SOLUTIA

Applied Chemistry, Creative Solutions

Solutia Inc.
300 Birmingham Highway
Anniston, Alabama 36201
Tel 205-231-8447

October 15, 1998

Mr. Wm. Gerald Hardy, Chief
Hazardous Waste Branch
Land Division
Alabama Department of Environmental Management
1751 Cong. W. L. Dickinson Drive
Montgomery, Alabama 36109-2608

Re: ***Dredge Spoil Area Evaluation Report***
Solutia Inc. Anniston, AL Facility
EPA ID No. ALD 004 019 048

Dear Mr. Hardy:

Please find enclosed three (3) copies of Roux Associates, Inc.'s *Dredge Spoil Area Evaluation Report* presenting the findings and proposed recommendations regarding our recent evaluation of dredge spoil areas along Snow and Choccolocco Creeks. This report is submitted in accordance with the scope and schedule of our approved *Off-Site Interim Measures Plan, Revision 1.0*. We look forward to your review and approval of the proposed actions.

Sincerely,
SOLUTIA INC.

Alan G. Faust
Manager of Remedial Projects

enclosures

DREDGE SPOIL AREA EVALUATION REPORT
SNOW CREEK AND CHOCCOLOCCO CREEK
CALHOUN AND TALLADEGA COUNTIES, ALABAMA

October 15, 1998

prepared for:

Solutia Inc.
300 Birmingham Highway
Anniston, Alabama 36201

prepared by:

ROUX ASSOCIATES, INC.
1110 Nasa Road One, Suite 207
Houston, Texas 77058
(281) 335-4000

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1.0 INTRODUCTION

1.1 Background Information

Roux Associates, Inc. was retained by Solutia Inc. (Solutia) to locate and evaluate dredge spoil areas along Snow and Choccolocco Creeks in Calhoun and Talladega Counties, Alabama. The general area investigated is shown on Figure 1. Dredging along Snow Creek has been conducted by the City of Anniston on an as-needed basis to address specific construction or flooding concerns. Sediments previously removed from Snow Creek were reportedly placed along the nearby banks of the creek. Previous flood protection measures implemented along Choccolocco Creek by the Soil Conservation Service (SCS), now known as the United States Natural Resources Conservation Service (NRCS), included dredging of sediment trap areas to improve stream flows. Dredging of Choccolocco Creek near Oxford, Alabama was completed in a three-phase program which commenced in 1990 and was completed in 1994. Sediments removed from Choccolocco Creek were deposited in existing depressions or above grade and were stabilized by limiting the height and slope of the spoil areas and covering the areas with topsoil and vegetative cover.

Solutia Inc. is presently conducting a Resource Conservation and Recovery Act (RCRA) Corrective Action Program in accordance with the requirements of its RCRA Post-Closure Permit No. ALD004019048 issued by the Alabama Department of Environmental Management (ADEM) on January 7, 1997. On June 19, 1998, Solutia submitted an *Off-Site Interim Measures Plan* (Plan) to ADEM. This Plan was subsequently revised on August 5, 1998 and approved for implementation by ADEM on August 14, 1998. One of the tasks approved in the Plan was to locate and evaluate the previously described dredge spoil areas along Snow and Choccolocco Creeks. This document describes the methods used to locate and evaluate the dredge spoil areas (Section 2.0), reports the findings of this evaluation (Section 3.0), and presents recommendations as appropriate to ensure the future stability of these areas (Section 4.0).

1.2 Objectives

The objectives of this evaluation are to :

- Locate significant dredge spoil deposits in the area under investigation;
- Identify analytical characterization data, if any, that may have been collected for dredged material;
- Determine property ownership and land use for each dredge spoil area;
- Physically inspect and evaluate dredge spoil areas for stability and erosion control; and
- Identify future stabilization measures needed, if any, to control potential erosion or exposure.

2.0 METHODS OF INVESTIGATION

The following tasks were implemented to achieve the objectives described in Section 1.2:

1. Task 1 - Identify Potential Locations of Dredge Spoil Areas
2. Task 2 - Determine Property Ownership and Obtain Access
3. Task 3 - Identify Previously Collected Analytical Data (If Any)
4. Task 4 - Conduct Physical Inspection and Reconnaissance
5. Task 5 - Evaluate Stability and Exposure Potential
6. Task 6 - Prepare Report Detailing Findings and Recommendations

The methods of investigation used to complete Tasks 1 through 5 are described in detail in the following subsections. The findings of this investigation are presented in Section 3.0, and recommendations are presented in Section 4.0.

2.1 Identify Potential Locations of Dredge Spoil Areas

This task involved identifying and locating potential dredge spoil areas along the Snow Creek and Choccolocco Creek watershed areas. Dredging of Snow Creek from its confluence with the 11th Street Ditch along downstream areas of interest is the responsibility of the City of Anniston (City). City personnel were contacted and asked to perform a joint preliminary inspection to identify all dredge spoil areas along this reach of Snow Creek within the City limits. Eight potential areas were identified along the east and west banks of the Creek as shown on Figure 2. In each area, previously dredged material had been placed along the banks of the Creek.

Contract documents provided by the NRCS (Choccolocco Creek Channel Work, Contract Nos. 1 and 2) were reviewed to determine potential dredge spoil areas along Choccolocco Creek. A total of 32 potential areas were identified along the banks of Choccolocco Creek between its confluence with Snow Creek and Coldwater Creek. Preliminary discussions with NRCS personnel, however, indicated that only 19 of the 32 areas were actually used for placement of dredge spoils as shown on Figure 2. In addition, 17 of the 19 areas used were existing depressions or low areas requiring filling.

2.2 Determine Property Ownership and Obtain Access

Land ownership at each dredge spoil area location was determined by reviewing tax records and maps for Calhoun and Talladega Counties. Ownership information for dredge spoil areas along Snow and Choccolocco Creeks is provided in Table 1. All land owners along Snow Creek provided access to their properties for inspection. Preliminary discussions with the NRCS indicated that they previously negotiated and maintained access agreements with property owners along Choccolocco Creek allowing access to all identified dredge spoil areas. Solutia subsequently contacted the NRCS and the Choccolocco Creek Watershed Conservancy District (District) to request their cooperation in providing access to these areas. The District granted approval of this request and subsequently notified respective property owners that representatives from Solutia and the NRCS would be conducting inspections of dredge spoil areas located on their properties.

2.3 Identify Previously Collected Analytical Data

During this task, the City of Anniston and the NRCS were contacted to determine if either entity collected any analytical data characterizing materials previously dredged from Snow and Choccolocco Creeks, respectively. The City indicated that no analytical data were collected prior to dredging or after placement of the dredged material along the banks of Snow Creek.

Discussions with the NRCS indicated that no characterization sampling was performed in conjunction with its dredging activities in Choccolocco Creek. Previous sediment sampling conducted in 1983 along a 1 and $\frac{3}{4}$ mile segment of the Creek between its confluence with Snow Creek and the downstream Highway 21 bridge indicated polychlorinated biphenyl (PCB) concentrations ranging from 2.1 micrograms per gram (µg/g or parts per million) to 19.2 µg/g, with an average concentration of 9.9 µg/g for eight sets of composited samples. Based on these data collected by Monsanto Company, SCS and ADEM personnel indicating concentrations below 50 parts per million, the SCS sought and was granted approval to place all subsequently dredged material in the pre-selected locations referenced above.

2.4 Physical Inspection and Reconnaissance

During this task, each dredge spoil area previously identified was physically inspected to determine its exact location, physical dimensions and physical condition. In addition, each area was photographed and evaluated for evidence of slope stability or erosion problems. The inspections of Choccolocco Creek areas were conducted by civil engineers from Roux Associates, Inc. and Golder Associates, Inc., with staff support from Genesis Project, Inc., during the week of August 31, 1998. Staff from the NRCS accompanied the inspectors to confirm the locations of dredge spoil areas previously identified on contract maps. The inspection of the Snow Creek areas was conducted by a civil engineer from Golder Associates, Inc. during the week of September 7, 1998.

The exact location of each dredge spoil area was determined using a Global Positioning System (GPS) unit manufactured by Corvallis Microtechnology, Inc., unit model number CMT PC5L-GPS 9400. This unit has 12-channel tracking capabilities and is accurate to one (1) meter. Locations were logged in the "static" operational mode with a minimum occupation time of 30 seconds. Data collected in the field were downloaded and differentially corrected using a program provided by the manufacturer with data retrieved from a local base station in Birmingham, Alabama. The datum reference for this study is WGS 84. Location data were determined in a northing and easting format as well as latitude and longitude (degree) format to a precision of six (6) decimal places.

Other physical data collected for each area included:

- Bank location, left or right looking downstream
- Distance downstream in feet measured from:
  - ◊ 11th Street Ditch confluence for Snow Creek
  - ◊ Snow Creek confluence for Choccolocco Creek
- Top or crest elevation of each area determined in feet above mean sea level
- The horizontal distance measured in feet from the toe of each area to the respective creek top of bank
- The elevation drop from the toe to the top of bank

- Land use based on visual observation
- The length, width and height of each area measured in feet
- The type of soil characteristic of the dredge spoil area
- The type of cover and extent of vegetation for each area
- Area slope data including average slopes along the length and width of each area and the steepest slope observed
- Identification of any physical evidence of slumping, erosion or slope stability problems at each area

All of the data collected during this task were recorded on data sheets provided in Appendix A. Digital photographs of each area were also taken and are provided on the data sheets.

3.0 INVESTIGATION FINDINGS

3.1 Snow Creek

There are a total of eight dredge spoil areas located along the banks of Snow Creek between its confluence with the 11th Street Ditch and Choccolocco Creek, as shown on Figure 2. Physical data collected for each area are presented on data sheets in Appendix A and summarized in Table 2. The dredge spoil areas range in height from 3 to 7 feet and in areal extent from 225 square feet to 44,000 square feet. Six of the eight areas extend to the top of bank. One of the areas, Area No. 1, has a non-woven geotextile cover installed. The remaining areas have a well established vegetative cover comprised of trees, ivy, vines, weeds, brush, brier or kudzu. Four of the eight areas, Area Nos. 3 through 6, exhibit 1:1, near vertical slopes and show evidence of minor slumping. Two of the areas, Area Nos. 7 and 8, are flat, parallel to the creek and have near vertical slopes at the creek bank, making them susceptible to possible bank erosion.

3.2 Choccolocco Creek

There are a total of 19 dredge spoil areas located along the banks of Choccolocco Creek between its confluence with Snow Creek and Coldwater Creek, as shown on Figure 2. Physical data collected for each area are presented on data sheets in Appendix A and summarized in Table 2. Seventeen (17) of the 19 areas were existing depressions or low areas requiring filling, e.g. gravel pits, borrow pits, old scour areas or other low areas. Area No. 16 was placed along an existing side slope, and Area No. 24 was deposited on the back side of an existing flood berm (road dike). The areas range in height or depth from a maximum of 10 feet high to 7 feet deep, and in areal extent from 2,500 square feet to 46,200 square feet. Only three areas extend laterally to within 10 feet of the creek bank (Area Nos. 9, 24 and 29). The remaining areas are located at distances ranging from 20 feet to 500 feet away from the adjacent creek bank. There was no evidence of slumping, erosion or other stability problems at any of the areas. The majority of the area slopes are flat as would be expected for filled-in, low-lying areas. The steepest slope measured was for Area No. 24 which exhibited an average slope of 3:1 (H:V). All of the areas have a well established vegetative cover (grass and weeds) with the exception of Area Nos. 7, 9 and 26. Area No. 7 is located in a washed-in area in a

flood prone section of the property and is covered with sand. Area No. 9 is covered with gravel and sand at the surface. This area is located immediately adjacent to the Creek and is susceptible to flooding during heavy precipitation events. Area No. 26 is located adjacent to an old borrow pit. Grass and weeds cover most of the area; however, vegetation is absent at the interface of the dredge spoil area and the pit.

4.0 RECOMMENDATIONS

Overbank flow velocities during a 10-year flood event along Snow and Choccolocco Creeks are approximately 1 foot per second based on models used by the Federal Emergency Management Agency (FEMA) for community flood insurance studies, and would not be expected to result in resuspension or erosion of the existing dredge spoil areas. These areas have stabilized since original placement, and no future dredging activities that would disturb these areas are currently planned based on discussions with City of Anniston and NRCS personnel. The areas are generally located on parcels of property that are undeveloped or not used and exhibit an established vegetative or natural cover. Based on these considerations, the studied dredge spoil areas are not believed to serve as a significant source of impact to either the water quality of Snow or Choccolocco Creeks or potential human or ecological receptors. Recommendations to minimize any future potential adverse impacts from these areas are provided in the sections that follow for Snow Creek and Choccolocco Creek, respectively. All recommended measures will be implemented in the Spring of 1999 following ADEM and NRCS approval and subject to receipt of required access agreements from property owners.

4.1 Snow Creek

Recommendations to enhance the stability of dredge spoil areas located along Snow Creek fall into one of five categories as follow:

- No further action
- Hydro-seeding
- Installation of turf reinforcement mats
- Installation of erosion control blankets
- Regrading

Dredge spoil Areas No. 1 and No. 2 are located greater than 25 feet away from the Creek bank, are protected by established cover material and have an average slope of 2:1 (H:V). Neither area exhibits any evidence of slumping, erosion or other slope stability problems. Area No. 2 has a well established vegetative cover, and no further action is recommended for this

area. Area No. 1 is covered with a non-woven geotextile material; however, weeds are growing through at the geotextile overlaps (Appendix A). For this area, it is recommended that the existing cover material be removed and replaced with vegetative cover. Preparation of this area will require the removal and disposal of the existing fabric material and subsequent mowing of weeds to ground level. The area would then be hydro-seeded to establish a good stand of grass.

Dredge spoil Area Nos. 3 through 6 extend to the Creek bank and exhibit average slopes of 1:1 (H:V). Vegetation is well established at each area; however, each area exhibits some evidence of minor slumping. In order to prevent further slumping of these areas, it is recommended that permanent turf reinforcement mats be installed and seeded. Preparation of these areas will require the removal of large rocks, soil clods and existing vegetation to ground level to ensure intimate contact between the mats and subgrade. A turf reinforcement mat would then be installed, and the areas would be hydro-seeded to establish a good stand of grass. The turf reinforcement mats will stimulate rapid vegetative growth and provide permanent resistance to elevated hydraulic forces. The mats will permanently anchor the vegetative cover to the soil surface and provide twice the erosion protection of unreinforced vegetation. Typical specifications for turf reinforcement mats are provided in Appendix B. The mats are composed of a dense, three-dimensional web of polypropylene fibers, placed between two high strength nets and stitched together. The mats are installed in overlapping rolls and secured with ground-anchoring devices.

Dredge spoil Areas No. 7 and 8 are the most laterally extensive areas along Snow Creek and extend to the Creek bank wall. Each area is 3 feet in height, predominantly flat (parallel to the Creek) and is heavily vegetated with trees, ivy, vines and weeds. The sole potential concern associated with these areas is possible future bank erosion at the Creek wall under high flow conditions. In order to address this potential concern, it is recommended that these areas be regraded to create a minimum 3:1 (H:V) slope at the edge of the creek bank. All disturbed sediments would subsequently be covered with a natural, excelsior erosion control blanket and revegetated to ensure proper cover. The excelsior blanket is a flexible, wood-machined

blanket of curled wood excelsior designed to adhere to the soil and expedite seed germination. Typical specifications for an excelsior blanket are provided in Appendix B. The blanket is installed in overlapping rolls and secured with staples. Once vegetation is established, the blankets will begin to decompose within four to six months.

4.2 Choccolocco Creek

Dredge spoils removed from Choccolocco Creek were beneficially reused by the NRCS (SCS) to fill in low-lying areas or side slopes. The areas are generally located tens of feet away from the creek bank and are flat to mildly sloped showing no signs of slumping, erosion or other slope stability problems. These confined disposal areas were constructed in accordance with NRCS (SCS) specifications and, with the exception of Area Nos. 7, 9 and 26, have a well established vegetative cover (grass and weeds). Area No. 7 is located in a washed-in area on a flood prone section of the property and is covered with sand. Area No. 9 is located immediately adjacent to the Creek, susceptible to flooding and covered with gravel and sand at the surface. Area No. 26 is located adjacent to an old borrow pit. Grass and weeds cover most of the area; however, vegetation is absent at the interface of the dredge spoil area and the pit. In these three areas it is recommended that an excelsior erosion control blanket be installed and hydro-seeded to establish an adequate vegetative cover. The excelsior blanket is a flexible, wood-machined blanket of curled wood excelsior designed to adhere to the soil and expedite seed germination. Typical specifications for an excelsior blanket are provided in Appendix B. The blanket is installed in overlapping rolls and secured with staples. Once vegetation is established, the blankets will begin to decompose within four to six months.

Respectfully Submitted,

ROUX ASSOCIATES, INC.

John R. Loper, P.E.

Vice President and Principal Engineer

Table 1. Dredge Spoil Area Location, Property Ownership, and Land Use Data

Dredge Spoil Area	Location Lat. (° N) / Long. (° W)	Property Owner	Land Use
Area 1 / Snow Creek	33° 39' 17.9800" / 85° 50' 13.1877"	Anniston Land Co. , Inc.	Open field / undeveloped
Area 2 / Snow Creek	33° 39' 18.0002" / 85° 50' 14.3286"	Anniston Land Co. , Inc.	Hillside slope / wooded
Area 3 / Snow Creek	33° 39' 14.1785" / 85° 50' 14.2223"	Myrice & Keith Phillips / portions in ALDOT right-of-way	Empty lot / undeveloped
Area 4 / Snow Creek	33° 39' 08.3975" / 85° 50' 13.6812"	Rev. Charles Creel	Empty lots / undeveloped
Area 5 / Snow Creek	33° 39' 08.2186" / 85° 50' 13.2113"	Rev. Charles Creel	Empty lots / undeveloped
Area 6 / Snow Creek	33° 39' 08.1003" / 85° 50' 12.8329"	Rev. Charles Creel	Empty lots / undeveloped
Area 7 / Snow Creek	33° 37' 24.7975" / 85° 49' 46.9691"	U.S. Castings/U.S. Pipe, Primax Properties, LLC., James Jennings, Donald O. & Zandra Sills, (Frank) Chien-Hwa Chen	Flood plain / undeveloped
Area 8 / Snow Creek	33° 37' 24.8565" / 85° 49' 46.3722"	(the above own Areas 7 & 8)	Flood plain / undeveloped
Area 1 / Choccolocco Creek	33° 34' 48.9501" / 85° 54' 49.7044"	Frances Louise Candler	Flood plain / agricultural
Area 4 / Choccolocco Creek	33° 34' 59.9733" / 85° 53' 59.5825"	Perry & Patricia Kerr	Pasture / agricultural
Area 5 / Choccolocco Creek	33° 34' 52.4686" / 85° 54' 03.9470"	Perry & Patricia Kerr	Pasture / agricultural
Area 7 / Choccolocco Creek	33° 34' 39.1138" / 85° 54' 07.6704"	Perry & Patricia Kerr	Pasture / agricultural
Area 9 / Choccolocco Creek	33° 34' 39.5886" / 85° 54' 07.1254"	Perry & Patricia Kerr	Flood plain / undeveloped
Area 10 / Choccolocco Creek	33° 34' 33.1961" / 85° 53' 43.2474"	Perry & Patricia Kerr	Flood plain / undeveloped
Area 12 / Choccolocco Creek	33° 34' 33.2024" / 85° 53' 22.0937"	Doris R. Burrows	Flood plain / undeveloped
Area 15 / Choccolocco Creek	33° 34' 34.0765" / 85° 53' 13.1504"	Calhoun County Economic Development Council	Undeveloped
Area 16 / Choccolocco Creek	33° 34' 30.8762" / 85° 53' 00.6391"	Calhoun County Economic Development Council	Undeveloped
Area 18 / Choccolocco Creek	33° 34' 38.1790" / 85° 52' 13.0771"	City of Anniston	Airport buffer zone
Area 19 / Choccolocco Creek	33° 34' 31.3623" / 85° 51' 58.8287"	Billy Ray and Tommie Jean Camp	Pasture
Area 23 / Choccolocco Creek	33° 35' 01.6099" / 85° 51' 09.9273"	Joe N. Bennett	Pasture / agricultural
Area 24 / Choccolocco Creek	33° 35' 02.0814" / 85° 50' 54.9943"	Joe N. Bennett	Pasture / agricultural
Area 25 / Choccolocco Creek	33° 35' 05.1703" / 85° 50' 45.5931"	Bruce W. Corbett, Werner C. and Ruth E. Vogt	Flood plain / undeveloped
Area 26 / Choccolocco Creek	33° 35' 11.6729" / 85° 50' 32.8112"	Phyllis S. Weaver	Pasture / agricultural
Area 28A / Choccolocco Creek	33° 35' 20.6653" / 85° 50' 05.1416"	Phyllis S. Weaver	Pasture / agricultural
Area 28B / Choccolocco Creek	33° 35' 26.1406" / 85° 49' 59.4665"	Phyllis S. Weaver	Pasture / agricultural
Area 29 / Choccolocco Creek	33° 35' 37.2064" / 85° 49' 48.6254"	Phyllis S. Weaver	Pasture / agricultural
Area 31 / Choccolocco Creek	33° 35' 52.9926" / 85° 49' 43.2965"	Edward C. Hopson	Pasture / agricultural

Table 2. Dredge Spoil Area Physical Data

Dredge Spoil Area	Distance From Bank (ft)	Height/Depth (H/D ft)	Area (length x width) (ft x ft)	Steepest Slope	Type of Fill-In Area (per NRCS)	Cover Type	Slope Stability
Snow Creek							
Area 1	26.6	H ~ 6	57 x 30	2:1	Open field / undeveloped	Non-woven geotextile, some weeds	No evidence of problems, however, although weeds are growing at geotextile overlaps.
Area 2	30	H = 3	50 x 27	2:1	Hillside slope / wooded	Thick woods, briers, weeds	No evidence of problems.
Area 3	0	H = 7	40 x 13	Portions near vertical	Empty lot / undeveloped	Thick woods, briers, kudzu	Some minor slumping.
Area 4	0	H = 5	34 x 15	Portions near vertical	Empty lots / undeveloped	Weeds, brush	Some minor slumping.
Area 5	0	H = 5	33 x 15	Portions near vertical	Empty lots / undeveloped	Weeds, brush	Some minor slumping.
Area 6	0	H = 5	15 x 15	Portions near vertical	Empty lots / undeveloped	Weeds, brush	Some minor slumping.
Area 7	0	H = 3	450 x 40	Portions near vertical at bank	Flood plain / undeveloped	Trees, ivy, vines, weeds	Bank erosion possible.
Area 8	0	H = 3	550 x 80	Portions near vertical at bank	Flood plain / undeveloped	Trees, ivy, vines, weeds	Bank erosion possible.
Choccolocco Creek							
Area 1	70	D = 4	130 x 100	Flat	Low area	Grass and tall weeds	No evidence of problems
Area 4	75	D = 3 to 5	100 x 85	Flat	Old gravel pit	Grass and tall weeds	No evidence of problems
Area 5	200	D = 3 to 5	100 x 120	Flat	Old gravel pit	Grass and tall weeds	No evidence of problems
Area 7	500	D = 4	160 x 20	Flat	Low area, used as road fill	Sand (washed-in area of flood prone section of property)	No evidence of problems, however, vegetative cover is not present.
Area 9	0	D = 0 to 7	100 x 75	5:1 near creek edge	Old slough	Gravel and sand at surface	No evidence of problems, however, vegetative cover is not present.

Table 2. Dredge Spoil Area Physical Data

Dredge Spoil Area	Distance From Bank (ft)	Height/Depth (H/D ft)	Area (length x width) (ft x ft)	Steepest Slope	Type of Fill-In Area (per NRCS)	Cover Type	Slope Stability
Choccolocco Creek	(continued)						
Area 10	200	H = 2 / D=3	250 x 110	4:1 at pile edges	Low area	Grass and weeds	No evidence of problems
Area 12	80	D = 4 to 5	100 x 90	3:1 slope at west and south edge	Old gravel pit	Grass and weeds	No evidence of problems
Area 15	150	D = 3 to 4	70 x 150	Flat	Low area, proposed site of wetlands mitigation	Grass and tall weeds	No evidence of problems
Area 16	100	H ~ 2 / D = 2 to 5	165 x 100	4:1	Fill along existing side slope	Grass and tall weeds	No evidence of problems
Area 18	500	H = 3 / D = 2	130 x 150	3:1 (at northern edge)	Old borrow pit	Grass and tall weeds	No evidence of problems
Area 19	250	D = 5 to 6	100 x 65	Flat	Old borrow pit	Grass and tall weeds	No evidence of problems
Area 23	20	D = 3	185 x 100	10:1	Low area	Grass, weeds, some trees planted at perimeter	No evidence of problems
Area 24	~5 (next to flood berm)	H ~10	280 x 165	3:1	Fill on back side of road dike	Grass	No evidence of problems
Area 25	70	D = 4 to 5	110 x 100	Flat	Low area	Grass, weeds, small oak trees planted at perimeter	No evidence of problems
Area 26	~ 40	D = 5 to 6	140 x 60	3:1 where fill transitions into old borrow pit	Extended dam	Grass and weeds cover most of area, however at the edge of fill/borrow pit interface, no cover.	No evidence of problems, however, some soil is exposed at the edge of fill/borrow pit interface.
Area 28A	80	D = 5 to 6	240 x 70	Flat	Low area	Grass and weeds	No evidence of problems
Area 28B	80	D = 6 to 7	155 x 45	Flat	Low area	Grass and weeds	No evidence of problems
Area 29	10	D = 4 to 5	215 x 55	Flat	Old scour area	Grass and weeds	No evidence of problems
Area 31	300	H = 2 / D = 2	135 x 230	5:1 at south and east edges	Filled-in edge adjacent to low area	Grass	No evidence of problems

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Figure 1 - Area of Dredge Spoil Pile Evaluation

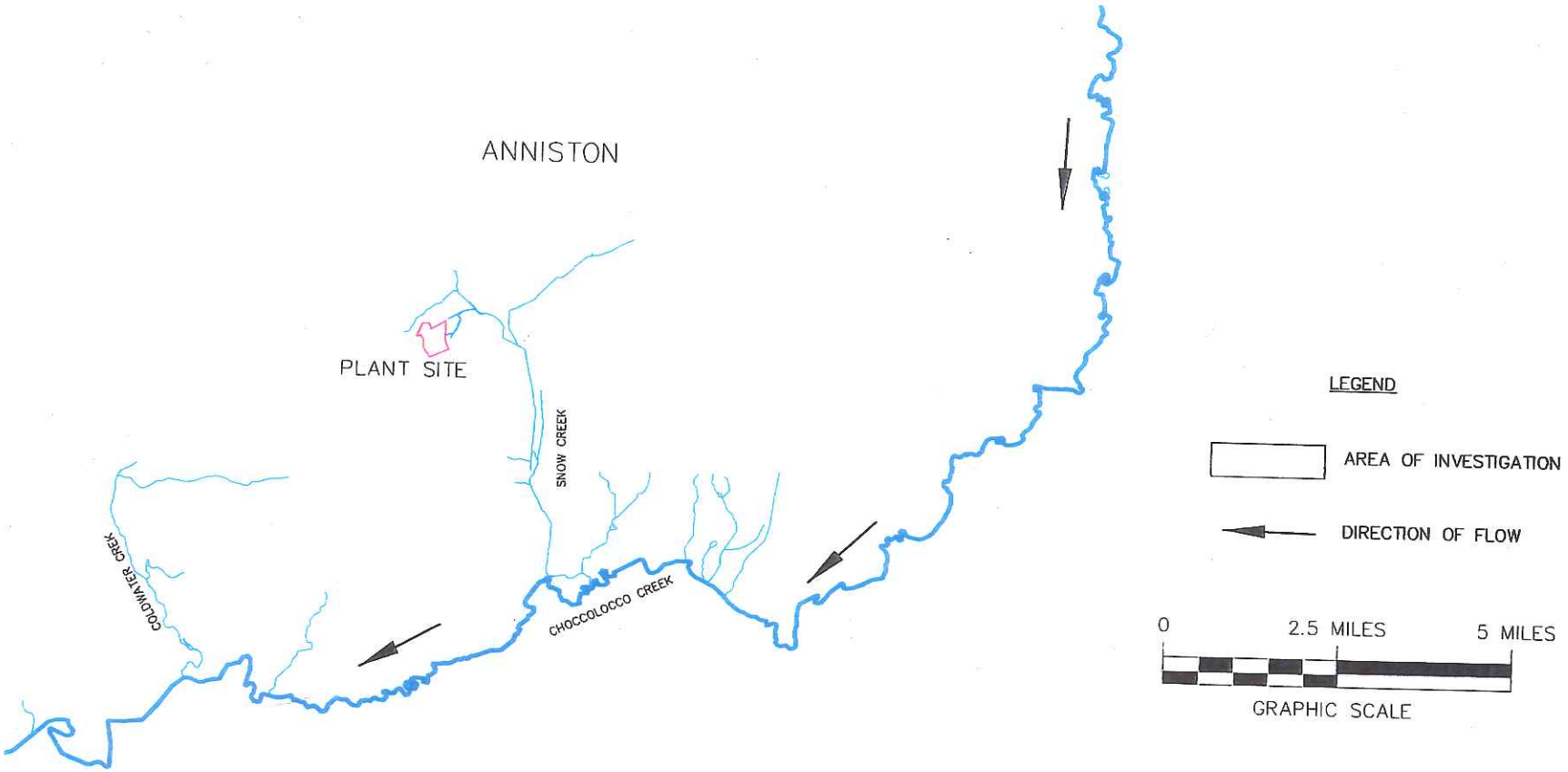

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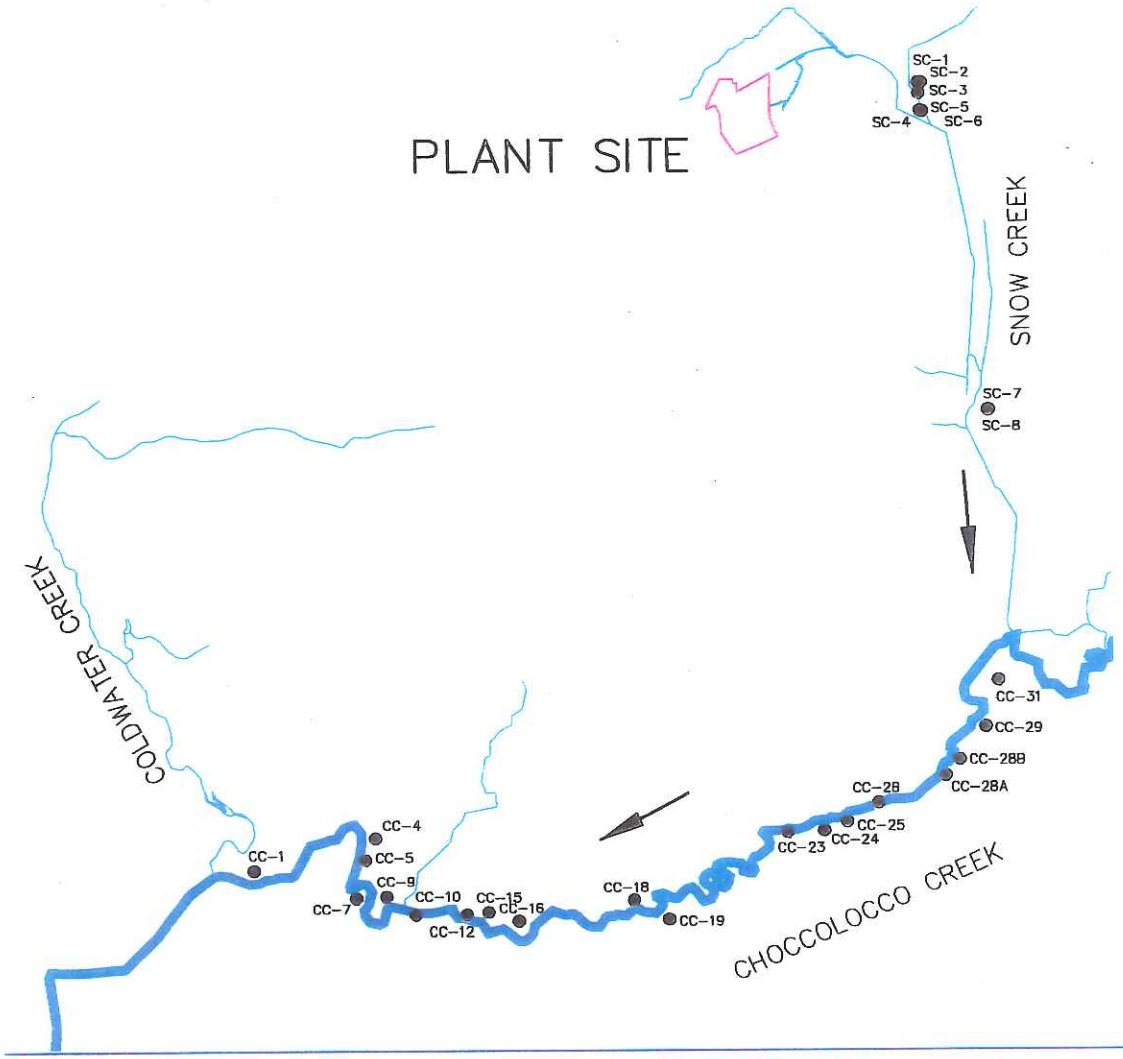
Figure 2 - Locations of Dredge Spoil Areas



LEGEND

SC–1	SNOW CREEK DREDGE SPOIL PILE
CC–1	CHOCCOLOCCO CREEK DREDGE SPOIL PILE
←	DIRECTION OF FLOW

0 2 MILES 4 MILES

GRAPHIC SCALE

NOTES:

1. MAPPING DERIVED FROM DATA PROVIDED BY O'BRIEN & GERE, INC. BASED ON USGS 1/100,000 DLG DATA AND U.S. CENSUS BUREAU 1990 TIGER DATA. PORTIONS REVISED BASED ON USGS 7.5 MINUTE QUADRANGLES.
2. DREDGE SOIL AREAS BASED ON GPS SURVEY CONDUCTED BY GOLDER ASSOCIATES, INC.

10209003/10209SMF.DWG 9/24/98 SYR-54-RLP AK ycc P: FRY70DAL L: ON=*, OFF=*REF

APPENDIX A

DREDGE SPOIL AREA DATA FORMS

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 1 / Snow Creek

DATE OF INSPECTION : 09/08/98

INSPECTED BY : Golder Associates Inc.

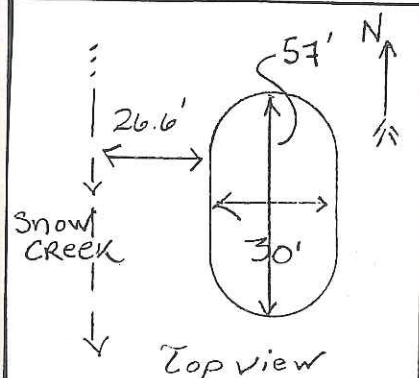
	(#1)	(#2)	(#5)	(#6)	(#7)	(#8)	(#9)
LOCATION (w/r to Centroid)	Northing (via GPS)	Easting (via GPS)	Left (L) or Right (R) Bank ? (looking downstm)	Distance (ft) Downstream from 11th St. Ditch Confluence (from map measurement)	Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	Elevation Drop Along (# 8) (approx.) (ft)
	1147760.0242	655051.9125					
	(#3)	(#4)					
	Latitude (via GPS)	Longitude (via GPS)					
	33° 39' 17.9800" N	85° 50' 13.1877" W	Left (L)	2,950	686	26.6	0 (at top of bank level)

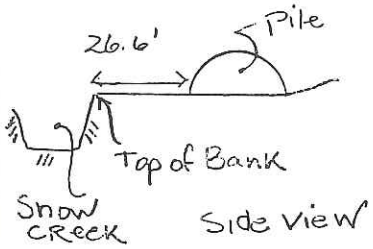
	(#10)	(#11)	(#12)
LAND OWNERSHIP INFORMATION	Parcel No.	Owner Name/Address	Land Use
	11-21-03-07-1-02-038 Calhoun Co.	Anniston Land Co., Inc. P.O. Box 850 / 16 W. 11th St. Anniston, Alabama 36201	Open field / undeveloped

	(#13)	(#14)	(#15)	(#16)	(#17)	(#18)
PHYSICAL DESCRIPTION	Length (ft)	Width (ft)	Height (ft)	Soil Type in Area	Cover Type and Description	Is Vegetation Well Estab. ?
	57	30	6 approx.	Sand Silt Gravel	Non-woven geotextile; some weeds	N/A; geotextile cover

	(#19)	(#20)	(#21)	(#22)	(#23)	(#24)
AREA SLOPE DATA	Average Slope Along Length (H) : (V)	Slope Length (Along Length) (ft)	Average Slope Along Width (H) : (V)	Slope Length (Along Width) (ft)	Steepest Slope (H) : (V)	Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
	2 : 1	12	2 : 1	12	2 : 1	No, although weeds are growing at geotextile over-laps.

SKETCH OF AREA





AREA PHOTOGRAPH

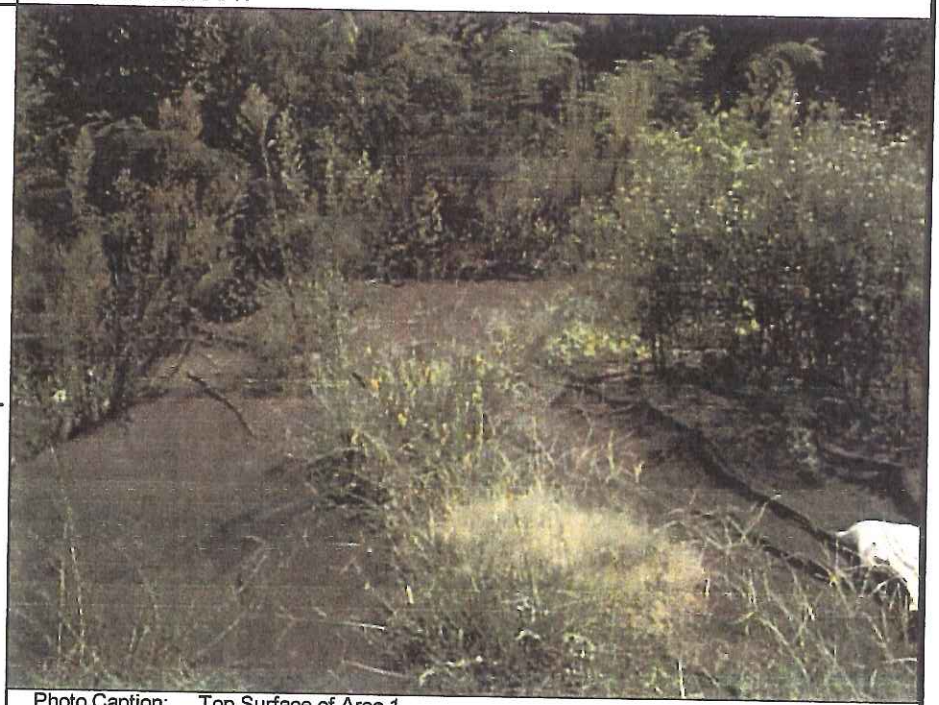


Photo Caption: Top Surface of Area 1.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 2 / Snow Creek

DATE OF INSPECTION : 09/08/98

INSPECTED BY : Golder Associates Inc.

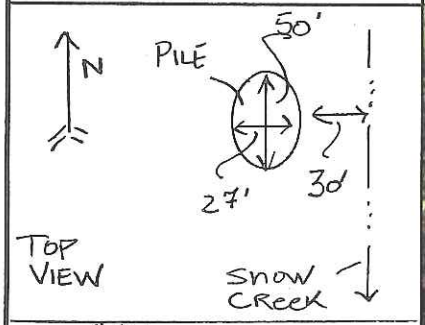
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance (ft) Downstream from 11th St. Ditch Confluence (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1147762.0654	654955.4760					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 39' 18.0002" N	85° 50' 14.3286" W	Right (R)	2,950	690	30	15 (above bank level)

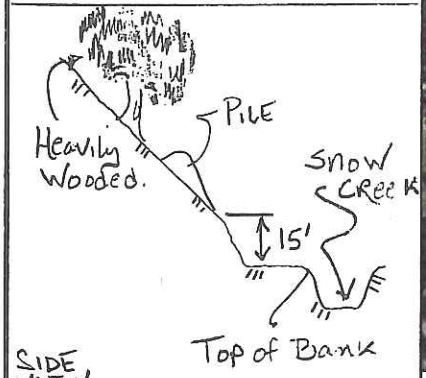
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	11-21-03-07-1-02-037 Calhoun Co.	Anniston Land Co., Inc. P.O. Box 850 / 16 W. 11th St. Anniston, Alabama 36201	Hillside slope / wooded

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	50	27	3	Sand Silt Gravel	Thick woods, briers, weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	2 : 1	4	2 : 1	4	2 : 1	No

SKETCH OF AREA





AREA PHOTOGRAPH

Photo Caption: Area 2, view to the east.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 3 / Snow Creek

DATE OF INSPECTION : 09/08/98

INSPECTED BY : Golder Associates Inc.

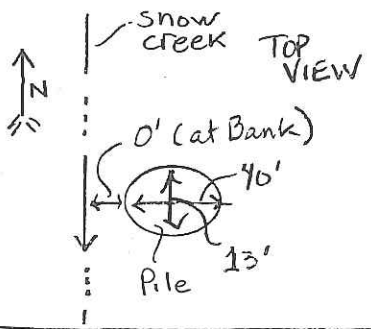
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance (ft) Downstream from 11th St. Ditch Confluence (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1147375.7722	654964.4496					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 39' 14.1785" N	85° 50' 14.2223" W	Left (L)	3,350	684	0	0 (at top of bank level)

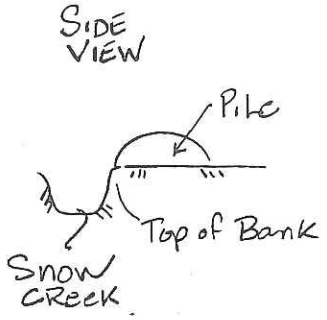
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	11-21-03-07-1-02-041 Calhoun Co.	Myrtice (& Keith) Phillips P.O. Box 4132 Blue Mountain, Alabama 32604 * Note : portions of pile are in ALDOT right - of - way.	Empty lot / undeveloped

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	40	13	7	Sand Silt Gravel	Thick weeds, briers, kudzu	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	1 : 1	7	1 : 1	7	Portions near vertical	Some minor slumping

SKETCH OF AREA





AREA PHOTOGRAPH

Photo Caption: Side view of Area 3, view to the west.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 4 / Snow Creek

DATE OF INSPECTION : 09/08/98

INSPECTED BY : Golder Associates Inc.

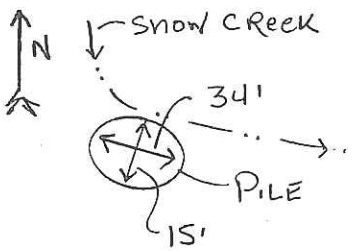
	(#1)	(#2)	(#5)	(#6)	(#7)	(#8)	(#9)
LOCATION (w/r to Centroid)	Northing (via GPS)	Easting (via GPS)	Left (L) or Right (R) Bank ? (looking downstm)	Distance (ft) Downstream from 11th St. Ditch Confluence (from map measurement	Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	Elevation Drop Along (# 8) (approx.) (ft)
	1146791.4399	655010.1633					
	(#3)	(#4)					
	Latitude (via GPS)	Longitude (via GPS)					
	33° 39' 08.3975" N	85° 50' 13.6812" W	Right (R)	4,050	678	0	0 (at top of bank level)

	(#10)	(#11)	(#12)
LAND OWNERSHIP INFORMATION	Parcel No.	Owner Name/Address	Land Use
	11-21-03-07-1-02-046 & -048 Calhoun Co.	Rev. Charles Creel 609 Mulberry Ave. Anniston, Alabama 36201	Empty lots / undeveloped

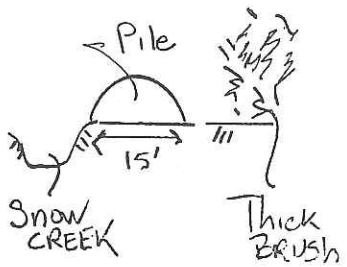
	(#13)	(#14)	(#15)	(#16)	(#17)	(#18)
PHYSICAL DESCRIPTION	Length (ft)	Width (ft)	Height (ft)	Soil Type in Area	Cover Type and Description	Is Vegetation Well Estab. ?
	34	15	5	Sand Silt Gravel	Weeds, brush	Yes

	(#19)	(#20)	(#21)	(#22)	(#23)	(#24)
AREA SLOPE DATA	Average Slope Along Length (H) : (V)	Slope Length (Along Length) (ft)	Average Slope Along Width (H) : (V)	Slope Length (Along Width) (ft)	Steepest Slope (H) : (V)	Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
	uneven, 1 : 1	4	uneven, 1 : 1	4	Portions near vertical	Some minor slumping

SKETCH OF AREA



Top View



Side View

AREA PHOTOGRAPH

Photo Caption: Top surface of Area 4.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 5 / Snow Creek

DATE OF INSPECTION : 09/08/98

INSPECTED BY : Golder Associates Inc.

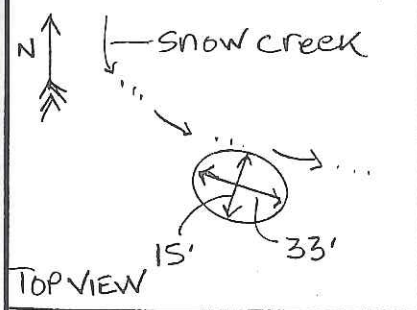
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance (ft) Downstream from 11th St. Ditch Confluence (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1146773.3550	655049.8813					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 39' 08.2186" N	85° 50' 13.2113" W	Right (R)	4,150	678	0	0 (at top of bank level)

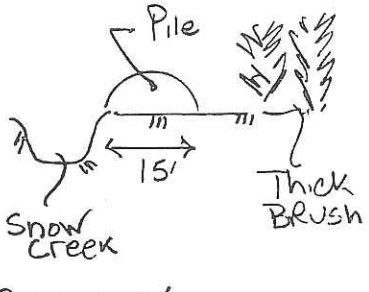
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	11-21-03-07-1-02-046 & -048 Calhoun Co.	Rev. Charles Creel 609 Mulberry Ave. Anniston, Alabama 36201	Empty lots / undeveloped

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	33	15	5	Sand Silt Gravel	Weeds, brush	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	uneven, 1 : 1	4	uneven, 1 : 1	4	Portions near vertical	Some minor slumping

SKETCH OF AREA





AREA PHOTOGRAPH

Photo Caption: Area 5, view to the east.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 6 / Snow Creek

DATE OF INSPECTION : 09/08/98 | INSPECTED BY : Golder Associates Inc.

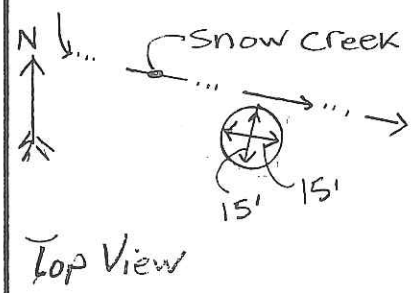
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance (ft) Downstream from 11th St. Ditch Confluence (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1146761.3945	655081.8720					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 39' 08.1003" N	85° 50' 12.8329" W	Right (R)	4,200	678	0	0 (at top of bank level)

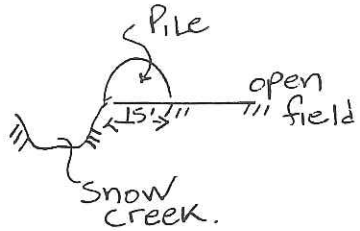
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	11-21-03-07-1-02-046 & -048 Calhoun Co.	Rev. Charles Creel 609 Mulberry Ave. Anniston, Alabama 36201	Empty lots / undeveloped

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	15	15	5	Sand Silt Gravel	Weeds, brush	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	uneven, 1 : 1	4	uneven, 1 : 1	4	Portions near vertical	Some minor slumping

SKETCH OF AREA





AREA PHOTOGRAPH

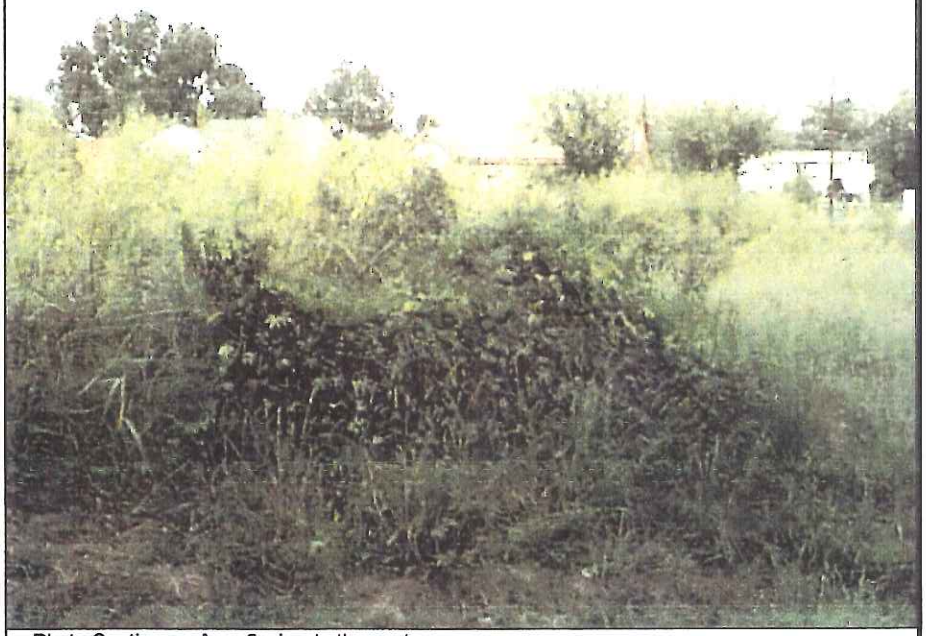


Photo Caption: Area 6, view to the east.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 7 / Snow Creek

DATE OF INSPECTION : 09/08/98

INSPECTED BY : Golder Associates Inc.

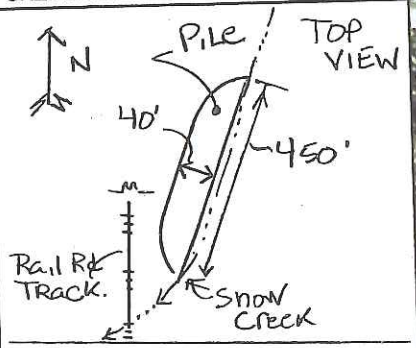
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance (ft) Downstream from 11th St. Ditch Confluence (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1136319.7268	657268.5650					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 37' 24.7975" N	85° 49' 46.9691" W	Right (R)	15,500	650	0	0 (at top of Bank Level)

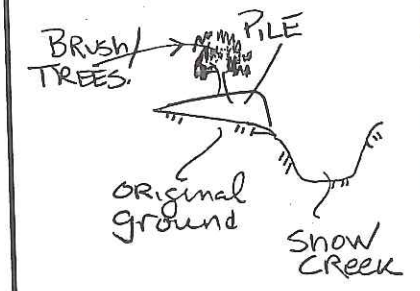
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	* Multiple, see attached list	* See attached list	Flood plain / undeveloped

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	450	40	3	Sand Silt Gravel	Trees, ivy, vines, weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Primarily flat parallel to creek	-NA-	Near vert. at creek bank	-NA-	Portions near vertical at bank	Bank erosion possible

SKETCH OF AREA





SIDE VIEW

AREA PHOTOGRAPH

Photo Caption: Area 7, view to the north (upstream).

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 8 / Snow Creek

DATE OF INSPECTION : 09/08/98

INSPECTED BY : Golder Associates Inc.

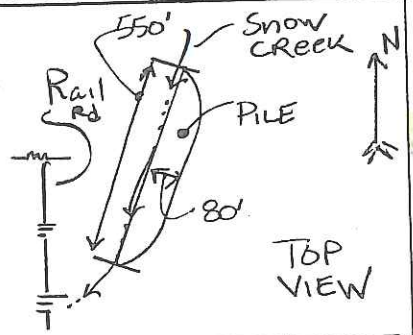
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance (ft) Downstream from 11th St. Ditch Confluence (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1136325.6870	657319.0367					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 37' 24.8565" N	85° 49' 46.3722" W	Right (R)	15,500	646	0	0 (at top of bank level)

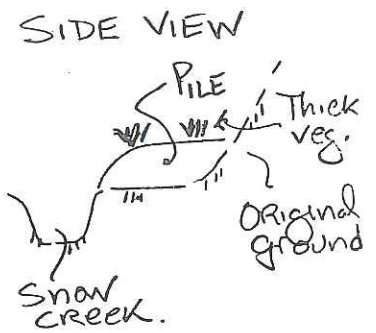
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	* Multiple, see attached list	* See attached list	Flood plain / undeveloped

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	550	80	3	Sand Silt Gravel	Trees, ivy, vines, weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Primarily flat parallel to creek	-NA-	Near vert. at creek bank	-NA-	Portions near vertical at bank	Bank erosion possible.

SKETCH OF AREA





AREA PHOTOGRAPH

Photo Caption: Area 8, view to the north (upstream).

SNOW CREEK DREDGE SPOIL AREAS

PROPERTY OWNERSHIP INFORMATION FOR AREAS 7 AND 8

Dredge Area #	Parcel No. (Calhoun Co.)	Owner Name / Address
7 & 8	11-21-04-20-2-01-33.06	U.S. Castings/U.S. Pipe 1831 Front Street Anniston, Al 36201
	11-21-04-2-01-27.01 & 11-21-04-20-2-01-33	PRIMAX Properties, LLC. (c/o William G. Seymour) 1115 East Morehead St. Charlotte, NC 28204
	11-21-04-20-2-01-33.02	James Jennings c/o Omega Homes, Inc. 1720 S. Quintard Ave. Anniston, Alabama 36201
	11-21-04-20-2-01-33.08 & 11-21-04-20-2-01-33.07 & 11-21-04-20-2-01-33.05	Donald O. (& Zandra) Sills P.O. Box 3342 Oxford, Alabama 36203
	11-21-04-20-2-01-33.01	(Frank) Chien-Hwa Chen 322 Mar-Sha Drive Anniston, Alabama 36206

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 1 / Choccolocco Creek

DATE OF INSPECTION : 09/02/98

INSPECTED BY : Genesis Project / Roux Associates

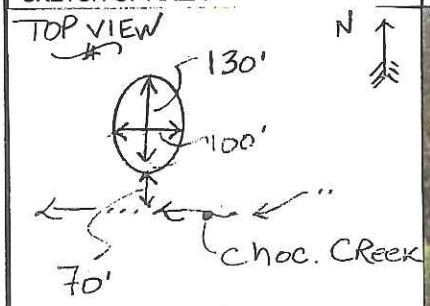
	(#1)	(#2)	(#5)	(#6)	(#7)	(#8)	(#9)
LOCATION (w/r to Centroid)	Northing (via GPS)	Easting (via GPS)	Left (L) or Right (R) Bank ? (looking downstm)	Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	Elevation Drop Along (# 8) (approx.) (ft)
	1120576.5283	631656.9024					
	(#3)	(#4)					
	Latitude (via GPS)	Longitude (via GPS)					
	33° 34' 48.9501" N	85° 54' 49.7044" W	Right (R)	45,500	589.4	70	0 (at top of bank level)

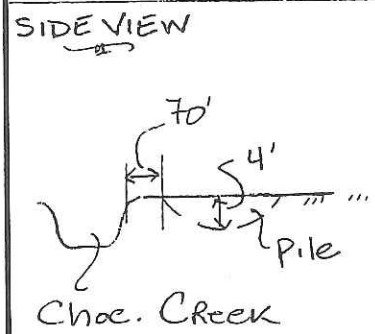
	(#10)	(#11)	(#12)
LAND OWNERSHIP INFORMATION	Parcel No.	Owner Name/Address	Land Use
	61-06-02-04-0-000-006-000 Talladega Co.	Frances Louise Candler P.O. Box 213 Ohatchee, Alabama 36271	Flood plain / agricultural

	(#13)	(#14)	(#15)	(#16)	(#17)	(#18)
PHYSICAL DESCRIPTION	Length (ft)	Width (ft)	Height (ft)	Soil Type in Area	Cover Type and Description	Is Vegetation Well Estab. ?
	130	100	-NA- Depth = 4 per NRCS	Sand Silt	Grass and tall weeds	Yes

	(#19)	(#20)	(#21)	(#22)	(#23)	(#24)
AREA SLOPE DATA	Average Slope Along Length (H) : (V)	Slope Length (Along Length) (ft)	Average Slope Along Width (H) : (V)	Slope Length (Along Width) (ft)	Steepest Slope (H) : (V)	Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
	Flat	-NA-	Flat	-NA-	Flat	No

SKETCH OF AREA





AREA PHOTOGRAPH

Photo Caption: Area 1, view to the west.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 4 / Choccolocco Creek

DATE OF INSPECTION : 09/03/98 | INSPECTED BY : Golder Associates / Roux Assoc.

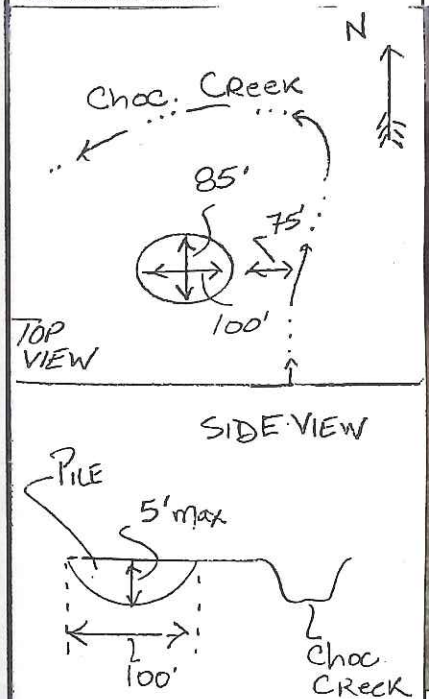
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1121685.7154	635898.0630					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 34' 59.9733" N	85° 53' 59.5825" W	Left (L)	39,500	575.2	75	0 (at top of bank level)

	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-02-04-0-000-013-000 Talladega Co.	Perry & Patricia Kerr 2310 Silver Run Rd. Munford, Alabama 36268	Pasture / agricultural

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	100	85	-NA- Depth = 3 to 5 per NRCS	Sand Silt Gravel	Grass and tall weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat	-NA-	Flat	-NA-	Flat	No

SKETCH OF AREA



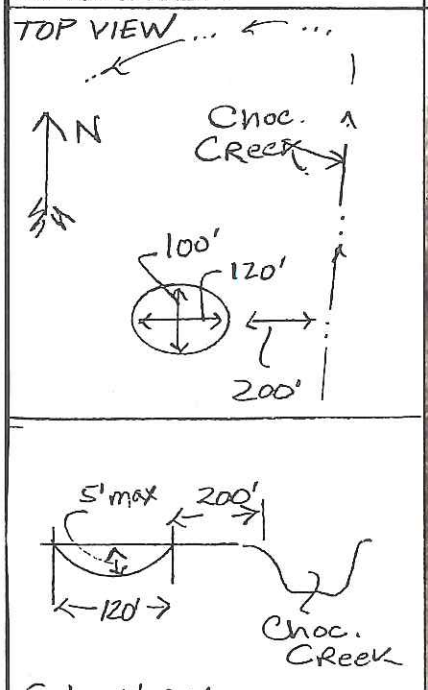
AREA PHOTOGRAPH

Photo Caption: Area 4, view to the north.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER :	AREA 5 / Choccolocco Creek						
DATE OF INSPECTION : 09/03/98			INSPECTED BY : Golder Associates / Roux Assoc.				
LOCATION (w/r to Centroid)	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
	1120929.3942	635528.3350					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 34' 52.4686" N	85° 54' 03.9470" W	Left (L)	38,500	575.6	200	0 (at top of bank level)
LAND OWNERSHIP INFORMATION	(#10) Parcel No.	(#11) Owner Name/Address				(#12) Land Use	
	61-06-02-04-0-000-013-000 Talladega Co.	Perry & Patricia Kerr 2310 Silver Run Rd. Munford, Alabama 36268				Pasture / agricultural	
PHYSICAL DESCRIPTION	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description		(#18) Is Vegetation Well Estab. ?
	100'	120'	-NA- Depth = 3 to 5 per NRCS	Sand Silt Gravel	Grass and tall weeds		Yes
AREA SLOPE DATA	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?	
	Flat	-NA-	Flat	-NA-	Flat	No	

SKETCH OF AREA



AREA PHOTOGRAPH

Photo Caption: Area 5, view to the east.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 7 / Choccolocco Creek

DATE OF INSPECTION : 09/02/98 | INSPECTED BY : Genesis Project / Roux Assoc.

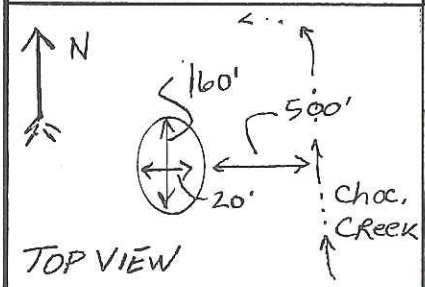
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1119579.7367	635212.4332					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 34' 39.1138" N	85° 54' 07.6704" W	Left (L)	36,500	574.8	500	0 (at top of bank level)

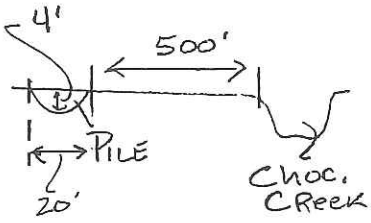
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-06-02-04-0-000-013-000 Talladega Co.	Perry & Patricia Kerr 2310 Silver Run Rd. Munford, Alabama 36268	Pasture / agricultural

	(#13) Length (Ft)	(#14) Width (Ft)	(#15) Height (Ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	160	20	-NA- Depth = 4 per NRCS	Sand Silt Gravel	Sand (washed-in area in flood prone section of property)	No

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat	-NA-	Flat	-NA-	Flat	No, however, vegetative cover is not present.

SKETCH OF AREA





AREA PHOTOGRAPH

Photo Caption: Area 7, view to the northeast.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 9 / Choccolocco Creek

DATE OF INSPECTION : 09/02/98

INSPECTED BY : Genesis Project / Roux Assoc.

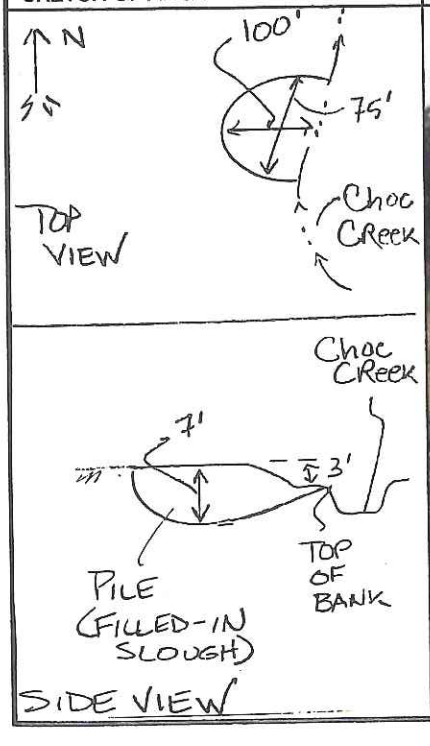
	(#1)	(#2)	(#5)	(#6)	(#7)	(#8)	(#9)
LOCATION (w/r to Centroid)	Northing (via GPS)	Easting (via GPS)	Left (L) or Right (R) Bank ? (looking downstm)	Distance Downstream from Snow Cr. (ft) (stream mile) (from map measurement)	Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	Elevation Drop Along (# 8) (approx.) (ft)
	1119627.0408	636273.8370					
	(#3)	(#4)					
	Latitude (via GPS)	Longitude (via GPS)					
	33° 34' 39.5886" N	85° 53' 55.1254" W	Left (L)	36,500	574.8	0	3 to top of bank level)

	(#10)	(#11)	(#12)
LAND OWNERSHIP INFORMATION	Parcel No.	Owner Name/Address	Land Use
	61-06-02-03-0-000-031-000 Talladega Co.	Perry & Patricia Kerr 2310 Silver Run Rd. Munford, Alabama 36268	Flood plain / undeveloped

	(#13)	(#14)	(#15)	(#16)	(#17)	(#18)
PHYSICAL DESCRIPTION	Length (ft)	Width (ft)	Height (ft)	Soil Type in Area	Cover Type and Description	Is Vegetation Well Estab. ?
	100	75	-NA- Depth = 0 to 7 per NRCS	Sand Silt Gravel	Gravel and sand at surface	No

	(#19)	(#20)	(#21)	(#22)	(#23)	(#24)
AREA SLOPE DATA	Average Slope Along Length (H) : (V)	Slope Length (Along Length) (ft)	Average Slope Along Width (H) : (V)	Slope Length (Along Width) (ft)	Steepest Slope (H) : (V)	Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
	Flat	-NA-	Flat	-NA-	5:1 near creek edge	No, however vegetative cover is not present.

SKETCH OF AREA



AREA PHOTOGRAPH

Photo Caption: Area 9, view to the west.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 10 / Choccolocco Creek

DATE OF INSPECTION : 09/02/98 | INSPECTED BY : Genesis Project / Roux Assoc.

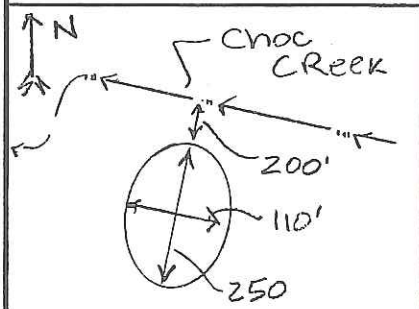
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1118980.2828	637278.3930					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 34' 33.1961" N	85° 53' 43.2474" W	Left (L)	34,000	577.8	200	0 (at top of Bank Level)

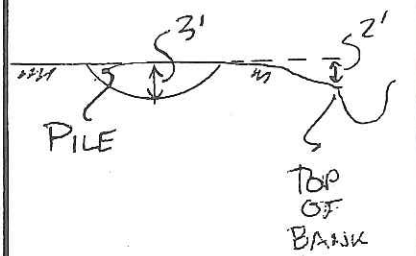
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-06-02-03-0-000-033-000 Talladega Co.	Perry & Patricia Kerr 2310 Silver Run Rd. Munford, Alabama 36268	Flood plain / undeveloped

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	250	110	2 above top of bank; Depth = 3 per NRCS	Sand Silt Gravel	Grass and weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat at top	apprx. 8 at edges where 4:1 slope	Flat at top	apprx. 8 at edges where 4:1 slope	4:1 at pile edges	No

SKETCH OF AREA





SIDE VIEW

AREA PHOTOGRAPH

Photo Caption: Area 10, view to the south.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 12 / Choccolocco Creek

DATE OF INSPECTION : 09/02/98

INSPECTED BY : Genesis Project / Roux Assoc.

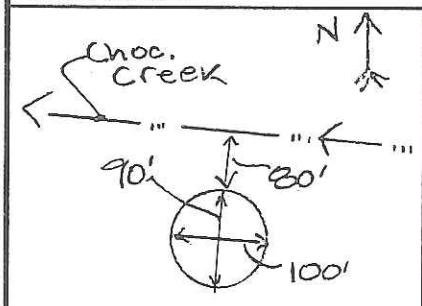
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1118979.9074	639068.1385					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 34' 33.2024" N	85° 53' 22.0937" W	Left (L)	32,000.00	580.1	80	0 (at top of bank level)

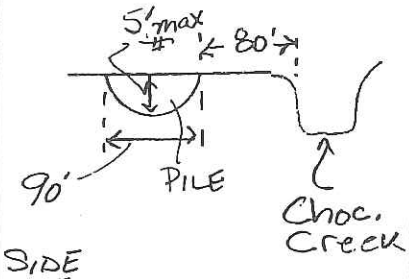
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-06-02-03-0-000-034-000 Talladega Co.	Doris R. Burrows P.O. Box 3118 Oxford, Alabama 36203	Flood plain / undeveloped

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	100	90	-NA- Depth = 4 to 5 per NRCS	Sand Silt Gravel	Grass and weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Mostly flat	-NA-	Mostly flat	-NA-	3:1 slope at west and south edge	No

SKETCH OF AREA





SIDE VIEW

AREA PHOTOGRAPH

Photo Caption: Area 12, view to the south.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 15 / Choccolocco Creek

DATE OF INSPECTION : 09/02/98

INSPECTED BY : Genesis Project / Roux Assoc.

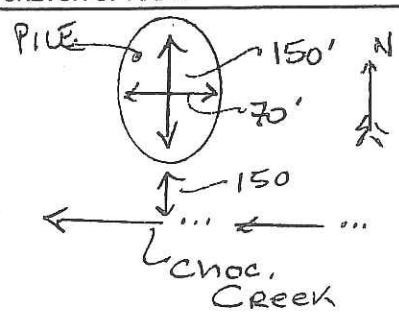
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1119067.8536	639824.8552					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 34' 34.0765" N	85° 53' 13.1504" W	Right (R)	31,000	578.6	150	0 (at top of bank level)

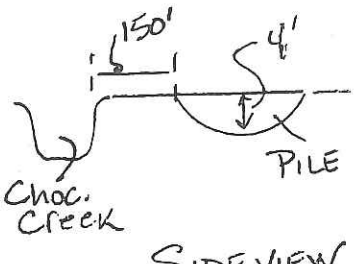
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-06-02-03-0-000-029-000 Talladega Co.	Calhoun County Economic Development Council P.O. Box 2283 Anniston, Alabama 36202	Undeveloped

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	70	150	-NA- Depth = 3 to 4 per NRCS	Sand Silt Gravel	Grass and tall weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat	-NA-	Flat	-NA-	Flat	No

SKETCH OF AREA





AREA PHOTOGRAPH

Photo Caption: Area 15, view to the west.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 16 / Choccolocco Creek

DATE OF INSPECTION : 09/02/98

INSPECTED BY : Genesis Project / Roux Assoc.

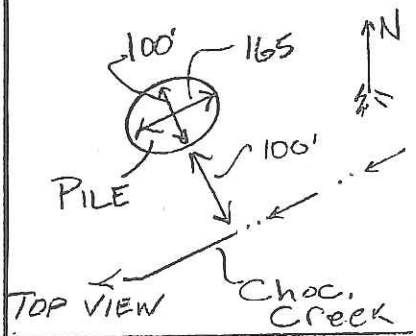
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1118743.8480	640883.2374					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 34' 30.8762" N	85° 53' 00.6391" W	Right (R)	30,000	581.8	100	0 (at top of bank level)

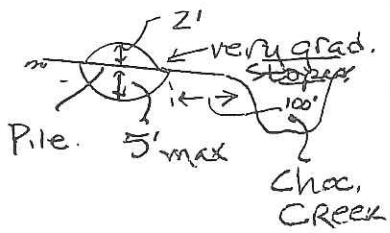
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-06-02-03-0-000-029-000 Talladega Co.	Calhoun County Economic Development Council P.O. Box 2283 Anniston, Alabama 36202	Undeveloped

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	165	100	aprx. 2' tall; Depth = 2 to 5 per NRCS	Sand Silt Gravel	Grass and tall weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat	-NA-	4 : 1	8 approx.	4 : 1	No

SKETCH OF AREA





SIDE VIEW

AREA PHOTOGRAPH

Photo Caption: Area 16, view to the east.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 18 / Choccolocco Creek

DATE OF INSPECTION : 09/02/98 | INSPECTED BY : Genesis Project / Roux Assoc.

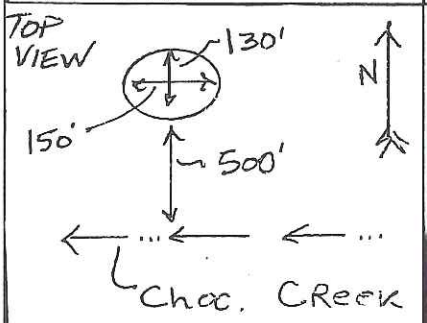
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (Ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1119480.2995	644907.6022					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 34' 38.1790" N	85° 52' 13.0771" W	Right (R)	24,000	588	500	0 (at top of bank level)

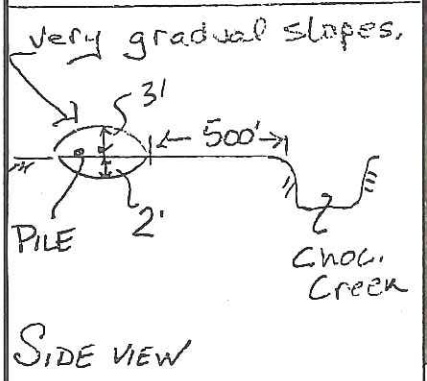
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-06-01-02-0-000-009-000 Talladega Co.	City of Anniston 1128 Gurnee Ave. Anniston, Alabama 36201	Airport buffer zone

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	130	150	3 Depth = 2 per NRCS	Sand Silt Gravel	Grass and tall weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Mostly flat	-NA-	Mostly flat	-NA-	3:1 (at Northern edge)	No

SKETCH OF AREA





AREA PHOTOGRAPH

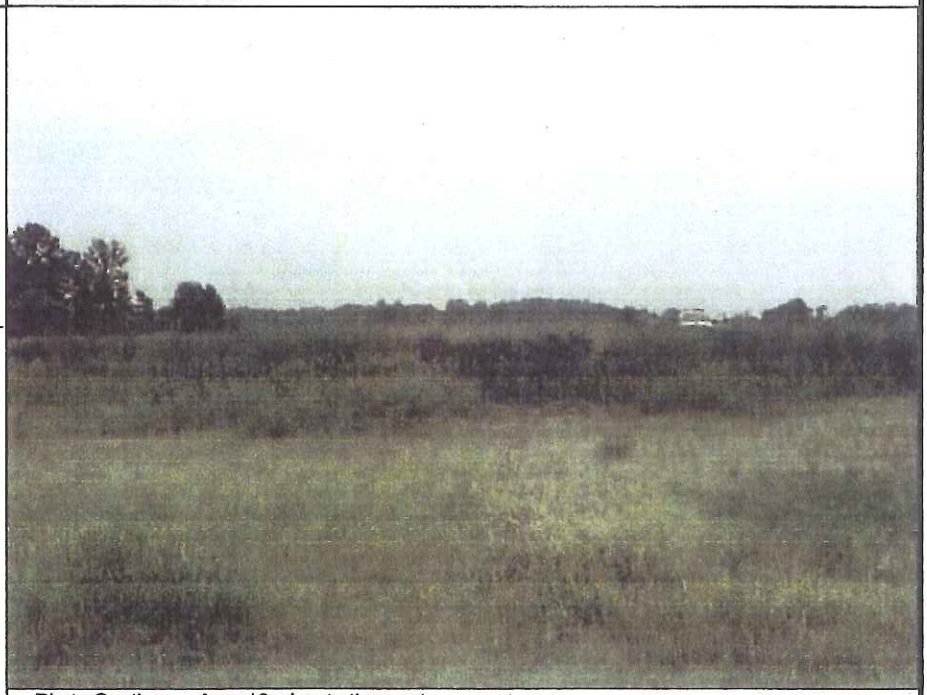


Photo Caption: Area 18, view to the west.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 19 / Choccolocco Creek

DATE OF INSPECTION : 09/02/98

INSPECTED BY : Genesis Project / Roux Assoc.

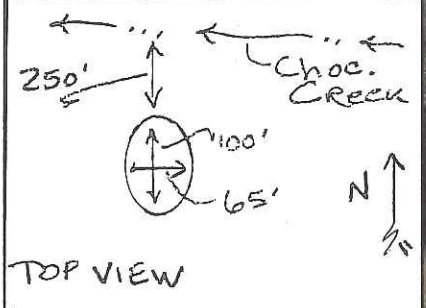
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx) (ft)
LOCATION (w/r to Centroid)	1118790.8812	646112.8811					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 34' 31.3623" N	85° 51' 58.8287" W	Left (L)	23,000	588	250	0 (at top of bank level)

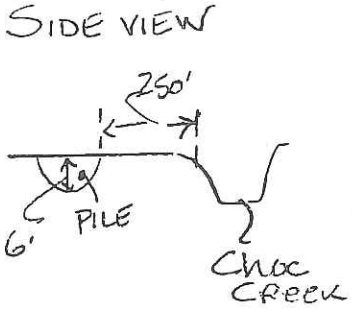
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-06-01-02-0-000-010-000 Talladega Co.	Billy Ray and Tommie Jean Camp 480 Kirby Road Oxford, Alabama 36203	Pasture

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	100	65	-NA- Depth = 5 to 6 per NRCS	Sand Silt Gravel	Grass and tall weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat	-NA-	Flat	-NA-	Flat	No

SKETCH OF AREA





AREA PHOTOGRAPH

Photo Caption: Area 19, view to the north.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 23 / Choccolocco Creek

DATE OF INSPECTION : 09/01/98

INSPECTED BY : Golder Associates / Roux Assoc.

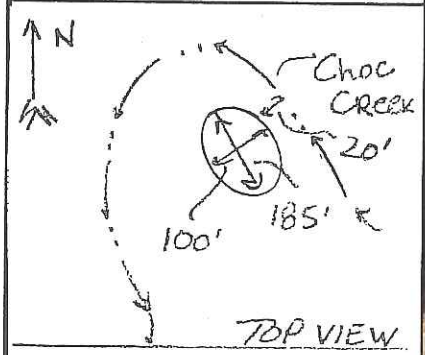
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1121847.1841	650250.8679					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 35' 01.6099" N	85° 51' 09.9273" W	Left (L)	16,000	593.2	20	2 above bank level)

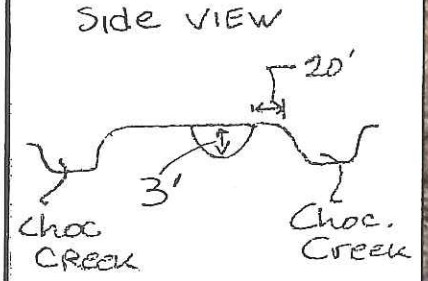
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-06-01-01-0-000-003-000 Talladega Co.	Joe N. Bennett 1608 Joe St. Oxford, Alabama 36203	Pasture / agricultural

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	185	100	-NA- Depth = 3 per NRCS	Sand & Silt	Grass, weeds, some trees planted at perimeter	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	10 : 1	40 approx.	10 : 1	40 approx.	10 : 1	No

SKETCH OF AREA





AREA PHOTOGRAPH

Photo Caption: Area 23, view to the northwest.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 24 / Choccolocco Creek

DATE OF INSPECTION : 09/01/98

INSPECTED BY : Golder Associates / Roux Assoc.

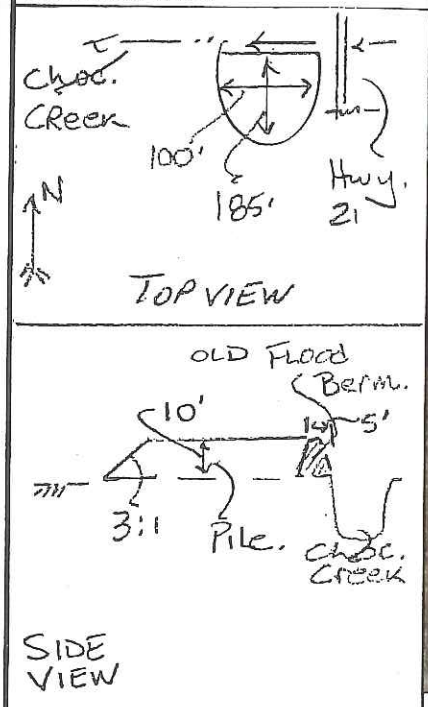
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1121894.6292	651514.1979					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 35' 02.0814" N	85° 50' 54.9943" W	Left (L)	14,500	594.2	~ 5 (next to flood berm)	2 above bank level)

	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	61-06-01-01-0-000-003-000 Talladega Co.	Joe N. Bennett 1608 Joe St. Oxford, Alabama 36203	Pasture / agricultural

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	280	165	~10	Sand Silt Gravel	Grass	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	3 : 1 w/ Flat top	50 approx.	3 : 1	50 approx.	3 : 1	No

SKETCH OF AREA



AREA PHOTOGRAPH

Photo Caption: Area 24, view to the east toward Highway 21 bridge.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 25 / Choccolocco Creek

DATE OF INSPECTION : 09/01/98

INSPECTED BY : Golder Associates / Roux Assoc.

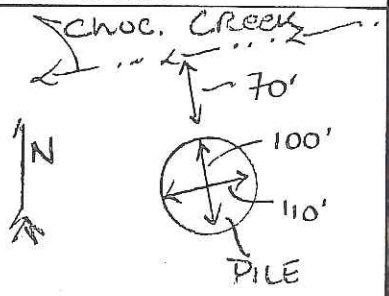
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (From Map Measmt.)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1122206.7393	652309.5733					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 35' 05.1703" N	85° 50' 45.5931" W	Left (L)	13,500	595.5	70	0 (at top of bank level)

	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	E 1/2 = 61-05-03-06-0-000-004-001	E 1/2 = Bruce W. Corbett 932 Allred Dr. Oxford, Alabama 36203	Flood plain / undeveloped
	W 1/2 = 61-05-03-06-0-000-004-008 Talladega Co.	W 1/2 = Werner C. & Ruth E. Vogt 7791 31st Ave. N St. Petersburg, Fl 33710	

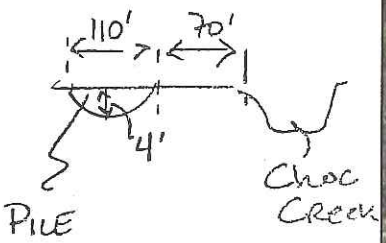
	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	110	100	-NA- Depth = 4 to 5 per NRCS	Sandy loam	Grass, weeds, small oak trees planted along perimeter	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat	-NA-	Flat	-NA-	Flat	No

SKETCH OF AREA



TOP VIEW



SIDE VIEW

AREA PHOTOGRAPH

Photo Caption: Area 25, view to the north.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 26 / Choccolocco Creek

DATE OF INSPECTION : 09/01/98

INSPECTED BY : Golder Associates / Roux Assoc.

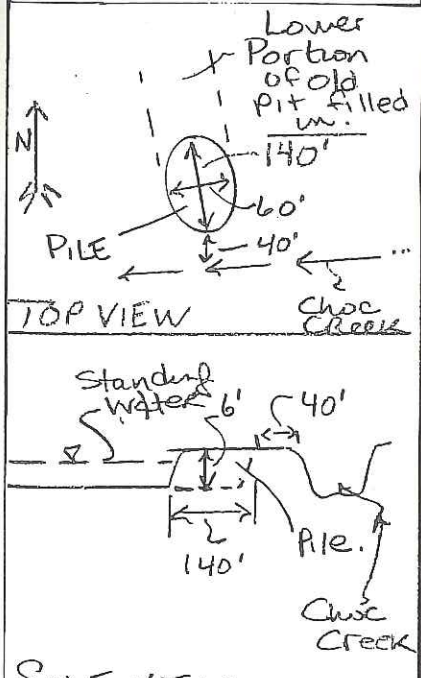
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1122863.8876	653390.9506					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 35' 11.6729" N	85° 50' 32.8112" W	Right (R)	12,000	595.8	~40	0 (at top of bank level)

	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	11-21-09-31-3-01-001 Calhoun Co.	Phyllis S. Weaver 1 Meadowlake Farm Rd. Oxford, Alabama 36203	Pasture / agricultural

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	140	60	-NA- Depth = 4 to 6 per NRCS	Sand, Silt Gravel	Grass and weeds cover most of area, however at the edge of fill / borrow pit interface, no cover.	Yes, except as noted under #17.

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat	-NA-	Mostly flat	-NA-	3 : 1 where fill transitions into old borrow pit.	No, however some soil is exposed at the location noted under #17.

SKETCH OF AREA



AREA PHOTOGRAPH

Photo Caption: Area 26, view to the southwest.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : Area 28 A / Choccolocco Creek

DATE OF INSPECTION : 09/01/98

INSPECTED BY : Golder Associates / Roux Assoc.

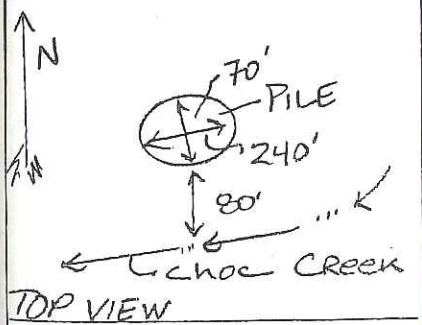
LOCATION (w/r to Centroid)	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
	1123772.6958	655731.7219					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 35' 20.6653" N	85° 50' 05.1416" W	Right (R)		596.1	80	0 (at top of bank level)

LAND OWNERSHIP INFORMATION	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
	11-21-09-31-4-001-002 Calhoun Co.	Phyllis S. Weaver 1 Meadowlake Farm Rd. Oxford, Alabama 36203	Pasture / agricultural

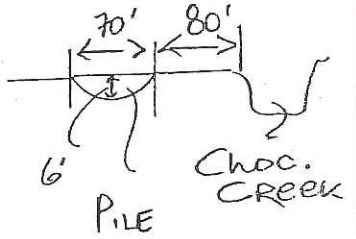
PHYSICAL DESCRIPTION	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
	240	70	-NA- Depth = 5 to 6 per NRCS	Sands Silts	Grass and weeds	Yes, except a dry spot on corner.

AREA SLOPE DATA	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
	Flat	-NA-	Flat	-NA-	Flat	No

SKETCH OF AREA



TOP VIEW



SIDE VIEW

AREA PHOTOGRAPH

Photo Caption: Area 28A, view to the east.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 28 B / Choccolocco Creek

DATE OF INSPECTION : 09/01/98

INSPECTED BY : Golder Associates / Roux Assoc.

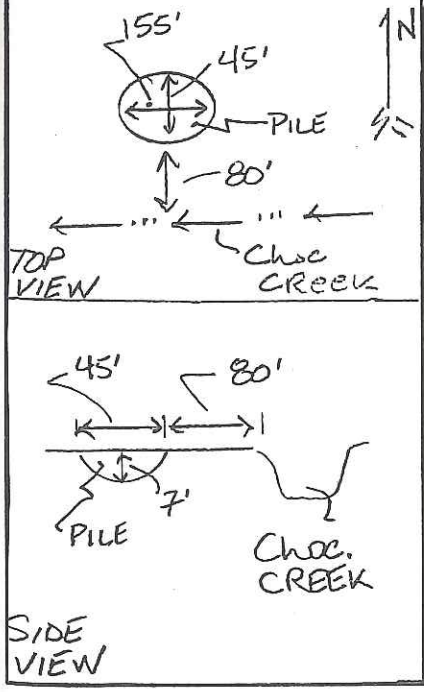
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1124326.1238	656211.7946					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 35' 26.1406" N	85° 49' 59.4665" W	Right (R)	9,000	596.1	80	0 (at top of (bank level)

	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	11-21-09-31-4-01-002 Calhoun Co.	Phyllis S. Weaver 1 Meadowlake Farm Rd. Oxford, Alabama 36203	Pasture / agricultural

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	155	45	-NA- Depth = 6 to 7 per NRCS	Sands Silts	Grass and weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat	-NA-	Flat	-NA-	Flat	No

SKETCH OF AREA



AREA PHOTOGRAPH

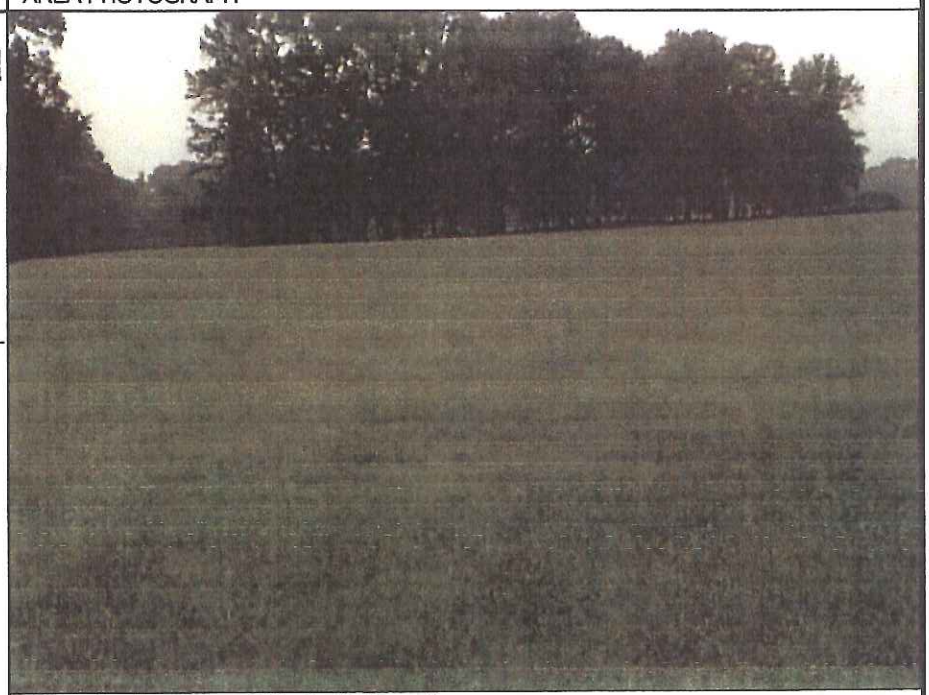


Photo Caption: Area 28B, view to the north.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 29 / Choccolocco Creek

DATE OF INSPECTION : 09/01/98

INSPECTED BY : Golder Associates / Roux Assoc.

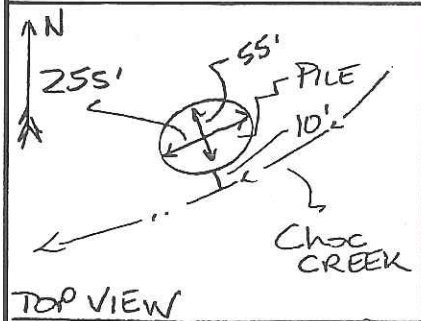
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1125444.6484	657128.8242					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 35' 37.2064" N	85° 49' 48.6254" W	Right (R)	6,500	597.8	10	0 (at top of bank level)

	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	11-21-09-31-4-01-002 Calhoun Co.	Phyllis S. Weaver 1 Meadowlake Farm Rd. Oxford, Alabama 36203	Pasture / agricultural

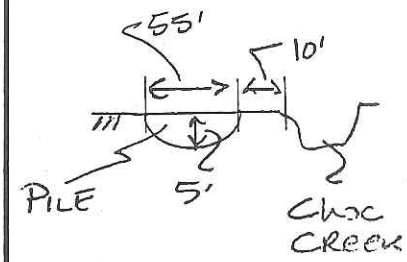
	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	215	55	-NA- Depth = 4 to 5 per NRCS	Sands Silts	Grass and weeds	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Flat	-NA-	Flat	-NA-	Flat	No

SKETCH OF AREA



TOP VIEW



SIDE VIEW

AREA PHOTOGRAPH

Photo Caption: Area 29, view to the west.

DREDGE SPOIL AREA DATA

AREA IDENTIFICATION NUMBER : AREA 31 / Choccolocco Creek

DATE OF INSPECTION : 09/01/98

INSPECTED BY : Golder Associates / Roux Assoc.

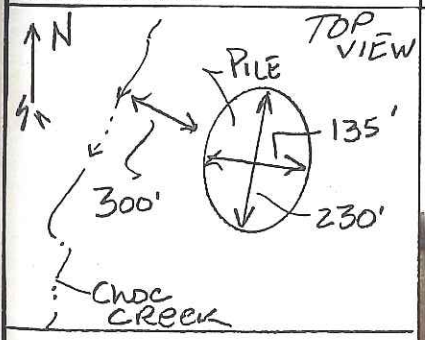
	(#1) Northing (via GPS)	(#2) Easting (via GPS)	(#5) Left (L) or Right (R) Bank ? (looking downstm)	(#6) Distance Downstream from Snow Cr. Confluence (ft) (from map measurement)	(#7) Top / Crest Elevation (approx.) (ft-MSL) (from NRCS reference benchmarks)	(#8) Horiz. Dist. From Toe of Area to Creek Top of Bank (ft)	(#9) Elevation Drop Along (# 8) (approx.) (ft)
LOCATION (w/r to Centroid)	1127040.2954	657579.5389					
	(#3) Latitude (via GPS)	(#4) Longitude (via GPS)					
	33° 35' 52.9926" N	85° 49' 43.2965" W	Left (L)	3,500	602.2	300	0 (at top of bank level)

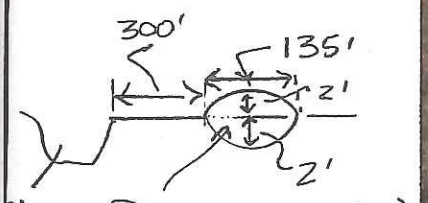
	(#10) Parcel No.	(#11) Owner Name/Address	(#12) Land Use
LAND OWNERSHIP INFORMATION	11-21-09-32-2-01-006 Calhoun Co.	Edward C. Hopson 1700 Cheaha Dr. Oxford, Alabama 36203	Pasture / agricultural

	(#13) Length (ft)	(#14) Width (ft)	(#15) Height (ft)	(#16) Soil Type in Area	(#17) Cover Type and Description	(#18) Is Vegetation Well Estab. ?
PHYSICAL DESCRIPTION	135	230	2 Depth = 2 per NRCS	Sands Silts Gravel	Grass	Yes

	(#19) Average Slope Along Length (H) : (V)	(#20) Slope Length (Along Length) (ft)	(#21) Average Slope Along Width (H) : (V)	(#22) Slope Length (Along Width) (ft)	(#23) Steepest Slope (H) : (V)	(#24) Is There Evidence of Slump, Erosion or Area Stability Problem(s) ?
AREA SLOPE DATA	Mostly flat, except at edges	-NA-	Mostly flat, except at edges	-NA-	5:1 at south and east edges	No

SKETCH OF AREA





Choc Creek. PILE (mostly Flat)

SIDE VIEW

AREA PHOTOGRAPH

Photo Caption: Area 31, view to the west.

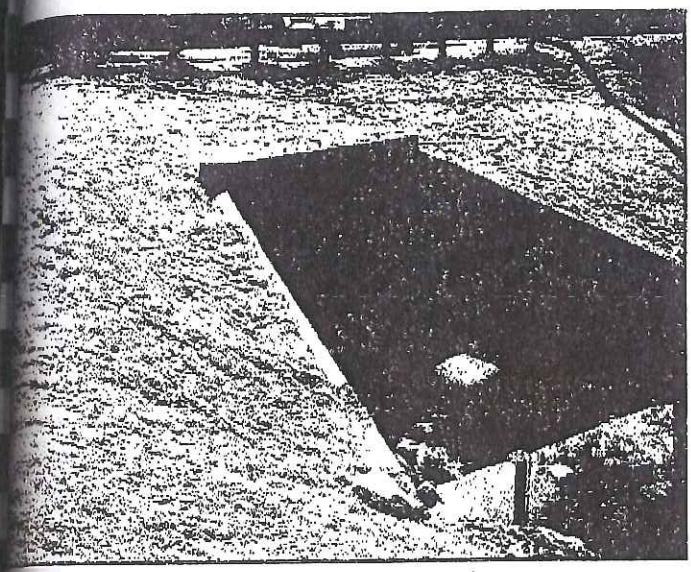
APPENDIX B

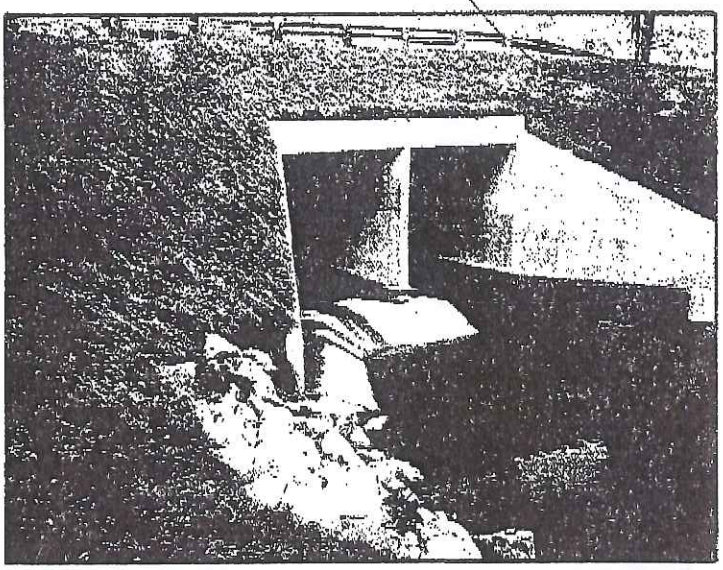
TYPICAL SPECIFICATIONS FOR EROSION CONTROL BLANKETS AND TURF REINFORCEMENT MATS

American Excelsior Company®

AN EMPLOYEE OWNED COMPANY

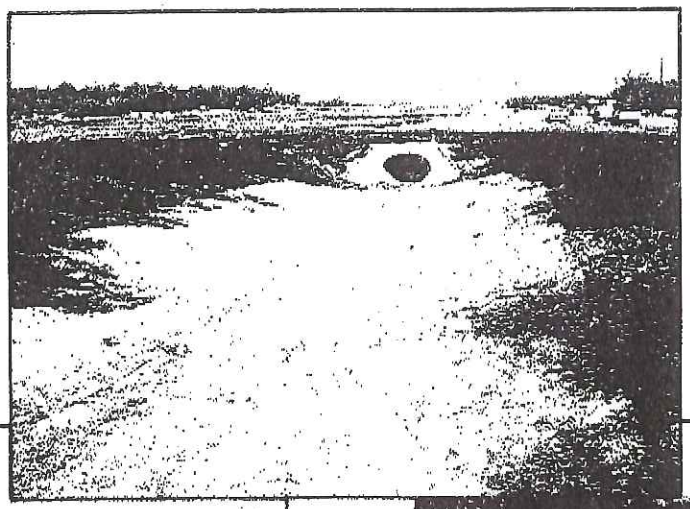
Curlex® Excelsior Blankets

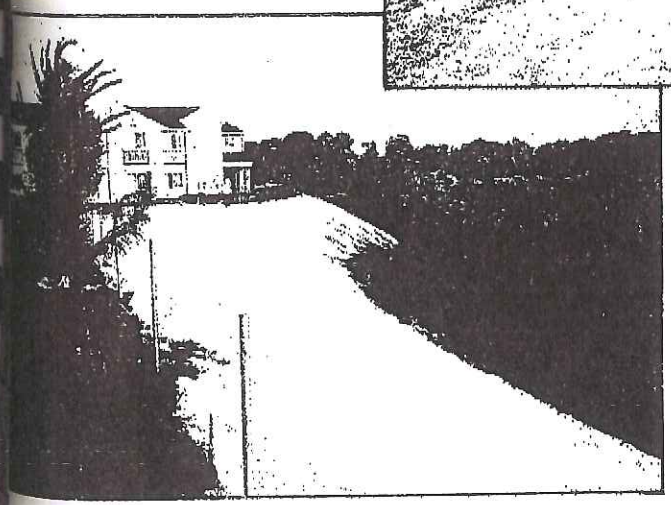


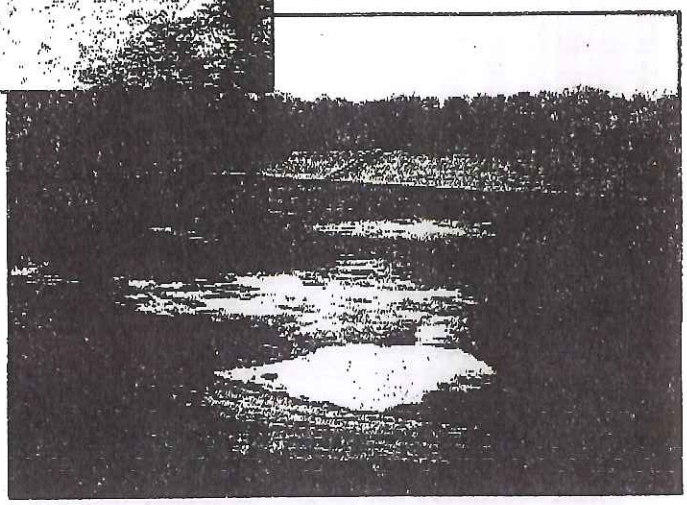


roduct.....

Results



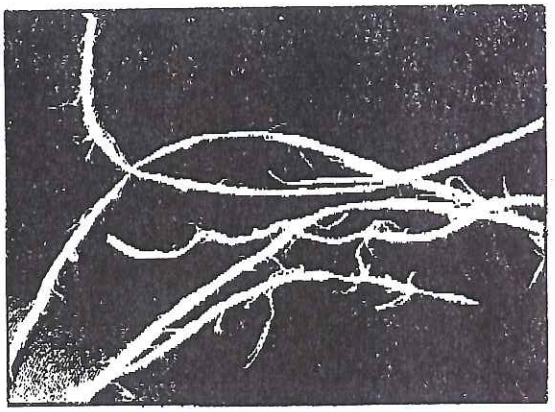




American Excelsior Company

"Working With Nature To Create a Better Environment"

Curlex® Blankets Have...

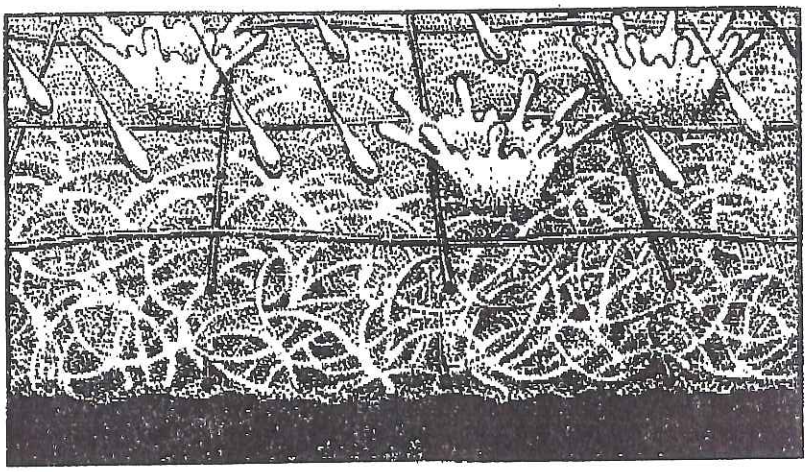


Curlex® Blankets have long passed the test of time, and their proven use has been seen by just about every agency or contractor who has disturbed soil.

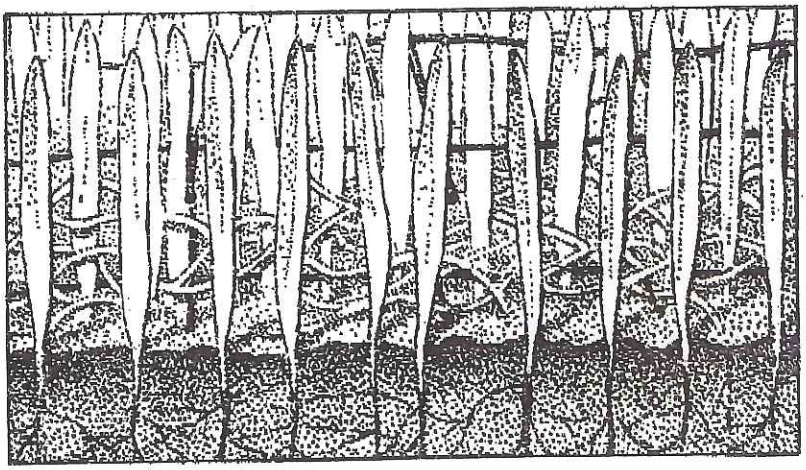
Curlex Blankets have a unique ability to not only "cling" to the soil, but to cling to its own internal construction, due to the "barbed" fibers. This reduces soil loss and provides strength in its foundation

Curlex Blankets also have a natural "mechanical" action, by its ability to expand and contract during weather conditions. As fibers come in contact with moisture, it causes the fibers to expand. As the water is released into the soil, the drying causes contraction of the fibers. This expansion/contraction helps the fibers dig into the soil, thus the natural mechanical action.

Curlex Blankets:



- Help protect seeds from harsh direct sunlight.
- Help reduce the fluctuations in soil temperature by creating a "blanket" for the germinating seeds.
- Help break-up heavy raindrops, which can cause added soil loss due to the "splashing" effect of lifted soils.
- Retain moisture, which is later available to the soil.
- Are a renewable resource. Aspen trees are self-propagating.
- Are stocked at over 30 company-owned locations.
- Are supported by company representatives who understand their products and the conditions they are used in.
- Have been exposed to numerous tests by state and federal agencies, as well as other outside sources.
- Are available in many constructions to meet various soil conditions.
- Germinating growth provides "thousands" of small anchors, which in turn aid in "locking" the product to the soil.
- Are available with various netting constructions that last from 30-60 days, to multiple years.
- Contain no weed seeds (do not have to be treated to kill foreign weed seeds).
- Conform to soil surfaces. Are not rigid, like some fibers.
- Aspen fibers are biodegradable, acting like a mulch which adds natural nutrients to the soil.
- Backed by business success that dates back to 1888.
- Vegetation is the ultimate key to the project's success, and Curlex Blankets have a greenhouse affect that helps expedite the germination.



American Excelsior Company produces a large variety of products related to erosion and sediment control.

Whether it is Excel™ Fibermulch II, Curlex Blankets or our Tri-Lock concrete revetment system, American Excelsior is close by. Consult the back cover for the location nearest you.

CURLEX® I
Erosion Control Blanket

Revised 04/06/98
Replaces 01/12/98

CURLEX® I MATERIAL SPECIFICATIONS

Materials:

Great Lakes Aspen Excelsior
Polypropylene netting
QuickGrass (green excelsior - optional)

Roll Sizes:

Width	Length	Area	Weight
4 ft (1.22m)	180 ft (54.9m)	80.0 sy (66.9 m^2)	78 lb (35.4 kg)
4 ft (1.22m)	112.5 ft (34.4m)	50.0 sy (41.8 m^2)	49 lb (22.2 kg)
8 ft (2.44m)	90 ft (27.4m)	80.0 sy (66.9 m^2)	78 lb (35.4 kg)
8 ft (2.44m)	56.25 ft (17.1m)	50.0 sy (41.8 m^2)	49 lb (22.2 kg)

Description:

Curlex®I erosion control blanket is a natural, excelsior blanket which provides a temporary organic cover to reduce erosion, protect seeds, enhance germination and hasten re-vegetation. Typically, *Curlex®I* is suitable for severe slopes up to 1.5:1 and channels up to 5.0 fps (1.5 mps). *Curlex®I* is furnished in rolls with polyethylene wrapping (paper wrapping for QuickGrass) to protect against the elements prior to installation and may be ordered stretch-wrapped in Master-Paks of six rolls each (banded in Master-Paks of four rolls for 8 foot widths) to minimize material handling requirements.

Physical Properties:

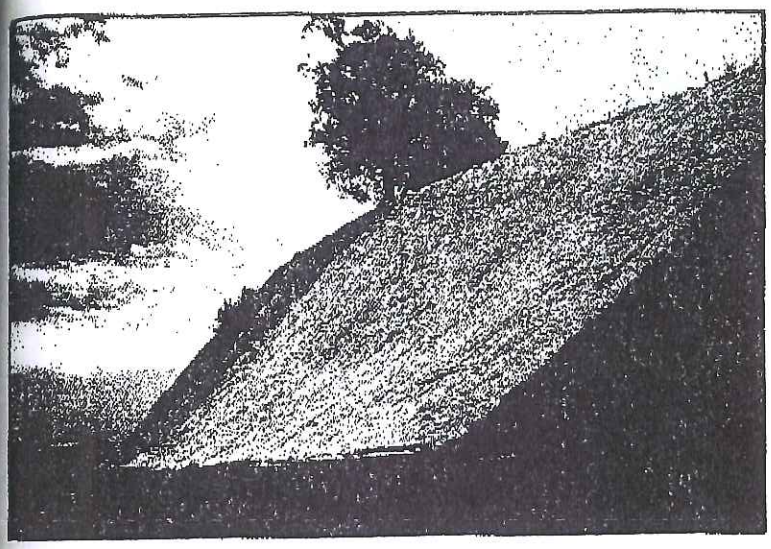
Fiber:	Great Lakes Aspen Excelsior with no weed seeds Curled, interlocking fibers with barbed edges
Fiber Size:	80% of fibers a minimum of 6" (15.24 cm) long 0.038" ± 0.010" wide by 0.018" ± 0.003" thick (0.97 mm ± 0.25 mm wide by 0.45 mm ± 0.08 mm thick)
Water Absorption:	250% ± 25%
Weight:	0.98 lb/sy (0.53 kg/m^2) ± 10%
Net:	Polypropylene (green or white-UV degrader additive)
Net Opening Size:	3/4" wide by 1-5/8" long (19 mm wide by 41 mm long)
Net Configuration:	Top side only

All weights and measures are based on product at time of manufacture

American Excelsior Company®
AN EMPLOYEE OWNED COMPANY

P.O. Box 5067 / 850 Avenue H East Arlington, TX 76011 Phone 800-777-SOIL Fax 817-649-7816

Curlex® I

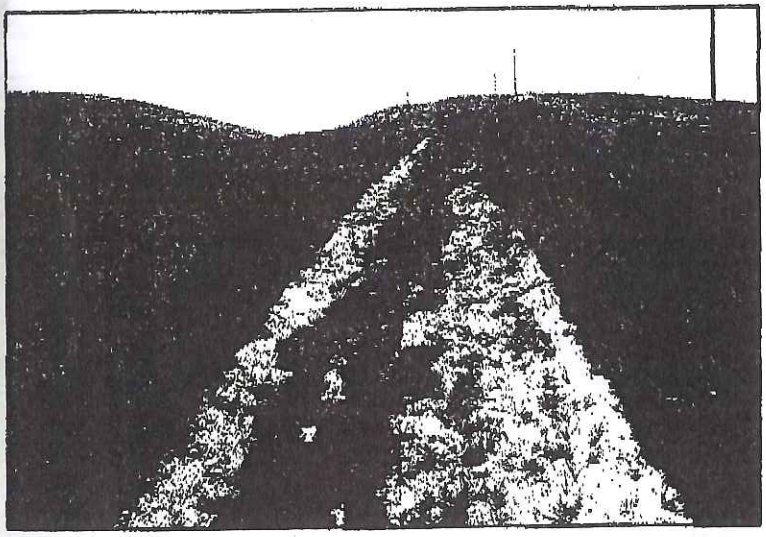


SPECIFICATION

A wood machined mat of curled wood excelsior of 80% six-inch or longer fiber length. It has consistent thickness, with the fibers evenly distributed over the entire area of the blanket. The top of each blanket shall be covered with a photo-degradable, extruded plastic mesh. Material shall not contain any chemical additives.

Recommended Use:	Slopes to 1.5:1, Channels to 5 fps
Roll Sizes:	4'x 180', 4'x 112.5', 8'x 90'
Weight:	.975 lbs./sq. yd.
Options:	Also available with a short 30-60 day life-cycle netting

Curlex® II (Double Sided)

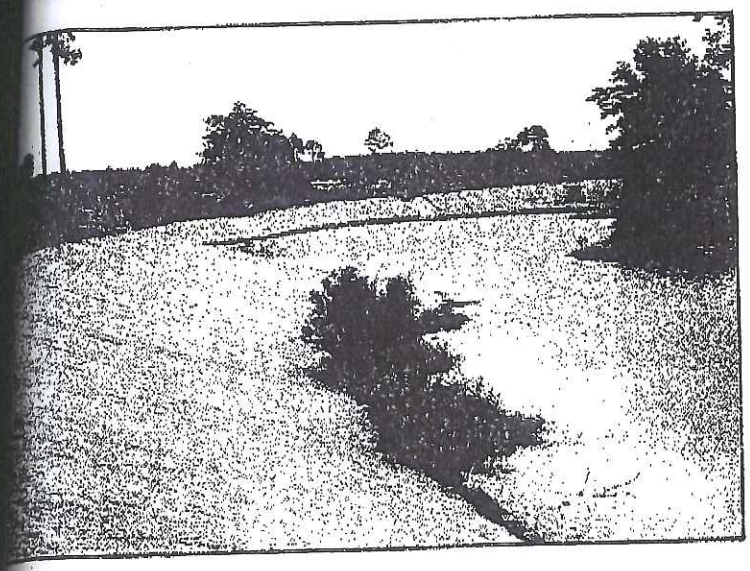


SPECIFICATION

A wood machined mat of curled wood excelsior of 80% six-inch or longer fiber length. It has consistent thickness, with the fibers evenly distributed over the entire area of the blanket. Both the top and bottom of each blanket shall be covered with a photodegradable, extruded plastic mesh. Material shall not contain any chemical additives.

Recommended Use:	Slopes to 1.5:1, Channels to 7 fps, Sandy Soils
Roll Sizes:	4'x 180', 4'x 112.5', 8'x 90', 8'x 56'
Weight:	1 lb./sq. yd.

Curlex® QuickGrass

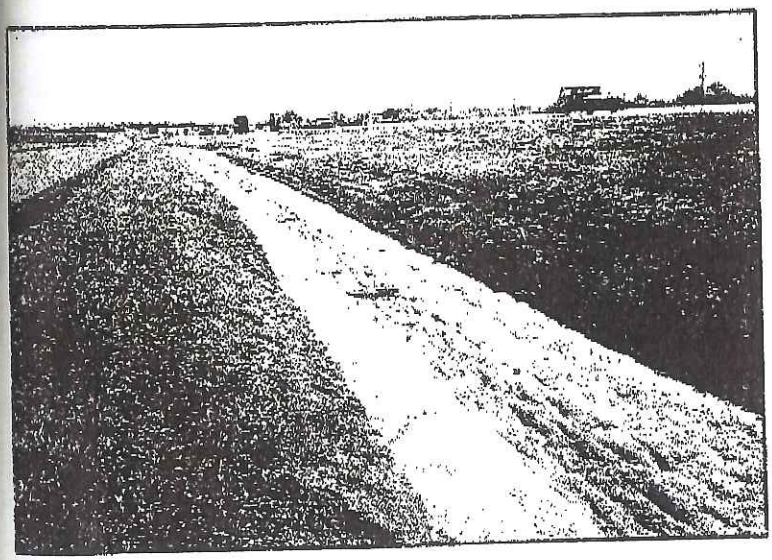


SPECIFICATION

A dyed green Aspen wood fiber mat constructed from curled excelsior, of which 80% is six-inches or longer in length. It has uniform color and consistent thickness, and the fibers are evenly distributed over the entire blanket. Each blanket is covered with a photodegradable, extruded plastic mesh and shall not contain any chemical additives.

Recommended Use:	Slopes to 1.5:1, Channels to 5 fps. Green color makes this product ideal for sensitive areas such as Landfills, Residential areas, Parks, etc.
Roll Sizes:	4'x 180', 4'x 112.5' 8'x 90'
Weight:	1.06 lbs./sq. yd.
Options:	Also available with a short 30-60 day life-cycle netting

Curlex® *III* (HV)



SPECIFICATION

The excelsior blanket shall consist of a heavy weight construction of a machined, curled wood fiber, produced in a mat form. Fibers shall consist of 80% six-inch or longer fibers with consistent thickness and evenly distributed over its entire areas. Each side is covered with black, heavy-duty, extruded plastic mesh designed to last for years and reinforce the root system after the excelsior mat has decomposed. Material shall not contain any chemical additives.

Recommended Use:	Channels to 10 fps, Slopes needing long-term protection
Roll Sizes:	4'x 100', 8' x 50'
Weight:	1.62 lbs./sq. yd.

Curlex® Installation Instructions

1) FINISH GRADE, FERTILIZE, AND SEED BEFORE APPLYING BLANKET
2) LOCATE BEGINNING OF ROLL USING STARTER SHEET

SLOPES

Product	Staple Diagram		Staples		Seam Overlap		Installation	
Soils	Cohesive	Non-Cohesive	Cohesive	Non-Cohesive	Cohesive	Non-Cohesive	Cohesive	Non-Cohesive
Curlex I	A	A	D	E	--	F	H	I
Curlex II	A	A	D	E	--	F	H	I
QuickGrass	A	A	D	E	--	F	H	I

CHANNELS

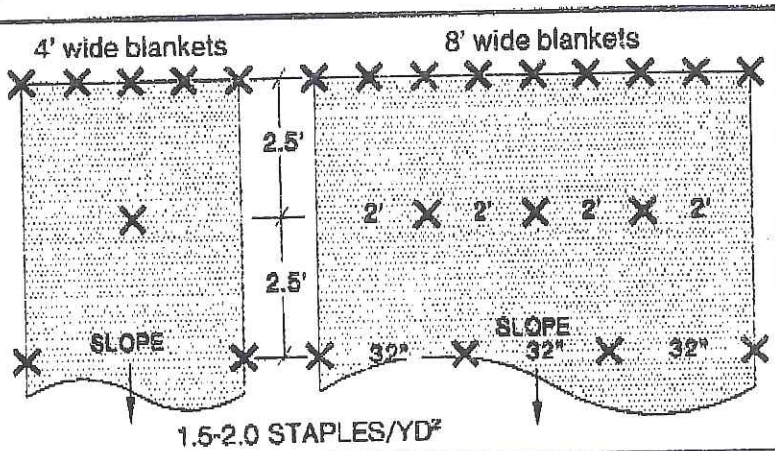
Product	Staple Diagram		Staples		Seam Overlap (with flow direction)	
Soils	Cohesive	Non-Cohesive	Cohesive	Non-Cohesive	Cohesive	Non-Cohesive
Curlex I	B	B	D	E	G	G
Curlex II	B	B	D	E	G	G
QuickGrass	B	B	D	E	G	G
Curlex III	C	C	D	E	G	G

COHESIVE SOILS:
- No overlap required on side seams
- Use 6" staple length

NON-COHESIVE SOILS:
- Use 6" side seam overlap
- Use 8' staple length
- Use 6" anchor trench at top of slope

A SLOPES
Up to 1.5H:1V

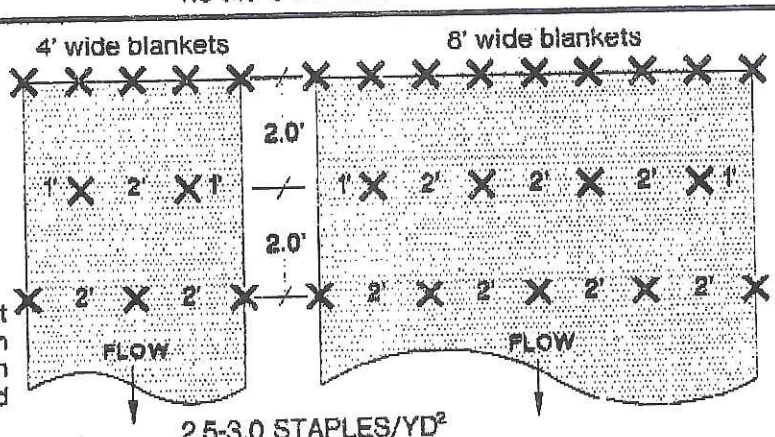
- Install the blanket vertically or horizontally.
- Use 12" staple spacing on starter row.



COHESIVE SOILS:
- Use 6" side seam overlap
- Use 6" staple length
- Use 6" transverse anchor trench at 100-ft. intervals

B CHANNELS

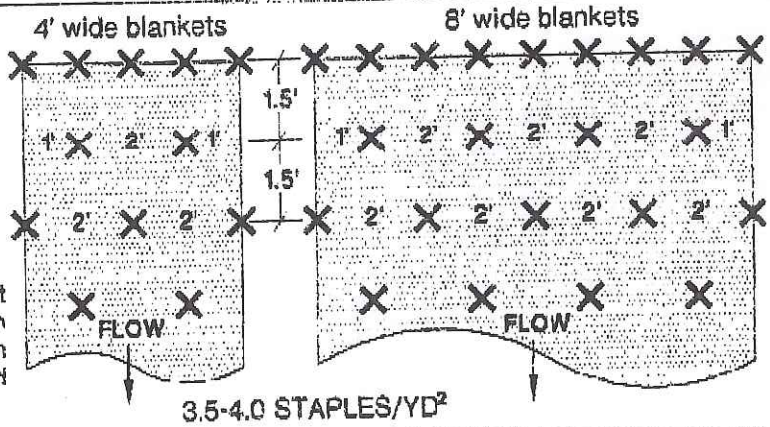
- Use 12" staple spacing on starter row.
- Upstream blanket should overlap downstream blanket a distance of 12" in a "shingle" fashion and bury the finished toe at least 6".



NON-COHESIVE SOILS:
- Use 6" side seam overlap
- Use 8" staple length
- Use 6" transverse anchor trench at 50-ft. intervals

C CHANNELS

- Use 12" staple spacing on starter row.
- Upstream blanket should overlap downstream blanket a distance of 12" in a "shingle" fashion and bury the finished toe at least 6".



D = 6x1x6 11 ga. wire E = 8x2x8 11 ga. wire F = 2" G = 6" H = Start 3' over grade break I = Start 3' over grade break & trench

Hi-Velocity Curlex® Blankets

apling Instructions for AMXCO -Velocity Curlex® Blankets

e wire staples, 11 gauge in diameter greater, "U" shaped with legs 8" long longer and 1" to 2" crown. Size and uge of staples used will vary with soil es. Use four staples across at the rt of each roll and continue to staple ng the length of the roll at 2 ft. ervals. When blankets are placed ong side each other, staple so as to tch the edge of each roll. In addition stapling the edges of the blanket at e appropriate intervals (see drawing), lace staples in the center of the blanket alfway between the outer staples.

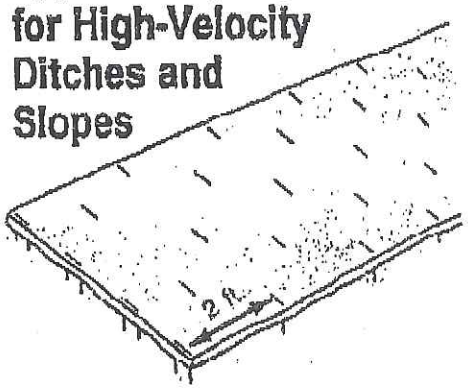
Hi-Velocity Curlex® Blankets

are recommended for the following water velocities:

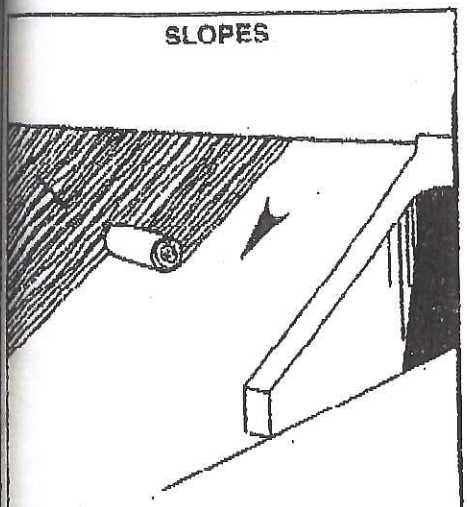
Soil Types	Velocity/Feet Per Second
Clay, Clay Loam, Silt Clay	11 FPS
Clay, Silty Clay, Sandy Clay Loam	9.8 FPS
Fine Sandy Loam, Silty Loam	8.6 FPS

These figures are based on ditch lining at over 3% grade up to 13%. On slope protection, the determining factor would be the grade of the slope, berms above and sheeting effect of water velocity.

Typical Stapling Pattern for High-Velocity Ditches and Slopes

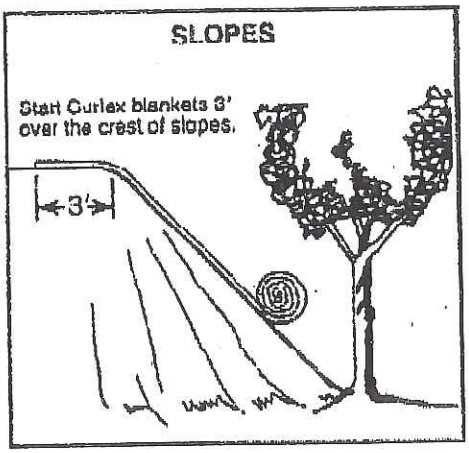


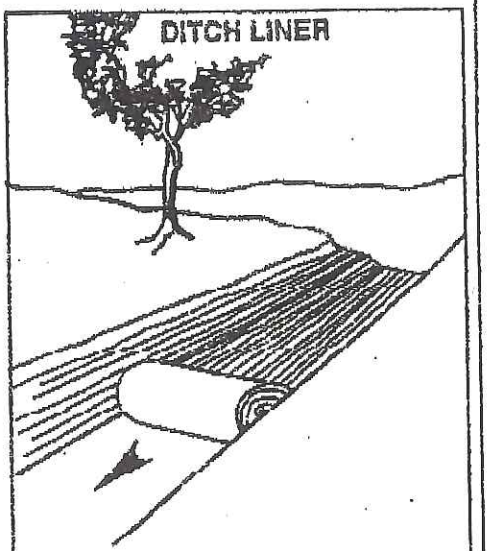
Use 4 staples across at the start of each roll and continue to staple throughout the length of the roll at 2 ft. intervals.
Overlap adjacent rolls 2" - 3" when used on horizontal installation. End and beginning of rolls overlap 6" minimum.



Curlex® Blankets can be installed horizontally or vertically on slopes. Grade and length of slope determine the easiest method.

Overlapping, check slots, and anchor ditches are not required. Butt the edges together on adjoining blankets.





Unroll blanket in the direction of water flow. When using two or more blankets side by side in ditch, do not put the seam (edge of adjoining blanket) in the center of the water flow. Offset 6 inches to 1 foot.
Bury upstream end 6 inches.

American Excelsior Company
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Rev. 4/10/94

LANDLOK® TRM 450 Turf Reinforcement Mat

LANDLOK TRM 450 is manufactured at one of Synthetic Industries' facilities that has achieved ISO-9002 certification for its systematic approach to quality. LANDLOK TRM 450 turf reinforcement mat consists of a dense web of green polypropylene fibers positioned between two biaxially oriented nets and mechanically bound together by parallel stitching with polypropylene thread. The matrix possesses strength and elongation properties to limit stretching in a saturated condition. Every component of the matrix is stabilized against ultraviolet degradation and inert to chemicals normally found in a natural soil environment. After a 24 hour saturation period, LANDLOK TRM 450 conforms to the property values listed below[1], which have been derived from quality control testing performed by one of Synthetic Industries' GAI-LAP accredited laboratories:

PROPERTY	TEST METHOD	ENGLISH VALUES[2] *MARV*	ENGLISH VALUES[2] *TYPICAL*
Mechanical			
Tensile Strength	ASTM D5035[3]	170 x 125 lb/ft	250 x 180 lb/ft
Tensile Elongation	ASTM D5035[3]	50% (max)	25%
Tensile Strength @ 10% Elongation	ASTM D5035[3]	n/a	105 x 90 lb/ft
Endurance			
UV Resistance @ 1000 hrs	ASTM D4355	80%	90%
Physical			
Mass Per Unit Area	ASTM D5261	10.0 oz/yd^2	10.5 oz/yd^2
Thickness	ASTM D1777	0.50 in	0.60 in
Resiliency[4]	ASTM D1777	80%	90%
Moisture Absorption	ASTM D570	0.01% (max)	0.01% (max)
Porosity[5]	Calculated	95%	95%
Ground Cover Factor[6]	Light Projection Analysis	74%	85%
Performance			
Velocity[7]	---	---	10 ft/sec
Shear Stress[7]	---	---	4 lb/ft^2

ROLL SIZES: 6.5 ft x 138.5 ft = 100 yd^2 (70 lbs)

SPECIAL ROLL SIZES: 3.25 ft x 138.5 ft = 50 yd^2 (40 lbs)
9.75 ft x 138.5 ft = 150 yd^2 (100 lbs)
13.0 ft x 138.5 ft = 200 yd^2 (135 lbs)

NOTES:

1. **The property values listed above are effective 12/3/96 and are subject to change without notice.**
2. Values for machine and cross-machine, respectively, under dry or saturated conditions. Minimum average roll values (MARV) are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported. Typical indicates mean or average of all test data.
3. Formerly test method ASTM D1682.
4. Resiliency defined as percent of original thickness retained after 3 cycles of a 100 psi load for 60 seconds followed by 60 seconds without load...thickness measured 30 measured after load removed by ASTM D1777.
5. Porosity calculation based upon mass per unit area, thickness, and specific gravity.
6. Ground Cover Factor represents "% shade" from Lumite Light Projection Test.
7. Maximum permissible design values listed are based on long-term (50 hrs), vegetated data obtained at an independent hydraulics testing facility. Additional values available upon request.

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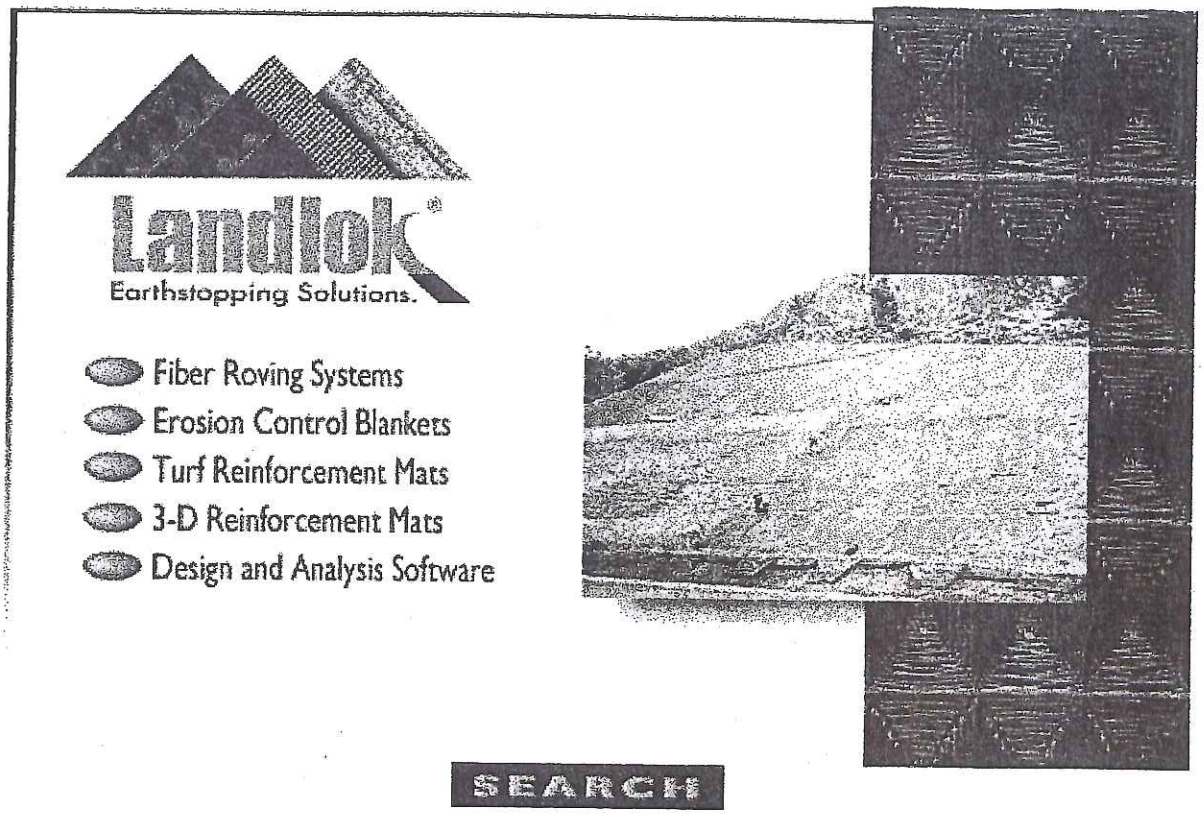

SEARCH

General Description

Our LANDLOK® system of erosion control products combines technology with nature to provide a wide range of hydraulic and mechanical properties while promoting revegetation. Our temporary erosion control products hold seed and soil in place before degrading once vegetation is established. And our permanent erosion control products provide life-long solutions.

Temporary Erosion Control

Fiber Roving Systems (FRS)

LANDLOK® fibers are an "environmentally friendly" polypropylene Fiber Roving System (ECB) designed to protect newly seeded areas from erosion under moderate flow conditions and promote rapid vegetation establishment. Extensive three dimensional overlapping of LANDLOK® fibers provide protection from rainfall impact and runoff, preserve soil moisture and provide beneficial shading and temperature moderation to foster plant development.

Erosion Control Blankets (ECB)

LANDLOK® degradable erosion control blankets are flexible products designed to hold seeds and soil in place until vegetation is established. The natural looking high strength polypropylene mesh protects the soil surface from water and wind erosion while offering partial shading and heat storage to accelerate vegetative development.

Permanent Erosion Control

Turf Reinforcement Mats (TRM)

OK Erosion Control Products

LANDLOK® three-dimensional turf reinforcement mats are designed to provide balanced performance over time. Composed of UV-stabilized, non-biodegradable, polyolefin fibers mechanically bound between two high-strength, biaxially oriented nets, LANDLOK® erosion mats are ideal for high flow/velocity applications such as drainage channels and steep slopes.

The benefits include: excellent temporary erosion protection, rapid and uninhibited vegetative growth and permanent resistance to elevated hydralic forces.

Pyramat® Erosion Matrix

A three-dimensional textile matrix, PYRAMAT® is designed for maximum strength, durability and performance in demanding biotechnical erosion control applications.

Composed of UV-stabilized monofilament yarns woven into dimensionally stable pyramid-like openings for maximum soil filling and retention, PYRAMAT® erosion matrix stabilizes soils and reinforces vegetation to replace hard armor systems. Rugged construction, durability and functional longevity separate this high-survivability material from turf reinforcement mats.

Design & Analysis Software

Using EC-DESIGN®, a user can calculate and select most appropriate product for a variety of channel and slope erosion control applications. The calculations follow state-of-the-practice Federal Highway Administration (FHWA) procedures including maximum velocity and shear stress analyses, integration of compound channels, soil loss estimations and pull-down window screens. Once the most appropriate product is selected, the results, specifications and CAD drawings are printed or can be saved on a disk.

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