

BOARD OF COUNTY COMMISSIONERS
SARPY COUNTY, NEBRASKA

RESOLUTION AUTHORIZING CHAIRMAN TO SIGN THE GRANT AWARD FOR THE TREES FOR NEBRASKA
TOWNS GRANT

WHEREAS, pursuant to Neb. Rev. Stat. §23-104(6) (Reissue 2007), the County has the power to do all acts in relation to the concerns of the County necessary to the exercise of its corporate powers; and,

WHEREAS, pursuant to Neb. Rev. Stat. §23-103 (Reissue 2007), the powers of the County as a body are exercised by the County Board; and,

WHEREAS, a Grant for the new trees was awarded to Sarpy County through the Nebraska Environmental Trust; and,

WHEREAS, the grant award must be signed and submitted to the Nebraska Environmental Trust; and,

WHEREAS, Sarpy County is committed to and supports the grant award for the Trees for Nebraska Towns Grant for the Sarpy County Ballpark; and;

NOW, THEREFORE, BE IT RESOLVED, By the Sarpy County Board of Commissioners that the Board Chairman is hereby authorized to sign the attached Award for the Trees for Nebraska Towns Grant.

DATED this 11th day of January, 2011.

MOVED by Jim Nekuda, seconded by Rusty Hike, that the above Resolution be adopted. Carried.

YEAS:

NAYS:

ABSENT:

Rusty Hike
Jim Wauer
Tom Thayer
Jack Klock
Tom Kitchat

none

none

ABSTAIN:
none

Attest:

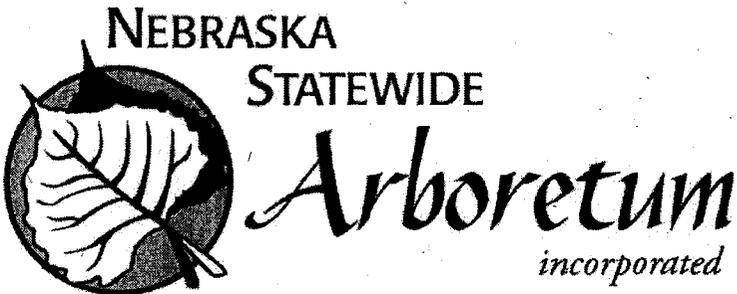
SEAL



Debra L. Houghtaling
County Clerk

Approved as to form:

[Signature]
County Attorney



December 17, 2010

Lisa Haire
1210 Golden Gate Drive
Papillion, NE 68046-2845

Dear Lisa:

Congratulations again on being selected to receive funding from the 2011 Trees for Nebraska Towns (TNT). This is the provision letter for the Sarpy County Ballpark Tree project. This letter outlines the funding provisions for your project.

Funding for your project is contingent upon the provisions noted below that must be satisfied before projects can receive the Notice-to-Proceed, begin the physical work or be reimbursed. There are three bulleted provision categories. Some categories may not have any provisions. Some of the provisions will require action or documentation. Others are provided for clarification or to make you aware of discrepancies that may have been found in your application and may not require any action or documentation. The following provisions are based on the grant program guidelines as found in the *TNT Description & Application* and the goals of the Nebraska Statewide Arboretum (NSA) to promote diverse and sustainable landscapes.

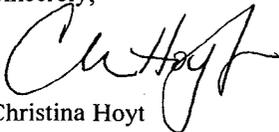
- **Budget limitations:** Your project was partially funded, yet must still adhere to TNT 2011 Expense allowances. 75% of the grant reimbursement must be for large maturing trees and installation (not exceeding 50% of plant purchase costs). Please note that the grant award is over \$10,000 and you will be required to get bids.
- **Size/type of nursery stock:** Project must use high quality nursery stock not exceeding 1 ½" caliper and meeting NSA specifications for high quality root systems. Plants must be purchased from nurseries licensed to do business in Nebraska. If you would like to use larger trees please contact me to discuss this.
- **Landscape design and species selection:** Thank you for submitting a planting plan with your application. More information is needed before we can approve the plan. Please contact us to discuss your plan. It is important to note that the gravel mulch as proposed in your plan IS NOT allowed under TNT funding.

This letter also contains two copies of the Project Agreement. Please sign and return one copy to NSA and retain a copy for your files. The Agreement is based upon your satisfying the provisions noted above, thus **your next action should be to address the provisions and provide the requested documentation and information and return the signed Project Agreement.**

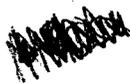
If there are no provisions noted, or after you have addressed the provisions noted, you will receive a Notice-to-Proceed for your project. You will be ready to begin the actual physical work on the project after you receive your Notice-to-Proceed letter and return the signed Project Agreement. **Please note: proceeding without the project Notice-to-Proceed letter and/or without returning the signed agreement will jeopardize your reimbursement.**

If you would like to discuss the provisions or have any questions please contact me at 402/472-5049 or choyt2@unl.edu.

Sincerely,



Christina Hoyt
Community Landscape Specialist



P.O. Box 830964
University of Nebraska
Lincoln, NE 68583-0964
arboretum.unl.edu
Phone: 402.472.2971
Fax: 402.472.8095



PROJECT AGREEMENT

Trees for Nebraska Towns Program 2011

December 17, 2010

The Trees for Nebraska Towns (TNT) Program was created primarily to help improve the diversity of large growing trees in communities across Nebraska. The Initiative is coordinated by the Nebraska Statewide Arboretum, Inc. (NSA) and funded by the Nebraska Environmental Trust, a beneficiary of the Nebraska Lottery. For its part, NSA agrees to reimburse the Sarpy County (hereafter referred to as the Project Sponsor) up to \$15,000 for eligible costs associated with implementing the Sarpy County Ballpark Tree Project project.

For their part, the project sponsor agrees to the following conditions:

1. The project application and all associated notifications from NSA are hereby considered a part of this agreement.
2. The project will be implemented according to plans submitted to, and approved in advance by NSA. Changes to approved design plans and/or plant species must be approved in advance by NSA.
3. Because of the threat of emerald ash borer, native ash species including green ash (*Fraxinus pennsylvanica*), white ash (*F. americana*), black ash (*F. nigra*), and blue ash (*F. quadrangulata*) will not be allowed for planting in the project without prior approval of NSA.
4. NSA retains the right to reject overused or other problematic species or cultivars proposed for use in the grant project.
5. The project shall conform to the NSA/NEFS Specifications for Partnership Projects, which are attached.
6. To be eligible for reimbursement, project expenses must conform to the requirements listed in the attached *TNT Funding Limitations*. Project costs submitted for reimbursement are subject to verification by NSA, Inc. before reimbursement is made.
7. At least 50% of the total project value will be contributed locally as matching funds including cash and eligible in-kind sources.
8. The project will conform to all applicable local, state and federal laws and regulations, including those regarding bidding practices.
9. The project must be completed by November 31, 2011 unless an extension is granted in advance from NSA. Projects must submit for reimbursement within 30 days after project completion.
10. Upon completion of the project, the Project Sponsor agrees to ongoing maintenance of the project.
11. The Project Sponsor understands and agrees that failure to comply with any of the terms of this agreement may result in the revocation or cancellation of NSA, Inc. approval and funding and/or a demand for repayment of any funds previously paid to the Project Sponsor by NSA, Inc. NSA, Inc. may terminate the project, in whole or in part, at any time before the expiration date of this contract whenever NSA, Inc. determines that the Project Sponsor has failed to comply with the conditions of the grant.

Signed:


Representative, (local project sponsor)

1/11/2011
Date


Connie Paxton, Nebraska Statewide Arboretum, Inc.

12-15-10
Date

TNT Funding Limitations

A. The following costs are eligible for reimbursement by TNT funds.

1. Trees and Companion Plants: Costs of purchasing trees and associated shrubs or woody groundcovers that are part of a larger plant massing strategy. **Large maturing trees should constitute at least 75% of the grant reimbursement.** Plants must be of high quality and purchased from nurseries licensed to do business in Nebraska.
2. Plant Installation: Costs associated with installing plant material including mulching and staking, not exceeding 50% of plant purchase cost, without prior approval.
3. Site Preparation: Activity and materials necessary to prepare the project site for planting including removal of dead or dying trees, brush or other plants, *minor* soil improvement (including compost and/or topsoil), and *minor* grading necessary for proper site drainage.
4. Wood Mulch: Wood mulch necessary to cover planting beds. Ideally, mulch should be recycled from local sources. Bagged and/or cypress mulch is not a reimbursable expense without prior approval.

B. Costs Not Eligible for Reimbursement:

1. Equipment: All costs associated with purchase of equipment.
2. Property: Any costs related to the purchase of real property.
3. Hardscape Items: Signs, benches, fountains, trash containers, structures or other hardscape items are not reimbursable but can serve as part of the match requirement.
4. Non-organic mulches: Gravel, rock, rubber or other non-organic material used as mulch.
5. Plastic edging and weed barriers are not a reimbursable expense and should not be used in the project.
6. Rubber weed mats: Plastic or rubber weed mats placed at the base of trees.

C. Matching Requirement & Eligible Matching Funds/Costs:

A minimum 50% match of the total project value is required for all projects (grant funds will not pay for more than 50% of the total project value). Any other funding source is eligible for matching funds. Donated and in-kind goods and services ARE allowed toward the required match. For grant matching purposes the value of volunteer labor will be \$20.85/hr. In-kind donations of professional labor can be valued at the actual rate. The following costs qualify for the local match requirement.

1. Eligible Grant Funded Costs: All eligible costs listed in item A above not reimbursed by grant funds automatically qualify for matching costs.
2. Companion Plant Material: Companion plants such as shrubs, perennials and/or groundcovers planted in association with trees for massing purposes and general project benefit.
3. Companion Plant Installation: The cost of installing companion plants.
4. Project Design & Planning: Reasonable costs of planning, designing and preparing for the project AFTER grant funding is awarded.
5. Watering Supplies: The reasonable cost to purchase watering hoses, sprinklers, low-output irrigation supplies, water wagons, etc. to get water to plant material. Turf irrigation materials are not eligible.
6. Hardscaping: Signs, benches, trash containers or other hardscape items important to the project. To qualify, such costs must be reviewed and approved in advance.
7. Initial Maintenance: The reasonable cost to properly care for trees and associated plantings for up to one year after planting. Eligible care activities include watering, weed control, re-mulching and removal of staking materials. Maintenance must be provided by city personnel, trained volunteers or a business normally involved in landscape care. A billing and/or activity summary must be submitted at the end of the first-year maintenance period.

Nebraska Statewide Arboretum & Nebraska Forest Service

SPECIFICATIONS FOR PARTNERSHIP PROJECTS

Bidding ♦ Design ♦ Tree Removal ♦ Purchasing ♦ Planting ♦ Initial Care

The Nebraska Statewide Arboretum inc. and Nebraska Forest Service (hereafter referred to as NSA/NFS) have developed the following specifications and guidelines in order to help grant funded and other partnership projects achieve success and establish healthy landscapes.

I. BIDDING OF PROJECTS

- All projects are expected to comply with local bidding ordinances and requirements (ordinances or requirements of the governmental unit or sponsoring authority that is responsible for the project). However, it is not the intent of the NSA /NFS that the lowest bid be automatically accepted, but rather that the lowest **responsible** bid is accepted. Bids shall be carefully evaluated considering nursery standards, project specifications and plant material requirements. If it is a requirement of the local governmental unit or sponsoring authority to accept the lowest bid only, then NSA/NFS shall be allowed to review all bids to determine that the lowest bid is indeed responsible and acceptable. If such a bid is not acceptable, the bidding process will be redone.
- If there are no local bidding ordinances or requirements governing the project, then the NSA/NFS bidding specifications shall govern the bidding process.
- Projects with a projected total cost of over \$10,000.00 shall show evidence of contacting more than one contractor to compare costs of materials and services. The NSA/NFS may waive this requirement upon written request by the project coordinator, citing reasons for a waiver request.
- Bids shall contain itemized plant material information including species, size (trees by trunk caliper), quantity and cost. Plant installation, plant delivery, mulch, or any other materials or labor shall be itemized and listed separately from plant material cost.
- Nurseries shall be licensed by the Nebraska Department of Agriculture. It is suggested that all plant material be guaranteed for at least one year from the planting date. No plant substitutions shall be allowed without the permission and approval of NSA/NFS. It is allowable for plant material to be obtained from more than one plant contractor.
- The grant coordinator reserves the right to refuse plant material that does not meet the specifications in this document or looks to be of poor quality.
- The *NSA/NFS Specifications for Partnership Projects* (this document) shall be included in all bid documents and all contractors shall comply with it.

II. PROJECT DESIGN AND IMPLEMENTATION

Note: Project implementation should not begin until written notification of design approval is received.

Developing good landscape design plans is very important to the success of partnership projects. All projects are required to be implemented from NSA/NFS approved design plans. In general, design plans should emphasize sustainable landscape practices including wise species selection and placement that help reduce the need for costly inputs of supplemental water, fertilizers, pesticides and difficult maintenance practices. NSA/NFS will review design plans and offer suggestions for changes if needed. Design plans must be legible and drawn at an appropriate and accurate scale and should include:

- a scale and north arrow
- major existing site features (including structures and roadways)
- existing trees and important landscape plants
- proposed new plantings with plant names clearly identified and hardscape improvements (if any)

Design service fees are typically an allowable use of grant funds. To be eligible for reimbursement, such fees must be paid to professional landscape designers or landscape architects. If needed, please contact the NSA inc. office for a list of design professionals in your area. Also, NSA inc. has design professionals on staff that can provide creative design solutions if so desired.

Plant Species Diversity

In an effort to increase visual and genetic diversity in the landscape, the NSA/NFS encourages the use of a greater variety of plants. The *Plant Diversity Initiative* document was developed as a guide to provide information about sustainable design and diverse plant species selection. It contains a short list of plants that are problematic or overused in some Nebraska landscapes. Some of the plants listed should not be used; others may have limited use. Please refer to that document for specific information.

III. TREE REMOVAL

Tree removals (when approved as a part of the project) shall be done either by qualified employees of the local government or by qualified (Nebraska Arborist Association or International Society of Arboriculture certified) commercial arborists. Commercial arborists shall provide proof of current liability insurance including workers compensation. Commercial arborists shall also meet all requirements provided for by local ordinance.

IV. PLANTING PRACTICES

Landscape planting is most successful when good stock and proper planting methods are used. The following are specifications and guidelines required by the NSA/NFS for purchasing and planting the most common types of landscape plant material (trees, shrubs and herbaceous plants).

Note: All projects and associated contractors shall comply with these specifications, which are considered to be a part of the agreement between NSA/NFS and all partnership program projects. NSA reserves the right to request a refund of any grant funds spent on inferior plant material or any plants improperly planted.

A. Plant Stock Specifications:

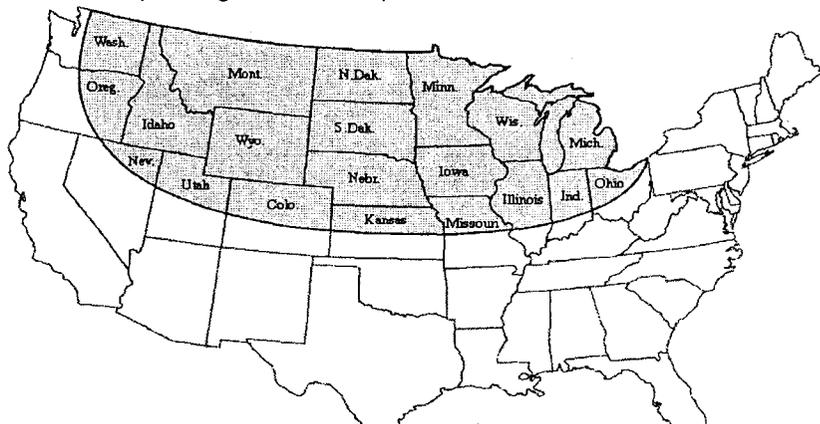
Trees and all associated plant material purchased and installed as a part of any funded project must be of high quality and purchased from nurseries licensed to do business in Nebraska.

1. **All plant material must have high-quality root systems!** Such root systems should be fibrous (containing numerous small feeder roots) and be free from significant root circling and girdling.
2. Preference will be given to bare-root trees and trees grown in root control containers that prevent stem girdling roots, excessive circling and pot-bound conditions. Such containers include fabric bags as well as plastic containers designed specifically for optimal root development (i.e. RPM containers, Rootmaker™ pots, Readyroot™ containers, slit pots, etc.).
3. Trees grown in traditional, smooth-sided plastic containers are strongly discouraged. However, trees placed in a container (containerized) for a short period of time (typically less than 6 months) for aid in sale and handling are allowed as long as the root systems remain viable.
4. Balled and burlapped (B&B) and spade-dug trees are allowed if high quality can be assured and costs are reasonable. For B&B stock, at least 18" of soil ball is required for each 1" caliper of trunk. All baskets and burlap must be removed completely prior to planting or removed to a depth of at least 12" in the hole after planting. For spade dug trees, at least 24" of spade width is required for each 1" of trunk caliper.

B. Plant Quality Standards

Minimum quality specifications for all nursery grown plants shall be the specifications contained in *American Standard for Nursery Stock*, specifically ANSI Z60.1, as adopted by the American Association of Nurserymen. A web copy of ANSI Z60.1 can be found at the website noted at the end of this specs document under heading "Resources". All plants shall be free of diseases, noxious weeds and damaging insects. All plants shall be subject to the laws and regulations of the State of Nebraska and shall be identified by plant names approved by NSA/NFS. Projects are strongly encouraged to investigate the source of nursery stock. Stock grown in Nebraska may be best adapted to Nebraska sites. Species selected for planting shall be adaptable to Nebraska, and the NSA/NFS reserves the right to approve species selections and sizes. The NSA/NFS highly recommends that trees originate from nurseries in the north central part of the United States as indicated by Figure 1.

All plants shall be packed and shipped from the supplier in a manner that



protects the plant against drying, freezing, breaking or other injury. Bare-root plants shall be packed in moist packing material and bundled to ensure against heat or mold damage. Plants shall be protected against the elements while in transit and shall be thoroughly inspected before acceptance. The project coordinator or individual(s) responsible for ordering plant material shall contact the nursery supplying the order to ensure compliance with these standards.

C. Plant Size Specifications

All plants installed in projects shall follow required specifications as detailed in the *American Standard for Nursery Stock* ANSI Z60.1, including height, caliper and volume measurements as applicable. A web copy of ANSI Z60.1 can be found at the website noted at the end of this specs document under heading "Resources". Plant materials not meeting these specifications shall be rejected prior to installation.

In general, smaller caliper trees will establish in the landscape more quickly. Smaller plants will often catch up to and exceed the size of larger plants that were planted at the same time. Plant sizes at the time of planting shall conform to the following size ranges. These ranges apply to all plants whether bare-root, containerized, balled and burlapped or spade dug. NOTE: Any plant larger than the size range listed will require prior approval.

- ♦ **Deciduous Trees:** ½" to 1.5" trunk caliper (measured at 12 inches above the ground). **Evergreen Trees:** 3 to 6 feet tall. Trees shall be well branched. **Spade Dug Trees:** Pre-approval is required for use of spade dug trees. If approved, the minimum spade size shall be 24" for each one inch trunk caliper (measured at 12 inches above ground).
- ♦ **Shrubs:** 12" to 24" inch height and/or width, depending on natural growth habit.
- ♦ **Herbaceous Perennials and Grasses:** Plant size shall vary depending on species, but plants shall be well-rooted and of an appropriate size to establish successfully in the landscape.

D. Planting Seasons

Spring and fall are the best times to plant most landscape plants in Nebraska. Planting can occur into winter if the ground is workable and plants are properly protected. **Planting should not occur and will not be approved without permission for any time during July and August.** Weather conditions can vary greatly from day-to-day and from year-to-year across Nebraska. Consequently those coordinating planting projects shall be cognizant of recent weather patterns and be prepared to take the steps necessary to ensure successful transplanting. It is especially important that irrigation be available if the post-planting period is dry. Dry periods are common throughout the growing season in Nebraska, especially during mid to late summer. Planting during extremely wet periods can also be problematic if the planting area cannot be prepared properly, or if water stands around the root zone of transplanted plants for extended periods of time.

E. Landscape Planting Practices

Pavement Cut-out Plantings: Trees planted in pavement cut-outs in downtowns, parking lots and medians are exposed to harsh and stressful growing conditions. They are subject to construction soils, compaction, temperature extremes, decreased horizontal root space and decreased gas exchange and moisture to roots. It has been the experience of the NSA/NFS that these plantings have greatly reduced life spans. Any plantings in sites such as those mentioned will require approval. Approval will be based on recommendations for minimum open soil space and will require the use of species that have been shown to be more tolerant of these areas. An engineering plan may be required before approval of any planting in these areas. Planting strips are less stressful than individual cut-outs because they create a larger open space. At least 3 feet of good soil should be added to planting areas after construction and before planting.

Preparing the Planting Site: Before any planting begins confirm that the soil is suitable for growing the selected plants. For questionable soils, a soil test would be helpful. If the soil is heavy clay or very compacted, the soil should also be tested to ensure that there is adequate drainage. If drainage is poor and the area seasonally wet, wet-tolerant species such as maple, sycamore, bald cypress and swamp white oak should be considered.

For most soils, amendments to the planting area are not necessary. New construction sites shall have at least 8 inches of top soil present or applied after construction. If soils are heavy clay or very compacted, consider replacing the soil with a good loam soil and/or incorporating composted organic materials to a depth of several inches.

Trees and Shrub Planting: Protect landscape plants when transplanting them by holding and lifting them by the container, basket or ball, not by the trunk. Keep the roots moist but not saturated. If you are not able to plant your tree or shrub immediately after purchase, place them in a cool, shaded area.

Note: Locate all underground utilities before digging.

Planting depth is of critical importance in the long term health and vigor of a tree. All trees shall be planted at a depth such that the uppermost structural roots are located within the top two inches of the soil surface (see figure 2 – proper tree planting). The root flare (or trunk flare) is the area between the vertical transition of the tree stem and the structural roots, and should be visible above grade upon planting. While root flare is somewhat difficult to detect in some young trees, the objective is to ensure that the uppermost two or more structural roots of the young tree are located near the soil surface. More on the topic of tree planting depth can be found under "Resources".

If planting balled and burlapped stock, the wire basket shall be cut and basket completely removed before planting. Remove burlap and all twine or similar material. Use care in handling the root ball. Part of the burlap can be left on to facilitate lifting the plant into the hole. After the plant is in the hole, the burlap should be cut away to the bottom of the planting hole, or as deep as possible. Shipping labels, wire, tags, wrapping and staking material shall be removed from the trunk and branches.

For container-grown or containerized plants, examine the roots after removing the pot. Plants shall not be pot bound. Plants with masses of circling roots are not acceptable for planting. Minimally encircled roots shall be straightened out in the planting hole as much as possible. For plants grown in fabric bags, the bag should be cut away and completely removed before planting.

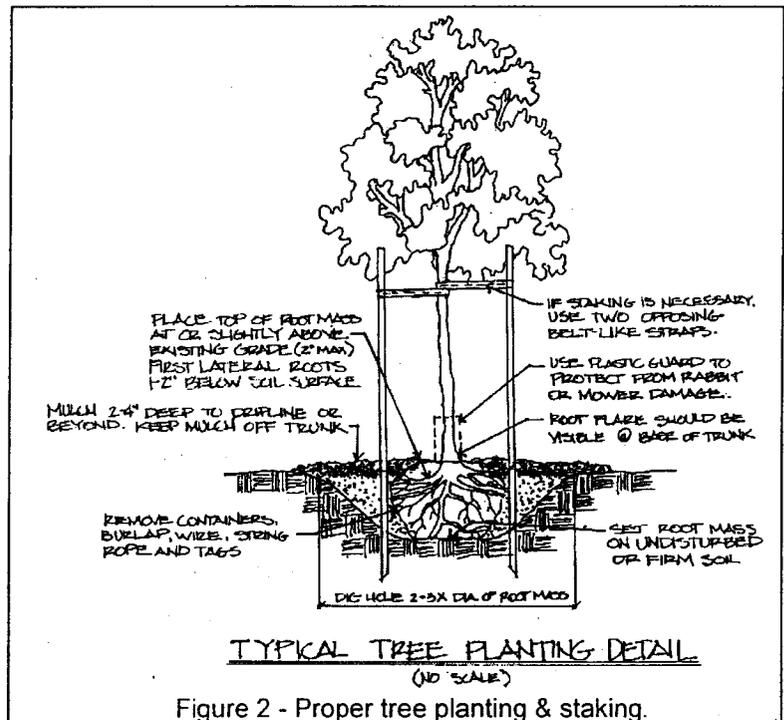


Figure 2 - Proper tree planting & staking.

The planting hole should be significantly wider than the root system or root ball and no deeper than the depth of the root system. Score the sides of the hole with shovel, especially in clay soils. Once the plant is in place, use the soil removed from the hole as the back-fill around the roots. When back-filling, water occasionally to remove air pockets. Be careful not to tamp or compact the soil, this can lead to excessive soil compaction and possible root damage. Do not incorporate organic matter, sand or other material into the back-fill since differences in soil-pore sizes are created which can restrict water movement and root growth between the root ball, planting hole and surrounding soil.

Mulching: Research has shown that wood chip mulch contributes to the healthy establishment of landscape plants. Mulching conserves moisture, reduces weed competition, insulates roots from heat and cold extremes, helps prevent mower and trimmer damage, and aids in long-term development of good soil structure. Mulching should be considered an ongoing practice that is a part of each year's maintenance routine. Depending on the type of mulch used and weather conditions, most tree and shrub beds shall need to be re-mulched every two to three years. Later applications should not increase the total mulch depth.

Mulch trees and shrubs with a 2-3 inch deep layer over the root zone. A tree of 1 1/2" caliper should have a mulch ring of 5' diameter or greater. Evergreens should be mulched to beyond the spread of the lowest branches. Mulch shall not be piled up against tree trunks and shall be kept a few inches from the base of the trunk. Mulch plants in massed groupings when possible. Avoid deep layers of mulch which could result in the tree being planted too deep.

Mulch perennials and grasses with only enough mulch to cover the soil (typically one inch or less). Many perennials and grasses, especially native species, will not tolerate heavy mulching.

Wood chips, shredded or chipped, serve as the best mulches. Be careful with lighter materials such as bark nuggets since they have a tendency to float out of the chip bed during heavy rains. Avoid cypress mulch as it tends to form dense mats and poor growing conditions, and is often harvested from endangered trees. Do not use rock mulches. Rock does not insulate against temperature extremes, and rock absorbs and radiates heat, which can lead to plant desiccation. Do not use black plastic or landscape fabric under the mulch layer. They inhibit proper air and water exchange by the roots.

Staking and Guying of Trees: The purpose of most staking and guying is to prevent a newly planted tree from tipping over in the wind. In Nebraska this practice is often necessary. Excessive movement can dislodge the small, fibrous roots in the soil before they are firmly established. However, many trees are lost because guying materials are not removed or are improperly installed.

Staking is especially important on open, windy and exposed sites, and sites with high use by people. Staking and guying materials shall be strong enough to provide support, but flexible enough to allow some movement. Guying materials shall have a broad surface at the point of contact with the tree to prevent damage from rubbing. Commercial tree ties and cloth or canvas webbing or straps that are at least one and one half inch wide are examples of good guying materials. **Do not use garden hose**. All staking and guying shall be monitored and adjusted as needed to prevent tree damage and girdling. **It shall be removed at the end of one year**. Stakes without guying may be left in the place longer in high use areas if needed to prevent damage from humans, mowers and other equipment or vehicles.

Wraps and Guards: Tree wraps can be used to protect the tree from damage while it is being transported and planted. Otherwise, trunks should not be wrapped during the growing season. Trunk wrapping may be desirable on some thin-barked trees such as red maple to prevent winter injury. Consult with NFS staff for recommendations.

Tree trunk damage from rodents, deer, mowers and weed trimmers can be prevented by using plastic trunk guards. Guards should be monitored regularly and removed before rubbing or girdling problems occur. It is preferable to use guards that allow for air movement. A variety of wire mesh/netting cages can be used to protect shrubs from rabbits in winter.

Watering: All plants should be thoroughly watered at the time of planting. This shall be done by the nursery contracted to do the installation. Supplemental watering is often needed for 1-2 years or more after planting. The amount of watering required will vary with the type of plant, type of soil, time of year and weather conditions. Avoid over-watering, especially in poorly drained soils.

Newly planted trees and shrubs should receive the equivalent of one inch of rainfall per week during the growing season. It is best to water trees thoroughly and slowly with enough water to fully moisten the root ball. In general, container and B&B plantings require more water at application than do bare root plantings. If rainfall is adequate during the growing season (1 inch per week) supplemental water is not required.

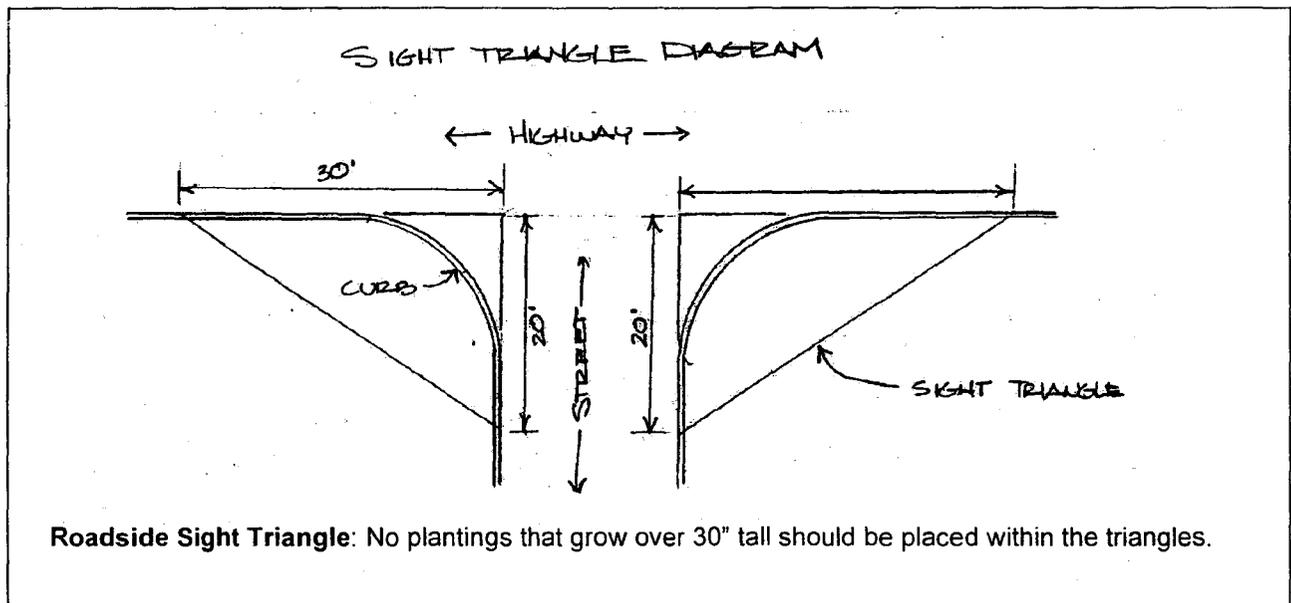
Perennials of small size or grown in porous media may dry out more quickly than trees and shrubs, and thus require closer monitoring. This is especially important during the first several weeks after planting when watering more frequently may be required. Native perennials and grasses typically require less moisture to become established and thereafter.

Fertilizing: Most top soils contain sufficient levels of available nutrients to supply the requirements of newly planted landscape plants, thus fertilization is not needed. Planting species that are tolerant of existing soil conditions will provide the greatest success. In situations where construction has altered the soil, the addition of good top soil and organic material such as compost may be necessary. Future determination of additional nutrient needs shall be made based upon the condition and vitality of the plants and analysis of soil samples. The addition of compost to perennial beds, rather than fertilizer, is also best.

V. Roadside Planting Considerations:

Permission from the proper authority is required before any plant material can be placed on a highway or street right-of-way. The Nebraska Department of Roads recommends that the following general rules be considered when planting along roadways.

1. A lateral obstacle clearance, or clear zone, exists along all roadways. No woody plants or fixed objects can be located in this zone. The clear zone varies depending on the road design and speed limit. Setbacks for some common situations are:
 - Highway in town with curb, speed limit 40 mph or below - all woody plants shall be at least 6 feet from back of curb.
 - Highways in town without curb; speed limit of 40 mph or below - all woody plants shall be at least 10 feet from edge of driving lane.
 - Rural highways without curb; any speed limit - all woody plants shall be at least 30 feet from edge of driving lanes.
2. All tree and shrub planting shall allow 10 feet on either side of fire hydrants.
3. Allow 15 feet from trunk of shade trees to light poles (10 feet for ornamentals).
4. Trees shall be located at least 20 feet on either side of any overhead utility line unless their natural habit shall keep them under the line.
5. Shade trees shall be at least 5 feet and ornamentals 10 feet from either side of drives.
6. Shade trees shall be pruned up to at least 8 feet over sidewalks, more over roadways.
7. Trees with an appropriate habit shall be selected to reduce branching in driving and walking areas.
8. Locate all above and below ground utilities before planting. Stay away from buried utility lines. When planting where storm sewers are located, verify that there is enough depth above the sewer to allow successful planting over them.
9. Plants shall not interfere with the visibility of any signs.
10. Shrubs and herbaceous perennials shall be less than 30 inches tall in medians.
11. Sight triangles, in which nothing over 30 inches tall can be planted, exist at all roadway intersections (including major driveways - see diagram below). The area of the site triangle varies depending on the adjacent highway speed. The diagram below shows a street intersecting a 30 mph highway. Shade trees can be planted with the trunks at the outside edge of the triangle. Ornamental trees shall be planted so no branching extends into the site triangle. Other plant material can be planted in this area but shall be less than 30 inches tall. In general, trees at most street/roadway intersections are to be located 25-30 feet from the adjacent street/roadway edge (contact your local, county or state governmental agency for specific guidelines).



V. RESOURCES:

It is highly recommended that professional help be used for all planting and maintenance projects. Technical assistance can be obtained from several sources including:

- Nebraska Forest Service - (402) 472-2971 or eberg2@unl.edu; jevertson1@unl.edu; or choyt2@unl.edu.
- UNL Extension Offices and Research Centers
- Local Natural Resources District Office

Sources of publications and information:

- Nebraska Forest Service: <http://www.nfs.unl.edu>
- Nebraska Statewide Arboretum: <http://arboretum.unl.edu>
- University of Nebraska Extension: <http://www.unl.extension.edu>
- International Society of Arboriculture, Box 3129, Champaign, IL 61826-3129 at <http://www.isa-arbor.com>
- TreeLink website <http://www.treelink.org/>
- *American Standard for Nursery Stock* ANSI Z60.1
<http://anla.org/applications/Documents/Docs/ANLStandard2004.pdf>
- Tree Planting Depth Information:
<http://mortonarb.org/research/rootpdf/AvoidingExcessiveSoilRootSystemTrees.pdf>

Private-sector professionals: Arborists, landscape architects and others in the nursery industry are good information sources. The Nebraska Nursery and Landscape Association and the Nebraska Arborists Association maintain lists of their members in Nebraska. These lists may be obtained free of charge by contacting their respective offices:

Nebraska Nursery and Landscape Assoc.
4200 Witherbee Blvd.
Lincoln, NE 68510
402-450-7192
<http://www.nnla.org>

Nebraska Arborists Association
Box 81414
Lincoln, NE 68501
402-476-3852
<http://nearborists.org>

State law requires that all distributors of nursery stock in the state of Nebraska be licensed by the Nebraska Department of Agriculture. This includes tree spade operators. The department maintains a list of all currently licensed nursery growers and dealers (including tree spade operators). This list may be obtained by writing or calling the department.

Nebraska Department of Agriculture Bureau of Plant Industry
Box 94756
Lincoln, NE 68509
402-471-2394

COOPERATING AGENCIES OF PARTNERSHIP PROGRAMS:



Sarpy County Board of Commissioners

1210 GOLDEN GATE DRIVE
PAPILLION, NE 68046-2895
593-4155

www.sarpy.com

ADMINISTRATOR Mark Wayne

DEPUTY ADMINISTRATOR Scott Bovick

FISCAL ADMIN./PURCHASING AGT. Brian Hanson



COMMISSIONERS

Rusty Hike District 1
Jim Thompson District 2
Tom Richards District 3
Jim Nekuda District 4
Jim Warren District 5

MEMO

TO: Sarpy County Board

FROM: Lisa A. Haire

RE: Trees for Nebraska Towns Grant Award

On January 11, 2011, the County Board will be asked to authorize the Chairman to sign the Trees for Nebraska Towns Grant Award.

Sarpy County was awarded \$15,000 from the Nebraska Environmental Trust to plant large maturing trees at the Sarpy County Ballpark. Sarpy County will be required to match \$15,000 for a project total of \$30,000. The county match will come out of funds already set aside for landscaping in the Ballpark budget.

Please do not hesitate to contact me if you have comments or questions.

January 7, 2011

Lisa A. Haire
593-1565

cc: Mark Wayne
Scott Bovick
Brian Hanson
Fred Uhe
Deb Houghtaling