



Margaret Annis Boys Trust: Supplemental Information

LANDSCAPE PLAN DESIGN GUIDELINES

Appropriate landscape planning of a site will promote the optimum aesthetic and functional benefit for the site, while taking ongoing maintenance requirements into consideration. The following items should be considered in the planning process:

- A soil sample to identify structural composition as well as pH and nutrient availability should be analyzed before or during the planning process. Consult Oklahoma County-OSU Cooperative Extension for soil sample information: 405/713-1125.
- An accurate scaled drawing or aerial photograph should be used during the planning process.
- All utilities, easements and property lines should be determined early in the planning process (call OKIE 1-800-522-6543).
- The sponsoring organization should identify areas of improvement to be considered, i.e., more trees, seating, trash collectors, etc.
- If appropriate, maintenance personnel should help the organization identify possible areas for attention and items that could help reduce maintenance issues.
- Select planting locations where plants have enough room to reach maturity. Crowding plants may cause excessive competition for light, soil nutrients, water and growing space. When spacing plants, use the measurements of the mature height and spread to determine location. (See Plant Selection, Planting, Spacing and Tree Planting Guidelines below.)
- Do not locate large trees under utility lines. Utility companies have the responsibility to keep lines free from limbs. Small trees and shrubs that mature below the line heights are good alternatives for these locations.
- Do not locate trees closer than 10' from drives or walks. The closer the trees are to the pavement, the more chance the roots will cause cracks or separation in the surface as the plant matures.
- Do not locate trees or large shrubs closer than one or one and one-half times their spread from sewer, water and septic lines.
- Try to maximize tree locations that could shelter a playground or park area from the north wind or shade a parking lot or south/west exposure of a building.
- Plan to provide shade for school or park playground areas, but always place trees far enough away from play equipment so that safety is not a factor.
- Plan for future additions, relocating existing playgrounds and new parking or vehicle drop-off routes.
- Plan for more pleasing or functional trash receptacles, seating, bicycle areas, sidewalk linkages, utility fences, lighting or other public use.
- All planning should be focused to maximize the aesthetic and functional benefits to the site while controlling the maintenance costs and demands for those responsible.
- Always identify broken or damaged equipment or other items that are safety hazards or unusable. Note these items on the plan for removal or repair.

LANDSCAPE PLANTING GUIDELINES

There are several considerations that must be taken into account prior to, during and following the planting process that will dramatically improve the survival and performance of trees transplanted to the landscape.

- Be sure that you are working with healthy and correctly dug and transported trees. Plants delivered in dry or loose soil balls are much more prone to transplant shock or death than those that have been maintained and handled properly.
- Be sure all utilities have been marked on the site (call OKIE 1-800-522-6543) and then stake locations using the plan to determine if any field adjustments need to be made.
- Dig a hole at least 18" -24" wider than the diameter of the root ball and not deeper than it has been grown in the nursery to prevent unwanted settling and a dish effect. The tighter the soil from clay and compaction, the more necessary it is to dig a wider hole.
- Carefully lower the tree into the hole being sure to support it from the root ball rather than the trunk. The root ball must stay firm and unbroken during the planting process.
- Orient the tree so that the lowest scaffold branch points into the prevailing southwest wind. Straighten the tree and backfill with only enough soil to support it.
- Cut the nylon twine and remove it. Unpin the top 1/3 of burlap and cut it off. Be sure not to disturb root ball during this procedure.
- Finish backfilling the hole and build a moat on the outside diameter of the hole.
- Stake and wrap the tree as shown on the detail sheet.
- Guide a hose through the soil supporting the new tree to the bottom of the hole. Slowly fill the hole with water to force any air trapped around the root ball to the surface.
- Fill the area within the moat with 3" - 4" of mulch. Follow through with implementing the Three-Year Maintenance Guidelines.

RECOMMENDED PLANT MATERIAL

The unpredictability of the Oklahoma climate and the severe shifts in weather has compelled the Oklahoma City Community Foundation to include the following technical recommendations for those groups submitting proposals to the Margaret Annis Boys Trust. These recommendations have been developed to enhance the chances for success of public land beautification projects funded by the Margaret Annis Boys Trust.

- Recommendation size: for deciduous trees, 1 ½ - 2 ½" caliper
 for evergreen trees, 5' – 6' tall
 for shrubs, 5, 10 or 15 gallon container grown
 for ground covers & perennials, 1 gallon container grown
- No trees that will mature to heights over 15' are allowed to be planted under any power lines. All trees must be planted far enough away from power lines so that at mature height and spread there will be no interference with power lines.
- A plan for maintenance, including watering, must be submitted at the time of application for a Margaret Annis Boys Trust grant. Irrigation systems are not required, but a plan for watering the trees and other plant materials during establishment is required. Establishment is generally three years.

- Trees recommended for Margaret Annis Boys Trust projects include:

Caneart Red Cedar	Sawtooth Oak
Kentucky Coffee Tree	Callery Pear & improved Pear varieties
Bald Cypress	Slash Pine
Lacebark Elm	Chinese Pistache
Amur Maple	Golden Raintree
Caddo Maple	Oklahoma Redbud
Shantung Maple	Desert Willow
River Birch	London Planetree
Burr Oak	Loblolly Pine
Chinquapin Oak	Cedar Elm
Shumard Red Oak	Texas Whitebud

- Shrubs/grasses recommended for Margaret Annis Boys Trust projects include:

Crape Myrtle	Dwarf Yaupon
Maiden Grass	Variegated Miscanthus
Nellie Stevens Holly(tree form)	Deciduous Holly
Winterberry Evonymus	Vitex
Nandina varieties	Vanhoutte Spiraea
Yaupon Holly	Burning Bush

- Trees ***not*** recommended for Margaret Annis Boys Trust projects are:

Green Ash	Bradford Pear
Catalpa	American Elm
Cottonwood (female)	Black Willow
Japanese Black Pine	Sweetgum
Hawthorne	Poplar varieties
Black Locust	Box Elder
Silver Maple	Russian Olive
Fruitless Mulberry	Willow Oak
Pin Oak	

PLANT MATERIAL SPECIFICATIONS

- All plants shall be true to species and variety with the latest edition of Standardized Plant Names, American Joint Committee on Horticultural Nomenclature.
- All plants shall be symmetrical in growth with balanced root and top growth and shall be No. 1 in grade or type, conforming to Horticultural Standards of the American Association of Nurserymen. All material shall be free of mechanical injury, decay or other defects.
- Plant material must be nursery grown and must have received the proper fertilizing, watering, root pruning and such other care as is normally received for a particular plant under nursery growing conditions. Balled and burlapped stock shall consist of plants grown under natural conditions in soils and climate comparable to Oklahoma County. **Plant material must have been grown within a 200-mile radius of the county of Oklahoma County.** Plants collected from wild or native stands will not be acceptable. Plants located from outside 200-mile radius growing area, must have prior approval of supplier by the Oklahoma City Community Foundation representative.
- Plant material specified as balled and burlapped, (B&B), must have a ball size according to American Association of Nurserymen Standards. All balls shall be firm earth from the original soil in which the plant grew. The ball shall be wrapped with burlap and tightly tied to hold it firm and intact. Any plants with broken or loose balls or manufactured balls will be rejected. Continued on page 4.

Plants wrapped in burlap only will be accepted. Earth balls wrapped in a polypropylene type material will not be acceptable. **Nylon twine for securing earth balls shall be required. Jute or sisal twine is not acceptable.** Only nursery stock that was harvested during the current season will be accepted. Nursery stock which has been held over through the year and re-burlapped will not be acceptable.

- Plant material specified as Acontainers© must be container-grown and conform to the size and conditions specified by the American Association of Nurserymen Standards.
- All plant material shall conform to existing state and federal laws and regulations governing plant diseases and infection and interstate movement.
- Plant material **shall be available for inspection at the nursery** or information concerning the **source of supply** on request by the representative of the Oklahoma City Community Foundation.
- Plant material shall be handled and shipped so that it is protected from room drying, wind and smoke damage. Where plant material is shipped over 30 miles, the material must be covered so as to prevent damage.
- Specified size of plant material shall be the maximum allowable size. Larger or smaller sizes will only be accepted upon approval of the Oklahoma City Community Foundation.
- Minimum branching height for shade and street trees **shall be 4' unless otherwise specified.**
- Plant material produced in Aroot control© in ground containers will be acceptable B&B nursery stock. **The fabric bag must be removed and the earth ball secured with burlap.**
- Balling and burlapping of all nursery stock for the Margaret Annis Boys Trust projects will proceed only after nursery stock is fully dormant in the fall and prior to bud break and leaf emergence in the spring.
- All trees not immediately installed on projects shall be properly Aheeled-in©, according to common nursery practices, after harvesting and root balls kept moist within the holding area until shipping.
- All trees will be shipped with trunk protectors to prevent mechanical injury to the trunk during loading, shipping and unloading.
- Transport of nursery stock will not be acceptable when air temperatures are below 30 degrees F.
- Plant material that has been damaged or does not conform to these specifications in any way will be rejected at time of delivery.
- Trees must be scheduled for installation at least seven days in advance. Utility location must be complete prior to installation.
- All trees shall be priced F.O.B. site and include installation, if requested.

PLANT MATERIAL SIZE AND SPACING GUIDELINES

Minimizing transplant shock will dramatically increase the trees potential to establish quicker and perform at a very favorable growth rate. Correct harvesting and planting of a young, vigorous tree is one of the best ways to ensure a successful transition to the school campus.

SIZE GUIDELINES

Recommended Size: For deciduous trees 12@ - 2" caliper
Up to 22@ on limited varieties

For evergreen trees 5' - 6' tall
6' - 8' on limited varieties

For shrubs 5-gallon container grown
6' - 8' balled and burlapped on limited varieties

Standard Root Ball Sizes for nursery-grown shade trees:

Caliper (Inches)	Height Range – Ft.	Min. Ball Dia. – In.	Min. Ball Depth – In.
1 ½	8-14	20	13 ½
1 ¾	8-14	22	14 ½
2	10-16	24	16
2 ½	10-16	28	18 ½

Caliper measurement should be taken 6" above ground level.

American Standard for Nursery Stock, ANSI Z60.1 for complete list of Nursery Standards for other types and sizes of trees and shrubs.

**Root control fabric containers may vary slightly in minimal root ball size.*

RECOMMENDED SPACING GUIDELINES

LARGE TREES	MATURE HEIGHT	RECOMMENDED SPACING
Lace Bark Elm	40'-60'	40'-50'
Kentucky Coffee Tree – London Planetree	40'-60'	40'-50'
Bald Cypress/Pond Cypress	40'-60'	40'-50'
Burr Oak	40'-60'	40'-50'
Shumard Red Oak	40'-60'	40'-50'
Chinquapin Oak	40'-60'	40'-50'

NOTE: No trees that will mature to heights over 15' are allowed to be planted under power lines. All trees must be planted far enough away from power lines so that at mature height and spread there will be no interference with power lines.

Guidelines for medium and small trees and large shrubs are on next page.

MEDIUM TREES	MATURE HEIGHT	RECOMMENDED SPACING
Golden Rain Trees	25'-40'	25'-35'
Caddo Maple	25'-40'	25'-35'
Shantung Maple	25'-40'	25'-35'
Sawtooth Oak	25'-40'	25'-35'
Chinese Pistache	25'-40'	25'-35'
Improved Pear Varieties	25'-40'	25'-35'
Eastern red cedar selections	25'-40'	25'-35'
River Birch	25'-40'	25'-35'
Loblolly Pine	25'-40'	25'-35'

SMALL TREES	MATURE HEIGHT	RECOMMENDED SPACING
"Oklahoma" Redbud	Less than 25'	15'-25'
Dessert Willow	Less than 25'	15'-25'
Amur Maple	Less than 25'	15'-25'
Texas Whitebud	Less than 25'	15'-25'
Hedge maple	Less than 25'	15'-25'
Saucer Magnolia	Less than 25'	15'-25'

LARGE SHRUBS	MATURE HEIGHT	RECOMMENDED SPACING
Vitex	5' – 10'	6'-15'
Crape Myrtle	5' – 10'	6'-15'
Yaupon Holly	5' – 10'	6'-15'
Nellie Stevens Holly	5' – 10'	6'-15'
Deciduous Holly	5' – 10'	6'-15'
Vanhoutte Spiraea	5' – 10'	6'-15'
Winterberry Evonymus	5' – 10'	6'-15'
Burning Bush	5' – 10'	6'-15'

THREE-YEAR ESTABLISHMENT PROGRAM*

First Year

- Water every 7-10 days using 50 gal. water per tree per watering.
- Maintain soil saucer for watering.
- Maintain 3-4" wood chip mulch layer within saucer.
- Apply three applications of Roundup per year in tree saucer to keep free of vegetation.
- Make 3-4 supervisory inspections during the year, supplemented by routine inspections by maintenance staff to determine ongoing maintenance needs; staking, watering, weed control, insect or disease control, vandalism, storm damage, removal.
- Late fall fertilizer application. (Consult Oklahoma County-OSU Cooperative Extension for exact application rates: 405/713-1125.)
- Late fall inspection to determine replacement needs.
- Plant replacements.
- Maintain tree wraps 1st year (late fall - early spring) on thin barked trees.
- Be sure to provide irrigation during winter when soil moisture levels decrease.

Second Year

- Spring removal of tree stakes.
- Water every 10-14 days (50 gal. per tree per watering)
- Maintain soil saucer for watering.
- Maintain 3-4" wood chip mulch layer within soil saucer.
- Apply three applications of Roundup per year in tree saucer to keep free of vegetation.
- Make 3-4 supervisory inspections during the year, supplemented by routine inspections by maintenance staff to determine ongoing maintenance needs including watering, weed control, insect or disease control, vandalism, storm damage, removal.
- Prune to develop strong scaffold branches.
- Late fall fertilizer application. (Consult Oklahoma County-OSU Cooperative Extension for exact application rates, 405/713-1125.)
- Late fall inspection to determine replacement needs.
- Plant replacements.
- Be sure to provide irrigation during winter when soil moisture levels decrease.

Third Year

- Water every 14-21 days during periods of drought (50 gal. per tree per watering).
- Maintain soil saucer for watering.
- Maintain 3-4" wood chip mulch layer within soil saucer.
- Apply three applications of Roundup per year in soil saucer to keep free of vegetation.
- Make 3-4 supervisory inspections during the year, supplemented by routine inspections by maintenance staff to determine ongoing maintenance needs including watering, weed control, insect or disease control, vandalism, storm damage, removal.
- Late fall fertilizer application. (Consult Oklahoma County-OSU Cooperative Extension for exact application rates, 405/713-1125.)
- Make replacements only if requested by property owner, or required for design integrity.
- Be sure to provide irrigation during winter when soil moisture levels decrease.

**Borrowed liberally from the Wichita, Kansas Parks and Recreation Department*