

LANDSCAPE WORK SPECIFICATIONS:

PART 1 - GENERAL

DESCRIPTION OF WORK:

Extent of landscape work includes furnishing all materials, equipment and labor necessary for preparation of final subgrade in planting area; distribution/application of topsoil; soil treatment; planting of trees and shrubs; protection/maintenance/guarantee/replacement of plants; related items required to complete work indicated on drawings and specifications. (See Landscape Plan.)

GUARANTEES:

Guarantee trees/shrubs/evergreens for period of one year after date of acceptance, against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse/damage by others, or unusual phenomena/incidents which are beyond landscape installer's control.

Remove/replace trees, shrubs, grass or other plants found to be dead or in unhealthy condition during warranty period. Make replacements during growth season following end of warranty period. Replace trees/shrubs which are in doubtful condition at end of warranty period, unless, in opinion of Landscape Architect, it is advisable to extend warranty period for a full-growing season.

Another inspection will be conducted at end of extended warranty period, if any, to determine acceptance/rejection. Only one replacement will be required at end of guarantee period, except for losses/replacements due to failure to comply with specified requirements.

INDUSTRY STANDARDS:

Some products and execution are specified in this Section by reference to published specifications or standards of the following (with respective abbreviations used). Reference is to the latest edition of the standard referenced.

- The American Society for Testing and Materials (ASTM)
Association of Official Agricultural Chemists (AOAC)
American Association of Nurserymen (AAN)
U.S. Department of Agriculture (USDA)

SUBMITTALS:

Substitutions shall not be considered unless it can be reasonably demonstrated that material specified is or shall be unavailable within 500 miles of the site of the work at the time of installation. Landscape Architect shall authorize the nearest equivalent obtainable size/variety of plant having some essential characteristics with equitable adjustment of contract price.

Certificates: All material whose transportation requires inspection and/or certification by any governmental agency shall be accompanied by copies of certification or inspection which shall be given to a selected representative at the site at the time of delivery.

Soil PH Testing: Landscape contractor to submit a soil sample to test the current PH Level, once beds are defined and prior to any planting. The PH Level must be (5.8-6.2) and approved by the Landscape Architect prior to any plant installation.

QUALITY ASSURANCE:

General: Ship landscape materials covered and with certificates of inspection required by governing authorities. Comply with regulations applicable to landscape materials. All plant material must be "nursery grown". All plant material collected from naturalized areas will be rejected.

Soil PH: Landscape Contractor to submit a soil sample, once beds are amended and prior to planting. The PH must be correct and checked by Landscape Architect prior to any planting.

Topsoil: Provide topsoil of a type that is in compliance with Part 2 - Products of this section.

Plant List: List of plants as shown on this sheet.
Quantities: Quantities necessary to complete plantings as shown/located on drawings shall be furnished.

Trees and Shrubs: Provide trees and shrubs grown in a recognized nursery in accordance with good horticultural practice. Provide healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun-suck, injuries, abrasions, or discoloration. All shade trees to be 'A' grade trees (see detail below).

Sizes: Provide trees and shrubs of sizes shown or specified in Plant List, which are minimum acceptable sizes and shall be measured before planting with branches in normal position.

Tagging Trees: Landscape Architect reserves the right to tag specimen trees (See General Notes) at place of growth for compliance with requirements for size and quality assurance. Landscape Contractor recommended to use the following nurseries for the supply of trees:

Table with columns for Nursery Name, Phone Number, and Selected Trees.

Inspection: Landscape Architect reserves the right to inspect trees and shrubs either at place of growth or at site, for compliance with requirements for name, variety, size and quality.

DELIVERY, STORAGE AND HANDLING:
Packaged Materials: Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery, and while stored at site.

Trees, Shrubs & Transplanted Trees: Provide freshly dug trees and shrubs. Do not prune prior to delivery. Do not bend or bind trees or shrubs in such manner as to damage bark, break branches or destroy natural shape.

JOB CONDITIONS:
Irrigation System: Irrigation system to be provided by Landscape Contractor. He shall be responsible for all coordination required to install the irrigation system.

Proceed with and complete landscape work as rapidly as portions of the site become available, working within seasonal limitations for each kind of landscape work required. See "Landscape Construction Sequence."

Utilities: Determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavation, as required. Maintain grade stakes set by others until removal is mutually agreed upon by parties concerned.

Coordination with Other Work: Plant new trees and shrubs after final grades are established and prior to planting lawns, unless otherwise acceptable to Landscape Architect.

PART 2 - PRODUCTS

Topsoil: Additional topsoil to be furnished at no cost to Owner. Topsoil to be natural, fertile, friable soil, possessing characteristics of representative productive soils in vicinity, obtained from naturally well-drained areas, not excessive, alkaline nor contain toxic substances harmful to plant growth; without admixture of subsoil or sand and reasonably free from clay/lumps/stones/slump/roots or similar substances 2" or more in diameter/length which might hinder plant operations. Landscape Architect requests topsoil by Pope Sand & Gravel of Winston-Salem, PH# (910) 785-3130.

Lime: Ground limestone containing not less than 85% total carbonates (minimum 85% will pass through a 100-mesh sieve and 90% will pass through a 20-mesh sieve. Use of limes is subject to specifications.

Commercial Fertilizer: Organic fertilizer Slay Green, variety Sp-26-B or approved equivalent dry/free-flowing in original unopened containers, each bearing minimum 10% guaranteed analysis, which conforms to applicable State Fertilizer laws. Any fertilizer which becomes "granular" or "clumpy" after application, will not be accepted.

Pre-emergence Herbicide: Landscape Contractor to apply pre-emergence herbicide as per manufacturer's specifications in all plant beds prior to final mulch.

Soil Conditioner: Soil conditioner composed of fine-grained, soft, small pine bark particles of 3/8" or less, provided in prepackaged bags or approved bulk delivery.

Mulch: Contractor shall apply/replace clean double ground hardwood mulch 3" depth.

Materials for Staking Trees: Contractor shall place stakes of sound new hardwood, treated softwood or redwood, free of knot holes/defects. Provide wire ties/tyres of 2-strand twisted plastic #9-12 gage galvanized iron wire, zinc-coated turnbuckles. Provide not less than 1/2" hose, out to required lengths to protect tree trunks from damage.

PART 3 - EXECUTION

PLANTING:

Layout: Location for plants/outlines of areas to be planted are indicated on plan. Where construction and utilities below ground or overhead are encountered or where changes must be made in construction, necessary adjustments to be approved by Landscape Architect.

Soil Preparation: Soil shall be as specified; be in relatively dry state and mixed thoroughly by hand or rotary mixer. Commercial fertilizer at rate of 20%:1 shall be added. All planting beds shall be coated with approved pre-emergence weed killer according to manufacturer's specifications.

Landscape Contractor responsible for all fine grading of bermed areas. General Contractor to provide topsoil. See Landscape Plans for locations.

For planting beds, mix planting soil thoroughly prior to planting or apply on surface of topsoil. For plant beds against building foundations, soil mix shall be mixed thoroughly prior to placement.

Bal/Burrapped Plants: After final setting loosen wrappings of balled/burrapped plants and roll wrappings back from top of ball leaving soil unbroken. Cut off excessive amounts of burlap, remove sufficient quantity to eliminate creation of voids upon decomposition.

Container Grown Plants: These may be applied in lieu of balled/burrapped plants if all other specified requirements are met; plants to have grown in container for minimum of six months and maximum of two years and when delivered, have sufficient root growth to hold earth when removed from container; plants must not be root bound. Remove container in way to prevent damage to plant/roots system.

Tree Pit Sizes: Minimum diameter/depth of planting pits for balled/burrapped, bare roots and container grown plants shall be 24" greater than diameter of ball/spread of roots and trees set directly on pit bottom to prevent settlement.

Shrubs/Groundcover: All plant beds for shrubs/groundcovers to be prepared for a total depth of 9" and should consist of 1 part existing soil, 1 part topsoil and 1 part soil conditioner (see soil mix). Fill existing soil to a minimum depth of 3"; add 3" of topsoil and fill thoroughly; add 3" of pine bark soil conditioner and fill with other amendments to a total depth of 9". Entire bed to be covered with 3" of double ground hardwood mulch.

Lawn - Seeding: All unpaired disturbed areas (or lawn to be re-established), including areas to be sodded, outside planting bed to be seeded with an even mixture of Hunter, Padre, and Magellan tall fescues, or approved equal, at a rate of 5-8 lbs./1,000 sq. ft. so as to produce a thick, firm stand of grass.

Seeding dates: Aug. 20 through Oct. 25 and Feb. 1 through May.

Setting Trees: All trees to be planted according to Planting Details shown on Landscape Plans. Unless otherwise specified, all trees to be planted in pits, centered, set on unexcavated soil to depths that finished grade level of plant after settlement shall be same as that which plant was grown; plant upright and faced to give best appearance/relationship to adjacent structures; plant above grade 3/4" for every foot of ball diameter.

Pruning New Plant Material: Remove dead/broken branches from all plant material. Prune all trees/shrubs to a branch node and remove only as much foliage as necessary for neat appearance while retaining natural growth habit of plant variety.

Guying Trees: All canopy trees 2" caliper or greater shall be staked and guyed. Landscape Contractor is responsible to remove all stakes and guys at the end of the one year warranty period. See Planting/Staking Details.

Mulching: Trees/shrubs shall be mulched immediately after planting with 3" depth of double ground hardwood mulch. Mulch the area over tree rootballs to a depth no deeper than 1.5-2". Keep all mulch away from the trunk flare. If plant has existing mulch, remove old mulch before applying new mulch.

Excavated Soil: To be disposed of by Contractor at no additional expense to Owner.

MAINTENANCE: Begin immediately after planting. Maintain trees/shrubs/other plants until final acceptance. Maintain trees/shrubs/other plants by pruning, cultivating, weeding as required for healthy growth. Restore planting saucers; tighten/repair stakes and guy supports and reset trees/shrubs to proper grades/vertical position as required. Restore/replace damaged wrappings. Sprays as required to keep trees/shrubs free of insects/diseases.

CLEANUP AND PROTECTION: During landscape work keep pavements clean; work area in orderly condition; protect work/materials from damage due to landscape operations; operations by other contractors/contractors/trespassers. Maintain protection during maintenance period. Treat/repair/replace damaged landscape work as required.

INSPECTION: See "Landscape Construction Sequence" and Landscape Plans. When landscape work is completed, including maintenance, Landscape Contractor shall, upon request, make inspection to determine acceptability. Contractor work may be inspected at any time at the discretion of the Landscape Architect. Contractor shall be responsible for all maintenance, including maintenance. Where inspection indicates work does not conform to specifications, replace rejected work, continue until acceptable. Maintenance to be inspected by Landscape Architect and found to be acceptable. Remove and plants to be taken promptly from project site.

PERMANENT SOD:

All unpaired disturbed areas (or lawn to be re-established) outside planting bed to be sodded with an even mixture of Hunter, Padre, and Magellan tall fescues, or approved tall fescue blend so as to produce a thick, firm stand of grass. Do not use fertilizer sodded areas. All areas to be sodded to have appropriate soil preparations, see specifications sod shall be of good and healthy color when delivered. Sod shall be harvested and delivered within a period of 36 hours or precautions must be taken to prevent sod from drying out while in transit.

SOD PREPARATION:

- 1. Remove any undesirable ground covers including any temporary seeding.
2. Rip the area to be sodded to a min. Depth of 4"-6".
3. Remove all loose rocks, roots, etc. Leaving surface smooth and uniform.
4. Prepare sod base as per A.A.N. standards
5. Apply sod and immediately stake/lift off all new lawn areas from pedestrian and vehicles for a period of 3 weeks.
6. Irrigate sodded areas for the 3 week period.

GENERAL LANDSCAPE NOTES:

- 1. General Contractor to use licensed Landscape Contractors with Landscape Architect prior to bidding. Bids using Landscape Contractors not pre-approved will not be considered.

Landscape Contractor to:

- 1. Follow landscape construction sequence.
2. Contact General Contractor prior to submitting bid to verify any phasing of planting areas.
3. Fine grade all grass and planting areas disturbed during construction. Remove from site all temporary seeding/stabilization, stones, gravel and all extraneous debris including roots and limbs prior to sodding/seeding. When fine grading insure that positive drainage is occurring.
4. Till and amend all plant beds as required in specifications. Apply pre-emergence herbicide per manufacturer's specifications in all plant beds prior to any planting. Cover entire bed with a 3" min. Clean mulch immediately after planting. Site mulch to be clean double ground hardwood mulch except for plant beds at the public doors--use mini-pine bark nuggets.
5. Bring to the attention of the Landscape Architect any debris or poor soils remaining in parking lot islands after general construction and prior to planting.
6. Verify all underground utilities prior to installation of any plant materials. Utilities shown on plan are for reference only and may not be all inclusive. See General Contractor for as-built drawings for all underground utilities.
7. Provide 3" diameter mulch rings for all trees in grass areas.
8. Insure that all free tree mulch rings are a minimum of 2.0' from the edges of shrub beds/stakes.
9. Neatly edge all plant bed/edges borders with a straight 1/2" cut edge.
10. Insure all trees of same variety match in shape and size where they are to be installed in rows or as street trees.
11. Obtain authorization prior to any changes of plant location due to utilities or other factors.
12. Protect all existing structures (i.e. Curb and gutter, pavement, etc.) during installation of large trees and other plants.
13. Prior to seeding, verify that all brooding and other landscaping activities in areas to be seeded have been completed.

PERMANENT SEEDING:

All unpaired disturbed areas (or lawn to be re-established) outside planting bed to be seeded with an even mixture of Hunter, Padre, and Magellan tall fescues, or approved equal, at a rate of 5-8 lbs./1,000 sq. ft. so as to produce a thick, firm stand of grass. Fertilize at a rate of 10 lbs./1,000 sq. ft. with 10-10-10 slow-release fertilizer (use straw and asphalt emulsion to cover seed until stable). Apply lime according to soil test, or apply 4,000 lbs./acre slow-release pelletized agricultural limestone.

Seeding dates: Aug. 20 through Oct. 25 and Feb. 1 through May.

SEEDBED PREPARATION:

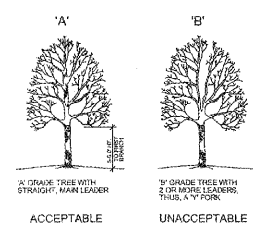
- 1. Remove any undesirable ground covers including any temporary seeding.
2. Rip the area to be seeded to a min. Depth of 4"-6".
3. Remove all loose rocks, roots, etc. Leaving surface smooth and uniform.
4. Apply seed, agricultural lime, and fertilizer uniformly and mix with the soil.
5. Mulch immediately after seeding and anchor mulch.

LANDSCAPE CONSTRUCTION SEQUENCE:

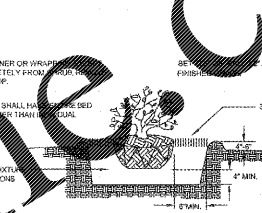
- Landscape Contractor to:
1. Visit site after authorization by General Contractor to begin, and assess/inspect condition of site prior to any planting.
2. Coordinate irrigation system installation, including all sleeve/wiring, with General Contractor during grading phase of work.
3. Stake and fill entire plant beds and include fertilizer, pre-emergence herbicides and soil mix per specifications.
4. Transport all plants to site covered. Any plants damaged during or prior to shipping to the site will not be accepted.
5. Contact Architect for approval/initial of all plant beds and plant stock prior to installation.
6. Proceed according to planting plan upon approval by Architect of plants and plant bed staking and preparation.
7. Contact Architect, upon completion of work, for final approval of work.
8. Make necessary adjustments for approval. Landscape Contractor responsible for contacting the G.C. to set a meeting to review the punch items.
9. Maintain all plant material according to specifications/warranty.
10. Immediately remove/replace any dead or dying plants during warranty period.

SPECIAL CONDITIONS:

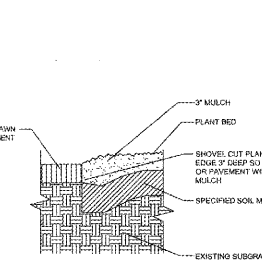
- 1. Landscape contractor is responsible for coordinating a "site acceptance inspection" with the owner, General Contractor and Architect prior to start of construction.
2. Landscape contractor to submit a soil sample, once beds are amended and prior to planting. The pH must be correct and checked by Landscape Architect prior to any planting.
3. Landscape contractor is responsible for providing topsoil in traffic islands so there is a crown of 10-12" at the center of each island.
4. All canopy trees 2" caliper or greater shall be staked and guyed. Landscape contractor is responsible to remove all stakes and guys at the end of the one year warranty period.
5. All free-form and multi-stem trees to have multiple trunks (min 3 each) and be linked up a min. of 3.0'. All large canopy trees to have the height of their first branches 5-6' above ground. All columns and single story trees to have the height of their first branches 4-5' above ground.
6. Soil mix for all perennial areas to be 6" thick "mini-mix" from Southern Agricultural Fertilizer, States, NC (1-800-477-8843).
7. All perennial areas (i.e. Stella Crano daylilies) to be mulched with mini-pine bark nuggets. Plant beds at public doors to be mulched with mini-pine bark nuggets.



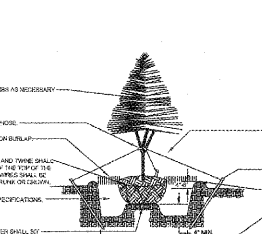
'A' AND 'B' GRADE TREES NO SCALE



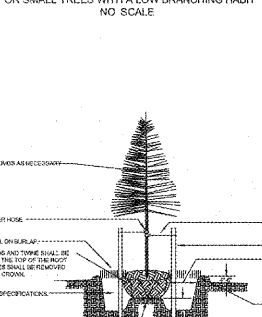
SHRUB PLANTING DETAIL NO SCALE



MULCH EDGE @ LAWN OR PAVEMENT NO SCALE



TREE PLANTING DETAIL FOR SMALL TREES WITH A LOW BRANCHING HABIT NO SCALE



TREE PLANTING DETAIL FOR TREES 1 1/2\"/>

SOIL MIX (SEE SPECS.):

One part existing soil / One part topsoil / One part pine bark soil conditioner
Planting bed depth to be a minimum of 9"

SOIL PREPARATION:

- 1. Prepare all shrub beds to a total depth of 9"
2. Rip existing subsurface soil to a minimum 3" depth.
3. Add 3" of topsoil and fill with existing soil.
4. Add 3" of pine bark soil conditioner and fill thoroughly with other amendments.



Stimmel Architecture & Engineering logo and contact information.

Professional Engineer Seal for Stimmel, North Carolina, License No. C-69.

Table for recording date, time, and initials for the seal.

SAM'S XPRESS logo and address information.

Address and contact information for SAM'S XPRESS CAR WASH.

Table for recording dates and initials for the specifications.