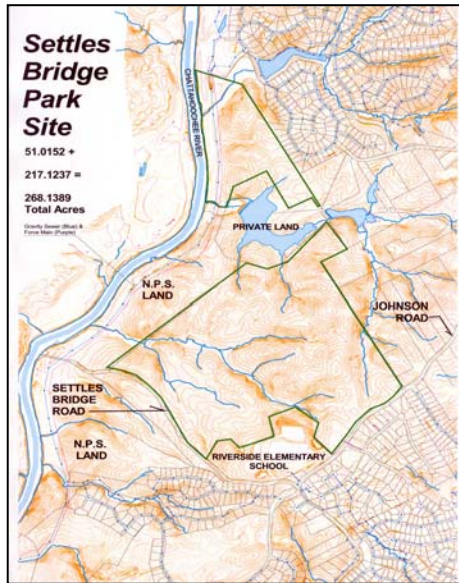


# *Settles Bridge Park Site Master Plan*



**Gwinnett County Department of Community Services, Parks Division**

The Jaeger Company  
February 2006



# *Settles Bridge Park Site Master Plan*

## Summary Report

Prepared for:  
Gwinnett County Department of Community Services  
Parks and Recreation

February 2006



Landscape Architecture • Historic Preservation  
Planning • Environmental Assessment

119 Washington Street  
Gainesville, GA 30501  
770.534.0506 • FAX 770.534.0507  
[www.jaegerco.com](http://www.jaegerco.com)

The Settles Bridge Park Master Plan was prepared with the participation and guidance of the Master Plan Steering Committee members:

Tracey Bailey  
Rudy Bowen  
Barry Britt  
Marcie Diaz  
Linda Fleming  
Marsha Goodwin  
Susan Herd  
Chris Horstmann  
Mrs. Mark Jewell  
Philip Manuel  
George Minno  
Steve Reynolds  
Jun Ro  
Alan Schneiberg  
Guru Setty  
Pauline Shannon  
Beverly Smith  
Russ Thornton  
Erik Van Dyck  
Guy Van Ort  
Garry Wallace

*Gwinnett County Department of Community Services*

Phil Hoskins – Department Director, Parks & Recreation  
Grant Guess – Division Director, Parks & Recreation Project  
Administration  
Rex Lee Schuder – Principal Planner, Parks & Recreation Project  
Administration

*Gwinnett County Board of Commissioners*

Commission Chairman: Charles Bannister  
District 1 Commissioner: Lorraine Green  
District 2 Commissioner: Bert Nasuti  
District 3 Commissioner: Mike Beaudreau  
District 4 Commissioner: Kevin Kennerly

*Consultants - The Jaeger Company*

Dale Jaeger – Principal  
Anne Wilfer – Senior Project Manager  
Luke Rushing – Assistant Project Manager



## Table of Contents

### *Section*

- 1.0 Introduction
  - 1.1 Project Goals and Objectives
  - 1.2 Site Context
  - 1.3 Methodology
- 2.0 Historical Background
  - 2.1 Historical Research
  - 2.2 Deed Research
  - 2.3 Historic and Aerial Maps
  - 2.4 DNR Historic Survey
  - 2.5 Archaeological Research and Investigation
- 3.0 Site Inventory and Analysis
  - 3.1 Slope Analysis
  - 3.2 Hydrology
  - 3.3 Soil Analysis
  - 3.4 Vegetation
  - 3.5 Chattahoochee River Corridor
  - 3.6 Stream Buffer Requirements
  - 3.7 Cultural Resources
- 4.0 Program Development
  - 4.1 Parking and Roads
  - 4.2 Trail Network
  - 4.3 Wildlife Viewing Area / Meadow Establishment
  - 4.4 Structures
  - 4.5 Utilities and Lighting
  - 4.6 Furnishings
  - 4.7 Play Areas
  - 4.8 Skate Park
  - 4.9 Dog Park
  - 4.10 Senior Area
  - 4.11 Signage
  - 4.12 Maintenance Area
  - 4.13 Site Management
- 5.0 Plan Development
  - 5.1 Alternative Development Concepts
  - 5.2 Preliminary Master Plan
  - 5.3 Master Plan
- 6.0 Cost Estimate and Phasing
  - 6.1 Development Budget Summary

### ***List of Figures***

Figure 1	Settles Bridge Park Site Map
Figure 2	Helicopter View of 51-Acre Parcel 2004
Figure 3	Helicopter View of 217-Acre Parcel 2004
Figure 4	1938 Gwinnett Highway Map
Figure 5	1916 Tax Plat Map
Figure 6	Portion of 1972 Gwinnett County DNR Survey
Figure 7	Portion of 1992 Forsyth County DNR Survey
Figure 8	Settles Bridge
Figure 9	Former Road Bed
Figure 10	Former Well
Figure 11	Wooden Piers
Figure 12	Example of Agricultural Terracing
Figure 13	Example of Agricultural Terracing
Figure 14	Specimen Oak Tree

### ***List of Tables***

Table 1	Settles Bridge Park Site Deed Records
Table 2	Final Master Plan Cost Estimate

### ***List of Illustrations***

Illustration 1	Aerial View 1938
Illustration 2	Aerial View 1955
Illustration 3	Aerial View 1972
Illustration 4	Aerial View 2000
Illustration A	Slope Analysis
Illustration B	Hydrology
Illustration C	Soil Analysis
Illustration D	Soil Table
Illustration E	Vegetation
Illustration F	Chattahoochee River Corridor
Illustration G	Vulnerability Categories
Illustration H	Cultural Features
Illustration I	Preliminary Design Option 1
Illustration J	Enlarged Plan Option 1
Illustration K	Preliminary Design Option 2
Illustration L	Enlarged Plan Option 2
Illustration M	Preliminary Design Option 3
Illustration N	Enlarged Plan Option 3
Illustration O	Preliminary Master Plan Overall Plan
Illustration P	Preliminary Master Plan Enlarged Plan
Illustration Q	Preliminary Grading Concept
Illustration R	Final Master Plan Overall Plan
Illustration S	Final Master Plan Enlarged Plan
Illustration T	Trail Length Map
Illustration U	Phase One Overall Plan



***List of Illustrations Continued***

Illustration V            Phase One Enlarged Plan  
Illustration W            Phase One Trail Lengths Map

***Appendices***

*Appendix A*    Deed of Conservation Easement  
*Appendix B*    Tabulation of Concerns from Public Meeting  
*Appendix C*    Settles Bridge Steering Committee Minutes  
*Appendix D*    Historical Research – The Jaeger Company  
*Appendix E*    NEPA Study  
*Appendix F*    Detailed Cost Estimate

## 1.0 Introduction

The Settles Bridge Park Site is a unique property that offers access to the Chattahoochee River and an opportunity to experience a variety of other natural resources, as well as cultural features, in a passive park environment.

### 1.1 Project Goals and Objectives

As part of an ongoing effort by Gwinnett County to address countywide needs for open space, the Settles Bridge Park land will offer a passive recreational opportunity with an emphasis on sustainability, preservation of unique site features and interpretation of cultural resources. The principal goals of the Master Plan are as follows:

- Preserve the natural resources.
- Preserve and interpret the cultural resources.
- Provide well-built multi-use and nature trails.
- Provide amenity areas to service surrounding neighborhoods and a variety of user groups.
- Provide a safe, environmentally sustainable and usable environment for passive park activities.

In addition, there is potential for this park site to connect to existing trails to the south along the Chattahoochee River Corridor, to tie into future development of trails to the north of the site and to connect westerly across Settles Bridge into Forsyth County. With the general boom of development in this area, public space is vanishing quickly and the preservation of open space and pedestrian linkages will be essential for maintaining some quality of life for the residents in the surrounding neighborhoods and for anyone who comes to this region for passive recreational activities.

### 1.2 Site Context

The total acreage for the Settles Bridge Park Site is 268-acres, consisting of two parcels linked by National Park Service (NPS) land: a northern 51-acre parcel bounded on the north and south by NPS land, on the west by the Chattahoochee River, on the east by the Wild Timber subdivision and on the southeast by residential tracts; and a southern 217-acre parcel bounded on the north by private residential property, on the south by Settles Bridge Road, on the west by NPS land, on the east by Johnson Road and on the southeast by the Riverside Elementary School. The 217-acre parcel was recently purchased by Gwinnett County and the 51-acre parcel is leased by the county from The Department of Natural Resources (DNR). Portions of the Settles Bridge Park site are currently accessed for passive recreation, primarily hiking, jogging and biking, via



old roadbeds and unpaved trails that community members maintain with their own resources.

The 217-acre parcel has been identified to possess significant natural, scenic, aesthetic and open space features and ecological values worthy of preservation and conservation. In December of 2004 this property was placed under a Conservation Easement (see *Appendix A*).

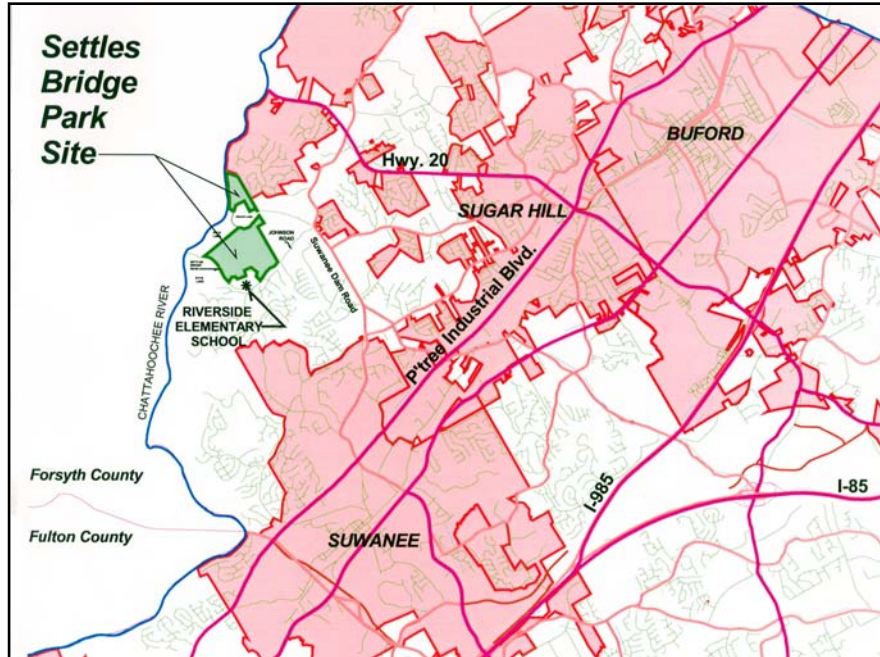


Figure 1: Settles Bridge Park Site Location Map



Dept. of Community Services

Settles Bridge Park Site Master Plan

Print #40803162  
Date:08/03/04

Aerial Photography, Inc. 954-568-0484

*Figure 2: Helicopter View of 51-Acre Parcel, 2004*



Dept. of Community Services

Settles Bridge Park Site Master Plan

Print #40803146  
Date:08/03/04

Aerial Photography, Inc. 954-568-0484

*Figure 3: Helicopter View of 217-Acre Parcel, 2004*



### 1.3 Methodology

Using a traditional approach to the park planning process, the project progressed through a series of interim tasks to arrive at a consensus Master Plan. The sequence of tasks performed to develop the Master Plan included:

- Program Confirmation based on input of staff as well as the Steering Committee.
- Inventory & Analysis of the site, including topography, vegetation, hydrology, soils and historical research.
- Alternative Development Concepts were prepared to test a variety of design approaches, their feasibility and impact on the site.
- A Preliminary Master Plan that blended elements from multiple concepts with a Preliminary Cost Estimate and a Grading Concept Plan to illustrate the extent of earthwork required.
- A Draft Master Plan with Cost Estimate
- A Final Master Plan with a refined Cost Estimate that included phasing for implementation.
- Phase One Master Plan, Grading Concept Plan and Cost Estimate
- Presentation of final products to the Gwinnett County Recreation Authority and the Gwinnett County Board of Commissioners.

The following provides brief descriptions of the methodology and project timeline:

#### Public Input Meeting (July 8, 2004)

The advertised public meeting at North Gwinnett High School was well attended and included remarks by Wayne Hill, Chairman of Gwinnett County Commission; Grant Guess, Director of the Planning and Project Administration Division; and Rex Schuder, Principal Community Planner for Parks and Recreation. Attendees were invited to fill out Community Interest Forms and Steering Committee Applications. A number of attendees expressed concerns and interests for the site in an open forum.

Completed Community Interest Forms were collected and tabulated by The Jaeger Company (see *Appendix B*). Completed Steering Committee Application Forms were collected by the county and used to determine membership of the committee. The committee of eighteen members represented a cross section of interested parties from adjacent or nearby neighborhoods.



Public Meeting at North  
Gwinnett High School



Remarks by County  
Commissioner

**Base Plan Development (July 2004)**

Using GIS files obtained from the county, The Jaeger Company prepared a composite base plan of the site.

**Site Visit (July 28-29, 2004)**

Members of the Jaeger Company and Rex Schuder met at the site for two consecutive days for a walkthrough inspection and overview of existing conditions. Major natural and cultural features were identified and noted.

**Steering Committee Scheduling Meeting (August 11, 2004)**

The plan development process began with the creation of a project schedule and discussion of the anticipated process. In attendance were Rex Schuder, members of the Jaeger Company and Steering Committee Members. The schedule for Steering Committee meetings was agreed upon. All meetings were held in the evening at the Gwinnett County Justice and Administration Center (except the Saturday field trips). A tabulation of the Community Interest Forms was distributed to the Steering Committee.

**Gwinnett County Park Facilities Tour (September 11, 2004)**

Rex Schuder, a member of the Jaeger Company and the Steering Committee went on an all-day bus tour of several Gwinnett County Parks. A variety of park features were reviewed at each location, described below:

Little Mulberry Park:

- Parking lot in high visibility area
- Early American Parks Movement Architecture
- Wood structures: kiosk, pavilion, shelter
- Stone structures: mounds, council ring, walls, paving, drainage structures
- Pedestrian bridges – wood with metal components; and stone footbridge
- Playground
- Pervious trails
- Multi-purpose trail – paved
- Trail signage – wood
- Water fountain

McDaniel Farm:

- Historically accurate reconstructed barn, fencerow
- Wooden structures: pavilion, kiosk, restroom facility, gate feature
- Stone structures

- Pedestrian bridges – corten steel; and wood with metal components
- Interpretive/educational signage
- Multi-purpose trail – paved

Ronald Reagan at Five Forks Park:

- Wooden structures with tin roofs: pavilion, shelter with picnic & cookout amenities
- Concrete block restroom facility with tin roof
- Bocce Court
- Horseshoe Court
- Skate Park
- Dog Park
- Pedestrian bridge – wooden
- Directional signage – metal
- Mulched trail
- Multi-purpose trail – paved
- Drainage structures

Tribble Mill Park:

- Structures: kiosk, pavilion, restroom facility
- Pedestrian bridge – corten steel
- Multi-purpose trail – paved
- Dirt trails
- Wooden trail markers
- Wooden bench
- Stonework – walls, seating
- Playground

**Settles Bridge Park Site Tour (September 19, 2004)**

Rex Schuder, a member of the Jaeger Company and the Steering Committee went on a walking tour of the park site and made observations of the current state of the landscape. Throughout the day there were discussions about the various stages of vegetative succession and the impact of Southern Pine Beetle damage. Several cultural features including agricultural terracing, a former home site and a well were also observed.

Programming for the park site was discussed over lunch, keeping in mind the restrictions for development along the Chattahoochee River. For a detailed list of park programming elements (see *Appendix C*).

**Inventory & Analysis and Preliminary Design (October 19, 2004)**



Steering Committee Touring the Site

The Settles Bridge Park Steering Committee convened for the presentation of Inventory & Analysis, which included an overview of historical research, and three Preliminary Design Options. The committee provided feedback about what they liked or disliked about each option and offered ideas for compromise and solution.

**Preliminary Master Plan (November 16, 2004)**

The Steering Committee convened for the presentation of the Preliminary Master Plan. This plan incorporated elements from the three options with respect to the comments and suggestions from the previous presentation. A Preliminary Grading Plan and Preliminary Cost Estimate were also presented.

**Final Master Plan (December 8, 2004)**

The Steering Committee convened for the presentation of the Final Master Plan and Final Cost Estimate. The committee was engaged in a prioritization exercise and voted on what they felt to be the most important elements for Phase One Construction. A Phase One Construction Budget was developed during the meeting. The Steering Committee then voted in favor of the Master Plan.

**Final Presentations**

The Final Master Plan was presented to the Gwinnett County Board of Recreation on February 10<sup>th</sup>, 2005 and to the Gwinnett County Board of Commissioners on March 1<sup>st</sup>, 2005. The site plan was approved by both with no revisions.

## 2.0 Historical Background

The following is a summary of the archival research conducted in order to document, interpret and highlight the site's wealth of cultural and natural resources.

### 2.1 Historical Research

Historical research focused primarily on available written records, most of which were not primary sources. Repositories consulted included: the Georgia Archives; Georgia Historic Preservation Division Records; Gwinnett County Historical Society clipping files; Gwinnett County real estate records; University of Georgia Map Room; and local libraries. The following paragraphs describe information from these repositories.

### 2.2 Deed Research

Tract 1 is located in the 7th District, land lot 317, parcel 1. According to the *History of Gwinnett County, Georgia*, by James C. Flanigan, the original owner of land lot 317 in the 7th District from the 1820 Land Lottery was Josiah Hickman of Hall County. Tract 2 is situated in the 7th district, land lot 342, parcel 3. According to Flanigan this land lot was won by Thomas Jinson of Chatham County in the 1820 Land Lottery for Gwinnett County. These land lots were then subdivided after the land lottery and were owned by a variety of individuals, organizations and businesses.

A chain of title was researched for the Settles Bridge Park site parcel owned by Gwinnett County (Tract 1) and the parcel owned by the State of Georgia (Tract 2). The results of this research are summarized in *Table 1*. Since these two parcels were originally large acreage tracts, and were later part of an assemblage by the West Lumber Company, it was difficult to trace today's park site tracts to the original owners. For that reason, no deeds were found prior to 1914 for either of the two parcels. The West Lumber Company started acquiring the lands that make up the park site in 1953. At some point after 1955 the name of this company changed to the West Equipment Company.

In 1999 the West Equipment Company sold approximately 217 acres to Gwinnett County (Tract 1), and in the following year sold approximately 130 acres to the Georgia Trust for Public Land, which in 2001 turned control of approximately fifty-one acres (Tract 2) over to the State of Georgia which is the northern tract of land now owned by the DNR and leased by Gwinnett County.

The first purchase of land by the West Lumber Company was on December 15, 1953 from Sam Burton for 140 acres (recorded in deed book 115, page 83 of Gwinnett County). West Lumber Company sold



this land to West Enterprises, Incorporated on December 1, 1974 (recorded in deed book 347, page 200 of Gwinnett County).

The second purchase of land by the West Lumber Company was from Robert J. Graves for two and one-half acres on March 10, 1954, finalized in May 8, 1954 (recorded in deed book 115, page 349 and deed book 115, page 347 of Gwinnett County respectfully). This property appears to be the same property conveyed to John S. Lynn by West Lumber Company on January 20, 1954 (recorded in deed book 115, page 500 of Gwinnett County). How this land passed from John S. Lynn to Robert J. Graves is unknown.

The third purchase of land by the West Lumber Company was from Zollie Lynn for two acres on June 15, 1954 (recorded in deed book 115, page 430). It appears that Zollie Lynn inherited the property from Woodrow Lynn who purchased the property from West Lumber Company on January 6, 1954 (deed referenced in deed book 347, page 200 of Gwinnett County). These two latter purchases of two and two and one-half acres were part of the 140 acres purchased by West Enterprises (incorporated from West Lumber Company), according to the aforementioned 1974 deed. Both of these parcels are noted in this deed as having several buildings on them and plat book A, page 87 is referenced. It is hard to place the exact location of this plat on the current park site, but it is likely that "Terry Mill Road", which passes through the middle of the depicted tract of land, is what is now referred to as Settles Bridge Road. This is further supported by the description recorded in deed book 115, page 150 of the transaction between West Lumber Company and John S. Lynn that describes "Settled Bridge-Level Creek Road" with a house on the northwest side of the road and a barn on the southeast side. These transactions are represented in Group 1 of *Table 1*.

The fourth purchase of land by the West Lumber Company was from S.C. Cole for sixty-five acres on August 25, 1954 (recorded in deed book 115, page 550 of Gwinnett County). The West Lumber Company sold this land to West Enterprises, Inc. on December 1, 1974 (recorded in deed book 947, page 206 Gwinnett County). The afore mentioned 1954 deed notes that this is the farm transferred to Carl C. Hill by the Georgia Loan and Trust in 1946 (recorded in deed book 80, page 106) for the same acreage. This deed also notes that A.W. Humphreys previously owned the farm. Carl C. Hill in turn sold the property to G.W. Allen on December 2, 1946 (recorded in deed book 81, page 521 of Gwinnett County). It is unknown how the property passed into S.C. Cole's possession from G.W. Allen. These transactions are represented in Group 2 of *Table 1*.

The fifth purchase of land by the West Lumber Company was from W.H. Maltbie for eighty-three acres on December 8, 1955 (recorded in deed book 121, page 416 of Gwinnett County). Eighty acres of this parcel was sold to W.H. Maltbie by J.A.P. Titshaw on November 22, 1922 (recorded in deed book 42, page 113 of Gwinnett County). J.A.P. Titshaw in turn purchased this from Mrs. S.S. Titshaw (possibly his mother) on December 7, 1914 (recorded in deed book 24, page 418 of Gwinnett County). W.H. Maltbie purchased two acres of this eighty-three acre parcel on February 12, 1923 from Sam Burton (recorded in deed book 114, page 221). A parcel of land of approximately .33 acres is known to be a part of the park site which was transferred from L.D. King to J.A.P. Titshaw prior to 1923 (reference recorded in deed book 114, page 221 of Gwinnett County). It is noted in this deed that a gin house was to be erected on the parcel of land by J.A.P. Titshaw. It is assumed that this land was transferred as part of the sale of eighty acres to W.H. Maltbie from J.A.P. Titshaw in 1922. These transactions are represented in Group 3 of *Table 1*.

The sixth and final purchase of land by West Lumber Company was from Jack D[ewitt]. Davis, the estate of Esther O'Shields Davis & Allene Davis for 34 acres on August 15, 1963 (recorded in deed book 202, page 148 of Gwinnett County). This property was purchased on January 6, 1942 by J[ack] Dewitt Davis from A.B. Thompson (recorded in deed book 72, page 41 of Gwinnett County). These transactions are represented in Group 4 of *Table 1*.

	Date	Acreage	Grantor	Grantee	Deed Book - Page
	December 28, 2001	51.0152	Trust for Public Land	State of Georgia	25786-35
	January 10, 2000	130	West Equipment Company	Trust for Public Land	19868-128
	January 10, 2000	347.1237	Affidavit of Possession for West Equipment Company	West Equipment Company	19867-126
	January 5, 2000	?	West Equipment Company	Trust for Public Land	19868-135
	December 1, 1974	231	West Lumber Company	West Enterprises, Inc.	949-32
	December 27, 1927	231	J.L. Kennedy	C.W. & R.R. Maltbie	42-364
	1999 - ?		Affidavit of Possession for West Equipment Company		19868-1
	November 1, 1999	217.1237	West Equipment Company	Gwinnett County	19475-22
Group 1	December 1, 1974	140	West Lumber Company	West Enterprises, Inc.	347-200
	December 15, 1953	140	Sam Burton	West Lumber Company	115-83
	May 8, 1954	2.5	Robert J. Graves	West Lumber Company	115-347
	March 10, 1954	2.5	Robert J. Graves	West Lumber Company	115-349
	January 20, 1954	2.5	West Lumber Company	John S. Lynn	115-500
	June 15, 1954	2	Zollie Lynn	West Lumber Company	115-430
	January 6, 1954	2	West Lumber Company	Woodrow Lynn	No Deed
	December 1, 1974	65	West Lumber Company	West Enterprises, Inc.	947-206
Group 2	August 25, 1954	65	S.C. Cole	West Lumber Company	115-550
	December 2, 1946	65	Carl C. Hill	G.W. Allen	81-521
	October 25, 1946	65	Georgia Loan & Trust	Carl C. Hill	80-106
	December 1, 1974	83	West Lumber Company	West Enterprises, Inc.	No Deed
Group 3	December 8, 1955	83	W.H. Maltbie	West Lumber Company	121-416
	February 12, 1923	2	Sam Burton	W.H. Maltbie	114-221
	November 22, 1922	80	J.A.P. Titshaw	W.H. Maltbie	42-113
	1923 - Prior	0.33	L.D. King	J.A.P. Titshaw	No Deed
	December 7, 1914	80	Mrs. S.S. Titshaw	J.A.P. Titshaw	24-418
Group 4	August 15, 1963	34	Jack D. Davis, Esther O'Shields Davis & Allene Davis	West Lumber Company	202-148
	January 6, 1942	34	A.B. Thompson	J. Dewitt Davis	72-41

Legend	
Settles Park - Gwinnett County	
Trust for Public Land & State of Georgia	

Table 1: Settles Bridge Park Site Deed Records

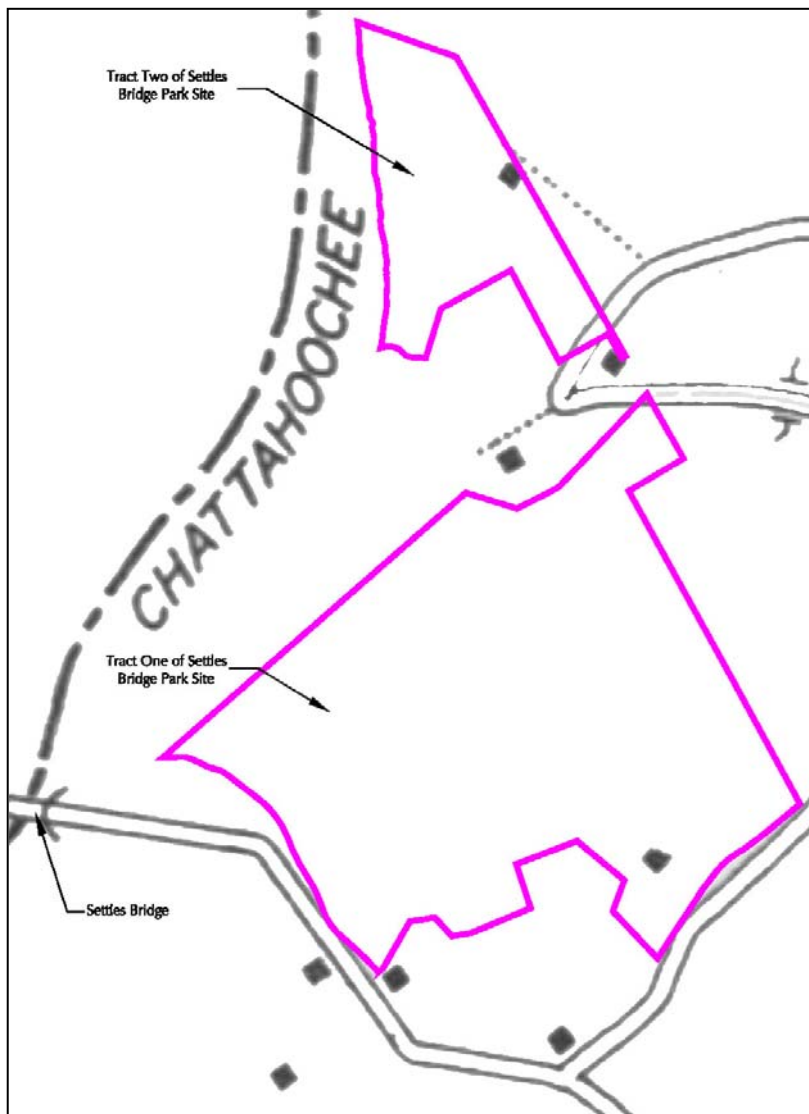
## 2.3 Historic and Aerial Maps

A review of property ownership through deed research and a review of historic maps and aerial photographs yielded a few historic maps of areas that include the park site. One of these maps is a 1938 GDOT Gwinnett County Highway Map. This map illustrates the locations of farms, churches and roads in Gwinnett County (see *Figure 4*). According to this map there were two farms within the park site area (one located on tract 1 and one on tract 2).

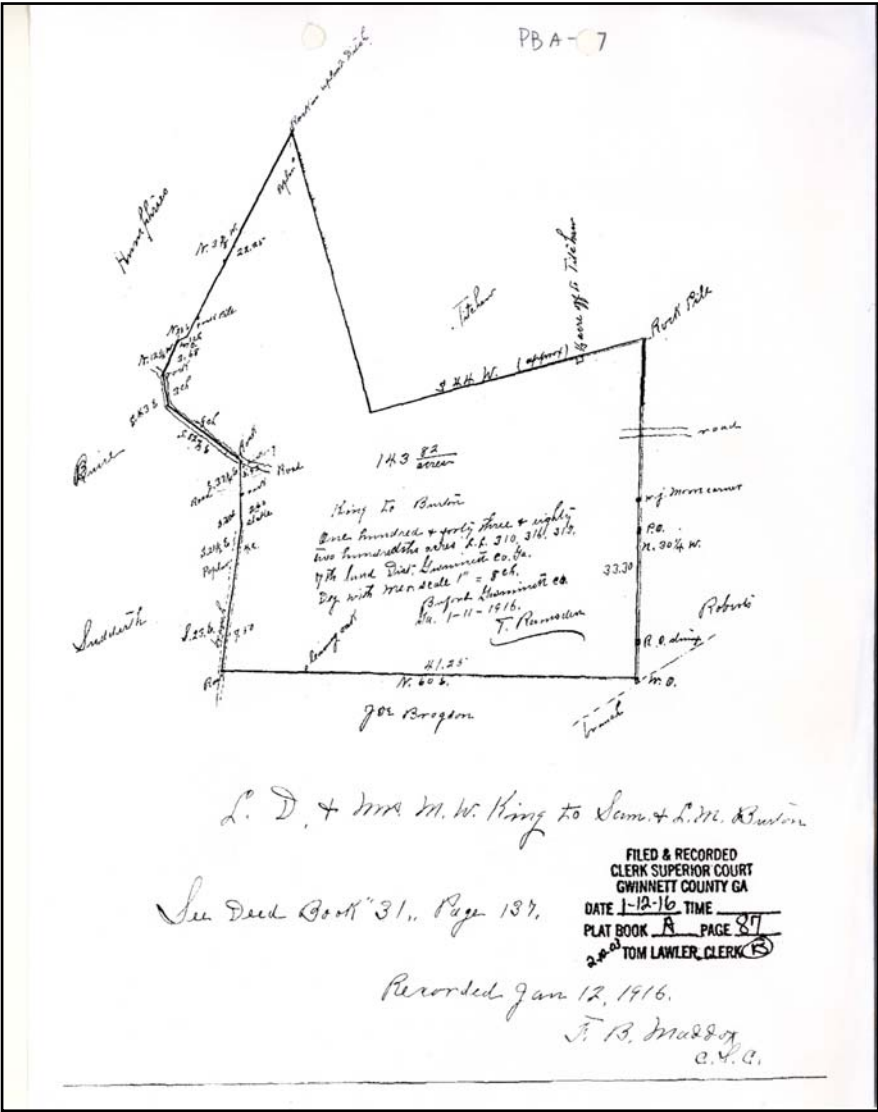
Another historic map for this area is a 1938 aerial map (see *Illustration 1*). On this map agricultural terracing is evidenced, but individual house sites and farmsteads are not discernible. Another historic aerial for the site from 1955 shows the bulk of agricultural terracing reclaimed by trees (see *Illustration 2*). This also suggests a decline in farm activity on

the site between 1938 and 1955. Many small family-run farms in Georgia ceased to exist in the mid-twentieth century, as better paying jobs were made available and could be accessed by improved public roads into nearby cities such as Lawrenceville, Suwannee and Atlanta. The 1955 aerial corresponds with the approximate date of acquisition by the West Lumber Company of the land encompassing the park site. The company apparently had plans to timber the site with possible real estate speculation as well.

Another historic map found in relation to the park site is a plat referenced in deed book 115, page 83 of Gwinnett County. This is in reference to the land sold by Sam Burton to the West Lumber Company in 1953 (see *Figure 5*).



*Figure 4: Portion of 1938 Gwinnett County Highway Map*



*Figure 5: This 1916 tax plat was the only tax plat found during the chain of title research, and is referenced to the sale of property from Sam Burton to the West Lumber Company on December 15, 1953 (recorded in deed book 115, page 83 of Gwinnett County). On this plat we can see that the lands owned by the Titshaw Family were adjacent, roughly northeast, of the property owned by Sam Burton. Unfortunately there are not enough known landmarks on the tax plat to reference this property to the existing park site.*

From the deed research, it was possible to discern that the families described below were associated with the park site. These families and individuals include: W.H. Maltbie, S.C. Cole, Zollie Lynn, Robert J. Graves, Sam Burton, Carl C. Hill, L.D. King, the Titshaw family of Gwinnett County, and the Settle family of Forsyth County. These individuals and families were researched through the *History of Gwinnett County, Georgia*, the Georgia Archives, the Gwinnett County Historical Society, the records at HPD, the digitized *Vanishing Georgia* Collection and online. No information on these individuals or families was found at the Gwinnett County Historical Society. A genealogical book of the Titshaw family was found at the Georgia Archives, but it did not yield any information on either Mrs. S.S. Titshaw or J.A.P. Titshaw, who resided on land that is now part of the park site.

Searching through the digitized *Vanishing Georgia* database at the Georgia Archives uncovered a photograph of a two-story farmhouse owned by a William Maltbie. This may be the W.H. Maltbie that had previously owned land on the park site, but the house was outside Lawrenceville, not near Suwannee where the park site is located, suggesting that he may have owned more than one farm. No other information about individuals and families associated with the park site was found in the *Vanishing Georgia* database.

A William Maltbie born in 1784 was listed in volume one and volume three of the *History of Gwinnett County, Georgia*. He married Philadelphia Winn of the prominent Winn family of Gwinnett County and was a native of Connecticut who he held public offices, including the second clerk of the Inferior Court. This William Maltbie would have been deceased by the time of the deed recorded in 1923, and is therefore assumed to be an ancestor of the park site land owner William Maltbie. This assumption is further supported by a list of offspring of Philadelphia and William Maltbie, which includes a William H. Maltbie.

The HPD records were researched to find information pertaining to the individuals and families associated with the park site. The search yielded only limited information on the Terry and Settle Families associated with Settles Bridge. An article entitled “History of the Terry and Settle Families” from the *North Georgia Star* dated July, 1997 offered information about the family tree and refers mostly to the area west of the park site in Forsyth County. A paragraph in the article discusses Settles Bridge and is included below:

The land owned by Toy (Terry) Settle once contained approximately 264 acres situated along the picturesque Chattahoochee River. And although that river may have been scenic, it nevertheless posed an obstacle for

those wishing to be on the other side. A ferry served to transport citizens to and from on the river until 1915, when an iron bridge was erected to link Forsyth and Gwinnett Counties. In a 1980 interview with Scott Vaughan, staff writer for the Forsyth County News, Settle described preparations for the bridge, “We had to build the road on around to the narrow place (in the river) and make a circle so that people would have access to the bridge. We had to clear it out and make the road ourselves.” (Incidentally, the total cost of the bridge was \$4,750, with Forsyth County’s portion of the payment set at \$1,500.) Toy Settle couldn’t explain, however, how the span came to be known as “Settles Bridge”.

The article also states how the Settle family was involved in farming in the area and was considered a prominent family that filled many public offices.

Aerial Photography illustrates the evolution of site use over the span of eight decades, including representative years of 1938, 1955, 1972 and 2000. Evidence of agricultural practices is apparent on the earlier aerials, with a gradual return to forested land apparent in the later aerials. Since most of the images were taken in the winter months, concentrations of pine forest versus hardwood forest are easy to distinguish (see *Illustrations 1-4*).

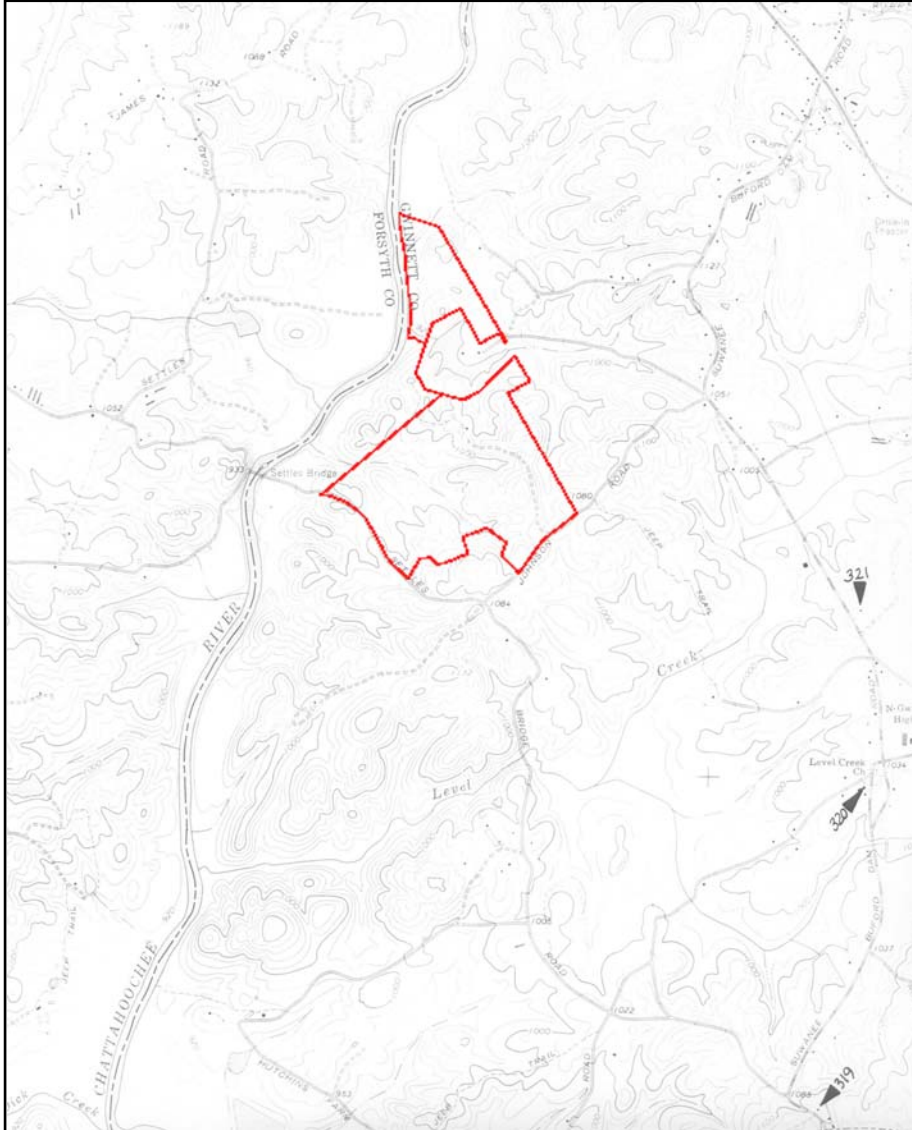
## 2.4 DNR Historic Structures Survey

The DNR county surveys were consulted regarding the park site. No resources were found on the Gwinnett County DNR survey in the park site area (see *Figure 6*). A resource was found in the Forsyth County DNR survey in the park site area (see *Figure 7*). This resource is Resource # FO-00-390 and is referred to as “Settles Bridge” (see *Appendix C*). According to this survey form, the bridge was built circa 1930 – 1939 and it is notably made of hand forged steel with concrete piers. It also is noted that the decking has been removed so that the bridge cannot be crossed. This resource is related to Resource # FO-00-391 that is referred to as the “Terry-Settle House” (see *Appendix D*). The house built circa 1830 – 1840 is not within the boundaries of the park site. This resource was the main house of a farm that once stretched to the Chattahoochee River. Originally the family that owned this farm operated a ferry at the Settles Bridge site and then later constructed the bridge that is still standing today.



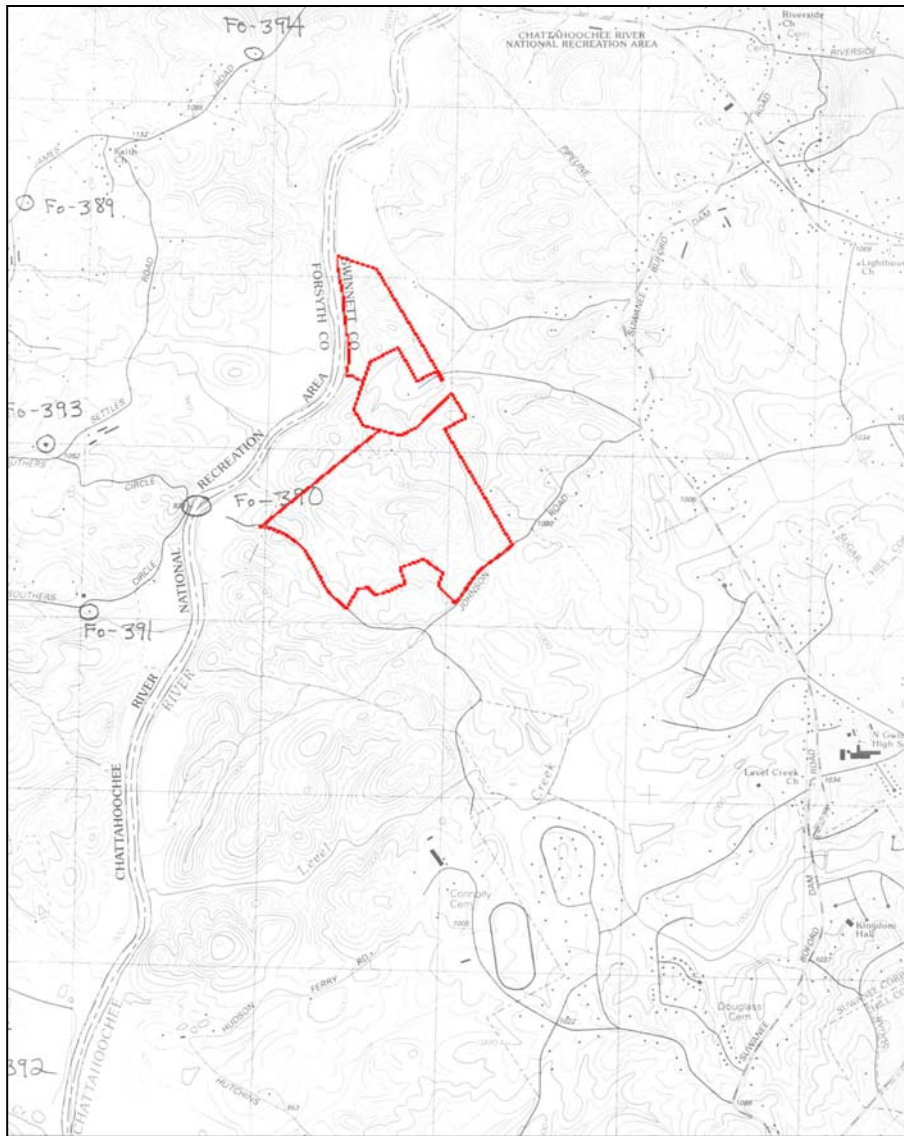
View of Settles Bridge without Decking





*Figure 6: Portion of Gwinnett County DNR Survey undertaken in 1972. The Settles Bridge Park Site did not contain any identified resources.*





*Figure 7: Portion of Forsyth County DNR Survey undertaken in 1992. Only one resource, Settles Bridge, is found near the park site.*

## 2.5 Archaeological Research and Investigation

The archaeological research element was conducted by sub-consultant archaeologists New South Associates. This included a literature review of previously conducted archaeological investigations for the park site property and the immediate surrounding area.

The literature research identified locations of sites where archaeological investigation had occurred in the vicinity of the park property and descriptions of the findings. Information directly pertaining to the park

site was nearly non-existent due to the fact that no previous archaeological testing has ever been performed on the park property, with the exception of one shovel test pit on Tract 1. This site is one of a series of shovel test pits that were conducted prior to the installation of new sewer lines along the Chattahoochee River.

The lack of archaeological testing within the park property is primarily due to the fact that the site has never been slated for development, which would require an archaeological survey prior to any land disturbing activities. The surrounding developed areas have been tested and there is documentation of prehistoric and historic occupation. This information strongly suggests that similar findings would be discovered on the park site property too.

Archaeological field investigation was also conducted by New South Associates along a proposed trail route that would connect the two park parcels through NPS property. The proposed trail route through NPS property was selected by NPS officials and will utilize portions of an existing unpaved 8'-0" wide maintained road bed and a portion of the sewer easement. The trail will be 8'-0" wide and constructed of a pervious surface material with a natural appearance. At least two 8'-0" wide footbridges will be necessary to traverse ravines along the route that contain tributary water flowing toward the Chattahoochee River.

Because the NPS property is part of the Chattahoochee River National Recreation Area (CRNRA), planned excavations for scientific data recovery had to be in compliance with the Archaeological Resources Protection Act (ARPA). Therefore a permit had to be approved before any data recovery could begin. The results of the environmental screening/archaeological testing are included at the back of this report (see *Appendix E*).

### 3.0 Site Inventory and Analysis

In order to gain a better understanding of the physical characteristics of the park site, a number of features were examined, assessed and mapped.

#### 3.1 Slope Analysis (*Illustration A*)

Topographic information for the park site was obtained from the county GIS system and included data at a two-foot contour interval. A majority of the site is fairly steep and is divided by several flowing streams. The property has a net 194-foot grade change with elevations ranging from the highest of 1098 feet to the lowest of 903 feet. A majority of the site has over a 15% grade, with some areas terraced from former agricultural occupation. A few acres of level ground are associated with the flat-topped ridges on the southwestern side of the property.



Portion of Proposed Trail Route



Staking of Proposed Trail Route Centerline

### 3.2 Hydrology (*Illustration B*)

The Upper Chattahoochee River Watershed is part of the larger Apalachicola-Chattahoochee-Flint River Basin. The Chattahoochee River is sourced from the North Georgia Mountains, through Lake Sydney Lanier and many other tributaries north of the park site. The only significant tributary between the site and Buford Dam to the north is Richland Creek. For a more complete identification of tributaries see *Gwinnett County Flood Insurance Maps*.

The entire Settles Bridge Park Site is within the Upper Chattahoochee River Watershed. Nearly all storm water drains into the Chattahoochee through a well-defined series of unnamed tributaries and intermittent swales. Some swales remain dry except during rain events while others have some water in them at all times. During rain events the water level of the river can rise dramatically.

Where proposed pavements and roofs are concentrated on site, compliance with the new county storm water regulations will be required. All impervious development must be limited to constitute no more than 15% of the total acreage, per county standards. For conservation easement requirements (see *Appendix A*).

### 3.3 Soil Analysis (*Illustrations C & D*)

Soils at the Settles Bridge Park Site are distributed relative to the topography. Clay loams and sandy clay loams are generally found along the hilltops. Floodplain soils consisting of alluvial sand, silt, and clay are deposited in narrow flats along the Chattahoochee River in the northwest section of the site. Local alluvial soils along smaller streams in the southern section of the site have been washed down from the uplands. Stripped topsoil and gullies are visible remnants of past agricultural practices.

A soils map of the park site was created to assess the suitability of proposed uses to the soil types present. A table was also prepared to summarize physical attributes of soils found on the site (see *Illustration D*). Soils that are prone to frequent flooding are unsuitable for trail building. Soils found to provide severe limitations upon recreational building uses are those subject to flooding or are generally wet, of a slope greater than 15%, or have less than three feet depth to bedrock. Therefore proper trail construction and location will be crucial to the long-term success of the trail system.

Gwinnett County engaged the Matrix Engineering Group to conduct a geotechnical evaluation to coincide with the Master Planning effort. The areas targeted for subsurface exploration were locations that have



View of the Chattahoochee River from the Park Site

recently suffered severe pine beetle devastation and would be most suitable for park development. Most of the areas tested did not yield any extreme conditions, such as surface rock or unsuitable soils that would interfere with typical park site development practices.

The Jaeger Company had access to the geotechnical report at the time this report was written. Subsequent consultants should obtain this data from the county. For reference the report is entitled “Preliminary Subsurface Exploration and Geotechnical Engineering Evaluation at Proposed Settles Bridge Park Site, Gwinnett County, Georgia.” The report number is: MEG 97140-34, and dated September, 2004.

### 3.4 Vegetation (*Illustration E*)

Settles Bridge Park is situated on the upper banks of the Chattahoochee River in the Upper Piedmont of Georgia. The site has a history of farming practices and is now primarily successional forest with concentrations of pine stands, many of which have succumbed to die back from southern pine beetle damage. Mature specimen trees and a greater diversity of native understory shrub layers and ground cover occur in stream corridor ravines that were spared from clearing during agricultural occupation. The following is a breakdown of identified categories of vegetation:

#### Oak-Hickory Forest

These areas are primarily located on the drier high points and most inland portions of the park parcels (away from the river). Southern red oak, white oak, chestnut oak, hickory, wild cherry, slippery elm, sourwood and dogwood comprise the hardwood canopy. Some residual dead pine trees occur on the ridges. Understory plants are sparse, consisting of a few lowbush blueberry shrubs and some muscadine grape vines. At the highest points, red maple, beech and sassafras are more dominant. A slightly younger forest also occurs on the low points of these areas, including tulip poplar, beech, red cedar, sourwood and a few living pines. Understory shrubs include sparkleberry and blueberry.

#### Pine Forest

Aerial photography taken during the winter of 1999 clearly shows concentrations of pine trees. Most of these areas are hilltops that contained greater than sixty percent mature pine trees, which have recently succumbed to pine beetle infestation. Most of the dead trees are still standing, but many have toppled over. The result has allowed more daylight in and has made these areas seem more meadow-like in character. Grasses, blackberry patches and sumac stands have taken hold. In some places younger pine trees are trying to reestablish, including loblolly and short needle pines. Smaller understory deciduous species such as red maple, scrub oak, hawthorn, sourwood, dogwood



Pine Beetle Devastation



and wild cherry are prevalent on the slopes adjacent to the hilltops. Larger tree species establishing include tulip poplar and sweetgum. In the wooded areas understory shrubs include blueberry, sparkleberry and honeysuckle. Ground cover is sparse, consisting of a few ferns and some muscadine grape vines.

#### Bluff Slope Ravine Forest

Due to steep sided banks and active waterways, these areas were spared from disturbance of agricultural practices, making this vegetation category the most diverse and pristine. Large native azaleas, pawpaw and a variety of ferns, including: cinnamon, lady, royal and Christmas, are prevalent along the streams banks. Running ground cedar forms a lush carpet and other native ground cover that you would expect to find on a forest floor are also present: mayapple and doll's eyes. Several specimen beech, hickory and cherry trees are also present.

#### Bottomland/Floodplain Forest

These areas are flat, boggy grasslands adjacent to stream channels. Trees include water oak, tulip poplar, red maple and willow. Sparkleberry, ferns and running ground cedar are present close to the stream banks.

#### Successional Forest

These areas contain a high percentage of young pine trees, most of which have also been devastated by pine beetle damage. Many of the dead trees have fallen, knocking over other trees in their paths. Smaller deciduous understory trees are thriving in close proximity to each other, making these areas visually impenetrable. Tree species include sourwood, dogwood, emergent oak, tulip poplar, sweet gum and several varieties of hawthorn. Highbush and lowbush blueberries comprise the shrub layer. Running ground cedar and pipsissewa in shaded areas and lichens in more open areas are some of the typical ground covers.

#### Erosion Gully

The gullies are a result of the former agricultural practices, but remained more protected than the hillsides. Mature beech, sweetgum, northern red oak, dogwood and pawpaw comprise the canopy layer. High and lowbush blueberry dominate the shrub layer. Concentrations of leucothoe occur along the waterways. Poison ivy and smilax vines are growing on some of the trees. The groundcover layer is more diverse due to the availability of water and includes some species of plants that are not found anywhere else on the site. Pink lady slipper orchids, rattlesnake plantain, pipsissiwa, and ferns

#### Invasive Exotics

These plants are concentrated in the sewer easement clearing along the Chattahoochee River, which is also the area of greatest disturbance.



Doll's Eyes



Ferns



Running Ground Cedar

### 3.5 Chattahoochee River Corridor (*Illustrations F & G*)

The Metropolitan River Protection Act of 1973 (Georgia Code 12-5-440 et seq.) established a 2000-foot river corridor on both sides of the Chattahoochee River and its impoundments, including the streambed and any islands for forty-eight miles of river between Buford Dam and Peachtree Creek. The entire smaller parcel and approximately one-third of the larger parcel of the Settles Bridge Park site fall within the Chattahoochee River Corridor. The Atlanta Regional Commission (ARC) was appointed to adopt a land and water protection plan and to review development proposals for consistency with plan standards (see *Illustration F*). The plan includes three sets of standards:

#### 1.) Vulnerability Standards:

- All corridor land is in one of six vulnerability categories based on the land's characteristics.
- Each category has maximum amounts of land disturbance and impervious surface stated as a percentage of category area.
- Land disturbance is any activity disturbing the land or the existing vegetation.
- Impervious surface is any paved, hardened or structural surface such as buildings, driveways, decks, patios, pools, etc.

Atlanta Regional Commission Maps entitled "Land Vulnerability" document the vulnerability category of land in the corridor. The Settles Bridge Park site encompasses several different vulnerability categories (see *Illustration G*). All proposed development plans should conform to the following percentages based on categories:

<u>Vulnerability Category</u>	<u>Percent Maximum Land Disturbance</u>	<u>Percent Maximum Impervious Surface</u>
A	90	75
B	80	60
C	70	45
D	50	30
E	30	15
F	10	2

#### 2.) Buffer Zone Standards:

- A 50-foot undisturbed, natural vegetative buffer along the river and its impoundments.
- A 35-foot undisturbed, natural buffer along flowing streams in the corridor.
- A 150-foot impervious surface setback along the river and its impoundments.

- Limited exceptions to the buffers include footpaths, bridges and public water supply intakes.

### 3.) Floodplain Standards:

- Fill in the river's 100-year floodplain, up to the 100-year flood elevation, must be balanced with an equal volume of cut.
- Flood flows cannot be blocked.
- Within the river's standard project floodplain (the 500-year floodplain), a height limit of 35-feet above the existing grade is required for all structures other than bridges.

### **3.6 Stream Buffer Requirements**

As of April 2005 Gwinnett County standards for stream buffer requirements are becoming more stringent as follows:

- 50' setback undisturbed area from top of stream bank, both sides of stream
- Additional 25' setback (from 50' undisturbed setback) allowing only pervious surfaces (such as foot paths, natural surface trails) and grading shall be minimal
- All types of impervious cover is prohibited in this 75' buffer zone
- Existing development and current land-disturbing projects are "grandfathered"

Trail alignment for this master plan will respect these new standards. All pervious trails will be located at a minimum setback of 50' from edge of stream banks and impervious trails will be located at a minimum setback distance of 75' from edge of stream banks. Crossing points with bridge structures will be perpendicular to the streams for the most direct approach and to minimize impact to the stream bank shoulders.

### **3.7 Cultural Resources**

A site visit was performed by The Jaeger Company on November 8, 2004 to inventory cultural features found on the park site. The features are keyed to *Illustration H* and include: the Settles Bridge; three examples of agricultural terracing; a former site access road; an open well; two stone piles; piers for a former house; and a specimen oak tree. Photographs of most of these features are found below.



*Figure 8: The Settles Bridge was built ca. 1930 – 1939 and replaced a ferry operation run by the Settle Family (according to the DNR survey). Other accounts date the bridge construction as ca. 1915. The bridge reputedly cost \$4,750. \$1,500 of this cost was paid for by Forsyth County.*



*Figure 9: This former road probably provided access to farmlands within the park site. As evidenced by the mature trees this road has not been in use for a long time, (probably since the 1950s as farming ceased in this area) as evidenced in the 1955 Aerial, Illustration 2.*





*Figure 10: This former well was probably an artesian well due to its small size, approximately two feet in diameter. This structure dates to the mid-twentieth century. There was probably a house nearby, as wells were commonly in the domestic sphere of a farmhouse (roughly 100-200 feet out from the house), according to Tilling the Earth: Georgia's Historic Agricultural Heritage.*



*Figure 11: The wooden piers shown here were formerly used to hold a small farmhouse up off the ground.*





*Figure 12: Example of Agricultural Terracing (Tract 1). This was a popular farming practice throughout Georgia History from the mid-nineteenth century-1930s. Agricultural terracing creates level areas for farming and helps to keep erosion in check.*



*Figure 13: Example of Agricultural Terracing (Tract 2). This is still a popular farming practice today as it allows the sloping terrain of north Georgia to become useable space. The popularity of terracing coincided with the popularity of Agricultural Societies that espoused good farming and land conservation practices.*





*Figure 142: Specimen Oak Tree adjacent to a rock pile found in the northern portion of the park site (Tract 2). Rock piles were often made as areas were cleared for farmlands and homesteads. Also rock mounds, as part of Native American burial practices, have been noted in this area.*

## 4.0 Program Development

With an emphasis on providing passive recreational opportunities for a number of user groups, elements to include with the park plan were explored.

During the second scheduled field trip, the Steering Committee, a member of the consultant team and Rex Schuder determined a program for the park site. The group had an in-depth discussion of all the possible program elements and they carefully weighed the options before voting on a collection of the most suitable items to include at this particular site, with respect to long-range goals of the park plan. For meeting minutes that include a list of agreed upon park program elements (see *Appendix C*).

The park will be supported by a variety of improvements that facilitate access, visitor comfort and use of the property. The overall concept for park development is to provide a variety of desired recreation facilities serving all age groups while preserving the integrity of the park as a passive use space and to enhance public access to natural features. Clearing of trees will be selective and grading limited to locations designated for parking and amenity structures. Alignment of trails will be strategic, coinciding with the topography in order to minimize erosion problems.

### 4.1 Parking and Roads

Vehicular circulation within the park will be limited to a short access road connecting the main (lower) and minor (upper) parking areas. These lots will be served by one access point off Johnson Road, with a 200 linear foot decel lane for approaching from the east. Maintenance vehicles will utilize the entry drive and the multi-use trail system to access site amenity areas.

Roads in the site will be pervious asphalt. Parking lot aisles and parking spaces with striping are proposed as pervious pavement, allowing for groundwater infiltration in parking areas. Pervious pavement allows rainwater to flow through pavement uniformly, allowing it to naturally filter in the gravel sub-base material and purify before re-entering the ground, therefore reducing pollutants. Pervious pavements also reduce erosion and lower costs associated with storm water management systems. In addition, there is some savings on construction because curb and gutter and drainage system structures will not be needed.

### Desired Parking Allotment for Proposed Park Facilities

<u>Facility</u>	<u>Parking Spaces</u>
Senior/Dog Park (upper lot)	50
PavilionArea/Playground/Teen Area/ (lower lot)	150

Native hardwood shade trees planted in islands or in close proximity to the parking lots will help to cool the expanse of asphalt paving. Parking spaces will be constructed in pervious pavement to allow for groundwater infiltration.

## 4.2 Trail Network

### Multi-Use Trail

An asphalt-paved, twelve-foot wide multi-use trail will be accessible from the lower and upper parking areas. Several loops will circulate around the amenity areas and into a portion of the woodland. These trails are concentrated near the main areas of park development and do not extend beyond the southern half of the 217-acre park parcel. The northern 51-acre parcel does not contain any paved trails.

Trails will be routed to deliberately pick up locations on the park property that exhibit obvious cultural resource features. These elements will be maintained and highlighted with interpretive signage to educate visitors about the region's unique heritage. Cultural resources include evidence of former home sites and agricultural practices.

### Nature Trails

A natural surface walking path network for pedestrian use will occupy other portions of the site. There are two types of unpaved trails: eight-foot wide (mostly existing routes that follow former road beds); and six-foot wide natural surface footpaths that connect into the more remote areas of the park land. Footbridges are part of the trail system where needed to traverse swales and tributary streams. Nature trails are recommended to have a maximum slope of eight percent.

## 4.3 Wildlife Viewing Area/Meadow Establishment

Meadow establishment is recommended for several areas where pine beetle damage has devastated mature stands of trees. These areas have also undergone geotechnical testing for grading purposes and land sculpting. The meadows will provide a grazing area for wildlife and viewing opportunities from the multi-purpose and nature trail systems. Wherever possible healthy trees should be retained and meadow edges should be planted with clusters of native shrubs to provide cover for

birds and other wildlife. Meadow seed species should include a mix of native grasses plus perennial wildflowers such as butterfly weed, showy primrose, and black-eyed susan, all of which can withstand occasional mowing.

#### **4.4 Structures**

A number of structures will be included with the park plan. These elements are necessary to provide temporary shelter, restroom facilities and park information.

##### **4.4.1 Pavilions/Shelters**

A sixty-foot diameter structure is proposed for the primary amenity area on Johnson Road. The pavilion will be supported on a concrete pad and contain picnic tables, outdoor grills and security lighting. This facility would be available to the public when there are no rental reservations.

Smaller shelters with approximately 400 SF are associated with age-appropriate amenity areas. Three shelters are located on the park site: one at the teen amenity area; one at the senior amenity area; and one near the galaxy structure in the meadow adjacent to the teen area.

A linear metal frame canvas-covered shade structure is slated for the walkway surrounding the play area. The walkway will contain benches on concrete pads and the canvas structure will allow mothers to sit in the shade and be able to monitor their children from the edge of the playground.

##### **4.4.2 Kiosks**

Orientation kiosks will be placed at both parking areas. These custom kiosks will have at least two sides containing interpretive and orientation information. Park rules, bulletins and trail maps with measured trail loops can also be posted on these kiosks.

##### **4.4.3 Restrooms**

Restrooms will be associated with both amenity areas in the park. The county standard restroom facility of an approximate 600 SF building is specified for these locations. There will be one restroom building near the large pavilion at the lower level amenity area and one at the upper amenity area. Restroom facilities will also contain drinking fountains.

#### **4.5 Utilities and Lighting**

There are currently no utilities on site for park use. The addition of utility service to the park will include water, sanitary sewer and electricity. All utilities will be brought in from locations on Johnson Road and should be buried underground. In order to curtail after hours use, it was determined that the park will not be lighted.

#### **4.6 Furnishings**

Benches shall be placed at one quarter mile intervals along the twelve-foot wide multi-purpose trail. Additional benches will be located at the dog park, playground area, senior and teen areas. Adult swings shall be placed near the pavilion amenity area.

Picnic tables will be provided, including ten to twelve within the pavilion, and clusters of four to five in areas near the pavilion area. Grills will be associated with only the picnic tables closest to the pavilion area for maintenance purposes. Trash receptacles will be associated with all picnic areas and should be accessible by maintenance vehicles.

#### **4.7 Play Areas**

The purpose of the play areas is to provide outdoor recreational opportunities for children of all ages. Play areas assure a constant flow of responsible adults on site during daylight hours. The play areas may be partially enclosed by seatwalls to provide definition of space and to offer seating. Playground equipment will include play structures for both tots and older children and ancillary play equipment. The play areas will be adjacent to a minimum one-acre open lawn space and will include shade trees and some type of shade structure. The play areas should meet current Gwinnett County playground design standards. The play area adjacent to the teen activity area should contain teen appropriate play equipment such as swings and teen climbing equipment as well as shade trees.

#### **4.8 Skate Park**

Modern skate parks include elements commonly found in urban plazas as well as concrete ramped elements. Skate park features can be modular ramp and rail elements or poured in place concrete “bowl” ramps. A skate park designer should be consulted in selecting elements for the skate park. Phasing of the skate park could include the purchase of modular systems that get replaced with more permanent skate structures as funding becomes available.

#### **4.9 Dog Park**

A dog park is a fenced area in which dogs are allowed to run off-leash while being supervised by their owners. There are several community benefits to dog parks. Dog parks allow for socialization and exercise of dogs in a safe, fenced environment, provide an area for dogs to legally run off-leash, and alleviate illegal use by dogs of other park amenity areas. Dog parks also allow for socialization between dog owners (and non-owners) when they gather to watch their animals play.



The dog park should provide the following at a minimum:

- An enclosure of the entire area by a six-foot high chain link fence
- A double-gated entry area
- Shade trees and potable water
- Garbage cans plus a pooper-scooper station
- Benches
- ADA access
- Regular maintenance
- Areas of grass and areas of pea gravel
- At least three fenced zones within the perimeter fenced area for:
  - Large Dogs
  - Small Dogs
  - Dog Run – linear space

#### **4.10 Senior Area**

The Senior Area will support a variety of games and activity courts including: bocce, shuffleboard, horseshoes and permanent checkers/chess tables. The senior area will be ADA accessible and located in close proximity to the parking area, restroom facility and shelter structure.

#### **4.11 Signage**

A sign to identify arrival at the park will be strategically placed on Johnson Road. Signs for vehicular traffic within the park will be located at the parking lots and at the access point on Johnson Road. Trail signage will be placed at trailheads, at intersections of all trails and at intervals along longer stretches of trail, approximately every quarter mile (1,320 linear feet).

#### **4.12 Maintenance Area**

An approximate 12,000 SF maintenance compound is proposed for housing equipment related to park upkeep. The compound will consist of a gravel paved area surrounded by chain link fencing and should be accessible from the park access drive. This facility should be tucked behind existing vegetation and screened with new vegetation to ensure that it is not visible and detracting from the natural park setting.

#### **4.13 Site Management**

Basic maintenance of the park property will be handled by the Gwinnett County Department of Parks and Recreation.

##### **4.13.1 Landscape Management**

Landscape management will consist of regular mowing of open turf areas and the dog park and less frequent mowing of meadow areas.

Due to the natural woodland character of the site, only native plant species are recommended for planting associated with park development. Native plantings will help new development areas blend with the natural aesthetic of the site.

#### **4.13.2 Forest Management**

Forest management will consist of pruning or removing trees that obstruct trails, roadways and parking lots; threaten buildings and other structures; or interfere with any type of circulation activity. Diseased trees should be monitored and removed if the spread of disease cannot be controlled. All pines infested with pine beetle should be felled and/or destroyed and removed from the site. Efforts to preserve healthy trees will be a high priority in all areas, as well as preservation and restoration of the understory woodland shrub layer.



Understory Shrub Layer

## 5.0 Plan Development

As part of the planning process a number of options for arrangement of determined park elements were explored.

### 5.1 Alternate Development Concepts

Based on findings from inventory and analysis, three concept plans were developed by The Jaeger Company. A variety of options were explored, resulting in three feasible design solutions, which satisfied the project goals and objectives, but differed principally on the basis of locations of amenity areas, trails and access points to the site; and the extent of open space development. After the options were presented and reviewed by the committee, program elements were more clearly defined and a hybrid scheme based on two of the concepts was decided upon. This hybrid was the basis for development of the Preliminary Master Plan.

All three concept plans represent the same overall program development but differ in terms of trail routing and distances, amenity and parking area arrangement and the extent of open space development. Option One has consolidated parking located just off Johnson Road; Option Two offers two parking lots just off Johnson Road – an upper and a lower lot; and Option Three has a lot off Johnson Road and another off Settles Bridge Road. The following bulleted items are from an agenda for the presentation of the three concept plans and includes a list of items common to all three schemes, as well as lists of items unique to each option:

#### **Common to all Three Options:**

- Parking for 200 Vehicles
- Amenity/Pavilion Area
  - (1) 60' d. Pavilion
  - (1) 25' x 25' Restroom Facility
  - 7,000 SF Playground with Splash Element and Sandbox
  - Swings for Adults
- Teen Area
  - (1) 20' x 20' Shelter
  - (2) Half Court Basketball Courts
  - 10,000 SF Skate Park
- Senior Area
  - (1) 20' x 20' Shelter
  - Senior Game Courts
- Dog Park
- Open Space Meadows
- Trails w/ Footbridges
- Overlook on the River
- Benches

- Highlighted Cultural Sites
- 150' x 150' Maintenance Area

### **Option 1**

- 78,924 SF asphalt paved parking area
- 1 mile 6' wide concrete paved connector walks
- 0.7 miles 10-12' wide asphalt paved multi-use trails
- 4.6 miles 6'-8' wide nature trails
- 24.4 acres of open space meadows
  - 6.0 acres east
  - 18.4 acres west

### **Option 2**

- 95,181 SF asphalt paved parking area
  - 73,051 SF lower lot
  - 22,130 SF upper lot
- 55,727 SF asphalt roadway
- 0.5 miles 6' wide concrete paved connector walks
- 2.5 miles 10-12' wide asphalt paved multi-use trails
- 3.1 miles 6'-8' wide nature trails
- 21.4 acres of open space meadows
  - 4.1 acres east
  - 17.3 acres west
- Multi-use trail access off Settles Bridge Road

### **Option 3**

- 81,799 SF asphalt paved parking area
  - 38,212 east lot
  - 43,587 west Lot
- 18,522 SF asphalt roadway
- 0.4 miles 6' wide concrete paved connector walks
- 2.4 miles 10-12' wide asphalt paved multi-use trails
- 3.6 miles 6'-8' wide nature trails
- 23.2 acres of open space meadows
  - 5.7 acres east
  - 16.0 acres west
  - 1.5 acres north
- Suspension bridge
- Vehicular access off Settles Bridge Road

The meeting minutes summarized the presented information and feedback from committee members (see *Appendix B*). The following comments and suggestions resulted from this meeting:

1. Most committee members preferred the split arrangement of parking and amenity areas in Option 2 (*Illustrations K & L*).
2. Also preferred were the extensive trail network and the introduction of a suspension bridge as part of the multi-use trail system in Option 3 (*Illustrations M & N*).
3. Several committee members felt there should be clear separation between:
  - a. Teen Area & Playground
  - b. Playground and Parking
  - c. Dog Park & other Amenity Areas
4. The issue of security and how the park would be lighted (or not lighted) were discussed.

Based on these comments, the following is a list of what will be incorporated in the Preliminary Master Plan:

1. Provide a single vehicular entrance point off Johnson Road.
2. Provide two parking lots off Johnson Road with a majority of the parking in the lot closest to Johnson Road.
3. Flip the arrangement of the playground and teen area to locate the playground furthest from the park entrance for safety reasons.
4. Provide an acre of lawn space adjacent to the playground.
5. Maintain as many existing trees as possible.
6. Provide a shelter near the main pavilion area that is not rentable.
7. Provide a shade structure at the playground.
8. Add a deceleration lane along Johnson Road and a 6' wide sidewalk that parallels the road for the entire length of the park frontage.

## **5.2 Preliminary Master Plan (11.16.04) (*Illustrations O – Q*)**

The Preliminary Master Plan and Grading Concept were presented. The plan incorporated elements from the previously presented options and introduced new elements that were based on input from the staff. Overall the plan was very well received. A Preliminary Cost Estimate was distributed and costs were discussed in general terms. The meeting minutes provide more details about items discussed (see *Appendix B*). The following is a bulleted summary of the Steering Committee input:

1. There was a question about how the plan implementation will be prioritized.
2. A committee member wanted to know how the site history/cultural sites would be incorporated into the park plan.

3. The name of the park is still being decided, therefore it will be called: "The Settles Bridge Park Site" until further notice.
4. Trail types and distances will need to be further developed to provide loops of varying distances and to offer a variety of experiences.
5. Other suggested refinements to the plan include:
  - a. Group the pavilion and play area closer together
  - b. Provide a shade structure in the play area
  - c. Divide the play area between younger and older children
  - d. Indicate an appropriate location for a maintenance yard
  - e. Add adult swings
  - f. Look for other potential points of site access - through the elementary school property
  - g. Investigate possible sanitary sewer tie in connections from off-site manholes
  - h. Explore the possibility of an on-site residence for a park security officer

### **5.3 Master Plan (12.08.04) (*Illustrations R – T*)**

The Final Master Plan with revised grading and Cost Estimate were presented. The Final Master Plan did not change that much from the Preliminary Master Plan, but was refined by rearranging some of the elements in the amenity areas. A few items requested for inclusion at the last meeting, such as a designated maintenance area, were added to the drawing. Alignment of the road and portions of the trails were adjusted in order to minimize the steepness of grade.

A trail lengths map with color-coded loops of varying trail distances was also prepared and displayed at the presentation. This map was developed to illustrate potential trail route options of varying distances within the overall trail system.

The committee was reminded of the projected budget for Phase One Construction and then engaged in a prioritization exercise led by Rex Schuder. For a complete list of prioritized items (see *Appendix C*). The following is an ordered list of items that were voted in as part of the Phase One Construction:

1. Trails - a balance of paved and unpaved
2. Restroom Building – to be supported by Phase One utility infrastructure
3. Pavilion Area/Playground – plus site access and parking lot off Johnson Road
4. Teen Area – minus the Skate Park\*
5. Dog Park

\*This item will be designed in Phase One, but bid as an alternate for construction.

## **6.0 Cost Estimate and Phasing**

Upon completion of the Master Plan a Cost Estimate was prepared. Prices of materials reflect current market rates and include installation fees (see *Table 2*).

### **6.1 Development Budget Summary**

Using the Master Plan Cost Estimate as a reference, Phase One Construction will include the following:

#### **6.1.1 Parking and Roads**

Construction of the Johnson Road Amenity Area Parking and Roads includes: a 200' deceleration lane on Johnson Road, the asphalt entry drive segment into the lower parking lot, the asphalt parking aisles and 150 delineated pervious parking spaces. There will also be striped crosswalk zones where pedestrians can safely traverse the parking bays to get to and from the park. Removable bollards are recommended for the intersection of the asphalt entry drive and the twelve-foot wide asphalt trail, to prevent vehicles from advancing into the park site. If needed, maintenance and emergency vehicles will be allowed access at this point by removing the bollards.

#### **6.1.2 Paved Multi-Use Trails**

Approximately half of the proposed twelve-foot wide paved multi-use trail, with some adjustments around the Dog Park, will be constructed in Phase One. Also in Phase One, the access road to the future upper parking lot will be constructed as a section of the multi-use trail and will form a portion of an approximate one-mile trail loop that originates at the kiosk adjacent to the Johnson Road parking lot. In future phases of development, this portion of multi-use trail will become a continuation of the access road connecting to a future parking lot at the top of the hill.

Eliminated from this phase of work is the portion of multi-use trail that circulates around the Western Meadow space and connects that space to Settles Bridge Road. This leaves a linear segment of trail terminating at the footbridge on the western side of the park land and bottom of a large hill. In order to create a destination at this terminus, the trail will form a loop just before the footbridge, creating a small pull-off space. This space will include approximately 20 linear feet of seatwall built into the high side of the slope parallel to the stream, offering a place off the main trail to rest and enjoy the scenery before ascending back up the hill to the amenity area.

#### **6.1.3 Unpaved Nature Trails**

All unpaved nature trails of six and eight feet widths will be constructed in the 217-acre parcel. The proposed connector trail to and trail loops within the 51-acre parcel will not be developed in this phase of work.



#### **6.1.4 Pavilion Area and Playground**

The pavilion and playground area includes an approximate 0.4-acre playground, a 1.0-acre lawn area and a playground shade structure. Other structures include a 60-foot diameter pavilion and a 625 SF restroom building. The pavilion and immediate surrounding area will support picnic tables and outdoor grills, the restroom facility will support a drinking fountain. Site furnishings in these areas will include benches and trash receptacles on concrete pads. Service for water, sewer and electricity will be required for the restroom and for irrigation of the lawn area.

Included at the staff's request is a decorative wrought iron fence with rustic stone piers to provide separation from the park property along Johnson Road. The fence will have points of penetration along the frontage where sidewalks are perpendicular to the road and will offer access into the park. Also included is a 6-foot wide concrete sidewalk extending across the park property frontage on Johnson Road which connects to the walks leading through the parking lot and ultimately into the park trail network.

#### **6.1.5 Teen Area**

The Teen Area will be constructed as specified except for the skate park, which will be designed with Phase One but bid as an alternate for construction. This is due to the anticipated cost of the skate park being the most expensive item for Teen Area development. The portion of the Teen Area within the meadow is to include a shelter, a large galaxy structure and a swing set.

#### **6.1.6 Dog Park**

The Dog Park was the only portion of the upper amenity area voted for inclusion with Phase One Construction. Due to the fairly level topography at the top of the hill and in order to minimize the amount of earthwork, it was determined that the Dog Park should occupy the area slated for the upper parking lot. When other portions of this area are ready to be constructed, the Dog Park can shift to its originally intended location. Therefore some adjustments to the layout and grading plans were necessary. The Dog Park will be accessible by pedestrian modes of travel only in this phase, eliminating the need to construct the paved access road and parking lot. Water service for irrigation of the lawn and to provide potable water for pets and their owners will be included with this phase of work. It is to be designed and bid as an alternate.

#### **6.1.7 Miscellaneous Park Development**

A number of site preparation efforts need to take place before the park elements can be realized: trash removal; clearing and grubbing (including felling of dead pine trees); earthwork/grading; erosion

control; and storm water management. Initial development should include some signage: a park entry sign to announce arrival at the site; two traffic signs (stop signs for exiting the parking lot and for exiting the park site); and one kiosk to display site information and orientation maps with trail loops.

The following is a prioritized list of additional items to include in the Phase One Budget (if bids are below budget):

1. Trail development to and within the 51-acre parcel, including the overlook on the river.
2. Senior Amenity Area
3. Western Meadow

A Cost Summary follows. A Detailed Cost Estimate is included at the back of this report, see *Appendix F*.

**SETTLES BRIDGE PARK SITE**

*The Jaeger Company*

**FINAL MASTER PLAN COST ESTIMATE 12.08.05**

**COST SUMMARY**

<b>Item</b>	<b>Total</b>
<b>Park Development</b>	\$407,610
<i>Clearing &amp; Grubbing, Erosion Control, Storm Water Management, Maintenance Area</i>	
<b>Parking &amp; Roads</b>	\$492,450
<i>Grading, Paving, Striping, Decel Lane, Traffic Signs</i>	
<b>Pavilion &amp; Playground Area</b>	\$1,033,725
<i>Site Work, Utilities, Pavilion, Restroom, Playground, Shade Structure, Site Furnishings</i>	
<b>Teen Area</b>	\$405,975
<i>Site Work, Utilities, Shelters, Play Structures, Courts, Site Furnishings</i>	
<b>Senior Area</b>	\$548,850
<i>Site Work, Utilities, Associated Structures, Courts, Site Furnishings</i>	
<b>Dog Park</b>	\$177,500
<i>Site Work, Fencing, Site Furnishings</i>	
<b>West Meadow</b>	\$661,650
<i>Site Work, Multi-Use Trail, Site Furnishings</i>	
<b>Trails &amp; Associated Structures</b>	\$1,369,500
<i>Site Work, Suspension &amp; Footbridges, Overlook, Signage</i>	
<b>Total</b>	<b>\$5,097,260</b>
<b>Contingencies, Design Fees, Etc.</b>	<b>\$2,054,196</b>
<b>Grand Total</b>	<b>\$7,151,456</b>

**COST SUMMARY - PHASE ONE CONSTRUCTION**

**Total Budget \$2,400,000**

*(Based on Steering Committee Recommendations)*

<b>Item</b>	<b>Total</b>
<b>Site Work &amp; Storm Water Management</b> <i>(half of total, excluding the Dog Park)</i>	\$230,250
<b>Johnson Road Parking Lot (150 spaces) &amp; 200' Decel Lane</b>	\$200,845
<b>Trail Development (on portion of 217-Acre Parcel)</b>	\$646,985
<i>Loop A, Loop B, Loop D - Multi-Use, Connector G - Multi-Use, + 20 LF of seatwall</i>	
<b>Pavilion &amp; Playground</b> <i>(minus the Splash Element)</i>	\$979,125
<b>Teen Area</b> <i>(minus Skate Park - design only this phase)</i>	\$225,975
<b>Dog Park</b> <i>(includes site work, water line &amp; irrigation) - potential alternate</i>	\$291,500
<b>Signage</b>	\$10,400
<i>Park Entry, Traffic</i>	
<b>Miscellaneous</b>	\$200,000
<i>Contingencies, Mobilization</i>	
<b>Total Cost</b>	<b>\$2,785,080</b>

Table 2: Final Master Plan Cost Summary with Phase One Construction Budget.

# Illustrations





119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507

This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.



SETTLES BRIDGE  
PARK SITE  
GWINNETT COUNTY, GEORGIA

Date: **12.06.04**

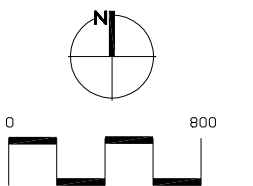
Revisions: \_\_\_\_\_

ProjectNo.: **04037**

Scale: **1" = 800' - 0"**

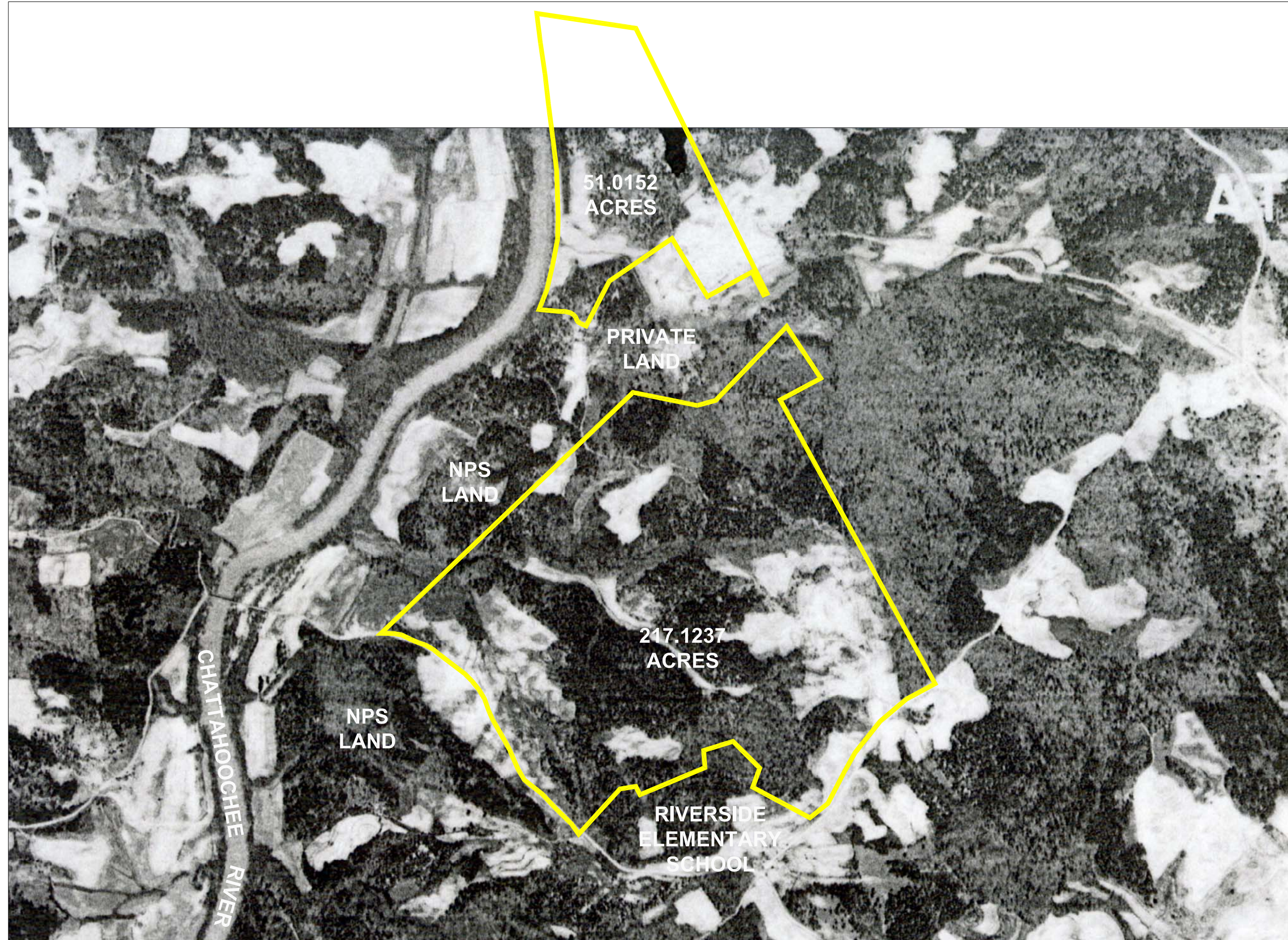
Drawn: **LR**

Checked: **AW**



AERIAL VIEW  
1938

ILLUSTRATION 1







119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507

This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.



SETTLES BRIDGE  
PARK SITE  
GWINNETT COUNTY, GEORGIA

Date: **12.08.04**

Revisions: \_\_\_\_\_

ProjectNo.: **04037**

Scale: **1" = 800' - 0"**

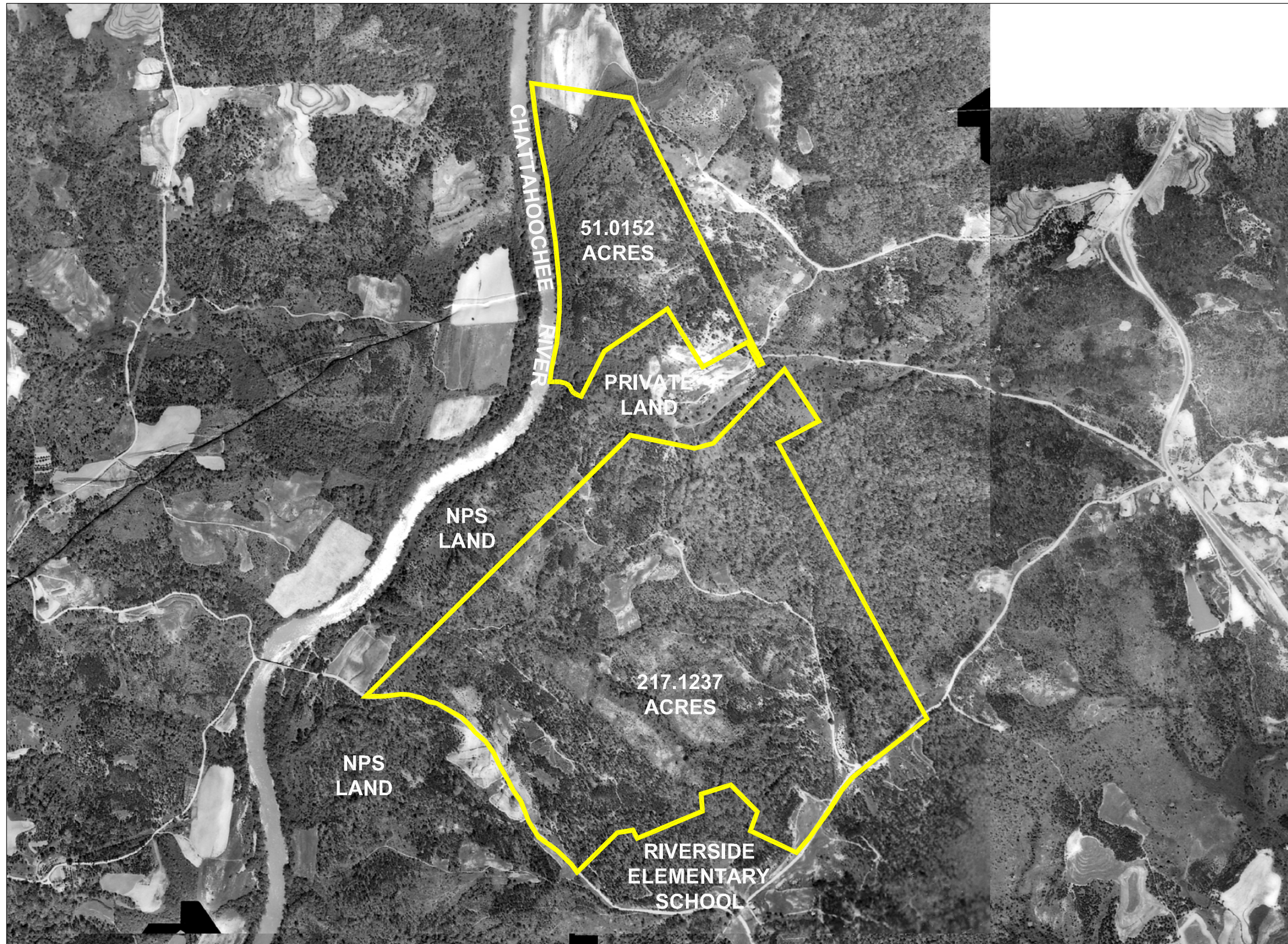
Drawn: **LR**

Checked: **AW**

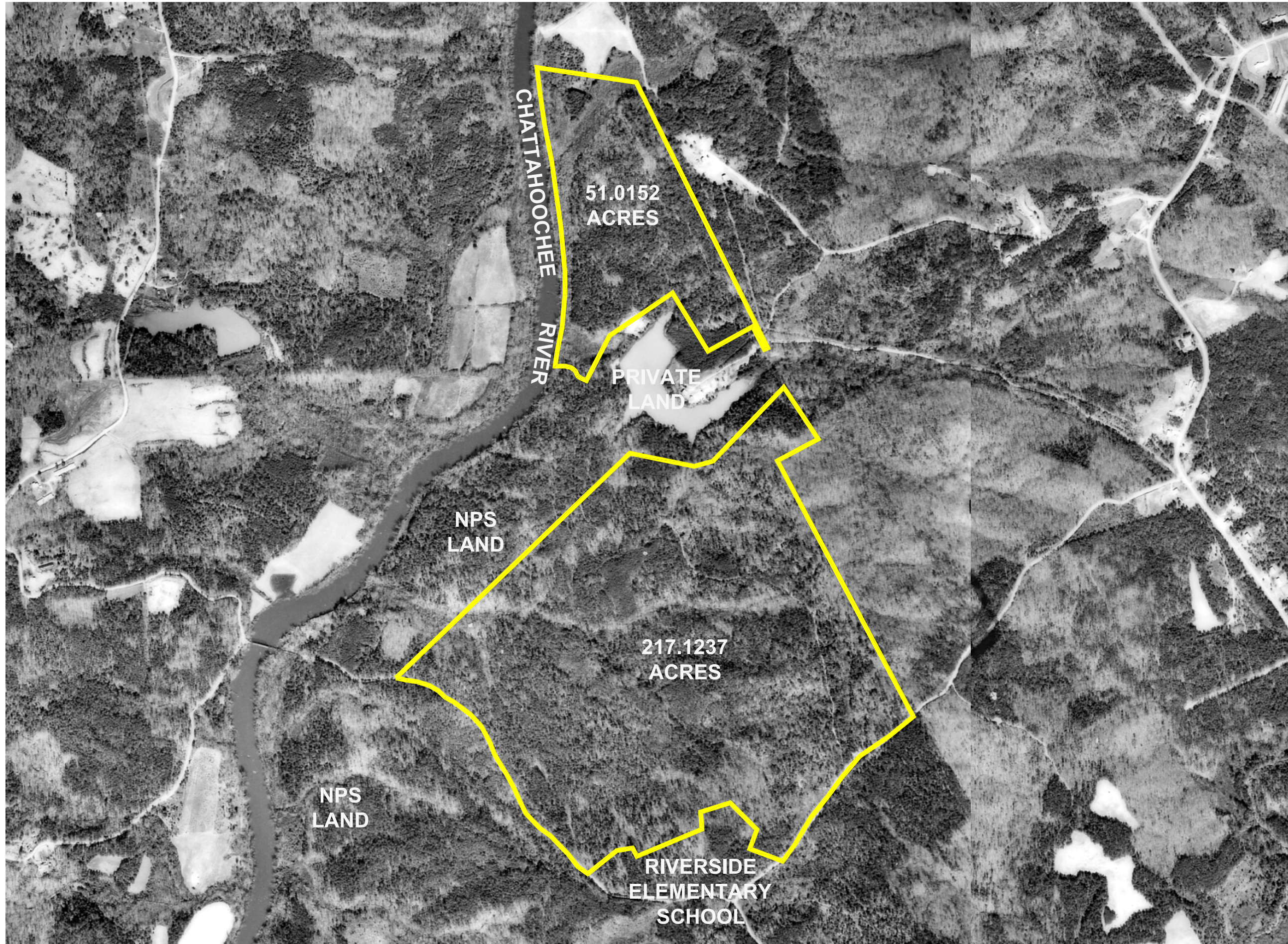


AERIAL VIEW  
1955

ILLUSTRATION 2







119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507

This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.



## SETTLES BRIDGE PARK SITE

GWINNETT COUNTY, GEORGIA

Date: 12.08.04

Revisions: \_\_\_\_\_

\_\_\_\_\_

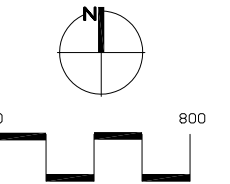
\_\_\_\_\_

Project No.: 04037

Scale: 1" = 800' - 0"

Drawn: LR

Checked: AW



AERIAL VIEW  
1972

ILLUSTRATION 3



THE  
JAEGER  
COMPANY

119 Washington Street, Gainesville, GA 30501  
770/534-0508 FAX: 770/534-0507

This drawing and all reproductions are  
copyrighted and property of the Landscape  
Architect and Planner and may not be  
published, reproduced, or used in any way  
without permission.



SETTLES BRIDGE  
PARK SITE

GWINNETT COUNTY, GEORGIA

Date: 12.08.04

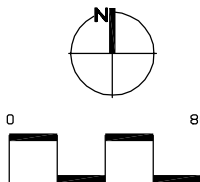
Revisions: \_\_\_\_\_

ProjectNo.: 04037

Scale: 1" = 800' - 0"

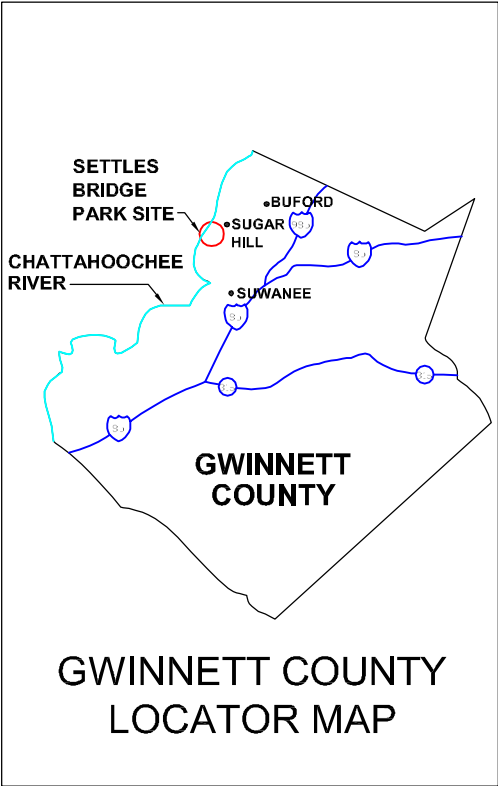
Drawn: LR

Checked: AW

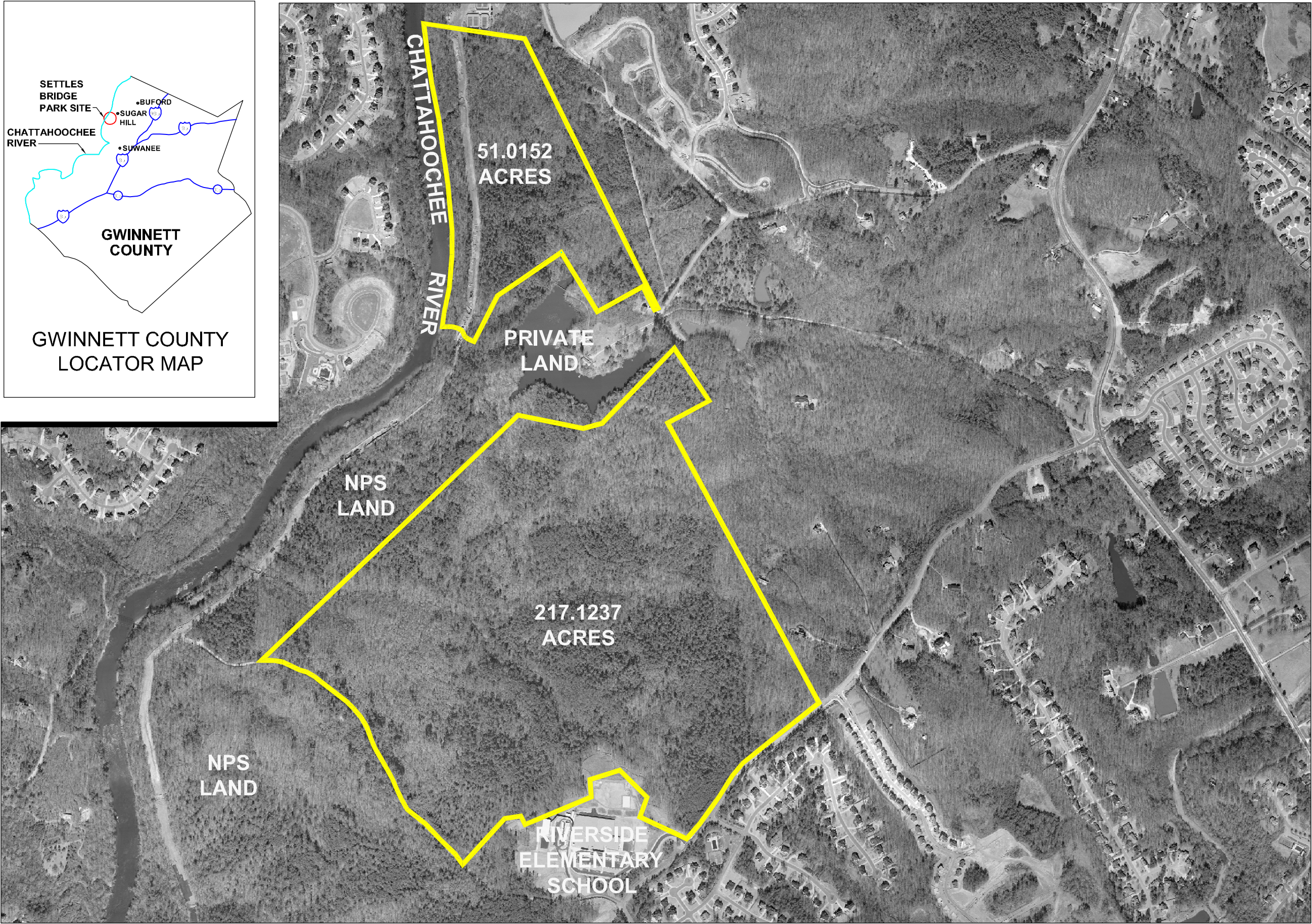


AERIAL VIEW  
2000

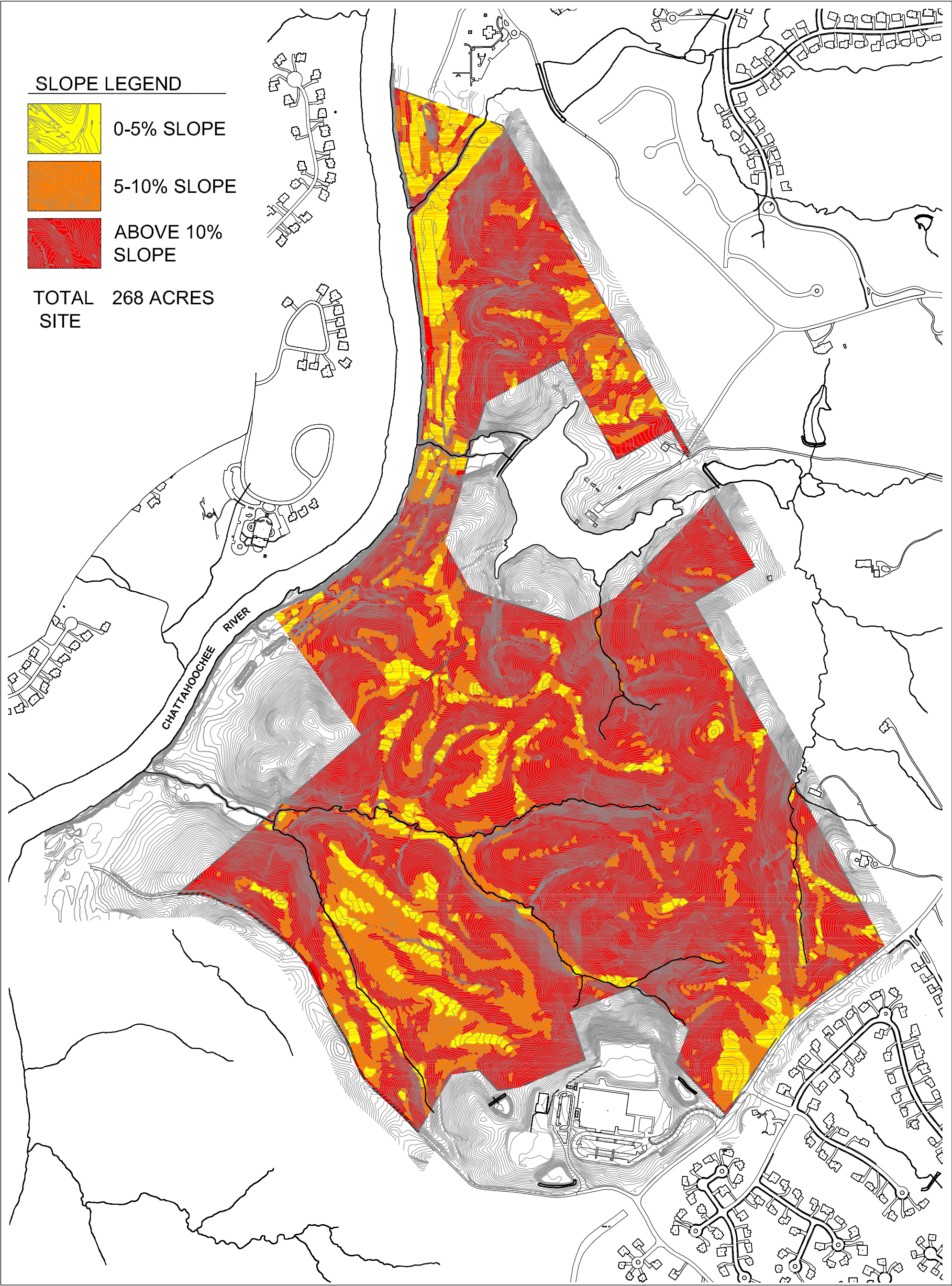
ILLUSTRATION 4



GWINNETT COUNTY  
LOCATOR MAP







Landscape Architecture • Historic Preservation • Planning



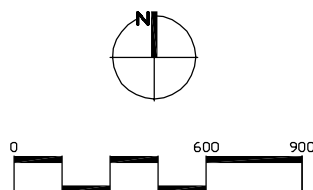
119 Washington Street, Gainesville, GA 30601  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**  
Revisions: \_\_\_\_\_  
Project No.: **04037**  
Scale: **1" = 600' - 0"**  
Drawn: **LR**  
Checked: **AW**

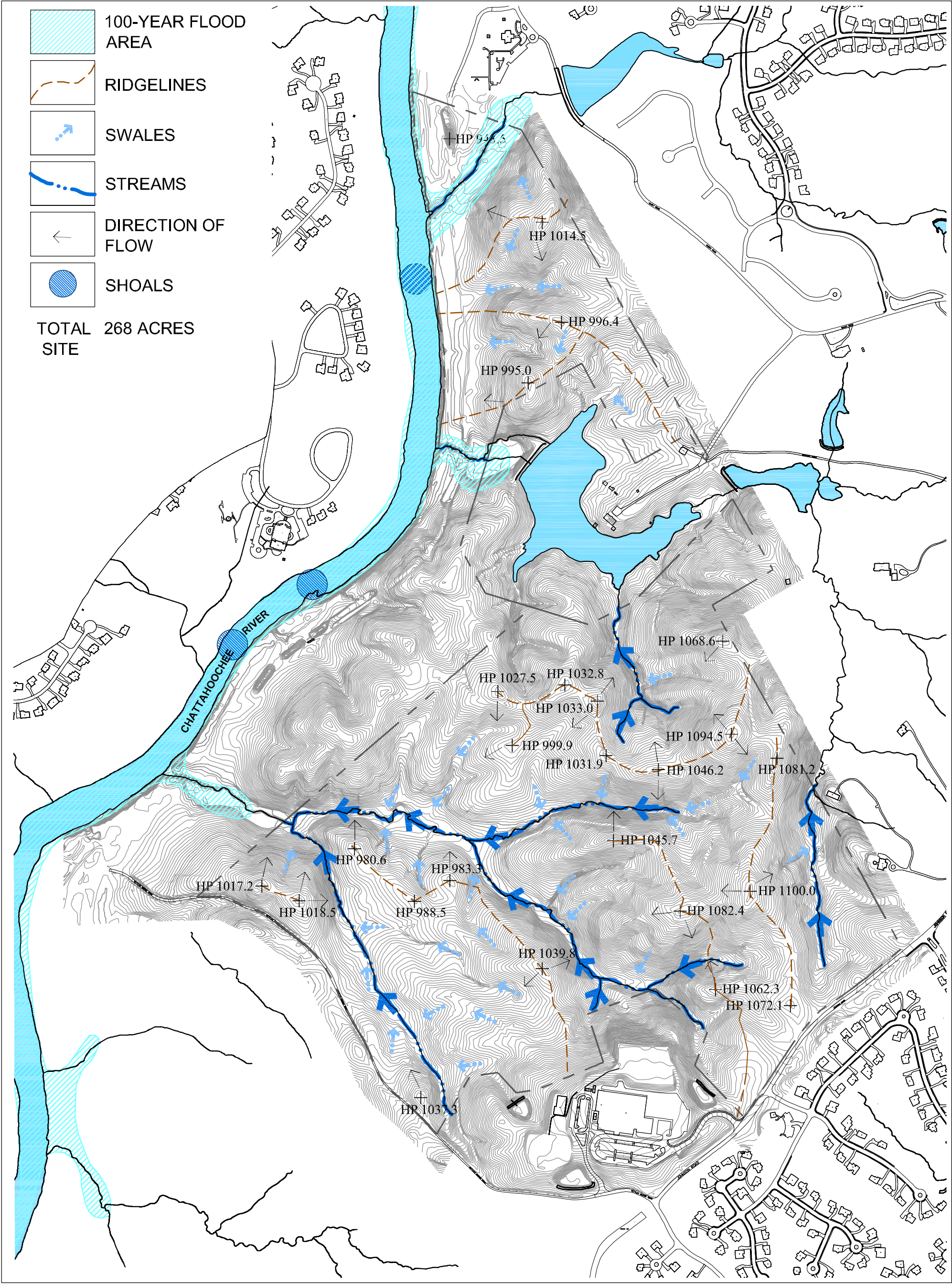
**SETTLES BRIDGE  
PARK SITE**  
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



**SLOPE  
ANALYSIS**

ILLUSTRATION  
A







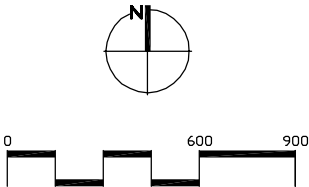
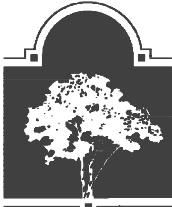


SOIL LIMITATIONS

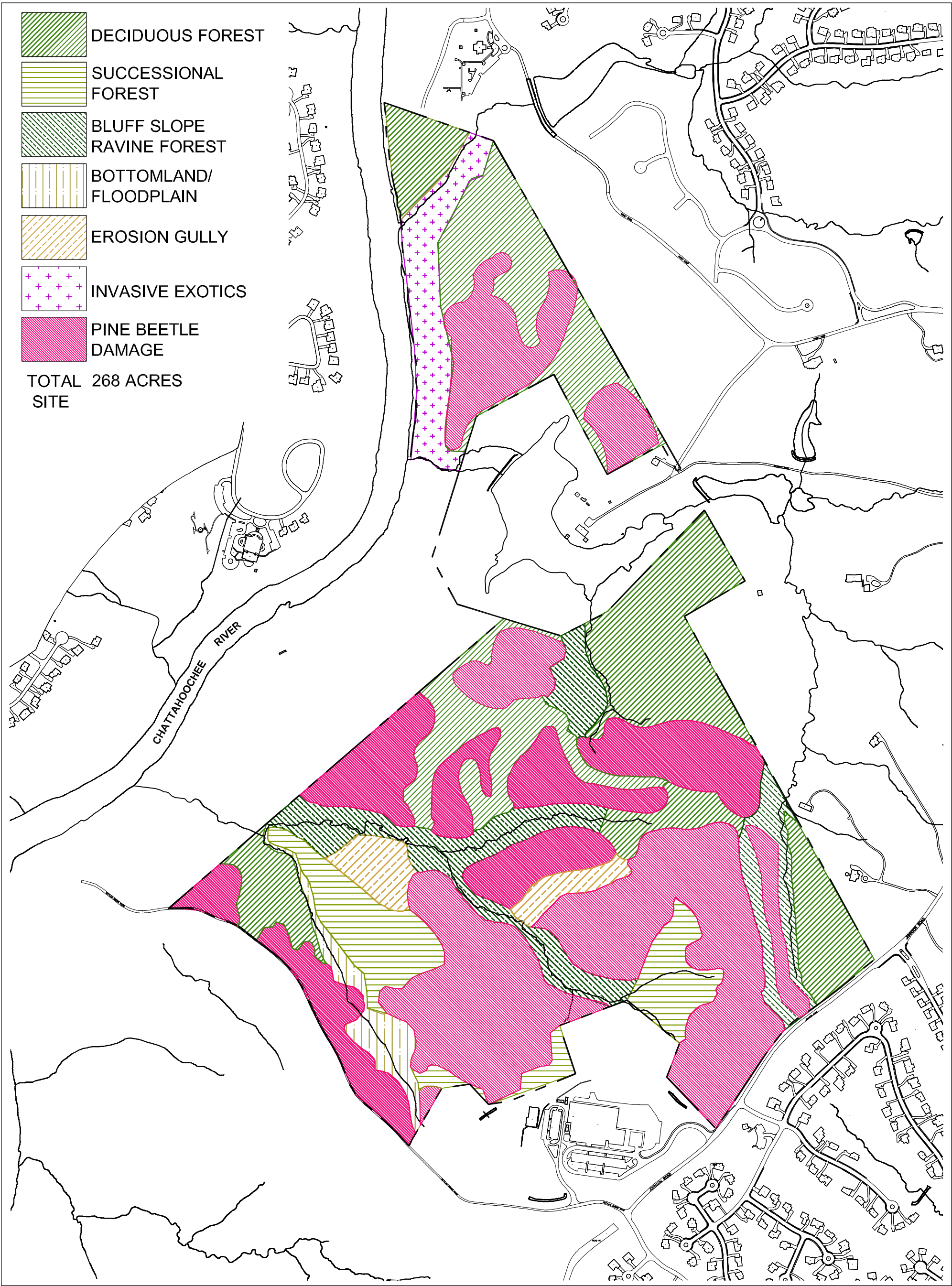
				Limitations for	Limitations for
Soil Key	Soil Type	Slope	Erosion	building structures	paths and trails
		%			
AmB2	Appling sandy loam	2-6	eroded	slight	slight
AmC2	Appling sandy loam	6-10	eroded	slight	slight
Bfs	Buncombe loamy fine sand	0-2		severe	slight
Cfs	Chewacla	0-2	flooded	severe	severe
CnG	Congaree	0-2		severe	moderate
CoS	Congaree	0-2	flooded	severe	moderate
CuS	Congaree loam	0-2	flooded	severe	moderate
CyD2	Cecil sandy loam	10-15	eroded	moderate	slight
GuL	Gullied land	10-25		severe	moderate
LDF	Louisberg stony loamy sand	15-45		severe	moderate
LkD	Louisa gravelly sandy loam	6-15		moderate	slight
LkF	Louisa gravelly sandy loam	15-45		severe	moderate
LnE	Louisberg loamy sand	10-25		severe	moderate
MhC2	Madison gravelly sandy loam	6-10	eroded	slight	slight
MiB2	Madison sandy clay loam	2-6	eroded	slight	moderate
MiC2	Madison sandy clay loam	6-10	eroded	slight	moderate
MiD2	Madison sandy clay loam	10-15	eroded	moderate	moderate
MiF2	Madison sandy clay loam	10-45	eroded	severe	moderate
PfC2	Pacolet sandy loam	6-10	eroded	slight	slight
PgC2	Pacolet sandy clay loam	6-10	eroded	slight	moderate
PgD2	Pacolet sandy clay loam	10-15	eroded	moderate	moderate
PgE2	Pacolet sandy clay loam	15-25	eroded	moderate	moderate
Pif	Pacolet cobbly sandy loam	15-45		severe	moderate
WgB2	Wickham sandy loam	2-6	eroded	slight	slight
WgC2	Wickham sandy loam	6-10	eroded	slight	slight

ESTIMATED SOIL PROPERTIES

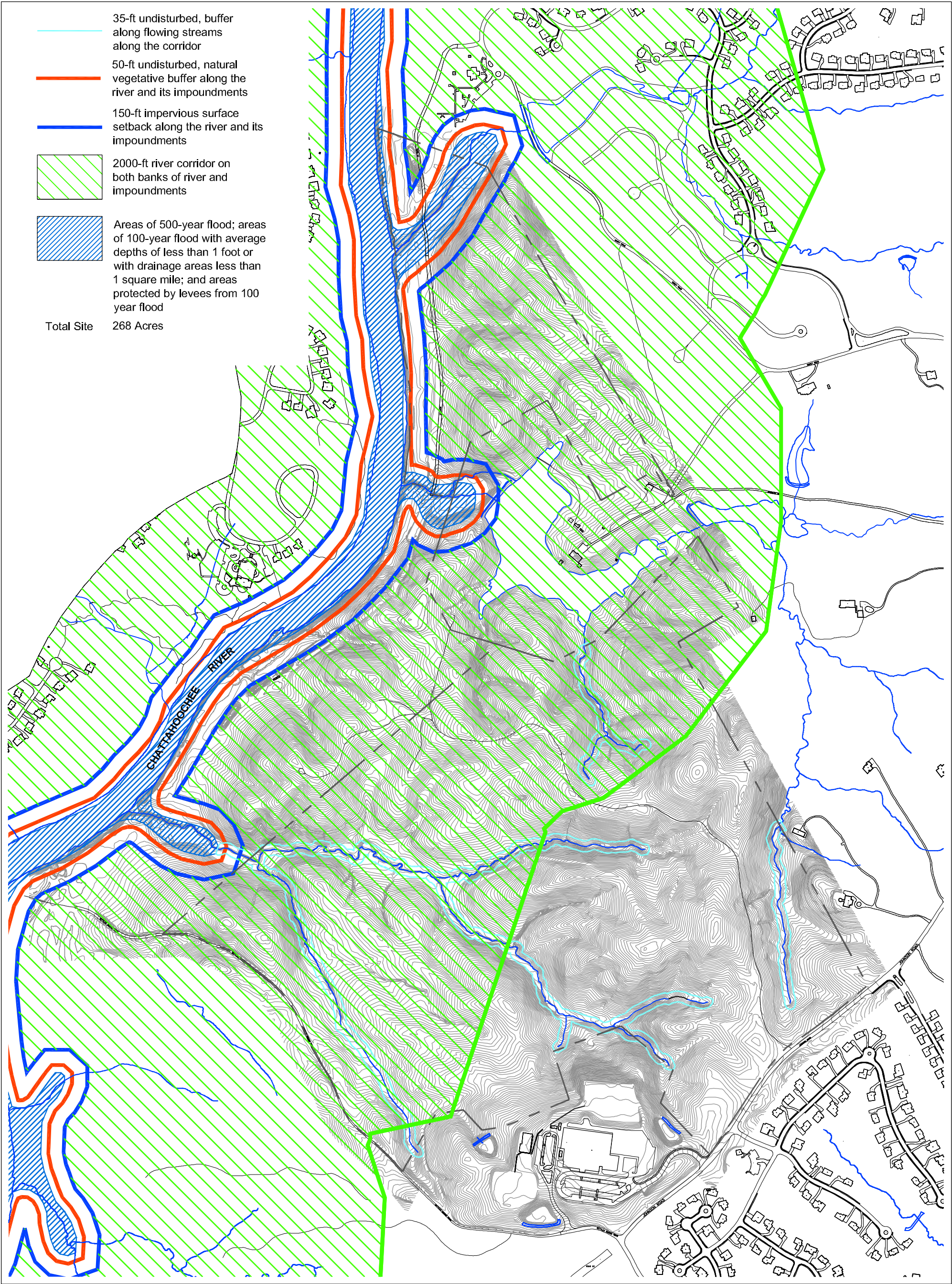
Soil Name	Depth to hard rock	Depth to seasonally high water table	Depth from surface	USDA Texture	Reaction	Shrink-swell potential
	(ft)	(In)	(In)		(pH)	
Appling	>8	>50	0-10	Fine sandy loam	4.5-5.0	Low
			10-24	Sandy clay loam	4.5-5.0	Moderate
			24-42	Sandy clay	4.5-5.0	Moderate
Buncombe	>6	>60	0-12	Loamy fine sand	4.5-5.0	Low
			12-74	Loamy fine sand	4.5-5.0	Low
Cecil	>10	>60	0-8	Sandy loam	5.1-5.5	Low
			8-34	Sandy clay	4.5-5.5	Moderate
			34-52	Clay loam	4.5-5.5	Moderate
			52-56	Sandy loam	4.5-5.5	Low
Chewacla	>10	0-24	0-6	Silt loam	4.5-5.0	Low
			6-28	Silty clay loam	4.5-5.0	Moderate
			28-42	Silt loam	4.5-5.0	Low
Congaree	>10	36-40	0-8	Silt loam	5.1-5.5	Low
			8-40	Fine sandy loam	5.1-5.5	Low
			40-52	sandy clay loam	5.1-5.5	Moderate
Gullied*						
Louisa	>5	>60	0-6	Gravelly sandy loam	4.5-5.0	Low
			6-52	Gravelly sandy clay loam	4.5-5.0	Low
Louisburg	1.5-4	>60	0-6	Loamy sand	5.1-5.5	Low
			6-13	Sandy loam	5.1-5.5	Low
			13-29	Weathered rock		
			29	Granite and gneiss		
Madison	>10	>60	0-6	Gravelly sandy loam	5.1-5.5	Low
			6-10	Clay loam	5.1-5.5	Moderate
			10-23	Sandy clay	5.1-5.5	Moderate
			23-29	Sandy clay loam	5.1-5.5	Low
			29-90	Weathered mica schist		
Pacolet	>6	>60	0-8	Sandy loam	5.1-5.5	Low
			8-26	Clay	5.1-5.5	Moderate
			26-34	Sandy clay loam	5.1-5.5	Moderate
			34-48	Sandy loam	5.1-5.5	Low
Wickham	>10	35	0-7	Sandy loam	4.5-5.0	Low
			7-21	Clay loam	4.5-5.0	Moderate
			21-62	Clay loam to clay	4.5-5.5	Moderate
*-Too variable to be rated.						











Landscape Architecture · Historic Preservation · Planning



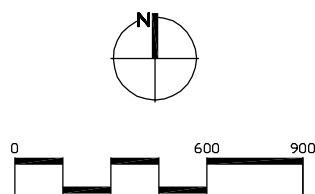
119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**  
Revisions: \_\_\_\_\_  
Project No.: **04037**  
Scale: **1" = 600' - 0"**  
Drawn: **LR**  
Checked: **AW**

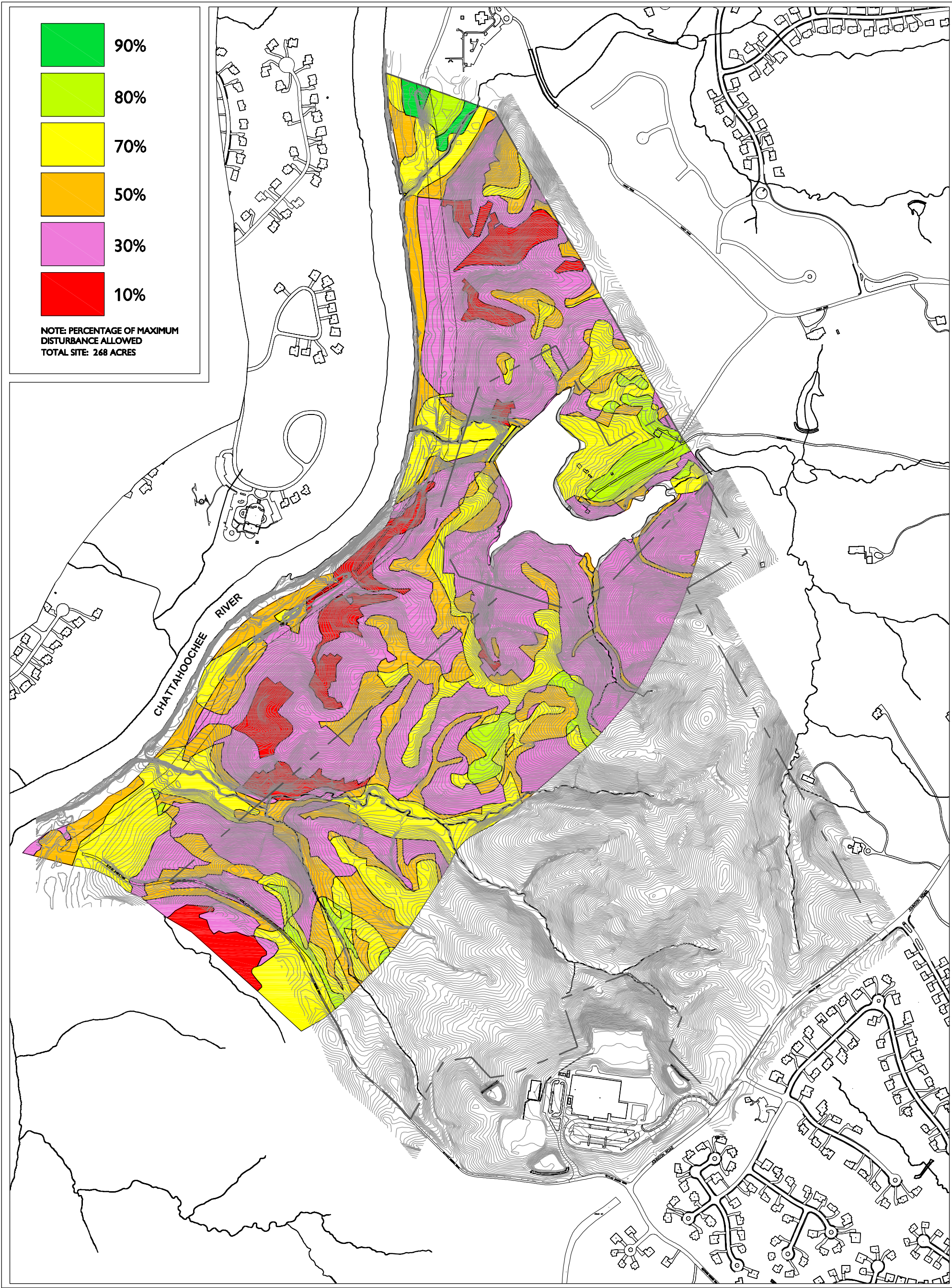
**SETTLES BRIDGE  
PARK SITE**  
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



**CHATTAHOOCHEE  
RIVER  
CORRIDOR**

ILLUSTRATION  
F





Landscape Architecture · Historic Preservation · Planning



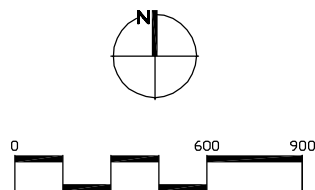
119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**  
Revisions:  
Project No.: **04037**  
Scale: **1" = 600' - 0"**  
Drawn: **LR**  
Checked: **AW**

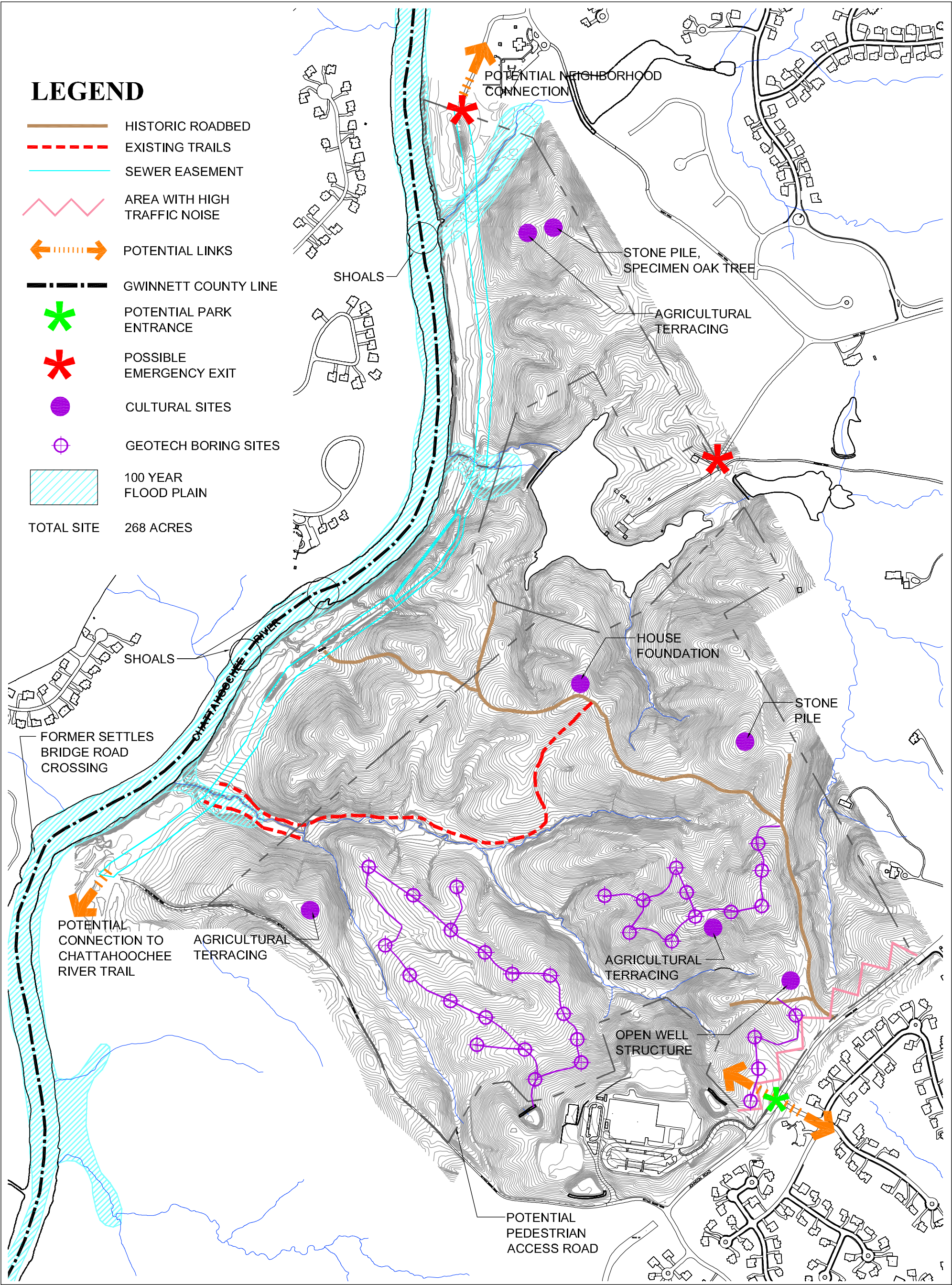
**SETTLES BRIDGE  
PARK SITE**  
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



**VULNERABILITY  
CATEGORIES**

ILLUSTRATION  
G

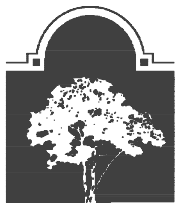




Landscape Architecture - Historic Preservation - Planning



119 Washington Street, Gainesville, GA 30601  
770/534-0506 FAX: 770/534-0507

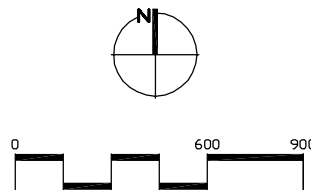


This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**  
Revisions:  
Project No.: **04037**  
Scale: **1" = 600' - 0"**  
Drawn: **LR**  
Checked: **AW**

## SETTLES BRIDGE PARK SITE

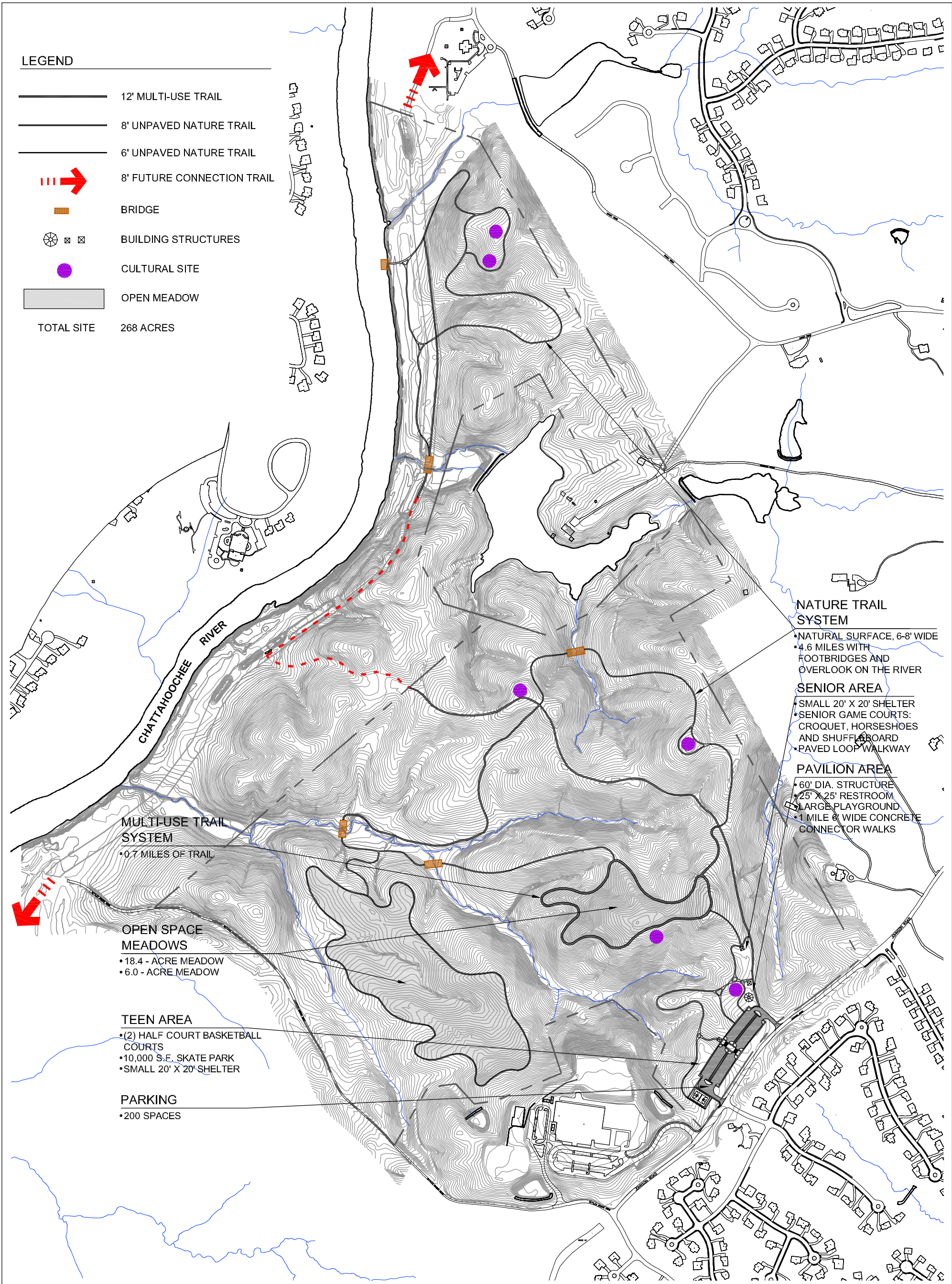
GWINNETT COUNTY DEPARTMENT OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



## CULTURAL FEATURES

ILLUSTRATION H





Landscape Architecture • Historic Preservation • Planning



119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**

Revisions:

Project No.: **04037**

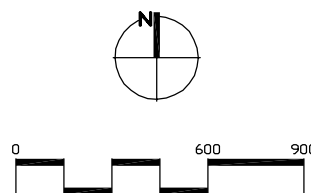
Scale: **1" = 600' - 0"**

Drawn: **LR**

Checked: **AW**

## SETTLES BRIDGE PARK SITE

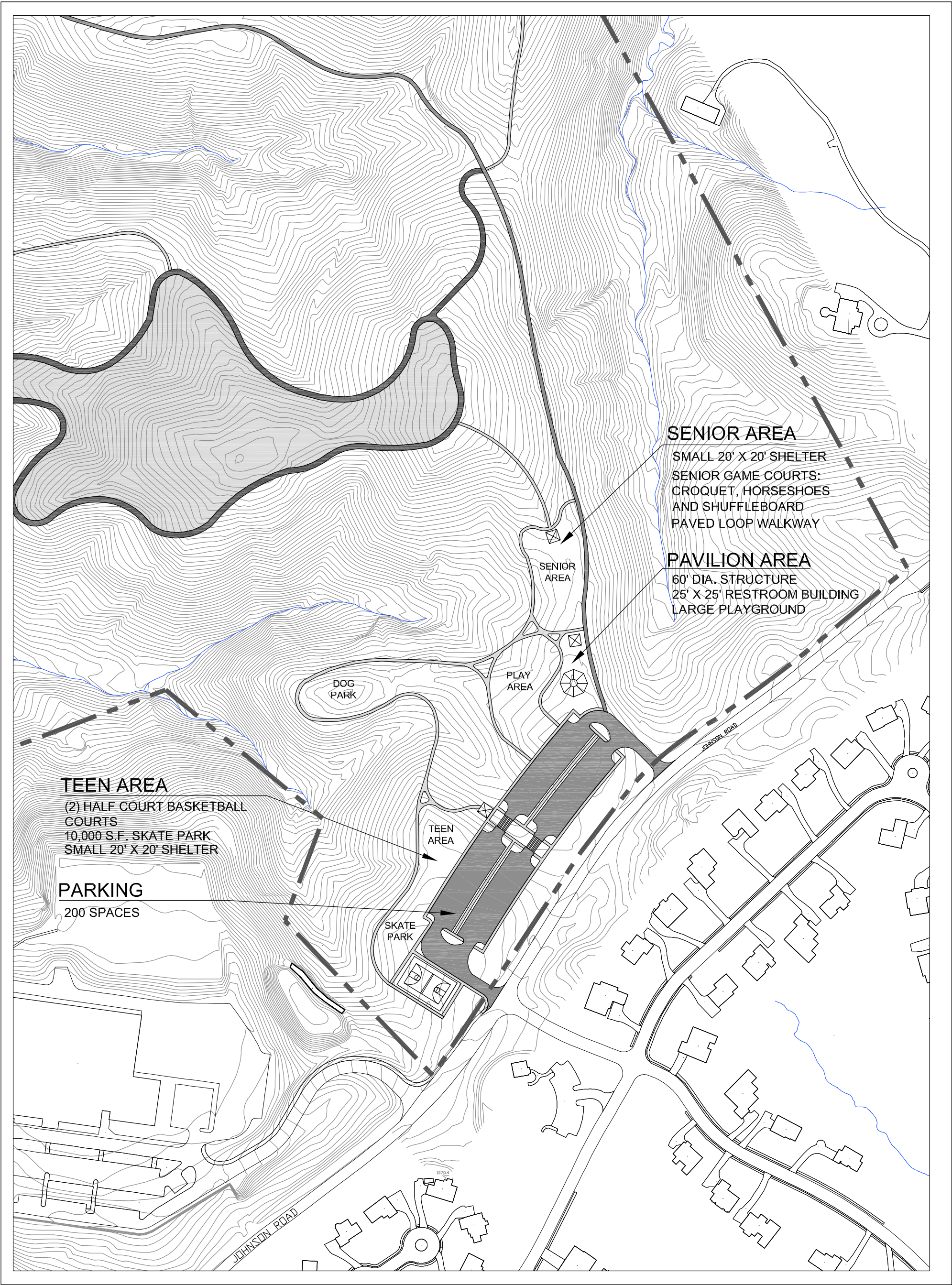
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



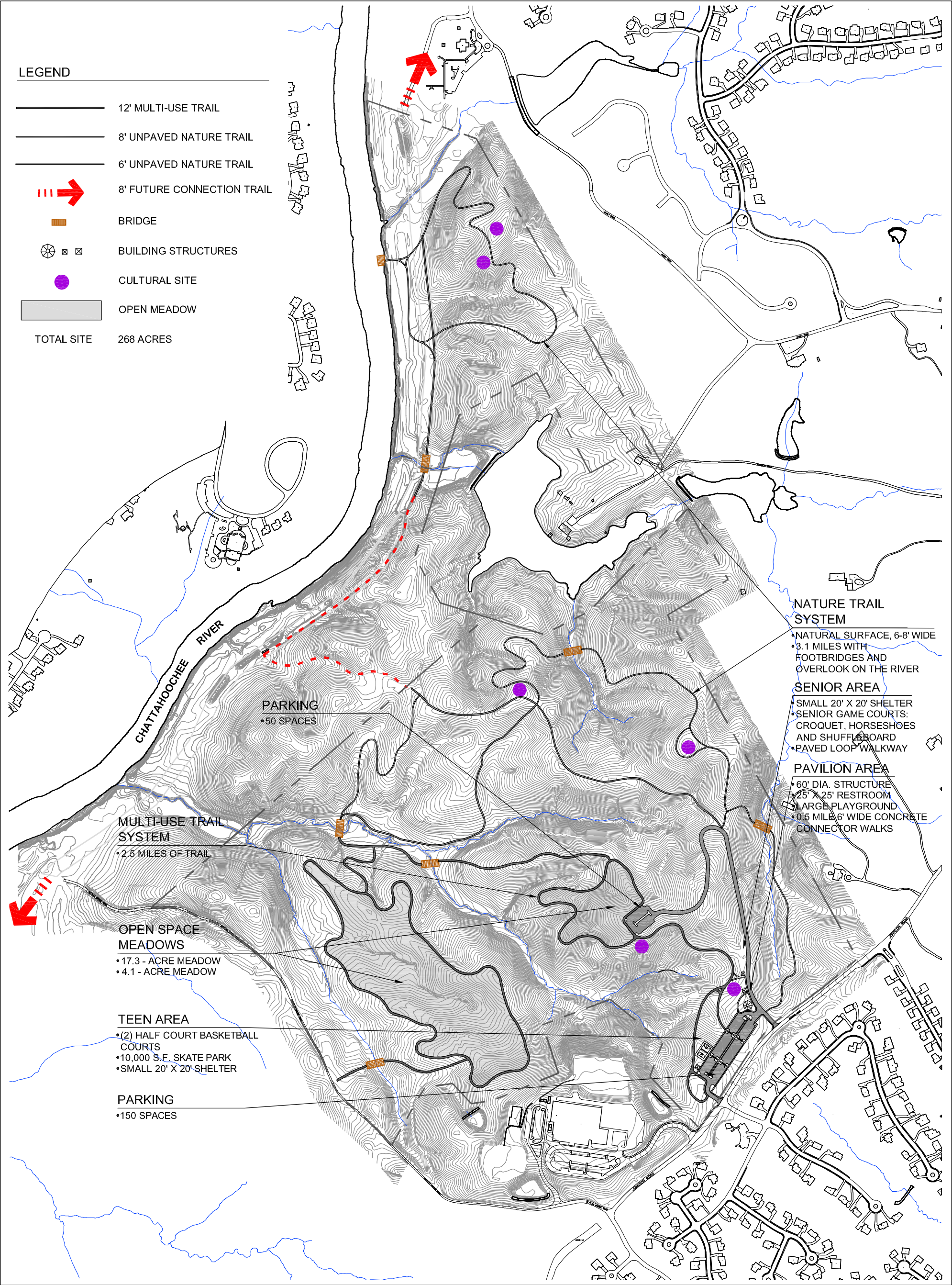
## PRELIMINARY DESIGN OPTION 1

ILLUSTRATION  
1





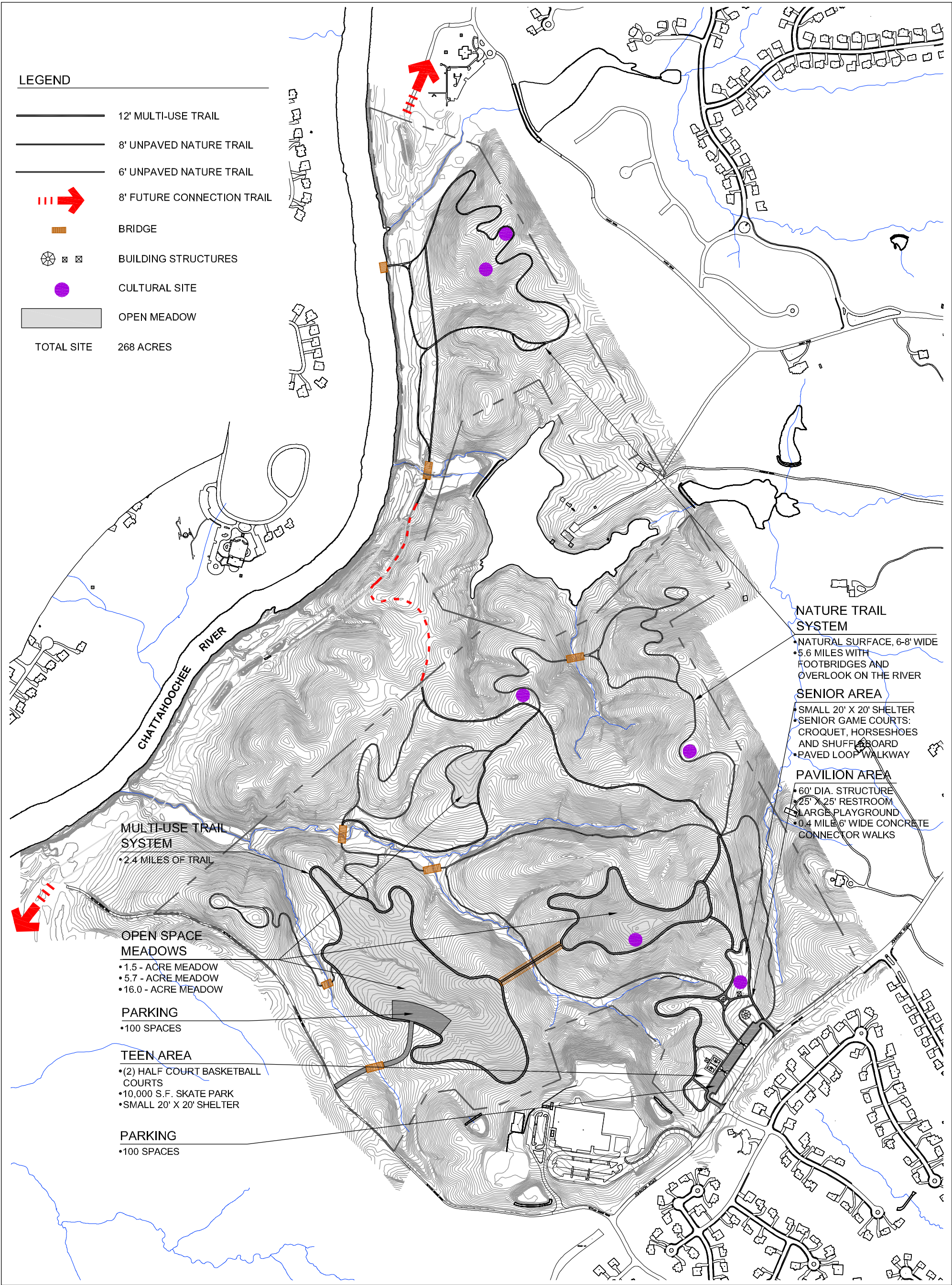




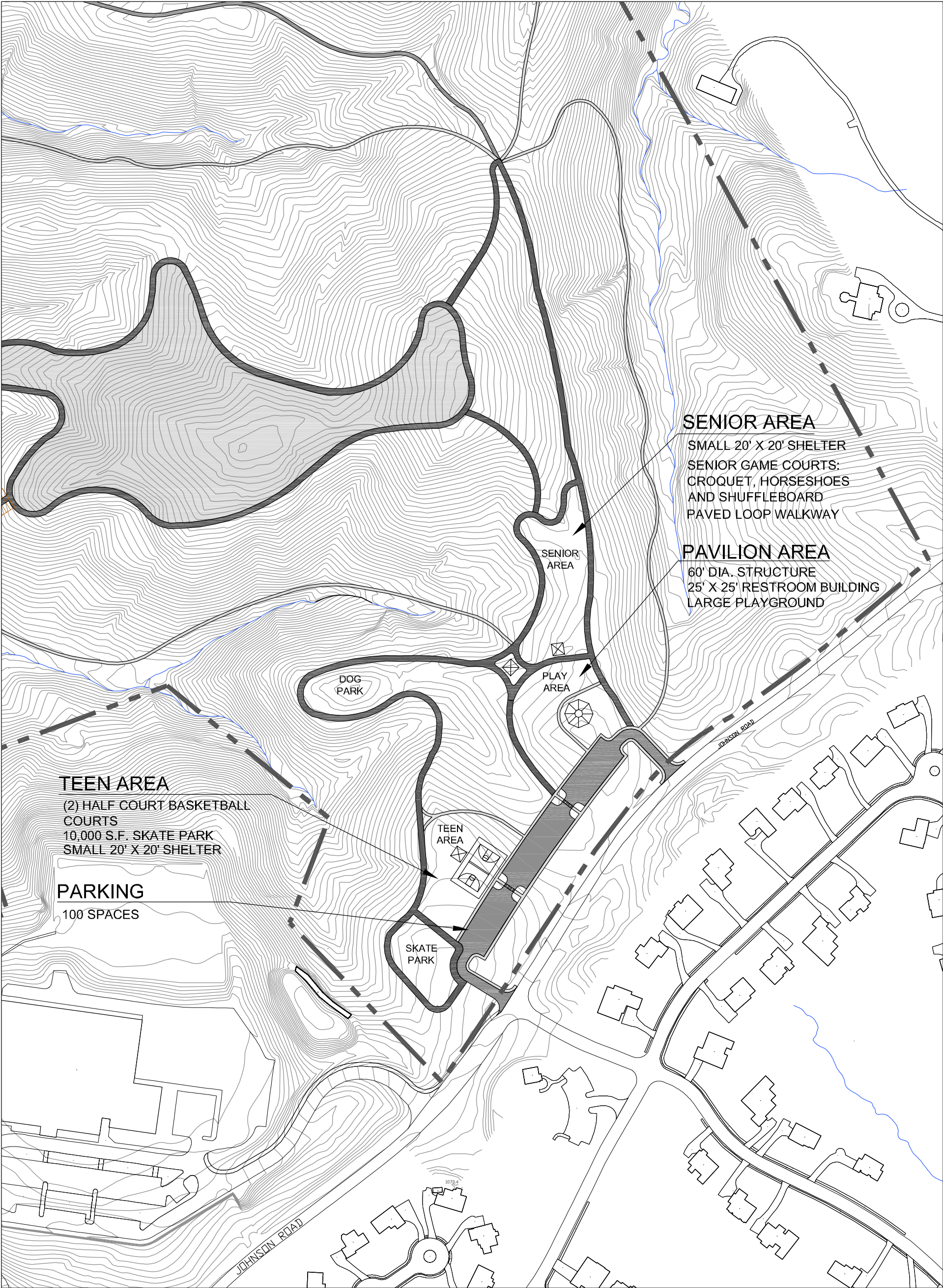












Landscape Architecture • Historic Preservation • Planning



119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are  
copyrighted and property of the Landscape  
Architect and Planner and may not be  
published, reproduced, or used in any way  
without permission.

Date: **12.8.04**  
Revisions:  
  
ProjectNo.: **04037**  
Scale: **1" = 200' - 0"**  
Drawn: **LR**  
Checked: **AW**

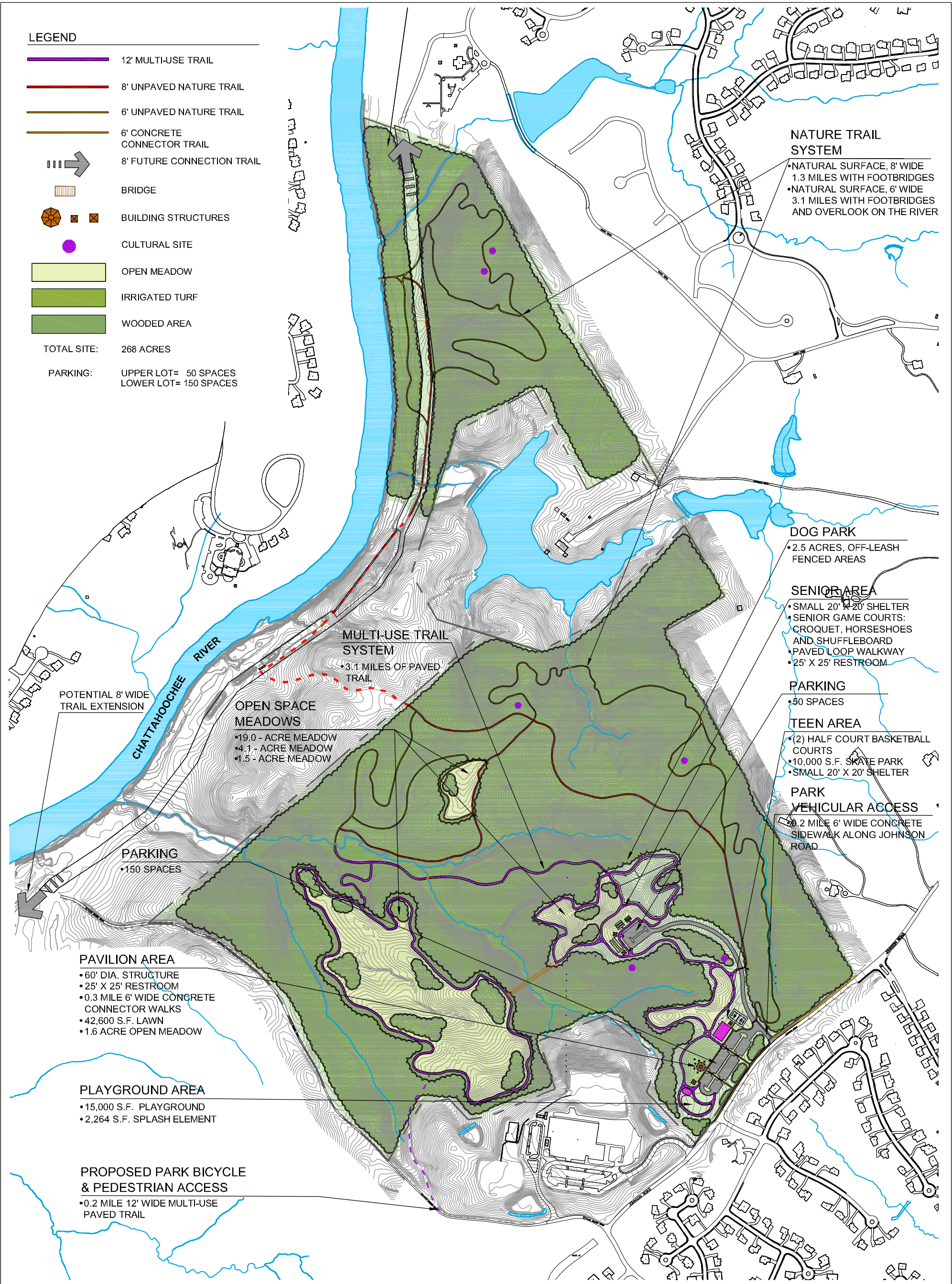
**SETTLES BRIDGE  
PARK SITE**  
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



**ENLARGED  
PLAN  
OPTION 3**

**ILLUSTRATION  
N**





Landscape Architecture • Historic Preservation • Planning



119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507

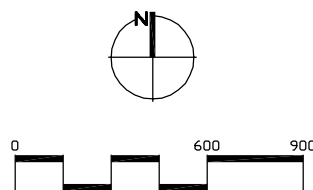


This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**  
Revisions: \_\_\_\_\_  
Project No.: **04037**  
Scale: **1" = 600' - 0"**  
Drawn: **LR**  
Checked: **AW**

## SETTLES BRIDGE PARK SITE

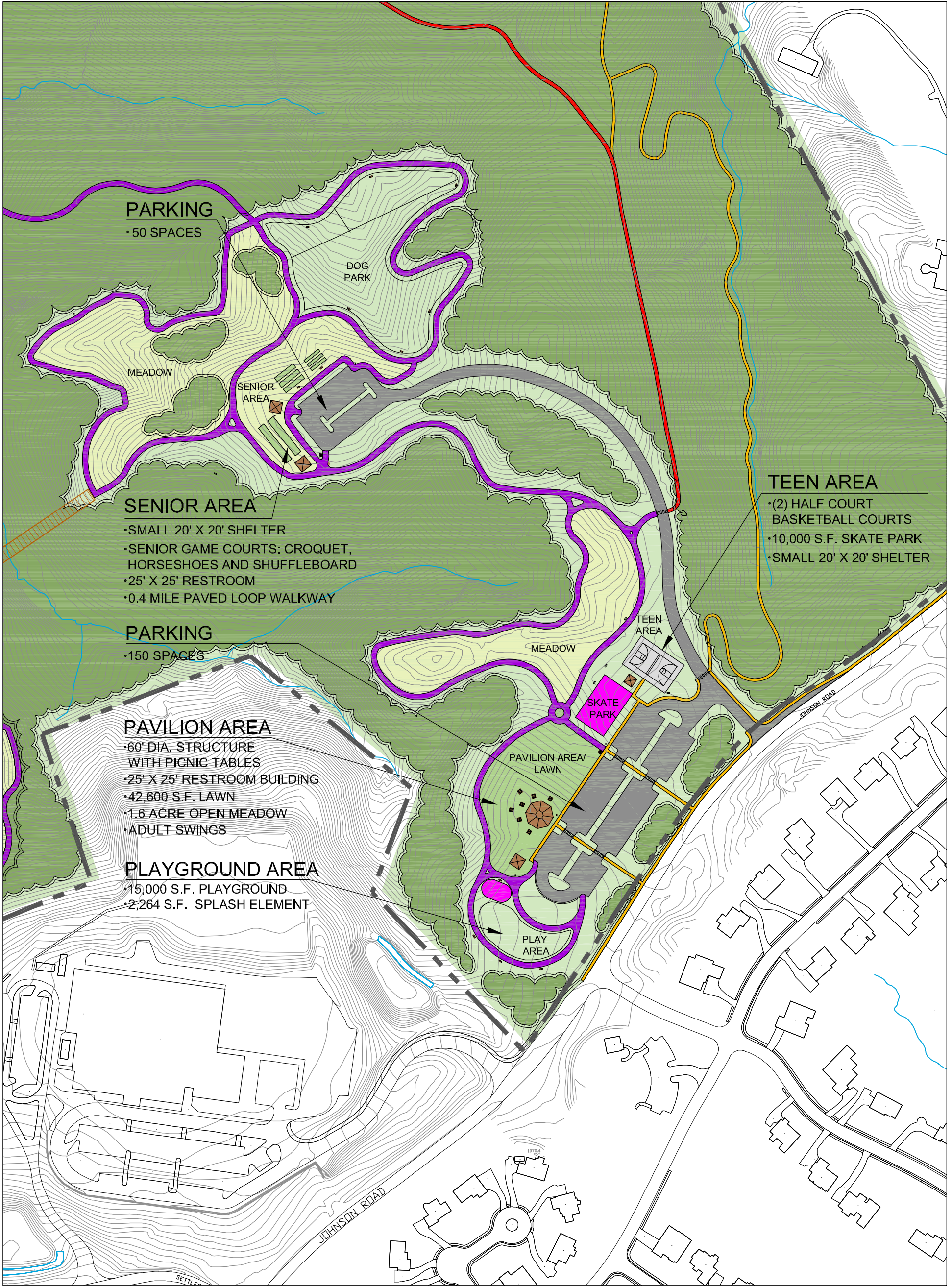
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



## PRELIMINARY MASTER PLAN OVERALL PLAN

ILLUSTRATION  
0

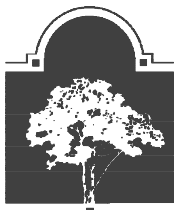




Landscape Architecture • Historic Preservation • Planning



119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**

Revisions:

Project No.: **04037**

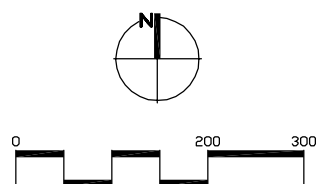
Scale: **1" = 200' - 0"**

Drawn: **LR**

Checked: **AW**

## SETTLES BRIDGE PARK SITE

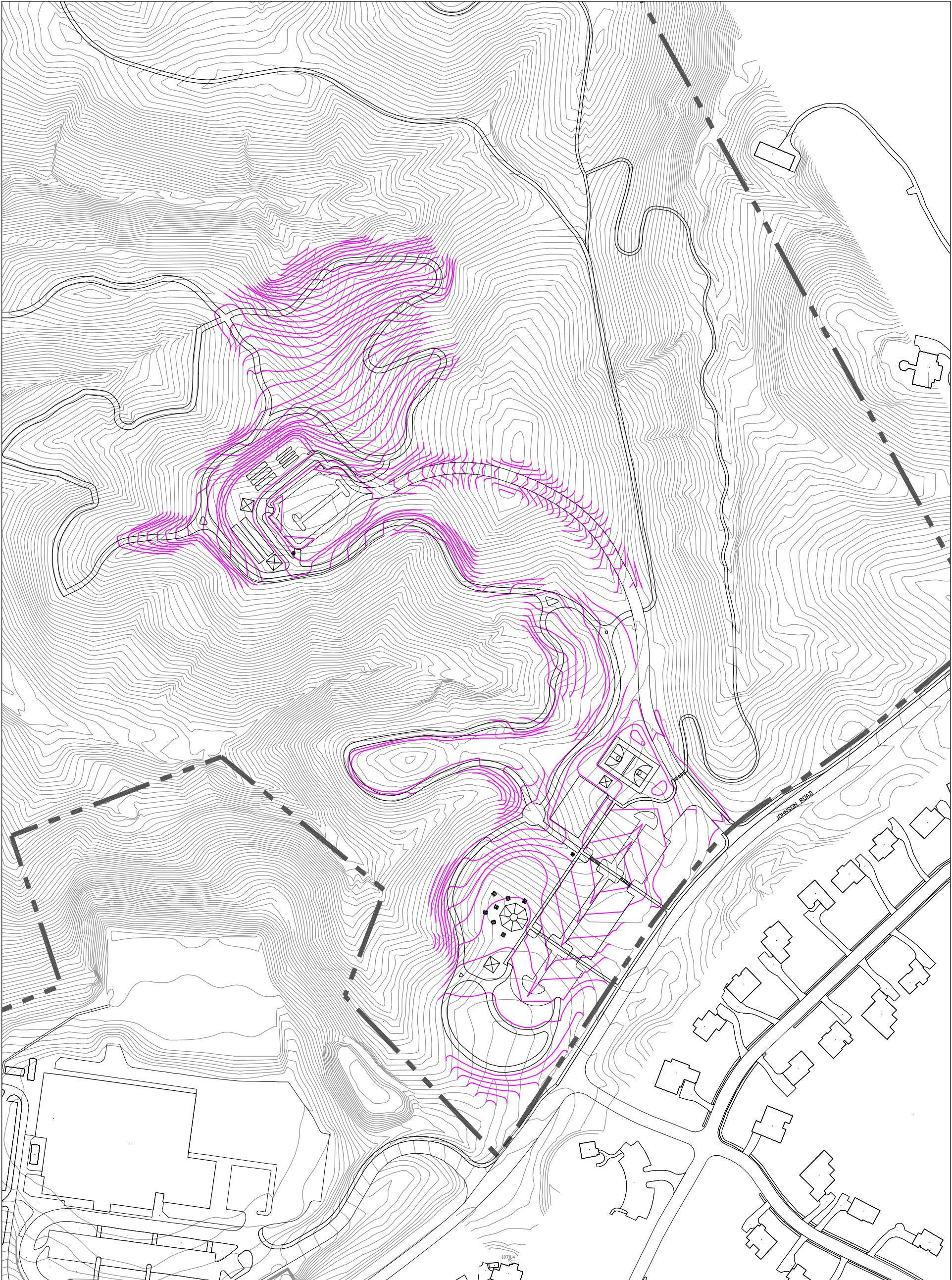
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



## PRELIMINARY MASTER PLAN ENLARGED PLAN

ILLUSTRATION  
P





Landscape Architecture • Historic Preservation • Planning



119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**

Revisions:

Project No.: **04037**

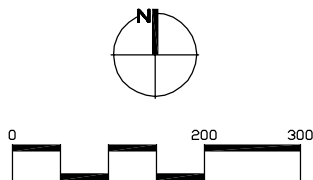
Scale: **1" = 200' - 0"**

Drawn: **LR**

Checked: **AW**

# SETTLES BRIDGE PARK SITE

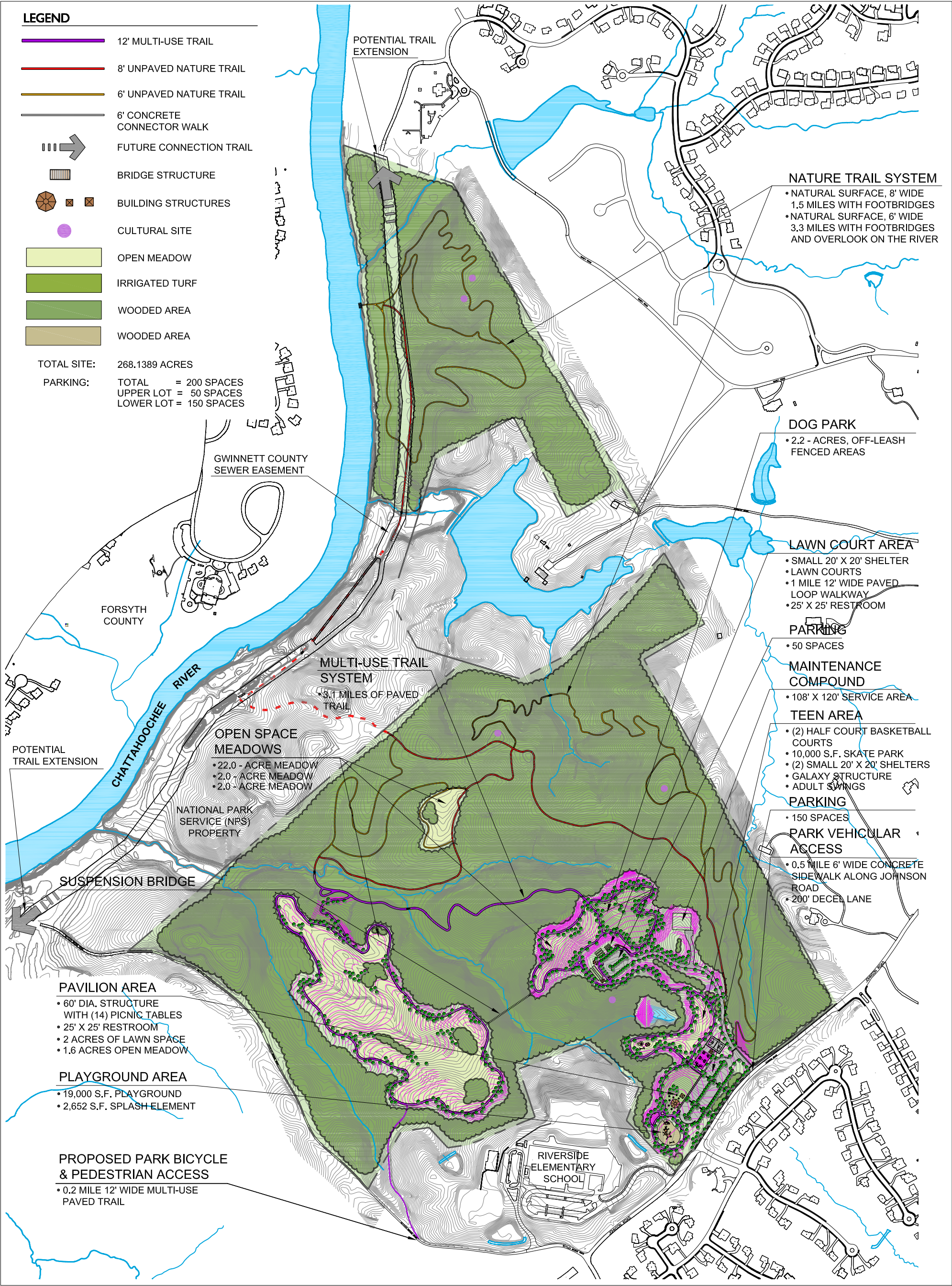
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



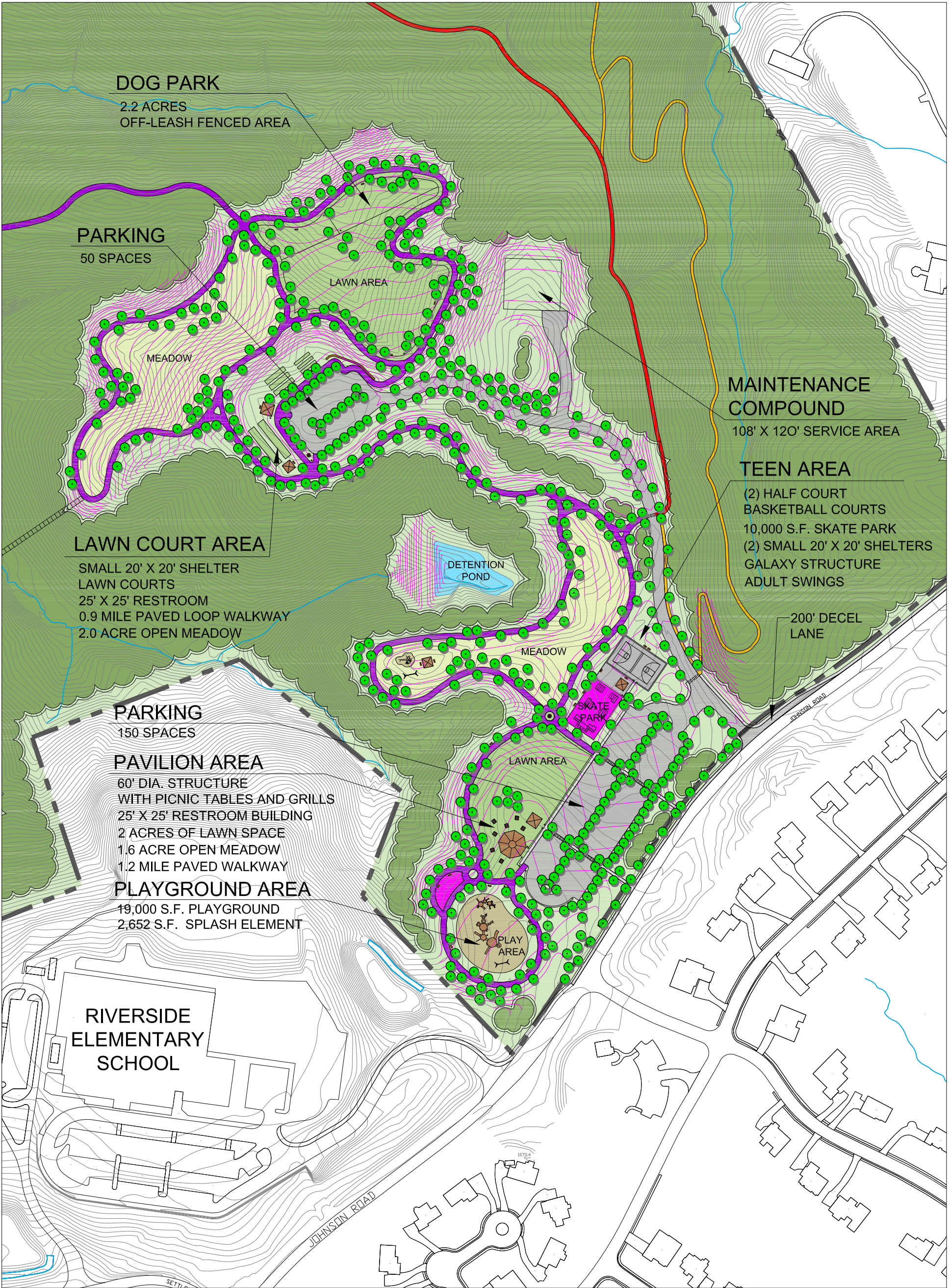
## PRELIMINARY GRADING CONCEPT

ILLUSTRATION  
Q









Landscape Architecture • Historic Preservation • Planning



119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are  
copyrighted and property of the Landscape  
Architect and Planner and may not be  
published, reproduced, or used in any way  
without permission.

Date: **12.8.04**

Revisions:

ProjectNo.: **04037**

Scale: **1" = 200' - 0"**

Drawn: **LR**

Checked: **AW**

## SETTLES BRIDGE PARK SITE

GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



## FINAL MASTER PLAN ENLARGED PLAN

ILLUSTRATION  
S



LEGEND

LOOP "A"- 1.7 MILES (8,789')

LOOP "B"- 0.9 MILES (4,791')

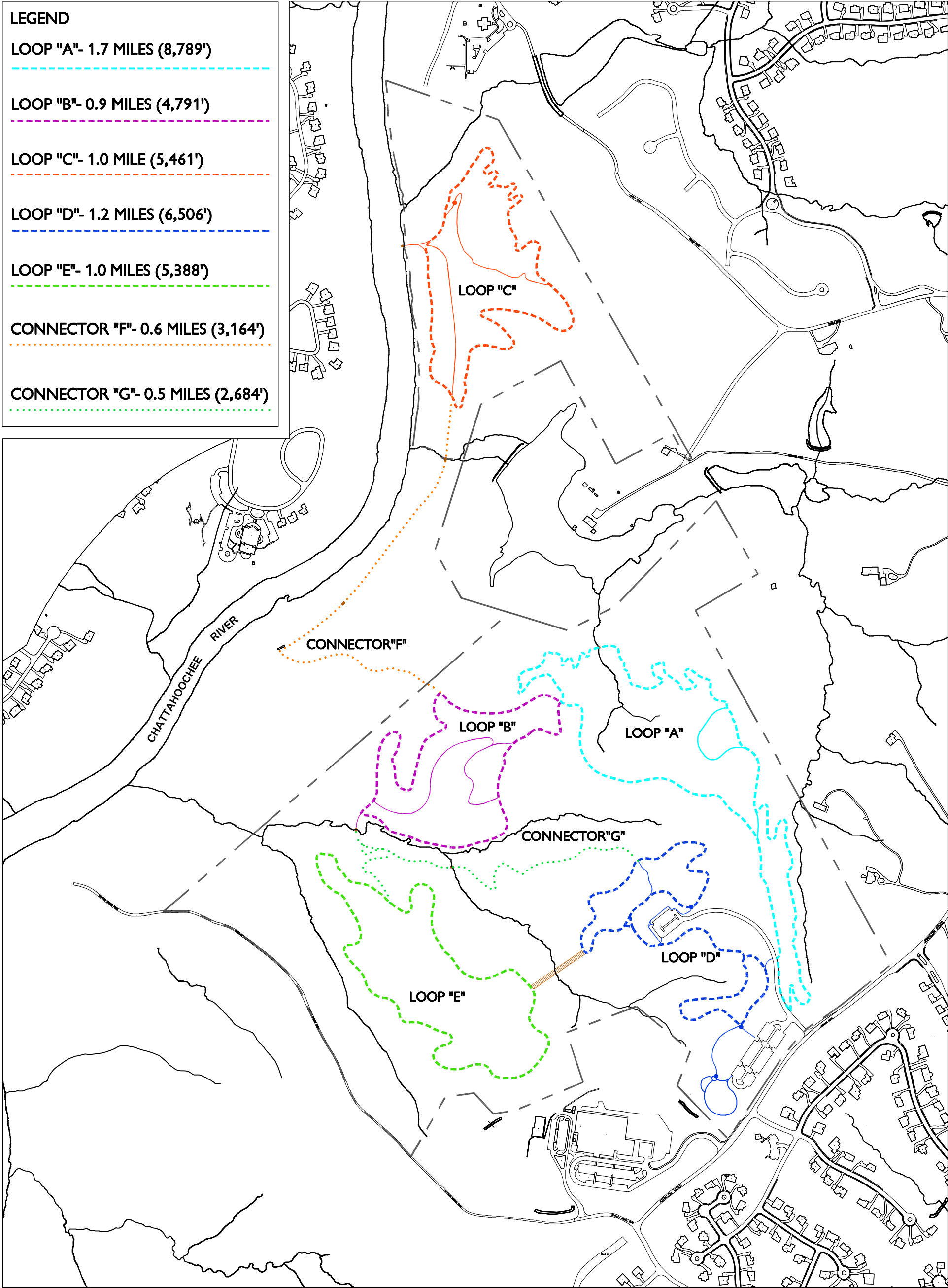
LOOP "C"- 1.0 MILE (5,461')

LOOP "D"- 1.2 MILES (6,506')

LOOP "E"- 1.0 MILES (5,388')

CONNECTOR "F"- 0.6 MILES (3,164')

CONNECTOR "G"- 0.5 MILES (2,684')



Landscape Architecture • Historic Preservation • Planning



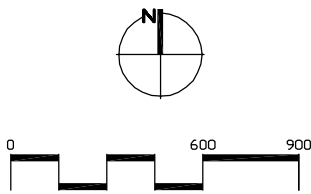
119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**  
Revisions: \_\_\_\_\_  
Project No.: **04037**  
Scale: **1" = 600' - 0"**  
Drawn: **LR**  
Checked: **AW**

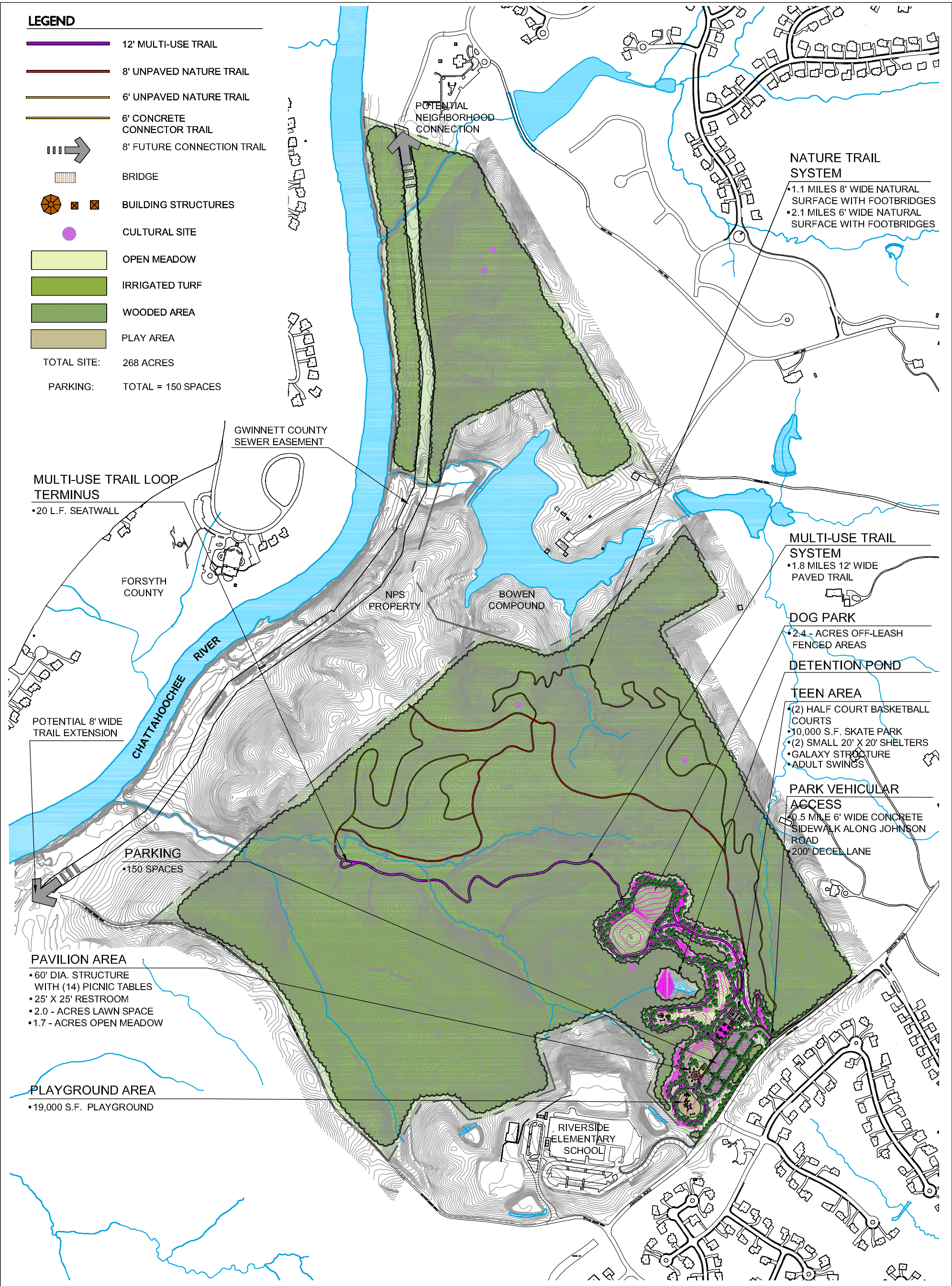
**SETTLES BRIDGE  
PARK SITE**  
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



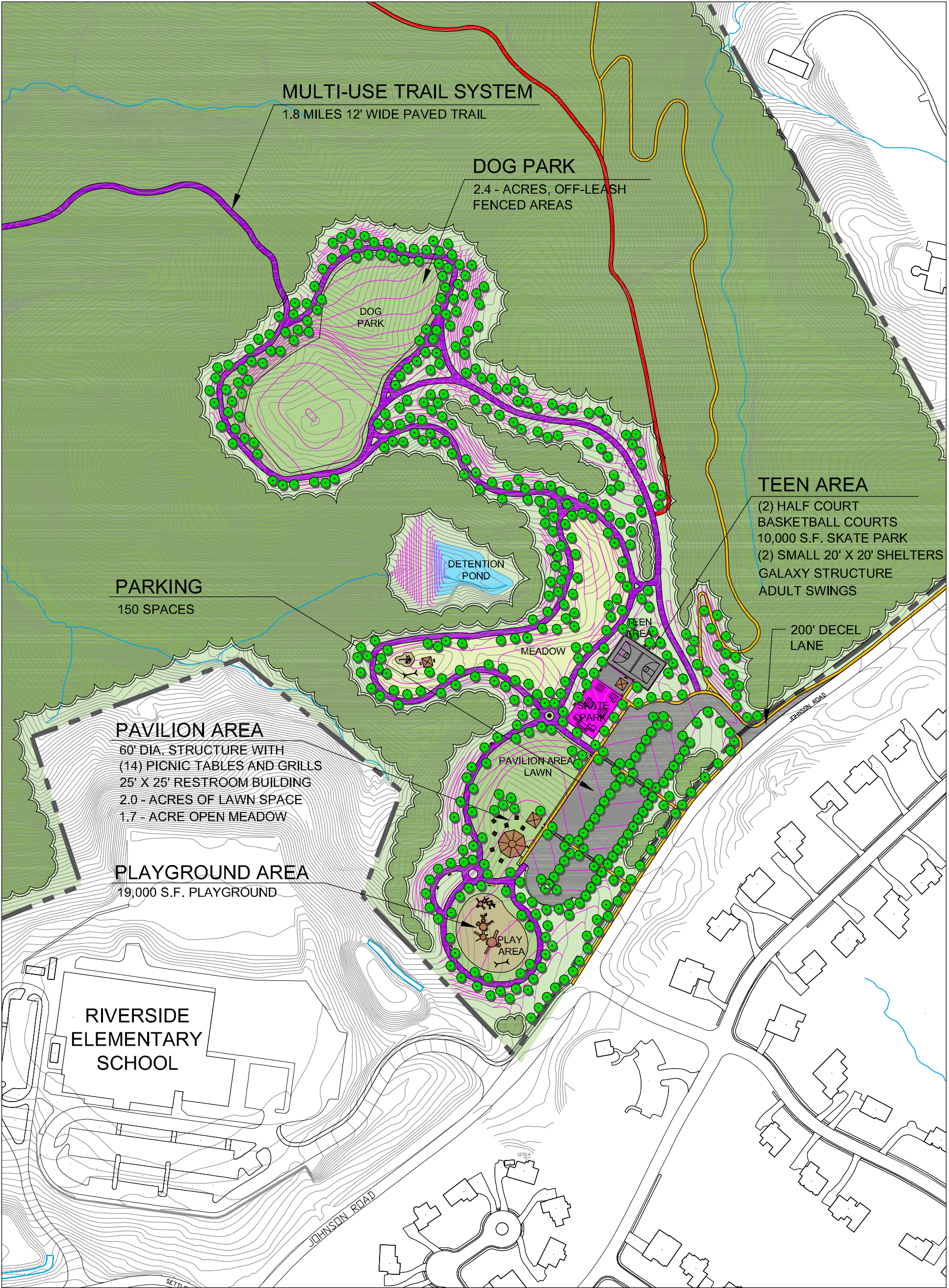
**TRAIL  
LENGTH  
MAP**

ILLUSTRATION  
T









Landscape Architecture • Historic Preservation • Planning



119 Washington Street, Gainesville, GA 30501  
770/534-0506 FAX: 770/534-0507



This drawing and all reproductions are copyrighted and property of the Landscape Architect and Planner and may not be published, reproduced, or used in any way without permission.

Date: **12.8.04**

Revisions:

Project No.: **04037**

Scale: **1" = 200' - 0"**

Drawn: **LR**

Checked: **AW**

## SETTLES BRIDGE PARK SITE

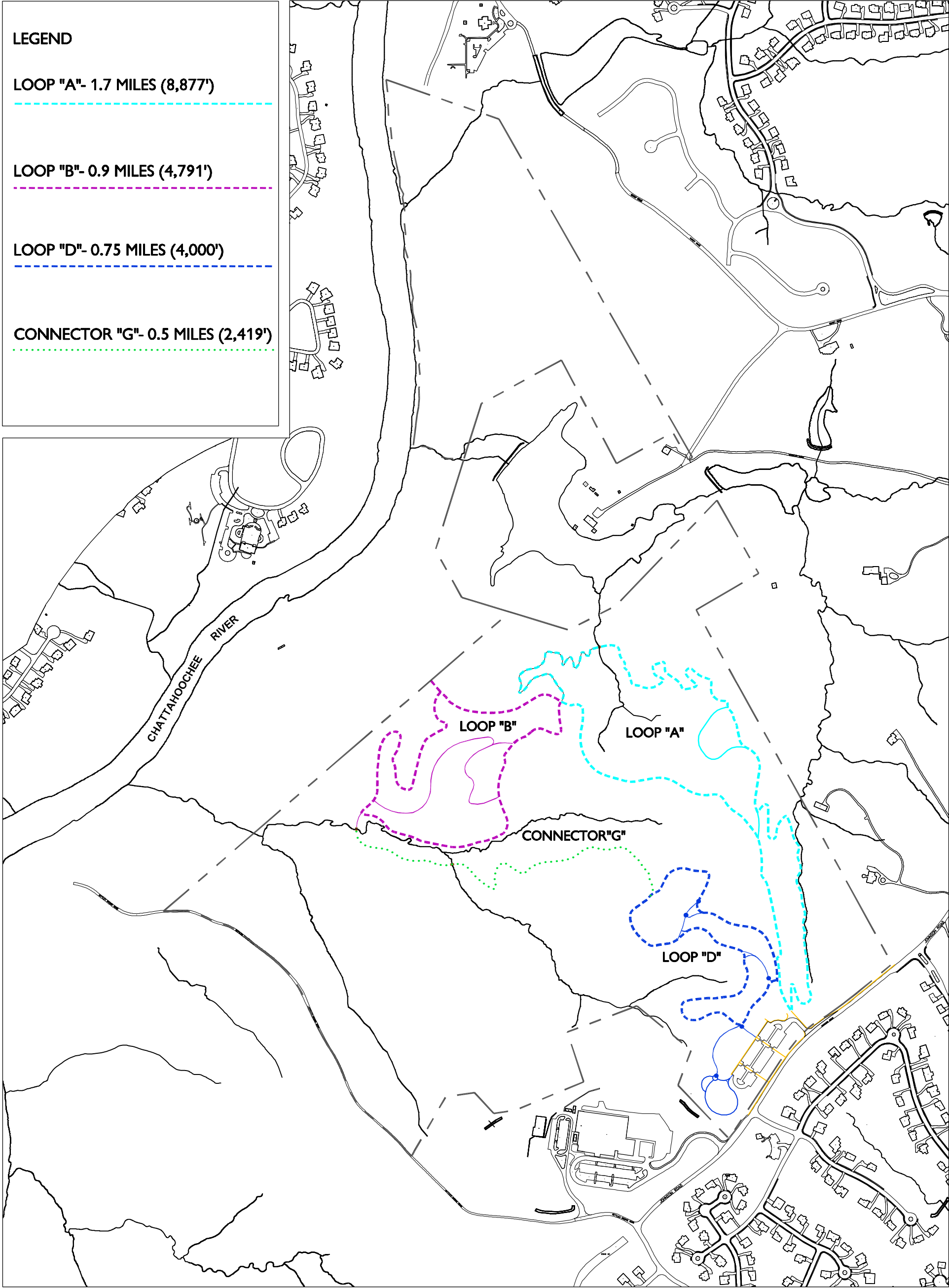
GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES  
GWINNETT COUNTY, GEORGIA



PHASE ONE  
ENLARGED PLAN

ILLUSTRATION  
V





# ***Appendix A***

## **Deed of Conservation Easement**



BK41221PG0225

FILED AND RECORDED  
CLERK SUPERIOR COURT  
GWINNETT COUNTY, GA

05 JAN -6 PM 2:00

TOM LAWLER, CLERK

STATE OF GEORGIA

COUNTY OF GWINNETT

DEED OF CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT, made this 29 day of Dec, 2004, by and between Gwinnett County, Georgia, a political subdivision of the State of Georgia (hereinafter referred to as the "County"), and the Gwinnett County Recreation Authority, a political subdivision of the State of Georgia (hereinafter referred to as the "Recreation Authority").

WITNESSETH

WHEREAS, the County is the owner of certain real property comprising approximately **217.1237** acres located in Gwinnett County, Georgia and known as **Settles Bridge Park** (hereinafter referred to as the "Property"), the Property being more particularly described in Exhibit "A" attached hereto and incorporated herein by this reference; and

WHEREAS, the Property in its present state possesses significant natural, scenic, aesthetic and open-space features and ecological values (collectively, the "Open Space Values");

WHEREAS, the preservation of the Property in its present state will clearly enhance the Open Space Values; and

WHEREAS, the Open Space Values are of great importance to the parties and the people of Gwinnett County and the general public, and are worthy of preservation and conservation; and

WHEREAS, the Recreation Authority is a qualified "holder" within the meaning of O.C.G.A. § 44-10-2(2); and

WHEREAS, by this Indenture, the parties mutually intend that the Property be preserved in perpetuity in substantially its existing state, thereby furthering the conservation and protection of a "relatively natural habitat of fish, wildlife, or plants or similar ecosystem" (as used in Section 170(h) of the Internal Revenue Code of 1986, as amended), and the preservation of open space for the scenic enjoyment and recreational use of the public, which preservation will yield a significant public benefit; and

003282

WHEREAS, the County, as owner of the Property, wishes to convey to the Recreation Authority a nonpossessory interest in the Property to preserve and protect the Open Space Values of the Property in perpetuity, and the Recreation Authority wishes to accept such conveyance from the County, in order to honor the intentions of the County stated herein and to preserve and protect in perpetuity the Open Space Values of the Property for the benefit of this generation and generations to come, but only upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, for and in consideration of TEN AND NO/100 DOLLARS (\$ 10.00) in hand paid at or before the sealing of these presents, the mutual intentions expressed in the foregoing recitals, the mutual covenants, terms, conditions and restrictions contained herein and other good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, and pursuant to O.C.G.A. § 44-10-1 et seq., which expressly authorizes the conveyance herein contained, the County has freely and voluntarily granted, bargained, sold, aliened, conveyed and confirmed, and by these presents does freely and voluntarily grant, bargain, sell, alien, convey and confirm, unto the Recreation Authority and its successors and assigns, a perpetual, irrevocable, non-exclusive conservation easement (the "Conservation Easement") over, across, and through the Property for the purposes hereinafter set forth. The Recreation Authority, by its execution hereof, accepts the foregoing grant of the Conservation Easement, and the recordation of this Indenture shall constitute a "recordation of the acceptance" by the Recreation Authority within the meaning of O.C.G.A. § 44-10-3(b). Upon the recordation hereof, the Recreation Authority shall be entitled to enforce the Conservation Easement pursuant to O.C.G.A. § 44-10-4.

1. *General Purpose.* It is the general purpose of the Conservation Easement to assure that the Property will be retained forever in its present natural and scenic condition to assure its availability for the recreational enjoyment and use of the public and to prevent any use of the Property that will significantly impair or interfere with the Open Space Values of the Property.

2. *Rights of the Recreation Authority.* To accomplish the purpose of the Conservation Easement, the following rights are conveyed to the Recreation Authority by this Indenture:

A. To preserve and protect the Open Space Values of the Property.

B. To enter upon the Property at reasonable times and upon reasonable prior notice in order to monitor the County's



compliance with and otherwise enforce the terms of the Conservation Easement, provided that such entry shall not unreasonably interfere with the County's use and quiet enjoyment of the Property.

C. To prevent any activity on, or use of, the Property that is materially inconsistent with the purposes of the Conservation Easement, and to require the restoration of such areas or features of the Property as may be damaged by any such inconsistent activity or use.

3. *Prohibited Uses.* Any activity on, or use of, the Property materially inconsistent with the purpose of the Conservation Easement is prohibited. It is mutually agreed and understood, however, that the Conservation Easement permits the County and its successors-in-interest to use the Property for all purposes, present and future, not inconsistent with the Conservation Easement. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited:

A. The change, disturbance, alteration, or impairment of the natural, scenic, and aesthetic features of the Property, except as expressly provided herein.

B. Any residential, commercial or industrial use of, or activity on, the Property, with the exception of residential use by law enforcement officers and park caretakers and commercial uses permitted in accordance with the provisions of the Gwinnett County Parks Ordinance.

C. The construction or maintenance on the Property of cellular phone or antennae towers.

D. The construction or maintenance on the Property of any buildings, structures or other improvements, other than requisite fencing and as otherwise expressly permitted herein.

E. The exploration for, or extraction of, oil, gas or other minerals, hydrocarbons, soils or other materials on or below the surface of the Property.

F. The dumping or other disposal of trash or garbage on the Property.

G. Any use or activity that causes or presents a substantial and continuing risk of soil erosion.

H. The construction, maintenance, or erection of any

sign or billboard on the Property, except as permitted in accordance with the provisions of the Gwinnett County Parks Ordinance. The posting of trail markers, destination markers, interpretive signs, directional signs, no-hunting and no-trespassing signs shall also be permitted.

4. *Reserved rights.* The County reserves to itself and its successors and assigns the rights of entry and use and all other rights accruing from its and their ownership of the Property not inconsistent with the purposes of the Conservation Easement. Without limiting the generality of the foregoing, the following rights are expressly reserved:

A. The right to improve and maintain the Property so as to provide for the scenic enjoyment and recreational use of the public, all in accordance with Gwinnett County Parks and Recreation guidelines. Said improvements to the Property may include, but shall not be limited to, those listed as Allowable Facilities at Passive Parks, attached hereto as Exhibit "B" and incorporated herein by this reference. Notwithstanding the foregoing, impervious surfaces associated with the said improvements shall not exceed fifteen (15%) percent of the total area of the Property.

B. The right to take action necessary to prevent erosion of the Property or to protect public health or safety.

C. The right to lease or to give, sell, assign or otherwise transfer the Property or any portion thereof by operation of law or by deed, in each case subject and subordinate to this Indenture.

D. The right to construct, extend and maintain utility systems.

E. Except as expressly provided herein, the County retains exclusive access to and use of the Property.

F. Except as limited in this Indenture, the County reserves all rights as fee owner of the Property, including, without limitation, the right to use the Property for all purposes not inconsistent herewith.

5. *The Recreation Authority's Remedies.* If the Recreation Authority determines that the County is in violation of the terms of this Indenture or that a violation is threatened, the Recreation Authority shall give written notice to the County of such violation and demand corrective action sufficient to cure the violation, and, when the violation involves injury to the Property, resulting from



any use or activity inconsistent with the purpose of this Indenture, to restore the portion of the Property so injured. If the County fails to cure such violation within thirty (30) days after receipt of notice thereof from the Recreation Authority, or under circumstances where the violation cannot reasonably be cured within a thirty (30) day period, fails to begin curing such violation within the thirty (30) day period, or fails to continue diligently such cure thereafter until finally cured, the Recreation Authority may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Indenture, including, without limitation, to enjoin the violation, by temporary or permanent injunction, and to require the restoration of the Property to the condition that existed prior to any such injury. The Recreation Authority's remedies described in this Paragraph 5 shall be cumulative and shall be in addition to all other remedies now or hereafter existing at law or in equity, subject always, however, to any obligation upon the Recreation Authority to give the County notice or an opportunity to cure, or both, pursuant hereto.

6. *The Recreation Authority's Discretion.* Enforcement of the terms of this Indenture shall be at the discretion of the Recreation Authority, and any forbearance by the Recreation Authority in the exercise of its rights under this Indenture in the event of any breach of any term hereof by the County shall not be deemed or construed to be a waiver by the Recreation Authority of such term or of any subsequent breach of the same or any other term of this Indenture or of any of the Recreation Authority's rights hereunder. No delay or omission by the Recreation Authority in the exercise of any right or remedy upon any breach by the County shall impair such right or remedy or be construed as a waiver.

7. *Acts beyond the County's Control.* Nothing contained in this Indenture shall be construed to entitle the Recreation Authority to bring any action against the County or to suggest that the County would have any liability for any injury to or change in the Property resulting from causes beyond the County's control, including, without limitation, fire, flood, storm, earth movement, other acts of God, natural or man-made disasters, unauthorized acts of third parties or other damage beyond the County's control, or from any prudent action taken by the County under emergency conditions to prevent, abate or mitigate significant injury to the Property resulting from such causes.

8. *Costs and Liabilities.* The County retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership of the Property.

9. *Extinguishment.* If circumstances arise in the future such as render the purpose of this Indenture impossible to accomplish, the Conservation Easement can only be terminated or extinguished, whether in whole or in part, by judicial proceedings in a court of competent jurisdiction pursuant to O.C.G.A. § 44-10-4(c).

10. *Assignment.* This Conservation Easement is transferable, but the Recreation Authority may assign its rights and obligations under this Indenture only upon receiving the express written consent of the County and only to an organization that is a "qualified organization" at the time of transfer under Section 170(h) of the code or a Federal, state or local governmental agency or other entity, and the applicable regulations promulgated thereunder, and also authorized to acquire, hold and enforce conservation easements under O.C.G.A. §§ 44-10-2, 44-10-3 and 44-10-4. As a condition precedent to any such transfer, the Recreation Authority and its successors and assigns shall require a specific written assumption of and agreement to be bound by this Indenture from each transferee hereunder, which assumption shall state that the purposes that the Conservation Easement is intended to advance shall continue to be carried out by such transferee. A copy of each such assumption shall be sent to the County or the successors or assigns of the County.

11. *Notices.* Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other hereunder shall be in writing and either served personally or sent by nationally recognized, overnight courier service or U.S. registered or certified mail, postage prepaid, return receipt requested, addressed as follows (or to such other address(es) as may be specified by any such party to the other hereunder by written notice delivered in accordance with this Paragraph 11):

To the County:

Director, Department of Community Services  
Gwinnett County Justice and Administration Center  
75 Langley Drive  
Lawrenceville, Georgia 30045



To the Recreation Authority:

Chairman  
Gwinnett County Recreation Authority  
75 Langley Drive  
Lawrenceville, Georgia 30045

Any notice or other communication mailed as herein above provided shall be deemed effectively given or received on the date of delivery, if personally served or if delivered by nationally recognized, overnight courier service, or on the date indicated on the return receipt, if sent by U.S. registered or certified mail as described above. If any notice mailed is properly addressed but returned for any reason, such notice shall be deemed to be effective notice given on the date of mailing.

12. *General Provisions.*

A. Controlling Law. The interpretation and performance of this Indenture shall be governed by and construed in accordance with the laws of the State of Georgia.

B. Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Indenture shall be liberally construed to effectuate the purposes hereof and the policy and purposes of O.C.G.A. § 44-10-1 et seq. If any provision of this Indenture is found to be ambiguous, an interpretation consistent with the purposes of this indenture that would render the provision valid shall be favored over any interpretation that would render it invalid.

C. Severability. If any provision of this Indenture, or the application thereof to any person or circumstance, is found to be invalid, the remainder of the provisions of this Indenture or the application of such provision to persons or circumstances other than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.

D. Entire Agreement. This Indenture sets forth the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior discussions, negotiations, understandings and agreements relating thereto, all of which are merged herein.

E. No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of the County's title in any respect.

F. Successors and Assigns; Covenants, Etc.

The covenants, terms, conditions and restrictions of this Indenture shall be binding upon and shall inure to the benefit of, the parties hereto and their respective successors and assigns, and shall continue as an easement and servitude running with the Property in perpetuity and enforceable against the County and all present and future owners, tenants and other holders of any interest in the Property. The benefits conferred herein upon the Recreation Authority shall be in gross and assignable by the Recreation Authority, but only in accordance with Paragraph 10 above. The terms "County" and "Recreation Authority", when used herein, shall be deemed to refer to Gwinnett County, Georgia and the Gwinnett County Recreation Authority, as the case may be, and their successors and assigns.

G. Termination of Rights and Obligations. Each

party's rights and obligations under this Indenture shall terminate upon the transfer of such party's interest in this Indenture pursuant to Paragraph 10 above or the Property, as the case may be, except that liability for the acts or omissions occurring prior to such transfer shall expressly survive such transfer.

H. Captions. The captions in this Indenture have

been inserted solely for convenience of reference, are not a part of this Indenture and shall have no effect upon construction or interpretation.

I. The County's Successors-In-Title. The County

agrees that any conveyance of the Property by the County will be made expressly subject to the terms, conditions, restrictions and purposes of this Indenture and the same shall be inserted by the County in, or incorporated by reference in, any subsequent deed or other legal instrument by which the County divests itself of fee simple or any other interest in the Property or any portion thereof, and the County hereby agrees to notify the Recreation Authority or its successors or assigns of any such conveyance.

J. Recordation. The County and the Recreation

Authority agree that this Indenture shall be promptly recorded in the Office of the Clerk of the Superior Court of Gwinnett County, Georgia.

TO HAVE AND TO HOLD the Conservation Easement unto the Recreation Authority and its successors and assigns, together with all and singular the rights, members and appurtenances thereof to the same being, belonging or in anywise appertaining, to the only proper use, benefit and behoof of the Recreation Authority forever.



The covenants agreed to and the terms, conditions, restrictions and purposes imposed as aforesaid shall not only be binding upon the County but its successors and assigns, and shall continue as an easement and servitude running in perpetuity with the Property.

IN WITNESS WHEREOF, the parties have caused these presents to be executed under seal as of the date first-above written.

WINNETT COUNTY, GEORGIA

By:

FC WAYNE HILL, CHAIRMAN

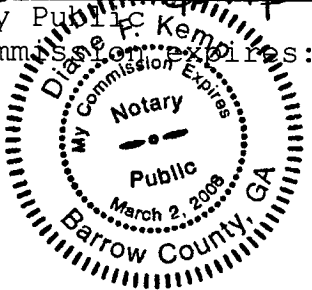
ATTEST:

Brenda Maddox  
BRENDA MADDOX  
COUNTY CLERK

Signed, sealed and delivered  
in the presence of:

Unofficial Witness

Diane F. Kemp  
Notary Public  
My commission expires:



(Signatures continued on following page)

WINNETT COUNTY RECREATION  
AUTHORITY

By: Phylecia Wilson  
PHYLECIA WILSON, CHAIRPERSON

ATTEST: David Kerler  
SECRETARY

Signed, sealed and delivered  
in the presence of:

Unofficial Witness  
Eleanor M. Garbarino  
Notary Public  
My commission expires: 12-10-07

APPROVED AS TO FORM:  
Shirley P. P. P.  
SR. ASSISTANT COUNTY ATTORNEY



## LEGAL DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN LAND LOTS 316, 317, 341, 342, AND 343 OF THE 7TH DISTRICT, GWINNETT COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE LAND LOT CORNER COMMON TO LAND LOTS 317, 318, 341 AND 342; THENCE FROM SAID POINT OF BEGINNING AS THUS ESTABLISHED, ALONG THE LAND LOT LINE DIVIDING LAND LOTS 317 AND 318, SOUTH 29 DEGREES 03 MINUTES 27 SECONDS EAST A DISTANCE OF 532.43 FEET TO A POINT; THENCE SOUTH 29 DEGREES 02 MINUTES 41 SECONDS EAST A DISTANCE OF 1035.16 FEET TO A POINT; THENCE SOUTH 28 DEGREES 46 MINUTES 14 SECONDS EAST, A DISTANCE OF 996.17 FEET TO A POINT ON THE NORTHWESTERLY RIGHT OF WAY OF JOHNSON ROAD (RIGHT OF WAY WIDTH VARIES; THENCE ALONG SAID RIGHT OF WAY THE FOLLOWING COURSES AND DISTANCES, SOUTH 44 DEGREES 25 MINUTES 44 SECONDS WEST, A DISTANCE OF 8.13 FEET TO A POINT; THENCE SOUTH 50 DEGREES 31 MINUTES 08 SECONDS WEST, A DISTANCE OF 275.46 FEET TO A POINT; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 109.57 FEET, HAVING A RADIUS OF 1880.37 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 52 DEGREES 11 MINUTES 17 SECONDS WEST, 109.56 FEET TO A POINT; THENCE SOUTH 53 DEGREES 51 MINUTES 27 SECONDS WEST, A DISTANCE OF 138.15 FEET TO A POINT; THENCE SOUTH 62 DEGREES 08 MINUTES 05 SECONDS WEST, A DISTANCE OF 6.33 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 259.09 FEET, HAVING A RADIUS OF 603.12 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 49 DEGREES 49 MINUTES 50 SECONDS WEST, 257.10 FEET TO A POINT; THENCE SOUTH 37 DEGREES 31 MINUTES 26 SECONDS WEST, A DISTANCE OF 149.59 FEET TO A POINT; THENCE SOUTH 33 DEGREES 29 MINUTES 59 SECONDS WEST, A DISTANCE OF 586.26 FEET TO A POINT; THENCE LEAVING SAID RIGHT OF WAY, NORTH 43 DEGREES 41 MINUTES 50 SECONDS WEST, A DISTANCE OF 466.75 FEET TO A POINT; THENCE NORTH 20 DEGREES 32 MINUTES 27 SECONDS EAST, A DISTANCE OF 237.27 FEET TO A POINT; THENCE NORTH 50 DEGREES 42 MINUTES 33 SECONDS WEST, A DISTANCE OF 443.31 FEET TO A POINT; THENCE SOUTH 69 DEGREES 23 MINUTES 22 SECONDS WEST, A DISTANCE OF 471.64 FEET TO A POINT; THENCE SOUTH 18 DEGREES 21 MINUTES 38 SECONDS EAST, A DISTANCE OF 331.68 FEET TO A POINT; THENCE SOUTH 67 DEGREES 26 MINUTES 17 SECONDS WEST, A DISTANCE OF 465.58 FEET TO A POINT; THENCE SOUTH 81 DEGREES 01 MINUTES 51 SECONDS WEST, A DISTANCE OF 140.77 FEET TO A POINT; THENCE NORTH 42 DEGREES 59 MINUTES 10 SECONDS WEST, A DISTANCE OF 181.29 FEET TO A POINT; THENCE SOUTH 81 DEGREES 31 MINUTES 55 SECONDS WEST, A DISTANCE OF 183.30 FEET TO A POINT; THENCE SOUTH 30 DEGREES 02 MINUTES 07 SECONDS WEST, A DISTANCE OF 399.58 FEET TO A POINT; THENCE SOUTH 42 DEGREES 44 MINUTES 44 SECONDS EAST, A DISTANCE OF 531.75 FEET TO A POINT IN THE CENTERLINE OF SETTLE BRIDGE ROAD (AKA SETTLES BRIDGE ROAD) (30 FOOT EASEMENT); THENCE ALONG THE CENTERLINE OF SAID ROAD, FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 76.81 FEET, HAVING A RADIUS OF 198.61 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 55 DEGREES 57 MINUTES 14 SECONDS WEST, 76.33 FEET TO A POINT; THENCE NORTH 44 DEGREES 52 MINUTES 29 SECONDS WEST, A DISTANCE OF 206.96 FEET TO A POINT; THENCE NORTH 43 DEGREES 23 MINUTES 45 SECONDS WEST, A DISTANCE OF 80.58 FEET TO A POINT; THENCE NORTH 46 DEGREES 57 MINUTES 01 SECONDS WEST, A DISTANCE OF 107.61 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 444.19 FEET, HAVING A RADIUS OF 2580.94 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 45 DEGREES 35 MINUTES 36 SECONDS WEST, 443.64 FEET TO A POINT; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 212.01 FEET, HAVING A RADIUS OF 407.03 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 35 DEGREES 36 MINUTES 07 SECONDS WEST, 209.62 FEET; THENCE NORTH 20 DEGREES 40 MINUTES 49 SECONDS WEST, A DISTANCE OF 100.55 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 108.76 FEET, HAVING A RADIUS OF 578.68 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 26 DEGREES 03 MINUTES 52 SECONDS WEST, 108.60 FEET TO A POINT; THENCE NORTH 31 DEGREES 26 MINUTES 55 SECONDS WEST, A

DISTANCE OF 132.37 FEET TO A POINT; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 233.33 FEET, HAVING A RADIUS OF 1250.01 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 26 DEGREES 06 MINUTES 04 SECONDS WEST, 232.99 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE, WITH AN ARC DISTANCE OF 388.39 FEET, HAVING A RADIUS OF 693.53 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 36 DEGREES 47 MINUTES 50 SECONDS WEST, 383.34 FEET TO A POINT; THENCE NORTH 52 DEGREES 50 MINUTES 27 SECONDS WEST, A DISTANCE OF 265.10 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 113.80 FEET, HAVING A RADIUS OF 282.28 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 64 DEGREES 23 MINUTES 27 SECONDS WEST, 113.03 FEET TO A POINT; THENCE FOLLOWING A CLOCKWISE CURVE WITH AN ARC DISTANCE OF 73.67 FEET, HAVING A RADIUS OF 375.45 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 70 DEGREES 19 MINUTES 09 SECONDS WEST, 73.55 FEET TO A POINT; THENCE NORTH 64 DEGREES 41 MINUTES 52 SECONDS WEST, 95.15 FEET TO A POINT; THENCE FOLLOWING A COUNTERCLOCKWISE CURVE WITH AN ARC DISTANCE OF 86.72 FEET, HAVING A RADIUS OF 182.93 FEET, SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 78 DEGREES 16 MINUTES 43 SECONDS WEST, 85.91 FEET TO A POINT; THENCE SOUTH 88 DEGREES 08 MINUTES 25 SECONDS WEST, A DISTANCE OF 130.37 FEET TO A POINT; THENCE LEAVING THE CENTERLINE OF SETTLE BRIDGE ROAD, NORTH 49 DEGREES 09 MINUTES 39 SECONDS EAST, A DISTANCE OF 2900.53 FEET TO A POINT; THENCE SOUTH 73 DEGREES 04 MINUTES 30 SECONDS EAST, A DISTANCE OF 389.06 FEET TO A POINT; THENCE NORTH 62 DEGREES 53 MINUTES 16 SECONDS EAST, A DISTANCE OF 334.43 FEET TO A POINT; THENCE NORTH 43 DEGREES 49 MINUTES 50 SECONDS EAST, A DISTANCE OF 926.99 FEET TO A POINT; THENCE SOUTH 29 DEGREES 44 MINUTES 53 SECONDS EAST, A DISTANCE OF 532.69 FEET TO A POINT; THENCE SOUTH 59 DEGREES 42 MINUTES 15 SECONDS WEST, A DISTANCE OF 458.87 FEET TO THE LAND LOT CORNER COMMON TO LAND LOTS 317, 318, 341 AND 342 BEING THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PROPERTY IS SHOWN ON A CONSERVATION EASEMENT EXHIBIT, SETTLES BRIDGE PARK SITE, DRAWN FOR GWINNETT COUNTY DEPARTMENT OF COMMUNITY SERVICES CONTAINING 217.1237 ACRES, PREPARED BY HANNON, MEEKS & BAGWELL DATED NOVEMBER 16, 2004.



**EXHIBIT "B"****List of Allowable Facilities for Passive Parks with Conservation Easement**

(Includes Open Space Parks, Passive Community Parks, and parks containing features of both)

NOTE: Some items on the list will not be appropriate for every passive park. Park size limitations, existence of very steep terrain or sensitive plant/animal communities or other limiting factors may cause some listed activities to be prohibited in certain passive park sites. The individual park's site master plan will determine which of the global list of allowable facilities shall be allowed within that specific park.

## 1. Geographic Features

- A. Ponds or Lakes (constructed)
- B. Meadows (grass or wildflowers on rolling terrain)
- C. Turf (irrigated grass on graded area for informal play)
- D. Woodlands (retained existing woods, newly reforested areas or some combination of both)

## 2. Trail Systems (Stairs, ramps, bridges and boardwalks may be a part of all trail system types)

- A. Multi-purpose Paved Trails (for walking, jogging, biking, skating, 8'-12' width)
- B. Natural Surface Pedestrian Trails (8' - 4' width, dirt, mulch and/or gravel)
- C. Equestrian Trail (6'-8' width, dirt, mulch and/or gravel)
- D. Mountain Biking Trail (4'-6' width, dirt, mulch and/or gravel)
- E. Overlooks (decks, wide trail sections, benched areas)
- F. Outdoor Classrooms (with benches and deck/patio zones)

## 3. Fishing Facilities

- A. Piers
- B. Docks
- C. Boat Shed & Rental Office
- D. Boat Ramps (into rivers, ponds & lakes)
- E. Access Ramp for human and electric battery powered watercraft
- F. Fishing Pond or Lake

## 4. Playground/Pavilion/Picnic Facilities

- A. Pavilions (varying sizes - rentable)
- B. Shelters (smaller structures - non-rentable)
- C. Playgrounds (varying sizes and materials with swings and play structures for both tots and older children)
- D. Play Zones (swings and play structures for pre-teens)
- E. Outdoor Seniors Activities (Horseshoe Pits, Bocce Courts, Shuffleboard, Outdoor Chess/Checkers Tables)
- F. Splashground (aquatic play area)

## 5. Unstructured Play Courts and Zones (unlighted)

- A. Disc (Frisbee) Golf Course (conforming to existing terrain)
- B. Tennis, Basketball and Volleyball Courts (two of each maximum)
- C. Free Skating Park (for skateboards & in-line skates)

D. Dog Park (fenced area for off-leash dogs with appropriate amenities)

6. Site Furniture

Includes but not limited to: Benches Adult Swings, Picnic Tables, Picnic Tables with integrated roofs, Water Fountains, Bike Racks, Trash Receptacles.

7. Signage

Includes but not limited to: Entrance Rules, Directional, Traffic Control, Safety, Warning, Interpretive, Park System Event Public Notice.

8. Maintenance Compound Facilities

- A. Maintenance Building
- B. Yard
- C. Ancillary structures

9. Restroom Facilities

- A. Restroom Building
- B. Restroom Building with Maintenance Storage Room

10. Parking Facilities and Driveways

- A. Parking Lots
- B. Lighting
- C. Vehicular Access Driveways
- D. Maintenance/Public Safety Driveways
- E. Storm drainage features as required

11. Fencing

- A. Security
- B. Pedestrian Control
- C. Ornamental.

12. Lighting

- A. Security
- B. Pedestrian Access & Convenience
- C. Vehicular Access
- D. Entrance

13. Other Buildings

- A. Concessions
- B. Office
- C. Activity Building
- D. Environmental Education Center
- E. Caretaker or Resident Police Officers Residence



BK41221PG0239

F. Information Kiosks

# ***Appendix B***

## **Tabulation of Concerns from Public Meeting**



**Settles Bridge Park Regional Open Space Park Master Plan**  
**Community Interest Form Results** (Preliminary, Priority List Totals) 07/08/2004

Concerns, Issues, Suggestions	Times Mentioned	Priority First	Second	Third	Fourth	Fifth	Sixth/No Priority
Nature Trails (Hiking)	50	25	9	5	4	0	7
Add Picnic Areas	22	0	5	5	4	0	8
Add Playground	19	1	4	3	2	3	6
Bike Trails (Paved)	18	1	5	1	5	2	4
Access to River	10	4	0	4	1	0	1
Fishing Access Trails	10	2	2	2	0	0	4
Wildlife Observation- I.D. Signs	9	0	3	1	1	1	3
Off Leash Dog Area	9	1	3	1	0	2	2
Bike Trails (Unpaved)	9	3	0	0	0	0	6
Nature Center (Educational Programs)	7	0	0	2	1	0	4
Maintain Wooded Areas	7	3	4	0	0	0	0
Restroom Facilities	7	1	1	0	0	0	5
Minimal Development	6	1	1	0	1	0	3
Non-Motorized Boathouse (Canoe, Kayak, etc.)	6	2	0	1	1	0	2
Open Lawn Area	4	0	1	1	1	0	1
Quiet Place	3	1	0	1	0	0	1
Bird Watching	3	1	0	2	0	0	0
Passive Recreation/Open Space/Play Areas	3	2	0	0	1	0	0
Minimal Paved Parking Lots	3	0	0	1	0	0	2
Add Sidewalk	3	0	0	0	0	0	3
Basketball Courts and Sports Fields	3	1	1	1	0	0	0
Safe and Secure Park	3	0	0	1	0	2	0
Habitat Conservation/Replant Trees	2	0	0	0	1	1	0
Gravel Parking Lot	2	0	1	0	0	1	0
Horse Trails	2	0	1	1	0	0	0
Add Benches	2	0	0	0	1	0	1
Amphitheater	2	0	0	1	0	0	1
Water Fountains	2	0	1	0	0	0	1
Traffic Congestion	2	0	0	0	1	0	1
No Ball Fields	2	0	1	0	0	0	1
Native Plant Watching	2	0	0	1	0	0	1
Leash Law	2	0	0	1	0	0	1
Handicapped Trails	2	0	0	1	0	0	1
Camping	2	0	1	0	0	1	0
Lake	1	0	1	0	0	0	0
BMX Race Track	1	0	0	0	1	0	0
Add Historical Markers	1	0	0	0	1	0	0
No Boat Ramps	1	0	0	0	0	0	1
Lawn Games (Volleyball, Horseshoes, etc.)	1	0	0	0	0	1	0
Orienteering	1	0	0	0	0	1	0
Riverwalk	1	0	0	0	0	0	1
Exercise Stations	1	0	0	0	1	0	0
Park Fee	1	0	0	0	1	0	0
No Development	1	1	0	0	0	0	0
No Lights	1	0	1	0	0	0	0
History Center	1	0	0	0	0	1	0
Trash Receptacles	1	0	0	0	0	0	1
Bow Hunting	1	0	0	0	0	0	1
No Off-Road Vehicles	1	0	0	0	0	1	0

**Concerns and Perceived Problems:**

(times mentioned on survey forms)

Traffic Congestion	25
Security	12
Over Development	9
Tree Destruction	8
Dog Restrictions	6
Lighting of Fields	6
Loud Noise	6
NPS Plans (Access to the River)	5
Motorized Vehicles	5
Access to Site	4
Too Much Paving	3
Operating Hours	3
Cleanliness	3
Erosion and Pollution	2
Disturb My Property	2
Parking	2
Strangers	2
No Sports Fields Needed	2
Too Much Money Being Spent	1
Boat Ramps	1
Boating	1
Dumping of Trash	1
Bike Access	1
Habitat Destruction	1
No Multi-Use Trails	1
Wasting Money by Building Structures	1
Partying Teenagers	1
Too Many Parks	1
Hunting	1
No Playground Equipment	1
No Fees for Park	1
Usage of Park	1



**How People Found Out About the Meeting:** (times mentioned on survey forms)

1 Billboard on Johnson Rd	17
2 Flyer in Mailbox	14
3 Newspaper	8
4 Meeting Notice on Johnson Rd. Property	7
5 E-mail from Friend	6
6 Gwinnett Daily Post	3
7 Sign Posted near Riverside Elementary	3
8 Gwinnettparks.com Website	3
9 No Reply	2
10 E-mail Notification by S.O.R.B.A.	2
11 WWW.NGTV.ORG (Message Board)	1
12 Told by Planning and Zoning Member	1
13 Father	1
14 Mailer	1
15 Flyer at Justice Center Office	1
16 Sign Posted	1
17 Public Notification Letter	1
18 Atlanta Journal Constitution	1

# ***Appendix C***

## **Settles Bridge Steering Committee Minutes**



## **Settles Bridge Park Site Master Plan**

Public Meeting held at North Gwinnett High School

08 July 2004

7:00-9:00 p.m.

Approximately 100 attendees

**Introductions** by *Grant Guess, Gwinnett County:*

**Opening Remarks** by *Wayne Hill, Gwinnett County Commissioner:*

Settles Bridge has held a special place in the commissioner's heart since childhood. He has fond memories of going there to swim and holds a special memory of his uncle saving a drowning boy's life. He hopes the soon to be appointed Steering Committee will make certain that the site's unique qualities are celebrated and preserved.

The county purchased the Settles Bridge Park land from the West Family. The money was raised by a one cent Special Purpose Options Sales Tax (SPLOST). Other Gwinnett County park lands that were acquired using SPLOST money include McDaniel Farm and an additional 1800-acres at Dacula Park. The commissioner hopes that SPLOST will continue.

**Project Background Information** by *Grant Guess:*

The Settles Bridge Park land consists of two parcels, one approximately 51-acres and the other approximately 217-acres, for a total area of 268-acres. The parcels are separated by National Park Service (NPS) land. In order to connect the two parcels, collaboration must occur between Gwinnett County and NPS. In addition, citizen involvement and public input will be an important part of the design process. The 2004 Comprehensive Plan will also be a factor for consideration during the planning process.

The Settles Bridge land was formerly used for agricultural purposes and is recovering from farming practices. The property contains some fairly steep valleys that were not suitable for farming and contain larger trees. Overall there is not much diversity to the vegetation. The consultants will assess and map the entire property to inventory vegetation, hydrology, soils, unique features, views, points of access, etc. Since the park is slated for passive use, some of the program elements might include trails, open meadows and preserved forest land.

**Community Interest Forms** by *Rex Schuder, Gwinnett County:*

Community Interest Forms were passed out to the entire audience and collected by The Jaeger Company (consultants) for tabulation. The tabulation will serve as the basis for park programming.

**Park Planning Process/Steering Committee** by *Rex Schuder:*

The park planning process was explained to involve the following meetings (two Saturdays and four evenings at a minimum):

- Scheduling (evening) – bring calendars and establish dates for meetings during an approximate 3-4 month period
- One full day bus tour of other park sites (Saturday)
- One full day for a walking tour of the park site (Saturday)
- Inventory & Analysis (evening)
- Three Alternative Concepts (evening)
- Preliminary Master Plan, Grading Concept & Cost Estimate (evening)
- Final Master Plan & Prioritization based on Refined Cost Estimate - presentation to Recreation Authority & Steering Committee (evening)
- – after plan approval, recommend to Board of Commissioners (day) Steering Committee invited to attend

Steering Committee Forms were passed out to audience members who expressed interest and collected by the county (Rex Schuder)

### **Public Comments:**

1. Chris Lewis, 200 Johnson Road:

He was concerned about traffic congestion in the area. He stated that at peak time there were 1200 cars passing the site per hour and on the weekends, there were 350 cars passing the site per hour. He is very interested in activities that are not associated with large amounts of traffic.

2. George Minno, 355 Highland Gate Circle:

He was curious as to how the National Park Service's (NPS) plans would coordinate with the master planning of the site. Would Gwinnett County be able to work with NPS effectively?

Grant Guess: We are in contact with NPS and they express willingness to work together on the project.

(Someone in the crowd stood up and said comments could be made to the NPS through their website [nps.gov] and that comments must be submitted with a name, address and phone number or it would not even be read. The comments are due to NPS by July 30<sup>th</sup>, 2004.

3. Marie Vadel, 670 Birnamwood Drive.

She wanted to know if the county could give a 100% guarantee that the park would be passive. She expressed concern about residential progress; more specifically, the fact that an elementary school is right next to the park. An increase in crime in the area is another concern of hers. Lastly, she was also concerned about the traffic in the area. She states that it is bad now, and the park would only worsen the situation.

Grant Guess: There is never a 100% guarantee, but how the park will turn out is up to the public. Will ask someone from Riverside Elementary to be on the steering committee and they will work with DOT to minimize traffic congestion in the area.



4. Unidentified audience member:

Why can't access be on another road than Johnson road? Will the parking lot be visible from the road?

Grant Guess: All avenues of access will be explored in the design process. The visibility of the parking lot can help to keep crime down by allowing passerby's to patrol it on a daily basis.

5. Pat Sutton, 385 Highland Gate Circle:

Doesn't want parking lot next to her house. She suggests to Mr. Hill "Buy some more land."

6. Linda Fleming, 6795 Bass Circle, Buford:

She stated the need for bike accessibility in the area. She also brought up the idea of connecting bike trails to the trails at Suwannee, The Mall of Georgia and possibly link to Roger's Bridge.

7. Milt \_\_\_\_\_, Lawrenceville: (fisherman)

He wants access to the river for fishing. He brought up that the Chattahoochee River from McGinnis Bridge to I-20 is declared a "pristine area", meaning that improvements (i.e. trails) cannot be seen from any vantage point on the river. NPS fought the clean up of the river a couple of months ago. Chattahoochee is ranked in the top 100 streams for best trout fishing. NPS has plans to remove non-native plants and fish from the Chattahoochee; it has already been done in the Smokey's. He feels this is an extreme measure especially since the area has been developing rapidly and has changed greatly in the past four years (since the NPS study of 2000). He would like NPS to reconsider their recommendations based on current conditions the park surroundings.

8. Russell Thorn, 191 Johnson Road:

He supports green space. He sites a park where two women had their purses stolen from their cars. He is worried about crime and says that the park must be policed. He is also concerned about fire in the area. There are a lot of dead pines and material that could aid a fire. He is also concerned about the traffic congestion in the area. He states that sidewalks are needed in the area as well.

Grant Guess: Acknowledges the threat of fire in the area; but at the moment, there is not a lot of access to the site so that the dead material could be removed. In the meantime the county could fell dead trees and leave them on the ground, to be removed at a later date.

9. Stan Crane, 2356 Ceiba Court, Lawrenceville: (Bicyclist)

Praises the Yellow River site but states that the traffic congestion to get there makes it almost not worth it. He wants mountain bike trails that are not paved. These would provide access through the site as well as more trails for mountain bike enthusiasts. He is with the Southern Off-Road Bicycling Association (SORBA) and the members would be a patrol for the area as well as recreation seekers. He also wants trails that lead to the river. Trail runners could enjoy the trail system as well.

10. Tracey Bailey, 869 Middle Fork Trail, (Riverside PTA):

She is concerned about the safety of the children at Riverside elementary. There needs to be a boundary between the school and the park (i.e. fence, berm, etc.)

11. Scott Willenbrock, 220 Galesburg Drive, Lawrenceville: (Bicyclist)

He wants mountain bike trails. There are limited trails now, and we need more. Yellow River is good example but it is too limited. Sustainable trails are possible, without being paved.

12. Greg Smith, 222 South Bartow St, Cartersville:

He wants to maintain access to the river. He is worried about dealing with the NPS on this project. Wants to see how Gwinnett County works with the NPS and learn from it.

13. Dr. Jun Ro, 6269 Grand Loop Road:

Will there be any quiet space in the park?

Grant Guess: There will be 90% or more quiet space in the park.

14. Dave Bouchelle, 1493 Riverview Run Lane:

How will we access the 50-acre parcel to the north of the site?

Grant Guess: We will work with the NPS to get pedestrian access between the two parcels. It is up in the air now on exactly how it will work.

15. Unidentified audience member:

When did we talk to NPS?

Grant Guess: It was about a month ago.

16. Unidentified audience member:

Who owns the unpaved portions of Settles Bridge Road?

Grant Guess: Not exactly sure. I will have to talk to DOT to find out if there are any setbacks or right of ways. The road has not been used in so long that we are not exactly sure who owns those sections of the road. If the bridge was still open, the county would have control of it.





**SETTLES BRIDGE PARK SITE MASTER PLAN  
STEERING COMMITTEE  
PROJECT SCHEDULING MEETING MINUTES**

**Date of Meeting:** 11 August 2004

**Date of Issue:** 13 August 2004

**Attendees:**

Rudy Bowen

Barry Britt

Marcie Diaz

Linda Fleming

Marsha Goodwin

Mrs. Mark Jewell

Philip Manuel

George Minno

Steve Reynolds

Jun Ro

Alan Schneiberg

Guru Setty

Pauline Shannon

Beverly Smith

Russ Thornton

Erik Van Dyck

Guy Van Ort

Garry Wallace

Rex Lee Schuder – Parks & Recreation Project Administration, Gwinnett Co.

Dale Jaeger – The Jaeger Company

Anne Wilfer – The Jaeger Company

---

The Settles Bridge Park Steering Committee convened with their calendars to develop a schedule for the Master Plan Process. Rex Schuder shared color enlargements of a recent helicopter flyover of the park site which clearly illustrate the pine beetle devastation. All attendees introduced themselves and steering committee members identified where they reside in relation to the park land. A number of committee members were able to identify their homes on the maps!

Rex Schuder stated that he normally needs two weeks lead time to reserve a tour bus. Therefore the first field trip was targeted for a Saturday that everyone could agree on in early September. The second field trip was scheduled for the following Saturday. Rex Schuder then asked The Jaeger Company to indicate how much time they needed to prepare the following materials for presentation:

Inventory & Analysis and (3) Conceptual Plan Drawings

Preliminary Design, Grading Concept and Preliminary Cost Estimate

Final Master Plan and Refined Cost Estimate

The group agreed on dates when these materials will be presented at evening meetings in the Gwinnett County Building. Rex Schuder stated that other parks department officials will also be reviewing the submitted materials and offering comments throughout this process. Final Presentations to the Recreation Authority and The Board of Commissioners will be scheduled at later dates. The Steering Committee Members are encouraged to attend these presentations as well.

*Please notify The Jaeger Company of any errors of omissions in these minutes.*





**SETTLES BRIDGE PARK SITE MASTER PLAN**  
**STEERING COMMITTEE FIELD TRIP**  
**GWINNETT COUNTY PARKS TOUR**

**Date of Field Trip:** 11 September 2004

**Date of Issue:** 15 September 2004

**Attendees:**

Rudy Bowen

Marcie Diaz

Susan Herd

Chris Horstmann

Mark Jewell

Philip Manuel

George Minno

Steve Reynolds

Jun Ro

Alan Schneiberg

Guru Setty

Beverly Smith

Russ Thornton

Erik Van Dyck

Garry Wallace

Rex Lee Schuder – Parks & Recreation Project Administration, Gwinnett Co.

Luke Rushing – The Jaeger Company

---

The Settles Bridge Park Steering Committee was guided by Rex Schuder on an all day tour of four Gwinnett County Parks. Examples of typical Gwinnett County Park features and amenities were observed and reviewed at each location. Below is a list of the parks visited and descriptions of key features discussed at each location:

**1. Little Mulberry Park**

-Parking-

The parking lot is located in a high visibility area to encourage passive policing of the park. This location is also in close proximity to amenities and allows for convenient access.

-Architecture-

The design features and detailing of the structures is representative of the Early American Parks Movement.

-Special Features-

Many stacked stone mounds are present on the ridge that runs through the park site.

-Forrest Ecology-*Definition by Rex-*

A successional forest begins to establish with pine, usually Loblolly Pine. Smaller hardwoods take hold next, shaded and protected by the larger pines towering above. As the hardwoods mature, they crowd out the pines. Montane vegetation begins to establish an understory plant layer as the pines are weeded out.

**Features:**

Structures (kiosk, pavilion, shelter)  
Stonework (walls, drainage structures, gutters)  
Woodwork (trail signage)  
Permeable Surface Trails  
Pedestrian Bridge (stone)  
Multi-Purpose Trail (paved)  
Playground

<Lunch>

**2. McDaniel Farm**

-Structures-

The main barn was partially rebuilt and reinforced to make it stronger, but detailed to look like a rustic farm building. The fencerow was also reconstructed in a way to make it look historic, by placing fence posts at irregular intervals.

**Features:**

Structures (kiosk, restroom, pavilion, barn)  
Stonework (structures)  
Pedestrian Bridge (wooden)  
Educational Signage  
Gates (wooden)  
Multi-Purpose Trail (paved)

**3. Ronald Reagan at Five Forks Park**

-Variety of uses-

The park offers a diverse mix of activities that appeal to most of the local community, regardless of age. *Rex defined a successful park space as one in which two teenagers would court one another in broad daylight within the presence of responsible adults in a public place.*

-Parking-

The size of a parking lot can meter the flow of people into a park, to make sure that the crowd using the park does not exceed the park's carrying capacity.

**Features:**

Structures (pavilion, shelter, restroom)  
Recreational Opportunities (playground, basketball courts, bocce courts, horseshoes & skate park)  
Dog Park  
Cookout Area  
Trail Signage (metal)  
Pedestrian Bridge (wooden)  
Drainage Structures  
Trail Surfaces (paved, mulched)



#### 4. Tribble Mill Park

-Dirt Trails-

If they are not constructed well, they will erode and become unusable for most people. Techniques for properly grading the trails should be used for construction to ensure that water does not flow straight down the center of the trail like a streambed.

**Features:**

Structures (kiosk, pavilion, restrooms)

Playground

Trail Markers (wooden)

Multi-Purpose Trail (paved)

Stonework (walls, seating area)

Pedestrian Bridge (steel)

Dirt Trails (unpaved)

*Please notify The Jaeger Company of any errors or omissions in these minutes.*



## **SETTLES BRIDGE PARK SITE MASTER PLAN**

### **STEERING COMMITTEE FIELD TRIP**

### **SETTLES BRIDGE PARK SITE TOUR**

***Date of Field Trip:*** 19 September 2004

***Date of Issue:*** 22 September 2004

**Attendees:**

Rudy Bowen

Barry Britt

Marcie Diaz

Susan Herd

Mark Jewell

Philip Manuel

George Minno

Jun Ro

Alan Schneiberg

Pauline Shannon

Beverly Smith

Russ Thornton

Erik Van Dyck

Guy VanOrt

Grant Guess– Parks & Recreation Project Administration, Gwinnett Co.

Rex Lee Schuder – Parks & Recreation Project Administration, Gwinnett Co.

Dale Jaeger – The Jaeger Company

---

The Settles Bridge Park Steering Committee was guided by Rex Schuder on an all day tour of the Settles Bridge Park property. Site maps were provided by Gwinnett County so that committee members could follow the tour route. After meeting at Riverside Elementary School and receiving an orientation from Rex, the tour began on the 217 acre site at an access point (former road cut) on Johnson Road.

The committee followed an existing road stopping at a former home site and observing an open well in the landscape. There was also continued discussion and observations throughout the day about the various stages of vegetative succession occurring at the site, much caused by the recent pine beetle damage. The group also observed a number of areas within the site that retained agricultural terracing, visually expressing the former farming practices at the site.

Continuing to follow the existing road to the northwest property line of the 217 acre site, the group reached a “fork” in the road. Rex noted that the northern fork extended to the boundary of the Bowen tract (an adjacent land owner), while the southern route extended to the Chattahoochee River in a southwesterly direction. Both routes extended across National Park



Service (NPS) land. The southern fork would result in a path that was not direct, while the northern fork did not extend directly to the 51 acre site either. Rex noted “saddle” land forms in this area of the site and showed the group on the map how these features might be used to provide a more direct access to the 51 acre site that would remain fairly level.

Once on NPS land, the committee followed the southern fork of the existing road which terminated into an existing sewer easement. The committee followed the easement in a northerly direction to reach the 51 acre site. One area of the sewer easement contained two parallel corridors – one was the permanent sewer easement which extended through an area bordered by a mature hardwood forest, while the other area was the construction easement. The permanent sewer easement was built by means of a tunnel and was situated closest to the river. The group followed the construction easement, rejoining the sewer easement further north. Vegetative succession was discussed several times along the open easement which was in early stages old field succession, noting particularly the emergence of young hardwoods in some of the open areas as compared to young pines in others. The easement is apparently mowed every few years to remove trees before they can become established.

The committee continued to follow the sewer easement, but at one point decided to bypass a large drainage ditch and travel through the Bowen property (with Mr. Bowen’s permission) as an alternate route. At approximately one-half into the 51 acre site, the committee left the sewer easement and turned west and passed through woodlands with thick under brush, much of the vegetation being privet, an invasive exotic plant that spreads rapidly along creeks throughout the southeast. Once reaching the Chattahoochee River at the location of shoals, the committee enjoyed the pleasant views from this bluff. Rex observed large number of walnut trees in this area of the site. Development on the opposite side of the river could be seen from this location.

Discussion ensued on the restrictions that NPS is presently proposing for the Chattahoochee River National Recreation Area (which includes the NPS property that separates these two tracts). Restrictions include prohibiting any bridge structures or riverside overlooks. NPS also proposes that views from the river remain unobstructed, which poses a challenge in this project, since it would be desirable to locate trails with views to the river. Rex noted that a future NPS public meeting is planned at a location in Gwinnett, so committee members were encouraged to attend. Rex noted that special interest groups, particularly trout fishermen, had been the most vocal group to date. The Atlanta Regional Commission (ARC) is another agency with purview over the river corridor. ARC’s boundary includes reviewing development proposals within 1,000 feet of the river.

After leaving the riverside, the group traveled a short distance further north along the sewer easement before stopping at a creek that bisects the 51 acre site. The creek creates an isolated triangular piece of land at the northwest corner of the tract. Due to the cost of bridge construction, even if a bridge were allowed by NPS and ARC, the group seemed to agree that this portion of the site should not be developed.

The committee then traveled up the steep hillside at the eastside of the 51 acre site and observed a series of intact agricultural terraces, many with piles of rocks strewn about, reflecting the work of farmers in the past. After almost reaching the summit, the group stopped at a specimen size oak which was also surrounded by the native rock and discussed various options for a

future trail system in this area. There is the opportunity for a series of interesting trail loops that could follow contour lines and include switchbacks to negotiate the slopes.

The group then took a more direct route back to the school to adjourn for lunch, again traveling through the Bowen property and then following a pristine stream valley that extended from southern portions of the Bowen tract to northern portions of the 217 acre site. The creek side vegetation in this area was undisturbed. Rex noted a plant (Baby Doll Eyes) that still needs to be identified.

The group had lunch at a nearby restaurant, Pepe's. Mr. Bowen treated the group to lunch. The committee then "brainstormed" about the potential park program. Ideas generated included the following:

- Benches*
- Canoe Take-out Location on River*
- Dog Park*
- Interpretation (historical and natural information)*
- Lawn Area – Large Open Meadow (5-7 ac)*
- Kid Skate Area*
- Multi-purpose Court*
- Overlooks (at shoals & along the river)*
- Pavilion (Large for Community Gathering)*
- Picnic Area (with small pavilions)*
- Playground (like Tribble Mill, desires a shady location with a sandbox)*
- Senior Area (Horse Shoe Pit & Croquet)*
- Splash Ground Element for Play*
- Support Facilities – Parking, Restrooms*
- Swings for Adults*
- Teenage Area (like Five Forks – near parking – visible location)*
- Trails (Boardwalk, Multi-purpose Paved Trail & Nature Trails – unpaved, mulched)*

The committee discussed this park being a "hybrid" of typical Gwinnett County parks, a blend of open space and passive parks. There was also discussion of "tiers of intensity" with the more active uses being placed in closest proximity to roads (Johnson & Settles Bridge) with less intensive uses being further into the site. This would result in less intensive uses along the Chattahoochee River frontage.

The afternoon site tour focused on the balance of the 217 acre site. Beginning again at the school, the group traveled on Settles Bridge Road, entering the site at a recent road cut created in geotechnical testing of the site. A roadbed was identified in the area and noted as a potential location for the future construction access. There was extensive pine beetle damage in this area of the site. The group followed a loop route, eventually exiting the site at the entrance location. Rex described an intact stream valley in this area of the site, but due to time limitations the group was unable to see.

Rex met with committee members – Tracey Bailey, Garry Wallace and Guru Setty – on Wednesday September 22, 2004 and walked the site, since these committee members were not able to attend the Saturday tour.

*Please notify The Jaeger Company of any errors or omissions in these minutes.*





**SETTLES BRIDGE PARK SITE MASTER PLAN**  
**STEERING COMMITTEE**  
**MEETING MINUTES**

**Date of Meeting:** 19 October 2004

**Date of Issue:** 25 October 2004

**Attendees:**

Barry Britt

Marcie Diaz

Marsha Goodwin

Susan Herd

Mark Jewell

George Minno

Steve Reynolds

Jun Ro

Alan Schneiberg

Guru Setty

Beverly Smith

Erik Van Dyck

Guy Van Ort

Garry Wallace

Rex Lee Schuder – Parks & Recreation Project Administration, Gwinnett Co.

Dale Jaeger – The Jaeger Company

Anne Wilfer – The Jaeger Company

Luke Rushing – The Jaeger Company

---

The Settles Bridge Park Steering Committee convened at the Gwinnett Justice and Administration Center for the presentation of the Inventory and Analysis and Preliminary Design Options for the Settles Bridge Park site. The meeting was kicked off by Gwinnett County Parks police officer; Major Dost, who discussed nuisances within Gwinnett County Parks. Major Dost discussed specific instances involving cars being burglarized during the daytime, men meeting men in restroom facilities for “some strange reason” and skate boarders vandalizing site furnishings such as picnic tables which they move around and use as skating apparatus. Major Dost also elaborated on the inability for the police to patrol all the parks all the time; he explained that there are only 12 officers split into 2 shifts at any given time.

The meeting then proceeded with some background information and an overview of the project progress up to this point by Anne Wilfer. Ms. Wilfer mentioned that research of historic

**Corporate Office:** 119 Washington Street • Gainesville, GA 30501 • 770-534-0506 • Fax 770-534-0507 • [www.jaegerco.com](http://www.jaegerco.com)  
480 East Broad Street, Suite 17 • Athens, GA 30601 • 706-543-5459 • Fax 706-548-7939

sites documented in and around the project area had been completed by the archaeologists. A chain of title research was completed by the Jaeger Company. She offered that strategic low level reconnaissance archaeology would be arranged for the obvious cultural sites on the property. Ms. Wilfer then introduced a 1938 aerial photograph of the site, recently found in the map collection at the University of Georgia Library. Agendas prepared by the Jaeger Company were distributed and served as a guide for the presentation.

Luke Rushing presented the Inventory and Analysis maps for the site. The maps included; the Chattahoochee River Corridor Setback Requirements, Vulnerability Categories, Slope Analysis, Soils, Hydrology, Vegetation and Site Features.

Rex Schuder offered an update on connecting the two park parcels with a trail route through NPS property. Rex presented NPS with two options for linking the two parcels with a trail. NPS has declared a preference for Option B, but apparently this does not mean anything until a NEPA study has been conducted. The Jaeger Company was asked to provide a proposal to assist the county with this study.

Prior to the presentation of the three preliminary design options, handouts containing the map illustrations for inventory and analysis were distributed. Ms. Wilfer's presentation of the design options followed with the organization of the agenda by first discussing features common to all three of the plans and then discussing the differences between them. *See the attached agenda for reference.*

Common features included; 200 parking spaces, an amenity area, a teen area, senior area, dog park, open space meadows, trails with footbridges, an overlook on the river, benches, highlighted cultural sites, a canoe take-out location and a maintenance area. Ms. Wilfer then began to discuss the differences between options:

Option 1 concentrated all the parking and the required amenities on Johnson Road. This left the bulk of the site accessible by pedestrian activities only. Most of the trail routes were 6'-0" wide unpaved walking trails. This option was referred to as the "low impact scheme".

Option 2 split the parking so there was a lot on Johnson Road and another smaller lot above it on the hilltop at the small meadow. This option required a paved roadway into the park to provide vehicular access to the upper lot. It was suggested that amenities could also be split and accommodated in one of the two parking locations. The dog park was targeted for the upper level meadow to provide some separation from people-related activities at the lower level. This option also offered a multi-use trail entrance into the site from Settles Bridge Road.

Option 3 also offered split parking, with one lot on Johnson Road and another off Settles Bridge Road. Vehicular access off Settles Bridge Road would require paving the road up to the entrance and a vehicular bridge to cross the ravine on the site. This option also had a more extensive multi-use trail network and introduced a suspension bridge for connecting the two meadow spaces over a steep sided ravine.

The committee then discussed what they liked and disliked about each option and offered ideas for compromise and solution. Members of the committee felt that there should be clear separation between the teen area and the playground, maintaining the teen area in a high visibility area near the road. Site access and connection between the two open meadow spaces were also discussed. Surrounding and linking the two meadow spaces with multi-use trails provided a more extensive multi-use network and was preferred by several people. Concerns for safety were expressed about the designs that had isolated parking, especially the lot off Settles Bridge Road. Some of the committee members preferred separation of the dog park from the rest of the amenities, and liked the possibility of locating the senior area

Corporate Office: 119 Washington Street • Gainesville, GA 30501 • 770-534-0506 • Fax 770-534-0507 • [www.jaegerco.com](http://www.jaegerco.com)  
480 East Broad Street, Suite 17 • Athens, GA 30601 • 706-543-5459 • Fax 706-548-7939



next to the dog park as well. The issue of how the park would be lighted (or not lighted) was also discussed in great detail. The general intent is for the park to be open from daylight to dusk, with use after dark discouraged.

The committee then came to a conclusion that Option 2, with some revisions, will be the seed from which the preliminary master plan will evolve. Rex Schuder summarized the committee's overall direction for which the consultants will develop a plan:

Maintain a 100' buffer between park development and adjacent residential properties. Accommodate a dog park, senior area, restroom facility and parking at the smaller meadow space. Ideally the dog park should be 3.5-acres. Provide trail linkage between the two meadow spaces at the ground level and include a pedestrian only suspension bridge spanning the ravine between the meadows. Provide the majority of parking on Johnson Road. Flip the arrangement of the teen area and the playground so the play area is a safe distance from the interior access road. Provide clear separation between the teen area and the play area, add a fence if necessary. Provide an acre of lawn space adjacent to the pavilion and play area for kids to run around. Maintain as many trees as possible and figure out a way to provide shade for the amenity area playground, multi-use trails and seating locations. Provide a shelter near the playground and teen area that will not be rentable. The main pavilion will be rentable. The trail network will be a combination between Option 2 and Option 3.

The following are action items for the Jaeger Company:

- *Show a 6'-0" wide sidewalk along Johnson Road for the full length of the park property frontage (to be provided by the county).*
- *Add a decel lane and turning lane for access off Johnson Road. Confirm requirements with county and GDOT.*
- *Investigate possible access from school property. Locate old road spur with potential for multi-use trail access - would not require a bridge to traverse ravine into the property.*
- *Inquire about sewer tie-in for restroom facilities and cost implications.*
- *Pursue strategic archaeology effort.*

*Please notify The Jaeger Company of any errors or omissions in these minutes.*



## **SETTLES BRIDGE PARK SITE MASTER PLAN**

### **STEERING COMMITTEE**

### **PRELIMINARY MASTER PLAN PRESENTATION - MEETING MINUTES**

**Date of Meeting:** 16 November 2004

**Date of Issue:** 22 November 2004

**Attendees:**

Barry Britt

Marcie Diaz

Marsha Goodwin

Susan Herd

Steve Reynolds

Jun Ro

Alan Schneiberg

Beverly Smith

Erik Van Dyck

Guy Van Ort

Garry Wallace

Rex Lee Schuder – Parks & Recreation - Project Manager, Gwinnett Co.

Grant Guess – Parks & Recreation, Gwinnett Co.

Phil Hoskins – Director, Department of Community Services – Gwinnett County

Dale Jaeger – The Jaeger Company

Anne Wilfer – The Jaeger Company

Luke Rushing – The Jaeger Company

---

The Settles Bridge Park Site Steering Committee convened at the Gwinnett Justice and Administration Center (GJAC) for the presentation of the Preliminary Master Plan for the Settles Bridge Park site. Rex Schuder began the meeting by showing a display graphic from another park in Gwinnett County. This was to illustrate a comparison between parking capacities of Gwinnett County parks. Mr. Schuder noted that 200 spaces for Settles Bridge is actually a small number relative to the size of the total site. The number is also fewer than most park sites in Gwinnett County. Mr. Schuder also added that Riverside Elementary has a +/- 100 space parking lot and this space could possibly be used as an overflow parking lot on weekends. It is also likely that the park's parking lot could provide the school with overflow parking for evening events.

The meeting then proceeded with Anne Wilfer presenting the Preliminary Master Plan and discussing the features of the plan. An overall plan that showed the entire site was displayed.



An enlarged plan providing details of the amenity areas was also presented. A preliminary grading plan was on display to illustrate the extent of required earthwork.

The meeting was then opened for comments by the Steering committee members with Mr. Schuder asking each member for their opinions. Most committee members were pleased with the plan, with some minor comments. The comments received by the committee are referred to in the "action items" listed at the end of these minutes. Discussion included the following.

The committee asked how elements of the plan will be prioritized and Mr. Schuder responded that priorities will be set at the next meeting. The committee wanted to know if the history would be incorporated into the site's master plan and the status of the archaeological element of work. Ms. Wilfer answered this question, stating that the major cultural sites will be further documented based on both the archeological findings to date as well as additional historical research. The archeologists have also provided a fee proposal for limited shovel testing at the site, which may be considered as an addition to the scope. As an end result, interpretive displays at the various cultural sites and/or an interpretive kiosk in one location, such as near the parking lot or in the amenity area, will likely be a recommendation in the final master plan.

There was a question about the park's name. Rex Schuder mentioned at this time that the title of drawings should be Settles Bridge Park Site and that the decision on the park name is at the discretion of the Gwinnett County Recreation Authority and will be made at a later date. The Steering Committee was advised that they can recommend a name or names for consideration. There was a question about trail types and Mr. Schuder noted that the multi-use trail will be paved, but that the natural trails will be unpaved with an earthen surface, similar to the Appalachian Trail system. There was also a question about trail lengths, in regard to priorities and phasing. The Jaeger Company agreed to provide additional information on the trail lengths.

The next issue was brought up by Mr. Schuder in regard to the amenity area. He felt that the playground and pavilion should be closer together. The committee also felt that there was a great need for seating and shade conditions near to the playground for children and parents. The topic of shade structures (including breathable fabrics) and trees for locations in the playground was discussed by the committee as well. The idea of trees in the playground would require additional fencing or some type of enclosures around each tree to ensure they are not damaged. Mr. Schuder also noted that it will take many years for new tree plantings to grow into shade producing trees. The committee also wanted to divide the playground between the younger and older kids.

The next issue was the trail connecting the two parcels through National Park Service (NPS) land. Mr. Schuder noted that he is waiting on Mrs. Jaeger for a proposal for additional work that will meet the environmental assessment requirements of NPS. Ms. Jaeger noted that she is waiting for a return call from the NPS. The committee also felt that buildings should be more clearly identified on the drawings, since there was confusion as to what was a pavilion versus a restroom.

Rex Schuder then commented on what he thought might be changed in the plan. His idea was that the upper parking should be closer to the large meadow to the west. The committee disagreed with having parking adjacent to the suspension bridge, so Mr. Schuder withdrew this suggestion. Mr. Schuder felt that the amenity area will be shuffled around, in regard to the restroom, playground and pavilion placement. Mr. Schuder also informed the committee that a maintenance yard, roughly the size of two tennis courts will be needed on the site. The maintenance yard will have to have a paved access to the paved road on the site.

The discussion then turned to the issue of park sewer service. The site will need sewer for restrooms in both the Johnson Rd. amenity area and at the eastern meadow. Several options for routing sewer lines and accessing existing manholes have been considered. The best possible scenario would be to have the sewer line extend from the restroom in the eastern meadow (Dog Park & Senior Courts Zone) along the paved road leading to the Johnson Road parking lot, then to the restroom near the Pavilion, thus lessening destruction to woodlands.

Mr. Guess then explained that there is consideration for a future addition of a residence to be added to the site for a police officer. This is being considered as a means of providing park security. Since police officers work different shifts, the park would be patrolled at different times. The potential location of the residence would be to the southeast of the site along Johnson Road.

The committee was then asked to vote on the recommendations of the Preliminary Master Plan. The vote was unanimous in favor of the plan.

The Jaeger Company then passed out a preliminary version of the cost estimate to the committee. The cost estimate was discussed, noting some changes that need to be made and some omissions. Some elements will need to increase in price due to associated equipment. The main goal of this exercise was to show the committee how much the park will actually cost and how limited the available funds are in completing the entire plans.

Discussion also followed on the cost of the suspension bridge and the various options in the design of a suspension bridge. Examples in north Georgia at Tallulah Falls State Park and also at a location near the Toccoa River were noted.

The following are action items for the Jaeger Company:

- *Locate outdoor classroom at Riverside Elementary and ADA accessibility*
- *Address shade concerns in playground space*
- *Consider kid-scale urinal in restroom near playground*
- *Add swings for older kids in vicinity of skate park*
- *Add maintenance compound to site (approximate location noted which would require adjustment of current park road alignment)*
- *Minor adjustments in amenity area, based on final comments from Mr. Schuder*
- *Display lengths of trail loops and types*
- *Consider further archeological testing at site*

Next meeting will be held on Wednesday, December 8, 2004 at GJAC in Conference Room B starting at 7:00 pm.

*Please notify The Jaeger Company of any errors of omissions in these minutes.*



## **SETTLES BRIDGE PARK SITE MASTER PLAN**

### **STEERING COMMITTEE**

### **FINAL MASTER PLAN PRESENTATION - MEETING MINUTES**

**Date of Meeting:** 08 December 2004

**Date of Issue:** 10 December 2004

**Attendees:**

Barry Britt

Marcie Diaz

Marsha Goodwin

Susan Herd

Mark Jewell

Phillip Manuel

Steve Reynolds

Jun Ro

Guru Setty

Alan Schneiberg

Beverly Smith

Erik Van Dyck

Guy Van Ort

Garry Wallace

Rex Lee Schuder – Parks & Recreation - Project Manager, Gwinnett Co.

Dale Jaeger – The Jaeger Company

Anne Wilfer – The Jaeger Company

Luke Rushing – The Jaeger Company

---

The Settles Bridge Park Site Steering Committee convened at the Gwinnett Justice and Administration Center (GJAC) for the presentation of the Final Master Plan for the Settles Bridge Park site. Rex Schuder provided an overview of the park development budget. The overall budget is \$2.8 million, minus design fees of approximately \$400,000 for a total construction budget of \$2.4 million.

The meeting proceeded with Anne Wilfer presenting an overview of the archaeological and historical research findings to date. Sub consultants, New South Associates, conducted a literature review which identified all sites in the vicinity of the park site that have had shovel testing. This testing was required prior to permitting for land disturbing activity. Since the park site has never been slated for development, there is only one test site within the park boundary (in tract one, near the western border). The Jaeger Company expanded the historical review of the park site to include deed research and a 1938 Gwinnett County

**Corporate Office:** 119 Washington Street • Gainesville, GA 30501 • 770-534-0506 • Fax 770-534-0507 • [www.jaegerco.com](http://www.jaegerco.com)  
480 East Broad Street, Suite 17 • Athens, GA 30601 • 706-543-5459 • Fax 706-548-7939



Highway Map. The deed research explained how a much larger land tract, including the park site, was acquired by the West Lumber Company. Names of the former property owners were highlighted and although one deed contained a drawing of the property, it was not possible to determine where this was located within the park property. The 1938 map illustrated roads, natural features and building locations. Superimposing the park site boundaries on the map placed several historic buildings within the park and in proximity to extant features. For example, the well is located very near to one of the former building sites. Historic aerials showing how the landscape has returned to forest from its past agricultural use and current photographs of the cultural features remaining on the park property were also presented.

Luke Rushing presented the Grading Concept Plan and explained what the targeted slope range was for each of the areas slated for park use development. He also expressed that to date there is a surplus of cut (approximately 30% over the total amount of cut). The consultants will continue to work toward balancing the amount of cut and fill on the site, with the goal of ending up with only around 10% excess cut. Luke also presented the Trail Lengths Map, which was developed through collaboration with Rex Schuder. The goal of this map was to illustrate some of the possible options for trail loops within the park site. These loops are part of the overall park trail system, offering routes with specific distances.

Anne Wilfer then presented the Final Master Plan on two boards, one showing the overall plan at a scale of 1"=600'-0" and an enlarged view of the amenity areas at a scale of 1"=200'-0". She explained that the plan had not changed that much from the Preliminary Master Plan, but it had been refined by rearranging some of the elements in the amenity areas. A few items requested for inclusion at the last meeting, such as a designated maintenance area, were also added to the drawing. Alignment of the road and portions of the trails were adjusted to minimize the steepness of grade. It was also explained that the grading plan had been a major focus of the plan refinement efforts.

The Final Cost Estimate was then circulated. Anne Wilfer explained how it was organized and elaborated that costs to develop certain areas of the park, such as the West Meadow, were broken out as separate categories. After a brief review, Rex Schuder asked the committee members to offer recommendations on what they felt was the single most important element to be constructed first. The committee then voted a number of times to determine what they felt to be most important elements for Phase One Construction. The prioritization exercise yielded the following:

1. Paved and Unpaved Trail Development – a balance of both
2. Pavilion/Play Area
3. Teen Area
4. Dog Park
5. 51-Acre Trail Development
6. Senior Area
7. Western Meadow

Dale Jaeger facilitated development of the Phase One Construction Budget by selecting items to be included from the Cost Estimate. A running total, which also included a contingency cushion, targeted the projected budget amount of \$2.4 million. It was determined

that not all of the elements from the prioritization exercise could be included. Of the items listed above, approximately half could be realized with the available funding. This raised a debate over the importance of providing amenities for teens, dogs and their owners, or seniors. Due to the remoteness of certain elements, such as the 51-acre parcel and the western meadow, it was easy to sort some items by areas of development. The following is a list of the items that will be part of the Phase One Construction Budget:

1. Trails – a balance of paved and unpaved
2. Pavilion Area and Playground, including associated utilities
3. Teen Area (Skate Park - design only)\*
4. Dog Park (if funding is adequate)
5. Park Entry Sign (1)
6. Traffic Signs (at least 2)
7. Associated Earthwork, Clearing & Grubbing and Seeding

\*It was determined that the Skate Park would be designed in Phase One, but bid as an alternate for construction.

Alternates for inclusion with the bid package were discussed and since the cost for the Dog Park did not include earthwork, it would likely run higher than the cost category was indicating. Therefore there may not be enough funds available to construct the Dog Park. The necessity of water service to this location also adds considerably to the overall cost to realize the development of this area. *For details, see the attached Phase One Cost Summary.*

The committee was then asked to vote on the recommendations of the Master Plan, future phasing for implementation and cost associations. The plan was approved by a majority ruling. Five out of fourteen committee members disagreed, believing that the skate park should not take precedence over the dog park.

*Please notify The Jaeger Company of any errors of omissions in these minutes.*

# ***Appendix D***

**Historical Research –  
The Jaeger Company**





# GEORGIA HISTORIC RESOURCES

Historic Preservation Section  
Georgia Department of Natural Resources

205 Butler Street, Suite 1462  
Atlanta, Georgia 30334  
404/656-2840

Resource No. FO-00-390  
County Forsyth

For instructions, see the Georgia Historic Resources Survey Manual

1 Name(s) of resource

*Seale's Bridge*

3 Address/location

*Crosses Chattahoochee River, E side Southers Cir., .6 mi. E of Seale's Rd.  
Suwanee (vicinity), 30174*

4 Owner's name and mailing address

5 ☐ Building

☒ Structure

☐ Site

☐ Object

☐ Landscape feature

6 ☐ Representative example of building type

Number represented

7 Use, current *abandoned bridge*

original *road-related transportation; water-related transportation;*

2 Location map with North at top



8 Date of construction (or estimate)

*CA. 1930 - 1939*

9 Major changes & date (explain in No.25)

☐ Altered

☐ Moved

☐ Addition

☐ Destroyed

10 Architect/engineer/designer

*Unknown*

11 Contractor/builder/craftsman

*Unknown*

12 Style

13 Building type

14 Original Floor Plan

15 Plan shape

*rectangular*

16 Number of stories

17 Facade symmetry & front door(s)

18 Roof type & material

19 Chimney placement & material

20 Type of construction

*handmade steel*

21 Exterior material(s)

22 Foundation material(s)

*concrete pier*

23 Porch(es)

24 Windows

25 Additional physical description

*Fair condition, threatened by recent development in area [CHD]  
decking removed, cannot be crossed*

26 Negatives: roll #

frames #



27 Description of outbuildings (if any)

28 Site plan with North at top

29 Description of landscape features

*forest/woods - natural; bend in the river*

30 Number of buildings 1 structures 0  
     outbuildings 0 sites 0  
     landscape features 0

31 Description of the environment

32 Archaeological potential

33 History

34 Historical theme(s)

*THEMES: architecture*

35 Significance

*[yes, type of bridge construction, transportation route]*

36 Sources of information

37 Prepared by (person, organization and address)

*David Cullison/Claudia Deviney  
 Forsyth Co. Board of Commissioners  
 P.O. Box 128  
 Cumming, GA 30128*

38 Date of survey 1993 - 1995 resurvey

39 Government preservation activity

☐ Section 106 review ☐ Grant  
☐ Tax certification ☐ Other

40 SHPO evaluation

43 Recognition and date

☐ National Landmark  
☐ National Register  
☐ Georgia Register  
☐ Local designation  
☐ HABS/HAER  
☐ Determination of eligibility  
☐ Other

41 USGS quadrangle name Suwanee, GA

UTM reference

16 766640 3776640

zone easting northing

42 Tax map number





# GEORGIA HISTORIC RESOURCES

Historic Preservation Section  
Georgia Department of Natural Resources

205 Butler Street, Suite 1462  
Atlanta, Georgia 30334  
404/656-2840

Resource No. FO-00-391  
County Forsyth

For instructions, see the Georgia Historic Resources Survey Manual

1 Name(s) of resource

[Terry] Settle House

3 Address/location

1 1/4 mi. E of James Burgess Rd. on Southers Cir.  
Suwanee (vicinity), 30174

4 Owner's name and mailing address

Centex Homes, Inc. or GA Trust for Hist.  
Preservation

5 ☒ Building

☐ Structure

☐ Site

☐ Object

☐ Landscape feature

6 ☐ Representative example of building type

Number represented

7 Use, current *Vacant/Not in Use*

original *single dwelling*

2 Location map with North at top



8 Date of construction (or estimate)

CA. 1830 - 1840

9 Major changes & date (explain in No.25)

☐ Altered

☐ Moved

☐ Addition

☐ Destroyed

10 Architect/engineer/designer

Unknown

11 Contractor/builder/craftsman

Unknown

12 Style

Folk Victorian - elements

Craftsman - elements

13 Building type

single pen; dogtrot, then central hallway

14 Original Floor Plan

one room - one room deep; central hallway (passage) - one room deep

15 Plan shape

rectangular

16 Number of stories

One-and-a-half

17 Facade symmetry & front door(s)

asymmetrical, two doors

18 Roof type & material

side-oriented gable - metal - standing seam

19 Chimney placement & material

both gable-ends (exterior) - fieldstone; off-center, within roof surface - brick

20 Type of construction

log; balloon frame/platform frame

21 Exterior material(s)

weatherboard/clapboard/beveled siding; novelty siding/shiplap/drop siding  
shingles; asbestos siding

22 Foundation material(s)

stone pier; stone pier with infill; concrete pier with infill

\*23 Porch(es)

verandah (front, 1 story, partial, wood, shed/pent); verandah (side, 1 story,  
partial, wood, gable); verandah (side, 1 story, partial, concrete, shed/pent);

24 Windows

double-hung sash (flat-headed, see item #25, rectangular)

25 Additional physical description

Fair to poor condition, threatened by modern construction  
probably eligible for National Register; window patterns  
= 2/2, 4/4, 6/6; originally log single pen built in the  
1830s or 1840s; second log pen added with dogtrot (probably  
w/ dirt floor) between; composite chimneys with dates on  
log pens; dogtrot enclosed, rear ell 1850-1875; front porch  
dormers, knee braces, end of rear ell, well porch added  
1880-1915; porch, rooms behind S end and concrete block  
added c1960

26 Negatives: roll #

frames #





## 27 Description of outbuildings (if any)

privy - vertical board, tin roof; collapsing

smokehouse - log (probably late 19th century), tin roof

garage - weatherboard, tin roof; collapsing

corn crib - log, tin roof; across the road  
now owned by another family

barn/shed - frame, tin roof  
now owned by another family

chicken house - flush board siding, tin roof; collapsing

## 29 Description of landscape features

yard setting - informal/picturesque; terracing/contouring/retaining walls;  
terracing/contouring; forest/woods - natural; on bluff, near Chattahoochee  
River

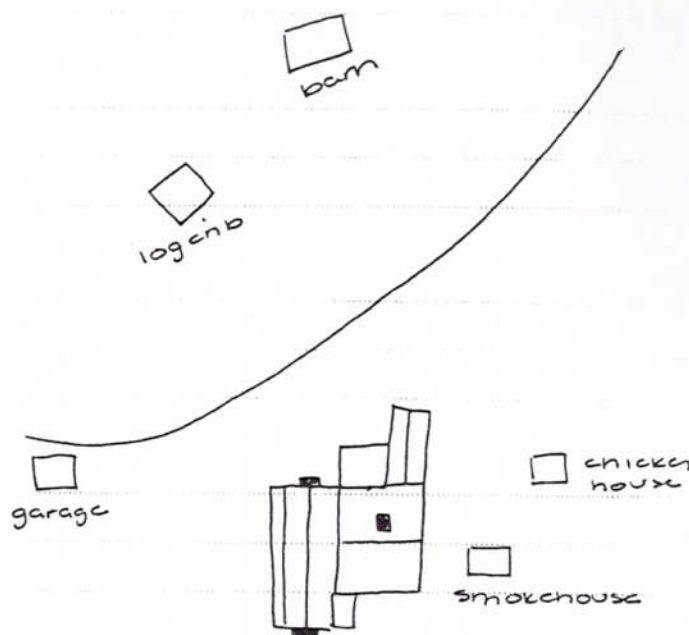
drylaid stone retaining wall

30 Number of buildings 1 structures 0  
outbuildings 6 sites 0  
landscape features 0

## 31 Description of the environment

urban - residential (mixed old and new)

## 28 Site plan with North at top



## 32 Archaeological potential

ruts (roads, paths, trails, gardens) (observed)  
black smith shop/area (reported)

## 33 History

One of the oldest homes in the county.

## 34 Historical theme(s)

THEMES: architecture

## 35 Significance

rare architectural type (good example/illustration)  
history - development (good example/illustration)  
rare architectural technique, log (good example/illustration)

Important to early settlement history

## 36 Sources of information

## 37 Prepared by (person, organization and address)

David Cullison/Claudia Deviney  
Forsyth Co. Board of Commissioners  
P.O. Box 128  
Cumming, GA 30128

## 38 Date of survey 1993 - 1995 resurvey

## 39 Government preservation activity

☐ Section 106 review ☐ Grant  
☐ Tax certification ☐ Other

## 40 SHPO evaluation

appears to meet Nat. Reg. criteria

## 41 USGS quadrangle name Suwanee, GA

UTM reference

16 766060 3776040

zone easting northing

## 42 Tax map number

## 43 Recognition and date

☐ National Landmark  
☐ National Register  
☐ Georgia Register  
☐ Local designation  
☐ HABS/HAER  
☐ Determination of eligibility  
☐ Other

## SOURCES CONSULTED

1. Georgia Department of Transportation. "1938 GDOT Gwinnett County Highway Map." Located at the Georgia Archives, Morrow, Georgia.
2. "1938 Aerial for Gwinnett County, Georgia." Located at the Map Room, Science Library, University of Georgia, Athens, Georgia.
3. "1955 Aerial for Gwinnett County, Georgia." Located at the Gwinnett County Department of Community Services, Lawrenceville, Georgia.
4. "History of the Terry and Settle Families." North Georgia Star, July 1997, p. 32.
5. "Forsyth County Comprehensive Plan," available [online] at [www.co.forsyth.ga.us](http://www.co.forsyth.ga.us). Accessed October 2004.
6. "W.H. Maltbie House." Vanishing Georgia Collection, Georgia Division of Archives and History, Office of the Secretary of State, Morrow, Georgia.
7. "Terry-Settle House." Identified Sites File, National Register Archives, Georgia Historic Preservation Department, Atlanta, Georgia.
8. "Gwinnett County DNR Survey, 1978." County Survey Files, National Register Archives, Georgia Historic Preservation Department, Atlanta, Georgia.
9. "Forsyth County DNR Survey, 1992." County Survey Files, National Register Archives, Georgia Historic Preservation Department, Atlanta, Georgia.
10. Worthy, Marvin Nash. History of Gwinnett County, Georgia 3 vol. Atlanta, Georgia: Stein Printing Company, 1994.
12. Flanigan, James C. History of Gwinnett County, Georgia 1 vol. Hapeville, Georgia: Tyler & Company, 1943.
12. Gwinnett County, Georgia. Superior Court. Deed Book 25786, Page 35.
13. IBID. Deed Book 19868, Page 135.
14. IBID. Deed Book 19868, Page 128.
15. IBID. Deed Book 19867, Page 126.
16. IBID. Deed Book 19868, Page 1.
17. IBID. Deed Book 19475, Page 22.
18. IBID. Deed Book 121, Page 416.
19. IBID. Deed Book 115, Page 550.
20. IBID. Deed Book 115, Page 430.
21. IBID. Deed Book 115, Page 347.
22. IBID. Deed Book 115, Page 349.
23. IBID. Deed Book 115, Page 83.
24. IBID. Deed Book 81, Page 521.
25. IBID. Deed Book 80, Page 106.
26. IBID. Deed Book 114, Page 221.
27. IBID. Deed Book 42, Page 113.
28. IBID. Deed Book 24, Page 418.
29. "Suwannee." Clippings File, Gwinnett County Historical Society, Lawrenceville, Georgia.
30. "Family Histories." Clippings File, Gwinnett County Historical Society, Lawrenceville, Georgia.

# ***Appendix E***

**NEPA Study**



## Appendix 1 — Environmental Screening Form (November 2003)

This form should be attached to all documents sent to the regional director's office for signature. Sections A and B should be filled out by the project initiator (may be coupled with other park project initiation forms). Sections C, D, E, and G are to be completed by the interdisciplinary team members. While you may modify this form to fit your needs, you must ensure that the form includes information detailed below and must have your modifications reviewed and approved by the regional environmental coordinator.

### A. PROJECT INFORMATION

Park Name Chattahoochee River National Recreational Area  
Project Number \_\_\_\_\_

Project Type (Check):

☐ Cyclic

☐ Cultural Cyclic

☐ Repair/Rehab

☐ ONPS

☐ NRPP

☐ CRPP

☐ FLHP

☐ Line Item

☐ Fee Demo

☐ Concession  
Reimbursable

☐ Other  
(specify) \_\_\_\_\_

Trail Corridor

Project Location Gwinnett County, Georgia; Settles Bridge Unit  
Project Originator/Coordinator \_\_\_\_\_  
Project Title \_\_\_\_\_  
Contract # \_\_\_\_\_  
Contractor Name \_\_\_\_\_  
Administrative Record Location \_\_\_\_\_  
Administrative Record Contact \_\_\_\_\_

**B. PROJECT DESCRIPTION/LOCATION** [To begin the statutory compliance file, attach to this form, maps, site visit notes, agency consultation, data, reports, categorical exclusion form (if relevant), or other relevant materials.] **SEE ATTACHMENTS FOR FURTHER INFORMATION.**

The project is a proposed trail corridor connecting two parcels of land planned for a new Gwinnett County park - Settles Bridge Park. The trail will follow an existing sewer easement through part of the NPS property. The trail is to be 8 feet wide from inside rail to inside rail and is to be pervious aggregate material (or possibly mulched). Two creek drainage channels are within the trail alignment; therefore, two pedestrian bridges are to be constructed. The bridges will be 8 feet wide and of simple wood construction. The bridges are to be sturdy enough to bear the load of a lightweight maintenance vehicle.

Preliminary drawings attached? ☒ Yes ☐ No

Background info attached? ☒ Yes ☐ No

Date form initiated \_\_\_\_\_

Anticipated compliance completion date \_\_\_\_\_

Projected advertisement/Day labor start \_\_\_\_\_

Construction start \_\_\_\_\_



**C. RESOURCE EFFECTS TO CONSIDER** (Tailor the following to meet individual park/unit project needs.)

Please see section F (Instructions for Determining Appropriate NEPA Pathway) prior to completing this section. Also, use the process described in DO-12, 2.9 and 2.10; 3.5; 4.5(G) to (G)(5) and 5.4(F) to help determine the context, duration and intensity of effects on resources.

Are any impacts possible on the following physical, natural or cultural resources?	Yes	No	Data Needed to Determine
1. Geological resources-soils, bedrock, streambeds, etc.		X	
2. From geohazards		X	
3. Air quality		X	
4. Soundscapes		X	
5. Water quality or quantity		X	
6. Streamflow characteristics		X	
7. Marine or estuarine resources		X	
8. Floodplains or wetlands		X	
9. Land use, including occupancy, income, values, ownership, type of use		X	
10. Rare or unusual vegetation-old growth timber, riparian, alpine		X	
11. Species of special concern (plant or animal; state or federal listed or proposed for listing) or their habitat		X	
12. Unique ecosystems, biosphere reserves, World Heritage sites		X	
13. Unique or important wildlife or wildlife habitat		X	
14. Unique or important fish or fish habitat		X	
15. Introduce or promote nonnative species (plant or animal)		X	
16. Recreation resources, including supply, demand, visitation, activities, etc.	X		
17. Visitor experience, aesthetic resources	X		
18. Cultural resources, including cultural landscapes, ethnographic resources		X	
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure		X	
20. Minority and low-income populations, ethnography, size, migration patterns, etc.		X	
21. Energy resources		X	
22. Other agency or tribal land use plans or policies		X	
23. Resource, including energy, conservation potential		X	
24. Urban quality, gateway communities, etc.		X	
25. Long-term management of resources or land/resource productivity		X	
26. Other important environmental resources (e.g., geothermal, paleontological resources)		X	



<b>D. Mandatory Criteria: If implemented, would the proposal:</b>	<b>Yes</b>	<b>No</b>	<b>Data Needed to Determine</b>
A. Have material adverse effects on public health or safety?		X	
B. Have adverse effects on such unique characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands; floodplains; or ecologically significant or critical areas, including those listed on the National Register of Natural Landmarks?		X	
C. Have highly controversial environmental effects?		X	
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		X	
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		X	
F. Be directly related to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
G. Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places?		X	
H. Have adverse effects on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have adverse effects on designated Critical Habitat for these species?		X	
I. Require compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?		X	
J. Threaten to violate a federal, state, local, or tribal law or requirement imposed for the protection of the environment?		X	
K. involve unresolved conflicts concerning alternative uses of available resources (NEPA sec. 102(2)(E)).		X	
L. Have a disproportionate, significant adverse effect on low income or minority populations (EO 12898).		X	
M. Restrict access to and ceremonial use of Indian sacred sites by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 130007)		X	
N. Contribute to the introduction, continued existence, or spread of federally listed noxious weeds (Federal Noxious Weed Control Act).		X	
O. Contribute to the introduction, continued existence, or spread of non-native invasive species or actions that may promote the introduction, growth or expansion of the range of nonnative invasive species (EO 13112).		X	
P. Require a permit from a federal, state, or local agency to proceed, unless the agency from which the permit is required agrees that a CE is appropriate?	X		
Q. Have the potential for significant impact as indicated by a federal, state, or local agency or Indian tribe?		X	
R. Have the potential to be controversial because of disagreement over possible environmental effects.		X	
S. Have the potential to violate the NPS Organic Act by impairing park resources or values?		X	



**E. OTHER INFORMATION (Please answer the following questions/provide requested information.)**

Are personnel preparing this form familiar with the site? ☒ Yes ☐ No

Did personnel conduct a site visit? ☒ Yes ☐ No (If yes, attach meeting notes or additional pages noting when site visit took place, who attended, etc.)

Is the project in an approved plan such as a General Management Plan or an Implementation Plan with an accompanying environmental document? ☐ Yes ☒ No

If so, plan name \_\_\_\_\_

Is the project still consistent with the approved plan? ☒ Yes ☐ No (If no, prepare plan/EA or EIS.)

Is the environmental document accurate and up-to-date? ☒ Yes ☐ No (If no, prepare plan/EA or EIS.) FONSI/ ROD ☐ (Check) Date approved \_\_\_\_\_

Are there any interested or affected agencies or parties? ☒ Yes ☐ No

Did you make a diligent effort to contact them? ☒ Yes ☐ No

Has consultation with all affected agencies or tribes been completed? ☒ Yes ☐ No **NPS Consult**  
(If so, attach additional pages detailing the consultation, including the name, the dates, and a summary of comments from other agencies or tribal contacts.)

Are there any connected, cumulative, or similar actions as part of the proposed action?

☐ Yes ☒ No (If so, attach additional pages detailing the other actions.)

**F. INSTRUCTIONS FOR DETERMINING APPROPRIATE NEPA PATHWAY**

First, always check DO-12, section 3.2, "Process to Follow" in determining whether the action is categorically excluded from additional NEPA analyses. Other sections within DO-12, including sections 2.9 and 2.10; 3.5; 4.5(G)(4) and (G)(5), and 5.4(F), should also be consulted in determining the appropriate NEPA pathway. Complete the following tasks: conduct a site visit or ensure that staff is familiar with the site's specifics; consult with affected agencies, and/or tribes; and interested public and complete this environmental screening form.

If your action is described in DO-12 section 3.3, "CE's for Which No Formal Documentation is Necessary," follow the instructions indicated in that section.

If your action is not described in DO-12, section 3.3, and IS described in section 3.4, AND you checked yes or identified "data needed to determine" impacts in any block in section D (Mandatory Criteria), this is an indication that there is potential for significant impacts to the human environment, therefore, you must prepare an EA or EIS or supply missing information to determine context, duration and intensity of impacts.

If your action is described in section 3.4 and NO is checked for all boxes in section D (Mandatory Criteria), BUT you have initially checked "yes" in section C (Resource Effects to Consider) during internal scoping, this means that the team should do additional analyses to determine the context, duration and intensity of effects. If the magnitude of effects is then determined to be at the negligible or minor level, then usually there is no potential for significant impacts, then an EA or EIS is not required. If, however, during internal scoping and further investigation, resource effects still remain unknown, or are at the minor to moderate level of intensity, and the potential for significant impacts may be likely, an EA or EIS is required.

In all cases, data collected to determine the appropriate NEPA pathway must be included in the administrative record.



**G. INTERDISCIPLINARY TEAM SIGNATORY (All interdisciplinary team members must sign.)**

By signing this form, you affirm the following: you have either completed a site visit or are familiar with the specifics of the site; you have consulted with affected agencies and tribes; and you, to the best of your knowledge, have answered the questions posed in the checklist correctly.

Interdisciplinary Team Leader Name	Field of Expertise	Date Signed
Diana G. Miles	NEPA Planner	5/12/05
Technical Specialists Names	Field of Expertise	Date Signed
Anne Wilfer	Landscape Architect	
Rex Schuder	Parks Planner	
David Ek	NPS	
Matt Tankersley	Archaeology	

} will sign  
Final

**H. SUPERVISORY SIGNATORY**

Based on the environmental impact information contained in the statutory compliance file and in this environmental screening form, environmental documentation for the subject project is complete.

Recommended:

Compliance Specialist	Telephone Number	Date

Approved:

Superintendent	Telephone Number	Date



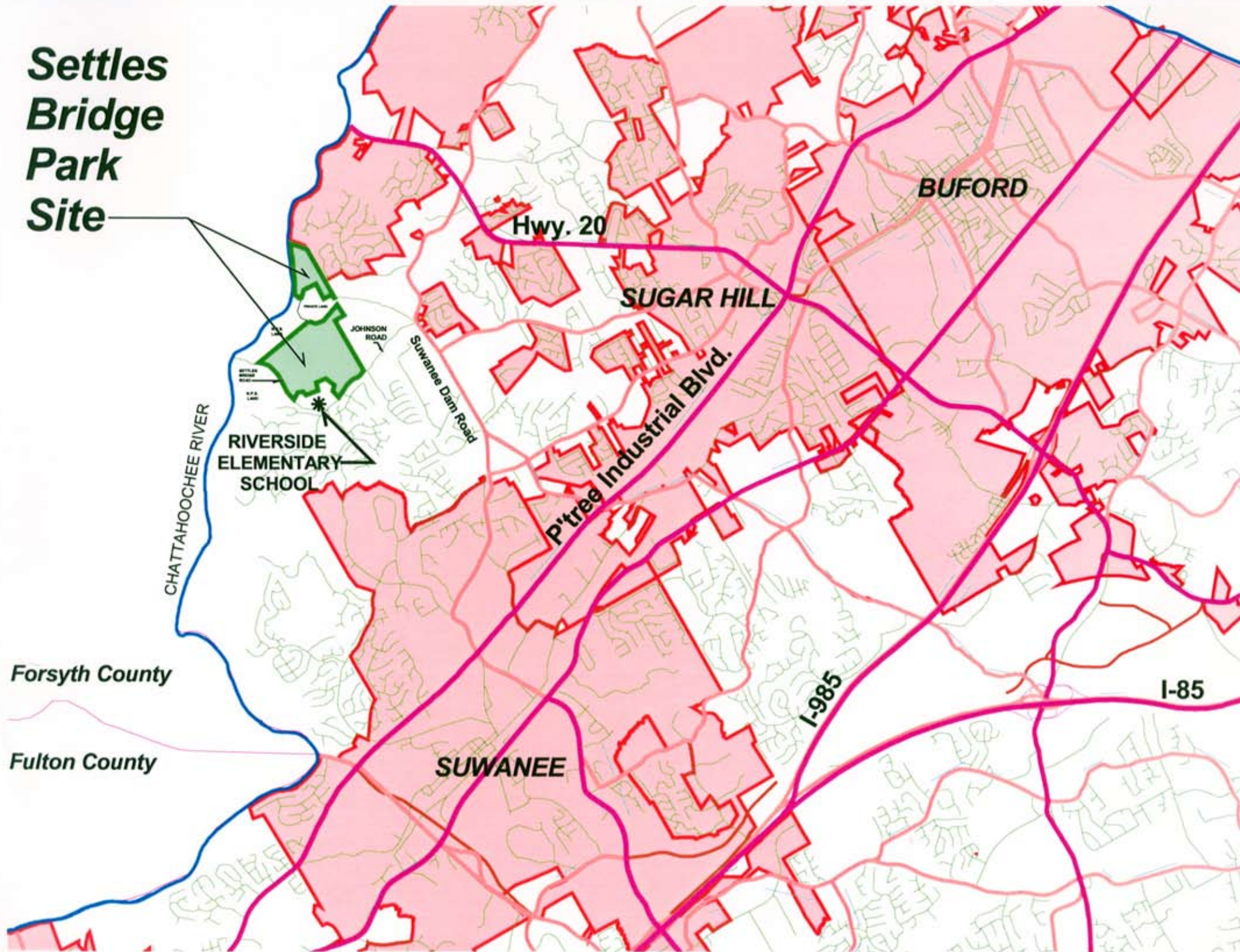
## B. Project Description/Location

### ATTACHMENTS

1. Graphic: Settles Bridge Park Site
2. Graphic: Settles Bridge Park Site Linkage Study Existing Conditions, Potential Linkage Route "A"
3. Graphic: Settles Bridge Park Site Linkage Study Existing Conditions, Potential Linkage Route "B" (Preferred route and the option considered under this proposal)
4. Site Visit Minutes, Settles Bridge Park, Gwinnett County, 2.8.05
5. Phase I Archeological Survey of the Settles Bridge Trail Corridor, Gwinnett County, May 9 2005
6. Locations of Special Concern Animals, Plants and Natural Communities in Gwinnett County, GA, October 22, 2004
7. Rare and Protected Species List – Actual and Potential, Chattahoochee National Recreation Area, May 10, 2005
8. GPS Map of the Settles Bridge unit of NPS, showing populations of each Threatened and Endangered Species found there, May 10, 2005

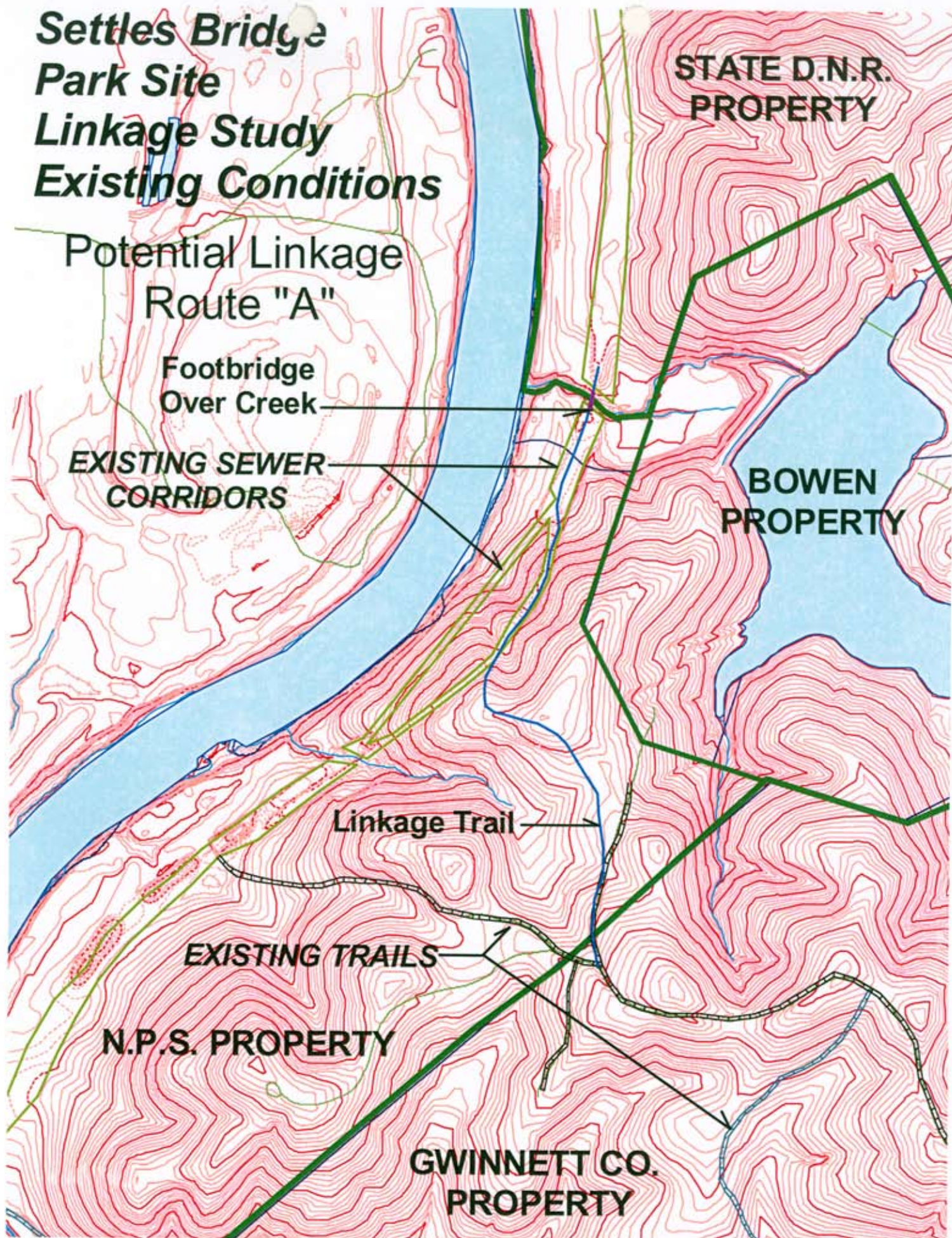


# Settles Bridge Park Site



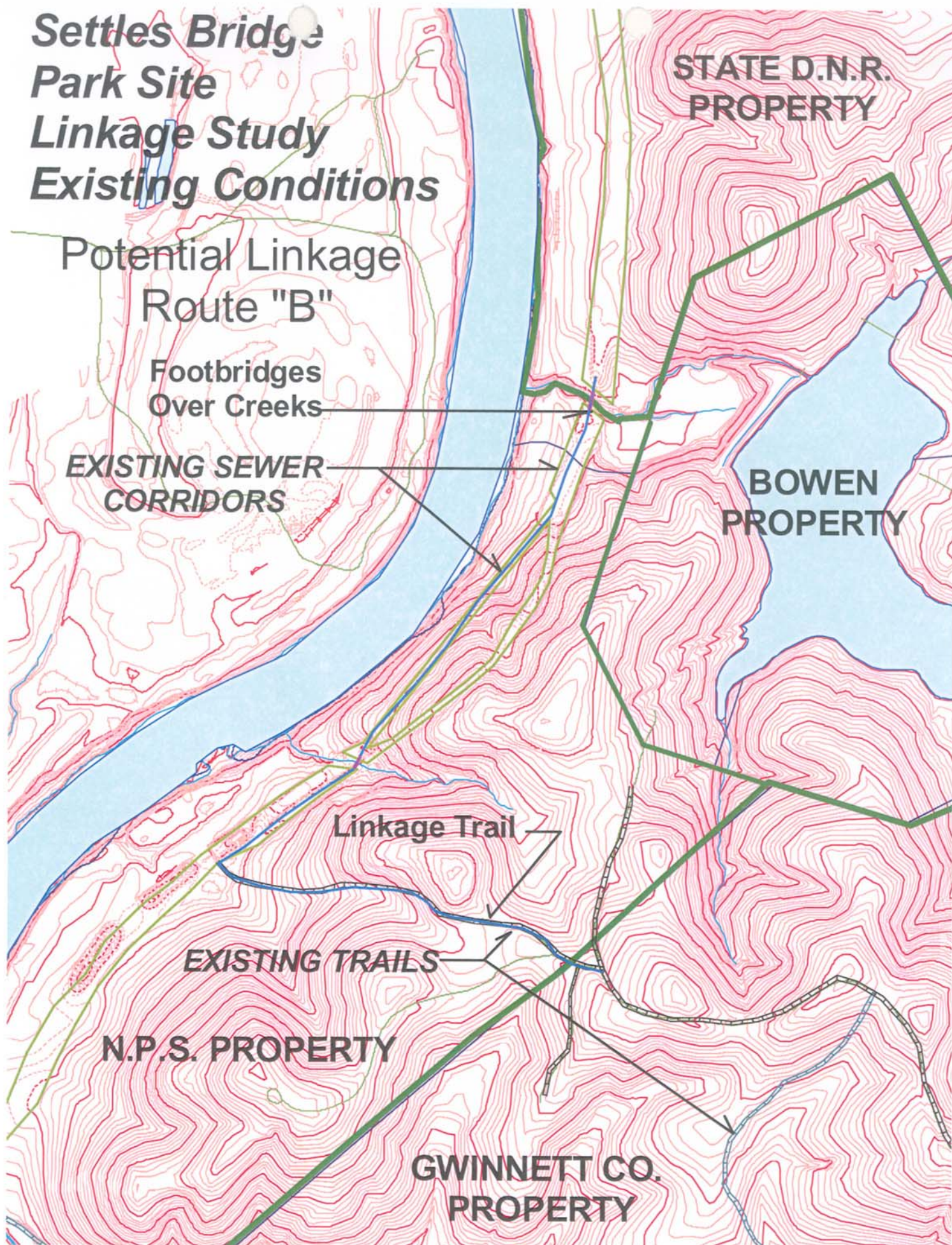


**Settles Bridge  
Park Site  
Linkage Study  
Existing Conditions**





**Settles Bridge  
Park Site  
Linkage Study  
Existing Conditions**





**Settles Bridge Park  
Gwinnett County  
Site Visit Regarding Proposed Trail through National Park Service property  
February 8, 2005**

**Attendees:**

David Ek, Chief Science & Resource Management, Chattahoochee National Recreation Area, National Park Service (NPS)

Diana Miles, Senior Planner, The Jaeger Company (TJC)

Anne Wilfer, Senior Landscape Architect, The Jaeger Company (TJC)

**Minutes**

NPS and TJC staff discussed the specifics proposed for the trail and visually assessed the proposed trail alignment along its length during the site visit, from the Gwinnett County Settles Bridge Park site through NPS property and the utility easement along the Chattahoochee River. The proposed trail is eight (8) feet wide and is surfaced with a pervious, natural material. Two creek drainage channels on the trail alignment will require a foot bridge; the proposed bridge will have a natural rustic appearance and will be no wider than eight (8) feet across. The eight (8) foot wide trail is important to allow access by motorized vehicles ("gators") for emergency or maintenance situations.

TJC inquired if the NPS has any typical bridge details for foot bridges that they'd like to see in this project. NPS has some concepts for foot bridges for a current project in Roswell, Georgia. Foot bridges should be low-key, primitive, and narrow (no wider than eight feet). NPS and TJC agreed that "gator" access across the bridges may be understandable for safety issues.

NPS recommended that the utility company maintaining the easement (to be shared partially by the proposed trail) should be consulted regarding the foot bridges and whether their maintenance procedures will ensure the safety and integrity of any foot bridges.

NPS has located three or four endangered species in the general vicinity of the proposed trail; NPS can provide this information as they have already completed surveys of the area. NPS is pretty confident that no additional surveys would be required in the area of the proposed trail (beyond the archaeological survey being conducted by TJC).

NPS recommends that when the construction of the trail takes place that there should be someone on site who knows what to look for regarding potential cultural resources. This person should halt construction if anything of interest is observed, such as archaeological resources or endangered plants.



NPS is working to introduce native species, such as the Georgia Astor, to the area. This work involves establishing maintenance agreements with partners along the easements.

TJC gave an update on the details and status of the Settles Bridge Master Plan. NPS requested a review of the Master Plan for Settles Bridge Park. NPS has concerns about service road access and the problems they've had with illegal dumping.

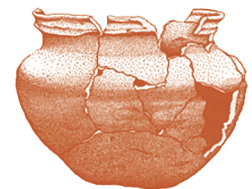
NPS is in the middle of a Master Planning process and one user group involved in the process is interested in having a water access near the existing Settles Bridge. NPS inquired if Gwinnett County or TJC are considering similar recommendations or future funding in their Master Plan for the Settles Bridge Park? NPS has plans to construct a step-down ramp near the Settles Bridge and to widen the parking lot with crushed gravel in July or August of 2005. Water access projects require an Environmental Assessment (EA); there are currently seven (7) water access projects underway in the park. They are currently within a thirty (30) day public comment period; the documents are on the NPS website.

Future pedestrian connections over the Settles Bridge were discussed. NPS is in discussions with Forsyth County regarding the potential pedestrian connection of Gwinnett and Forsyth Counties using the bridge. The bridge is owned partly by NPS and partly by Forsyth County.

Phase I Archaeological Survey of the  
**Settles Bridge Trail Corridor**

Gwinnett County, Georgia

Federal Archaeological Permit CHAT 05-001



**New South Associates**

6150 East Ponce de Leon Avenue  
Stone Mountain, Georgia 30083





# Phase I Archaeological Survey of the Settles Bridge Trail Corridor

Gwinnett County, Georgia

Federal Archaeological Permit CHAT 05-001

---

Report submitted to:

The Jaeger Company • 367 Prince Avenue, Suite 2 • Athens, Georgia 30601

---

Report prepared by:

New South Associates • 6150 East Ponce de Leon Avenue • Stone Mountain, Georgia 30083

---

J.W. Joseph, Phd. RPA – Principal Investigator

Wm. Matthew Tankersley – Archaeologist and Co-Author

Theresa M. Hamby – Archaeologist and Co-Author

Mary Beth Reed – Historian and Co-Author

May 9, 2005 • Draft Report  
New South Associates Technical Report 1267





# ABSTRACT

New South Associates conducted a Phase I Archaeological survey of the proposed Settles Bridge Park trail corridor on April 15, 2005. The proposed trail was partially located in the Chattahoochee River National Recreation Area, Settles Bridge Unit. Since a portion of the corridor fell on federal land, a request was placed to The National Park Service's Southeastern Archaeological Center (SEAC) for a Federal Archaeological Permit. The permit (No. CHAT 05-001) was received on April 4, 2005, and fieldwork was conducted soon after.

The corridor was approximately 3,250 feet in length and 8 feet wide. It extended east along existing dirt roads to the Chattahoochee River floodplain. The trail corridor then turned north to parallel the river, following an existing sewer line corridor. A total of 41 shovel test pit locations were investigated. In addition to the archaeological survey of the transect, Global Positioning System (GPS) readings were collected along the project corridor. The data was collected with a Trimble GPS unit, and this unit provides GPS data that is accurate within sub-meter range. No artifacts were discovered within the study corridor. No further archaeological investigation is recommended for the project area.



# ACKNOWLEDGEMENTS

The authors of this report would like to thank Dr. Bennie Keel of the National Park Service Southeastern Archaeological Center and Mr. David Ek of the Chattahoochee River National Recreation Area. Our appreciation also goes to Ann Wilfer, Diana Miles and Luke Rushing, of the Jaeger Company, for providing project information and their assistance in the field.

# TABLE OF CONTENTS

ABSTRACT..... III

ACKNOWLEDGEMENTS .....IV

TABLE OF CONTENTS ..... V

LIST OF FIGURES AND TABLES.....VI

I. INTRODUCTION ..... 1

II. ENVIRONMENTAL CONTEXT .....3

III. THE CULTURAL CONTEXT.....5

    Previous Archaeological Research In Gwinnett County.....5

    Prehistoric Overview ..... 10

        Paleoindian Period ..... 10

        Archaic Period ..... 10

        Woodland Period ..... 11

        Mississippian Period..... 12

        Protohistoric Period ..... 13

    Historic Overview ..... 14

IV. METHODS..... 17

V. RESULTS AND RECOMMENDATIONS ..... 19

REFERENCES CITED..... 23

APPENDIX A: RESUME OF THE PRINCIPLE INVESTIGATOR



# LIST OF FIGURES AND TABLES

Figure 1. Project corridor and previously recorded sites featured in the literature review .....	2
Figure 2. Photographs of Project Corridor .....	20
A. Project Corridor in the Chattahoochee River floodplain.....	20
B. Disturbed soil profile associated with the sewer line construction .....	20
Figure 3. Photographs of Project Corridor .....	21
A. Project corridor on the landforms above the river floodplain.....	21
B. Subsoil in the upland portion of the project area.....	21
 Table 1. Reports conducted in the Settles Bridge Park area.....	 7

# I. INTRODUCTION

New South Associates conducted a Phase I Archaeological survey of the proposed Settles Bridge Park trail corridor on April 15, 2005. The proposed trail was partially located in the Chattahoochee River National Recreation Area, Settle Bridge Unit. The National Park Service's Southeastern Archaeological Center (SEAC) provided a Federal Archaeological Permit (No. CHAT 05-001) on April 4, 2005. The permit granted access to the portion of the project area within federal lands. The corridor was approximately 3,250 feet in length and 8 feet wide. It extended east along existing dirt roads to the Chattahoochee River floodplain. The trail corridor then turned north to parallel the river, following an existing sewer line corridor (Figure 1).

Prior to the archaeological survey of the project area, a literature search was conducted which detailed the known historic and prehistoric sites in the vicinity of project area (Hamby 2004). The study of the previously recorded sites encompassed an area greater than the current corridor, but includes pertinent information on sites in close proximity to the project area. Therefore, the literature review is reproduced in the Previous Archaeological Research section of this report.

A total of 41 shovel test pit locations were investigated. Approximately half the shovel test pit locations were along an existing sewer line corridor (Figure 2a). Soil in this area was disturbed. The remaining shovel test pit locations were situated on the slopes leading out to the river floodplain (Figure 3a). A majority of these shovel test pit locations were found on the sloped side of landforms and in runoff channel between knolls and ridge tops. The tops of the landforms overlooking the river floodplain were eroded and subsoil was observed on the ground surface (Figure 3b).

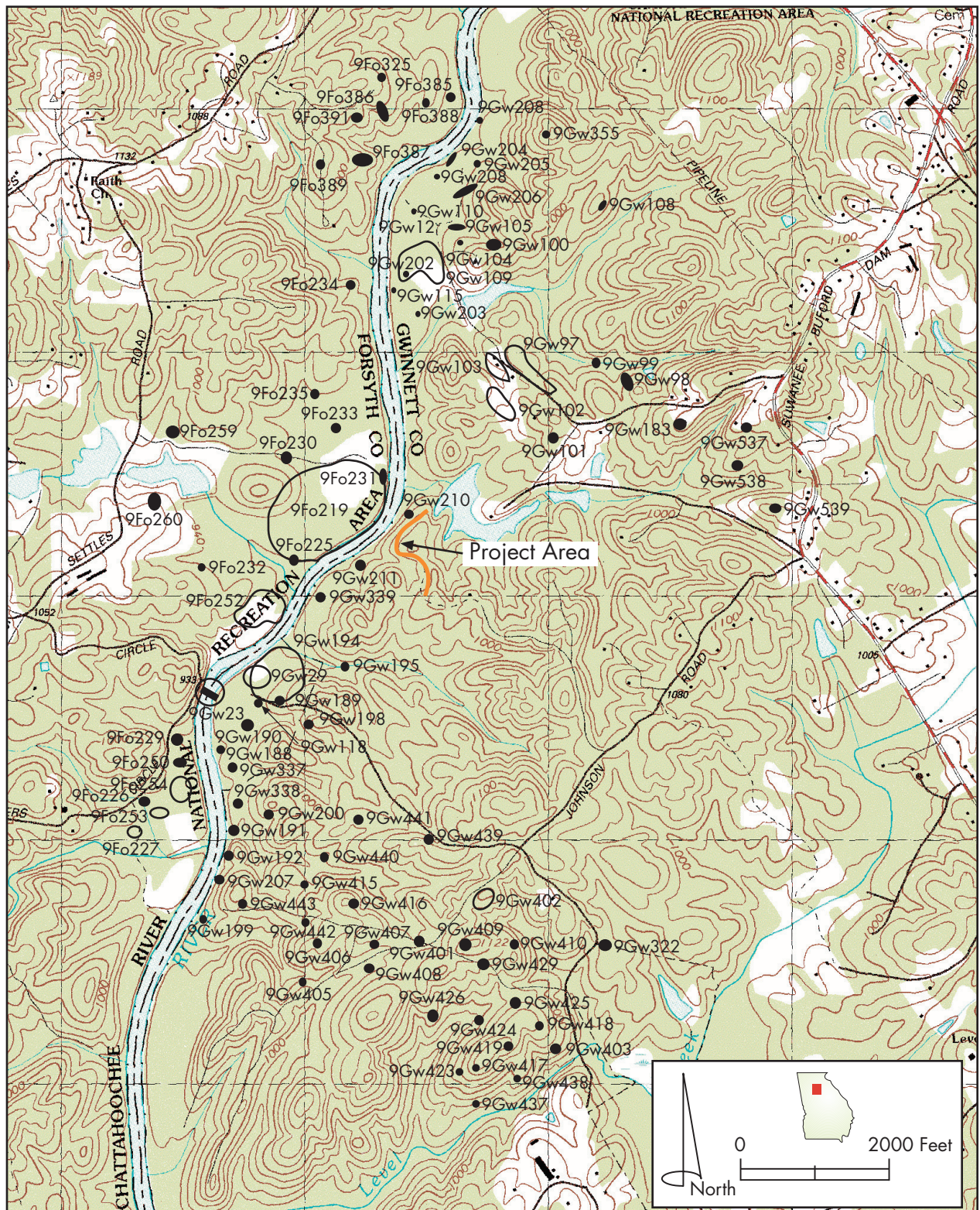
The route the survey transect makes from the river floodplain into the adjacent hills was map using a Trimble GPS unit. This GPS data receiver maps locations with sub-meter accuracy. The data can be used in a number of mapping and CAD computer programs. The project area plans in this report employ the GPS readings taken in the field and are directly applied to the USGS Quadrangle maps.

No archaeological sites or isolated finds were discovered during the course of the survey. A majority of the shovel test pit locations were eroded or impacted by sewer line construction. No further archaeological work is recommended for the project corridor.

The Principal Investigator for the survey was Dr. J. W. Joseph, RPA. Mary Beth Reed acted as the project historian, authoring the report's historic overview of Gwinnett County. Theresa M. Hamby authored the prehistoric overview and portions of the environmental overview. Wm. Matthew Tankersley was the project Field Director, and was assisted in the field by Joe Ivanowski and Bruce Young. Wm. Matthew Tankersley wrote the remainder of the report. Tom Quinn expertly prepared the graphics, which illustrate this report. The resume of the Principal Investigator is included as Appendix A.



Figure 1  
Project Location and Previously Recorded Sites featured in the Literature Review



Source: USGS 7.5' Suwannee Quadrangle, GA



## II. ENVIRONMENTAL CONTEXT

The project corridor is located in the northern portion of Gwinnett County, which in turn lies in the north central portion of Georgia. The entire county lies in the Upper Piedmont physiographic province (Tate 1967). The Piedmont bisects the state, separating the Ridge and Valley and Blue Ridge Provinces in the north part of the state from the Coastal Plain in the south. The Piedmont is divided into Upper and Lower Provinces. The Upper Piedmont lies near the foothills of the Blue Ridge and Ridge and Valley and contains residual hills and ridges. This area is drained by the Savannah, Chattahoochee, Etowah and Coosawattee Rivers (Hally and Rudolph 1986). The survey corridor was limited to the Chattahoochee floodplain and the hill adjacent to the floodplain.

Elevations in the county range from about 720 feet above sea level to more than 1,200 feet on the ridge tops. The topography consists of broad, convex ridge tops with dissections from multiple drainages and gentle to strong slopes, except for those near major streams, which are short and steep. The climate is generally moist and temperate. During the summer, high temperatures average 84 to 90 degrees Fahrenheit and low temperatures average 62 to 67 degrees. Winters are mild, and precipitation, which falls almost entirely in the form of rain, is well distributed over the area, with a yearly average of approximately 49 inches. March is the wettest month and October is the driest. The first frost usually occurs in late October while the last frost occurs late in March (Tate 1967).

The vegetation within the project area includes oaks, poplars, sweet gum, American elm, loblolly and shortleaf pines, hickories, and maples. Shrub types include blackberry, French mulberry, buckthorns and honeysuckle. The modern fauna includes white-tailed deer, squirrel, beaver, opossum, skunk, and raccoon (Shelford 1963). The survey corridor was located in area mixed pine and hardwood forest with some areas of dense under story.

The Gwinnett County Soil Survey (Tate 1967) identifies three soils types within the corridor. Two of the soil types are Pacolet sandy clay loams: one is found on slopes of 10 to 15 percent while the other is found on slopes of 15 to 25 percent. The remaining soil type is Madison sandy clay loam. It is found on slopes of 15 to 45 percent. All soil types identified by the survey are eroded. Eroded soils were the norm along a majority of the project corridor. In areas devoid of impact from the sewer line construction the soils were congruent with the soils described in the county survey.





### III. THE CULTURAL CONTEXT

The following section describes the prehistoric and historic cultural development of North Central Georgia and Gwinnett County in order to provide a framework against which to judge the significance of any cultural resources found by the survey project. Background research was reported to the Jaeger Company on October 15, 2004 concerning two larger tracts associated with the development of the Settles Bridge Park area. The corridor surveyed is located within the scope of this literature review. Therefore, the previous background research (Hamby 2004) and accompanying table of previously recorded sites is reproduced below.

#### PREVIOUS ARCHAEOLOGICAL RESEARCH IN GWINNETT COUNTY

New South Associates conducted an archaeological literature review of the two Settles Bridge Park tracts. The literature review was conducted at the Georgia Archaeological Site Files located at the Riverbend Research Laboratory at the University of Georgia in Athens. There, the site forms for already recorded sites surrounding the study area were copied. Pertinent sections of technical reports for studies conducted in the area were also copied. The previously recorded sites are summarized the accompanying table, and site and project specifics are discussed below. The table is followed by references of reports conducted in the area.

Sites and studies conducted within a 1.0-mile distance of any of the study tract's boundaries were investigated. Large land tracts, both to the north and the south of the current study area have been surveyed and resulted in the discovery of a plethora of historic and prehistoric sites. These previously recorded sites and the current study area is illustrated on Figure 1.

A significant number of the previously recorded sites were discovered by Tom Gesham of Southeastern Archeological Services in a 1987 study of the Lake Lanier Reregulation dam and lake area. The study surveyed 798 acres of floodplain on both sides of the Chattahoochee River in Forsyth and Gwinnett Counties. The survey resulted in the discovery of 73 prehistoric sites and 5 historic sites, for a site density of one for every 10 acres surveyed. Of the prehistoric sites, the most commonly identified site component was the Woodstock phase of the Early Mississippian period.

The Fairgreen Development tract is located to the north of the Settles Bridge study tract. The tract, consisting of approximately 310 acres, was surveyed in 1997 by R. S. Webb & Associates. The study resulted in the recordation of 15 archaeological sites, 8 isolated finds and 3 isolated rock piles. This is a site density of one site for every 21 acres surveyed. This density is less than that found by Gresham, however if you include the isolates and rock piles, the density changes to one site for every 12 acres, and number that is more in line with Gresham's findings. Occupations represented by the sites include Middle Woodland, Late Woodland (Napier), Early Mississippian (Woodstock), Late Mississippian (Lamar) as well as the Nineteenth to the Middle Twentieth Century.

Three of the sites, 9Gw109, 9Gw110, and 9Gw112 were recommended as eligible for inclusion in the NRHP after the survey, and concurrence was received following review by the SHPO. Site 9Gw112 is not marked on the accompanying map, as it falls just outside the one-mile radius



surrounding the study area. Once the sites were tested, Site 9Gw109 was redefined as three sites, 9Gw109, 9Gw115, and 9Gw203. Of the three newly defined sites, only 9Gw203 was considered eligible for the NRHP.

Only one of the previously recorded sites, 9Gw195, lies within the boundaries of the Settles Bridge Study Tract. The site is located near the western boundary of the larger tract, near the Chattahoochee River and was recorded during the 1987 study at Lake Lanier. The site was defined based on architectural remnants, as limited shovel testing did not reveal any artifacts. Due to the lack of artifacts, the site could only be dated to the historic period and it was recommended as ineligible for inclusion in the National Register of Historic Places (NRHP).

A 1938 Gwinnett County Highway Map that shows cultural symbols such as houses, farmsteads, churches, etc. was reviewed as part of the study. The map notes three farmsteads in the larger, southernmost study tract and two within or on the borders of the smaller, northernmost tract. One of these may be represented by Site 9Gw103 but it is difficult to tell as the map scale and level of detail is very different from the current USGS Quadrangle. These farmsteads may now be identifiable as historic sites within the study tract. No farmstead is indicated in the vicinity of Site 9Gw195, the only site located within the Settles Bridge Study Tract.

Considering the study tract's location adjacent to the Chattahoochee River which is the focus of substantial prehistoric and historic activity as well as the fairly high site densities found at surrounding studies, the site potential of the Settles Bridge Park Tracts is considered high. The research indicates that numerous sites, dating both to the historic and prehistoric period periods, are likely to be found if a Phase I survey of the tract is conducted. It is likely that the majority of any sites discovered on the study tracts will not be eligible for inclusion in the NRHP. There is the potential for a few eligible sites in the tract, though whether or not they would be suitable for interpretation in the park is unknown.

The previously recorded sites in the vicinity, as well as in the region, allow us to identify the most archaeologically sensitive portions of the Settle Bridge Park tract. The floodplain of the Chattahoochee is considered the most sensitive area, likely to contain significant prehistoric sites. This is not of great concern in the lower tract, as its northwestern border is some distance from the floodplain. However, the northernmost tract directly borders the river and is intersected by an intermittent creek flowing from the river. This area has a high potential to contain a significant prehistoric site and subsurface construction in this area should be avoided. Ridge, hill, and knoll tops are also likely to contain sites, both prehistoric and historic. The significance of sites in these areas is more difficult to ascertain, and is dependent to a large degree on preservation, and whether or not these locations have been used agriculturally and have suffered from erosion. Sloped areas are the least sensitive as they are not usually a focus of prehistoric or historic occupation or activity.

Table 1. Reports conducted in the Settles Bridge Park area.

Site Number	Site Type	Cultural Periods/Phases	NRHP Recommendation
9Fo219	Unknown – Mary Stover Griffin Collection	Unknown	Unknown
9Fo225	Prehistoric Artifact Scatter	Unknown Prehistoric	Recommended Unknown
9Fo226	Historic House Site	Historic 20 <sup>th</sup> Century	Recommended Ineligible
9Fo229	Prehistoric Artifact Scatter	Unknown Prehistoric	Unknown
9Fo230	Prehistoric and Historic Artifact Scatter	Unknown Prehistoric Ceramic, Unknown Historic	Recommended Ineligible
9Fo231	Prehistoric Artifact Scatter	Unknown Prehistoric	Recommended Ineligible
9Fo232	Prehistoric Artifact Scatter	Unknown Prehistoric Ceramic	Recommended Unknown
9Fo233	Prehistoric Artifact Scatter	Early Mississippian, Late Woodland, Late Archaic, Pre-Late Archaic	Recommended Eligible
9Fo234	Prehistoric Lithic Quarry	Unknown Prehistoric	Unknown
9Fo235	Prehistoric Artifact Scatter	Unknown Prehistoric	Recommended Unknown
9Fo252	Prehistoric Artifact Scatter with Midden	Early Archaic, Early Woodland, Middle Woodland/Kellog, Cartersville	Recommended Unknown
9Fo253	Prehistoric and Historic Artifact Scatter	Late Woodland/Woodstock, Unknown Historic	Recommended Ineligible
9Fo254	Prehistoric Artifact Scatter	Unknown Prehistoric	Unknown
9Fo255	Prehistoric Artifact Scatter	Unknown Prehistoric	Unknown
9Fo259	Historic House Site, Out House	Unknown Historic	Unknown
9Fo260	Prehistoric Isolated Artifact	Late Woodland/Hamilton	Unknown
9Fo325	Historic House Site	Historic 20 <sup>th</sup> Century	Recommended Ineligible
9Fo385	Prehistoric Isolated Artifact	Unknown Prehistoric	Unknown
9Fo386	Prehistoric Lithic Scatter	Unknown Prehistoric	Unknown
9Fo387	Prehistoric Lithic and Historic Artifact Scatter	Unknown Prehistoric	Unknown
9Fo388	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Fo389	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Fo391	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw12	Prehistoric Artifact Scatter	Middle Archaic, Middle Woodland	Unknown
9Gw29	Prehistoric and Historic Artifact Scatter	Late Archaic, Late Woodland/ Early Mississippian (Woodstock), Unknown Historic	Recommended Ineligible
9Gw97	Prehistoric Lithic Scatter Historic Artifact Scatter	Unknown Prehistoric Historic 19 <sup>th</sup> – 20 <sup>th</sup> Century	Recommended Ineligible
9Gw98	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw99	Historic Still	Historic 20 <sup>th</sup> Century	Recommended Ineligible
9Gw100	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw101	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw102	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw103	Prehistoric Lithic Scatter/Historic House Complex	Unknown Prehistoric / Late 19 <sup>th</sup> to Early 20 <sup>th</sup> Century	Recommended Ineligible
9Gw104	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw105	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible



Site Number	Site Type	Cultural Periods/Phases	NRHP Recommendation
9Gw106	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw108	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw109	Prehistoric Artifact Scatter	Early Woodland/Dunlap, Middle Woodland/Deptford, Cartersville, Late Woodland, Napier, Historic 19 <sup>th</sup> -20 <sup>th</sup> Century	Recommended Ineligible
9Gw110	Prehistoric Village	Late Woodland/Woodstock Unknown Prehistoric	Recommended Ineligible
9Gw115	Prehistoric Artifact Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw118	Prehistoric Artifact Scatter	Unknown Prehistoric	Unknown
9Gw183	Prehistoric Lithic Scatter	Archaic	Recommended Ineligible
9Gw188	Prehistoric Artifact Scatter	Late Woodland	Recommended Ineligible
9Gw189	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw190	Prehistoric Lithic Scatter	Unknown Prehistoric	Unknown
9Gw191	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw192	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw193	Prehistoric Rock Shelter	Late Woodland	Recommended Ineligible
9Gw194	Prehistoric and Historic Artifact Scatter	Late Archaic, Late Woodland/ Early Mississippian (Woodstock), Unknown Historic	Recommended Ineligible
9Gw195	Historic Structure	Unidentified Historic	Recommended Ineligible
9Gw198	Prehistoric Artifact Scatter, Historic Isolated Artifact	Woodland/Yadkin, Historic 19 <sup>th</sup> -20 <sup>th</sup> Century	Recommended Ineligible
9Gw199	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw200	Prehistoric Artifact Scatter	Late Woodland/Woodstock	Unknown
9Gw203	Prehistoric and Historic Artifact Scatter	Late Archaic, Middle Woodland/Swift Creek, Late Woodland/Woodstock/Napier, Early Mississippian, Historic 19 <sup>th</sup> -20 <sup>th</sup> Century	Determined Eligible
9Gw204	Prehistoric and Historic Artifact Scatter	Early Mississippian, Unknown Historic	Unknown
9Gw205	Prehistoric Artifact Scatter	Unknown Prehistoric	Unknown
9Gw206	Prehistoric Artifact Scatter	Early Mississippian	Unknown
9Gw207	Prehistoric Artifact Scatter	Unknown Prehistoric	Unknown
9Gw208	Prehistoric Artifact Scatter	Unknown Prehistoric	Unknown
9Gw210	Prehistoric Artifact Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw211	Prehistoric Artifact Scatter	Early-Middle Archaic, Early Mississippian	Recommended Ineligible
9Gw322	Prehistoric Artifact Scatter	Middle Archaic/Morrow Mountain Late Archaic Savannah River	Unknown
9Gw337	Prehistoric Artifact Scatter	Woodland	Recommended Ineligible
9Gw338	Prehistoric Artifact Scatter	Late Woodland/Woodstock, Napier	Recommended Ineligible
9Gw339	Prehistoric Artifact Scatter	Probable Late Woodland or Early Mississippian	Recommended Ineligible
9Gw355	Historic House Site	Historic 19 <sup>th</sup> Century	Recommended Ineligible
9Gw401	Prehistoric Lithic Scatter	Early Archaic/Kirk	Recommended Ineligible

Site Number	Site Type	Cultural Periods/Phases	NRHP Recommendation
9Gw402	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw403	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw405	Historic House Site Cellar	Historic 19 <sup>th</sup> -20 <sup>th</sup> Century	Recommended Ineligible
9Gw406	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw407	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw408	Historic House Site Historic Foundation Historic Chimney Historic Well	Historic 19 <sup>th</sup> -20 <sup>th</sup> Century	Unknown
9Gw409	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw410	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw415	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw416	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw417	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw418	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Ineligible
9Gw419	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw423	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw424	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw425	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw426	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw429	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw437	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw438	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw439	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw440	Prehistoric Lithic Scatter	Unknown Prehistoric	Recommended Eligible
9Gw441	Prehistoric Lithic and Historic Scatter	Unknown Prehistoric, Historic 19 <sup>th</sup> -20 <sup>th</sup> Century	Recommended Eligible
9Gw442	Prehistoric Lithic and Historic Scatter	Unknown Prehistoric, Historic 19 <sup>th</sup> -20 <sup>th</sup> Century	Recommended Eligible

Several major projects and reports have synthesized data from a multitude of small survey and excavation reports producing information useful on a regional scale. These are referenced in the following discussion of cultural periods in North Central Georgia. Most notable among these projects and reports are the series of synthetic reports (still incomplete) resulting from the efforts of Ray Crook (1986) in his *A Strategy for Cultural Resource Planning in Georgia*. Three of these are salient to the current survey: Anderson et al.'s (1990) *Paleoindian Period Archaeology of Georgia*, Wood and Bowen's (1995) *Woodland Period Archaeology of Northern Georgia*, and Hally and Rudolph's (1986) *Mississippi Period Archaeology of the Georgia Piedmont*. For the Archaic, Joffe Coe (1964) and Wauchope's (1966) work are still primary sources.

One of the most valuable contributions of the prehistoric overview is an overview of settlement patterning in each of the cultural periods within geographically related areas. This gives the archeologist and the reader a foundation on which to base expectations for site types within the specific study area. Anderson and Joseph (1988) present an overview of the prehistory of Piedmont Georgia with an emphasis on the upper Savannah River valley, which is not unlike the

dissected interriverine uplands found in Gwinnett County. In *Prehistory of the Middle Chattahoochee River Valley*, Cantley and Joseph (1991) discuss prehistoric settlement patterns in the West Point Lake area in Troup County. The work accomplished by the University of Georgia in the Wallace Reservoir during the 1970s and 1980s is also useful for much the same reason as the Russell Reservoir work synthesized by Anderson and Joseph (1988).

## PREHISTORIC OVERVIEW

The studies mentioned above, as well as other works, were consulted to write the following prehistoric overview.

### PALEOINDIAN PERIOD

The earliest prehistoric occupation of Georgia is the Paleoindian, generally placed between 10,000 and 8,000 B.C. Hally and Rudolph (1982:9) note that fluted points are reported for the region, with a greater frequency below the Fall Line and a decrease within the Piedmont. While such distribution has not received sufficient documentation to be considered conclusive, Hally and Rudolph (1982) speculate that this pattern may be the product of enhanced environmental variation between the Piedmont and Coastal Plain at the time of the Paleoindian occupation. Paleoindians focused their settlement strategy on base camps situated in ridge top barrens and within proximity to bottomland swamps and prairies, and depended in part on hunting Pleistocene megafauna, such as mammoth (Mason 1962). Such settings appear to have occurred within the Coastal Plain province during the Paleoindian Period, while the Piedmont was more likely to have been heavily forested. It has also been suggested that Paleoindian groups developed long distance trade networks (Charles 1986). Anderson et al. (1990) note that Paleoindian sites in Georgia have been found on levees, terraces, upland edges, and uplands. The floodplains of small streams are not expected to contain such sites. Anderson et al. (1990) also offer a chronology of Early (Clovis), Middle (Unfluted Lanceolate, Suwannee, Simpson, and Cumberland), and Late Paleoindian (Fluted and Unfluted Dalton) projectile points by county in Georgia. One Clovis Point is reported in Gwinnett County and one or more is noted in the surrounding counties of Cherokee, Bartow, Clayton, Jackson, Oconee, Green, and Putnam. Middle Paleoindian points are reported in Cherokee, Forsyth, Greene and Oglethorpe Counties, while Late Paleoindian points are noted in Cherokee, Oconee, Clarke, Oglethorpe, Greene, and Putnam Counties. The authors note that point concentrations in some counties are due, in part, to differences in collecting and reporting in the state. No Paleoindian sites or tools, such as Clovis or Dalton Points were found during this survey.

### ARCHAIC PERIOD

The Archaic Period is still not well known in North Central Georgia. This period dates from 8,000 to 1,000 B.C. and has three phases. The Early Archaic appears to be a modification of the preceding Paleoindian Period with a shift to the hunting of more modern large game and lasted until around 6,000 B.C. (Caldwell 1957, Anderson and Joseph 1988). The social organization at this level is best defined as egalitarian bands that hunted and gathered seasonally available resources within limited geographic areas (Griffin 1952). They were also occasionally involved in the exchange of goods and ceremonial activities (Caldwell 1957). Coe (1964) specifies Palmer and Kirk points, as well as hafted scrapers as being diagnostic of the early Archaic. Diagnostic



artifacts include Big Sandy, Kirk Corner-notched, Bifurcate and Kirk Stemmed types (Anderson and Joseph 1988).

The Middle Archaic Period is differentiated from the Early Archaic by ground stone tools, and by Stanly, Morrow Mountain and Guilford projectile points. Economic organization probably changed very little from the small hunting bands thought to characterize the Early Archaic and Paleoindian. Middle Archaic sites found throughout the Southeast date between 6,000 and 3,500 B.C. (Anderson and Joseph 1988, Blanton et al. 1987, Coe 1964, Wauchope 1966).

The Late Archaic Period, dating from 3,500 to 1,000 B.C. saw the transition from a preceramic, hunting-gathering culture to a fiber tempered ceramic, horticultural-oriented society. Information concerning the social organization of these people remains largely unknown. However, it is generally believed that they existed in small bands within limited geographical areas. Settlements appear to have been occupied for longer periods of time than previously, and population appears to have increased during this period. Projectile point types characteristic of this time period are various stemmed points including the ubiquitous Savannah River point and Otter Stemmed points (Blanton et al. 1987, Coe 1964, Wauchope 1966).

Cantley and Joseph, in *Prehistory of the Middle Chattahoochee River Valley* (1991), offer a synthesis of several differing theories of settlement patterning in the Archaic Period. For the Early Archaic, they cite Cable's (1982) *Effective Temperature/Technological Organization* model, O'Steen's (1983) *Wallace Reservoir* model and Anderson and Hanson's (1988) *Band/Macroband* model. Cable's argument, contrary to traditional thinking, contends that climatic warming would prompt increased mobility. O'Steen, based on data from 248 Early Archaic sites in the flood pool of the Wallace Reservoir, observed that the sites were most likely to occur in areas containing the most diverse and dense resources. Finally, Anderson and Hanson (1988) suggest an "annual settlement round" with migration from the Piedmont to the Coastal Plain in the spring, and a return to just below the Fall Line for the winter months. Sassaman's (1983) model of "adaptive flexibility" and Goodyear et al.'s (1979) riverine/interriverine model are cited for the Middle Archaic. Sassaman's model argues that peoples of the Middle Archaic migrated on a regular basis in order to exploit locally available resources. Goodyear et al. (1979) suggest that base camps were established along river floodplains while the extraction and procurement sites were located in the upland and interriverine areas. For the Late Archaic, Sassaman (1983) is referenced again, suggesting that base camps were situated in the floodplain and specialized procurement sites were located in the uplands. No Archaic sites were found by this survey.

## WOODLAND PERIOD

The transition from Archaic to Woodland culture in the region is marked by the appearance of sand and grit tempered ceramics, sedentism, and horticulture. The period as a whole is characterized by increased social complexity, ceremonial activities and a diversified subsistence pattern that relied on small game animals, aquatic life and agricultural products. Diagnostic artifacts now include ceramic types, which have a much more localized focus. While the Woodland Period is generally much better understood than the preceding periods, many questions of interest to archeologists still need to be answered (Garrow 1975). The Woodland Period is commonly divided into three phases in the Southeast based on ceramic and point types and on the presence or absence of burial mounds.

The Early Woodland Period (1,000 - 100 B.C.) in North Georgia is not well documented; however, there is growing evidence that suggests the people of the Early Woodland were less dependent upon agricultural goods than previously thought (Ford 1985). These people lived in villages that were located in floodplains along creeks and streams. The most widely recognized component of Early Woodland is Kellogg Phase. The most common artifacts marking Kellogg Phase sites are Dunlap fabric marked pottery, most commonly found as large storage jars. Other artifacts include grinding stones and boat stones (Caldwell 1957; Wood and Bowen 1995). Projectile point types that were characteristic of this period include the Copena and the Candy Creek (Cambron and Hulse 1975; Kneberg 1956). These people continued to rely on hunting, but at the same time, supplemented their diet by the exploitation of wild plants.

The Cartersville focus began during the transition from the Early Woodland to the Middle Woodland Period (100 B.C. - A.D. 500). Ceramic types typical for the Early Woodland continued to be produced and Cartersville simple stamped was introduced (Garrow 1975). Hunting and gathering still played an important role in the daily economy of Middle Woodland groups, although the presence of large village sites along major rivers and streams suggests an increasing reliance on domesticated products (Jeffries 1976). During this period the first burial mounds were constructed in North Georgia (Cable et al. 1991).

The Late Woodland Period (A.D. 500 - 900) in North Central Georgia is mostly characterized by the Swift Creek Phase. However, it is recognized that some Swift Creek sites may date to the Middle Woodland. In most areas, it appears that there is a gradual change from Cartersville to Swift Creek. Evidence suggests that Woodland peoples continued to rely heavily on horticultural products as a subsistence base. This period is marked by the appearance of Swift Creek and Napier Complicated Stamped ceramics (Garrow 1975, Rudolph 1986). This time is viewed as the transitional period from a semi-agricultural to a fully agricultural subsistence base that marks the beginning of the Mississippian Period. No Woodland sites were found within the project area.

### MISSISSIPPIAN PERIOD

The Mississippian Period is marked by the presence of temple mounds rather than burial mounds and by a fully agricultural subsistence base economy. Mounds are usually located adjacent to or in large stream floodplains and were probably parts of larger villages or towns. Maize and probably other crops were grown by Mississippian peoples, although hunting and gathering was still part of their economy. One of the major Mississippian sites in North Georgia is the Etowah Mound complex in Cartersville. Cultural markers of the Mississippian include stockade villages, a hierarchical social system, temple mounds, maize agriculture, and Savannah, Woodstock, Etowah and Wilbanks Complicated Stamped ceramics (Blanton et al. 1987).

Hally and Rudolph (1986) divide the Mississippian Period into Early, Middle, and Late Mississippian. Woodstock, Macon Plateau, Averett, and Etowah Cultures are all expressions of the Early Mississippian Period (A.D. 900 to 1200) in the Upper Piedmont. The Woodstock Culture may be the earliest expression of Mississippian culture in the Upper Piedmont, and is typified by sand tempered, wide-mouthed conoidal jars. Macon Plateau pottery types are completely unlike any other types in the Lower Piedmont. They are grit or shell tempered, but are undecorated in contrast to other pottery types in the area. The Averett Culture was centered in a tightly circumscribed area mostly within the Coastal Plain and was described by Knight and Mistovich

(1984) as a "...quasi-Mississippian phenomenon...". Averett pottery is sand or grit tempered and is plain, incised, or brushed. Etowah Culture ceramics sometimes occurred with Woodstock ceramics, and are also found in association with Averett pottery.

The Savannah Culture is the only culture recognized within the Middle Mississippian Period (A.D. 1200 to 1350). Savannah Culture is defined by four pottery types: Savannah Complicated Stamped, Etowah Complicated Stamped, Savannah Check Stamped, and Savannah Plain. Within the Savannah Culture, several phases have been identified, including the Beaverdam, Hollywood, Scull Shoals, and Wilbanks Phases, all named after representative sites (Hally and Rudolph 1986).

The Late Mississippian Period (A.D. 1350 to 1550) begins with a ceramic transition from Savannah Culture of the Middle Mississippian to Lamar Culture. The Lamar Phase ended with the entrance of Europeans, such as de Soto and de Luna, into the area (Hally and Rudolph 1986). Wood (1990:44-45) described Stamp Creek Ceramics from Lake Allatoona as having grit and quartz tempering, complicated stamping with Etowah-like diamond, line block, fylfot cross, and concentric circles with straight lines as design motifs.

In a survey conducted by Southeastern Archaeological Services, Ledbetter et al. (1986:IV-112) noted that of the Savannah sites identified a large number of them were located in upland environments. This pattern of site location suggests that Savannah Culture populations were not confined to the floodplains as in the preceding Woodstock and Etowah Cultural Periods. The Stamp Creek sites of the Late Mississippian Period, located by the same survey, appeared to be oriented along the floodplains in the same sort of settlement patterns as in the Early Woodland. This project found no Mississippian or later aboriginal material.

## PROTOHISTORIC PERIOD

The Protohistoric Period in Georgia begins with the explorations of three Spaniards, de Soto, de Luna, and Pardo, in the middle sixteenth century. Hernando de Soto was the only one to enter the Piedmont. They all entered the Ridge and Valley province, de Luna and Pardo traveling there through South Carolina (Smith 1992).

De Soto's mission was to find and obtain wealth, especially precious metals. Archaeological evidence suggests he may have visited several North Georgia recorded sites such as Bullard's Landing, Cowart's Landing, the Lamar site, the Shinholser site, the Shoulderbone site, and the Dyar site before he left Georgia for South Carolina. He returned to Georgia in the summer of the same year and visited the town of Coosa, what is now believed to be the Little Egypt site. He moved on to Itaba, which is thought to be the Etowah site, and visited the province of Ulibahali near what is now Rome, Georgia, before moving into Alabama. Tristan de Luna entered the Southeast in 1559, bringing Mexican farmers to colonize. Most of the colonists food supplies were lost in a storm, so approximately 100 of de Luna's men, including some veterans of the de Soto campaign, traveled north into Georgia, looking for Coosa to trade European materials for food. Eight towns of Coosa are mentioned in the de Luna narratives, as well as Ulibahali and Apica. Juan Pardo entered Georgia from Santa Elena in South Carolina, with the mission of finding a route to the Zacatecas, Mexico silver mines, as well as pacifying Indians. One soldier of Pardo's expedition reached Coosa, while the rest never reached Georgia (Smith 1987, 1992).



According to historical documentation, the next Europeans to enter the interior were Gaspar de Salas and two Franciscan monks, Pedro Fernandez de Chosas and Francisco de Veras. These men visited Ocute and Tama, which Smith believes is the Altamaha site of the de Soto narratives. However, he does note that Sam Lawson believes Tama and Ocute are further south in the Coastal Plain. The Spanish fear of English in the interior led to several further expeditions to the interior in the seventeenth century including one in 1602 led by Juan de Lara, one in 1624, and one in 1628 led by Pedro de Torres (Smith 1992).

## HISTORIC OVERVIEW

Late in the eighteenth century and early in the nineteenth century, most of Northern Georgia was occupied by the Cherokee Nation. Following the Creek removal in 1827, the state of Georgia turned its attention to the Cherokee who were almost completely assimilated to a western lifestyle. They had become agriculturalists and many had converted to Christianity. A Cherokee syllabary was invented and a newspaper, *The Cherokee Phoenix*, was printed in both English and Cherokee. They established a capital, New Echota, and in 1827 adopted a national Constitution. By 1828, Georgians recognized that the Cherokee would not voluntarily leave the property they had husbanded, so legislative action was taken by which state laws were extended over the Cherokee Nation. The Cherokee government was forbidden to function within the state two years later. While the Cherokee sought legal protection from the U.S. Supreme Court in *Cherokee Nation v. Georgia* (1831), the court decided that the Cherokee were not a foreign nation and had no right to sue. In 1831 the state of Georgia ordered the Nation's lands surveyed and in 1832 the state granted them to white citizens in a land lottery. In the 1830s, after the lottery, white citizens began to arrive in the Nation and demand their land. The United States made several treaties of cession with unauthorized Cherokee representatives. Those Cherokee who did not leave during that period were forcibly removed in 1838 (Coleman 1982).

Gwinnett County was formed in 1818 via the Lottery Act of that year. Prior to its establishment, Gwinnett County had been part of early Franklin County and Jackson County. In 1818, a section of Jackson County and the area west of the Hightower Indian Trail, east of the Apalachee River abutting Hall County, were joined into Gwinnett. The actual survey and distribution of county land would come two years after the creation of the county. After two early attempts to establish a courthouse location, the site was fixed at the future location of Lawrenceville. Four streets were laid out around the courthouse and lots were offered for sale (Flanigan 1943:24-29). The new village incorporated in 1821, offered business opportunities as well as political power. By 1849, it had expanded into a full-fledged county seat with a brick courthouse, a granite jail, two churches, two hotels, and two schools devoted to the education of each gender (White 1849:298). Until the arrival of the railroad, Lawrenceville would be the economic and political center of the county, which relied from the outset on agriculture.

White's *Statistics of Georgia* (1849:295-299) offers a verbal snapshot of the county. The county description notes that the new county embraced approximately 551 acres that were drained by the Chattahoochee River and its tributaries. In addition, the headwaters of the Alcovy, Apalachee, and Yellow Rivers are situated in Gwinnett. The land along these drainages was considered prime farmland by White, who commented interestingly on the number of fences, built of stone. Cotton, corn, and wheat were produced by mid-nineteenth-century farmers who averaged per acre 500 pounds of cotton, 20 bushels of corn, and 10 bushels of wheat. Those landowners along the

Chattahoochee had higher farm values than those farmers whose soils were described as "red" or "gray." Land along the Chattahoochee was valued at \$20 to \$30 per acre while red land was valued considerably less, at \$8 an acre. Fifty cents to three dollars could buy an acre of "gray" land.

The manufacturing interests of the county residents complemented their agrarian economic base. Nine sawmills, 26 gristmills, three merchant mills, seven distilleries, and two wool-carding concerns were located within the county. However, only three of these ran year round. The population of the early county was given at 10,062, with 2,048 African Americans, and 8,014 Whites. In 1849, the post offices that served the county were located at Lawrenceville, Auburn, Cains, Choice's store, Orrsville, Pinkneyville, Rock Bridge, Suwanee, Sweet Water and Yellow River. An 1863 map and a turn of the century topographic map indicate that a number of these post office locations, namely Auburn, Orrsville, Sweetwater, Suwanee, and Rock Bridge, became small towns or communities that survived into the twentieth century.

While economic and personal upheaval followed the Civil War in Gwinnett County, the study area itself was physically unaffected by battles. Following the Civil War, the establishment of the railroad within the county promoted change. The Southern Railroad, completed in 1871, allowed the growth of new towns such as Norcross, Duluth, and Buford. Twenty years later, towns such as Carl, Dacula, Auburn, Gloster, Luxomni, Lilburn, Grayson and Lawrenceville would receive an economic boost from the newly completed Seaboard Railway that cut through the center of the county (McPherson 1981:31). Gwinnett County remained primarily rural despite this town growth (McPherson 1981:33):

Off and on, cotton reigned king in rural Gwinnett County for many years. It was the principal income for many farmers for a number of years. Around the World War I period, cotton boomed to 45 cents a pound. By 1915, the boll weevil had entered Georgia; by 1919, Georgia's cotton crop had dropped to one third of the normal production.

In 1880, the average farm size in the county was estimated at 115 acres, and Gwinnett County ranked after Burke, Carroll, and Washington counties in total number of farms. Fifty-eight percent of the farms were owner-operated while 40 percent were sharecropped; the remainders were rentals. The 1900 Agricultural Schedule echoes these data, showing that Gwinnett ranked fourth in the state in total number of farms again (3,442) with an average farm size of 82.3 acres. By the turn of the century, however, sharecroppers outnumbered owner-operators. Forty percent of the county's farms were owner-operated and 50 percent were sharecropped.

In addition to the shift from owner-operated to sharecropped farms, other changes occurred within the agricultural sphere. Twentieth-century farmers in Gwinnett County shifted from cotton production to dairy farming to truck farming and to cultivating a wider range of crops with scientific farming techniques. Thus, in the 1930s and 1940s, corn, cotton, wheat, oats, rye, barley, and vegetables were grown. Gwinnett County would also be the first to promote cooperative canning amongst its farmers and would also encourage the growth of the poultry industry.

While Gwinnett County was still rural in the 1950s, the next decades witnessed tremendous growth as Gwinnett began to benefit from its central location between growing population centers of Gainesville, Athens, and Atlanta. Lake Lanier and the completion of I-85 opened up areas for

commercial and residential development, and the location of large businesses, such as Western Electric within the county, has made for substantial growth. In the 1980s, Gwinnett was characterized as the fastest growing county in the state and the country, and the once rural landscape, punctuated with farms, churches and schools, is now more a part of urban Atlanta than farmland.



## IV. METHODS

A field crew consisting of a Field Director and two field research assistants conducted the survey of approximately 3,250 feet of proposed trail corridor extending from Johnson Road east toward Chattahoochee River National Recreation Area land on the banks of the Chattahoochee River. The trail corridor was approximately eight feet in width, and followed an existing dirt road along the upland portion and a sewer line corridor along the portion adjacent to the river.

Field coverage of the study corridor consisted of a pedestrian survey accompanied by shovel test pit excavation. The crew walked a single transect along the centerline of the proposed trail corridor. All exposed ground surface was visually inspected. Shovel test pits were excavated in areas of less than 75 percent surface visibility and of less than 15 percent slope. These tests were spaced at a 20-meter interval and were 30-centimeters in diameter. Each shovel test pit was excavated until culturally sterile soil was found. The contents of each test were screened through on quarter inch hardware cloth. No artifacts were recovered during the course of the survey.

A single crewmember walked the entire project corridor periodically taking GPS readings. Employed in this task was the Trimble GPS unit. This unit provides GPS data with sub-meter accuracy. This data was in turn used for the creation of the project area maps that illustrate this report.

If artifacts were recovered during the survey, additional shovel test would be excavated at a 10-meter interval in a grid pattern until two negative tests were established in each direction. A site was to be defined by the presence of artifacts from the same broad cultural period, pre-1955, with the following combinations; three or more artifacts from a 30-meter surface area; two or more artifacts from a shovel test that are not co-joinable, one artifact from a shovel test and one from the surface within a 20-meter radius. Also to be considered was the presence of surface features, such as wells, chimney falls, or house piers. The location of surface features and structure was also considered in the determination of site boundaries. An isolated find was to be defined by the discovery of two or fewer artifacts within a 30-meter radius or artifacts that were obviously redeposited. No sites were found within the project area. Additionally, since no artifacts were recovered no laboratory methods are discussed.



## V. RESULTS AND RECOMMENDATIONS

New South Associates conducted a Phase I Archaeological survey of the proposed Settles Bridge Park trail corridor on April 15, 2005. The corridor was approximately 3,250 feet in length and eight feet wide. A total of 41 shovel test pit locations were investigated. Approximately half the shovel test pit locations were along an existing sewer line corridor (Figure 2a). Soils in this area were disturbed. Disturbance was indicated by highly mottled clay soils accompanied by granite road gravel (Figure 2b).

The disturbance was the result of the excavation of the trench to accommodate the sewer line running parallel with the Chattahoochee River. The soil profile of shovel test pits in this area revealed the highly mottled clay soils and gravel extended to, and at times into, the steep slope of the neighboring landforms. The remaining shovel test pit locations were situated on the slopes leading out of the river floodplain (Figure 3a). A majority of these shovel test pit locations were found on the sloped sides of landforms and in runoff channels between knolls and ridge tops. Where soil was present above sterile subsoil it consisted of a 5YR4/4 reddish brown loamy clay. At its deepest, this soil type was found to a depth of 55 centimeters below ground surface. However, in the majority of the excavated shovel test pits this soil was isolated to the top 10 centimeters of the soil profile. The tops of the landforms overlooking the river floodplain were eroded and subsoil was observed on the ground surface (Figure 3b).

No artifacts were recovered in or around any of the shovel test pit locations investigated within the project area. Though the Chattahoochee River floodplain is known for its rich archaeological context, the construction of the sewer line compromised the integrity of the original soil layers. The depth of this disturbance makes the possibility of deeply deposited, undiscovered cultural resources unlikely. Also, the eroded nature of the slope found in the adjacent hills does not provide an ideal setting for the preservation of archaeological sites. Therefore, no further archaeological work is recommended for the trail corridor.



Figure 2  
Photographs of Project Corridor



A. Project corridor in the Chattahoochee River floodplain.



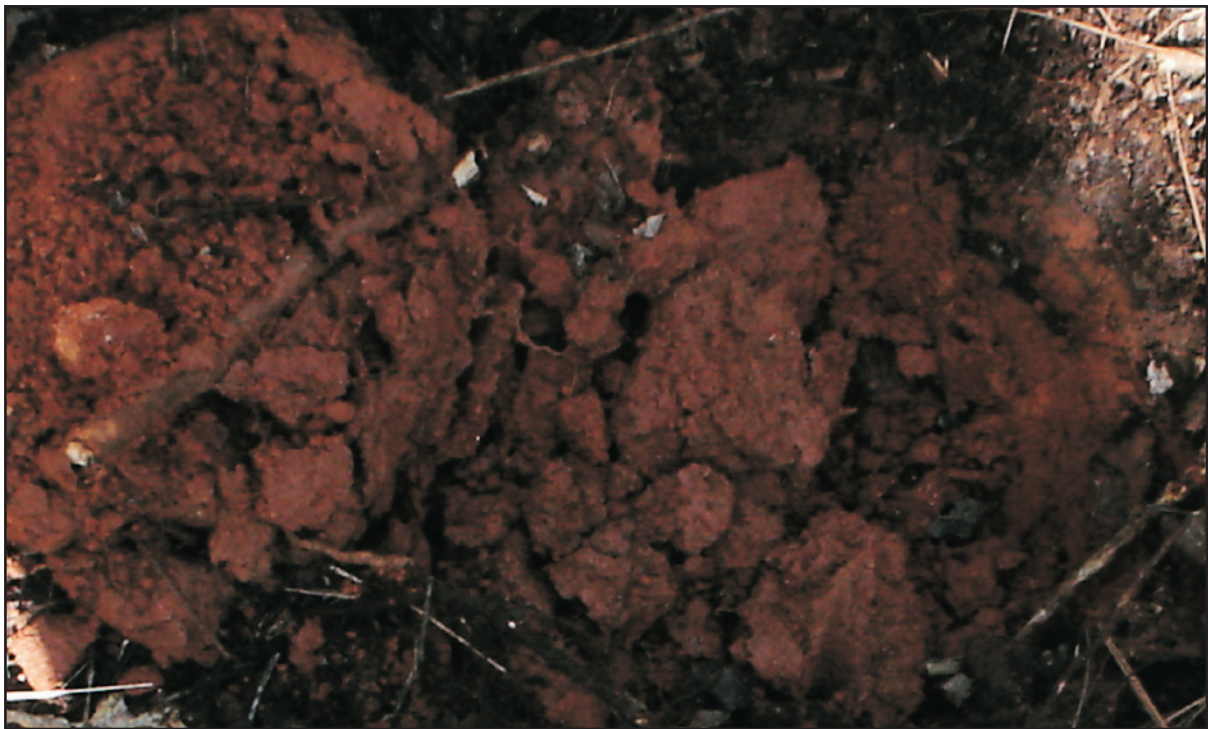
B. Disturbed soil profile associated with the sewer line construction.



Figure 3  
Photographs of the Project Corridor



A. Project corridor on the landforms above the river floodplain.



B. Subsoil in the upland portion of the project area.





# REFERENCES CITED

- Anderson, D. G. and G. T. Hanson  
1988 Early Archaic Settlement in the Southeastern United States: A Case Study from the Savannah River Basin. *American Antiquity* 53:262-286.
- Anderson, D. G. and J. W. Joseph  
1988 *Prehistory and History Along the Upper Savannah River: Technical Synthesis of Cultural Resource Investigations, Richard B. Russell Multiple Resource Area*. Prepared by Garrow and Associates, Inc., Atlanta, Georgia.
- Anderson, D. G., R. J. Ledbetter and L. O'Steen  
1990 *PaleoIndian Period Archaeology of Georgia*. Georgia Archaeological Research Design Paper No. 6. University of Georgia.
- Blanton, D. B., S. Bryne, and M. B. Reed  
1987 *Cultural Resources Investigations of the Proposed East Tennessee-Ball Ground Pipeline Corridor*. Submitted to the Atlanta Gas Light Company. Prepared by Garrow & Associates, Inc., Atlanta, Georgia.
- Cable, J. S.  
1982 Differences in Lithic Assemblages of Forager and Collector Strategies. In *Archeological Survey and Reconnaissance Within the Ten-Year Floodpool Harry S. Truman Dam and Reservoir*, edited by Richard Taylor. Submitted to the Kansas City District Corps of Engineers. Prepared by Gilbert Commonwealth Associates, Inc.
- Cable, J. S. and L. E. Raymer (with contributions)  
1991 *Archeological Test Excavations at the Lake Acworth Site (9Co45) and the Butler Creek Site (9Co46), Allatoona Lake*, Cherokee and Cobb Counties, Georgia. Submitted to the Mobile Corps of Engineers. Prepared by New South Associates, Stone Mountain, Georgia.
- Caldwell, J.  
1957 *Survey and Excavations in the Allatoona Reservoir, Northern Georgia*. Ms. Number 151 on File, Department of Anthropology, University of Georgia, Athens.
- Cambron, J. W. and D. Hulse  
1975 *Handbook of Alabama Archaeology: Part I: Point Types*. Archaeology Research Center Association of Alabama, Inc. Birmingham.
- Cantley, C. E., and J. W. Joseph  
1991 *Prehistory of the Middle Chattahoochee River Valley: Findings of the 1989-1990 West Point Lake Archeological Survey and Site Testing Project*. Submitted to the U. S. Army Corps of Engineers, Mobile District. Prepared by New South Associates, Stone Mountain, Georgia.
- Charles, T.  
1986 The Fifth Phase of the Collectors Survey. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, *The Notebook* 18: 1-27.
- Coe, J. L.  
1964 *The Formative Cultures of the Carolina Piedmont*. Transactions of the American Philosophical Society. New Series Volume 54, Part 5.
- Coleman K.  
1982 *Georgia History in Outline*. The University of Georgia Press. Athens, Georgia.
- Crook, M. R.  
1986 *A Strategy for Cultural Resource Planning in Georgia*. State of Georgia Department of Natural Resources, Parks and Historic Sites Division, Historic Preservation Section.

- Flanigan, J. C.  
1943 *History of Gwinnett County Georgia 1818-1943*. Tyler & Co. Hopewell, Georgia.
- Ford, R. I.  
1985 *Prehistoric Food Production in North America*. Anthropological Papers, Museum of Anthropology, University of Michigan.
- Garrow, P. H.  
1975 The Woodland Period North of the Fall Line. *Early Georgia* 3 (1):17-26
- Goodyear, A. C., J. H. House, and N. W. Ackerly  
1979 *Laurens-Anderson: An Archeological Study of the Interriverine Piedmont*. Anthropological Studies 4, Institute of Archeology and Anthropology, University of South Carolina.
- Gresham, Thomas H.  
1987 *Cultural Resources Survey of the Proposed Lake Sidney Lanier Reregulation Dam and Lake Area, Forsyth and Gwinnett Counties, Georgia*. Report prepared for the US Army Corps of Engineers, Savannah District. Report prepared by Southeastern Archeological Services, Athens, Georgia.
- Griffin, J. B.  
1952 *Archeology of the Eastern United States*. University of Chicago Press.
- Hally, D. J. and J. L. Rudolph  
1982 *West Point Lake Cultural Resources Survey: Final Report*. Submitted to the U. S. Army Corps of Engineers, Mobile District. The University of Georgia, Athens.  
  
1986 *Mississippi Period Archaeology of the Georgia Piedmont*. University of Georgia Laboratory of Archaeology Series Report Number 24. University of Georgia, Athens.
- Jeffries, R. W.  
1976 *The Tunnacunnee Site: Evidence of Hopewell Interaction in Northwest Georgia*. Anthropological Papers of the University of Georgia, No. 1 Athens.
- Kneberg, M.  
1956 Some Important Projectile Point Types Found in the Tennessee Area. *Tennessee Archaeologist* 12(1): 17-28.
- Knight, V. J., and T. C. Mistovich  
1984 *Walter F. George Lake Archaeological Survey of Fee Owned Lands, Alabama, Georgia*. Report of Investigations No. 42. Office of Archaeological Research, University of Alabama, Tuscalusa.
- Ledbetter, J. R., W. D. Wood, K. G. Wood, and R. F. Ethridge  
1986 *Cultural Resources Survey of Allatoona Lake Area*. Submitted to the U. S. Army Corps of Engineers, Mobile District by Southeastern Wildlife Services, Inc.
- Mason, R. J.  
1962 The Paleo-Indian Tradition in Eastern North America. *Current Anthropology* 3:227-283.
- McPherson, J.  
1981 *Gwinnett County History*. On deposit at the Georgia Department of Archives and History.
- O'Steen, L. D.  
1983 *Early Archaic Settlement Patterns in the Wallace Reservoir: An Inner Piedmont Perspective*. Unpublished masters thesis, Department of Anthropology, University of Georgia, Athens.
- Rudolph, T. P.  
1986 *Regional and Temporal Variability in Swift Creek and Napier Ceramics from North Georgia*. Paper presented at the Southeastern Archeological Conference, Nashville, Tennessee.
- Sassaman, K. E.  
1983 *Middle and Late Archaic Settlement in the South Carolina Piedmont*. Unpublished M. A. thesis, Department of Anthropology, University of South Carolina, Columbia.

- Shelford, V. E.  
1963 *The Ecology of North America*. University of Illinois Press, Urbana.
- Smith, M. T.  
1987 *Archaeology of Aboriginal Culture Change in the Interior Southeast Depopulation During the Early Historic Period*. Ripley P. Bullen Monographs in Anthropology and History, Number 6. University of Florida Press, The Florida State Museum, Gainesville.  
  
1992 *Historic Period Indian Archaeology of Northern Georgia*. University of Georgia Laboratory of Archaeology Series Report Number 30. University of Georgia, Athens.
- Tate, R. J.  
1967 *Soil Survey of Gwinnett County, Georgia*. United States Department of Agriculture.
- Wauchope, R.  
1966 *Archaeological Survey of Northern Georgia With a Test of Some Cultural Hypotheses*. Memoirs of the Society for American Archaeology, Number 21. Salt Lake City.
- Webb, Robert S. with contributions by Scot J. Keith, Grace F. Keith, and Neil L. Norman  
1998 *Cultural Resources Survey of the Proposed Fairgreen Development Site, Gwinnett County, Georgia. Report prepared for Fairgreen Development*. Report Prepared by R. S. Webb & Associates, Holly Springs, Georgia.
- White, George  
1849 *Statistics of the State of Georgia*. W. Thorne Williams, Savannah.
- Wood., W. D.  
1990 *Regional Chronologies*. In *Lamar Archaeology, Mississippian Chiefdoms in the Deep South*. University of Alabama Press, Tuscaloosa and London.
- Wood, W. D. and W. R. Bowen  
1995 *Woodland Period Archaeology of Northern Georgia*. Georgia Archaeological Research Design Paper No. 9. University of Georgia.





# APPENDIX A: RESUME OF THE PRINCIPLE INVESTIGATOR





# J. W. Joseph, Ph.D. (RPA)

President/ Project Manager

## Education:

Ph.D., Historical Archaeology, University of Pennsylvania - 1993

M.A., American Civilization, University of Pennsylvania - 1982

B.A., Anthropology, University of South Carolina - 1980

**Registration:** R.O.P.A., 1986

## Experience by Region:

Southeast GA, SC, NC, AL, TN, FL, MS

Mid-Atlantic VA, MD

Northeast PA, NJ

Other US IL, KS, KY, LA, AR

Caribbean Puerto Rico, USVI

International Panama, Egypt, France

## Summary of Qualifications:

Dr. J. W. Joseph serves New South Associates as President and Project Manager. Dr. Joseph is a Registered Professional Archaeologist with more than 26 years of professional experience. He has directed research for the National Park Service, the U.S. Army Corps of Engineers (Mobile, Jacksonville, Wilmington, Fort Worth and Savannah Districts), various State Historic Preservation Offices, Departments of Transportation, and a number of private clients. He has experience in historical archaeology, urban archaeology, preservation planning, and HABS/HAER documentation, and is the author of more than 141 technical reports and 10 research publications. He is a former member of the Georgia National Register of Historic Places Review Board as well as a past president of the Georgia Council of Professional Archaeologists.

## Representative Reports and Publications:

2002 J. W. Joseph and Martha Zierden, editors

*Another's Country: Archaeological and Historical Perspectives on Cultural Interaction in the South Colonies.* University of Alabama Press, Tuscaloosa and London.

2001 Hamby, Theresa M. and J. W. Joseph.

*Architectural Review and Determination of Eligibility of the Williams Homesite, Resource No. FU-NF-63, Fulton County, Georgia.* Report submitted to Matrix Engineering.

2001 Denise Messick, J. W. Joseph and Natalie P. Adams

*Tilling the Earth: Georgia's Agricultural Heritage, A Context.* Georgia Department of National Resources, Historic Preservation Division and Georgia Department of Transportation.

1989 J. W. Joseph and Mary Beth Reed.

*"An Increase of the Town" An Archeological and Historical Investigation of the Proposed Mobile Convention Center Site, Mobile, Alabama.* Report submitted to the City of Mobile, Alabama.

## Locations of Special Concern Animals, Plants and Natural Communities in Gwinnett County, Georgia

"US" indicates species with federal status (Protected, Candidate or Partial Status). Species that are federally protected in Georgia are also state protected.

"GA" indicates Georgia protected species.

Find details for the species below on our special concern lists for [animals](#) and [plants](#).

Date of information - 10/22/2004

### Animals

No animals listed in Gwinnett county.

### Plants

- *Aesculus glabra* Ohio Buckeye
- US · *Amphianthus pusillus* Pool Sprite
- *Amsonia ludoviciana* Louisiana Blue Star
- *Aster avitus* Alexander Rock Aster
- US · *Aster georgianus* Georgia Aster
- GA · *Cypripedium acaule* Pink Ladyslipper
- GA · *Cypripedium parviflorum* var. *pubescens* Large-flowered Yellow Ladyslipper
- *Eriocaulon koernickianum* Dwarf Pipewort
- *Fimbristylis brevivaginata* Flatrock Fimbry
- GA · *Hydrastis canadensis* Goldenseal
- US · *Isoetes melanospora* Black-spored Quillwort
- GA · *Melanthium woodii* Ozark Bunchflower
- *Panax quinquefolius* American Ginseng
- GA · *Schisandra glabra* Bay Starvine
- GA · *Sedum pusillum* Granite Stonecrop
- GA · *Waldsteinia lobata* Piedmont Barren Strawberry

### Natural Communities

No natural communities listed in Gwinnett county.

NOTE: This is a working list and is constantly revised ([see element occurrence data disclaimer](#)). For the latest changes, acknowledgment of numerous sources, interpretation of data, or other information connected with this list, please contact:

Greg Krakow - Data Manager  
Georgia Department of Natural Resources  
Wildlife Resources Division  
Georgia Natural Heritage Program  
2117 U.S. Highway 278 S.E.  
Social Circle, Georgia 30025-4714  
Phone: (770)918-6411  
Fax: (706)557-3033





Federal	Status, State, Federal - Global, State Rank	Scientific Name	Common Name	Habitat	May	Recorded
	G2, S2	<i>Fimbristylis brevivaginata</i>	Flatrock Fimbry	Granite outcrops		
	G3, S1	<i>Fothergilla major</i>	Dwarf mountain witch alder	Rocky (sandstone, granite) woods; bouldery stream margins		X
	SU - G4T3, S2S3	<i>Hexastylis shuttleworthii</i> var. <i>harperi</i>	Shuttleworth's ginger	Low terraces in floodplain forests; edges of bogs		X
	SE - G4, S2	<i>Hydrastis canadensis</i>	Goldenseal	Rich woods in circumneutral soil		X
	SE - G2Q, S2	<i>Hymenocallis coronaria</i>	Shoals spiderlily	Rocky shoals of broad, open rivers		
Yes	SE, FE - G5, S1?	<i>Isoetes melanospora</i>	Black-spored quillwort	Vernal pools on granite outcrops		
	G5, S2	<i>Lilium canadense</i>	Canada Lily	Openings in rich woods		X
	G4, S2	<i>Listera australis</i>	Southern twayblade	Poorly drained circumneutral soils (bogs)		
	G5, S2?	<i>Melanthium latifolium</i>	Bunchflower	Mesic deciduous hardwood forests		
	G5, S2	<i>Melanthium woodii</i>	Ozark bunchflower	Moist, hardwood woods, in small clumps on terraces along streams or lower slopes		X
	ST - G4, S2	<i>Nestronia umbellula</i>	Indian olive	Mixed with dwarf shrubby heaths in oak-hickory-pine woods; often in transition areas between flatwoods and uplands		X
	G3G4, S2	<i>Panax quinquefolius</i>	Ginseng	Mesic hardwood forests; cove hardwood forests		X
Yes	ST, FC - G2G3, S1S2	<i>Platanthera integrilabia</i>	Monkey-face orchid	Wet thickets; seepy open northern hardwood forests		
	G3, S2	<i>Pycnanthemum curvipes</i>	Mountain-mint	Open, mesic woods		X
	ST - G3, S3	<i>Rhododendron prunifolium</i>	Plumleaf azalea	Mesic hardwood forests in ravines and on sandy, seepy streambanks		
Yes	SE, FE - G2, S1	<i>Rhus michauxii</i>	Michaux's sumac	Open forests over ultramafic rock		
	G3, S2	<i>Schisandra glabra</i>	Bay star-vine	Rich woods on stream terraces and lower slopes		X
	ST - G3, S1	<i>Sedum nevii</i>	Nevius' stonecrop	Gneiss ledges on river bluffs		
	ST - G3, S3	<i>Sedum pusillum</i>	Granite stonecrop	Granite outcrops, often in mats of Hedwigia moss under Juniperus virginiana		
	SR - G4, S2	<i>Stewartia malacodendron</i>	Silky camellia	Along streams on lower slopes of beech-magnolia or beech-basswood-Florida maple forests		
	G4, S3?	<i>Stewartia ovata</i>	Mountain camellia	Mesic hardwood forests; bluff forests		X
Yes	SE, FE - G2, S2	<i>Trillium reliquum</i>	Relict trillium	Mesic hardwood forests; limesink forests; usually with Fagus and Tilia		
	ST - G2, S2	<i>Waldsteinia lobata</i>	Piedmont barren strawberry	Stream terraces and adjacent gneiss outcrops		X
	G5, S1?	<i>Zanthoxylum americanum</i>	Northern prickly-ash	Rocky, openly wooded slopes; river banks and terraces		
	<b>NOTES:</b>					
	SE - State Endangered	G1 - Critically imperiled globally because of extreme rarity (5 or fewer occurrences).				
	ST - State Threatened	G2 - Imperiled globally because of rarity (6 to 20 occurrences).				
	SR - State Rare	G3 - Rare and local throughout range or in a special habitat or narrowly endemic (on the order of 21 to 100 occurrences).				
	SU - State Unusual	G4 - Apparently secure globally (of no immediate conservation concern).				
	FE - Federally Endangered (Listed)	G5 - Demonstrably secure globally.				
	FT - Federally Threatened (Listed)	S1 - Critically imperiled in state because of extreme rarity (5 or fewer occurrences).				
	FC - Federal Candidate	S2 - Imperiled in state because of rarity (6 to 20 occurrences).				
	(...) - Partially Listed by Range	S3 - Rare or uncommon in state (on the order of 21 to 100 occurrences).				
	PDL - Proposed Delisting	S4 - Apparently secure in state (of no immediate conservation concern).				
	Q - Taxonomic question; unsure status					

Project Site

Bay Star Vine

Ozark Bunchflower

Pine Barren Strawberry

Ozark Bunchflower

Pine Barren Strawberry

Bay Star Vine

Ginseng

Goldenseal  
Ginseng



## Categorical Exclusion Form

Project: Settles Bridge Trail Project

Date: 11/22/2005

Describe the project, including location (reference the attached Environmental Screening Form (ESF), if appropriate):

This project is a proposed trail corridor connecting two parcels of land planned for a new Gwinnett County park (Settles Bridge Park). The trail will follow an existing sewer easement/existing primitive trail through part of NPS (National Park Service) property. This trail will not be constructed on new location. The trail is to be 8-feet wide from inside rail to inside rail and is to be pervious aggregate material or possibly mulched. Two perennial streams are within the trail alignment; therefore two pedestrian bridges are to be constructed spanning the length of the two streams. The bridges will be 8-feet wide and of simple wood constructed. The bridges are to be sturdy enough to bear the load of a lightweight maintenance vehicle.

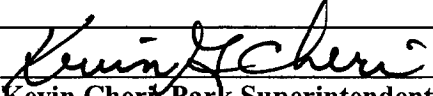
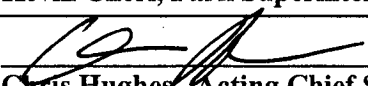
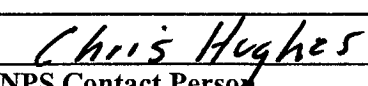
Describe the category used to exclude action from further NEPA analysis and indicate the number of the category (see section 3-4 of NPS-12):

NPS-12 Section 3-4-C-12. Minor trail relocation or development of compatible trail networks on logging roads or other established routes.

Describe any public or agency involvement effort conducted (reference the attached ESF):

Internal Scoping conducted.

On the basis of the environmental impact information in the statutory compliance file, with which I am familiar, I am categorically excluding the described project from further NEPA analysis. No exceptional circumstances (i.e., all boxes in the ESF are marked "no") or conditions in section 3-6 apply, and the action is fully described in section 3-4 of NPS-12.

 Kevin Chert, Park Superintendent	<u>12/15/05</u> Date
 Chris Hughes, Acting Chief Science and Resource Management	<u>12/15/05</u> Date
 NPS Contact Person	<u>Resource Manager</u> Title
1978 Island Ford Parkway Atlanta, Georgia 30350	770-399-8074 x265



# ***Appendix F***

## **Detailed Cost Estimate**

**SETTLES BRIDGE PARK SITE***The Jaeger Company***FINAL MASTER PLAN COST ESTIMATE 12.08.05**

<i>Item</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i>	<i>SubTotal</i>	<i>Total</i>
<b>Parking and Roads</b>					<b>\$389,325</b>
Asphalt (Roadway)	8,950	SY	\$20	\$179,000	
Pervious Asphalt (Parking Lot)	3,260	SY	\$26	\$84,760	
Striping (200 spaces)	3,680	LF	\$3	\$11,040	
Crosswalk Striping	175	LF	\$3	\$525	
Deceleration Lane (Johnson Rd)	200	LF	\$120	\$24,000	
Landscaping - Trees	200	EA	\$450	\$90,000	
<b>Johnson Road Amenity Area</b>					<b>\$1,315,950</b>
<i>Teen Area</i>					<i>\$344,100</i>
Skate Park	10,000	SF	\$18	\$180,000	
Basketball Court (2-half court)	1	LS	\$27,000	\$27,000	
Fencing, (Vinyl Clad Chain Link, 10')	350	LF	\$25	\$8,750	
Galaxy Structure	1	EA	\$30,000	\$30,000	
Adult Swings	2	EA	\$2,500	\$5,000	
Shelter (20'x20')	2	EA	\$24,000	\$48,000	
Bench on Concrete Pad	6	EA	\$1,200	\$7,200	
Trash Receptacle on Concrete Pad	1	EA	\$800	\$800	
Landscaping - Trees	83	EA	\$450	\$37,350	
<b>Pavilion and Playground Area</b>					<b>\$971,850</b>
Sewer Waste Service	3,000	LF	\$60	\$180,000	
Electricity/Conduit	3,000	LF	\$14	\$42,000	
Water Service	3,000	LF	\$24	\$72,000	
Playground	19,000	SF	\$12	\$228,000	
Splash Element	2,275	SF	\$24	\$54,600	
Pavilion Structure (60' Diameter)	2,550	SF	\$60	\$153,000	
Picnic Tables	14	EA	\$1,500	\$21,000	
Bench on Concrete Pad	10	EA	\$1,200	\$12,000	
Trash Receptacle on Concrete Pad	2	EA	\$800	\$1,600	
Outdoor Grill	4	EA	\$600	\$2,400	
Restroom (25'x25')	625	SF	\$130	\$81,250	
Drinking Fountain	1	EA	\$1,800	\$1,800	
Irrigation	1	LS	\$20,000	\$20,000	
Shade Structure	500	SF	\$50	\$25,000	
Decorative Fencing	150	LF	\$25	\$3,750	
Sidewalks, 6' width	1,350	LF	\$28	\$37,800	
Turf Area (Seeded)	2	AC	\$4,000	\$6,400	
Landscaping - Trees	65	EA	\$450	\$29,250	

**SETTLES BRIDGE PARK SITE***The Jaeger Company***FINAL MASTER PLAN COST ESTIMATE 12.08.05**

<i>Item</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i>	<i>SubTotal</i>	<i>Total</i>
<b>Upper Amenity Area</b>					<b>\$623,225</b>
<i>Senior Area</i>					<i>\$486,975</i>
Shelter (20'x20')	400	SF	\$60	\$24,000	
Senior Amenity Court Area	1	LS	\$25,000	\$25,000	
Restroom (25'x25')	625	SF	\$130	\$81,250	
Drinking Fountain	1	EA	\$1,800	\$1,800	
Sewer Waste Service	3,000	LF	\$60	\$180,000	
Electricity/Conduit	3,000	LF	\$14	\$42,000	
Water Service	3,000	LF	\$24	\$72,000	
Bench on Concrete Pad	4	EA	\$1,200	\$4,800	
Trash Receptacle on Concrete Pad	2	EA	\$800	\$1,600	
Landscaping - Trees	101	EA	\$450	\$45,450	
Retaining Walls	121	LF	\$75	\$9,075	
<i>Dog Park</i>					<i>\$136,250</i>
Fencing (vinyl clad chain link, 6')	1,890	LF	\$25	\$47,250	
Paved Double Check Entrance Gate	1	EA	\$1,500	\$1,500	
Paved Watering Hose Area	1	EA	\$2,500	\$2,500	
Bench on Concrete Pad	5	EA	\$1,200	\$6,000	
Pooper Scooper Station	3	EA	\$500	\$1,500	
Turf Area (Seeded)	2	AC	\$4,000	\$8,000	
Irrigation	1	LS	\$20,000	\$20,000	
Landscaping - Trees	110	EA	\$450	\$49,500	
<b>West Meadow Area</b>					<b>\$661,650</b>
Clearing and Grubbing	22	AC	\$3,500	\$77,000	
Erosion Control	1	LS	\$15,000	\$15,000	
Earthwork	34,000	CY	\$6	\$187,000	
Meadow Seeding	22	AC	\$4,000	\$88,000	
Multi-Use Trail (12' wide asphalt)	7,175	LF	\$26	\$186,550	
Bench on Concrete Pad	8	EA	\$1,200	\$9,600	
Trash Receptacle on Concrete Pad	5	EA	\$800	\$4,000	
Landscaping - Trees	210	EA	\$450	\$94,500	
<b>Misc. Park Development</b>					<b>\$1,211,360</b>
Removal of Existing Trash/Debris	1	LS	\$15,000	\$15,000	
Clearing and Grubbing	40	AC	\$3,500	\$140,000	
Erosion Control	1	LS	\$25,000	\$25,000	
Earthwork	90,000	CY	\$6	\$495,000	
Meadow Seeding	12	AC	\$4,000	\$48,000	
Detention Pond - Landscaping	1	LS	\$8,000	\$8,000	
Stormwater Management	1	LS	\$40,000	\$40,000	
Overlook on River	1	LS	\$100,000	\$100,000	
Suspension Bridge	1	LS	\$250,000	\$250,000	
Orientation Kiosk	2	EA	\$7,500	\$15,000	
Park Entry Sign	2	EA	\$4,500	\$9,000	
Traffic Signs	4	EA	\$350	\$1,400	
Alternate Multi-Use Trail Park Access	960	LF	\$26	\$24,960	
Maintenance Area (108' x 120')	1	LS	\$40,000	\$40,000	



**SETTLES BRIDGE PARK SITE**  
**The Jaeger Company**  
**FINAL MASTER PLAN COST ESTIMATE 12.08.05**

<i>Item</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i>	<i>SubTotal</i>	<i>Total</i>
<b>Multi-Use Trail System</b>					<b>\$260,150</b>
Clearing and Grubbing	3	AC	\$3,500	\$8,750	
Multi-Use Trail (12' wide asphalt)	9,100	LF	\$26	\$236,600	
Seatwall	20	LF	\$150	\$3,000	
Footbridge	2	EA	\$5,000	\$10,000	
Signage	6	EA	\$300	\$1,800	
<b>Unpaved Nature Trail System</b>					<b>\$198,000</b>
Clearing and Grubbing	1	AC	\$3,500	\$4,900	
Nature Trail (8' wide)	7,800	LF	\$24	\$187,200	
Footbridge	1	EA	\$5,000	\$5,000	
Signage	3	EA	\$300	\$900	
<b>Unpaved Nature Trail System</b>					<b>\$437,600</b>
Clearing and Grubbing	2	AC	\$3,500	\$8,400	
Nature Trail (6' wide)	17,600	LF	\$24	\$422,400	
Footbridge	1	EA	\$5,000	\$5,000	
Signage	6	EA	\$300	\$1,800	
<b>Subtotal</b>					<b>\$5,097,260</b>
<b>Contingency (15%)</b>					<b>\$764,589</b>
<b>Insurance/Bonds/Other Fees (10%)</b>					<b>\$586,185</b>
<b>Land. Arch./Eng./Arch./Survey Fees (12%)</b>					<b>\$703,422</b>
<b>TOTAL</b>					<b>\$7,151,456</b>