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TECHNICAL SPECIFICATIONS - PLANTING, SECTION 329000

PART 1 - GENERAL

- 1.1 SUMMARY
A. PROVIDE ALL LABOR, EQUIPMENT AND INCIDENTALS REQUIRED TO RENDER ALL SERVICES REQUIRED TO SUCCESSFULLY INSTALL ALL TURF AND LANDSCAPE PROPOSED WITHIN THE PROJECT AREA AS DEFINED ON PLANS.
B. WORK WILL INCLUDE BUT IS NOT LIMITED TO PREPARATION, INSTALLATION, AND MAINTENANCE FOR PROPOSED TURF AND LANDSCAPE MATERIAL.
1.2 SUBMITTALS
A. PROVIDE TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO ANY PLANTING ACTIVITIES. SUBMITTALS SHALL INCLUDE:
1. A COPY OF CURRENT CERTIFICATE AS A CERTIFIED LANDSCAPE CONTRACTOR BY THE FLORIDA NURSERY, GROWERS, AND LANDSCAPE ASSOCIATION (FNGLA).
2. A COPY OF CURRENT PEST CONTROL LICENSE (ROW, ORNAMENTAL AND/OR AQUATIC, IF APPROPRIATE)
3. CERTIFICATION BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES AS A COMMERCIAL FERTILIZER APPLICATOR PER SE-14.117(18) F.A.C.
4. MANUFACTURER'S LABELS OR INFORMATION FOR ANY COMPONENTS INCORPORATED INTO THIS PROJECT, INCLUDING BUT NOT LIMITED TO FERTILIZERS, PESTICIDES, AND STAKING SYSTEMS.
5. IF IMPORTED FILL IS REQUIRED TO AUGMENT EXISTING CONDITIONS FOR PLANTING, PROVIDE IMPORTED FILL AS DESCRIBED WITHIN PRODUCTS SECTION. PROVIDE A SOIL ANALYSIS THROUGH THE UNIVERSITY OF FLORIDA EXTENSION SOIL TESTING LABORATORY FOR EACH FILL SOURCE AND INCLUDING INCLUDE A WRITTEN REPORT CONTAINING SOIL-AMENDMENT AND FERTILIZER RECOMMENDATIONS FOR EACH SOURCE.
6. SCHEDULE OF VALUES. PRIOR TO THE COMMENCEMENT OF THE WORK, SUBMIT INSTALLED UNIT PRICES FOR ALL PLANT MATERIALS (MULCH SHALL BE INCLUDED IN THE INSTALLED UNIT PRICING) AND SODDING. THE SCHEDULE OF VALUES SHOULD EQUAL THE TOTAL CONTRACT PRICE FOR LANDSCAPE INSTALLATION.
7. TYPEWRITTEN INSTRUCTIONS PROVIDING A MAINTENANCE SCHEDULE AND ALL MAINTENANCE OPERATIONS NECESSARY TO MAINTAIN THE PLANTINGS DURING AND FOLLOWING INSTALLATION, AS SPECIFIED BELOW.
8. WRITTEN WARRANTIES AS SPECIFIED BELOW.
9. RECORD DRAWINGS: FURNISH ONE SET OF RECORD DRAWINGS THAT CLEARLY SHOW ALL CHANGES MADE TO THE ORIGINAL CONTRACT DRAWINGS DURING THE COURSE OF THE WORK. DRAWINGS SHALL BE PROVIDED IN PDF FILE FORMAT AND TO BE FULLY LEGIBLE AND TO SCALE.
1.3 QUALITY CONTROL
A. ALL WORK SHALL BE PERFORMED BY A FNGLA CERTIFIED LANDSCAPE CONTRACTOR (FCLC) WHO HAS COMPLETED LANDSCAPE WORK SIMILAR IN SCOPE, MATERIAL, DESIGN, AND EXTENT TO THAT AS INDICATED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL TREE AND SHRUB ESTABLISHMENT. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN FCLC CERTIFICATION UNDER FNGLA.
B. PRUNING AND TRIMMING, IF REQUIRED, SHALL BE PERFORMED BY A CERTIFIED ARBORIST, AS CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA).
C. ALL PLANT MATERIAL TO COMPLY WITH FLORIDA #1 GRADE QUALITY STANDARD AS DEFINED AND SPECIFIED WITHIN THE LATEST EDITION OF THE 'FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS' PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF PLANT INDUSTRIES. PROVIDE HEALTHY, VIGOROUS STOCK GROWN IN A RECOGNIZED NURSERY IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES AND FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALED, INJURIES, ABRASIONS, OR DISFIGUREMENT.
D. UNSATISFACTORY OR DEFECTIVE MATERIAL MAY BE REJECTED AT ANY TIME, AND REJECTED MATERIAL SHALL BE REMOVED IMMEDIATELY FROM THE PROJECT SITE.
E. CONTRACTOR SHALL MAINTAIN AND EXPERIENCED, FULL-TIME SUPERVISOR ON THE PROJECT SITE DURING ALL PLANTING ACTIVITIES.
F. SUBSTITUTIONS WILL NOT BE ACCEPTED UNLESS PROOF OF NON-AVAILABILITY OR EVIDENCE OF 'EQUAL' STATUS IS DEMONSTRATED PRIOR TO ORDERING AND/OR INSTALLATION. CONTRACTOR TO SUBMIT A SUBSTITUTION REQUEST TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO ORDERING, DELIVERY, OR INSTALLATION OF MATERIAL. THE SUBSTITUTION REQUEST SHALL IDENTIFY THE ISSUE WITH THE SPECIFIED MATERIAL AND PROPOSE ALTERNATIVE, EQUAL MATERIAL(S). INFORMATION TO BE PROVIDED REGARDING ALTERNATIVE MATERIALS SHALL INCLUDE SCIENTIFIC NAME, COMMON NAME, SIZE, AND SOURCE.
G. PACKAGE STANDARD PRODUCTS WITH MANUFACTURER'S CERTIFIED ANALYSIS OR ANALYSIS BY RECOGNIZED LABORATORY.
1.4 CONTRACTOR REQUIREMENTS
A. PROVIDE ALL EQUIPMENT, MATERIALS AND LABOR NECESSARY FOR COMPLETION OF WORK AND MAINTENANCE.
B. OBTAIN ALL NECESSARY PERMITS, LICENSES, AND NOTIFICATIONS AND PAY FEES NECESSARY FOR COMPLETION OF THE WORK.
C. COMPLY WITH ALL APPLICABLE CODES.
D. COORDINATE WITH OTHER TRADES WORKING ON THE PROJECT DURING PLANTING ACTIVITIES.
E. COORDINATION SHALL OCCUR WITH OTHER CONTRACTORS OR PROJECTS OCCURRING OFF SITE IF NECESSARY.
F. IDENTIFY AND VERIFY THE LOCATION OF ALL UTILITIES WITHIN PROPOSED PLANTING AREAS. CONTRACTOR TO CONTACT SUNSHINE STATE ONE CALL OF FLORIDA, INC. AS REQUIRED BY CHAPTER 556 OF FLORIDA STATUTES PRIOR TO ANY EXCAVATION OR PLANTING ACTIVITIES.
G. PROVIDE SAFE STORAGE FOR ALL EQUIPMENT AND MATERIALS. STORAGE OF SUCH ITEMS IS AT THE CONTRACTOR'S RISK.
H. REPAIR, AT NO COST TO THE OWNER, ANY DAMAGE OCCURRING DUE TO CONTRACTOR NEGLIGENCE TO EXISTING UTILITIES, STRUCTURES, FURNISHINGS, HARDSCAPE, LANDSCAPE, OR OTHER ELEMENTS TO REMAIN. ANY DAMAGED WORK SHALL BE REPAIRED AS PER PLANS, OTHER SPECIFICATIONS SECTIONS, OR AS INSTRUCTED BY THE OWNER'S REPRESENTATIVE.
I. MAINTENANCE DURING INSTALLATION AND UNTIL FINAL ACCEPTANCE.
1.5 WARRANTY
A. EXISTING LANDSCAPE AND VEGETATION
1. ALL EXISTING LANDSCAPE AND TURF TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION ACTIVITIES.
B. NEW PLANTS
1. WARRANTY SHRUBS AND GROUND COVER FOR A PERIOD OF TWELVE (12) MONTHS AFTER DATE OF SUBSTANTIAL COMPLETION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR THAT WHICH IS A RESULT OF NEGLIGENCE BY OWNER, ABUSE, DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS WHICH ARE BEYOND THE CONTRACTOR'S CONTROL.
2. REMOVE AND REPLACE ANY LANDSCAPE MATERIAL FOUND TO BE DEAD OR IN UNHEALTHY CONDITION DURING WARRANTY PERIOD.
B. NEW SOD
1. WARRANTY ALL GRASS FOR A PERIOD OF SIX (6) MONTHS AFTER SUBSTANTIAL COMPLETION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH, AS DETERMINED BY THE OWNER'S REPRESENTATIVE, EXCEPT FOR DEFECTS RESULTING FROM NEGLIGENCE BY THE OWNER, ABUSE OR DAMAGE BY OTHERS, OR THE UNUSUAL PHENOMENA OR INCIDENTS, WHICH ARE BEYOND THE CONTRACTOR'S CONTROL.
2. REMOVE AND REPLACE ALL TURF FOUND TO BE DEAD OR IN AN UNHEALTHY CONDITION DURING WARRANTY PERIOD AS DETERMINED BY THE OWNER'S REPRESENTATIVE.
C. REPAIR GRADES, LAWN AREAS, PAVING, AND ANY OTHER DAMAGE RESULTING FROM REPLACEMENT PLANTING OPERATIONS, AT NO ADDITIONAL COST TO OWNER.
D. IF ANY PLANTS ARE REPLACED DURING THE WARRANTY PERIOD, THEN THE REPLACEMENT MATERIAL SHALL ALSO BE WARRANTED FOR THE SAME PERIOD AS LISTED FOR NEW MATERIAL ABOVE, FROM THE DATE OF REPLACEMENT. ONLY ONE REPLACEMENT WILL BE REQUIRED EXCEPT FOR LOSSES OR REPLACEMENTS DUE TO FAILURE TO COMPLY WITH SPECIFIED REQUIREMENTS.
E. A FINAL INSPECTION MAY BE MADE AT THE END OF THE WARRANTY PERIOD TO DETERMINE ACCEPTANCE OR REJECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER, IN WRITING, THIRTY (30) DAYS PRIOR TO THE END OF THE WARRANTY PERIOD, AT WHICH TIME THE OWNER HAS THE OPTION TO PERFORM AN END OF WARRANTY INSPECTION. FAILURE TO NOTIFY THE OWNER OF THE END DATE OF THE WARRANTY PERIOD SHALL CAUSE THE WARRANTY PERIOD TO EXTEND UNTIL SUCH TIME AS THE CONTRACTOR GIVES THE OWNER THE REQUIRED 30 DAYS' NOTICE.
1.6 DELIVERY, STORAGE, AND HANDLING
A. PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN CONTAINERS SHOWING WEIGHT, CERTIFIED ANALYSIS, AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETERIORATION DURING DELIVERY AND WHILE STORED AT SITE.
B. SOD: TIME DELIVERY SO THAT SOD WILL BE PLACED WITHIN 24 HOURS AFTER STRIPPING. PROTECT SOD AGAINST DRYING AND BREAKING OF ROLLED STRIPS.
C. PLANTS: DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE. DO NOT BEND OR BIND-TIE SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OF DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING DELIVERY. DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX (6) HOURS AFTER DELIVERY, SET PLANTS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE. DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS UNTIL PLANTING TIME. HANDLE PLANT MATERIALS BY ROOTBALL.
1.7 PROJECT CONDITIONS
A. COORDINATE AND COOPERATE WITH OTHER TRADES TO ENABLE WORK TO PROCEED AS RAPIDLY AND EFFICIENTLY AS POSSIBLE.
B. IF WEATHER CONDITIONS DETRIMENTAL TO PLANTING ARE ENCOUNTERED OR ANTICIPATED, NOTIFY THE OWNER'S REPRESENTATIVE OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING. PLANTING SHALL NOT OCCUR DURING PERIODS OF OR WITHIN 48 HOURS OF PREDICTED TEMPERATURES LESS THAN 32 F.
C. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED OR ANTICIPATED, INCLUDING BUT NOT LIMITED TO LIMESTONE, ROAD BASE, RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OBSTRUCTIONS, OR TOXIC MATERIALS, NOTIFY THE OWNER'S REPRESENTATIVE OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
D. MAINTAIN GRADE STAKES SET BY OTHERS UNTIL REMOVAL IS MUTUALLY AGREED UPON BY PARTIES CONCERNED.
E. DETERMINE LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK. CALL SUNSHINE STATE ONE CALL, 811. PERFORM WORK IN A MANNER THAT AVOIDS POSSIBLE DAMAGE. HAND EXCAVATE AS REQUIRED.

PART 2 - PRODUCTS

- 2.1 FILL
A. IF REQUIRED TO AUGMENT EXISTING SOILS FOR LANDSCAPE AND TURF INSTALLATION, PROVIDE NEW, DEEP FILL MATERIAL AS PER USDA STANDARD TEXTURES AND THAT IS TAKEN FROM WELL-DRAINING LOCAL SOURCES WITH SIMILAR SOIL TYPES AS FOUND AT THE PROJECT SITE.
B. FILL TO BE SUITABLE FOR PLANT GROWTH, FRIABLE, AND FREE OF CLAY LUMPS, BRUSH, WEEDS, SEEDS, ROOTS, STUMPS, STONES, ORGANIC MUCK, HARD PAN CLAY, LITTER AND CONSTRUCTION DEBRIS INCLUDING LIMEROCK OR PAVING BASE MATERIAL, ASPHALT, AND CONCRETE, AND OTHER EXTRANEIOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH
C. FILL TO BE OF PH 5.6-5.
2.2 MULCH
A. MULCH SHALL BE AS INDICATED IN NOTES OR THE PLANT SCHEDULE AND TO BE FREE OF BRANCHES, CONES, AND DEBRIS.
2.3 COMMERCIAL FERTILIZER
A. ADHERE TO ALL LOCAL REQUIREMENTS REGARDING FERTILIZER TYPES AND APPLICATIONS.
B. APPLY FERTILIZER ONLY TO PLANTING AREAS. CLEAN UP FERTILIZER THAT MAY BE CAST ON ADJACENT HARDSCAPE, ETC.
C. FOLLOW WATER MANAGEMENT DISTRICT AND LOCAL REGULATIONS WHEN APPLYING FERTILIZER NEAR WETLANDS, WATER BODIES, OR STORMWATER FACILITIES.
D. SHRUBS AND GROUNDCOVERS: UTILIZE A ROOT STARTER OR EQUIVALENT SLOW RELEASE FERTILIZER TO ENCOURAGE ROOT GROWTH. APPLY AT MANUFACTURER'S RECOMMENDED RATE. ROOT STARTER SHALL BE A COMPLETE, SLOW RELEASE FERTILIZER WITH ORGANIC NITROGEN AND CONTAIN THE FOLLOWING PERCENTAGES OF AVAILABLE PLANT NUTRIENTS:
1. BETWEEN 5-6% TOTAL NITROGEN (N) CONSISTING OF 3.5-4.5% WATER INSOLUBLE/SLOW RELEASE NITROGEN AND 1.5% WATER SOLUBLE NITROGEN
2. BETWEEN 1-2% PHOSPHATE (P2O5)
3. BETWEEN 0.5-3% POTASH/POTASSIUM (K)
E. PALMS: FERTILIZE WITH AN 8N - 2P2O5 - 12K2O + 4MG WITH MICRONUTRIENTS. 100% OF N, K, AND MG SHALL BE IN SLOW RELEASE FORM AND MICRONUTRIENTS SHALL BE IN SULFATE OR CHELATE (FE ONLY) FORM. 5.60 UNITS OF SLOW RELEASE NITROGEN SHALL BE POLYMER COATED. 5.80 - 8.40 UNITS OF SLOW RELEASE POTASH SHALL BE POLYMER COATED. SLOW RELEASE MG SHALL BE PRILLED (GRANULAR) KIESERITE. FERTILIZER SHALL CONTAIN APPROXIMATELY 1.5 - 2% MN AND FE (0.1 - 0.2% FOR FE IF CHELATED), PLUS TRACE AMOUNTS OF B (0.15%), ZN (0.15%), AND CU (0.05%).
F. TURF: PROVIDE FERTILIZER WITH NOT LESS THAN SIXTEEN (16) PERCENT TOTAL NITROGEN, FOUR (4) PERCENT AVAILABLE PHOSPHORIC ACID AND EIGHT (8) PERCENT SOLUBLE POTASH. APPLY AT MANUFACTURER'S RECOMMENDED RATE.
2.4 PLANT MATERIALS
A. PROVIDE SHRUBS AND GROUNDCOVERS OF SIZE, GENUS, SPECIES, AND VARIETY AS SHOWN IN THE PLANT SCHEDULE FOR LANDSCAPE WORK THAT CONFORM TO FLORIDA NO. 1 QUALITY STANDARDS.
B. PROVIDE HEALTHY, VIGOROUS STOCK GROWN IN A RECOGNIZED NURSERY IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES AND FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALED, INJURIES, ABRASIONS, OR DISFIGUREMENT.
C. LANDSCAPE MATERIAL SHALL BE CONTAINER GROWN MATERIAL UNLESS OTHERWISE SPECIFIED OR UNLESS APPROVED BY THE OWNER'S REPRESENTATIVE.
2.5 SOD
A. PROVIDE SAND-GROWN ONLY, STRONGLY ROOTED SOD, NOT LESS THAN TWO YEARS OLD, FREE OF WEEDS AND UNDESIRABLE NATIVE GRASSES, AND MACHINE CUT TO PAD THICKNESS OF 3/4 INCH (PLUS OR MINUS 1/4 INCH), EXCLUDING TOP GROWTH AND THATCH. PROVIDE ONLY SOD CAPABLE OF VIGOROUS GROWTH AND DEVELOPMENT WHEN PLANTED. SOD SHALL BE VIABLE AND NOT DORMANT.
B. PROVIDE SOD OF UNIFORM PAD SIZES WITH A MAXIMUM 5% DEVIATION IN EITHER LENGTH OR WIDTH. BROKEN PADS OR PADS WITH UNEVEN ENDS WILL NOT BE ACCEPTABLE. SOD PADS INCAPABLE OF SUPPORTING THEIR OWN WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON UPPER 10 PERCENT OF PAD WILL BE REJECTED.
C. STABILIZING NETTING OR OTHER SYNTHETIC MATERIALS WITHIN SOD SHALL BE PROHIBITED.
D. SOD TO BE AS LISTED WITHIN THE PLANT SCHEDULE.
E. REFER TO CIVIL PLANS FOR SOD TYPE AND INSTALLATION METHODS WITHIN STORMWATER FACILITIES.
2.6 WEED PRE-EMERGENT HERBICIDE
A. IF APPROVED BY OWNER, APPLY 'RON STAR G' PRE-EMERGENT HERBICIDE, OR APPROVED EQUAL IN PLANTING AREAS.

PART 3 - EXECUTION

- 3.1 PREPARATION
A. CONDUCT A PRE-CONSTRUCTION CONFERENCE ON SITE WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK. DISCUSS PROPOSED ACTIVITIES, REVIEW PROPOSED PLANTING AREAS, AND CONFIRM PROPOSED SCHEDULE OF WORK. PROVIDE ONE WEEK'S NOTICE OF PROPOSED CONFERENCE.
B. ENSURE ALL ASPHALT, LIMEROCK, AND OTHER CONSTRUCTION DEBRIS ARE REMOVED FROM AREAS OF PROPOSED PLANTING OR SODDING TO A MINIMUM DEPTH OF THREE FEET PRIOR TO INSTALLATION.
C. CLEAN EXISTING SOIL OF ROOTS, PLANTS, SODS, STONES, CLAY, LUMPS AND OTHER EXTRANEIOUS MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH.
D. PLANTING DEPTH OF SOIL SHALL BE A MINIMUM OF THREE (3) FEET. IF FILL MUST BE ADDED, IT SHALL CONFORM TO THE REQUIREMENTS LISTED ABOVE.
E. PLANTING AREAS SHALL NOT BE COMPACTED.
F. PLANTING AREAS SHALL BE WELL-DRAINING. IF SATURATED OR WET CONDITIONS EXIST IN PROPOSED PLANTING AREAS OR WITHIN PLANTING HOLES, DO NOT PLANT MATERIAL AND CONTACT LANDSCAPE ARCHITECT FOR DIRECTION.
G. GAIN APPROVAL FROM OWNER PRIOR TO WORK FOR REMOVAL OF EXISTING GRASS, VEGETATION, AND TURF BY METHODS OTHER THAN HAND REMOVAL. IF APPROVED, SPRAY AREAS WITH 'ROUND UP' OR OTHER APPROPRIATE HERBICIDE AND PERFORM ADDITIONAL SPRAY TREATMENTS AS NEEDED TO ENSURE A COMPLETE KILL. REMOVE AND DISPOSE OF RESULTING DEAD VEGETATION AND TURF. DO NOT TURN RESULTING DEAD VEGETATION OR TURF OVER INTO SOIL. REPEAT IF NECESSARY TO REMOVE EXISTING VEGETATION.
H. FOR TURF AREAS INDICATED FOR RENOVATION, MECHANICALLY CUT OUT AREAS OF FAILING TURF AND CREATE A CLEAN EDGE FOR NEW SOD INSTALLATION.
I. FINE GRADE PROPOSED PLANTING AND SOD AREAS TO SMOOTH, EVEN SURFACES WITH LOOSE, UNIFORMLY FINE TEXTURE AND FREE OF LUMPS, CLODS, STONES, ROOTS, AND OTHER EXTRANEIOUS MATTER. ROLL, RAKE, AND DRAG AREAS, REMOVE RIDGES, AND FILL DEPRESSIONS AS REQUIRED TO MEET FINISH GRADES.
J. ALLOW FOR SOD THICKNESS IN AREAS TO BE SODDED SUCH THAT INSTALLED SOD MEETS FINISHED GRADES.
3.2 TREE BARRIERS AND EXISTING TREE PROTECTION
A. REFER TO NOTES ON DEMOLITION PLANS OR LANDSCAPE PLANS REGARDING TREE PROTECTION AND TREE PROTECTION BARRIERS.
B. MINIMIZE IMPACTS ON EXISTING TREE ROOTS AS MUCH AS POSSIBLE. AVOID TREE ROOT PLATE AREAS AS DEFINED BY PERMITTING AGENCIES.
C. ALL ROOTS OF TREES TO REMAIN THAT ARE IMMEDIATELY ADJACENT TO EXTENSIVE EXCAVATION AND ARE 1" DIAMETER OR OVER SHALL BE HAND CUT. EXPOSE ROOTS BY HAND DIGGING, HAND CUT OR SAW CLEANLY, AND IMMEDIATELY COVER WITH SOIL. DO NOT ALLOW CUT ROOTS TO DRY OUT.
D. SUPPLEMENTAL IRRIGATION IS REQUIRED FOR TREES THAT HAVE UNDERGONE ROOT PRUNING. PROVIDE SUPPLEMENTAL IRRIGATION IMMEDIATELY FOLLOWING PRUNING AND CONTINUE THROUGH CONSTRUCTION.
3.3 PLANTING
A. PLANT TREES, SHRUBS, AND GROUND COVER AFTER FINAL GRADES ARE ESTABLISHED AND PRIOR TO PLANTING OF LAWNS UNLESS OTHERWISE AUTHORIZED BY OWNER'S REPRESENTATIVE. IF PLANTING OF TREES AND SHRUBS OCCURS AFTER INSTALLATION OF LAWNS, PROTECT LAWN AREAS AND PROMPTLY REPAIR DAMAGE CAUSED BY LANDSCAPE INSTALLATION.
B. LAY OUT INDIVIDUAL PLANT LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS. TRIANGLE SPACING SHALL BE USED FOR SHRUBS AND GROUNDCOVERS UNLESS OTHERWISE SPECIFIED IN PLANS OR BY OWNER'S REPRESENTATIVE. OUTLINE AREAS AND SECURE OWNER'S REPRESENTATIVE'S OR OWNER REPRESENTATIVE'S ACCEPTANCE BEFORE START OF PLANTING WORK. MAKE MINOR ADJUSTMENTS AS MAY BE REQUIRED.
C. EXCAVATE PITS, BEDS, AND TRENCHES SUCH THAT PITS ARE AS DEEP AS THE PLANT'S ROOTBALL AND 1.5 TIMES THE DIAMETER OF THE ROOTBALL. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION. SCARIFY SIDES OF PIT.
D. FILL EXCAVATIONS FOR SHRUBS WITH WATER AND ALLOW WATER TO PERCOLATE OUT PRIOR TO PLANTING. NOTIFY OWNER'S REPRESENTATIVE OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING IF PITS DO NOT DRAIN PRIOR TO PLANTING.
E. REMOVE PLANT MATERIAL FROM CONTAINER AND SHRUBS BY THE ROOTBALL AND NOT BY THE TRUNK OR MAIN STEM. SET PLANT MATERIAL STOCK IN CENTER OF PIT OR TRENCH WITH TOP OF BALL AT 1-2" ABOVE ADJACENT FINISH LANDSCAPE GRADES.
F. REMOVE ANY SYNTHETIC OR STRAPPING MATERIAL PRIOR TO SETTING PLANT MATERIAL INTO PLANTING PIT OR TRENCH.
G. ENSURE PLANT MATERIAL IS PLUMB.
H. PLACE BACKFILL AROUND BASE AND SIDES OF BALL AND WORK IN EACH LAYER TO SETTLE BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS. ENSURE ROOTBALL REMAINS 1-2" ABOVE ADJACENT FINISH GRADE. WHEN EXCAVATION IS APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED. WATER AGAIN AFTER PLACING FINAL LAYER OF BACKFILL.
I. DISH TOP OF BACKFILL FOR TREES AND PALMS TO ALLOW FOR MULCHING.
J. ALL PLANT MATERIAL SHALL BE FERTILIZED AT THE TIME OF PLANTING ONLY IF THAT IS WITHIN THE ALLOWABLE FERTILIZING TIME WINDOW PER COUNTY CODE. MIX OR APPLY FERTILIZER ON TOP OF ROOTBALL AND NOT UNDER OR WITHIN PLANTING PITS. APPLY JUST INSIDE OF PLANT FOLIAGE/DRIPLINE AND NOT DIRECTLY ON STEMS OR EXPOSED ROOTS OF MATERIAL. MIX SPECIFIED FERTILIZERS WITH EXISTING SOIL AT RATES SPECIFIED BY THE MANUFACTURER. DELAY MIXING OF FERTILIZER IF PLANTING WILL NOT FOLLOW PLACING OF PLANTING SOIL WITHIN THREE (3) DAYS. DO NOT APPLY OR SPILL FERTILIZER ON IMPERVIOUS SURFACES. IMMEDIATELY CLEAN OFF AND/OR CONTAIN IF SO. DO NOT WASH, SWEEP, OR BLOW OFF EXCESS OR SPILLED FERTILIZER INTO DRAINS, STORMWATER DITCHES OR PONDS, OR OTHER WATER BODIES OR CONVEYANCE SYSTEMS.
K. APPLY PRE-EMERGENT HERBICIDE, IF APPROVED BY OWNER, AND AS PER MANUFACTURER'S SPECIFICATIONS.
L. MULCH PITS, TRENCHES, AND PLANTED AREAS. PROVIDE A THREE (3) INCH THICKNESS OF MULCH AND WORK ONTO TOP OF BACKFILL. THE FINISH LEVEL OF MULCH SHOULD MEET ADJACENT FINISH GRADES. MULCH AREAS BETWEEN GROUND COVER PLANTS.
M. WATER THOROUGHLY AFTER PLANTING, TAKING CARE NOT TO COVER CROWNS OF PLANTS WITH WET SOILS.
N. GUY AND STAKE TREES AND PALMS IMMEDIATELY AFTER PLANTING AS NEEDED.
3.4 SODDING NEW LAWNS
A. ENSURE GRADE IS SMOOTH AND EVEN WITH A LOOSE, UNIFORM TEXTURE. ROLL, RAKE AND DRAG PROPOSED LAWN AREAS, REMOVE RIDGES, AND FILL DEPRESSIONS AS REQUIRED TO MEET FINISH GRADES AND PROVIDE AN EVEN SURFACE FOR SOD INSTALLATION.
B. LAY SOD WITHIN 24 HOURS FROM TIME OF STRIPPING.
C. MOISTEN PREPARED LAWN AREAS BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE MOISTURE TO DRY BEFORE PLANTING LAWNS. DO NOT CREATE A MUDDY SOIL CONDITION.
D. APPLY SPECIFIED COMMERCIAL FERTILIZER IF WITHING THE ALLOWABLE FERTILIZING TIME WINDOW PER COUNTY CODE. APPLY AT RATES SPECIFIED AND THOROUGHLY MIX INTO UPPER TWO INCHES OF SOIL IN AREAS OF PROPOSED SOD. DELAY APPLICATION OF FERTILIZER IF LAWN PLANTING WILL NOT FOLLOW WITHIN A FEW DAYS. SPREADER DEFLECTOR SHIELDS ARE REQUIRED WHEN FERTILIZING VIA ROTARY/BROADCAST SPREADERS. DO NOT APPLY OR SPILL FERTILIZER ON IMPERVIOUS SURFACES. IMMEDIATELY CLEAN OFF AND/OR CONTAIN IF SO. DO NOT WASH, SWEEP, OR BLOW OFF EXCESS OR SPILLED FERTILIZER INTO DRAINS, STORMWATER DITCHES OR PONDS, OR OTHER WATER BODIES OR CONVEYANCE SYSTEMS.
E. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD STRIPS. DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. TAP SOD FIRMLY IN PLACE ONCE LAID.
F. ANCHOR SOD ON SLOPES GREATER THAN 3:1 WITH WOOD PEGS TO PREVENT SLIPPAGE, IF NEEDED.
G. AVOID DAMAGE TO SUBGRADE OR SOD DUE TO INSTALLATION ACTIVITIES.
H. WATER SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING.
3.5 CLEANUP
A. MAINTAIN WORK AREAS IN AN ORDERLY CONDITION. KEEP PAVEMENTS AND ADJACENT SITE AREAS CLEAN. REMOVE ALL POTS, LITTER, TOOLS, EQUIPMENT, AND EXTRANEIOUS SOIL, SOD, OR MATERIALS AT THE END OF EACH WORK DAY. STORE MATERIALS AND EQUIPMENT WHERE DIRECTED. DISPOSE OF MATERIALS AS DIRECTED.
3.6 NEW PLANT PROTECTION
A. PROTECT LANDSCAPE WORK AND MATERIALS FROM DAMAGE DURING CONSTRUCTION. MAINTAIN PROTECTION DURING INSTALLATION AND THROUGHOUT THE MAINTENANCE PERIOD. TREAT, REPAIR, OR REPLACE DAMAGED LANDSCAPE WORK AS DIRECTED.
B. TREES WHICH ARE TO REMAIN IN THE CONSTRUCTION AREA SHALL BE PROTECTED FROM DAMAGE THROUGHOUT THE CONSTRUCTION PROCESS BY THE CONTRACTOR.
C. DO NOT PERMIT HEAVY EQUIPMENT OR STOCKPILES WITHIN THE DRIP LINE OF EXISTING OR NEWLY PLANTED TREES. REMOVE INTERFERING BRANCHES WITHOUT INJURY TO TRUNKS.
3.7 MAINTENANCE
A. MAINTENANCE ACTIVITIES SHALL INCLUDE THE FOLLOWING ACTIVITIES DURING CONSTRUCTION AND UNTIL FINAL ACCEPTANCE:
1. WEEDING: MAINTAIN PLANTINGS AND TURF AS WEED FREE.
2. MULCHING: MAINTAIN MULCH AT TREES, PALMS, AND WITHIN PLANTING BEDS AT A 3" DEPTH.
3. PEST CONTROL: SPRAY AS REQUIRED TO KEEP PLANTINGS AND TURF FREE OF INSECTS AND DISEASE.
4. MOWING: MOW TURF AREAS AS NEEDED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
5. REPLACEMENT: REPLACE PLANTS OR SOD AREAS THAT ARE IN POOR CONDITION.
6. LITTER REMOVAL: REMOVE LITTER AND DEBRIS FROM LANDSCAPE AND TURF AREAS.
7. RESTORE PLANTING SAUCERS OF TREES AND SHRUBS.
8. TIGHTEN AND REPAIR STAKE AND GUY WIRE SUPPORTS, IF PRESENT, AND RESET TREES AND SHRUBS TO PROPER GRADES OF VERTICAL POSITION AS REQUIRED.
9. REMOVE ALL TREE STAKING, IF PRESENT, WITHIN ONE YEAR AFTER PLANTING.
3.8 REPLACEMENT OF EXISTING LANDSCAPE DAMAGED DURING PROJECT
A. ANY EXISTING VEGETATION, INCLUDING TREES AND SHRUBS, DAMAGED OR DESTROYED SHALL BE REPLACED OR MITIGATED BY THE CONTRACTOR WITH LIKE SPECIES OR ANOTHER SPECIES APPROVED BY THE OWNER'S REPRESENTATIVE. ANY AREA OF VEGETATION THAT IS DAMAGED DURING CONSTRUCTION WILL BE RESTORED TO ITS ORIGINAL STATE WITHIN 72 HOURS OF THE COMPLETION OF THE ASSOCIATED CONSTRUCTION WORK.
B. IF REMOVAL OF AN EXISTING TREE REQUIRES MITIGATION, THE CONTRACTOR SHALL BE LIABLE FOR THE COMPLETE COST, INCLUDING BUT NOT LIMITED TO TREE REPLACEMENT COSTS AND PAYMENTS REQUIRED TO PERMITTING AGENCIES.
C. TREE REPLACEMENT SPECIES AND PROCEDURES SHALL BE DISCUSSED WITH AND APPROVED BY THE OWNER'S REPRESENTATIVE AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF ACTIVITIES.
3.9 INSPECTION AND ACCEPTANCE
A. WHEN ALL LANDSCAPE WORK IS SUBSTANTIALLY COMPLETE, THE OWNER'S REPRESENTATIVE WILL, UPON REQUEST, MAKE A SUBSTANTIAL COMPLETION INSPECTION TO DETERMINE ACCEPTABILITY AND COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE OWNER'S REPRESENTATIVE WILL PRODUCE A WRITTEN PUNCH LIST FOR THE CONTRACTOR AND OWNER'S REPRESENTATIVE TO IDENTIFY ITEMS THAT SHALL BE ADDRESSED PRIOR TO FINAL ACCEPTANCE.
B. ONCE ITEMS OF THE PUNCH LIST ARE ADDRESSED, THE OWNER'S REPRESENTATIVE WILL CONDUCT A FINAL COMPLETION INSPECTION. IF NECESSARY, THE OWNER'S REPRESENTATIVE WILL PRODUCE A FINAL PUNCH LIST FOR THE CONTRACTOR AND OWNER'S REPRESENTATIVE TO IDENTIFY ITEMS TO BE ADDRESSED PRIOR TO FINAL ACCEPTANCE.
C. FINAL ACCEPTANCE WILL NOT BE ISSUED UNTIL ALL PUNCH LIST ITEMS HAVE BEEN COMPLETED AND ACCEPTED BY THE OWNER AND ALL SUBMITTALS HAVE BEEN MADE.
D. WORK MAY BE INSPECTED FOR ACCEPTANCE IN PORTIONS AS PHASES OF INSTALLATION ARE COMPLETED AND AS AGREEABLE TO THE OWNER'S REPRESENTATIVE, PROVIDED EACH PORTION OF WORK OFFERED FOR INSPECTION IS SUBSTANTIALLY COMPLETE.

END OF SECTION

Table with columns for No., Date, and Revisions. Includes a row for 100% REVIEW on 08/2023.

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Licensed Professional information: KHA PROJECT 242270000, DATE AUGUST 2023, SCALE AS SHOWN, DESIGNED BY KHA, DRAWN BY MA, CHECKED BY CEM, DATE: C. ELISABETH MANLEY, FLORIDA LICENSE NUMBER 6666722

LANDSCAPE TECHNICAL SPECIFICATIONS

LEVY COUNTY GOVERNMENT CENTER LANDSCAPE DESIGN PREPARED FOR LEVY COUNTY FLORIDA