

PLANTING SCHEDULE

TREES	COMMON NAME/BOTANICAL NAME	CONT	CAL	SIZE	SHRUBS	COMMON NAME/BOTANICAL NAME	CONT	CAL	SIZE
ACE MA2	MARMO FREEMAN MAPLE / ACER FREEMANII 'MARMO'	B & B	2.5"	CAL	JUN FOR	SEA GREEN JUNIPER/JUNOPERUS CHINENSIS 'SEA GREEN'	5 GAL		
QUE BIC	SWAMP WHITE OAK/QUERCUS BICOLOR	B & B	3"	CAL	HEU MA2	MARMALADE CORAL BELLS/HEUCHERA X 'MARMALADE'	1 GAL		
QUE RUB	RED OAK/QUERCUS RUBRA	B & B	2.5"	CAL	TY	NIGRA YEW/TAXUS X MEDIA 'NIGRA'	36"	B & B	
CER CAN	EASTERN REDBU/CERCIS CANADENSIS	8'	BB						
LT	TULIP TREE/ LIREODENDROM TULIPIFERA	8'	BB						
TIL RED	REDMOND AMERICAN LINDEN/TILIA AMERICANA 'REDMOND'	8'	BB						

GROUND COVER
 TSB BLUEGRASS SEED MIX TURF

THE SEED MIX FOR ALL TURF AREAS SHALL BE A GENERAL PURPOSED BLEND OF TURFGRASSES AS FOLLOW, OR AN APPROVED EQUAL.

FIELD OF DREAMS GAMEDAY MIXTURE - NATIONAL SEED, DOWNERS GROVE, IL. 888-965-7333

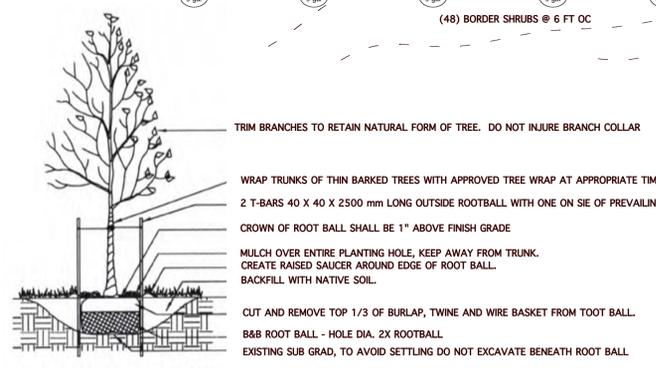
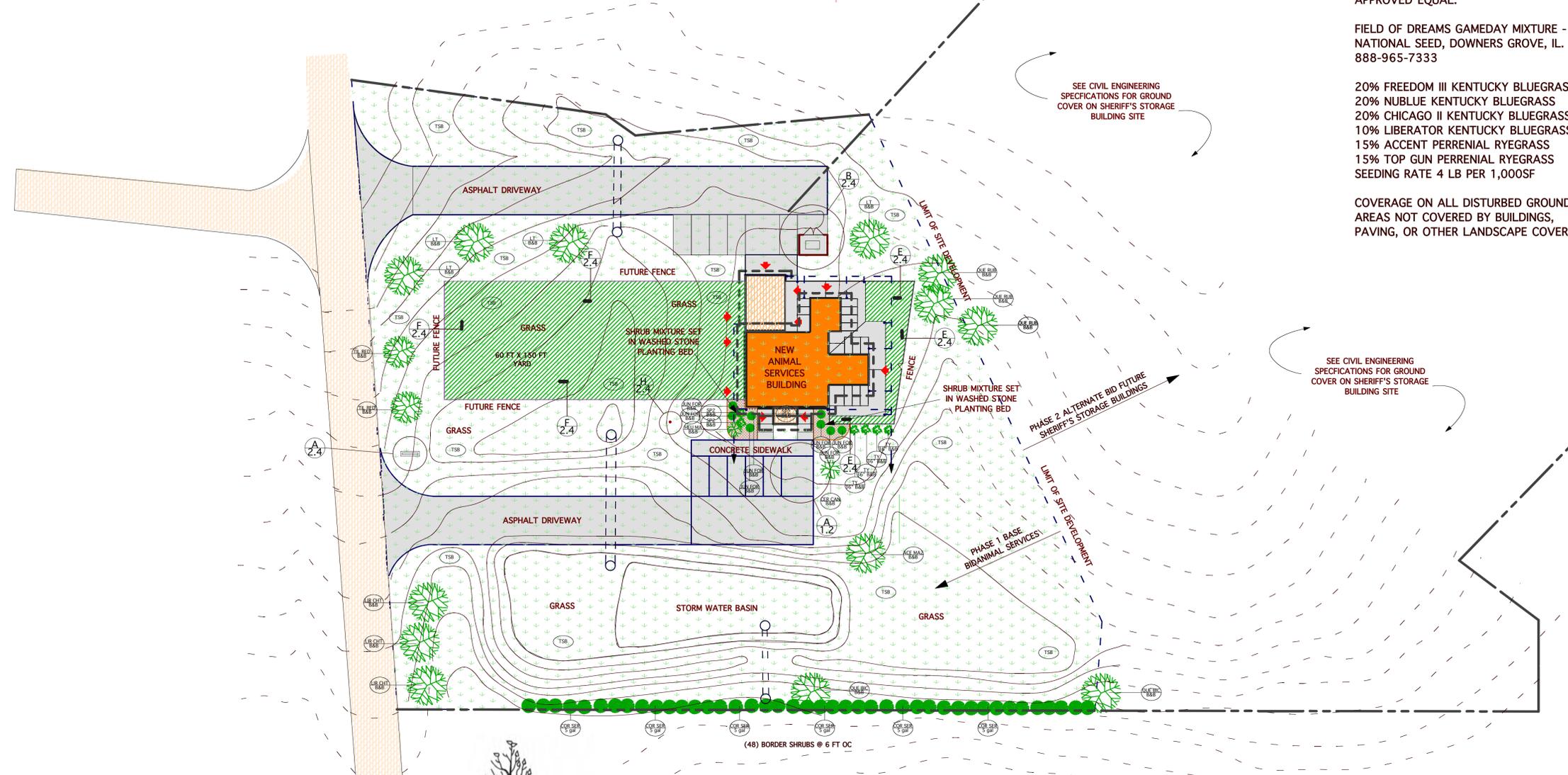
20% FREEDOM III KENTUCKY BLUEGRASS
 20% NUBLUE KENTUCKY BLUEGRASS
 20% CHICAGO II KENTUCKY BLUEGRASS
 10% LIBERATOR KENTUCKY BLUEGRASS
 15% ACCENT PERENNIAL RYEGRASS
 15% TOP GUN PERENNIAL RYEGRASS
 SEEDING RATE 4 LB PER 1,000SF

COVERAGE ON ALL DISTURBED GROUND AREAS NOT COVERED BY BUILDINGS, PAVING, OR OTHER LANDSCAPE COVERS

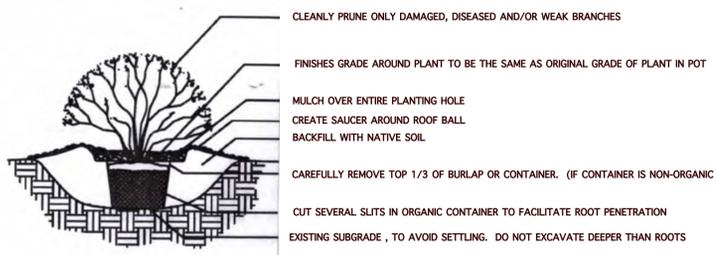
LANDSCAPE PLAN NOTES:

- SCOPE OF WORK:**
- 1- PROVIDE LANDSCAPE PLANTS FOR NEW ANIMAL SERVICES SITE AREA PER ADJACENT PLANTING SCHEDULE. SEE SHEET L-3 LANDSCAPE SPECIFICATIONS.
 - 2- WOOD FENCE AROUND DOG YARD AREAS.
 - 3- FUTURE CHAINLINK FENCE AROUND DOG EXERCISE YARD. SEE BIDDING ALTERNATES IN PROJECT MANUAL
 - 4- NOTE MONUMENT SIGN AT PUBLIC DRIVEWAY INTO ANIMAL SERVICES SITE. SEE BIDDING ALTERNATES IN PROJECT MANUAL

DEVELOPED SITE AREA
92,999 sq ft



SHADE TREE PLANTING DETAIL



SHRUB PLANTING DETAIL



Mark J. Schmidt Architect
 PO BOX 762
 Watoma, WI 54982
 800 - 236 - 0140
 920 - 787 - 0140
 design@ksarch.net

LandTech Design, Ltd.
 2950 Cherry Road
 Chicago, IL 60643
 Ph. 630.554.9864
 Fax 630.206.1864

NEW BUILDING FOR;
BOONE COUNTY ANIMAL SERVICES AND ADOPTION CENTER
 1546 SQUAW PRAIRIE ROAD
 BELVIDERE, ILLINOIS

ISSUED:	BID DOCUMENTS
DATE:	10/29/15
DRAWN BY:	CHECKED BY:
	JOB No. K13036

LANDSCAPE PLAN
 SHEET No. **L-1**

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PART I – GENERAL
1.01 DESCRIPTION

This work includes, but is not limited to, furnishing and transporting all materials, equipment and labor necessary to:

1. Dig and prepare plant holes, prepare the soil for planting.
2. Plant specified materials as shown.
3. Water, mulch, fertilize, wrap, brace and perform other incidental operations.
4. Maintain new plant material, through the guarantee period and replace all unacceptable plants.

PART II
2.01 MATERIALS

A. Topsoil

Topsoil required to complete the work of planting shall not be extremely neither acid nor alkaline, nor contain toxic substances harmful to plant growth. Topsoil used shall be uniform in color and texture, free from grass, roots, sod, weeds, rocks, stiff clay, clods, debris or any other substance over one (1) inch in diameter or undesirable to plant growth. Topsoil will be inspected by the Owner at either the source of supply or as delivered and shall meet the approval of the Owner prior to use.

B. Soil Mixtures

1. Deciduous plants shall be backfilled with a mixture of six (6) parts topsoil mixed with one (1) part uncompressed peat moss by volume.
2. Evergreen plants shall be backfilled with a mixture of three (3) parts topsoil mixed with one (1) part mushroom compost by volume.
3. Use of existing soils is permitted in the backfill mix, unless otherwise directed by the owner and as noted on the plans.
4. Groundcover and perennial plants shall be planted and backfilled in topsoil amended with 1/3 peat moss and 1/3 mushroom compost by volume as specified and according to manufacturer's instructions and recognized practices.

D. Mushroom Compost

Mushroom compost shall be supplied by a commercial source and shall meet the requirements of Article 717.08 of the "Standard Specifications". Mushroom compost shall have been used for a minimum of one crop of mushrooms and be well composted, with an admixture of 15 – 30% topsoil.

E. Mulch

Mulch material shall consist of shredded tree bark and shall be non-toxic to vegetation. It shall consist of either mixed hardwood species or pine alone. Sixty (60) per cent of the shredded bark shall range between one (1) and three (3) inches in length; the remaining forty (40) percent shall be less than one (1) inch in length. The maximum width of the particles shall not exceed one and one-half (1 1/2) inches. Minimum depth of mulch shall be four (4) inches compacted.

F. Fertilizer

Fertilizer shall meet the requirement of Article 717.07 of the "Standard Specifications", and shall be applied at the rates and ratios specified herein. Acceptable brands are Woodace or approved equal.

G. Peat

Peat shall be not less than 80% decomposed organic matter by weight on an oven-dried basis. Peat shall be delivered in a workable condition, free of lumps.

H. Wrapping material

Wrapping material for tree trunks shall be Kraft paper of a double layer treated type as normally manufactured for nursery use, and as approved by the owner. Wire screening, if specified, shall be a double thickness of window wire screening as approved by the owner.

I. Guying and bracing – not required.

J. Plant material

Trees, shrubs, evergreens and groundcover shall conform to quality, size and grade of the "American Standard for Nursery Stock: (ANSI Z60.1–latest edition) adopted by the American Association of Nurserymen.

1. Inspection of Plant Material

a. Inspection of plant material will be made at the nursery by the Owner or his duly authorized representative, whenever such an examination is deemed practical, and must be in the field (or in storage houses) of the nursery supplying the material. The Owner reserves the right to place identification seals on any or all plants selected. If the owner is unable to inspect plant material at the nursery, the contractor must submit samples to the Owner for approval at no added cost. The owner shall inspect plants again upon delivery to the site.

b. Approval of material on such an examination shall not be construed as an acceptance of it. Final acceptance will not be made until the plant material is in a healthy, growing condition as provided in Section 3.04.

c. All plant material, including collected stock, shall comply with the State and Federal laws with respect to inspection for plant diseases and insect

infestation. An inspection certificate, required by law to this effect, shall accompany each shipment and on arrival the certificate shall be filed with the Owner.

PART III – EXECUTION
3.01 PERFORMANCE OF WORK

General:

The contractor shall layout all work in the field with the landscape architect for approval. The work shall consist of:

1. Install new plant materials as shown, complete with guarantee as specified.
2. Remove and legally dispose off-site of all excess materials, excavation, edging, and discarded plant material.

A. Planting Season:

Regardless of calendar date, plants must be dormant at the time they arrive at the site of the work or storage site.

1. Spring Planting: This work shall be performed from the time the soil can be worked until the plant, under field conditions, is not dormant except that:

- a. Evergreen planting shall terminate on June 1.
- b. Seedlings shall be planted only during the spring planting season.

2. Fall Planting: This work shall be performed from the time the plant becomes dormant until the ground cannot be satisfactorily worked except that evergreen planting shall be performed between September 1 and November 1.

B. Digging of Plants

Plants shall not be dug until the contractor is ready to transport them from their original locations to the site of work or approved storage. The maximum time lapse between digging and being properly loaded as specified above for shipment to the site of the work or being placed in approved storage shall be four (4) days for balled or burlapped plants and one (1) day for bare root plants. They shall be dug with care, avoiding injury to the plants or loss of damage of the roots, particular attention being given to fibrous roots. Immediately after digging, roots shall be protected against drying out and freezing. Bare root plants shall be dug only when air temperatures exceed 35° F.

C. Notice of Delivery

The contractor shall inform the Owner 24 hours before making any delivery of plant material. Each shipment shall be accompanied by an invoice showing sizes and varieties included. A copy of the invoice shall be given to the owner upon delivery of the plant material.

D. Transportation

During transportation, the contractor shall exercise care to prevent injury and drying out of the plants. Upon arrival at the temporary storage location or site of the work, plants will be inspected for proper shipping procedures as defined in Section G, Paragraph 4 of Materials. Should the roots be dried out, large branches be broken, balls of earth be broken or loosened, or areas of bark be torn, the owner may reject the injured tree. When a tree has been so rejected, the contractor shall at once remove it from the area of the work and replace it.

E. Temporary Storage

No plant shall remain in temporary storage over the summer. Plants that are not to be planted immediately, shall be protected in the following manner:

1. Balled and Burlapped Plants and Container Grown Plants: Plants may remain on the site of the work only 72 hours prior to being planted or placed in storage.
2. Balled and burlapped plants shall be kept moist and their solidity carefully preserved. To prevent drying out or freezing, they shall be stored either in a cool, moist storage building or placed in a compact group with suitable mulch material placed around and between the balls so they are completely covered.
3. Container grown plant material shall be kept moist by watering as directed by the Owner. To prevent freezing, they shall be stored either in a cool, moist storage building or placed in a compact group with a suitable mulch material placed around and between the balls so they are completely covered.

F. Lay-Out of Planting

The area to be planted shall be finished to line and grade before planting operation is begun. Locations for plants and outlines of areas to be planted shall be marked on the ground and staked by the contractor. The Owner shall approve all such locations before any excavation is made.

G. Excavation of Plant Holes

1. Normal Conditions: The sides of all plant holes shall be vertical and the bottom horizontal. All plant holes shall be dug in such a manner that the inside surfaces of the hole shall be in a loose friable condition prior to planting. Glazed or compacted sides will not be permitted. The Owner must approve the equipment used to dig the plant holes.

On slopes, the depth of excavation will be measured at the center of the hole.

Excess material excavated from the holes shall be removed from the site and legally disposed of. The excavated material shall not be stockpiled on the site.

a. Excavation for Trees: The diameter of the tree hole shall be at least two

(2) feet greater than the diameter of the ball or spread of roots, and at least six (6) inches deeper than the root ball, unless a larger hole size is required by the plans or specifications.

b. Excavation for Shrubs and Groundcover: Holes for shrubs and groundcover shall be dug within the staked outline of the planting bed. The interval of planting will be designated on the plans. Spacing shall be measured from center to center and alternate rows shall be staggered.

2. Shrubs and Groundcovers

a. Immediately prior to digging holes for shrubs and groundcover beds, the soil surface of the area to be planted shall be cultivated to a depth of not less than 4 inches, with equipment approved by the Owner, until the surface is smooth and relatively free of debris, gullies, clods, grass, weeds, and stones. All shrub and groundcover beds shall be in a weed-free condition prior to planting and mulching.

b. Where annual and/or perennial plants shall be incorporated within the planting bed, the contractor shall cultivate to a minimum of 12 inches deep, and amend soil as specified herein under section 2.01–B Soil Mixtures.

c. Holes for shrubs shall be at least one (1') foot greater in diameter than that of the ball or spread of the roots and at least six (6") deeper than the root ball or spread of the roots.

2. Heavy Clay or Compacted conditions (when noted on plans): The sides of all plant holes shall be sloped, and the sides of the hole shall be in a loose, friable condition. The ball shall rest upon a raised "platform" on the bottom of the pit.

The hole diameter for trees shall be twice the size of the root ball and at least 6" deeper than the root ball. Excavated soil materials may not be used in the backfill mix.

H. Planting Procedures:

1. Backfill shall be prepared as specified for the specific plant material. The prepared backfill mixture shall, at the time of planting, be in a loose, friable condition. At no time shall the prepared backfill or other topsoil used on the job be stockpiled on turf or in ditches.

2. All excavated material not suitable for backfilling as approved shall be legally disposed of.

3. All plants shall be placed in a plumb position and set at the same depth as they grew in the nursery field. Prepared backfill shall be placed around the root system. Tamping or watering shall accompany the backfilling operation to eliminate air pockets.

4. A thorough watering of trees, shrubs and groundcover with a method approved by the Owner shall follow the backfilling operation. This watering shall completely saturate the backfill and be performed during the same day of planting. After the ground settles as a result of the watering, additional backfill shall be placed to match the level of the finished grade. Approved watering equipment shall be at the site of the work and in operational condition prior to starting the planting operation.

5. Balled and Burlapped Plants: After the plant is placed in the hole, all cords and burlap shall be cut away from the trunk and placed below grade.

6. Container Grown Plants: Prior to placing the plant in the hole, the container shall be removed with care so as not to disturb the ball of soil that contains the root system. During the planting operation, care shall be taken not to destroy the solidity of the ball of soil. Pots of material that will decompose in one growing season need not be removed.

7. Bare Root Plants: The roots shall be carefully spread in a natural position and prepared backfill shall be worked in around the roots so each root is individually packed to eliminate air pockets. The plant shall be gently raised and lowered to assure contact of the roots with the soil.

8. A circular water saucer shall be constructed around each individual plant to the satisfaction of the Owner.

I. Water

1. Water shall be fresh, clean, potable and free from injurious amounts of mineral and organic substances.

2. Contractor is solely responsible for providing all water required in the project.

J. Mulching

Immediately after watering, plants shall be mulched. A layer of specified mulch shall be used to cover the circular water saucer to a depth of four (4) inches when settled. When the plant is in a bed in which spacing is less than six (6) feet on centers, or as noted on the plans, the entire bed shall be mulched to a depth of four (4) inches with the material specified. The mulch shall be extended three (3) feet beyond the peripheral plants of the bed. When mulching groundcover beds, care shall be taken not to bury leafy stems or vines under mulch material.

All mulching shall be kept in a minimum of 3" from the trunk of all trees and shrubs.

L. Wrapping

Immediately after planting, trunks of all deciduous trees 1/2 inch diameter or larger shall be wrapped spiral from the ground to the lowest major branch (after pruning) overlapping the wrap at least one third (1/3) of its width.

M. Pruning

1. Qualified personnel, experienced in horticultural practices and operations

shall perform all pruning. Pruning shall be done in the presence of the Owner and in such a manner as to preserve the natural growth habit of each plant.

2. The method and location of pruning and the percentage of growth to be removed shall meet the approval of the Owner. All pruning shall be done with sharp tools in accordance with the best horticultural practices.

3. The ends of all broken and damaged roots of 1/4 inch or larger shall be pruned with a clean cut, removing only the injured portion. All broken branches, stubs, and improper cuts of former pruning shall be removed.

4. Deciduous Trees: Pruning shall not be performed, except to remove dead or damaged twigs or branches, and as directed by the Owner.

5. Deciduous Shrubs: In general, shrubs shall be cut back to 1/2 of their height. Shrubs that are slow growing or do not sucker readily shall be pruned in the same manner as deciduous shade trees.

6. Evergreens: Evergreens shall not be pruned except to remove broken branches.

N. Bracing

1. All shade trees and evergreen trees taller than three (3) feet in height and less than four and one-half (4 1/2) inches in diameter shall be braced with steel posts or in another method approved by the Owner. For bare root trees, the post shall be placed within eighteen (18) inches of the trunk. For balled and burlapped or container grown trees, the post shall be placed adjacent to the outside of the ball. The post shall be driven vertically to a depth of eighteen (18) inches below the bottom of the hole. The anchor plate shall be aligned perpendicular to a line between the tree and the post. The tree shall be firmly attached to each post with a double guy of # 14 galvanized steel wire. The portion of the wire in contact with the tree shall be encased in a hose of a type and length approved by the Owner.

a. Shade trees less than three (3) inches in caliper and evergreen trees less than six (6) feet in height require two (2) posts so placed that a line between them will be parallel to the prevailing winds.

b. Shade trees that are three (3) inches in diameter and are smaller than four and one-half inches in diameter and evergreen trees that are six (6) – eight (8) feet in height require three (3) posts so placed that they are equidistant from each other.

c. Shade trees over four and one-half (4 1/2) inches in diameter, and evergreen trees over eight (8) feet in height shall be guyed with three (3) guys consisting of #12 galvanized steel wire which shall be secured to the tree trunk just above the lowest major branch (approximately six (6) to eight (8) feet above ground level) for deciduous trees and secured not less than two-thirds (2/3) the height of evergreen trees. The portion of the wire in contact with the tree shall be encased in a hose of a type and length approved by the Owner. The lower end of the guys shall be attached to an earth anchor as specified herein that is set at least thirty (30) inches into the ground at an angle that is parallel to the line of pull. The anchors shall be placed equidistant from the tree at approximately two-thirds (2/3) the vertical distance from the ground to the point where the guy is attached to the tree.

d. All guy cables shall be flagged with bright, visible safety tape.

2. During the life of the contract, if trees blow down, sway excessively, or are otherwise injured because of improper bracing, the Owner will reject such injured trees, and they shall be replaced by the contractor at his own expense.

3. The bracing shall be removed from the trees and legally disposed of by the contractor just prior to final acceptance and at no additional cost to the Owner.

3.02 MAINTENANCE

Maintenance shall begin immediately after the planting is completed and shall continue for one (1) year until final inspection and acceptance. All these requirements for proper care during the maintenance period shall be considered incidental to the cost of the contract and shall be performed within five (5) days following notification by the Owner.

Maintenance of new plantings shall consist of weeding, watering, mulching, spraying, adjusting braces, resetting plants to proper grades or upright position, repair of water saucers or other work which is necessary to maintain the health and satisfactory appearance of the plantings.

1. Watering: Additional watering shall be performed at least once within every thirty (30) days during the months of May through October. The schedule for watering within the thirty (30) day increments will be determined by the Owner. Should excessive moisture conditions prevail, the Owner may delete any or all of the additional watering cycles or any part of said cycles. The contractor shall not be relieved in any way from the responsibility for unsatisfactory plants due to the amount of supplemental watering.

2. Weeding: Weeds and grass growth shall be removed from within the earthen saucer of individual trees and from the area within the periphery of the mulched plant beds. This weeding shall be performed at least once during the months of May through October. The weeding schedule will be determined by the owner. The contractor shall not be relieved in any way from the responsibility for unsatisfactory plants due to the extent of weeding.

REVISIONS	1	5-26-15	FLAGPOLE
DATE: 4-3-15	DRAWN: JMW		
PROJECT #: 425-15	SCALE: AS NOTED		
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Landscape Plans			
BOONE COUNTY ANIMAL SERVICES BELVIDERE, ILLINOIS			
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