1. THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES SHALL OCCUR PRIOR TO AND CONCURRENT WITH LAND DISTURBING ACTIVITIES.

2. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL AND LOCAL CODES.

3. ALL MATERIALS AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH CITY OF DALTON STANDARDS AND THE GEORGIA DEPARTMENT OF TRANSPORTATION, AS APPLICABLE.

4. DEVIATION FROM THESE PLANS AND SPECIFICATIONS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.

5. CONTRACTOR IS RESPONSIBLE FOR NOTIFICATIONS AND LIAISON WITH UTILITY COMPANIES IN THE PROCESS OF LOCATING, RELOCATION AND TIE—IN TO PUBLIC UTILITIES. ALSO, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL INSPECTORS, INCLUDING COUNTY AND CITY INSPECTORS PRIOR TO BEGINNING SITE CONSTRUCTION.

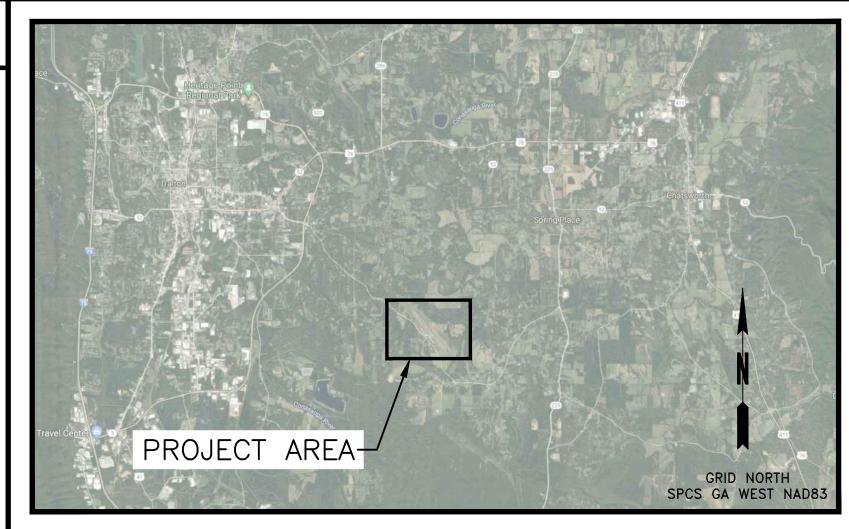
6. THERE MAY BE ADDITIONAL UTILITIES THAN THOSE SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS SHOWN AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS AND NECESSARY INVERTS OF ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE DEPARTMENT OF THE UTILITY COMPANIES. THE CONTRACTOR IS RESPONSIBLE FOR THE NOTIFICATIONS AND LIAISON WITH UTILITY COMPANIES IN THE PROCESS OF LOCATING. RELOCATING AND TIE—IN TO THE PUBLIC UTILITIES.

7. IF CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, THEY SHALL, AT THEIR OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE ENGINEER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.

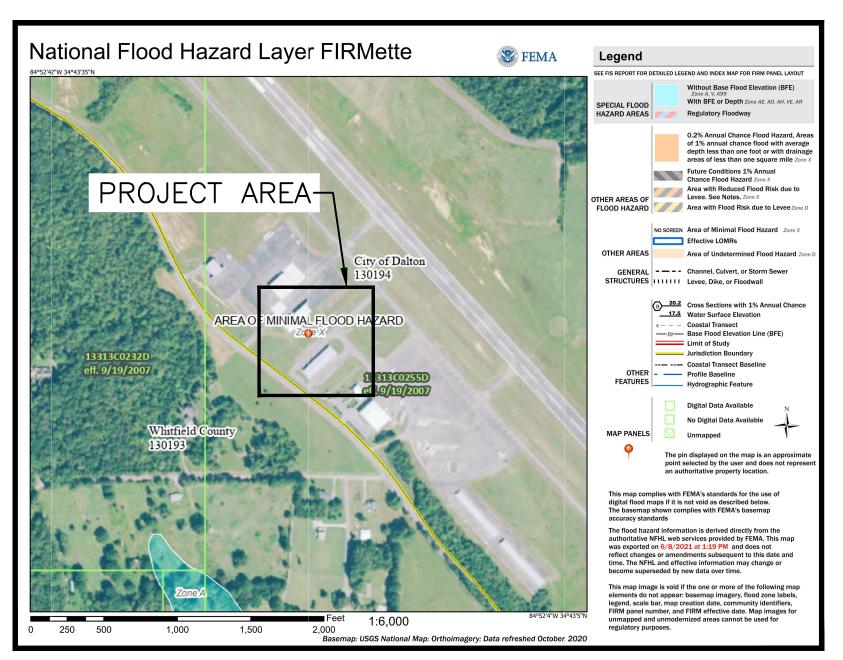
8. LAND DISTURBANCE PERMIT TO BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION.

9. STUMPS AND CONSTRUCTION DEBRIS SHALL BE DEPOSITED IN A PROPERLY PERMITTED LANDFILL.

10. ALL APPROPRIATE SITE WORK SHALL CONFORM TO ADA STANDARDS.



LOCATION MAP NTS



FEMA STATEMENT

THIS PROPERTY IS NOT LOCATED IN A 100 YEAR FLOOD HAZARD AREA BASED ON THE FLOOD INSURANCE RATE MAP FOR THIS AREA. THE MAP NUMBER FOR THIS AREA IS 13313C0255D AND THE DATE OF SAID MAP IS SEPTEMBER 19, 2007.

REQUIRED ENGINEER'S INSPECTION

AS PER THE GEORGIA DEPARTMENT OF NATURAL RESOURCES ENVIRONMENTAL PROTECTION DIVISION, NPDES GENERAL PERMITS FOR CONSTRUCTION ACTIVITY GAR100001, GAR100002, & GAR100003; PART IV, A., 7 REQUIRES THE EROSION CONTROL PLAN DESIGN PROFESSIONAL TO MAKE A SITE INSPECTION. FOR STAND ALONE PROJECTS THAT BEGIN CONSTRUCTION ACTIVITY AFTER THE EFFECTIVE DATE OF THIS PERMIT, THE PRIMARY PERMITEE MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN, EXCEPT WHEN THE PRIMARY PERMITEE HAS REQUESTED IN WRITING AND EPD HAS AGREED TO AN ALTERNATE DESIGN PROFESSIONAL, TO INSPECT THE INSTALLATION OF THE CONTROL MEASURES (BMP'S) WHICH THE DESIGN PROFESSIONAL DESIGNED WITHIN SEVEN (7) DAYS AFTER THE INITIAL CONSTRUCTION ACTIVITIES COMMENCE. FOR CONSTRUCTION ACTIVITIES WHERE CONSTRUCTION BEGAN ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THE INSPECTION IS TO OCCUR WITHIN SEVEN (7) DAYS AFTER THE PLAN HAS BEEN IMPLEMENTED. THE DESIGN PROFESSIONAL SHALL DETERMINE IF THESE BMP'S HAVE BEEN INSTALLED AND ARE BEING MAINTAINED AS DESIGNED. THE DESIGN PROFESSIONAL SHALL REPORT THE RESULTS OF THE INSPECTION TO THE PRIMARY PERMITTEE WITHIN SEVEN (7) DAYS AND THE PERMITEE MUST CORRECT ALL DEFICIENCIES WITHIN TWO (2) BUSINESS DAYS OF RECEIPT OF THE INSPECTION REPORT FROM THE DESIGN PROFESSIONAL UNLESS WEATHER RELATED SITE CONDITIONS ARE SUCH THAT ADDITIONAL TIME IS REQUIRED.



OWNER/DEVELOPER:
CITY OF DALTON
300 W WAUGH ST
DALTON, GA 30720
TEL: 706-278-9500

24 HOUR CONTACT:
ANDREW WIERSMAN
TEL: (706) 913-7423

DALTON MUNICIPAL AIRPORT

HANGAR SITE DEVELOPMENT

PARCEL NUMBER 09-322-01-000 ZONED GA

ADDRESS: 4485 AIRPORT RD SE,

DALTON, GA 30721

WHITFIELD COUNTY, GA

TOTAL AREA: 354 ACRES
DISTURBED AREA: 0.57 ACRES

OWNER:

NAME: CITY OF DALTON

ADDRESS: 300 W WAUGH ST

DALTON, GA 30720

PHONE: 706-278-9500



200 NORTH COBB PARKWAY, BL. MARIETTA, GA 36
PHONE: (770) 971–5407 FA)
THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHAN WHATSOEVER WITHOUT FIRST OBTAINING THE EXPRESS WRITTE

DPMENT
323
ECTION

HANGAR SITE DEVELOPMEN LAND LOT(S) 322 & 323 OF THE 09 DISTRICT, 01 SECTION

NO. REVISION REFERENCE DATE

SEAL

ORGINETION

No. 031264
PROFESSIONAL
KNET

KNET

ORGINETION

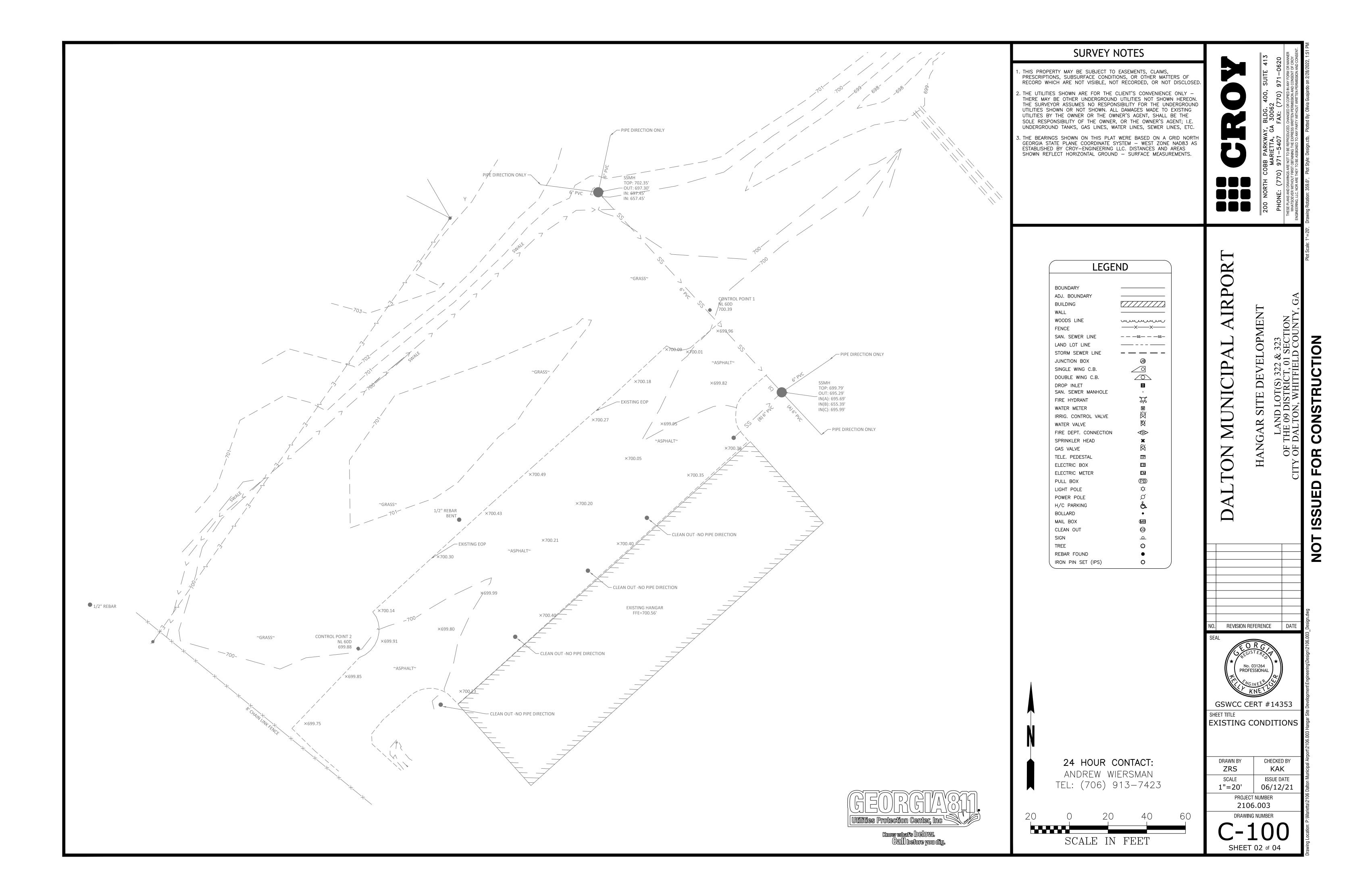
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KAK

ISSUE DATE

AS SHOWN | 06/12/21

2106.003

| | | | | CITY OF DALTON, WHITFIELD



Know what's below.

Call before you dig.

THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF GEORGIA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS AND DETAILS (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIA AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED I THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIAT APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.

EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATIO AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES. NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.

ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND DESIGN PROFESSIONAL BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.

ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND DESIGN PROFESSIONAL DIRECTLY FROM THE TESTING AGENCY.

EROSION NOTES

OPERATION AND MAINTENANCE OF THE DAM. THE STATE LAW CONTINUES

PREVENT THE GROWTH OF TREES OR BRUSH ON THE EMBANKMENT

WHERE PERMANENT OR TEMPORARY PONDING OF WATER MAY CAUSE

WEAKENING AND/OR FAILURE ALONG THE ROOTS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF GEORGIA PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.

ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS

ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL B REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.

GRADING NOTES

THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATE AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.

WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.

ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.

STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE

FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO GDOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT

ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.

ALL CUT OR FILL SLOPES SHALL BE A MAXIMUM OF 3 (HORIZONTAL) (VERTICAL) IN CUT AND 3:1 IN FILL CONDITIONS UNLESS OTHERWISE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE BARRIERS.

THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL

SITE NOTES

REVISION REFERENCE

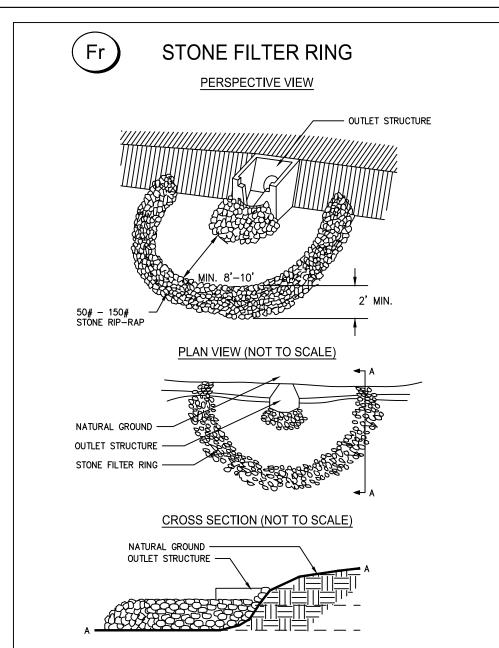
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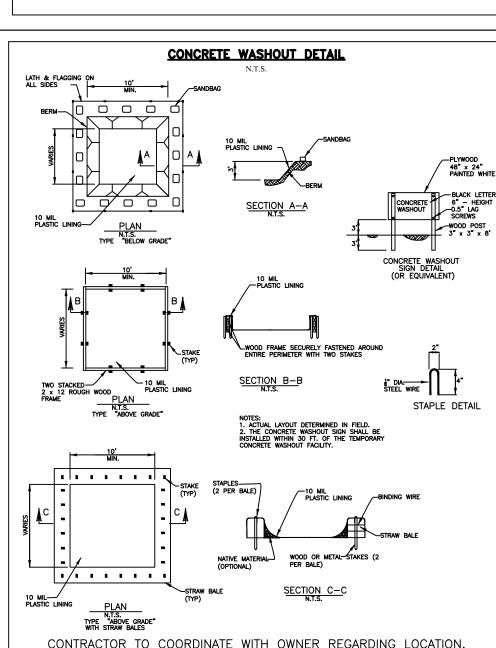
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SITE, GRADING, DRAINAGE, & EROSION CONTROL

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ZRS	KAK									
SCALE 1"=20'	ISSUE DATE									
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PROJECT NUMBER										

2106.003





DS1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

SPECIFICATIONS

This standard applied to grades or cleared areas where seedings may not have a suitable growing

season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

and sediment barriers.

Site Preparation 1. Grade to permit the use of equipment for applying and anchoring mulch.

2. Install needed erosion control measures as required such as dikes, diversions, berms, terraces

3. Loosen compact soil to a minimum depth of 3 inches. Mulching Materials

Select one of the following materials and apply at the depth indicated:

1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application. 2. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch.

This method of mulching can greatly reduce erosion control costs. 3. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and reused.

When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed

1. Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanical 2. If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the

Anchoring Mulch

decomposition of the organic mulches.

3. Apply polyethylene film on exposed areas.

1. Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special 'packer disk'. Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. Straw or hay mulch shall be anchored immediately after application.

Straw or hay mulch spread with special blower-type equipment may be anchored. Tackifiers, binders and hydraulic mulch with tackifier specifically designed for taking straw can be substituted for emulsified asphalt. Please refer to specification Tackifiers and binders. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.

. Netting of the appropriate size shall be used to anchor *wood waste*. Openings of the netting shall not be larger than the average size of the wood waste chips. 3. Polyethylene film shall be anchor trenched at the top as well as incrementally as necessary.

(Sd1-S) SILT FENCE - TYPE SENSITIVE FRONT VIEW 4' MAX. O.C. ---(WOVEN WIRE FENCE NOTES: 1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

SPECIFICATIONS

Grading and Shaping Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others. No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

Seedbed Preparation

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or hand-seeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall. When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

Lime and Fertilizer

Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at determined by soil test for pH. Quick acting lime should be incorporated to modify pH during the germination period. Bio stimulants should also be considered when there is less than 3% organic matter in the soil. Graded areas require lime application. Soils must be tested to determine required amounts of fertilizer and amendments. Fertilizer should be applied before land preparation and incorporated with a disk, ripper, or chisel. On slopes too steep for, or inaccessible to equipment, fertilizer shall be hydraulically applied, preferably in the first pass with seed and some hydraulic mulch, then topped with the remaining required application rate.

Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker-seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand. See table below.

Temporary vegetation can, in most cases, be established without the use of mulch provided there is little to no erosion potential. However, the use of mulch can often accelerate and enhance germination and vegetation establishment. Mulch without seeding should be considered for short term protection. Refer to Ds1 - Disturbed Area Stabilization (With Mulching Only).

During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

PLANT, PLANTING RATES, AND PLANTING DATES FOR TEMPORARY COVER OR COMPANION CROPS

CDECVEC		DCAST TES					NT R S								
SPECIES	PER	PER 1000	PIEDMONT REGION												REMARKS
	ACRE	SQ. FT.	J	F	M	A	M	J	J	A	S	0	N	D	
BARLEY (Horduem vulgare) alone	144 lbs.	3.3 lbs.													14,000 seed per pound Winterhardy. Use or productive soils.
in mixture	24 lbs.	0.6 lb.	J	F	M	A	M	J	J	A	S	o	N	D	productive sons.
LESPEDEZA,ANNUAL (Lespedeza striata) alone in mixture	40 lbs. 10 lbs.	0.9 lb. 0.2 lb.	J	F	М	A	М	J	J	A	s	О	N	D	200,000 seed per pour May volunteer for several years. Use inoculant EL.
LOVEGRASS, WEEPING (Horduem vulgare) alone in mixture	4 lbs. 2 lbs.	0.1 lb. 0.05 lb.	J	F	M	A	M	J	J	A	s	o	N	D	1,500,000 seed per pound. May last for several years. Mix wi Sericea lespedeza.
MILLET, BROWNTOP (Panicum fascicalatum) alone in mixture	40 lbs. 10 lbs.	0.9 lb. 0.2 lb.	J	F	М	A	М	J	J	A	s	О	N	D	137,000 seed per pound Quick dense cover. Wil provide too much competition in mixtures seeded at high rates.
MILLET, PEARL (Pennesetum glaucum) alone	50 lbs.	1.1 lb.	J	F	M	A	M	J	J	A	s	o	N	D	88,000 seed per pound Quick dense cover. May reach 5 feet in height. N recommended for mixtur
OATS (Avena sativa) alone in mixture	128 lbs. 32 lbs.	2.9 lbs. 0.7 lb.	J	F	M	A	M	J	J	A	s	О	N	D	13,000 seed per poun Use on productive soi Not as winterhardy a rye or barley.
RYE (Secale cereale) alone in mixture	168 lbs. 28 lbs.	3.9 lbs. 0.6 lb.	J	F	М	A	М	J	J	III A	s	О	N	D	18,000 seed per poun Quick cover. Drough tolerant and winterhardy.
RYEGRASS, ANNUAL (Lolium temulentum) alone	40 lbs.	0.9 lb.	J	F	 M	 A	M	J	J	A	s	o	N	D	227,000 seed per pour Dense cover. Very competitive and is not be used in mixtures
SUDANGRASS (Sorghum Sudanese) alone	60 lbs.	1.4 lb.	J	F	М	A	M	J	J	A	s	o	N	D	55,000 seed per poun Good on droughty site Not recommended for mixtures.
WHEAT (Triticum Aestivum) alone in mixture	180 lbs. 30 lbs.	4.1 lbs. 0.7 lb.	J	F	М	A	М	J	J	A	s	0	N	D	15,000 seed per poun

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

Seedbed Preparation Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used (but is strongly recommended for any seeding process, when possible). When conventional seeding is to be used, seedbed preparation will be

Broadcast Plantings 1. Tillage, at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches; alleviate compaction; incorporate lime and fertilizer; smooth and firm the soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.

Γillage may be done with any suitable equipment 3. Tillage should be done on the contour where feasible. 4. On slopes too steep for the safe operation of tillage equipment, the soil surface shall be pitted or trenched across the slope with appropriate hand tools to provide two places 6 to 8 inches apart in which seed may lodge and germinate. hydraulic seeding may also be used.

5. Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble For nursery stock plants, holes shall be large enough to accommodate roots without crowding. 7. Where pine seedlings are to be planted, subsoil under the row 36 inches deep on the contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September.

All legume seed shall be inoculated with appropriate nitrogen-fixing bacteria. the innoculant shall be a pure culture prepared specifically for the seed species and used within the dates on the container. A mixing medium recommended by the manufacturer shall be used to bond the innoculant to the seed. for conventional

seeding, use twice the amount of innoculant recommended by the manufacturer. For hydraulic seeding, four times the amount of innoculant recommended by the manufacturer shall be used. All inoculated seed shall be protected from the sun and high temperatures and shall be planted the same day inoculated. No

Mix the seed (innoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.

inoculated seed shall remain in the hydroseeder longer than one hour.

plant shall be set in the hole.

Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a culti-packer-seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other

No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment, the seed must be uniformly distributed and planted at the proper depth. Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots. Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface.

Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the

Mulch is required for all permanent vegetation applications. mulch applied to seeded areas shall achieve 75% to 100% soil cover. When selecting a mulch, design professionals should consider the mulch's functional longevity, vegetation establishment enhancement, and erosion control effectiveness. Select the mulching material from the following and apply as

1. Dry straw or dry hay of good quality and free of weed seeds can be used. dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.

2. Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Dry straw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding. One thousand pounds of wood cellulose or wood pulp fiber, which includes a tackifier, shall be used with hydraulic

seeding on slopes 3/4:1 or steeper. 4. Sericea Lespedeza hay containing mature seed shall be applied at a rate of three tons per acre. 5. Pine straw or pine bark shall be applied at a thickness of 3 inches for bedding purposes. other suitable materials in

sufficient quantity may be used where ornamentals or other ground covers are planted. This is **NOT** appropriate for 6. When using temporary erosion control blankets or block sod, mulch is not required. 7. Bituminous treated roving may be applied on planted areas, slopes, in ditches or dry water-ways to prevent erosion.

Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must meet Georgia Department of Transportation specifications. Wood cellulose and wood pulp fibers shall not contain germination or growth inhibiting factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual metering and aid in uniform application

Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting the mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of the soil

Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic seeding equipment.

Anchor straw or hay mulch immediately after application by one of the following methods: Hay and straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk" or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or

2. 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be plowed into the soil. . Synthetic tackifiers, binders or hydraulic mulch specifically designed to tack straw, shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's

specifications. All tackifiers, binders or hydraulic mulch specifically designed to tack straw should be verified nontoxic nrough EPA 2021.0 testing. Refer to Tackifiers-Tac 4. Rye or wheat can be included with fall and winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to one-half bushel per acre. 5. Plastic mesh or netting with mesh no larger than one inch by one inch may be needed to anchor straw or hay mulch on

unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's

Mulch is used as a bedding material to conserve moisture and control weeds in nurseries, ornamental beds, around shrubs, and on bare areas on lawns.

Grass Hay Wood Waste 4" TO 6

Irrigation will be applied at a rate that will not cause runoff.

Topdressing will be applied on all temporary and permanent (perennial) species planted alone or in mixtures with other species. Recommended rates of application are listed in table 6-5.1.

Second Year and Maintenance Fertilization

Lime Maintenance Application Apply one ton of agricultural lime every 4 to 6 years or as indicated by soil tests. Soil tests can be conducted to determine more accurate requirements, if desired. Use And Management

Mow Sericea Lespedeza only after frost to ensure that the seeds are mature. mow between November and march. Bermudagrass. Bahia grass and Tall Fescue may be mowed as desired. Maintain at least 6 inches of top growth under any use and management. Moderate use of top growth is beneficial after establishment. Exclude traffic until the plants are well established. Because of the quail nesting season, mowing should not take place between may and September.

FERTILIZER REQUIREMENTS

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	NITROGEN TOP DRESSING RATE
1. Cool season grasses	First	6-12-12	1500 lbs./ac.	50-100 lbs./ac.
	Second	6-12-12	1000 lbs./ac.	
	Maintenance	10-10-10	400 lbs./ac.	30 lbs./ac.
2. Cool season grasses	First	6-12-12	1500 lbs./ac.	0-50 lbs./ac.
and legumes	Second	0-10-10	1000 lbs./ac.	
	Maintenance	0-10-10	400 lbs./ac.	
3. Ground covers	First	10-10-10	1300 lbs./ac.	
	Second	10-10-10	1300 lbs./ac.	
	Maintenance	10-10-10	1100 lbs./ac.	
4. Pine seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole	
5. Shrub Lespedeza	First Maintenance	0-10-10 0-10-10	700 lbs./ac. 700 lbs./ac.	
6. Temporary cover crops seeded alone	First	10-10-10	500 lbs./ac.	30 lbs./ac.
7. Warm season	First	6-12-12	1500 lbs./ac.	50-100 lbs./ac.
grasses	Second	6-12-12	800 lbs./ac.	50-100 lbs./ac.
	Maintenance	10-10-10	400 lbs./ac.	30 lbs./ac.
8. Warm season	First	6-12-12	1500 lbs./ac.	50 lbs./ac.
grasses and legumes	Second	0-10-10	1000 lbs./ac.	
	Maintenance	0-10-10	400 lbs./ac.	

PLANT, PLANTING RATES, AND PLANTING DATES FOR PERMANENT COVER

PLANTING DATES

	RA'							IG UT							
SPECIES	PER					K S M(REMARKS							
	ACRE	1000 SQ. FT.	J	F	M	A	M	J	J	A	S	o	N	D	
BAHIA, PENSACOLA (Paspalum notatum) alone or w/ temp. cover	60 lbs.	1.4 lb.													166,000 seed per pound. Low growing. Sod forming Slow to establish. Plant
with other perennials BAHIA, WILMINGTON	30 lbs.	0.7 lb.	J	F	M	A	M	J	J	A	S	O	N	D	with a companion crop. Will spread into bermuda
(Paspalum notatum) alone or w/ temp. cover with other perennials	60 lbs. 30 lbs.	1.4 lb. 0.7 lb.	J	F	M	A	M	J	J	A	$ \mathbf{s} $	o	N	D	pastures and lawns. Mis with Sericea lespedeza or weeping lovegrass.
BERMUDA, COMMON (Cynodon dactylon) alone with other perennials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb.	J	F	м	A	М	J	J	A	s	o	N	D	1,787,000 seed per pound. Quick cover. Low growing and sod forming. Full sun. Good for athletic fields.
BERMUDA, COMMON (Cynodon dactylon) with temporary cover with other perennials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb.	J	E	M	٨	М		J			О	N	D	Plant with winter annuals. Plant with tall fescue.
BERMUDA SPRIGS (Cynodon dactylon) Coastal, Common, or Tift 44	40 cu. ft.	0.9 cu. ft.	j J		M		M		J		S	0	N	D	A cubic foot contains approximately 650 sprigs. A bushel contains 1.25 cubic feet or approximately 800 sprigs.
CENTIPEDE (Eremochloa ophiuroides)	Block s	od only													Drought tolerant. Full sun or partial shade. Effective adjacent to concrete and in concentrated flow areas. Irrigation is needed until fully established. Do not plant near pastures
CROWNVETECH (Coronilla varia) with winter annuals or	15 lbs.	0.3 lb.	J	F	M	A	M	J	J	A	S	O	N	D	Winterhardy as far north as Athens an Atlanta. 100,000 seed per pound. Dense growth Drought tolerant and fire resistant. Attractive rose, pink, and white blossoms spring to late fall. Mix with
cool season grasses FESCUE, TALL			J	F	M	A	M	J	J	A	s	o	N	D	30 pounds of Tall fescue or 15 pound or rye. Inoculate seed with M inoculan 227,000 seed per pound. Use alone only on better sites. Not for droughty
(Festuca arundinacea) alone with other perennials	50 lbs. 30 lbs.	1.1 lb. 0.7 lb.	J	F	M	A	M	J	J	A	s	o	N	D	soils. Mix with perennial lespedezas o crownvetch. Apply topdressing in spring following fall plantings. Not fo heavy use areas or athletic fields.
LESPEDEZA, SERICA (Lespedeza cuneata) scarified unscarified seed-bearing hay	60 lbs. 75 lbs. 3 tons	1.4 lbs. 1.7 lbs. 138 lbs.													350,000 seed per pound. Widely adapted. Low maintenance. Mix with weeping lovegrass, commo- bermuda, bahia, or tall fescue. Takes 2 to 3 years to become fully established. Excellent on
	3 10115	150 100.	J	F	M	A	M	J	J	A	s	0	N	D	roadbanks. Inoculate seed with EL inoculant. 300,000 seed per pound. Height of
LESPEDEZA (Lespedeza virgata DC) or (Lespedeza cuneata G. Don) scarified unscarified	60 lbs. 75 lbs.	1.4 lbs. 1.7 lbs.													growth is 18 to 24 inches. Advantageous in urban areas. Spreading-type growth has bronze coloration. Mix with Weeping lovegrass, Common bermuda, bahia, tall fescue or winter annuals. Do not mix with Sericea lespedeza. Slow to develop solid stands. Inoculate seed
LESPEDEZA, SHRUB (Lespedeza bicolor) (Lespedeza thumbergii)		-	J	F	M	A	M	J	J	A	S	O	N	D	with EL inoculate. Provide wildlife food and cover.
plants LOVEGRASS, WEEPING (Eragrostis curvula) alone	3' 2 4 lbs.	0.1 lb.	J	F	M	A	M	J	J	A	S	О	N	D	1,500,000 seed per pound. Quick cover. Drought tolerant. Grows well with
with other perennials PANICGRASS,	2 lbs.	0.05 lb.	J	F	M	A	M	J	J	A	s	o	N	D	Sericea lespedeza on roadbanks. Grows well on coastal sand
ATLANTIC COASTAL (Panicum amarum var. amarulum)	20 lbs.	0.5 lb.	J	F	M	A	M	J	J	A	s	o	N	D	dunes, borrow areas, and grave pits. Provides winter cover for wildlife. Mix with Sericea lespedeza except on sand dunes
REED CANARY GRASS (Phalaris arundinacea) alone with other perennials	50 lbs. 30 lbs.	1.1 lbs. 0.7 lb.	J	F	М	A	М	J	J	A	s	o	N	D	Grows similar to tall fescue.
SUNFLOWER, 'AZTEC' MAXIMILLIAM (Helianthus maximiliani)	10 lbs.	0.2 lb.	J		м		М	J	J	A	s		.,	D	227,000 seed per pound. Mix with weeping lovegras or other low-growing grasses or legumes.

DURABLE SHRUBS AND GROUND COVERS FOR PERMANENT COVER

Common Name	Scientific Name	Mature Height	Plant Spacing	Comments					
Albelia	Abelia grandiflora	3-4 ft.	5 ft.	Also a prostrate form 2 feet high. Sur semi-shade. Semi-evergreen.					
Carolina Yellow Jessamine	Gelsemium sempervirens	low	3 ft.	Vine. Yellow, trumpet-like flowers. Hardy, one of best vines. Evergreen. Native to Georgia.					
Carpet Blue	Ajuga reptans	2-4 in.	3 ft.	Needs good drainage, partial shade. I or white flowers. Evergreen.					
Bearberry Cotoneaster	Cotoneaster dammeri	2-4 in.	5 ft.	White flowers, red fruit. Sun. Evergr					
Ground Cover Cotoneaster	Cotoneaster salicifoluis 'Repens'	1-2 ft.	5 ft.	White flowers, red fruit. Sun. Evergr					
Rock Cotoneaster	Cotoneaster horizontalis	1-2 ft.	5 ft.	Semi-evergreen. Sun.					
Virginia Creeper	Parthenocissue quinquefolia	low	3 ft.	Red in fall. Vine. Deciduous. Native Georgia.					
Daylilly	Hemerocallis spp.	2-3 ft.	2 ft.	Many flower colors. Full sun. Very F					
English Ivy	Hedera helix	low	3 ft.	Shade only. Climbs.					
Compacta Holly	Ilex crenata 'Compacta'	3-4 ft.	5 ft.	Sun, semi-shade.					
Chinese Holly	Ilex cornuta 'Rotunda'	3-4 ft.	5 ft.	Very durable. Sun, semi-shade.					
Dwarf Burford Holly	Ilex burfordii 'Nana'	5-8 ft.	8 ft.						
Dwarf Yaupon Holly	Ilex vomitoria 'Nana'	3-4 ft.	5 ft.	Very durable, sun, semi-shade.					
Repandens Holly	Ilex crenata 'Repandens'	2-3 ft.	5 ft.	Sun, semi-shade.					
Andorra Juniper	Juniperus horizontalis 'Plumosa'	2-3 ft.	5 ft.	Excellent for slopes. Sun.					
Andorra Compacta Juniper	Juniperus horizontalis 'Plumosa compacta'	1-2 ft.	5 ft.	More compact than andora.					
Blue Chip Juniper	Juniperus horizontalis 'Blue Chip'	8-10 in.	4 ft.						
Blue Rug Juniper	Juniperus horizontalis 'Wiltonii'	4-6 in.	3 ft.	Very low. Sun.					
Parsons Juniper	Juniperus davurica 'Expansa' (Squamata Parsoni)	18-24 in.	5 ft.	One of the best, good winter cover.					
Pfitzer Juniper	Juniperus chinensis 'Pfitzerana'	6-8 ft.	6 ft.	Needs room.					
Prince of Wales Juniper	Juniperus horizontalis 'Prince of Wales'	8-10 in.	4 ft.	Feathery appearance.					
Sargent Juniper	Juniperus chinensis 'Sargentii'	1-2 ft.	5 ft.	Full sun. Needs good drainage. Good winter color.					
Shore Juniper	Juniperus conferta	2-3 ft.	5 ft.	Emerald Sea or Blue Pacific cultivard good.					
Liriope	Liriope muscari	8-10 in.	3 ft.						
Creeping Liriope	Liriope spicata	10-12 in.	1 ft.	Spreads by runners.					
Big Leaf Periwinkle	Vinca major	12-15 in.	4 ft.	Lilac flowers in spring. Semi-shade.					
Common Periwinkle	Vinca minor	5-6 in.	4 ft.	Lavender-blue flowers in spring. Semi-shade.					
Cherokee Rose	Rosa laevigata	2 ft.	5 ft.	Rampant grower. Not for restricted s					
Memoria Rose	Rosa weuchuriana	2 ft.	5 ft.	Rampant grower.					
St. Johnswort	Hypericum calycenum	8-12 in.	3 ft.	Semi-shade.					
Anthony Waterer Spirea	Spirea bumalda	3-4 ft.	5 ft.	Sun.					
Thunberg Spirea	Spirea thinbergii	3-4 ft.	5 ft.	Sun.					

REVISION REFERENCE GSWCC CERT #14353 **EROSION CONTROL**

DETAILS CHECKED BY KAK ISSUE DATE SCALE AS SHOWN | 06/12/21

2106.003

PROJECT NUMBER

