

PLANT SCHEDULE

TREES LW TE TG	QTY 7 15 5	BOTANICAL NAME Lagerstroemia x `Natchez` Thuja occidentalis `Emerald Green` Thuja standishii x plicata `Green Giant`	COMMON NAME White Crape Myrtle Multi-Trunk Emerald Green Arborvitae Green Giant Arborvitae	CONT B & B B & B B & B	CALIPER 10` ht. 6` ht. 8` ht.		<u>REI</u>
SHRUBS CLA HYP ILC JUC RHO ROR	QTY 24 19 40 59 51 36	BOTANICAL NAME Calamagrostis x acutiflora `Karl Foerster` Hydrangea paniculata `Little Lime` llex cornuta `Dwarf Burford` Juniperus chinensis `Sargentii` Rhododendron x `Delaware Valley White` Rosa x `Knockout` TM	COMMON NAME Feather Reed Grass Little Lime Hydrangea Dwarf Burford Holly Sargant Juniper Delaware Valley White Azalea Rose	CONT 3 gal B & B B & B 3 gal B & B B & B	HEIGHT 24" HT. 24" HT. 24" HT. 24" HT.		<u>REI</u>
GROUND COVERS LV RG SM	QTY 76 14 12	BOTANICAL NAME Liriope muscari `Variegata` Rudbeckia fulgida `Goldstrum` Salvia x sylvestris `May Night`	COMMON NAME Variegated Lily Turf Coneflower Sage	CONT 1 gal. 1 gal 1 gal		SPACING 15" o.c. 15" o.c. 12" o.c.	<u>REI</u>

NOTES:

- 1. CONTRACTOR TO REMOVE ALL RED MULCH AND REPLACE WITH 3" OF BROWN SHREDDED HARDWOOD MULCH.
- 2. CONTRACTOR TO LIMB UP AND CLEAR GRUB FROM TREES WITH LESS THAN 40% LIVE BRANCHING.
- 3. PROPOSED SIGN LOCATION SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND IS SUBJECT TO CHANGE. ADDITIONAL UTILITY AND EASEMENT RESEARCH IS RECOMMENDED PRIOR TO FINALIZING SIGN LOCATION AND SIZE.

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sheet number **L1**

rock material by dry weight.

2) Compost shall be sampled and tested as required by the Seal of Testing Assurance Program of the United States Composting Council (USCC) and shall meet the physical requirements for compost as determined by USCC.

3) The product shall possess no objectionable odors. The product must meet all applicable USEPA CFR, Title 40, Part 503 Standards for Class A biosolids. The moisture level shall be such that no visible water or dust is produced when handling the material. Composted Pine Bark Fines: Shall be approved composted, ground pine bark having no particle with a dimension greater than 3/4 inch.

Sand: Shall be guartz based sharp concrete sand, ASTM C-33 Fine Aggregate, with a Fines Modulus Index between 2.8 and 3.2. Perlite: Coarse horticultural grade expanded, volcanic perlite. Maximum density shall be 8 lb./ft3.

pH shall be 6.5 to 7.5. Perlite shall be meet the Perlite Institute's Standards for Gradation for Horticultural Perlite for Coarse Perlite with no more than 70% passing through a #16 Standard Sieve.

G. Humus: Shall be mature, stable, weed free, and produced by aerobic decomposition of organic matter. Compost feedstock shall be plant matter, such as high lignin forestry products or yard waste (leaves, brush and yard trimmings). Humus shall have a pH between 6 and 7.5.

Soluble Salt Concentration shall be less than 10dS/m. Cation exchange capacity rate shall be 100-250.

The product must not contain any visible refuse or other physical contaminants, substances toxic to plants, or over 5% sand, silt, clay or rock material by dry weight.

5) The product shall possess no objectionable odors. The product must meet all applicable USEPA CFR, Title 40, Part 503 Standards for

The moisture level shall be such that no visible water or dust is produced when handling the material. Trace Elements: Shall be commercially available slow release materials containing zinc (Zn), Molybdenum (Mo), Copper (Cu), Boron (B), and Magnesium (Mn).

Fertilizer: A commercial fertilizer for ornamental trees, shrubs and ground cover with an analysis of 10% Nitrogen, 6% Phosphorus and 4% Potassium shall be used. This fertilizer shall be granular with a minimum of 50% of the total Nitrogen in organic form. 14-14-14-Osmocote

Soil Separator: Shall be rot resistant non-woven polypropylene filter fabric, water permeable, and unaffected by freezing and thawing. Acceptable products include: Mirafi 140N, Mirafi Civil Engineering Co., or Stabilenka Type T-80, American Enka Co., Enka, N.C. K. Planter Drainage Fabric: Shall be prefabricated planter drainage fabric Miradrain 9000, a composite system consisting of a Mirafi

drainage fabric bonded to a three-dimensional highly impact-resistant plastic core. The core shall have the following attributes: Compressive Strength: (ASTM D-1621), 15,000 + PSF. Overlaps: Shall be capable of mechanically interlocking so as to prevent separation of the overlaps during backfill.

(or approved equal) shall be applied at a rate of 10 lbs. per square foot, tilled to a depth of 8 inch, shall be used for perennials.

PLANT MATERIALS: (Refer to the PLANT LIST on the drawings for specific types and quantities of plants): Plants shall be nursery grown in accordance with good horticultural practices. Plants shall either be obtained from local nurseries and/or

others, which have soil (heavy clay) and climatic conditions similar to those in the locality of the project. B. Plant material grown in sandy, well-drained soil will not be approved for this project. Plants shall be true to species and variety and unless specifically noted otherwise, all plants shall be of specimen quality, exceptionally heavy, symmetrical, tightly-knit plants, so trained or favored in their development and appearance as to be superior in form, number of branches, compactness and symmetry.

C. Plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf, free of disease, insect pests, eggs or larvae and shall have healthy, well-developed root systems. They shall be free from physical damage or any conditions that would prevent thriving health and the desired appearance.

D. Trees, which have a damaged or crooked leader, or multiple leaders, unless specified in the plant list, will be rejected. Trees with abrasion of the bark, sun scald, disfiguring knots, or pruning cuts more than 1 1/4 inch diameter which have not completely callused, will be

E. Plants shall conform to measurements specified in the plant schedules except that plants larger than specified may be used if acceptable to the Landscape Architect or owner. Use of such plants shall not increase the contract price. If larger plants are accepted, the root ball shall be sized for the larger plant. F. Caliper Measurement: Shall be taken at a point on the trunk 6 inches above natural ground line for trees up to 4 inches diameter, and at

a point 12 inches above the natural ground line for trees over 4 inches diameter. G. Plants shall be measured when branches are in the normal position. Height and spread dimensions specified refer to the main body of

the plant and not from branch tip to tip. 8. SOIL MIXING PROCEDURES:

A. Topsoil used in sand/soil mixes shall be screened or shredded prior to mixing in sands. Maximum clod inclusion for soil mixes shall

Clod size (largest dimension) % of the soil mix volume Less than 1" 20% 1 to 3 inches 3 to 6 inches

not exceed:

>6 inches B. Source material and soil mix stockpiles shall be protected from rain by covering with filter cloth.

Examine the areas and conditions where soil mix is to be installed and notify the Architect of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of

B. Cooperate with other Contractors and trades working in and adjacent to other work areas. Examine drawings which show development of entire project and become familiar with scope of other work required.

10. SOIL INSTALLATION - GENERAL PROCEDURES A. If subgrade soil compaction exceeds 80%, existing soil shall be ripped to a depth of 12 inch to alleviate compaction which has taken place during construction. Prior to loosening of soil, Contractor must locate existing utilities and coordinate with Owner any underground electric lines, drainage pipes, conduits, etc.

Prepare the subgrade by roughening the top 3" of the subsoil by dragging the teeth of a backhoe bucket across the surface. Begin soil installation as soon as subsoil is prepared. Use low impact equipment with track belts, large tires, or low tire pressure to lower compaction and soil damage during installation. Monitor compaction during installation and loosen soils as needed if compaction exceeds 80%.

Install specified soil in 12"-18" thick lifts. Compact each lift sufficiently to reduce settling but not enough to prevent the movement of water and feeder roots through the soil. The soils in each lift should feel firm to the foot in all areas and make only slight heel prints. 11. INSTALLATION OF SOIL MIX FOR LAWN AREAS ON GRADE:

A. Soil Mix for Lawns on Grade: shall consist of 10% compost and 90% topsoil, by volume. These materials must meet specifications described in Section 2.00. B. Loosen subgrade lawn areas to a minimum of 3". Remove stones more than 1-1/2" in any dimension and sticks, roots, rubbish, and

other extraneous matter. Limit preparation to areas which will be planted promptly after preparation. C. Spread soil mix for lawn areas on grade to a minimum depth of 4" as required to meet grade and elevations shown on drawings, after lightly rolling and natural settlement. Allow for sod thickness in areas to be sodded.

INSTALLATION OF SOIL MIX FOR TREE PITS ON GRADE

Confirm that native subsoil drains at a rate of at least ½" per hour. If drainage is less than ½" per hour, provide subsurface drainage

Install 30-36" of Soil Mix for Tree Pit Backfill on Grade: Shall consist of clay loam to sandy clay loam soil, sand, and composted pine bark fines at a rate of 5:5:1 to 10:5:1.5 to achieve the (a) Clay content of Soil Mix shall be 10-20% of the soil mix, by volume.

Minimum amount of coarse to medium sand in the mix shall be 55% Minimum infiltration rate at 80-85% compaction shall be 1-3 inches per hour. Composted pine bark fines shall not exceed 10% of the total soil mix by volume. Till 4" of compost into the top 6" of the installed Soil Mix for Tree Pit Backfill on Grade

INSTALLATION OF SOIL MIX FOR MULCHED SHRUB AND PERENNIAL BEDS Confirm that native subsoil drains at a rate of at least ½" per hour. If drainage is less than ½" per hour, provide subsurface drainage

Install 4" of Soil Mix for Mulched Shrub and Perennial Beds on Grade: Shall consist of clay loam to sandy clay loam soil, sand, and composted pine bark fines at a rate of 5:5:1 to 10:5:1.5 to achieve the

(a) Clay content of Soil Mix shall be 10-20% of the soil mix, by volume. Minimum amount of coarse to medium sand in the mix shall be 55% Minimum infiltration rate at 80-85% compaction shall be 1-3 inches per hour. Composted pine bark fines shall not exceed 10% of the total soil mix by volume.

Till 4" of compost into the top 6" of the installed Soil Mix for Tree Pit Backfill on Grade **INSTALLATION OF SILVA CELL PLANTING SOIL MIX:**

Soil Mix shall be installed per Manufacturer's recommendations Planting Soil Mix shall consist of Topsoil, Compost, and coarse sand mixed to the following proportion:

% by volume 12-17% 35-50% Coarse Sand

35-50% Topsoil) Ratio shall be adjusted to achieve a water permeability between 0.75 and 1.75 inches per hour when compacted to 80-85% of maximum dry density. The permeability of the allowable topsoil materials will vary the overall permeability of the final mix. Submit multiple mix ratios for permeability to establish the correct mix ratio for the available topsoil.

2) Final Mix shall have a pH between 5.5 and 6.5. Final mix shall have an organic matter content of between 3 and 5%.

INSTALLATION OF PLANTING SOIL MIX OVER STRUCTURE: Soil Mix Over Structure shall consist of 32% Topsoil, 25% Composted Pine Bark Fines, 12% Perlite, 12% Sand, and 12% Humus.

Final Mix shall have a pH of 5.5 to 6.5. Final Mix shall have an organic matter content of between 3 and 5%.

Final Mix shall contain a maximum of 55% Sand. Maximum saturated density of the mix shall be 92 lbs./ft3. Testing shall be done in accordance with ASTM C29.

Coordinate landscape fill work with installation of drains, drain pipes, waterproofing, protection board and drainage board, and filter fabric. Do not begin any backfilling operations until irrigation system specified elsewhere is installed. Do not place landscape fill until

planters have been approved by Owner and authorization to proceed has been given. Do not damage drainage system while installing soil C. Install specified soil in 12"-18" thick lifts. Compact each lift sufficiently to reduce settling but not enough to prevent the movement of

water and feeder roots through the soil. The soils in each lift should feel firm to the foot in all areas and make only slight heel prints.

D. During placement of soil mix in planters, contractor shall take great care to ensure proper drainage with said soil after placement and compaction.

16. EROSION CONTROL MATERIAL AND PLANTING ON STEEP SLOPES:

A. Material meeting the requirements of the specifications shall be installed and maintained on the designated areas as shown and specified. The areas to be covered shall be prepared and fertilized as specified before the erosion material is placed. Immediately prior to the planting operations, the material shall be laid evenly, smoothly and in contact with the soil throughout. B. Lay erosion control materials with one inch nominal openings in accordance with manufacturer's instructions. Unroll in direction of

water flow. Overlap sheets by at least 6 inches. Where strips are to be spliced lengthwise, overlap strips by 8 inches. Upgrade section shall be on top of all splices.

C. The Contractor shall maintain and protect the erosion control material until the final inspection. Maintenance shall consist of repairs made necessary by erosion, wind or any other cause. Following the restoration of damaged areas under plant and turf guarantee and establishment requirements for applicable underlying items; the erosion control material shall be repaired or replaced to meet the original requirements and maintained until the final inspection.

Excavation: Excavate all tree pits and planting areas to the width and depth shown in the planting details. Center plant in pit and orient for the best visual effect. Set plants plumb and hold rigidly in position until soil has been tamped firmly around root ball.

Mulch within 48 hours after planting and after applying the pre-emergent herbicide, except ground cover areas (which shall have organic material placed before planting) with a 2" layer of mulch immediately after planting. All bed lines shall be cut with a smooth consistent edge to a minimum depth of 3 inches. Keep mulch out of the crowns of shrubs and off buildings, sidewalks, light standards, and other structures.

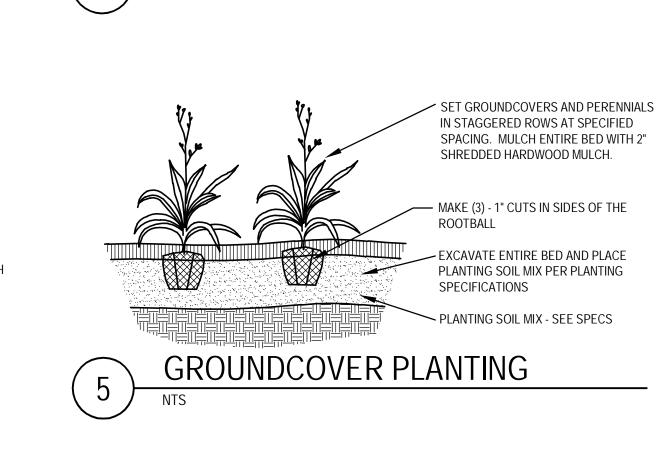
D. All planting areas to conform to specified grades after full settlement has occurred and mulch has been applied. Provide saucers around tree pits as shown on planting details. Remove all tags, labels, strings, etc. from all plants. 18. <u>Permanent Seeding or Sodding for Grass Areas</u>

Lawn Seed or Sod varieties shall be an improved variety turf-type tall fescue blend. The landscape contractor shall select from varieties approved by the Maryland or Virginia Department of Agriculture. Refer to the Virginia Erosion and Sediment Control Handbook, for guidelines, specifications and installation techniques of seed and

Maintenance shall begin immediately after each plant and lawn area is installed and shall continue until 90 days after final acceptance of the last section.

ARBORTIE AT BARK ON EACH MAJOR STEM. ALL MAJOR STEMS SHOULD BE WIRED TOGETHER. TURNBUCKLE (3), GALVANIZED SET TREE AT ORIGINAL GRADE OR UP TO 1/8 DEPTH OF ROOT BALL 2" SHREDDED HARDWOOD MULCH SOIL SAUCER: USE PREPARED TOPSOIL, 6" MIN. HARDWOOD STAKES (3) ROPES AT TOP OF BALL SHALL BE CUT. REMOVE TOP 1/2 OF BURLAP. NON-BIODEGRADABLE MATERIAL SHALL BE TOTALLY REMOVED PLANTING SOIL MIX PER PLANTING SPECIFICATIONS UNDISTURBED SOIL PEDESTAL

ORNAMENTAL TREE PLANTING



GROUNDCOVER SPACING

PLANT (TYP.)

PLANT SPACING

8" O.C.

10" O.C.

12" O.C.

18" O.C.

24" O.C.

36" O.C.

48" O.C.

ROW

' A '

6.93" O.C.

8.66" O.C.

10.4" O.C.

15.6" O.C.

20.8" O.C.

30.0" O.C.

31.5" O.C.

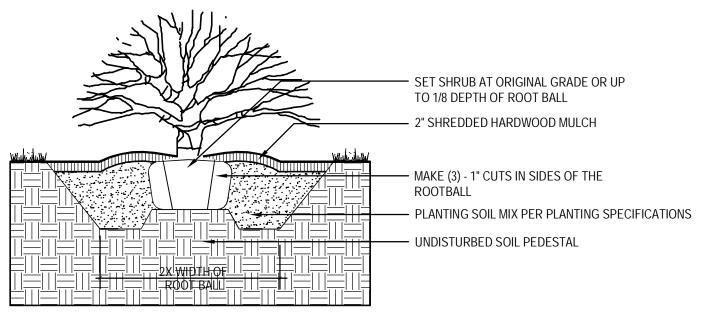
NOTE: GROUNDCOVERS AND

TRIANGULAR SPACING

PERENNIALS TO BE INSTALLED WITH

 ARBORTIE AT BARK GUY WIRES (3), WHITE FLAG ON EACH 2 STRANDS OF TWISTED GALVANIZED WIRE EACH TURNBUCKLE (3), GALVANIZED — SET TREE AT ORIGINAL GRADE OR UP TO 1/8 DEPTH OF ROOT BALL — 2" SHREDDED HARDWOOD MULCH — SOIL SAUCER: USE PREPARED SOIL, 6" MIN. ROPES AT TOP OF BALL SHALL BE CUT. REMOVE TOP 1/2 OF BURLAP. NON-BIODEGRADABLE MATERIAL SHALL BE TOTALLY REMOVED UNDISTURBED SOIL PEDESTAL

EVERGREEN TREE PLANTING



SHRUB PLANTING



SHEET NUMBER