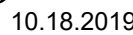


**LANDSCAPE ARCHITECT**  
**STUDIO GREEN SPOT, INC.**  
1784 W. McDERMOTT DR., SUITE 110  
ALLEN, TEXAS 75013  
(469) 369-4448  
CHRIS@STUDIOGREENSPOT.COM



- ## GENERAL LAWN NOTES

1. FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS INDICATED ON CIVIL PLANS.
2. ADJUST CONTOURS TO ACHIEVE POSITIVE DRAINAGE AWAY FROM BUILDINGS. PROVIDE UNIFORM ROUNDING AT TOP AND BOTTOM OF SLOPES AND OTHER BREAKS IN GRADE. CORRECT IRREGULARITIES AND AREAS WHERE WATER MAY STAND.
3. ALL LAWN AREAS TO RECEIVE SOLID SOD SHALL BE LEFT IN A MAXIMUM OF 1" BELOW FINAL FINISH GRADE. CONTRACTOR TO COORDINATE OPERATIONS WITH ON-SITE CONSTRUCTION MANAGER.
4. IMPORTED TOPSOIL SHALL BE NATURAL, FRIABLE SOIL FROM THE REGION, KNOWN AS BOTTOM AND SOIL, FREE FROM LUMPS, CLAY, TOXIC SUBSTANCES, ROOTS, DEBRIS, VEGETATION, STONES, CONTAINING NO SALT AND BLACK TO BROWN IN COLOR.
5. ALL LAWN AREAS TO BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED, AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR ARCHITECT PRIOR TO INSTALLATION.
6. ALL ROCKS 3/4" DIAMETER AND LARGER, DIRT CLOTS, STICKS, CONCRETE SPOILS, ETC. SHALL BE REMOVED PRIOR TO PLACING TOPSOIL AND ALL LAWN INSTALLATION.
7. CONTRACTOR SHALL PROVIDE (1") ONE INCH OF IMPORTED TOPSOIL ON ALL AREAS TO RECEIVE LAWN.

- LANDSCAPE NOTES**

1. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED SITE ELEMENTS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS
2. CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND NOTIFY ARCHITECT OF ANY CONFLICTS. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF UNDERGROUND UTILITIES.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED LANDSCAPE AND IRRIGATION PERMITS.
4. CONTRACTOR TO PROVIDE A MINIMUM 2% SLOPE AWAY FROM ALL STRUCTURES.
5. ALL PLANTING BEDS AND LAWN AREAS TO BE SEPARATED BY STEEL EDGING. NO STEEL TO BE INSTALLED ADJACENT TO SIDEWALKS OR CURBS.
6. ALL LANDSCAPE AREAS TO BE 100% IRRIGATED WITH AN UNDERGROUND AUTOMATIC IRRIGATION SYSTEM AND SHALL INCLUDE RAIN AND FREEZE SENSORS.
7. ALL LAWN AREAS TO BE SOLID SOO BERMUDAGRASS, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

## LANDSCAPE TABULATIONS

TOTAL SITE AREA (50,891 s.f.)

Requirements: 10% of total site area to be landscaped

Required	Provided
5,089 s.f. (10%)	7,052 s.f. (40%)
	not including playground areas

## STREET FRONTAGE

Requirements: Street frontage, one (1) shade tree, 3.5" cal per 30 l.f. of street frontage.

BOSSY BOOTS DRIVE (170.90 l.f.)

Required	Provided
(6) trees, 3.5" cal.	(6) trees, 3.5" cal.

STOCKTON DRIVE (222 I.f.)

Required	Provided
(8) trees, 3.5" cal.	(8) trees, 3.5" cal.

PARKING LOT (33 spaces)

Requirements: One (1) shade tree and one (1) ornamental tree for every 30 parking spaces. No parking space shall be more than 50 feet from any tree. A headlight screen shall be provided by means of shrubs or berm.

Required	Provided
(1) trees, 3" cal.	(6) trees, 3" cal.
(1) ornamental trees	(2) ornamental trees
24" ht. screen	24" ht. evergreen screen

## PLANT MATERIAL SCHEDULE

TREES					
TYPE	QTY	COMMON NAME	BOTANICAL NAME	SIZE	REMARKS
AE	3	Allee Elm	<i>Ulmus parvifolia</i> 'Elmer II'	3.5" cal.	container, 13' ht., 5' spread, 5' clear straight trunk
CE	6	Cedar Elm	<i>Ulmus crassifolia</i>	3.5" cal.	B&B, 13' ht., 5' spread min., 5' clear straight trunk
CM	2	Cedar Myrtle 'Dallas Red'	<i>Lagerstroemia indica</i> 'Dallas Red'	3" cal.	container, 5 trunks, tree form, 5' spread
EP	5	East Palatka Holly	<i>Ilex x attenuata</i> 'East Palatka'	3" cal.	container, 8' ht., 4' spread, tree form
LO	12	Live Oak	<i>Quercus virginiana</i>	3.5" cal.	container, 13' ht., 5' spread, 5' clear straight trunk

## SHRUBS

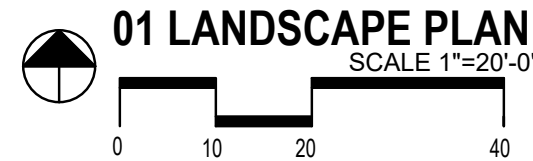
TYPE	QTY	COMMON NAME	BOTANICAL NAME	SIZE	REMARKS
DHG	197	Dwarf Hameln Grass	<i>Pennisetum alopecuroides</i> 'Hameln'	5 gal.	container full, well rooted
DWM	55	Dwarf Wax Myrtle	<i>Myrica pusilla</i>	5 gal.	container, 240" ht., 20" spread
IH	32	Inland Hawthorn 'Clara'	<i>Raphiolepis indica</i> 'Clara'	5 gal.	container full, well rooted
LOR	72	Loropetalum 'Ruby'	<i>Loropetalum chinense</i> 'Ruby'	5 gal.	container, 24" ht., 24" spread
PR	58	Prostrate Rosemary	<i>Rosmarinus officinalis</i> 'Prostratus'	1 gal.	container full, well rooted, 12" o.c.
WM	6	Wax Myrtle	<i>Myrica cerifera</i>	48" ht.	container, 48" ht., 36" spread, 6" o.c.

GROUNDCOVERS	
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TYPE	QTY	COMMON NAME	BOTANICAL NAME	SIZE	REMARKS
SC	350	Seasonal Color		4" pots	selection by owner, container, 10" o.c.,
WC	455	Winter Creeper	<i>Eronymus fortunei</i>	4" pots	container, 3- 12" runners min., 12" o.c.
		'419' Bermudagrass	<i>Cynodon dactylon</i> '419'		Solid Sod refer to notes

NOTE: Plant list is an aid to bidders only. Contractor shall verify all quantities on plan. All heights and spreads are minimums. All plant material shall meet or exceed remarks as indicated. All trees to have straight trunks and be matching within varieties.

<p><b>OWNER</b>  TWIN CREEKS BUSINESS PARKS, INC.  300 TWIN CREEK DRIVE  ALLEN, TEXAS 75013  CONTACT: CHARLES C. NIES  TEL: 972-390-1190</p>	<p><b>DEVELOPER</b>  TRIANGLE DEVELOPMENT &amp;  MANAGEMENT SERVICES  1784 W. MCDEMOTT DRIVE, SUITE 110  ALLEN, TEXAS 75013  CONTACT: KEVIN PATEL, P.E.  TEL: 214-609-9271</p>	<p><b>ENGINEER</b>  TRIANGLE ENGINEERING LLC  TXPE FIRM # 11525  1784 W. MCDEMOTT DRIVE, SUITE 110  ALLEN, TEXAS 75013  CONTACT: KEVIN PATEL, P.E.  TEL: 469-331-8566</p>	<p><b>SURVEYOR</b>  A&amp;W SURVEYORS, INC.  P.O. BOX 870029  2220 GUS THOMASSON ROAD  MESQUITE, TEXAS 75162  CONTACT: JOHN S. TURNER  TEL: 972-681-4975</p>
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**GODDARD SCHOOL**

**BOSSY BOOTS DRIVE  
ALLEN, TEXAS**

**ISSUE:**

FOR APPROVAL 09.26.2019

CITY COMMENTS 10.18.2019

DATE:

10.18.2019

**SHEET NAME:**

LANDSCAPE PLAN

**SHEET NUMBER**

## L.1



## 1.1 REFERENCED DOCUMENTS

Refer to bidding requirements, special provisions, and schedules for additional requirements.

## 1.2 DESCRIPTION OF WORK

Work included: Furnish all supervision, labor, materials, services, equipment and appliances required to complete the work covered in conjunction with the landscaping covered in these specifications and landscaping plans, including:

1. Planting (trees, shrubs, and grass)
2. Bed preparation and fertilization
3. Notification of sources
4. Water and Maintenance until final acceptance
5. Guarantee

### 1.3 REFERENCE STANDARDS

- A. American Standard for Nursery Stock, published by American Association of Nurserymen 27 October 1980, Edition, by American National Standards Institute, Inc. (Z60.1) – plant material.
- B. American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standardized Plant Names.
- C. Texas Association of Nurserymen, Grades and Standards.
- D. Hortis Third, 1976 - Cornell University

#### 1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

- |    |  |
|----|--|
| A. | The Contractor shall, within ten (10) days following acceptance of bid, notify the Architect/Owner of the sources of plant materials and bed preparation required for the project.   |
| B. | Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel, and crushed stone. Samples shall be approved by Architect before use on project.   |
| C. | Product Data: Submit complete product data and specifications on all other specified materials.  |
| D. | Submit three representative samples of each variety of ornamental trees, shrubs, and groundcover plants for Architect's approval. When approved, tag, install, and maintain as representative samples for final installed plant materials. |
| E. | File Certificates of Inspection of plant material by state, county, and federal authorities with Architect, if required.   |
| F. | Soil Analysis: Provide sandy loam soil analysis if requested by the Architect.   |

### PART 3 - EXECUTION

### 3.1 BED PREPARATION & FERTILIZATION

- |    |   |
|----|---|
| A. | Landscape Contractor to inspect all existing conditions and report any deficiencies to the Owner.   |
| B. | <p>All planting areas shall be conditioned as follows:</p> <ol style="list-style-type: none"> <li>1. Prepare new planting beds by scraping away existing grass and weeds as necessary. Till existing soil to a depth of six (6") inches prior to placing compost and fertilizer. Apply fertilizer as per manufacturers recommendations. Add six (6") inches of compost and till into a depth of six (6") inches of the topsoil. Apply organic fertilizer such as Sustane or Green Sense at the rate of twenty (20) pounds per one thousand (1,000) square feet.</li> <li>2. All planting areas shall receive a two (2") inch layer of specified mulch.</li> <li>3. Backfill for tree pits shall be as follows: Use existing top soil on site (use imported topsoil as needed) free from large clumps of rocks, debris, caliche, subsalts, etc., placed in nine (9") inch layers and watered in thoroughly.</li> </ol> |
| C. | <p>Grass Areas:</p> <ol style="list-style-type: none"> <li>1. Areas to be Solid Sod Bermudagrass: Blocks of sod should be laid joint to joint, (staggered joints) after fertilizing the ground first. Roll grass areas to achieve a smooth, even surface. The joints between the blocks of sod should be filled with topsoil where they are pointed gaps open, then watered thoroughly.</li> <li>2. Areas to be Hydromulch Bermudagrass: Hydromulch Bermudagrass seed should be applied at a rate of two (2) pounds per one thousand (1,000) square feet. Use a 4" x 8" batter board against the bed areas.</li> </ol>  |

### 3.2 INSTALLATION

- |    |  |
|----|--|
| A. | Maintenance of plant materials shall begin immediately after each plant is delivered to the site and shall continue until all construction has been satisfactorily accomplished.   |
| B. | Plant materials shall be delivered to the site only after the beds are prepared and area ready for planting. All shipments of nursery materials shall be thoroughly protected from the driving winds during transit. All plants which cannot be planted at once, after delivery to the site, shall be well protected against the possibility of drying by wind and sun. Balls of earth B & B plants shall be kept covered with soil or other acceptable material. All plants remain the property of the Contractor until final acceptance. |
| C. | Position the trees and shrubs in their intended location as per plan.  |
| D. | Notify the Landscape Architect for inspection and approval of all positioning of plant materials.  |
| E. | Excavate pits with vertical sides and horizontal bottom. Tree pits shall be large enough to permit handling and planting without injury to balls of earth or roots and shall be of such depth that, when planted and settled, the crown of the tree will be at or near the same relationship to the finish grade as it did to soil surface in original place of growth.  |

## **JOB CONDITIONS**

- A. General Contractor to complete the following punch list. Prior to Landscape Contractor initiating any portion of landscape installation, General Contractor shall leave planting bed areas three (3") inches below finish grade of sidewalks, drives and curbs as shown on the drawings. All lawn areas to receive solid soil shall be left one (1") inch below the finish grade of sidewalks, drives, and curbs. All construction debris shall be removed prior to Landscape Contractor beginning any work.
- B. General Contractor shall provide topsoil as described in Section 02200 - Earthwork.
- C. Storage of materials and equipment at the job site will be at the risk of the Landscape Contractor. The Owner cannot be held responsible for theft or damage.

## 1.6 MAINTENANCE AND GUARANTEE

- A. Maintenance:**
1. The Landscape Contractor will be held responsible for the maintenance of all work from the time of planting until final acceptance by the Owner. No trees, shrubs, groundcover or grass will be accepted unless they show a healthy growth and satisfactory foliage conditions.
  2. Maintenance shall include watering of trees and plants, cultivation, weeding spraying, edging, pruning of trees, moving of grass, cleaning up and all other work necessary of maintenance.
  3. A written notice requesting final inspection and acceptance should be submitted to the Owner at least seven (7) days prior to completion. An on-site inspection by Owner and Landscape Contractor will be completed prior to written acceptance.
  4. After final acceptance of installation, the Landscape Contractor will not be required to do any of the above listed work.
- B. Guarantee:**
1. Trees shall be guaranteed for a twelve (12) month period after acceptance. Shrubs and groundcover shall be guaranteed for twelve (12) months. The Contractor shall replace all dead materials as soon as weather permits and upon notification of the Owner. Plants, including trees, which have partially died so that shape, size, or symmetry has been damaged, shall be considered subject to replacement. In such cases, the opinion of the Owner shall be final.
    - a. Plants used for replacement shall be of the same size and kind as those originally planted and shall be planted as originally specified. All work, including materials, labor and equipment used in replacements, shall carry a twelve (12) month guarantee. Any damage, including roots in lawn or bed areas, incurred as a result of making replacements shall be immediately repaired.
    - b. At the direction of the Owner, plants may be replaced at the start of the next year's planting season. In such cases, dead plants shall be removed from the premises immediately.
  2. When plant replacements are made, plants, soil, mix, fertilizer and mulch are to be utilized as originally specified and respected for full compliance with Contract requirements. All replacements are to be included under "Work" of this section.

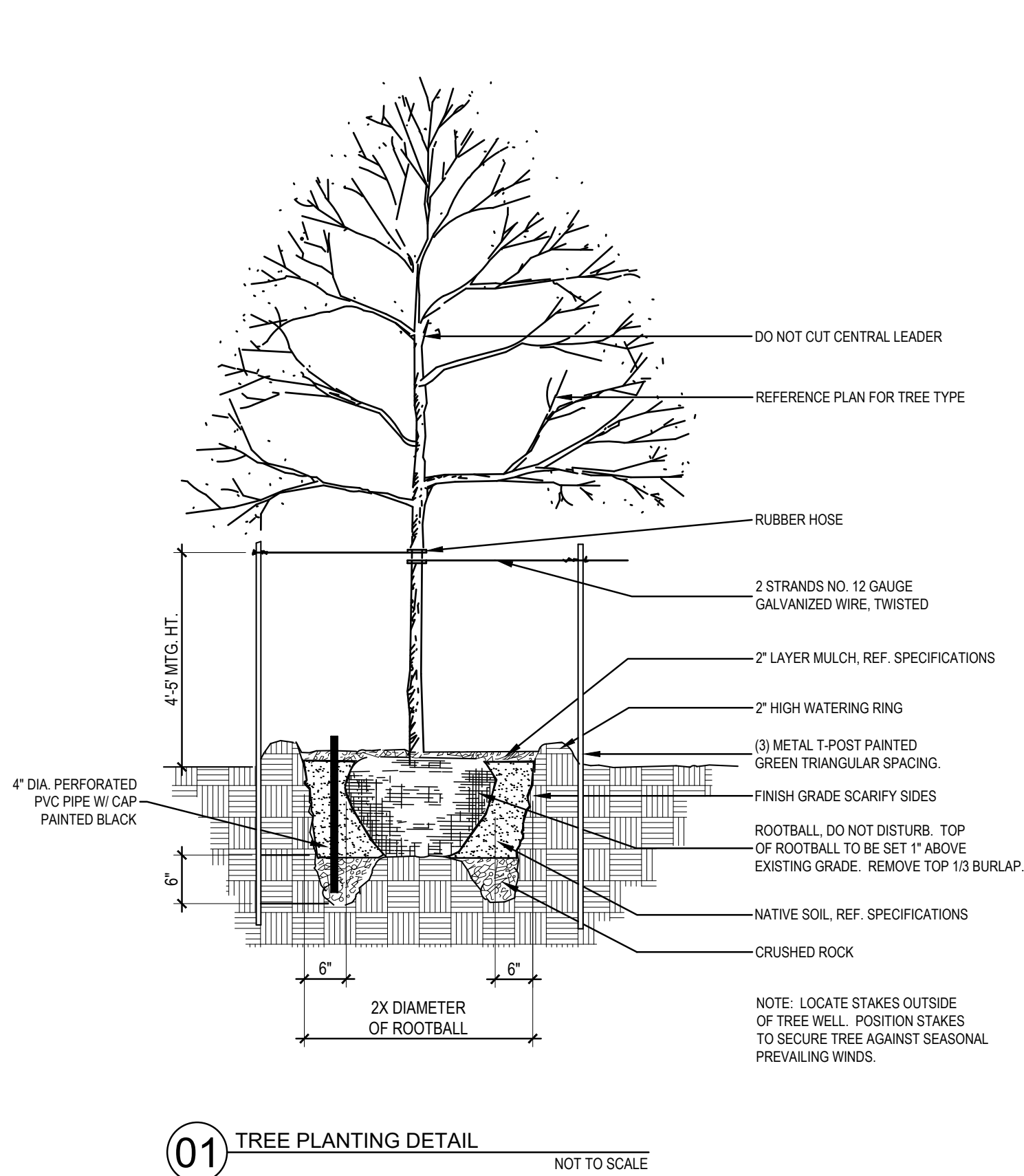
## 1.7 QUALITY ASSURANCE

- A. General: Comply with applicable Federal, State, County and Local regulations governing landscape materials and work
- B. Personnel: Employ only experienced personnel who are familiar with the required work. Provide full time supervision by a qualified foreman acceptable to Landscape Architect.
- C. Selection of Plant Material:

1. Make contact with suppliers immediately upon obtaining notice of contract acceptance to select and book materials. Develop a program of maintenance (pruning and fertilizing) that will insure the purchased materials will meet and exceed proposed specifications.
2. Landscape Architect will provide a key identifying each tree location on site. Written verification will be required to document material selection, source and delivery to site.
3. Owner and/or Architect shall inspect all plant materials when reasonable at place of growth for compliance with requirements for genus, species, cultural/variety, size and quality.
4. Owner and/or Architect retains the right to further inspect all plant material upon arrival at the site and during installation for size and condition of root balls, limbs, branching habit, insects, injuries, and latent defects.
5. Owner and/or Architect may reject unsatisfactory or defective material at any time during the project of work. Materials rejected from the site immediately.
6. Plants damaged in transit or at job site shall be rejected.

## 1.8 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Preparation:
1. Balled and Burlapped (B&B) Plants: Dig and prepare shipment in a manner that will not damage roots, branches, shape, and future development.
  2. Container Grown Plants: Deliver plants in rigid container to hold ball shape and protect root mass.



### 3.3 CLEANUP AND ACCEPTANCE

- A. Cleanup: During the work, the premises shall be kept neat and orderly at all times. Storage areas for all materials shall be so organized that they, too, are neat and orderly. All trash and debris shall be removed from the site as work progresses. Keep paved areas clean by sweeping or hosing at end of each days work.

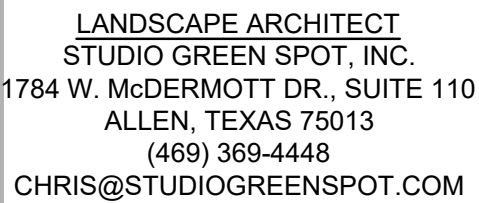
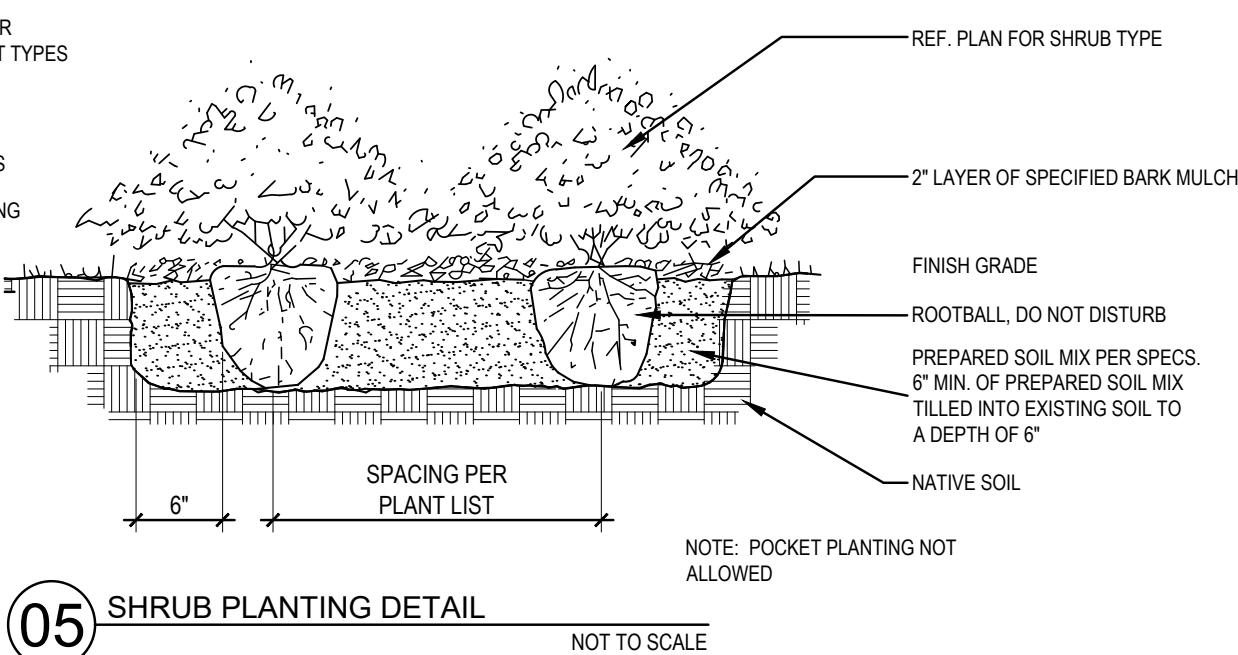
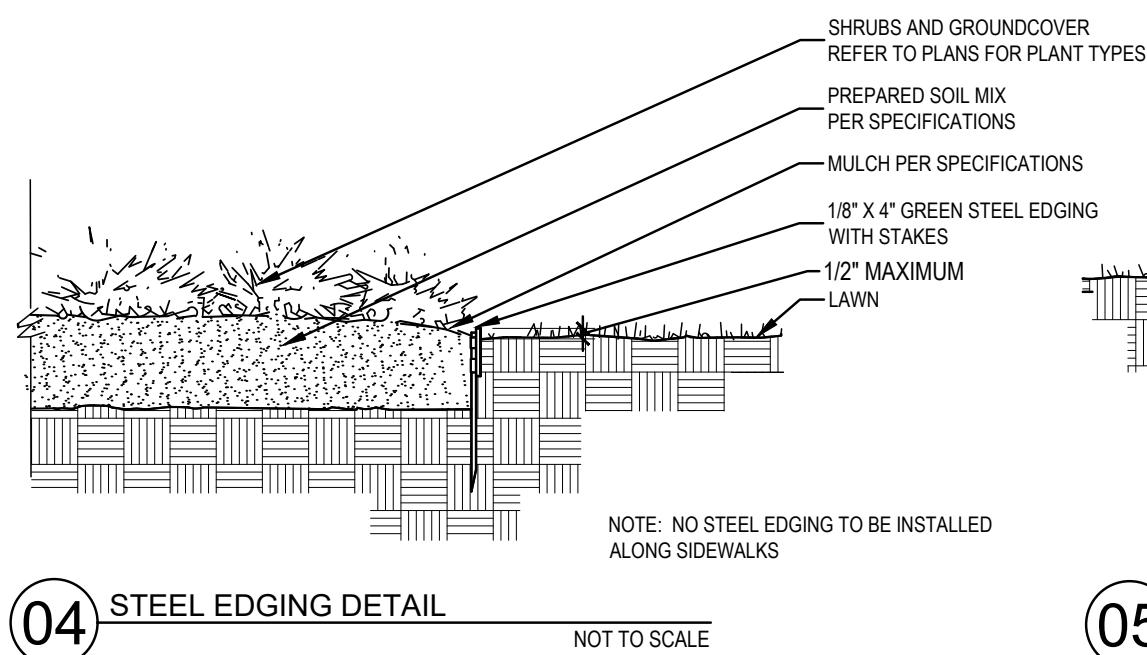
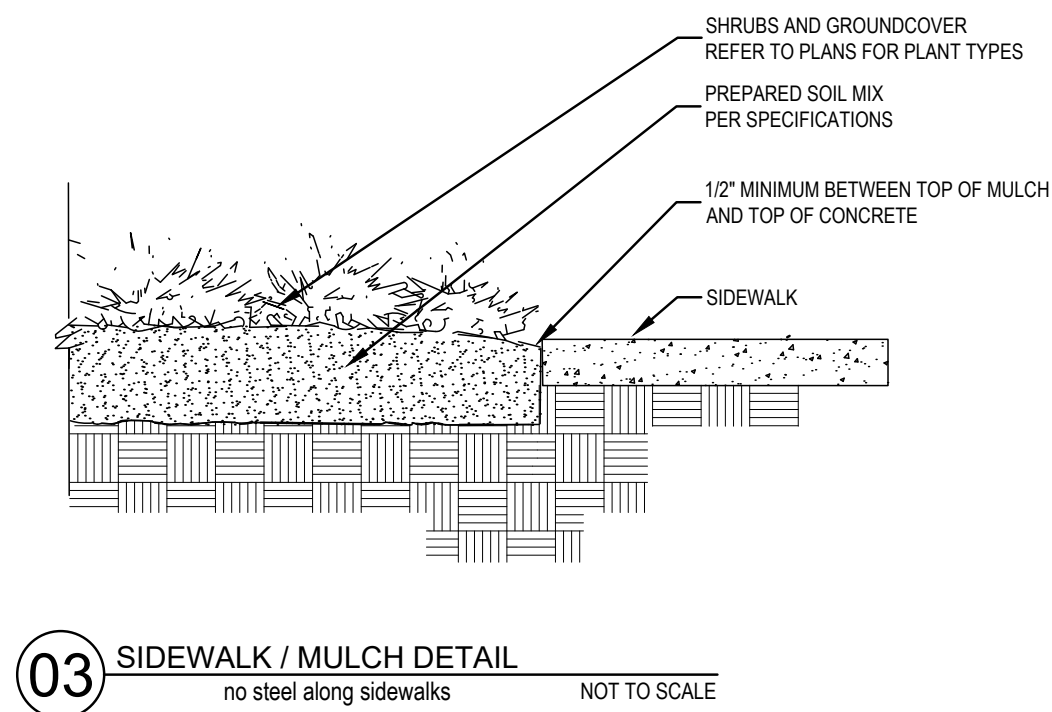
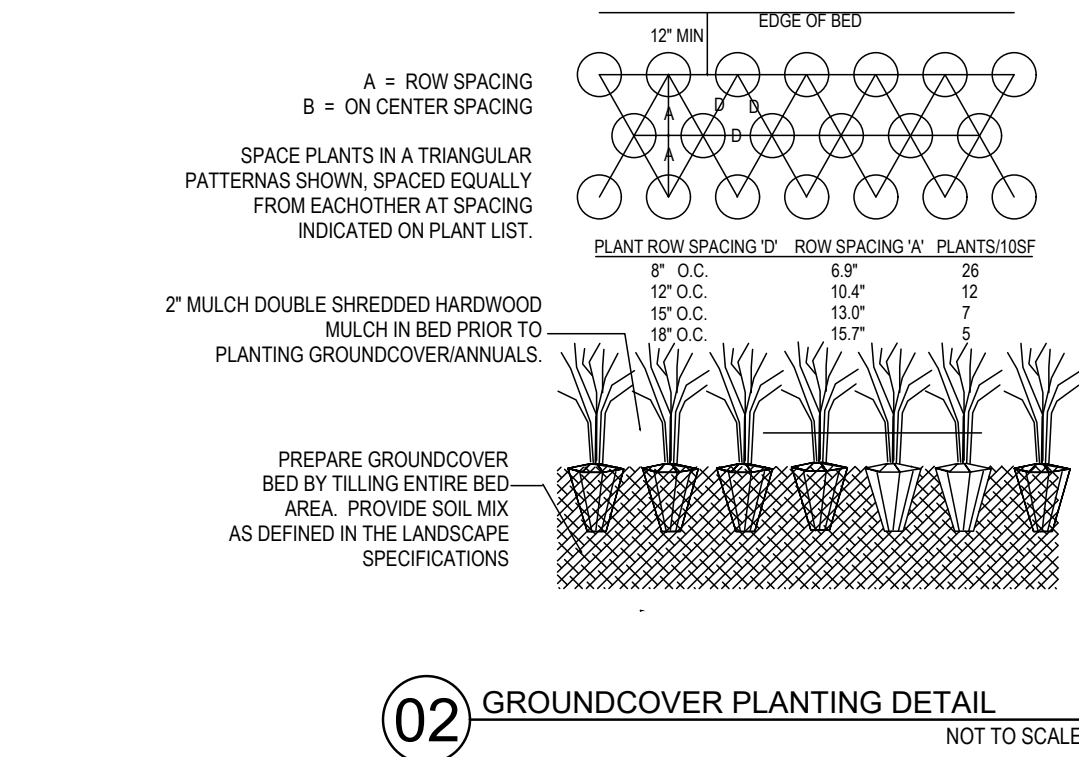
END OF SECTION

## 2.2 SOIL PREPARATION MATERIALS

- |    |   |   |
|----|---|---|
| A. | Sandy Loam:   | <ol style="list-style-type: none"> <li>1. Fiable, fertile, dark, loamy soil, free of clay lumps, subsoil, stones and other extraneous material and reasonably free of weeds and foreign grasses. Loam containing Dallastgrass or Nutgrass shall be rejected.</li> <li>2. Physical properties as follows:               <ul style="list-style-type: none"> <li>Clay – between 7-27 percent</li> <li>Silt – between 15-25 percent</li> <li>Sand – less than 52 percent</li> </ul> </li> <li>3. Organic matter shall be 3%-10% of total dry weight</li> <li>4. If requested, provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.</li> </ol> |
| B. | Organic Material:   | Compost with a mixture of 80% vegetative matter and 20% animal waste. Ingredients should be a mix of course and fine textured material.   |
| C. | Preferred Bedding Soil as supplied by Vital Earth Resources, Gladewater, Texas; Premium Bedding Soil as supplied by Living Earth Technology, Dallas, Texas or Acid Gr Municipal Mix as supplied by Soil Building Systems, Dallas, Texas or approved equal |   |
| D. | Sharp Sand:   | Sharp sand must be free of seeds, soil particles and weeds.   |
| E. | Mulch:  | Double Shredded Hardwood Mulch, partially decomposed, dark brown. Living Earth Technologies or approved equal.  |
| F. | Organic Fertilizer:   | Fertilizer, Sustane, or Green Sense or equal as recommended for required applications. Fertilizer shall be delivered to the site in original unopened containers, each bearing the manufacturer's guaranteed statement of analysis.   |
| A. | Commercial Fertilizer:  | 10-20-10 or similar analysis. Nitrogen source to be a minimum 50% slow release organic Nitrogen (SCU or UF) with a minimum 8% sulphur and 4% iron plus micronutrients.  |
| B. | Peat:   | Commercial sphagnum peat moss or partially decomposed shredded pine bark or other approved organic material.  |

### 2.3 MISCELLANEOUS MATERIALS

- |    |   |
|----|---|
| A. | Steel Edging: Shall be Ryerson "Estate Curbing", 1/8" x 4" with stakes 4" on center.  |
| B. | <p>Staking Material for Shade Trees:</p> <ul style="list-style-type: none"> <li>1. Post: Studded T-Post, #1 Armocon with anchor plate, 6'-0" length; paint green.</li> <li>2. Wire: 12 gauge, single strand, galvanized wire.</li> <li>3. Rubber hose: 2 ply, fiber reinforced hose, minimum 1/4 inch inside diameter. Color: Black.</li> </ul> |
| C. | Gravel: Washed native pea gravel, graded 1 in. to 1-1/2 in.   |
| D. | <p>Filter Fabric: Mirafil 140M by Celanese Fibers Marketing Company, available at Lofthouse Co., (214) 631-5250 or approved equal.</p>  |



09.26.2019

**GODDARD SCHOOL**

**BOSSY BOOTS DRIVE  
ALLEN, TEXAS**

**ISSUE:**

FOR APPROVAL 09.26.19

DATE:

09.26.2019

**SHEET NAME:**

## LANDSCAPE SPECIFICATIONS

**SHEET NUMBER**

## L.2