# QUALITY CONTROL GRASS SWALE SPECIFICATIONS

- CHECK DAMS CHECK DAMS SHALL BE CONSTRUCTED OF A NON-EROSIVE MATERIAL SUCH AS WOOD, GABIONS, RIPRAP, OR CONCRETE. ALL CHECK DAMS SHALL BE UNDERLAID BY FILTER FABRIC PER STD. & SPEC 3.18: RIP RAP OF VESCH\_1992 EDITION.

  4. WOOD PRESSURE TREATED LOGS OR TIMBERS, OR WATER—RESISTANT TREE SPECIES SUCH AS CEDAR, USER OF SHALL BE UNDERLAID TO SHALL BE UNDERLAID.
- HEMLOCK, SWAMP OAK OR LOCUST.
- HEIRLOCK, SWAMP OAK OR LOCUST.

  GABIONS HEXAGONAL TRIPLE TIMST MESH WITH PVC COATED GALVANIZED STEEL WIRE. THE MAXIMUM LINEAR DIMENSION OF THE MESH OPENING SHALL NOT EXCEED 4.5 INCHES. THE AREA OF THE MESH OPENING SHALL NOT EXCEED 10 SQUARE INCHES. STONE OR RIPRAP FOR GABIONS SHALL BE SIZED ACCORDING TO TABLE 3.13—2. IT SHALL CONSIST OF FIELD STONE OR ROUGH UNHEWN QUARRY STONE. THE STONE SHALL BE HARD AND ANGULAR AND OF A QUALITY THAT WILL NOT DISINTEGRATE WITH EXPOSURE TO WATER OR WEATHERING. THE SPECIFIC GRAVITY OF THE INDIVIDUAL STONES SHALL BE AT LEAST 2.5. RECYCLED CONCRETE MAY BE USED IF IT HAS A DENSITY OF AT LEAST 180 POUNDS PER CUBIC FOOT AND DOES NOT HAVE ANY EXPOSED STEEL OR REINFORCING BARS.

  RIPRAP ALL RIPRAP SHALL CONFORM WITH VESCH STD. & SPEC 3.18; RIPRAP, AND VOOT STANDARDS FOR OPEN GRADED COURSE AGGREGATE.

  CONCRETE ALL CONCRETE SHALL CONFORM WITH VIOLOTOR SCS. SPECIEL/ATIONS.
- d. CONCRETE ALL CONCRETE SHALL CONFORM WITH VOOT OR SCS SPECIFICATIONS.
  UNDERLYING SOIL MEDIUM THE UNDERLYING SOILS SHOULD CONSIST OF THE FOLLOWING.
- a. SOIL USDA ML, SM, OR SC.
  b. SAND ASTM C—33 FINE AGGREGATE CONCRETE SAND; VDOT FINE AGGREAGATE, GRADING
- c. INFILTRATION RATE FOR THE ENGINEERED SOIL SHALL BE 0.27 IN/HR 0.5 IN/HR.
  d. BOTTOM OF SOIL MEDIUM SHALL BE AT LEAST 2 FEET ABOVE WATER TABLE.
  e. AT LEAST ONE (1) TEST FOR EACH GRASS SWALE AREA SHALL BE PERFORMED TO CHECK THE
- INFILTRATION RÀTE FOR ENGINEERED SOIL MIXTURE.
- PEA GRAVEL PEA GRAVEL SHOULD CONSIST OF WASHED ASTM D 448 (% to 1/4 III); VOOT NO. 8 OPEN-GRADED COURSE AGGREGATE.
- 4. UNDERDRAIN AN UNDERDRAIN SYSTEM BELOW THE SWALE BOTTOM SHALL CONSIST OF THE FOLLOWING: a. GRAVEL - AASHTO M-43 (1/2 TO 2 IN), VOOT NO. 3 OPEN-GRADED COURSE AGGREGATE.
- b. PVC PIPE AASHTO M-278, 4-INCH RIGID SCHEDULE 40, PERFORATIONS OF 3/8-INCH DIAMETER AT 6-inch centers, 4 holes per row.
- C. FILTER FABRIC SHALL BE PER SPECIFICATIONS FOUND IN <u>VESCH\_1992</u> EDITION.
  VEGETATION CONTRACTOR SHALL ESTABLISH A DENSE COVER OF MATER TOLERANT, EROSION RESISTANT GRASS WITH FOLLOWING CHARACTERISTICS:

   A DEEP ROOT SYSTEM TO RESIST SCOURING
   A HIGH STEM DENSITY, WITH WELL-BRANCHED TOP GROWTH

- TOLERANCE TO FLOODING
  RESISTANCE TO BEING FLATTENED BY RUNOFF
  AN ABILITY TO RECOVER GROWTH FOLLOWING INUNDATION.
- RECOMMENDED GRASSES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: KENTUCKY-31 TALL FESCUE, REE CANARY GRASS, REDTOP, AND ROUGH-STALKED BLUE GRASS.

# **BIO-RETENTION AREA** SPECIFICATIONS

### 1. SOIL INSTALLATION

SOIL TEXTURE AND STRUCTURE: THE BIORETENTION AREAS SHALL CONTAIN A PLANTING SOIL MIXTURE OF 50% SAND, 30% LEAF COMPOST (FULLY COMPOSTED, NOT PARTIALLY ROTTED LEAVES), AND 20% TOPSOIL TOPSOIL SHALL BE SANDY LOAM OR LOAMY SAND OF UNIFORM COMPOSITION, CONTAINING NO MORE THAN 5% CLAY, FREE OF STONES, STUMPS, ROOTS, OR SIMILAR OBJECTS GREATER THAN ONE INCH, BRUSH, OR ANY OTHER MATERIAL OR SUBSTAINCE WHICH MAY BE HARMFUL TO PLANT GROWTH, OR A HINDRANCE TO PLANT GROWTH OR MAINTENANCE. THE TOP SOIL SHALL BE FREE OF PLANTS OR PLANT PARTS OF BERINDA GRASS, QUACK GRASS, JOHNSON GRASS, MUGNORT, NUTSEDGE, POISON IVY, CANADIAN THISTLE OR OTHERS AS SPECIFED. IT SHALL NOT CONTAIN TOXIC SUBSTANCES HARMFUL TO PLANT GROWTH.

1.2 SOIL TESTING.
THE TOP SOIL SHALL BE TESTED AND MEET THE FOLLOWING CRITERIA:

PH RANGE: 5.0 – 7.0 ORGANIC MATTER: GREATER THAN 1.5 MAGNESIUM (MG): 100+ UNITS

PHOSPHORUS (P205): 150+ UNITS POTASSIUM (K20): 120+ UNITS

SOLUBLE SALTS. NOT TO EXCEED 800 PPM/S MMHOS/CM (SOIL), NOT TO EXCEED 3,000 PPM/2.5 MMHOS/CM

THE FOLLOWING TESTING FREQUENCIES SHALL APPLY TO THE ABOVE SOIL CONSTITUENTS: PH, ORGANIC MATTER: 1 TEST PER 90 CUBIC YARDS, BUT NO MORE THAN 1 TEST PER BIORETENTION AREA MAGNESIUM, PHOSPHORUS, POTASSIUM, SOLUBLE SALTS: 1 TEST PER 500 CUBIC YARDS, BUT NO LESS THAN 1

ONE GRAIN SIZE ANALYSIS SHALL BE PERFORMED PER 90 CUBIC YARDS OF PLANTING SOIL, BUT NO LESS THAN 1 TEST PER BIORETENTION AREA. SOIL TESTS MUST BE VERIFIED BY A QUALIFIED PROFESSIONAL.

A MULCH LAYER SHALL BE PROVIDED ON TOP OF THE PLANTING SOIL. AN ACCEPTABLE MULCH LAYER SHALL INCLUDE SHREDDED HARDWOOD OR SHREDDED WOOD CHIPS OR OTHER SMILLAR PRODUCT OF THE APPROVED MULCH PRODUCTS ALL MUST BE WELL AGED. LIMITION IN COLOR AND EDEF OF EXPECTABLE MULCH PRODUCTS

1.4 SAND THE SAND FOR BIORETENTION BASINS WHEN UTILIZED, SHALL BE ASTU C-33 CONCRETE SAND AND FREE OF

DELETERIOUS MATERIAL.

1.5 SOIL PLACEMENT:

INSTALLATION OF SOILS MUST BE DONE IN A MANNER THAT WILL ENSURE ADEQUATE FILTRATION. AFTER SCARIFYING THE

INSTALLATION OF SOILS MUST BE DONE IN A MANNER THAT WILL ENSURE ADEQUATE FILTRATION. AFTER SCARIFYING THE INVERT AREA OF THE PROPOSED FACILITY, PLACE SOIL AT 8"-12" LIFTS. LIFTS ARE NOT TO BE COMPACTED BUT ARE PERFORMED IN ORDER TO REDUCE THE POSSIBILITY OF EXCESSIVE SETTLEMENT. LIFTS MAY BE LIGHTLY WATERED TO ENCOURAGE NATURAL COMPACTION. AVOID OVER COMPACTION BY ALLOWING TIME FOR NATURAL COMPACTION AND SETTLEMENT. NO ADDITIONAL MANUAL COMPACTION OF SOIL IS NECESSARY. RAVE SOIL MATERIAL AS NEEDED TO LEVEL OUT. OVERFILL ABOVE THE PROPOSED SURFACE INVERT TO ACCOMMODATE NATURAL SETTLEMENT TO PROPER GRADE. DEPENDING UPON THE SOIL MATERIAL, UP TO 2018 NATURAL COMPACTION MAY OCCUR. FOR FACILITIES DESIGNED WITH A LINER, NO SCARFICATION OF THE INVERT AREA IS REQUIRED. IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF THE BIORETENTION AREA AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF ENORETENTION AREAS ARE EXCAVATED USING A LOADER, THE CONTRACTOR SHOULD USE MIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF-TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCING INFILTRATION RATES AND STORAGE VOLUMES AND IS NOT ACCEPTABLE COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE. COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACTURE THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT. ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACK FILLING THE FACILITY AND PLACEMENT OF UNDERDRAIN. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE. WHEN BACK FILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" OR GREATER, DO NOT USE HEAVY ÉQUIPMENT WITHIN THE BIORETENTION BASIN, HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS. IN ORDER TO SPEED UP THE

### OCCUR AFTER THE FIRST PRESOAK, AND ADDITIONAL SETTLEMENT MAY OCCUR SUBSEQUENT TO THE INITIAL WETTING, IF TIME AND CONSTRUCTION SCHEDULING PERMITS, IT IS PREFERABLE TO ALLOW NATURAL SETTLEMENT TO OCCUR WITH THE HELP OF RAIN EVENTS TO PRESOAK THE SOIL MEDIUM. 2. GEOTEXTILE SPECIFICATIONS:

GEOTEXTILE FABRIC SHALL MEET ASTM D-751 (PUNCTURE STRENGTH - 125 LB)

ASTM D-1 117 (MULLEN BURST STRENGTH - 400 PSI)

DEPTH OF THE GRAVEL SHALL NOT EXCEED 12"

RIVER-RUN, WASHED GRAVEL IS PREFERRED.

ASTM D-1682 (TENSILE STRENGTH - 300 LB) FABRIC SHALL HAVE 0.08" THICK E.O.S. OF \$100 SIEVE, AND MAINTAIN 125 GPM PER SQ. FT. FLOW RATE.

3. UNDERDRAIN SPECIFICATION

3.1 UNDERDRAIN MATERIAL TYPES
UNDERDRAIN SYSTEMS SHALL CONSIST OF PVC PIPE MATERIAL. ALTERNATIVE PIPE MATERIAL INCLUDE FLEXIBLE ADS PIPE. OTHER PIPE MATERIALS MAY BE SUBSTITUTED AT THE DESIGNER'S PREROGATIVE AND WITH CONCURRENCE OF THE

NATURAL COMPACTION PROCESS, PRESONKING THE PLACED SOIL MAY BE PERFORMED. SIGNIFICANT SETTLEMENT CAN

3.2 UNDERDRAIN CONNECTIONS.

PIPE JOINTS AND STORM DRAIN STRUCTURE CONNECTIONS SHALL BE ADEQUATELY SEALED TO AVOID PIPING CONDITIONS. (WATER SEEPING THROUGH PIPE OR STRUCTURE JOINTS). PIPE SECTIONS SHALL BE COUPLED USING SUITABLE CONNECTION RINGS AND FLANGES. FIELD CONNECTIONS TO STORMORAIN STRUCTURES AND PIPES SHALL BE SEALED WITH POLYMER GROUT MATERIAL THAT IS CAPABLE OF ADHERING TO SURFACES. UNDERDRAIN PIPE SHALL BE CAPPED (AT STRUCTURE) UNTIL COMPLETION OF SITE. UNDERDRAINS CONNECTED DIRECTLY TO A STORM DRAINAGE STRUCTURE SHALL BE NON-PERFORATED FOR A DISTANCE OF AT LEAST 5' FROM THE STRUCTURE INTERFACE TO AVOID POSSIBLE PIPING

3.3 UNDERORAIN PERFORATIONS PERFORATED PVC PIPE SECTIONS SHALL HAVE PERFORATIONS OF 1/4" OR 3/8" SPACED AT 6" CENTER TO CENTER, ALONG THREE (3) LONGITUDINAL RONS. PERFORATIONS SHALL BE PLACED AT THE INVERT OF PIPE. SOIL AND GRAVEL COVER OVER THE UNDERDRAIN SHALL BE AT LEAST 2" IN DEPTH. PLACEMENT OF 2"-3" GRAVEL BEDDING IS RECOMMENDED BENEATH THE DISCHARGE POINTS.

3.4 OBSERVATION/CLEANOUT STANDPIPE: IN OBSERVATION/CLEANOUT STANDPIPE SHALL BE INSTALLED IN EVERY BIORETENTION FACILITY THAT HAS A DEPTH GREATER THAN 2' AND/OR AN UNDERDRAIN SYSTEM. THE OBSERVATION WELL SHALL CONSIST OF A RIGID NON-PERFORATED PVC PIPE, 4 TO 8 INCHES IN DIAMETER. IT SHOULD BE LOCATED IN THE CENTER OF THE STRUCTURE AND BE CAPPED FLUSH WITH THE GROUND ELEVATION OF THE FACILITY. THE TOP OF THE WELL SHALL BE CAPPED WITH A SCREW, OR FLANGE TYPE COVER TO DISCOURAGE VANDALISM AND TAMPERING, LOCK IS NOT NECESSARY. 3.5 FILTER MATERIALS (GRAVELS):

PLACEMENT OF THE GRAVEL OVER THE UNDERDRAIN SHALL BE DONE WITH CARE. CONTRACTOR SHALL AVOID DROPPING THE GRAVEL FROM HIGH LEVELS FROM A BACKHOE OR FRONT-END LOADER BUCKET. CONTRACTOR SHALL SPILL THE GRAVEL DIRECTLY OVER UNDERDRAIN AND SPREAD MANUALLY. THE CONSTRUCTION SPECIFICATIONS FOR GRAVEL USED PROTECT BIORETENTION UNDERDRAINS FOLLOWS:

GRAVEL STONE SIZE SHALL BE NO GREATER THAN 1/2"- 1 1/2" IN DIAMETER. (BLUE STONE, DOUBLE WASHED, #57 THE USE OF "PEA GRAVEL" IN PLACE OF GEOTEXTILE FABRIC IS OPTIONAL, BUT PREFERRED

3.6 PEA GRAVEL DIAPHRAGM:
CONTRACTOR HAS THE OPTION TO USE PEA GRAVEL DIAPHRAGM INSTEAD OF GEOTEXTILE CLOTHING. IT SHOULD HAVE A MINIMUM THICKNESS OF 3-4" AND A MAXIMUM THICKNESS OF 8". WHERE SITUATIONS PERMIT, A GREATER DEPTH MAY BE APPLIED. A
PERMEABLE FILTER FABRIC SHALL BE PLACED OVER THE UNDERDRAIN GRAVEL BLANKET AND BENEATH THE PEA GRAVEL DIAPHRAGM. 3.7 FILTER FABRIC

THE FILTER FABRIC MUST MEET A MINIMUM PERMITTIVITY RATE OF 75 GAL/MIN/FT2 AND SHALL NOT IMPEDE THE INFILTRATION RATE OF THE SOIL MEDIUM. FILTER FABRIC MAY BE PLACED ALONG THE "WALLS" OF THE FACILITY TO HELP DIRECT THE WATER FLOW DOWNWARD AND TO REDUCE LATERAL FLOWS. FILTER FABRIC MUST BE PLACED ALONG THE SIDEWALLS, (FROM THE SUBGRADE AND OVER THE STONE) WHEN INSTALLING A FACILITY IN A MEDIAN STRIP OR PARKING LOT LANDSCAPE ISLAND TO PREVENT LATERAL FLOW UNDER PAVEMENT.

### 4. BIORETENTION AREA PLANTING SPECIFICATIONS

- 1. ROOT STOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT FROM THE SOURCE TO THE JOB SITE AND UNTIL PLANTED.

  2. WALLS OF PLANTING PIT SHALL BE DUG SO THAT THEY ARE VERTICAL.
- 3. THE DIAMETER OF THE PLANTING PIT MUST BE A MINIMUM OF SIX INCHES (6") LARGER THAN THE DIAMETER OF THE BALL OF
- 4. THE PLANTING PIT SHALL BE DEEP ENOUGH TO ALLOW 1/8 OF THE OVERALL DIMENSION OF THE ROOT BALL TO BE ABOVE GRADE. LOOSE SOIL AT THE BOTTOM OF THE PIT SHALL BE TAMPED BY HAND,
- 5. THE APPROPRIATE AMOUNT OF FERTILIZER IS TO BE PLACED AT THE BOTTOM OF THE PIT (SEE BELOW FORFERTILIZATION RATES).
  6. THE PLANT SHALL BE REMOVED FROM THE CONTAINER AND PLACED IN THE PLANTING PIT BY LIFTING AND CARRYING THE PLANT BY ITS' BALL (NEVER LIFT BY BRANCHES OR TRUNK). 7. SET THE PLANT STRAIGHT AND IN THE CENTER OF THE PIT SO THAT APPROXIMATELY 1/8 OF THE DIAMETER OF THE ROOT BALL
- IS ABOVE THE FINAL GRADE. 8. BACKFILL PLANTING PIT WITH EXISTING SOIL.
- 9. MAKE SURE PLANT REMAINS STRAIGHT DURING BACKFILLING PROCEDURE. 10. NEVER COVER THE TOP OF THE BALL WITH SOIL MOUND SOIL AROUND THE EXPOSED BALL
- 1. TREES SHALL BE BRACED BY USING 2° BY 2° WHITE OAK STAKES, STAKES SHALL BE PLACED PARALLEL TO WALKWAYS AND BUILDINGS, STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL, UTILIZING HOSE AND WIRE THE TREE IS BRACED TO THE STAKES.

  12. BECAUSE OF THE HIGH LEVELS OF NUTRIENTS IN STORMWATER RUNOFF TO BE TREATED, BIORETENTION BASINPLANTS SHOULD NOT REQUIRE CHEMICAL FERTILIZATION.

### 5. Inspection requirements:

. THE CONTRACTOR SHALL ARRANGE A "PRECONSTRUCTION MEETING" WITH THE OWNER AND ARCHITECT/ ENGINEER PRIOR TO BEGINNING WORK ON THE BIORETENTION FACILITY.

2. At the completion of excavation to inspect sub grade preparation. DURING UNDERDRAIN AND FILTER INSTALLATION.

4. BACK FILL OF SOIL INTO THE BIORETENTION AREAS. SOIL CERTIFICATIONS FOR BACK FILL ARE REQUIRED. 5. THE FINAL TOPSOIL LAYERS SHOULD BE THOROUGHLY WETTED ACHIEVE SETTLEMENT OF THE SOIL/SAND BACKFILL MIX. 8. ADDITIONAL SOIL BACKFILL SHOULD BE PLACED AS REQUIRED TO ACHIEVE THE DESIGN TOP SURFACE ELEVATIONS.

7. THE WORK SHALL BE INSPECTED BY THE OWNER/ARCHITECT PRIOR TO FINAL STABILIZATION AND PLANTING. B. SEDMENT & EROSION CONTROL PRACTICES MAY BE REMOVED UPON APPROVAL BY THE COUNTY INSPECTOR

### LANDSCAPE MATERIALS

SYMBOL & KEY	SCIENTIFIC NAME	COMMON NAME	SIZE	CONTAINER	QUANTITY
	Aronia arbutifolia 'Brilliantissima'	BRILLIANT BEAUTYBERRY	18"-24"	#3	15
O AC	Amelanchier canadensis	SHADBLOW SERVICEBERRY	6' CLUMP	<i>₿&amp;₿</i>	4
	liex glabra	INKBERRY	18"-24"	<b>#</b> 3	6
NS NS	Nyssa sylvatica	BLACK GUM	1.5" CAL.	8&8	6
O NL	Viburnum lentago	NANNYBERRY	18"-24"	<b>#</b> 3	10
EE NOTE #1	Lotus corniculatus	BIRDSFOOT TREFOIL	SEED OR PLUG		1,800 SF
	Deschampsia caespitosa	TUFTED HAIRGRASS	SEED OR PLUG		500 SF
	Panicum virgatum	SWITCH GRASS	SEED OR PLUG		300 SF

#### LANDSCAPE NOTES:

- 1. NO SYMBOL IS SHOWN ON THE PLANS FOR Lotus corniculatus (BIRDSFOOT TREFOIL), IT SHALL BE PLANTED UNDER TREES AND WITHIN THE LIMITS OF THE BIORETENTION BASIN WHERE NO OTHER SHRUB OR GROUNDCOVER IS INDICATED.
- 2. ALL TREE MATERIALS SHALL MEET THE MINIMUM REQUIREMENTS AS DESCRIBED IN THE MOST RECENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK. ANSI 260.1. AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.

LUMSDEN ASSOCIATES, P.C. ENGINEERS-SURVEYORS-PLANNERS ROANOKE, VIRGINIA

- 3. ALL SHRUB MATERIALS SHALL MEET THE MINIMUM REQUIREMENTS AS DESCRIBED IN THE MOST RECENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK. ANSI 260.1. AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. SHRUB
- MATERIALS SHALL BE WELL-ROOTED AND A MINIMUM OF 3-GALLON CONTAINER SIZE. 4. AT THE TIME OF DELIVERY, ALL PLANT MATERIALS NOT IMMEDIATELY PLACED IN THEIR FINAL PLANTING LOCATION MUST BE STORED IN A SHADED LOCATION WITH ADEQUATE AIR CIRCULATION, AND BE KEPT MOIST.
- 5. THIS PLAN IS TO SATISFY THE MINIMUM REQUIREMENTS OF THE FRANKLIN COUNTY ZONING ORDINANCE. THE DEVELOPER MAY INCREASE PLANTING DENSITY BEYOND THE MINIMUM

