

PUBLIC SANITARY UTILITY SEWERAGE SYSTEM NOTES:

1. ALL PUBLIC SANITARY UTILITY SYSTEM CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF BRYAN TECHNICAL SPECIFICATIONS AND STANDARD DETAILS FOR PUBLIC INFRASTRUCTURE.

PART 1 - GENERAL

1.1 SCOPE:

PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR COMPLETE INSTALLATION OF LANDSCAPING, AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

1.3 QUALITY ASSURANCE

A. PROVIDE PLANT MATERIALS IN COMPLIANCE WITH APPLICABLE STATE AND FEDERAL LAWS RELATING TO INSPECTION FOR DISEASES AND INSECT INFESTATION AT GROWING RATE.

B. PLANTS ARE SUBJECT TO INSPECTION AND APPROVAL BY THE LANDSCAPE ARCHITECT. PLANTS REQUIRED FOR THE WORK MAY BE INSPECTED AND TAGGED AT THE GROWING SITE BEFORE BEING DUG.

C. OBSERVATION AT GROWING SITE DOES NOT PRECLUDE RIGHT OF REJECTION AT JOB SITE. PLANTS DAMAGED IN TRANSIT OR AT JOB SITE MAY BE REJECTED.

D. EMPLOY ONLY QUALIFIED PERSONNEL FAMILIAR WITH REQUIRED WORK.

E. OFF-SITE TOPSOIL AND TOPSOIL ON-SITE TESTING (PAID BY LANDSCAPE CONTRACTOR):

- 1. PROVIDE SOURCE OF OFF-SITE SOIL TO THE LANDSCAPE ARCHITECT FOR PURPOSES OF SOIL INVESTIGATION.
- 2. TAKE RANDOM REPRESENTATIVE SOIL SAMPLES FROM AREAS TO BE PLANTED.
- 3. TEST SOIL SAMPLES FROM BOTH SOURCES FOR PH, ALKALINITY, TOTAL SOLUBLE SALTS, POROSITY, SODIUM CONTENT AND ORGANIC MATTER AND PROVIDE RESULTS TO LANDSCAPE ARCHITECT FOR APPROVAL.

1.4 REFERENCED STANDARDS

A. AMERICAN STANDARD FOR NURSERY STOCK, APPROVED 1986 BY AMERICAN NATIONAL STANDARDS INSTITUTE, INC. - PLANT MATERIALS.

B. HORTUS THIRD, 1976 - CORNELL UNIVERSITY - PLANT NOMENCLATURE.

C. ASTM - AMERICAN STANDARD TESTING MATERIAL - SHARP SAND.

1.5 SUBMITTALS:

A. SUBMIT 1 QUART SAMPLES OF THE FOLLOWING MATERIALS:

- 1. SANDY LOAM TOPSOIL
- 2. ORGANIC AMENDMENT
- 3. MULCH
- 4. POTTING SOIL

B. SUBMIT LAB SOIL TEST ANALYSIS RESULTS FOR ON-SITE TOPSOIL AND IMPORT SANDY LOAM TOPSOIL.

C. SUBMIT MANUFACTURER'S DATA FOR THE FOLLOWING

- 1. FERTILIZER
- 2. POTTING SOIL
- 3. STEEL EDGING

D. SUBMIT DIGITAL PHOTOGRAPHS OF ALL PLANT MATERIALS FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO DELIVERY TO THE SITE.

E. FILE CERTIFICATE OF INSPECTION OF PLANT MATERIAL BY STATE AND FEDERAL AUTHORITIES WITH LANDSCAPE ARCHITECT, IF REQUIRED BY STATE.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING:

A. PREPARATION FOR DELIVERY:

1. BALLED AND BURLAPPED (B&B) PLANTS: DIG AND PREPARE SHIPMENT IN A MANNER THAT WILL NOT DAMAGE ROOTS, BRANCHES, SHAPE, AND FUTURE DEVELOPMENT.

1. CONTAINER GROWN PLANTS: DELIVER PLANTS IN CONTAINERS SUFFICIENTLY RIGID TO HOLD BALL SHAPE AND PROTECT ROOT MASS DURING SHIPPING.

B. DELIVERY:

1. DELIVER PACKAGED MATERIALS IN SEALED CONTAINERS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETERIORATION DURING DELIVERY AND WHILE STORED AT SITE.

2. DO NOT DELIVER MORE PLANT MATERIALS THAN CAN BE PLANTED IN ONE DAY UNLESS ADEQUATE STORAGE AND WATERING FACILITIES ARE AVAILABLE ON JOB SITE. STORAGE OF MATERIALS AND EQUIPMENT AT THE JOB SITE WILL BE AT THE RISK OF THE LANDSCAPE CONTRACTOR. THE OWNER WILL NOT BE HELD RESPONSIBLE FOR THEFT OR DAMAGE.

3. IF BALLED PLANTS CANNOT BE PLANTED WITHIN 24 HOURS AFTER DELIVERY TO SITE, PROTECT ROOT BALLS BY HEELING IN WITH SAW DUST OR OTHER APPROVED MATERIAL.

4. PROTECT DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALL OR DESICCATION OF LEAVES.

5. NOTIFY LANDSCAPE ARCHITECT OF DELIVERY SCHEDULE 48 HOURS IN ADVANCE SO PLANT MATERIAL MAY BE OBSERVED UPON ARRIVAL AT JOB SITE.

6. REMOVE REJECTED PLANT MATERIAL IMMEDIATELY FROM SITE.

1.7 JOB CONDITIONS:

A. PLANTING RESTRICTIONS: PERFORM ACTUAL PLANTING ONLY WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE IN ACCORDANCE WITH LOCALLY ACCEPTED PRACTICE.

B. PROTECTIONS:

1. DO NOT MOVE EQUIPMENT OVER EXISTING OR NEWLY PLACED STRUCTURES WITHOUT APPROVAL OF LANDSCAPE ARCHITECT AND GENERAL CONTRACTOR.

2. PROVIDE BOARD-ROADING AND SHEETING AS REQUIRED TO PROTECT PAVING AND OTHER IMPROVEMENTS FROM DAMAGE.

3. IN NO WAY SHALL ANY TREES, PLANTS, GROUND COVER OR SEASONAL COLOR OBSTRUCT DRAINAGE OR BLOCK A 2% MINIMUM POSITIVE SLOPE AWAY FROM BUILDINGS.

C. UTILITIES:

1. DETERMINE LOCATIONS OF UNDERGROUND UTILITIES AND PERFORM WORK IN A MANNER WHICH WILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE, IF REQUIRED, TO MINIMIZE POSSIBILITY OF DAMAGE TO UNDERGROUND UTILITIES.

2. MAINTAIN GRADE STAKES SET BY OTHERS UNTIL REMOVAL IS MUTUALLY AGREED UPON BY PARTIES CONCERNED.

3. COORDINATE WORK WITH IRRIGATION CONTRACTOR TO PREVENT DAMAGE TO UNDERGROUND SPRINKLER SYSTEM.

1.8 WARRANTY:

A. WARRANT PLANTS AND TREES FOR ONE YEAR AFTER FINAL ACCEPTANCE. REPLACE DEAD MATERIALS AND MATERIALS NOT IN VIGOROUS, THRIVING CONDITION AS SOON AS WEATHER PERMITS AND ON NOTIFICATION BY LANDSCAPE ARCHITECT. REPLACE PLANTS INCLUDING TREES, WHICH IN THE OPINION OF LANDSCAPE ARCHITECT HAVE PARTIALLY DIED THEREBY DAMAGING SHAPE, SIZE, OR SYMMETRY.

B. REPLACE PLANTS AND TREES WITH SAME KIND AND SIZE AS ORIGINALLY PLANTED, AT NO COST TO OWNER. PROVIDE ONE-YEAR WARRANTY ON

REPLACEMENT PLANTS. THESE SHOULD BE REPLACED AT START OF NEXT PLANTING OR DIGGING SEASON. IN SUCH CASES, REMOVE DEAD TREES IMMEDIATELY. PROTECT IRRIGATION SYSTEM AND OTHER PIPING CONDUIT OR OTHER WORK DURING REPLACEMENT. REPAIR ANY DAMAGE IMMEDIATELY.

C. WARRANTY EXCLUDES REPLACEMENT OF PLANTS AFTER FINAL ACCEPTANCE BECAUSE OF INJURY BY STORM, DROUGHT, DROWNING, HAIL, FREEZE, INSECTS OR DISEASES.

D. AT THE END OF THE WARRANTY PERIOD, STAKING AND GUYING MATERIALS SHALL BE REMOVED FROM THE SITE.

1.9 MAINTENANCE

A. WATER: WILL BE AVAILABLE ON SITE. PROVIDE NECESSARY HOSES AND OTHER WATERING EQUIPMENT REQUIRED TO COMPLETE WORK.

B. UNTIL FINAL ACCEPTANCE, MAINTAIN PLANTINGS AND TREES BY WATERING, CULTIVATING, MOWING, WEEDING, SPRAYING, CLEANING AND REPLACING AS NECESSARY TO KEEP LANDSCAPE IN A VIGOROUS, HEALTHY CONDITION AND RAKE BED AREAS AS REQUIRED.

C. A WRITTEN NOTICE REQUESTING FINAL INSPECTION AND ACCEPTANCE SHOULD BE SUBMITTED TO LANDSCAPE ARCHITECT SEVEN (7) DAYS PRIOR TO COMPLETION. AT THAT TIME OWNER AND LANDSCAPE ARCHITECT WILL PREPARE A FINAL PUNCH LIST TO BE REVIEWED WITH LANDSCAPE CONTRACTOR. WHEN SUCH PROJECT IS DEEMED COMPLETE BY LANDSCAPE ARCHITECT, AN ON-SITE INSPECTION BY OWNER, LANDSCAPE CONTRACTOR AND LANDSCAPE ARCHITECT WILL BE COMPLETED PRIOR TO WRITTEN ACCEPTANCE.

D. FOLLOWING FINAL ACCEPTANCE, MAINTENANCE OF PLANT MATERIAL WILL BECOME THE OWNER'S RESPONSIBILITY. THE CONTRACTOR SHALL PROVIDE OWNER WITH A RECOMMENDED MAINTENANCE PROGRAM.

PART 3 - EXECUTION

3.1 CONDITION OF SURFACES:

A. CONTRACTOR WILL BE RESPONSIBLE FOR ANY REQUIRED EXCAVATION AND FOR RAKING AND SMOOTHING OF GRADE. IT IS RECOMMENDED THAT LANDSCAPE CONTRACTOR COORDINATE WITH GRADING CONTRACTOR TO ESTABLISH SUBGRADES FOR PLANTING AREAS AS REQUIRED BELOW.

B. EXAMINE SUBGRADE UPON WHICH WORK IS TO BE PERFORMED. NOTIFY THE LANDSCAPE ARCHITECT OF UNSATISFACTORY CONDITIONS.

3.2 MIXING SOILS:

A. PLANTING MIX: SHALL CONSIST OF 50% SANDY LOAM TOPSOIL, 30% ORGANIC AMENDMENT, 10% SHARP WASHED SAND, AND 10% DECOMPOSED GRANITE. SAND COMPONENT MAY BE INCREASED OR DECREASED BASED ON SAND CONTENT OF TOPSOIL SUBMITTED TO LANDSCAPE ARCHITECT.

B. PRE MIXED SOILS MAY BE ACCEPTED IN LIEU OF ABOVE MIX AS NOTED IN PARAGRAPH 2.2.B.

3.3 BED PREPARATION

A. ALL BED AREAS ON PLANS WHERE SHRUBS AND/OR GROUNDCOVERS ARE CONTINUOUSLY PLANTED SHALL RECEIVE A MINIMUM OF 4" DEPTH OF CONTINUOUS PLANTING MIX.

B. LAY OUT BED AREAS FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO DIGGING

C. EXCAVATE EXISTING MATERIAL AS NEEDED TO ALLOW PLACEMENT OF 4" OF PLANTING MIX AND 3" OF MULCH.

D. SCARIFY BED AREA SUBGRADE WHERE EXCESSIVE COMPACTION IS GREATER THAN 85% STANDARD PROCTOR TO A DEPTH OF 4-INCHES BY DISCING OR ROTOTILLING. REPEAT CULTIVATION AS REQUIRED TO THOROUGHLY LOOSEN SOIL.

E. EVENLY SPREAD 4" OF CONTINUOUS PLANTING MIX THROUGHOUT THE PLANTING AREA. DO NOT INCORPORATE INTO NATIVE SOILS BELOW.

F. WHENEVER A PLANTING BED FALLS WITHIN THE DRIPLINE OF EXISTING TREES TO REMAIN, DO NOT EXCAVATE AS NOTED BELOW. UTILIZE THE FOLLOWING BED PREPARATION:

- 1. EVENLY SPREAD THE FOLLOWING AMENDMENTS OVER THE ENTIRE BED AREA AND LIGHTLY INCORPORATE INTO THE TOP 1" OF SOIL WITH RAKE OR OTHER HAND IMPLEMENT. AMENDMENTS PER 1000 SF SHALL BE:
 - a) 3 CY ORGANIC AMENDMENT
 - b) 30 LB ORGANIC FERTILIZER
 - c) 40 POUNDS GYPSUM
 - d) 2 POUNDS SULFUR

G. RAKE AMENDED AREAS CLEAN AND REMOVE ALL ROCKS, ROOTS, AND DEBRIS. DIRT CLOUDS AND CLAY LUMPS GREATER THAN 1" IN DIAMETER SHALL BE BROKEN APART OR REMOVED.

3.2 TREE PLANTING:

A. STAKE TREE LOCATIONS FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO DIGGING.

B. PLANT TREES IN PITS 2 TIMES THE DIAMETER OF THE ROOT BALL AND EQUAL TO DEPTH OF ROOT BALL.

C. AFTER EXCAVATION OF TREE PITS, REVIEW WATER PERCOLATION WITH LANDSCAPE ARCHITECT. IF TREE PIT DOES NOT DRAIN ADEQUATELY PREPARE HOLE FOR USE WITH A TREE SUMP. PAINT PVC STAND PIPE AND COVER DARK GREEN. AFTER TREE IS INSTALLED, PUMP WATER OUT ON A DAILY BASIS.

D. IN THE EVENT ROCK OR UNDERGROUND CONSTRUCTION WORK OR OBSTRUCTIONS ARE ENCOUNTERED IN ANY PLANT PIT EXCAVATION WORK TO BE DONE UNDER THIS SECTION, ALTERNATE LOCATIONS MAY BE SELECTED BY THE LANDSCAPE ARCHITECT. WHERE LOCATIONS CANNOT BE CHANGED THE OBSTRUCTIONS SHALL BE REMOVED TO A DEPTH OF NOT LESS THAN SIX (6") INCHES BELOW BOTTOM OF BALL WHEN PLANT IS PROPERLY SET AT THE REQUIRED GRADE. THE WORK OF THIS SECTION SHALL INCLUDE THE REMOVAL OF THE SITE OF SUCH ROCK OR UNDERGROUND OBSTRUCTIONS ENCOUNTERED AT THE COST OF THE LANDSCAPE CONTRACTOR.

E. BACKFILL TREE PITS WITH A MIXTURE OF 1/2 PLANTING MIX AND 1/2 EXISTING SITE SOIL. LIGHTLY TAMP EVERY 6-INCHES TO FILL ALL VOIDS AND POCKETS. WHEN PIT IS 2/3 FULL, WATER THOROUGHLY AND LEAVE WATER TO SOAK IN. PLACE FERTILIZER PLANTING TABLETS PER MANUFACTURER'S RECOMMENDATIONS. APPLY SUPERTHRIVE PER MANUFACTURER'S RECOMMENDATIONS COMPLETE BACKFILLING AND FORM A SAUCER AROUND THE TREE. FILL SAUCER WITH WATER AND LEAVE TO SOAK IN. FILL SAUCER WITH WATER AGAIN.

F. COMPLETELY FILL EACH TREE SAUCER WITH MULCH TO A DEPTH OF THREE INCHES.

G. CONTRACTOR SHALL KEEP TREES PLUMB UNTIL ESTABLISHED. GUYING AND/OR STAKING TO MAINTAIN THAT PLUMB CONDITION SHALL BE AT THE CONTRACTOR'S DISCRETION. HOWEVER, IF TREES ARE NOT PLUMB, THE CONTRACTOR WILL BE REQUIRED TO GUY AND/OR STAKE THOSE TREES IN A METHOD ACCEPTABLE TO THE LANDSCAPE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

H. PRUNING: PRUNE TREES TO PRESERVE THE NATURAL CHARACTER OF THE PLANT IN A MANNER APPROPRIATE TO ITS PARTICULAR REQUIREMENTS IN THE LANDSCAPE DESIGN AS DIRECTED BY THE LANDSCAPE ARCHITECT. IN GENERAL, REMOVE AT LEAST ONE-THIRD OF WOOD BY THINNING AND PRUNING. DO NOT CUT BACK TERMINAL BRANCHES. THIN NATIVE GROWN PLANTS HEAVIER THAN NURSERY GROWN PLANTS. REMOVE SUCKER GROWTH AND BROKEN OR BADLY BRUISED BRANCHES.

3.3 SHRUB PLANTING

A. PLACE PLANTS IN POSITION ON BED AREAS BEFORE CANS HAVE BEEN REMOVED. OBTAIN APPROVAL FROM LANDSCAPE ARCHITECT. DO NOT REMOVE BURLAP

FROM BB PLANTS. LANDSCAPE ARCHITECT RESERVES RIGHT TO INTERCHANGE OR SHIFT PLANTS PRIOR TO PLANTING.

B. ALL SHRUBS OUTSIDE PREPARED BED AREAS OR WITH ROOT BALLS DEEPER THAN DEPTH OF BED PREPARATION SHALL BE POCKET PLANTED. EXCAVATE PLANTING HOLE 2 TIMES THE WIDTH AND HEIGHT OF THE ROOT BALL. BACKFILL WITH PLANTING MIX.

C. PLANT WHERE LOCATED, SETTING PLANTS WITH TOPS OF BALLS EVEN WITH TOPS OF BEDS, AND COMPACT SOIL CAREFULLY AROUND EACH PLANT BALL.

D. WATER EACH PLANT THOROUGHLY WITH HOSES TO ELIMINATE AIR POCKETS.

E. CAREFULLY PRUNE PLANTS TO REMOVE DEAD OR BROKEN BRANCHES AND HAKE RAKE BED AREAS TO SMOOTH EVEN SURFACES.

F. AFTER PLANTING HAS BEEN COMPLETED AND APPROVED BY LANDSCAPE ARCHITECT, MULCH BED AREAS THREE INCHES DEEP.

3.4 GROUNDCOVER AND SEASONAL COLOR PLANTING

A. ALL GROUNDCOVER AND SEASONAL COLOR PLANTING SHALL OCCUR IN PREPARED BED AREAS PER SPECS WITH AT LEAST 4 INCH DEPTH OF PLANTING MIX.

B. PLACE PLANTS IN POSITION ON BED AREAS BEFORE CANS HAVE BEEN REMOVED. OBTAIN APPROVAL FROM LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT RESERVES RIGHT TO INTERCHANGE OR SHIFT PLANTS PRIOR TO PLANTING.

C. PLANT WHERE LOCATED, SETTING PLANTS WITH TOPS OF BALLS EVEN WITH TOPS OF BEDS, AND COMPACT SOIL CAREFULLY AROUND EACH PLANT BALL.

D. WATER EACH PLANT THOROUGHLY WITH HOSES TO ELIMINATE AIR POCKETS.

E. CAREFULLY PRUNE PLANTS TO REMOVE DEAD OR BROKEN BRANCHES AND HAND-RAKE BED AREAS TO SMOOTH EVEN SURFACES.

F. AFTER PLANTING HAS BEEN COMPLETED AND APPROVED BY LANDSCAPE ARCHITECT, MULCH BED AREAS THREE INCHES DEEP.

3.6 CLEANUP: DURING WORK, KEEP PREMISES NEAT AND ORDERLY INCLUDING ORGANIZATION OF STORAGE AREA. REMOVE TRASH, INCLUDING DEBRIS RESULTING FROM REMOVING WEEDS AND ROCKS FROM PLANTING AREAS, PREPARING BEDS, OR PLANTING PLANTS FROM SITE DAILY AS WORK PROGRESSES. KEEP WALK AND DRIVEWAY AREA CLEAN BY SWEEPING OR HOSING.

THE CONTRACTOR IS TO RENDER THE FOLLOWING LANDSCAPE MAINTENANCE SERVICES DURING THE TERM OF THE INITIAL CONSTRUCTION CONTRACT. IN ADDITION, THE CONTRACTOR IS TO INDICATE A PRICE FOR A ONE YEAR EXTENDED MAINTENANCE CONTRACT TO BEGIN AFTER THE CONSTRUCTION PROJECT IS COMPLETE AND ACCEPTED. THIS PRICE IS TO BE SUBMITTED ON A SEPARATE LINE ITEM.

PART 1 - GENERAL 1.1 SCOPE:

A. WORK INCLUDED IN BASE BID: PERFORM ALL WORK NECESSARY UTILIZING ACCEPTABLE HORTICULTURAL PRACTICES FOR THE EXTERIOR LANDSCAPE MAINTENANCE OF THE PROJECT AS REQUIRED HEREIN. SUCH WORK INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

- 1. MONITORING ADJUSTMENT AND MINOR REPAIR OF THE LANDSCAPE IRRIGATION SYSTEM.
- 2. PROTECTION OF VACUUM BREAKERS AGAINST FREEZE DAMAGE.
- 3. MOWING, EDGING AND TRIMMING OF TREES AND SHRUBS.
- 4. PRUNING AND TRIMMING OF TREES AND SHRUBS.
- 5. RESTAKING AND ADJUSTMENT OF STAKES AND GUYING IF REQUIRED.
- 6. APPROVAL, BY OWNER, OF MATERIAL SUBSTITUTIONS PRIOR TO USE.
- 7. APPLICATION OF FERTILIZERS, INSECTICIDES AND HERBICIDES.
- 8. REPLACEMENT OF PLANT MATERIAL (EXTRA SERVICE).
- 9. GENERAL SITE CLEAN UP & REMOVAL OF TRASH, AND PRODUCTS OF MAINTENANCE.

B. EXTRA SERVICES: THE INTENT OF THE CONTRACT IS TO PROVIDE A COMPREHENSIVE MAINTENANCE PROGRAM TO INCLUDE ALL REQUIRED SERVICES, EXCEPT THOSE SERVICES SPECIFICALLY EXCLUDED, TO PERFORM THE WORK FOR THE STATE TIME PERIOD.

1. ALL SERVICES NOT INCLUDED IN THE BASE BID SHALL BE CONSIDERED "EXTRA SERVICES" AND WILL BE CHARGED FOR SEPARATELY ACCORDING TO THE NATURE OF THE ITEM OF WORK. THE WRITTEN CONSENT AND AUTHORIZATION OF THE OWNER OF THEIR AUTHORIZED REPRESENTATIVE MUST BE OBTAINED PRIOR TO THE PERFORMANCE OR INSTALLATION OF SUCH "EXTRA SERVICES" ITEMS AND PRIOR TO PURCHASE OF ANY CHARGEABLE MATERIALS.

2. SUCH WORK MAY INCLUDE REPLACEMENT OF DEAD PLANT MATERIALS OR MAJOR REPAIRS OF IRRIGATION SYSTEM CREATED BY ACTS OF VANDALISM OR OTHER CONTRACTS OR OTHER SITE RELATED WORK.

3. AUTHORIZED EXTRA SERVICES WORK MUST BE SUMMARIZED WEEKLY AND SUBMITTED WITH RECEIPTS TO THE OWNER.

4. THE OWNER IS NOT BOUND BY THE SPECIFICATIONS OR CONTRACT TO UTILIZE THE LANDSCAPE MAINTENANCE CONTRACTOR IN THE PERFORMANCE OF "EXTRA SERVICE WORK".

5. THE LANDSCAPE MAINTENANCE CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH OTHER CONTRACTORS ON THE SITE SO AS TO NOT HINDER THE PERFORMANCE OF ANY WORK.

6. AUTHORIZED CHARGES FOR EXTRA WORK WILL BE PAID MONTHLY.

1.2 SUBSTITUTIONS:

A. SPECIFIC REFERENCE TO MANUFACTURER'S NAMES AND PRODUCTS SPECIFIED IN THIS SECTION ARE USED AS STANDARDS, BUT THIS IMPLIES THE RIGHT TO SUBSTITUTE OTHER MATERIAL OR METHODS WITHOUT WRITTEN APPROVAL OF THE OWNER. SUCH PERMISSION MUST BE SECURED WITHOUT ADDITIONAL COST TO OWNER.

B. INSTALLATION OF ANY APPROVED SUBSTITUTIONS CONTRACTOR'S RESPONSIBILITY. ANY CHANGES REQUIRED FOR INSTALLATION OF ANY APPROVED SUBSTITUTION MUST BE MADE TO THE SATISFACTION OF ANY WITHOUT ADDITIONAL COST TO OWNER.

1.3 SCHEDULE

ALL WORK UNDER THIS CONTRACTOR SHALL BE PERFORMED IN ACCORDANCE WITH THE SCHEDULE INCLUDED.

1.4 CONTRACTOR'S PERFORMANCE

A. THE CONTRACTOR'S WORKMEN SHALL BE NEAT IN APPEARANCE, PERFORM THEIR WORK IN A PROFESSIONAL MANNER, KEEP NOISE TO A MINIMUM AND STAGE THEIR WORK FROM A LOCATION ON THE SITE OUT OF THE WAY OF THE MAINSTREAM OF THE USES. IN GENERAL, THE CONTRACTOR'S PRESENCE ON THE SITE SHALL BE AS INCONSPICUOUS AS POSSIBLE.

B. THE INTENT AND SPIRIT OF THIS PROJECT MANUAL IS TO PROVIDE A GUIDELINE FOR THE CONTRACTOR TO FOLLOW IN ORDER TO PROVIDE OWNER WITH LANDSCAPE MAINTENANCE SERVICES OF THE HIGHEST QUALITY. WHERE THE MANUAL REFERS TO "AS-NEEDED" OR "AS REQUIRED" THE INTENT IS FOR THE CONTRACTOR TO PERFORM THE SERVICES NECESSARY TO MAINTAIN THE PROPERTY AT THE HIGHEST POSSIBLE QUALITY LEVEL. NOTHING CONTAINED WITHIN THIS PROJECT MANUAL SHALL BE INTERPRETED AS RELIEVING THE CONTRACTOR OR HIS RESPONSIBILITY TO PERFORM THE WORK IN A PROFESSIONAL MANNER AND TO THE COMPLETE SATISFACTION OF THE OWNER.

C. IF DISPUTES ARISE AS TO THE QUALITY OF THE SERVICES PERFORMED THE OWNER OR OWNERS DESIGNATED REPRESENTATIVE SHALL MAKE THE FINAL DETERMINATION OF RESPONSIBILITIES.

1.5 NEGLECT AND VANDALISM:

A. TURF, TREES OR PLANTS THAT ARE DAMAGED OR KILLED DUE TO CONTRACTOR'S OPERATIONS, NEGLIGENCE OR CHEMICALS SHALL BE REPLACED AT NO EXPENSE TO THE OWNER. IF PLANT DAMAGE OR DEATH IS CAUSED BY CONDITIONS BEYOND THE CONTRACTOR'S CONTROL, REPLACEMENT SHALL BE AT THE OWNER'S EXPENSE.

B. SPRINKLERS OR STRUCTURES THAT ARE DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS MUST BE REPLACED BY THE CONTRACTOR PROMPTLY. LIKEWISE, DAMAGE TO THE IRRIGATION SYSTEM BY OTHERS SHALL BE CORRECTED IMMEDIATELY BY THE CONTRACTOR, AT THE OWNER'S EXPENSE.

C. ALL WATER DAMAGE, EITHER NATURAL OR MAN-MADE, RESULTING FROM CONTRACTOR'S NEGLIGENCE SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

D. ALL DAMAGE TO OR THEFTS OF LANDSCAPING AND IRRIGATION INSTALLATIONS NOT CAUSED OR ALLOWED BY THE CONTRACTOR SHALL BE CORRECTED BY THE CONTRACTOR AT THE OWNER'S EXPENSE UPON RECEIPT OF WRITTEN AUTHORIZATION TO PROCEED.

1.6 JOB CONDITIONS:

A. CONTRACTOR SHALL ACQUAINT HIMSELF WITH ALL SITE CONDITIONS. SHOULD EXCAVATION BE REQUIRED THE CONTRACTOR SHALL PROMPTLY NOTIFY THE UTILITY COORDINATION COMMITTEE FOR UTILITY LOCATIONS. FAILURE TO DO SO WILL MAKE CONTRACTOR LIABLE FOR ANY AND ALL DAMAGE THERE TO ARISING FROM HIS OPERATIONS.

B. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT SITE CONDITIONS, IRRIGATION AND PLANTS. SHOULD DAMAGE BE INCURRED, THIS CONTRACTOR SHALL REPAIR DAMAGE TO ITS ORIGINAL CONDITION OR FURNISH AND INSTALL EQUAL REPLACEMENT AT THIS EXPENSE.

1.7 EMERGENCIES:

A. THE CONTRACTOR SHALL ANSWER EMERGENCY OR COMPLAINT CALLS WITHIN TWELVE (12) HOURS AND CORRECTIVE ACTION SHALL BE COMPLETE WITHIN 24 HOURS.

B. THE CONTRACTOR SHALL ANSWER EMERGENCY CALLS REGARDING THE LANDSCAPE IRRIGATION SYSTEM FAILURE OR NEED OF REPAIR, AND TAKE CORRECTIVE ACTION WITHIN EIGHT (8) HOURS. SUCH WORK, UNLESS CAUSED DUE TO NEGLECT ON THE PART OF THE LANDSCAPE MAINTENANCE CONTRACTOR, SHALL BE CONSIDERED "EXTRA SERVICES".

1.8 RESTRICTION:

A. DO NOT USE GROWTH REGULATORS OR GROWTH RETARDANTS ON THIS WORK.

PART 2.0 - MATERIALS AND MACHINERY

2.1 IRRIGATION SYSTEM MATERIALS: REPLACEMENT MATERIALS THROUGH THE SYSTEM SHALL BE AS SPECIFIED AND/OR NOTED ON THE "CONTRACT DOCUMENTS", NEW AND IN PERFECT CONDITION.

2.2 MATERIALS: MATERIALS LISTED UNDER THIS SECTION ARE EXPRESSLY SPECIFIED FOR USE BUT DOES NOT PROHIBIT OR RESTRICT THE CONTRACTOR FROM PROVIDING OTHER APPROVED MATERIALS NOT LISTED IN ORDER TO COMPLETE THE WORK REQUIRED HEREIN. ALL MATERIALS SHALL BE NEW AND IN PERFECT CONDITION.

A. PRE-EMERGENCE WEED CONTROL: CONTRACTOR OPTION (GRANULAR)

B. POST-EMERGENCE WEED CONTROL: CONTRACTOR OPTION

C. HERBICIDE: CONTRACTOR OPTION.

D. INSECTICIDE: CONTRACTOR OPTION.

E. FUNGICIDE: CONTRACTOR OPTION.

F. FIRE ANT CONTROL: SHALL BE SLOW RELEASE APPLIED AT SIX (6) WEEK INTERVALS. SPOT TREAT WEEKLY WITH A CONTACT PRODUCT WHERE MOUNDS APPEAR. ALTERNATE PRODUCTS FOR EFFECTIVE CONTROL.

G. SHRUB BED FERTILIZER: APPLY AT MANUFACTURER'S RECOMMENDED RATES FOR EACH PLANT USED. SHALL BE OSMACOTE SLOW RELEASE.

H. LAWN FERTILIZER: 15-5-10 WITH 50% SULPHUR COATED UREA AND 4% IRON.

I. TREE FERTILIZER: DAVEY ARBORGREEN: APPLY USING THE MAXIMUM MANUFACTURER'S RECOMMENDED RATE AND PROCEDURES.

J. MULCH: SHREDDED CYPRESS MULCH.

K. TREE STAKES AND GUYS: SHALL MATCH THOSE IN USE AT THE SITE.

2.3 MACHINERY: MACHINERY REQUIREMENTS LISTED UNDER THIS SECTION ARE NOT INTENDED TO BE RESTRICTIONS OF SPECIFIC MANUFACTURERS OR MODELS UNLESS SO STATED. SPECIFIC MENTION OF MANUFACTURERS IS INTENDED AS A GUIDE TO ILLUSTRATE THE FINAL PRODUCT OF MAINTENANCE OPERATIONS DESIRED.

2.4 MOWERS:

A. SHALL BE COMMERCIAL GRADE ROTARY TYPE IN GOOD WORKING ORDER, FINELY TUNED TO PROTECT THE LAWN FROM EXCESSIVE EXHAUST FUMES. BLADES SHALL BE SHARP TO REDUCE SHREDDING OF THE CUT GRASS BLADES. GRASS CATCHERS NOT REQUIRED.

B. LAWN EDGERS: SHALL BE OF A RIGID BLADE TYPE THAT WILL PRODUCE A FINE CLEAN EDGE WHERE LAWNS MEET WALKWAYS, PAVEMENTS OR CURBS.

C. PRUNING TOOLS: SHALL BE MAINTAINED IN GOOD WORKING ORDER, CUTTING EDGES SHALL BE SHARP. DISINFECT ALL TOOLS WHEN USED FOR THE REMOVAL OF DISEASED LIMBS WITH A TWENTY (20%) PERCENT SOLUTION OF CHLOROX AND WATER.

PART 3.0 - EXECUTION 3.1

LANDSCAPE IRRIGATION SYSTEM: THE CONTRACTOR SHALL, A TOTAL OF 18 TIMES A YEAR, MONITOR AND PROGRAM THE AUTOMATIC CONTROLLING DEVICES TO PROVIDE OPTIMUM MOISTURE LEVELS IN ALL PLANTED AREAS.

A. IRRIGATION CYCLES SHALL BE SET TO TAKE PLACE PRIOR TO SUNRISE (USUALLY 4:00 -5:00 AM) UNLESS OTHERWISE INSTRUCTED BY THE OWNER, EXCEPT DURING VISITS OF GROUNDS MAINTENANCE PERSONNEL DURING SUCH VISITS THE IRRIGATION SYSTEM MAY BE OPERATED AS DESIRED BY THOSE PERSONNEL.

B. DO NOT PROGRAM CONTROLLERS OPERATING ON THE SAME WATER METER TO WATER DURING THE SAME TIME PERIOD SO AS TO PREVENT OVER-DRAFT OF WATER METERS. DO NOT SWITCH CONTROLLER TO "OFF" AT ANY TIME, EXCEPT AS REQUIRED FOR TESTING AND FOR MAINTENANCE OPERATIONS.

C. COMPLETE SPRINKLER SYSTEM SERVICING SHALL BE PERFORMED AS REQUIRED TO MAINTAIN SPRINKLERS IN CORRECT OPERATING CONDITION, INCLUDING ALL REQUIRED LABOR. APRIL THROUGH SEPTEMBER THE OPERATION OF SPRINKLERS SHALL BE INSPECTED AND MONITORED ON A TWICE-PER-MONTH BASIS TO ASSURE PROPER COVER AND OPERATION. OCTOBER THROUGH MARCH MONITOR AND INSPECT SPRINKLERS ONCE PER MONTH OR UPON THE REQUEST OF THE OWNER. THIS CHECK SHALL INCLUDE VISUAL "INSPECTION" OF ALL ACCESSIBLE COMPONENTS OF THE IRRIGATION SYSTEM INCLUDING BUT NOT LIMITED TO CONTROLLERS, REMOTE CONTROL VALVES, QUICK COUPLERS AND HEADS.

D. ADJUST SPRINKLERS TO AVOID DAMAGE TO WINDOWS, BUILDINGS AND SIGN WALLS, ALSO ADJUST HEADS TO KEEP WATER OFF THE STREET. MAKE REPAIRS AND ALTERATIONS TO THE SPRINKLING SYSTEM AND WATER LINES. ALL SPRINKLER REPAIRS SUCH AS CLEANING OF HEAD OR BREAKS CAUSED BY THE CONTRACTOR SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

3.2 TREE MAINTENANCE:

A. TREES THAT MAY REQUIRE GUYS, STAKES OR SPECIAL CARE DURING THE WINTER WINDS AND RAINS SHALL RECEIVE THE REQUIRED CARE PRIOR TO THE TIME OF RAINS AND HIGH WINDS TO INSURE THAT NO DAMAGE RESULTS TO THE PLANT MATERIAL.

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Walker Partners
engineers * surveyors
T.B.P.E. Registration No. 8053

BTX RETAIL, LP

**SHOPS AT HUDSON OAKS
LOT 5R**

LANDSCAPE NOTES

8/30/2023
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A. CONTRACTOR SHALL MAINTAIN STAKING AND GUYING OF TREES AT ALL TIMES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO TREES OR PLANT MATERIALS CAUSED BY CHAFING OR BREAKAGE OR FOLIAGE OR LIMBS COMING IN CONTACT WITH STAKES OR GUYTS. REPLACE BROKEN PLANT STAKES AND TIES AS NEEDED. IF TIES ARE TOO TIGHT, THEY MUST BE REPLACED OR ADJUSTED.

C. ALL SUCKERS SHALL BE CONTINUALLY REMOVED FROM TREES. GRASS SHALL BE TRIMMED AT THE BASE OF TREES IN A MANNER THAT SHALL PROTECT TREE TRUNKS FROM CUTTING OF BARK AND CAMBIUM LAYER. DO NOT USE "POWER TRIMMERS". A 4" DIAMETER MULCH RING BAND AROUND TREE TRUNK MAY BE USED AS A WEED AND GRASS DETERRENT.

D. ANNUAL TREE PRUNING AND/OR SHAPING AS NEEDED. ALWAYS PRUNE OUT DEAD WOOD. REFER TO SCHEDULE. CONTACT OWNER PRIOR TO COMMENCING ANY PRUNING OR SHAPING WORK.

E. MULCH TREES ONLY WHEN SO DIRECTED BY THE OWNER.

F. SPRAY ALL TREES FOUR TIMES PER YEAR TO CONTROL FOLIAR FEEDING INSECTS. THE SPRAY SHALL CONSIST OF ALTERNATELY SPRAYING 2 TIMES WITH AN INSECTICIDE SPRAY AND 2 TIMES WITH A FUNGICIDE BEGINNING IN MARCH, WITH THE LAST SPRAY IN SEPTEMBER.

G. CONTINUALLY REMOVE SUCKERS.

H. MONITOR FOR APHIDS, POWDERY MILDEW AND OTHER COMMON AILMENTS AND TREAT IMMEDIATELY TO ELIMINATE THESE PROBLEMS.

3.3 GUIDELINES FOR CRAPE MYRTLE TREES:

A. PRUNE CRAPE MYRTLES IN FEBRUARY TO REMOVE DEAD BRANCHES AND TO SHAPE HEAD FOR SPRING/SUMMER GROWTH.

B. FERTILIZE IN FEBRUARY EACH YEAR WITH SUPER PHOSPHATE APPLIED PER MANUFACTURER'S RECOMMENDATIONS FOR FLOWERING TREES.

3.4 TURF MAINTENANCE:

A. MOWING: ALL COMMON BERMUDA AND/OR ST. AGUSTINE GRASS SHALL BE MOWED APPROXIMATELY EVERY SEVEN DAYS MARCH - OCTOBER. DURING PERIODS OF MILD WEATHER THE CUT SHOULD NOT BE LOWER THAN TWO (2") INCHES FROM THE SOIL. NEVER SCALP THE LAWN OR CUT MORE THAN ON-HALF (1/2) THE EXISTING TOP GROWTH IN ONE MOWING. ON IRRIGATED AREAS, REMOVE THE CLIPPINGS, NEVER ALLOWING VISIBLE CLIPPINGS TO REMAIN ON LAWN SURFACE MORE THAN FOUR (4) HOURS. ALL SIDEWALKS AND CURBS SHALL BE EDGED AS WELL AS OTHER OBJECTS (NON LIVING) IN THE GRASS ZONE. ALLOW GRASS TO GROW UP TO BUT NOT OVER SPRINKLER HEADS. TRIM GRASS AROUND HEADS WITH A CIRCULAR SPRINKLER HEAD TRIMMER. DO NOT USE "WEED-EATERS" TO TRIM AROUND SPRINKLER HEADS.

B. WATERING: PROVIDE A REGULAR, DEEP WATERING PROGRAM. THE ESTABLISHED TURF SHOULD NOT BE KEPT WET BUT SHOULD DRY OUT SOMEWHAT BETWEEN WATERINGS. A TWICE WEEKLY WATERING IS GOOD UNDER REGULAR CONDITIONS, BUT IF IT IS HOT OR WINDY, WATER MORE OFTEN. IN VERY HOT WEATHER, A FAST WATERING WITH FINE SPRAY WILL COOL THE TURF ZONE AND CAN SUPPLEMENT THE REGULAR, DEEPER WATERING PROGRAM. IN SHADED AREAS CAUSED BY TREES, WATER MORE FREQUENTLY BECAUSE OF THE COMPETITION FOR SOIL MOISTURE. IF LAWN MILTS (SHOWS GREY-BROWN) WATER MORE FREQUENTLY.

C. LAWN FERTILIZER: APRIL 1 - 22-0-6 ANALYSIS AT THE RATE OF 10 POUNDS FERTILIZER PER 1,000 SQUARE FEET, NITROGEN CONTENT SHALL CONSIST OF 50% SULPHUR COATED UREA. ANALYSIS SHALL INCLUDE 4% IRON. MAY 15 - 24-6-12 ANALYSIS AT THE RATE OF 10 POUNDS FERTILIZER PER 1,000 SQUARE FEET, NITROGEN CONTENT SHALL CONSIST OF 50% SULPHUR COATED UREA. ANALYSIS SHALL INCLUDE 4% IRON. JULY 1 - 15-5-10 ANALYSIS AT THE RATE OF 10 POUNDS FERTILIZER PER 1,000 SQUARE FEET, NITROGEN CONTENT SHALL CONSIST OF 50% SULPHUR COATED UREA. ANALYSIS SHALL INCLUDE 4% IRON. AUGUST 15 - 15-5-10 ANALYSIS AT THE RATE OF 10 POUNDS FERTILIZER PER 1,000 SQUARE FEET, NITROGEN CONTENT SHALL CONSIST OF 50% SULPHUR COATED UREA. ANALYSIS SHALL INCLUDE 4% IRON. OCTOBER 1 - 22-0-6 ANALYSIS APPLIED AT THE RATE OF 10# PER 1,000 SQUARE FEET. NO SULPHUR COATED UREA, NO IRON.

D. FERTILIZER: TRACE ELEMENTS IN FERTILIZER SHALL BE BASED ON THE RECOMMENDATIONS OF THE SOIL LABORATORY. THE FERTILIZATION PROGRAM WILL BE CLOSELY MONITORED BY THE OWNER. THE CONTRACTOR SHALL PREPARE SUBMITTALS PRIOR TO EACH APPLICATION SHOWING THE AREA TO BE COVERED. THE QUANTITY OF FERTILIZER TO BE APPLIED AND THE RATES OF APPLICATIONS. THE OWNER WILL MONITOR THE APPLICATION TO INSURE THAT MATERIALS AND PROCEDURES ARE AS SPECIFIED.

E. WEED CONTROL AND UNDESIRABLE GRASS - GENERAL:

- CONTRACTOR SHALL USE EXTREME CARE IN THE USE OF CHEMICALS FOR WEED CONTROL. BEFORE SUCH APPLICATIONS ARE MADE, THE TURF SHOULD BE WELL ESTABLISHED AND IN A VIGOROUS CONDITION.
- ALL CHEMICAL APPLICATIONS SHALL BE PROPERLY LICENSED WITH THE PROPER GOVERNING AUTHORITIES.
- THE CONTRACTOR SHALL CARRY THE INSURANCE REQUIRED BY THE GOVERNING AUTHORITY.
- APPLY CHEMICALS AT THE MANUFACTURER'S RECOMMENDED RATE TO ACHIEVE COMPLETE CONTROL OF WEEDS AND UNDESIRABLE GRASSES.
- ALL PRODUCTS UTILIZED ON THIS PROJECT MUST BE LABELED FOR TURF USE.
- SPOT TREATMENT OF WEEDS AND UNDESIRABLE GRASSES SHALL BE ACHIEVED WITHOUT DAMAGING THE SURROUNDING TURF.

F. WEED AND UNDESIRABLE GRASS CONTROL SCHEDULE: ALL BERMUDA GRASS TURF SHALL BE SPRAYED 2 TIMES IN EARLY SPRING FOR POST-EMERGENT CONTROL OF WINTER WEEDS, AND 2 TIMES IN JUNE - AUGUST FOR POST-EMERGENT CONTROL OF CRABGRASS, DALLISGRASS, AND OTHER BROADLEAF GRASSES, FOR A TOTAL OF 4 CYCLES. NOTE: IF PERMANENT TURF ESTABLISHMENT IS NOT COMPLETE, DO NOT APPLY PRE-EMERGENT HERBICIDE. SUMMER/FALL SPOT TREAT TURF AREAS TO ACHIEVE A MINIMUM 98% PURE STAND OF TURF.

G. INSECTS: CONTROL INSECTS WITH REGULAR APPLICATIONS OF COMMERCIAL INSECTICIDES AT THE MANUFACTURER'S RECOMMENDED RATE.

H. DISEASES: SPRAY FOR DISEASES WHEN THEY FIRST BECOME APPARENT WITH AN APPROVED COMMERCIAL FUNGICIDE STRICTLY ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

I. MAINTAIN MULCHED SAUCERS AROUND ALL TREES FOR ONE YEAR AFTER PLANTING. TRIM GRASS AS REQUIRED TO PREVENT GRASS FROM ENCRACING INTO THE SAUCER AREA. NO "WEED-EATERS" SHALL BE USED AROUND THE TRUNK OF ANY TREE AT ANY TIME.

J. IF INITIAL INSTALLATION (ANY OR ALL) OF THE PROJECT SITE IS IN WINTER RYE, THE CONTRACTOR WILL AT THAT TIME CHANGE THE MOWING AND TRIMMING RATE TO 45 TIMES A YEAR. CONTRACTOR SHALL ALSO DURING THE 1 YEAR MAINTENANCE PERIOD AND AT THE APPROPRIATE SEASON, CHEMICALLY KILL OUT WINTER RYE AND HYDROMULCH BERMUDA.

K. ANNUAL APPLICATION OF HERBICIDE WILL BE APPLIED TO OVERSEEDED TURF TO AID IN THE ERADICATION OF RYE GRASS.

3.5 SHRUB AND GROUND COVER BED MAINTENANCE:

A. WEEDING OF ALL SHRUB, GROUND COVER BEDS AND SEASONAL COLOR BEDS SHALL BE PERFORMED TWICE MONTHLY (TOTAL 24 TIMES).

B. ALL SHRUB AND GROUND COVER BEDS SHALL BE PRUNED 8 TIMES A YEAR

MARCH - OCTOBER IN AN ATTEMPT TO DEVELOP THE NATURAL FORM OF THE PLANT.

C. PRE-EMERGENT WEED CONTROL SHALL BE APPLIED 1 TIME IN EARLY SPRING AND 1 TIME IN LATE FALL IN PLANTER BEDS ONLY AFTER CAREFUL THOUGHT OF WHAT IS TO OCCUR IN PLANTERS DURING THE GROWING SEASON.

D. ALL SHRUB, GROUND COVER BEDS AND SEASONAL COLOR AREAS SHALL BE FERTILIZED 3 TIMES PER YEAR AT A RATE OF 2 POUNDS OF FERTILIZER PER 1,000 SQUARE FEET. APRIL 1 - 22-0-6, JULY 1 - 15-5-10, OCTOBER 1 - 22-0-6

3.6 USE OF HERBICIDES, INSECTICIDES, STERILANTS, POISON, AND ANIMAL TRAPS:

A. THE CONTRACTOR IS HEREBY GRANTED PERMISSION TO USE SUCH HERBICIDES, INSECTICIDES, POISON, AND ANIMAL TRAPS AS IT MAY FIND NECESSARY AND ADVANTAGEOUS IN ITS GROUNDS MAINTENANCE ACTIVITIES. HERBICIDES, INSECTICIDES, STERILANTS, AND ANIMAL TRAPS MUST BE USED RESPONSIBLY AND IN CONFORMANCE WITH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. THE CONTRACTOR ASSUMES

B. ALL LIABILITY FOR DAMAGE AND/OR INJURY RESULTING FROM ACCIDENT OR MISUSE OF THESE PRODUCTS AND/OR EQUIPMENT. THE OWNER RETAINS THE RIGHT TO PROHIBIT THE USE OF ANY HERBICIDE, INSECTICIDE, POISON, OR ANIMAL TRAP THAT HE MAY JUDGE TO BE UNDESIRABLE FOR ANY REASON.

C. PRODUCT LEAVING AN UNDESIRABLE RESIDUE OR ODOR (I.E., WEED OIL) SHALL NOT BE USED.

D. THE OWNER SHALL BE NOTIFIED PRIOR TO APPLICATION AND ADVISED OF ANY DANGER ASSOCIATED WITH THE USE OF THESE PRODUCTS (I.E., TO AVOID PERSONAL CONTACT WITH SPRAYED AREAS, ETC.).

E. APPLY INSECTICIDES AS NEEDED TO PROTECT ALL PLANT MATERIALS FROM DAMAGE. THE INSECT CONTROL PROGRAM SHALL INCLUDE SLUGS AND SNAILS AND ADVANCE PREVENTIVE SPRAYING FOR TWIG BORERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHOOSING THE CHEMICALS AND INSECTICIDES HE USES AND SHALL BE ACCOUNTABLE FOR ANY MISUSE OF SAME.

F. APPLY THE PROPER FUNGICIDE, HERBICIDE AND PESTICIDES FOR THE CONTROL OF PESTS, WEEDS AND PLANT DISEASES OR TREAT CUTS ON TURF, PLANTS AND TREES.

3.7 GENERAL CLEAN UP:

A. THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIALS OR REFUSE FROM HIS OPERATIONS OFF THE PROPERTY.

B. ALL PLANT GROWTH SHALL BE PREVENTED IN ANY CRACKS IN WALKS OR WITHIN PAVED AREAS.

C. LEAVES, PAPERS, GRASS CLIPPINGS OR OTHER DEBRIS SHALL BE REMOVED AT LEAST WEEKLY OR AT EACH VISIT FROM ALL AREAS.

D. SWEEP ROADS AND WALKS OF REFUSE, DIRT AND OTHER MATERIALS WHICH MAY BE DEPOSITED AS A RESULT OF THE MAINTENANCE OPERATION.

E. CONTRACTOR WILL EVALUATE BARK MULCH 4 TIMES A YEAR DURING THE 1 YEAR MAINTENANCE PERIOD AND REPLACE BARE SPOTS AS NEEDED.

PART 4.0 - SCHEDULE

4.1 SCHEDULE: THE SCHEDULE AS INCLUDED HEREIN SHALL GOVERN THE WORK. SHOULD THE CONTRACTOR REQUIRE AN ALTERATION OF THE SCHEDULE, CONTACT THE OWNER.

PART 5.0 - MAINTENANCE SCHEDULE

5.1 MOWING, EDGING, TRIMMING, LITTER CLEAN UP, AND IRRIGATION MONITORING AND OTHER RELATED MAINTENANCE FEATURES:

| MOW | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--|-----|-----|-------------------------------------|-----|-----|-----|-----|-----|--|-----|-----|-----|-------|
| EDGE/TRIM | | | | 2 | 4 | 4 | 5 | 5 | 5 | 4 | 2 | | 36 |
| CLEAN/TRASH/WEED (BEDS) | | | 2 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 2 | | 36 |
| SPRINKLER | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 18 |
| FERTILIZE (LAWN) | | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 5 |
| POST EMERGENT (LAWN) | | | 1 | 1 | | | | 1 | | | | | 4 |
| | | | POST-EMERGENT OF WINTER WEEDS | | | | | | POST-EMERGENT OF CRABGRASS AND OTHER BROADLEAF | | | | |
| FERTILIZE (BEDS, INCL. GROUND COVER) | | | 1 | | 1 | | 1 | | | | | | 3 |
| PRE-EMERGENT (BEDS) | | | 1 | 1 | | | | | | 1 | | | 2 |
| CULTIVATE BEDS | | | | | 1 | 1 | 1 | 1 | | | | | 5 |
| PRUNE (SHRUBS) | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 8 |
| PRUNE (GROUND COVER) | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 8 |
| PRUNE (TREES) | | | 1 | | | | | | | | | | 1 |
| | | | (CRAPEMYRTLES TO REMOVE SEED HEADS) | | | | | | | | | | |
| INSECT / DISEASE CONTROL (LAWN & BEDS) | | | AS NEEDED | | | | | | | | | | |
| TREES (INSECTICIDE) | | | 1 | | | 1 | | | | | | | 2 |
| TREES (FUNGICIDE) | | | 1 | | | | | | 1 | | | | 2 |

LAWN PART 1 - GENERAL

1.1 SCOPE: FURNISH ALL LABOR, TOOLS, TRANSPORTATION, MATERIALS, EQUIPMENT, SUPERVISION, ETC., REQUIRED TO ADEQUATELY ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE FROM LUMPS AND DEPRESSIONS AS INDICATED BY PLANS AND SPECIFICATIONS. REPLACE ANY PART OF THE AREA FAILING TO SHOW UNIFORM COVER UNTIL A DENSE LAWN IS ESTABLISHED. THE COST OF MISCELLANEOUS LABOR AND MATERIALS FOR TOPSOIL, WEEDING, TILLING, PEST CONTROL, FERTILIZING, ETC., ARE NOT SEPARATE PAY ITEMS AND SHALL BE INCLUDED IN THE BID PRICE FOR GRASSING.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

A. LANDSCAPING

1.3 PAYMENT:

A. PAYMENT FOR GRASS PLANTING OR HYDROMULCHING FOR GENERAL TURF AREAS WILL BE MADE AFTER FINAL ACCEPTANCE BASED ON THE METHOD OF PAYMENT STATED IN THE BID PROPOSAL. IF BASED ON AREA UNITS, SUCH AS SQUARE FEET OR SQUARE YARDS, PAYMENT WILL BE BASED ON ACTUAL FIELD MEASUREMENTS. THE CONTRACTOR SHALL SEED, FERTILIZE, MAINTAIN AND ESTABLISH A HEALTHY STAND OF GRASS BEFORE ACCEPTANCE OR PAYMENT FOR GRASS WILL BE CONSIDERED BY THE OWNER.

B. BIDDERS SHALL BE AWARE THAT ESTIMATES OF WORK UNDER THE SPECIFICATIONS FOR MONTHLY PAYMENTS ARE MADE ON NON-PERISHABLE MATERIALS ONLY. PAYMENTS FOR PERISHABLES WILL BE MADE AFTER FINAL ACCEPTANCE OF THE PROJECT. ALL GRASS PLANTING, TILLING, FERTILIZER, ETC. SHALL BE CONSIDERED PERISHABLE, THEREFORE, NO PARTIAL PAYMENTS WILL BE PAID FOR GRASS PLANTING AND ASSOCIATED WORK.

1.4 MAINTENANCE OF GRASS: THE CONTRACTOR SHALL MAINTAIN THE GRASS UNTIL FINAL ACCEPTANCE. SUCH MAINTENANCE SHALL INCLUDE SPRAYING, WEEDING, CULTIVATION, FERTILIZING, WATERING, DISEASE AND INSECT CONTROL, TOP DRESSING LOW SPOTS, PLUS ANY PROCEDURES CONSISTENT WITH HORTICULTURAL PRACTICE NECESSARY TO INSURE NORMAL, VIGOROUS, AND HEALTHY GRASS.

1.5 JOB CONDITIONS:

A. WATER: WILL BE AVAILABLE ON SITE. PROVIDE NECESSARY HOSES AND OTHER WATERING EQUIPMENT REQUIRED TO COMPLETE WORK.

B. LAWN AREAS WILL BE LEFT WITHIN 0.1 FOOT OF FINISH GRADE BY OTHER TRADES. FINE GRADING, RAKING AND SMOOTHING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

1.6 SCHEDULE

A. SEEDING/HYDROMULCHING - BERMUDA GRASS: NORTH TEXAS: COMPLETE ONLY BETWEEN MAY 1 TO AUGUST 31 UNDER FAVORABLE CONDITIONS. (WARM SEASON) CENTRAL TEXAS: COMPLETE ONLY BETWEEN MAY 1 TO SEPTEMBER 15 UNDER FAVORABLE CONDITIONS. (WARM SEASON)

B. SEEDING/HYDROMULCHING - PERENNIAL RYEGRASS: COMPLETE ONLY BETWEEN SEPTEMBER 1 TO APRIL 30, EXCEPT AT FRONT OF PROJECT, AS DETERMINED BY OWNER, UNDER FAVORABLE CLIMATIC CONDITIONS.

C. SODDING: BERMUDA SOD: NORTH TEXAS: MAY 1 TO AUGUST 31 (WARM SEASON) AND SEPTEMBER 1 TO APRIL 30 (COOL SEASON) WITH OVERSEED OF PERENNIAL RYE. CENTRAL TEXAS: MAY 1 TO SEPTEMBER 15 (WARM SEASON) AND SEPTEMBER 16 TO APRIL 30 (COOL SEASON) WITH OVERSEED OF PERENNIAL RYE. (USE NURSERY OVERSEEDED SOD, IN LIEU OF SEEDING AFTER INSTALLATION, IF AVAILABLE.)

D. QUALIFICATIONS: DUE TO UNSEASONABLE WEATHER, THE ABOVE DATES MAY VARY; HOWEVER, DO NOT PROCEED WITH GRASSING OPERATIONS BEYOND THESE DATES WITHOUT ASSUMING FULL RESPONSIBILITY FOR A STAND OF GRASS.

1.7 ACCEPTANCE: THE WORK WILL BE ACCEPTED WHEN A COMPLETED, UNDAMAGED STAND OF GRASS IS ACHIEVED, AS APPROVED BY THE OWNER AND THE LANDSCAPE ARCHITECT.

PART 2 - MATERIALS

2.1 TOPSOIL:

A. FERTILE, DARK, LOAMY SOIL, FREE OF CLAY LUMPS, SUBSOIL, STONES AND OTHER EXTRANEEOUS MATERIAL AND REASONABLE FREE OF WEEDS AND FOREIGN GRASSES. TOPSOIL CONTAINING DALLISGRASS OR NUTGRASS SHALL BE REJECTED.

B. PHYSICAL PROPERTIES AS FOLLOWS:

- CLAY - BETWEEN 7-27 PERCENT
- SILT - BETWEEN 28-50 PERCENT
- SAND - LESS THAN 52 PERCENT

2.2 GRASS:

A. GRASS SEED: EXTRA FANCY, HULLED AND TREATED, LAWN TYPE SEED, DELIVERED TO SITE IN ORIGINAL, UNOPENED CONTAINERS MEETING REQUIREMENTS OF TEXAS STATE SEED LAW. MINIMUM PURITY GERMINATION 90 PERCENT.

B. SOD: SOLID SOD, LIVE, RICH, DARK GREEN IN COLOR, FREE OF FOREIGN GRASSES, WEEDS, NUTGRASS, CUT WITH A FULL 3/4 INCH OF HEAVY CLAY COVERING ROOTS. DELIVER TO SITE IN 12 INCH SQUARES OR 12 INCH WIDE ROLLS. DO NOT STACK FOR MORE THAN 24 HOURS BETWEEN TIME OF CUTTING AND TIME OF DELIVERY.

2.3 FERTILIZER: FERTILIZER SHALL BE ORGANIC BASE, UNIFORM IN COMPOSITION, DRY AND FREE FLOWING. DELIVER FERTILIZER TO SITE IN ORIGINAL, UNOPENED CONTAINERS, EACH BEARING MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS.

A. FIRST APPLICATION: 12-12-12 ELEMENT PERCENTAGE WITH MINIMUM 8% SULFUR AND 4% IRON, PLUS MICRO NUTRIENTS.

B. SECOND APPLICATION: 3:1:2 ELEMENT RATIO. NITROGEN SOURCE TO BE A MINIMUM 50% SLOW RELEASE ORGANIC NITROGEN (SCU OR UF) PLUS MINIMUM 8% SULFUR AND 4% IRON PLUS MICRO NUTRIENTS.

2.4 MULCH FIBER: WOOD CELLULOSE FIBER FOR HYDROMULCH: WEYERHAUSER OR EQUAL WITH GREEN COLOR ADDITIVE.

2.5 TACKIFIER: NATURAL, NON-ASPHALTIC VEGETABLE GUM WITH GELLING AND HARDENING AGENTS.

2.6 SHARP SAND: CLEAR, WASHED SAND (FINE AGGREGATE) - ASTM C-33.

2.7 HERBICIDE: ROUND-UP OR EQUAL.

PART 3 - EXECUTION

3.1 PREPARATION:

A. SCARIFY LAWN AREAS WHERE EXCESSIVE COMPACTION IS GREATER THAN 85% STANDARD PROCTOR TO A DEPTH OF 4-INCHES BY DISCING OR ROTOTILLING. REPEAT CULTIVATION AS REQUIRED TO THOROUGHLY LOOSEN SOIL.

B. LEAVE AREAS FREE OF WEEDS AND READY FOR FINAL GRADING.

C. PROVIDE BARRICADES AROUND SCARIFIED AREAS TO PREVENT COMPACTION BY CONSTRUCTION VEHICLES.

3.2 SPREADING TOPSOIL

A. NO TOPSOIL SHALL BE PLACED UNTIL SUBGRADE IS APPROVED BY LANDSCAPE ARCHITECT.

B. CONTRACTOR TO FURNISH AND SPREAD TOPSOIL ON LAWN AREAS TO A DEPTH OF SIX INCHES.

C. WORK TOPSOIL TO A SMOOTH UNIFORM SURFACE AND COMPACT FIRMLY.

D. FEATHER TOPSOIL INTO UNDISTURBED AREAS CREATING A SMOOTH, EVEN TRANSITION. SPREAD ADDITIONAL TOPSOIL IN UNDISTURBED AREAS TO ELIMINATE WATER PONDING.

3.3 FINAL GRADING:

A. REMOVE FROM SITE AND LEGALLY DISPOSE OF STONES 1-INCH AND LARGER, STICKS AND OTHER DEBRIS EXPOSED DURING THIS OPERATION.

B. PROVIDE FINISH GRADING LEAVING SURFACE UNIFORM WITHOUT DEPRESSIONS AND UNDULATIONS, GRADED APPROXIMATELY 1-INCH BELOW PAVING.

C. SECURE APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO PROCEEDING WITH GRASSING OPERATION.

3.4 HERBICIDE: APPLY HERBICIDE TO REMOVE ANY REMAINING WEEDS. THIS WORK IS TO BE PERFORMED BY A LICENSED PESTICIDE APPLICATOR FOLLOWING THE MANUFACTURER'S RECOMMENDATIONS.

3.5 FERTILIZER:

A. PLACE FIRST APPLICATION WITH HYDROMULCH AT RATE OF 12 POUNDS PER 1,000 SQUARE FEET.

B. UNIFORMLY DISTRIBUTE SECOND APPLICATION USING A ROTARY TYPE FERTILIZER SPREADER 3-4 WEEKS AFTER FIRST APPLICATION AT 12 POUNDS PER 1,000 SQUARE FEET.

3.6 HYDROMULCH/SEEDING:

A. AT THE TIME OF HYDROMULCH/SEEDING, SOIL SHALL BE MOIST BUT NOT MUDDY, AND WIND VELOCITY SHALL NOT EXCEED TEN (10) MILES PER HOUR. ADD WATER IF REQUIRED TO MOISTEN SOIL.

B. HYDROMULCH SEED UNIFORMLY AT THE RATE OF 2 POUNDS OF BERMUDA GRASS SEED PER 1,000 SQUARE FEET OR OTHER RATE AS SPECIFIED ON PLANS.

C. ADD TACKIFIER TO HYDROMULCH MIX FOR SLOPES 5:1 OR GREATER AT THE RATE OF 1 LB. PER BAG OF MULCH.

D. USE A 4' X 8' BATTER BOARD AGAINST BED AREAS.

3.7 MECHANICAL SEEDING: SEED UNIFORMLY AT A RATE 125 POUNDS OF BERMUDA GRASS SEED PER ACRE OR 350 POUNDS OF RYE GRASS PER ACRE. USE GRASS DRILL, BRILLION SEEDER, OR VIKING ROLLER.

3.8 SOLID SOD:

A. SOLID SOD: PLANT GRASS BY HAND, EDGE TO EDGE WITH STAGGERED JOINTS.

TOP DRESS WITH SHARP SAND RAKED IN CAREFULLY TO FILL JOINTS. ROLL TO ELIMINATE UNDULATIONS AND PROVIDE COMPLETE SOIL CONTACT. ALL BERMUDA GRASS INSTALLED DURING THE WINTER MONTHS (SEPTEMBER-APRIL) SHALL BE OVERSEED WITH RYE GRASS BEFORE INSTALLATION. (NOT OVERSEED AT SITE.) THE INFORMATION CENTER, ALL STREET FRONTAGE, POOLS AND ANY BUILDING HOUSING MODEL UNITS ARE TO RECEIVE SOLID SOD AS SPECIFIED. NO HYDROMULCH IN THE ABOVE AREAS WILL BE ALLOWED - ONLY SOLID SOD.

B. FERTILIZING: FERTILIZE IMMEDIATELY AFTER GRASS IS PLANTED AT RATE OF 4 LBS. PER 1,000 SQUARE FEET. REPEAT FERTILIZING AT THE SAME RATE 3-4 WEEKS LATER. MODIFY APPLICATION RATE IF RECOMMENDED BY SOIL TESTING LAB.

3.9 ESTABLISHMENT AND MAINTENANCE OF LAWN AREAS:

A. WATERING:

1. WATER LAWN AREAS IMMEDIATELY AFTER GRASSING OPERATION.

2. CONTINUE WATERING AS REQUIRED TO KEEP SOIL UNIFORMLY MOIST TO A MINIMUM DEPTH OF 4-INCHES.

3. BE ALERT TO OVER-WATERING NEWLY PLANTED GRASS, PARTICULARLY IN HEAVY CLAY SOILS.

B. REPLANTING/EROSION CONTROL:

1. CORRECT ANY EROSION THAT MAY OCCUR DURING THE ESTABLISHMENT OF GRASS.

2. RESEED (SOD) ANY AREAS NOT SHOWING SUFFICIENT GROWTH WITHIN 3 WEEKS AFTER INITIAL GRASSING. CONTINUE SEEDING (SODDING) UNTIL A STAND OF GRASS IS ACHIEVED.

3. A STAND OF GRASS WILL BE DEFINED AS A UNIFORM COVER OF ACTIVELY GROWING TURF.

C. MOWING/WEED CONTROL:

1. MOW LAWN AREAS WEEKLY UNTIL A STAND OF GRASS IS ACHIEVED. BEGIN MOWING WHEN THE LAWN REACHES A HEIGHT OF 3-INCHES SET MOWER TO CUT AT 2-INCHES. A MINIMUM OF TWO MOWINGS ARE REQUIRED.

2. WEED LAWN AREAS UNTIL ACCEPTANCE, REMOVING ALL FOREIGN VEGETATION, EITHER BY HOING OR PULLING. IF APPROVED, HERBICIDE SPOT TREATMENTS MAY BE USED.

3.10 CLEANUP

DURING WORK, KEEP PREMISES NEAT AND ORDERLY, INCLUDING ORGANIZATION OF STORAGE AREAS. REMOVE TRASH, INCLUDING DEBRIS RESULTING FROM REMOVING WEEDS AND ROCKS FROM SITE DAILY AS WORK PROGRESSES. KEEP PAVED AREAS CLEAN BY SWEEPING OR HOSING.

| REV. | DESCRIPTION | DATE |
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BTX RETAIL, LP

SHOPS AT HUDSON OAKS

LOT 5R

LANDSCAPE NOTES

8/30/2023
DATE

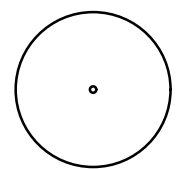
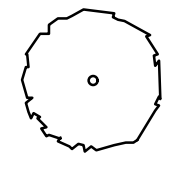
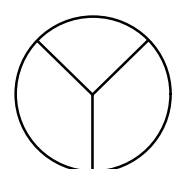
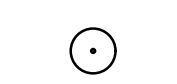


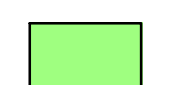
R. Alan Munger, PE
R. ALAN MUNGER, PE

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| CHECKED | RDS, SRG |
| PROJECT NO. | RAM |
| | 4-01139.08 |

DRAWING NO.
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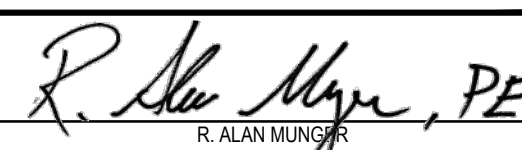



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| A. | | | | | |
|--|---|-----------------|------------------------|---------------------|---------|
| EXISTING TREES | | | | | |
| | QTY | CREDIT PER TREE | TOTAL CREDITS | | |
| EXISTING TREES WITH TRUNK DIAMETER OVER FOUR AND ONE-HALF INCHES PROTECTED DURING CONSTRUCTION | | | | | |
| | 3 | 400 | 1200 | | |
| PLANT SCHEDULE | | | | | |
| TREES | BOTANICAL/COMMON NAME | ROOT | SIZE | NOTES | QTY |
|  | QUERCUS VIRGINIANA/ LIVE OAK | CONT. | 4" CAL | 12'-14' H X 5'-6" W | 6 |
|  | FRAXINUS TEXENSIS/ TEXAS ASH | CONT. | 4" CAL | 12'-14' H X 5'-6" W | 6 |
| ORNAMENTAL | BOTANICAL/COMMON NAME | ROOT | SIZE | NOTES | QTY |
|  | LAGERSTROEMIA INDICA "NATCHEZ"/GRAPE MYRTLE "NATCHEZ" | CONT. | 2" CAL, MULTI-TRUNK | 8'-9' H X 3'-4' W | 12 |
| SHRUBS | BOTANICAL/COMMON NAME | ROOT | SIZE | NOTES | QTY |
|  | NANDINA DOMESTICA/ HEAVENLY BAMBOO | 5 GAL | 30" HT. | | 125 |
|  | SABAL MINOR/ DWARF PALMETTO | 5 GAL | 24" HT. | | 80 |
| SUCCULENTS | BOTANICAL/COMMON NAME | ROOT | SIZE | NOTES | QTY |
|  | HESPERALDE PARVIFLORA/ RED YUCCA | 5 GAL | 24" HT. | | 82 |
| SOD | BOTANICAL/COMMON NAME | SIZE | SPACING | NOTES | QTY |
|  | ZOYSIA JAPONICA STEUD/ ZOYSIA GRASS | SOD | | | 5800 SF |


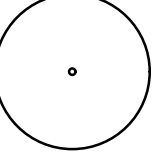
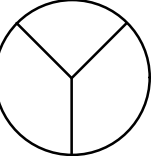
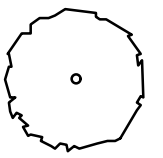




| | | |
|--|---------------------|------------------------|
| ZONING DESIGNATION: PD-M MIXED USE | | |
| (a) BUILDING SITE | | |
| (1) AREA REQUIREMENTS | | TOTAL AREA |
| TOTAL DEVELOPED AREA CALCULATION | | |
| MAIN BUILDING AREA (SF) | | 13,770 S.F. |
| PARKING AREA (SF)(INCLUDES STORAGE AREA) | | 45,210 S.F. |
| TOTAL DEVELOPED AREA | | 58,980 S.F. |
| (1) (a) REQUIRED LANDSCAPE AREA (15% OF TOTAL) | | 8,847 S.F. |
| (2) TREES | REQUIRED | PROVIDED |
| 50% MIN. OF REQ. LANDSCAPE AREA TO BE TREES | 4,424 S.F. | 5,400 S.F. |
| 50% MIN. OF REQ. TREES ARE CANOPY | 2,212 S.F. | 3,600 S.F. |
| (2) (c) TREES AREA CALCULATIONS | AREA GRANTED | TREES PROVIDED |
| NEWLY PLANTED CANOPY TREES 1.5" - 3" CAL. | 200 S.F. EACH | 12 TREES |
| EXISTING TREES WITH TRUNK DIAMETER OVER FOUR AND ONE-HALF INCHES PROTECTED DURING CONSTRUCTION | 400 S.F. EACH | 3 TREES |
| *NOTE: ALL TREES SHALL BE CONTAINER, AND FOUND ON 62-482 TREE LIST | | |
| (3) SHRUBS | AREA GRANTED | PLANTS PROVIDED |
| 2 GALLONS UP TO 15 GALLONS | 10 S.F. | 287 |
| (4) GRASSES AND GROUNDCOVERS | REQUIRED | PROVIDED |
| AREA SHALL NOT EXCEED 15% OF LANDSCAPE AREA | 1,328 S.F. | 1,328 S.F. |
| FOR EVERY 100 S.F. LANDSCAPE AREA; 10 S.F. GRANTED | 4,472 S.F. | 4,472 S.F. |
| (b) PARKING AREAS | | |
| (1) TREES | REQUIRED | PROVIDED |
| 1 TREE REQUIRED FOR EACH ISLAND | 8 ISLANDS | 10 TREES |
| (2) SHRUBS, GRASSES, AND LIVE GROUNDCOVERS | REQUIRED | PROVIDED |
| PARKING LOT ISLAND 100% COVERAGE OF LIVE MATERIAL | 100% | 100% |

- NOTES:
- ALL TREES TO BE USED ON SITE SHALL BE TAKEN FROM THE TREE SPECIES LIST 62-482
 - ALL LANDSCAPING SHALL BE 100% IRRIGATED WITH AN AUTOMATIC SPRINKLER SYSTEM
 - NO PLANTING MATERIAL HIGHER THAN 30" SHALL BE LOCATED WITHIN THE VISIBILITY TRIANGLE OF ANY DRIVE AISLE
 - TREES SHALL NOT BE LOCATED WITHIN 10 LATERAL FEET OF AN OVERHEAD UTILITY WIRE OR WITHIN 5 LATERAL FEET OF ANY UNDERGROUND UTILITY. UNLESS THE TREE IS NONCANOPY IN WHICH CASE, IT CAN BE LOCATED WITHIN 10 FEET OF AN OVERHEAD UTILITY LINE
 - ALL ROADS, CURBS, PARKING, DRAINAGE, AND DRAINAGE TIE-INS RE: CIVIL
 - ALL CALCULATIONS ARE BASED OFF OF MINIMUM LANDSCAPE CODE REQUIREMENTS

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| REV. | DESCRIPTION | DATE |
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|  Walker Partners engineers ★ surveyors <small>T.B.P.E. Registration No. 8053</small> | | |
| BTX RETAIL, LP | | |
| SHOPS AT HUDSON OAKS LOT 5R | | |
| LANDSCAPE NOTES | | |
| 8/30/2023 |  | R. ALAN MUNGER, PE |
| DATE | | |
|  | DESIGNED | RAM |
| | DRAFTED | DPS |
| | CHECKED | RDS, SRG |
| | PROJECT NO. | RAM |
| | | 4-01139.08 |
| DRAWING NO. L002 | | |

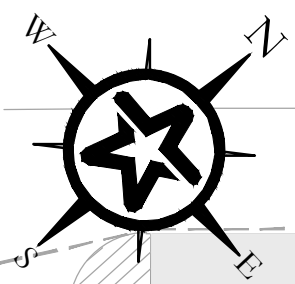
NOTE: PLANS ARE NOT TO BE USED FOR CONSTRUCTION. PLANS TO BE USED FOR BIDDING AND PERMITTING PURPOSES ONLY.

LEGEND

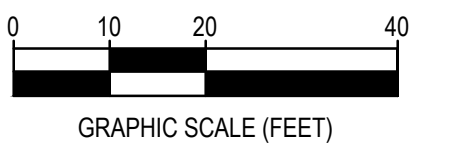
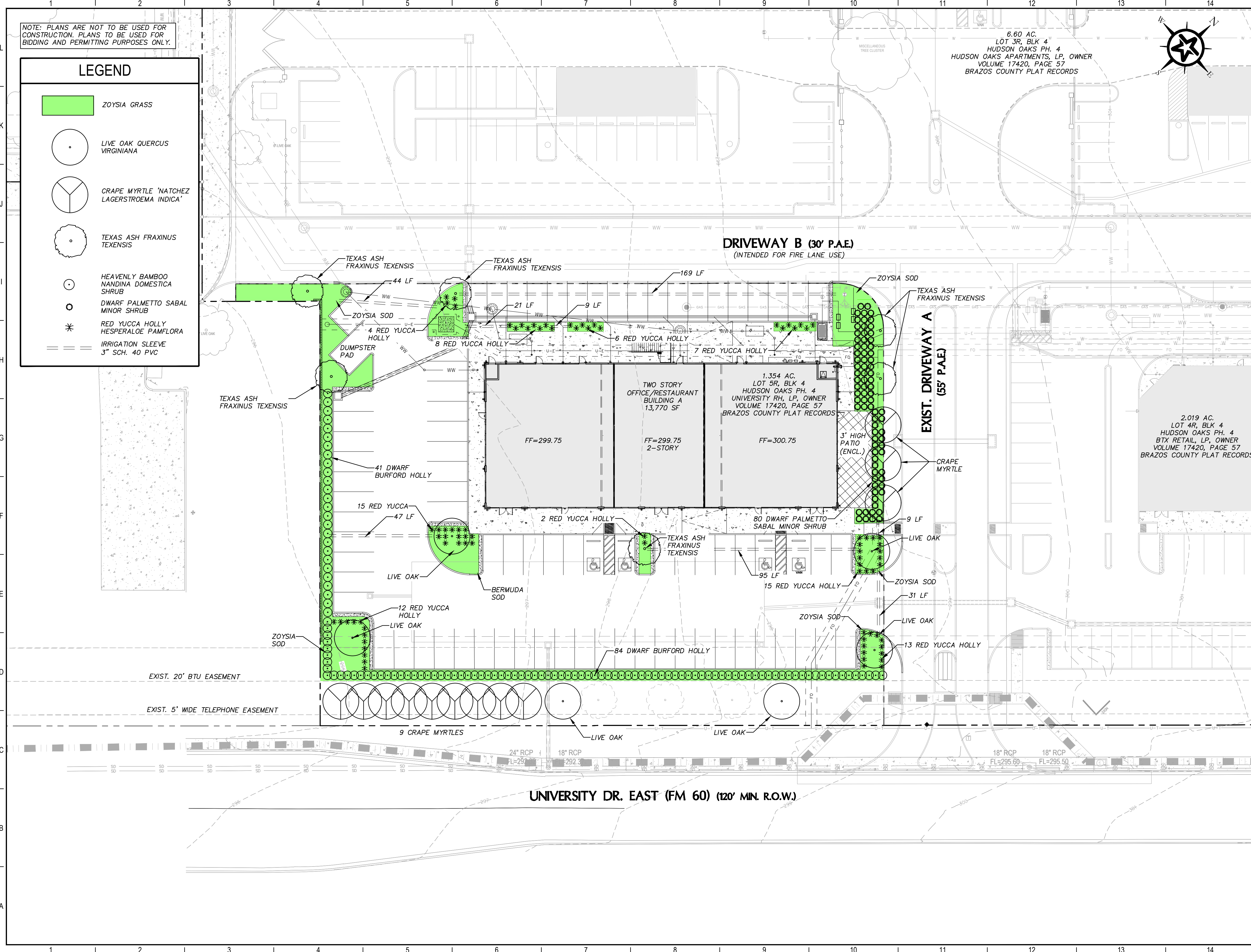
-  ZOYSIA GRASS
-  LIVE OAK QUERCUS VIRGINIANA
-  CRAPE MYRTLE 'NATCHEZ LAGERSTROEMA INDICA'
-  TEXAS ASH FRAXINUS TEXENSIS
-  HEAVENLY BAMBOO NANDINA DOMESTICA SHRUB
-  DWARF PALMETTO SABAL MINOR SHRUB
-  RED YUCCA HOLLY HESPERALOE PAMFLORA
-  IRRIGATION SLEEVE 3" SCH. 40 PVC

GENERAL NOTES

1. ALL LANDSCAPING SHALL BE IRRIGATED BY AN UNDERGROUND SPRINKLER SYSTEM.
2. TO ENSURE THE GROWTH OF TREES IN END ISLANDS, A MINIMUM 24-INCH SOIL DEPTH AND 250 CUBIC FEET OF APPROXIMATE PLANTING MEDIUM IS REQUIRED PER TREE, WITH TOPSOIL MOUNDED TO A CENTER HEIGHT.



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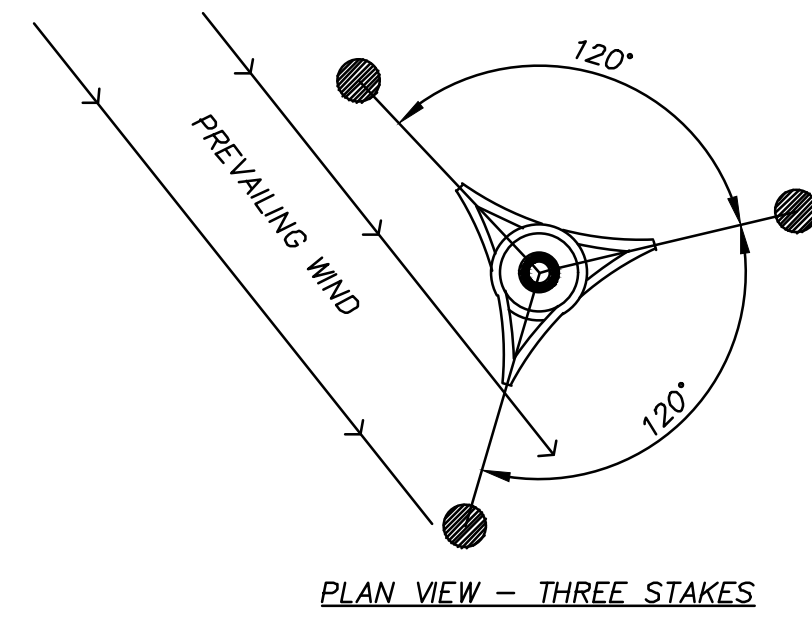
BTX RETAIL, LP
SHOPS AT HUDSON OAKS
LOT 5R

LANDSCAPE PLAN AND ANALYSIS

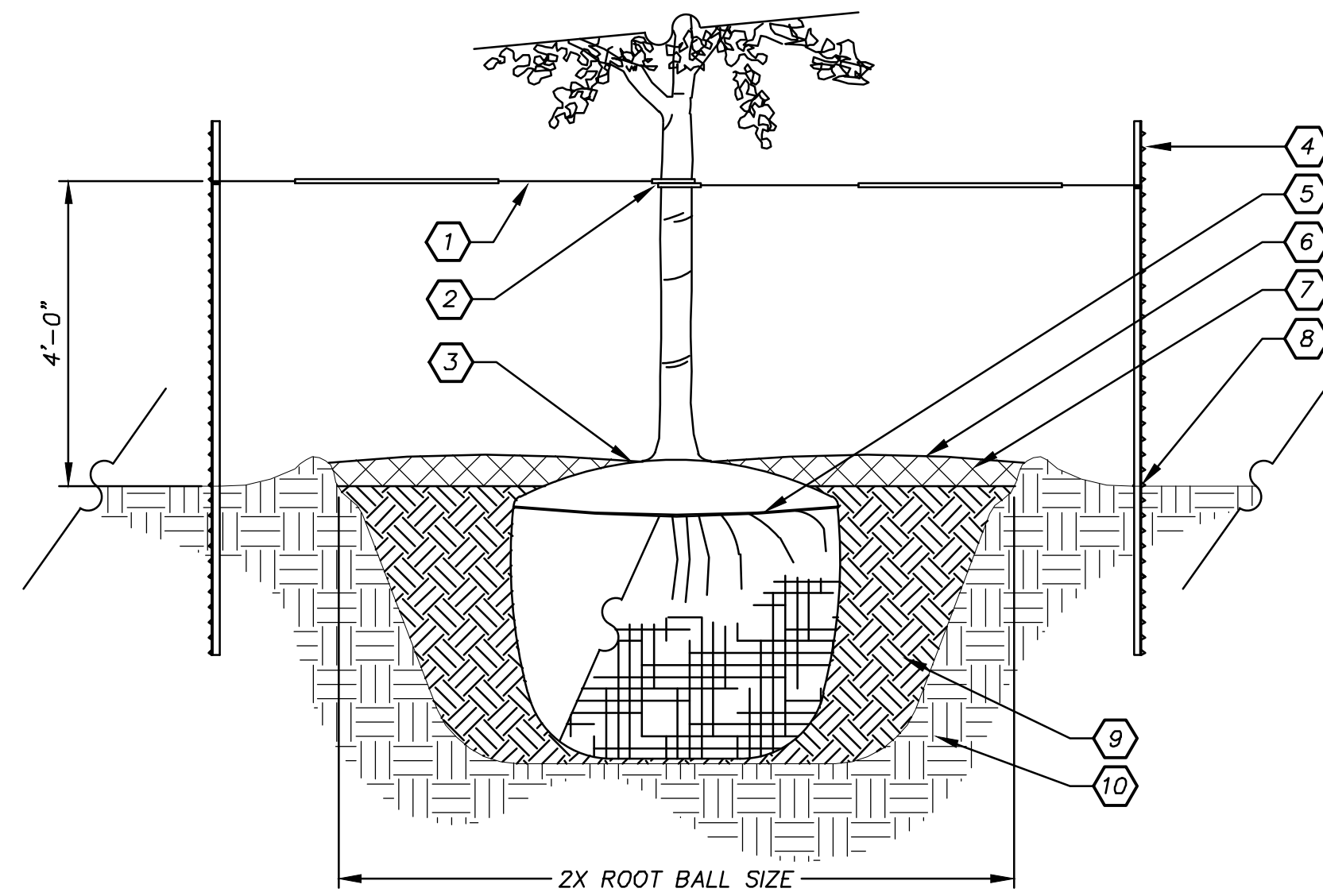
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 R. ALAN MUNGER, PE



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| CHECKED | RDS, SRG |
| PROJECT NO. | RAM |
| DRAWING NO. | 4-01139.08 |
| | L100 |



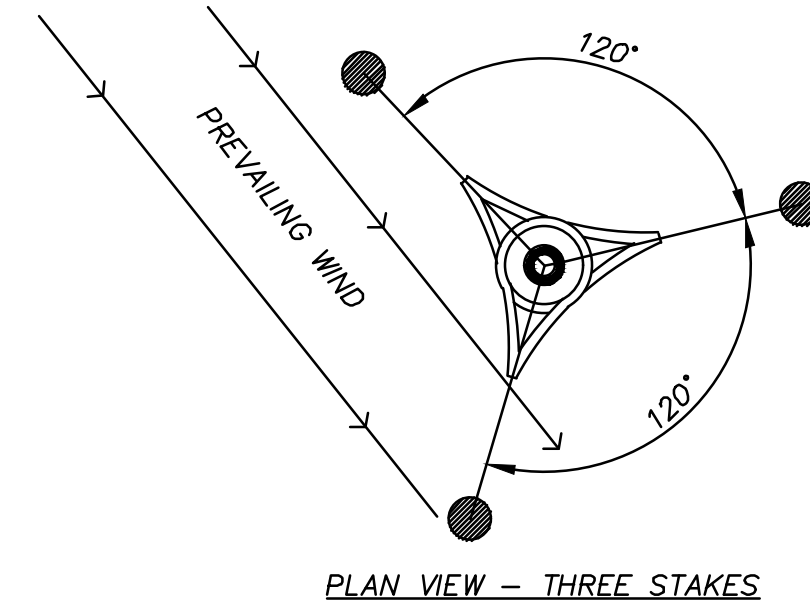
- NOTES:
1. REFERENCE SHEETS L000-L003 FOR ADDITIONAL REQUIREMENTS.
 2. TREES LESS THAN 4" CALIPER = (2) T-POSTS, TREES 4" CALIPER AND GREATER = (3) T-POSTS.
 3. POSTS AND STAKING TO BE REMOVED AFTER 1 YEAR.



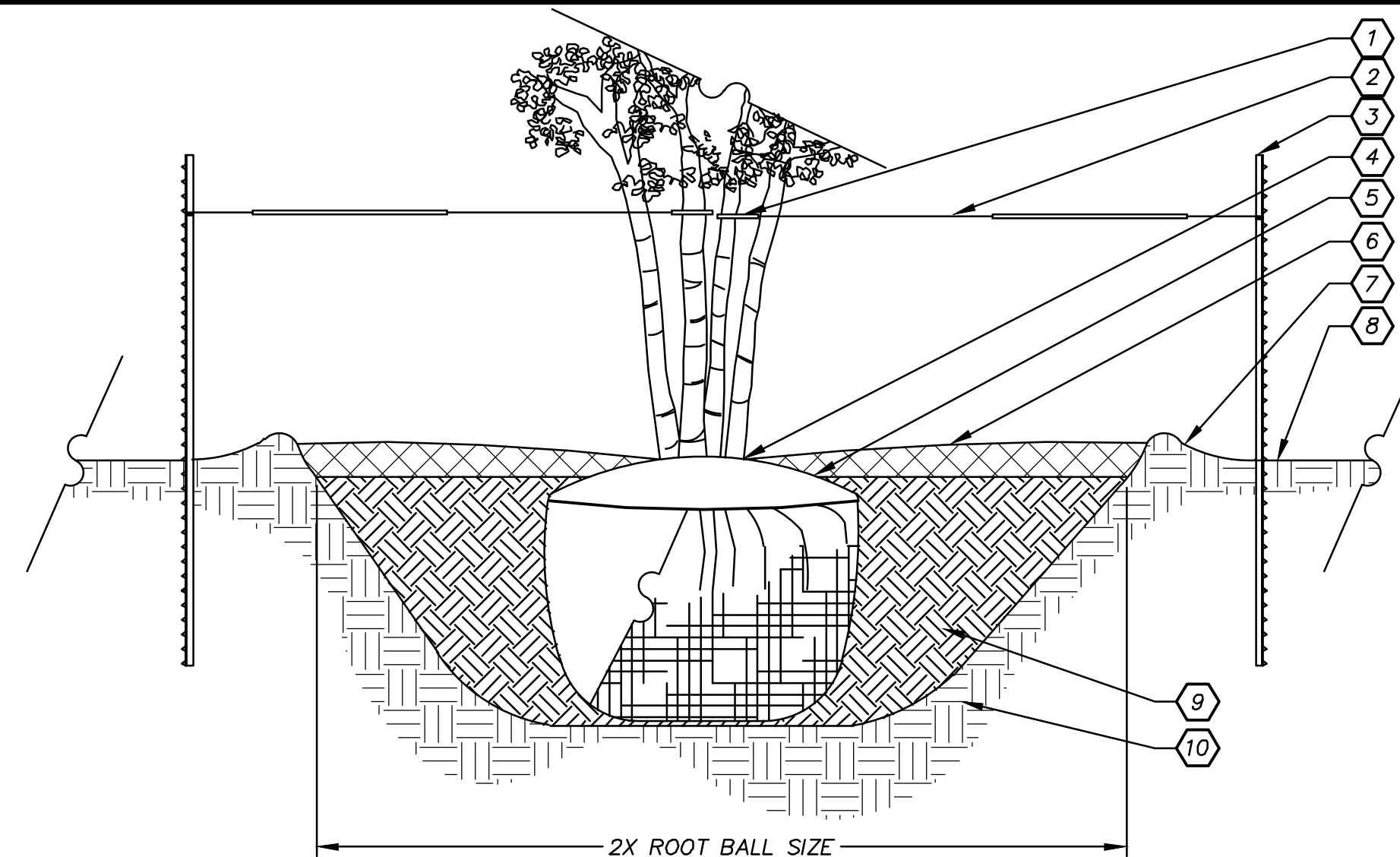
- 1 12" GAUGE MULTI-STRAND WIRE, PLACE MINIMUM 1/2" PVC PIPE AROUND EACH WIRE, EXPOSED WIRE SHALL BE MAXIMUM 2" EACH SIDE
- 2 BLACK RUBBER HOSE
- 3 TOP OF ROOT BALL TO BE 2" ABOVE FINISHED GRADE, MULCH TO BE NO DEEPER THAN 2" WITHIN 6" OF TREE TRUNK, SET ROOT BALL ON UNDISTURBED GRADE
- 4 6'-0" GREEN METAL T-POST TO BE INSTALLED 1'-0" MINIMUM INTO UNDISTURBED SUBGRADE, DO NOT DISTURB ROOT BALL, T-POSTS TO BE PARALLEL, VERTICAL, AND EVEN
- 5 CUT ALL ROPES, WIRES, AND BURLAP FROM TRUNK AND TOP OF ROOT BALL, REMOVE ALL CONTAINERS FROM ROOT BALL
- 6 3" LAYER OF SPECIFIED MULCH
- 7 5" HIGH EARTHEN WATER RETENTION BASIN
- 8 FINISH GRADE
- 9 SPECIFIED SOIL BACKFILL MIX
- 10 UNDISTURBED SUBGRADE

I1 TREE PLANTING DETAIL

1" = 2'



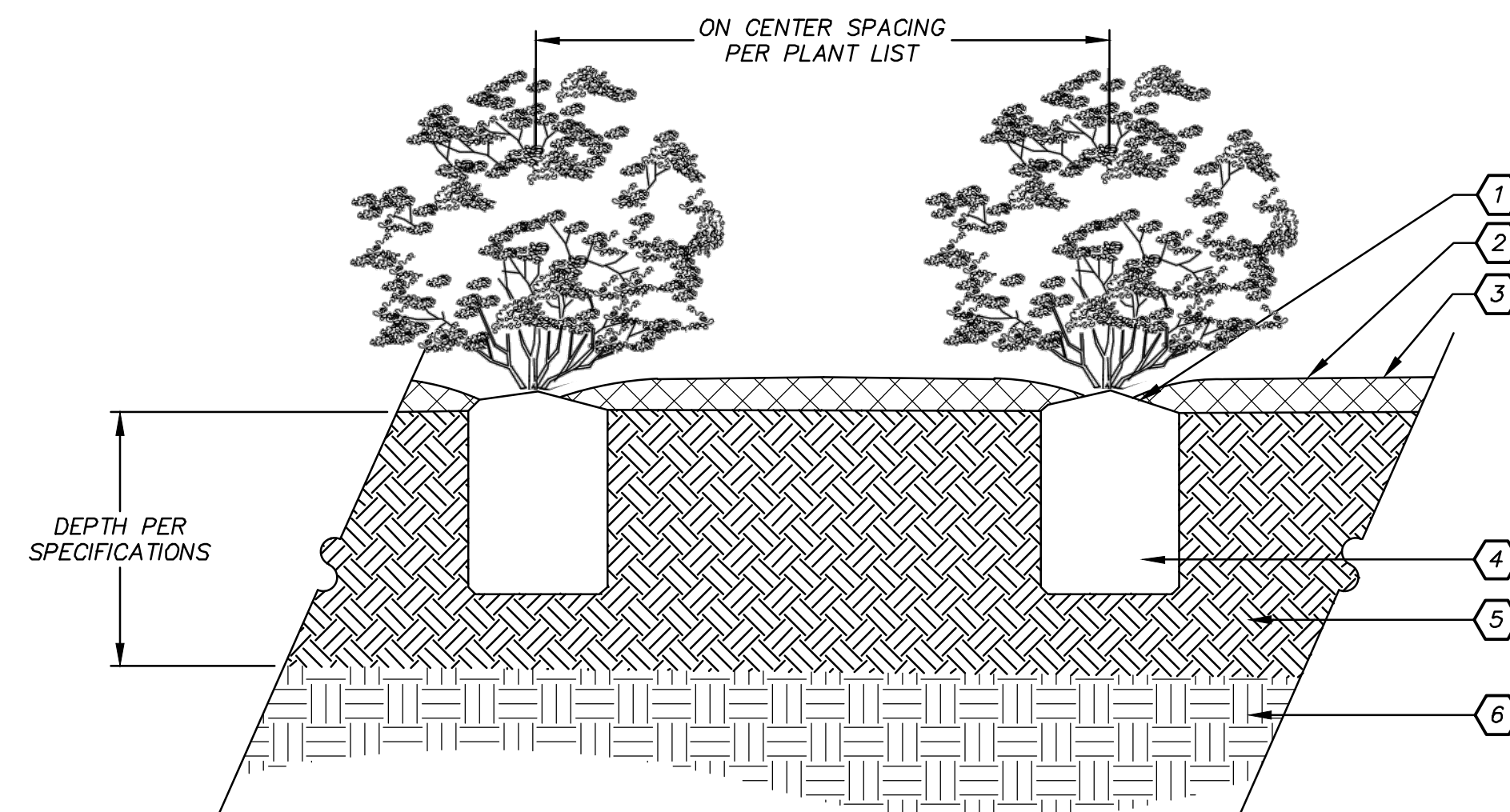
- NOTES:
1. REFERENCE SHEETS L000-L003 FOR ADDITIONAL REQUIREMENTS.
 2. TREES LESS THAN 6' HEIGHT = (2) T-POSTS, TREES 6' HEIGHT AND GREATER = (3) T-POSTS.
 3. POSTS AND STAKING TO BE REMOVED AFTER 1 YEAR.



- 1 BLACK RUBBER HOSE, ATTACHED TO (2) MINIMUM INNER LARGER CANES
- 2 12 GAUGE MULTI-STRAND WIRE, PLACE MINIMUM 1/2" PVC PIPE AROUND EACH WIRE, EXPOSED WIRE SHALL BE MAXIMUM 2" EACH SIDE
- 3 6'-0" GREEN METAL T-POST TO BE INSTALLED 1'-0" MINIMUM INTO UNDISTURBED SUBGRADE, DO NOT DISTURB ROOT BALL, T-POSTS TO BE PARALLEL, VERTICAL, AND EVEN
- 4 TOP OF ROOT BALL TO BE 2" ABOVE FINISHED GRADE, MULCH TO BE NO DEEPER THAN 2" WITHIN 6" OF TREE TRUNK, SET ROOT BALL ON UNDISTURBED GRADE
- 5 CUT ALL ROPES, WIRES, AND BURLAP FROM TRUNK AND TOP OF ROOTBALL, REMOVE ALL CONTAINERS FROM ROOT BALL
- 6 3" LAYER OF SPECIFIED MULCH
- 7 5" HIGH EARTHEN WATER RETENTION BASIN
- 8 FINISH GRADE
- 9 SPECIFIED SOIL BACKFILL MIX
- 10 UNDISTURBED SUBGRADE

E1 MULTISTEM TREE DETAIL

1" = 2'



- 1 BLACK RUBBER HOSE, ATTACHED TO (2) MINIMUM INNER LARGER CANES
- 2 FILL BED WITH MINIMUM 3" LAYER OF SPECIFIED MULCH, TAPER MULCH AWAY FROM TRUNK
- 3 FINISH GRADE
- 4 REMOVE CONTAINER AND ANY WRAPPING, TWINE, WIRES, ETC.
- 5 SPECIFIED PLANTING MIX
- 6 UNDISTURBED SUBGRADE

- NOTES:
1. BROKEN OR CRUMBLING ROOT BALLS WILL BE REJECTED.
 2. CARE SHOULD BE TAKEN NOT TO DAMAGE THE SHRUB OR ROOT BALL WHEN REMOVING IT FROM ITS CONTAINER.
 3. DIG PLANT PIT TWICE AS WIDE AND AS HIGH AS THE CONTAINER.
 4. PRUNE ALL DEAD OR DAMAGED WOOD PRIOR TO PLANTING, DO NOT PRUNE MORE THAN 20% OF LIMBS.

A1 SHRUB DETAIL

1" = 2'

| REV. | DESCRIPTION | DATE |
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BTX RETAIL, LP

SHOPS AT HUDSON OAKS LOT 5R

LANDSCAPE DETAILS

8/30/2023 *R. Alan Munger, PE*
DATE R. ALAN MUNGER

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| DESIGNED | RAM |
| DRAFTED | DPS |
| CHECKED | RDS, SRG |
| PROJECT NO. | RAM |
| PROJECT NO. | 4-01139.08 |
| DRAWING NO. | L101 |

