front and side yard areas.) | Minimum and Maximum Turf per Lot Size: (See Note 2) <br> Small - $40 \%$ Min. and $50 \%$ Max. <br> Standard - 30\% Min and 40\% Max. <br> Large - $25 \%$ Min. and $40 \%$ Max. <br> Estate $-25 \%$ Min. and $40 \%$ Max. |
| 2. | 1 Shade Tree, and either | $21 / 2$ inch caliper |
|  | 1 Ornamental Tree | 2 inch caliper |
|  | Or 1 Evergreen Tree | 6 foot height |
| 3. | Front yard shrubs per lot size: <br> Small - 8 <br> Standard - 16 <br> Large - 26 <br> Estate - 36 | Shrubs - 5 gallon container Min. - Plant material shall conform with American Standard for Nursery Stock, Ansi Z60.1, current addition. <br> Fabric may be omitted under annuals, perennials and groundcovers. <br> Use a variety of shrubs and plant materials that will provide visual interest during all seasons. |
| SIDE YARDS |  |  |
|  | Internal side yard, not exposed to public view - No plant material is required but mulches are required for soil stability. <br> External side yards on corner lots exposed to public view - Shall be landscaped with turf, and shrubs and trees at the rate of one tree and 10 shrubs per 40 linear feet of side yard. |  |
| REAR YARDS |  |  |
|  | Turf or xeric landscaping is not required. In rear yards the use of natural turf shall be limited to not more than $45 \%$ of the area to be landscaped. No maximum restriction shall apply to the use of artificial turf. Rear yards at corner lots exposed to public view shall be landscaped with turf or xeric landscaping. |  |
| NOTE 1: Perennials and ornamental grasses may be substituted for shrubs at 3 one-gallon perennial or ornamental grass species per one five-gallon shrub. |  |  |
| NOTE 2: Lot sizes: Small 3,700sf - 5,999sf; Standard 6,000sf - 8,999sf; Large 9,000sf - 14,999sf Estate 15,000 sf and greater. |  |  |

Figure 2 shows how to apply landscape regulations found in Table 14.3a to a typical corner lot.

Fig. 2 Plan View, Typical Corner Lot


## STREET

Note: Sidewalks may be attached or detached depending on site plan requirements. Street trees in tree lawns are in addition to all other side, rear, and front yard landscape requirements.

LEGEND:


Landscaping within a side and rear yard is required in all areas not located behind a fence and are exposed to public view:

- Landscape Requirement. 1 tree / 10 shrubs per 40 linear feet.
- Exception. Landscaping is not required in a side and /or rear yard behind a fence or whenever the width between the fence and walk is 24 inches or less. Mulch is required. (See Fig. 2)
- All required landscaping and mulch within a side or rear yard must be completed concurrent with installation of the fence.


Refer to Table 14.3A Turf Option and 14.3B Xeric option for front yard landscape requirements.

## H. <br> Front Yard Xeriscape Landscapes

This section will provide the homeowner and landscape professional with information needed for the design and implementation of front yard Xeriscapes. A plan to scale that complies with requirements found herein must accompany requests made to the Director of Planning for Front yard landscapes as required in Table 14.3b, Fig. 2, p. 51. Fig. 2 shows a typical front yard xeriscape that conforms to all of the requirements found in Table 14.3b. Home Yard Landscaping - Xeric Option.

## 1. Definitions.

Drip line - The outside edge of a tree's branch structure.
Landscapable area - The remaining permeable surface area after the surface area of driveways, walks, decorative pavement, existing plant beds, and the area within an existing deciduous or evergreen tree's drip line are subtracted. The landscapeable area is calculated from within property lines.

Mulch/non-living groundcover - Nonliving plant materials that are applied to plant beds, the base of trees, and shrubs. Mulches include organic materials such as wood chips and shredded bark, and inert organic materials such as decomposed granite, crushed rock, river rock, and cobble. Organic and inorganic mulches should be applied at a uniform depth of 3 inches minimum.

Plant bed - An area prepared for the planting of plant materials. All areas that are not considered to be borders, edging, concrete, asphalt, artificial streambeds, and natural stone or man-made pavers shall be considered to be plant beds. All plant beds shall be mulched with organic and/or inorganic mulches.

Plant materials - All living plant species consisting of trees, shrubs, annuals, perennials, vines, groundcovers, ornamental and turf grasses that will thrive in the city's climate.

Square footage value - A value in square feet assigned to evergreen trees, deciduous and evergreen shrubs, perennials, annuals, and groundcover for the purpose of calculating plant material quantities. Each plant's square footage value is based on a number that will provide $50 \%$ coverage at the time of planting as required in Sec. 1461431. Values for each plant species may be found in item Table 14.8 Plant Material Coverage Values.

Existing Tree cover. The area surrounding an existing deciduous or evergreen tree located within the drip line.

Tree Lawn. The landscape area between the sidewalk and street and usually located within the right-of-way. Tree lawns are not included in front yard landscape calculations.

Xeriscape - Waterwise landscaping. A landscaping method that utilizes individual site conditions to maximize efficient water usage. The seven principals of xeriscape are:

1. Minimize cool season turf grasses.
2. Replace turf areas with hardscape such as decking patios, walkways, etc.
3. Reduce turf areas with mulched planting beds.
4. Amend soil with organic matter.
5. Zone or group plants by water, soil, and sun needs.
6. Zone irrigation by plant water needs.
7. Maintain landscape to reduce water usage by weeds and promote healthy plant growth.

Zeroscape - Landscapes consisting of natural or manmade materials such as rock that are not landscaped with turf grasses, shrubs, perennials, annuals, and groundcovers. A prohibited landscape that does not comply with Aurora City Code Chapter 146, Zoning, Article 14. Landscaping, Sec. 146-1431 Living Material Requirements.

Zone - To group plants according to water requirements. The components of an irrigation system consisting of heads, emitters, and lateral pipes that are connected to a single valve for the purposes of controlling the amount of irrigation according to each zone's unique watering needs.

## 2. Procedures and Process.

Requests for Xeriscape front yard landscapes-including side and rear yards when visible from a public street--shall be made in writing to the Director of Planning and shall include a scaled landscape plan. The plan shall conform to all requirements found in section 3 Landscape Plan Requirements. Persons taking advantage of the city's Xeriscape Rebate Program will develop a
Xeriscape plan with the assistance of Aurora Water and will not have to submit a plan to the Planning Department for approval.

## 3. Landscape Plan Requirements.

To facilitate review of your xeriscape landscape and to expedite the review process a landscape plan drawn to scale shall be provided when the request is made to the Director of Planning. The following information is required on all landscape plans:

- North arrow and scale.
- Scale not less than one inch equal to 10 feet.
- Title Block complete with residence address, owners name, designer if other, phone number, and date,
- Property lines, utility easements, walks, drives, hard pavement, existing landscaping to remain, city trees, and building/s foot print/s.
- Draw proposed and existing plant material to scale. Recommended dimensions for proposed plant are: Shade Trees, $25^{\prime}$ dia, maximum; Ornamental trees, $15^{\prime}$ dia. Maximum; Evergreen trees, 10' dia. Maximum; shrubs, perennials, ornamental grasses, 3 ' to 5 ' depending on species.
- Existing tree cover, existing plant beds, and plant containers drawn to scale.
- Plant list including symbols, quantities, water usage characteristics, botanic and common names, size in applicable caliper inches, height, and container.
- Total landscaped area.
- The area in square feet and percentage of the total landscape area of rock mulch, bark or wood mulch, and decorative pavement.
- Location of three-dimensional features such as boulders, berms, fences, and walls.


## 4. Xeriscape Requirements.

The conversion of all front yard landscapes to Xeriscape should comply with the following regulations shown below. Also see Fig. 1, Typical Xeriscape per Table 14.3b requirements, and Fig. 2, Table 14.3b Home Yard Landscaping - Xeriscape Option, Aurora City Code, Article 14 Landscaping for more information.

1. Residents without an approved site plan. Residences living in a neighborhood that does not have a site plan are 'grandfathered' from current landscape requirements found in the Zoning Code. However, they must comply with Section 142-75 Duty to Provide and maintain landscaping. See SECTION VI, XI, and VII.
2. Residences with an approved site plan. These residents may choose to comply with Aurora City Code, Chapter 146, Zoning, Article 14 Landscaping, Section 1461450, and Table 14.3b Xeric Option (Fig. 2). Homeowners should contact their HOA for submittal and approval requirements before landscaping.

- Plant Materials - All plant material shall comply with Sec. 146-1426 Plant Material Requirements. Plant materials should be integrated with walls, fences, structures, and landscape materials. A variety of plant materials should be provided to screen privacy areas, utility hardware, and to provide a high degree of visual interest during all seasons.
- Irrigation - All converted front yard landscapes shall be watered by an underground automatic irrigation system and comply with requirements as found in Sec. 146-1430 Irrigation and City of Aurora Irrigation Ordinance. Contact Aurora Water for irrigation requirements.
- Non-living materials - The use of non-living landscape materials such as river rock, crushed rock, cobbles, crusher fines, shredded bark, bark chips, wood chips, pole peelings, natural stone, manmade pavers, and other approved materials shall be subject to the following landscape restrictions and limitations as found in city code:
(A) Borders, edging, paths, and artificial streambeds (Fig 1). Non-living landscape materials may be used for borders, paths, or artificial streambeds and may be exempt from landscape coverage requirements found in item (C) below:
(B) Mulches or non-living groundcover. Are subject to area coverage requirements found in item (D) and landscape requirements found in item (E).
(C) Plant beds (Fig 1. and 2). All areas that are not regarded as edging, paths, and artificial streambeds shall be designated as plant beds. All plant beds should be mulched with organic and/or inorganic mulches as found in item (D). All plant beds shall be planted with quantities of plant material that will provide a minimum of $50 \%$ coverage when planted as described in item (E).
(D) Organic and inorganic mulches (Fig 1). Rock mulch is limited to not more than $50 \%$ of the total landscapeable area, whereas, the use of organic mulch is unlimited.
(E) Plant quantity requirements (Fig 1. and 2). Plant material quantities are based on assigned square footage values for evergreen trees, shrubs, annuals, perennials, and groundcovers. The total square footage value for plant materials
within a plant bed shall be equal to or exceed the square footage of the plant bed. Square footage values are based on 50\% coverage at time of planting as required in code. Also see Section 146-1431, Article 14 Landscaping available on line or in the Planning Department.
(F) Natural stone and man-made pavers. Other non-living landscape materials including brick pavers, concrete pavers, asphalt pavers, and other natural stone or manmade pavers are subject to these requirements and recommendations:
(i) The use of natural stone and/or manmade pavers shall not exceed $40 \%$ of the landscapeable area. (Fig. 2)
(ii) It is recommended that all pavers shall be laid on a base course of compacted builder's sand, crusher fines, or other approved material. Base course material should be applied over undisturbed earth and weed barrier at a depth of not less than 3 inches.
(iii) It is recommended that all joints and gaps between pavers shall be spaced to provide an even safe walkable surface.
(G) Three dimensional natural or manmade feature. Walls, fences, rock garden, boulders, and earth berms constructed from natural or approved man-made materials shall be integrated into the overall landscape. Select a minimum of one from the following features (Fig. 1. \& 2):
(i) 1 foot to $2 \frac{1}{2}$ foot high decorative natural stone, stucco, or approved CMU Wall
(ii) Fence in accordance with Article 17 Fence, Wall, and Awning Regulations.
(iii) Low earth berm - Maximum height of $21 / 2$ feet; grade may not exceed one foot of rise for each four feet of run.
(iv) Rock Garden - Consisting of natural boulders and approve rock garden plant materials. Detail drawings are required for review and approval.
(v) Boulders - Minimum number of 3 ; Boulders must be a minimum or 18 inches in height with minimum dimensions of two feet by three feet.

Figure 1 Plan View Typical Xeric Option.


## LEGEND:

A. PAVERS, $40 \%$ MAX.
B. OUTDOOR FURNITURE (Optional)
C. PLANTERS (Optional)
D. SHRUB/PERENNIAL BORDER
E. ORNAMENTAL GRASSES
F. COBBLE EDGING
G. CRUSHER FINE PATH
H. LOW GROWING ANNUALS, PERENNIALS, AND GROUNDCOVER
I. LOW WALL
J. TREE LAWN; not a part

ENTRANCE
PLANTERS (C)
BENCHES (B)

## Notes, Fig. 1:

1. Pavers - The installation of all-natural stone and manmade pavers shown in area A shall comply with requirements found in section (F).
2. Plant beds - Areas D, E, and H are considered to be plant beds and are subject to mulching and planting quantities found in sections (D) and (E).
3. Edging and paths - Cobble edging, item F, and the crusher fine path item $G$, shall comply with requirements found in section (A).
4. Design - Follow the standards and city codes and don't be afraid to exercise your imagination!

Figure 2

| Table 14.3B Home Yard Landscaping-Xeric Option <br> Front, Side, and Rear Yard Landscaping Requirements for Single-Family Detached, Two-Family, and SingleFamily Attached Duplex Homes. |  |  |
| :---: | :---: | :---: |
| FRONT YARD |  |  |
|  | (A) <br> Plant Quality and Type | (B) <br> Requirements |
| 1. | Applicability | Requirements apply to all lot sizes. |
| 2. | Turf | No turf is required. |
| 3. | Request and landscape plan | Submit request in writing to Director of planning accompanied with landscape plan at a minimum scale of one inch equals 10 feet. |
| 4. | Rock and inorganic mulches. (See note 1) | Rock mulch is limited to not more than $50 \%$ of the area to be landscaped. <br> $50 \%$ of all rock and other mulch areas shall be covered with living plant material. |
| 5. | Plant materials (See note 1) | All plant materials shall comply with requirements found in Sec. 146-1426 Plant Material Requirements. |
| 6. | Pavers (See note 1) | Brick pavers, asphalt pavers, and natural stone limited to not more than $40 \%$ of the landscaped area. |
| 7. | Features | One of the following features shall be incorporated: <br> a. Wall -1 ft . to $21 / 2 \mathrm{ft}$. high decorative natural stone, stucco, or approved CMU wall. <br> b. Fence - in accordance with art. 17 Fence. <br> c. Berms - low earth berm $21 / 2 \mathrm{ft}$. tall max. Slopes not to exceed one foot rise for each 4 feet of run. <br> d. Natural boulders - 3 - two feet by three feet min. |
| 8. | 1 Shade tree, and either | $21 / 2$ inch caliper |
|  | 1 Ornamental tree | 2 inch caliper |
|  | Or 1 Evergreen tree | 6 foot height |
| 9. | Shrubs: (See notes 2) | Shrubs - 5 gallon container Min. - Plant material shall conform with American Standard for Nursery Stock, Ansi Z60.1, current addition. <br> Fabric may be omitted under annuals, perennials and groundcovers. <br> Use a variety of shrubs and plant materials that will provide visual interest during all seasons. |
| SIDE YARDS |  |  |
|  | Internal side yards, not exposed to stability. <br> External side yards on corner lots exp front yard areas and applying front | lic view - No plant material is required but mulches are required for soil sed to public view - Shall be landscaped by combining visible side and standards. |
| REAR YARDS |  |  |
|  | Turf or xeric landscaping is not requ area to be landscaped. Rear yards landscaping. | d. In rear yards the use of turf shall be limited to no more than $45 \%$ of the corner lots exposed to public view shall be landscaped with turf or xeric |
| NOTE 1: At corner lots with a side yard visible to public view, front and side yard areas shall be combined for calculation of xeric requirements. |  |  |
| NOTE 2: Perennials and ornamental grasses may be substituted for shrubs at 3 one-gallon perennial or ornamental grass species per one five-gallon shrub. |  |  |

## 50\% Long-Lived Material Calculations and Front Yard Landscape Area Calculations

Fig. 3 Plan View. 50\% long-lived material calculations.


NOTE: The tree lawn is not within property lines and therefore is not included in front yard landscape calculations.

[^1]Fig. 1 Plan View. Front yard landscape area calculations.


Landscape Area. The area that lies within the front yard setback and within property lines that is used for front yard landscape calculations.

Landscape area calculations are used to determine if a homeowner is in compliance with Sec. 142-75 Duty to provide and maintain landscaping, namely, duty to provide not less than $50 \%$ of long-lived organic materials such as sod, turf, shrubs, trees, and other similar materials. They are also used to calculate minimum and maximum artificial or natural turf square footages allowed as found in Sec. 146-1450 and Table 14.3a Turf Option.

The landscape area is equal to the sum of all landscape areas:

A $+\mathrm{B}+\mathrm{C}+\mathrm{D}=$ Landscape Area.
NOTE: The tree lawn is not within property lines and therefore is not included in front yard landscape calculations.

In some cases it may be appropriate to include a side yard or portion of a side yard in these calculations. For instance, in older neighborhoods or in newer neighborhoods with large or estate size lots it is a common practice to include side yards as part of the front yard landscape.

Fig. 2 Plan View, Typical Corner Lot


## I.

## Artificial Turf Requirements

This section should provide the homeowner, installer, and landscape professional with all the information needed for the design and implementation of artificial turf in residential lots and all other developments.

## Sec. 146-1402. Definitions.

The following words or phrases used in this article shall be defined as listed:
(A) Artificial Turf. A man-made substitute for organic turf, lawn, or sod which effectively simulates the appearance of a well-maintained lawn and meets all of the quality, material and installation standards listed in Section 146-1414 of this article.

## Sec. 146-1413 Turf Regulations.

## The design and installation of all new turf and artificial turf areas shall comply with the following requirements:

(A) Turf Area Limitations for Each Lot Containing Single-family Detached, Two-family, and Single-family Attached Duplex Homes. Turf requirements for such areas shall be subject to all of the requirements listed in tables 14.3A and 14.3B of this article
(B) Turf Area Limitations for All Other Development Areas except Playfields and Golf Courses. In all other development sites except playfields, and golf courses, the use of cool-season grass sod, seed, and seed mixtures that contain cool-season grass species shall be limited to not more than $33 \%$ of the site's total landscaped area.
(C) Declared Drought Emergency Measures. At such times as the city council may declare a drought emergency, the installation of turf may be delayed, subject to preparation measures contained in Section 146-1405. Such measures shall be completed prior to the issuance of a certificate of occupancy.
(D) Artificial Turf. Artificial turf as defined and described in Section 146-1402(f) and Section 146-1414 may be used to meet the natural turf requirements of this article when installed in accordance with all city requirements and regulations. The use and installation of artificial turf is also subject to the following limitations:

1. In single family detached, two-family and single-family attached duplex homes. Artificial turf may replace natural turf in front, side, and rear yards, but must meet minimum and maximum percentage requirements found in Table 14.3a.
2. In all other uses. Artificial turf shall be considered a non-living material and its use as such shall be limited as specified in Section 146-417 Living Material Requirements. More specifically, the quantity of artificial turf that may be installed shall be determined in combination with all other natural non-living materials so that the combination of these materials may not exceed $50 \%$ of said site's landscape area as measured within property lines.
3. Prohibited use. The use of indoor or outdoor plastic or nylon carpeting or other materials or combinations of materials as a replacement for artificial turf or natural turf shall be prohibited.

## Sec. 146-1414 Artificial Turf Standards.

The use of artificial turf shall be governed by the following standards:
(A) Materials. Artificial turf shall be of a type known as cut pile infill and shall be manufactured from polypropylene, polyethylene, or a blend of polypropylene and polyethylene fibers stitched onto a polypropylene or polyurethane meshed or hole-punched backing. Hole-punched backings shall have holes spaced in a uniform grid pattern with spacing not to exceeding four inches by six inches on center.
(B) Installation. Artificial turf shall be installed over a compacted and porous road base material and shall be anchored at all edges and seams. Seams shall be glued and not sewn. An infill medium consisting of ground rubber, ground coal slag, clean washed sand and ground rubber, or other approved mixture shall be brushed into the fibers to insure that the fibers remain in an upright position and to provide ballast that will help hold the turf in place and provide a cushioning effect.
(C) Slope Restrictions. The installation of artificial turf on slopes greater that 6.6\% shall require the approval of the city engineer and shall meet requirements of the Public Works Department.
(D) General Appearance. Artificial turf shall be shall be installed and maintained to effectively simulate the appearance of a well-maintained lawn. The Planning Department shall maintain and make available for public inspection a sample of various artificial turf products that meet this standard of appearance.

Applicability of Artificial Turf Requirements. Residents living within the following areas when installing artificial turf within the front or side yard should follow the requirements applicable to where they live as shown below:

- Residents without a site plan. These residents may substitute artificial turf for natural turf, but they shall also comply with Section. 142-75 Duty to Provide and Maintain Landscaping. Within a front yard, provide at least $50 \%$ long lived organic materials. See appendix SECTION XIV. Artificial turf cannot be counted as a living material.
- Residents with a site plan. These residents may substitute artificial turf to natural turf, but they shall also comply with turf requirements when installing artificial turf within a front or side yard as found in Section 146-1450, Table 14.3a Home Yard Landscaping - Turf Option. See attached.
- Rear Yards. All residents may install $100 \%$ of the area within the rear yard in artificial turf.
- HOA Covenants. Always check with your HOA to determine if they allow artificial turf.

| Table 14.3A Home Yard Landscaping-Turf option <br> Front, Side, and Rear Yard Landscaping Requirements for Single-Family Detached, Two-Family, and Single-Family Attached Duplex Homes. <br> See Fig. 1. |  |  |
| :---: | :---: | :---: |
| FRONT YARD |  |  |
|  | (A) <br> Plant Quality and Type | (B) Requirements |
| 1. | Turf. (At corner lots with a side yard visible to public view, turf areas shall include both front and side yard areas.) | Minimum and Maximum Turf per Lot Size: (See Note 2) <br> Small - 40\% Min. and 50\% Max. <br> Standard - 30\% Min and 40\% Max. <br> Large - $25 \%$ Min. and $40 \%$ Max. <br> Estate - 25\% Min. and 40\% Max. |
| 2. | 1 Shade Tree, and either | $21 / 2$ inch caliper |
|  | 1 Ornamental Tree | 2 inch caliper |
|  | Or 1 Evergreen Tree | 6 foot height |
| 3. | Front yard shrubs per lot size: <br> Small-8 <br> Standard - 16 <br> Large - 26 <br> Estate-36 | Shrubs - 5 gallon container Min. - Plant material shall conform with American Standard for Nursery Stock, Ansi Z60.1, current addition. <br> Fabric may be omitted under annuals, perennials and groundcovers. <br> Use a variety of shrubs and plant materials that will provide visual interest during all seasons. |
| SIDE YARDS |  |  |
|  | Internal side yard, not exposed to public view - No plant material is required but mulches are required for soil stability. <br> External side yards on corner lots exposed to public view - Shall be landscaped with turf, and shrubs and trees at the rate of one tree and 10 shrubs per 40 linear feet of side yard. |  |
| REAR YARDS |  |  |
|  | Turf or xeric landscaping is not required. In rear yards the use of natural turf shall be limited to not more than $45 \%$ of the area to be landscaped. No maximum restriction shall apply to the use of artificial turf. Rear yards at corner lots exposed to public view shall be landscaped with turf or xeric landscaping. |  |
| NOTE 1: Perennials and ornamental grasses may be substituted for shrubs at 3 one-gallon perennial or ornamental grass species per one five-gallon shrub. |  |  |
| NOTE 2: Lot sizes: Small 3,700sf - 5,999sf; Standard 6,000sf - 8,999sf; Large 9,000sf - 14,999sf Estate 15,000 sf and greater. |  |  |

Figure 1 Artificial Turf Conversions and Other landscape Requirements


## STREET

## LEGEND:

ENTRANCE


50\% LONG-LIVED ORGANIC MATERIALS SUCHAS SHRUBS AND TREES. SEE SEC. 142-75.


PERCENTAGE OF
ARTIFICIAL TURF AS REQUIRED PER LOT SIZE AS SHOWN IN TABLE 14.3A. NO LIMIT IN REAR YARD.

LANDSCAPE REQUIREMENTS:

## TREES*:

- 2 TREES - ALL LOTS

SHRUBS*:

- 8 SHRUBS - SMALL LOTS
- 16 SHRUBS - STANDARD LOTS
- 26 SHRUBS - LARGE LOTS
- 32 SHRUBS - ESTATE LOTS
*Existing trees and shrubs may be counted toward landscape requirements.
\% OF ARTIFICIAL TURF:
- $40-50 \%$ TURF - SMALL LOTS
- $30-40 \%$ TURF - STANDARDS LOTS
- $25-40 \%$ TURF - LARGE LOTS
- $25-40 \%$ TURF - ESTATE LOTS
- Rear Yard - Unlimited - ALL LOTS


## J. Revegetation Plan Check List

A revegetation plan is intended to be a stand alone document; however, staff may allow under extenuating circumstances for revegetation plan information to be placed on the landscape plan. Discuss your situation with a Planning Department landscape architect before proceeding.

## List of Required Items:

a. Title Block.
b. North arrow and scale.
c. Finish grade contours. Show one foot or two-foot contours.
d. Re-vegetated areas. Show all applicable areas.
e. Soils Information, Type and Slope. Show soils information.
f. Seed Mixture Information, common \& botanical names, percentage of species.
g. Seed Application Rates, PLS/Acre.
h. Seeding and Mulching Methods.
i. Plant List, trees, shrubs, other.
j. Initial, Conditional, and Final Acceptance Requirements.
k. Monitoring and Stewardship Program Outline.

1. Maintenance Plan for weeding, herbicide applications, erosion control, and mowing. $1^{\text {st }}, 2^{\text {nd }}$, and $3^{\text {rd }}$ years.
2. Temporary fencing. Show locations on plan and show details/description if required.
3. Initial notification. Show requirements.
4. Yearly Report. Show requirements.
5. Reseeding. Show requirements.
6. Irrigation Requirements and Supplemental Irrigation. Irrigation may be required after it has been determined that grasses have not been successfully established. Show requirements.
7. Irrigation of trees and shrubs located within a re-vegetation area. Show requirements.

## K. <br> Development Review Staff List:

Following Development Review Team members will from time to time comment on landscape design. Please contact them directly to discuss issues. Note this list is subject to change without notice.

## Contact

Department

## Phone

Chris Ricciardiello, Sr. Parks and Open Space, 303 739-7154
Landscape Architect/Plans Review

Doug Hintzman, Sr.
Landscape Architect/Plans Review

Steven Gardner, Principal Engineer Public Works Drainage, Traffic

Ted Wiedeman, Water Engineering, Design
Engineer
Edward Francis, Water
Engineering,
Plans Examiner
Neil Wiegert, Plans
Examiner II
Mike Dean, Supervisor
Life-Safety, Fire
Mark Geyer, Project
Manager
Gary Sandel - Project
Manager

Planning, Design, \&
Construction
Parks and Open Space,
303 739-7147
Planning, Design, \& Construction

Public Works - Traffic 303 739-7852
Services

Aurora Water - Plans 303 739-7296
Review

Aurora Water - Plans 303 739-7382
Review

Development Services $\quad 303$ 739-7613

Development Services
303 739-7447

City Manager's Office - $\quad 303$ 739-7588
Development Assistance
City Manager's Office - 303 739-7354
Development Assistance

## L. <br> Landscape Material Placement Criteria

Recommended Street Tree Planting Criteria

| Criteria | Recommended Distance/Spacing* |
| :---: | :---: |
| Street Tree Species | Large Deciduous Species - $21 / 2$ inch caliper min. |
| Spacing | 40 feet on center, centered within tree lawn, or 5 ft from back of curb when no detached walk is present. |
| Distance from Intersecting Flowline | Local Streets -54, <br> Collect Streets -68 <br> Arterial Streets -87 |
| $\begin{aligned} & \text { Distance Stop } \\ & \text { Sign } \end{aligned}$ | May Vary; See Distance from Intersecting Flowline |
| Distance from Traffic Signal |  |
| Street Light |  |
| Electric Power or Utility Pole | 10 ft . |
| Existing Trees | May vary depending on species and location. |
| Water and Gas Meters <br> Utility Enclosures <br> Transformers | 8 ft . |
| Intersecting: <br> Driveways <br> Sidewalk <br> Curb <br> Trail <br> Bike Path | 5 ft . |
| Alley Entrances | 5 ft . |
| Railroad Track Crossing | 5 ft . from edge of Railroad R.O.W. |
|  |  |

*Distances are always measured from face of object nearest to tree to center of tree; or at a 90degree angle from a line to center of tree; or from center of tree to center of tree.

Recommendations for plant material separations at time of installation:

| FROM: | Recommend Separations* | nt Material |
| :---: | :---: | :---: |
|  | Trees | Shrubs or Edge of Plant Bed |
| Transformers Utility Enclosures | 8 ft . | 8 ft . |
| Fire Hydrants | 8 ft . | 8 ft . |
| Sidewalks, trails, bicycle paths | 5 ft . | 3 ft . |
| Building <br> Foundations | 10 ft . ** | 5 ft . |
| Utility Easements | 8 min . | $21 / 2 \mathrm{ft}$. min. |
| Other Structures | 10 ft . ** | 5 ft . |
|  |  |  |
|  |  |  |
|  |  |  |
| Locate thorny trees and shrubs a minimum of 20 ft . and 4 ft . respectively, from public walks. |  |  |

*Distances are always measured from face of object nearest to tree or plant bed to center of tree or edge of plant bed; or at a 90degree angle from a property line, easement line, public or private right-of-way line, curb, or edge of pavement to center of tree or edge of plant bed.
**Distances may vary depending on circumstances and species of tree. For instance, upright pear species may be planted much closer to buildings when located within raised planters or plant beds.


[^0]:    ${ }^{1}$ Requirements based on Site Plan or PDP application submittal date.
    ${ }^{2}$ Measured from corner of house at front setback to rear lot line. (See Fig. 2)

[^1]:    Tree Lawn

