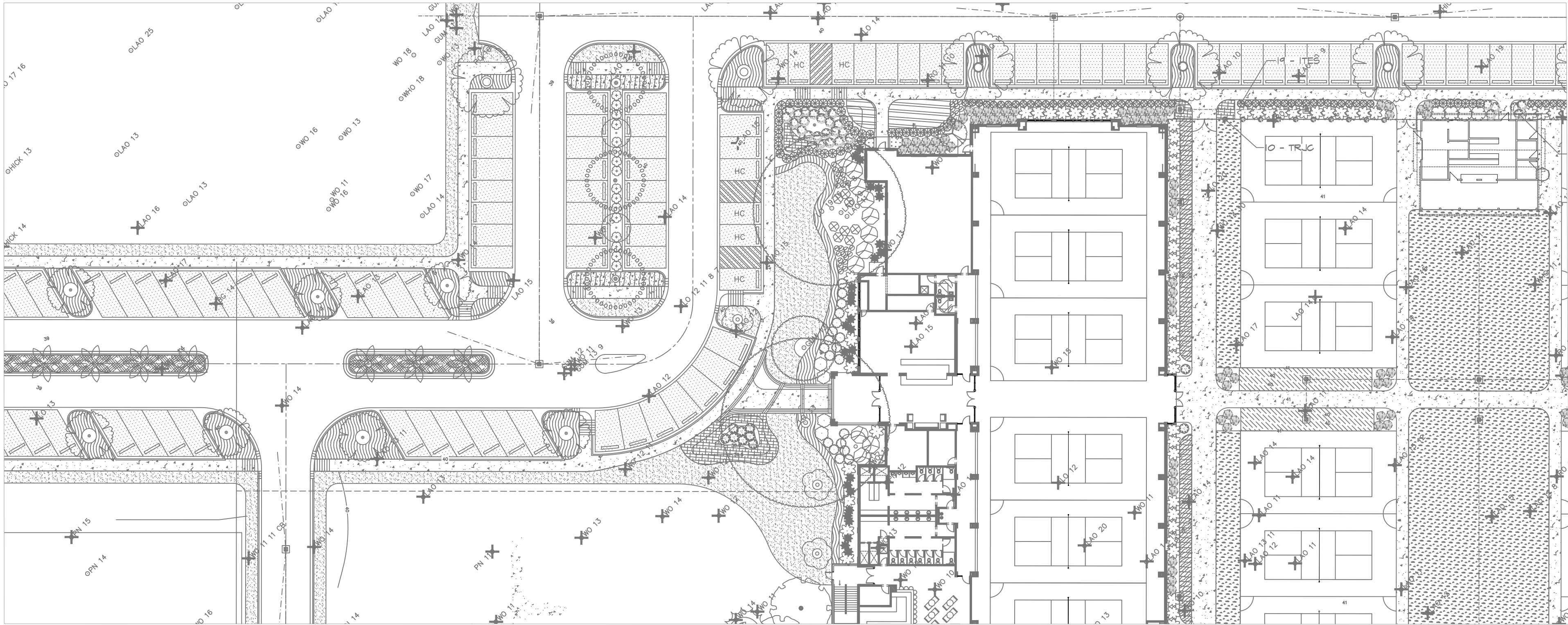


FINAL DEVELOPMENT PERMIT SET

LOWCOUNTRY PICKLE BALL
LANDSCAPE PLAN

TOWN OF BLUFFTON, SOUTH CAROLINA



GENERAL NOTES:

1.

ALL NOTES APPLY TO ALL DRAWINGS AND ALL TRADES.
2.

THIS IS A CONSTRUCTION SET USED TO DESCRIBE THE DESIGN INTENT ONLY. ALL CONSTRUCTION DETAILS, LAYOUT, GRADING, UTILITIES, PROPERTY LINES, ETC. MUST BE FIELD VERIFIED WITH ANY DISCREPANCIES REPORTED TO THE OWNER OR OWNERS REPRESENTATIVE. ALL CONSTRUCTION MUST ADHERE TO ALL NATIONAL, STATE AND LOCAL CODES. JK. TILLER ASSOCIATES, INC. IS NOT RESPONSIBLE FOR ANY WRONGFUL CONSTRUCTION PRACTICES.
3.

ALL SURVEY AND SITE INFORMATION WERE COMPILED FROM A VARIETY OF UNVERIFIED SOURCES AT VARIOUS TIMES. SITE INFORMATION MUST BE FIELD VERIFIED BEFORE CONSTRUCTION BEGINS. REPORT ANY DISCREPANCIES TO THE OWNER OR OWNERS REPRESENTATIVE.
4.

ALL SURVEY AND SITE INFORMATION HAS BEEN OBTAINED FROM CAROLINA ENGINEERING, BEAUFORT, SOUTH CAROLINA.
5.

IT IS THE RESPONSIBILITY OF ALL CONTRACTORS AND TRADES TO COORDINATE THE INSTALLATION OF THEIR WORK WITH THE INSTALLATION OF WORK BY ALL OTHER CONTRACTORS AND TRADES.
6.

THE REQUIREMENTS OF THE SPECIFICATIONS, DRAWINGS, GENERAL REQUIREMENTS, AND ALL ITEMS OF THE CONTRACT DOCUMENTS ARE EQUALLY BINDING FOR ALL CONTRACTORS AND TRADES.
7.

EACH CONTRACTOR IS REQUIRED TO MAINTAIN FULL SETS OF THE CONTRACT DOCUMENTS FOR HIS EMPLOYEES USE ON THE PROJECT TO ASSURE THAT ALL WORK IS PROPERLY COORDINATED AND FOR REVIEWS BY COUNTY AND / OR MUNICIPALITY OFFICIALS FOR INSPECTIONS.
8.

THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND INSPECTIONS AS REQUIRED BY LOCAL PLANNING, ZONING AND BUILDING CODE AUTHORITIES.
9.

JK. TILLER ASSOCIATES, INC. THE OWNER'S AND / OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED OF ANY SITE CONDITIONS WHICH MAY NECESSITATE MODIFICATION TO THE PLAN. THE OWNER OR OWNER'S REPRESENTATIVE SHALL, IF NECESSARY, MAKE 'INFIELD MODIFICATIONS'.
10.

THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND FOR ANY DAMAGE AND MAKE REPAIRS THAT MAY OCCUR TO EXISTING UTILITIES IN ACCORDANCE WITH THE UTILITY REQUIREMENTS.
11.

THE CONTRACTOR SHALL PROTECT ALL TREES AND VEGETATION THAT IS NOT SCHEDULED TO BE REMOVED: SEE CIVIL PLANS FOR TREE PROTECTION REQUIREMENTS.
12.

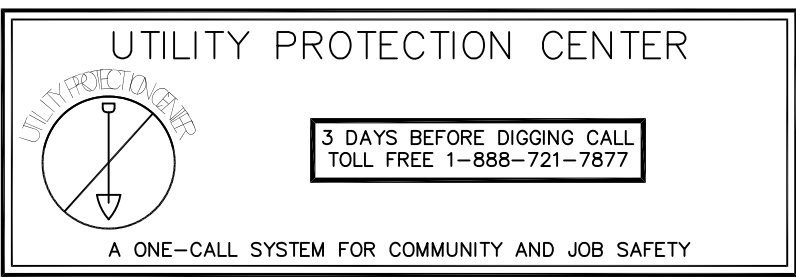
THE OWNER MAY REQUIRE FLAG MEN TO BE AVAILABLE DURING THE CONSTRUCTION PROCESS.
13.

ALL WORKMANSHIP AND INSTALLATION FOR ALL TRADES SHALL MEET OR EXCEED THE PRODUCT MANUFACTURER'S RECOMMENDATIONS AND/OR ALL NATIONAL, STATE, AND LOCAL CODES.
14.

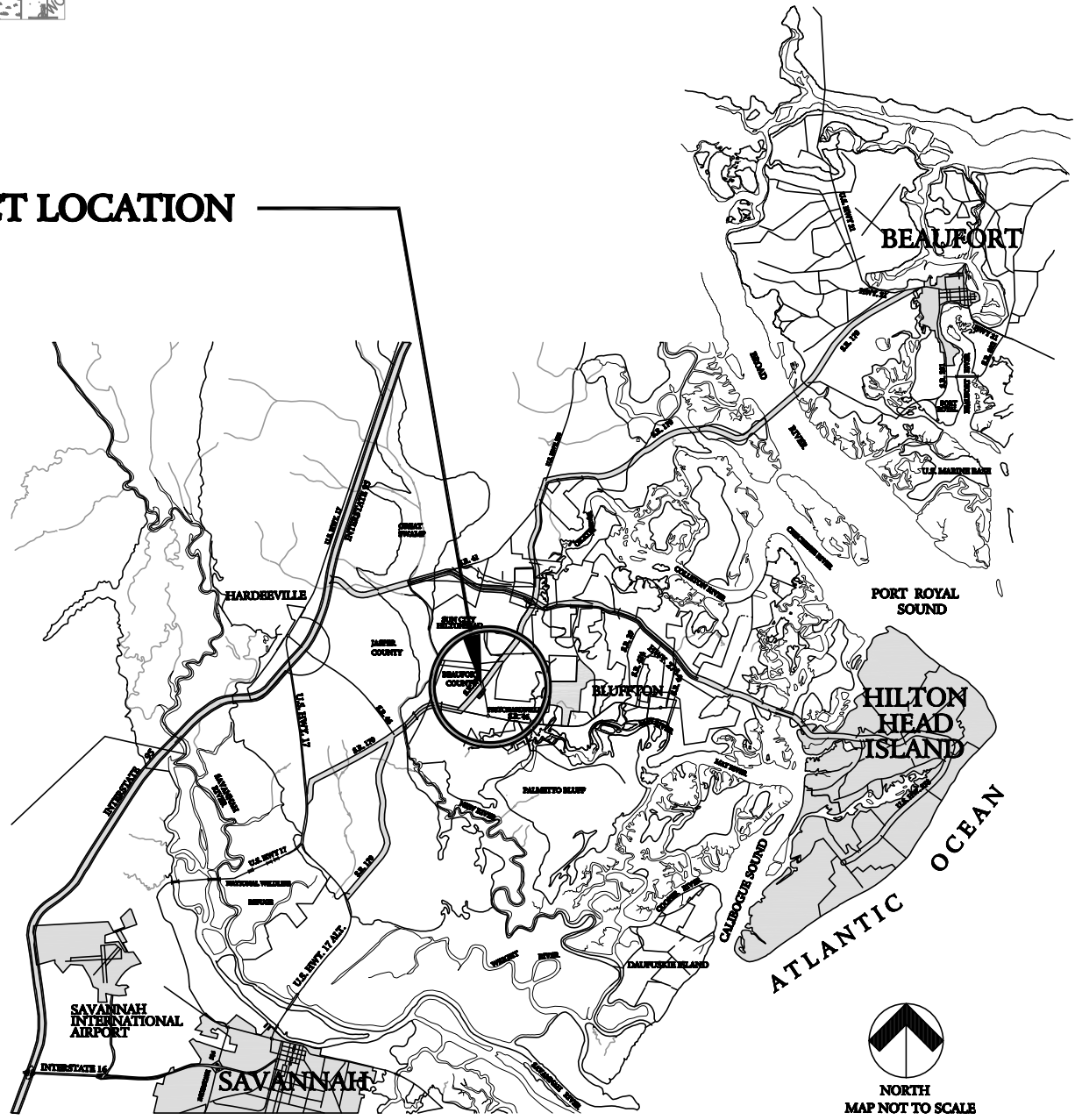
ANY DEVIATION FROM THESE PLANS MUST BE SPECIFICALLY APPROVED BY JK. TILLER ASSOCIATES, INC. AND THE OWNER OR OWNER'S REPRESENTATIVE.

SHEET INDEX

C6	COVER SHEET
S6L	SHEET LAYOUT
L1	LANDSCAPE PLAN
L2	LANDSCAPE PLAN
L3	LANDSCAPE PLAN
L4	LANDSCAPE PLAN
P6	PLANT SCHEDULE
S1	LANDSCAPE SPECS
S2	GRASSING SPECS



PROJECT LOCATION

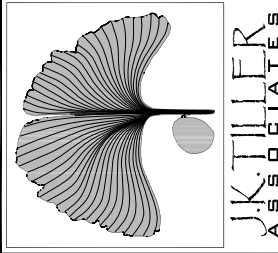


JKT JOB NUMBER: 200549-03

J. K. TILLER ASSOCIATES, INC.

LAND PLANNING
181 BLUFFTON ROAD, SUITE F203
BLUFFTON, SC 29910
Voice 843.815.4800
jtiller@jtiller.com

LANDSCAPE ARCHITECTURE
BLUFFTON, SC 29910
Fax 843.815.4802



LOWCOUNTRY PICKLE BALL
LANDSCAPE PLAN
TOWN OF BLUFFTON, SOUTH CAROLINA

Sheet Title:
Cover Sheet

Job Number:
200549-03

Date:
March 29, 2023

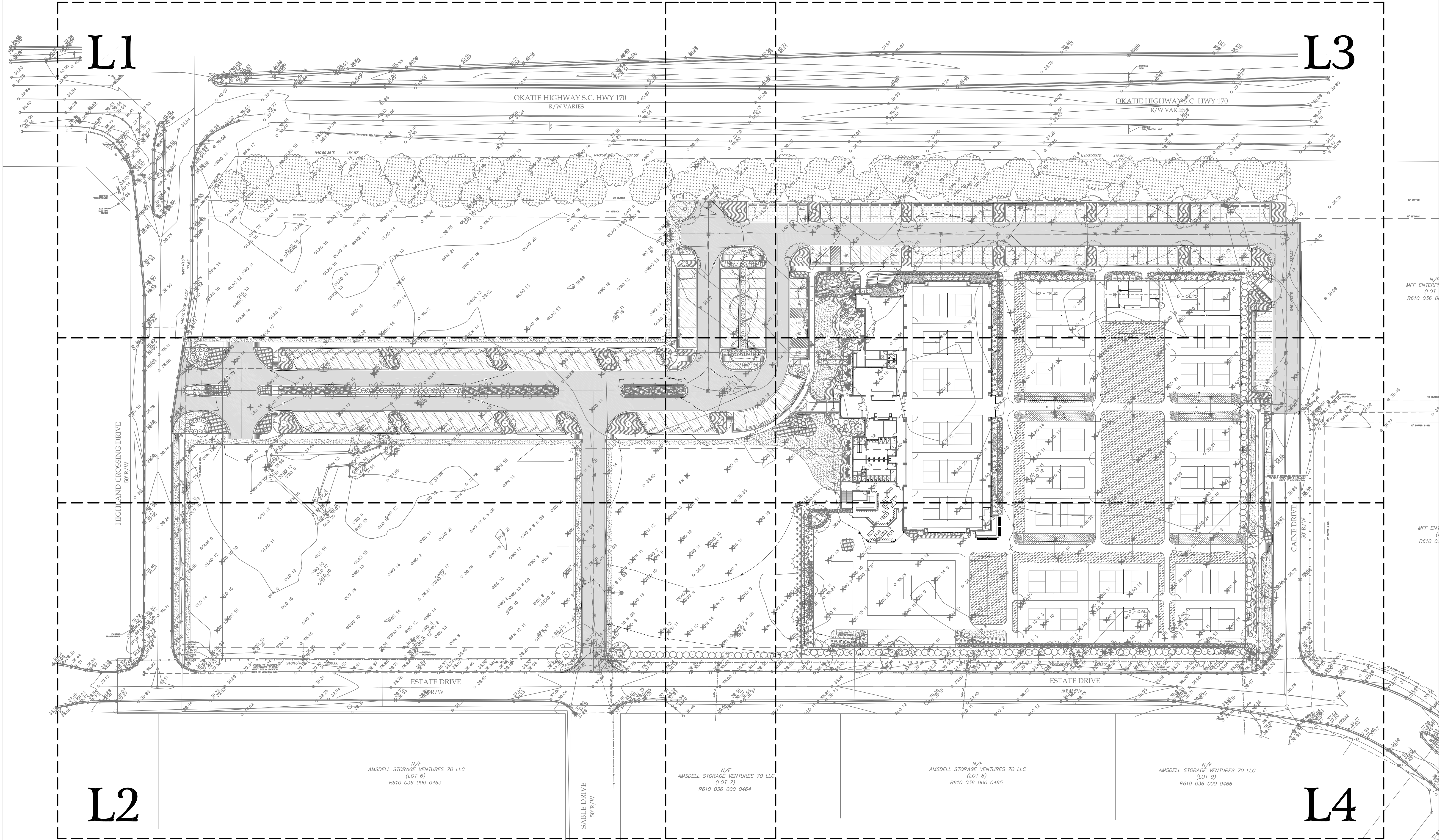
Drawn:
WSC, KD

Approved:

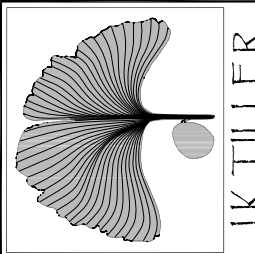
Revisions:
08/30/2023
HCOD Submittal

Sheet

CS
Of 9



J. K. TILLER ASSOCIATES, INC.
LAND PLANNING
181 BLUFFTON ROAD, SUITE F203
BLUFFTON, SC 29910
Voice 843.815.4800
jtiller@kaller.com



LOWCOUNTRY PICKLE BALL
LANDSCAPE PLAN
TOWN OF BLUFFTON, SOUTH CAROLINA

Sheet Title:
Sheet Layout

Job Number:
200549-03

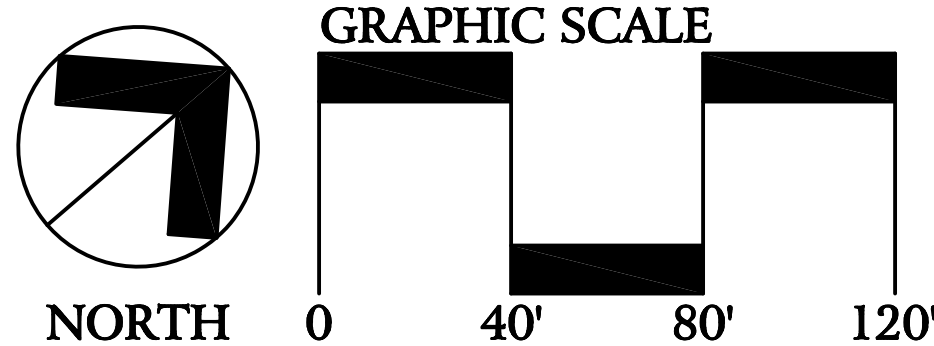
Date:
March 29, 2023

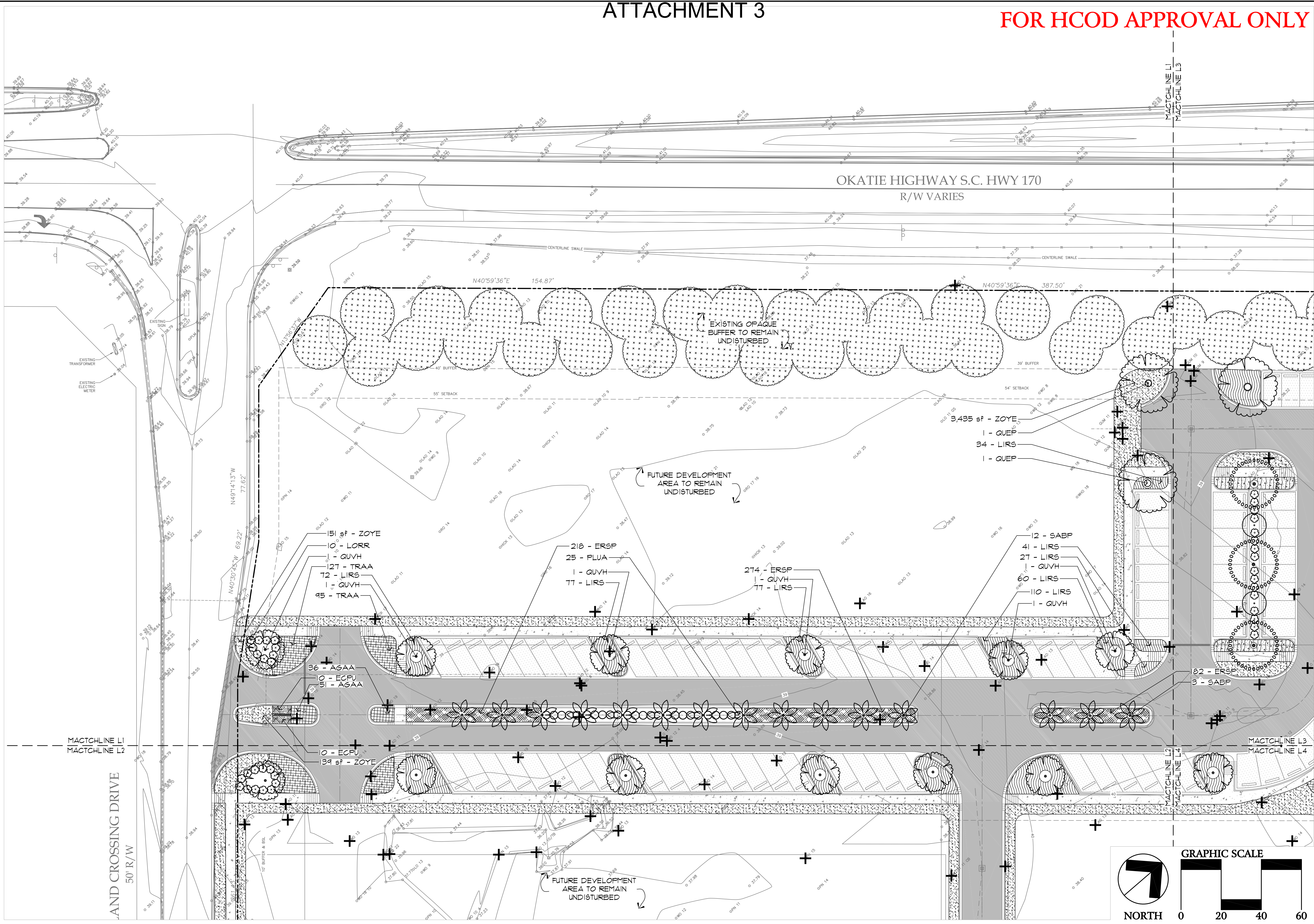
Drawn:
WSC, KD

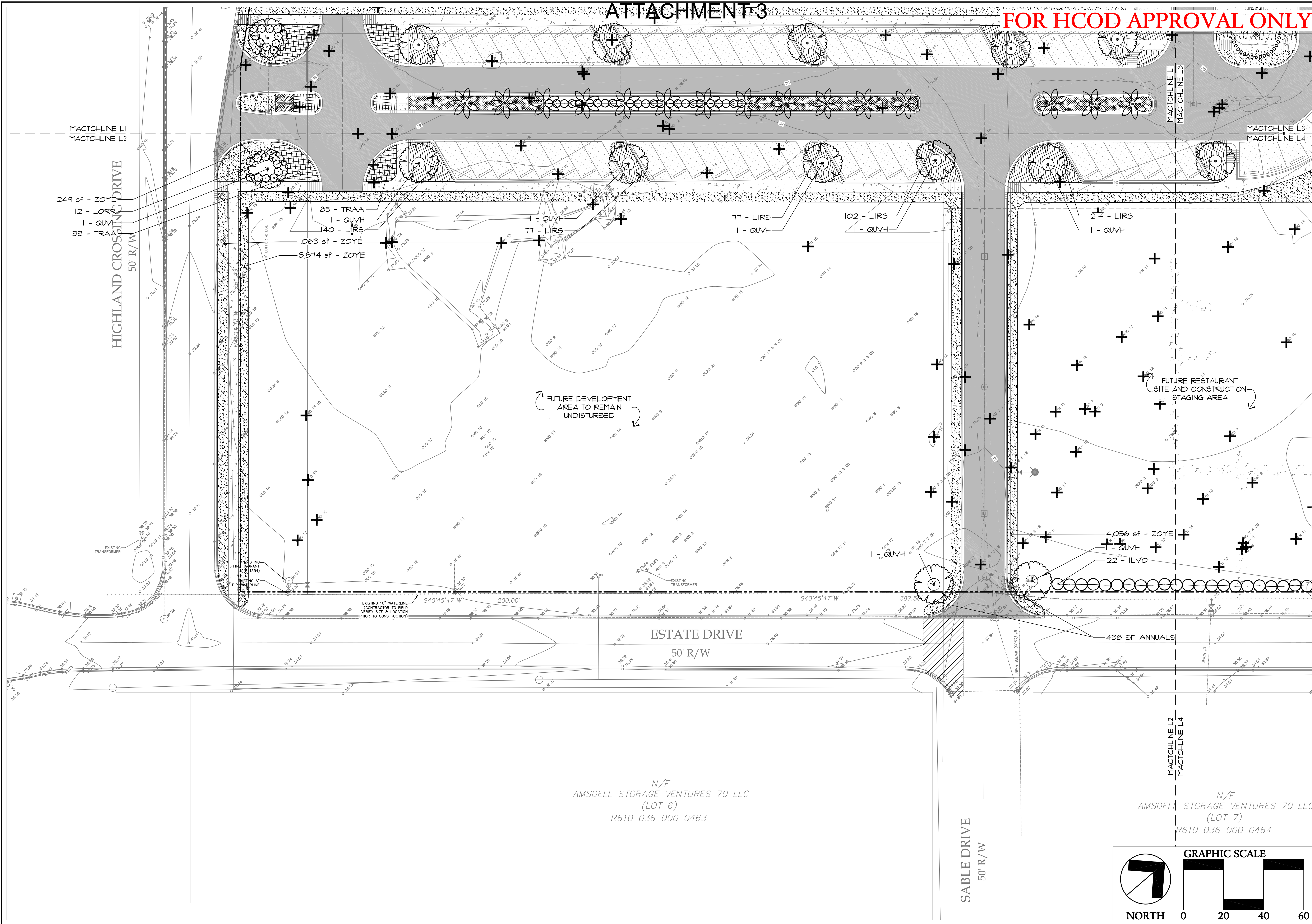
Approved:

Revisions:
08/30/2023
HCOD Submittal

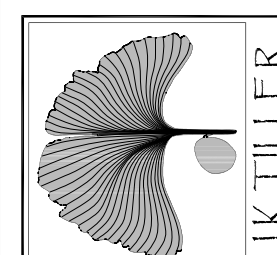
Sheet
SL
Of 9







J. K. TILLER ASSOCIATES, INC.
LAND PLANNING
181 BLUFFTON ROAD, SUITE F203
BLUFFTON, SC 29910
Voice 843.815.4800
jtiller@jktiller.com



LOWCOUNTRY PICKLE BALL
LANDSCAPE PLAN
TOWN OF BLUFFTON, SOUTH CAROLINA

Sheet Title:
Planting Plan

Job Number:
200549-03

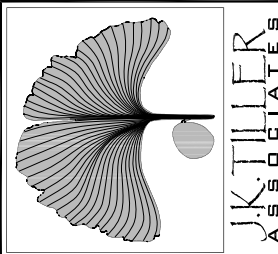
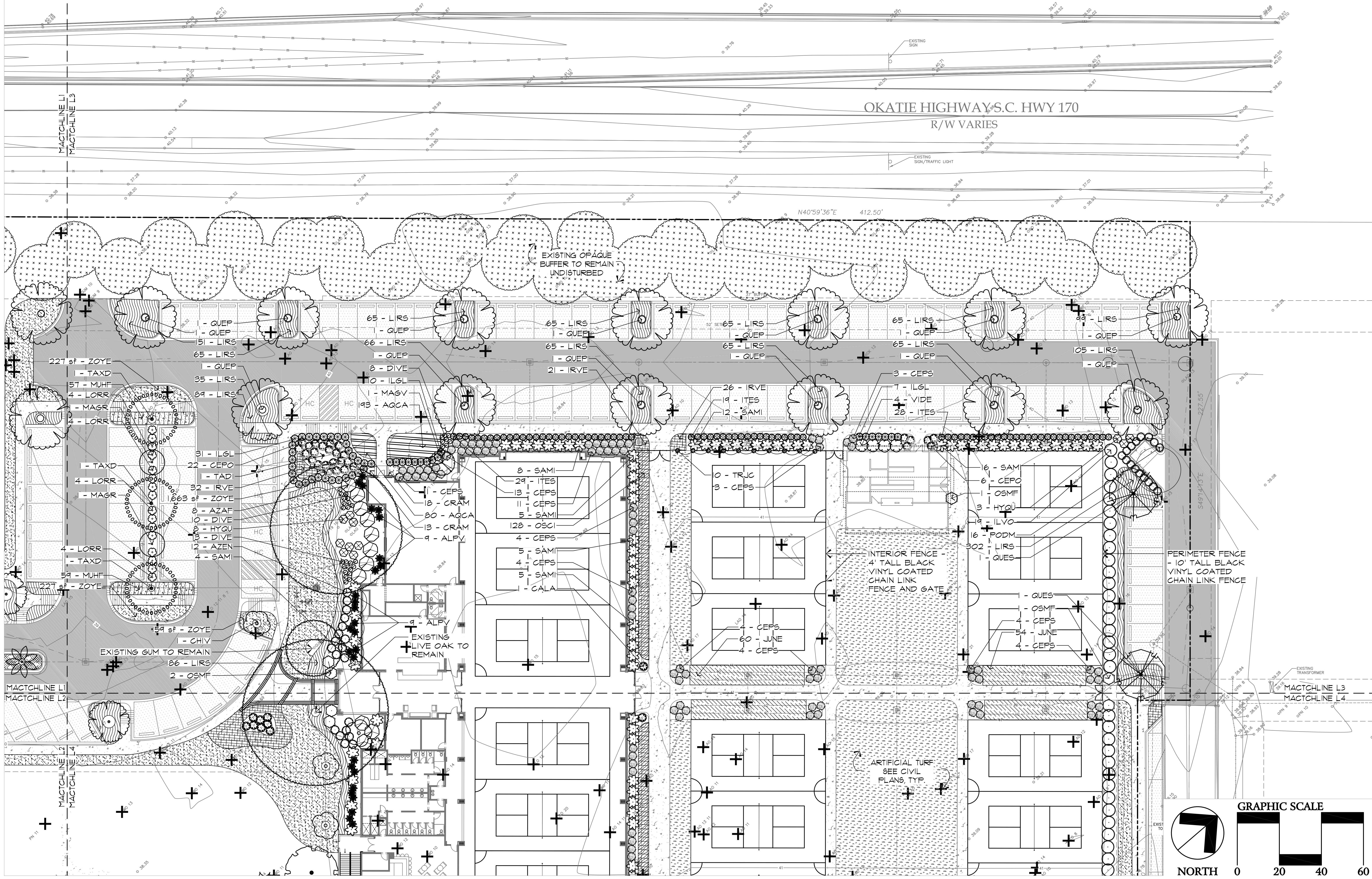
Date:
March 29, 2023

Drawn:
WSC, KD

Approved:

Revisions:
08/30/2023
HCOD Submittal

Sheet
L2
Of 9



LOWCOUNTRY PICKLE BALL
LANDSCAPE PLAN
TOWN OF BLUFFTON, SOUTH CAROLINA

Sheet Title:
Planting Plan

Job Number:
200549-03

Date:
March 29, 2023

Drawn:
WSC, KD

Approved:

Revisions:
08/30/2023
HCOD Submittal

Sheet Title:
Planting Plan

Date:
March 29, 2023

Drawn:
WSC, KD

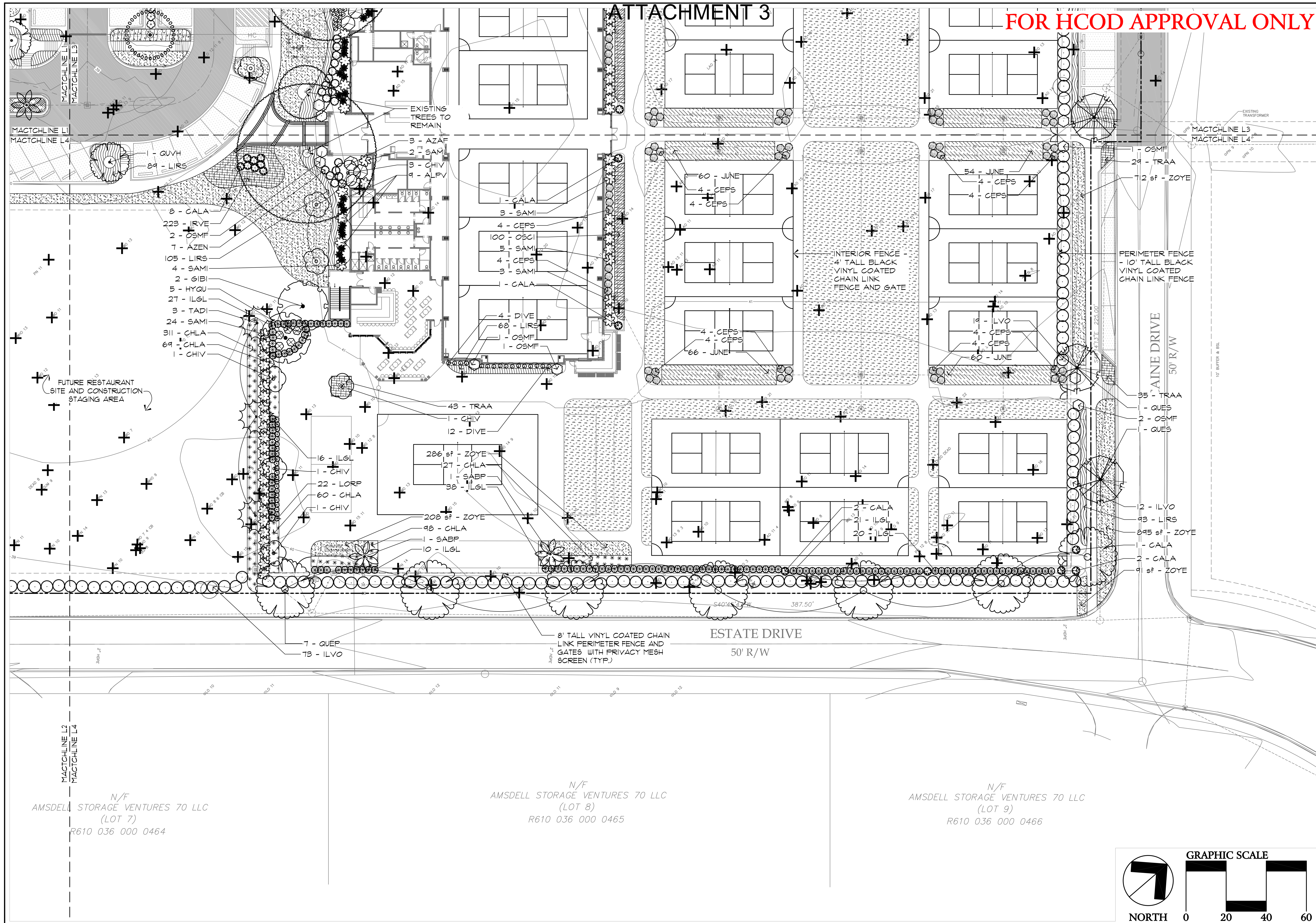
Approved:

Revisions:
08/30/2023
HCOD Submittal

Sheet

L4
Of 9

ATTACHMENT 3



ATTACHMENT 3

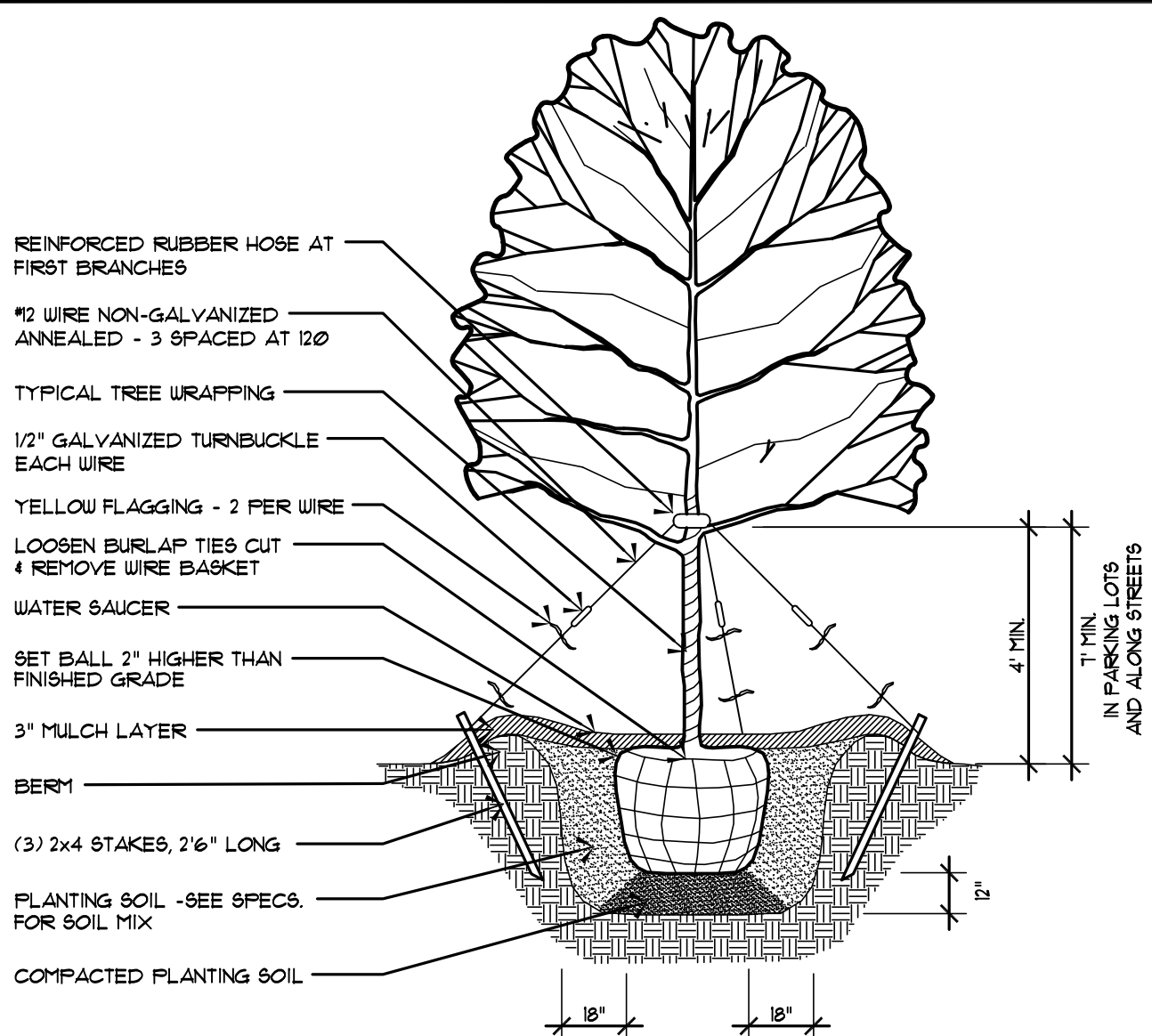
PLANTING NOTES:

- MATERIALS LIST WAS PREPARED FOR ESTIMATING PURPOSES, CONTRACTOR SHALL MAKE OWN QUANTITY TAKE-OFF USING DRAWINGS AND SPECIFICATIONS TO DETERMINE QUANTITIES TO HIS SATISFACTION, REPORTING PROMPTLY ANY DISCREPANCIES WHICH MAY EFFECT BIDDING.
- ROOT TYPES MAY BE FREELY SUBSTITUTED IN CASE OF BALLED AND BURLAPPED OR CONTAINER GROWN, ALL OTHER SPECIFICATIONS TO REMAIN UNCHANGED.
- CONTRACTOR TO VERIFY THAT ALL PLANT MATERIAL IS AVAILABLE AS SPECIFIED WHEN PROPOSAL IS SUBMITTED.
- SEE TREE, SHRUB, AND GROUND COVER PLANTING DETAILS AND SPECIAL PROVISIONS FOR PLANTING SPECIFICATIONS.
- CONTRACTOR SHALL TEST SOIL PH AND CONDITIONS FOR ALL SOD AREAS TO INSURE THAT PROPER SOIL REQUIREMENTS ARE MET FOR THE SODDED LAWN. SOIL SHALL BE AMENDED BY CONTRACTOR AS INDICATED BY SOIL TEST AND SPECIFICATIONS TO ACHIEVE PROPER SOIL CONDITIONS.
- CONTRACTOR SHALL STAKE OUT ALL SHRUB BED LINES, TREE LOCATIONS, AND SHRUB GROUPINGS FOR APPROVAL BY LANDSCAPE ARCHITECT BEFORE BEGINNING PLANTING OPERATIONS. IF PLANTING OCCURS WITHOUT APPROVAL, RELOCATION OF PLANTINGS REQUESTED BY THE LANDSCAPE ARCHITECT SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- ALL SHRUB BEDS TO RECEIVE 3" DEEP LONGLEAF PINESTRAW MULCH.
- CONTRACTOR TO MAINTAIN THE PLANTINGS AND CONTROL WEEDS IN MULCH AREAS THROUGH THE DURATION OF CONSTRUCTION UNTIL FINAL ACCEPTANCE.
- ALL PLANT BED AND SOD AREAS TO RECEIVE 100% IRRIGATION COVERAGE EXCEPT WHERE NOTED ON THE PLAN.
- IN THE PLANT SCHEDULE, PLANTS NOTED AS "SPECIMEN", SHALL BE SELECTED BY THE LANDSCAPE ARCHITECT AT THE NURSERY OR PHOTOS OF THE PLANTING STOCK SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL.
- HERBICIDE SHALL BE APPLIED TO PLANTING AREAS PRIOR TO LANDSCAPE INSTALLATION.
- PLANT BED SHALL BE TESTED FOR PH AND AMENDED PRIOR TO INSTALLATION.
- PLANT SIZES AND SPECIES MAY VARY DUE TO AVAILABILITY. CHANGES TO PLANT SIZES AND SPECIES MUST BE APPROVED BY THE LANDSCAPE ARCHITECT. SUBSTITUTED PLANT SPECIES SHALL HAVE SIMILAR CHARACTER AS ORIGINAL PLANT.
- THE PLANT BED AREAS LABELED AS "AN" SHALL BE PLANTED WITH ANNUALS AND PERENNIALS SELECTED BY THE LANDSCAPE ARCHITECT. SELECTIONS AND FINAL PLACEMENT OF ALL ANNUAL AND PERENNIAL BEDS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.

PLANT SCHEDULE

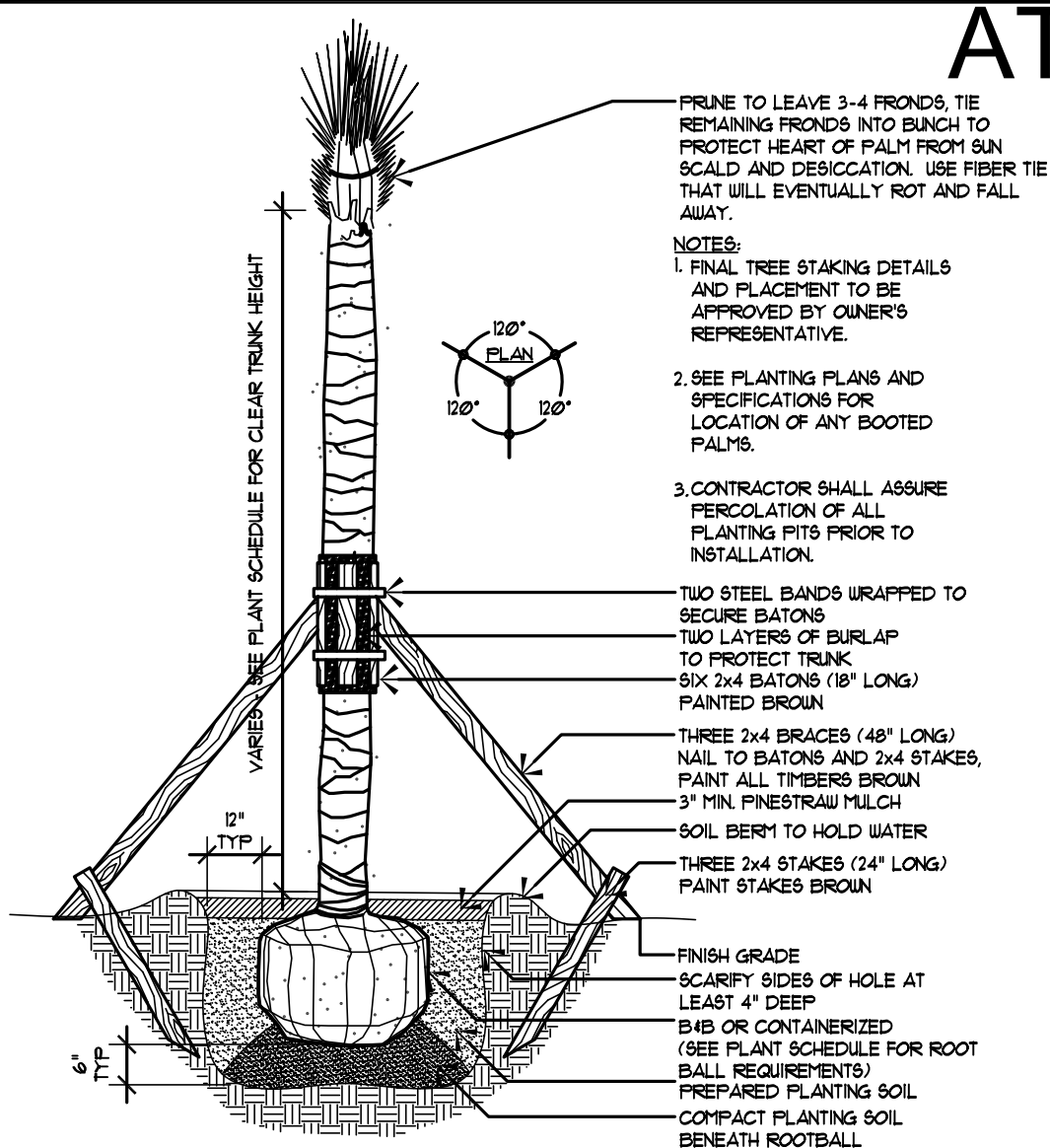
TREES	QTY	BOTANICAL / COMMON NAME	GAL.	HEIGHT	SPREAD	CONT.
CHIV	8	Chionanthus virginicus / White Fringetree MULTI-TRUNK SPECIMEN	1.5"-2"	8'-10'	4'-6"	Cont.
GIBI	2	Ginkgo biloba 'Autumn Gold' TM / Maidenhair Tree	2"-3"	8'-10'	4'-6"	Cont.
MAGR	2	Magnolia stellata 'Royal Star' / Royal Star Magnolia	2"	8'-10'	4'-6"	Cont.
MAGV	1	Magnolia virginiana / Sweet Bay MULTI-TRUNK SPECIMEN	1.5"-2"	6'-8'	2'-3'	Cont.
QUEP	22	Quercus phellos / Willow Oak	3"	10'-12'	5'-6"	Cont.
QUES	4	Quercus shumardii / Shumard Red Oak	3"	10'-12'	6'-8"	Cont.
QUVH	15	Quercus virginiana 'High Rise' / High Rise Live Oak	2.5"-3"	12'-14'	5'-6"	Cont.
SABP	17	Sabal palmetto / Cabbage Palmetto TOP THIRD TO REMAIN BOOTED, REFOLIATED	-	13'-14'	B&B	
TADI	4	Taxodium distichum / Bald Cypress	3"	10'-12'	4'-6"	Cont.
TAXD	3	Taxodium distichum / Bald Cypress	3"	10'-12'	4'-6"	Cont.
SHRUBS	QTY	BOTANICAL / COMMON NAME	CONT	HEIGHT	SPREAD	
ALPV	27	Alphila zerumbet 'Variegata' / Variegated Shell Ginger	3 Gal.	3'-4'	2'-3'	
AZEN	19	Azalea Encore TM / Encore Azalea	3 Gal.	15"-18"	15"-18"	
AZAF	11	Azalea indica 'Formosa' / Formosa Azalea	3 Gal.	16"-20"	16"-20"	
CALA	16	Callicarpa americana / American Beautyberry	3 Gal.	3' min.	3' min.	
CEPO	28	Cephalanthus occidentalis / Buttonbush	3 Gal.	2'-3'	2'-3'	
CEPS	105	Cephalanthus occidentalis 'SMCOSS' / Sugar Shack® Buttonbush	3 Gal.			
DIVE	47	Diets vegeta / African Iris	3 Gal.	18"-24"	12"-18"	
HYQU	16	Hydrangea quercifolia / Oakleaf Hydrangea	3 Gal.	18"-24"	18"-24"	
ILGL	180	Ilex glabra / Inkberry Holly	3 Gal.	18"-24"	18"-24"	
ILVO	145	Ilex vomitoria / Yaupon Holly Full to Bottom	15 Gal.	4'-6'	2'-3'	
ITES	76	Itea virginica 'Sprich' / Little Henry® Sweetspire	1 Gal.	1' min.	2' min.	
LORP	22	Loropetalum chinense 'Purple Pixie' / Purple Pixie Loropetalum	1 Gal.	1.5'-1.8'	1.5'-1.8'	
LORR	38	Loropetalum chinense 'Ruby' / Ruby Loropetalum	3 Gal.	18"-24"	18"-24"	
OSMF	11	Osmanthus fragrans / Fragrant Tea Olive MULTI-TRUNK SPECIMEN	7 Gal.	3'-4'	3' min.	
PLUA	25	Plumbago auriculata / Blue Plumbago	3 Gal.	18"-24"	18"-24"	
PODM	16	Podocarpus macrophyllus maki / Shrubby Yew FULL TO GROUND	7 Gal.	3'-4'	18"-24"	
SAMI	96	Sabal minor / Dwarf Palmetto	7 Gal.	2' min.	2' min.	
VIDE	4	Viburnum dentatum / Viburnum	3 Gal.	2' min.	2'-3'	
VINE/ESPALIER	QTY	BOTANICAL / COMMON NAME	CONT	HEIGHT	SPREAD	
TRJC	10	Trachelospermum jasminoides 'Confederate' / Confederate Jasmine Staked	3 Gal.	2' min.		
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT.	HEIGHT	SPREAD	
AGAA	87	Agapanthus praecox orientalis 'Albus' / White African Lily	1 Gal.	12"-18"	6'-8"	18" o.c.
ECPU	20	Echinacea purpurea / Purple Coneflower	1 Gal.	12"-18"	12"-18"	24" o.c.
ERSP	674	Eragrostis spectabilis / Purple Love Grass	1 Gal.	12"-18"	8"-12"	18" o.c.
LIRS	3,016	Liriope muscari 'Super Blue' / Super Blue Liriope	1 Gal.	6"-12"	6"-12"	18" o.c.
MUHF	116	Muhlenbergia filipes / Muhly	3 Gal.	18"-24"	12"-18"	24" o.c.
TRAA	547	Trachelospermum asiaticum 'Asiatic' / Asiatic Jasmine	1 Gal.	3'-4"	6'-8"	18" o.c.
ZOYE	17,435 sq	Zoysia japonica 'Empire' / Korean Grass	SOD			
BIORETENTION	QTY	BOTANICAL / COMMON NAME	CONT.	HEIGHT	SPREAD	
AQCA	273	Aquilegia canadensis / Eastern Columbine	1 Gal.	12" min.	12"-18"	15" o.c.
CHLA	665	Chasmanthium latifolium / Northern Sea Oats	1 Gal.	6" min.	6"-12"	18" o.c.
GRAM	31	Crinum americanum / Swamp Lily	1 Gal.	6" min.	6"-12"	15" o.c.
IRVE	302	Iris versicolor / Blue Flag	1 Gal.	12"-18"		18" o.c.
JUNE	354	Juncus effusus / Common Rush	1 Gal.	12" min.	6"-12"	36" o.c.
OSCI	228	Osmunda cinnamomea / Cinnamon Fern	1 Gal.	12"-18"	12"-18"	24" o.c.

FOR HCOD APPROVAL ONLY



NOTES:

- SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO BE USED.
- ONLY GUY TREES WHEN SITE CONDITIONS REQUIRE IT.
- PLANT ROOT BALL FLUSH WITH FINISHED GRADE UNLESS AREA HAS POOR DRAINAGE, IN WHICH CASE PLANT ROOTBALL 2" ABOVE GRADE.
- REMOVE ALL BRANCHES THAT ARE DAMAGED, RUBBING OR CROSSING OTHER BRANCHES.
- NEVER CUT A CENTRAL LEADER.
- FINAL TREE STAKING AND PLACEMENT TO BE APPROVED BY OWNERS REP.
- CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.



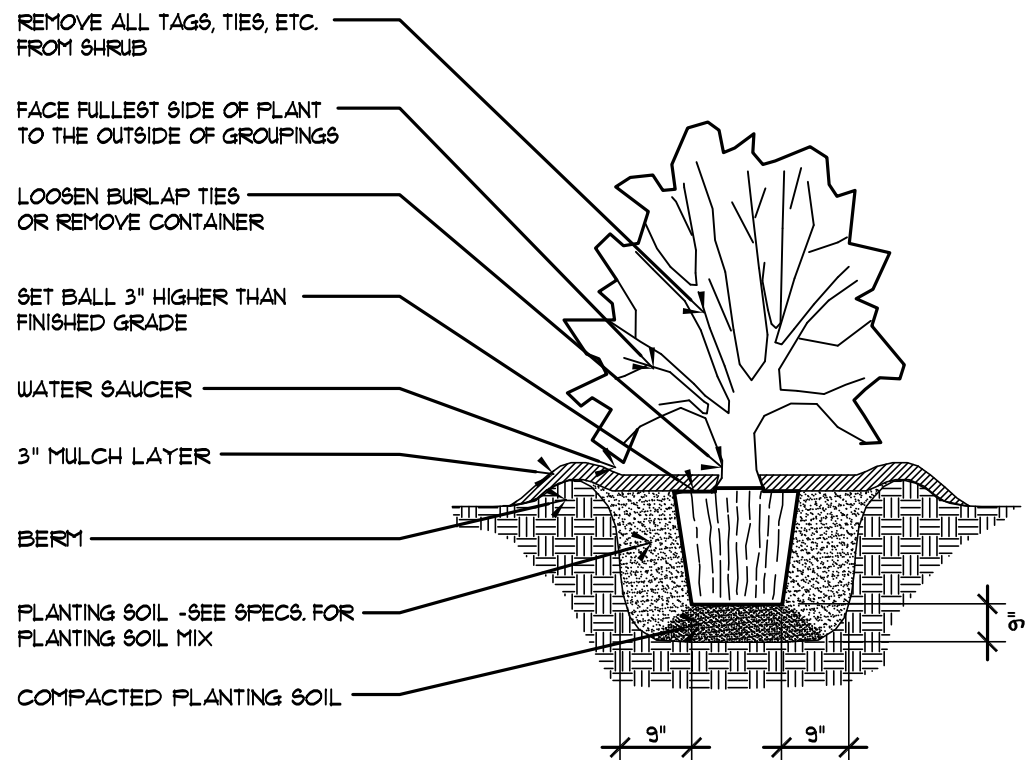
NOTES:

- SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO BE USED.
- PLANT ROOT BALL FLUSH WITH FINISHED GRADE UNLESS AREA HAS POOR DRAINAGE, IN WHICH CASE PLANT ROOTBALL 2" ABOVE GRADE.
- SABAL PALMETTOS SHOULD BE DEFOLIATED. PROTECT CABBAGE HEAD FROM DAMAGE. ALL OTHER PALM SPECIES MUST HAVE FRONDS TIED W/BIODEGRADABLE STRAP OR TWINE.
- FINAL TREE STAKING AND PLACEMENT TO BE APPROVED BY OWNERS REP.
- CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

1 Tree Planting

L#

Not to Scale



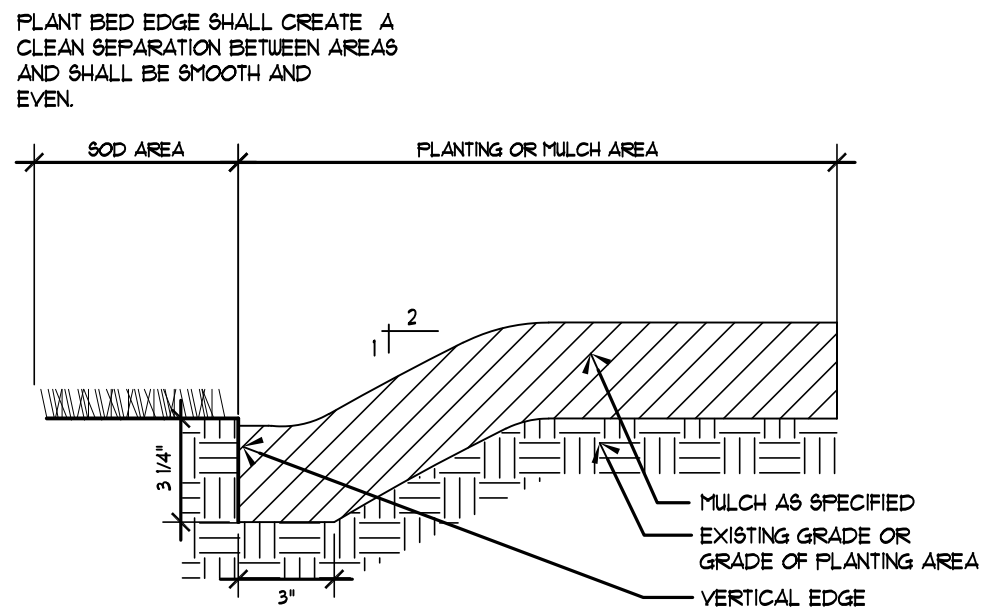
NOTES:

- SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO BE USED.
- WHEN GROUND COVER AND SHRUBS ARE USED IN MASSES, DO NOT FORM SOIL BERMS ON INDIVIDUAL PLANTS AND ENTIRE PLANTBED SHALL BE EXCAVATED TO RECEIVE PLANTING SOIL AND PLANT MATERIAL.
- PLANT ROOT BALL FLUSH WITH FINISHED GRADE UNLESS AREA HAS POOR DRAINAGE, IN WHICH CASE PLANT ROOTBALL 2" ABOVE GRADE. COORDINATE WITH OWNERS REP. PRIOR TO SETTING ROOTBALL ELEVATIONS.
- CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

3 Shrub Planting

L#

Not to Scale



NOTES:

- TRENCH EDGE TO BE LOCATED BETWEEN PLANTING BEDS AND ALL LAWN AREAS.

5 Sod / Plant Bed Edge Detail

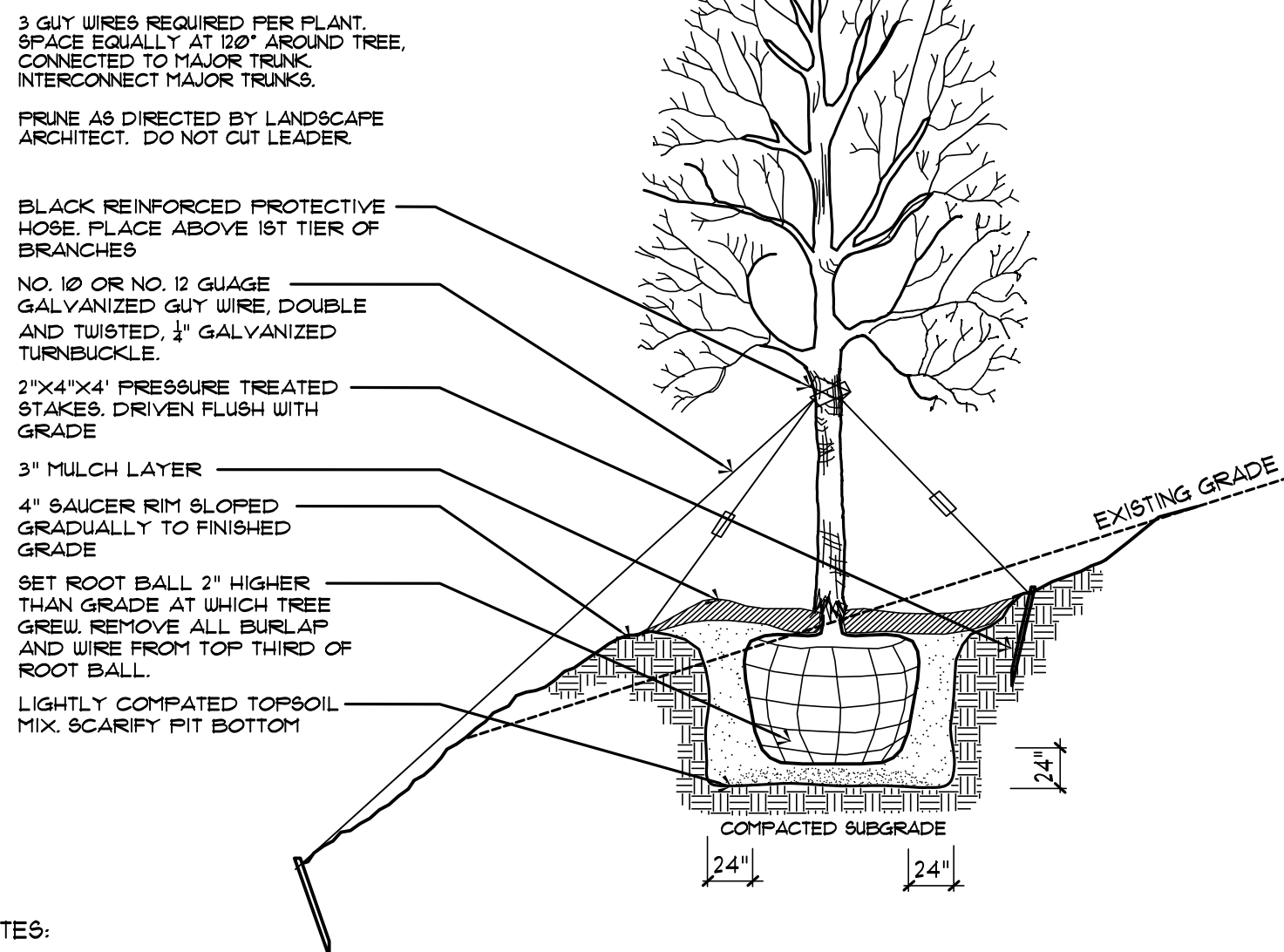
L#

Not to Scale

2 Palmetto Tree Planting

L#

Not to Scale



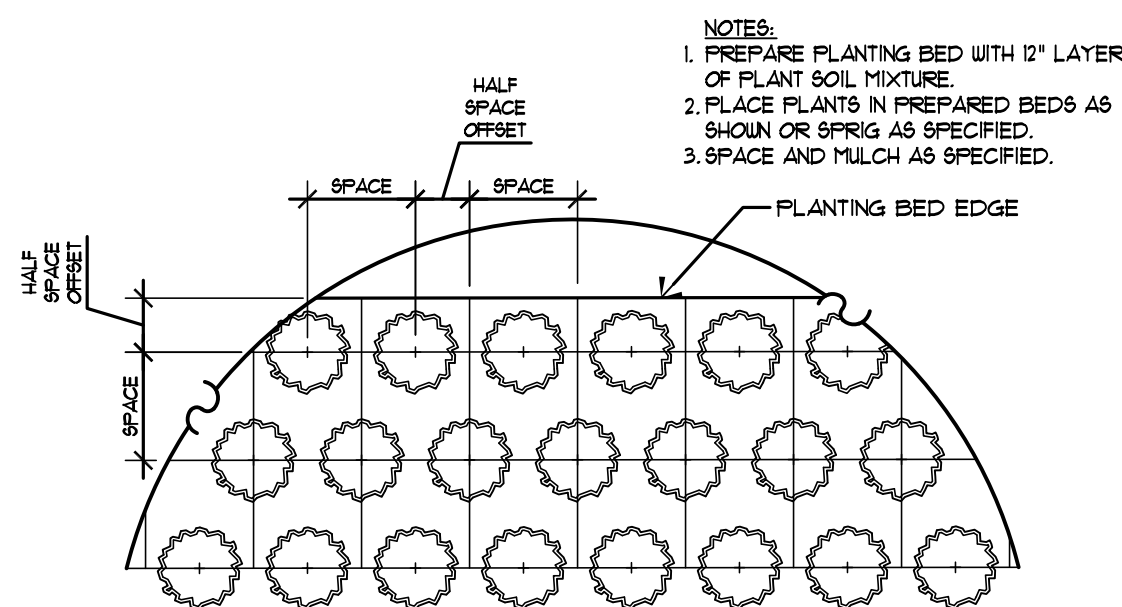
NOTES:

- SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO BE USED.
- ONLY GUY TREES WHEN SITE CONDITIONS REQUIRE IT.
- PLANT ROOT BALL FLUSH WITH FINISHED GRADE UNLESS AREA HAS POOR DRAINAGE, IN WHICH CASE PLANT ROOTBALL 2" ABOVE GRADE.
- REMOVE ALL BRANCHES THAT ARE DAMAGED, RUBBING OR CROSSING OTHER BRANCHES.
- NEVER CUT A CENTRAL LEADER.
- FINAL TREE STAKING AND PLACEMENT TO BE APPROVED BY OWNERS REP.
- CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

4 Tree Planting on Slope

L#

Not to Scale

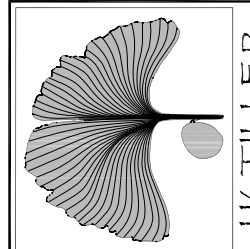


6 Ground Covers & Perennials

L#

Not to Scale

J. K. TILLER ASSOCIATES, INC.

LANDSCAPE ARCHITECTURE
BLUFFTON, SC 29910
Voice 843.815.4802
Fax 843.815.4802

LOWCOUNTRY PICKLE BALL

LANDSCAPE PLAN

Town of Bluffton, South Carolina

Sheet Title:
Planting Schedule,
Notes and DetailsJob Number:
200549-03Date:
March 29, 2023Drawn:
WSC, KD

Approved:

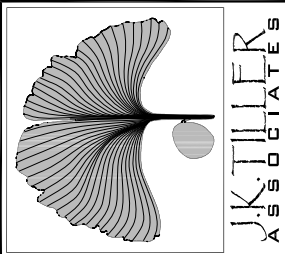
Revisions:
08/30/2023
HCOD Submittal

Sheet

PS
Of 9

S:\projects\2025\49-03\Planting Plan.dwg, \$T, 6/30/2023 11:52:25 AM

LANDSCAPING SPECIFICATIONS			ATTACHMENT 3		
PART 1- GENERAL			E. TREES SPECIFIED FOR STREET TREE GRADE SHALL CONFIRM TO STANDARDS OF THE ANJA: 1. SUITABLE FOR PLANTING AS STREET TREES. 2. FREE OF BRANCHES TO APPROXIMATELY 50% OF HEIGHT FROM THE GROUND. 3. CROWN OF TREE SHALL BE IN GOOD BALANCE WITH THE TRUNK.		
11 DESCRIPTION			2.7 FERTILIZERS		
A. THE WORK COVERED IN THIS SECTION CONSISTS OF SOIL PREPARATION, FINE GRADING, LAWNS, TREES, SHRUBS AND GROUND COVER PLANTINGS, THEIR PROTECTION AND MAINTENANCE OF PLANTING AREAS UNTIL ACCEPTANCE.			A. COMMERCIAL FERTILIZER SHALL BE SLOW RELEASE 5-10010 OR 6-12-12 (OR AS RECOMMENDED BY SOIL TEST), UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR APPLICATION WITH APPROPRIATE EQUIPMENT. DELIVER TO SITE UNOPENED IN MANUFACTURER'S STANDARD CONTAINERS SHOWING WEIGHT, ANALYSIS AND NAME OF THE MANUFACTURER. IF STORED ON SITE PROTECT FROM THE ELEMENTS.		
12 RELATED WORK			2.8 PEAT MOSS		
A. SEE CIVIL AND LANDSCAPE PLANS AND SPECIFICATIONS.			A. PEAT MOSS SHALL BE FINELY SHREDDDED, 90% ORGANIC MOSS PEAT, BROWN IN COLOR AND SUITABLE FOR HORTICULTURAL PURPOSES. PEAT SHALL BE MEASURED IN AIR DRY CONDITION, CONTAINING NOT MORE THAN 35% MOISTURE BY WEIGHT. ASH CONTENT SHALL NOT EXCEED 10%.		
13 QUALITY ASSURANCE			2.9 MUCH FOR TREES, SHRUBS AND GROUND COVERS		
A. QUALIFICATIONS OF WORKMEN: CONTRACTOR SHALL PROVIDE AT LEAST ONE PERSON PRESENT AT ALL TIMES DURING EXECUTION OF WORK THAT IS THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND METHODS OF THEIR INSTALLATION AND WHO SHALL DIRECT ALL WORK PERFORMED UNDER THIS SECTION. B. STANDARDS: ALL SEED, SOD, TREES, SHRUBS AND GROUND COVERS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, COUNTY AND/ OR MUNICIPALITY LAWS REQUIRING INSPECTION FOR DISEASE AND INSECT CONTROL. 1. PLANTS AND PLANTING METHODS SHOULD CONFIRM TO THE LATEST EDITION OF AMERICAN STANDARDS FOR NURSERY STOCK, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, 100 VERMONT AVENUE, NW, SUITE 300, WASHINGTON, DC 20005. 2. PLANTS SHOULD BE TRUE AND REPRESENTATIVE OF THEIR GENUS, SPECIES, CULTIVARS OR VARIETY. NURSERY STOCK SHIPPED IN THE ACCORDANCE WITH THE REQUIRED SPECIFICATIONS SHALL BE DEEMED TO BE ACCEPTABLE WITHIN THE TERMS OF THIS SECTION IF IT IS TYPICAL IN SIZE AND HABITS FOR THE SPECIES IN THE REGION OF THE COUNTRY IN WHICH IT IS GROWN UNLESS THE SPECIFICATIONS INCLUDE ADDITIONAL DETAILS. 3. PRIOR TO ORDERING ANY PLANT MATERIAL, REPRESENTATIVE PHOTOS OF EACH SPECIES SHALL BE PROVIDED FOR REVIEW AND ACCEPTANCE. 4. ONE OF EACH BUNDLE OR LOT SHALL BE TAGGED WITH NAME AND SIZE OF THE PLANT IN ACCORDANCE WITH AMERICAN NURSERY AND LANDSCAPE ASSOCIATION STANDARDS. IN ALL CASES BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES. LANDSCAPE ARCHITECT SHOULD BE CONSULTED IN THE EVENT QUESTIONS ARISE ABOUT NOMENCLATURE OF PLANTS TO BE USED AND THEIR AVAILABILITY.			A. MULCH FOR NON-BIO RETENTION AREAS SHALL BE AS SHOWN ON PLANS. B. MULCH FOR BIO RETENTION AREAS SHALL BE SHREDDDED HARDWOOD.		
14 DELIVERY, STORAGE AND HANDLING			2.10 STAKING EQUIPMENT		
A. DELIVER GRASS SEED IN ORIGINAL CONTAINERS SHOWING ANALYSIS OF SEED MIXTURE, PERCENTAGE OF PURE SEED, YEAR OF PRODUCTION, NET WEIGHT, DATE OF PACKAGING AND LOCATION OF PACKAGING. DAMAGED PACKAGES ARE NOT ACCEPTABLE. B. DELIVER FERTILIZERS IN WATERPROOF BAGS SHOWING WEIGHT, CHEMICAL ANALYSIS AND NAME OF MANUFACTURER. C. DELIVER SOD ON PALLETS. D. HANDLING OF PLANTS SHALL BE BY LIFTING THE ROOT MASS OR CONTAINER AND NOT BY LIFTING PLANT BY TRUNK OR BRANCHES. HANDLING OF PLANTS IN AN IMPROPER FASHION SHALL BE CAUSE FOR REJECTION OF PLANT MATERIALS. CARE MUST BE TAKEN DURING ALL PHASES OF THE LOCATION AND PLANTING PROCEDURES NOT TO DAMAGE THE ROOT SYSTEM, TRUNK OR BRANCHES. ALL PLANT MATERIALS SHOULD BE PLANTED AS SOON AFTER ARRIVAL AT THE SITE AS POSSIBLE. CONTRACTOR IS RESPONSIBLE FOR KEEPING THE PLANTS SAFE FROM INJURY BY THE CONSTRUCTION ACTIVITY AND WATERED TO PREVENT DRYING OUT BEFORE PLANTING. BALLED AND BURLAPPED PLANTS SHALL BE 'HEALED-IN' AND PROTECTED WITH BURLAP OR OTHER ACCEPTED MATERIAL IF THEY CANNOT BE PLANTED UPON DELIVERY. PLANTS WITH BROKEN MAJOR BRANCHES, BADLY BRUISED OR DAMAGED BARK ARE NOT ACCEPTABLE AND WILL BE REJECTED.			A. TREES AND PALMS SHALL BE STAKED AS SHOWN IN LANDSCAPE PLANS.		
15 PLANTING DATES			2.11 WATER		
A. THE PLANTING SEASON FOR TREES, SHRUBS AND GROUND COVERS IS BETWEEN OCTOBER 1ST AND JUNE 1ST OF THE FOLLOWING YEAR. DO NOT PLANT IF TEMPERATURE IS BELOW FREEZING OR ABOVE 90 DEGREES. PLANTING AT ANY OTHER TIME OTHER THAN THE PLANTING SEASON IS THE CONTRACTOR'S OPTION AND FULL RESPONSIBILITY AND WITHOUT ADDITIONAL COMPENSATION. PLANTING MAY AT THE OPTION OF CONTRACTOR, BE POSTPONED INTO THE FOLLOWING PLANTING SEASON BUT WITHOUT ADDITIONAL COMPENSATION PROVIDED THE OWNER AND THE LOCAL GOVERNING JURISDICTION HAVE APPROVED. B. PLANTING DATES FOR SOD, SPRIGGING OR SEEDING SHALL BE PER THE GRASSING SPECIFICATION.			A. CONTRACTOR SHALL PROVIDE WATER TO THE PROJECT VIA THE INSTALLATION OF A NEW IRRIGATION SYSTEM CONNECTED TO POTABLE WATER SYSTEM FOR THE AREAS SHOWN ON THE PLANS. ANY TEMPORARY WATERING NEEDED SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE CONSIDERED AS INCLUDED IN THE BASE BID.		
16 MEASUREMENT AND PAYMENT			PART 3- EXECUTION		
A. MEASUREMENT- THE ITEMS LISTED IN THE PROPOSAL SHALL BE CONSIDERED AS SUFFICIENT TO COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ANY PORTION OF WORK NOT LISTED IN BID FORM, BUT REQUIRED TO COMPLETE THE WORK, SHALL BE DEEMED TO BE A PART OF THE ITEM WITH WHICH IT IS ASSOCIATED AND SHALL BE INCLUDED IN THE COST OF THE UNIT SHOWN IN THE BID FORM. B. PAYMENT- PAYMENT FOR THE UNIT SHOWN ON THE BID FORM SHALL BE CONSIDERED TO COVER THE COST OF ALL LABOR, MATERIAL, EQUIPMENT AND PERFORMING ALL OPERATION NECESSARY TO COMPLETE THE WORK IN PLACE. NO PAYMENT WILL BE MADE FOR ANY MATERIAL WASTED, USED FOR THE CONVENIENCE OF THE CONTRACTOR, UNUSED OR REJECTED. 1. TREES, SHRUBS AND GROUND COVERS- WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PLANTED/INSTALLED AND ACCEPTED TREES, SHRUBS AND GROUND COVERS. 2. PAYMENT FOR GRASSING WILL BE MADE PER THE GRASSING SPECIFICATIONS. 3. CLEARING: WILL BE PAID FOR AT THE LUMP SUM PRICE OF CLEARING.			3.1 FINE GRADING		
PART 2- PRODUCTS			A. ALL AREAS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE FINE GRADED TO THE DESIRED GRADES. ALL AREAS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE FINE GRADED FREE OF ROOTS, DEBRIS AND/OR OTHER OBJECTIONABLE MATERIAL, BEFORE PLANTING OR GRASSING COMMENCE. ANY ADDITIONAL FILL MATERIAL NEEDED TO FILL LOW OR UNEVEN AREAS SHALL BE PROVIDED BY THE CONTRACTOR. POSITIVE DRAINAGE AWAY FROM STRUCTURES SHALL BE PROVIDED IN ALL PLANT BEDS SO STANDING WATER DOES NOT OCCUR. PLANTING BEDS SHALL BE RAISED ABOVE ADJACENT LAWN AREAS TO PROVIDE GOOD DRAINAGE CONDITIONS. B. PLANTING AND GRASS AREAS IF NOT LOOSE, SHALL BE LOOSENEO TO A MINIMUM DEPTH OF 3 INCHES BEFORE FERTILIZER, SEED OR SOD IS APPLIED.		
21 MATERIALS			3.2 FERTILIZERS AND SOIL AMENDMENTS		
A. CONTRACTOR SHALL AT THE TIME OF DELIVERY, FURNISH OWNER AND/ OR LANDSCAPE ARCHITECT WITH INVOICES OF ALL MATERIALS RECEIVED; IN ORDER THE QUALITY AND SOURCE OF MATERIALS MAY BE REVIEWED.			A. CONTRACTOR SHALL PROVIDE TOPSOIL ANALYSIS TEST THAT HAS BEEN PROVIDED BY THE STATE AGRICULTURAL EXPERIMENT STATION, SOIL AND WATER CONSERVATION DISTRICT, STATE UNIVERSITY OR OTHER QUALIFIED PRIVATE TESTING LABORATORY AS APPROVED BY LANDSCAPE ARCHITECT. B. APPLY FERTILIZERS AND SOIL AMENDMENTS AFTER FINE GRADING AND MIX THOROUGHLY INTO UPPER TWO INCHES OF OF SOIL. C. FERTILIZERS AND OTHER NECESSARY SOIL AMENDMENTS SHALL BE APPLIED AT THE RATE RECOMMENDED BY TOP SOIL ANALYSIS TEST.		
22 TOPSOIL			3.3 SODDING		
A. TOPSOIL SHALL BE EXISTING SOIL ON SITE AMENDED PER SOIL TEST RECOMMENDATIONS.			A. SEE GRASSING SPECIFICATION.		
23 SEED			3.4 SPRIGGING		
A. SEE GRASSING SPECIFICATION.			A. SEE GRASSING SPECIFICATION.		
24 SPRIG			3.5 SEEDING		
A. SEE GRASSING SPECIFICATION			A. SEE GRASSING SPECIFICATION.		
25 SOD			3.6 SEED PROTECTION		
A. SEE GRASSING SPECIFICATION.			A. SEE GRASSING SPECIFICATION.		
26 PLANT MATERIALS			3.7 LAYOUT OF TREES, SHRUBS AND GROUND COVERS.		
A. PROVIDE ALL PLANT MATERIALS AS INDICATED ON THE PLANS. IN THE EVENT OF ANY DISCREPANCIES BETWEEN QUANTITIES OF PLANTS INDICATED ON THE PLANT SCHEDULE AND THOSE INDICATED ON THE PLAN, PLAN QUANTITIES SHALL GOVERN. PLANTS SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE, AND SHALL HAVE HEALTHY WELL DEVELOPED ROOT SYSTEMS. PLANTS SHALL BE FROM A NURSERY 300 MILES NORTH OR SOUTH OF THE PROJECT LOCATION AND SHALL HAVE BEEN GROWN UNDER CLIMATE CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. C. PLANTS SHALL POSSESS A NORMAL BALANCE BETWEEN HEIGHT AND WIDTH. PLANTS SHALL BE MEASURED WHEN BRANCHES ARE IN THEIR NORMAL POSITION. HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT FROM BRANCH TIP TO TIP. PLANTS LARGER IN SIZE THAN SPECIFIED MAY BE USED WITH NO CHANGE IN CONTRACT PRICE. D. PLANTS SHALL BE DUG WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER NOT LESS THAN RECOMMENDED BY AMERICAN STANDARD FOR NURSERY STOCK AND OF SUFFICIENT DEPTH TO INCLUDE FIBROUS AND FEEDING ROOTS. PLANTS WILL NOT BE ACCEPTED IF BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATIONS.			A. ALL PLANTS SHALL BE PLACED IN THE PROPER LOCATION AS SHOWN ON CONSTRUCTION PLANS, ALLOWING LANDSCAPE ARCHITECT TO REVIEW ALL PLANT LOCATIONS PRIOR TO ACTUAL PLANTING. LANDSCAPE ARCHITECT MAY MAKE MINOR ADJUSTMENTS WHICH SHALL NOT BE CAUSE FOR CHANGES TO THE CONTRACT PRICE.		
			3.8 OBSTRUCTIONS BELOW GROUND		
			A. PRIOR TO EXCAVATING PLANTING HOLES, CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ELECTRICAL, PHONE OR TELEVISION CABLES OR CONDUITS, WATER, DRAINAGE OR SEWER LINES AND ANY OTHER SUBSURFACE STRUCTURES AND TAKE PRECAUTIONS TO PROTECT THEM. ANY DAMAGE TO UNDERGROUND UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. B. IN THE EVENT ROCK, UNDERGROUND CONSTRUCTION WORK, OR OTHER OBSTRUCTIONS ARE ENCOUNTERED IN ANY PLANT HOLE EXCAVATION UNDER THIS CONTRACT, ALTERNATE LOCATIONS MAY BE SELECTED. WHERE LOCATIONS CANNOT BE CHANGED THE OBSTRUCTIONS SHALL BE REMOVED TO A DEPTH OF NOT LESS THAN THREE (3) FEET BELOW GRADE AND NOT LESS THAN SIX (6) INCHES BELOW BOTTOM OF BALL OR ROOTS WHEN PLANT IS PROPERLY SET AT REQUIRED GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF SUCH ROCK OR OTHER UNDERGROUND OBSTRUCTIONS ENCOUNTERED.		
			3.9 PLANTING HOLES		
			A. FOR TREES, SHRUBS AND GROUND COVERS, THE PLANTING HOLE SHALL BE AS SHOWN IN THE PLANTING DETAIL PLANS. DO NOT LEAVE PLANTING HOLES OPEN OVERNIGHT. IN A EVENT THAT PLANT HOLES ARE DUG AND NOT PLANTED IN A TIMELY MANNER, INSTALL FOUR (4) FOOT HIGH ORANGE SAFETY FENCING AROUND ALL EXCAVATED AREAS.		
			3.10 PLANTING TREES AND SHRUBS		
			A. SHALL BE SAME AS GROWING THE THE NURSERY AND/OR CONTAINER SOIL LEVEL. ADJUST BOTTOM SOIL MIX TO INSURE PROPER PLANTING LEVEL WITH THE PROPOSED SURROUNDING GRADES. CHECK PLANTS TO INSURE PROPER VERTICAL ALIGNMENT. B. FILL HOLES TO PROPER HEIGHTS TO RECEIVE PLANT AND THOROUGHLY TAMP BEFORE SETTING THE PLANT. SET PLANT IN UPRIGHT POSITION IN THE CENTER OF THE HOLE, AND COMPACT THE BACKFILL MIXTURE AROUND THE BALL OR ROOTS. ADD SOIL AMENDMENTS AS REQUIRED TO IMPROVE THE FERTILITY OF EXISTING SOIL AND PLANT GROWING CONDITIONS. 1. WHEN BALLED OR BURLAPPED PLANTS ARE SET, COMPACT TOPSOIL AROUND BASE OF BALL TO FILL ALL VOIDS. ALL BINDINGS SHALL BE REMOVED AND THE TOP HALF OF BURLAP REMOVED FROM AROUND THE ROOT BALL. IF BURLAP IS MADE OF NATURAL FIBRES, IT CAN BE LAID BACK FROM THE ROOT MASS OR CAN BE CUT AWAY. 2. CONTAINERIZED PLANTS SHALL HAVE THE CONTAINER REMOVED PRIOR TO PLANTING. CARE SHALL BE TAKEN TO PROTECT ROOT MASS FROM INJURY AND TO KEEP IT INTACT. IF ROOT MASS SHOWS EVIDENCE OF BEING BOUND OR MATTED, THREE VERTICAL 3" DEEP CUTS SHALL BE MADE ON ALTERNATE SIDES OF THE ROOT MASS AND ROOTS FULLED AWAY SLIGHTLY. THIS IS TO UNTANGLE ROOTS WHICH HAVE BEGUN TO CIRCLE THE ROOT MASS AND ENCOURAGE NEW ROOT GROWTH. ALL WEEDS GROWING IN THE ROOT MASS SHALL BE REMOVED PRIOR TO PLANTING. 3. ROOTS OF BARE ROOT PLANTS SHALL BE SPREAD OUT AND TOPSOIL CAREFULLY WORKED IN AMONG THEM. REMOVE WITH A CLEAN CUT ANY BROKEN OR FRAYED ROOTS.		
			3.11 PLANTING GROUND COVERS		
			A. PLANTING BEDS SHALL BE THOROUGHLY WORKED TO A DEPTH OF TWELVE (12) INCHES INCORPORATING FERTILIZER AND OTHER SOIL IMPROVEMENTS AT THE RECOMMENDED RATE SUGGEST BY THE SOIL TEST. RAKE PREPARED PLANTING BED UNTIL LEVEL, SMOOTH AND FREE FROM ALL SOIL, LUMPS, ROCKS, STICKS AND OTHER DELETERIOUS MATERIALS. BED AREA SHOULD BE NEATLY OUTLINED. SPACE THE PLANTS EVENLY AS INDICATED BY THE DRAWINGS. PLANT ONLY IN SOIL THAT IS MOIST AND FRIABLE AND NOT WET OR SOGGY. IN THE CASE OF PLANTING IN OPEN ON HOT DAYS, SHORTEN THE TIME BETWEEN PLANTING AND WATERING.		
			3.12 WATERING		
			A. THOROUGHLY WATER EACH PLANT WHEN THE HOLE IS 1/2 FULL., AGAIN AT 3/4 FULL AND THEN COMPLETE BACKFILLING. ONCE BACKFILLING IS COMPLETE WATER AGAIN, THEN TAMP THE SOIL IN PLACE UNTIL THE SURFACE OF THE BACKFILL IS LEVEL WITH SURROUNDING AREA AND THE PLANT BEARS THE SAME RELATION OF THE FINISHED GRADE AS IT BORE TO THE EXISTING GRADE BEFORE BEING DUG. B. EARTH SAUCERS SHALL BE CONSTRUCTED AROUND THE PERIMETER OF THE PLANTING HOLES OF ALL TREES AND ALL SINGLE PLANTED SHRUBS. EARTH SAUCERS SHALL BE MINIMUM 3" HIGH AND COMPACTED TO RETAIN WATER. EARTH SAUCERS SHALL NOT BE INSTALLED IN THE AREAS WHERE THE SUBSOIL IS VERY POORLY DRAINED OR AROUND MASS SHRUB/ GROUNDCOVER PLANTINGS. C. ALL TREES AND SHRUBS TO BE HAND WATERED ON A REGULAR BASIS AS NECESSARY DURING THE WARRANTY PERIOD.		
			3.13 SOIL MIX		
			A. SHALL BE PER EXISTING SOILS ON SITE WITH RECOMMENDED AMENDMENTS FROM SOIL TESTS.		
			3.14 STAKING OF TALL PLANTS		
			A. SHALL BE DONE ONLY IF SITE/ ENVIRONMENT CONDITIONS MAKE IF REQUIRED. IF REQUIRED, TREES AND PALMS SHALL BE STAKED AS INDICATED ON THE PLANS.		
			3.15 MULCHING		
			A. ALL PLANTS SHALL BE MULCHED WITH AN EVENLY THICK LAYER OF CLEAN MULCH IMMEDIATELY AFTER PLANTING. MASS PLANT BEDS SHALL BE COMPLETELY MULCHED TO THE LIMITS OF BED AS SHOWN ON THE PLANS. LIMIT OF MULCHING FOR INDIVIDUAL TREES AND SHRUBS SHOULD BE SLIGHTLY BEYOND THE SAUCER BERM. THE AREAS MULCHED SHOULD BE TIDY AND CLEAN IN APPEARANCE.		
			3.16 PRUNING		
			A. REMOVE DEAD, BROKEN OR BRUISED BRANCHES AFTER PLANTING USING CLEAN, SHARP TOOLS.		
			3.17 WEEDING		
			A. ALL PLANTED AREAS SHALL BE KEPT FREE FROM WEEDS AND UNDESIRABLE GRASSES UNTIL FINAL ACCEPTANCE BY THE OWNER. SEE GENERAL NOTES ON PLANS FOR ADDITIONAL INFORMATION.		
			3.18 INSECT AND DISEASE CONTROL		
			A. ALL PLANT MATERIALS SHALL BE DISEASE OR INSECT FREE UPON ARRIVAL TO THE SITE. HOWEVER SHOULD ANY PLANTS SHOW SIGNS OF INSECT OR DISEASE INFESTATIONS. CONTRACTOR SHALL IDENTIFY NATURE OF INFESTATION AND SUBMIT TO LANDSCAPE ARCHITECT A PROPOSED METHOD OF CONTROL. CONTRACTOR SHALL TREAT ALL INFESTED PLANTS AT ITS EXPENSE. SHOULD THE INFESTATION BE WIDE SPREAD AND UNCONTROLLABLE, PLANTS AFFECTED SHOULD BE REMOVED FROM SITE, FRESH PLANTS BROUGHT IN AND ALL OTHER PLANTS TREATED TO PREVENT INFESTATION OF REMAINING PLANTS AT CONTRACTOR'S EXPENSE.		
			3.19 CLEAN UP		
			A. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL THE TRASH, DEBRIS, RUBBISH AND ALL OTHER MATERIALS ASSOCIATED WITH THE CONSTRUCTION OF SITE ON A DAILY BASIS. ALL TAGS, FLAGS AND LABELS WILL BE REMOVED FROM PLANTS AND TREES. THE SITE SHALL BE KEPT BROOM CLEANED AND TIDY. CLEANUP OF THE SITE IS A PREREQUISITE TO FINAL ACCEPTANCE BY THE OWNER.		
			PART 4- MAINTENANCE AND WARRANTY		
			4.1 MAINTENANCE		
			A. PROTECT ALL PLANTINGS (GRASS, PLANTS AND TREES) UNTIL ACCEPTED BY THE OWNER. ALL DAMAGE, REGARDLESS OF CAUSE, SHALL BE IMMEDIATELY REPAIRED AND PLANTS REPLACED IF NECESSARY. ERECT TEMPORARY FENCES, BARRICADES, SIGNS AND OTHER PROTECTION AS NEEDED TO PREVENT TRAMPLING. CONTRACTOR IS NOT RESPONSIBLE FOR REPLACEMENT OF DAMAGED OR MISSING PLANTS AND PLANT MATERIALS DUE TO VANDALISM OR OTHER ACTS BEYOND THE CONTROL OF THE CONTRACTOR IF PROPER BARRIERS OR OTHER SAFEGUARDS HAVE BEEN MAINTAINED. B. MAINTENANCE SHALL INCLUDE BUT IS NOT LIMITED TO WATERING, WEEDING, CULTIVATING, REMOVAL OF DEAD MATERIAL, MULCH REAPPLICATION, RESETTING PLANTS TO PROPER GRADES OR UPRIGHT POSITION, LAWN MOWING, FERTILIZING AND OTHER NECESSARY OPERATIONS. C. THE CONTRACTOR SHALL REPAIR IMMEDIATELY ANY AREAS DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS OR EROSIONS. D. THE CONTRACTOR SHALL MAINTAIN ALL PROPOSED PLANTINGS UNTIL FINAL ACCEPTANCE IS ISSUED BY THE OWNER. E. AT THE END OF THE MAINTENANCE PERIOD, ALL PLANTS SHALL BE IN A HEALTHY GROWING CONDITION. DURING THE MAINTENANCE PERIOD SHOULD THE APPEARANCE OF ANY PLANT INDICATE A WEAKNESS AND PROBABILITY OF DYING, IMMEDIATELY REPLACE WITHOUT ADDITIONAL COST TO THE OWNER. REPLACEMENTS REQUIRED BECAUSE OF VANDALISM OR OTHER CAUSES BEYOND THE CONTROL OF THE CONTRACTOR ARE NOT PART OF THIS CONTRACT.		
			4.2 WARRANTY		
			A. ALL SHRUBS, GROUND COVERS AND TREES SHALL BE GUARANTEED BY THE CONTRACTOR TO BE ALIVE AND HEALTHY FOR A ONE YEAR PERIOD AFTER SUBSTANTIAL COMPLETION IS ISSUED BY THE OWNER. A FINAL INSPECTION WITH THE OWNER SHALL BE CONDUCTED AT THE END OF THE WARRANTY PERIOD TO DETERMINE IF ANY PLANTS WILL BE REQUIRED TO BE REPLACED. B. ANY LAWN, PLANT OR TREE WHICH IS DEAD OR NOT SHOWING SATISFACTORY GROWTH SHALL BE REPLACED AT CONTRACTOR'S EXPENSE AT THE END OF WARRANTY PERIOD. ALL REPLACEMENTS SHALL BE OF ORIGINAL QUALITY AND OF A SIZE EQUAL TO ADJACENT PLANTS OR TREES OF SAME KIND.		
			END OF SECTION		



J. K. TILLER ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
BLUFFTON, SC 29910
FAX 843.815.4802
LAND PLANNING
181 BLUFFTON ROAD, SUITE F203
Bluffton, SC 29910
Voice 843.815.4800
FAX 843.815.4800
jtiller@jktiller.com

LOWCOUNTRY PICKLE BALL
LANDSCAPE PLAN
Town of Bluffton, South Carolina

Sheet Title:
Landscape Specifications

Job Number:
200549-03

Date:
March 29, 2023

Drawn:
WSC, KD

Approved:

Revisions:
08/30/2023
HCOD Submittal

Sheet
S1
Of 9

ATTACHMENT 3

GRASSING SPECIFICATIONS

PART 1- GENERAL

11 SECTION INCLUDES

- A. SEEDING, PLANTING GRASS AND FERTILIZING GRADED AREAS AROUND BUILDINGS, STRUCTURES, SOCCER FIELD AND SIDEWALK SHOULDERS AND OTHER DISTURBED AREAS.
- B. SEED PROTECTION
- C. MAINTAINING GRASSED AREAS UNTIL FINAL ACCEPTANCE.

12 RELATED WORK

- A. CIVIL AND LANDSCAPE PLANS AND SPECIFICATIONS.

13 DELIVERY, STORAGE AND HANDLING

- A. DELIVER GRASS SEED IN ORIGINAL CONTAINERS SHOWING ANALYSIS OF SEED MIXTURE, PERCENTAGE OF PURE SEED, YEAR OF PRODUCTION, NET WEIGHT, DATE OF PACKAGING AND LOCATION OF PACKAGING. DAMAGED PACKAGES ARE NOT ACCEPTABLE. STORE IN COOL, DRY LOCATIONS AWAY FROM CONTAMINANTS.
- B. DELIVER FERTILIZER IN WATERPROOF BAGS, SHOWING WEIGHT, CHEMICAL ANALYSIS AND NAME OF MANUFACTURER. DAMAGED BAGS ARE NOT ACCEPTABLE. STORE IN COOL DRY LOCATIONS AWAY FROM CONTAMINANTS.
- C. DELIVER SOD ON PALLETS.
- D. ALL MATERIAL SHOULD BE ACCEPTABLE TO THE LANDSCAPE ARCHITECT PRIOR TO THE USE.

14 PLANTING DATES.

- A. THIS SPECIFICATION PROVIDES OR ESTABLISHMENT OF A PERMANENT GRASS COVER BETWEEN THE DATES OF MARCH 1 AND SEPTEMBER 30. IF FINISHED EARTH GRADES ARE NOT COMPLETED IN TIME TO PERMIT PLANTING AND ESTABLISHMENT OF PERMANENT GRASS DURING THE FAVORABLE SEASON BETWEEN THE DATES SPECIFIED ABOVE UNLESS OTHERWISE ACCEPTED. CONTRACTOR WILL BE REQUIRED TO PLANT A TEMPORARY COVER TO PROTECT NEW GRADED AREAS FROM EROSION AND TO KEEP WINDBORNE DUST TO A MINIMUM. THE TEMPORARY COVER SHALL BE PLANTED BETWEEN OCTOBER 1 AND FEBRUARY 28 UNLESS OTHERWISE PERMITTED.

15 MEASUREMENT AND PAYMENT

- A. WHEN THE SEASON OR STAGE OF PROJECT IS SUCH RESULTS OF GRASSING WORK CANNOT BE DETERMINED, CONDITIONAL ACCEPTANCE WILL BE MADE ON WORK COMPLETED. WHEN CONDITIONAL ACCEPTANCE IS MADE FOR ITEMS OF WORK COVERED, CONTRACTOR SHALL BE ENTITLED TO 50% OF BID PRICE FOR THE ACTUAL WORK PLACED AND SHALL RECEIVE REMAINING 50% OF BID PRICE WHEN FINAL ACCEPTANCE IS MADE. CONDITIONAL ACCEPTANCE SHALL NOT APPLY TO REMAINING ITEMS OF WORK, AND FULL BID PRICE PAYMENT SHALL BE MADE WHEN WORK IS ACCEPTABLY PLACED AND COMPLETED IN ACCORDANCE WITH SPECIFICATIONS.
- B. PAYMENT FOR GRASSING WILL BE MADE AT CONTRACT UNIT PRICE FOR THE ITEM 'GRASSING' AND SUCH PAYMENT SHOULD CONSTITUTE FULL COMPENSATION FOR FURNISHING AND PLACING SEED AND FERTILIZER OR SOD WHERE DIRECTED AND PROTECTING AND MAINTAINING SEED AND SOD IN ALL GRADED AND DISTURBED AREAS.

PART 2- PRODUCTS

- A. CONTRACTOR SHALL SUBMIT SOURCE AND SPECIES CERTIFICATION DOCUMENTS TO LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO INSTALLATION, SUPPLY COMPLETE INFORMATION ON ALL ANALYSIS/ TEST METHODOLOGIES AND RESULTS: LABORATORY CERTIFICATIONS, MANUFACTURER'S SPECIFICATIONS AND AGENCY APPROVALS TO THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT OF SOIL MIXTURES. IN ADDITION PROVIDE THE LANDSCAPE ARCHITECT WITH THOROUGHLY MIXED SAMPLE OF SOIL MIXES FOR APPROVAL PRIOR TO PLACEMENT. LANDSCAPE CONTRACTOR SHALL MAKE MODIFICATIONS AND IMPROVEMENTS TO SOIL MIXES DEEMED NECESSARY BY THE SOIL ANALYSIS TO MEET REQUIREMENTS SPECIFIED HERE IN BEFORE AND TO ENSURE PROPER GROWING MEDIUM FOR PLANT MATERIAL.

21 SEED

- A. ALL SEED SHALL CONFORM TO ALL STATE LAWS AND TO ALL REQUIREMENTS AND REGULATIONS OF THE STATE DEPARTMENT OF AGRICULTURE.
- B. THE VARIETIES OF SEED AS SPECIFIED IN SECTION 22, SHALL BE INDIVIDUALLY PACKAGED OR BAGGED, AND TAGGED TO SHOW NAME OF SEED, NET WEIGHT, ORIGIN, GERMINATION, LOT NUMBER AND OTHER INFORMATION REQUIRED BY THE STATE DEPARTMENT OF AGRICULTURE.
- C. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO TEST, REJECT OR ACCEPT ALL SEEDS BEFORE SEEDING.

22 SEEDING SCHEDULE

A. SEED	RATE	PLANTING DATES
PRINCESS 11" BERMUDA	75 LBS / ACRE	MARCH 1 - SEPTEMBER 30
ANNUAL RYE (TEMP ONLY)	75 LBS / ACRE	OCTOBER 1 - FEBRUARY 28

23 FERTILIZER

- A. COMMERCIAL FERTILIZER OF APPROVED TYPE, CONFORMING TO STATE FERTILIZERS LAWS AT THE RATE AS RECOMMENDED BY SOILS TEST.

24 LIME

- A. AGRICULTURAL GRADE LIMESTONE AT RATE AS RECOMMENDED BY SOILS TEST.

25 SPRIG

- A. HEALTHY LIVING STEMS, STOLONS, OR RHIZOMES AND ATTACHED ROOTS OF LOCALLY ADAPTED GRASS WITHOUT ADHERING SOIL, INCLUDING TWO TO THREE NODES AND FROM FOUR TO SIX INCHES LONG. OBTAIN FROM HEAVY, DENSE, CERTIFIED SOD. PROVIDE SPRIGS WHICH HAVE BEEN GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. COORDINATE HARVESTING AND PLANTING OPERATIONS TO PREVENT EXPOSURE OF SPRIGS TO THE SUN FOR MORE THAN 30 MINUTES BEFORE COVERING AND MOISTENING. SPRIGS SHOWING SIGNS OF WILT, MOLD, CONTAINING WEEDS OR OTHER DETRIMENTAL MATERIAL OR THAT ARE HEAT DAMAGED WILL BE REJECTED.
- B. THE VARIETIES OF SPRIG AS SPECIFIED IN SECTION 2.6 SHALL BE INDIVIDUALLY PACKAGED OR BAGGED AND TAGGED TO SHOW NAME OF SPRIG, NET WEIGHT, ORIGIN AND OTHER INFORMATION REQUIRED BY THE STATE DEPARTMENT OF AGRICULTURE.
- C. SPRIGS SHALL BE PURE TO THE VARIETY SPECIFIED AND SHALL BE FREE OF OTHER GRASS SPECIES, WEEDS OR FOREIGN MATTERS.
- D. SPRIGS SHALL BE HARVESTED BY DIGGING (NOT COLLECTED ABOVE SOIL LEVEL) SHREDDING SOD, BY ROTOTILLING SOD AND RAKING, BY VERICUTTING OR BY A SPRIG HARVESTER. SPRIGS SHALL CONSIST MOSTLY OF RHIZOMES AND CROWNS WITH ONLY A FEW GREEN LEAVES.

2.6 SPRIGGING SCHEDULE

A. SPRIG	RATE	PLANTING DATES
TIWAY 419' BERMUDA (or approved equal)	1000 BUSHELs / AC. (coverage in 3 months)	APRIL 1 -MARCH 31
STABILIZE SITE WITH TEMPORARY GRASS SEED (see section 2.2)		SEPTEMBER 1 - MARCH 31
B. IN AREAS WHERE EXISTING GRASS IS TO BE MATCHED, CONTRACTOR SHALL SPRIG AT THE RATE AND DATES RECOMMENDED BY SPRIG DISTRIBUTOR		

2.1 SOD

- A. SOD SHALL BE PREMIUM GRADE, DENSELY ROOTED, GOOD QUALITY GRASS OF THE SPECIES AND CERTIFIED VARIETY AS SHOWN ON THE PLANS, FREE FROM NOXIOUS WEEDS WITH NO SURFACE SOIL BEING VISIBLE. THE SOD SHALL BE OBTAINED FROM AREAS WHERE THE SOIL IS REASONABLY FERTILE. SOD OF SPECIFIED SPECIES WITH NOT LESS THAN 95% GERMINATION, NOT LESS THAN 85% PURE SEED AND NOT MORE THAN 0.5% WEED SEED. THE SOD SHOULD BE MACHINE CUT TO A UNIFORM SOIL THICKNESS, THAT SHOULD CONTAIN PRACTICALLY ALL OF THE DENSE ROOT SYSTEM AND NOT BE LESS THAN 1 INCH THICK.

- B. BEFORE CUTTING SOD SHOULD BE MOVED TO A HEIGHT OF NOT LESS THAN 1-1/2' OR MORE THAN 2'. SOD SHALL BE CUT IN UNIFORM WIDTHS MIN. 12" AND LENGTH MIN. 24".
- C. SOD SHALL BE DELIVERED TO THE SITE IN A FRESH, MOIST CONDITION, WITH HEALTHY GREEN FOLIAGE. IT SHALL BE UNLOADED FROM DELIVERY TRUCKS ON PALLETS OR ROLLS AND PLACED IN FINAL POSITION WITHIN 24 HOURS OF DELIVERY. SOD SHALL BE PROTECTED FROM WIND AND SUN AND SHOULD NOT BE ALLOWED TO DRY OUT BEFORE PLANTING.
- D. SOD SHALL BE STRONG ENOUGH TO SUPPORT ITS OWN WEIGHT AND RETAIN ITS SIZE AND SHAPE WHEN SUSPENDED VERTICALLY FROM A FIRM GASP ON THE UPPER 10% OF THE SECTION.

2.8 ACCESSORIES

- A. STRAW MULCH: OAT OR WHEAT STRAW, REASONABLY FREE FROM WEEDS, FOREIGN MATTER DETRIMENTAL TO PLANT LIFE, AND IN DRY CONDITION.
- B. EXCELSIOR MULCH: EXCELSIOR MULCH SHALL CONSIST OF WOOD FIBRES CUT FROM SOUND, GREEN TIMBER, THE AVERAGE LENGTH OF FIBRES SHALL BE 4 TO 6 INCHES, CUT SHALL BE MADE IN SUCH A MANNER AS TO PROVIDE MAXIMUM STRENGTH OF FIBRE, BUT AT SLIGHT ANGLE TO NATURAL GRAIN OF WOOD TO CAUSE SPLINTERING OF FIBRES WHEN WEATHERING IN ORDER TO PROVIDE ADHERENCE TO EACH OTHER AND TO SOIL.
- C. WOOD CELLULOSE FIBRE SHALL BE MADE FROM CHIP PARTICLES MANUFACTURED PARTICULARLY FOR DISCHARGING UNIFORMLY ON THE GROUND SURFACE WHEN DISPERSED BY A HYDRAULIC WATER SPRAYER. IT SHALL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND BLEND WITH GRASS SEED AND FERTILIZER TO FORM A HOMOGENOUS SLURRY. MULCH FIBRES SHALL INTERTWINE PHYSICALLY TO FORM A STRONG MOISTURE HOLDING MAT ON THE GROUND SURFACE AND ALLOW RAINFALL TO PERCOLATE IN THE UNDERLYING SOIL. THE MULCH SHALL BE HEAT PROCESSED TO CONTAIN NO GERMINATION AND OR GROWTH INHIBITING FACTORS. IT SHALL BE DYED (NON-TOXIC) AN APPROPRIATE COLOR TO FACILITATE METERING OF MATERIAL.

2.9 PRODUCT REVIEW

- A. CONTRACTOR SHALL PROVIDE LANDSCAPE ARCHITECT WITH A COMPLETE DESCRIPTION OF ALL PRODUCTS BEFORE ORDERING. THE LANDSCAPE ARCHITECT WILL REVIEW ALL PRODUCTS BEFORE THEY ARE ORDERED.

PART 3- EXECUTION

3.1 PREPARATION

- A. AREAS TO BE SEEDED OR SPRIGGED SHALL BE MADE SMOOTH AND UNIFORM AND SHALL CONFORM TO THE FINISHED GRADE INDICATED ON PLANS.
- B. REMOVE FOREIGN MATERIALS, PLANTS, ROOTS AND DEBRIS FROM SURFACES TO BE SEEDDED.
- C. GRASSING AREAS, IF NOT LOOSE, SHALL BE LOOSENED TO A MINIMUM DEPTH OF 3 INCHES BEFORE FERTILIZER, SEED, SPRIG OR SOD IS APPLIED.
- D. AMENDMENTS TO SOILS SHALL BE INCORPORATED INTO LOOSENED 3 INCH TOP SOIL LAYER AS RECOMMENDED BY SOIL TESTS.

3.2 STAND OF GRASS

- A. BEFORE ACCEPTANCE OF SEEDING OR SPRIGGING IS PERFORMED FOR THE ESTABLISHMENT OF PERMANENT VEGETATION, CONTRACTOR WILL BE REQUIRED TO PRODUCE A SATISFACTORY STAND OF PERENNIAL GRASS WHOSE ROOT SYSTEM SHALL BE DEVELOPED SUFFICIENTLY TO SURVIVE DRY PERIODS AND WINTER WEATHER AND BE CAPABLE OF RE-ESTABLISHMENT IN SPRING.
- B. BEFORE ACCEPTANCE OF SEEDING PERFORMED FOR THE ESTABLISHMENT OF TEMPORARY VEGETATION, CONTRACTOR WILL BE REQUIRED TO PRODUCE A STAND OF GRASS SUFFICIENT TO CONTROL EROSION FOR A GIVEN AREA AND LENGTH OF TIME BEFORE THE NEXT PHASE OF CONSTRUCTION OR ESTABLISHMENT OF PERMANENT VEGETATION IS TO COMMENCE.

3.3 SEEDING AND SPRIGGING DATES

- A. SEEDING AND SPRIGGING SHALL BE PERFORMED DURING PERIODS AND AT RATES SPECIFIED IN THEIR RESPECTIVE SCHEDULES. SEEDING AND SPRIGGING WORK MAY, AT DISCRETION OF CONTRACTOR, BE PERFORMED THROUGHOUT THE YEAR USING SCHEDULE PRESCRIBED FOR A GIVEN PERIOD. SEEDING AND SPRIGGING WORK SHALL NOT BE CONDUCTED WHEN THE GROUND IS FROZEN OR EXCESSIVELY WET. CONTRACTOR SHALL BE REQUIRED TO PRODUCE A SATISFACTORY STAND OF GRASS REGARDLESS OF THE PERIOD OF YEAR WORK IS PERFORMED.

3.4 APPLYING LIME AND FERTILIZER

- A. FOLLOWING ADVANCE PREPARATION AND PLACING, SELECTED MATERIAL FOR SHOULDERS AND SLOPES, LIME AND FERTILIZER, IF CALLED FOR, BASED ON SOIL TESTS, SHALL BE SPREAD UNIFORMLY OVER THE DESIGNATED AREAS AND SHALL BE THOROUGHLY MIXED WITH THE SOIL TO THE DEPTH OF APPROXIMATELY 2 INCHES. FERTILIZER AND LIME SHALL BE APPLIED AT THE RATE RECOMMENDED BY REQUIRED THE SOIL TESTS. UNLESS OTHERWISE PROVIDED, LIME WILL NOT BE APPLIED FOR TEMPORARY SEEDING. IN ALL CASES WHERE PRACTICABLE, ACCEPTABLE MECHANICAL SPREADERS SHALL BE USED FOR SPREADING FERTILIZERS. ON STEEP SLOPES SUBJECT TO SLIDES AND INACCESSIBLE TO POWER EQUIPMENT, THE SLOPES SHALL BE ADEQUATELY SCARIFIED. FERTILIZERS MAY BE APPLIED ON STEEP SLOPES BY HYDRAULIC METHODS AS A MIXTURE OF FERTILIZER AND SEED. WHEN FERTILIZER IS APPLIED WITH COMBINATION SEED AND FERTILIZER DRILLS, NO FURTHER INCORPORATION WILL BE NECESSARY. THE FERTILIZER AND SEED SHALL BE APPLIED TOGETHER WHEN WOOD CELLULOSE FIBRE MULCH IS USED. ANY STONES LARGER THAN 2-1/2" IN ANY DIMENSION, LARGER CLODS, ROOTS OR OTHER DEBRIS BROUGHT TO THE SURFACE SHALL BE REMOVED.

3.5 SEEDING

- A. SEED SHALL BE SOWN WITHIN 24 HOURS FOLLOWING APPLICATION OF FERTILIZERS AND LIME, AND PREPARATION OF THE SEEDBED AS SPECIFIED IN SECTION 3.4. SEED SHALL BE UNIFORMLY SOWN AT THE RATE SPECIFIED BY THE USE OF ACCEPTABLE MECHANICAL SEED DRILLS. ROTARY HAND SEEDERS, POWER SPRAYERS OR OTHER SATISFACTORY EQUIPMENTS MAY BE USED ON STEEP SLOPES OR ON OTHER AREAS INACCESSIBLE TO SEED DRILLS.
- B. SEEDS SHALL BE COVERED AND LIGHTLY COMPACTED BY MEANS OF CULTIPACKER OR LIGHT ROLLER IF THE DRILL DOES NOT PERFORM THIS OPERATION. ON SLOPES INACCESSIBLE TO COMPACTION EQUIPMENT, THE SEED SHALL BE COVERED BY DRAGGING SPIKED CHAINS, BY LIGHT HARROWING OR BY OTHER SATISFACTORY METHODS.
- C. APPLY WATER WITH FINE SPRAY IMMEDIATELY AFTER EACH AREA HAS BEEN SOWN.
- D. DO NOT SOW SEEDS WHEN GROUND IS TOO DRY, DURING WINDY PERIODS OR IMMEDIATELY FOLLOWING A RAIN.
- E. IF PERMITTED BY SPECIAL PROVISIONS, WOOD CELLULOSE FIBRE MULCH MAY BE USED.

3.6 SEED PROTECTION (STRAW MULCH)

- A. ALL SEEDED AREAS SEEDED WITH PERMANENT GRASSES SHALL BE UNIFORMLY MULCHED IN A CONTINUOUS BLANKET IMMEDIATELY FOLLOWING SEEDING AND COMPACTING OPERATIONS, USING AT LEAST TWO TONS OF STRAW PER ACRE.

3.1 SEED PROTECTION (EXCELSIOR MULCH)

- A. SEED SHALL BE SOWN AS SPECIFIED IN SECTION 3.5. WITHIN 24 HOURS AFTER COVERING OF SEED, EXCELSIOR MULCH SHALL BE UNIFORMLY APPLIED AT THE RATE OF 2 TONS PER ACRE. THE MULCH MAY BE APPLIED HYDRAULICALLY OR BY OTHER ACCEPTABLE METHODS. SHOULD THE MULCH BE PLACED IN A DRY CONDITION, IT SHALL BE THOROUGHLY WETTED IMMEDIATELY AFTER PLACING. LANDSCAPE ARCHITECT MAY REQUIRE LIGHT ROLLING OF THE MULCH TO FORM A TIGHT MAT.

3.8 SEED PROTECTION (WOOD CELLULOSE FIBRE MULCH)

- A. AFTER THE LIME HAS BEEN APPLIED AND GROUND PREPARED AS SPECIFIED IN SECTION 3.4, WOOD CELLULOSE FIBRE MULCH SHALL BE APPLIED AT THE RATE OF 1500 POUNDS PER ACRE IN A MIXTURE OF SEED AND FERTILIZER. HYDRAULIC EQUIPMENT SHALL BE USED FOR APPLICATION OF FERTILIZER, SEED AND SLURRY OF THE PREPARED WOOD PULP. THE EQUIPMENT SHALL HAVE A BUILT IN AGITATION SYSTEM WITH AN OPERATING CAPACITY SUFFICIENT TO AGITATE, SUSPEND AND HOMOGENEOUSLY MIX A SLURRY OF THE SPECIFIED AMOUNT OF FIBRE, FERTILIZER, SEED AND WATER. THE SLURRY DISTRIBUTION LINES SHOULD BE LARGE ENOUGH TO PREVENT STOPPAGE. THE DISCHARGE LINE SHALL BE EQUIPPED WITH A SE OF HYDRAULIC SPRAY NOZZLES WHICH WILL PROVIDE AN EVEN DISTRIBUTION OF SLURRY ON VARIOUS AREAS TO BE SEEDDED. THE SLURRY TANK SHALL HAVE A MINIMUM CAPACITY OF 1000 GALLONS.
- B. SEED, FERTILIZER, WOOD PULP MULCH AND WATER SHALL ALL BE COMBINED INTO THE SLURRY TANK FOR DISTRIBUTION OF ALL INGREDIENTS IN ONE OPERATION BY HYDRAULIC SEEDING METHOD SPECIFIED HEREIN. MATERIALS SHALL BE COMBINED IN A MANNER RECOMMENDED BY THE MANUFACTURER. THE SLURRY MIXTURE SHALL BE REGULATED SO AMOUNTS AND RATES OF APPLICATION SHALL RESULT IN UNIFORM APPLICATION OF ALL MATERIALS AT RATES NOT LESS THAN THE AMOUNT SPECIFIED. USING THE COLOR OF WOOD PULP AS A GUIDE, EQUIPMENT OPERATOR SHALL SPRAY PREPARED SEED BED WITH A UNIFORM VISIBLE COAT. THE SLURRY SHALL BE APPLIED IN A SLEEPING MOTION, IN AN ARCHED STREAM, TO FALL LIKE RAIN, ALLOWING WOOD FIBRES TO BUILD UPON EACH OTHER UNTIL AN EVEN COAT IS ACHIEVED.

3.9 SPRIGGING

- A. SPRIGS SHALL BE PLACED AT THE DATES AND RATES AS SHOWN IN SECTION 2.6. THE SPRIGGING METHOD SHALL BE BY BROADCAST SPRIGGING, HYDROPLANTING OR ROW PLANTER. SPRIGGING PROCEDURE SHALL ENSURE EVEN COVERAGE. SPRIGS APPLIED BY BROADCAST OVER THE SITE WITH A DISTRIBUTOR OR HYDROSEEDER SHALL BE PLANTED AT THE RATES LISTED IN SECTION 2.6. COVER BROADCAST SPRIGS WITH STRAW MULCH IMMEDIATELY AFTER BROADCAST AND WATER IN IMMEDIATELY (WITHIN 2 HOURS)
- C. SPRIGS INSTALLED BY ROW PLANTER CREATING A NARROW FURROW THAT COVERS 50 TO 80% OF THE SPRIG WITH SOIL MAY USE LESS SPRIG MATERIAL. RATE SHALL BE AS RECOMMENDED BY SPRIG SUPPLIER TO PROVIDE A SOLID STAND OF TURF WITHIN THE TIME REQUIRED IN SECTION 2.6. WATER IN IMMEDIATELY (WITHIN 1 HOUR)

3.10 SODDING

- A. SOD SHALL BE PLACED BETWEEN MARCH 1ST AND DECEMBER 1ST, HOWEVER IF SOD IS TO BE PLACED DURING PERIODS OF TEMPERATURES OVER 90 DEGREES F, THE CONTRACTOR SHALL TAKE EXTRA CARE FOR QUICK PLACEMENT OF SOD WITH ADEQUATE, CONSISTENT WATERING NECESSARY TO ENSURE SOD THRIVES AS PLANTED.
- B. SOD SHALL BE PLACED WITHIN 24 HOURS OF CUTTING.
- C. PLACE TOP ELEVATION OF OF SOD 1/2 INCH BELOW ADJOINING PAVING OR CURBS.
- D. ALL AREAS TO BE SODDED SHALL BE BROUGHT TO THE PROPER LINE GRADE OR CROSS SECTION AS WAS EXISTING PRIOR TO CONSTRUCTION. SOD SHALL BE PLACED SO THAT UPON COMPLETION, THE EDGES OF THE SODDED AREAS WILL BE SMOOTH AND CONFORM TO THE PROPOSED FINISHED GRADE. SOD SHALL BE LAID SMOOTH EDGE TO EDGE, WITH STAGGERED JOINTS. SOD SHALL BE IMMEDIATELY PRESSED FIRMLY INTO CONTACT WITH BED BY TAMPING OR ROLLING, TO ELIMINATE ANY AIR POCKETS. A TRUE AND EVEN SURFACE SHALL BE PROVIDED TO TO INSURE KNITTING WITHOUT DISPLACEMENT OF THE SOD OR DEFORMATION OF THE SURFACES OF THE SODDED AREAS. DO NOT STRETCH OR OVERLAP SOD PIECES. FOLLOWING COMPACTION SCREENED SOIL OF GOOD QUALITY SHALL BE USED TO FILL ALL CRACKS, AND EXCESS SOIL SHALL BE WORKED INTO THE GRASS WITH RAKES OR OTHER SUITABLE EQUIPMENT. ON SLOPES STEEPER THAN 4 TO 1, THE SOD SHALL BE FASTENED IN PLACE WITH SUITABLE WOOD OR METAL PINS TO HOLD THE SOD IN PLACE. ANY DAMAGE BY EROSION OR OTHER CAUSES, THAT MAY HAVE OCCURRED AFTER COMPLETION OF GRADING OPERATIONS SHALL BE REPAIRED, BEFORE COMMENCING WITH THE SODDING OPERATIONS.
- E. IMMEDIATELY BEFORE SODDING, MOISTEN TOPSOIL WITH A FINE SPRAY TO A MINIMUM 1" DEPTH. SOD SHALL NOT BE LAID ON SOIL THAT IS DRY AND POWDERY.
- F. SOD SHALL BE MOIST WHEN LAID AND PLACED ON MOIST GROUND. SOD SHALL BE CAREFULLY PLACED BY HAND, BEGINNING AT THE TOE OF SLOPES AND WORKING UPWARDS. THE LENGTH OF THE STRIPS SHALL BE AT RIGHT ANGLES TO THE FLOW OF SURFACE WATER. ALL JOINTS SHOULD BE TIGHTLY BUTTED AND END JOINTS SHALL BE STAGGERED AT LEAST 12 INCHES. THE SOD SHALL BE IMMEDIATELY PRESSED FIRMLY INTO THE GROUND BY TAMPING OR ROLLING. FILL ALL JOINTS BETWEEN STRIPS WITH FINE SCREENED SOIL. SOD ON SLOPES SHALL BE PEGGED WITH SOD PEGS TO PREVENT MOVEMENT. THE SOD SHALL BE WATERED, MOVED, WEDED, REPAIRED OR OTHERWISE MAINTAINED TO INSURE THE ESTABLISHMENT OF A UNIFORM HEALTHY STAND OF GRASS UNTIL ACCEPTANCE.
- G. WITHIN 2 HOURS AFTER SOD HAS BEEN PLACED, THOROUGHLY WATER TO A MINIMUM DEPTH OF 4". AFTER SOD AND SOIL HAVE DRIED, ROLL SODDED AREAS TO ENSURE GOOD BOND BETWEEN SOD AND SOIL AND TO REMOVE DEPRESSIONS, AND IRREGULARITIES. ROLL SODDED AREAS WITH A ROLLER NOT EXCEEDING 150 LBS. PER FOOT OF ROLLER WIDTH. TOP DRESS AND ROLL AGAIN AS NECESSARY TO CREATE SMOOTH EVEN SURFACE.

PART 4- MAINTENANCE, WARRANTY AND ACCEPTANCE

4.1 MAINTENANCE

- A. MAINTENANCE SHALL CONSIST OF PROVIDING PROTECTION AGAINST TRAFFIC, WATERING TO ENSURE UNIFORM SEED GERMINATION AND TO KEEP SURFACE OF SOIL DAMP, AND REPAIRING ANY AREAS DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS OR EROSION. MAINTENANCE SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO WATERING, WEEDING, CULTIVATING, REMOVAL OF DEAD MATERIAL, LAWN MOWING, FERTILIZING AND OTHER NECESSARY OPERATIONS.
- B. THE CONTRACTOR SHALL MAINTAIN ALL PROPOSED PLANTINGS UNTIL THE DATE OF FINAL ACCEPTANCE BY THE OWNER.

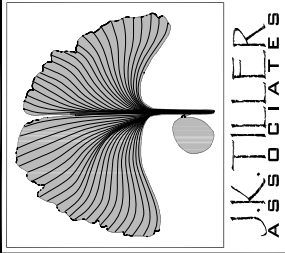
4.2 WARRANTY

- A. ALL GRASSED AREAS SHALL BE GUARANTEED BY THE CONTRACTORS TO BE ALIVE AND HEALTHY FOR A ONE YEAR PERIOD FROM THE DATE OF SUBSTANTIAL COMPLETION ISSUED BY THE OWNER. A FINAL INSPECTION WITH THE OWNER SHALL BE CONDUCTED AT THE END OF THE WARRANTY PERIOD TO DETERMINE IF ANY AREAS REQUIRE REPLANTING. AT THE END OF THE WARRANTY PERIOD, THE SOD SHALL SHOW EVIDENCE OF ROOTING TO THE UNDERLYING SOIL AND SHALL HAVE NO COMPETITIVE WEED GROWTH FROM EITHER THE SOD OR FROM BETWEEN THE THE SOD JOINTS.
- B. ANY GRASSED AREA WHICH IS DEAD OR NOT SHOWING SATISFACTORY GROWTH SHALL BE REPLACED AT CONTRACTORS EXPENSE AT THE END OF WARRANTY PERIOD. ALL REPLACEMENTS SHALL BE ORIGINAL QUALITY AND OF A SIZE EQUAL TO ADJACENT PLANTS OR TREES OF THE SAME KIND. REPLACEMENTS REQUIRED BECAUSE OF VANDALISM, EXCESSIVE USE OR OTHER CAUSES BEYOND THE CONTROL OF THE CONTRACTOR ARE NOT PART OF THIS CONTRACT.

4.3 ACCEPTANCE

- A. BEFORE ACCEPTANCE OF SEEDING PERFORMED BY THE ESTABLISHMENT OF PERMANENT VEGETATION, CONTRACTOR WILL BE REQUIRED TO PRODUCE SATISFACTORY STAND OF PERENNIAL GRASS WHOSE ROOT SYSTEM SHALL BE DEVELOPED SUFFICIENTLY TO SURVIVE DRY PERIODS AND WINTER WEATHER AND BE CAPABLE OF RE-ESTABLISHMENT IN SPRING.
- B. A MINIMUM COVERAGE OF 80% DENSITY OVER 100% OF THE DISTURBED AREA IS REQUIRED FOR SEEDED AREAS BEFORE PROJECT ACCEPTANCE. SPRIG AND SOD AREAS SHALL HAVE 95% COVERAGE OVER 100% OF THE DISTURBED AREA PRIOR PROJECT ACCEPTANCE.

END OF SECTION



J. K. TILLER ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
181 BLUFFTON ROAD, SUITE F203
BLUFFTON, SC 29910
Voice 843.815.4800
Fax 843.815.4802
jtiller@keller.com

LOWCOUNTRY PICKLE BALL
LANDSCAPE PLAN
Town of Bluffton, South Carolina

Sheet Title:
Grasses
Specifications

Job Number:
200549-03

Date:
March 29, 2023

Drawn:
WSC, KD

Approved:

Revisions:
08/30/2023
HCOO Submittal

Sheet

S2
Of 9