

#### NOTES:

- ALL CHAINLINK FENCE SHALL BE BLACK VINYL COATED WITH A TOP AND BOTTOM RAIL
- 20' LONG WOOD BENCH SHALL BE EMBEDDED INTO THE CONCRETE. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS.
- TRASH RECEPTACLES SHALL BE IN CONFORMANCE WITH CITY OF MIAMI STANDARDS.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR DUGOUT ROOF.

# SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT

STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156 PH. (305) 412-8185 FAX. (305) 412-8105 FL CERTIFICATE OF AUTHORIZATION NO. 00004892

SUBCONSULTANT:

ROSENBERG SARDNER DESIGN

LANDSCAPE ARCHITECTURE / LAND PLANNING
17670 NW 78th AVE., Suite 214, MIAMI, FLORIDA, 33015
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PROFESSIONAL SEAL:

KEN GARDNER, ASLA. FL LICENSE NO. 1569 ROSENBERG GARDNER DESIGN

PROJECT NUMBER: 09213010.43

PROJECT NAME & ADDRESS:

## **DOUGLAS PARK**

CORRECTIVE ACTION PLAN 2795 SW 37 AVE MIAMI, FL

CLIENT NAME & ADDRESS:



CITY OF MIAMI CAPITAL IMPROVEMENTS PROGRA 444 SW 2ND AVENUE MIAMI, FLORIDA 33130

REV	DESCRIPTION	DATE
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SCALE: AS NOTED

FILE NAME: LA—sheets.dwg

DRAWN BY: KE

CHECKED BY: KEG

E: DECEMBER, 2015

DRAWING TITLE:

BALLFIELD LAYOUT PLAN

KNOW WHAT'S BELO ALWAYS CALL 81 BEFORE YOU DI

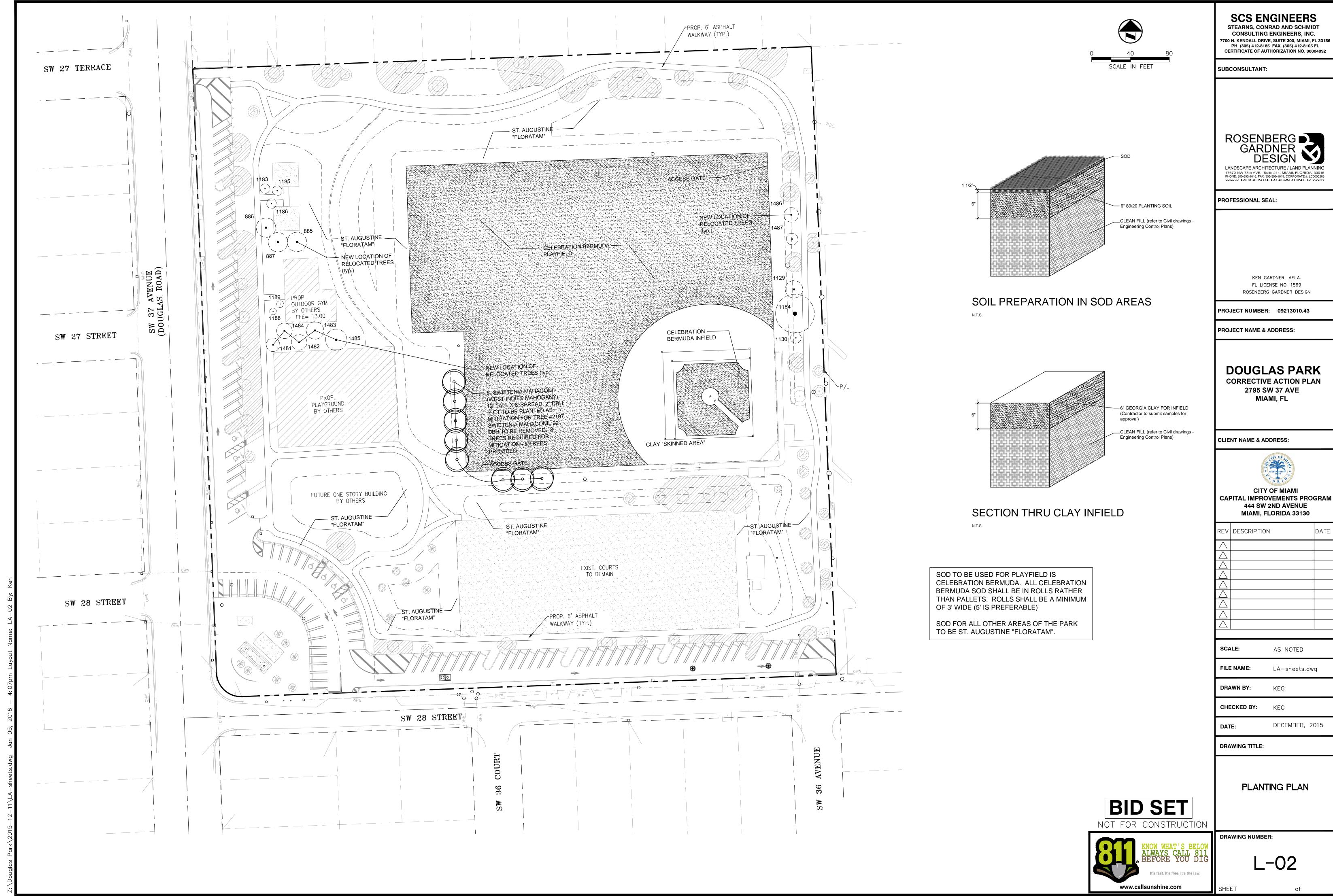
www.callsunshine.com

**BID SET** 

DRAWING NUMBER:

L-01

HFFT



7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156

DESCRIPTION	DATE
	DESCRIPTION

1.2 CONTRACTOR QUALIFICATIONS

A. Landscape installation work to be performed by a Contractor Certified by the Florida Nurserymen, Growers and Landscape Association (FNGLA) as a Certified Landscape Contractor. Any pruning to be supervised by an Arborist, certified by the International Society of Arboriculture (ISA) and licensed in Miami-Dade County.

1.3 INVESTIGATION OF UTILITIES A. Prior to beginning work, the Contractor shall be responsible to locate existing underground utilities. Check with all utility companies and Sunshine

1.4 SUBSTITUTIONS A. Only materials specified will be accepted, unless approved in writing by the Landscape Architect in advance.

1.5 PLANT SIZES A. All plant sizes shall equal or exceed the minimum sizes as specified in the plant list. When plant sizes are specified as a range of size, installed materials shall average the mean of the range specified. Plants shall be measured

be done at the time of planting. 1.6 PLANT QUALITY A. All plant material shall be equal to or better than Florida No. 1 as classified by "Grades and Standards for Nursery Plants" by the Division of Plant Industry, Florida Department of Agriculture. They shall have a growth habit that is normal

following pruning, with branches in normal position. All necessary pruning shall

for the species; healthy, vigorous, free from insects, disease and injury. B. The Owner or Landscape Architect reserves the right to refuse any plant material which does not conform to the intent of the written specifications or

C. CIRCLING ROOTS FOUND ON CONTAINER-GROWN MATERIAL WILL NOT BE ACCEPTED UNLESS REMEDIAL ROOT PRUNING, APPROVED BY THE LANDSCAPE ARCHITECT IS DONE BEFORE PLANTING.

1.7 PLANT QUANTITY A. The plant quantities shown on the plant list are to be used only as an aid to bidders. In the case of discrepancy between the plant list and the plan, the quantity on the plan shall override the plant list.

1.8 UNIT PRICES

A. The successful bidder shall furnish to the Owner and the Landscape Architect, a unit price breakdown for all materials. The Owner may, at his discretion, add to or delete from the materials utilizing the unit price breakdown submitted to and accepted by the Owner.

1.9 SUBMITTALS A. Fertilizer: The Contractor shall submit to the Owner and Landscape Architect documentation that all the fertilizer used for the project is of the analysis specified and placed at the rates specified in section 2.2 FERTILIZER.

B. Planting soil: The Contractor shall submit a sample of the planting soil (approximately 1 cu. Ft.) for approval by the Landscape Architect prior to delivery to the site.

1.10 CLEAN-UP & MAINTENANCE OF TRAFFIC A. Follow procedures in FDOT Index 600 for maintenance of traffic during

B. At the end of each work day, the Contractor shall remove debris and shall barricade the un-filled holes in a manner appropriate in the path of pedestrians

C. Upon completion of the work or any major portion of the work or as directed by the Landscape Architect, all debris and surplus material from his work shall be removed from the job site.

1.11 MAINTENANCE PRIOR TO ACCEPTANCE A. The Contractor is responsible to maintain the plantings until they are accepted under the provisions of 1.12 "ACCEPTANCE OF INSTALLATION".

1. Plants: Begin maintenance immediately following the final plant installation operation for each plant and continue until all plant installation is complete and accepted. Maintenance shall include watering all plants, weeding, mulching, pest and disease control, tightening and repairing of guys, repair of braces, removal of dead growth, resetting of plants to proper grade or up-right position. restoration of plant saucer, litter pick-up in plant beds and other necessary operations to assure specified minimum grade of Florida No. 1.

2. Turf Areas: Begin maintenance of turf immediately following the placement of sod and continue until sod installation is complete and accepted. Maintenance shall include but not be limited to, watering, leveling, mowing, weed and pest control, fungus and disease control and other necessary operations as determined by the Landscape Architect and good nursery practice.

3. Re-setting or straightening trees and palms: The Contractor shall re-set and/or straighten trees and palms as required at no additional cost to the Owner unless caused by sustained winds of 75 mph or more. Then, the costs of the operations may be charged to the owner. Re-set trees within 48 hours.

1.12 ACCEPTANCE OF INSTALLATION A. Inspection: Inspection of the work, to determine completion of contract work, exclusive of the possible replacement of plants and turf, will be made by the Landscape Architect at the conclusion of the maintenance period. Written notice requesting such an inspection and submitted by the Contractor at least ten (10) days prior to the anticipated date.

1.13 GUARANTEE A. Guarantee all plants for a period of one year (CCD). Guarantee shall commence from the date of written acceptance. Plant material which is on the site and scheduled to be relocated is not covered by the guarantee except in the case of Contractor's negligence or work that has been done in an unworkman-like manner. The Contractor is not responsible for loss due to acts of god, (i.e.) sustained winds of 75 mph or more, floods, frost, lightning,

1.14 REPLACEMENT A. Replacement shall be made during the guarantee period as directed by the Landscape Architect within ten (10) days from time of notification. For all replacement plant material, the quarantee period shall extend for an additional forty-five (45) days beyond the original guarantee period. The Contractor shall be responsible to provide water to the replacement plants in sufficient quantity to aid in their establishment. At the end of the guarantee period, inspection will be made by the Landscape Architect, upon written notice requesting such inspection and submitted by the Contractor at least five (5) days before the anticipated date. Replacement plants must meet the requirements of Florida No. 1 at time of inspection. Remove from the site all plants that are dead or in a state of unsatisfactory growth, as determined by the Landscape Architect. Replace these and any plants missing due to the Contractor's negligence as soon as conditions permit.

1. Materials and Operations: All replacement plants shall be of the same kind and size as indicated on the plant list. The Contractor shall supply and plant the plants as specified under planting operations.

2. Cost of Replacements: A sum sufficient to cover the estimated cost of possible replacements, including material and labor will be retained by the Owner and paid to the Contractor after all replacements have been satisfactorily made and approved by the Landscape Architect.

#### **PART 2 - MATERIALS**

A. Planting soil for trees, shrubs and ground covers shall be of the composition noted on the plans, measured by volume.

B. Soil for Sodded Areas: shall be coarse lawn sand.

2.2 FFRTII I7FR A. Fertilizer for trees, palms, shrubs, and groundcovers shall be as follows: LESCO Palm Special 13-3-13 or equal, Sulfur coated with iron and other minor elements and maximum of 2% chlorine, or brand with equal analysis. The fertilizer shall be uniform in composition, dry and free flowing and shall be delivered to the site in the original unopened containers, bearing the manufacturer's guaranteed analysis. Fertilizer for sod and seeded areas shall be 6-8-6, 50% organically derived nitrogen, or equal.

2.3 WATER A. The Contractor shall provide potable water on site, available from the start

of planting. The Contractor is responsible to ascertain the location and accessibility of the water source. The Contractor is responsible to provide the means of distribution (i.e. water truck, hoses, etc.) for distribution of water to the planting areas.

A. Mulch shall be shredded Melaleuca mulch (Florimulch) as manufactured by Forestry Resources, Inc., or equal.

2.5 ROOT BARRIER MATERIAL A. When specified in the plans, root barrier material shall be Biobarrier (19.5 inch width) Reemay or approved equal.

B. Install per details in the plans. **PART 3 - INSTALLATION PROCEDURES** 

3.1 LAYOUT A. Verify location of all underground utilities and obstructions prior to excavation.

3.2 HERBICIDE TREATMENT

A. In all areas infected with weed and/or grass growth, a systemic herbicide, such as Roundup, shall be applied per manufacturer's rates. When it has been established where work will be done, the systemic herbicide shall be applied in accordance with manufacturer's labeling to kill all noxious growth. Contractor shall schedule his work to allow more than one application to obtain at least 95% kill of undesirable growth. If necessary, Contractor shall conduct a test to establish suitability of product and applicator to be used on this project, prior to execution of the full application.

3.3 PLANT PIT EXCAVATION AND BACKFILLING A. Trees: See the Planting and Bracing Details and notes.

B. All planting holes shall be hand dug where machine dug holes may adversely affect utilities or improvements.

C. Shrubs and Groundcover: Shrubs and groundcover shall be planted in a soil bed as described in the notes and details. Space shrubs and provide setback from curb and pavements as shown in the plans.

D. Watering of field-grown plants: Thoroughly puddle in water to remove any air pockets in the plant hole.

3.4 WATERING

A. The Contractor is responsible to provide the water for all new plants and transplants and means of distribution (i.e. hand watering or water truck) during the maintenance period and extending into the period after acceptance until the full schedule as listed below is complete. Water for trees and other large field grown plants shall be supplemented by hand or water truck, in addition to the irrigation system, (if one is provided). Contractor can adjust watering schedule during heavy rain season upon approval of the Landscape Architect.

AMOUNT OF WATER PER APPLICATION For trees up to 5 inch caliper - 5 gallons From 5 to 8 inch caliper - 25 gallons

9 inch and up caliper - 50 gallons FREQUENCY OF WATER

Daily for the first week 3 times per week for weeks 2 - 5 2 times per week for weeks 6 - 8

1 time per week for weeks 9 - 12 B. Water in plants by thoroughly soaking of the entire root ball immediately after planting. For large trees and shrubs, add water while backfilling hole to

eliminate any air pockets in the soil around the root ball. C. Water shrubs, sod and groundcover a minimum of once daily for a week or

until an irrigation system is fully operational. If no irrigation system is to be installed, the Contractor shall be responsible for watering the shrub, sod, and groundcover for the time specified above, after installation of each section of the planting installed.

3.5 FERTILIZING

A. Add fertilizer on top of the surface of shrubs beds and tree and palms root balls two (2) months after installation. Fertilize sod within two (2) days after installing after planting of each segment of the job. Fertilizer shall be applied after soil has been well moistened. Fertilizer shall be washed off of plant leaves and stems immediately after application. Apply at the following rates:

Trees and Large Shrubs: One (1) pound per inch of trunk diameter, spread evenly over the root ball area.

2. Shrubs: One half (1/2) handful per shrub, spread evenly over the root ball

3. Groundcover: Twelve (12) pounds per 100 sq. ft. of bed area.

4. Sod: Twelve (12) pounds per 1,000 sq. ft. Wash fertilizer off blades immediately after spreading.

3.6 MULCHING A. Spread mulch two (2) inches thick uniformly over the entire surface of shrubs and groundcover beds, depth measured after settling, unless otherwise specified in the plans. Provide 36" diameter bed of mulch, measured from outer edge of the trunk, for all trees and palms planted in sod areas. Keep mulch away from contact with the trunk. Create a 6" high ring of mulch at the outer edge of tree and palm holes.

3.7 GUYING AND BRACING A. See the details bound herewith or made part of the plans.

A. Provide a blanket of lawn sand as described in the notes in these plans. Prior to planting, remove stones, sticks, etc. from the sub-soil surface. Excavate existing non-conforming soil as required so that the finish grade of sod is flush with adjacent pavement or top of curb as well as adjacent sod in the case of sod patching.

B. Place sod on moistened soil, from minimum 3' wide rolls (preferably 5' wide) with edges tightly butted. Sod shall be watered immediately after installation to uniformly wet the soil to at least two inches below the bottom of sod strips. Immediately after soaking, the sod shall be rolled with a 500 pound hand roller mmediately after placing.

C. Keep edge of sod bed a minimum of 18" away from groundcover beds and 24" away from edge of shrub beds and 36" from trees, measured from the edge

D. Apply fertilizer to the sod as specified in Section 3.5.

E. Excavate and remove excess soil so top of sod is flush w/top of curb or adjacent pavement, or adjacent existing sod

**SODDING SPECIFICATIONS** 

PART I \_GENERAL

1.01 SCOPE OF WORK

A. This Section specifies the furnishing and placing of sod and the furnishing and placing of the fertilizer, water, staples and stakes required for placing of sod.

B. The work shall include, but not be limited to, delivery, storage, protection to the public, inspections, excavation, installation, grading, backfilling, fertilizing, sod installation, rolling, sanding, watering, mowing, cleanup,

1.02 QUALITY ASSURANCE

A. The Landscape Architect shall have the right, during any phase of the work operations, to reject any and all work and materials which do not meet the requirements of the Plans or Specifications. Rejected work and materials shall be immediately removed from the project area and replaced with acceptable work and material within seven (7) calendar days or as approved by the Landscape Architect.

B. Standards:

1. Nomenclature: Botanical and common names for sod, including varieties, have been derived from accepted names of the landscape

2. Grade Standards: a. Sod shall be nursery grown and shall comply with required inspections, grading standards and plant regulations as set forth by

b. Quality grade shall be based on the standards of sod quality grades of Premium, Standard or Commercial as established by the Turfgrass Producers Association of Florida, Inc.

1.03 CUTTING, DELIVERY AND HANDLING

the Florida Department of Agriculture.

A. Cutting Sod: Sod shall be cut with a root/soil mat of sufficient thickness to withstand handling.

B. Delivery: Deliver sod on pallets with root system protected from exposure to wind and sun. Deliver sod in quantities not in excess of that required for subsequent placement with in 48 hours of cutting.

1.4. GUARANTEE: The Contractor shall maintain the sodded areas in a healthy, vigorous, undamaged condition for a period of 90 days beginning on the date of acceptance of the sodding. Guarantee shall include the filling, leveling and repairing of eroded areas, re-sodding areas exhibiting lack of healthy growth and mowing the grass each time it reaches three inches in height.

PART 2 \_ MATERIALS

2.01 SOD

A. Sod shall be Argentine Bahia or St. Augustine 'Floratam', where indicated in the plans. The quality grade shall be STANDARD GRADE. Based upon the standards of sod quality as established by the TURFGRASS PRODUCERS ASSOCIATION OF FLORIDA, INC. The sod shall be well matted with roots and of firm, tough texture having a compact top growth and heavy root development. The allowable weed content shall be as follows: (Standards for Premium and Commercial grades are provided for reference only.)

Premium \_ no weeds or any other grass allowed. Only the species of sod specified.

Standard \_ no casually visible broadleaf weeds, no obvious patches of weeds and no more than 2% of any other grass or weed in the total

Commercial -any sod which does not meet the weed restrictions of Premium or Standard.

Sod sections shall be strong enough to support their own weight and retain their size and shape when suspended vertically from a firm grasp on the upper 10% of the section. Sod shall be moist and relatively free of thatch, up to one half inch allowable (uncompressed). The soil embedded in the sod shall be a clean earth, free of stones and debris.

B. Mowing: The sod shall have been mowed at least three times with a lawn mower with final mowing not more than seven days prior to the sod being cut for placement.

C.Cutting: Sod shall not be harvested when moisture content (excessively dry or wet) may adversely affect its survival and shall be live, fresh and uninjured at the time of placement. After approval of source, mow and rake as necessary to remove excessive top growth and debris. Cut sod with mechanical sod cutters, retaining native soil mat of sufficient thickness to withstand handling. The sod shall be provided in commercial pad sizes measuring not less than 12" by 24" with a uniform thickness of 1 inch to 3/4 inches at time of cutting. Measurement for thickness shall exclude top growth and thatch.

2.02 BACKFILL/PLANTING SOIL

A.Backfill: Comprised of sandy loam taken from the top 8 inches of existing sod on site.

2.03 WATER

A. The Landscape Contractor is responsible for ascertaining the location and accessibility of a potable water source for distribution to the newly sodded areas. If there is no approved source of potable water available at the job site, or the irrigation system is not operating or providing sufficient coverage, then the Landscape Contractor shall be responsible for bringing in a water truck or tank for hand watering.

2.04 FERTILIZER

A.If requested by the Landscape Architect, submit for approval, copies of the manufacturer's specifications or analysis of fertilizer intended for use.

B. Fertilizer shall be granular type having an analysis of 12\_6\_8, derived

Total Nitrogen 12% Derived from activated sludge urea form, sulphur coated urea & potassium nitrate 75.00% Ammoniacal 0.00%

from the following sources:

Water soluble 10.25% Water insoluble 1.00% 6%

Phosphoric Acid Derived from triple super phosphate

Water Soluble Potash 8%

Derived from Sulphate of Potash Magnesium, Potassiun Nitrate, sulphate of Potash. and activated sludge Total Magnesium 2.41% Water Soluble 2.41% Derived from Sulphate of Potash Magnesium

Total Manganese .77% Derived from Manganous Oxide Total Boron Derived from Sodium Borate Total Copper .07% Derived from Copper Oxide Total Zinc .08% Derived from Zinc Oxide

Derived from Iron Oxide and Ferrous Sulphate

Total Iron

A.Composition and Quality: Granular, uniform in composition, dry and free flowing, suitable for application by equipment intended for the purpose. Deliver in unopened bags fully labeled with the manufacturer's analysis.

B. Comply with the State of Florida fertilizer laws.

2.05 Stakes: Softwood, 3/4 inch by 3/4 inch by eight inches, unpainted and

2.06 Staples: Metal, 11 gage, 10 inches long, 1 inch wide.

PART 3 \_ EXECUTION

3.01 INSPECTION: Inspect surfaces indicated to receive sod and verify that related preceding work has been completed. Do not proceed with placement until conditions are satisfactory.

3.02 PREPARATION: Remove stones, sticks, rubbish and other extraneous matter from areas to be sodded. Eliminate voids and rough areas and produce a smooth, evenly graded surface. If weed growth is present in the area to be sodded, remove the top three (3) inches of existing soil material and weed growth.

3.03 INSTALLATION

A. Planting soil: Spread planting soil over the area to be sodded to a uniform depth of two (2) inches.

B. Fertilizer: Spread fertilizer over the planting soil at the rate of 12 pounds per 1000 square feet of lawn area or as recommended by the manufacturer. Use a Mechanical spreader capable of uniformly distributing the fertilizer at the specified rate. Disc the spread fertilizer

C.Placement of sod: Place sod on a moist bed of planting soil. Sod shall be carefully placed by hand, edge to edge in rows at right angles to slopes, commencing at the base of sloped areas to be sodded and working upward. The sod shall be immediately pressed firmly into contact with a 500 pound hand roller or other suitable equipment, approved by the Landscape Architect, that will produce a 90 pound per square inch compression grading. The rolling operation shall provide a true and even surface and ensure knitting without displacement of sod or deformation of the surfaces of the sodded area. Hand tamp those areas inaccessible to the roller. The edges of the sodded area shall be staggered in a corresponding manner providing the offset along the edge does not exceed 6 inches. All vertical edging adjacent to sodded areas shall be tamped so as to produce a feathered edge.

D. Sanding: If, after installation, the sod bed is in need of an application of sandy top dressing, in the opinion of the Landscape Architect, to correct irregularities, gaps or shrinking joints, the Contractor shall perform this

penetration of at least six inches. Avoid puddling and erosion of soil.

2. Provide continuous watering of sod in order to achieve optimum growth conditions for establishment. Water shall be applied as necessary. The amount of water and frequency of watering shall be based on the specific needs of the sod, the time of year, amount of rainfall and other environmental conditions present at the time. This acceptance or for a minimum of sixty (60) consecutive days, whichever is greater in time.

3. If there is no source for water available at the project, such as a hose bib(s) or fire hydrant(s) if approved for use, then the Contractor shall be responsible for supplying water for hand watering by means of a

F. On slopes having a ratio of 1 in 3 or greater, peg the installed sod into place with not less than two stakes per square yard.

3.04 CLEANUP

A.Remove fertilizer containers, sod pallets and sodding debris from the site and dispose of properly. Sweep sod waste, soil and fertilizer from paved areas, curbs and walks

3.05 MAINTENANCE PRIOR TO FINAL ACCEPTANCE

A. Maintenance Prior to Final Acceptance

1. Maintenance shall begin immediately after sod is installed and continue until final acceptance except for the watering indicated in the paragraph below. This watering shall begin as indicated and shall continue until completed, even if the indicated period goes beyond the time of final acceptance.

2. Sod maintenance shall include watering, repair of erosion, litter removal, and all other care needed for proper growth of the sod. Mowing and edging shall be performed at least once every fourteen

3. Insecticides:

recommended by the County Agent, and approved by the Landscape Architect, prior to implementation

their possession all labeling associated with the chemical. Also, the

confined to the infected area. Spraving techniques, which may introduce the material being sprayed beyond the immediate area of the individual plant, are strictly prohibited.

documentation of such compliance e. All insecticides shall be applied by a licensed/certified operator only.

necessary, until all sodded areas are covered with a satisfactory lawn. Damage resulting from erosion, gullies, washouts, or other causes shall be repaired by filling with topsoil, tamping, re-fertilizing, and

5. Protection: Sodded areas shall be protected against trespassing and damage. Sod that has been damaged or injured shall be treated or replaced as directed, in compliance with the Specifications, at no additional cost to the DCAD.

6. Keep sidewalks, curbs and gutters, drainage structures, driveways, parking areas, streets, terraces, decks and pavers free of grass

completion will be scheduled. B. Survival and Conditions: The Contractor shall be responsible for the proper maintenance and the survival and condition of the sod from the

Sod shall be alive and in good growing condition at the time of final acceptance.

NOTE - IRREGULAR OR MULTI-STEMED TREES SHALL HAVE A SIMILAR STAKING PATTERN A SINGLE TRUNKED TREES. STAKES NEED NO ALL BE ATTACHED TO EVERY STEM ALL SUPPORT MATERIALS ARE TO BE REMOVED FROM THE TREES ONCE THE TREES HAVE BECOME ESTABLISHED(NOT TO EXCEED 12 MONTHS FROM THE COMPLETION OF THE PROJECT). \*TREE STAKING SHALL NOT SET ROOTBALL SO -PROTRUDE INTO SIDEWALK AREA TRUNK FLARE OR TOP ROOT OR CONFLICT WITH ADA ACCESS. IS 2" ABOVE SURROUNDING GRADE INSTALL 2" OF MULCH OVER 3" DIAMETER CIRCLE AROUND THE TRUNK. DO NOT PLACE MULCH WITHIN 3" OF THE 5/8" DIAMETER NYLON STRAPS WRAPPED REMOVE ANY PORTION OF WIRE — AROUND TRUNK & PULLED TAUT, TIED TO BASKETS ABOVE THE TOP HALF OF THE ROOTBALL. REMOVE WOOD DOWELS. BURLAP COVERINGS BELOW THE TOP HALF OF THE ROOTBALL. 6" HIGH TEMPORARY RETENTION RING OF SOIL TO ASSIST IN COMPLETE REMOVE ALL SYNTHETIC IRRIGATION OF THE TREE. REMOVE RING 3 MONTHS ROOTBALL COVERING MATERIALS AFTER INSTALLATION. (2)2" DIA. 8' LONG WOOD DOWELS FINISHED GRADE 20°APART DRIVEN THROUGH LTOP SOIL BOTTOM OF PLANTING PIT HOLES TO ACCOMMODATE PLANTS SHALL LIGHTLY COMPACTED SUBGRADE SOIL WITH ALL ROCKS 2" OR LARGER REMOVED - 3 TIMES ROOT BALL DIAMETER

> PLANTING & BRACING DETAIL **UNDER 3 1/2" CALIPER**

N.T.S.

SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT

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**PROFESSIONAL SEAL:** 

KEN GARDNER, ASLA. FL LICENSE NO. 1569 ROSENBERG GARDNER DESIGN

PROJECT NUMBER: 09213010.43

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**DOUGLAS PARK CORRECTIVE ACTION PLAN** 2795 SW 37 AVE MIAMI, FL

CLIENT NAME & ADDRESS:



444 SW 2ND AVENUE

**MIAMI, FLORIDA 33130** 

REV DESCRIPTION

SCALE: AS NOTED

LA-sheets.dwg

DECEMBER, 2015

DRAWN BY: KEG

**CHECKED BY:** KEG

FILE NAME:

DATE:

BE A MINIMUM OF THREE TIMES THE SIZED OF **DRAWING TITLE:** ALL BACKFILL FOR TREES SHALL BE AS EXISTING

FERTILIZER SHALL BE INSTALLED AS PER THE

It's fast. It's free. It's the law.

**BID SET** 

NOT FOR CONSTRUCTION

www.callsunshine.com

LANDSCAPE SPECIFICATIONS AND TREE PLANTING DETAIL

**DRAWING NUMBER:** 

Total Chlorine 2.00%

1.00%

into the planting soil to a depth of two inches.

task at no additional cost.

E. Watering:

1. Water the sod initially to develop uniform coverage and deep water

watering shall begin after placement of the sod and continue until final

a. Contractor shall apply all insecticides as needed, for complete control of pests and diseases. The materials and methods shall be in accordance with highest standard horticultural practices and as

b. When a chemical is being applied, the person using it shall have in chemical shall be applied as indicated on the said labeling. c. The spraying of insecticides and other such chemicals are to be

d. The implementation of control measures for pests and disease infestations shall be in strict compliance with all federal and local

The operator shall have the license/certification in their possession when insecticides are being applied. 4. After sod has been laid, tamped and top dressed, areas which fail to show uniform growth and health, shall be re-sodded, as often as

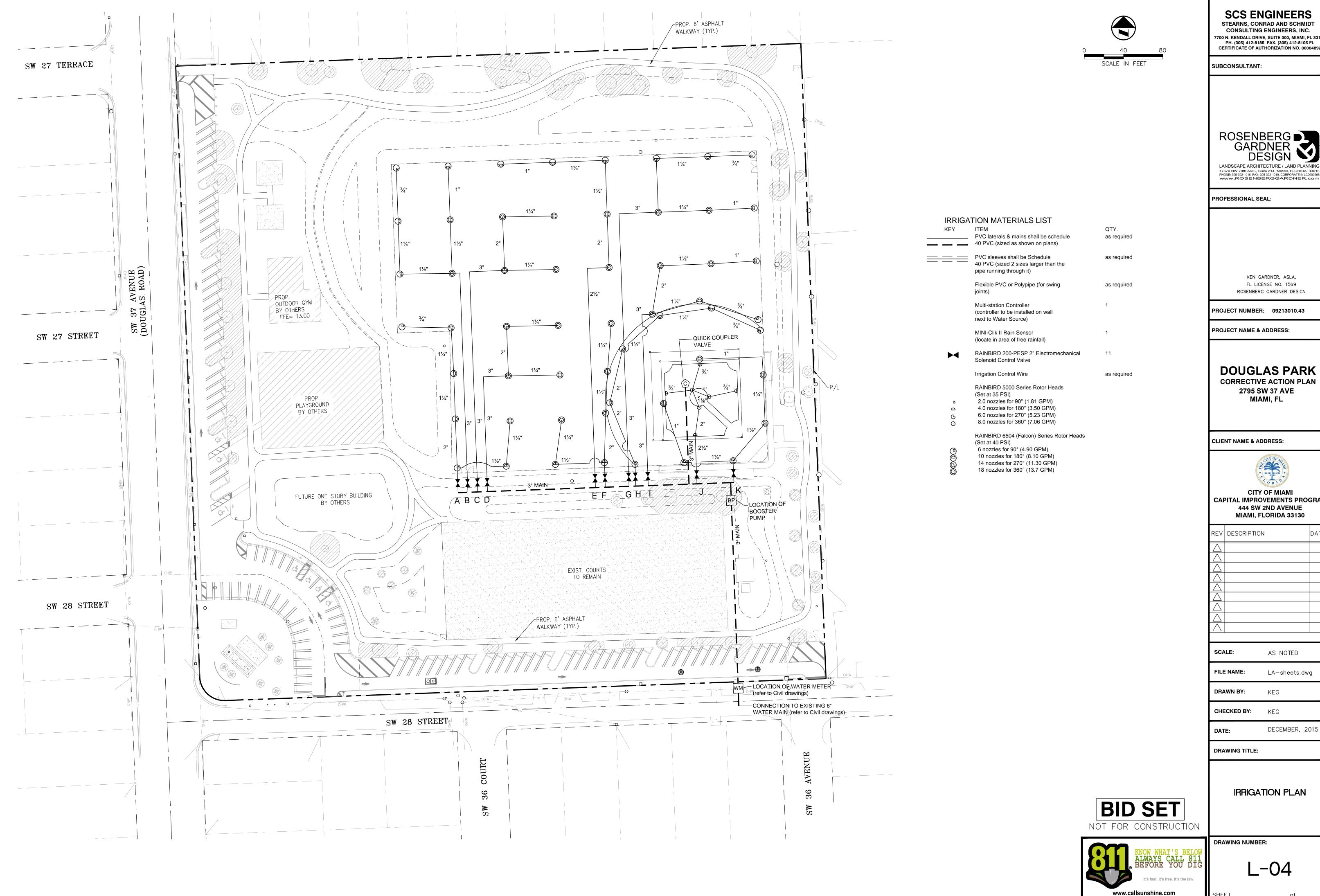
regulations. Upon request, the Contractor shall furnish

re-sodding by the Contractor at his or her expense.

7. Material rejected during the course of construction shall be removed

with ten (10) working days and replaced before an inspection for

time a landscape item is installed until final acceptance. C.Replacement: Replacement of sod shall be the responsibility of the Contractor including the possible replacement of sod resulting from removal by theft or vandalism or acts of negligence on the part of others.



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SCALE:		AS NOTED	

AS NOTED

IRRIGATION PLAN

L-04

2. Contractor shall coordinate with General Contractor or other pertinent Contractors on the job to insure that sleeves are provided and installed under hard surfaces to allow access to all areas to be irrigated. All sleeves shall be constructed of Schedule 40 PVC. Bury all sleeves a minimum of 24" below the surface. Sleeve to be 2 times the size if the pipe running through it. Sleeve shall extend 24" past the edge of pavement into the area

3. GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

4. REPAIR UTILITIES: The Contractor shall be responsible to verify the location of all utilities by hand excavation or other appropriate measures before performing any work that may result in damage to utilities structures, or property. The Contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to his operations. All costs involved in disruption of service and repairs due to negligence on part of the Contractor shall be his responsibility.

5. AS-BUILT DRAWINGS: Prints of the plans will be supplied to the Contractor for recording "as-built" information. Immediately upon installation of any work which deviates from what is shown on the Plans, the Contractor shall clearly indicate such changes in red pencil on the prints. Such changes shall include, but not be limited to, changes in (1) materials; (2) sizes of material; (3) location; and (4) quantities.

6. The entire installation shall fully comply with all applicable local and state codes and ordinances. The Contractor shall take out all required plumbing and electrical applications and permits, arrange for all necessary inspections and shall pay all fees and expenses in connection with same as part of work under the contract.

7. UNIT PRICES: The successful bidder shall furnish, to the Owner, a unit price breakdown for all materials. The Owner may at his own discretion, add to or delete from the materials, using the unit price breakdown submitted to and accepted by the Owner.

8. MAINTENANCE PERIOD: The irrigation system shall be maintained for a period of 90 days after final acceptance of installation. Maintenance shall include checking of the system 2 times per week. Contractor shall be responsible to replace/repair any broken or malfunctioning parts of the system including those damaged by accidents or vandalism. Repairs shall be made immediately at the time of inspection or when notified by the Landscape Architect.

9. The irrigation system shall provide 100% coverage with a minimum of 90% overlap of water spray.

10. The system is design to provide sprinkler precipitation rates that are nearly equal in each zone. Mixing of sprinklers with widely varying precipitation rates in a zone will not be accepted.

11. All pipe shall be made of Schedule 40 PVC, except flexible PVC (or Toro funny pipe) for flexible swing joint and Schedule 80 galvanized steel pipe for all above ground fittings. Pipe locations shall be adjusted in the field. When laying out mains and laterals, locate pipe near edges of pavement or against buildings wherever possible, to allow space for plant rootballs. Coordinate pipe locations with plantings. Bury all mains 18" below surface and laterals 12". Depth shall be measured to top of pipe.

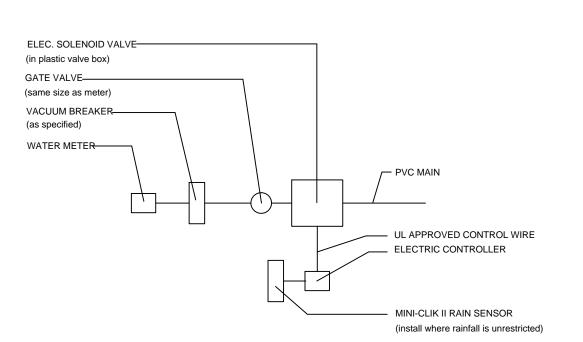
12. Keep pop-up sprinkler heads a minimum of 8" from edges of pavement and curbing, and heads on risers a minimum of 18", or as indicated in the

13. All heads located in shrub or groundcover beds shall be installed on a swing joint as per details in the plans.

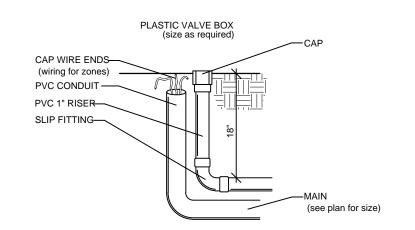
14. Place irrigation control wire in conduit in the same trench as mains and under the main. ASI wire shall be #14 or larger solid copper U.L. approved underground direct burial cable and shall be continuous with no splices from controller to solenoid valve.

15. Valve locations are schematic and shall be adjusted in the field. Each valve shall be in a separate valve box (10" x 16") min.). When grouping valve boxes in grass or groundcover areas, set boxes a minimum of 12' apart to allow grass or groundcover to grow between them. When possible, hide valve boxes in shrub beds, a minimum of 12" from edge of beds. Set all valve boxes, concrete or plastic, in ground with cover flush with finish grade, and level, with a minimum of 6" of pea gravel at the bottom of the box, with at least 2" of clearance from the bottom of the valve to the top of

16. TESTING: Notify the Landscape Architect in writing when testing will be conducted. Conduct test in the presence of the Landscape Architect. After all PVC assembly is completed the lines shall be flushed to insure that no rocks, sand, or other foreign debris remains in the lines. The mains shall be filled with water and all outlets shall be capped and plugged. The main shall be pressurized to 100 PSI for a minimum of one hour. No section of the main will be approved if the pressure drops more than 5 PSI at the end of the one hour period. Leaks shall be repaired immediately and the system shall be re-tested until found satisfactory by the Landscape Architect.

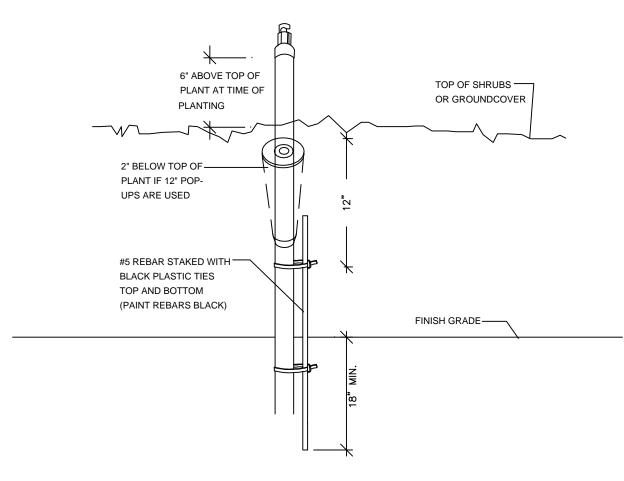


### **CONNECTION TO METER DETAIL**



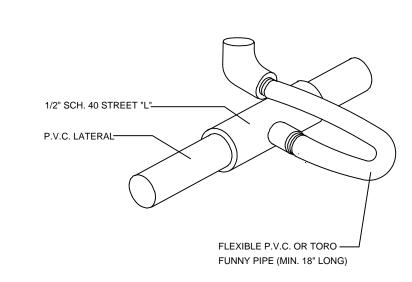
#### DETAIL OF STUB-OUT FOR FUTURE USE

N.T.S.

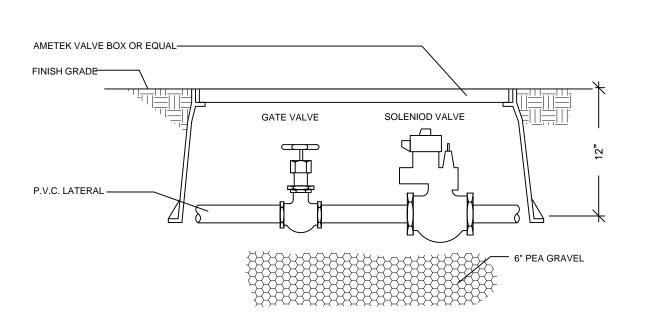


#### SPRINKLER ON RISER DETAIL FOR SHRUB AREAS

N.T.S.



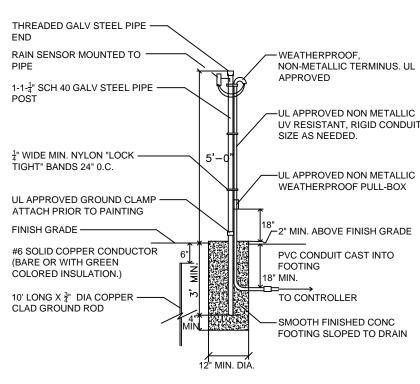
#### FLEXIBLE SWING JOINT DETAIL



## TYPICAL SOLENOID VALVE ASSEMBLY

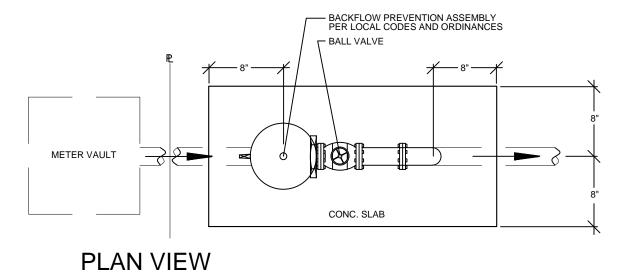


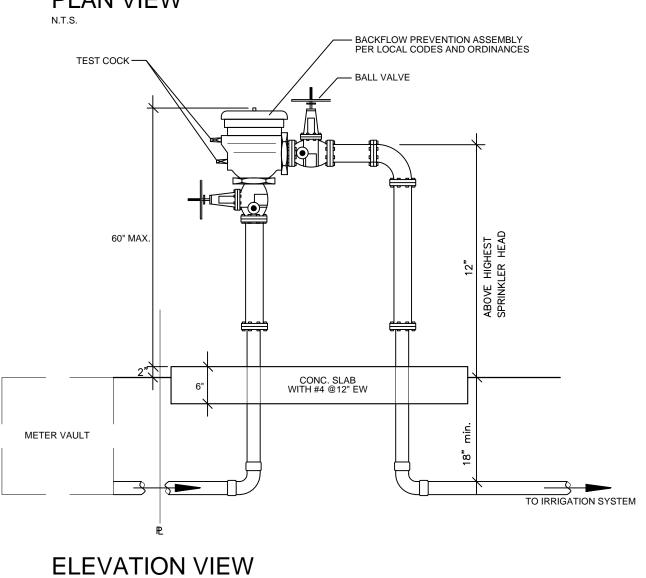
ALL WIRE CONNECTIONS SHALL BE APPROVED WATERTIGHT CONNECTIONS. FINISH ENTIRE ASSEMBLY, EXCEPT FOR EQUIPMENT, WITH FLAT BLACK ACRYLIC PRIME METALLIC SURFACES WITH ZINC CHROMATE PRIOR TO FINISHING.



#### RAIN SENSOR DETAIL

N.T.S.





# MDC WASA - PRESSURE VACUUM BREAKER DETAIL IRRIGATION SYSTEM ONLY (WS 4.19)

**SCS ENGINEERS** STEARNS, CONRAD AND SCHMIDT

CONSULTING ENGINEERS, INC. 7700 N. KENDALL DRIVE, SUITE 300, MIAMI, FL 33156 PH. (305) 412-8185 FAX. (305) 412-8105 FL **CERTIFICATE OF AUTHORIZATION NO. 00004892** 

SUBCONSULTANT:

ROSENBERG LANDSCAPE ARCHITECTURE / LAND PLANNING 17670 NW 78th AVE., Suite 214, MIAMI, FLORIDA, 33015 PHONE: 305-392-1016, FAX: 305-392-1019, CORPORATE #: LC0000266 www.ROSENBERGGARDNER.com

**PROFESSIONAL SEAL:** 

KEN GARDNER, ASLA. FL LICENSE NO. 1569 ROSENBERG GARDNER DESIGN

PROJECT NUMBER: 09213010.43

PROJECT NAME & ADDRESS:

# **DOUGLAS PARK**

**CORRECTIVE ACTION PLAN** 2795 SW 37 AVE MIAMI, FL

CLIENT NAME & ADDRESS:



**CITY OF MIAMI** CAPITAL IMPROVEMENTS PROGRAM 444 SW 2ND AVENUE

**MIAMI, FLORIDA 33130** 

REV	DESCRIPTION	DATE
$\triangle$		
	·	

SCALE: AS NOTED

LA-sheets.dwg

DRAWN BY: KEG

CHECKED BY: KEG

-MATERIALS: PIPES AND FITTINGS SHALL BE APPROVED BY ASAE STANDARDS APPENDIX F.

-GUARD POSTS SHALL BE INSTALLED IF THE ASSEMBLY IS EXPOSED TO POSSIBLE DAMAGE

-PIPING SHALL BE SCHEDULE 40 BRASS OR TYPE K COPPER PIPE WITH THREADED FITTINGS IN ACCORDANCE WITH WASD CONSTRUCTION SPECIFICATIONS FOR DONATION WATER MAINS.

-THE DEPARTMENT SHALL HAVE UNRESTRICTED AND CONTINUOUS ACCESS TO THE VACUUM

-SEE SPECIFICATIONS AND CONTACT DEPARTMENT FOR CURRENTLY APPROVED TYPES OF

**BID SET** 

NOT FOR CONSTRUCTION

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BACKFLOW PREVENTION ASSEMBLIES AND PRESSURE VACUUM BREAKERS (SEE WS 4.18

-THE ASSEMBLY SHALL BE INSTALLED WITH MINIMIUM HORIZONTAL CLEARANCES OF 30

-THE ASSEMBLY SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION, APPROVED BY THE

INCHES FREE FROM OBSTRUCTIONS IN ALL DIRECTIONS.

PVC PIPING IS NOT ACCEPTED BY WASD.

SHEET 4 OF 4 OR ON THIS SHEET)

DEPARTMENT.

FROM VEHICULAR TRAFFIC, AS DETERMINED BY THE DEPARTMENT.

DECEMBER, 2015

**DRAWING TITLE:** 

IRRIGATION NOTES AND

**DETAILS** 

**DRAWING NUMBER:**