



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, MOBILE
CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

CESAM-RD
PUBLIC NOTICE NO. SAM-2006-02428-SVL

NOV 21 2006

JOINT PUBLIC NOTICE
U.S. ARMY CORPS OF ENGINEERS
AND
STATE OF ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

**PROPOSED AFTER THE FACT PERMIT APPLICATION INCLUSIVE OF
RESTORATION AND MITIGATION PLANS FOR SCHULER FARMS, LLC,
IN PINCKNEYVILLE, ALABAMA**

TO WHOM IT MAY CONCERN:

The Mobile District has received a application, for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344). Please communicate this information to all interested parties.

APPLICANT: Schuler Farms, LLC
c/o Spectrum Environmental, Inc.
700 Southgate Drive, Suite A
Pelham, Alabama 35124

WATERWAY: Harbuck Creek, two unnamed tributaries to the Little Hillabee Creek, and the Little Hillabee Creek itself, in the Tallapoosa watershed in Sections 8, 16, 17, 18, Township 22 South, Range 7 East, in Clay County, and Section 3, Township 24 North, Range 21 East, in Tallapoosa County, Alabama.

WORK COMPLETED: The applicant is requesting after the fact authorization for the conversion of 3.2 acres of wetlands to pasture land, the channelization of approximately 1,270 linear feet of intermittent stream, the relocation of approximately 600 linear feet of intermittent stream, and the installation of 14 culverts on intermittent streams. As mitigation for those wetland impacts, the applicant has proposed to purchase 3.2 wetland credits from the Yellowleaf Mitigation Bank, when it is approved. The Stream Channel/Streambank Restoration and Relocation Worksheet were completed by the applicant on all impacted stream areas noted above; this worksheet determined that 15,366.20 mitigation credits are required to offset the impacts. As mitigation for those stream impacts onsite restoration

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and mitigation have been proposed as follows:

- **Steam Channel/Streambank Restoration generating 3,863 credits to be applied towards credits required.**
- **Riparian Buffer Restoration and Preservation generating 12,494.50 credits. Of this, 11,502 will be applied towards credits required, and an additional 500 credits will be applied to offset further downstream sedimentation issues (totaling 12,2002), leaving a credit balance of 492.50 credits.**

WORKED PROPOSED: The applicant intends to construct a farm pond commensurate to the size of the cattle herd in an intermittent stream, at an undetermined future date. This farming activity is exempt from Section 404(b) regulations.

The applicant has applied for certification from the State of Alabama in accordance with Section 401(a)(1) of the Clean Water Act, and upon completion of the required advertising, a determination relative to certification will be made.

This public notice is being distributed to all known interested persons in order to assist in developing facts on which a decision by the U.S. Army Corps of Engineers (Corps) can be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production, and in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above.

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Comments are use in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state with particularity, the reasons for holding a public hearing.

Evaluation of the probable impacts involving deposits of dredged or fill material into waters of the United States will include the application of the Section 404 (b)(1) guidelines established by the Administrator of the U.S. Environmental Protection Agency.

A Cultural Resource Survey of the property is being performed by the applicant. The survey results will be submitted to the State Historical Preservation Officer for review and concurrence.

A preliminary review of the proposed site using the U.S. Department of the Interior List of Endangered and Threatened Wildlife and Plants indicates that the proposed activity will not affect listed endangered or threatened species, or their critical habitat.

Any Correspondence concerning this Public Notice should refer to Public Notice Number **SAM-2006-02428-SVL** and should be directed to the District Commander, U.S. Army Engineer District, 218 Summit Parkway, Suite 222, Homewood, Alabama 35209, with a copy of the Alabama Department of Environmental Management, Post Office Box 301463, Montgomery, Alabama 36130-1463 in time to be received not later than **29 December 2006**.

If you have any questions concerning this publication, you may contact **Ms. S. Vandi Leheny** at telephone number **(205) 290-9096** or by email at sharon.v.leheny@sam.usace.army.mil. Please refer to the above Public Notice number when calling or in your email correspondence.

For additional information about the Mobile District's Regulatory Program, please visit our web site at www.sam.usace.army.mil/RD/reg, and please take a moment to complete our customer satisfaction survey while you're there. Your responses are appreciated and will allow us to improve our services.

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MOBILE DISTRICT
U.S. Army Corps of Engineers
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1.0 Introduction

This permit application has been submitted on behalf of Schuler Farms, LLC for an after the fact permit.

1.1 Project Background

Mr. Bill Schuler received a Notice of Violation (NOV) in November 2004 from the Alabama Department of Environmental Management (ADEM). The NOV was issued after a site inspection was conducted by ADEM personnel as a result of a complaint. During the site visit it was revealed that the site was not registered for coverage under the NPDES permit program as required by ADEM Administrative Code Chapter 335-6-12 to discharge construction stormwater from the site. Walter Schoel Engineering was subsequently contracted to resolve the ADEM issues.

A site visit was conducted on August 25, 2005 by Bill Schuler, Carl Hubbert of Walter Schoel Engineering, and Cindy House-Pearson of the US Army Corps of Engineers (USACE). The purpose of the site visit was to assess potential unauthorized impacts to waters of the US. Based on the site visit and historical documentation, it was determined that an intermittent stream was relocated, a separate intermittent stream was channelized, and wetlands were converted to pasture and a channelized stream.

On August 4, 2006 a Warning Letter was issued by ADEM as a result of a site inspection conducted by ADEM personnel on August 1, 2006. Subsequently, Spectrum was contracted to assess and resolve the ADEM and USACE issues.

1.2 Project Description

The site is located on Liberty Road in Clay County, with a small piece of the property located in Tallapoosa County (Appendix A - Figure 1905001-1). More specifically, the site is located in Sections 8, 16, 17, and 18 of Township 22 South, Range 7 East. The portion in Tallapoosa County is found in Section 3, Township 24 North, Range 21 East. The site is centered at Latitude 33° 06' 51" North Latitude 85° 56' 17" West. The site is located within the Tallapoosa watershed.

**INDIVIDUAL 404 PERMIT APPLICATION
SCHULER FARMS, LLC – CLAY & TALLAPOOSA COUNTIES, AL – SPECTRUM PROJECT 1905-001**

The subject site consists of approximately 1,100 acres that is currently used as a farm for cattle grazing and horse breeding. Several horse stables, a hay barn, a fuel storage facility, and a general storage/living quarters building are among the structures currently on the subject property (Appendix A - Figure 1905001-2). The property has been in the Schuler family since the late 1970's. USDA Farm Service Agency number 3375 and tract number 10732 had been previously assigned to the site. There are currently 64 head of cattle on the property as well as Clydesdale horses. This winter Mr. Schuler intends to sell the majority of his cattle, as are many farmers, due to the hay shortage. Summer droughts have impacted hay production and pasture conditions. According to the National Agricultural Statistic Service in mid-July, 83% of Alabama's pastures were listed in poor condition. Mr. Schuler will re-populate his cattle supply after the winter.

Photographs were taken on the site and are included in Appendix B. Figure 1905001-3 depicts the photograph locations.

2.0 Project Impacts

2.1 Site Research

Numerous resources were utilized to determine the extent of the unauthorized activities, including national wetland inventory maps, historical aerial photographs, soil survey maps, and Google earth images.

2.2 Impacts

Previous Impacts

Based on a letter written by Carl Hubbert (formerly of Walter Schoel Engineering, Inc.) dated December 5, 2005 and Spectrum's site visits, we have determined the following impacts, depicted on Figure 1905001-4, have occurred on the subject property:

- Channelization of approximately 1,270 feet of intermittent stream;
- Relocation of approximately 600 linear feet of intermittent stream;
- Conversion of approximately 3.2 acre of wetlands (beaver dam impoundment) to pasture (the acreage was determined by National Wetland Inventory maps);
- Placing approximately 1,810 linear feet of stream in culverts (14 separate culverts were installed).

Total Impacts: 3,680 linear feet of intermittent stream and 3.2 acres of wetlands

Proposed Impacts

In the future, Mr. Schuler intends to create pasture for his cattle in the southeastern portion of his property. He would like to create a farm pond, adjacent to the pasture, in the intermittent stream. This farm pond will either be excavated in the stream channel or perhaps a pond created outside of the channel and the water pumped from the stream into the pond. It is Spectrum's understanding that provided that the farm pond is commensurate to the size of the cattle herd, the construction of a farm pond in an intermittent stream is exempt from Section 404(b) regulations.

2.2 *Impact Factors*

Appendix C contains the Adverse Impact Factors for Riverine Systems Worksheet used for determining the total mitigation credits required for the proposed impact to the intermittent streams. After entering all factors for the impact area, the total stream mitigation credits required is 15,365. Although culverts are exempt from Section 404(b) regulations when associated with farming activities, Schuler Farms is offering mitigation for these impacts. The mitigation is described in Section 3.0.

3.0 Proposed Mitigation

3.1 Wetland Mitigation

Schuler Farms, LLC is proposing to purchase 3.2 wetland credits from the Yellowleaf Mitigation Bank when the Bank is approved.

3.2 Stream Mitigation

Schuler Farms, LLC is proposing to mitigate for the impact of approximately 3,680 linear feet of waters of the U.S. using on-site mitigation. This will involve the restoration of the channelized stream and buffer enhancement of several streams intermittent and perennial streams located on the subject site, as well as the stream that was relocated. All of the mitigation areas will be placed in a restrictive covenant.

As mentioned previously, 15,365 stream credits are required for the mitigation. The Stream Channel/Streambank Restoration and Relocation Worksheet and the Riparian Buffer Restoration and Preservation Worksheet were completed to determine the number of credits available on the site. The worksheets are attached in Appendix C. The on-site mitigation generates 16,488 credits. Figure 1905001-2 depicts the location and relationship of each Net Benefit located on the site. Photographs are provided in Appendix B.

The mitigation for the relocated stream and other stream segments on the property lend themselves to riparian buffer enhancement, which will include the removal of non-native, invasive species including Silktree (*Albizia julibrissin*) and sawbriars. The removal will be done via hand methods using bush axes, swing blades, and machetes. The stumps will be treated by spraying Arsenal directly on the stump while carefully avoiding other desirable vegetation in the vicinity of the stump. The areas will be planted using native species. A discussion of each net benefit, including specifics of the planting, is provided below.

3.2.1 Stream Channel/Streambank Restoration

Net Benefit 1

Stream Type

The stream is classified as intermittent because the stream will occasionally dry up during dry times.

Existing Condition

The existing condition is impaired because of the channelization.

Net Benefit

The stream channel restoration will be classified as a “good” stream channel restoration/streambank stabilization action and is classified as a Priority 3 Restoration. The restoration activities will involve:

- ✓ Restoring a natural meander to the stream. The lower portion of stream (between culverts 4 and 5 – Figure 1905001-4) is establishing a meander on its own. Spectrum will use the natural path the stream is taking to restore the streambanks. In the upper portion of the stream, Spectrum will design one meander to the stream channel.
- ✓ Restoring in-stream features such as riffle/pool complexes. This will be completed by placing rock in the stream bed at specific locations along the stream.
- ✓ Vegetating the banks with an assortment of herbaceous vegetation such as *Juncus effusus* and *Panicum* sp., which will aid in erosion control and will act as a filter to prevent significant amounts of sediment from entering the creek.
- ✓ Vegetating the buffer with a variety of native grasses and hardwoods (in 3 gallon containers) such as River Birch (*Betula Nigra*) and Laurel Oak (*Quercus laurifolia*). The trees will be planted on 20 foot centers to fill the entire buffer area. The grasses will aid in the dissipation of sediment entering the creek.
- ✓ Removing fencing that is currently in the stream channel in the lower portion of the stream, which occurred due to the stream reverting back to a natural meander.

The buffer on the upper portion of the restored stream (between culverts 3 and 4) will be established 50 feet from the ordinary high water mark (OHWM) on both sides of creek. The buffer on the lower portion of the stream will be established 100 feet from the OHWM on both sides of the creek. Photo documentation of the buffer areas is depicted in Appendix B. The buffers will be fenced to prevent horses from encroaching into the buffer area.

After the stream restoration is complete, the stream will be surveyed and markers placed in certain locations in the field at known distances from the stream bank. This will be done to monitor any changes in the stream’s path that may occur over time.

Monitoring/Contingency

Schuler Farms is prepared to implement a Level II monitoring/contingency program for this site to include the collection of basic information such as:

- ✓ Vegetation Present;
- ✓ % species composition;
- ✓ Average species height and diameter at breast height;
- ✓ Biological data (density and diversity of mammals, birds, reptiles, amphibians, fish, freshwater mussels, etc. within the buffer and/or stream).

Additionally, the success of planted vegetation will be monitored, which will include the survival rate and growth. If 75% survivability is not achieved, trees will be re-planted to achieve the desired density. All monitoring will be conducted before mitigation is implemented and semi-annually (twice a year) for five years. Two reports per year will be submitted to the USACE Birmingham field office.

Priority Area

The priority area is tertiary.

Control

Schuler Farms will have a Restrictive Covenant recorded with a legal description describing the buffer zone. An example Restrictive Covenant is included in Appendix D, which is the example Covenant that is found on the USACE's website. Once the Restrictive Covenant is complete and recorded, a copy will be forwarded to the USACE.

Linear Feet of Stream

The length of stream to be restored is 1,270.

Total Credits Generated

The stream restoration project generates 3,683 credits.

3.2.2 Riparian Buffer Restoration and Preservation

Net Benefit 1

Stream Type

Net Benefit 1 is located on a portion of UT1, an intermittent stream.

Priority Area

The Priority Area for Net Benefit 1 is classified as Tertiary.

Net Benefit

This section of stream lends itself to “enhancement” activities described as the removal of invasive species, such as the Silktree, and the replanting in select areas of indigenous species at a rate of 10 – 50 % of the linear footage. The majority of the planting will be implemented along the most downstream portion of this net benefit area. Currently there is a lot of shrubby species along the creek, and the primary invasive species is the Silktree. The removal of the Silktree and the planting of saplings will greatly enhance this area. The species to be planted will be Laurel Oak (*Quercus laurifolia*) or a similar species. The buffer for this net benefit will be established on both side of the creek at 2 X MBW (100 feet).

Monitoring/Contingency

Schuler Farms is prepared to implement a Level II monitoring/contingency program for this site to include the collection of basic information such as:

- ✓ Vegetation Present;
- ✓ % species composition;
- ✓ Average species height and diameter at breast height;
- ✓ Biological data (density and diversity of mammals, birds, reptiles, amphibians, fish, freshwater mussels, etc. within the buffer and/or stream).

Additionally, the success of planted vegetation will be monitored, which will include the survival rate and growth. If 75% survivability is not achieved, trees will be re-planted to achieve the desired density. All monitoring will be conducted before mitigation is implemented and annually for five years, and an annual report submitted to the USACE Birmingham field office.

Control

Schuler Farms will have a Restrictive Covenant recorded with a legal description describing the buffer zone.

Linear Feet of Stream Buffer

Net Benefit 1 is 2,000 feet.

Total Credits Generated

Net Benefit 1 generates 3,300 credits.

Net Benefit 2

Net Benefit 2 exists along UT2. There is a culvert currently in place and will remain there to gain access to the property perimeter.

Stream Type

Net Benefit 2 exists along a portion of UT2, an intermittent stream.

Priority Area

The Priority Area for Net Benefit 2 is classified as Tertiary.

Net Benefit

This section of stream lends itself to “enhancement” activities described the replanting of indigenous species at a rate of 51 - 100 % of the linear footage. The species to be planted will be similar to existing trees on the site, such as Southern Red Oak (*Quercus falcata*) and Yellow Poplar (*Liriodendron tulipifera*). The buffer for this net benefit will be established on Stream Side A at 2 x MBW (100 feet) and Stream Side B at 1 X MBW (50 feet), where available. There is a small portion where only a 25 foot buffer will be available. This is indicated on Figure 1905001-2. Trees will be planted on 20 foot centers to fill the entire buffer area; therefore, there will be 3 rows of trees along the entire length of stream buffer.

Monitoring/Contingency

Schuler Farms is prepared to implement a Level II monitoring/contingency program for this site to include the collection of basic information such as:

- ✓ Vegetation Present;
- ✓ % species composition;
- ✓ Average species height and diameter at breast height;
- ✓ Biological data (density and diversity of mammals, birds, reptiles, amphibians, fish, freshwater mussels, etc. within the buffer and/or stream).

Additionally, the success of planted vegetation will be monitored, which will include the survival rate and growth. If 75% survivability is not achieved, trees will be re-planted to achieve the

desired density. All monitoring will be conducted before mitigation is implemented and annually for five years, and an annual report submitted to the USACE Birmingham field office.

Control

Schuler Farms will have a Restrictive Covenant recorded with a legal description describing the buffer zone.

Linear Feet of Stream Buffer

Net Benefit 2 is 550 feet.

Total Credits Generated

Net Benefit 2 generates 924 credits.

Net Benefit 3

Stream Type

Net Benefit exists along the relocated portion of UT2.

Priority Area

The Priority Area for Net Benefit 3 is classified as Tertiary.

Net Benefit

This section of stream lends itself to “enhancement” activities described as the removal of invasive species and the replanting in select areas of indigenous species throughout at a rate of 51 – 100 % of the linear footage. The species to be planted will be similar to existing trees on the site, such as Southern Red Oak (*Quercus falcata*) and Yellow Poplar (*Liriodendron tulipifera*). The buffer for this net benefit will be established on both sides of the creek at 1 X MBW (50 feet). Trees will be planted on 20 foot centers to fill the entire buffer area; therefore, there will be 3 rows of trees along the entire length of stream buffer.

The vegetation that has emerged along the relocated creek bank is desired grasses, rushes, and sedges. These herbaceous plants are an asset to this creek and will not be enhanced at this time. The vegetation along the creek bank will continue to be monitored for potential invasives and any other potential problems and will be addressed at that time.

Monitoring/Contingency

Schuler Farms is prepared to implement a Level II monitoring/contingency program for this site to include the collection of basic information such as:

- ✓ Vegetation Present;
- ✓ % species composition;
- ✓ Average species height and diameter at breast height;
- ✓ Biological data (density and diversity of mammals, birds, reptiles, amphibians, fish, freshwater mussels, etc. within the buffer and/or stream).

Additionally, the success of planted vegetation will be monitored, which will include the survival rate and growth. If 75% survivability is not achieved, trees will be re-planted to achieve the desired density. All monitoring will be conducted before mitigation is implemented and annually for five years, and an annual report submitted to the USACE Birmingham field office.

Control

Schuler Farms will have a Restrictive Covenant recorded with a legal description describing the buffer zone.

Linear Feet of Stream Buffer

Net Benefit 3 is 450 feet.

Total Credits Generated

Net Benefit 3 generates 742.5 credits.

Net Benefit 4

Stream Type

Net Benefit 4 exists along a portion of Little Hillabee Creek. The Little Hillabee Creek is a perennial stream with varying widths throughout the subject property. The average width of the creek on the property is approximately 20 feet, but can get as wide as 40 feet in some locations.

Priority Area

The Priority Area for Net Benefit 4 is classified as Tertiary.

Net Benefit

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This section of stream lends itself to “enhancement” activities. This area contains portions of land along the southern side of the stream that have been cleared of vegetation. This area will be planted with indigenous species at a rate of 10 – 50 % of the linear footage. The species to be planted will be similar to existing trees on the site, such as Southern Red Oak (*Quercus falcata*) and Yellow Poplar (*Liriodendron tulipifera*). The buffer for this net benefit will be established on both sides of the stream at 4 X MBW (200 feet).

Monitoring/Contingency

Schuler Farms is prepared to implement a Level II monitoring/contingency program for this site to include the collection of basic information such as:

- ✓ Vegetation Present;
- ✓ % species composition;
- ✓ Average species height and diameter at breast height;
- ✓ Biological data (density and diversity of mammals, birds, reptiles, amphibians, fish, freshwater mussels, etc. within the buffer and/or stream).

Additionally, the success of planted vegetation will be monitored, which will include the survival rate and growth. If 75% survivability is not achieved, trees will be re-planted to achieve the desired density. All monitoring will be conducted before mitigation is implemented and annually for five years, and an annual report submitted to the USACE Birmingham field office.

Control

Schuler Farms will have a Restrictive Covenant recorded with a legal description describing the buffer zone.

Linear Feet of Stream Buffer

Net Benefit 4 is 960 feet.

Total Credits Generated

Net Benefit 4 generates 2,880 credits.

Net Benefit 5

Stream Type

Net Benefit 5 exists along a portion of Little Hillabee Creek, a perennial stream.

Priority Area

The Priority Area for Net Benefit 5 is classified as Tertiary.

Net Benefit

This section of stream lends itself to “enhancement” activities described as the removal of invasive species and the replanting in select areas of indigenous species at a rate of 10 – 50 % of the linear footage. As with Net Benefit 4, portions of the buffer along this segment of stream on Stream Side A have been cleared of vegetation, lending this area as great potential for mitigation. The species to be planted will be similar to existing trees on the site, such as Southern Red Oak (*Quercus falcata*) and Yellow Poplar (*Liriodendron tulipifera*). The buffer for this net benefit will be established on Stream Side A at 4 X MBW (200 feet) and Stream Side B at 1 X MBW (50 feet).

Monitoring/Contingency

Schuler Farms is prepared to implement a Level II monitoring/contingency program for this site to include the collection of basic information such as:

- ✓ Vegetation Present;
- ✓ % species composition;
- ✓ Average species height and diameter at breast height;
- ✓ Biological data (density and diversity of mammals, birds, reptiles, amphibians, fish, freshwater mussels, etc. within the buffer and/or stream).

Additionally, the success of planted vegetation will be monitored, which will include the survival rate and growth. If 75% survivability is not achieved, trees will be re-planted to achieve the desired density. All monitoring will be conducted before mitigation is implemented and annually for five years, and an annual report submitted to the USACE Birmingham field office.

Control

Schuler Farms will have a Restrictive Covenant recorded with a legal description describing the buffer zone.

Linear Feet of Stream Buffer

Net Benefit 5 is 900 feet.

Total Credits Generated

Net Benefit 5 generates 1,890 credits.

Net Benefit 6

Stream Type

Net Benefit 6 exists along a portion of Little Hillabee Creek.

Priority Area

The Priority Area for Net Benefit 6 is classified as Tertiary.

Net Benefit

This section of stream lends itself to “enhancement” activities described as the removal of invasive species and the replanting in select areas of indigenous species at a rate of 10 – 50 % of the linear footage. The species to be planted will be similar to existing trees on the site, such as Southern Red Oak (*Quercus falcata*) and Yellow Poplar (*Liriodendron tulipifera*). The buffer for this net benefit will be established on one side of the stream at 4 X MBW (200 feet).

Monitoring/Contingency

Schuler Farms is prepared to implement a Level II monitoring/contingency program for this site to include the collection of basic information such as:

- ✓ Vegetation Present;
- ✓ % species composition;
- ✓ Average species height and diameter at breast height;
- ✓ Biological data (density and diversity of mammals, birds, reptiles, amphibians, fish, freshwater mussels, etc. within the buffer and/or stream).

Additionally, the success of planted vegetation will be monitored, which will include the survival rate and growth. If 75% survivability is not achieved, trees will be re-planted to achieve the desired density. All monitoring will be conducted before mitigation is implemented and annually for five years, and an annual report submitted to the USACE Birmingham field office.

Control

Schuler Farms will have a Restrictive Covenant recorded with a legal description describing the buffer zone.

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Linear Feet of Stream Buffer

Net Benefit 6 is 1,450 feet.

Total Credits Generated

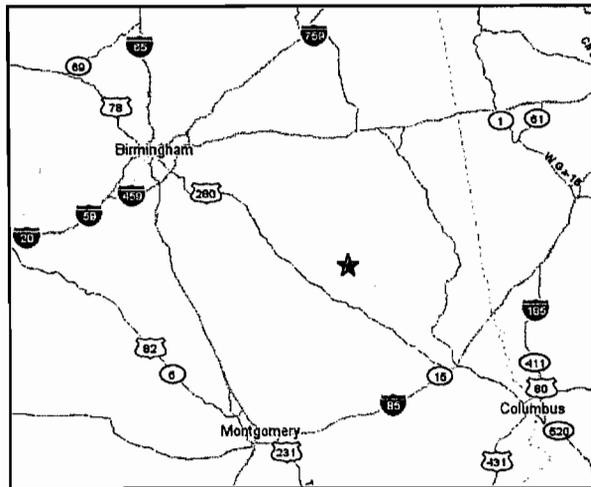
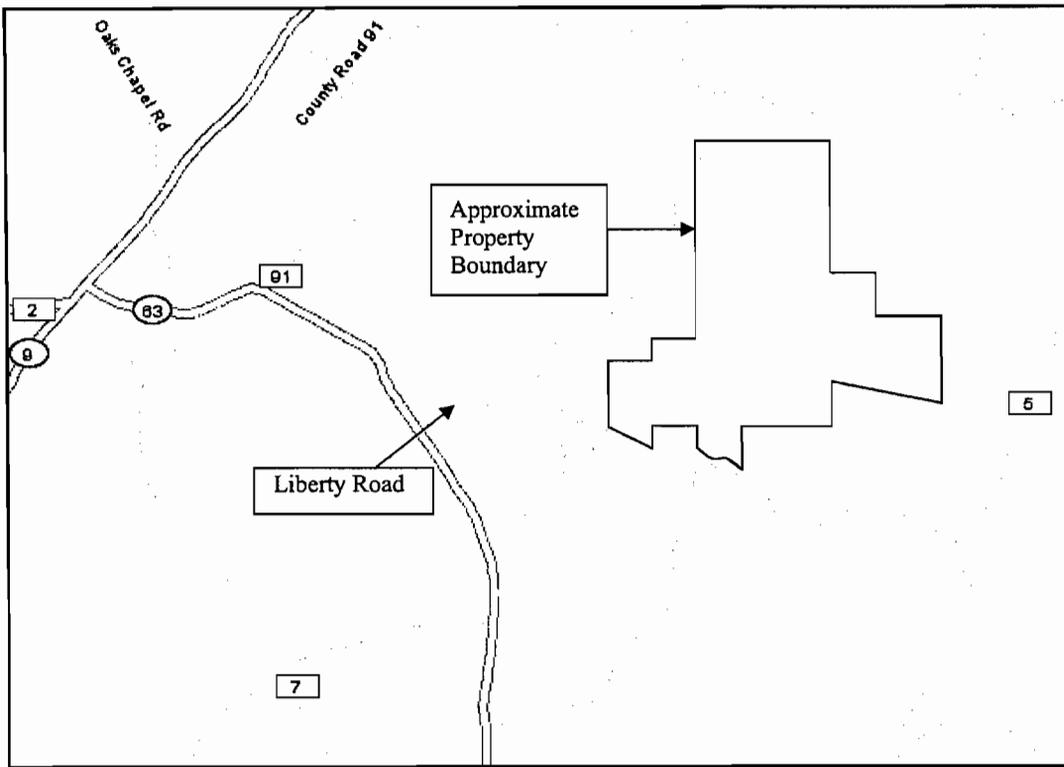
Net Benefit 6 generates 2,755 credits.

Total Mitigation Credits Generated On-Site: 16,488

Total Mitigation Credits Needed: 15,365

4.0 Threatened & Endangered Species and Cultural Resources

A threatened and endangered species survey and cultural resources survey was not conducted because construction activities commenced at the site before this application was submitted.



Taken from Yahoo.com
Not To Scale



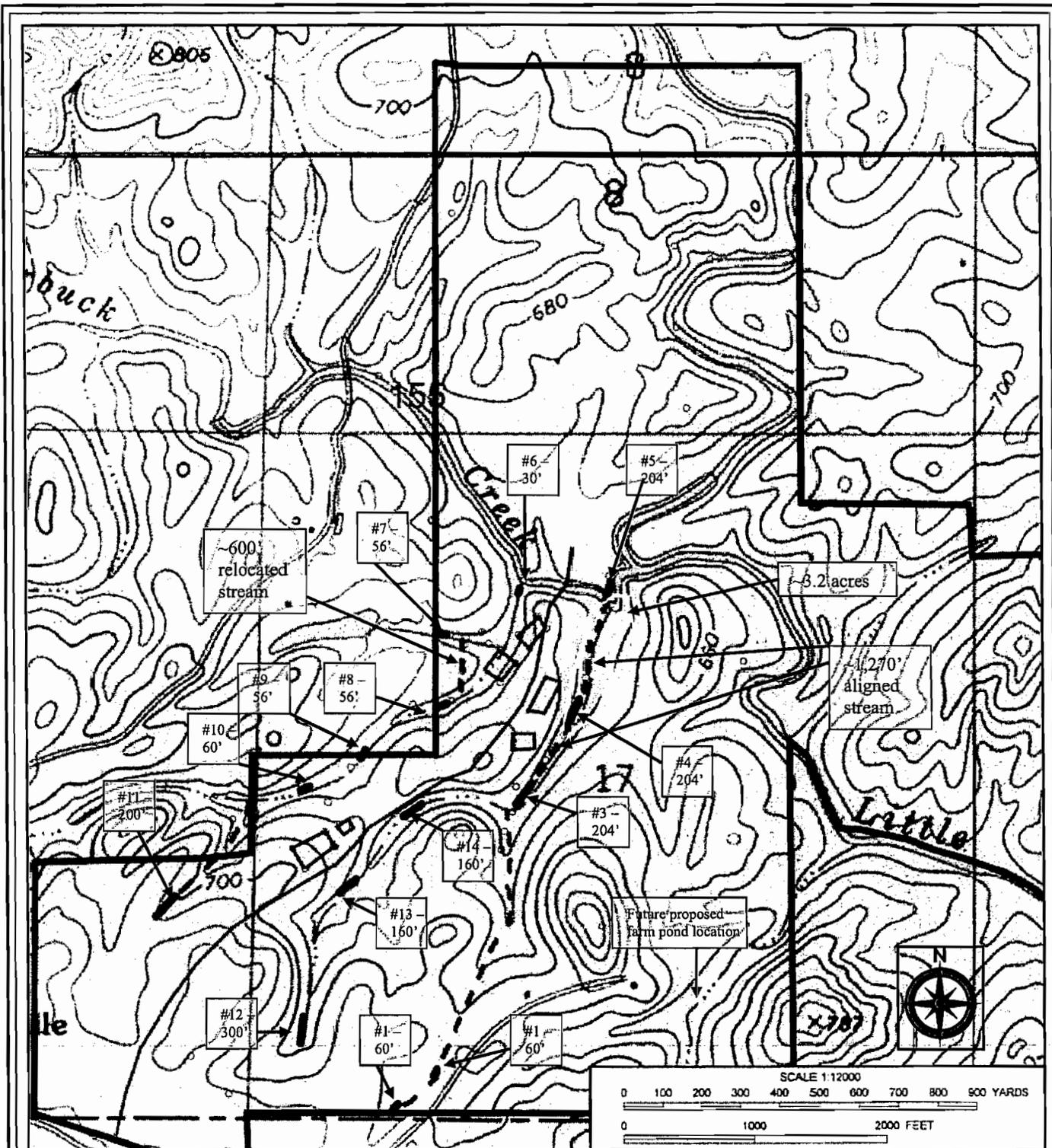
NO.	DATE	REVISION NOTE	BY

Drawn By: CMS	Project #: 1905-001
Checked By:	Date: 10-2-06
Project Manager:	File Name:

SPECTRUM
Environmental Services, Inc.

700 SOUTHGATE DR.
SUITE A
PELHAM, AL 35124
FAX (205) 864-2142
PHONE (205) 864-2000

TITLE
Figure 1905001-1 Site Locator Map Schuler Farm Property Clay County, AL



Taken from Maptech, Inc.

Legend:

- Culverts
- Impacted Stream
- Existing Structures/Road
- Impacted Wetlands

NO.	DATE	REVISION NOTE	BY

Drawn By: CMS	Project #: 1905-001
Checked By: CS	Date: 10/2/05
Proj. Mgr.:	File Name:

SPECTRUM

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 SUITE A
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 PHONE (205) 864-2000

TITLE
Figure 1905001-4 Areas of Impact Map Schuler Farm Property Clay County, AL