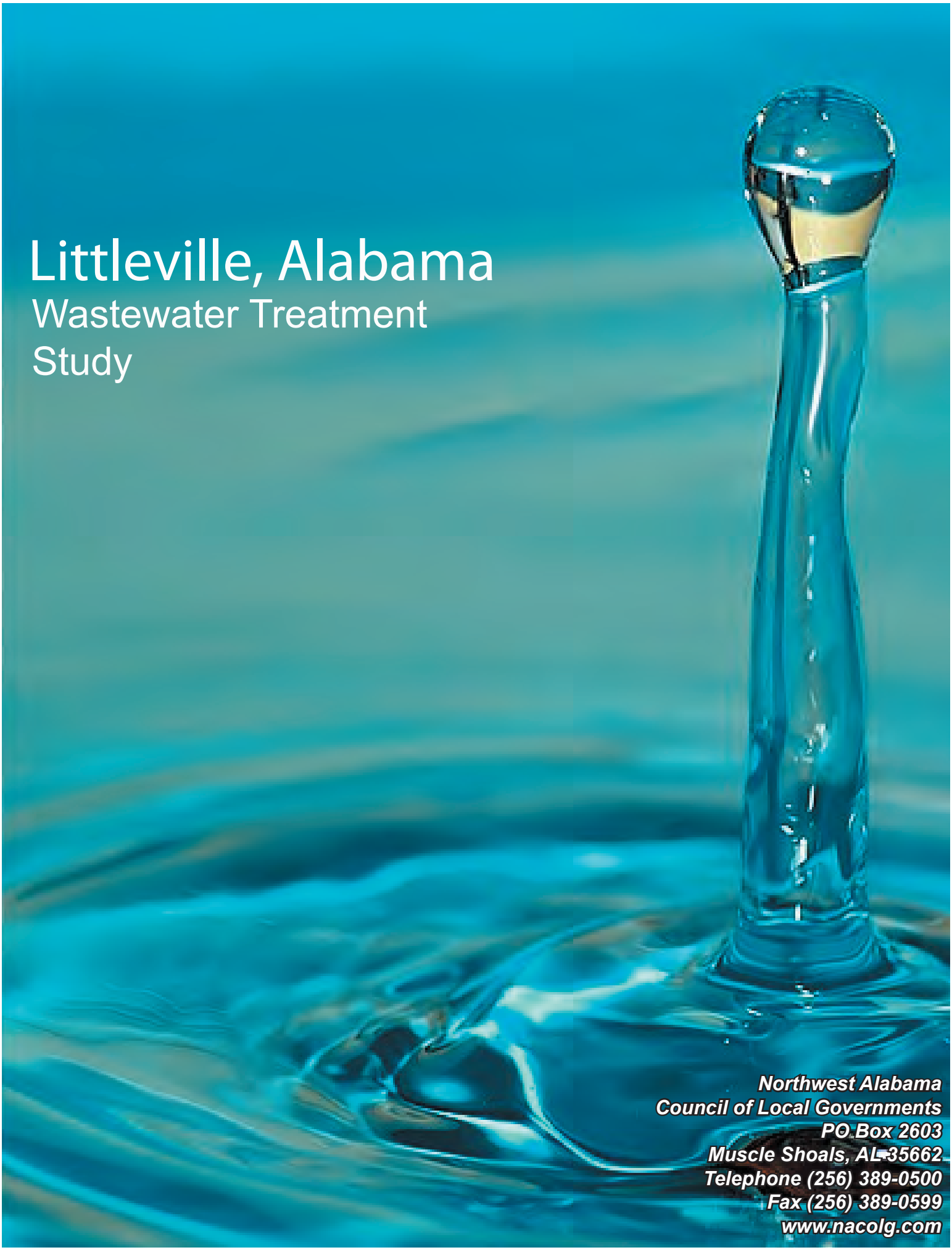

Littleville, Alabama

Wastewater Treatment Study

Northwest Alabama
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TOWN OF LITTLEVILLE, ALABAMA

WASTEWATER FACILITIES PLAN

The Town of Littleville, Alabama
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Jointly Prepared by:

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July 2006

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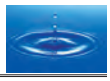


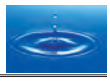
1.0 GENERAL SCOPE OF THE WORK

This study analyzes land use, economic, and growth patterns of the Town of Littleville, Alabama to include a new industrial park and surrounding community areas in southern Colbert County and northern Franklin County. These analyses were completed to assist in developing a long-range wastewater facilities plan for the town of Littleville. This study is a joint venture of the Northwest Alabama Council of Local Governments (NACOLG) and Goodwyn, Mills, and Cawood, Inc. pursuant to the agreement made and entered January 5, 2006.

NACOLG prepared the physical analysis, demographic evaluations, economic data, housing assessment and land use abstract sections of the document (sections 3.0, 4.0, 5.0, 6.0, 7.0). Goodwyn, Mills, and Cawood, Inc. compiled the sections describing estimates for wastewater flow rates and treatment alternatives, recommendations, discussions of potential funding sources, scope, and summary (sections 2.0, 8.0, 9.0, 10.0, and Appendix C)

The study area is located in the southern portion of Colbert County, Alabama and is delineated by a circumference of 2 miles from the town center. The town center is the Town Hall of Littleville and is defined by the coordinates 34°22’36. 160” North, 88°03’37. 236” West. The projection period for the study is twenty years. The population and flow rate projections were extended to 40 years. The objectives of the sewer facilities study were as follows:

- Provide preliminary estimates for potential sewage flow rates from the study area.
- Provide preliminary sizes and locations for potential collection and treatment facilities.
- Evaluate alternative collection, treatment, and disposal options.
- Provide preliminary recommendations and cost estimates for the most feasible alternatives.



2.0 WASTEWATER FLOW RATES

The Town of Littleville operates a sanitary sewer collection and treatment system. The original system was installed in 1988 and included a small diameter collection system and a treatment facility with primary and secondary treatment capabilities. Upgrades to the system have included additional collection lines in 1991 and improvements to the treatment facility in 2005. Approximately 350 customers are currently served by the system with an average flow of 70,000 gallons per day.

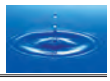
The original collection system was designed as a small diameter, liquid only system. Prior to the system being installed, all wastewater treatment was through on-site disposal systems including septic tanks and field lines. When the original system was installed, connections were made to the septic tanks outside the residences, providing for the treatment of solids within tank and allowing liquid only to enter the collection system. This allowed the town to install small diameter gravity lines at a substantial cost savings.

The rolling topography throughout the town would not permit the system to be installed by gravity only. The system is served by a series of 10 pump stations including a main lift station at the treatment plant. In addition, approximately 150 to 200 residences have individual pumps located outside their septic tanks due to elevation restraints of the gravity collection system. The small pumps are installed in fiberglass wet wells located outside the residences and are maintained by the town.

Approximately 80% of the residences of Littleville are served by the centralized sewer system. The town has plans to extend to the remaining areas of town in the future. An immediate expansion will include gravity lines and a pump station southeast of town to serve proposed residential developments. The proposed development would add as many as 50 new houses in an area around the existing golf course. The town is also in the process of developing an industrial park behind town hall. Sewer flow rates from the proposed developments must be taken into consideration in planning for sewer facility upgrades.

The treatment and disposal of wastewater at the individual lot level is adequate in certain rural applications, but as the densities increase as in more urban/subdivision setting, the problem of groundwater contamination and pollution necessitates sewer collection with off site sewer treatment. The area of south Littleville is one area of main concern. There are several existing homes, several homes in construction, and much of the City's growth is forecasted in this area. The southern portion of Littleville drains northwest to Hyde Lake, which is the largest body of water in the City and has a high level of significance for the local area. With the addition of each new residence and business, Hyde Lake is becoming more and more susceptible to pollution caused by inadequate sewer infrastructure.

In order to determine the required collection and treatment capacities for the existing system as well as future growth of the town, the amount, timing, and characteristics of the waste generated must be established. Flows must be considered from residential, commercial, and industrial establishments in the town. The time variation of flows is also important in determining the



expected minimum and peak flows for the system. The gravity-flow portion of the system must be able to sustain minimum volumes for self-cleansing as well as peak flows. In addition, consideration must be given to potential inflow and infiltration of groundwater into the system, which will affect treatment processes.

The amount of sewage flows from a community depends greatly on the area's population. Domestic wastewater flows vary greatly throughout the day, and usually include peaks in the morning and evening. A hydrograph, shown in Appendix B, shows an example of water use versus wastewater flow from a subdivision in Baltimore County Maryland. Two distinctive peaks can be seen on the hydrograph. J.J. Lentz of John Hopkins University performed a study in 1963 in which wastewater flows from communities in California, Florida, Missouri, and Maryland were observed. The study found that, without the influence of lawn sprinkling and inflow/infiltration, wastewater flow rates are basically equal to water use. As a general rule, water usage for residential customers is approximately 150 to 200 gallons per day.

Average daily flows for the Town of Littleville sewer system are approximately 70,000 gallons per day. Peak flows of over 300,000 gallons per day are observed after a rainfall event. The large flows overcome the capacity of the sewer treatment plant and have forced the town to bypass the system and overflow into the discharge creek. The town has performed inflow/ infiltration studies on portions of the system and found the majority of the inflow to be from the existing septic tanks connected to the system. The leaking tanks need to be pumped and sealed to prevent groundwater from entering the sewer system. The town has made efforts to correct this problem by sealing a small number of the tanks and replacing some others.

Flows from the proposed industrial park must be estimated and consideration given to the continued development of the park. Water usage from an industry will vary greatly, depending on the type of operation, number of employees, and number of shifts. Consideration must be given to the waste generated by employees as well as that generated as a part of the manufacturing process. Industries will generate approximately 20 gallons per day per employee as a general rule. For initial calculation purposes, an employment of 1,000 people will be considered, with a total water usage of 20,000 gallons per day.

In planning for the growth of a sanitary sewer treatment facility, expected growth factors must be included. Using the existing wastewater production for the town of approximately 70,000 gallons per day and a growth factor of 3% over the next 20 years, the resulting flow would be approximately 125,000 gallons per day. This growth factor takes into account the proposed residential developments south of town. Combining the anticipated flows from the industrial park and residential development, the total flow into the new system would be approximately 145,000 gallons per day.

The inflow and infiltration problems the town currently has must also be considered in the future design of the sewer system. Inflow is the flow of storm water runoff into the collection system, usually through a manhole, pump station opening, or through the connection of illicit roof drains connected to the sewer system. Storm water flows of 20-70 gpm can enter through a leaking manhole cover under only 1" of water. Roof drainage from a typical 1,000 ft^2 house tied to a

system can add flows in excess of 10 gpm. Infiltration is the flow of groundwater into the system through the pipe joints, manhole wall, or septic tanks as is the case with this system. Depending on the location of the sewer, type and tightness of the joint, and soil characteristics, infiltration will typically range from 3,500-5,000 gpd/mi/24 hr for an 8 in. pipe and could reach flows as high as 60,000 gpd/mi in extreme cases.

3.0 CHARACTERISTICS OF STUDY AREA

General

The Town of Littleville Planning Study Area is located within a 2 mile radius of the town hall, which is understood in this study as the center of the Littleville community. The study area encompasses the Littleville incorporated boundary as declared on the 1st of December 2005 **(Figure 3.1)**.

The Planning Study Area (PSA) is rural with traditional characteristics of agricultural communities. The Littleville Town Hall combined with a cluster of residential and commercial structures compose the core of the Littleville community **(Figure 3.2)**. The regional terrain is flat to slopping with the lowest elevation at 492 feet and the highest elevation within the study area being 885 feet **(Figure 3.3)**. The Littleville Municipal Water System serves the town of Littleville proper.

3.2 Climate

The Planning Study Area has a moderate climate. The climate, on an annual basis, varies from hot summers of long duration with sporadic precipitation to mild winters with abrupt periods of extreme cold. Consistent and sufficient precipitation is prevalent throughout the region ***(Appendix B)***.

3.3 Topography

The topography in the planning study area is flat to moderately sloping. Elevations within the incorporated boundary are from 492 feet to 885 feet above mean sea level with the average elevation within the study area being 682 feet above sea level **(Figures 3.3)**.

3.4 Soils

The 1985 Soil Survey of Colbert County along with the 1965 Soil Survey of Franklin County, published by the Soil Conservation Service, provides a detailed assessment of the soils, their properties, and how those properties may potentially affect development, and therefore the need for sanitary sewer services. For the purpose of this study, the impact of soil properties on the use of on-site septic tank fields is the most important issue. Unsatisfactory performance of septic absorption fields, including excessively slow absorption of effluent, surfacing or effluent, and hillside seepage, can affect public health. Sufficient unsaturated soil material must be found beneath the absorption field to filter the effluent effectively.

The soils in the PSA are most commonly composed of the three separate soil compositions. There is the Nectar and Nauvoo fine sandy loam which has a 6 to 10 percent slope and moderate permeability. The Wynnville silt loam has 2 to 6 percent slope also has moderate permeability. Then the third most common soil composition within the Littleville PSA is Chisca-Nella-Nectar complex. This complex has a 10 to 45 percent slope and a very slow permeability. However,

these are not the only three soil compositions within the study area, there are also seven other soil types **(Figures 3.4)**.

The permeability levels of the soils within the Planning Study Area were then assessed and the limitations for site development were determined **(Figures 3.5)**. The three levels where derived by analyzing the dispersion and shrink-swell potential of the soil survey series identified within the PSA by the 1985 Soil Survey for Colbert County and the 1965 Soil Survey of Franklin County Alabama. The levels are identified as low permeability, medium permeability, and high permeability. For a more detailed assessment of the effect of soils properties on other uses, e.g. roads, commercial buildings, dwellings, academic institutions, refer to the series of tables in the Soil Survey of Colbert County 1985 and the Soil Survey of Franklin County 1965.

3.5 Geologic Characteristics

The geologic formations in the planning study area are of sedimentary origin and range in age from Cretaceous to Mississippian. The parent material consists of limestone, sandstone, gravel, and shale. Geologic units include the Hartselle Sandstone, the Golconda Formation, and the Cypress Sandstone. The Cypress Sandstone is light gray to greenish gray, massive sandstone. It is overlain by olive gray, soft, calcareous shale and hard, grayish brown limestone of the Golconda Formation. Above the Golconda Formation is the tan, silty Hartselle Sandstone.

3.6 Groundwater Availability

Precipitation is the source of groundwater in the area. Part of the precipitation seeps into the zone of saturation to become groundwater. The difficulty for water availability occurs in and around the limestone valleys where a readily available supply can be difficult to locate.

The physical characteristics of geological formations largely determine the occurrence of groundwater. Permeable rocks called ‘aquifers’ are reservoirs for groundwater, which provide the main source for the planning study area water resources. These aquifers are supported by a rapid recharge ability enabled by the carbonate geology creating several caves in the region as well as the chance for surface contamination from point and non-point sources.

The study area is underlain with the Tuscaloosa Group from the Cretaceous period creating the Tuscaloosa and Bangor Limestone aquifer. The projected yields from wells placed within the planned study area in a limestone aquifer are around 100 to 500 gallons per minute at a depth of less than 300 feet. The sands and gravels of the Tuscaloosa Group supply adequate amounts of water for domestic and agricultural use if the sediments are of sufficient thickness.

3.7 Natural Resources

The primary natural resources are created by the underlying geologic formations. The PSA contains large amounts of forested land with quality timber resources. In addition there are mineral and rock deposits of iron ore, asphalt, gravel, limestone, and bauxite.

3.8 Critical Sites Within Planning Study Area

3.8.1 Historical Sites:

The Alabama Historical Commission, State Historic Preservation Officer (SHPO), was contacted by letter and a request was submitted for a routine document search for the planning study area. A copy of the letter of request and the SHPO response is available in Appendix D. Typically, the SHPO indicates that prior to the development of detailed plans a submittal should be forwarded for the specific site to be utilized and a resource assessment to be conducted by a professional archeologist. Prior to the commencement of any wastewater collection and/or treatment system a more specific site evaluation should be submitted to the SHPO and clearance received for the specific site and project.

3.8.2 Landfill Site(s):

The Town of Littleville is serviced by the County Colbert Landfill located just east of U.S. Highway 43. There is also the Franklin County Landfill in Belgreen, Alabama, and a landfill directly south of Littleville in Russellville, Alabama.

3.9 Planning Study Area Hydrological Cycle

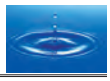
Basic atmospheric processes account for the hydrologic cycles of the planning area. The basic cycles consist of the evaporation of water from the Gulf of Mexico and lesser bodies of surface water in the region. This vapor moisture is then transported by regional air currents and eventually deposited as precipitation primarily as rainfall and the uncommon accumulation of snow. This precipitation then either collects as surface drainage in one of the numerous watercourses or bodies of water, or infiltrates into the groundwater system. Small quantities of rainfall are directly intercepted by vegetation. Surface waters either impound and evaporate to return as precipitation or traverse via discrete channels to the Gulf of Mexico where the evaporation process reoccurs thereby completing the hydrologic cycle.

3.10 Flood Prone Areas Within Planning Study Area

The Town of Littleville Planning Study Area has isolated areas of localized flooding due to local drainage patterns. The major areas subject to a one hundred year flood are along Bear Creek and its tributaries West and South of the Littleville Town Hall and James Creek and its tributaries running North to Northeast of the Littleville Town Hall. A copy of the flood hazard map as developed by FEMA accompanies this report. **Figure 3.6** derived from Flood Insurance Rate Map shows the flood hazard area around the Littleville PSA.

3.11 Prime Farmland

The Littleville Planning Study Area contains a significant number of small farms broken up by scattered residential and commercial development. This area has historically been a marginal producer of common agricultural products due to limitations of slope. Cotton, soybeans, poultry, and cattle are the major agricultural income producers to the local economy of Littleville.



3.12 Planning Study Area Air Quality

The Alabama Department of Environmental Management (ADEM) Air Quality Division has performed air quality studies from several sites across the state, monitoring several different factors. An air quality assessment was performed in 2001 for Particulate Matter from a site on Wilson Dam Road and 2nd Avenue in Muscle Shoals, Alabama.

The Environmental Protection Agency (EPA) breaks down the study of particulate matter into two categories PM 2.5 and PM 10. PM 2.5 is matter less than 2.5 micrometers and PM 10 is that greater than 2.5 micrometers. The EPA standard set on July 18, 1997 states that the annual 24 hour PM 2.5 emission is set at 15 micrograms per cubic meter. The 2001 study from the Muscle Shoals location shows an annual arithmetic mean of 12.8 micrograms per cubic meter, thus concluding that the air quality for the area meets national standards.

3.13 Water Systems Analysis

3.13.1 Existing System

Public water in the planning study area is provided by the Town of Littleville, which operates the distribution center for this part of the county. A series of water lines ranging from one inch to eight inch lines are supplied by two water storage facilities located Northeast of the Littleville Town Hall (34°22'33.512" North, 88°03'19.56" West at 75,000 gallon capatown) as well as Northwest of Littleville Town Hall (34°22'32.948" North, 88°04'21.156" West at 250,000 gallon capatown).

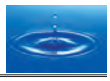
Water pressure is generally adequate for the current customer load, but the expected increase of industrial and residential use due to the Appalachian Regional Commission's Appalachian Development Highway System (ADHS) is seeing development changes. The ADHS route Corridor V that follows State Highway 24 North of the planning study area will affect consumption rates as economic development opportunities arise.

3.14 Transportation System

Surface transportation in the planning study area is good. The community is served by a series of roads and streets generally following the topographic relief of the rolling terrain. Major access to the region is by way of U.S. Highway 43 and the system of Colbert County Roads.

3.15 Drainage

The area has relatively good drainage characteristics due to the sloping topography and system of ditches and small streams. Runoff for the Northwest Alabama Region is generally to the north and northwest, flowing into the Tennessee River immediately to the north. Runoff for the planning study area is predominately into Bear Creek and James Creek.



3.16 Recreation

Most recreational programs are held outside of the PSA, however, there is a golf course located at the southern tip of the study area. Twin Pines Golf Course is an 18 hole golf course located just east of U.S. Highway 43 and covers land in both Colbert and Franklin Counties.

Privately held tracts of forested and agricultural land offer recreational activities to outdoor enthusiast at present and for future generations. The northwest side of the state is considered an outdoor tourist's paradise with rural and urban communities forming partnerships to achieve regional goals in tourism and recreation.

4.0 INCORPORATED BOUNDARY POPULATION TRENDS

4.1 Population Trends

The Town of Littleville has experienced a variation in popluation over the past few decades with a population estimate of 1,262 in the United States Census Bureau Report of 1980. The 1990 census saw a major decline as the population dropped to 925 people within the town boundary. The census data for the year 2000 reported and increase of 53 persons to a total of 978 residents. Comparatively, Colbert County's population in the 1980 census accounted for 54,519 persons, which dropped to 51,666 in 1990 and then rose in the 2000 census estimates to 54,984.

4.2 Population Projections

Traditional population projection methodology will result in acceptable projections for the fifty-year estimate. However, the accuracy of population projections is directly proportional to the size of the existing population and the historical rate of growth, and inversely proportional to the length of the time projected. Therefore, it is difficult to accurately predict in long-range projections a small population with little growth. The following projections are based on the previous two decades of census data. Using the 1990 and 2000 census, the rate of change is 5.3 persons per year. The linear growth projection methodology was applied and the projected populations are as follows:

Table 4.1
Town of Littleville Incorporated Area
Population Projections

Year	Base Population/Projected
2000	978
2025	1111
2050	1243

*Source: NACOLG Linear Projections

4.3 Population Profile 2000 Census

Females compose 51.3 percent of the Littleville population, while males makeup 48.7 percent of the population according to the 2000 census. The largest age group in the 2000 census is the 35 to 44 year olds. The working population 18 years and over make up 746 of the of the 978 persons in the census data at 76.3%, while 65 years and over is 123 persons at 12.6%. School age children represent 23.7% of the population. Table 4.2 shows the population by sexes and age.

Table 4.2 Sex and Age Population Profile 2000 Census

SEX AND AGE	Number	Percentage
Male	476	48.7
Female	502	51.3
Under 5 years	62	6.3
5 to 9 years	70	7.2
10 to 14 years	57	5.8
15 to 19 years	56	5.7
20 to 24 years	58	5.9
25 to 34 years	134	13.7
35 to 44 years	164	16.8
45 to 54 years	133	13.6
55 to 59 years	62	6.3
60 to 64 years	59	6.0
65 to 74 years	76	7.8
75 to 84 years	33	3.4
85 years and over	14	1.4
Median age (years)	37.9	(X)
18 years and over	746	76.3
Male	358	36.6
Female	388	39.7
21 years and over	725	74.1
62 years and over	163	16.7
65 years and over	123	12.6
Male	53	5.4
Female	70	7.2

4.4 Academic Institutions and Educational Attainment

Youth in and around the Town of Littleville attend Colbert County Public Schools. Colbert Heights Elementary School serves students through the grades K-6 and is located at 1551 Sunset Drive Tuscumbia, Alabama 35674. Enrollment is 443 students, 105 from Littleville, with a student to teacher ratio of 13.6 to 1. Colbert Heights High School serves the students through the grades 7-12 and is located at 6825 Woodmont Drive Tuscumbia, Alabama 35674. Enrollment is 523 students, 26 from Littleville, with a student to teacher ratio of 15.4 to 1.

Educational statistics based on the 2000 census for the town of Littleville are derived from the population 25 and over (671persons), which shows 67 persons with less than a 9th grade education and 138 with an education falling in between the 9th and 12th grade level. There are 295 persons with the highest level of education being a high school education or equivalent. Littleville has 99 residents with some college experience, 20 with an Associates degree, 36 with a Bachelor's degree and 16 with a graduate or professional degree.

5.0 ECONOMY

5.1 Employment by Sector Littleville:

Industry	Number of Employees
Agriculture, forestry, fishing, hunting, and mining	7
Construction	42
Manufacturing	141
Wholesale Trade	13
Retail Trade	66
Transportation, warehousing, and utilities	38
Information	9
Finance, insurance, real estate	9
Professional, management	6
Educational, health and social services	60
Arts, entertainment, recreation, food services	21
Public administration	18
Other Services	17

5.2 Income per Household

Income	Number
Households	381
Less than $10,000	40
$10,000 to $14,999	41
$15,000 to $24,999	72
$25,000 to $34,999	52
$35,000 to $49,999	77
$50,000 to $74,999	76
$75,000 to $99,999	22
$100,000 to $149,999	1
$150,000 to $199,999	N/A
$200,000 or more	N/A

5.3 Labor Force

The Town of Littleville has a labor force of 746 individuals. Labor force is here defined as persons 16 years of age and older residing within the incorporated limits of the Town of Littleville. There are no major employers within the planning study area. Businesses with a small number of employees are scattered throughout the community with an active retail service center needing economic and urban revitalization. Small businesses employing fewer than five people each are scattered throughout the area along the county and state highways.

5.4 Income

Median Family Income Franklin County

Year	Income
2000	$31,954

Median Family Income Littleville, Alabama

Year	Income
2000	$32,583

6.0 HOUSING

6.1 General

From 1990 to 2000, the total number of housing units cannot be calculated due to the lack of data availability for the population demographic based on total populations less than 5,000 persons. For the 2000 census there were 424 housing units (Table 6.1).

Table 6.1
Structural Characteristics of Housing Units in Incorporated Area

Units In Structure	2000	Percent of Total
1 Unit Detached	348	82.1
1 Unit Attached	2	0.5
2 Units	9	2.1
3 or 4 Units	7	1.7
5 to 9 Units	N/A	N/A
10 to 19 Units	3	0.7
20 or more Units	N/A	N/A
Mobile Home	55	13.0

6.2 Age of Structures

Table 6.2
Year-Round Housing Units by Year of Construction

Age of Structure	Number of Units	Percent of Total
1999 to March 2000	4	0.9
1995 to 1998	39	9.2
1990 to 1994	27	6.4
1980 to 1989	52	12.3
1970 to 1979	119	28.1
1960 to 1969	100	23.6
1940 to 1959	74	17.5
1939 or earlier	9	2.1

*The largest percentage of current housing stock was built between 1970 and 1979.

6.3 Condition of Housing Stock

A total of thirteen occupied housing units in the Town of Littleville are overcrowded. Units with 1.01 persons or more per room represent 3.4 percent of the total occupied units. This compares to the state average in 2000 of 2.94 percent.

One of the most widely recognized methods for determining substandard housing conditions involves classifying those housing units as substandard which lack complete plumbing facilities. When employing this method in the Town of Littleville there were no units in the town that did not have complete plumbing facilities in 2000. This figure is slightly above the statewide average of .56 percent.

In 2000, the median value of an owner-occupied housing unit was $60,800.00. In comparison, the average value of an owner-occupied unit statewide was $85,100. The median contract rent in Littleville was $408.00 per month as compared to the state average of 447.00 per month.

6.4 Subsidized Housing

There is currently not any public housing in Town of Littleville.

6.5 Housing Trends:

Table 6.5
Housing Trends

Year	Housing Units Per Year
Prior Years	50
Year 1970-1979	72
Year 1980-1989	60
Year 1990-2000	197
Totals	379

*Table 6.5 illustrates the housing trend in the Littleville area.

7.0 LAND USE

7.1 Existing Land Use

The predominant land use in the Planning Study Area is agricultural/vacant and single family residential. The agricultural/vacant land is being primarily pastured and timberlands with scattered patches of single family housing. Several streams bounded by county roads break up this pattern **(Figure 7.1)**.

Throughout the planning study area, roads and highways tend to have single-family residences spread along them, many on large lots. There is some subdivision development found on road spurs coming off of U.S. Highway 43. The resulting overall pattern is one not quite urban yet no longer rural **(Figure 7.2 and 7.3)**. Several older neighborhoods within the central area of Littleville appear to have been planned and initially developed as a residential subdivision. Due in part to the lack of economic growth, Littleville housing development has remained for the most part unchanged.

7.2 Future Land Use

In the study area there is no formal land use or planning process that enacts or guides land use regulations. Development of any type and intensity may occur virtually anywhere. As long as the development (residential, commercial, and industrial) can safely use septic tanks, and the site is not in a FEMA identified flood zone the development has no land use restrictions.

Planning for future economic development opportunities, the citizens of Littleville have allotted and set aside acreage northwest of the town hall to be the new Littleville Industrial Park. The creation of this park is dependent on the Town of Littleville being able to provide services that would make the town more attractive to new businesses, which would include a sanitary sewer collection and treatment system. A discouraging effect on future growth and development will result from the lack of centralized wastewater collection and treatment system. **Figure 7.4** Identifies future development as envisioned by the Mayor of Littleville. Development patterns shown on the future landuse map indicate confined commercial development along the Highway 43 corridor with confined residential development throughout the rest of the town.

8.0 WASTEWATER TREATMENT ALTERNATIVES

Wastewater systems have one or more discharge points, which ultimately flow to a public watercourse. The purpose of treating the wastewater is to prevent the pollution of the receiving stream. Treatment alternatives involve various physical, chemical, biological, and sludge treatment methods. The degree of treatment required is based on the characteristics of the receiving stream including flow rates and use, such as recreation, fish and wildlife, drinking water, etc. Other factors in determining the required treatment for wastewater involve the type of waste including municipal and industrial and the expected quantity to be received.

Wastes generated from an industrial facility can be treated by one of three methods. The waste may be treated in a separate industrial treatment plant, discharged to the municipal treatment facility for complete treatment, or pre-treated at the facility site prior to discharge into the municipal system. Municipal wastes must be closely monitored due to the effect certain materials could have on the municipal treatment processes. Certain wastes should not be included in the municipal system, including materials that could create a fire or explosion hazard, materials that could interrupt the hydraulic flow, and hazardous materials that could cause harm to people or the treatment process.

Treatment of wastewater typically consists of a combination of preliminary treatment, primary settling, biological treatment, secondary settling, and disinfection. All processes are not required for all wastewater flows. In certain circumstances with minimal flows and large receiving waters, primary treatment may achieve the desired results. In environmentally sensitive areas, additional secondary treatment as well as disinfection may be needed to reach the same results. The required parameters for the effluent flow are normally established by the governing agency based on the characteristics of the receiving water.

Preliminary process can include pumping, screening, shredding of solids, flow measuring, and preaeration. Most wastewater treatment facilities are gravity flow systems and often require pump or lift stations at the beginning. Screening of the wastewater is primarily used for the protection of the mechanical components of the plant from sand and other debris. Flow measuring is generally required by discharge permits as a tool to compute percentage of removal. Preaeration can be used in preliminary treatment to add oxygen to the wastewater and to aid in later treatment processes.

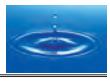
Primary treatment, the most commonly used form of wastewater treatment, involves sedimentation. Sedimentation, also called clarification, is the removal of solid particles from suspension by gravity. A large percentage of pollutants in the influent can be settled out by using a sedimentation basin or lagoon. Primary sedimentation usually removes 30%-50% of the suspended solids in typical municipal wastewater. This process usually involves minimal maintenance due to the lack of mechanical components. This process of removing solids may be accelerated by the addition of a flocculent, which causes the particles to bond together and settle from the water at a faster rate.

Secondary or advance treatment is a biological process to remove additional organics from the

wastewater. Secondary treatment alternatives include activated sludge processes, trickling filters, or rotating biological contactors. All process use microorganisms to synthesize the organics. The resultant from this type of treatment is a sludge that must be periodically removed and disposed of. The advantages to secondary treatment include a high percentage of suspended solid and BOD removal. On the other hand, these processes often require a high degree of operation and maintenance to ensure proper working conditions.

Both primary and secondary treatment process produce a concentrated sludge, which, over a period of time must be disposed of. Disposal of this accumulated waste sludge can be a major economic factor in wastewater treatment. The sludge is often returned to the influent of the treatment plant for continued processing and solid removal. The sludge must be dewatered by thickening in a holding tank, belt filter pressing, or by centrifugation. The resulting sludge material can then be disposed of by a number of methods including application as a fertilizer/soil conditioner for agricultural use or in a landfill along with municipal solid waste. In both cases, the sludge must be covered with soil the same day it is applied to the land. The dewatered sludge may also be disposed of by incineration, although costs prohibit this in most cases.

Other forms of advanced treatment may also be required, depending on the characteristics of the influent and receiving stream and the limits of the discharge permit. Filtration is used to separate solids from wastewater that were not removed in previous processes by passing through a porous medium. Filter media usually includes granular material such as sand and anthracite coal. Disinfection of wastewater prior to discharge is used in certain circumstances where the receiving stream has a critical use or in the direct reuse of the effluent. Methods for disinfection include chlorination and the use of ultraviolet rays. Other forms of advanced treatment used on a limited basis include taste and odor control, fluoridation, corrosion control, and removal of chemicals.



9.0 SELECTED ALTERNATIVES

The Town of Littleville operates a wastewater treatment facility with primary and secondary treatment. The plant is located southeast of town, east of US Hwy 43. The only waste received at the plant is from residences and business located within the town. No industrial waste is currently treated at the plant.

The plant is currently permitted by ADEM to discharge 172,000 gallons per day. The plant should have the required capacity to meet expected wastewater flows for the town for the next 20 years. However, plant improvements and upgrades will be required to keep the plant effluent within the permit requirements and to provide for the safe health of the town's residences.

The wastewater treatment plant was constructed in 1988 and consists of a main lift station, oxidation ditch with paddle aeration, boat clarifier, ultraviolet (UV) disinfection treatment system, sludge thickening tank converted to a chlorine contact chamber, cascading saturator, tablet dechlorinator, and two sludge drying beds. The plant and pumps were designed based upon receiving sewage from the 230 existing septic tanks. However, the septic tanks were never sealed when they were connected to the system. Not only has this caused many problems with sewage backup, but it has also caused a significant infiltration/inflow problem for the sewer system and the treatment plant. Daily flows at the wastewater plant average 70,000 gallons per day, but are as high as 300,000 gallons per day during storm events.

The plant was designed for wastewater to be disinfected via a UV treatment system. The UV system has had problems with faulty lamps since operations began. Currently, the UV system is not in operation. Due to the high fecal coliform levels present in the treated wastewater, chlorine disinfection was added to the ADEM permit. Until recently, WWTP personnel add chlorine to the waste stream before the wastewater enters the UV disinfection chamber. The treated wastewater was then dechlorinated by sulfur dioxide tablets before entering the cascading saturator and being discharged to Stinking Bear Creek.

The wastewater treatment plant was originally designed to have a sludge-thickening tank. However, during the final design and construction, no mechanics were installed. The plant operators have been using the tank as a chlorine contact chamber since ADEM required additional disinfection using chlorine. The chlorine contact chamber is a side-fed tank as opposed to center-fed, which caused short-circuiting with the treated effluent.

Plant personnel have also modified the field piping to try to solve some of the system problems they have encountered. These modifications have created a bottleneck situation at the treatment plant because of the different size lines used in the piping structure. They modified field piping to utilize the existing sludge thickening tank as a chlorine contact chamber. By doing so, they tapped the 8" effluent line with a 6" line to the 6" waste sludge influent. The system was modified with valves in order to discharge through the chlorine contact chamber or directly to the cascading saturator as designed, while wasting sludge. During wasting sludge procedures, the modified lines were valved to route effluent directly to discharge. After completion, valves were then opened and closed to route the effluent back through the modified chlorine contact chamber,

whose influent line still contains waste sludge. This volume of waste sludge was routed into the chlorine contact chamber with treated effluent, which could have caused spikes in the fecal coliform levels.

On December 19, 2001, the Littleville wastewater treatment plant was placed under a Consent Order by ADEM for violating permit discharge limits of fecal coliform. The town completed a project in 2005 in which a gas chlorine and sulfur dioxide system and chlorine contact chamber were installed for disinfection and de-chlorination. The revised system has been in operation for approximately 1-year with successful results during normal flow periods. In addition, the town has performed rehabilitation of existing septic tanks to reduce the amount of infiltration and inflow within the system.

Additional improvements are planned for the system as funding becomes available. A mechanical screen and compactor and grit removal system and classifier are needed at the headworks to aid in the primary treatment process. Improvements to the sludge thickening system including a new return sludge pump station, sludge thickening mechanism, and decant mechanism will replace the existing outdated equipment. A 25' diameter clarifier unit will replace the existing boat clarifier to produce a more efficient clarification process. Finally, a new laboratory building is needed at the site with updated testing equipment to aid the town in monitoring the treatment process.

A major issue that must be addressed by the town is the problem of inflow/infiltration of groundwater into the sanitary sewer system. The plant operator is forced to bypass the plant and discharge untreated effluent into the receiving stream frequently during rainfall events. The town has attempted to isolate problem areas through smoke testing and has been able to stop some of the inflow into the main gravity lines. The major component of inflow is from the existing septic tanks that were not properly sealed when the system was originally installed. Approximately 30 of the town's worst tanks have been replaced and the town plans to either repair or replace the remaining tanks as a part of their continuous sewer maintenance plan.

A detailed cost estimate of the planned improvements to the collection and treatment systems is included as a part of this study. ***(See Appendix B)***

10.0 POTENTIAL FUNDING SOURCES

The Town of Littleville was awarded an EPA grant in the amount of $238,000.00 and a separate appropriation for $50,000 for wastewater plant and sewer system improvements, which were completed in 2005. Additional plant and collection system improvements are planned by the town when funding becomes available. Approximately 1 million dollars in improvements are planned by the town. However, with the limited funds available, the town cannot afford to accomplish these tasks without the aid of grant funds. In addition to the planned plant improvements, the town will also need to be prepared to install and maintain new gravity sewer mains and pump stations as the growth of areas outside the system occur.

Funding for sanitary sewer facility improvements and construction is available from a number of government agencies. The Alabama Department of Environmental Management offers a revolving loan program in which municipalities can borrow funds at a reduced interest rate. The Alabama Department of Community Affairs offers grant programs such as the Community Development Block Grant, which grant municipalities a certain percentage of funding for a project. These grants are awarded based on a number of factors including median household income and on the project's ability to influence the economy through the creation of new jobs. The federal government also offers grant and loan programs through the United States Department of Agriculture and the United States Environmental Protection Agency. The Town of Littleville could also secure private funding through loans and bond issues. The repayment of this money would be secured by future revenues from the system as well as anticipated growth to the economy by the creation of jobs.

Funding is also available through special appropriations from the federal government. The town has made a request to their United States Congressman for special appropriations to aid in the required improvements. Special appropriations for sewer improvements are typically routed through the US Environmental Protection Agency or other federal agencies and require a certain percentage of matching funds. The town should continue to seek funding from these sources and educate the congressman of the importance of making the required improvements.

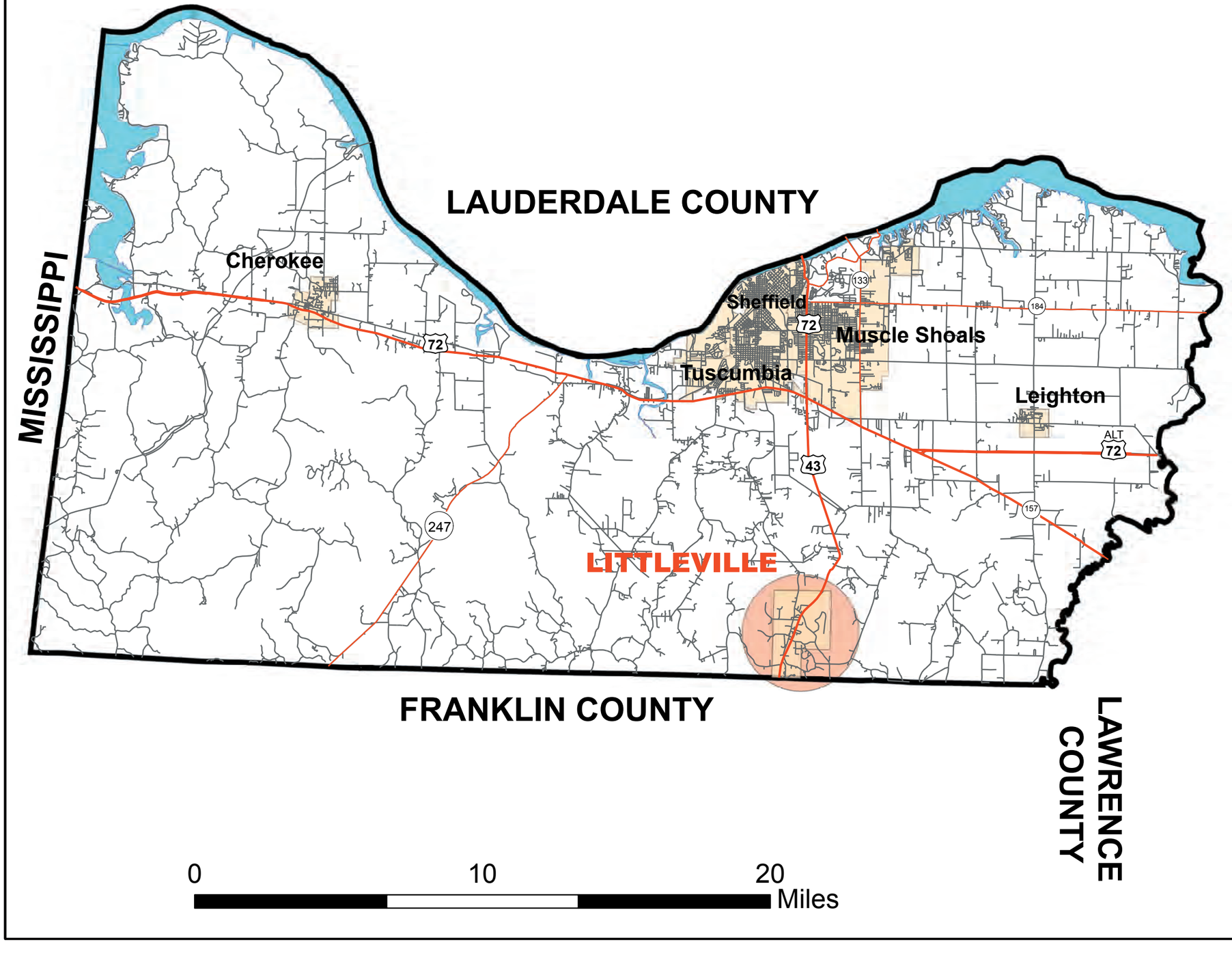
Appendix A
Maps

Figure 3.1

COLBERT COUNTY

Waste Water Facilities Study

Location Map



US Highway
State Highway
Roads
City Limits
2 Mile Study Area
Colbert County

N
W
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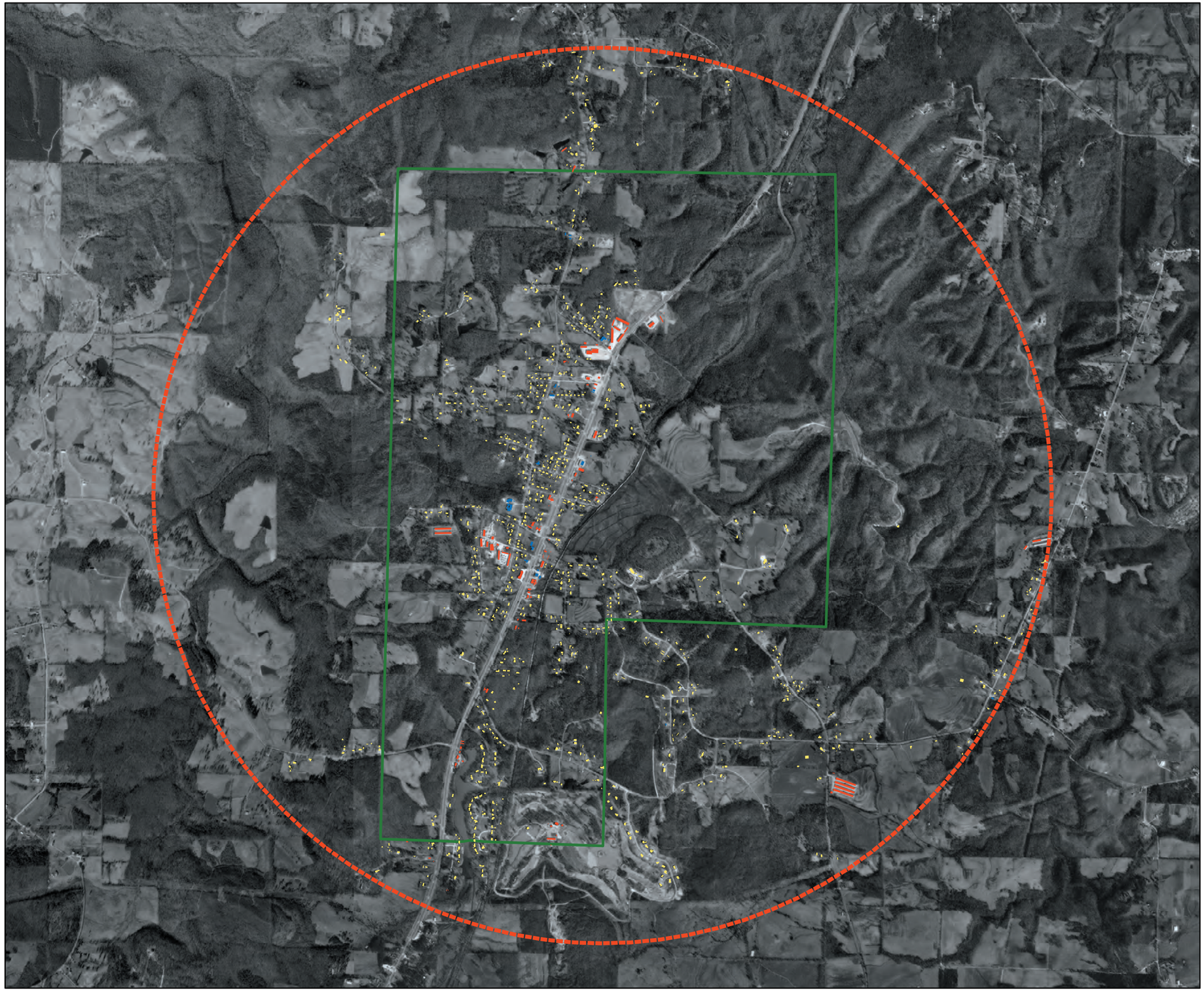
Northwest Alabama Council of Local Governments
December 2005

Figure 3.2

LITTLEVILLE

Waste Water Facilities Study

Structure Locations



- Commercial
- Institutional/Government
- Residential
- Study Area
- City Limits

N

W E

S

0 0.125 0.25 0.5 0.75 1 Miles

Northwest Alabama Council of Local Governments

December 2005

Figure 3.3

Littleville

Waste Water Facilities Study

TOPOGRAPHY

2 Mile Study Area

City Limits

N

W E

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0 0.125 0.25 0.5 Miles

Northwest Alabama Council of Local Governments
December 2005

Figure 3.4

COLBERT COUNTY

Waste Water Facilities Study

Soil Types

- City Limits
- BaE
- CaB
- CbA
- ChD
- CnF
- Gw
- Mp
- NNC
- SpD
- TuB
- WnB

N
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0 0.125 0.25 0.5 0.75 1 Miles

Northwest Alabama Council of Local Governments
December 2005

Soils Data From Figure 3.4

BaE	Barfield-Rock outcrop complex
Permeability	moderately slow
Available water capacity	very slow
Soil Reaction	slighty acid to mildy alkaline
Organic Matter	moderately low
Natural fertility	medium
Depth to Bedrock	8 to 20 inches
Root Zone	8 to 20 inches
Depth to the water table	more than 6 feet
Flooding	none

CaB	Capshaw silt loam
Permeability	slow
Available water capacity	high
Soil Reaction	stongly acid to medium acid
Organic Matter	moderately low
Natural fertility	low
Depth to Bedrock	4 to 5 feet
Root Zone	48 to 60 inches
Depth to the water table	3.5 to 5 feet
Flooding	none

CbA	Chenneby slit loam
Permeability	moderate
Available water capacity	high
Soil Reaction	very strongly acid to medium acid
Organic Matter	moderately low
Natural fertility	medium
Depth to Bedrock	more than 60 inches
Root Zone	more than 60 inches
Depth to the water table	1.0 to 2.5 feet
Flooding	occasional

ChD	Chisca loam
Permeability	very slow
Available water capacity	moderate
Soil Reaction	extremely acid to strongly acid
Organic Matter	low
Natural fertility	low
Depth to Bedrock	40 to 60 inches
Root Zone	40 to 60 inches
Depth to the water table	more than 6 feet
Flooding	none

CnF	Chisca-Nella-Nectar
Chisca	
Permeability	very slow
Available water capacity	moderate
Soil Reaction	extremely acid to strongly acid
Organic Matter	low
Natural fertility	low
Depth to Bedrock	40 to 60 inches
Root Zone	30 to 50 inches
Depth to the water table	more than 6 feet
Flooding	none

CnF	Chisca-Nella-Nectar
Chisca	
Permeability	very slow
Available water capacity	moderate
Soil Reaction	extremely acid to strongly acid
Organic Matter	low
Natural fertility	low
Depth to Bedrock	40 to 60 inches
Root Zone	30 to 50 inches
Depth to the water table	more than 6 feet
Flooding	none

CnF	Chisca-Nella-Nectar
Nella	
Permeability	moderate
Available water capacity	moderate
Soil Reaction	very strongly acid or strongly acid
Organic Matter	low
Natural fertility	low
Depth to Bedrock	40 to 60 inches
Root Zone	40 to 60 inches
Depth to the water table	more than 6 feet
Flooding	none

CnF	Chisca-Nella-Nectar
Nectar	
Permeability	moderately slow
Available water capacity	high
Soil Reaction	extremely acid to medium acid
Organic Matter	moderately low
Natural fertility	low
Depth to Bedrock	40 to 60 inches
Root Zone	40 to 60 inches
Depth to the water table	more than 6 feet
Flooding	none

NNC	Nectar and Nauvoo fine sandy loams
Necatr	
Permeability	moderately slow
Available water capacity	high
Soil Reaction	extremely acid to medium acid
Organic Matter	moderately low
Natural fertility	low
Depth to Bedrock	40 to 60 inches
Root Zone	40 to 60 inches
Depth to the water table	more than 6 feet
Flooding	none

NNC	Nectar and Nauvoo fine sandy loams
Nauvoo	
Permeability	moderate
Available water capacity	moderate or high
Soil Reaction	very strongly acid to medium acid
Organic Matter	moderately low
Natural fertility	low
Depth to Bedrock	40 to 60 inches
Root Zone	40 to 60 inches
Depth to the water table	more than 6 feet
Flooding	none

SpD	Smithdale-Pikeville complex
Smitdale	
Permeability	moderate
Available water capacity	moderate
Soil Reaction	very strongly acid or strongly acid
Organic Matter	moderately low
Natural fertility	low
Depth to Bedrock	more than 60 inches
Root Zone	more than 60 inches
Depth to the water table	more than 6 feet
Flooding	none

SpD	Smithdale-Pikeville complex
Pikeville	
Permeability	moderate or moderately rapid
Available water capacity	moderate
Soil Reaction	very strongly acid or strongly acid
Organic Matter	moderately low
Natural fertility	low
Depth to Bedrock	more than 60 inches
Root Zone	more than 60 inches
Depth to the water table	more than 6 feet
Flooding	none

TuB	Tupelo-Colbert complex
Tupelo	
Permeability	slow
Available water capacity	high
Soil Reaction	very strongly acid to medium acid
Organic Matter	low
Natural fertility	low
Depth to Bedrock	more than 60 inches
Root Zone	more than 60 inches
Depth to the water table	1 to 2 feet
Flooding	none

TuB	Tupelo-Colbert complex
Colbert	
Permeability	very slow
Available water capacity	high
Soil Reaction	very strongly acid to slightly acid
Organic Matter	moderately low
Natural fertility	low
Depth to Bedrock	40 to 72 inches
Root Zone	40 to 72 inches
Depth to the water table	3.5 to 5 feet
Flooding	none

WnB	Wynnville silt loam
Permeability	moderate
Available water capacity	moderate
Soil Reaction	extremely acid to strongly acid
Organic Matter	low
Natural fertility	low
Depth to Bedrock	48 to more than 60 inches
Root Zone	18 to 36 inches
Depth to the water table	1.5 to 2.5 feet
Flooding	none

Mp	Mine pits and dumps
Gw	Gullied land

Figure 3.5

COLBERT COUNTY

Waste Water Facilities Study

Soil Limitations for Site Development

City Limits

Severe Limitations

Moderate Limitations

N

W E

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0 0.125 0.25 0.5 0.75 1 Miles

Northwest Alabama Council of Local Governments

December 2005

Figure 3.6

Littleville

Waste Water Facilities Study

Flood Prone Areas

- Streams
- City Limits
- 2 Mile Study Area
- 100 Year Flood Plain
- 500 Year Flood Plain
  (No Data in Area)

N
W E
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0 0.125 0.25 0.5 0.75 1 Miles

Northwest Alabama Council of Local Governments
December 2005

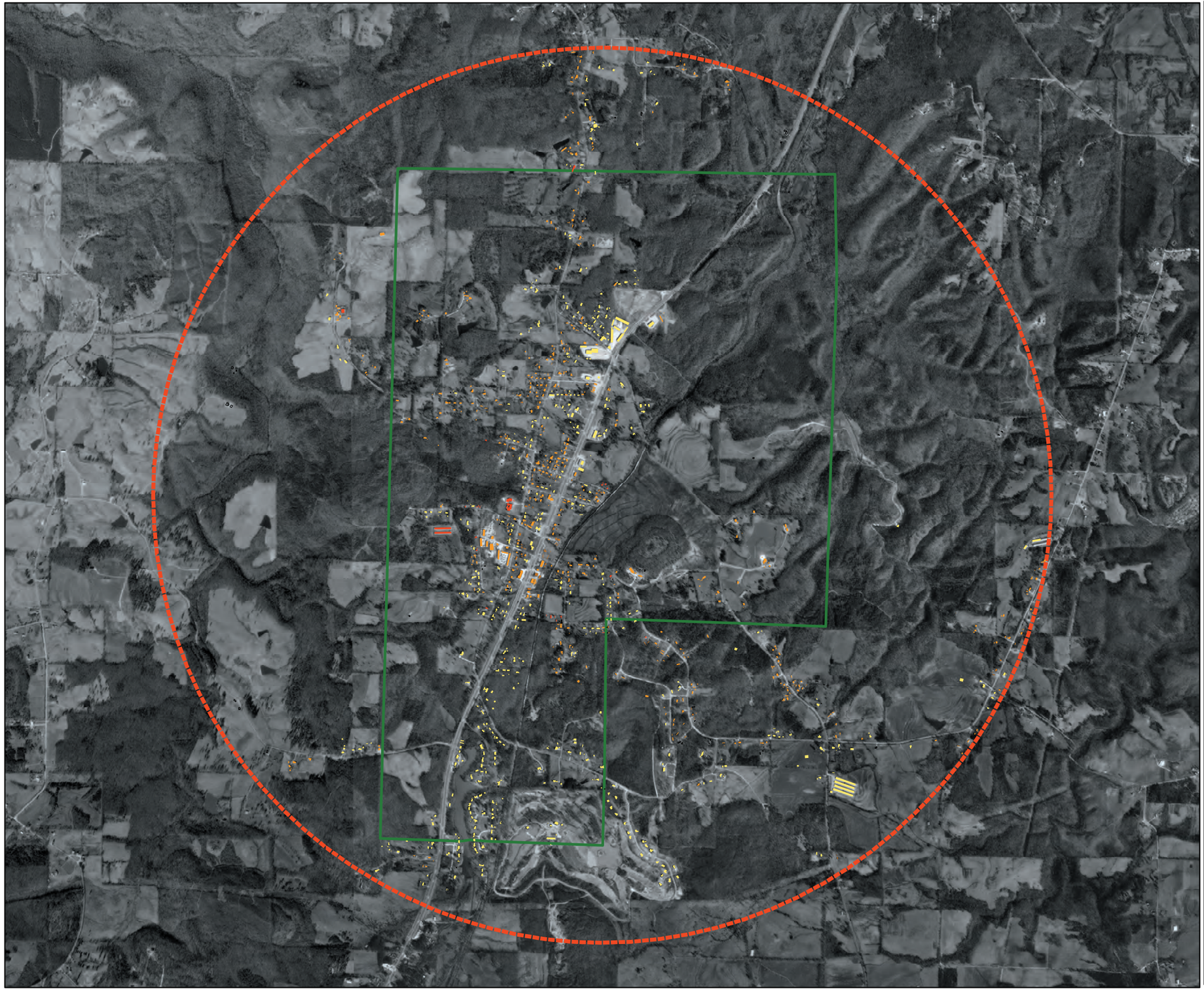

Figure 7.3

LITTLEVILLE

Waste Water Facilities Study

Structure Analysis

- Standard
- Substandard Minor
- Substandard Major
- Dilapidated
- Study Area
- City Limits

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0 0.125 0.25 0.5 0.75 1 Miles

Northwest Alabama Council of Local Governments

December 2005

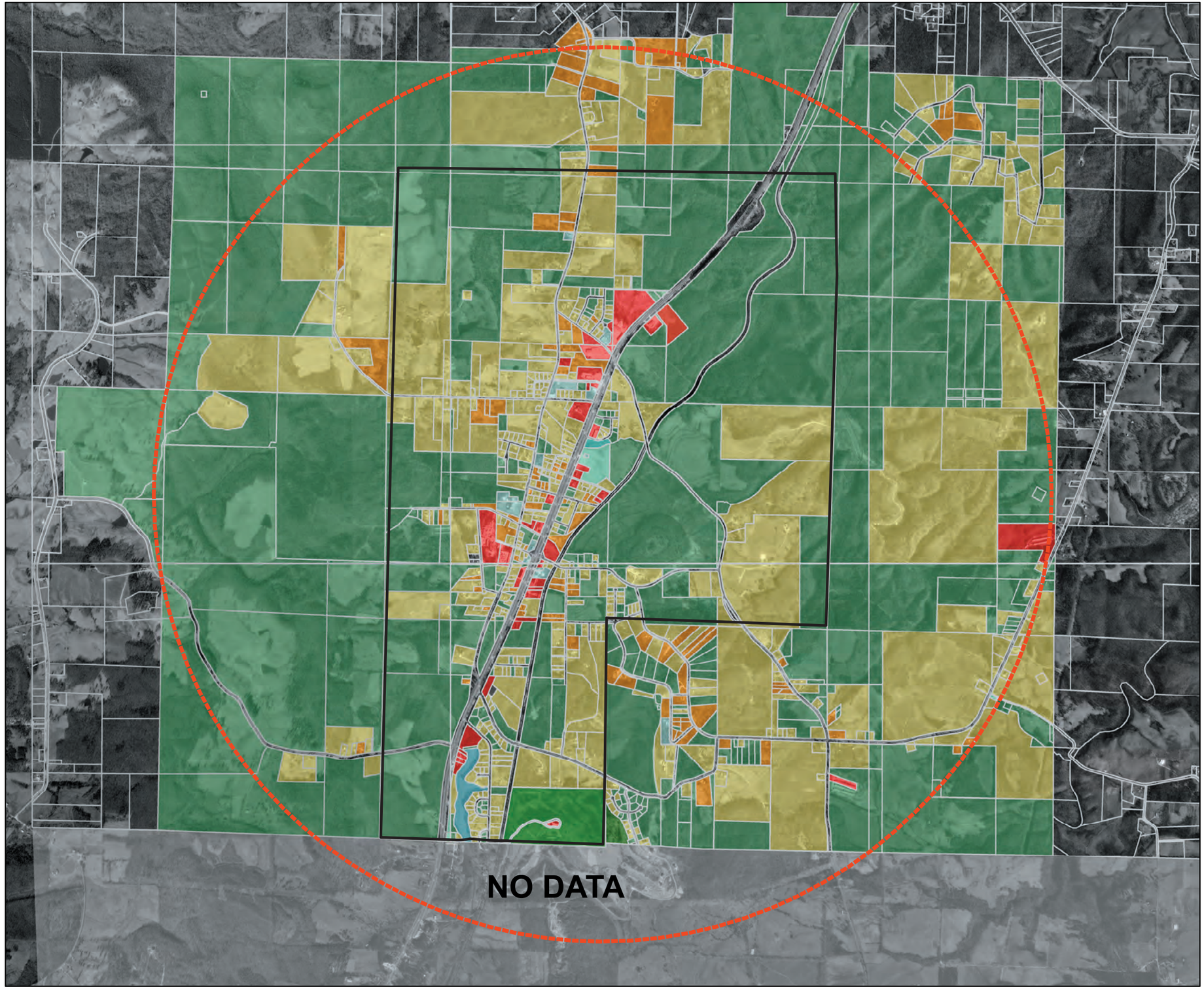

Figure 7.1

LITTLEVILLE

Waste Water Facilities Study

Landuse Survey

- Study Area
- City Limits
- Parcels
- Agriculture/Vacant
- Parks and Recreation
- Single Family
- Manufactured Homes
- Commercial
- Institutional/Government
- Water
- Franklin County

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0 0.125 0.25 0.5 0.75 1 Miles

Northwest Alabama Council of Local Governments
December 2005

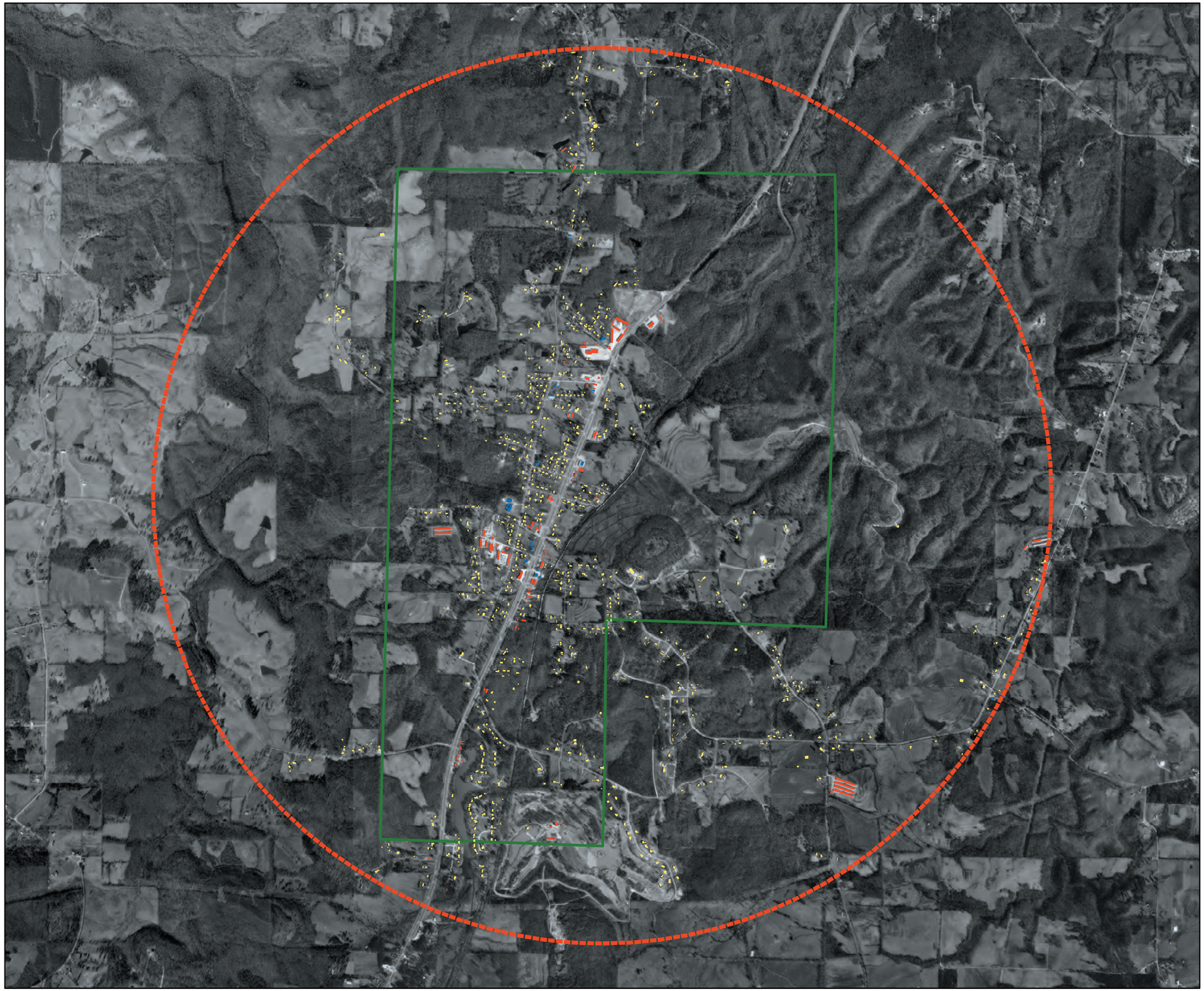


Figure 7.2

LITTLEVILLE

Waste Water Facilities Study

Structure Locations

- Commercial
- Institutional/Government
- Residential
- Study Area
- City Limits

N
W E
S

0 0.125 0.25 0.5 0.75 1 Miles

NORTHWEST ALABAMA COUNCIL OF LOCAL GOVERNMENTS
nacolg
Unity for Progress

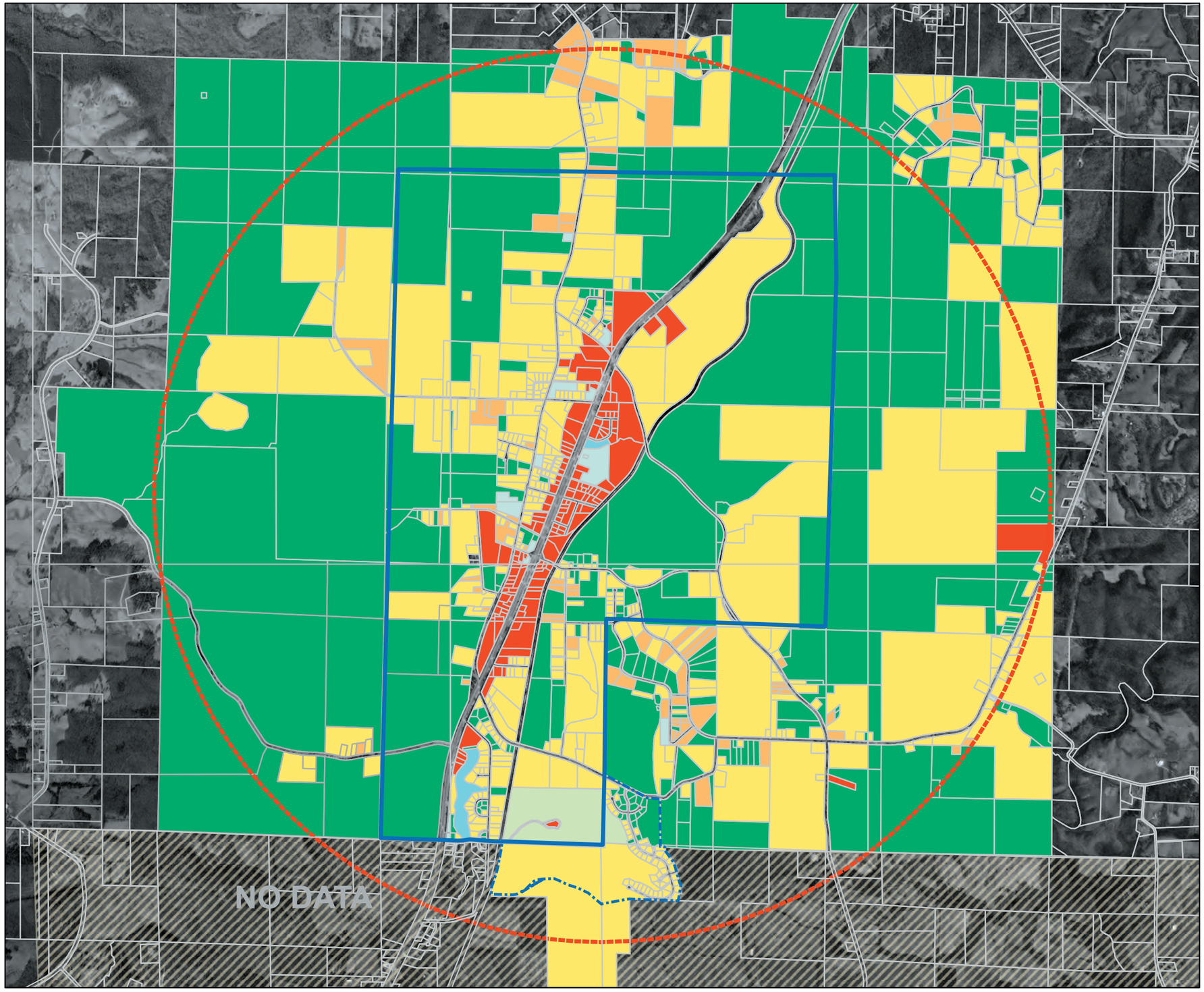
Northwest Alabama Council of Local Governments
December 2005

Figure 7.4

LITTLEVILLE

Waste Water Facilities Study

Future Landuse



- Study Area
- Approximate City Limits
- Estimated City Limits
- Colbert County Parcels
- Franklin County Parcels
- Parks and Recreation
- Manufactured Homes
- Single Family
- Commercial
- Water
- Franklin County (No Data)
- Agriculture/Vacant
- Institutional/Government

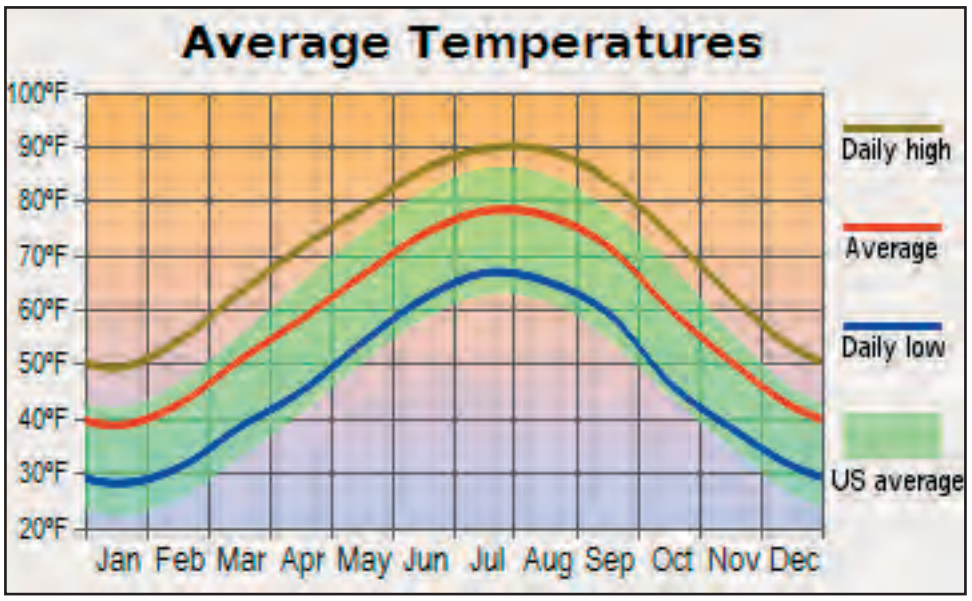
N
W E
S

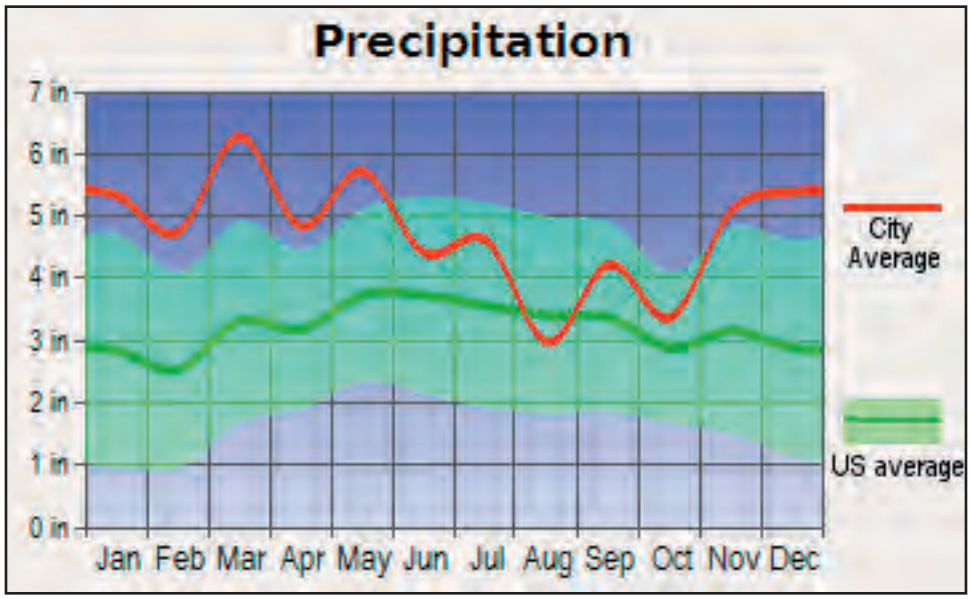
0.5 0.25 0 0.5 Miles

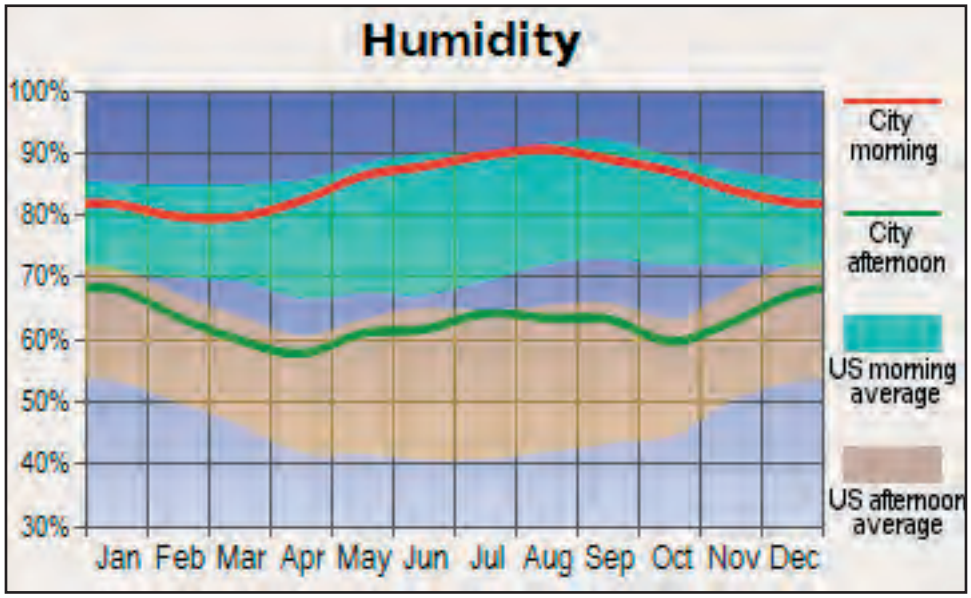
Northwest Alabama Council of Local Governments

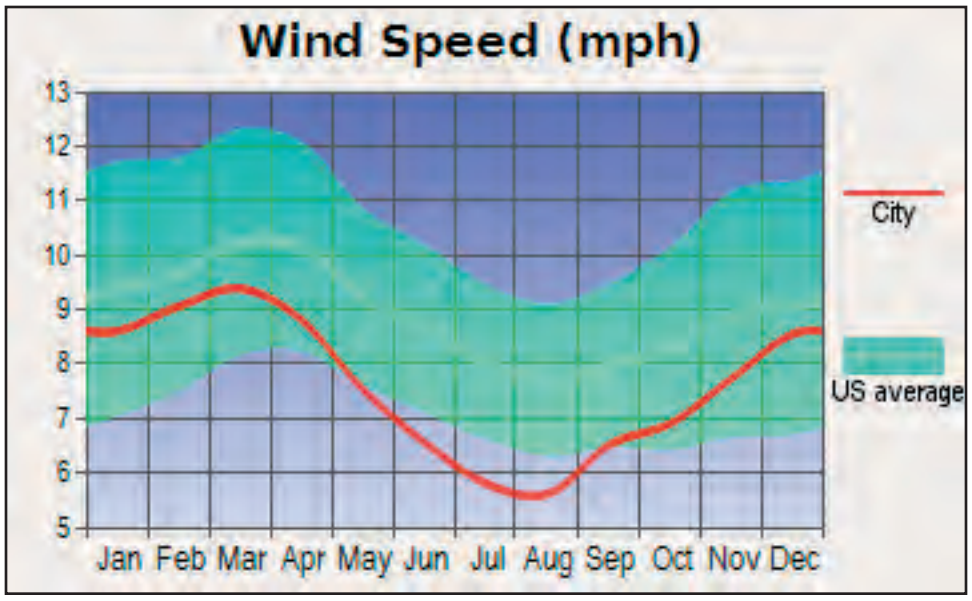
June 2006

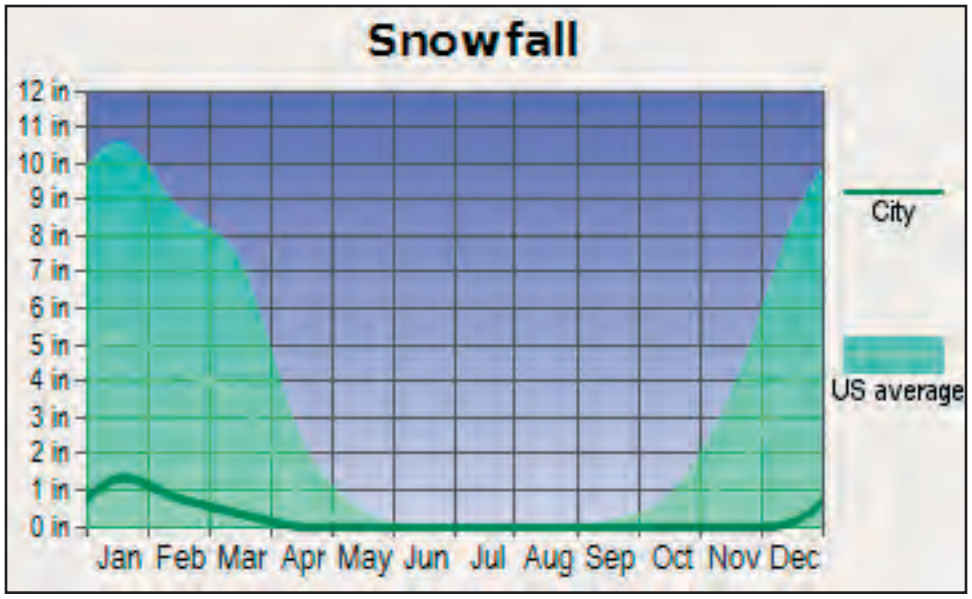
Appendix B
Charts

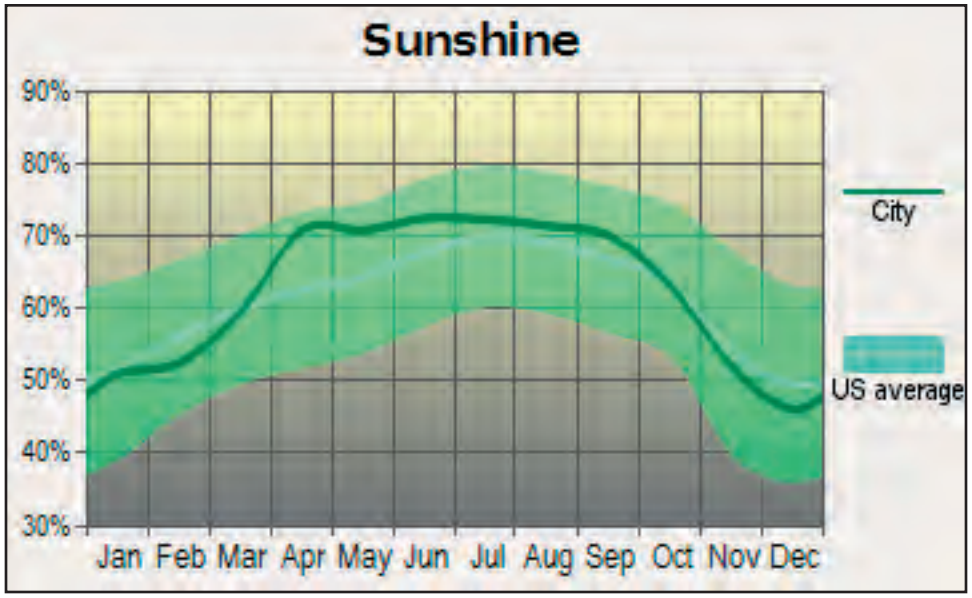

Average Temperatures
100°F
90°F
80°F
70°F
60°F
50°F
40°F
30°F
20°F
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Daily high
Average
Daily low
US average

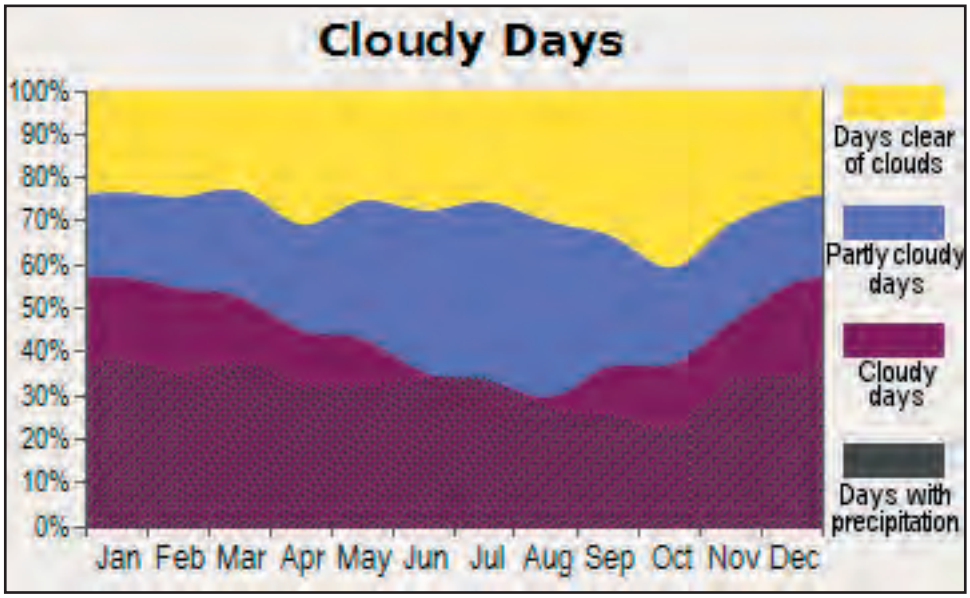

Precipitation
7 in
6 in
5 in
4 in
3 in
2 in
1 in
0 in
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
City Average
US average


Humidity
100%
90%
80%
70%
60%
50%
40%
30%
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
City morning
City afternoon
US morning average
US afternoon average


Wind Speed (mph)
13
12
11
10
9
8
7
6
5
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
City
US average


Snowfall
12 in
11 in
10 in
9 in
8 in
7 in
6 in
5 in
4 in
3 in
2 in
1 in
0 in
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
City
US average


Sunshine
90%
80%
70%
60%
50%
40%
30%
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
City
US average


Cloudy Days
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Days clear of clouds
Partly cloudy days
Cloudy days
Days with precipitation

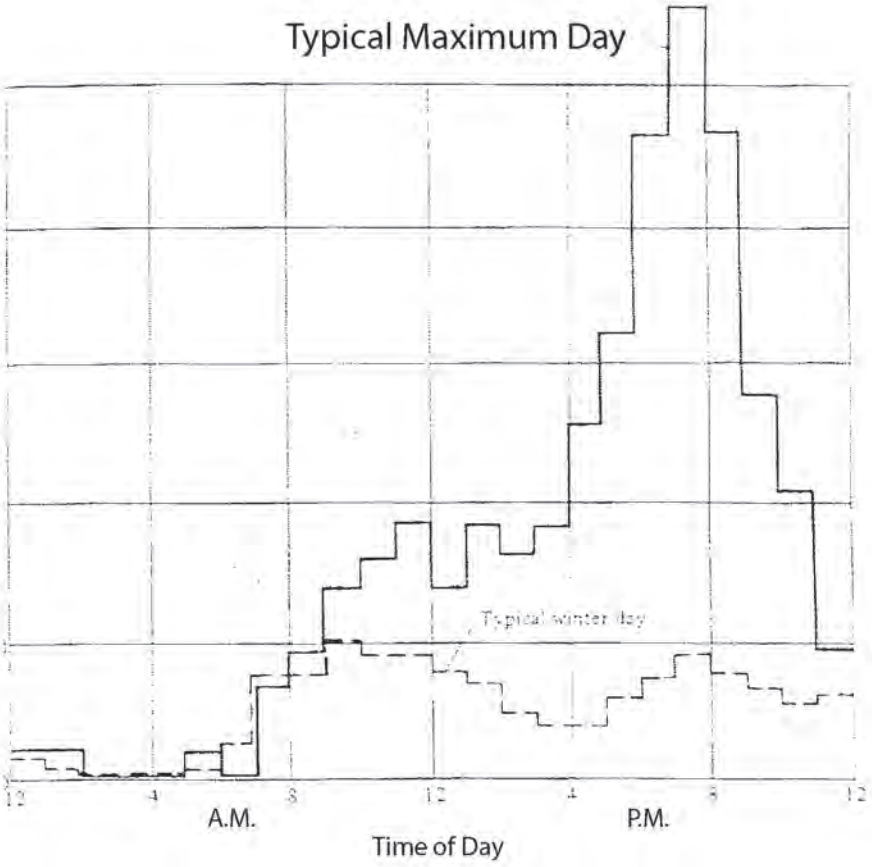


Figure 4.2 Daily water use patterns, maximum day and winter day. (From Residential Water-Use Research Project, John Hopkins University and Federal Housing Administration, 1963.)

February 26, 2002

Preliminary Construction Cost Estimate
Wastewater Treatment Plant Improvements
Littleville, Alabama

Item	Qty.	Unit	Description	Unit Cost	Total Cost
Phase-1			**Consent order correction with Fecal Coliform limits**		
			Chlorine Disinfection and Sulfur Dioxide		
1	1	LS	Dual 1150 bottle system in FRP enclosure		$ 35,000
2	22	CY	Concrete tankage and excavation for unit	$ 600	$ 13,200
3	1	LS	Yard Piping, valves and effluent meter		$ 25,000
4	1	LS	Electrical		$ 15,000
5	1	LS	Mobilization, bonds, insurance		$ 19,000
				Construction Sub-Total	$ 105,200
				Project Contingency	$ 10,500
				Total Construction Cost	$ 115,900
				Design and Construction Engineering	$ 20,960
				Administrative Fees	$ 16,300
				Total Project Cost	**$ 153,060**
Phase-2			**Flow monitoring - Infiltration/Inflow study**		
1	250	Ea	Seal connections at 250 septic tanks	$ 400	$ 100000
2	1	LS	Smoke test system / flow monitor study		$ 3000
3	1	LS	Repair leaks		$ 22000
				Construction Sub-Total	$ 125,000
				Project Contingency	$ 5,000
				Total Construction Cost	$ 130,000
				Design and Construction Engineering	$ 22,100
				Administrative Fees	$ 16,500
				Total Project Cost	**$ 152,100**

Phase-3			**Headworks**			
1	1	Ea	Mechanical self cleaning screen and compactor		$	50,000
2	1	Ea	Vortex grit removal system and classifier		$	75,000
3	80	CY	Concrete tankage and excavation for units	$ 500	$	36,000
4	1	LS	Yard Piping, valves and influent meter		$	30,000
5	1	LS	Electrical		$	20,000
6	1	LS	Mobilization, bonds, insurance		$	34,000
				Construction Sub Total	$	245,000
				Project Contingency	$	25,000
				Total Construction Cost	$	270,000
				Design and Construction Engineering	$	40,500
				Administrative Fees	$	28,000
				Total Project Cost	$	**338,500**
Phase-4			**Sludge Thickening**			
1	1	LS	Upgrade return sludge pump station		$	25,000
2	1	LS	Install Sludge thickening mechanism in existing tank		$	30,000
3	1	LS	Install decant mechanism in sludge tank		$	7,500
4	1	LS	Yard Piping, valves and RAS meter		$	20,000
5	1	LS	Electrical		$	15,000
6	1	LS	Mobilization, bonds, insurance		$	25,500
				Construction Sub-Total	$	133,000
				Project Contingency	$	15,000
				Total Construction Cost	$	148,000
				Design and Construction Engineering	$	24,420
				Administrative Fees	$	18,000
				Total Project Cost	$	**191,420**
Phase-5			**Clarification**			
1	1	LS	Remove boat clarifier mechanism from oxidation ditch		$	15,000
2	1	LS	Install 125' diameter clarifier unit		$	45,000
4	30	CY	Concrete tankage and excavation for units	$ 600	$	18,000
3	1	LS	Yard Piping and valves		$	25,000
4	1	LS	Electrical		$	15,000
5	1	LS	Mobilization, bonds, insurance		$	25,000
				Construction Sub-Total	$	143,000
				Project Contingency	$	15,000
				Total Construction Cost	$	158,000
				Design and Construction Engineering	$	26,070
				Administrative Fees	$	20,000
				Total Project Cost	$	**184,070**

Phase-6			Laboratory		
1	1	LS	Laboratory building - metal Building / insulated / monolithic slab approx. 25'x27.5'=687.5 ft.² @ $/ft.²	$	45,000
2	1	LS	Building electrical and HVAC	$	15,000
3	1	LS	Lab fixtures, equipment and supplies	$	50,000
4	1	LS	Site prep, clearing and grassing	$	10,000
5	1	LS	Mobilization, bonds, insurance	$	20,000
			Construction Sub-Total	$	140,000
			Project Contingency	$	10,000
			Total Construction Cost	$	150,000
			Design and Construction Engineering	$	24,750
			Administrative Fees	$	18,000
			Total Project Cost	$	**193,750**
			Total Project Construction Cost	$	1,009,060
			Design and Construction Engineering	$	121,087
			Administrative Fees	$	50,000
			Total Project Cost	$	**1,180,147**

Appendix C

Phase I Environmental Site Assessment

PHASE I ENVIRONMENTAL SITE ASSESSMENT
APPROXIMATELY 30± ACRES
1810 US HIGHWAY 43
LITTLEVILLE, AL 35654

Prepared For:

Mayor Kenneth Copeland
1810 George Wallace Hwy
Littleville, AL 3654

Prepared By:
GOODWYN, MILLS & CAWOOD, INC.
125 Interstate Park Drive
Montgomery, Alabama 36109

March 9, 2005

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D. Qualifications of Environmental Professionals Participating in Phase I Environmental Site Assessments

E. References

SECTION 1
SUMMARY

SECTION 1
SUMMARY

1.1 Executive Summary

Goodwyn, Mills & Cawood, Inc. (GMC) has completed a Phase I Environmental Site Assessment (ESA) for the Town of Littleville. The Phase I ESA was completed on an approximately 30±-acre site in Colbert County, Alabama, that is proposed for development as a commerce park.

A Phase I ESA includes a records review of both state and federally listed facilities, maps, an interview with current/former landowners, and visual observations of the site. A Phase I ESA does not include any testing or sampling of materials (i.e. soil, water, air, building materials, etc.).

This report was completed in general accordance with the requirements established by the American Standards for Testing and Materials (ASTM) E-1527-00. Based on the findings of this assessment, no evidence of Recognized Environmental Conditions (RECs) located on the site was discovered at the time of the site visit.

GMC conducted an Environmental First Search records review of the target site that revealed one (1) facility, within the ASTM radius of concern that appears on the Leaking Underground Storage Tank (LUST) List.

Two drainage ways are located on the property, one running in an easterly direction from the outlet of a pond near the north boundary of the property and one running in a southeasterly direction through the middle of the property. The northern waterway probably would be considered "waters of the U.S." and the southern drain would likely be considered "wetlands". Both "wetlands" and "waters of the U.S." are regulated by the U.S. Army Corps of Engineers (USACE). It is the recommendation of **GMC** to have the USACE issue a jurisdictional determination of the drainage ways so any Section 404 permits can be acquired, prior to initial land disturbance.

SECTION II
INTRODUCTION

SECTION II
INTRODUCTION

2.1 Purpose

Goodwyn, Mills & Cawood, Inc. (GMC) was retained by Mayor Kenneth Copeland to perform a Phase I Environmental Site Assessment (ESA) on the subject site located in Sections 26 and 27, of Township-5-South, Range-11-East, in Colbert County, Alabama (Refer to Figure 1). The purpose of a Phase I ESA is to conduct a records review and visual site inspection to identify recognized environmental conditions at the subject site.

2.2 Detailed Scope of Services

GMC conducted the Phase I ESA in general accordance with the American Society for Testing and Materials (ASTM) codes E 1527-00 Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process[1].

The scope of work performed as part of the Phase I ESA is as follows:

- A historical review of the use and improvements made to the subject site.
- A review of applicable building, zoning, planning, sewer, water, fire and environmental department records that would have information on or have an interest in the property and neighboring sites.
- An investigation of the subject property and neighboring properties with regard to the Environmental Protection Agency's (EPA) National Priorities List (NPL) or Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) list and similar state lists.
- An inspection of the site and all improvements with a visual inspection for hazardous materials and regulated non-hazardous materials.
- A review of available information to determine whether present owners or tenants have stored, created or discharged hazardous materials or waste, and, if applicable, a review of whether appropriate procedures and safeguards have been observed.
- A written report summarizing the findings with conclusions as to the potential environmental degradation believed to be associated with the property.

[1] Copyright 2000, American Society for Testing and Materials, West Conshohoken, PA. All rights reserved.

2.3 Limitations and Exceptions

Goodwyn, Mills & Cawood, Inc. (**GMC**) has performed this investigation for the exclusive use of the client, their lending institution and their legal counsel specifically for the subject site. **GMC** prohibits republication or reuse of any report without **GMC's** prior written consent.

The conclusions contained in this report are based upon the conditions at the site during the time of the investigation. As stated in the ASTM E-1527-00 standard, an environmental site assessment meeting or exceeding the Practice E 1527-00 and completed less than 180 days previously is presumed to be valid. An environmental site assessment meeting or exceeding either practice ASTM E-1527-00 or 1528-00 completed more than 180 days previously may be used to the extent outlined in the standard.

Environmental problems at this site not included in the scope of work, if any, are not the responsibility of **GMC**. Examples of such problems are unreported releases, unreported sites, and sites not listed by the Alabama Department of Environmental Management (ADEM) or by the Environmental Protection Agency (EPA).

The only warranty made by **GMC** in connection with the services provided is that we have used the degree of skill and care ordinarily exercised by similarly situated professionals in our locality. No other warranty, expressed or implied, is made or intended.

GMC will not be required to sign any documents, no matter by whom requested, that would result in **GMC** having to certify, guarantee or warrant the existence of conditions whose existence **GMC** cannot ascertain. The client also agrees not to make resolution of any dispute with **GMC** or payment of any amount due to **GMC** in any way contingent upon **GMC** signing any such certification.

2.4 Special Terms and Conditions

The following are a list of issues that **GMC** specifically did not address in this ESA; however, the list is not exhaustive:

1. Lead-Based Paint
2. Lead in Drinking Water
3. Asbestos Containing Building Materials
4. Wetlands
5. Regulatory Compliance
6. Cultural and Historic Resources
7. Industrial Hygiene
8. Health and Safety
9. Ecological Resources
10. Endangered and Threatened Species
11. Indoor Air Quality
12. High Voltage Power lines

2.5 User Reliance

The owner(s) of the document may rely upon this document. The owner's attorneys and other parties that are considered "interested parties" may rely upon this document by permission of the owner as outlined in the ASTM E 1527-00 Standard. An environmental professional is not required to independently verify the information provided but may rely on information provided unless it is obvious that certain information is not correct based on other information, or that he or she has actual knowledge that certain information is incorrect.

SECTION III
SITE DESCRIPTION

SECTION III
SITE AND VICINITY DESCRIPTION

3.1 Site Location

The subject site is located in Littleville, Alabama on the east side of Alabama Highway 43 in Colbert County, Alabama (see Figure 1). The subject site is approximately 30±-acres in a rural setting. Surrounding properties of the subject site include pastureland, residences and commercial businesses. The Norfolk-Southern Railroad borders the site to the West.

3.2 Site and Vicinity Characteristics

3.2.1 Surface Drainage

The Russellville, Alabama Quadrangle Map shows the elevation of the site to be approximately 660-690 feet above sea level. The surface water flow in the vicinity of the subject site seems to be primarily in an easterly direction toward Dodson Branch flowing north alongside the railroad right-of-way until it combines with James Creek.

3.2.2 Regional Characteristics and Geological Setting

The site lies within the Little Mountain district of the Interior Low Plateaus Physiographic Province. The Little Mountain district is a low escarpment that bisects the Highland Rim section. The Highland Rim section is typically an area of low relief and flat rolling topography.

The geologic formation that crops out in the vicinity of the site is the Hartselle Sandstone. The Hartselle Sandstone is composed of quartzose sandstone with interbedded shale.

3.2.3 Hydrogeology

Two major aquifers have been identified in study area. They are the Tuscumbia-Fort Payne aquifer and the Bangor aquifer. The Tuscumbia-Fort Payne aquifer is the major aquifer for the entire study area north of Little Mountain but has not been developed south because of the availability of water from the overlying Bangor aquifer. The aquifer is recharged throughout its outcrop by water, which infiltrates and percolates through the regolith. Water in this aquifer is partially confined because of the lower hydraulic conductivity of the overlying residual mantle.

The Bangor aquifer, which includes the Hartselle Sandstone, is a significant source of water only in a small part of the study area. The aquifer is recharged throughout its outcrop by water, which infiltrates and percolates through the regolith. The water in this aquifer is partially confined. Enlarged solution fractures in the Bangor may be a significant source of water, but the aquifer is not used extensively in the study area.

3.2.4 Soils

According to the Colbert County Soil Survey, as many as seven soils are found on the subject site. Figure 2 illustrates the location of the site and the soil types located there.

- ***Capshaw silt loam, 2-6% slopes, (CaB)***
  This gently sloping, deep, well-drained soil is on ridges and short, uneven side slopes in the limestone valleys. Typically, the surface layer is dark brown silt loam about 8-inches thick. This soil is used mostly for cultivated crops or for pasture. Low strength, the shrink-swell potential, wetness, and the slow permeability are limitations affecting building site development.

- ***Chisca loam, 6-15% slopes, (ChD)***
  This sloping or strongly sloping, deep, well-drained soil is on ridges and uneven side slopes in the limestone valleys. Typically, the surface layer is a dark grayish brown loam about 2-inches thick. The underlying material is clay about 23-inches thick; weathered shale bedrock is at a depth of about 55-inches. Most areas of the Chisca soil are used as woodland. A very high shrink-swell potential, low strength, and the very slow permeability are severe limitations affecting building site development.

- ***Nectar and Nauvoo fine sandy loams, 6-10% slopes, (NNC)***
  This soil consists of the deep, sloping, well-drained, moderately slowly permeable Nectar soil and the deep, sloping, well-drained moderately permeable Nauvoo soil. Generally, these soils are in long and relatively narrow areas on ridgetops, the upper side slopes, and plateaus. Typically, the surface layer of the Nectar soil is brown fine sandy loam about 4-inches thick, soft sandstone bedrock is at a depth of about 50-inches. Typically, the surface layer of the Nauvoo soil is dark grayish brown fine sandy loam about 2-inches thick; the underlying material is a soft sandstone bedrock. The Nectar and Nauvoo soils are used mostly for pasture or as woodland. The shrink-swell potential, slope, and low strength are all moderate to severe limitations for roads, streets and buildings.

- ***Wynnville silt loam, 2-6% slopes, (WnB)***
  This gently sloping, very deep, moderately well-drained soil is on broad plateaus. Typically the surface layer is a brown silt loam about 2-inches thick. The upper part of the subsoil, to a depth of 23-inches, is yellowish brown loam. The Wynnville soil is used mainly for cultivated crops or for pasture. Wetness is a moderate limitation affecting building site development.

None of these soil types are listed as hydric on the Hydric Soils of the United States (1995), the Alabama hydric soils list (1995), or the Colbert County hydric soils list; however, standing water and vegetation indicating hydric conditions was noted on site. A hydric soil is one that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper horizons, which may cause it to be

wetlands subject to the jurisdiction of the U.S. Army Corps of Engineers.

3.3 Current Use of the Property

Representatives of **GMC** visited the subject site on March 4, 2005. Currently, the site is mostly undeveloped pastureland/forestland. Cattle farming and annual hay harvesting were recognized as agricultural practices taking place on the majority of the property over the years. No private residences are located on the property.

3.4 Description of Structures, Roads, and Other Improvements on Site

On the date of the site visit, a walking and vehicular reconnaissance was conducted at and within an approximate 1-mile radius of the site. US Highway 43 runs North to South adjoining the subject site to the West (see Figure 1) and the Norfolk-Southern Railroad borders the property to the East.

3.5 Current Use of Adjoining Properties

North	Residential/Commercial
South	Residential
East	Norfolk-Southern Railroad/Undeveloped Pastureland
West	Highway 43/Commercial/Residential

This site is located in a rural setting. Surrounding properties consist almost exclusively of pastureland, residences, and a few commercial businesses.

SECTION IV
USER PROVIDED INFORMATION

SECTION IV
USER PROVIDED INFORMATION

4.1 Title Records

A copy of a warranty deed for the property has been reviewed and is attached as Appendix B. The deed contains the purchase date and the legal description of the property.

4.2 Environmental Liens or Activity and Use Limitations

GMC has no knowledge of any environmental liens against the subject property.

4.3 Specialized Knowledge

GMC has no specialized knowledge of the subject site.

4.4 Valuation Reduction for Environmental Issues

GMC has identified one (1) site listed on the Leaking Underground Storage Tank (LUST) List within a 0.5-mile radius of the subject site that could adversely affect the property value of the subject site. The information obtained from Environmental First Search Records Review regarding the LUST site is located in Appendix C of this report. The owner of the LUST is listed as the Party Pack at1655 Highway 43 Littleville, AL., 35654.

4.5 Owner, Property Manager, and Occupant Information

The Public Building Authority of the Town of Littleville currently owns the property. The planned future of the property is for industrial and commercial use. Currently the Town Hall is located on the front portion of the property along Highway 43.

4.6 Reason for Performing Phase I

A Phase I ESA is being performed on this property by Goodwyn, Mills, & Cawood, Inc. **(GMC),** for the Town of Littleville in order to determine the environmental condition of the property, as part of their "due diligence" investigation prior to receiving grant money to aid in the development of the site.

SECTION V
RECORDS REVIEW

SECTION V
RECORDS REVIEW

5.1 Standard Records Review

GMC conducted an Environmental First Search Records Review of the subject site using the ASTM standard checklist with search distances relevant to each environmental database (Appendix C). Only one potential site appears listed in the Environmental First Search Records Review.

5.2 Historical Review

The Russellville, Alabama USGS Quadrangle Map (Figure 1) reveals that the subject site is located in Colbert County, Alabama. Currently, a majority of the site consists of pastureland and forestland bordering the site. Also, US Highway 43 runs East to West along the western portion of the property and the Norfolk-Southern Railroad borders the site to the East.

5.3 Additional Records Review

GMC contacted Mr. Mike Melton with the Colbert County Emergency Management Agency (EMA) regarding hazardous spills within a 1-mile radius of the subject site. Mr. Stevens stated that there have been no hazardous spills reported to the EMA within a 1-mile radius of the subject site. Mr. Melton did state that he had been called to a diesel spill further to the south of Littleville, however, this incident occurred outside of a 1-mile radius of the site.

SECTION VI
SITE
RECONNAISSANCE

SECTION VI
SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

On March 4, 2005, a representative of **GMC** made a vehicular reconnaissance within an approximate 1-mile radius around the subject site.

This site is located in a rural setting. Surrounding properties consist almost exclusively of pastureland, residences, or commercial businesses. The Town Hall is located along the western boundary of the property alongside Highway 43. The Norfolk Southern Railroad borders the site to the East.

6.2 Hazardous Substance Containers and Unidentified Substance Containers

During the site visit, fill material was noted on-site. The fill material consists of dirt, concrete, metal and other various items. A car battery was noted within the fill material. Items such as car batteries, metal, discarded oil containers, pesticides, and other chemicals should be properly discarded in a permitted landfill or recycled appropriately. No other evidence of hazardous or unidentified substance containers was noted on the site on the date of the site reconnaissance other than the car battery. No sign of distressed vegetation was discovered at the time of the site visit.

6.3 Storage Tanks

Representatives from **GMC** noted that an active gas station was located on the western side of Highway 43, south of the property. The station is known as the Party Pack and contains an underground storage tank. No significant signs of oil stained vegetation or soil were noted around the building. On the date of the site visit, **GMC** was unable to ascertain if there were hydraulic lifts inside the building.

SECTION VII
INTERVIEWS

SECTION VII
INTERVIEWS

7.1 Interview with Previous Property Owner & Current Property Owner

Repeated efforts to contact Mrs. Brenda Anderson Morrow, who is listed as the previous owner according to the deed, were unsuccessful.

A representative of **GMC** interviewed Mayor Kenneth Copeland in regards to the site. According to Mayor Copeland, the property is proposed for use as a commerce park. The Town of Littleville is currently applying for grant in order to help with the cost of developing the site.

7.2 Interview with Local Government Officials

A representative of **GMC** interviewed Mayor Kenneth Copeland in regards to the fill material located on-site. Mayor Copeland stated that the Town was using some excess dirt for a water and sewer project to help bring the site up to grade. Mayor Copeland was unaware that regulated objects had become intermingled with the fill material. Mayor Copeland was also unaware of the possible wetlands on-site.

GMC contacted Mr. Mike Melton with the Colbert County Emergency Management Agency (EMA) regarding hazardous spills within a 1-mile radius of the subject site. Mr. Stevens stated that there have been no hazardous spills reported to the EMA within a 1-mile radius of the subject site. Mr. Melton did state that he had been called to a diesel spill further to the south of Littleville, but that it was outside of a 1-mile radius of the site.

SECTION VIII
FINDINGS

SECTION VIII
FINDINGS

8.1 Findings

The environmental conditions associated with the property include the following:

- No distressed vegetation or evidence of reportable quantities of spills or releases of hazardous chemicals on-site was identified during the March 4, 2005 visit to the subject site.

- **GMC** conducted an Environmental First Search records review of the target site. The records review revealed one facility, the Party Pack, was listed on the Leaking Underground Storage Tank (LUST) within a 0.5-mile radius of the subject site that could adversely affect the property value of the subject site.

- According to the site investigation performed by representatives of **GMC**, regulated fill material was located within the subject site. A car battery was noted within the fill. Items such as car batteries, metal, discarded oil containers, pesticides, and other chemicals should be properly discarded in a permitted landfill or recycled appropriately.

- Two drainage ways flowing in an easterly direction through the subject site may potentially be classified as "wetlands" or "waters of the U.S.".

SECTION IX
CONCLUSION

SECTION IX
CONCLUSION

9.1 Conclusion

In conclusion, **GMC** has performed a Phase I ESA in general conformance with the scope and limitations of ASTM Practice E 1527-00 of the subject site referred to as the Town of Littleville Commerce Park.

The potential for contamination predominantly comes from the fill material that has been placed on-site and the LUST located across Highway 43 at the Party Pack.

Based upon the information gathered in the preparation of this report, **GMC** recommends further action be taken to remove any regulated waste found on-site. It is also the recommendation of **GMC** to have the U.S. Army Corps of Engineers (Corps) issue a jurisdictional determination of the two drainage ways that run through the property so any Section 404 permits can be acquired, prior to initial land disturbance. **GMC** also recommends, as a result of the soil properties listed in the Colbert County Soil Survey, that a qualified geo-technical engineer take soil borings on-site in order to determine the site's suitability for development.

APPENDICES

APPENDIX A
FIGURES

FIGURE 1

Goodwyn, Mills & Cawood Environmental Consultants, Inc. P. O. Box 3605 125 Interstate Park Drive Montgomery, Alabama	TITLE: USGS QUADRANGLE MAP WITH SITE BOUNDARY	DESIGNED:
		DRAWN: WFF
	PROJECT: TOWN OF LITTLEVILLE COMMERCE PARK	SCALE: 1" = 1,000'
		DATE: 03/09/05

FIGURE 2

Goodwyn, Mills & Cawood Environmental Consultants, Inc. P. O. Box 3605 125 Interstate Park Drive Montgomery, Alabama	TITLE: COLBERT CO. SOILS MAP WITH SITE BOUNDARY	DESIGNED:
		DRAWN: WFF
	PROJECT: TOWN OF LITTLEVILLE COMMERCE PARK	SCALE: 1" = 1,000'
		DATE: 03/09/05

P-1

Aerial photo of site.

02/04/05

APPENDIX B
WARRANTY DEED

STATE OF ALABAMA)
)
COLBERT COUNTY)

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that I, BRENDA ANDERSON MORROW, a married woman, hereinafter known as *GRANTOR*, for and in consideration of the sum of Ten and 00/100 ($10.00) Dollars and other good and valuable considerations to me in hand paid by THE PUBLIC BUILDING AUTHORITY OF THE TOWN OF LITTLEVILLE, hereinafter known as *GRANTEE*, receipt and sufficiency of which is hereby acknowledged, does hereby grant, bargain, sell and convey unto *GRANTEE*, its heirs and assigns, the following described real property located and being in Colbert County, Alabama, to-wit:

NO TAX COLLECTED

TRACT ONE:
A tract of land partly in the Northwest quarter of Section 26, and partly in the Northeast quarter of Section 27, Township 5 South, Range 11 West, Colbert County, Alabama, more particularly described as follows, to-wit: To find the point of beginning, commence at the Northwest corner of said Section 26 and run South 4 degrees 04 minutes East for 1889 feet to a point; run thence South 51 degrees 48 minutes East for 279.36 feet to a point on the centerline of the Southern Railroad tract, and to the point of beginning; run thence North 51 degrees 48 minutes West for 374.21 feet; run thence South 49 degrees 16 minutes West for 113.25 feet to a point in the centerline of a roadway, thence run North 77 degrees 03 minutes West along said centerline for 388.6 feet, run thence leaving said roadway North 16 degrees 33 minutes East for 237 feet; thence North 76 degrees 47 minutes West for 313 feet to the East line of Highway 43; thence along said East line North 16 degrees 33 minutes East for 322 feet to a point; thence leaving said East line run South 79 degrees 31 minutes East for 928 feet; thence North 7 degrees 55 minutes West for 419 feet to an old ditch; thence with said ditch; North 78 degrees 52 minutes East for 41 feet; North 58 degrees 17 minutes East for 122 feet; North 87 degrees 49 minutes East for 110 feet; North 47 degrees 02 minutes East for 201 feet; South 82 degrees 16 minutes East for 159 feet, thence North 86 degrees 44 minutes East for 169 feet; thence South 73 degrees 13 minutes East for 226.55 feet to the centerline of aforementioned railroad; run thence in a southwesterly direction along the centerline of said railroad for 1269.7 feet, more or less to the point of beginning. Said tract is subject to half the right of way for railroad off the east side thereof and to half the right of way for secondary road off the south side thereof.

TRACT TWO:
Commence at the Northeast quarter of Section 27, Township 5 South, Range 11 West, Colbert County, Alabama; thence West along the North

Section line of said Section to a point on the Easterly right of way line of U. S. Highway No. 43; thence in a Southwesterly direction along said Easterly right of way line of U. S. Highway No. 43 approximately 1775 feet to the center of a ditch to a point for the point of beginning; thence continue Southwesterly along the Easterly right of way line 215 feet to a point, which said point is also the Northwest corner of that certain 24 acres of land conveyed to W. B. Ballington Lumber Company, Inc., a corporation, by Frank H. Ballington and wife, Irene Ballington on June 18, 1974, which deed of conveyance is recorded in Deed Record 338, page 982 in the Office of the Judge of Probate of Colbert County, Alabama; thence South 79 degrees 31 minutes East 618 feet to a point; thence North 7 degrees 55 minutes West 419 feet to a point; thence in a Southwesterly direction to the point of beginning; lying and being partly in the Northeast quarter of the Northeast quarter of said Section 23 and partly in the Southeast quarter of said Section 23, Township 5 South, Range 11 West in Colbert County Alabama.

Together with the improvements and appurtenances thereto belonging.

The above described real property does not constitute any part of the Grantor's homestead.

TO HAVE AND TO HOLD the aforegranted premises unto the said *GRANTEE*, its heirs or assigns, forever.

And *GRANTOR* covenants with *GRANTEE*, its heirs and assigns, that *GRANTOR* is lawfully seized in fee of the aforegranted premises, that they are free from all encumbrances, except 1999 Ad Valorem taxes, which by the acceptance of this conveyance are assumed by *GRANTEE*, that the *GRANTOR* has a good right to sell and convey the same to the *GRANTEE* its heirs and assigns, and that the *GRANTOR* will warrant and defend the premises to the *GRANTEE*, its heirs and assigns forever, against all lawful claims of all persons.

IN WITNESS WHEREOF, the *GRANTOR* has hereunto set her hand and seal, this 29th day of January, 1999.

Brenda Anderson Morrow (SEAL)
BRENDA ANDERSON MORROW

-2-

APPENDIX C
FIRST SEARCH
RECORDS REVIEW

FirstSearch Technology Corporation

Environmental FirstSearch ™ Report

TARGET PROPERTY:

1810 US 43 HWY

LITTLEVILLE AL 35654

Job Number: E5012

PREPARED FOR:

03-04-05

Tel: (781) 551-0470 *Fax: (781) 551-0471*

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Environmental FirstSearch
Search Summary Report

Target Site: 1810 US 43 HWY
LITTLEVILLE AL 35654

FirstSearch Summary

Database	Scl	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	12-10-04	1.00	0	0	0	0	0	0	0
CERCLIS	Y	01-18-05	0.50	0	0	0	0	-	0	0
NFRAP	Y	06-23-04	0.15	0	0	0	-	-	0	0
RCRA TSD	Y	09-12-04	0.50	0	0	0	0	-	0	0
RCRA COR	Y	09-12-04	1.00	0	0	0	0	0	0	0
RCRA GEN	Y	09-12-04	0.15	0	0	0	-	-	0	0
ERNS	Y	12-31-04	0.15	0	0	0	-	-	0	0
State Sites	Y	12-15-04	1.00	0	0	0	0	0	0	0
Spills-1990	Y	NA	0.15	0	0	0	-	-	0	0
SWL	Y	10-13-04	0.50	0	0	0	0	-	0	0
REG UST/AST	Y	12-05-04	0.15	0	0	0	-	-	0	0
Leaking UST	Y	12-15-04	0.50	0	0	0	0	-	1	1
- TOTALS -				0	0	0	0	0	1	1

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes, the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Environmental FirstSearch
Site Information Report

Request Date:	03-04-05	**Search Type:**	COORD
Requestor Name:	Hassey Brooks	**Job Number:**	E5012
Standard:	ASTM		**Filtered Report**

TARGET ADDRESS: 1810 US 43 HWY
LITTLEVILLE AL 35654

Demographics

Sites:	1	**Non-Geocoded:**	1	**Population:**	NA
Radon:	NA				

Site Location

	Degrees (Decimal)	**Degrees (Min/Sec)**		**UTMs**
Longitude:	-87.672273	-87:40:20	**Easting:**	438352.121
Latitude:	34.596066	34:35:46	**Northing:**	3828258.836
			Zone:	16

Comment

Comment: PHASEIESA

Additional Requests/Services

Adjacent ZIP Codes: 0 Mile(s)

ZIP Code	City Name	St	Dist/Dir	Sel

Services:

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Topographical Maps	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Environmental FirstSearch
Sites Summary Report

TARGET SITE: 1810 US 43 HWY
LITTLEVILLE AL 35654

JOB: E5012
PHASEIESA

TOTAL: 1 **GEOCODED:** 0 **NON GEOCODED:** 1 **SELECTED:** 1

ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Map ID
1	LUST	PARTY PACK LS1990607	1655 HIGHWAY 43 LITTLEVILLE AL 35654	NON GC	

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

TARGET SITE: 1810 CS 43 HWY
LITTLEVILLE AL 35654

JOB: 15013
PHASEIESA

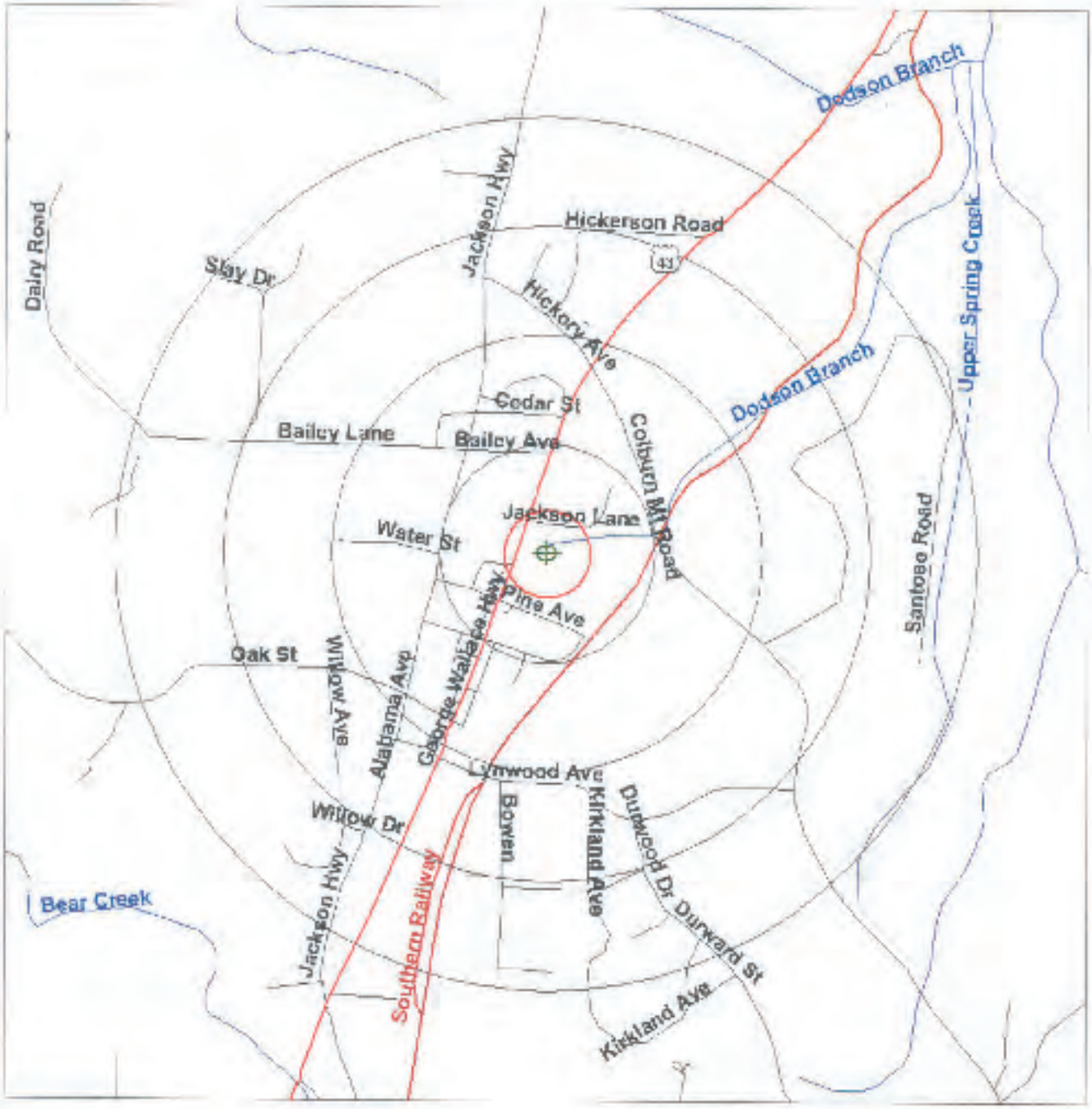
Street Name	Dist/Dir	Street Name	Dist/Dir
A W Todd Hwy	0.08 SW		
Bailey Ave	0.23 NE		
Circle Dr	0.15 SW		
Elm	0.23 SW		
Elm Ln	0.24 SW		
George Wallace Hwy	0.07 NW		
Green Light St	0.24 SW		
Jackson Ln	0.09 NW		
North Jackson	0.24 NW		
Pine Ave	0.15 SW		
Pine St	0.15 SW		
Water St	0.25 SW		

Environmental FirstSearch

1 Mile Radius

ASTM Map: NPL, RCRACOR, STATE Sites

1810 US 43 HWY, LITTLEVILLE AL 35654



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 34.596056 Longitude: -87.673571)

Identified Site, Multiple Sites, Receptor

NPL, Brownfield, Solid Waste Landfill (SWL), or Hazardous Waste

Railroads

Black Rings Represent 1/4 Mile Radii, Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM Map: CERCLIS, RCRATSD, LUST, SWL

1810 US 43 HWY, LITTLEVILLE AL 35654

Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 34.596366 Longitude: -87.672275)

Identified Site, Multiple Sites, Receptor

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads

Black Rings Represent 1/4 Mile Radii. Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

ASTM Map: RCRAGEN, ERNS, UST

1810 US 43 HWY, LITTLEVILLE AL 35654

Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 34.596066 Longitude: -87.672273) .....

Identified Site, Multiple Sites, Receptor .....

SWF, Unverified, Solid Waste Landfill (SWF), or Hazardous Waste .....

Railroads .....

Black Rings Represent .5 Mile Radii; Red Ring Represents 500 ft. Radius

APPENDIX D
QUALIFICATIONS

QUALIFICATIONS AND SIGNATURES

STATEMENT OF QUALIFICATIONS

GMC has conducted numerous environmental site assessments within Alabama and surrounding states. **GMC's** staff is well trained and has a Registered Environmental Property Assessor (REPA) conducting or overseeing the assessment of each project. The qualifications and experience of **GMC** staff are attached herein.

CERTIFICATION

"I certify that this site assessment has been conducted in accordance with ASTM codes and in accordance with assessment practices conducted by similarly situated environmental professionals in this area. All information collected was reviewed and the collecting of information was overseen by a person qualified to conduct environmental site assessments. The information submitted herein, to the best of my knowledge and belief, is true, accurate, and complete."

Findley Frazer
Engineering Intern

Date

Galen Thackston, P.E., REPA
President

Date

W. FINDLEY FRAZER

EDUCATION: B.E. Civil Engineering
Vanderbilt University

REGISTRATION: Registered TN Engineer in Training

EXPERIENCE: Engineer dealing with environmental issues such as Phase I, II & III Environmental Site Assessments, storm water permitting, underground storage tank closures, surface and subsurface investigations, source water delineations contamination assessments and corrective action services, flood studies, detention basin design, wetland determinations and delineations, and Title V air permitting.

ADDITIONAL TRAINING: Alabama Air Regulatory Update
Sponsored by ADEM-Air Division & the Alabama Chapter-A&WMA
Embassy Suites Hotel-Montgomery, Alabama - May 25, 2004
8-hour seminar

Brownfield Redevelopment Seminar
6-hour seminar
Birmingham, Alabama November 6, 2003

Groundwater Seminar
ADEM 2002
16-hour seminar

GALEN J. THACKSTON

EDUCATION: B.S. Civil Engineering
Auburn University

REGISTRATION: Registered Professional Engineer #21637
Registered Environmental Property Assessor #5520

PROFESSIONAL: American Society of Civil Engineers
American Society of Professional Engineers

EXPERIENCE: Project Engineer dealing with environmental issues such as Phase I, II & III Environmental Site Assessments, storm water permitting, underground storage tank closures and underground storage tank specification writing, surface and subsurface investigations, contamination assessments and corrective action services, flood studies, detention basin design and asbestos surveys, wetland determinations and delineations

ADDITIONAL TRAINING:

"The Role of Environmental Audits and Site Assessments"
Georgia Institute of Technology, 1991
40-hour seminar
Passed 150 point, 3-hour examination

"Inspecting Buildings for Asbestos Containing Materials"
Georgia Institute of Technology, 1991
24-hour seminar
Passed written examination

"Waste Materials Management"
Auburn University, 1991
16-hour seminar

"Avoiding Environmental Liability in Alabama"
National Business Institute, Inc., 1991
8-hour seminar

Subtitle "D" Conference
Alabama Department of Environmental Management, 1991

JEFF B. FINCHER

EDUCATION: B.S. Geology
Auburn University

REGISTRATION: Licensed Professional Geologist #1030

EXPERIENCE: Project Geologist dealing with all aspects of underground storage tank closures, closure assessments, preliminary investigations, and secondary investigations. Development of corrective action plans for the remediation of sites contaminated with petroleum products. The corrective action plans included soil vapor extraction systems; combination soil vapor extraction and groundwater pump and treat systems, and bio-remediation systems.

Project Geologist- conducted various Phase I and Phase II Environmental Site Assessments.

Project Geologist - Hazardous and non- hazardous waste sampling, and disposal.

Project Geologist - Developed Closure\Post Closure Plans for Municipal Solid Waste Landfills, and Inert Landfills.

Project Geologist – conducted various Source Water Protection Area (SWPA) Delineations.

ADDITIONAL TRAINING: Hazardous Waste Operations & Emergency Response - 8-Hour refresher course

APPENDIX E
REFERENCES

REFERENCES

Harris, MacArthur C., United States Department of Agriculture. Soil Survey Calhoun County, Alabama. 1958.

Mausbach, M. J. and Johnson, P. R. United States Department of Agriculture. Hydric Soils of the United States. 1989.

DeJarnette, Sydney S. and Crownover, Jo E., United States Geological Survey. Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama: Area 6. 1987.

United States Soil Conservation Service. Munford, AL, 7.5' Series Quadrangle Map; Eulaton, AL, 7.5' Series Quadrangle Map, 1956, photo-revised 1972.

Environmental First Search Technology Corporation, 254 County Road 427 South #226, Longwood, FL 32750-5466, (407) 265-8900.

Appendix D
Letters and Additional Information

Northwest Alabama Council of Local Governments

P.O. Box 2603, Muscle Shoals, Alabama 35662

Keith Jones
Executive Director

(256) 389-0500
(256) 389-0599 - Fax

Ed Crouch
Chairman

Bill Hendrix
Vice Chairman

December 5, 2005

Chief, Enforcement Section, Regulatory Branch
U.S. Army Corps of Engineers
Nashville District Office
P.O. Box 1070
Nashville, TN 37202-1070

Dear Mr. Goldman:

The Northwest Alabama Council of Local Governments Community Planning Department is in the process of preparing a wastewater facilities feasibility study for the city of Littleville, Alabama. Our office would like your evaluation of the planning study area for possible construction of a wastewater treatment facility within the defined study area.

We are interested in your evaluation of known jurisdictional streams and jurisdictional wetlands or other significant features that should be recognized pursuant a Section 404 of the Clean Water Act requiring a DA permit. I recognize that no specific site or sites have been identified for the construction of the project and this may impede a finalized answer from your office. However, your evaluation of the planned study area will be extremely important in providing initial information for pursuing the overall feasibility of the projects.

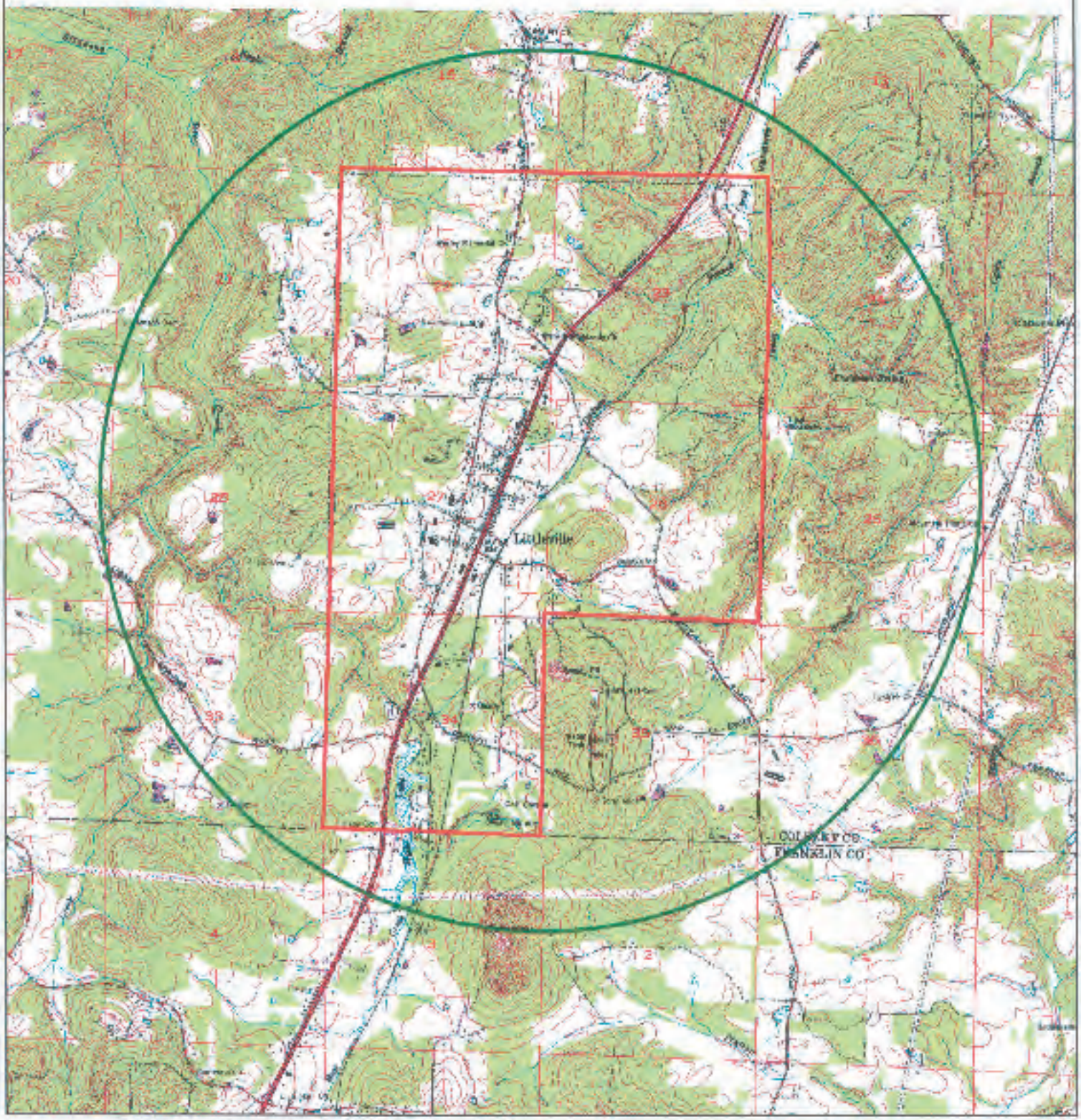
A USGS topographic map is enclosed. The planning study area is bounded in green and the current Littleville city limits are outlined in red.

If you have any questions, please do not hesitate to contact our department.

Sincerely,

J.J. Foster
Northwest Alabama Council of Local Governments

Littleville, Alabama Topography



2 Mile Study Area

City Limits

0 0.25 0.5 1 1.5 2 Miles

Northwest Alabama Council of Local Governments
December 2006

DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
3701 Bell Road
NASHVILLE, TENNESSEE 37214

REPLY TO
ATTENTION OF:

December 21, 2005

Regulatory Branch

SUBJECT: File No. 2005-02621; Lillieville, Alabama Wastewater Treatment Facility

Mr. D.J. Foster
Northwest Al Council of Local Governments
P.O. Box 2603
Muscle Shoals, AL 35662

Dear Mr. Foster:

In response to your December 5, 2005, letter requesting comments regarding known jurisdictional streams and wetlands, any activity involving the discharge of dredged or fill material in any streams or waterway, including wetlands, would likely require a Department of the Army (DA) permit pursuant to Section 404 of the Clean Water Act (CWA).

Without detailed plans or a site location, we can't determine specific impacts to jurisdictional waters. Typically, any stream showing up as a blue line stream on a US Geological Survey quad map would be considered jurisdictional; however, there could likely be jurisdictional waters, including wetlands, which do not show on these maps.

When you determine where your facilities would be located, we recommend that you hire a qualified environmental consultant to determine if jurisdictional streams or wetlands would be impacted.

If you have any questions or comments, please contact me at the above address or phone (615) 369-7500.

Sincerely,

Bradley K. Bishop
Chief, Western Regulatory Section
Operations Division

Northwest Alabama Council of Local Governments

P.O. Box 2603, Muscle Shoals, Alabama 35662

Keith Jones
Executive Director

(256) 389-0500
(256) 389-0599 - Fax

Ed Crouch
Chairman

Bill Hendrix
Vice Chairman

December 5, 2005

Mr. Lawrence Oaks
State Historic Preservation Officer
Alabama Historical Commission
468 South Perry Street
Montgomery, Alabama 36130-0900

Dear Mr. Oaks:

The Northwest Alabama Council of Local Governments Community Planning Department is in the process of preparing a wastewater facilities feasibility study for the city of Littleville, Alabama. Our office would like your evaluation of the study area for historical and archeological significant sites.

We are interested in your evaluation of known archaeological sites, significant architectural resources or other cultural features that should be recognized during the feasibility study. I understand that no specific site or sites have been identified for the construction of the project and this may impede a finalized answer from your office. However, your evaluation of the planned study area will be extremely important in providing initial information for pursing the overall feasibility of the two projects.

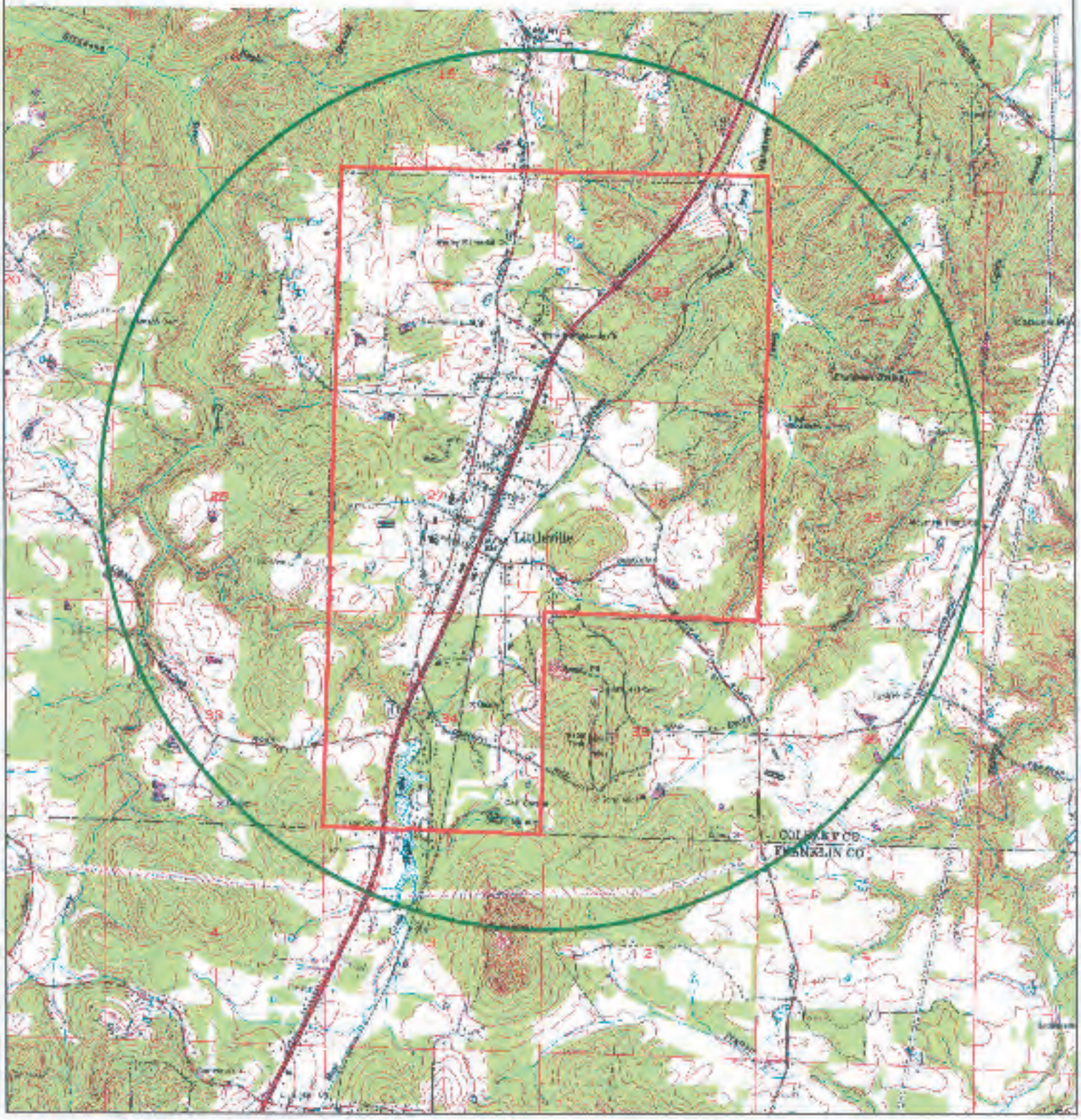
A USGS topographic map is enclosed. The planning study area is bounded in green and the current Littleville city limits are outlined in red.

If you have any questions, please do not hesitate to contact our department.

Sincerely,

J.J. Foster
Northwest Alabama Council of Local Governments

Littleville, Alabama Topography



2 Mile Study Area

City Limits

0 0.25 0.5 1 1.5 2 Miles

Northwest Alabama Council of Local Governments
December 2006

preserveALA
ALABAMA HISTORICAL COMMISSION

December 29, 2005

J.J. Foster
NACOLG
P.O. Box 2603
Muscle Shoals, Alabama 35662

Re: AHC 2006-0267; Wastewater Facilities Feasibility Study, Colbert County

Dear Mr. Foster:

Upon review of the above referenced project, the Alabama Historical Commission has determined that there is one known archaeological site within the two mile study area. At least three archaeological assessments have been conducted within the area. Therefore the area has a high probability for the presence of archaeological resources. For this reason, depending on the condition of the chosen project site, we will likely request that that a cultural resources assessment be conducted by a professional archaeologist for the entire project area. The resulting report should be forwarded to our office for review and comment prior to commencement of ground disturbing activities. In addition, we request photographs and completed survey forms for any structures at least 50 years old within or adjacent to the project area; these locations should be keyed to a good quality map. When the project site has been chosen, please contact our office.

We appreciate your efforts on this issue. Should you have any questions, please contact Amanda McBride of our office. Please reference the AHC tracking number above in all correspondence.

Very truly yours,

Elizabeth Ann Brown
Deputy State Historic Preservation Officer

EAB/ALM/alm

Enclosure: survey form

468 South Perry Street
Montgomery, Alabama
36130-0900

(p) 334-242-3184
fax 334-240-3477

Alabama Historical Commission Survey Form

Survey Number:
County:
Property Name:
Property Address:
City: Zip:
Photograph Number: Roll Number(s):
Negative Number(s):

Section/Township/Range:
Quadrangle:
Proximity to Town: Unknown N/A Within town limits
Within 1 mile 1-5 miles 5+ miles
Property Category: Building District
Related Resource Group (Mill village, farm, suburb):
Surveyor:
Survey Date:

[Construction Date]
Circa

[Height]
N/A Other
1 story ½ story 2 story
2 ½ story 3 story
Basement?

[Use]
Historic
Current

Unknown
Other
Agriculture
Cemetery
Commerce/Trade
Defense
Education
Government
Health Care
Industry/Processing
Multiple Dwelling
Recreation/Culture
Religion
Secondary Structure
Single Dwelling—farm
Single Dwelling—Non farm
Social
Transportation
Vacant/Not in Use

Historic Function:
Current Function:

[Common Form]
[Commercial, Religious & Residential]
Unknown N/A
Wide III
Other
Akron Plan—religious
Bungalow
Central Passage/Hall
Coastal/Creole Cottage
Contemporary
Cross gable—religious—tower at E
Dogtrot
Double pen
Double Pile
Double Shotgun
E-Plan
Extended I-house
Foursquare
Free standing commercial—flat roof
Free standing commercial—gable front
Free standing commercial—parapet front
Front gable—corner steeple—religious
Front gable—central tower—religious
Front gable—no steeple—religious
Front gable—side steeple—religious
Front gable—side tower—religious
Front gable—twin tower—religious
Gas Station
H-plan
I-house
Irregular
L-plan
Manufactured home
Masonic plan

Minimal Traditional
One-part commercial block
Pyramidal
Quonset
Raised Cottage
Ranch
Rectangular Plan
Romanesque Plan—religious
Saltbox
Shed
Shotgun
Side Hall
Single pen
Split Level
Spraddle roof
Square Plan
Temple Front—commercial
Three-part vertical commercial
Tidewater Cottage
T-plan
Two-part commercial block
U-Plan
Vault—commercial
Vertical Block—commercial

[Style Elements]
Common Form with no stylistic details

Common Form with stylistic details
[Select all that apply]
Federal
Greek Revival
Italianate
Gothic Revival
Queen Anne
Stick/Eastlake
Second Empire
Romanesque Revival
Renaissance Revival
Colonial Revival
Classical Revival
Tudor Revival
Mediterranean/Spanish Revival
Craftsman
Art Moderne
Art Deco
Classical Modern
International
Mission
New Formalism
Brutalism
Other

[High Style]
[Select all that apply]
Federal
Greek Revival
Italianate
Gothic Revival
Queen Anne
Stick/Eastlake
Second Empire
Romanesque Revival
Renaissance Revival
Colonial Revival
Tudor Revival
Classical Revival
Mediterranean/Spanish Revival
Craftsman
Art Moderne
Art Deco
Classical Modern
International
Mission
New Formalism
Brutalism
Other

[Main Roof Configuration]
N/A
Unknown
Other
Clipped gable
Conical
Cross gable
Flat
Front gable
Gable on hip
Gambrel
Hip
Hip on gable
Hip with cross gables
Hip with double front gables
Hip with single front gable
Mansard
Monitor
Multi-gable
Pyramidal
Round
Sawtooth
Shed
Side gable
Spraddle
Vaulted

[Roof Material]
N/A
Other
Asphalt
Built-up
Composite
Metal
Slate
Tar
Tile
Wood

[Features]
N/A
Other
Belfry
Decorative dormer
Decorative gable
Dormer
Parapet
Steeple/Spire
Tower/Turret

[Chimney Configuration]
No chimneys present

Number of Exterior
Materials #1 Materials #3
Materials #2 Materials #4

Number of Interior
Materials #1 Materials #3
Materials #2 Materials #4

Number of Central
Materials #1 Materials #3
Materials #2 Materials #4

[Chimney Configuration continued]
Number on End
Materials #1 Materials #3
Materials #2 Materials #4

Number of Front
Materials #1 Materials #3
Materials #2 Materials #4

[Exterior Wall Material]

Primary
Secondary
Replacement

☐☐☐ N/A
☐☐☐ Unknown
☐☐☐ Other
☐☐☐ Aluminum Siding
☐☐☐ Asphalt
☐☐☐ Beaded Weatherboard
☐☐☐ Board & Batten
☐☐☐ Brick—Common Bond
☐☐☐ Brick—Flemish Bond
☐☐☐ Brick—Mixed Bond
☐☐☐ Brick—Other
☐☐☐ Brick—Undetermined Bond
☐☐☐ Brick—Veneer
☐☐☐ Cast Iron
☐☐☐ Composite
☐☐☐ Concrete—Block
☐☐☐ Concrete—Cast
☐☐☐ Concrete—Molded Block
☐☐☐ Concrete—Poured
☐☐☐ Corrugated Metal
☐☐☐ Curtain Wall
☐☐☐ Drop Siding/Novelty Siding
☐☐☐ Fiberglass
☐☐☐ Flushboard
☐☐☐ Glass Block
☐☐☐ Log—Diamond notch
☐☐☐ Log—Full Dovetail
☐☐☐ Log—Half Dovetail
☐☐☐ Log—Saddle Notch
☐☐☐ Log—Square Notch
☐☐☐ Log—V-Notch
☐☐☐ Log with Weatherboard
☐☐☐ Permastone
☐☐☐ Pigmented Structural Glass
☐☐☐ Plate Glass
☐☐☐ Plastic
☐☐☐ Plywood
☐☐☐ Porcelain Enameled Metal
☐☐☐ Sheet Metal
☐☐☐ Stone—Cut
☐☐☐ Stone—Natural
☐☐☐ Stucco
☐☐☐ Terra Cotta
☐☐☐ Tile
☐☐☐ Vertical Board
☐☐☐ Vinyl Siding
☐☐☐ Weatherboard
☐☐☐ Wood Shingle

[Principal Porch Integrity]
☐ N/A
☐ Other
☐ Altered
☐ Not original—contemporary
☐ Not original—historic
☐ Original
☐ Reconstruction
☐ Removed or fallen

[Principal Porch Type]
☐ N/A
☐ Unknown
☐ Other
☐ Attached
☐ Door hood
☐ Entry porch
☐ Inset/Loggia
☐ Porte Cochere
☐ Recessed
☐ Stoop

[Foundation Material]
☐ N/A
☐ Unknown
☐ Other
☐ Brick
☐ Concrete—Block
☐ Concrete—Poured
☐ Stone
☐ Wood

[Foundation Type]
☐ N/A
☐ Unknown
☐ Other
☐ Continuous
☐ Piers
☐ Piers with Infill
☐ Slab

[Principal Window Pane Configuration]
(4/4, 6/6, 4/1, etc.) ________

[Principal Window Type]
☐ N/A
☐ Unknown
☐ Other
☐ Awning
☐ Casement
☐ Double Hung
☐ Fixed
☐ Hopper
☐ Jalousie

[Window Material]
☐ Other
☐ Metal
☐ Synthetic
☐ Wood

[Landscape features]
☐ N/A
☐ Unknown
☐ Other
☐ Casual/unplanned yard
☐ Designed drives/walks
☐ Designed plantings/beds
☐ Designed fencing/walls
☐ Drainage/irrigation systems
☐ Fence/Hedgerows
☐ Field systems
☐ Formal/geometric features

☐ Informal/Picturesque
☐ Pasture
☐ Plantations groves/orchards
☐ Pond
☐ Terracing/contouring
☐ Woods

[National Register]
☐ Not listed
☐ Individually Listed
☐ Listed in District
Registered as:

[WRITTEN DESCRIPTION]
[ADDITIONAL INFORMATION]
[SKETCHES]

Northwest Alabama Council of Local Governments

P.O. Box 2603, Muscle Shoals, Alabama 35662

Keith Jones
Executive Director

(256) 389-0500
(256) 389-0599 - Fax

Ed Crouch
Chairman

Bill Hendrix
Vice Chairman

December 5, 2005

Mr. Larry E. Goldman,
Field Supervisor
U.S. Department of the Interior
Fish and Wildlife Service
P.O. Drawer 1190
Daphne, AL 36526

Dear Mr. Goldman:

The Northwest Alabama Council of Local Governments Community Planning Department is in the process of preparing a wastewater facilities feasibility study for the city of Littleville, Alabama. Our office would like your evaluation of the planning study area for possible construction of a wastewater treatment facility within the defined study area.

We are interested in your evaluation of possible affected species or other significant features that should be recognized pursuant to current governmental regulation. I recognize that no specific site or sites have been identified for the construction of the project and this may impede a finalized answer from your office. However, your evaluation of the planned study area will be extremely important in providing initial information for pursing the overall feasibility of the projects.

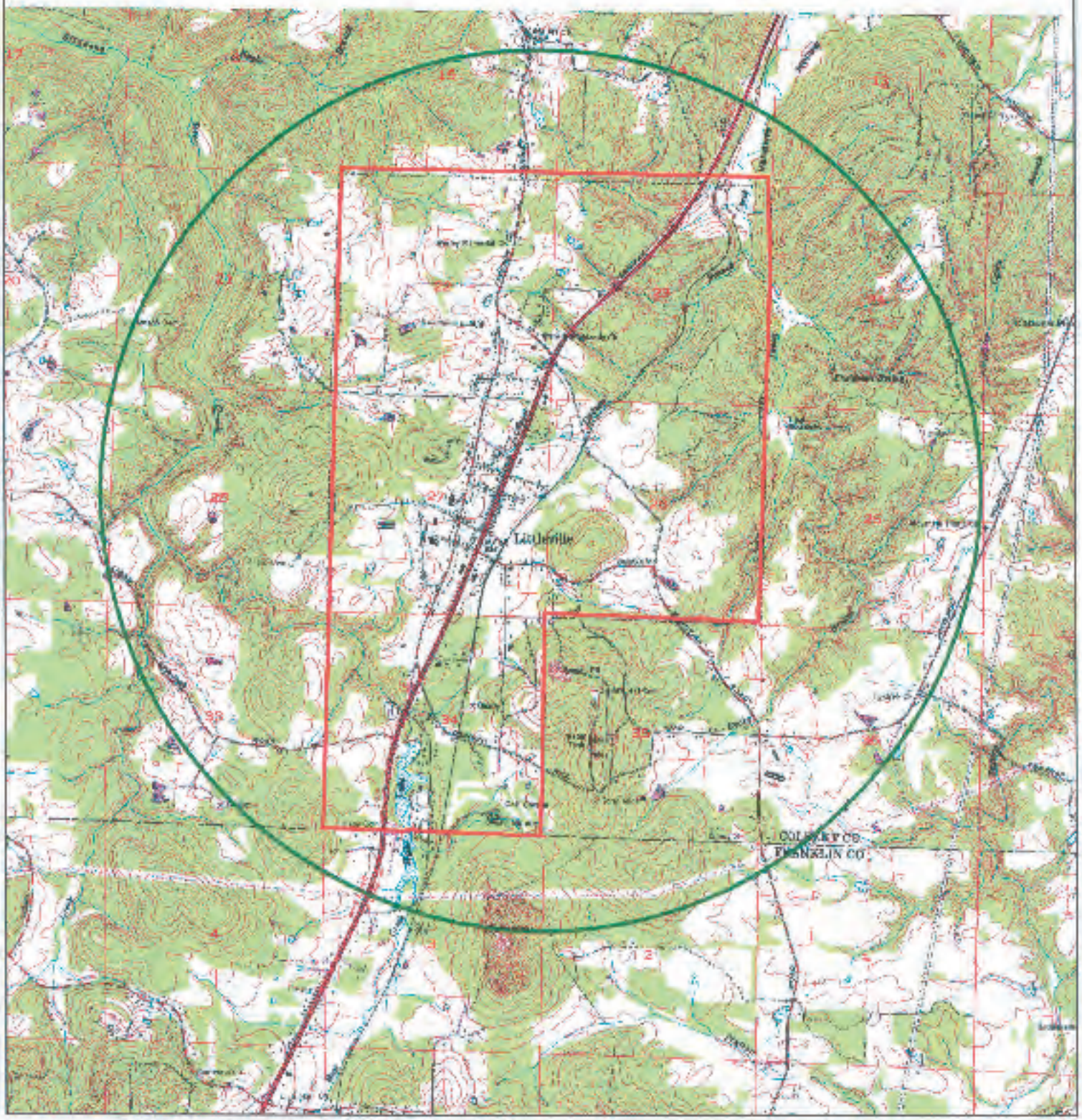
A USGS topographic map is enclosed. The planning study area is bounded in green and the current Littleville city limits are outlined in red.

If you have any questions, please do not hesitate to contact our department.

Sincerely,

J.L. Foster
Northwest Alabama Council of Local Governments

Littleville, Alabama Topography



2 Mile Study Area

City Limits

0 0.25 0.5 1 1.5 2 Miles

Northwest Alabama Council of Local Governments
December 2006

U.S. Environmental Protection Agency

Superfund Information Systems

CERCLIS Database
Archived Sites
Site Documents
Data Element Dictionary (DED)
Order Superfund Products
Customer Satisfaction Survey

CERCLIS Database

Search Results

Search Criteria:

City:	LITTLEVILLE
State(s):	Alabama
Region(s):	04

Found **0** site(s) that match your search criteria listed above
To conduct another search, return to the **Search CERCLIS** page or request a **Customized SIS Report**

DISCLAIMER: Be advised that the data contained in these profiles are intended solely for informational purposes use by employees of the U.S. Environmental Protection Agency for management of the Superfund program. They are not intended for use in calculating Cost Recovery Statutes of Limitations and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the United States. EPA reserves the right to change these data at any time without public notice.

URL: http://cfpub.epa.gov/supercpad/cursites/srchrslt.cfm
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