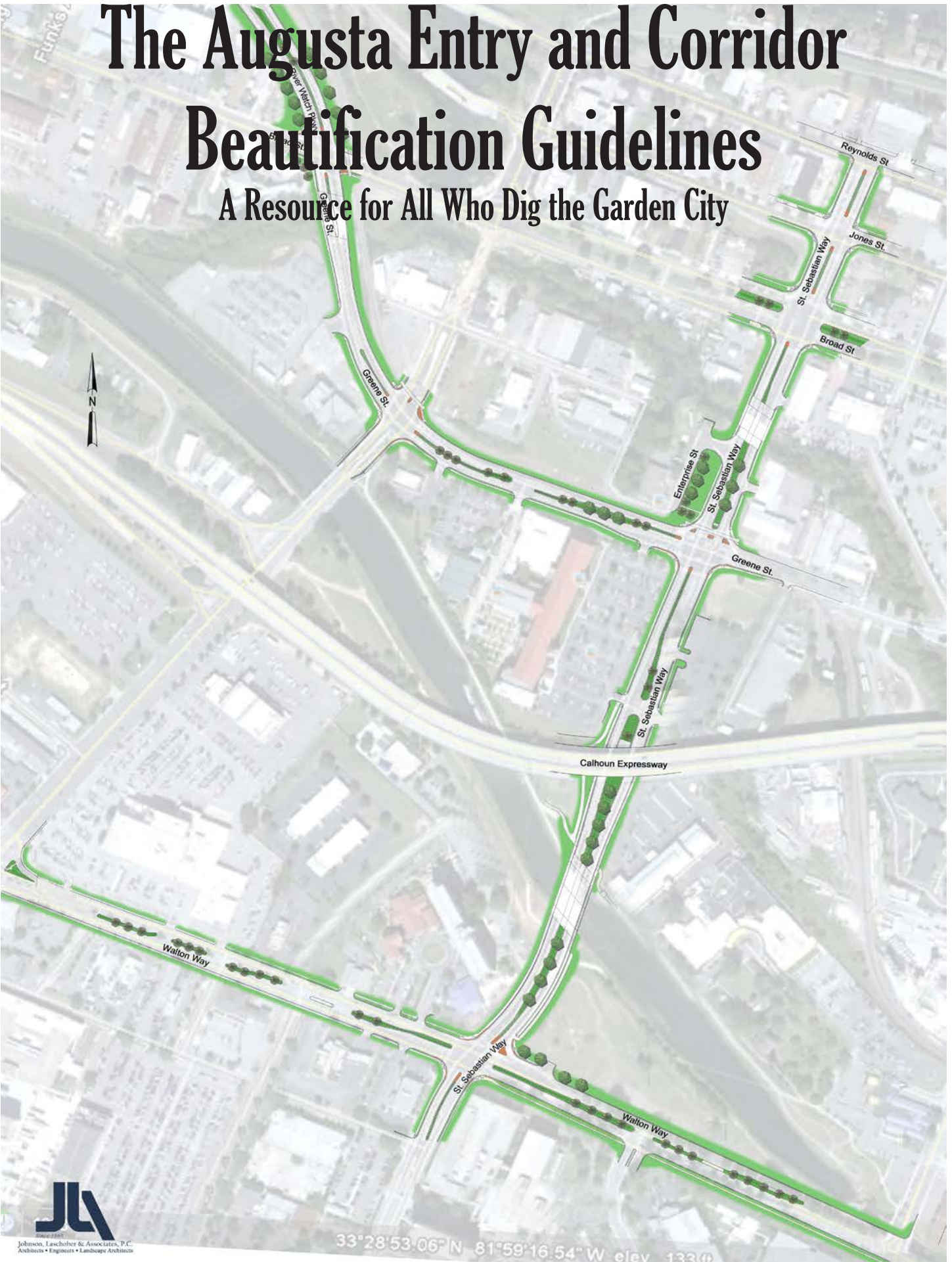
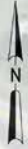


The Augusta Entry and Corridor Beautification Guidelines

A Resource for All Who Dig the Garden City



Johnson, Lorchel & Associates, P.C.
Architects • Engineers • Landscape Architects

33°28'53.06" N 81°59'16.54" W elev 133 ft

The Augusta Entry and Corridor Beautification Guidelines

A Resource for All Who Dig the Garden City

Sponsored by the Augusta Convention and Visitors Bureau and Augusta-Richmond County

Written by Johnson, Laschober, and Associates, P.C.

June 2013

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Definitions:

Contractor- The contractor shall be defined as the party who enters into a contractual agreement put forth by another entity.

The City- The city, as used herein, shall refer to the Augusta, Georgia municipal government.

Landscape Architect-Landscape architect as used herein shall refer to a professional licensed as a landscape architect by the state of Georgia. The landscape architect shall be the principal party involved in the design of any Beautification project.

Contract-Shall refer to a written agreement between two parties involved in an Augusta beautification project, that is intended to be enforceable by law.

Corridor- A corridor shall refer to any thoroughfare including immediate surrounding buildings, parcels, views, etc. determined to be of specific importance to the image of the city by the Augusta Beautification Committee.

Design Phase-The design phase of a project, as specified herein, will include all project related activities between procurement of a Landscape Architect and the beginning of construction. Design Phase includes project development, design documents, construction documents, and permitting.

Construction Phase-Construction phase, as specified herein, will include all activity between procurement of a Construction Contractor and Final Completion of Construction according to the contract.

Maintenance Phase-The maintenance phase as specified herein will include the continuing maintenance of the project by a professional landscape maintenance company for the lifespan of the project.

Right of Way (R/W)-Right of way shall refer to the legal right, established by usage or grant, to pass along a specific route through property belonging to another.

Beauty Spot-A beauty spot as referred to herein shall be a small area meant to bring emphasis to an area or create an impact on passers-by. Beauty spots will be typified by more complex design and may be designed independently or as part of a corridor.

Groundcover- A groundcover as described herein shall refer to any low growing grass, vine, or shrub that is intended to completely cover the area in which it is planted. Such plants will often be low and wide, or of a creeping or spreading variety.

Hardscape- Hardscape shall refer to any non landscaped area within the scope of the design. Typically, hardscape will be poured concrete, concrete or clay pavers, or asphalt. Concrete and asphalt hardscape elements may have color added, be stamped, or be formed to create a more visually appealing design.

Xeric- Xeric, as referred to herein shall be defined as a descriptor of any low water use area.

Sponsor- Sponsor, only as referred to herein, as a part of the Augusta Beautification Agreement, shall refer to the Augusta Georgia municipal government.

Company-The Company, only as referred to herein, as a part of the Augusta Beautification Agreement, shall refer to the party who enters into an agreement with the city under the Augusta Beautification Agreement Program.

Purpose

The purpose is three fold: to beautify the Garden City, to welcome visitors to our city and make a positive first impression by creating positive experiences, and finally to differentiate between different corridors and districts to build a sense of place and reinforce local character.

Applicability

This code shall apply to all new roadway construction, existing landscape improvements and all development projects within a designated Entryway Corridor. Variances shall be requested through the Augusta Beautification Committee by contacting Augusta Georgia Planning and Development Department.

Planned Gateways & Corridors:

The following areas have been identified by the City of Augusta for beautification initiatives:

Gateways:

- Riverwatch Parkway at Alexander Drive
- Doug Bernard Parkway at Bobby Jones Expressway (extending from Bobby Jones to the airport and to the Gordon Highway intersection which is included)
- Sandbar Ferry Road at Bobby Jones Expressway

Secondary Gateways:

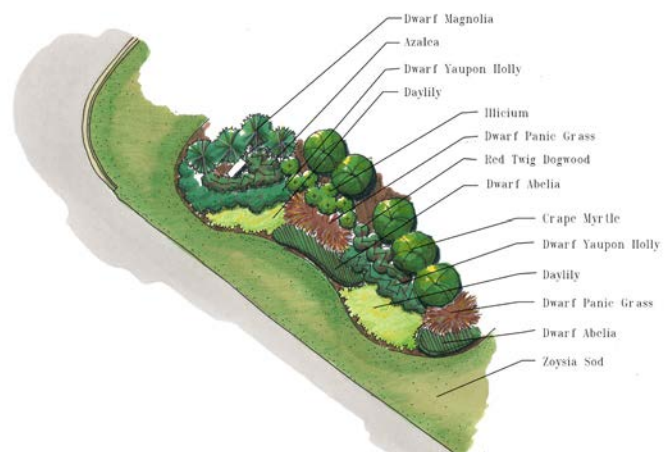
- Wheeler Road at I-20 (Established and maintained by Wheeler Rd businesses)
- Alexander Drive (Established and maintained by Barry Storey)
- St. Sebastian Way (Established and maintained by area businesses)
- Gordon Highway east of Bobby Jones Expressway (Established and maintained by the Gordon Highway Development Committee)
- Deans Bridge Road & Gordon Highway



Augusta Beautification project before landscape construction.



Augusta Beautification project after landscape construction.



Proposed Beautification Project Rendering

Interstate Interchanges (subject to GDOT approval)

- Washington Road at I-20
- Riverwatch Parkway at I-20
- Deans Bridge Road at I-520
- Doug Bernard Parkway at I-520
- Gordon Highway at I-520

Other area of interest may arise as further development increases – or as targeted by private groups or city departments.

Starting the Process

Projects can be established in a variety of ways by private donors, civic groups, organizations, businesses, or by a branch of the Augusta Georgia municipal government.

Common means of project establishment are as follows:

- Garden City Improvement/Augusta Beautification as clearing house/first stop for municipal or private projects
- Road Construction Projects will necessitate a review for landscape opportunities while in concept phase, in order to better plan available landscape space.
- Projects may be initiated by the City or by stakeholders through this process.

See Augusta Beautification Approval Process for information on how to initiate a project below. Augusta Beautification Agreement is attached as an exhibit.

“AUGUSTA BEAUTIFICATION APPROVAL PROCESS” (For Private Parties)

1. The Company/Organization selects an area to be considered for landscaping.
2. The Company/Organization contacts the Augusta Richmond County Planning Commission to obtain approval for the site selected, the program requirements and agreement documents.
3. The Company/Organization provides a detailed landscaping and maintenance plan to Augusta Georgia Planning Commission which will be reviewed by the Augusta Beautification Oversight Committee*. The landscaping plan must be prepared or reviewed by a Registered Landscape Architect and include plant material types, size and requested locations in accordance with the Augusta Beautification Standards. The maintenance plan includes an estimated annual maintenance cost, plan for funding, length of commitment, and contact information of the party committing to maintain the area.
4. The Company/Organization provides proof of insurance as follows:
 - A. Worker’s Compensation - Certificate of Insurance
 - B. General Liability Insurance - \$1,000,000 minimum coverage
 - C. Automobile Insurance - \$500,000 minimum coverage
5. The Company/Organization is notified of required revisions and/or approval of plan.
6. The Company/Organization signs and submits five (5) copies of Augusta Beautification Program Agreement to the City Law Department. The CEO/President and Corporate Secretary must sign all documents. The Company/Organization’s Corporate Seal must be affixed. The Mayor executes the agreement.
7. Installation may begin. (Pending all necessary plan approvals have been accepted.)

*The Augusta Beautification Committee consists of representatives from the Augusta Richmond County Planning Commission, Traffic & Engineering, Parks & Recreation, and the Augusta Convention & Visitors Bureau.”



Major arterials are the most restricted regarding planting design and irrigation.



Minor arterials offer many opportunities for high impact design.



Local streets offer opportunity for civic groups and homeowners to join in the beautification effort.

Design Procurement

Projects initiated by the City will follow the standard practice for project procurement. Privately initiated projects with the City as a donor will require the submission of a minimum of three bids. Fully privately funded jobs are free to use any procurement means the owner desires.

All Augusta Beautification projects shall be designed by a Georgia licensed Landscape Architect only.

Design Process

Roadway classification will have a direct correlation with the design character and maintenance requirements for any project. Corridors that receive the most traffic will be more complex in design character and require more frequent maintenance than lesser traveled ways. All corridors and entry ways will receive enhanced maintenance in late March and early April. Augusta Beautification Committee will classify each project and reserves the right to re-classify as it sees fit.

Roadway Classifications

- Major arterials will be defined as any roadway with more than 4 lanes, with limited access, and divided medians.
- Minor arterials will be defined as any roadway with 4 lanes, divided roadway, and limited access.
- Collector streets shall be defined as those unrestricted access roadways with more than two lanes.
- Local streets will be defined as those unrestricted access roads with only 2 lanes.

Right of Way Ownership Implications

Georgia Department of Transportation (GDOT) Right of Way (R/W)

For projects or parts of projects which are on GDOT R/W see the attached “Policy for Landscaping and Enhancements on GDOT Right of Way”.

Augusta, Georgia R/W

Follow the above mentioned GDOT guideline for any items not addressed, in this book of standards.

Many of the planting limitations and irrigation restrictions from the GDOT Guideline are not required for medians and roadway shoulders within ARC Right of Way. Please contact the Augusta Traffic Engineering Department for further clarity.

Typical design characterization

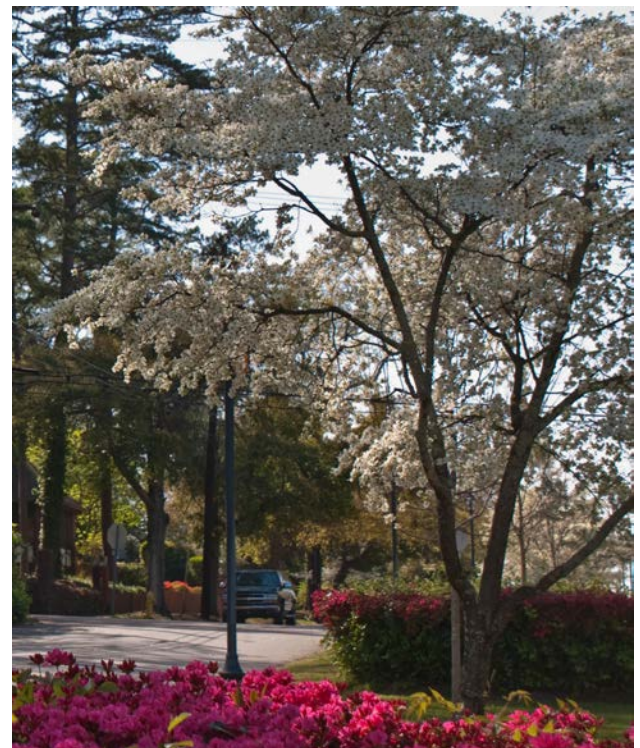
The typical Augusta Georgia gateway design will be representative of the city in its character and composition. Traditional plants of the southern garden will be prominently featured in each project and accompanied by hardy plants that both complement the southern palette and thrive in the heat of summer. Plantings should be designed to provide year round interest, with particular attention paid to providing impact from late March to early April. Plantings should favor the southern garden style where possible. Ornamental heavy plant combinations should be paired with tidy edges of sod, groundcovers, or mulch. Projects should be designed for ease of maintenance.

Expected Project Life

- Projects should be designed to provide a minimum 50 year project life. The use of appropriate plant material and irrigation equipment will help to extend the project's lifetime. Assume a minimum 10 year cyclical refurbishment period for major maintenance, such as seasonal bed soil replenishment, major tree pruning, major irrigation maintenance, and sub-surface drainage maintenance.



Using hardy plant material is necessary to maintain a beautiful project year round.



But here garden plants should be prominent in any Augusta Beautification Project.

Median Type	Description	Design and Technical Directions
Narrow	Medians 6' in width or less	<p>Concrete recommended as standard material: basic City standard is poured in place concrete curbs with broom finish between curbs; where stamped colored concrete has been used in nearby medians on the same arterial, its use should be continued</p> <p>Special area guideline pavement should be used in place of standards where applicable</p>
Beauty Spot/Gateway	Sections of medians and shoulders at key intersections and gateway points that function to announce arrival at an important place along an arterial corridor	<p>Medians designed to integrate with area-specific streetscape design guidelines</p> <p>Well detailed and higher quality materials due to high levels of importance</p> <p>Median trees selected to coordinate with street trees</p> <p>Banners, entry signage, gateway elements, public art, special lighting (only where coordinated by Engineering).</p> <p>Area-specific entry signage/bollards used to announce median where approved by Engineering.</p> <p>Standard median signage shall be from Augusta Convention and Visitors Bureau "City of Augusta Wayfinding and Welcome Signage" Program</p>
Town/Neighborhood Center	Designated areas for intensive pedestrian-oriented commercial, mixed use and civic development Medians designed to integrate with area-specific streetscape design guidelines.	<p>Well detailed due to high levels of pedestrian activity.</p> <p>Trees selected to match street trees with emphasis on growing conditions for tree health and longevity to maximize greening, including use of structural soils under paved areas such as pedestrian crosswalk to prevent roots from breaking and heaving crosswalk.</p> <p>Trees generally planted on centerline of median to minimize impacts on sightlines to commercial storefronts/signage.</p> <p>Medians designed to support pedestrian safety and traffic calming.</p>

Median Type	Description	Design and Technical Directions
Commercial Corridor/ Business Park	<p>Arterial road with concentration of commercial land uses with primarily vehicular rather than pedestrian orientation</p> <p>Medians designed to provide continuity and identity to the corridor.</p>	<p>Standard level of detail due to comparatively low levels of pedestrian activity.</p> <p>Standard hardscape treatment where no area-specific guidelines exist.</p> <p>Emphasis on greening through use of trees and mass plantings of shrubs/groundcover</p> <p>Trees generally planted on centerline of median to minimize impacts on sightlines to commercial storefronts/signage.</p> <p>Minimize vehicular crossings of median to maximize greening opportunities.</p>
Residential Corridor	<p>Arterial road with concentration of residential land uses, especially where residences have entries related to the fronting arterial Multifamily to single family residential land use character should be reinforced by median treatment.</p>	<p>Vehicular crossings of median should be minimized in order to maximize greening opportunities.</p> <p>Median lighting is warranted in order to minimize light impacts on residential uses; no banners</p> <p>Informal plantings to maximize greening, to communicate a residential character, and to create strong contrast with commercial corridors.</p> <p>Groupings of different tree species either on centerline or staggered as width permits; use of areas of spring bulbs; use of accent areas of flowering shrubs/groundcovers, particularly near intersections or other focal points.</p> <p>Plant selection from drought tolerant species related to a residential plant palette, including grasses and common roses.</p>

Median Type	Description	Design and Technical Directions
Park Open Space Corridor	Major park and intersections with major greenway corridors	<p>Medians should be planted to compliment the character of major parks – from urban to naturalized treatments.</p> <p>Consideration should be given to avoiding medians within major park , especially park that are treated as forest areas in favor of minimizing the overall width of the developed road right-of-way since green space at the road edge is substantially higher value as part of the urban forest than a median.</p> <p>Greenway crossings of arterials should be announced and facilitated by the median treatment on a case by case basis –potential design details could include pedestrian crosswalk , bollards for refuge and visual cues for motorist, signage or banners.</p> <p>Use native species consistent with the ecology of the area to increase habitat values associated with the nearby green space.</p> <p>Heritage Area (Cultural and Natural) Medians at places of heritage significance, including buildings on the Heritage Register, intersections of heritage roads Special features or planting in the median should complement and assist in the interpretation of heritage features –potential details include signage, pole-mounted banners, placement of an appropriate artifact in the median (historic farm machine at a heritage farmstead), historic plant materials (flowering fruit trees).</p>
Rural/Agricultural Corridor	Generally medians are not required	<p>Medians should be planted with simple mass plantings that suit the adjacent cultural landscape character; rural residential should use a residential plant palette; agricultural uses should generally have a row of trees with one consistent groundcover species.</p>

Median and Non-Median General Characteristics

- The Augusta Beautification Committee reserves the right to establish the classification of any project or portion of a project as xeric or non-xeric.

Xeric Landscapes

- In a xeric median, the plants are to be drought resistant and will only be watered until establishment. Xeric medians will have similar character to Non-xeric medians where possible. Turf grasses will not be used in xeric medians due to high water requirement. Ground cover or mulch will serve as the main field of the median.
- Xeric medians will be best suited with native and hardy plant materials.

Non-Xeric Landscapes

- In non-xeric medians, irrigation shall be installed and equipped with smart controller technology. Calsense brand of controller is the system in use by Augusta, Georgia. Turf grass is acceptable in non-xeric medians.

Plant Usage by Plant Type

Grass/Groundcover

Spacing

- Groundcover should be installed and spaced to achieve full continuous plant mass in two years and at no greater than 3' O.C. See GDOT guide.

Use

- Groundcover shall be used as the lowest layer of plant material within bed lines where turf is included in the design. In some instances (xeriscaping, low water or low maintenance zones), groundcovers may be used curb to curb as the field in which the planting beds are established.

Location

- Groundcovers will be used to reinforce gradual height changes leading the eye upward between turf and shrubs or trees. Groundcover may also be used in any location that cannot sustain grass or cannot be mowed.



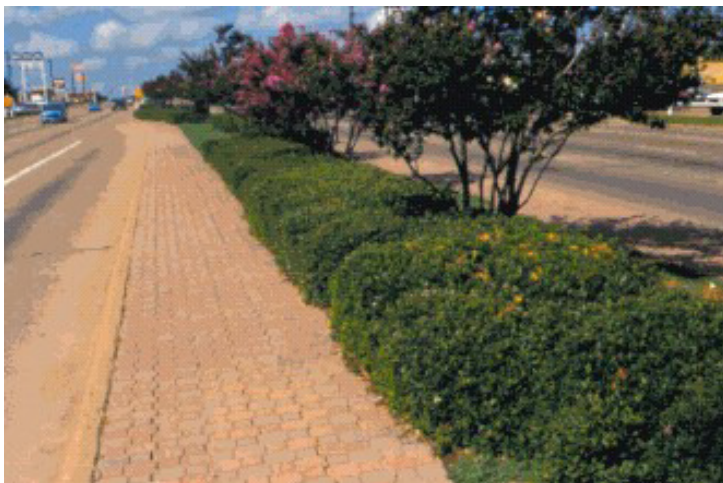
Xeric landscapes are composed of plants that require very little water after establishment.



Non-Xeric Landscapes require irrigation to perform at peak condition.



Where grass is not used, groundcovers become the main ground level element.



Spacing shrubs for mature size helps prevent looking overgrown and decreases likelihood of disease.



Clonal plant varieties are preferred due to consistency of character and performance from plant to plant.



Large trees can be used quite effectively to frame a space and create enclosure.

Shrubs

Spacing

- Shrubs shall be spaced according to mature size. Small shrubs can be placed 3'-5' apart, while large shrubs will generally be installed at 5'-8' O.C.

Use

- Shrubs should be used to create year round interest in the design. With the appropriate mix of evergreen and deciduous plants with unique flower color and foliage texture, the project can provide interest all year round.

Location

- Shrubs function as the main eye level accompaniment to the trees which will usually define the space above. In the case where trees are not allowed, large shrubs may function as the predominant space defining element and may be used like trees with medium and small shrub accompaniment.

Large Trees

Spacing

- As a rule of thumb, large shade trees may be planted at 40' O.C. in linear projects. In some instances (i.e. high speed corridors) larger spacing is acceptable, but should under no circumstance exceed 60' O.C.

Use

- Clonal varieties of large native trees shall be specified where possible.
- Trees will be used as the spine of all linear projects and set the tone of the corridor. Trees will be used to reduce heat island effect by shading roadways, to break up expansive stretches of median by introducing rhythm and pattern, as well as to frame views and create focal points.
- Trees form an implied barrier creating separate spaces. Median trees divide the roadway into two spaces while trees on the curb or shoulder can envelope the whole roadway as one space with "walls" on either side.

Location

- In general, trees will be planted centrally in linear projects (setback restrictions apply in medians). Incorporate trees throughout the project area to form spaces and focal points.

Small Trees

Spacing

- As a rule of thumb, small trees shall be spaced at 20'-30' O.C.

Use

- Small trees function in a role that is a hybrid between the space defining large tree and the interest of flowering shrubs. Small trees can function as either, in order to provide the perfect complement or transition between the shrub and large tree.

Location

- In general, trees will be planted centrally in linear projects (setback restrictions apply in medians). Incorporate trees throughout the project area to form spaces and focal points.

Seasonal Color

Spacing

- Seasonal color shall be the responsibility of the organization/company to install as needed in order to keep vibrant annuals in bloom all year long. Plants shall be spaced so that at maturity of plants the seasonal bed will be completely covered in continuous vegetation.

Use

- Seasonal color shall make up a minimal amount of the total landscaped area. Use shall be to provide an impact upon approaching a landscaped median. Pops of color and interesting foliage texture combinations are encouraged.

Location

- Locate to make an impact as people first approach the project or corridor.

Care should be taken to minimize or prevent new plantings of any type within the root zone of established trees.



Small trees often offer added visual impact through flowering or fall color.



Seasonal color should be used to create visual impact with a small footprint.



In order to limit large scale losses, the amount of unproven plants in each project will be limited.



The theme tree will be the predominant reoccurring design component and set the character of the project.



Dark brown double hammered hardwood bark mulch shall be the preferred mulch used in all beds.

Recommended Plant Type Ratios

The Augusta Beautification Committee reserves the right to determine the theme plant species of any corridor or project.

- No more than 25% of the total plant material (by area) proposed for a project shall be azaleas.
- No more than 20% of the total plant material proposed for a project shall be deciduous plant material by area (Excluding trees).
- No less than 60% of total trees proposed for a project shall be large trees.
- A theme tree/shrub combination shall be established for every project or corridor. Approximately 60% of any plant category (large tree, small tree, flowering shrub) will be of the theme species for the project. Any project completed as a continuation of an established project, or proposed in a corridor with an established theme tree/shrub combination shall not vary the theme tree.
- A maximum of 2 plant types per project, which have not been proven in Garden City Improvement previous project or included in initial Guideline plant palette, may be used in a new project. Unproven plant material is not to exceed 10% total project plant material by area.
- No invasive exotic species as defined by the Georgia Exotic Pest Plant Council shall be specified for installation in any project.

Mulch

- All mulch used in beautification projects shall be organic in nature. No stone or synthetic mulch shall be used.
- Preferred mulch materials are double hammered hardwood bark mulch or long leaf pine straw. If artificial color is to be used, mulch should be naturally colored in brown hues. No black or red mulches will be accepted.
- Mulch shall be installed between 2"-4" thick and shall be replaced as needed and at minimum twice per year.
- No mulch shall be installed immediately around base of plants. See planting details.

Median Specific Characteristics

Design with experiential progression in mind.

- Create multiple groups of complementary plant materials (Group A, Group B, Group C). Begin to establish patterns by alternating plant groups (aba- aba, aba-aca-aba, etc.). Multiple plant groupings and establishment of perceptible patterns are particularly important on long linear projects. A break in the pattern can be used to create a focal point or emphasis.

- Design with speed and scale in mind.

Lengthen plant groups and individual spacing of major design elements on high speed corridors.

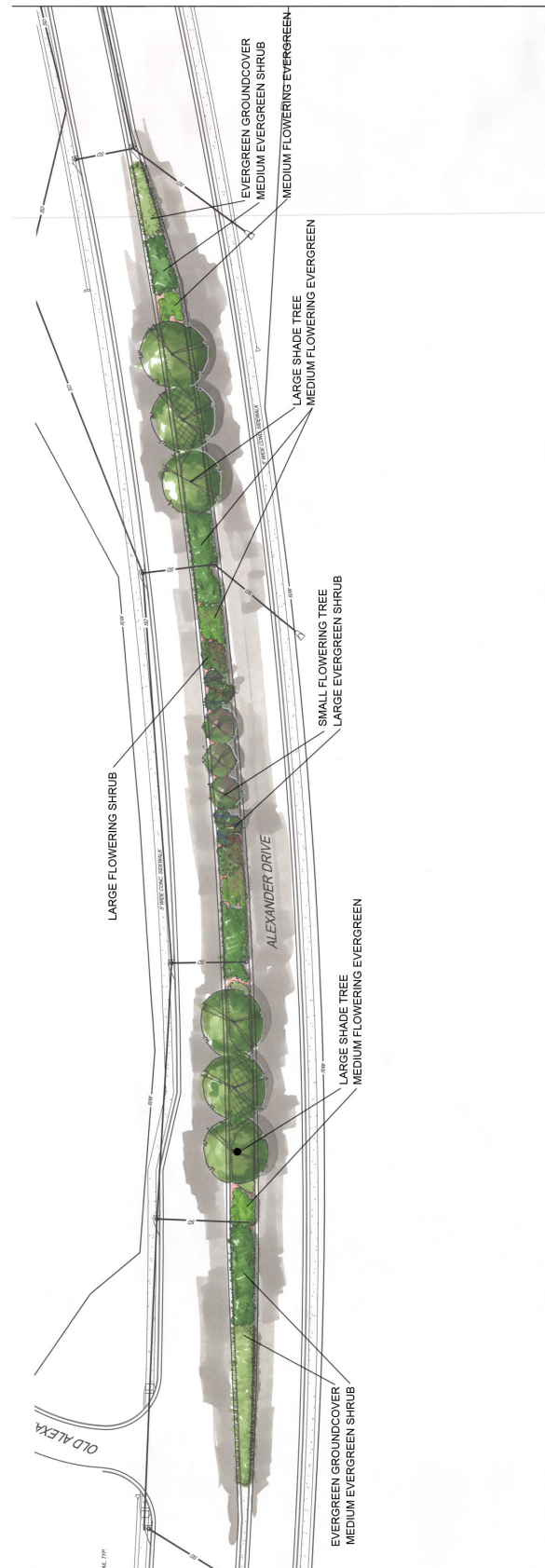
- Use the ends and center of projects to create an impacting experience. Medians will be experienced from both sides by users traveling in opposite directions. Be sure to account for direction of travel and whether travelers are entering or leaving the city.

Design based on median width

- Median widths < 15' wide may not receive a tree that matures at larger than 4" in caliper. See GDOT guide.
- Median widths 15'-35' wide shall have one row of trees max.
- Median widths 35'+ may have multiple rows of trees.

Narrow medians

- Construction of medians less than 6' wide should be avoided where possible.
- Landscape medians should not be less than 8' wide.
- Medians less than 8' wide should be addressed with approved hardscape material. Clay pavers or stamped/stained concrete are preferred. Clay/brick pavers are not allowed in GDOT R/W.



Repeating similar elements throughout the design corridor help to create both variety and unity.



Pavers installed in a narrow median restrained by concrete curb



Paver joints shall be swept with polymeric sand to prevent weed growth and overall maintenance required.

Pavers

- When pavers are used in a project, they shall be set on a 4" graded aggregate base course and graded to provide positive drainage.
- Joints shall be swept with polymeric sand and surface treated with pre-emergent herbicide immediately following installation.
- Where pavers are installed adjacent to a curb, surface of pavers should be installed flush with top of curb. A 1/2" pre-formed expansion joint shall be provided at curb paver interface. Metal or masonry edge restraint shall be used where edge of paver area is not bound by a structural element.
- Paver color shall be determined by pre-existing materials within corridor or established design pattern for gateway or corridor.
- No debris or liquid waste from masonry or other construction shall be placed or disposed of in proposed planting areas or area existing plants.

Plant Palette

Botanical Name	Common Name	Min.S ize Installed	Xeric
Large Trees			
Acer buergerianum ‘Valynor’	Trident Maple	4” CAL	YES
Nyssa sylvatica ‘Wildfire’ or ‘Green Gable’	Black Gum	4” CAL	YES
Quercus hemisphaerica	Darlington Oak	4” CAL	
Quercus phellos ‘Hightower’	Hightower Willow Oak	4” CAL	
Taxodium distichum	Bald Cypress	4” CAL	YES
Ulmus parvifolia ‘Bosque’	Lacebark Elm	4” CAL	
Ulmus americana ‘Princeton’	American Elm	4” CAL	
Ginkgo biloba	Ginkgo	4” CAL	
Small Trees			
Acer griseum	Paper Bark Maple	10’-12’ B&B	
Chionanthus virginicus	Fringe Tree	10’-12’ B&B	YES
Juniperus virginiana	Eastern Red Cedar	10’-12’ B&B	YES
Lagerstroemia sp.	Crape Myrtle	10’-12’ B&B	YES
Magnolia grandiflora ‘Alta’ or ‘Little Gem’	Dwarf Southern Magnolia	10’-12’ B&B	
Prunus x yeodensis	Yoshino Cherry	10’-12’ B&B	
Large Shrubs			
Azealea indica ‘G.G. Gerbing’ or ‘George Tabor’	Indica azalea	7 GAL	
Camellia japonica	Japonica Camellia	7 GAL	
Forsythia x intermedia	Golden Bells	7 GAL	
Ilex x ‘Nellie R. Stevens’	Nellie R. Steven’s Holly	7 GAL	
Ilex x ‘Savannah’	Savannah Holly	7 GAL	YES
Illicium parviflora	Anise tree	7 GAL	
Loropetalum ‘Burgundy’	Burgundy Loropetalum	7 GAL	
Myrica cerifera	Southern Wax Myrtle	7 GAL	YES
Osmanthus fragrans	Fragrant Tea Olive	7 GAL	
Viburnum tinus	Laurestinus	7 GAL	YES
Vitex agnus-castus	Chaste Tree	7 GAL	

Botanical Name	Common Name	Min. Size Installed	Xeric
Small Shrubs			
Abelia grandiflora	Dwarf Abelia	3 GAL	
Azalea x 'Encore'	Encore Azalea	3 GAL	
Berberis thunbergii sp.	Japanese Barberry	3 GAL	
Ilex cornuta	Carissa Holly	3 GAL	YES
Ilex vomitoria 'Nana'	Dwarf Yaupon Holly	3 GAL	YES
Loropetalum chinensis 'Emerald Snow'	Emerald Snow Loropetalum	3 GAL	
Loropetalum chinensis 'Ever Red Sunset'	Ever Red Sunset Loropetalum	3 GAL	
Panicum virgatum	Panic Grass	3 GAL	YES
Pennisetum alopecuroides	Hameln's Dwarf Fountain Grass	3 GAL	
Raphiolepis indica	Indian Hawthorne	3 GAL	YES
Raphiolepis umbellata 'Minor'	Dwarf Yedda Hawthorne	3 GAL	YES
Rosa x Knockout	Knockout Rose	3 GAL	YES
Groundcover			
Hemerocallis sp.	Daylily	1 GAL	YES
Juniperus sp.	Juniper	1 GAL	YES
Liriope sp.	Lilyturf	1 GAL	
Loropetalum chinensis 'Daruma Dwarf' or 'Peacock'	Dwarf Daruma or Purple Pixie Loropetalum	1 GAL	YES
Trachelospermum asiaticum	Asiatic Jasmine	1 GAL	YES
Gardenia x 'Radicans'	Dwarf Gardenia	1 GAL	
Veronica peduncularis 'Georgia Blue'	Georgia Blue Speedwell	1 GAL	

Turf Grasses

- Preferred turf grass for beautification projects shall be Palisades Zoysia.
- Other species of grass including Centipede and Bermuda may be considered pending site location and micro climatic conditions.
- Certification of grass species by submission to project Landscape Architect or Augusta Tree and Landscape Maintenance Department will be required prior to installation.

Installation Methods

See detail section in appendix for complete library of approved details for inclusion in plans submitted for approval.

Planting Beds Preparation

- All plants shall meet the requirements set forth in the American Standards for Nursery Stock (ANSI Z.60). All plants shall be installed at the sizes specified by the approved landscape plan and will not be accepted otherwise.
- Prior to installation, all plant material shall be inspected by the Landscape Architect. Contractor shall have sole responsibility for coordinating pre-installation inspection. Plant labels including genus, species, and cultivar shall remain attached to each plant until reviewed and approved by the Landscape Architect. Substitution due to plant availability requires the approval from the Landscape Architect.
- Plant material shall be balled and burlapped or container grown as specified. No container grown stock will be accepted if it is root bound. All plastic or synthetic root wrapping material shall be removed at time of planting. Burlap should be pulled back approximately one third of root ball height, in order to discourage wicking of moisture from the rootball.
- Plant material should not be stored on site without being installed within 24 hours unless temporary irrigation and shade are provided. Root balls of plant material delivered to site shall not be allowed to dry out before installation.
- All plants shall be hand watered thoroughly twice during the first 24 hours after installation. After planting, all trees, shrubs, and grass shall be watered weekly or as necessary to maintain the equivalent of one inch of absorbed water per week.
- Prior to planting, the location of all plant



All synthetic material will be removed from the rootballs of plants at the time of installation.



Remove the top layer of burlap from the rootball during installation.



Temporary plantings or other protection are required, if plant materials are not installed within 24 hours.



Landscaped areas should be graded to encourage drainage and prevent puddling.



Bedlines shall be created with a three inch deep shovel cut edge.



Nylon strap with shock absorbing components should be used to securely brace new trees.

material is to be stacked and approved by the Landscape Architect.

- Planting beds shall have a minimum slope of 2% to encourage positive drainage and discourage saturated root systems. Supplement areas with suitable topsoil if needed to provide positive drainage.
- The landscape contractor shall provide fertilizer, pre-emergent herbicide, lime topsoil and planting mixture as per the installation specifications.
- Bed lines shall have a three inch deep shovel cut trench edge where mulch meets grass, concrete walks or curbs unless otherwise specified. Bed lines shall be smooth and continuous and be within a reasonable location and shape as illustrated on plans. Place mulch under plants and into bed line trenches.
- Planting bed areas shall be treated with Round-up or equal herbicide spray, by a licensed herbicide applicator and left undisturbed for 7 days prior to beginning excavation and prep. There shall be no weeds or grass clumps in excavated median prior to topsoil placement. Contractor shall also schedule a time for Landscape Architect to observe finished excavation prior to placement of planting soil.
- Contractor shall be responsible for full landscape maintenance through a thirty day maintenance period following the date of final completion. At completion of the thirty day period the owner will be responsible for all maintenance and watering.
- Contractor is responsible for the cleanup of all containers, pallets, debris, etc. resulting from his/her work
- All plant material, including turf grass shall be warranted for a period of one year. Warranty does not include acts of God or vandalism.

General Tree Planting

- Nylon strap with shock absorbing components and wooden stakes shall be used for all tree support staking. Pull straps tight, but do not over tighten.
- Plant root ball 1"-2" above existing grade.

- Mark the north facing side of the tree prior to initial digging. Using the mark ng install the tree in the same orientation as it was excavated.
- Tree rings shall be created using 2"-4" deep organic mulch installed at a minimum of 8 -10' in width. A 2" high earthen saucer of native soil shall be created near the edge of the mulch ring to better retain water.
- If present, the wire basket shall be completely removed from the root ball and burlap shall be pulled back one third of the height of the root ball.
- Tree installation pit shall extend a minimum of 12" beyond the root ball along the flat undisturbed bottom of the pit. Diameter of the top of the tree pit shall be at minimum two times the width of the root ball.
- Grade backfill of tree pit away from the base of tree to provide positive drainage.
- Central leader shall never be pruned.

Evergreen Tree Planting Detail

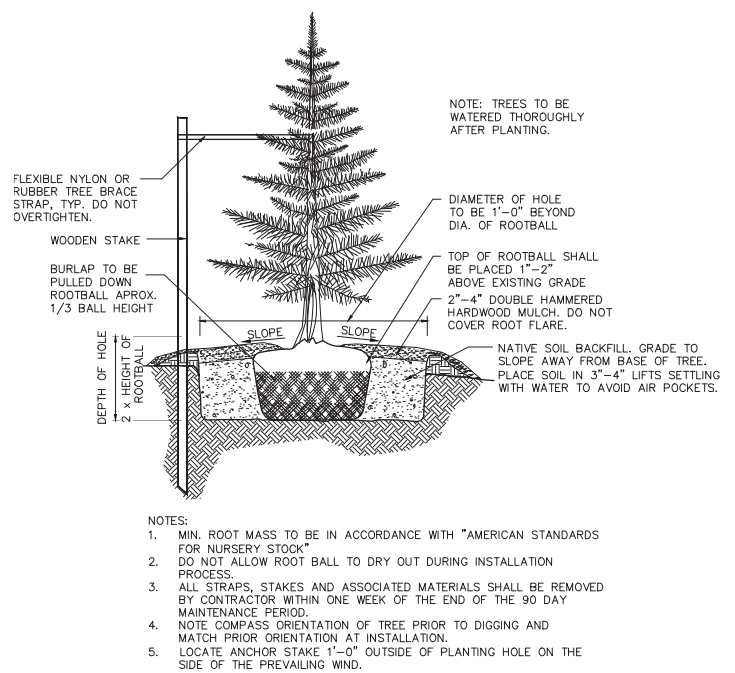
- One support stake shall be driven into the ground at 1'-6" away from the edge planting hole on the side of the prevailing wind. A nylon strap with shock absorbing components shall be attached from the tree to the stake for support. All straps and stakes shall be removed within one week of the end of the 90 day maintenance period.

Multi Trunk Tree

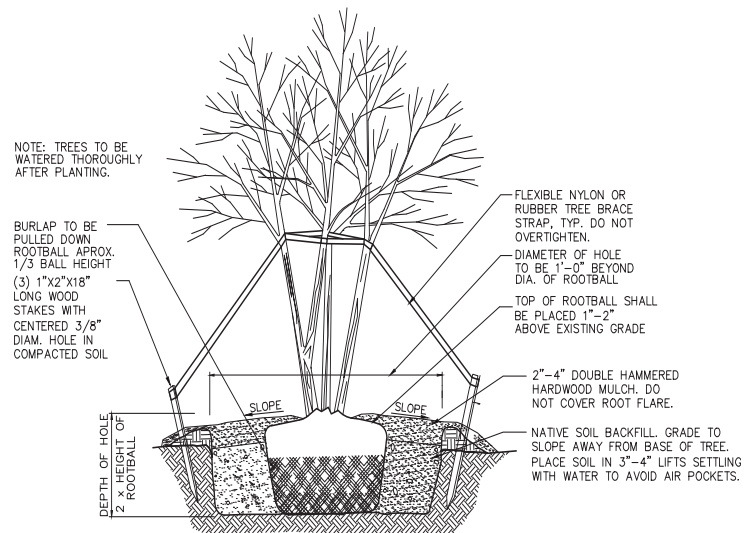
- Tree staking should be done with 1"x2"x18 long wood stakes in compacted soil. Nylon straps with shock absorbing components should be wrapped to multiple trunk per strap and then secured to a stake in order that each main trunk is anchored against the wind. All straps and stakes shall be removed within one week of the end of the 90 day maintenance period.

Typical Tree Planting Detail

- Tree staking should be done with 1"x2"x18 long wood stakes in compacted soil. Nylon straps with shock absorbing components should brace the tree in three directions from the lowest set of branches to the stakes. All straps and stakes shall be removed within one week of the end of the 90 day maintenance period.



EVERGREEN TREE PLANTING DETAIL



MULTI-STEM TREE PLANTING DETAIL

NOT TO SCALE



Percolation tests should be performed to determine whether supplemental drainage is required.



Rocky or debris laden soils shall require excavation to a depth of no less than 12 inches.



Soil samples shall be tested to determine whether soil amendments are necessary.

Shrub Installation Detail

- Plant top of root ball at or just above finish grade.
- Lay out beds as illustrated on plan. Fill in planting bed with triangular spaced plants measured from center to center.
- Planting hole shall be minimum 1' outside of root ball at surface and wider at the top than at the bottom.

Median Plant Spacing Detail

- This detail is required in all GDOT Rights-of Way. No shrub shall be planted closer than 3' from the face of curb. Groundcovers shall not be planted closer than 18" to face of curb.
- Sod shall not encroach closer than 2' from adjacent plantings and shall be defined by a 3" deep shovel cut bed edge.
- Use triangular plant spacing as shown in detail.

Soil, Planting Media Preparation

Establish Rate of Percolation

- Test percolation by excavating an 18" deep hole and filling it with water. If percolation of the water from the hole takes more than 24 hours, percolation is insufficient and soil amendment and improvement should be undertaken.
- Soil samples shall be taken to the local County Extension Agency for testing. Soil amendments shall be added as recommended by testing agency.
- In cases where the existing soil has a high rock or debris content or fails the percolation test, excavation and replacement of soil media will be necessary.
- In excavation and replacement scenarios, no less than 12", and preferably 18" or more of soil should be removed throughout the project area.
- When replacing soil, care should be taken that the subsoil be left in a manner that promotes positive drainage, by insuring slope of 2% or more to a drainage structure and relatively

consistent surface without pot holes or low points intermediate.

- Finished grades of imported soil should be left 1" minimum below any curb or other hardscape in an attempt to provide a clean, flush edge between top of concrete and abutting sod or mulch. Imported soil should be finish graded to provide positive drainage across surface. See "Sod Installation Detail".
- The imported topsoil shall meet the attached criteria and a sample shall be submitted to the Landscape Architect in a 1 gallon re-sealable plastic bag for approval prior to installation.

Underdrains/Sewer tie-ins

- Where possible, French drains should be installed at the subsurface to enhance drainage.
- French drains should be tied to storm sewer at an existing drainage structure by core drilling. When grades are prohibitive, or there is no available structure into which to tie French drains, the use of rock sump areas will be accepted. See detail.
- Under drains are recommended in all medians, however, in areas where existing soils pass percolation test and further excavation is not required due to poor existing soil material, french drains will not be required.

Irrigation

- Irrigation is preferred in the design of all beautification projects. GDOT does not allow irrigation within medians without a variance and has requirements for its installation on roadway shoulders. See the attached GDOT manual for further reference to irrigation requirements and variance process.
- The Augusta, Georgia municipal government prefers the use of a "smart irrigation system" to reduce the waste and danger of water on roadways. Smart irrigation systems are equipped with an anemometer to monitor wind speeds, a thermometer to determine possibility of freezing, and pressure loss sensors to eliminate waste in a pipe burst scenario, as well as, moisture and rainfall monitoring in order to efficiently and



French drains are suggested in all median beautification projects.



The Calsense controller monitors many site conditions to p ervice water during.



Calsense controllers can b monitored b a central compt er.



Irrigation by water truck is one method of establishing plants in a xeric landscape.



Drip irrigation bags are another option for use during the establishment period for xeric landscapes.



Directional drilling is the preferred method of providing irrigation and power access to areas installed without sleeves or conduit.

safely distribute water to plants as needed. ARC is equipped with the Calsense line of smart irrigation controllers and operating software. All proposed controllers shall be compatible with this system.

Standard Irrigation

- Standard irrigation projects will employ a Calsense smart irrigation system linked to city control. The Calsense installation requirement is driven by project size and budget. Contact Augusta Beautification Committee for information on possible variance.
- Augusta Utilities Department is often amicable in offering in-kind donations of water utility installation and water service. In most circumstances, when AUD makes in-kind donations AUD installs water lines from a needed tap to the water meter. Irrigation designer or Landscape Architect shall coordinate with AUD civil engineer to coordinate efficient layout, tap locations, and supply line sizing.
- Contractors are encouraged to contact the area Calsense Representative for assistance in installation and setup of the Calsense irrigation system, particularly the controller, associated sensors and programming.

Xeric Plantings

- Xeric planting scenarios are designed for minimal water use. While not preferred, the use of xeric landscaping is allowed under this guideline where standard irrigation is not available or not allowed.
- See plant palette for approved plants for xeric landscapes.
- Xeric landscapes shall receive irrigation in an amount equal to 1" rainfall each week for the first year of installation. This can be accomplished through temporary use of an irrigation system or by use of a water truck

Directional Drilling and Boring

- In order to avoid the necessity of drilling or boring, all new-construction projects shall include 2-6" dedicated sleeves for irrigation access to any

location that creates an enclosed landscaped area. This shall include but is not limited to, landscaped medians, parking lot islands, driveways at street yard crossings, foundation planting areas, etc.

- On existing sites or in areas where there is no irrigation access provided, boring and directional drilling are preferred to open cuts. Any project under GDOT jurisdiction will require a utility encroachment permit in addition to the special encroachment permit. Without a variance, sleeving will also be required to be Schedule 80 PVC within the R/W.

- Augusta, Georgia requires minimum 48" cover over all roadway drilling or boring. Jack and bore pits will be a minimum of 36" from the edge of pavement /back of curb. No road or driveway shall be open cut without authorization from the Traffic Engineer.

- In the event that the required minimum cover cannot be achieved due, contractor shall notify project Landscape Architect and Augusta Engineering Department.



All landscaped areas confined by hardscapes should be provided with access via sleeves upon installation.



Open cuts shall be avoided at all costs through the use of sleeving and directional drilling.



Sponsor signage may be displayed for limited times with approval of the Augusta Beautification Committee.



Augusta Convention and Visitors Bureau has established a Welcome and Wayfinding sign program.

Signage

Sponsor Signage

- Sponsor recognition signage will be allowed in the form of removable signs with sponsor logos. Sponsor Signage will be allowed to be displayed at the project during initial installation through completion, during Early April, and by request of the Sponsor for special events. Requests should be sent, in writing, to the chair of the Augusta Beautification Committee.

Program Signage

- Program signage will be installed permanently in each project completed as part of the Augusta Beautification Program.
- Program signage will identify the project as a part of the Augusta Beautification Program, and refer readers to the program website, which will list all parties involved in the project, project bio and statistics, before and after pictures, and information on becoming a part of the program.

Welcome and Way Finding Signage

- Welcome to Augusta and District
Wayfinding signage installation is an ongoing project of the Augusta Convention and Visitors Bureau. Many of the welcome sign locations will be accompanied by landscaping to create 'Beauty Spots' and are available as project locations for potential sponsors.

Permit Process

GDOT

When proposed project is on the R/W belonging to the GDOT, the project will have to be approved by GDOT in addition to the local permitting process. The standard process for landscape improvements in the GDOT R/W includes a special encroachment permit issued through the District Access Management Office. A landscape review will also be required through the GDOT landscape office.

- Medians are the most restricted area of landscaping with heavy restrictions on irrigation. Most irrigation in medians requires a Variance approved by the GDOT Commissioner.
- Roadway shoulders and areas outside of the traveled way are less restricted in the use of landscaping and irrigation.
- Refer to Attached GDOT Guide for more information on restrictions and requirements.

GDOT Grant Process

The GDOT offers assistance through grants to local municipalities in the effort to improve local roadways. When awarded a grant, the project does not require an Encroachment Permit. There are however many more requirements that do have to be met, including the Landscape Office Review.

- Concept Meeting
- Concept Report
- Environmental Report
- Design Phase
- Construction Documents
- Bidding
- Construction Management

Augusta, Georgia

Each roadway beautification project will also require completion of the Augusta, Georgia plan approval process. GDOT regulations supersede City requirements, but do not alleviate the necessity of a plan review.

- Land Disturbance Permit and 3-Phase ESPC for Projects will be required for any project or phase with greater than 1 acre of disturbed area. Erosion

Control BMPs will be required on all projects regardless of size. No project is exempt.

- When submitting for design review approval, a submittal of 12 full sets of plans shall be delivered to the Augusta Georgia Planning and Development Department. Review fees may be waived by the P&D Department at the Directors' discretion, for projects benefitting the city.

Construction Bidding Process

Projects initiated by the City will follow the standard practice for project procurement. Privately initiated projects with the City as a donor will require the submission of a minimum number of bids. Fully privately funded jobs are free to use any procurement means the owner desires.

Construction Process

Pre-Construction Meeting

A Pre-construction meeting is to be attended by a representative from each city department involved in the project, any state department with jurisdiction, project sponsor, project designer, and contractor. Pre-con shall be scheduled by contractor per Augusta, Georgia standards. Site visits are encouraged as part of the Pre-construction when possible.

Permits

Design permitting shall be the sole responsibility of the Landscape Architect. Construction Phase permits are the responsibility of the Contractor to procure as necessary.

Erosion Control Measures

For projects requiring a Land Disturbing Activity Permit, an erosion control plan will be submitted to the Augusta, Georgia Engineering Department during the design phase. Erosion control BMPs will be the responsibility of the contractor to install and maintain. During construction, all erosion control measures shall be maintained as drawn on the approved plans or as directed by project Landscape Architect or Augusta Traffic Engineering Department. Plans should be red lined, dated to reflect changes and kept available on site throughout construction.

Traffic Control

When necessary, a traffic control plan will be submitted to the Augusta, Georgia Engineering Department during the design phase. In some instances, based on project complexity, as determined by AED, inclusion of appropriate details from the most recent Manual on Uniform Traffic Control Devices will suffice. Traffic control will be the responsibility of the contractor to procure and maintain. During construction, all traffic control measures shall be maintained as drawn on the approved plans or as directed by design engineer or City Traffic Engineer. Plans should be red lined, dated to reflect changes and kept available on site throughout construction.

Construction Observation

Construction observation will be completed by the project Landscape Architect at the frequency established between the Owner and Landscape Architect in the Contract. Landscape Architect will be present for all project milestones, as established in the contract. Augusta, Georgia will also complete site observation as deemed necessary and discussed in the Project pre-construction meeting.

Post Bid Changes

Post bid changes shall be initiated by submittal of Request for Information to project Landscape Architect and appropriate permitting authority. If additional approval is required for requested change, the appropriate submittals will be made by Landscape Architect. Contract drawings shall be red lined and dated. Post bid changes will be negotiated as a change to the contract between owner and contractor or Landscape Architect.

Maintenance Process

As part of the Augusta Beautification Program, project sponsors will be responsible for the installation, monitoring, and maintenance of the landscape improvements, by employing a contracted professional landscape maintenance company. Scheduled maintenance to be performed is to include but not be limited to: mowing, edging, pruning, blowing, litter control, as well as other general maintenance.

Contractor Selection

Qualifications

- Contractors shall have completed at minimum 3 projects of equal scope, complexity and value.
- Contractors shall meet the minimum bonding and insurance requirements per Augusta Beautification Agreement.
- Contact Augusta Beautification Committee for information on qualified contractors and landscape maintenance companies.

Long-Term Maintenance Plan

Sponsors will be required to commit to providing the maintenance of the project area they wish to adopt. Sponsor shall produce a plan demonstrating provision for the maintenance cost of a contracted professional landscape maintenance company over the entire commitment period. Multiple sponsor projects are encouraged and all participants will sign agreement.

Maintenance Schedule

A scope and frequency of maintenance will be established during the Augusta Beautification Agreement process based on roadway classification (High Visibility/High Maintenance, vice versa). All projects will receive enhanced maintenance in mid-March and Early April. For this reason, minimum biweekly* maintenance visits in the month of March will be required of all projects regardless of roadway classification. Maintenance Company should also complete touch ups during the first full week of April as needed (leaf litter, trash pickup, etc.).

*For the purpose of this document, bi-weekly shall mean every other week.

Growing Season

March-November Requirements

Mowing

Edging

Blowing

Deadheading & Fertilizing Flowering Plants

Tip pruning and Shaping of shrubs

Maintain mulch as needed

Weed control

Irrigation observation, maintenance, and adjustment

Litter/General area cleanup

Integrated Pest Management

Dormant Season

December-February Requirements

Leaf Control

Pruning of Trees and Shrubs

Irrigation Maintenance/Seasonal Precautions

Litter/General area cleanup

Mulch all beds

Pre-emergent Herbicide

Integrated Pest Management

Maintenance Schedule by Roadway

Classification

Roadway Classification	Growing Season Maintenance	Dormant Season Maintenance
Major Arterial	Bi-weekly	Bi-weekly
Minor Arterial	Bi-weekly	Bi-weekly
Collector	Bi weekly	Monthly
Local	Monthly	Monthly



Regular maintenance will be required at a frequency determined by the roadway classification.

Methods of Payment for maintenance contract

- The Garden City Improvement Fund has been established to facilitate the management of priority corridors. The public may make tax deductible donations and earmark donations for their corridor of choice.
- A group may petition to form a Business Improvement District to in order to maintain their corridor of choice through a Voluntary Tax Assessment.
- In order to begin a sanctioned project, the Augusta Beautification Committee will require 25% percent of the projected one year maintenance cost to be pledged.

Project Coordination and Installation

Coordination with Site Utilities and Signs

- Execution and installation of the landscape plan shall not be compromised by variations from approved location of site utilities and service connections including:
- Water, sanitary and storm sewer, electric, gas, cable television lines.
- Transformers, cable television and telephone boxes, air conditioning/heating units.
- Street lights, pedestrian lights and related service conduit, ballast/splice boxes.
- Traffic signs and signals.
- Site-use related signs or signature elements.
- Fire department connections, information stations, fire access ways or emergency vehicle access

As-Built Landscape and Irrigation Documents

- As-built documents are required for all landscape and irrigation installation. Contractor shall provide hardcopy and digital copy of as-built drawings to both landscape architect and Augusta Beautification Committee.

Drawings shall at a minimum indicate the following:

- As-constructed site conditions including clear delineation of all variation(s) and changes from approved drawings including location, quantity and specification of all project elements.

Landscape Drawings

Drawings shall at a minimum indicate the following:

- Pre-existing site conditions, including vegetation and other site features to be preserved.
- As-constructed conditions that identify and record the species, quantity and location of plantings.
- Updated Planting Schedule or Index indicating species, specifications and quantities.
- As-built drawings shall be prepared, dated and sealed by a Contractor certified in the State of Georgia.

Irrigation and Water Management Drawings

Drawings shall at a minimum indicate the following:

- As-constructed conditions that clearly identify and record the location, dimension and specification of all system components including heads, pipes, valves, controller(s), sleeves, backflow preventer(s) and water source.
- As-built documents shall be prepared, dated and signed by the Contractor of Record.



Traffic control measures shall be in place during installation and ongoing maintenance.

Contact List

Utilities

For information regarding location of water and sewer lines, GIS information, and coordination for installation, as well as, regarding possible in kind donations of Utility Department labor and equipment, please contact the Augusta Utilities Department.

Tom Weidmeier, Director
Augusta Utility Department
Phone: (706) 821-1851
Fax: (706) 821-1859
Email: tweidmeier@augustaga.gov

Deanna Davis, Civil Engineer
Augusta Utility Department
Phone: (706) 821-1851
Fax: (706) 821-1859
Email: ddavis2@augustaga.gov

Traffic

For traffic related concerns on projects within the Augusta, Georgia R/W, contact Steve Cassell. This includes any variance from the GDOT landscape guidelines, traffic control and roadway encroachment, Mowing and Maintenance Agreements, traffic signal or street light utility information, and coordination with proposed projects and transportation master plan.

Steve Cassell, P.E., PTOE
Asst. Director of Traffic Engineering
517 Telfair St.
Augusta, GA 30901
Phone:(706) 821-1850
Fax:(706) 821-1724
Email: scassell@augustaga.gov

Engineering

For concerns regarding Augusta Georgia erosion control and construction requirements, contact the Augusta Engineering Department.

David Smith, P.E.
Stormwater and Construction Engineer
522 Greene St.
Augusta, GA 30901
Phone:(706) 821-1706
Fax:(706) 821-1708

Planning & Zoning

For concerns regarding Zoning requirements and permitting procedures, contact Bob Austin at the Augusta Georgia Planning and Development Office.

Bob Austin
Zoning Administrator
525 Telfair St.
Augusta, GA 30901
Phone: (706) 821-1796
Fax: (706) 821-1806
Email: baustin@augustaga.gov

GDOT Local and District Offices

For projects or portions of projects which are located in a Georgia Dept. of Transportation R/W, GDOT requirements take precedent over local ordinances. For questions on permitting, guideline clarification, on-site meetings, and initiation of variances contact GDOT District 2 Access Management Office. Permits will be issued through the Augusta Area Permit Engineer. Please contact Ronnie Sanders for permit pickup, Pre-construction Meeting coordination, and construction site visit coordination.

Raye Southerland
801 Highway 15 South
Tennille, GA 31809
District 2 Access Management Supervisor
Phone: (478) 552-4621
Email: rsoutherland@dot.ga.gov

Todd Price
District 2 Access Manager
801 Highway 15 South
Tennille, GA 31809
Phone: (478) 552-4622
Email: tprice@dot.ga.gov

Ronnie Sanders
Area Permit Engineer
Route 2, Box 4260
Frontage Road
Evans, GA 30809
Phone: (706) 855-3476

Augusta Beautification Committee

To reach the Augusta Beautification Committee with questions or interest in sponsoring a beautification project, contact the Augusta, Georgia Planning and Zoning Office.

Garden City Improvement Fund

Starting in 2010, a public/private partnership between The City of Augusta, the Georgia Department of Transportation, the Augusta Convention and Visitor's Bureau, local businesses and concerned citizens has collaborated on several projects aimed at beautifying the City's major corridors. These efforts have been privately-led by concerned citizens and the Convention and Visitor's Bureau.

For this, we need help and are asking for the public's support through donations to the "Garden City Improvement Fund." Those wishing to Sponsor a project or wanting to help with ongoing maintenance may make a maintenance contribution in the name of the "Garden City Improvement Fund" through the Community Foundation of the CSRA. Donations can be made either on-line or mailed to the following address:

- The Garden City Improvement Fund
c/o The Community Foundation for the CSRA
Post Office Box 31358
Augusta, Georgia 30903

Donations are tax deductible.

Appendix

Construction Details

- Brick Paver Detail
- Evergreen Tree Planting Detail
- Multi-Stem Tree Planting Detail
- Standard Tree Planting Detail
- Shrub Planting Detail
- Median Plant Spacing Detail
- Suitable Imported Topsoil Note
- Sod Installation Detail
- Sump Area Drainage Detail
- Island Planting Bed Berm Detail w/ French Drain

Sample Approved Plan Set

- Cover Sheet
- Index Plan
- Landscape Plan Sheet 1 of 3
- Landscape Plan Sheet 2 of 3
- Landscape Plan Sheet 3 of 3
- Landscape Notes and Details
- Irrigation Plan 1 of 3
- Irrigation Plan 2 of 3
- Irrigation Plan 3 of 3
- Irrigation Notes and Details Sheet 1 of 3
- Irrigation Notes and Details Sheet 2 of 3
- Irrigation Notes and Details Sheet 3 of 3

Sample Augusta Beautification Program Agreement

Sample GDOT Landscape Guidelines

CONSTRUCTION DETAILS

INCLUDE AS SHOWN ON PLANS SUBMITTED FOR APPROVAL

NOTE:

PAVERS SHALL BE VELOUR FLASH SOLID
ITEM # 51-25-109, RUN# 51-92-07
BY CHEROKEE BRICK AND TILE CO.
800-277-2745

INTERLOCKING CLAY
PAVERS W/ POLYMERIC
SAND SWEPT JOINTS

2" SAND SETTING BED

GEOTEXTILE FILTER FABRIC

4" GRADED AGGREGATE BASE

WIDTH VARIES

2% MIN.

2% MIN.

WIDTH VARIES

PAVING

$\frac{1}{4}$ " PRE-GROUTED EXPANSION JOINT
MATERIAL AT PERIMETER OF PAVERS
AND 24' MAX. O.C. LONGITUDINALLY.

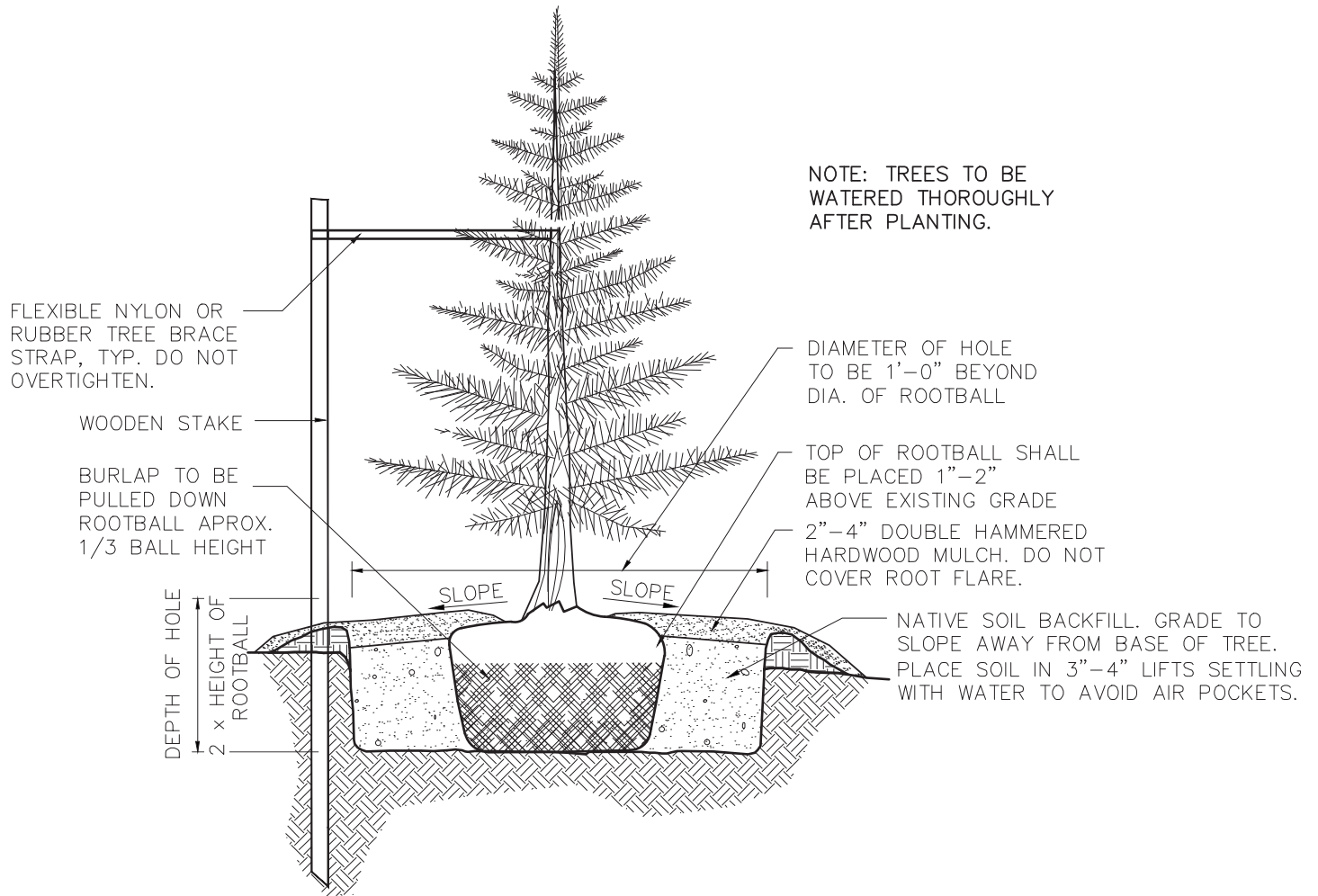
SUBGRADE

NOTE:

1. POLYMERIC SAND SHALL BE RECOMMENDED BY PAVER MANUFACTURER FOR THIS APPLICATION AND SUBMITTED TO LANDSCAPE ARCHITECT FOR APPROVAL.
2. METAL RESTRAINTS SHALL BE INSTALLED AT EDGE OF ANY BRICK PAVEMENT AREA NOT ABUTTING A CONCRETE CURB.
3. EDGING SHALL BE COMMERCIAL GRADE ALUMINUM BRICK EDGING. SUBMIT TO LANDSCAPE ARCHITECT FOR APPROVAL.

BRICK PAVEMENT DETAIL

NO SCALE



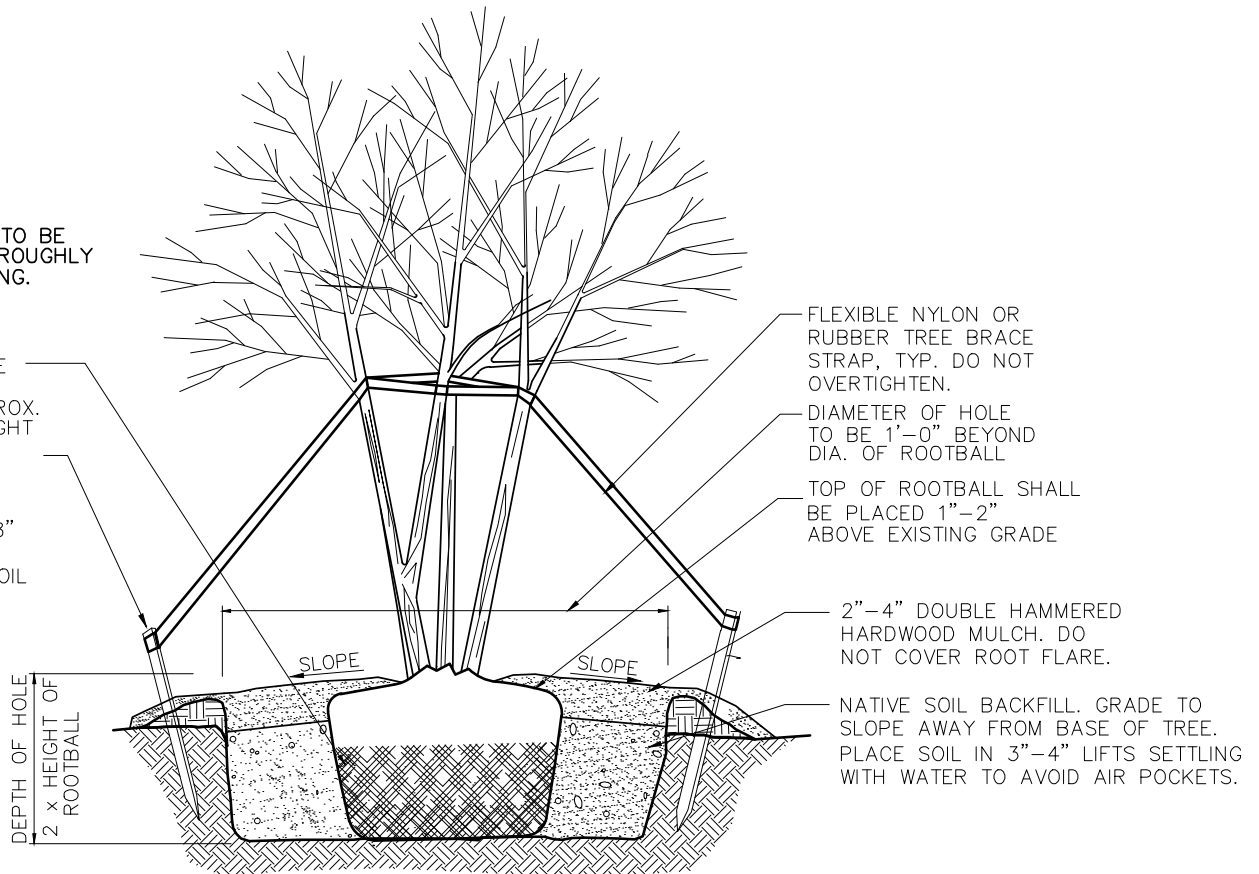
NOTES:

1. MIN. ROOT MASS TO BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY STOCK"
2. DO NOT ALLOW ROOT BALL TO DRY OUT DURING INSTALLATION PROCESS.
3. ALL STRAPS, STAKES AND ASSOCIATED MATERIALS SHALL BE REMOVED BY CONTRACTOR WITHIN ONE WEEK OF THE END OF THE 90 DAY MAINTENANCE PERIOD.
4. NOTE COMPASS ORIENTATION OF TREE PRIOR TO DIGGING AND MATCH PRIOR ORIENTATION AT INSTALLATION.
5. LOCATE ANCHOR STAKE 1'-0" OUTSIDE OF PLANTING HOLE ON THE SIDE OF THE PREVAILING WIND.

EVERGREEN TREE PLANTING DETAIL NTS

NOTE: TREES TO BE WATERED THOROUGHLY AFTER PLANTING.

BURLAP TO BE PULLED DOWN ROOTBALL APROX. 1/3 BALL HEIGHT
(3) 1"x2"x18" LONG WOOD STAKES WITH CENTERED 3/8" DIAM. HOLE IN COMPACTED SOIL



FLEXIBLE NYLON OR RUBBER TREE BRACE STRAP, TYP. DO NOT OVERTIGHTEN.

DIAMETER OF HOLE TO BE 1'-0" BEYOND DIA. OF ROOTBALL

TOP OF ROOTBALL SHALL BE PLACED 1"-2" ABOVE EXISTING GRADE

2"-4" DOUBLE HAMMERED HARDWOOD MULCH. DO NOT COVER ROOT FLARE.

NATIVE SOIL BACKFILL. GRADE TO SLOPE AWAY FROM BASE OF TREE. PLACE SOIL IN 3"-4" LIFTS SETTLING WITH WATER TO AVOID AIR POCKETS.

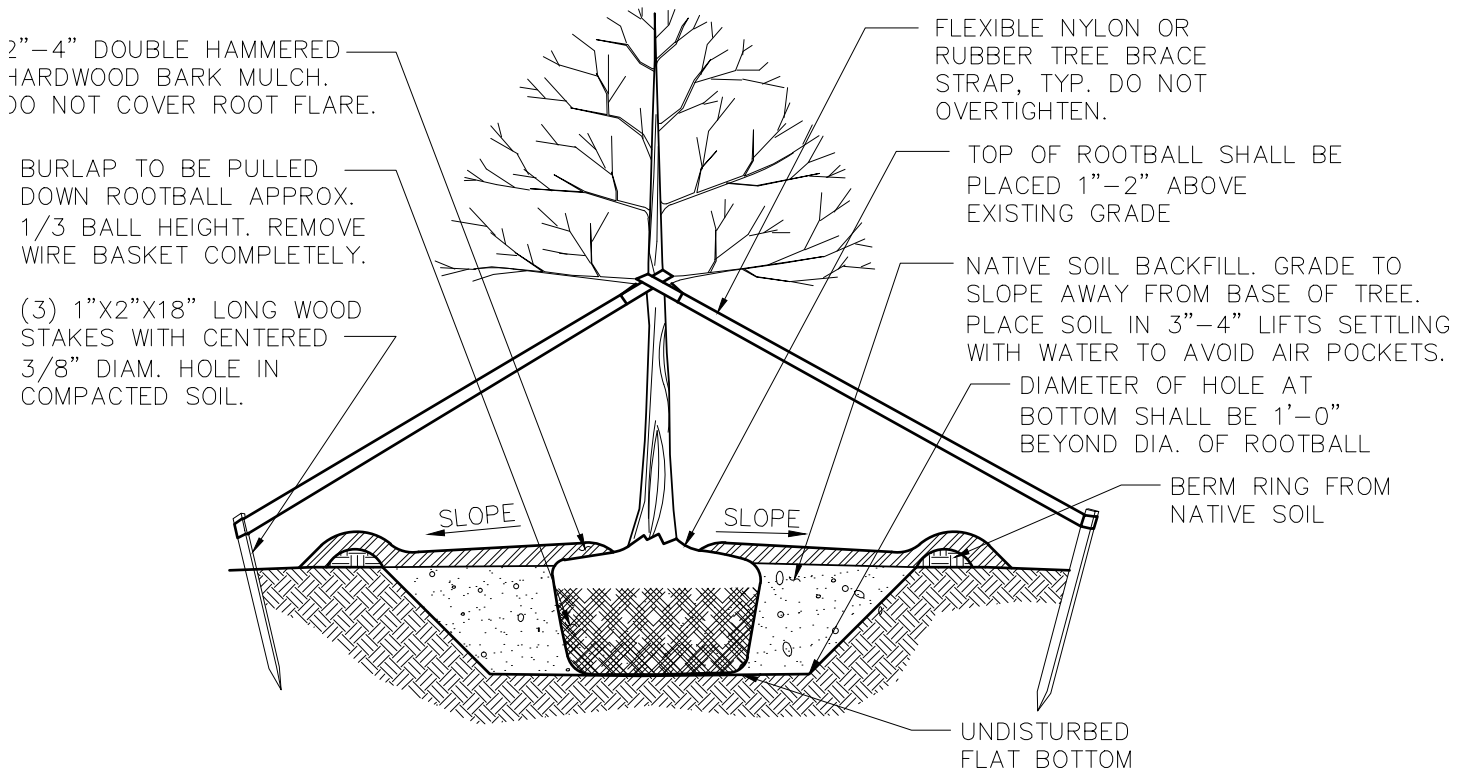
NOTES:

1. MIN. ROOT MASS TO BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY STOCK"
2. DO NOT ALLOW ROOT BALL TO DRY OUT DURING INSTALLATION PROCESS.
3. ALL STRAPS, STAKES AND ASSOCIATED MATERIALS SHALL BE REMOVED BY CONTRACTOR WITHIN ONE WEEK OF THE END OF THE 90 DAY MAINTENANCE PERIOD.
4. NOTE COMPASS ORIENTATION OF TREE PRIOR TO DIGGING AND MATCH PRIOR ORIENTATION AT INSTALLATION.

MULTI-STEM TREE PLANTING DETAIL

NOT TO SCALE

NOTE: TREES TO BE
WATERED THOROUGHLY
AFTER PLANTING.



TYP. TREE PLANTING DETAIL

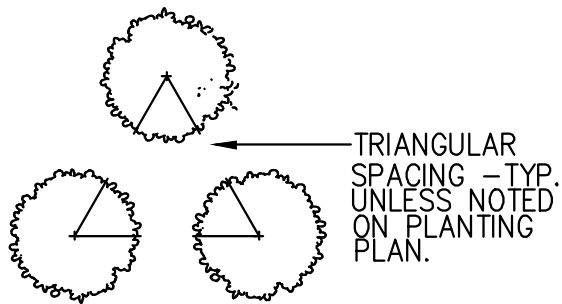
NO SCALE

NOTES:

1. MIN. ROOT MASS TO BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY STOCK"
2. DO NOT ALLOW ROOT BALL TO DRY OUT DURING INSTALLATION PROCESS.
3. ALL STRAPS, STAKES AND ASSOCIATED MATERIALS SHALL BE REMOVED BY CONTRACTOR WITHIN ONE WEEK OF THE END OF THE 90 DAY MAINTENANCE PERIOD.

TYPICAL BED LAYOUT:

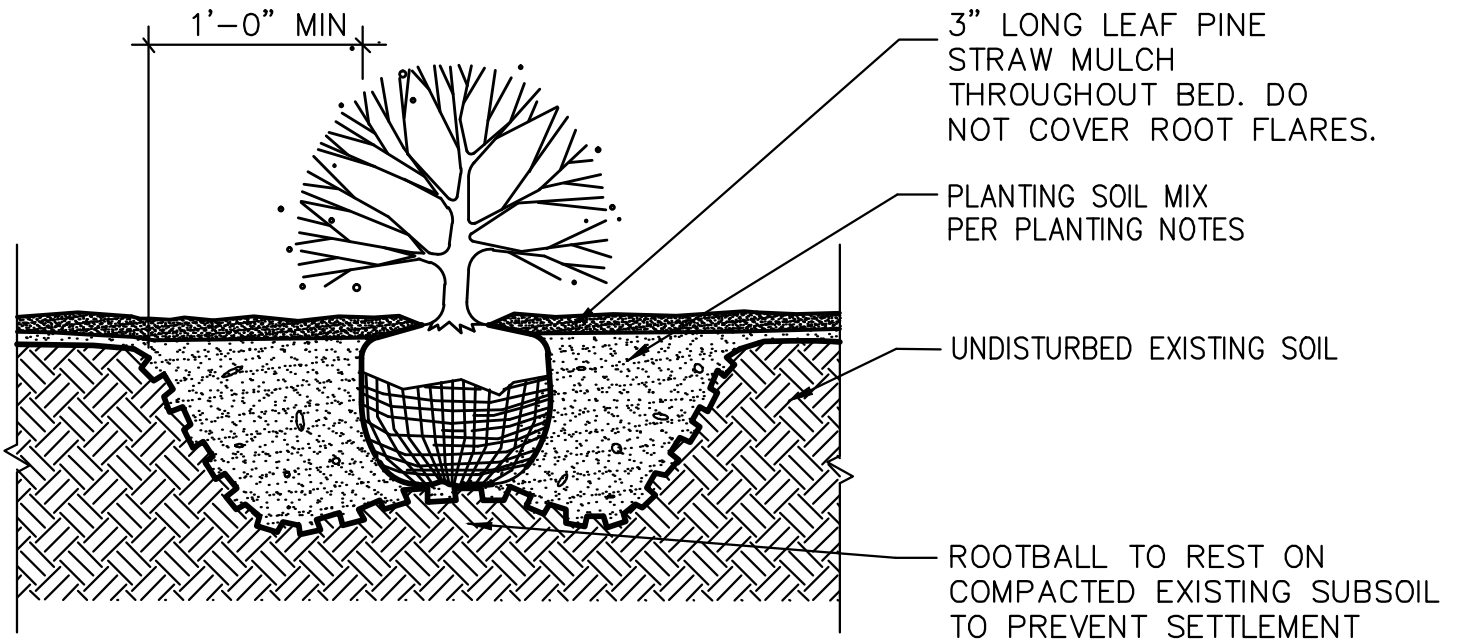
1. LAY OUT PERIMETER PLANTING SPACED AS PER PLAN.
2. FILL IN PLANTING BED WITH TRIANGULAR SPACING.
3. ADJUST AS PER L.A.'S INSTRUCTIONS.



NOTES:

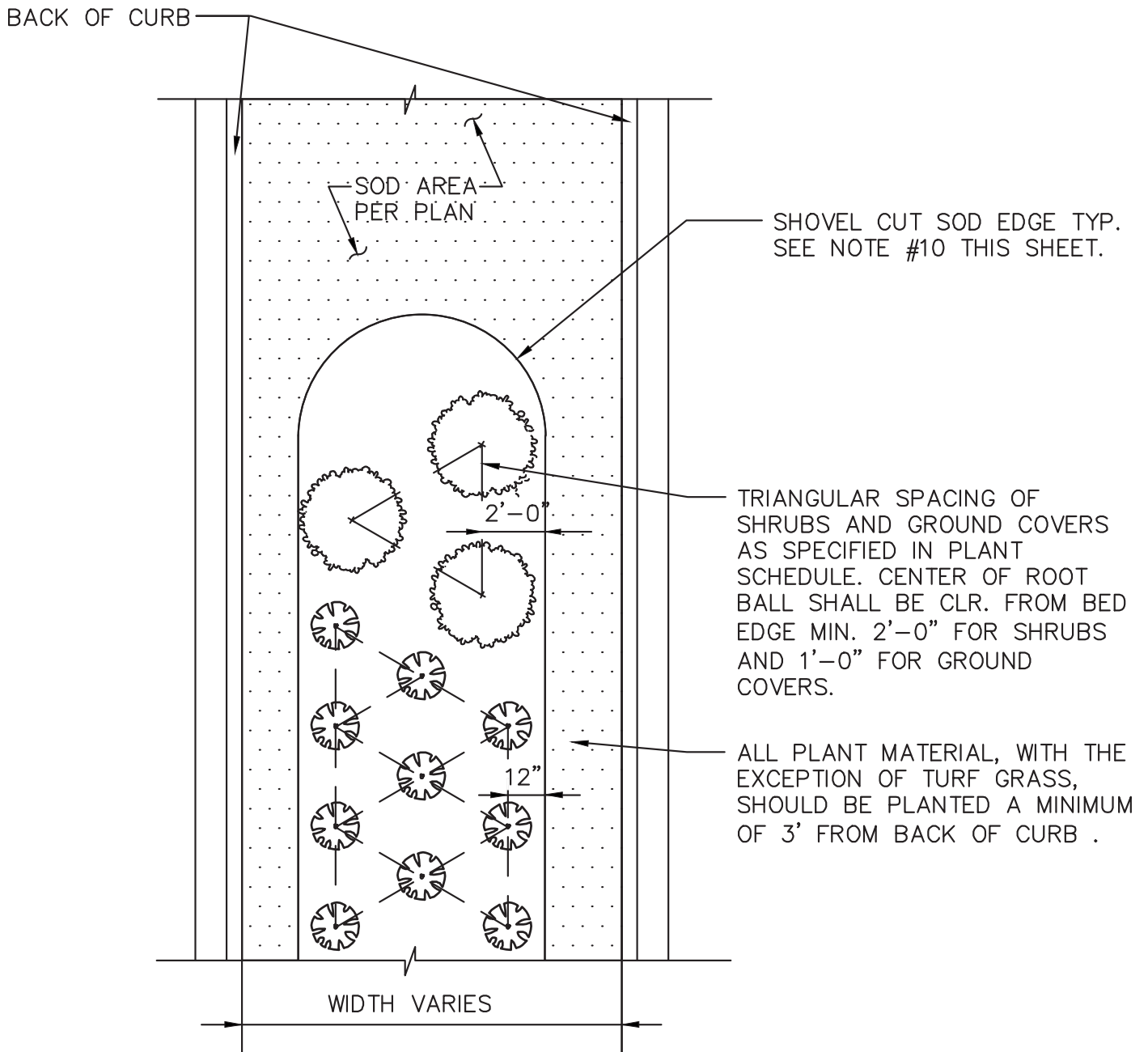
1) VERIFY FINISH GRADE ELEVATION. PLANT TOP OF ROOTBALL AT FINISH GRADE.

2) REMOVE BURLAP FROM TOP $\frac{1}{3}$ OF BALL. REMOVE CONTAINER PLANTS FROM CONTAINERS AND CUT ANY CIRCLING ROOTS.



SHRUB PLANTING DETAIL

NOT TO SCALE



MEDIAN PLANT SPACING DETAIL

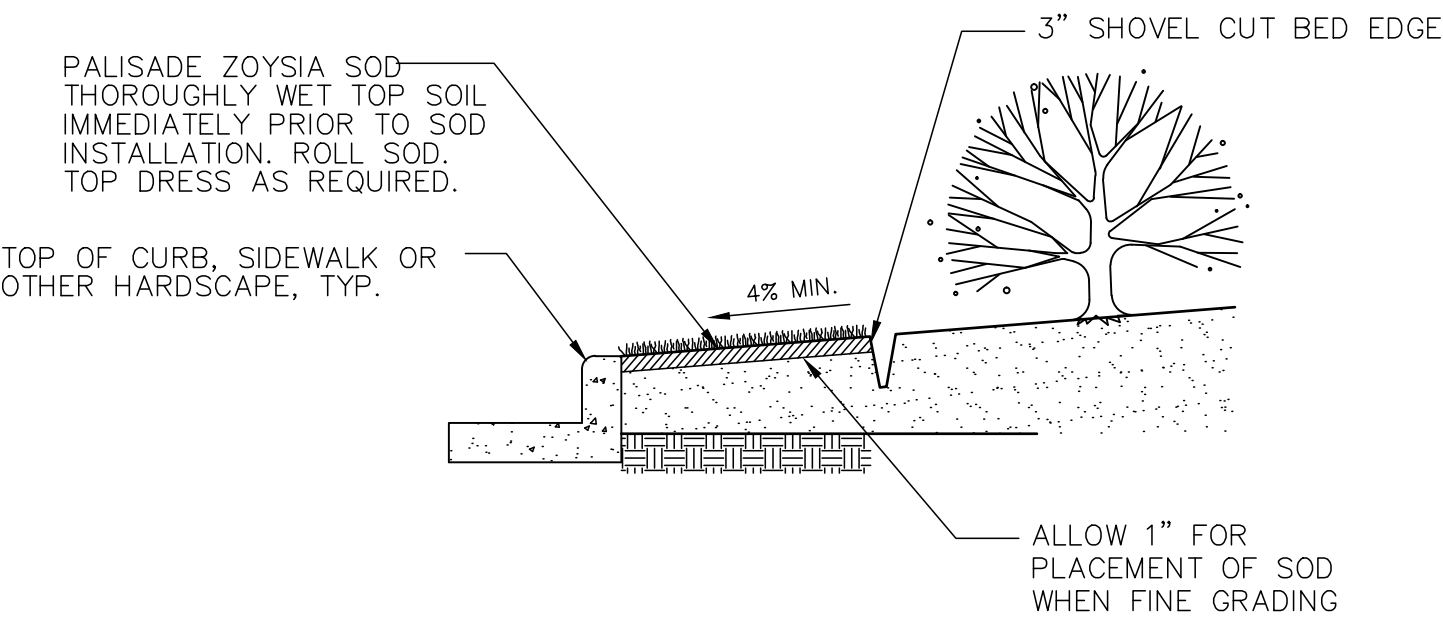
NO SCALE

SUITABLE IMPORTED TOPSOIL

- 1. A MIXTURE OF APPROVED TOPSOIL, SAND, AND ORGANIC MATERIAL MIXED TO MEET THE FOLLOWING SPECIFICATION.
- 2. PARTICLE SIZE DISTRIBUTION ACCORDING TO U.S.D.A. PARTICLE CLASSIFICATIONS:

PARTICLE	SIZE (MM)	ALLOWABLE LIMIT
GRAVEL	>4.75	MAX. 3%
FINE GRAVEL	2.00–4.75	MAX. 10%
VERY COARSE SAND	1.00–2.00	
COARSE SAND+	0.50–1.00	COMBINED
MEDIUM SAND	0.25–0.50	50–75%
FINE SAND	0.1–0.25	5–15%
VERY FINE SAND	0.05–0.10	0–10%
SILT	0.002–0.05	10–20%
CLAY	<0.002	10–20%

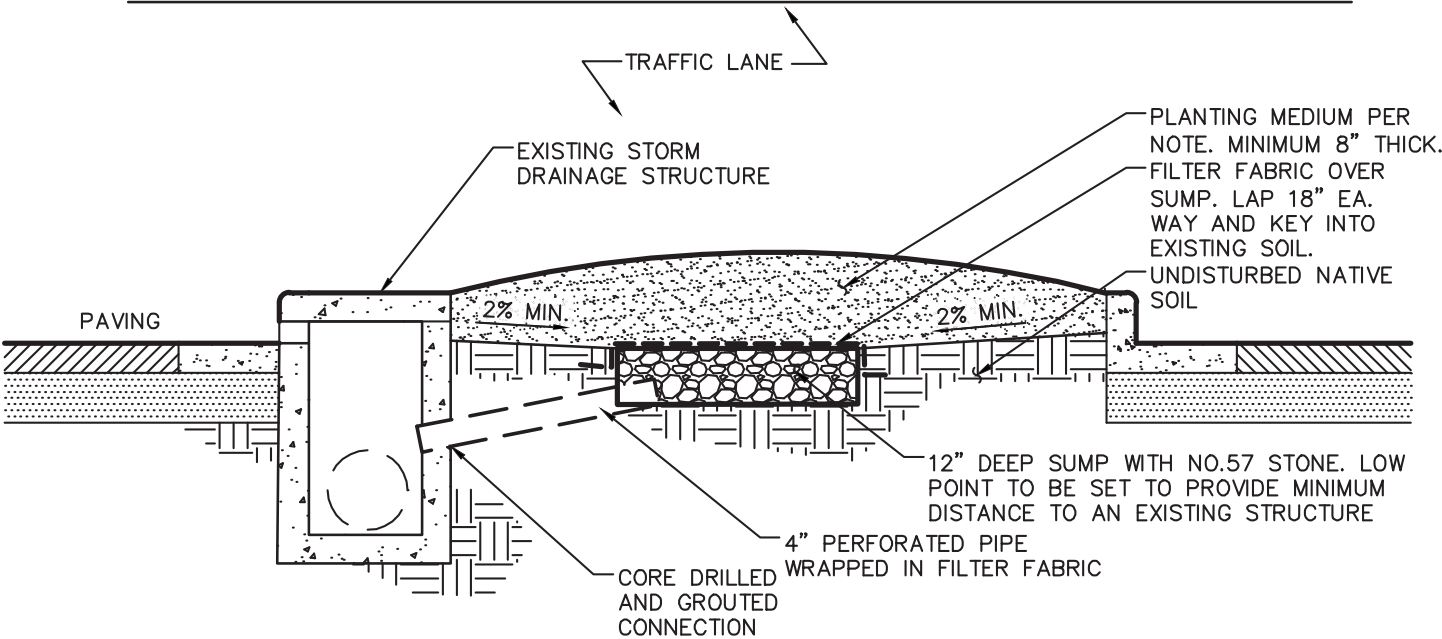
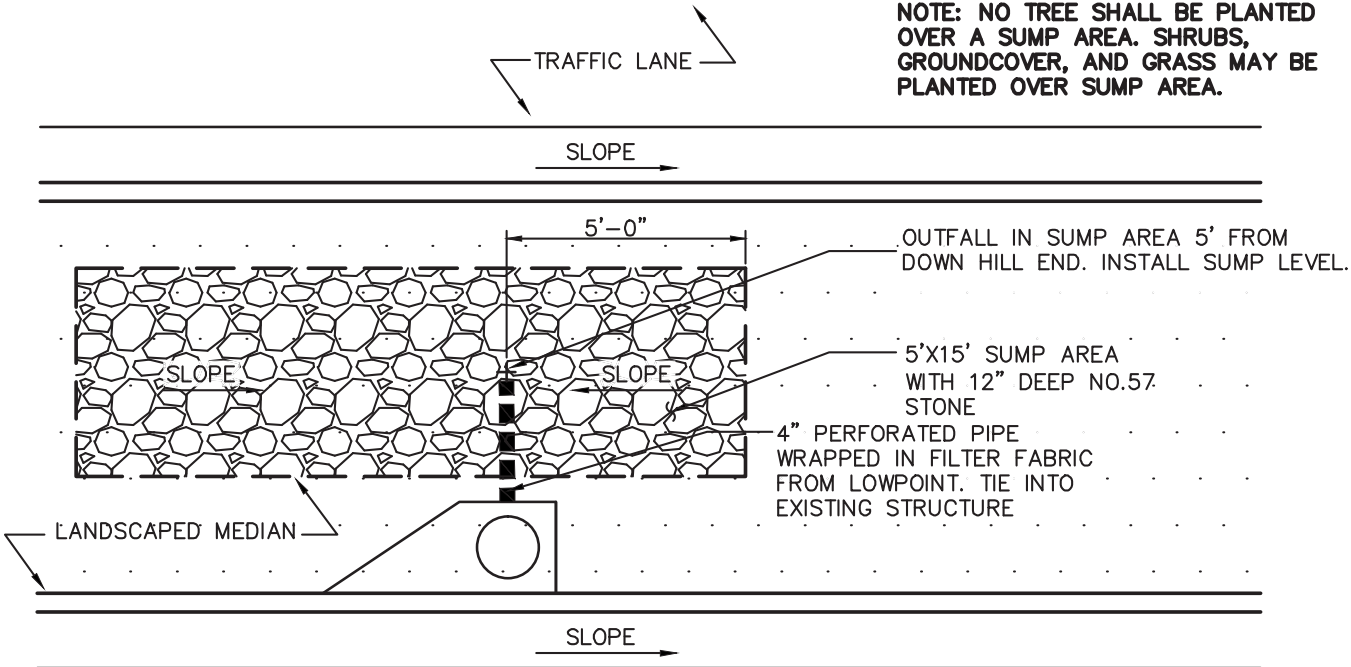
- 3. THE U.S.D.A. SOIL TEXTURE CLASS SHALL BE A SANDY LOAM, WITH NO MORE THAN 75% SAND AND NO MORE THAN 15% COMBINED SILT+CLAY.
- 4. THE ORGANIC MATTER SHALL BE 8 TO 15%.
- 5. DEPTH OF MIX AS INDICATED ON DRAWINGS.
- 6. CONTRACTOR SHALL PROVIDE A SUBMITTAL OF THE TOPSOIL MATERIAL IN A ONE GALLON RESEALABLE PLASTIC STORAGE BAG TO THE LANDSCAPE ARCHITECT FOR APPROVAL. CONTRACTOR SHALL ALSO PROVIDE A SOIL TEST BY AN APPROVED TESTING AGENCY OF THE PROPOSED MATERIAL FOR LANDSCAPE ARCHITECT APPROVAL.



SOD INSTALLATION DETAIL

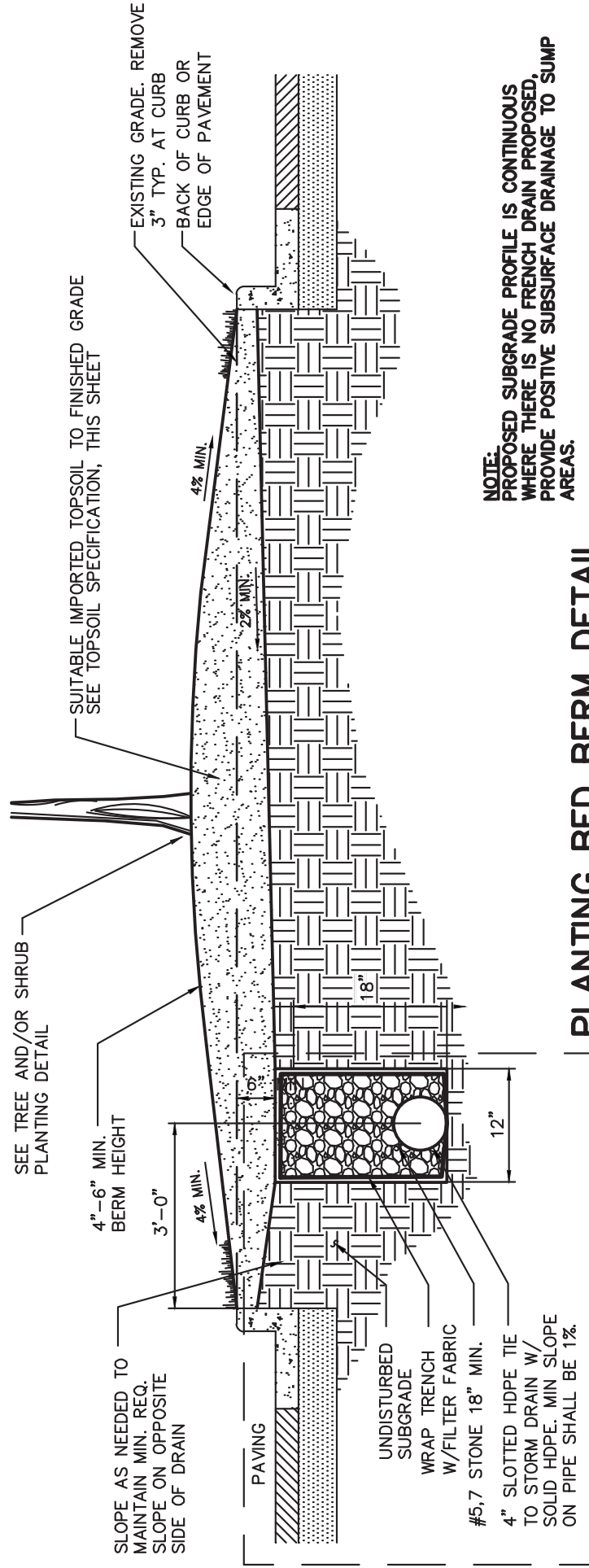
NOT TO SCALE

NOTE: NO TREE SHALL BE PLANTED OVER A SUMP AREA. SHRUBS, GROUNDCOVER, AND GRASS MAY BE PLANTED OVER SUMP AREA.



SUMP AREA DRAINAGE DETAIL

NO SCALE



PLANTING BED BERM DETAIL

NO SCALE

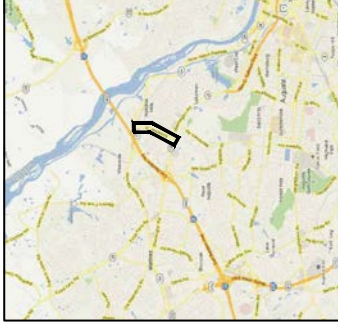
SAMPLE APPROVED PLAN SET
FOR REFERENCE ONLY, MOST RECENT DEVELOPMENT CODES APPLY

BARRY STOREY
1190 INTERSTATE PARKWAY, AUGUSTA, GEORGIA

ALEXANDER DRIVE LANDSCAPED MEDIAN IMPROVEMENTS

PROJECT DATA

OWNER/DEVELOPER.....BARRY STOREY
1190 INTERSTATE PARKWAY
AUGUSTA, GA. 30909
CONTACT REPRESENTATIVE.....BARRY STOREY
TEL. (706) 485-4888
ZONING.....R/A
DISTURBED AREA (AREA OF CONSTRUCTION).....2.87 ACRES
IMPERVIOUS AREA OF IMPROVEMENTS.....2.0 ACRES
PARCEL NO.R/A



LOCATION MAP

DRAWING INDEX

0001.....COVER SHEET
0002.....INDEX PLAN
1001.....LANDSCAPE PLAN-SHEET 1 OF 3
1002.....LANDSCAPE PLAN-SHEET 2 OF 3
1003.....LANDSCAPE PLAN-SHEET 3 OF 3
1004.....MISCELLANEOUS NOTES AND DETAILS
1005.....EROSION CONTROL NOTES AND DETAILS
1006.....IRRIGATION PLAN-SHEET 1 OF 6
1007.....IRRIGATION PLAN-SHEET 2 OF 6
1008.....IRRIGATION PLAN-SHEET 3 OF 6
1009.....IRRIGATION NOTES AND DETAILS-SHEET 4 OF 6
1010.....IRRIGATION NOTES AND DETAILS-SHEET 5 OF 6
1011.....IRRIGATION NOTES AND DETAILS-SHEET 6 OF 6

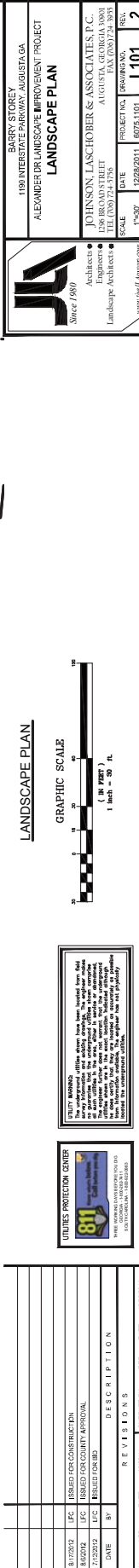


JOHNSON, LASCHOBER & ASSOCIATES, P.C.

1296 BROAD STREET
TEL: (706) 724-5766
AUGUSTA, GEORGIA 30901
FAX: (706) 724-3955

ARCHITECTS • ENGINEERS • LANDSCAPE ARCHITECTS

JOB NO. 5992.1110

[illegible]

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES FOR ALL UTILITIES AND EXCAVATION WORK TO BE DONE BY AUGUST 18TH, 2008, INCLUDING COUNTY ORDINANCES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LOCATING AND RELOCATION OF ALL UTILITIES AS EXISTING CONDITIONS PLAN DERIVED FROM PLANS PROVIDED BY GEORGIA DOT. CONTRACT SHALL VERIFY EXISTING UTILITIES AND LOCATIONS OF ALL UTILITIES AND PROJECT LANDSCAPE IMPROVEMENT OF ALL DISBURSEMENTS, AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, REGARDLESS OF PLAN REQUIREMENT OF LOT SIZE. NO DISBURSEMENT SHALL BE DONE UNTIL SUI BARRED INSTALLATION IS COMPLETED.
3. ALL DISBURSEMENTS TO BE GRASSED AND/OR RIP-RAPPED AS PER THE CONTRACTOR SHALL ADHERE TO THE WEIGHT LIMITS OF THE ROADWAY AND SHALL BE RESPONSIBLE FOR ALL EQUIPMENT AND/OR MATERIALS TO AND FROM THE SITE.
4. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR NON-COMPLIANCE OF WEIGHT LIMIT REGULATIONS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE AUGUSTA-ROCKHURST COUNTY ENGINEERING DEPARTMENT. THE PROJECT SHALL BE DONE PRIOR TO STARTING WORK ON THE PROJECT.
6. ALL CONSTRUCTION WITHIN AUGUSTA RIGHTS-OF-WAY MUST BE COMPLETED BY AUGUST 18TH, 2008, AND ALL UTILITIES SPECIFICATIONS.
7. THE CONTRACTOR SHALL CONTACT THE UTILITIES PROFESSIONAL IN CHARGE OF THE PROJECT PRIOR TO ANY EXCAVATION.
8. CALL BEFORE YOU DIG SERVICE IN ORDER TO LOCATE UTILITIES PRIOR TO STARTING ANY EXCAVATION.

CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND TESTING OF ALL TRAFFIC CONTROL DEVICES PER THE AUGUSTA-RICHMOND COUNTY ENGINEERING DEPARTMENT, TRAFFIC ENGINEERING DIVISION. THIS INCLUDES ALL ADVANCED WARNING SIGNALE AND REGULATION. SEE FIRST BY THE USDOT MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES 2003 OR MOST RECENT EDITION. COST OF TRAFFIC CONTROL MUST BE INCLUDED IN BASE BID. CONTRACTOR WILL IDENTIFY THE TRAFFIC CONTROL AND IDENTIFY AS AN ATTACHMENT TO BID FORM.

1. CONTRACTOR SHALL ALLOW NO SET, CHANGES, OR OTHER DELAYS FROM CONTRACTOR TO LAND DISTURBANCE TO ENTER THE STORM SEWER.
2. CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT STORM INLETS FROM EROSION AND DAMAGE TO THE STORM SEWER.
3. IN LEU OF SILT FENCE CONTRACTOR SHALL PROVIDE OUTLET PROTECTION AND EROSION CONTROL MEASURES TO PREVENT EROSION AND DAMAGE TO A REAR OF DISTURBED SURFACES. CONTRACTOR SHALL ALSO PROVIDE REGULAR CLEANUP OF SURFACES SURROUNDING BY STREET SWEEPING OR OTHER MEANS.
4. WORK WILL BE PHASED TO MINIMIZE LAND DISTURBANCE. AREAS EXPOSED DURING CONSTRUCTION WILL BE MULCHED, COVERED WITH PLASTIC SHEETING OR EQUIVALENT, AND PROTECTED FROM EROSION AND DAMAGE TO THE SOIL TO PREVENT SEDIMENTATION. CONTRACTOR SHALL DISBURSE ONLY AS MUCH AS NECESSARY TO COMPLETE THE PROJECT AND SHALL DISBURSE ONLY AS MUCH AS POSSIBLE EVERY DAY AS CAN BE PROPERLY SECURED THE END

1. SIGHT DISTANCES FOR ENTERING AND EXITING VEHICLES SHALL NOT BE OBSTRUCTED BY LANDSCAPE INSTALLATION. ALL LANDSCAPE MATERIAL WITHIN THE REQUIRED SIGHT DISTANCES OF AN ENTRANCE OR EXIT WILL COMPLY TO GSOT REQUIREMENTS FOR MAINTAINING SIGHT LINES. ALL STREET TREES WILL HAVE A LOWER LIMB HEIGHT OF 7' AND SHRUBS WILL BE MAINTAINED AT LESS THAN 50".



(IN PART)
1 inch = 30 ft.

0 10 20 30 40 50 60 70 80 90 100 110

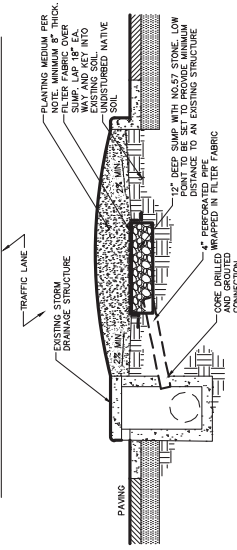
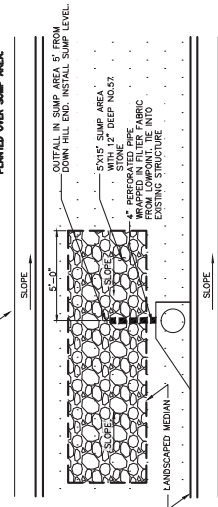


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REVISION NO.	DATE	BY	DESCRIPTION
2	8/17/2012	LFE	REVISED FOR CONSTRUCTION
1	8/6/2012	LFE	REVISED FOR COUNTY APPROVAL
0	7/12/2012	LFE	ISSUED FOR BID
REV	DATE	BY	DESCRIPTION
REVISIONS			

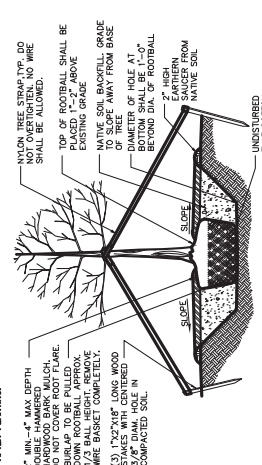
NOTE: NO TREE SHALL BE PLANTED OVER A SUMP AREA. SHEDS, DOWNSPUTS AND GRASSES MAY BE PLANTED OVER SUMP AREA.

TRAFFIC LANE



SUMP AREA DRAINAGE DETAIL

NOTE: TREES TO BE PLANTED OVER SUMP AREA SHALL BE PLANTED OVER SUMP AREA.



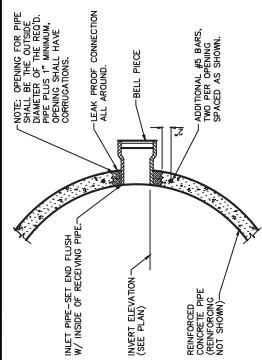
TOP TREE PLANTING DETAIL

1. ALL PLANT MATERIAL SHALL BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY STOCK"
2. PRUNE ALL DAMAGED OR WEAK LIMBS & ROOTS.
3. DO NOT ALLOW ROOT BALL TO DRY OUT DURING INSTALLATION PROCESS.
4. ALL STRAPS, STAKES AND ASSOCIATED MATERIALS SHALL BE REMOVED BY CONTRACTOR WITHIN ONE WEEK OF THE END OF THE 90 DAY MAINTENANCE PERIOD.

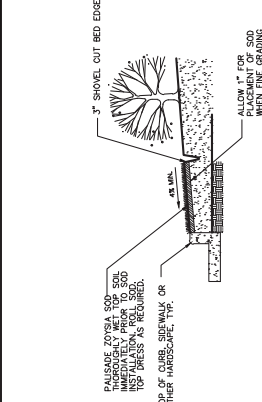
PLANTING NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL AND SHALL BE RESPONSIBLE FOR THE PROPER PLANTING SHOW ON ALL DRAWINGS TO COMPLETE THE PROJECT.
3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. ALL LANDSCAPE AND LAWN AREAS SHALL BE FINE GRADED AS SPECIFIED. THE FINISH GRADE SHALL BE 1/2\"/>

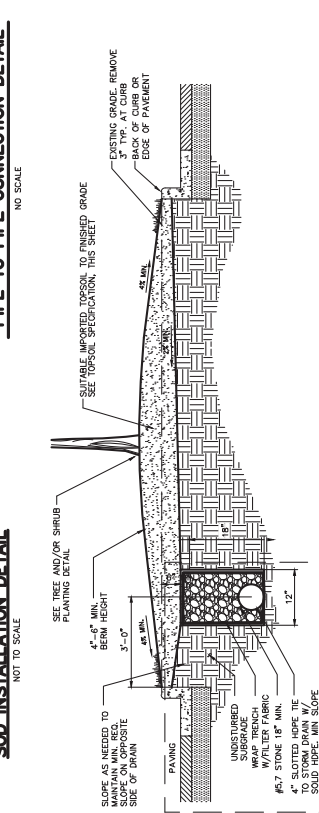
PIPE TO PIPE CONNECTION DETAIL



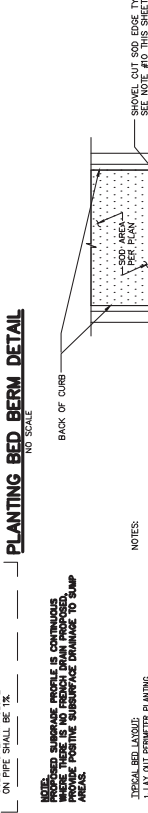
SOD INSTALLATION DETAIL



PIPE TO PIPE CONNECTION DETAIL



PLANTING BED BERM DETAIL



SHOVEL OUT 500 EDGE TYP. SEE NOTE #10 THIS SHEET.

BACK OF CURB

TRANSPLANT SPACING OF SHRUBS AND GROUND COVERS SCHEDULE CENTER OF ROOT BALL SHALL BE 12\"/>

ALL PLANT MATERIAL WITH THE EXISTING SOIL SHOULD BE PLANTED A MINIMUM OF 3\"/>

ROOTBALL TO REST ON UNDISTURBED EXISTING SOIL TO PREVENT SETTLEMENT

1. EVERY FINISH GRADE ELEVATION PLANT TOP TO FINISH GRADE

2. REMOVE BURLAP OR WIRE BASKET FROM TOP OF PLANT

3. 2\"/>

DO NOT COVER ROOT FLARE.

PLANTING NOTES

1. ALL PLANT MATERIAL SHALL BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY STOCK"

2. PRUNE ALL DAMAGED OR WEAK LIMBS & ROOTS.

3. DO NOT ALLOW ROOT BALL TO DRY OUT DURING INSTALLATION PROCESS.

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6. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.

7. ALL LANDSCAPE AND LAWN AREAS SHALL BE FINE GRADED AS SPECIFIED. THE FINISH GRADE SHALL BE 1/2\"/>

8. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS SPECIFIED.

9. NO CONTAINER GROWN STOCK WILL BE PLANTED.

10. ALL PLANTS SHALL BE SAVED AND MAINTAINED OR CONTAINER GROWN AS SPECIFIED.

11. MATERIAL MADE OF SYNTHETIC OR PLASTIC SHALL BE REMOVED AT THE TIME OF PLANTING.

12. STAKES AND ALL PLANT MATERIAL SHALL BE INSPECTED FOR DAMAGE AND ALL PLANT MATERIAL SHALL BE REPLACED IF IT IS DAMAGED.

13. NO PLANT MATERIAL WILL BE ACCEPTED IF IT IS DAMAGED OR IF IT IS NOT PLANTED WITHIN THE SPECIFIED TIME FRAME.

14. ALL PLANTS SHALL BE PLANTED AS SPECIFIED IN THE DRAWINGS.

15. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CLEAN UP OF ALL PLANT MATERIAL, PALETTES, DEBRIS, ETC. RESULTING FROM THE PLANTING PROCESS.

16. ALL PLANTS SHALL BE HAND WATERED THOROUGHLY TWICE DURING THE FIRST WEEK OF PLANTING.

17. MEDIAN SHALL BE HAND WATERED TWICE DURING THE FIRST WEEK OF PLANTING.

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143. MEDIAN SHALL BE HAND WATERED TWICE DURING THE FIRST WEEK OF PLANTING.

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CAUTION: IRRIGATION NOTE
THE IRRIGATION SYSTEM SHALL NOT RUN IN A MANNER THAT WILL CREATE A HAZARD TO TRAFFIC DURING FREEZING CONDITIONS. THE CAUSE/SEASONAL CONTROLLER IS EQUIPPED TO SHUT DOWN IRRIGATION SPRAY IN FREEZING CONDITIONS AS WELL IN THE EVENT OF A PIPE BURST.



CID
CARPENTER IRRIGATION DESIGN
3805 State Bridge Road/Suite G 440
Duluth, GA 30097
Off. 678-584-1938
E-mail: wccap@aol.com

(IN FEET)
1 inch = 30 ft.

UTILITY WARNING: ATTENTION: If you have been located from field survey, information and existing drawings. This engineer makes no guarantee that the underground utilities shown comprise all utilities in the area, either in service or abandoned. UNLIT UTILITIES are in this exact location indicated either by utility records or by field observation. The engineer does certify that they are located as accurately as possible from information available. The engineer has not physically located the underground utilities.

UTILITIES PROTECTION CENTER



THREE WORKING DAYS BEFORE YOU DIG
GEORGIA • 1-800-480-3611
SOUTH CAROLINA • 1-800-832-0440

REV	DATE	BY	DESCRIPTION
2	8/11/2012	LFC	ISSUED FOR CONSTRUCTION
1	6/5/2012	LFC	ISSUED FOR COUNTY APPROVAL
0	7/12/2012	LFC	ISSUED FOR BID

ISSUED BY:	LFC	DATE:	12/28/11	CHECKED BY:	0600	DATE:	12/28/2011
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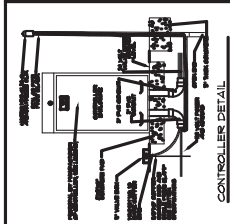
R E V I S I O N S			
NO. BY	DATE	12/29/01	CHECKED BY
	JFC		DATE 12/30/01

DATE	BY	DESCRIPTION
11/22/02	JFC	ISSUED FOR CONSTRUCTION
09/20/02	JFC	ISSUED FOR COUNTY APPROVAL
7/22/02	JFC	ISSUED FOR BID
DATE	BY	

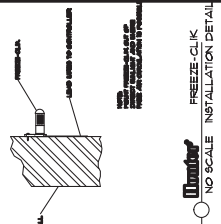
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	HEAD TYPE	WATER USE	PRECIP. RATE	RUN TIME
			(in/hr)	(min)
1	Shower	HIGH	0.5	60
2	Shower	MEDIUM	1.5	20
3	Shower	HIGH	0.5	60
4	Shower	HIGH	0.5	60
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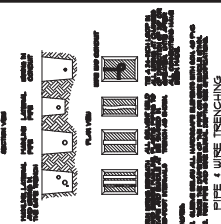
It is preferred to use a general schedule, set and to based on weather. The schedule can be modified to suit the needs of the facility



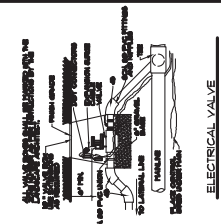
CONTROLLER DETAIL



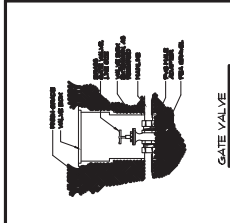
WILLIOTT FREEZE-CLIK
NO SCALE INSTALLATION DETAIL



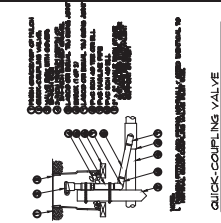
PIPE & WIRE TRENCHING



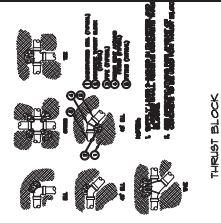
ELECTRICAL VALVE



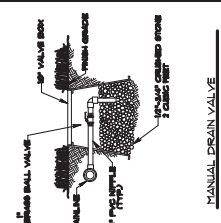
GATE VALVE



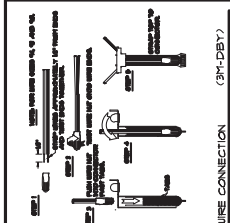
QUICK-COUPLING VALVE



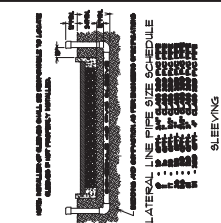
THRUST BLOCK



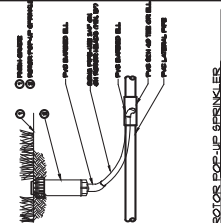
MANUAL DRAIN VALVE



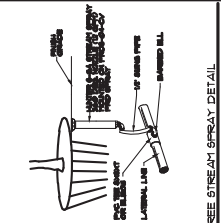
RE CONNECTION



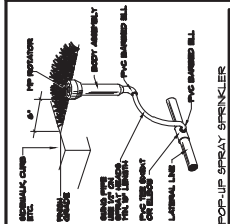
SLEEPING



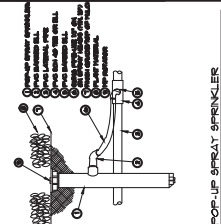
OTOR POP-UP SPRINKL



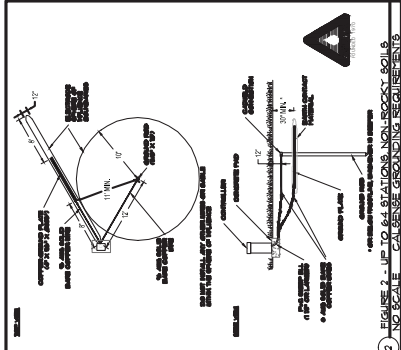
THE STREAM SPRAY DET



UP-UP SPRAY SPRINKLER



POP-UP SPRAY SPRINKL



2 FIGURE 2 - UP TO 64 STATIONS, NON-ROCKY SOILS
NO SCALE CALSENSE GROUNDING REQUIREMENTS

CALSENSE IRRIGATION NOTE

1. THE IRRIGATION SYSTEM SHALL NOT RUN IN A MANNER HAZARDOUS TO TRAFFIC DURING FREEZING CONDITIONS. CONTROLLER IS EQUIPPED TO SHUT DOWN IRRIGATION SYSTEMS AUTOMATICALLY WHEN THE TEMPERATURE FALLS BELOW 32°F.



BARRY STOREY
1190 INTERSTATE PARKWAY AUGUSTA, GA
ALEXANDER DR LANDSCAPE IMPROVEMENT PROJECT
IRRIGATION DETAILS

Architects	JOHNSON, LASCHOB & ASSOCIATES, P.C.	REV	
Engineers	1296 BROAD STREET	PROJECT NO.	1104
Landscapes Architects	AUGUSTA, GEORGIA 30901	DATE	12/28/2011
	TEL (706) 724-5756	N T S	5043 1110
	FAX (706) 724-3939		

CID
CARPENTER IRRIGATION DESIGN
5805 State Bridge Road/Suite G 440
Duluth, GA 30097
Off: 678-584-1338
E-mail: wccarp@aol.com

IRRIGATION DETAILS

UTILITY WARNING: The underground utilities shown have been located from field survey information and existing drawings. The engineer makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The engineer further does not warrant that the enclosed drawings show all utilities that may be located in the area. No liability shall be assumed by the engineer for any damage or loss resulting from information available. The engineer has not physically located the underground utilities.

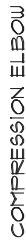
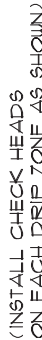
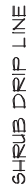
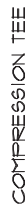
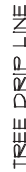
UTILITIES PROTECTION CENTER

811

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GEORGIA • 1-800-882-3111
SOUTH CAROLINA • 1-800-332-6968

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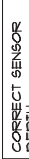
 <p>JLA Since 1989</p>	<p>IRRIGATION DRIP DETAILS</p>	
	<p>CLIENT: BARNEY STOREY 1151 INTERSTATE PARKWAY AUGUSTA, GA</p>	
<p>PROJECT: ALEXANDER DR LANDSCAPE IMPROVEMENT PROJECT</p>		
<p>DESIGNER: CARPENTER IRRIGATION DESIGN 5905 State Bridge Road/Suite G 440 Duluth, GA 30097 Off: 678-564-1338 E-mail: uscarpet@comcast.net</p>		
<p>INSTALLER: JOHNSON, LANCHESTER & ASSOCIATES P.C. 1206 IRONDALE AVENUE AUGUSTA, GEORGIA 30901 TEL (706) 724-5776 FAX (706) 724-9931</p>		
<p>SCALE: 1" = 10'</p>	<p>PROJECT NO.: 09040001 SHEET NO. 1105</p>	<p>DATE: 12/28/2004 BY: JLA</p>
<p>www.jlausa.com</p>		

REVISIONS				
NO.	DATE	BY	DESCRIPTION	
2	8/1/2012	LFC	ISSUED FOR CONSTRUCTION	
1	8/8/2012	LFC	ISSUED FOR COUNTY APPROVAL	
0	7/2/2012	LFC	ISSUED FOR BID	
REV	DATE	BY		

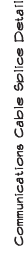
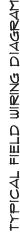
ASSEMBLED ENCLOSURE INS
(PROVIDED BY QINEP)

FLOW METER
INSTALLATION

1501



VANDAL RESISTANT ET GAGE ENCLASURE




CALSENSE
IRRIGATION NOTE

1. THE IRRIGATION SYSTEM SHALL NOT RUN IN A MANNER THAT WILL CREATE A HAZARD TO TRAFFIC DURING FREEZING CONDITIONS. THE CALSENSE CONTROLLER IS EQUIPPED TO SHUT DOWN IRRIGATION SPRAY IN FREEZING CONDITIONS AS WELL IN

IRRIGATION NOTE

1. THIS PROJECT INCLUDES THE INSTALLATION OF IRRIGATION SYSTEM COMPONENTS TO BE SUPPLIED BY THE OWNER. SEE PLANS AND IRRIGATION LEGEND SHEET 1104 FOR FURTHER INFORMATION.





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CALSENSE DETAILS

PROJECT NO. **1106**

DATE **12/28/2011**

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CAL SENSE DETAILS

[illegible]

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SAMPLE GDOT LANDSCAPE GUIDELINE

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