

Harbins/Alcovy River



CONSERVATION PARK SITE MASTER PLAN



Prepared for: Gwinnett County
Department of Community Services

Prepared by: CERULEA

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Harbins-Alcove River Park Site Master Plan

The Harbins-Alcove River Park Site Master Plan was prepared with the participation and guidance of the Master Plan Steering Committee members. We appreciate their efforts:

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Steering Committee touring the rock outcrop, north bank of the Alcove River, February 26, 2005

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Harbins-Alcovy River Park Site Master Plan

1.0 Project Goals and Objectives

At the Harbins-Alcovy River Park Site, Gwinnett County is seeking to address countywide recreational open space needs in a manner compatible with the sustainable preservation and interpretation of unique cultural and natural resources. This Master Plan was performed as a two stage process. Initially a site inventory and historical/archeological resources survey resulted in the identification of natural and cultural resources and their distribution throughout the park. The principal goals of this project, the preparation of a master plan to guide the development of the acreage of the park tract protected by a Conservation Easement were:

- Preserve the natural resources associated with the park.
- Preserve potential archeological resources from disturbance as a part of this project.
- Provide for potential interpretation of the extensive natural and cultural resources.
- Provide access suitable for a broad range of passive and active trail and open space activities.
- Encourage sufficient levels of use to ensure regular public presence to reinforce public safety objectives.

2.0 Site Context

The 1795-acre park site was acquired from a privately assembled group of parcels through 2003. The Park is located in the Harbins area, south of Dacula and Highway 316, where the Alcovy River exits Gwinnett into adjacent Walton County. Access to the site is via New Hope, Luke Edwards, and Indian Shoals Roads. The park is surrounded largely by low-density residences, farms, and forested land, a land pattern which is now transitioning to residential subdivision. Some adjacent parcels have recently been redeveloped as subdivision and other adjacent tracts are in the process of subdivision permitting.

The subject of this master plan report is the 1184-acre conservation overlay park parcel.

3.0 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 an initial natural and historical/archeological resource inventory of the entire 1795-acre tract. The inventory and analysis confirmed the footprint for the 1184-acre conservation overlay park footprint. The 611-acre balance of land was set aside for active recreation components, trails, and passive features to be determined in the future.

- Field reconnaissance to identify natural and optimal trail alignments using GPS to record site features not otherwise apparent on GIS and Aerial Photo Data.

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- Inventory and Analysis of the natural site features (topography, vegetation, hydrology, and soils).
- Inventory/Analysis of historical and archeological resources (included a Cedar Creek mill site, as well as Shady Grove Cemetery and associated former school/church site).
- Program Confirmation was based on input of staff as well as the Steering Committee following a thorough tour of this site and comparable Gwinnett park sites.
- Alternative Development Concepts were prepared to test a variety of design concepts.
- A Preliminary Master Plan was developed.
- A Draft Master Plan was developed as a refined preliminary plan with Cost Estimate.
- A Final Master Plan was developed with a refined, phased Cost Estimate.
- Presentation of the final and phase one plans to the Recreation Authority and Board of Commissioners.

The following provides additional brief description of the methodology and timeline:

Base Plan Development and limited Survey (through October, 2004)

The County furnished digital property surveys of the project site from surveyors, Hannon, Meeks, and Bagwell to comprise an ALTA/ACSM compliant land title survey. The boundary survey and GIS physical data were composited by the surveyors. In addition, a separate boundary survey was provided for a 53-acre and 14-acre tract survey of adjacent parcels acquired. All were composited together in Georgia State Plane Coordinates as a working file by the above surveyor.

The County provided a file named “PaperSurveysx6.dwg” indicating an adjacent 18-acre tract in Walton County owned by Prestwick Properties (Deedbook 707, page 286, Walton County). This tract contains the balance of the mill site ruins including the remaining 3 walls of the mill building. This file is in paper space format – not Georgia State Plane coordinates, but helps to make it clear that the mill house ruins are not in Gwinnett County.

CERULEA then prepared a composite AutoCAD base plan for the site reflecting County GIS data for topography, hydrology, roads, tree cover, fences, buildings and utilities. These GIS data layers were derived from the County GIS system and overlaid onto the Georgia State Plane surveys as provided by the Owner. In addition, floodplain hydrology layers were provided by the County stormwater staff and imported in SHP-file format into the AutoCAD file. Soils information was imported in a similar fashion, then manually text labeled to correspond to County Soil series maps.

Inventory and Analysis (through October 28, 2004)

The analysis phase culminated in an initial public hearing on October 28, 2004, attended by approximately 170 interested persons (though not all Gwinnett residents). A series of seven graphics were then prepared to record the findings organized under the headings of: Hydrology

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Diagram; Natural Feature Highlights; Circulation Diagram; Soils Data; Vegetation Analysis; Historical/Archaeological Resources; and Slope Analysis.

Representatives of special interest groups made pleas for consideration of the allowance of the following activities on the site: hunting, ATV riding, Mountain Biking, and Equestrian Riding.

Community Interest forms were distributed and collected at the close of the meeting. A total of 117 forms were returned and collated by CERULEA to provide initial guidance of desires and programmatic prioritization of the residents. Applications were for membership in a steering committee were also distributed and collected at the meeting.

Program Confirmation (through February 26, 2005)

Working closely with the steering committee to develop a program, the process began with a meeting with the Committee to establish a schedule for a walking tour of the a park site, a bus tour of other park sites in the County, and a series of concept and master plan refinement meetings. Consensus as to the prime natural and cultural resource preservation objective emerged from the site walking tour on February 26, 2005 during a committee picnic on the mossy rock outcrops on the east side of the Alcovy River. The committee, by show of hands, prioritized their desires for the parks master plan program components. This continued until 10 top priorities were listed in order of preference as follows:

1. Protect and Restore Cultural and Natural Resources, including stabilization of eroding trail beds, protection of delicate vegetation at rock outcrops, and interpretation of historical and natural features;
2. Pedestrian Trail System with natural surfacing;
3. Multi-purpose Paved Trails;
4. Mountain-Biking Trails (separated from equestrian trails where space allows)
5. Equestrian Trails;
6. General Activity Area to include Pavilion(s), Shelter(s); and Playground;
7. Open Meadow (occasional mowing), and some Turf Area (regular mowing/possibly irrigated), provided that mature woods are not removed to provide them;
8. Outdoor Senior's Activity Area to include Horseshoe Pitch, Bocce Court, Shuffleboard, and Gametables;
9. Teen Activity Area to include Teen Swings/Play Apparatus, Basketball & Volleyball (2 each), and Free Skatepark Area; and
10. Dogpark.

Conceptual Development (through April 27, 2005)

Three alternative concept plans were quickly developed to consider the program requirements. The plans were varied and were presented to the Steering Committee on April 12, 2005. All the alternatives satisfied the project goals and objectives, but differed principally on the basis of the common area location, parking lot location, and trail alignments. Guidance was rendered to

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direct CERULEA toward a preliminary master plan refinement. Refinements included trail lengths and alignment, locations of parking and other elements. This guidance was reflected in a Hybrid Program issued on April 27, 2005.

Preliminary Master Plan Development (May 3, 2005)

The Preliminary Master Plan was presented to the Steering Committee on May 3. Minutes of this meeting, prepared by CERULEA staff are located in Appendix D.

The principal features of the plan:

Vehicular arrival is located at the intersection of Luke Edwards and Indian Shoals Roads. The plan shows 200 paved parking spaces and 260 gravel-with-grass spaces. The equestrian parking lot is accessed off Indian Shoals Road. The maintenance area is located off Luke Edwards Road in the north-west corner of this part of the site, tucked back and sheltered by trees. The teen area is not encircled by parking. The size of the meadow is about 20 acres; about half of the acreage would be irrigated turf. The senior area is shown with shade pavilions. The children's play area is about the same as the earlier concepts. The configuration of the dog park was modified to follow the ridge line.

The total lengths of each trail system were in line with the consensus quantity from the last meeting. The paved multi-purpose trail did not have a target length, but rather must access appropriate parts of the site for security and maintenance purposes. Trails were looped as much as possible. Additionally, as much as possible, trails, particularly the equestrian and mountain biking trails, were kept out of soft and wet floodplain terraces. There is 6.9 mi of walking trail, the top trail element in the program priority list. The mountain biking trail has three looped components, some going adjacent to rock ledges, offering cyclists the option of a technical challenge of vertical rock ledges, if they so choose. Seven miles of mountain biking trail are sited north of the river. The equestrian trail system, all north of the Alcovy River is shown at 8.9 miles including grade-separated crossings at two critical locations.

Eroded land stabilization is allowed for approximately 25 acres. Restoration will include rebuilding soil profiles, change drainage flows, and revegetation. The core area grading plan allows for up to 121,000 excess cubic yards of earth excavation to provide for backfill needs in eroded areas.

The group opted to eliminate all mountain biking trails south of river and instead create loops of eastern trail section, generally as marked on plan by CERULEA and Committee members during the meeting.

There was much discussion of the construction budget for Phase I from the 2001 SPLOST (Special Local Option Sales Tax). The preliminary master plan total estimate was over \$10 million, so crafting of a Phase I budget for the final master plan would be challenging.

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Final Master Plan (through May 17, 2005)

CERULEA presented a draft final master plan to the committee on May 17, 2005. The plan was well received and the Phase I cost estimate was discussed in great detail. Revisions to the mountain bike trail were satisfactory to the group. Staff discussion of how to configure the maintenance compound for the first phase indicated that a fenced storage yard would be sufficient, provided with water service. The paved, 1-mile, gently-graded multi-purpose trail loop would only be partially provided.

Security for the Cemetery was discussed, with committee members in favor of a private entity being formed to coordinate the operations of the cemetery with the County. Perimeter cemetery fencing was desired as well, with possible County funding.

The committee also affirmed the following motion relative to negotiation with Walton County and the landowner of the adjacent 18-acre tract containing the mill ruins:

“We, the Harbins/Alcovy River Park Citizen Steering Committee request Gwinnett County to pursue access to the complete mill ruins for the purposes of preservation and citizen access.”



Mill Ruins on tract in Walton County

The final color master plan was prepared and presented to the Recreation Authority on June 9, 2005, and many of the Steering Committee members were in attendance. The plan was well received and no plan changes or alterations were requested. The final color master plan was prepared and presented to the Board of Commissioners on July 19, 2005, and again, many of the Steering Committee members were in attendance. The plan was again well received.

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4.0 Site Inventory and Analysis

The following constitutes a summary of the inventory and analysis process. Each major category of discussion is supplemented by a foldout graphic that follows this section. The entire 1795-acre park site was the subject of this analysis, although this master plan report focuses on the 1184-acre conservation overlay park parcel.

The graphic exhibits show the entire 1795-acre parcel. The final graphic shows a composite of the most interesting natural features of the site from each category including best viewpoints.

Topography

The Park is a complex landform, generally within the watershed of Cedar Creek and it's un-named tributaries, with a portion of the southwest of the tract associated with the Alcovy River. Less than 10% of the site is defined as within the 100-year floodplain. Floodplain terraces tend to be broad and flat with associated unsuitable soil conditions and probable wetland conditions.

The bulk of the tract is moderately sloping land, of limited severity (10- 20% slope). Less than 10% of the tract is flatter upland ridgeline of modest slope (less than 10% slope) – however, given the limited active development reserved for the entire tract, that will not impose a limitation on development of the park program.

Topography will be a major constraint on natural-surfaced trail systems (equestrian, walking, and mountain-bike). In those cases, the tenets of natural surface trail design require careful, on site flagging of trail alignments to assure that the rate of ascent of the trail is never more than 50% of the prevailing cross-slope. In addition, the trails must be out-sloped and furnished with frequent drainage dips. The trail length consequently becomes much longer than the simple desire line alignment of a given loop or segment.

Numerous rock outcrops were located, with sizes ranging from 100 square feet to over an acre. Several have sheer rock faces ranging to 10-vertical feet. In the extreme north end of the site, west of New Hope road, one outcrop spans nearly 40 vertical feet. This outcrop is dome shaped across it's face and is seasonally wet with seeping spring water. The rock is slick with moss and algae, presenting a serious safety hazard should a park visitor loose their footing on the steep rock face.

Along the Georgia Power easement, east of Cedar Creek, a large outcrop spans approximately 80 vertical feet. Unauthorized off-road 4-wheeler activity frequently uses this rock as an extreme challenge feature. The rock is difficult to traverse on foot, so certainly it is very hazardous in a vehicle, particularly under wet conditions. The rock is heavily covered with graffiti.

Located in a remote interior position over 3000 feet southwest of the intersection of Luke Edwards and Indian Shoals Roads, a pair of rock ledges provide a scenic sheltered overlook into the beautiful wooded valley of an un-named tributary.

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One of a pair of rock ledges overlooking the Alcovy's northernmost un-named tributary

The presence of twelve widely distributed rock outcrops in the open areas north of Indian Shoals road raises concerns about the developmental feasibility of this area. This count excludes rock outcrops in creek beds which normally would not be disturbed in the course of development. Extensive areas with shallow depth to bedrock are anticipated. An extensive geotechnical investigation is warranted to inform consideration of graded development of this area.

South of Indian Shoals, the rock outcrops continue, however, an anticipated programmatic focus on trail and interpretive activities would suggest that ground disturbance is not required near the outcrops.

Circulation

As an assemblage of tracts, various county roads bisect the park including Indian Shoals Road, New Hope Road, Luke Edwards Road, and Masters Road. Luther Wages Road, an unpaved road accesses the extreme southeast corner of the site – but that road will be abandoned pending proposed subdivision platting on the privately held tracts adjacent thereto. There is no vehicular access to the lands south of the Alcovy River. An access easement or fee simple private land acquisition is required to allow contractor access during construction and emergency or maintenance access thereafter. Candidate sites in Walton County were identified by Staff and CERULEA during the master plan. The first phase of development does not call for construction south of the Alcovy River, so that access need is not immediate.

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With regards to site access, New Hope Road is currently posted at 45 MPH, though CERULEA has observed vehicles traveling at much faster speeds. The road has a vertical and horizontal curve in the vicinity of the stop sign at Luke Edwards Road that limits visibility for those stopped at Luke Edwards. It is recommended that Gwinnett DOT study the safe stopping distance requirements per AASHTO standards to determine if this nearby intersection is in need of reconfiguration.

A park entrance near the intersection of Indian Shoals and Luke Edwards Roads would result in economical placement of parking on nearby flat terrain with minimal amounts of park driveway. The intersection should be signed for a full stop of both roads at that intersection.

The conservation park area is bisected the east by the unpaved and closed Luke Edwards Road. This alignment negotiates rolling topography and consequently is quite rutted in places. This former roadbed may be most useful for temporary construction access all the way to the flat rock and mill site. If paved, the alignment could be stabilized for a multi-use trail, but it is not suitable for natural surface trails in most cases due to excessive slope and incised drainage patterns.

Additional older abandoned dirt roads were located. Newer trails have been carved in a destructive manner by ATV's, dirt bikes, and 4-wheel drive vehicles. These trails also have been located and analyzed. Most of these existing trail alignments are eroded or otherwise unsuitable for natural surface trails. See the Appendices for a more thorough discussion of eroded lands stabilization to be accomplished as part of Phase I development.

Soils

The Harbins area is in large part underlain by rocky subsoils with poor percolation capacity. Numerous rock outcrops are documented on the **Soils Data** diagram. Large areas of the site, indicated with green hatching on the Soils Analysis, have soils that should be suitable for septic systems.

One exception to this is the site for the proposed maintenance facility west of Luke Edwards Road. This area is expected to be underlain by shallow bedrock. Consequently, use of this site would require wastewater effluent to be pumped to a septic field in another more suitable soils area to the south.

A complete soils study and testing will be required per Gwinnett County Health Department criteria to support design and permitting of septic fields required for Phase I and later phase development.

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Vegetation

Based on field reconnaissance and subsequent County GIS aerial photograph interpretation, the limits of various types of vegetation cover have been charted. This includes large areas of mature deciduous forest canopy, a very desirable vegetation class for an open space park program. The canopy extends throughout much of the site offering a variety of enjoyable woodland experiences for trail users.

It is recommended that areas of hardwood forest not be cleared for development of recreation facilities. Where the hardwood corridors are found outside of blue-line streams, there are often springheads located within the hardwood corridor.

The northern area of the site (beyond the conservation park) feature linear corridors of hardwood forest in association with creeks and deeper erosion gullies. West of New Hope Road, the effect of the hardwood forest distribution is to segment the developable acreage into 4 smaller tracts, while a larger, 65-acre tract may result on the east side of New Hope Road. East of Luke Edwards Road, approximately 79-acres remain after allowance for preservation of hardwood forests. Development potential of the residual acreage may be greatly reduced when shallow depth to bedrock is assumed based on occasional rock outcrops in the area.

North of Indian Shoals Road (again, beyond the limits of the conservation park), there is a large sideslope hardwood forest offering a sweeping panorama down to the Cedar Creek floodplain. Large Sweetbay Magnolia trees are scattered in the floodplain at Cedar Creek.



Hardwood Forest with Open Understory

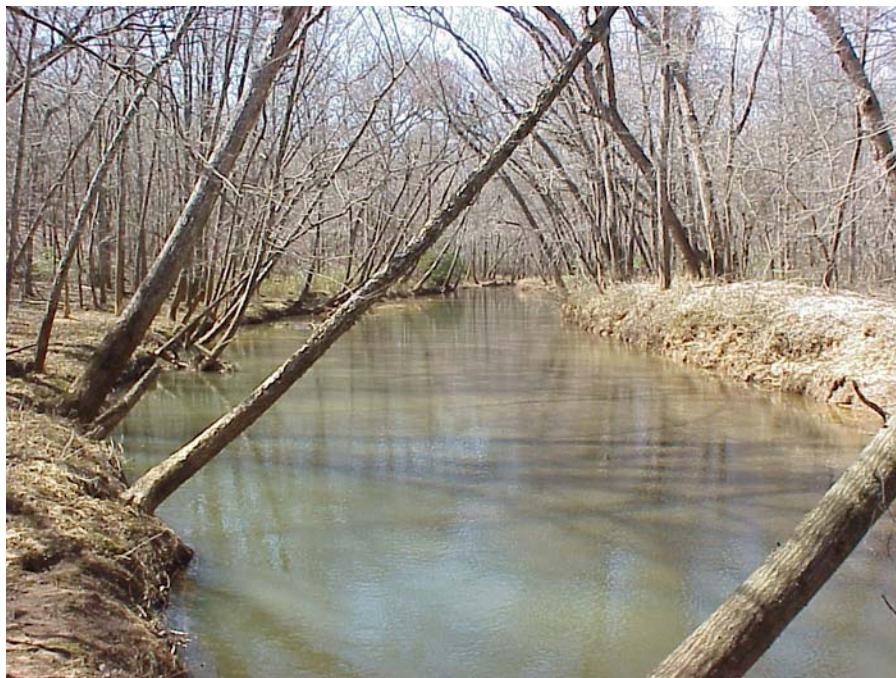
South of Indian Shoals Road, wider floodplains along the Alcovy River, Cedar Creek, and un-

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named tributaries contributes to a larger percentage of cover in mature hardwood forest. Of particular interest is a centrally located creek valley, carpeted with over 100 acres of mature hardwoods with open understory (see **Natural Features Highlights** graphic). Again, as in the northern acreage, the creek corridors in the southern portion of the tract are forested with better hardwood trees.

The greatest intensity of present unauthorized off-road 4-wheeler activity is focused on the open Georgia Power easement and the pine woods near the dumping ground at the end of Luther Wages Road. Unfortunately, 4-wheeler activity has recently expanded to include the better hardwoods areas near the Mill Ruins, and into the excellent hardwood stands north of the power easement and east of the Alcovy River. County efforts to curb this use and subsequent damage are now ongoing. Efforts include law enforcement: warnings; ticketing; and vehicle confiscation. In conclusion, bear in mind that much of the acreage adjacent to the better hardwoods includes medium age hardwoods in association with remnant pine or young hardwood understory. With time, these areas will transition to open hardwood status, such that 20-years hence, hundreds of acres would be appended to the open hardwood category.

While most of the better hardwoods are under 24" DBH (diameter at breast height), there are hundreds of trees greater than 36" DBH on site. They are randomly distributed in adjacency to creek corridors. Perhaps due to flood damage, larger tree specimens are absent in the Alcovy River floodway and adjacent alluvial terraces.



West Bank, Alcovy River

Large specimen trees also are located along the dirt Luke Edwards Road and at a probable former homesite near a springhead east of New Hope Road. Very large American Beech, White Oak, Tulip Poplar, and Southern Red Oak are located in the open woodlands north of the Georgia Power easement east of the Alcovy River – almost always at the bottom of banks near ravines and

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creek tributaries.

Large Sweetbay Magnolia, uncommon in Gwinnett County, are noted along the Cedar Creek watershed in association with the creek. Picturesque Cedar Glades, clusters of mature Red Cedar, are found near many of the rock outcrops, in association with a thick growth of moss and lichen.



Mosaic of Mosses, Lichens, and Vernal Pools at Rock Outcrop

Interesting understory vegetation includes small clusters of mountain laurel (*kalmia latifolia*) on the steep banks to the south of the Alcovy River. Along the lower slopes north of the Alcovy River are attractive concentrations of American Holly (*ilex opaca*). Along moist, mature hardwood banks are pleasing concentrations of Red Buckeye (*aesculus pavia*).

Ephemeral plants are those herbaceous plants that emerge in the spring to flower, before they fade away in the summer or fall. In the first week of April selected areas of the site were visited to confirm if ephemeral wildflower species were present. While many suitable areas of the site did not have any wildflower species (due to prior farming or grazing activity), other areas exhibited diverse flora. The principal concentration was found within the conservation park just north of the Georgia Power easement at a point east of the Alcovy River. Species found include Ginger, Bellwort, Violet (several varieties), Jack-in-the-Pulpit; Trillium, Bloodroot, and Yellowroot. Near Flat Rock, clusters of Fire Pink (*silene*) provide intense red color in the heat of summer.

A second category of rare plant community is associated with the granite outcrops. Of particular importance are large granite outcrops associated with vernal springs on both banks of the Alcovy River. Here we find dense carpets of highly varied mosses and lichens together with associated plants such as Orpine, Sedge, Sedum, Prickly Pear Cactus, and Adams Needle (*yucca*). These plant communities are very fragile as they subsist on a thin film of seasonally moist organic matter directly on a rock substrate. Shallow pools of water accumulate in pockets and further increase the plant diversity.

It is suggested that a botanist be retained to inventory potential rare plant species on these outcrops. In the recent past, 4-wheeler trails were getting close to the outcrops on the east side of the river, but the area has not yet been damaged. It will be very difficult to introduce hikers or

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bikers to such areas without damaging the fragile plant community – a protective boardwalk is needed to provide an interpretive traverse of the rocks.

Watershed

This site is located at the lower reaches of the Alcovy River watershed in Gwinnett County. In addition, two major creek watersheds – Palm Creek and Cedar Creek feed into the Alcovy River proximal to the park site. Consequently, the influences of a huge watershed is felt in the form of broad floodplains with adjacent frequently flooded terraces along the Alcovy river and along Cedar Creek (to a lesser extent). Less than 10% of the park acreage is covered by floodplain.

In numerous locations flowing creek water courses over rock ledges and boulders. Waterfall height seldom exceeds three or four feet, but the sound is pleasing. The most dramatic water feature is the “white-water” cascade on Cedar Creek, locally known as “Flat Rock”. This cascade is located just north of the Walton County park border. There are a total of 6 small waterfalls or cascades within the 1184-acre conservation park boundary.



Whitewater Cascade at Flat Rock

Numerous wetland springs contribute to the un-named tributaries. They provide abundant clear flowing water to sustain the adjacent streams. In the recent past, 4-wheeler tracks have been created through one spring flow east of the Alcovy River, north of the Georgia Power easement.

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Trail alignments must circumvent springs.

Gwinnett County recently adopted more stringent regulations pertaining to stream buffers requiring an undisturbed buffer 75 feet from the top of bank (wrested vegetation) on both sides of perennial streams, springs, ponds, and other such waters. This regulation explicitly excludes grading and impervious paving (defined as any kind of asphalt or concrete). The master plan alignment of trails contained herein reflects those regulations. In such cases where impervious trails cross water's buffers they do so on boardwalks. Natural surface trails are indicated within the buffers where wholesale grading (cut and fill) would not be indicated to achieve the trail treadway development. Roads (or impervious trails) may cross streams provided they do so in a nearly perpendicular geometry.

Cultural Resources

Cultural resources (man-made objects and other evidence of historical habitation) will play an important, aspect in the park. The Harbins Area encompasses the park and was a low density, agriculturally oriented community that never grew to higher density of many other local historical communities.

Aspects of the Harbins community found on the site include the ruins of many home sites (11 within the conservation park limits) as well as a portion of the ruins of the mill at Flat Rock. There were seven "open", unprotected dug wells encountered in the initial reconnaissance – such wells are extremely hazardous and should be filled and abandoned per state regulations.

A principal extant historical feature is the existing 1.0 acre Shady Grove Cemetery. The small cemetery has been thoroughly surveyed and an inventory of interments has been produced. Future interments would be anticipated; hence the County will maintain and secure the cemetery. In addition a very small abandoned cemetery, with simple non-engraved stone markers was located 2-3000 feet west of the Shady Grove Cemetery.

The Flat Rock mill ruins are partially located on the conservation park site. Within the Gwinnett County park site are located: a relatively recent concrete coffer dam; one older massive stacked stone pier; and a portion of the earthen mill race that carried water to the mill. The remnant stone walls of the mill building are located entirely in Walton County on an adjacent 18-acre tract (presently owned by Prestwick Properties, Deedbook 707, page 286, Walton County). As stated previously, the Steering Committee adopted a resolution to encourage Gwinnett County officials to pursue preservation and/or acquisition of the mill site.

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Massive Remnant Stone Pier at Flat Rock

Little evidence has thus far been found regarding Native American habitation. One promising site – a probable encampment, was identified on the west banks of Cedar Creek within the conservation park area. This site is not threatened by the proposed master plan development features

Two additional reports were authored by TRC. One contains a comprehensive inventory of the various historical and archeological sites found on the park property and the other provides a thorough inventory and survey of Shady Grove Cemetery. In addition, an interpretive historical site narrative intended to supplement an on-site interpretive graphics package is contained within the appendices of this report.

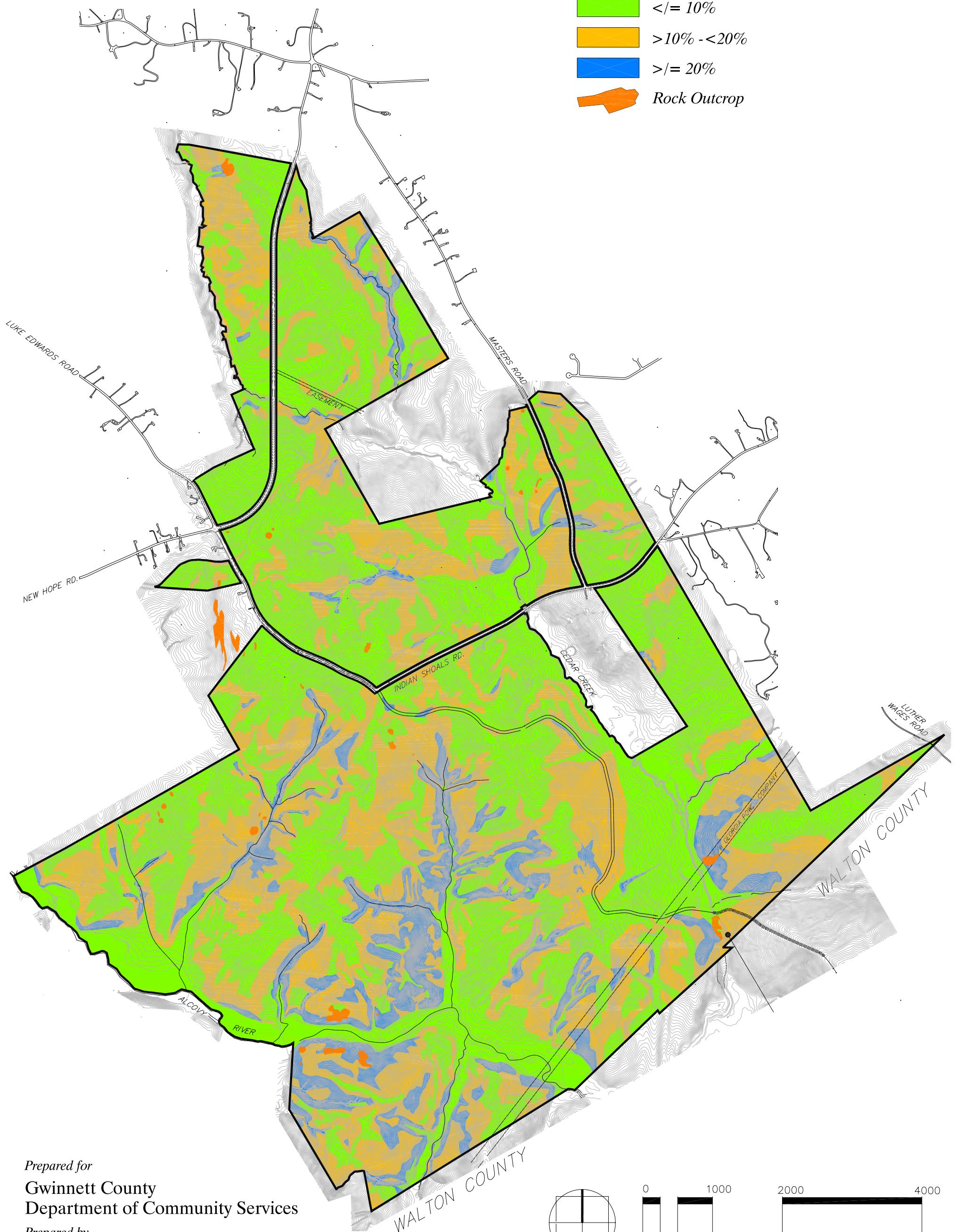
The authors were most impressed by one homesite ruin comprising a structure with a symmetrical pair of stone chimneys which overlooked the Alcovy River from the north at a time when agricultural activity would have likely resulted in a cleared viewshed down to the river. Opposite this site on the south side of the river is a more modest homesite ruin. It occurs to the author that one option for future historical landscape interpretation in the conservation park would be to selectively clear the vegetation to recreate a small viewshed including both of these two homesites, whereby park visitors could appreciate the dramatic transformation the land has experienced. These two sites are numbered 9GW581 and 9GW582 in the TRC report. The Steering Committee agreed that this historic landscape interpretive option should be explored in future design phases, but did not elect to fund any clearing in the first phase of development.

HARBINS ALCOVY RIVER PARK SITE

Inventory & Analysis

Slope Analysis

- <= 10% (Green)
- >10% - <20% (Yellow)
- >= 20% (Blue)
- Rock Outcrop (Orange)

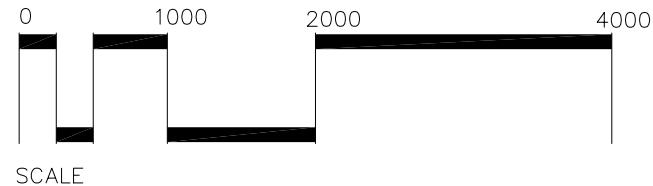
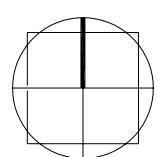


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Department of Community Services

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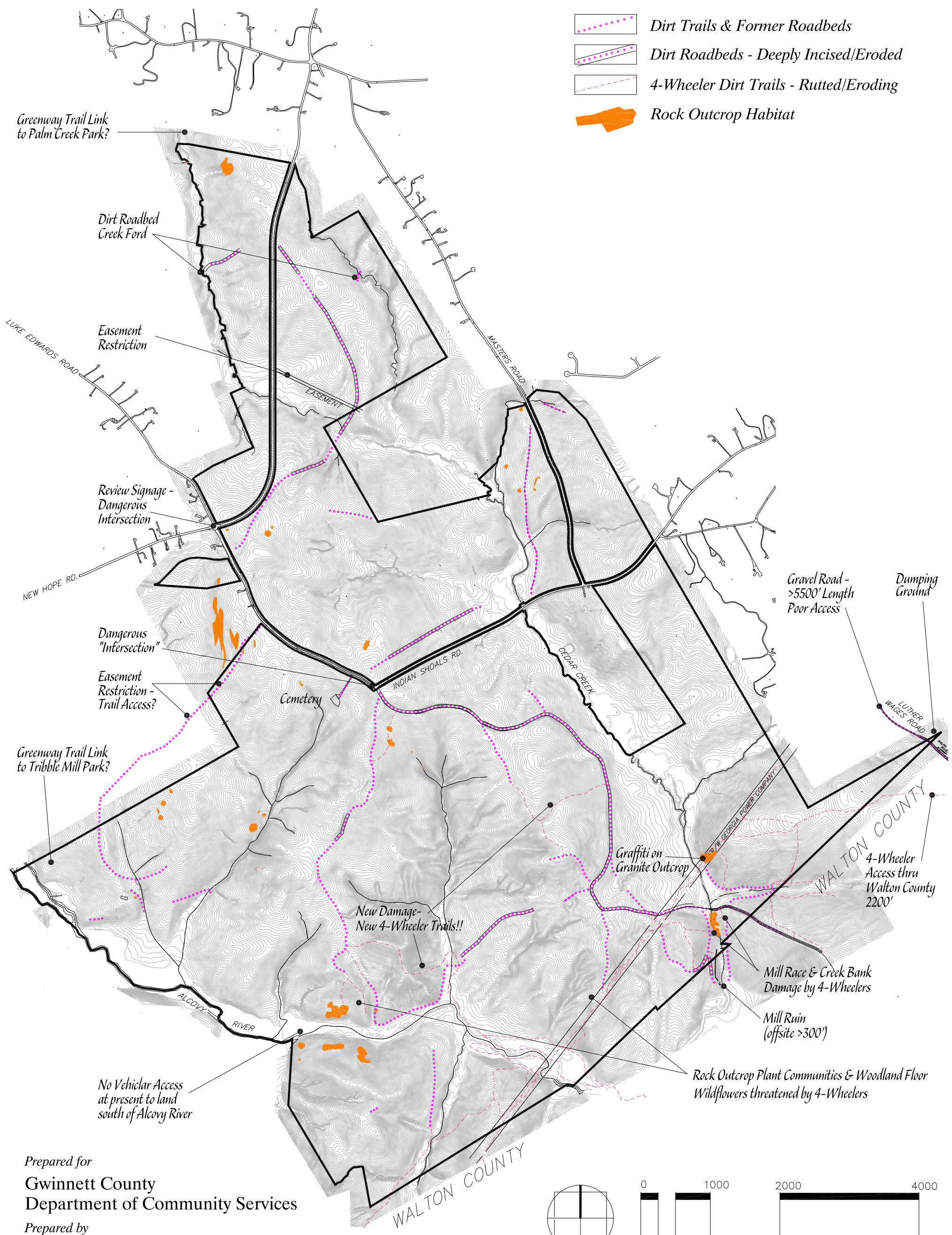
CERULEA, Inc. October, 2004



HARBINS ALCOVY RIVER PARK SITE

Inventory & Analysis

Circulation Diagram



HARBINS ALCOVY RIVER PARK SITE

Inventory & Analysis

Soils Data

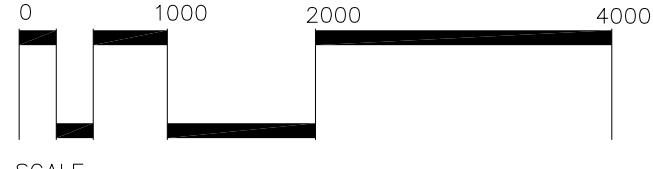
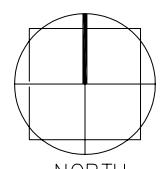


Prepared for

Gwinnett County
Department of Community Services

Prepared by

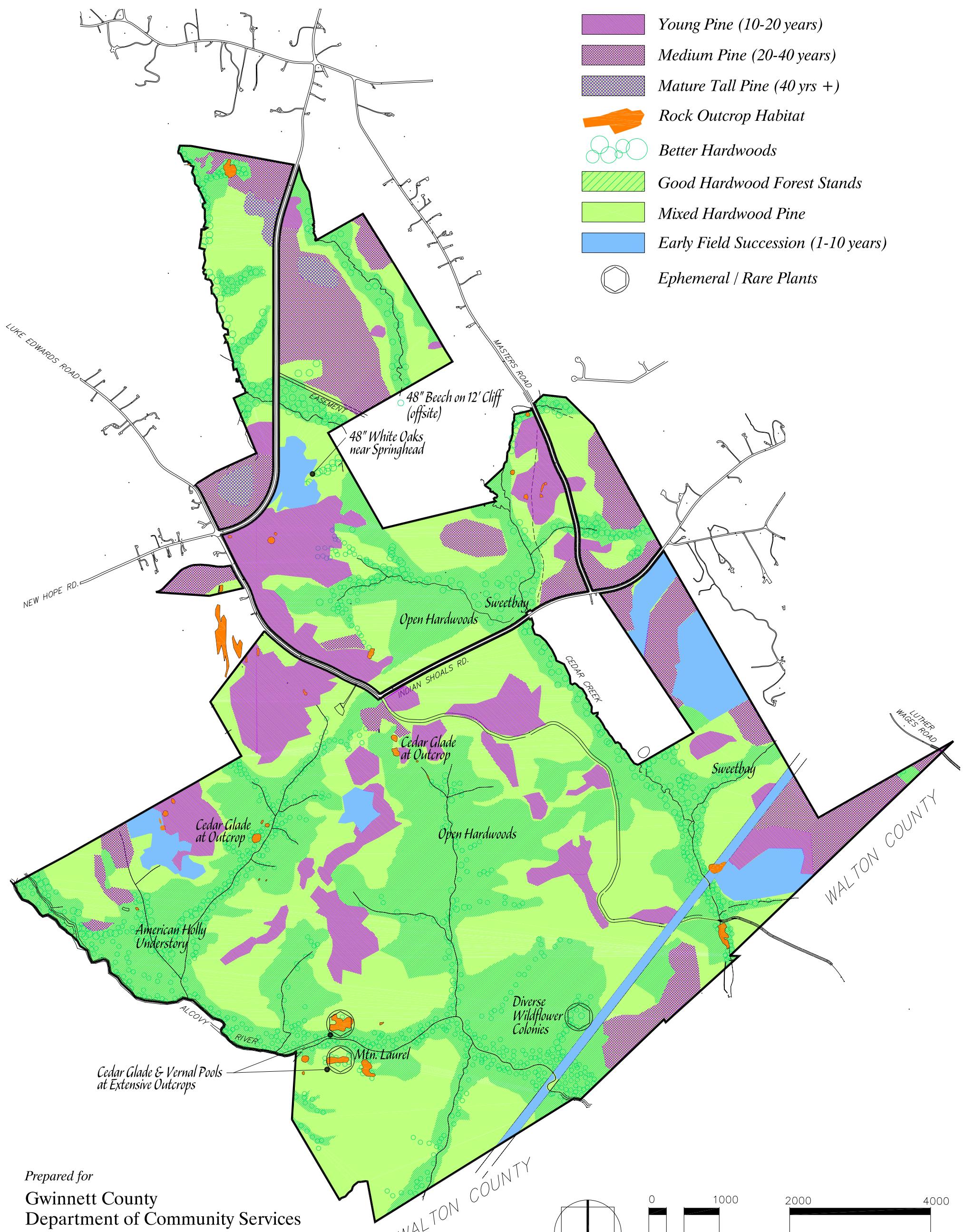
CERULEA, Inc. October, 2004



HARBINS ALCOVY RIVER PARK SITE

Inventory & Analysis

Vegetation Analysis



HARBINS ALCOVY RIVER PARK SITE

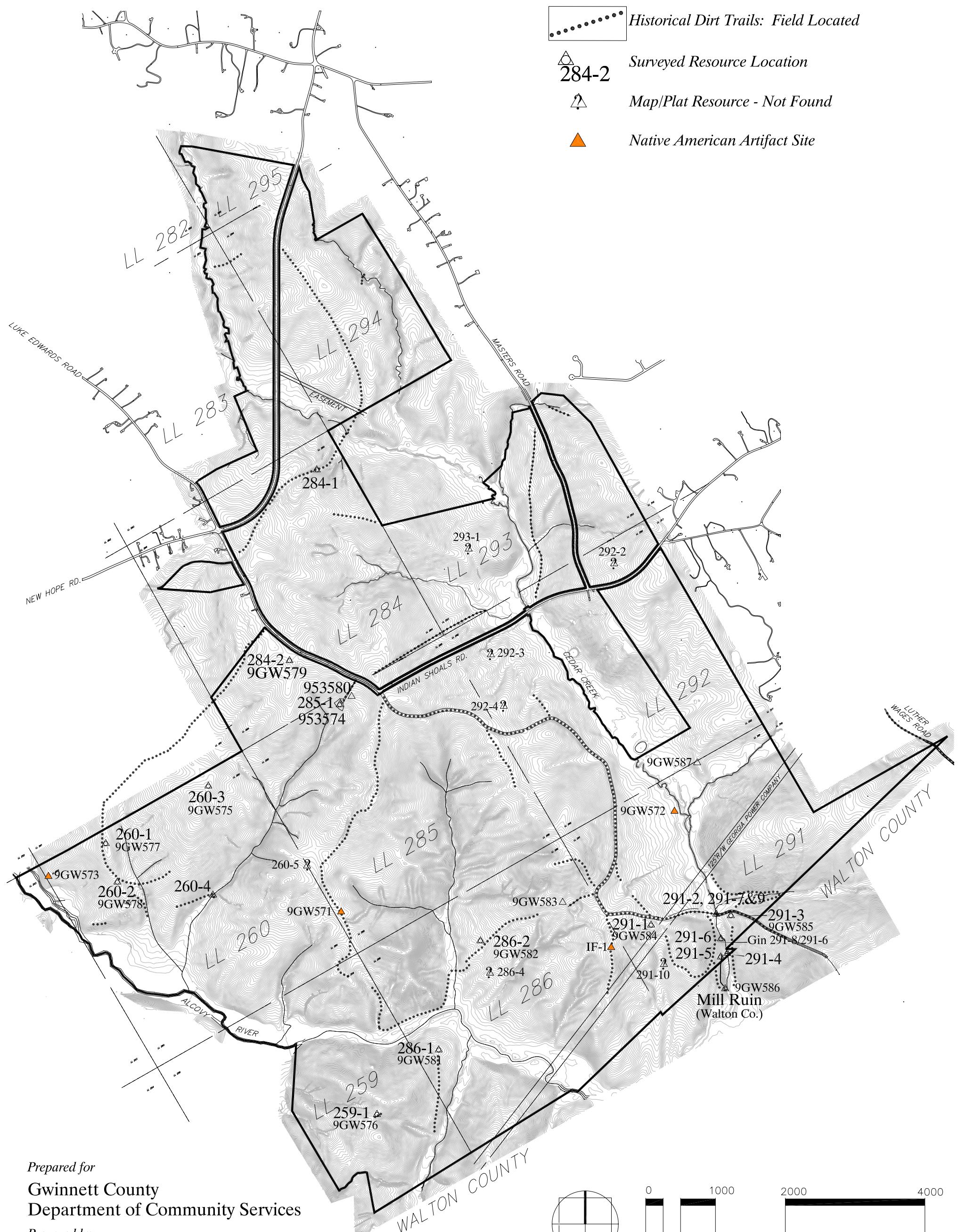
Inventory & Analysis

Hydrology Diagram



HARBINS ALCOVY RIVER PARK SITE

Historical/Archeological Resources

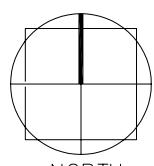


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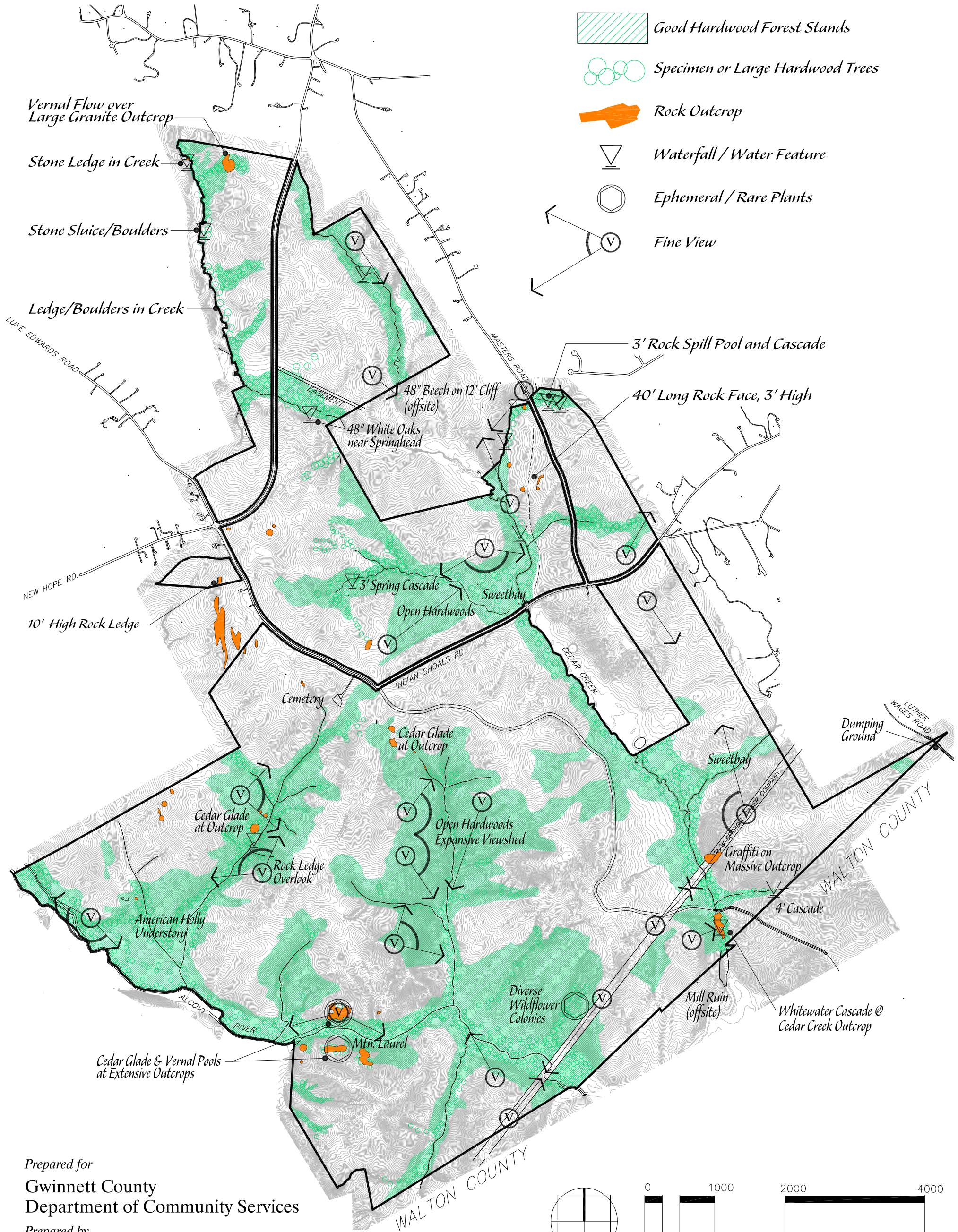
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HARBINS ALCOVY RIVER PARK SITE

Inventory & Analysis

Natural Feature Highlights

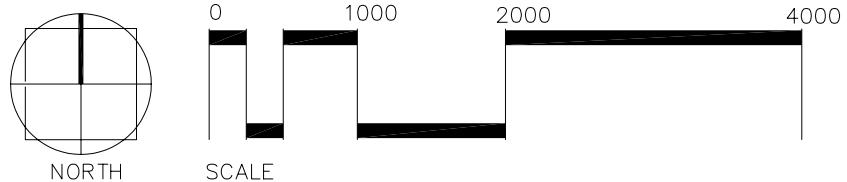


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Gwinnett County Department of Community Services

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Prepared by CERULEA, Inc. October, 2004



Harbins-Alcovy River Park Site Master Plan

5.0 *Development Program*

Working with the Steering Committee and DCS staff, a finalized program for park development was prepared. There was much discussion of this program with the Steering Committee in order to carefully consider the theming of the program elements. **Photos used herein to illustrate the character of various elements are not explicit guidance as to design, but indications of the intent and vision of the staff and steering committee through this process.**

Primary Objective

The Steering Committee determined that the primary mission of this development program was to **Protect and Restore Cultural and Natural Resources**, including stabilization of eroding trail beds, protection of delicate vegetation at rock outcrops, and interpretation of historical and natural features. This mission was superior to any other program objective.

Program Elements

The Park will be supported by a variety of improvements that facilitate access, visitor comfort and use of the property. Wholesale clearing or grading is not indicated, and vehicular access, parking and support facilities are to be confined near the proposed entrance at the intersection of Luke Edwards and Indian Shoals Roads. Consequently, the extent of support infrastructure will be limited. These elements would include:

Vehicular Circulation and Parking

Provide vehicular access at one paved, gated driveway opposite the terminus of paved Luke Edwards Road. This driveway is to be curbed at the ROW and at entrance islands/tight curves only. The asphalt pavement will include a pervious profile as used on previous projects in Little Mulberry Park and McDaniel Farm Park.

Grade the parking area, containing a total of 460 parking spaces, to bring the level of the higher ground down closer to the existing street elevation of the park entrance. Parking bays containing 200 parking spaces will also be pervious asphalt. Overflow grass parking containing 260 parking spaces will be “turfed–gravel” similar to that used at Tribble Mill Park (Festival Field Overflow Parking) and Little Mulberry Park (Hog Mountain Overflow and Equestrian Parking).

In addition, space for up to 3 busses is to be provided. Naturally landscaped islands will break up the mass of the parking lot. A separate turfed-gravel parking area with space for 20 equestrian trailers will be provided east of the main entrance off of Indian Shoals Road.

All park entrances would be gated for closure in the evening or whenever the park is closed. The lighting in the parking lots will be owned and operated by the County and will be on a timer. Parking lots will be landscaped with shade trees spaced and varied by species per County standards. At each park entrance provide a pylon sign of rustic stone, similar to that used at Little Mulberry and McDaniel Farm Parks.

Harbins-Alcovy River Park Site Master Plan

Multi-purpose Trail

Provide an asphalt-paved, 12' wide trail (narrower only in places of site constraint as approved by the County). A total of 8.8 miles of multi-purpose paved trail is provided. The paved trail will not have a center linestyle.

The first segment is a 1-mile handicapped accessible core loop adjacent to the parking lot and circulating throughout the cleared turf meadow. The slope will never exceed 5%, but will be kept as flat as possible. The balance of trails will be steeper in gradient. A short spur extends north of the core loop, providing access to the Cemetery, Dog Park, and Maintenance Area, terminating at a road crossing of Luke Edwards Road (and linking to probable future trails across the road in that area of the park).

West of the core loop, a short spur connects to a 2.1 mile central loop, providing access to walking trails to the west and generally of the uplands north of the Alcovy River. From this loop, a 3300-foot extension to the border of the park links to a proposed Greenway Trail providing access to both Palm Creek and Tribble Mill Parks. This spur requires a boardwalk crossing of an un-named tributary. Also from the central loop, a spur paved trail links to the Alcovy River Bridge and the extensive hiking and paved construction access trail beyond.

From the core loop, a 2-mile trail segment provides access all the way to Flat Rock. A spur provides access to cross Indian Shoals Road (when a future park buildout would open up trails in that area). From the Flat Rock segment, another trail spur crosses Cedar Creek via boardwalk and extends to the east, linking to a future adjacent subdivision's recreational trail near the point where the Georgia Power easement exits the park.

The Alcovy River Bridge shall be designed in a similar manner to those proposed for the Greenway Trail system upstream on both the Alcovy River and Palm Creek. The structure would consist of a concrete substructure with concrete deck (14-foot width) and timber/steel mesh railing (cor-ten steel alternate). The bridge could carry emergency vehicles and light construction traffic.

Natural Surface Trails

Three separate natural surface trail systems are included: hiking, mountain bike, and equestrian. The typical trail treadway will be graded mineral subsoil, pitched to drain, with requisite high points and low point dips to assure that whenever water accumulates on the trail, such water is shed off to the downslope side before the water can coalesce into a drainage pattern parallel to the treadway.

The trail alignment will be cleared to provide requisite clearance for vehicles, and equestrians. For equestrian trails the cleared height is critical as well as width. Also, any hazard trees, including trees in dead or leaning condition will be removed. Smaller tree branches will be chipped while trucks may be cut with a chain saw such that the full length of wood is placed in full ground contact to hasten decay. Roots, stumps and other trail debris may be placed as barricades at old

Harbins-Alcove River Park Site Master Plan

trails to be abandoned where directed by the Owner.

The natural subsoil treadway shall be flagged in the field by an Owner-approved professional trail builder and constructed by same entity (or another of equally acceptable credentials) using specialized hand tool and powered trail building equipment. The professional trail designer and builder shall be a member in good standing of the Professional Trailbuilders Association (list available on the internet at <http://www.trailbuilders.org/contractors.html>). In addition, the trail designer and builder shall provide no fewer than 3 references for projects of similar scope and complexity located within 75 miles of the project site.

In select cases determined in advance by parks security/maintenance officials, the natural-surfaced trail width shall be increased to accommodate the wheelbase of Gator/Cushman type equipment, and such alignments would be free of severe grade features such as steps or hairpin switchbacks. Climbing turns are preferred for all switchbacks.

Hiking Trail

Hiking trails will be 3-4 foot wide. A total of 8.3 miles of hiking trail is provided. The trail will feature an extensive 5-mile loop which explores the interesting natural and cultural features of the two un-named tributary valleys that flow to the north banks of the Alcove River. An additional 3.3-miles of hiking trail will be provided south of the Alcove River.

Where the hiking trail crosses over the rock outcrop at the north side of the Alcove River, the trail will be carefully pinned to the rock surface using anchors and sleepers in the format of a 5-foot wide boardwalk. Contractor access will be severely limited to prevent destruction of delicate mosses, lichens and vernal pool plant species associated with the rock.

Railings would not be provided at the boardwalk, however, signage would instruct trail users to stay on the boardwalk and off of the rock's delicate vegetation. Public use should be monitored to determine if the public is respecting the rock outcrop. If not, then a boardwalk railing system and rock outcrop perimeter barrier retrofit is advised.

Where the hiking trail crosses over the un-named tributary streams in two locations the trail will be elevated with a 5-foot wide wooden boardwalk.

Equestrian Trail

Equestrian trails (designated for joint-use with hikers) will be 4-5 feet wide. A total of 8.1 miles of equestrian trail is provided. The trail will feature an eastern and western loop connected by a central segment which explores the interesting natural features of the two un-named tributary valleys that flow to the north banks of the Alcove River.

Three linkages are indicated for the trail: one linkage at the future Alcove River Greenway Trail, one at a crossing of Luke Edwards Road, and one at a crossing of Indian Shoals Road. The construction of the latter two crossings would coincide with later development of the park

Harbins-Alcovy River Park Site Master Plan

acreage beyond the conservation park limits. Where the trail intersects with the paved multipurpose trail at the central loop and near Indian Shoals Road, the trail will pass beneath the multipurpose trail via a boardwalk underpass.

The equestrian trailhead includes a paved/curbed vehicular entrance, turfed-gravel parking with space for 20 equestrian trailers, and a hose bib for watering the horses.

Mountain Bike Trail

Mountain bike trails will be minimal width single-track alignments per IMBA standards. A total of 8.6 miles of equestrian trail is provided. The trail will feature three loops associated with Cedar Creek watershed – two to the west and one to the east. A wet ford will be provided to allow access to the east loop prior to development of a boardwalk crossing. The west loop nearest the parking lot will be oriented to novice mountain bikers.

An additional loop, west of the parking lot, will explore the northwestern uplands of the site, traversing near three separate rock outcrops where the trail could potentially be aligned to offer optional low stone ledges for advanced users. Trailhead signage will be placed in the main kiosk and will provide an abundance of safety notices and other rules of conduct for mountain bikers.

The professional trail builder will set pins flags for the entire mountain bike trail system so that volunteers approved by the Owner may construct any mountain bike trail segments not included in the Phase I construction contract.

General Activity Area

The general activity area is the heart of the park daily activity area and is desired to attract a wide range of users throughout the typical park day. Hopefully, sufficient numbers of park visitors will be attracted such that even during the park's slowest weekday hours there would be a steady presence of park users. The general activity area would include parking, an orientation kiosk with park map and rules within a small concrete, paver, and stone-accented arrival plaza with pay telephone and bike rack.



Rustic Orientation Kiosk

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Principal features include a children's play area, restroom with nearby drinking fountain, mid-size and small picnic pavilions, picnic tables, turf play meadow, outdoor lawn court area, and a 1-mile, handicapped-accessible core loop multipurpose trail. The Dog Park would be a short distance from this area, far enough away from young children who may be frightened by dogs. The Teen Area is located on the other side of the parking area from the general activity area, in a zone allowing for convenient observation of teen activities.

Restroom

A small 500-650 square foot park restroom will be provided, with three commodes/urinals per sex, for a total of 6 fixture units, required sinks and diaper changing stations. This structure would be rustic in theme, being a custom designed feature with wood siding over solid masonry, stone columns or veneer accents, exposed tongue-and-groove roof decking, and wood shingle or slate/simulated-slate roofing. This theme is illustrated in the range of two different restroom facilities recently developed at Little Mulberry and McDaniel Farm Parks.

Mid-Size Picnic Pavilion

Located within short walking distance of the parking lot would be a picnic pavilion. This structure would be rustic in theme, being a custom designed feature with large timbers (possibly glu-lam), stone columns or veneer accents, exposed tongue-and-groove roof decking, and wood shingle or slate/simulated-slate roofing. Space for 4 to 6 picnic tables would be provided with an octagonal or rectangular roofed area of approximately 1956 square feet. The structure would have security lighting (timer-operated) incorporated under the roof area. This theme is illustrated in the range of two different mid-sized picnic shelter facilities recently developed at Little Mulberry and McDaniel Farm Parks.

Small Rustic Picnic Pavilions

Space for up to 2 picnic tables would be provided with a rectangular covered area of approximately 300 square feet. The structure would not have security lighting. One recent example of rustic-themed small picnic pavilion in an open-space park setting was recently developed at Little Mulberry Park.

The six small pavilions are located as follows: two at the Outdoor Lawn Court Area; one at the Dog Park; one at the Turf Play Meadow; one at the Children's Play Area; and one at the Teen Area.

Playground

A large play area is sited in the park to help assure a constant flow of responsible adults during daylight hours. The presence of these adults, who will inadvertently observe the activity within the parking lot will greatly enhance real and perceived park safety. The play area would be located

Harbins-Alcovy River Park Site Master Plan

within 400 feet of the parking area. Commercially available play equipment more compatible with rustic themes would be evaluated. Landscape shade tree plantings are required in the vicinity. The play area surface wood be a resilient, finely chipped wood product used in conjunction with rubber mats at high traffic areas.

Turf Play Meadow

Located on a high ridgeline area largely of abandoned pasture and younger pine woods, a freeform shaped twenty-acre meadow will be sculpted out of this landform. Extensive grading would be required to maintain a gentle relationship with the park entrance and parking area. The turf would be non-irrigated, and would be cropped less frequently than sportsturf.

With wooded edges and perhaps with islands of selected preserved existing hardwood trees, the space would comprise a parkland composition of gently rolling lawn dotted with trees. At the south eastern edge, it would border a fine outcrop of granite with fine specimen trees. These trees must be field located to assure their preservation.

The non-irrigated open meadow would be managed to allow use for passive pursuits, including nature study, picnics, kite flying or other activities that do not result in soil compaction or loss of vegetative cover.

Outdoor Lawn Court Area

The outdoor court area is situated near the southeast corner of the turf play meadow adjacent to the 1-mile core loop trail. This space transitions to some beautiful granite outcrops dotted with red cedar trees and medium aged oak hardwoods. It is desired that the trees and outcrop would be field located so that a dramatic transition can be provided between the court area's hardscape elements and the natural landscape.

Hardscape elements include two small picnic pavilions, symmetrically arranged around a concrete and paver plaza. Within the plaza would be placed two shuffleboard courts and two bocce courts. Gametables and Picnic Tables would be placed under the pavilions.

Dogpark

Located far enough away from the children's play area so as not to frighten children, this 4.5-acre area is enclosed by six-foot tall vinyl-clad chain-link fencing and cross-fenced and gated to separate large dogs from smaller dogs. The surface would be a combination of irrigated turf and pea gravel.

The site is on a gently sloping upland ridge, presently forested in younger pine – clear cutting is anticipated as required. New shade tree plantings would be required. A small picnic pavilion is provided as are 8 picnic tables – some to be placed in the shelter. A drinking fountain with dog watering bowls will be required. Modest dogpark play apparatus will be provided.

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Teen Area

Located on the opposite side of the parking area from the children's play area so as not to mix teens and young children, the teen area features a small picnic pavilion with 4 picnic tables and a small concrete and paver plaza. Key features include: a small concrete skatepark with street skate features (6,400 SF); a teen play area with swings, climbing wall, and static apparatus (8,000 SF); two sand volleyball courts; two half-court basketball courts;

The site is on ridgeline, presently forested in younger pine – clear cutting and mass-grading is required to bring the site to the same level as the parking area. New shade tree plantings would be required as are sod and irrigation. A small picnic pavilion is provided as are 8 picnic tables – some to be placed in the shelter.

General Features and Support Systems

Furnishings

In general, furnishings will be spare and modest, and rustic themed (large timber and stone elements) as appropriate. Furnishings include benches, waste receptacles, game tables, bike racks, and picnic tables. Grills are not provided. Drinking fountains are provided at the general activity area and Dog Park (equipped with dog drinking bowls as appropriate). Also provide a decorative, historically compatible perimeter fence with drive gate around the Shady Grove Cemetery – funded by other County sources as part of Phase 1.

Signage

Directional signage will be custom designed similar to other County open space parks and will not be the County's current community park standard.

Interpretive, directional and trail marking signage will be provided throughout the trail network as appropriate. This would include trail maps placed in small rustic kiosks at selected trail intersections, and historical/natural interpretative signage placed in a rustic wooden “birdhouse” type box with a door. Inside a laminated sheet would tell about the history and vegetation. An introductory kiosk with trail map would be placed at the core loop trailhead near the parking lot and at the equestrian trailhead parking lot.

Maintenance Area

A modest, 1500 square foot park maintenance facility is proposed to provide covered storage and minimal staff office/restroom. This structure would be rustic in theme, being a custom designed feature with wood siding, stone columns or veneer accents, and wood shingle or slate/simulated-slate roofing. Two different rustic themed open-space park maintenance facilities have recently been developed at Little Mulberry and McDaniel Farm Parks.

Harbins-Alcovy River Park Site Master Plan

The compound would be surrounded by a perimeter vinyl-clad chain-link fence and drive gate. Water service would be provided with hose bibs. Wastewater from this building would have to be pumped to a remote septic field given the shallow depth to bedrock and poor absorption capacity expected at the immediate site. Phone service would also be provided to the building.

Off-Site Residence

As a separate project, implemented directly by the County (not a budgeted item in this master plan) provide an on site park ranger residence. This could be located outside of the conservation park, opposite the maintenance area drive on Luke Edwards Road.

Utilities

Stormwater System: The construction plans must be designed to meet the County stormwater quality/quantity management regulations and exceptions as applicable. Pavements are to be uncurbed to allow sheetflow off of the surface. Also, the asphalt parking surfaces and internal park drives will be pervious. Anticipate that temporary sediment basins will be required in the mass graded core area in addition to other erosion control BMPs. Provide NOI forms and EPD compliant NPDES plan documents and notations for required water quality monitoring.

Potable Water Distribution: Provide new water service originating at Luke Edwards and Indian Shoals Roads together with fire protection water distribution as required to protect proposed structures.

Sanitary System: Provide a septic field near the general activity area, sized as appropriate for the anticipated user population. A soil investigation by a licensed soil scientist is required to identify the best candidate soils and required replacement areas. Allow space for a second septic field to receive pumped wastewater effluent from the Maintenance Facility.

Telephone/Communications: Arrange for the extension of these services to the appropriate building locations on site. Also, provide for a centrally located pay phone for 911 phone access for trail users at the general activity plaza.

Lighting and Electricity: Arrange for the extension of these services to the appropriate building locations on site. Security light poles are to be placed at the proposed parking lot. Lights will be set on timers, and will not burn from dusk to dawn as is typical of power company installations.

Harbins-Alcovy River Park Site Master Plan

6.0 Development Budget

The first priority level (and Phase I program) list is based on a June, 2005, estimate of \$4.6 million construction cost and includes:

First Phase

Insurance, bonds, overhead, and other requirements	\$ 160,000
Site preparation	298,000
Site stabilization including eroded areas	365,000
Septic fields	15,000
Water distribution system	59,725
Lighting and communications	33,700
Signage	19,200
Core parking area	518,503
Maintenance compound hardscape	40,200
Trail system: 2.5 miles of 12' wide asphalt multi-purpose trail	731,066
Trail system: 4.5 miles of natural surface woodland trail up to 5' wide	463,836
Trail system: 6.5 miles of single track mountain bike trail	171,814
Trail system: 6.7 miles of 4-5' wide equestrian trail	576,904
Core area: restroom, kiosk, group shelter, playground, meadow, etc.	561,809
Contingency	292,876
Design fees	267,459
<u>Testing and utility location</u>	<u>\$25,000</u>
Subtotal	\$ 4,600,000

The future phase list contains the balance of the park program features the Steering Committee believed should be in the next construction phase or phases as additional funds become available:

Future

Insurance, bonds, overhead, and other requirements	\$ 196,000
Site preparation	202,250
Site stabilization	180,000
Septic field	15,000
Water distribution system	27,000
Site lighting and communications	5,000
Signage	25,000
Core parking area	161,000
Maintenance compound	185,450
Trail system: 12' wide asphalt multi-purpose trail	1,272,593
Trail system: 12' wide asphalt multi-purpose bridges and crossings	379,575
Trail system: segments south of river incl. clearing, grading, etc.	1,152,965
Trail system: natural surface woodland trail	142,455
Trail system: single track mountain bike trail	40,000
Trail system: equestrian	104,814

Harbins-Alcovy River Park Site Master Plan

Core area: picnic shelters, add'l. play equipment, meadow, tables, etc.	320,932
Seniors area	120,000
Teen area	353,000
Dog park	263,000
Contingency	100,000
Design fees	340,000
<u>Testing and utility location</u>	<u>40,000</u>
Subtotal Future Development	\$ 5,626,034

A more detailed estimate is included in the **Appendix**.

7.0 *Alternative Development Concepts and Master Plan*

A total of three alternative development concepts were prepared and presented to the Steering Committee. Following this, a hybrid plan, called the Preliminary Master Plan, was developed to reflect a consensus approach to the Park's development. With further revision, the Draft Final Master plan was developed. The draft was slightly refined to prepare the Master Plan.

Concept Plans A, B, and C

All three concept plans (**see diagrams Concept A, Concept B, Concept C**) represent identical development programs, but vary in terms of spatial layout, and adjacency. The differences in each concept relate primarily to layout of the various trail elements, and to a lesser extent, the general activity area and teen area elements.

Both DCS staff and Steering Committee members suggested that the preliminary master plan should:

- Provide general activity and parking layout similar to Concepts A&B.
- Do not encircle the Teen Area with the parking area, keep it more per Concept B.
- Provide meadow area of 15-20 Acres.
- Interpretative signage can be done with a small rustic "birdhouse" box with a door opening to reveal a laminated sheet telling about the history and vegetation.
- Total length is about 8-miles for each of the hiking, equestrian, mountain bike trails.

Preliminary Master Plan

The following refinements were incorporated into the Preliminary Master Plan (**see graphic**) based on comments by the Steering Committee and Staff:

- The Plan is acceptable with one refinement: eliminate all mountain biking trail south of river and instead create loops on the western side of Cedar Creek, generally as marked on the plan by CERULEA and Committee members.

Harbins-Alcovy River Park Site Master Plan

- A mountain biker's changing station is not needed.
- A viewing meadow at the top of the hill east of Cedar Creek is not needed.

At this point, a cost estimate was introduced for all elements (see [Appendix](#) for final version).

- The total project estimate was in excess of \$10 million. There was much discussion about the pros and cons of somewhat higher costs for rusticated materials versus more utilitarian materials. It was demonstrated that the better materials did not appreciably influence the total project budget of over \$10 million. We were required by the next meeting to prioritize a Phase I budget of \$4-4.2 million.

Draft Final Master Plan

CERULEA presented the revisions to the mountain biking trail as discussed at the end of the previous meeting and the addition of a residence for a park police officer on the north side of Luke Edwards Road. The mountain biking trail has been moved north of the Alcovy River in its entirety. Additionally, the Master Plan graphic shows the approximate 1 acre boundaries of the cemetery. Upon presentation of the final draft (see [graphic](#)) and Phase I cost estimate, the Committee approved the plan unanimously. Minor refinements to budget were noted:

- Provide water line and hose bib to equestrian area and maintenance area.
- Other County funding sources are to be tapped to provide a perimeter security fence around the cemetery (that cost not shown in the final cost estimate – but it is a part of the project).
- Volunteers can build balance of mountain bike trail not provided in Phase I budget – layout by Professional Trail Builder retained by the Phase I Contractor.

Final Master Plan

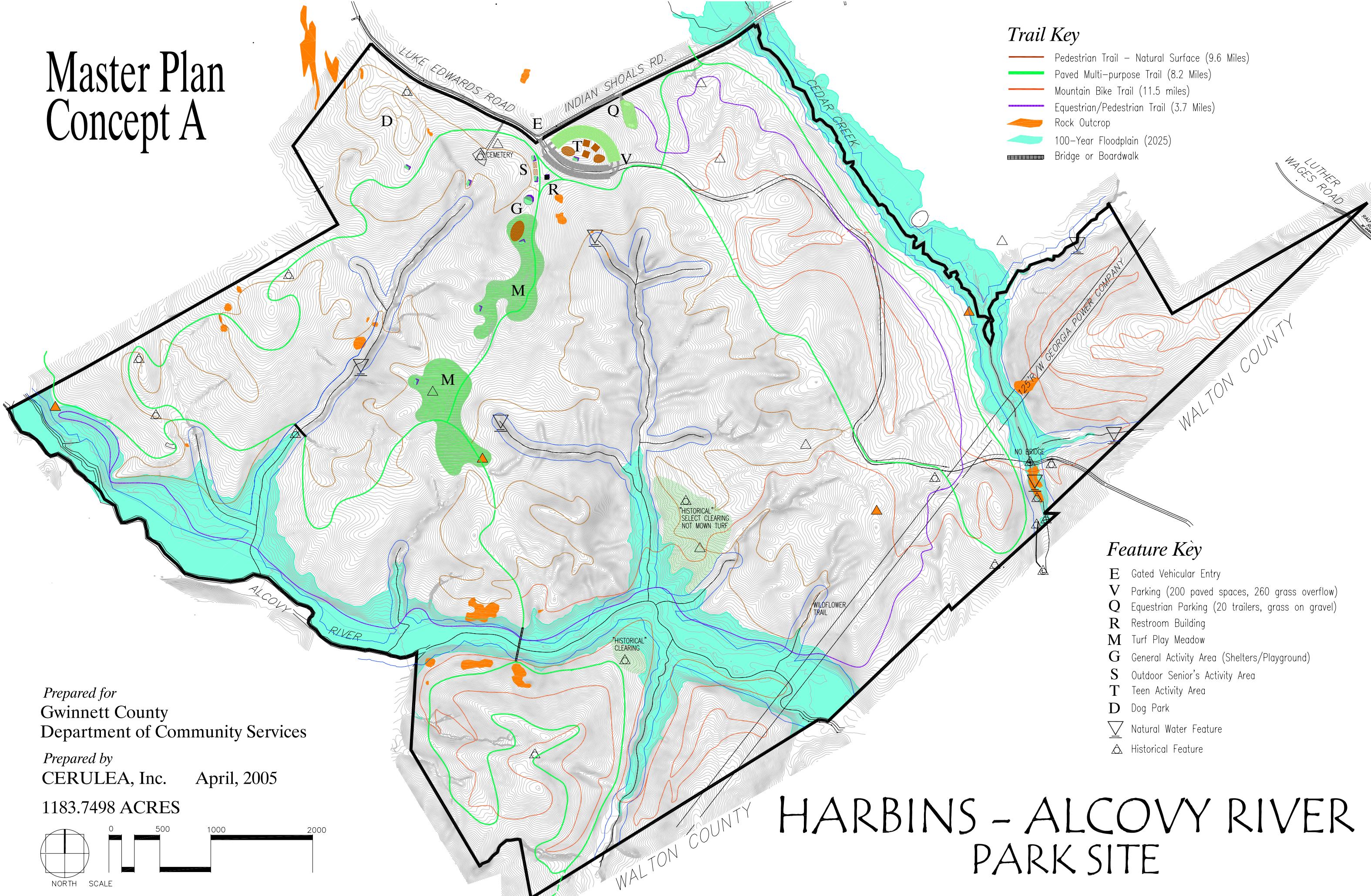
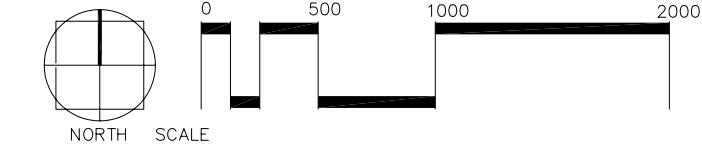
The final color master plan (see [graphic](#)) was prepared and presented to the Recreation Authority on June 9, 2005, and many of the Steering Committee members were in attendance. The plan was well received and no plan changes or alterations were requested. The final color master plan was prepared and presented to the Board of Commissioners on July 19, 2005, and again, many of the Steering Committee members were in attendance. The plan was again well received and no further alterations were requested.

Master Plan Concept A

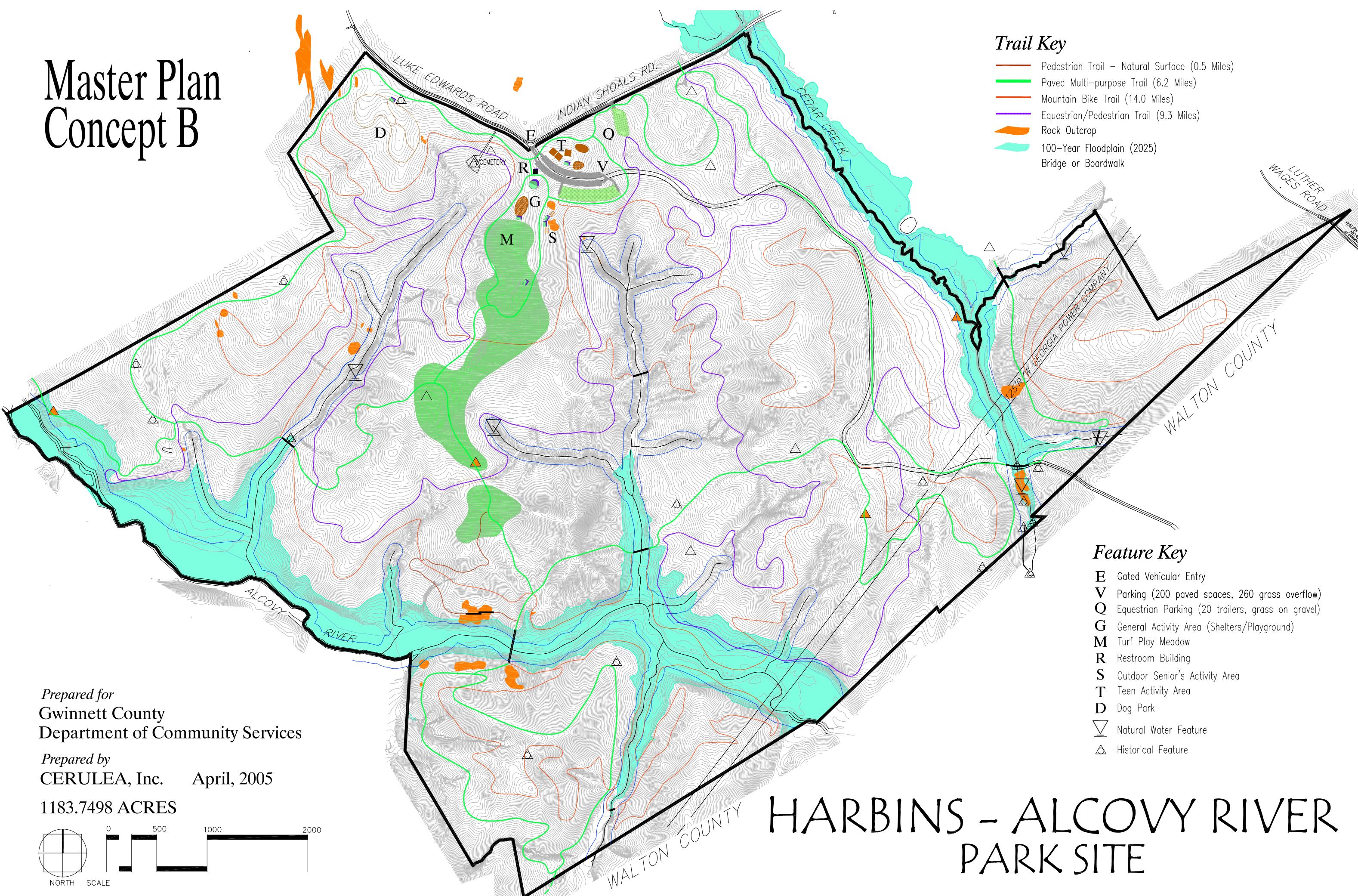
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Prepared by
CERULEA, Inc. April, 2005

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Master Plan Concept B

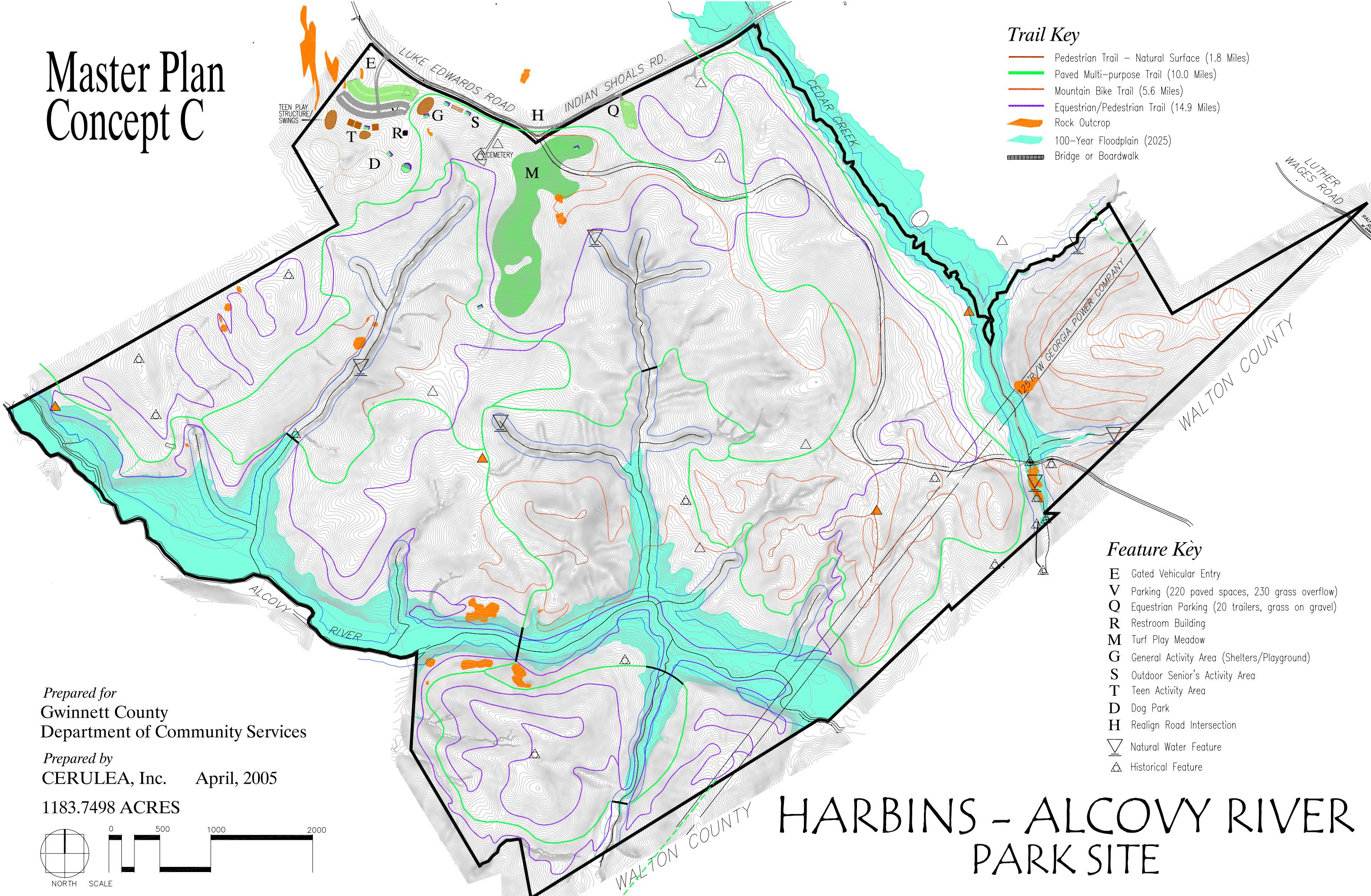
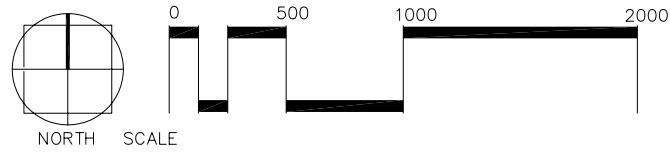


Master Plan Concept C

Prepared for
Gwinnett County
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Prepared by
CERULEA, Inc. April, 2005

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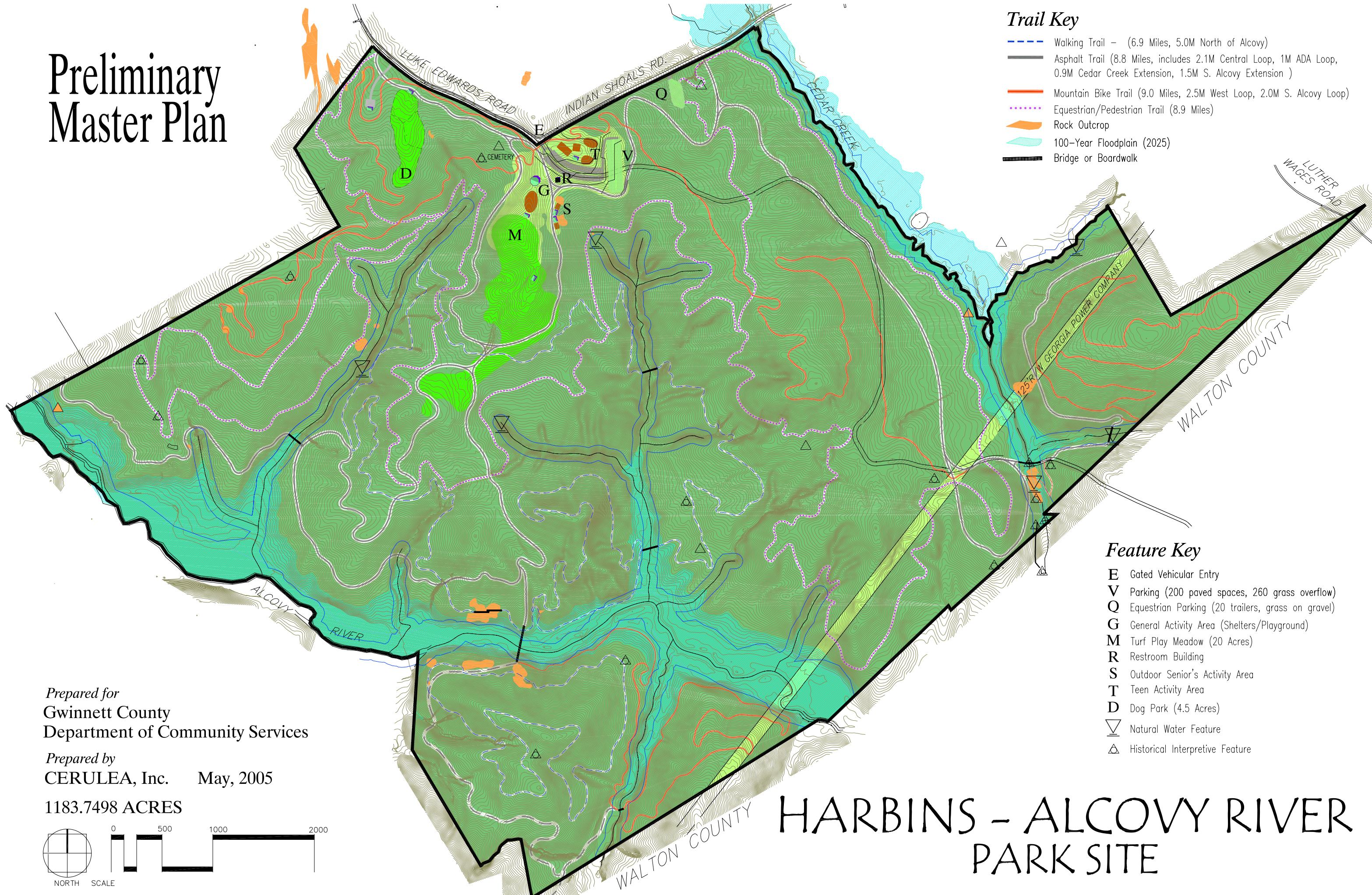
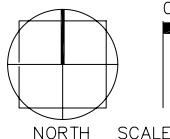


Preliminary Master Plan

Prepared for
Gwinnett County
Department of Community Services

Prepared by
CERULEA, Inc. May, 2005

1183.7498 ACRES



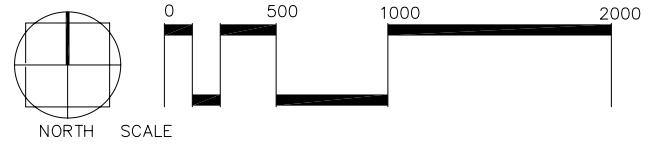
HARBINS - ALCOVY RIVER PARK SITE

Master Plan

Prepared for
Gwinnett County
Department of Community Services

Prepared by
CERULEA, Inc. June, 2005

1183.7498 ACRES



HARBINS - ALCOVY RIVER PARK SITE

Trail Key

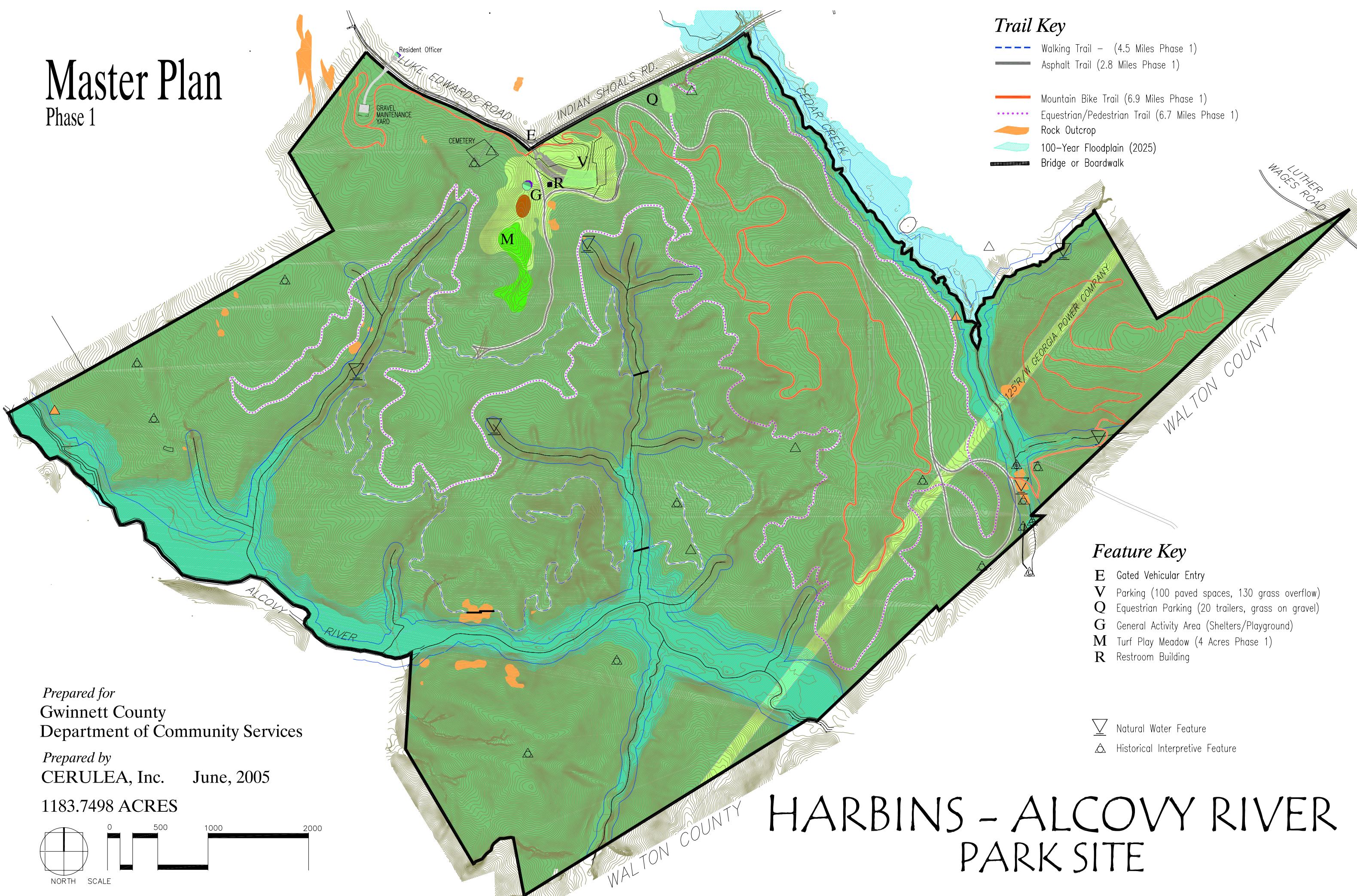
-  Hiking Trail – (8.3 Miles, 5.0M North of Alcovy)
-  Multi-purpose Trail (8.8 Miles, includes 2.1M Central Loop, 1M ADA Loop, 0.9M Cedar Creek Extension, 1.5M Alcovy Extension)
-  Mountain Bike Trail (8.6 Miles, 2.5M West Loop)
-  Equestrian/Pedestrian Trail (8.1 Miles)
-  Rock Outcrop
-  100-Year Floodplain (2025)
-  Bridge or Boardwalk

Feature Key

- E** Gated Vehicular Entry
- V** Parking (200 paved spaces, 260 grass overflow)
- Q** Equestrian Parking (20 trailers, grass on gravel)
- Z** Maintenance Compound
- G** General Activity Area (Shelters/Playground)
- M** Turf Play Meadow (20 Acres)
- R** Restroom Building
- S** Outdoor Lawn Court Area
- T** Teen Area (Basketball, Volleyball, Skatepark)
- D** Dog Park (4.5 Acres)
- ▽** Natural Water Feature
- △** Historical Interpretive Feature

Master Plan

Phase 1



Harbins-Alcovy River Park Site Master Plan

Appendix A: Master Plan Design Estimate

	Description	Quantity	Unit Price	Phase I	Future
	Insurance Cost/Bond Cost = 3%			\$120,000.00	\$156,000.00
	Owners Special Requirements, (job trailer, etc.)			\$40,000.00	\$40,000.00
Site Preparation					
Misc. Demolition/Clean-up/ Fence Removal					
Clearing: Chipping/Spreading - core area program - trails excluded					
Tree Protection - fencing save critical areas					
Storm Water BMP's/Filters					
Erosion Control					
Site Stabilization - Includes Eroded Lands Stabilization					
Earthwork - Core Area Cut w/ hauled export surplus to maintenance/dogpark & eroded areas					
Temporary Grassing : (includes stabilization areas)					
Fabric-lined Swales w/ Filter Stone Checks - Core & Stabilization Areas					
Reforestation Planting					
Erosion Control - focus on eroded areas, all measures					
Sewer Waste System - (Septic Fields)					
Maintenance Building Septic System w/ Ejector Pump to reach good soils					
Restroom Building Septic System w/ Ejector Pump to reach good soils					
Water System					
Phase I Maintenance 3/4" water meter and fees					
Phase I Equestrian 3/4" water meter and fees					
Phase I: 1.5" Meter w/out Waste Impact Fees - Restroom					
Phase I 6" DIP to Firehydrants - Maintenance & Parking					
Phase I Potable Water Piping 2" - Core Area					
Phase I Potable Water Piping 1" Maintenance					
Phase I Potable Water Piping 1" Maintenance					
Drinking Fountains - Non-Freeze w/ Dog Bowl Phase II					
Fire Hydrant - Parking Lot					
Fire Hydrant - Maintenance Area					

Trail System - 12' Wide Asphalt Multi-purpose - Main Park		2.5 miles Phase I	
Low Slope - 1-mile Core Loop (2500ft Phase I to reach Walking Trail Loop, balance is Alt. Bid.)	\$731,066	\$53.00	LF
Central Loop w/ Link to Core	2711.00	\$53.00	LF
Equestrian Underpass at Central Loop	11741.00	\$53.00	LF
Extension to Luke Edwards Crossing	40.00	\$750.00	LF
Extension to Tribble Mill/Palm Creek Trail	1910.00	\$53.00	LF
Trail Boardwalk @ Un-named Tributary - NW	3300.00	\$53.00	LF
Extension to Indian Shoals Crossing Link in Phase 2	150.00	\$750.00	LF
Equestrian Underpass at Indian Shoals	603.00	\$53.00	LF
Extension to Cedar Creek Crossing	40.00	\$750.00	LF
Trail Distance Markers and Route Markers	10522.00	\$53.00	LF
	26.00	\$350.00	EA
Trail System - 12' Wide Asphalt Multi-purpose - Bridges and Crossing Cedar Creek		\$0	
Cedar Creek Bridge	1.00	\$55,000.00	EA
Cedar Creek to Park Border ROW	3975.00	\$53.00	LF
Boardwalk @ Un-named Tributary, 8' Wide, Rails, Pole-supported	150.00	\$750.00	LF
Trail Distance Markers and Route Markers	4.00	\$350.00	EA
Trail System - S. Alcovy Segments (trails include clear/grade/drainage/stabilization)		\$0	
Alcovy River Bridge/Boardwalk - 10'-Width, Pile-supported w/ Clearspan over River	360.00	\$1,350.00	LF
12' Asphalt Trail - S. Alcovy Bridge Approach from Loop	615.00	\$53.00	LF
9' Asphalt Trails - South Alcovy Bridge to South Corner Park - Several Larger Ravine Culverts	5065.00	\$48.00	LF
9' Asphalt Trails - S. Park Corner to Ozora Church - One Larger Ravine Culverts	2275.00	\$48.00	LF
Walking Trail Trail - 4'-width (3.35 miles)	17700.00	\$13.50	SY
Boardwalk un-named Tributary 10' W x 50'	50.00	\$750.00	LF
Trail Distance Markers and Route Markers	16.00	\$350.00	EA
Trail System - Natural Surface Woodland Trail (up to 5' wide, typically 3-4' width)		\$463,836	
Upper Cove Woods Boardwalk to West Valley Overlook to Rock Boardwalk	12233.00	\$13.50	LF
Rock Boardwalk - 5' wide - no rails	300.00	\$200.00	LF
River Side Route - Rock Boardwalk to Lower Cove Boardwalk	2330.00	\$13.50	LF
High Point Route - Rock Boardwalk to Lower Cove Boardwalk	5800.00	\$13.50	LF
Boardwalks - Upper and Lower Cove, 5' wide, Rails, Pole-supported	300.00	\$300.00	LF
Boardwalks - Upper and Lower Cove, 8' wide, Rails, Pole-supported (alternate bid item)	300.00	\$670.00	LF
East Side - Cove Woods	5140.00	\$13.50	LF
Trail Route Markers	1.00	\$1,000.00	LS
4.5 miles Phase I		\$165,145.50	
Upper Cove Woods Boardwalk to West Valley Overlook to Rock Boardwalk	\$60,000.00		
River Side Route - Rock Boardwalk to Lower Cove Boardwalk	\$60,000.00		
High Point Route - Rock Boardwalk to Lower Cove Boardwalk	\$78,300.00		
Boardwalks - Upper and Lower Cove, 5' wide, Rails, Pole-supported	\$90,000.00		
Boardwalks - Upper and Lower Cove, 8' wide, Rails, Pole-supported (alternate bid item)	\$111,000.00		
East Side - Cove Woods	\$69,390.00		
Trail Route Markers	\$1,000.00		

		6.5 miles Phase I			
Trail System - Mountain Bike Trail (single track width, wider ONLY where req'd for access)		\$771,814			
West Valley Loop (3 Rock Ledge Features), 13,471 LF w/ Luke Edwards Crossing Portion		4513.00	\$4.50	LF	\$40,000.00
Cedar Creek Approach		19674.00	\$4.50	LF	\$20,308.50
East Cedar Creek (Wet Ford @ Cedar Creek & Tributary, distance assumes multi-trail NOT bu		12216.00	\$4.50	LF	\$88,533.00
Rules/Map Kiosk		1.00	\$3,000.00	EA	\$54,972.00
Trail Route Markers/Signs		1.00	\$5,000.00	LS	\$3,000.00
					\$5,000.00
Trail System - Equestrian (6.7 miles, 4.5' typical width)		\$576,904			
Decel Lane		1007.00	\$27.00	SY	\$27,189.00
Concrete Culvert w/ flared ends		80.00	\$50.00	LF	\$4,000.00
Turf Stabilized Gravel Parking - (Equestrian Trailers (20) Only, not-lighted)		3050.00	\$12.00	SY	\$36,600.00
Parking Landscape - Trees, Mulch and Grassing		1.00	\$20,000.00	LS	\$20,000.00
Timber Space Markers @ Equestrian		912.00	\$7.00	LF	\$6,384.00
Rules/Map Kiosk (1)		1.00	\$2,500.00	LS	\$2,500.00
Parking Entry Double Timber Gate		1.00	\$3,500.00	LS	\$3,500.00
Cedar Creek Loop		19363.00	\$13.50	LF	\$261,400.50
Spur to Luke Edwards Crossing		3120.00	\$13.50	LF	\$42,120.00
West Valley Loop (8,783 total all phases, 4644 phase 2, 2 Rock Ledge Features)		4139.00	\$13.50	LF	\$62,694.00
Cove Woods North Bypass (links to West Loop)		11441.00	\$13.50	LF	\$154,453.50
Trail Route Markers		1.00	\$5,000.00	LS	\$5,000.00
Core Area		\$561,809			
Restroom (660 sf ea, w/ small storage closet)		1.00	\$128,000.00	SF	\$128,000.00
Kiosk		1.00	\$10,000.00	LS	\$10,000.00
Mid-Size Group Shelter - Octagon, 1,956 SF		1.00	\$150,000.00	LS	\$150,000.00
Small Picnic Shelter ,400 sf (1)		2.00	\$25,000.00	LS	\$50,000.00
Children's Play Area (18,800 SF, equipt., mulch, perimeter rustic fence, rubber tiles at wear zone)		1.00	\$175,000.00	LS	\$125,000.00
Stonescape (seatwalls and features similar to Little Mulberry)		1.00	\$80,000.00	LS	\$15,000.00
Meadow - Fine Graded/Grassed/Non-Irrigated - No Sod - 4 acres Phase I		174240.00	\$0.12	SF	\$20,908.80
Permanent Grassing and Landscape		1.00	\$70,000.00	LS	\$40,000.00
Picnic Tables (2 ADA) moveable		2.00	\$800.00	EA	\$1,600.00
Picnic Tables at Shelters - 8 in Phase I		8.00	\$650.00	EA	\$5,200.00
Picnic Tables on Concrete Pads - 12 in Phase I		4.00	\$1,200.00	EA	\$4,800.00
Trash Receptacles (2 per Recycled Plastic Post)		6.00	\$350.00	EA	\$2,100.00
Concrete Walks		8000.00	\$5.00	SF	\$40,000.00
Brick Paving Entry Areas		1500.00	\$12.00	SF	\$18,000.00
Bike Racks		2.00	\$600.00	EA	\$1,200.00
					\$600.00

Outdoor Lawn Court Area	Small Picnic Shelter , 400 sf (2)	\$0	2.00	\$25,000.00	LS	\$50,000.00
Concrete/Brick Paving			1.00	\$16,000.00	LS	\$16,000.00
Shuffleboard (2) Bocce (2)			1.00	\$34,000.00	LS	\$34,000.00
Gametables and Picnic Tables			1.00	\$12,000.00	LS	\$12,000.00
Landscape			1.00	\$8,000.00	LS	\$8,000.00
 Teen Area		 \$0				
Small Picnic Shelter , 400 sf (1)			1.00	\$25,000.00	LS	\$25,000.00
Picnic Tables			4.00	\$12,000.00	LS	\$48,000.00
Concrete/Brick Walks			1.00	\$50,000.00	LS	\$50,000.00
Small Skatepark (6400 SF)			1.00	\$55,000.00	LS	\$55,000.00
Teen Play Area (8000 SF, swings/climbing walls, statics)			1.00	\$95,000.00	LS	\$95,000.00
Sand Volleyball Court (2)			2.00	\$8,000.00	EA	\$16,000.00
Basketball (2 half/court)			2.00	\$20,000.00	EA	\$40,000.00
Landscape/Sod/Irrigation			1.00	\$24,000.00	LS	\$24,000.00
 Dog Park		 \$0				
Small Picnic Shelter , 400 sf (1)			1.00	\$25,000.00	LS	\$25,000.00
Picnic Tables			8.00	\$650.00	LS	\$5,200.00
Perimeter 8' V-C-Fences/Gates			3000.00	\$20.00	LF	\$60,000.00
Irrigated Turf/Irrigated Gravel			196000.00	\$0.80	LS	\$156,800.00
Landscape			1.00	\$16,000.00	LS	\$16,000.00
 Construction Contingency - Unsuitable Soils/Septic, etc.		 \$292,876.00				
Subtotal All Construction						\$100,000.00
 Architectural/Engineering/Landscape/Survey Fees		 \$4,307,630.80				
Testing, Utility Locate						\$267,459.00
Program Management (Not Included)						\$25,000.00
 Sub-total All Construction		 \$4,600,089.80				
						 \$5,626,034.00
						 Phase 2

Harbins-Alcove River Park Site Master Plan

Appendix B: Erosion Stabilization Study

Appendix B: Harbins Conservation Park: Eroded Areas Stabilization Study

The objective of the study is to record areas of past and active erosion, such that efforts associated with the first phase of park development may target those areas for permanent stabilization. Certain areas of the site were subjected to destruction of permanent vegetation as a result of prior unauthorized use of the site by a wide variety of motorized vehicles. Such areas, particularly in areas of sloped terrain subsequently were eroded, and topsoil was lost, exposing rutted subgrades. The erosion is ongoing and it is the Owner's objective through the first phase development of this site to stabilize these areas with permanent vegetation.

During May of 2005, CERULEA visited the site and documented various existing eroded areas of the proposed Conservation Park Site. CERULEA made annotations on plans by hand, recording certain areas using a handheld GPS device. Areas presented on the following plan are not intended to be final, precise representations of the eroded areas limits, but rather comprise a general guide to the locations of areas requiring further study, delineation and design prior to construction document completion.

A cost estimate follows the plan and records the general nature of stabilization work anticipated to be required to restore the profile of eroded lands, fill/eradicate ruts, and otherwise establish permanent vegetation.

The work includes:

1. **Re-Grading** of areas in advance of establishment of permanent grassing, typically using the existing local soil, such that drainage patterns are returned to a sheet flow pattern and ruts are eliminated.
2. In cases of deeply incised former roadbeds and slopes, the plan indicates deeper **imported fills**, sourced from the excess earthwork cut area associated with the Phase I parking and common area/meadow. The excess cut is to be hauled to the indicated areas as a part of Phase I.
3. Provision of **earthen drainage channels** to intercept concentrated water as anticipated to arise and to conduct it at a gentle cross-slope to discharge in adjacent areas of stable permanent vegetation.
4. Such channels would be used in combination with **stone/gravel check dams** to protect downstream channels and to ensure that flow velocities are reduced to allow permanent vegetation establishment in the channel.
5. Provision of **Silt Fences** where required to protect areas where only sheet flows are anticipated, so that flow velocities are reduced, sediments are trapped, and permanent vegetation is established both upstream and downstream of the fences. Silt Fences are to be used with discretion only where they will provide the most benefit. They are not intended to merely encircle the perimeters of each delineated eroded area. They are not to be placed across the drainage channels.
6. **Permanent seeded vegetation** (not lawn type grasses as mowing will not be provided except perhaps annual bush-hogging, and not bermudagrass or temporary cover crops). Consider with the Owner the use of mixes of warm-season grasses, similar those used at McDaniel Farm Park's floodplains where cover for native ground-nesting bird species was provided.
7. On steep slopes, the seeded vegetation shall be placed in conjunction with **woven matting**, selected to provide a secure seedbed in the face of anticipated sheet flow conditions on those slopes.
8. At creek banks on Cedar Creek and the Alcovy River, provide **Watting** with appropriate species of stream bank stabilization shrubs (not tall type willows as the banks in all cases are located in the Georgia Power easement where trees are not permitted). Provide **Coir** or similar matting on the creek banks as required.
9. In eroded areas wider than 15' not otherwise located in the Georgia Power Easement, provide **reforestation seedling tree plantings** of native species such as oak and red maple that can establish in full sun conditions without irrigation. The budget for this work item is a separate line item in the Phase I project budget.

In addition, where eroded and abandoned trail/road beds are located proximal to proposed trails in the Phase I project scope, it is necessary to **provide barricades** of tree stumps and tree tops intermeshed to provide a barrier to access by the general public. The stabilization areas shall be monitored to assure satisfactory establishment of permanent vegetation before they are opened to use and potential damage by the contractor, the Owner, or the general public. Once satisfactory permanent vegetation is achieved, remove silt fences and accumulated sediments from fences and check dams.

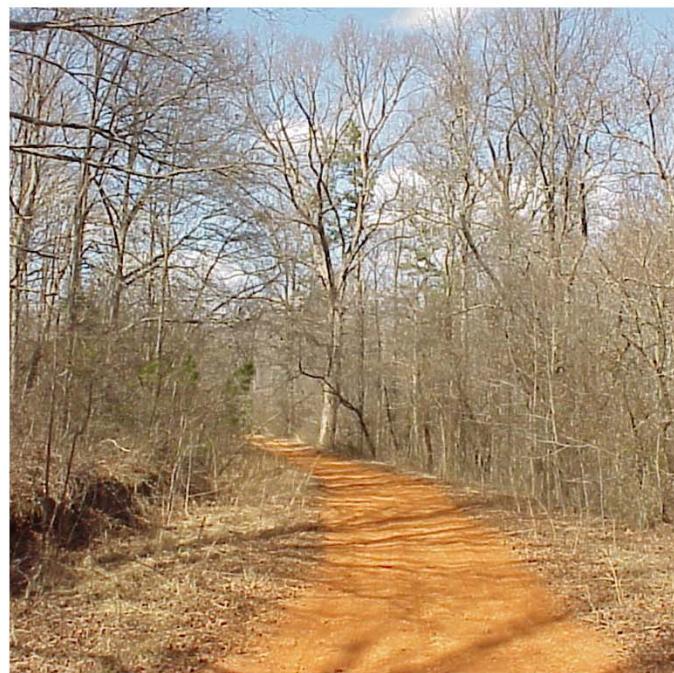
Photographs: Typical Eroded Areas Requiring Stabilization



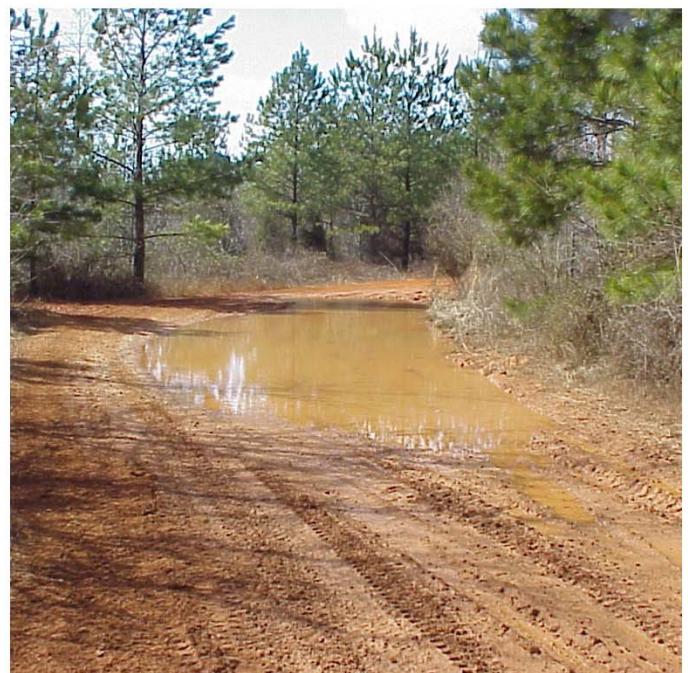
Widespread Erosion Ruts at Georgia Power Easement



Fully Incised Gypsy Trail above Flat Rock



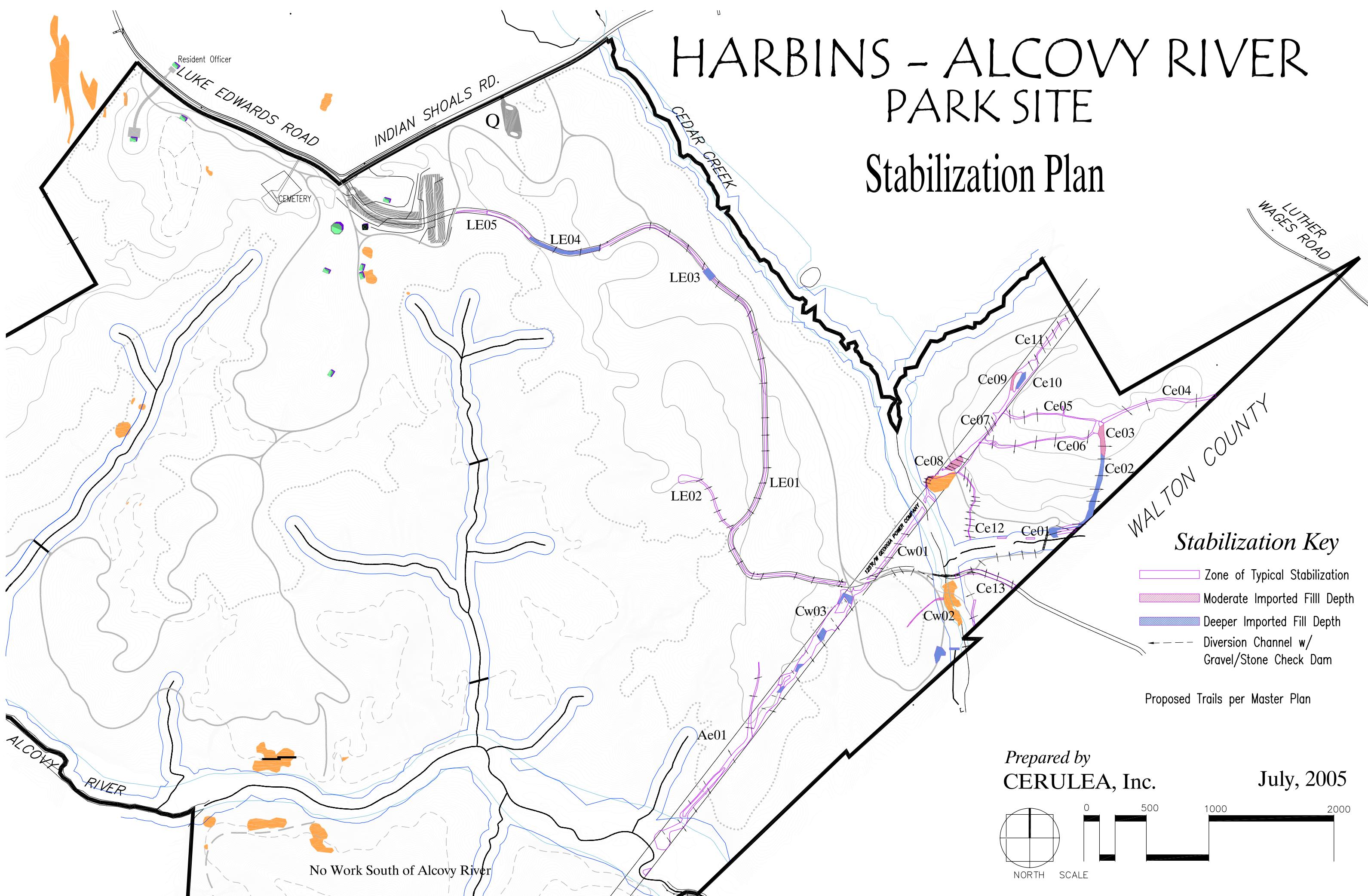
Eroded Soil Roadbed at Former Luke Edwards Road



Standing Water at Former Luke Edwards Road

HARBINS - ALCOVY RIVER PARK SITE

Stabilization Plan



Gwinnett County Dept. of Community Services

Harbins-Alcovy Conservation Park

Concept Cost Estimate (Existing Eroded Areas Stabilization)

Prepared by: CERULEA Incorporated

August 1, 2005

	Description	Quantity	Unit Price	Phase I
	Insurance Cost/Bond Cost = 3%			in base budget
	Owners Special Requirements, (job trailer, etc.)			in base budget
	East of Cedar Creek	\$120,508		
Ce01	Backfill at 2-3' deep rutted cross-slope, 4700 sf x 2-3'	500.00	10.00 CY	\$5,000.00
Ce01	3300 SF regrade only	110.00	5.00 CY	\$550.00
Ce01	Grass-seeded Fabric Mat	800.00	1.25 SY	\$1,000.00
Ce02	Backfill at 2-3' deep rutted cross-slope, 19000 sf x 2-3'	1760.00	10.00 CY	\$17,600.00
Ce02	Grass-seeded Fabric Mat	2100.00	1.25 SY	\$2,625.00
Ce02	Diversion Channel (earth w/ checks @ 70' o.c.)	300.00	5.00 LF	\$1,500.00
Ce02	Silt Fences	300.00	3.00 LF	\$900.00
Ce03	Backfill at 1-2' deep rutted cross-slope, 8700 sf x 1-2'	480.00	10.00 CY	\$4,800.00
Ce03	Grass-seeded Fabric Mat	966.00	1.25 SY	\$1,207.50
Ce03	Diversion Channel (earth w/ checks @ 70' o.c.)	120.00	5.00 LF	\$600.00
Ce03	Silt Fences	100.00	3.00 LF	\$300.00
Ce04	18000 SF regrade only	300.00	5.00 CY	\$1,500.00
Ce04	Grass-seeded Fabric Mat	2000.00	1.25 SY	\$2,500.00
Ce04	Diversion Channel (earth w/ checks @ end)	150.00	5.00 LF	\$750.00
Ce05	1500 SF regrade only	300.00	5.00 CY	\$1,500.00
Ce05	Grass-seeded Fabric Mat	1700.00	1.25 SY	\$2,125.00
Ce05	Diversion Channel (earth w/ checks @ end)	300.00	5.00 LF	\$1,500.00
Ce06	14700 SF regrade only	300.00	5.00 CY	\$1,500.00
Ce06	Grass-seeded Fabric Mat	1670.00	1.25 SY	\$2,087.50
Ce06	Diversion Channel (earth w/ checks @ end)	280.00	5.00 LF	\$1,400.00
Ce07	38500 SF regrade only	700.00	5.00 CY	\$3,500.00
Ce07	Grass-seeded Fabric Mat	4100.00	1.25 SY	\$5,125.00
Ce07	Diversion Channel (earth w/ checks @ end)	1300.00	5.00 LF	\$6,500.00
Ce07	Silt Fences	2000.00	3.00 LF	\$6,000.00
Ce07	Wattle Shrubs @ Creek in Coir Fabric	50.00	200.00 LF	\$10,000.00
Ce08	Backfill at 2-3' deep rutted cross-slope, 8500 sf x 2-3'	800.00	5.00 CY	\$4,000.00
Ce08	Grass-seeded Fabric Mat	940.00	1.25 SY	\$1,175.00
Ce08	Silt Fences	300.00	3.00 LF	\$900.00
Ce09	Backfill at 2-3' deep rutted cross-slope, 3000 sf x 2-3'	300.00	10.00 CY	\$3,000.00
Ce09	Grass-seeded Fabric Mat	300.00	1.25 SY	\$375.00
Ce10	Backfill at 4-5' deep rutted cross-slope, 4300 sf x 4-5'	800.00	10.00 CY	\$8,000.00
Ce10	Grass-seeded Fabric Mat	300.00	1.25 SY	\$375.00
Ce11	21500 SF regrade only	400.00	5.00 CY	\$2,000.00
Ce11	Grass-seeded Fabric Mat	2400.00	1.25 SY	\$3,000.00
Ce11	Diversion Channel (earth w/ checks @ end)	400.00	5.00 LF	\$2,000.00
Ce11	Silt Fences	300.00	3.00 LF	\$900.00
Ce12	800 SF regrade only	15.00	5.00 CY	\$75.00
Ce12	Grass-seeded Fabric Mat	90.00	1.25 SY	\$112.50
Ce12	Diversion Channel (earth w/ checks @ end)	200.00	5.00 LF	\$1,000.00
Ce12	Silt Fences	100.00	3.00 LF	\$300.00

						PAGE 2
Ce13	12000 SF regrade only	220.00	5.00	CY		\$1,100.00
Ce13	9000 SF fill to 12"	300.00	10.00	CY		\$3,000.00
Ce13	Grass-seeded Fabric Mat	2300.00	1.25	SY		\$2,875.00
Ce13	Diversion Channel (earth w/ checks @ end)	550.00	5.00	LF		\$2,750.00
Ce13	Silt Fences	500.00	3.00	LF		\$1,500.00
West of Cedar Creek						\$69,143
Cw01	18000 SF regrade only	330.00	5.00	CY		\$1,650.00
Cw01	Grass-seeded Fabric Mat	800.00	1.25	SY		\$1,000.00
Cw01	Diversion Channel (earth w/ checks @ end)	300.00	5.00	LF		\$1,500.00
Cw01	Silt Fences	200.00	3.00	LF		\$600.00
Cw01	Wattle Shrubs @ Creek in Coir Fabric	50.00	200.00	LF		\$10,000.00
Cw02	12000 SF regrade only	220.00	5.00	CY		\$1,100.00
Cw02	3000 SF fill to 18"	375.00	10.00	CY		\$3,750.00
Cw02	Backfill deep rutted cross-slope, 2000 SF x 3'	220.00	10.00	CY		\$2,200.00
Cw02	Grass-seeded Fabric Mat	2470.00	1.25	SY		\$3,087.50
Cw02	Diversion Channel (earth w/ checks @ end)	600.00	5.00	LF		\$3,000.00
Cw02	Silt Fences	500.00	3.00	LF		\$1,500.00
Cw03	81000 SF regrade only	1500.00	5.00	CY		\$7,500.00
Cw03	11000 SF rutted area, fill to 2.5'	1020.00	10.00	CY		\$10,200.00
Cw03	Grass-seeded Fabric Mat - slopes	4444.00	1.25	SY		\$5,555.00
Cw03	Grass-seed Flat Areas	6000.00	0.50	SY		\$3,000.00
Cw03	Diversion Channel (earth w/ checks @ end)	1500.00	5.00	LF		\$7,500.00
Cw03	Silt Fences	2000.00	3.00	LF		\$6,000.00
East of Alcovy River						\$58,600
Ae01	81000 SF regrade only - avg 12"	3000.00	5.00	CY		\$15,000.00
Ae01	Grass-seeded Fabric Mat - slopes only	6000.00	1.25	SY		\$7,500.00
Ae01	Grass-seed Flat Areas	3000.00	0.50	SY		\$1,500.00
Ae01	Diversion Channel (earth w/ checks @ end)	1600.00	5.00	LF		\$8,000.00
Ae01	Silt Fences	2200.00	3.00	LF		\$6,600.00
Ae01	Wattle Shrubs @ Creek in Coir Fabric	100.00	200.00	LF		\$20,000.00
Luke Edwards Road						\$62,275
LE01	50000 SF regrade only - avg 12"	1850.00	5.00	CY		\$9,250.00
LE01	Grass-seeded Fabric Mat - slopes only	5000.00	1.25	SY		\$6,250.00
LE01	Grass-seed Flat Areas	500.00	0.50	SY		\$250.00
LE01	Diversion Channel (earth w/ checks @ end)	600.00	5.00	LF		\$3,000.00
LE01	Silt Fences	400.00	3.00	LF		\$1,200.00
LE02	13000 SF regrade only - avg 12"	480.00	5.00	CY		\$2,400.00
LE02	Grass-seeded Fabric Mat - slopes only	1160.00	1.25	SY		\$1,450.00
LE02	Grass-seed Flat Areas	300.00	0.50	SY		\$150.00
LE02	Diversion Channel (earth w/ checks @ end)	300.00	5.00	LF		\$1,500.00
LE02	Silt Fences	200.00	3.00	LF		\$600.00
LE03	26000 SF regrade only - avg 12"	1000.00	5.00	CY		\$5,000.00
LE03	Backfill at double incised roadbed, 5000 sf x 4-5'	800.00	10.00	CY		\$8,000.00
LE03	Grass-seeded Fabric Mat - slopes only	2000.00	1.25	SY		\$2,500.00
LE03	Grass-seed Flat Areas	800.00	0.50	SY		\$400.00
LE03	Diversion Channel (earth w/ checks @ end)	600.00	5.00	LF		\$3,000.00
LE03	Silt Fences	600.00	3.00	LF		\$1,800.00
LE04	Backfill at double incised roadbed, 15000 sf x 18"	830.00	10.00	CY		\$8,300.00
LE04	Grass-seeded Fabric Mat - slopes only	2000.00	1.25	SY		\$2,500.00
LE04	Diversion Channel (earth w/ checks @ end)	150.00	5.00	LF		\$750.00
LE04	Silt Fences	100.00	3.00	LF		\$300.00
LE05	10000 SF regrade only - avg 6", very sandy	185.00	5.00	CY		\$925.00
LE05	2600 SF regrade only - avg 12", rutted narrow roadbed	100.00	5.00	CY		\$500.00
LE05	Diversion Channel (earth w/ checks @ end)	100.00	5.00	LF		\$500.00
LE05	Grass-seeded Fabric Mat - slopes only	1400.00	1.25	SY		\$1,750.00
Design/Survey/Testing						in base budget
Sub-total All Construction						\$310,525.00

Harbins-Alcovy River Park Site Master Plan

Appendix C: Historical Interpretive Narrative

TEXT FOR HISTORICAL MARKERS

Suggested text to be used on historical markers in Harbins-Alcovy River Park is presented here as a starting point for historical interpretation at the park. These concepts can be expanded upon and refined as a scope of work is developed that specifies the overall content, budget, and site specifics of the program. The interpretive approach used here ties the historic sites in the park to a series of “historical trails” that visitors can choose to explore. A main kiosk near the parking area would give an overview of the history of the area and illustrate the various historic trails.

Only one of the trails, the Shady Grove-Hugh Lowe Mill Historic Trail, is developed here. This would be the main historical trail in the park and would include most of the significant sites, as well as a variety of site types. Numbered signs guide visitors along paved trails that are part of the current master plan. The signs provide information on historic areas, as well as specific sites.

At least two other secondary trails could be developed to reach the more remote sites. Because the trail system will be built in phases, the interpretation at the sites on the secondary trails is presented as individual sites that can be grouped as appropriate to create a historic trail. These sites could also stand alone if necessary, offering a less structured way of including history as an element in the park program. In this report, the main trail is referred to as the Shady Grove-Hugh Lowe Mill Historic Trail, and the sites are given individual names for reference. These names can be changed at a later date if necessary.

Because site management guidelines have not been established, certain assumptions are made in the presentation of the text. Directional references such as “left,” “right,” and “behind,” are not included, since the exact locations for the signs have not been determined. These should be added so that the visitor can locate the features of interest, or find their way to the next marker. Some references to cardinal directions are made to clarify the descriptions in the text, but these might be changed on the final signs, since most visitors will not be familiar enough with the site to distinguish north, south, east, and west. Only two sketches (a schematic of the mill as it likely existed, and Roosevelt Etchison’s drawing of Shady Grove School) are included. Photographs, maps, and drawings should be added where appropriate to help the visitor visualize the landscape and understand the descriptions. An example of the type of drawing that might be included on the signs is provided for the Hugh Lowe Mill ruins sign. This is a generic drawing offered only as an example (it is not oriented properly). Customized graphics for the Harbins Park sites would need to be developed under an “interpretive signage” scope of work.

Features such as open wells and rotting timbers are described in the past tense, under the assumption that these potential hazards will be removed from the sites. One well may be kept open and covered with an open grate or other structure for safety. It is also suggested that signage be developed discouraging climbing on ruins, removing any artifacts, or disturbing sites. The unmarked cemetery was not included in the tours because of

concerns for site preservation. Cemeteries are attractive to vandals, and this cemetery's isolated location would make it difficult to protect.

Finally, it is suggested that a program be developed on everyday life in Harbins District that incorporates some of the material collected through oral interviews. This likely would require more than just signs. A tape-recorded program or printed brochure would be appropriate for this type of historical interpretation.

MAIN KIOSK

The text in the next section is for the main kiosk, which would be located near the parking area. This would serve as an introduction to the historical resources of the park and a guide to the historical trails. It should include a large, easy-to-read map of the park with the historical trails and sites marked, and might include paper copies of the maps that visitors could take with them as they explore. This kiosk could also contain historical materials that supplement the signs or expand further on a particular theme.

“History in Harbins-Alcovy River Park: A Tour of Historic Sites”

Although the land encompassed by Harbins-Alcovy River Park today is mostly wooded, with but few signs of human activity, the area was once home to a vibrant rural community of farms, a church, a school, and a mill. The area is closely identified with the tightly-knit African-American community of Shady Grove. The residents of Shady Grove were descendants of a group of black farmers who settled in the area after the Civil War. Many of them acquired large tracts of land and became successful farmers.

Much of the land in the park was part of a large plantation assembled around the time of the Civil War by Hugh Lowe, a white farmer who moved to Gwinnett County's Harbins District from the community of Windsor, located across the Alcovy River in Walton County. Lowe established a gristmill (for grinding corn into meal and grits) on Cedar Creek, which borders the eastern side of the park. Lowe died in 1890, but the mill apparently operated sporadically into the early twentieth century. Beginning in the 1920s, as a result of the boll weevil, the Depression, and the economic changes brought by World War II, farms were abandoned, and this area gradually reverted back to the woodlands that characterized it before the arrival of European Americans and their African slaves 100 years before. Small-scale farming and lumbering continued on the property into the 1950s and 1960s, but by the 1970s, there were no residents on the land, and little activity, setting the stage for its acquisition by the county for development of this park.

Only remnants of the historic Harbins community survive within the park. The activity areas are marked now only by crumbling stone walls, fallen chimneys, toppled stone piers, abandoned wells, and the tracks of old roads. Look for signs of past human activity as you explore the trails. Although it may appear that you are walking through untouched wilderness, the evidence of historic activity is everywhere. Signs along the trails will give you clues of what to look for as you go.

Where to look: Most of the significant historic remains of Harbins Park can be seen along the Shady Grove-Hugh Lowe Mill Historic Trail. There are two main activity areas located along this paved trail. The first area is the Shady Grove Community, which includes the Shady Grove Cemetery and the site of Shady Grove Church and School. These sites are located to the northwest of this sign, around the intersection of Luke Edwards and Indian Shoals roads. This was the center of an African-American community that developed after the Civil War and continued into the middle of the twentieth century. The second area is located around the beautiful Flat Rock Shoals, once a popular swimming hole for the community. The sites in this area include the dramatic ruins of the Hugh Lowe mill and dam, the site of a historic bridge and ford over Cedar Creek, and a number of house sites. Follow the numbered signs to tour the sites in these two areas.

More remote sites can be found throughout the park. These include abandoned house sites, old roadbeds, and agricultural terracing. Signs at these sites provide more information about the history of Harbins District and the individuals that once lived here.

SHADY GROVE-HUGH LOWE MILL HISTORIC TRAIL

Sign 1: Shady Grove Community Historic Sites (near church and school site)

Shady Grove, established after the Civil War, was characterized by a significant number of African-American landowners in the late nineteenth and early twentieth century. Most blacks in rural areas of Gwinnett County after the Civil War worked as sharecroppers on white-owned farms, or rented small tracts from white landlords. In Harbins District by 1880, however, members of the Kilgore, Livsey, and Burson families among others, had acquired land in the district.

Several of these African-American farmers amassed significant landholdings, produced cotton and corn in quantities for market sales, and leased their land to tenants, just as their white counterparts did. Thomas Kilgore, Jr., one of the founders of Shady Grove Church, owned over 300 acres of land in 1880. He produced 27 bales of cotton, the second largest crop in the district among both black and white farmers. His livestock was valued at \$575, a considerable sum for the time.

Another early farm in the Shady Grove community was that of Charles and Rhoda Burson. Charles purchased land within the park boundaries in 1874. The farm passed to Rhoda by 1880, when she reported livestock valued at \$257. She produced 300 bushels of corn on 15 acres and six bales of cotton on 27 acres. Pink Smith and Clark Smith were also early African-American landowners in the community.

Tax records for the Harbins District in 1909, show that of 21 African-American taxpayers, 15 owned real property, ranging in value from \$300 to \$1,500. Landowning among blacks declined during the 1910s, but there remained a significant African-American community in the area until after World War II, anchored by the Shady Grove church and school, located within the Harbins Alcovy Park property.

A. M. (Asberry) McCluskey, who moved to the community in 1923, not only kept his farm through the Depression years, but also continued to add to his holdings. His farm, located just north of the park, was one of the largest in Harbins District, either white- or black-owned. By 1939 he owned 365 acres and employed as many as five tenants at a time on the property. Among the individuals who were tenants on his land were Hal Jordan, Maggie Austin, Buster Kilgore, Bose Kilgore, and Wallace Bailey. He raised cotton and corn on the farm, as well as wheat, which was cut by hand with a scythe and a cradle. McCluskey also raised peanuts, watermelon, strawberries, and sweet potatoes in his garden and had orchards of apple, peach, and pear trees.

Maggie Austin moved to Harbins District in the late 1930s after the death of her husband. She sharecropped for a few years on land that included a portion of Harbins-Alcovy River Park, before purchasing the land with the help of her brother-in-law, Asberry McCluskey. She raised 10 children on the 237-acre farm, raising most of what they needed to eat.

Prior to World War II, Shady Grove was an isolated community. All of the roads were unpaved, and often in poor shape. A round-trip wagon ride to Lawrenceville took all day. There was no electricity or running water, and a doctor had to be called out from Dacula or Monroe when someone took ill.

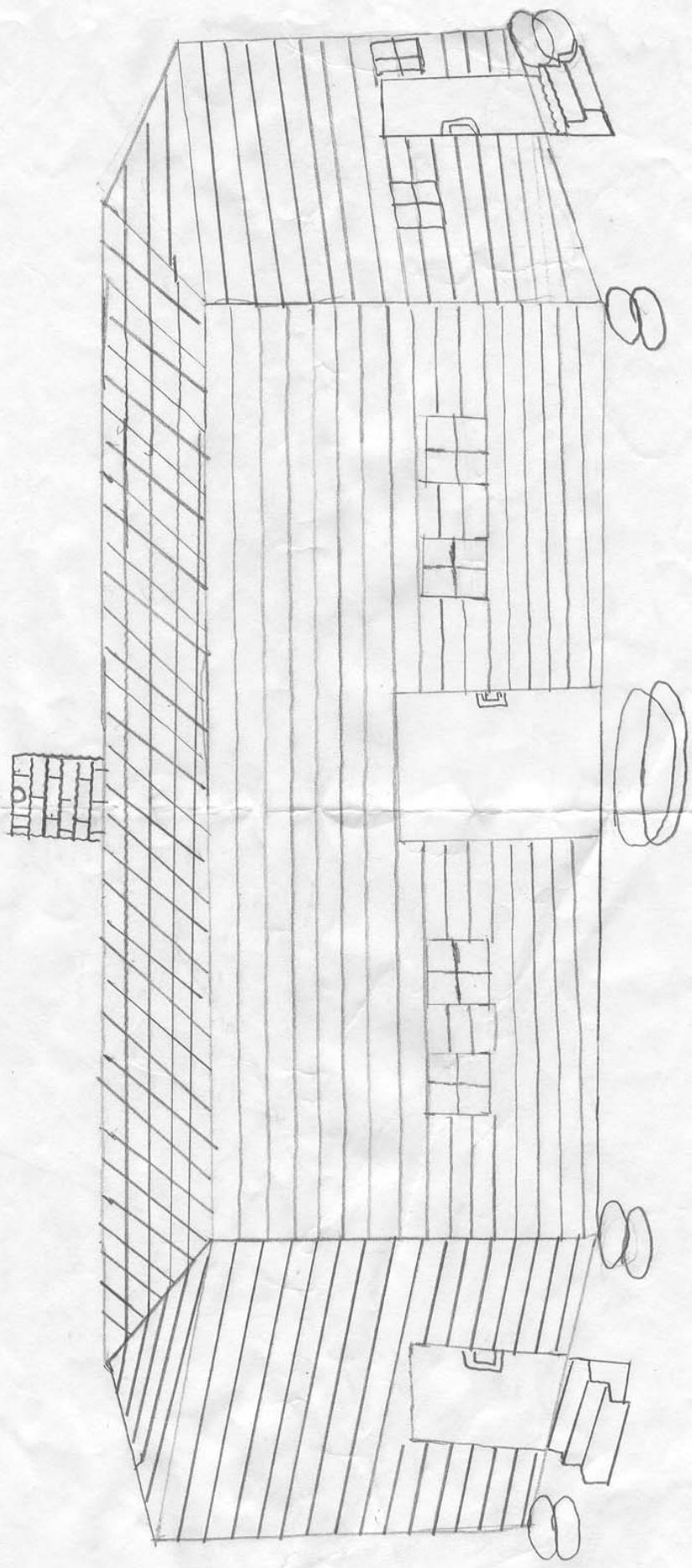
By the 1940s, a number of Shady Grove residents had cars and were able to take jobs outside the district. As small family farms became increasingly unprofitable in the 1940s and 1950s, Shady Grove's residents gradually moved away to work at factory jobs in Decatur, Atlanta, and as far away as Ohio. In recent years, some of those who grew up in Shady Grove have returned to live on the land that has been in their families for 100 years or more.

Sign 2. Shady Grove Church and School [9GW580]

The exact location of these buildings is not known since nothing remains of either structure. However, they can be seen in historic aerial photographs and plat maps. Each building occupied a one-acre parcel. Residents recall that each was a one-room, wood frame structure on piers. [Reconstructed sketches would be good here- at least use the drawing that Roosevelt Etchison did]

The Old Primitive Baptist Church was established before 1885. This church served the African-American community and was referred to as the "Hardshell" church, representing the Primitive Baptist faith. The one-acre church lot was located in the northeast corner of the Hugh Lowe lands, and Lowe may have contributed the land to the church. The Shady Grove Church was used until the 1940s when Walter and Nettie Kilgore donated land for a new church, called Center Hill Missionary Baptist Church, which was located outside the Harbins Alcovy River Park boundary.

The Shady Grove School was established in 1885 and met in the church until a school building was constructed. It is not known when the separate school lot and building were established. The first trustees of the school were men from prominent black families in



the Harbins District: Thomas Kilgore, Bud Austin, Elbert Burson, Bose Burson, and William Smith. In the 1920s, the school operated three to five months per year, usually in two sessions: one in the fall, after the cotton harvest, and one in the spring, after the plowing and planting. Students at the school recall that if the cotton was still in the field, they would get out in the afternoon to harvest it.

Among the teachers at the school were Dr. Miley Mae Hemphill, Ida Bell Gray, who was one of Dr. Hemphill's teachers, Mattie Burson, Hassie Burson, Nettie Kilgore, Emma Buggs Johnson, Mary Alice Graves, Maggie Livsey, and Priscilla Jones. During her first stint there, from 1935 to 1938, Dr. Hemphill was paid \$34 a month by the county. By 1946, when Ms. Jones was a teacher there, the pay was \$60 a month.

R. T. Livsey dismantled the school building in the 1950s to salvage the building materials and may have dismantled the church as well.

Sign 3. Shady Grove Cemetery [9GW574]

This cemetery is associated with the Shady Grove "Hardshell" Church and contains approximately 130 burials. Of these, only 58 have legible markers identifying the interred. The earliest burial identified is the grave of N. T. Kilgore, who died in 1905. Many prominent members of the African-American community are buried in this cemetery, including members of the Kilgore, Burson, Smith, Livsey, McCluskey, Austin, Edwards, and Moore families.

Approximately 32 graves have funeral home markers that no longer contain information, unmarked fieldstones, or illegible marked stones. The remaining 40 burials were unmarked, and were located by probing for evidence of a burial shaft.

Another cemetery containing no engraved markers is located to the west of this one within the park boundary. It is probably older than the Shady Grove Cemetery, since local residents do not know who is buried there. Approximately 10 burials are located at this site.

Sign 4. Flat Rock Shoals Historic Sites (on the paved trail leading to the shoals)

The historic sites in this section are all located on land that was owned by Hugh Lowe in the second half of the nineteenth century. Based on county tax records, Hugh Lowe purchased 700 acres of land in Gwinnett County around 1861, which probably included the land around the mill. Unfortunately, deed records for Gwinnett County prior to 1871 were lost in a courthouse fire. In 1880, his farm included 130 acres of improved land and nearly 800 acres of unimproved land, all valued at \$6,000. His livestock holdings were worth \$680, among the largest in the district, and he produced 1,350 bushels of corn on 65 acres and 25 bales of cotton on 40 acres. Only two farmers in the district produced more cotton in that year, one of whom was Thomas Kilgore, whose farm was located to the northwest of Lowe's on the Alcovy River.

A map of Lowe's lands in 1890 indicate that he owned almost 887 acres along Cedar Creek, much of which is now part of Harbins-Alcovy River Park. There were six houses on the land, along with a gristmill on Cedar Creek and a cotton gin and cotton press nearby. The location of Lowe's house is not known. It is believed that Lowe hired someone to operate the mill part time during the harvest season, since he did not list his occupation as "miller" on the census and he had a large farming operation to oversee. The date at which the mill fell out of use could not be determined, but it may have operated sporadically into the twentieth century.

After Lowe's death in 1890, his estate was divided into smaller parcels and sold at auction. James O. Whitworth and William T. Perry purchased the 24-acre tract containing the mill and dam and may have tried to continue the mill, since Perry's family was involved with other mills in the county. The gin and press were sold at auction for the benefit of the estate.

Cicero Ed (C. E.) Towler acquired ownership of the mill tract before 1919, but was forced to mortgage the property several times. He sold a 6-acre strip of land that included the "old Hugh Lowe mill and right-of-way" to J. W. Towler in 1919. The characterization of the mill as "old" may indicate that it was no longer functioning. J. W. and R. A. Braswell owned the mill site for most of the 1920s. They may have operated the mill at least sporadically, since Alvin McCluskey, who was born in 1919, recalls visiting the mill with his father when it was operating. The mill property was held by a number of different partners into the second quarter of the twentieth century. It apparently was permanently abandoned before the late 1930s when other informants recall visiting the ruins.

The John W. Braswell family acquired a large portion of the Lowe plantation in the early twentieth century, and the remains of their homeplace, as well as a tenant house that was probably constructed during their ownership, are the first sites on this trail. Another historic home site located just above the mill ruins is likely the residence of a tenant who operated the mill for Hugh Lowe. Along this trail you will also see the remains of a bridge over Cedar Creek and the location of the ford that was used when the bridge was not available.

Sign 5: Braswell Homeplace [9GW584]

A number of features were located from this early twentieth century house site, including a collapsed chimney constructed from large roughly cut and uncut fieldstone, stone piers at the corners of the house pad, and a well. There is also a stone wall along the road. The unlined well, dug into clay subsoil, is typical of the wells found at the old house sites in the park. It was constructed in back of the house and is 5 feet in diameter and 18 feet deep. Four fieldstones around the well suggest that a shed once enclosed it. Based on the placement of the piers and the house pad, the house was about 20 by 42 feet, with a rear addition measuring 18 by 20 feet. The chimney was located on the outside of the east end of the house.

This house is shown on a 1926 plat map as the “Braswell homeplace.” It was likely constructed around 1909 when John W. Braswell purchased the land. It was later occupied by tenants, including the Hardigree family.

Sign 6: Miller’s House [291-10]

The remains of this house included a collapsed chimney constructed from large, roughly cut and uncut fieldstone, stone piers, and a well. An enameled, tin bucket with crimped seams and a small amount of tin sheeting was found in the chimney fall. Three locally made bricks with gypsum-based mortar were found on the site, dating it to before 1900. A large stone that was probably an entrance step is located at the southeast corner of the feature. Based on the placement of this stone and another near it, the house may have had a front porch facing south, away from the road.

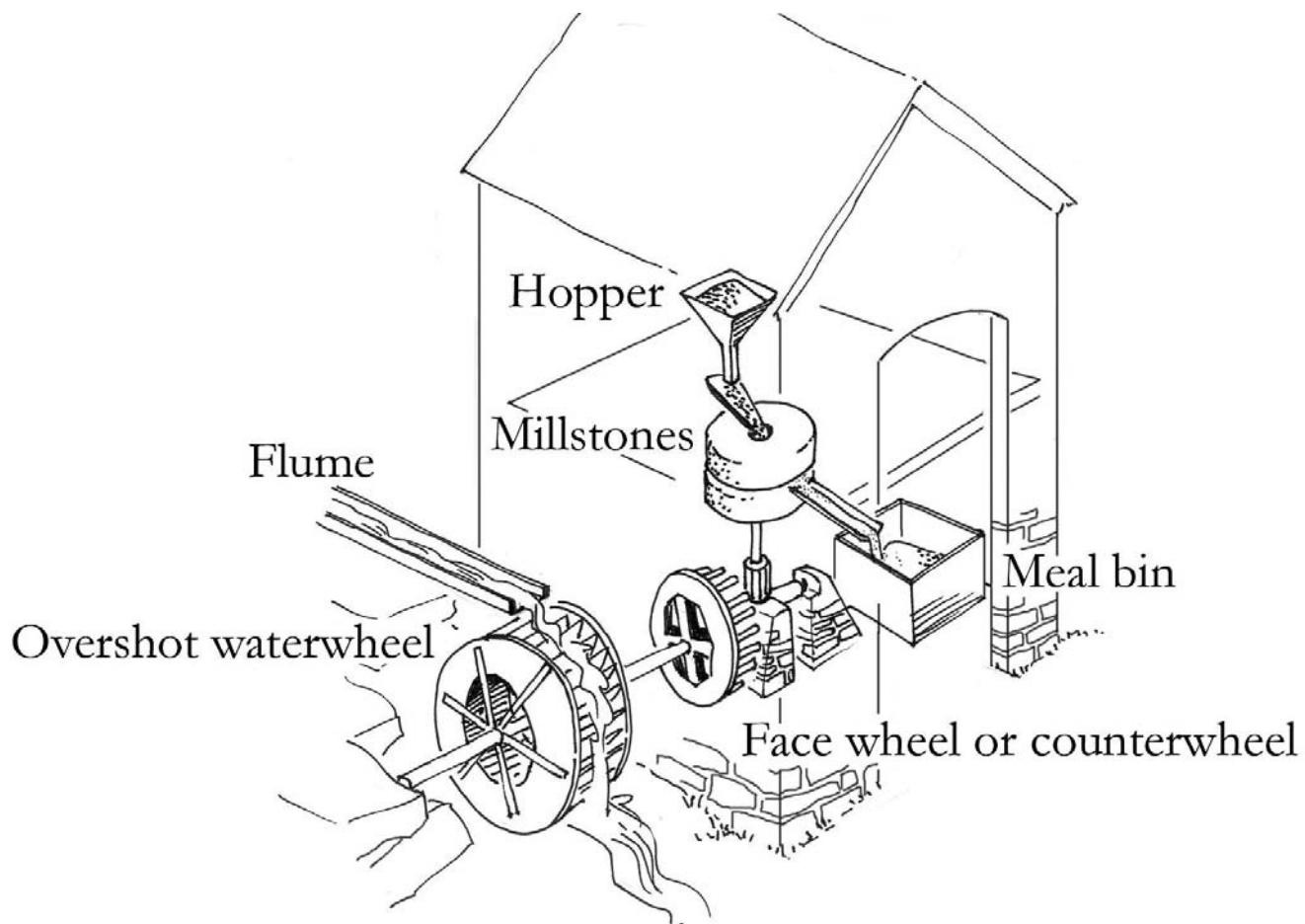
A house is shown in this location on an 1890 map of the Hugh Lowe estate. Along with the mill, Lowe had a large farm, and likely had a tenant on the land that worked in the mill. The location of this house and its early date suggest that it served as the miller’s residence. Cicero E. Towler, who bought the mill before 1919, lived in this house as well. A man named Lee Smith may have lived in the house after Towler.

Sign 7: The Hugh Lowe Mill Ruins [9GW586]

Hugh Lowe constructed this mill on Cedar Creek not far from its confluence with the Alcovy River sometime around the Civil War, although the exact date has not been established. The ruins of this mill are now considered to be in Walton County, but a number of deeds were found in Gwinnett County that included this mill.

The two-story mill house was constructed of mortared, square-cut and rough granite (much of it probably quarried on site as indicated by drill holes and cuts in the bedrock). Inside the mill building can be seen a mortared, hand-made brick fireplace and chimney, the impression of an interior staircase in the plastered wall, and notches for the second floor joists.

Residents of the Shady Grove community recall that the wheel for the mill was an overshot design, about 14 feet in diameter, constructed of metal, with a wooden rim. Boards were angled inside the rim to create buckets over which the water ran to drive the wheel. The wheel pit, which has since been filled in with debris, can be seen on the north side of the structure. The axle of the water wheel would have entered the building at ground level where it would have been geared to a vertical shaft that turned the grindstone on the second floor. The two-story opening on the west side of the mill suggests that a door was located on the second floor wall and a block and tackle was used to hoist the grain up to the machinery. It was then poured between two stones where it was ground. A chute would bring the milled grain back to hoppers or bins on the first floor. It would then be bagged and loaded on a wagon. Millers typically took a portion of the meal as payment. According to informants, only corn was ground at the Hugh Lowe mill. Wheat had to be taken to Winder or Braselton to be ground into flour. Below is a



Sketch of a typical 19th century gristmill showing the basic elements of the mill machinery.

Note: This drawing is a generic representation and does not reflect accurately the physical layout of the mill at the Hugh Lowe Mill. A custom illustration should be developed for the sign that is modeled after the actual mill, allowing the visitor to get an easier understanding of the site.

diagram of a typical mill showing the likely design of the Hugh Lowe mill. [see attached diagram]

Sign 8: The Mill Dam and Headrace [9GW586]

This is the dam that supplied the mill with water to power the wheel. It is made of concrete, which was not in common use for dam construction before about 1910. However, we know that the mill was in operation before 1890, so the concrete dam was apparently not the original structure. No solid evidence of an earlier earthen dam could be located on the creek, so it appears that the concrete dam is in the same location as the earlier dam. Although the dam is low and the pond it created would have been relatively small, it appears that the dam was not created to store a great amount of water, but merely to divert a portion of the water from Cedar Creek into the headrace. The wheel could be turned with surprisingly little water. Since Cedar Creek is a perennial stream, a large millpond apparently was not required.

The water was diverted into the headrace by adjusting the headgate, which is cut into the top of the dam. The headgate is built into the concrete dam and so likely represents a twentieth-century alteration to the original dam and sluice. Portions of the headrace, which carried the water to the mill, can be seen between the dam and the mill ruins along the west side of the creek.

Sign 9: Cotton Gin and Stone Pillars [291-8/291-6]

Along with the gristmill, Hugh Lowe had a cotton gin and press on his plantation. The gin removed the seed from the cotton bolls, and the press compacted it into bales. His gin likely processed the cotton of then tenants on his land, as well as that of other farmers in the area, but it probably was not a large commercial operation. The gin is shown in this general area on a map of the property made in 1890, but its exact location is difficult to determine. The two stone pillars at this site may be associated with the gin house, perhaps supporting the downslope side of a building that had its entrance at ground level.

Sign 10: Bridge Abutment and Ford at Cedar Creek [291-2]

The remains of a bridge over Cedar Creek can be seen here. The bridge was probably constructed in the early twentieth century. It can be seen in an aerial photograph made in 1938. Prior to the construction of the bridge, residents wishing to cross the creek forded the stream at the shoals located just downstream. The bridge was washed out or removed prior to 1952, after which the ford was once again used to cross the creek.

The shoals at the ford were known as Flat Rock and were a popular destination for recreation. Baptisms were also conducted here. In the 1960s the area began to develop a reputation as an unsafe place where drinking and illicit activities took place. The creation of Harbins-Alcovy River Park has helped protect the natural beauty of this place for future generations to enjoy as past residents once did.

Sign 11. Nunnaly/Smith Residence [9GW585]

This former house site consists of a concrete block retaining wall along the road, several fieldstone piers, a scatter of unmortared machine-molded brick, and push piles that indicate that the house was demolished. A dwelling may have been located on the site in the late nineteenth century based on map evidence and the presence of fieldstone piers, but the concrete blocks date to about 1910 or later. The land, which was part of the Hugh Lowe estate in 1890, was acquired by H. F. Towler in 1910, so he may have constructed the house on the site. Towler apparently died before 1920 and the property passed to his wife Elizabeth. A Jim Towler lived in this house at one time, according to one source, and later, Lucius Livsey and his wife Pearlie lived here. Pearlie was the granddaughter of Will Smith, whose family owned a 126-acre farm to the north of the Harbins-Alcovy River Park. The property belonged to Glenn Bennett by 1947. By 1957, the house was no longer standing.

INDIVIDUAL SITES

1. Bailey Place #1 [9GW577]

The remains of two similar houses are located in this area on what was a 185-acre tract bordering the Alcovy River. The houses were probably built by the Braswell family in the late nineteenth century, but were occupied from ca. 1935 to 1954 by Thomas H. Bailey and Raleigh Bailey, who owned the property at that time. The Baileys were an African-American family, and the property was known as the “Bailey Place.” E. L. Braswell & Son, probably a lumber company, owned the land before 1892. It remained in the Braswell family until some time prior to 1917, when H. F. Towler acquired it. The Towler family later sold the land to Thomas H. Bailey. The two houses do not appear on an 1894 map, but the machine-cut square nails found in the ruins suggest a construction date before the turn of the century. The houses can clearly be seen on a 1934 plat map, and a 1939 aerial photograph shows that most of the property was cleared for pasture or cultivation. The buildings were apparently still standing in 1955.

Site #1 consisted of house ruins, an outbuilding, and a well. Agricultural terraces are evident around the site. The remains of the house suggest an older core with later additions. First, the house was supported on piers made of both rock and mortared brick, with the stone piers all in the interior of the building. The machine-cut square nails found in the floor sills atop the stone piers suggest a date of construction before the turn of the century, as does the collapsed chimney of rough-cut and uncut granite fieldstone. However, the high quality of the bricks and masonry work found in the piers and in association with the fireplace appear to date to the 1930s or 1940s. Thus, it appears that the house was expanded, perhaps during the period that it was owned by the Baileys. The smaller brick piers indicate that a porch was added around the time that the house was enlarged.

The outbuilding, which appears to be a barn in a 1939 aerial photo, had only small, mortared brick piers of the same type used in the piers of house, dating it to the twentieth

century. The unlined well dug into clay subsoil was located between the house and the barn. Most artifacts lying about on the surface, including glass, metal, and plastic, dated to the 1950s, when the house was probably last occupied.

2. Bailey Place #2 [9GW578]

Like the previous site, this house is situated on an agriculturally terraced ridge overgrown with small pines. It was constructed on well-built, mortared brick piers identical to those at the previous site. The brick piers are of two sizes, the smaller being porch supports. One stone pier is located within the interior of the structure. The base of the collapsed chimney is largely intact and exhibits irregular courses of rough-cut and square-cut granite. No brick was seen to be associated with the fireplace, which seemed to be lined with vertical slabs of rough-cut granite. A tin roof covered the house and the frame was constructed with wires nails, dating it to the twentieth century. An unlined, 5-foot-diameter well dug into clay subsoil was located near the house. Rock associated with it suggests that it was enclosed by a shed. A possible privy hole is located east of the house. The house itself was approximately 30 × 40 feet and had a full length front porch.

Like the previous site, this house appears to have been constructed around the turn of the century, with modifications made in the 1930s or 1940s. The house was still standing in 1955, and the trash around the house dated mostly to this period.

3: Braswell Tenant House [9GW583]

The chimney standing at this site is well-built of rough-cut and quarried stone. A collapsed well was also found near the house. The house is located at the intersection of two old roads, and based on historic maps appears to have been constructed in the early twentieth century. The property was purchased in 1909 by John W. Braswell, whose homeplace is just down the road. It may have been constructed by or for one of his tenants. There were two such houses on his property in 1929. One of the residents of the house may have been "Cater" Brown.

4. Abe Smith House and Historic Road [9GW582]

This house is located near a historic property line, so it is unclear who the past owners of the property were. Assuming the front of the house faced downslope and overlooked the lands associated with the dwelling, the house is probably located on the Abe Smith lands, as indicated on an 1890 map of the Hugh Lowe lands to the east. Abe Smith is not listed in the 1890 tax digest of Gwinnett County, nor was he found in the 1880 or 1900 census, but an 1890 deed for the adjacent Hugh Lowe property notes that Smith was "colored." A number of members of the African-American Smith family owned land in the vicinity, and the Smith family is closely associated with the Shady Grove community. However, no further information could be located on Abe Smith. J. W. and A. M. Wilson acquired the land around 1900 based on other deeds, although no deed for this particular tract was found. The Wilsons held it until the 1930s when they fell on financial difficulties and it

was acquired for timberland. A house appears in this location on an 1894 map and a 1926 plat, but not on a 1935 plat of the property, or any subsequent maps.

This house site overlooks an unnamed branch of the Alcovy River and likely had a view of the river when the land was cleared for agriculture. The house pad appears to have been cut into the hillside. It had two collapsed chimneys constructed of rough-cut and uncut granite. The base of the north chimney is still intact, but rubble from the fallen south chimney obscures its base. No well was found, but a tin water bucket was found on the slope below the house. A bottle or jar base of amethyst glass found at the site dates to between 1880 and 1914. To the south of the site is the remnant of the old mill road that crossed the Alcovy River a short distance to the south in the nineteenth and early twentieth centuries. The “old road” is shown on a 1935 plat of this property, so it likely was no longer in use at that time. The deep ruts in the road indicate the heavy use by wagons and horses that caused severe downslope erosion.

5. Southside House #1 [9GW581]

This house site overlooks the Alcovy River near a road that crossed the Mill Road, which crossed the river to the north and led to Hugh Lowe’s Mill on Cedar Creek. The road is now rutted and overgrown. A collapsed fieldstone chimney, several fieldstone piers, and an unlined well dug into clay subsoil were all that remained of the house when the land was acquired for the park. Based on the distribution of piers and the chimney ruins, the house was no more than 20 by 30 feet. Artifacts from the site, including two fragments of an ironstone plate with raised flower design, a piece of lamp glass, colorless bottle glass sherds, and fragments of three medicine bottles, suggest a late nineteenth- to early twentieth-century date.

The site is on land attributed to Abe Smith in 1890 and purchased by J. W. and A. M. Wilson around the turn of the century. The Smiths were a black family closely identified with the Shady Grove community. Clark Smith was an early landowner in the area near the Alcovy River according to longtime residents of the area. This house appears on an 1894 map, but not on the 1935 plat of the property. The old road is shown in 1935, at which time it was apparently no longer in use, and remnants of the road can be seen to the southeast. A small clearing and a possible structure are visible in this location on an 1939 aerial photograph, but the surrounding lands appear to be overgrown, so the house was likely abandoned by that time.

6. Southside House #2 [9GW576]

Situated on a saddle of the ridge that was once accessed by a dirt road leading back to the Monroe Road to the southwest, all that remains of this house site is a segment of the old road, a collapsed chimney, some fieldstone piers, and a well. The fireplace features a lining of unmortared brick. The few artifacts found at the site did not provide reliable dates, but the bricks and pattern of construction suggest a late nineteenth to early twentieth century occupation.

Like the two previous sites, this one is on land attributed to Abe Smith in 1890 and purchased by J. W. and A. M. Wilson around the turn of the century. A number of other members of the Smith family owned land in the Shady Grove community. No structure appears in this location on any of the historic maps or plats consulted. A structure is visible in this location on a 1939 aerial photograph surrounded by woods. Apparently it was no longer used for agriculture. It may have been abandoned, or used by loggers or hunters.

Harbins-Alcove River Park Site Master Plan

Appendix D: Meeting Minutes

Harbins/Alcovy River Park: Kick-Off Public Meeting

Held on October 28, 2004 at &:00 p.m. at Harbins Elementary School

Public attendance estimated at 170 people.

In attendance from Gwinnett County Dept. of Community Services:

Phil Hoskins (PH)

Grant Guess (GG)

Rex Schuder (RS)

Eric Horne

Police Lt. Branch

In attendance from CERULEA, Inc:

John Gnoffo, ASLA (JG)

Kim Reid

In attendance from TRC:

Larissa Thomas

Jim D'Angelo (JA)

Meeting called to order at 7:10 p.m.

Introductions by Grant Guess (hereinafter GG)

GG:

1,795 acres were purchased in 2001. Purpose of the meeting is to talk about open space and what the public desires. Options include trails of all types, playgrounds, etc.

Over the years there has been lots of planning for parks including county-wide telephone surveys and public meetings to discuss needs with the Citizen's Steering Committee. This effort resulted in the Comprehensive Plan.

Tonight, fill out the Community Interest Forms to indicate your desires. Also fill in the application to be selected for the Steering Committee. You must be able to commit to a two-day walk of the site and a 1-2 day tour of similar park amenities to be held on weekends. Then there will be a series of at least six evening meetings and you will be expected to communicate with the group you are representing.

John Gnoffo (hereinafter JG) presented the Site Inventory & Analysis including the following graphics: Hydrology Diagram, Natural Feature Highlights, Circulation Diagram, Soils Data, Vegetation Analysis, Historical/Archaeological Resources, and Slope Analysis.

Under hydrology, he observed that there are a few nice little waterfalls and clear perennial streams. The site includes wetland areas typical of the piedmont, with flood plain wetlands, stream beds, and isolated groundwater springs.

Under vegetation, he observed that the woods are not particularly old – much of the site is transitional vegetation – but there are a few patches of old woods which may have been spared from agricultural production or pasturing in order to be selectively harvested.

There are rock outcrops which provide unique habitat and should be preserved.

Jim D'Angelo of TRC presented the historic and archaeological findings. They located a couple of cemeteries and building or home sites dating from the late 1800's to the early 1900's, but no later than the 1950's. Unfortunately, a court house fire in 1871 destroyed any predating records. Acquired records indicate that Hugh Lowe acquired a large parcel in 1860. He built a grist mill. A remaining concrete dam is too small for a head race. There are also references to blacksmithing, a sawmill, and a gin house, perhaps a cotton gin.

JG:

With regards to site access, New Hope Road is currently high speed with a sharp curve. There is no road access to the portion of the site south of the Alcovy River, although there evidence of off-road vehicles entering at the southwest boundary with Walton County.

Large areas of the site, indicated with green hatching on the Soils Analysis, have soils that should be suitable for septic systems.

GG:

Currently, no hunting or 4-wheel drive vehicles will be permitted on the site.

Rex Schuder (hereinafter RS) commented that African-American farmers were known to have done well in the Harbins area.

RS requested that everyone fill in the Community Interest Forms and fill out a request to be on the Steering Committee if interested and able to commit to the meetings. The Steering Committee Master Planning process was described as follows:

- Walk Site: will require at least two days over one or two weekends.
- Park Tour: will require 1 Saturday to tour existing Gwinnett County parks to become familiar with park amenities including their relation to the land and their impacts.
- Evening Steering Committee Meetings:
 - 1) Discuss program for this park including review of surveys completed tonight. Committee will rank by priority the programs to be included in the Plan.
 - 2) Discuss the 3 alternative concept plans developed by CERULEA which will include the programs decided upon at the previous meeting. Input from the Committee will be used to generate a composite Preliminary Master Plan.
 - 3) Refine the Preliminary Master Plan to arrive at the Final Master Plan. An additional meeting may be necessary with an interim plan before consensus is reached.
 - 4) Cost Estimate. After the desired plan is agreed upon, costs to develop each component will be presented and prioritization of construction of program elements will be discussed and decided upon in light of the currently available capital improvement funds.
- Recreation Authority Meeting. The Master Plan will be presented to the RA for approval. Steering Committee members are encouraged to attend.
- County Commissioners' Meeting. The Master Plan will be presented for official adoption by the Commissioners. Steering Committee members are encouraged to attend.

The Steering Committee will begin meeting early in 2005.

GG:

We would now like to take any questions or comments.

{Questions will be noted with a "?" and comments will be indicated with a ">".}

To a question about the mill, it was noted that it is actually located off site in Walton County.

? Is there enough room for a museum?

GG Yes, there's enough room, but doubts that it would happen here. Any artifacts could go to the Heritage Museum. Interpretive signage could be used in the manner of an outdoor museum.

A man identifying himself as a resident of Fulton County interested in mountain biking asked all mountain bikers to stand. Approximately 25-30 stood up. They requested non-paved biking trails.

A woman requesting equestrian trails asking all horseback riders to stand. About 18 people stood up.

> Trails could be shared.

A member of the Georgia ATV Riders Association asked ATV riders to stand. About 21 people stood up. He commented that this is a family activity. Their Association could assist in the maintenance of the trails. They encourage riding on legal trails only, staying out of rivers, and riding with helmets and safety equipment.

? What development is occurring around the Park?

GG: Most of the surrounding land is already subdivided.

? What can be done to keep cars from cutting through the Park on the roads?

GG: If a new road is already on the project list with the Department of Transportation, then it will eventually be built, but if not, then Parks and Recreation does not have the ability to build new roads or get them built by DOT.

> Former DOT Coordinator: Not aware of any proposed road improvements.

? At what point will the Superfund site be addressed?

GG: An EPA designated Superfund site on park property was not disclosed in the Phase I Environmental Study conducted before the land was purchased.

A man from the audience offered: There was paint buried on the site and perhaps elsewhere, but it has already been cleaned up.

A man interested in deer hunting in the park asked hunters to stand. About 20-24 people stood up. Written comments in support of deer hunting were available. It was proposed that hunts be limited to a few nights in season. The park would be otherwise closed. Hunting would be limited to archery only. The hunting management plan could be similar to that used by the Clayton County Water Authority and the Georgia State Parks Department and Wildlife Management Divisions.

? Could there be equestrian access via greenspace corridors?

Answer: The County is looking at linking to Tribble Mill Park. Power line access is up to each individual property owner. The Steering Committee can make recommendations.

> Chip Seaver: The County is trying to buy my property for the proposed connection.

GG: There is a proposed connection up the Alcovy River.

? Is the southern portion of the Park to be reserved for passive recreation putting the active programs in the northern section?

Answer: There's a lot of rock and we can't put ballfields there.

? When will the Park be open?

GG: The Steering Committee will begin meeting in January and it will take at least 4 months to devise and adopt a Master Plan. Then a design firm will be selected to create the construction documents. Construction can take a year. Some part should be open by mid-2007.

? Can builders contribute to park buildings?

GG: We wouldn't turn down money, but we don't actively solicit funds.

? Will grant money be accepted for the construction of equestrian trails?

GG: Yes.

? How many people will be on the Steering Committee?

GG: The largest has been 32, but that's a bit unwieldy. The Committee will include neighbors, special interests, etc.

> Bike trails are needed now and can't wait until 2007. For the park as a whole, we have a cooperative spirit, but trails need to be separate for specific uses.

? Is a new school planned at the intersection of Luke Edwards and New Hope Roads?

GG: We don't know.

? Are there plans for the part of the park on the west side of New Hope Road?

GG: No, not at this time. There are approximately 50 acres north of the creek.

Meeting was adjourned at 8:45 p.m. Forms were collected.

Note: Several people identified themselves before commenting or asking questions. Their names were believed to be as follows: Christopher Puggle, Tommy Hunter, Keith Hansard, Jan Sweeney, and Chip Seaver.

**HARBINS ALCOVY RIVER PARK SITE MASTER PLAN
STEERING COMMITTEE MEETING MINUTES
Scheduling**

Date: February 3, 2005

In attendance:

Bill Bennett	Chuck Rinaldo
Bill Crowder	Sean Shively
Paul Fekete	Kim Shupenia
Cathy Funk	Evelyn Sims
Marta Garland	Mike Smith
Susie Geyer	Sharon Smith
David Green	Suzanne Solis
Craig Hall	Jan Sweeney
Sharon Hendrix	Tom Vail
Jeff Jacenty	Ginny VanOostrom
Jimmy Orr	Clint Wauters
Jessie Parker	Senita Wooten
Pilar Quintero	

Charlotte Nash, Gwinnett County Recreation Authority

Phil Hoskins, Gwinnett County Department of Community Services (GCDCS)
Grant Guess, GCDCS
Rex Schuder, GCDCS
Eric Horne, GCDCS
David Clark, GCDCS
Mark Patterson, GCPR
John Gnoffo, CERULEA
Kim Reid, CERULEA
Jeff Holland, TRC Garrow

Meeting called to order at 7:00 p.m.

Rex Schuder introduced what will happen during the Saturday site walk. The site visit can only be done in good weather after a couple of dry days. Steering Committee members will meet at a designated spot. The morning will consist of a 3 mile walk to look at natural features of the site. Bring lunch and a quart of water in a back pack. A 4-wheel drive vehicle will bring back pack lunches to a designated spot. After lunch, the Committee will hike another 2-3 miles. Members will be going to view areas where there is deciduous woodland with hardwoods. The route taken will go past old home sites and an old roadbed. After eating lunch, the Committee will consider how people are feeling – a longer hike may be decided upon if folks are feeling well enough. This longer route goes past an older cemetery. There are no bathrooms so be prepared to go behind a tree.

Introductions:

Everyone introduced themselves.

Phil Hoskins expressed appreciation to all of the Steering Committee members who graciously volunteered their time to participate in this process.

Handouts:

Base map including topography and natural features,
Conservation Easement legislation.

Scheduling of Meetings:

Three Saturdays followed by four evening meetings are needed. The first Saturday will be an all day tour of existing parks. Weather is not critical for the Bus Tour of existing parks, although if there are severe thunderstorms or ice and snow predicted, the park tour meeting will be postponed. Otherwise, dress for the weather! This meeting will be to look at existing passive use facilities to develop a sense of what is involved in each item and to establish a vocabulary.

The second Saturday will be a tour of the site – dry weather is essential because even a 4-wheel drive truck cannot get through the deep mud in certain areas. It is important that every member makes their best effort to attend these site visits in order to understand the various amenities and the assets and drawbacks of the Harbins Park site. Members who cannot attend a Saturday tour can arrange for a weekday meeting with Rex.

Evening meetings will be held at GJAC – only three may be needed, but four are scheduled just in case a hybrid plan is needed.

By show of hands, who can go on Saturday, 2/12 – 19 of 24 can.

- On 2/19 - 3 cannot
- On 2/26 - everyone can go
- On 3/5 – 6 can't
- On 3/12 – 5 can't
- On 3/19 – everybody can go

Mark your calendars for the following Saturdays:

Feb. 19 – bus tour of parks – meet at 8:30 a.m. in Tribble Mill Park (exact location provided later)

Feb. 26 – Site Walk – meet in Tribble Mill Park

March 19 – Alternative date for Site Walk in case of inclement weather on 2/26

A Master Plan is a blend of site amenities and programming elements. During the site walk over lunch, Committee members will provide input on desired facilities stating priorities to the consultant. John Gnoffo will draw up three concepts to be presented at the first evening meeting.

Tuesday, April 12 – everyone is available. Meeting at 7:00 p.m. at Gwinnett County Justice and Administration Building (GJAC). Three different Concept Plans will be presented and discussed. At

the end of this meeting there should be some consensus, enough to develop a Hybrid Plan. Grant Guess to preside.

Tuesday, May 3 – 7:00 p.m. at GJAC. Refine Preliminary Master Plan and discuss costs of various elements.

May 17 – Meet at 7:00 p.m. at the *Rhodes-Jordan Community Center*. Refine Master Plan and cost estimate. During this meeting, elements will be prioritized. A list will be developed that indicates what should ideally be built first through to the last. Using the available budget, a list will be developed to determine what gets built in Phase I depending on funds available. By the end of this meeting, a majority vote to accept the Master Plan is needed. The Steering Committee recommendation will be sent to the Recreation Authority for adoption. The Recreation Authority meets at 3:00 p.m. on the second Thursday of each month. Committee members will be notified and are welcome to attend.

June 14 – 7:00 p.m. at GJAC: Extra meeting date if needed.

Note: Refer to meeting announcements for exact times and locations in case a change is necessary.

After the Recreation Authority vote, the Master Plan will advance to the Gwinnett County Commission to be officially adopted. This will happen as time allows, depending on other issues before the Commission. Steering Committee members will be notified and are welcome to attend.

Conservation Easements:

County-wide, nine different easements were filed. A line on the map surrounds the included acreage. These easements were established because the voters in Gwinnett County indicated their desire for conservation areas and green space. The State of Georgia's Greenspace Program included guidelines define what can and cannot be considered permanently protected green space. Golf courses, ballfields, and the like are not allowed. These permanently protected areas are to be accessible by the public. Exhibit B lists the types of facilities allowed in passive parks that are permanently protected with conservation easements. The Committee will be able to prioritize what gets selected. Other restrictions are included on page 3. However, there are exceptions like a house for a law officer or park caretaker or a concession stand. Any use or activity which yields risk of contribution to continuing erosion is prohibited. Even trails need to be handled carefully. The County has reserved rights: a sewer could go through and other utilities if deemed necessary

Meeting adjourned at 8:10

**Harbins/Alcovy River Park Site Master Plan
Citizen Steering Committee Meeting Minutes**

Purpose: Tour of County Parks
Date: Saturday, February 19, 2005; 8:30 a.m.–5:30 p.m.
Location: Various selected parks

Attendees: Harbins/Alcovy River Park Site Steering Committee

Bill Bennett	Pilar Quintero
Bill Crowder	Chuck Rinaldo
Paul Fekete	Sean Shively
Cathy Funk	Kim Shupenia
Marta Garland	Evelyn Sims
Susie Geyer	Sharon Smith
David Green	Eric Spencer
Craig Hall	Mark Stayt
Sharon Hendrix	Jan Sweeney
Jeff Jacenty	Tom Vail
Margaret Nguyen	Ginny VanOostrom
Jessie Parker	Senita Wooten

Absent: Jan Mitchell, Donna Sheldon, Mike Smith, Suzanne Solis, Peter Stanger, and Clint Wauters

Rex Schuder, Gwinnett County DCS: hereinafter “RS”
John Gnoffo, CERULEA, Inc.: hereinafter “JG”

I. Gwinnett County Parks Tour

Committee members signed in prior to leaving Tribble Mill Park by bus. RS confirmed we can't do BMX biking as that is not on the allowable passive parks facilities list. However, BMX may be possible in the active recreation park acreage – not a subject of this master plan. JG noted it is hard to provide state-of-art skateparks as the sport is rapidly evolving with new standards for “tricks” established by “x-game” proponents.

RS also noted that in terms of Harbin's approximately 600-acres outside of the conservation easement, much was left out to provide plenty of flexibility for active recreation elements given shallow depth to bedrock, and to allow for both primary septic field areas and reserve (future replacement) septic field areas. Remaining undisturbed acreage on the balance could ultimately become subject in the future to the same conservation easement overlay.

Tribble Mill Park

- Observed a paved multipurpose trail (with elevated boardwalks and short bridge segments) that encircles the lake;
- Observed a lighted, very ADA-Accessible children's playground. JG discussed costs (\$200K) and how more extensive rubber surfacing than used here would greatly increase the cost;
- Observed County-Provided Light Systems. Such systems can be lit for just a few hours a day, rather than dusk-to-dawn per power company standards.
- Observed a turf-parking area (aggregate based), used for occasional parking overflow but also preferred by casual park users for unstructured recreation (not formal game fields!) RS noted based on usage that they could have provided 2x turf-parking and 1/2x paved parking at the festival field area;
- Observed standard park restroom building size and materials as well as a small picnic shelter with tables;
- Discussed that Tribble has much more road infrastructure than more recently planned open space parks and that as a result there is much more traffic noise and pedestrian/vehicular road conflicts – our current approach is to minimize park roads/drives to the perimeter parking areas.
- JG comment- no shade trees near picnic/play/parking lots – shade trees now mandated for parking, allow \$ (maybe \$40K) for this at Harbins.

Bethesda Park

- Observed intense park/parking area use associated with soccer;
- RS noted Little Mulberry park parking already at capacity – need to provide overflow turf parking.
- Walked 1.5 mile 12'-wide asphalt multi-purpose trail loop, distance markers, parts adjacent to 100-year floodplain of Sweetwater Creek;
- Group agreed a paved trail regularly inundated by floodwaters was not desireable;
- Observed major drainage culverts, also typical sheetflow pattern over asphalt surface.
- Discussed methods used to preserve trees close to the trail edge – RS noted not all designers are so careful to preserve trees so close to the edge.
- Observed need to block short-cutting at trail switchbacks.
- RS commented that a test of a successful trail is perceived safety by women who now regularly use the trail during weekday daylight hours;
- RS commented that dirt trails may receive more illicit behaviors as they get less use and appear more remote from scrutiny.
- Observed large tree trunks from trail clearing left in contact with ground to enhance habitat (tops were chipped and spread in place).

Five Forks-Ronald Reagan Park

- Toured 25-acre passive community park chock full of passive features including K-6 children's play area, basketball, skatepark, teen play area, pond, turf meadow, dogpark, and senior citizen area (bocce and gametables).

- Observed separation of both restrooms and basketball from K-6 play area.
- RS discussed improvements needed to dog park area – greater surface area, better drainage, black vinyl clad fencing, watering area at low end of site with seating for adults adjacent.
- JG comment on prefab kit shelters verses more costly custom shelters – contrast this when we visit Little Mulberry.
- Observed neighborhood trail link under construction. RS noted neighborhood links are generally added when neighborhood asks for them.

McDaniel Farm Park

- Observed a small pervious asphalt parking lot with kiosk, restroom, bus parking, rustic signage, county-provided lighting and shade tree plantings.
- Observed a custom mid-size pavilion.
- Observed a large, tall timber boardwalk crossing a steep ravine.
- Walked the asphalt multipurpose trail to the floodplain, noting pre-engineered bridge placed over the stream. Baby strollers evident today, making use of the asphalt trail deep into the park, in spite of hilly terrain. Strollers and dirt trails not compatible. JG noted maximum slopes of about 10% were noted on the asphalt trail – to go steeper is to invite slippery conditions (wet leaves, etc).
- Observed lower number of park visitors relative to other parks visited today. RS commented that a play area on the Hwy 120 end of the park would help attract more users to the park – but like Tribble Mill, that was not included in the original master plan.

Little Mulberry Park

- Observed custom rustic picnic shelter, kiosk, and restroom, signage, lighting, etc.
- Noted a gently sloped trail loop available for less vigorous park trail seekers (5% max. slope).
- Walked the entire woodland trail loop. JG explained the drainage concept of stone steps, dips, culverts, and gutters to protect erodible aggregates and keep aggregate surfaces slope below 8-10% slopes. Observed how parks maintenance staff, in order to increase 4-wheeler service access had degraded the stepped portions of the trail. JG observed where interim aggregate fill slopes placed by parks staff were doomed to washout failure as they were too steep. JG noted where parks 4-wheelers damaged the rootzones of many large beech trees and the largest/oldest specimen oak tree. Bypass 4-wheeler trails now in place will become eroded ruts if used with any regularity. JG also noted that the 4-wheeler access enhancements would inspire use of the walking trail by cyclists (bikes are now excluded). Regrettably, the process of internal design review leading to construction did not receive genuine participation by all interested parties. Especially, maintenance staff's access requirements were not efficiently communicated. JG suggests development of an internal review form that must be signed and noted by parks review staff prior to park construction.

- JG noted that county prison inmate crews have removed critical screening vegetation from the maintenance area (opening an undesirable view), parking lot island (inviting shortcutting over steep terrain and impacting tree rootzones), and around the pond (destroying wildlife habitat, encouraging pedestrian access and subsequent bank erosion). JG suggests that items to be visually separated can not rely on planted or “protected” bands of existing vegetation – great horizontal separation is now advised.

**Harbins/Alcovy River Park Site Master Plan
Citizen Steering Committee Meeting Minutes**

Purpose: Tour of Harbins/Alcovy River Park Site
Date: Saturday, February 26, 2005; 8:30 a.m.–5:30 p.m.
Location: Met at Tribble Mill Park for transport to Harbins Park Site

Attendees: Harbins/Alcovy River Park Site Steering Committee

Bill Bennett	Pilar Quintero
Bill Crowder	Chuck Rinaldo
Paul Fekete	Sean Shively
Cathy Funk	Kim Shupenia
Marta Garland	Evelyn Sims
Susie Geyer	Sharon Smith
David Green	Suzanne Solis
Craig Hall	Eric Spencer
Sharon Hendrix	Peter Stangel
Jeff Jacenty	Mark Stayt
Margaret Nguyen	Tom Vail
Jessie Parker	Clint Wauters
	Senita Wooten

Absent: Jan Mitchell, Donna Sheldon, Mike Smith, Jan Sweeney, and Ginny VanOostrom

Charlotte Nash, Gwinnett County Recreation Authority
Gwinnett County DCS:

Phil Hoskins	Rex Schuder (“RS”)
Grant Guess	Eric Horne
Mark Patterson	David Clark
Marcie Diaz	Rick Diaz
Brian Sterner	

John Gnoffo, CERULEA, Inc.: hereinafter “JG”

Jeff Holland, TRC Garrow: hereinafter “JH”

- I. The group entered the park site via the Georgia Power ROW over an adjacent private land parcel. All noted the trash dumping and general poor condition of the roadbed at the south end of Luther Wages Road. The general discussion during the walk to the park included a comparison of the different stages of field succession (ecological), with representative areas of pasture, young pine woodland, mature pine woodland, and finally, areas transitioning to deciduous woodland.
- II. The group traversed the top of the rock outcrop above Cedar Creek, noting the difference between the park site (where eroding earthen trail beds were widely evident) to adjacent privately held land (where the only disturbed area was a

single trail used to access the undeveloped park site). Clearly, there had been a different code of conduct – unregulated - on the park property. JG recounted how enforcement efforts have been stepped up to discourage such motorized access.

III. From the Georgia Power ROW, the group walked along the top of a young pine forested ridge, descending a bare earth trail down to an unnamed tributary of Cedar Creek. Unchecked motorized vehicle activity has stripped a broad swath of hillside bare of vegetation. The sloped trail surface is now deeply rutted and is actively eroding. This erosion of the steeply pitched native soil trail bed was contrasted with a relatively non-eroded trail bed that was benched nearly parallel to the hillside gradient. JG noted that longer trails of modest slope would be proposed akin to the un-eroded benched trail.

IV. Hiking next to the whitewater crossing at Flat rock, RS ferried the group over the water in a county-owned 4-wheel drive vehicle. The group observed the ruins of a former homesite adjacent to the earthen/gravel remnants of the former Luke Edwards roadbed.

V. All were led off of the county-owned parkland to the ruins of the former mill. All agreed it would desirable to preserve and interpret the ruins in a cooperative manner with the adjacent landowner. The group also saw how ATV tracks had destroyed a small portion of the remnant earthen millrace on the park property.

VI. Hiking up the steep terrain above the mill ruins, the group was led past the stone chimney ruins (and open dug well) of the likely mill keeper's residence. Following the trail past deep puddles/water-filled ruts, the group emerged into the opening of the Georgia Power ROW, again observing the intense disturbance caused by the unauthorized vehicular trail users. The eroding trail culminated to the west on the disturbed banks of the Alcovy River, in a flat area of floodplain where deep puddles were obviously repeatedly engaged to test the mettle of the most extreme 4-wheeler users.

VII. Following the Alcovy River Floodplain north, the group emerged at the large mossy/lichen-covered rock outcrop overlooking the river. After breaking for the lunch, all steering committee members received a comprehensive list of potential program elements for the park. The group discussed the components of the list and then voted by show-of-hands for their first priority for inclusion in the park development program. This continued until 10 top priorities were listed in order of preference as follows:

1. Protect and Restore Cultural and Natural Resources, including stabilization of eroding trail beds, protection of delicate vegetation at rock outcrops, and interpretation of historical and natural features;
2. Pedestrian Trail System with natural surfacing;
3. Multi-purpose Paved Trails;
4. Mountain-Biking Trails (separated from equestrian trails where space allows)
5. Equestrian Trails;
6. General Activity Area to include Pavilion(s), Shelter(s); and Playground;
7. Open Meadow (occasional mowing), and some Turf Area (regular mowing/possibly irrigated), provided that mature woods are not removed to provide them;

8. Outdoor Senior's Activity Area to include Horseshoe Pitch, Bocce Court; Shuffelboard, and Gametables;
9. Teen Activity Area to include Teen Swings/Play Apparatus, Basketball & Volleyball (2 each), and Free Skatepark Area; and
10. Dogpark.

RS indicated parking and restroom facilities necessary to support the above would be provided. All agreed parking quantity would be used to establish a typical capacity threshold. Excess parking would occur in turf-on-gravel overflow parking areas.

Illegal activities such as motorized vehicle use and hunting on park property would not be considered as program or design elements. RS noted that hunting was also a management issue more than a design issue.

Following the program discussion, the group followed JG through an exploration of the core mature deciduous forest associated with the steep-walled valley of a small un-named tributary south of the big rock. The group hiked a recent ATV trail which offered a high elevation prospect of the wooded valley. The ATV trail ascends perpendicular to the contour, setting up a maximal erosion scenario in the future as the tread is guaranteed to become a channel for run-off from the treadway. Such trails will be abandoned and efforts are called for to restore such recent damage.

On the south side of the un-named tributary, the group explored the ruins of the dual chimney homesite that oriented toward the Alcovy River. JG noted that assuming the acreage between the home and the river were in crops, that a view to the river would be afforded from this site. In addition, another smaller homesite across the river would have been visible in the distance. The group discussed how interpretive artwork could be created for this location, allowing modern visitors to comprehend the historical landscape.

The group completed the traverse of the deciduous woodland valley, again following a new ATV trail ascending to the ridgeline near the former Luke Edwards Road. The group followed the narrow roadbed back to the intersection of Indian Shoals Road and the present terminus of Luke Edwards. Along the way, all noted the extensive trash and debris dumped along the road.

The tour closed at the Shady Grove Cemetery. Evelyn Sims pointed out the family grave site and other families graves. The school and church building site was also discussed, though no remains of the structure could be found.

**HARBINS ALCOVY RIVER PARK SITE MASTER PLAN
STEERING COMMITTEE MEETING MINUTES**

Alternative Conceptual Plans

Date: Tuesday, April 12, 2005

In attendance:

Steering Committee Members:

Bill Bennett	Chuck Rinaldo
Bill Crowder	Kim Shupenia
Cathy Funk	Evelyn Sims
Marta Garland	Mike Smith
Susie Geyer	Sharon Smith
David Green	Jan Sweeney
Sharon Hendrix	Tom Vail
Jeff Jacenty	Clint Wauters
Margaret Nguyen	Senita Wooten
Jessie Parker	
Pilar Quintero	
Charlotte Nash, Gwinnett County Recreation Authority	

Aaron Boggs, neighbor
Grant Guess, Gwinnett County Department of Community Services (GCDCS)
Rex Schuder, GCDCS
Mark Patterson, GCP (natural and cultural resources interpreter)
John Gnoffo, CERULEA
Kim Reid, CERULEA

Key

- ? indicates a question from a Committee Member
- indicates a comment from a Committee Member

Meeting called to order at 7:10 p.m.

Introduction of Concepts A, B, & C

John Gnoffo (hereinafter JG) provided a brief overview of the site features shown on the analysis boards presented at previous meetings indicating in particular the flood way, which is the area of greatest destruction in the flood plain during heavy rains. Additionally, a 75 foot water quality setback is required on both sides of a stream or river limiting access to certain areas because of the 150 foot swath with no grading or paving. Natural surface trails and boardwalks are allowable in these areas.

JG identified with GPS (a global positioning system) in the field wet and/or flowing water areas not indicated on previous surveys. He also removed steams shown on GIS, but found to be dry after field inspection.

There are areas indicated in green which would be good for a meadow. No hardwood forests would be removed to accomplish this.

On the plans, areas in blue or green hatch have good or adequate soils for installing a septic field. Unless a pump station is built, the restroom should be located here. Note that the area is developing rapidly and sewer may become available.

Areas of cultural interest, rock outcrops, viewpoints, and the best natural features are linked by the foot trails. Mountain bike trails are not sited as the only way to access these points.

Very little of the existing corridors could be used because they are too steep. JG met with two specialty trail building contractors (one of whom was Mike Ritter). Areas which previously had been thought to be inaccessible may not be because of their usage of specialized small grading equipment which most contractors do not have.

The following elements were previously prioritized as indicated:

- 1) Protect and restore cultural and natural resources/features; do no harm, but attempt to interpret them
- 2) Pedestrian trails with natural surfaces (not paved)
- 3) Multi-purpose paved trail system (also needed for maintenance and security access)
- 4) Separate mountain biking trail(s)
- 5) Equestrian trail(s)
- 6) Picnic pavilion and playground
- 7) Infrequently mowed meadow
- 8) Seniors area with a horse shoe pit, bocci court, and shade structures
- 9) Teen area with half court basketball and small skate park
- 10) Dog park

The paved multi-purpose trail will average 12 feet wide (indicated to scale on drawings). This is for all users except the equestrians (equestrians may use the multi-use trail for short stretches like bridge access, parking lot access, etc.). The other trails are also shown to scale on the drawings.

A separate parking lot for equestrians is shown off Indian Shoals Road. This is to provide a quiet place for loading and unloading horses. There are 20 pull through spaces amply sized for vehicle and trailer.

The tentative trail linkages to Palm Creek and Tribble Mill Parks are shown.

The green dotted line through Walton Co. property indicates the temporary construction access (to build the bridge across the Alcovy River) and emergency access.

Rex Schuder (hereinafter RS): When the Committee was walking the site, they came across no one. If the Committee wants to preserve the sense of big woods and isolation, then the number and extent of trails will have to be modest. Greater trail density will impinge upon the feeling of getting away and will also impact wildlife, the preservation of which was indicated as the #1 priority.

JG: For example, the south side of the Alcovy River could be left alone with just a natural foot path.

Discussion

?: Have the linkage easements been purchased?

RS: The Department is actively working on it, but we can't discuss the specifics.

?: Why not leave Harbins undeveloped except for trails since there is infrastructure at other nearby parks?

RS: We can minimize elements, but we need a baseline amount to attract enough day use for safety. Usage yields security. Within county parks, during the day, the multi-purpose trail attracts the most users followed by playgrounds. The greatest security concern is for 9:00 to 5:00 weekdays, so we need seniors and stay-at-home parents with small children or day care centers to come use the park.

Mark Patterson (hereinafter MP): There should also be a large pavilion to serve as a gathering place for school groups. This would be the same size as the one at Tribble Mill Park.

RS: Also, we are working on linkages to other parks, but they may not work out, so Harbins must be planned to be self-contained.

◦ There is not enough picnic space in the pavilions at existing parks. Often, the pavilions are rented.

RS: As a comment, the bigger pavilions can be reserved, but the smaller shelters are first come-first served. At Tribble Mill Park, not enough smaller (non-reserved) shelters were provided.

◦ 20 equestrian parking spaces is not enough.

RS: We recognize that there is pent up demand for equestrian and mountain biking trails some of which comes from neighboring counties. But the development of the park must create a sustainable infrastructure.

JG: There is adequate space adjacent to the equestrian parking area for expansion if deemed desirable in the future.

MP: There is a lot of recreation demand from people who live in other counties. Only 18% of the car tags in the parking lot at Yellow River are Gwinnett tags.

Grant Guess (hereinafter GG): How many parking spaces do the equestrians want?

MP: Area residents are going to ride their horses along the roadside to access the park instead of bringing their horses in trailers.

JG: Concerning equestrian trail length, Plan A is the shortest at 3.7 miles, but it is not a loop, so the equestrian would ride back the same way for a total of 7.4 miles total length. Understand that costs are going to restrain a lot of program elements, that is, it is unlikely that all of the mileage shown for any of the trails will be built in Phase 1.

? Can trail access be created from Luther Wages Road and the power line easement?

Jeff Jacenty: The power line easement would not be deeded to the individuals buying subdivision lots. Alternatively, this land could be deeded to the neighborhood association or to Gwinnett County parks.

JG: Horses can ford the streams, but a multi-purpose trail would require two bridges to access land east and north of Cedar Creek.

Action Item: Grant Guess will investigate and pursue this as quickly as possible so that this access can be reflected (or not) on the preliminary master plan to be presented at the next meeting.

- There is concern with locating trails in the flood plain because they become unusable in wet weather.
? What does flood plain 2025 mean?

JG: This reflects the expected high point of the 100-year event rain storm for the year 2025 after the area becomes fully developed. Flood levels are expected to rise with continued development.

MP: During any rain, trails would be closed to prevent damage. During wet weather periods even upland trails may be closed to prevent excess tread wear.

? Pedestrian trails were given the highest priority, but there are hardly any in Plans B and C. Why?

RS: Unless you tell us differently, we consider equestrian trails to be pedestrian trails.

We assume that 8 miles of equestrian trails provides a nice riding experience, enough to make it worthwhile to bring your horse to the park. Pedestrians on equestrian trails have a somewhat stressed experience due to the bumpiness of the surface and avoiding the manure.

? Is there enough money to do all of these things?

RS: We won't be able to fund half of the planned elements at the start. Associations may be able to help build the trails as planned through this process, but volunteers can't lay asphalt or build restrooms. A few people were chosen for the Steering Committee because of their experience with pulling together volunteers.

? What keeps people from trespassing off the trails?

RS: Policing.

RS: The survey folks completed at the first meeting indicated that by a large margin people are interested in hiking/walking trails and in the paved multi-purpose trail. Citizens want a nice place to walk; not nearly as many people own mountain bikes or horses.

Charlotte Nash: I've been riding horses here for years, but the balance of the funds to finish building the park will come from the SPLOST which requires another public vote. It is important to find the right balance to serve the public interest.

Consensus

JG: Tonight's objective is essentially to pick a mix of trails and identify areas accessed by each.

RS: Looking at the paved trail, a small loop is needed coming out of the parking area for seniors and parents with strollers.

Neither Plan B nor C reflects enough natural surface pedestrian trail. There should be at least 6 to 8 miles of dedicated natural surface pedestrian trail.

What is the minimum length of equestrian trail needed to make it worthwhile?

- 8-10 miles, minimum.
- We would prefer 12 miles
- That could be 6 miles out and back.
- We would prefer a loop on high ground out of the flood plain.

JG: For mountain biking, what is better: a longer trail or a trail with more extreme experiences?

Bill Bennett: There are people who want both. Some prefer a longer ride over more gentle terrain and some prefer a more extreme experience. There should be a minimum 8 mile loop.

RS: These three trails taken together along with the required multi-purpose trail for maintenance then would be more miles of trail than are shown in Plan C. Do we agree that this is too much?

Vote: By show of hands, majority voted yes, too many miles of trails would be required for everyone to get all they want.

RS: John will produce a hybrid plan which shows the following:

dedicated natural surface pedestrian: 6 mile loop

equestrian: 8 mile loop

mountain bike: 8 mile loop

Parks Department will meet to work on reducing the amount of multi-purpose trail.

? Does the trail design take into consideration the usability of trails after rain?

RS: There are multiple loops so that if one part is too wet, then you can go another way.

◦ Concerns about there being too much trail was expressed.

RS: There is an option of alternate use: The same trail is dedicated to a particular use on specific days. For example, the trail would be dedicated to mountain biking one day and hiking the next. The schedule would be posted and park staff and police would enforce the division of usage.

MP: The public won't support this – park users would have a hard time adjusting to considering a schedule. Also, there are not enough park police/rangers to enforce this.

? Is perimeter fencing installed?

RS: No, Gwinnett County does not fence their parks.

RS: Parking lot locations need to be decided.

JG: The location indicated on Plans A and B will save a lot of money in off-site road improvements.

Vote: By show of hands, for the parking lot location in Plans A & B or in Plan C.

Majority for A & B; no votes for location in Plan C.

RS: The highest single recreational demand in Gwinnett County right now is a basketball half court for teenage boys. This is part of a teen area which needs to be in a highly visible location, usually adjacent to parking. Plan A shows this area in the island between the asphalt parking and the overflow grass parking; Plan B shows the teen area adjacent to all parking, not in the middle.

Vote: Teen area in Plan A: 2 votes

Teen area in Plan B: majority

RS: The dog park, approximately 4.5 acres, D, in all plans is located in an area that is currently very young pines, which was recently pasture. It is located away from the playground because some children are scared of dogs and most people are there to walk their dogs, so the distance is not an issue.

? What is the historical site indicated nearest to D?

JG: It's the debris left over from a demolished house.

Vote: By majority of hands, location of the dog park is acceptable.

RS: How much meadow is desired? Not all meadow areas need to be mown under the same regime. Plan A shows 10-15 acres; Plan B shows 30-40 acres. As a comparison, all of Five Forks Park is 20 acres; at Little Mulberry Park, both meadows are 120 acres, but they were pasture when the land was purchased.

- If a horse trail is run through a meadow, the horses will naturally speed up, perhaps to a gallop. Some riders may like this, but inexperienced riders may not be able to control their horses in this area where people will be playing and picnicking.

Vote: Majority want some meadow.

Small (less than 15 acres): 0 votes

Medium, like Plan B only smaller (15-20 acres): 11 votes

Large (25 acres or more): 8 votes

RS: On Plan A near the bend in the Alcovy River, there is some light green hatching to indicate areas for opening a view to the river from the historical home sites. This can be done as a vista, where a relatively narrow band of all trees is cleared and mown grass is installed or a more historically accurate wider area of selective clearing is done with about 50/50 trees and grassland.

JG: We can also implement an interpretative area of successional vegetation.

RS: Interpretative signage can be done much more inexpensively by building a wooden “birdhouse” like box with a door. Inside is a laminated sheet telling about the history and vegetation. This is in lieu of expensive, ceramic signs which have been done for past projects. TRC Garrow, the company which did the historical investigation, is already under contract to write the narrative for interpreting the history of the site.

Vote: Majority of hands for continued investigation of options for enhancing historic landscapes and interpretation.

Meeting adjourned at 9:45 p.m.

Next meeting is Tuesday, May 3, 7:00 p.m., in the same location at GJAC. The Preliminary Master Plan will be presented and discussed.

HARBINS ALCOVY RIVER PARK SITE MASTER PLAN Hybrid Program

NATURAL AREA STABILIZATION/REFORESTATION

Delineate on plans areas needing restoration.

Prioritize stabilization areas and degrees of stabilization.

HISTORICAL INTERPRETATION

Continue investigation of options for enhancing historic landscapes and interpretation, including clearing several acres near 2 former home sites to open a view to each across the Alcovy River.

TRAILS

Provide equestrian/pedestrian trail 8-miles loop.

Provide pedestrian trail 6-mile loop.

Provide mountain bike trail 8-mile loop.

The paved multi-purpose trail will average 12-feet wide. This is for all users except the equestrians (equestrians may use the multi-use trail for short stretches like bridge access, parking lot access, etc.).

Parks Department will meet to work on reducing the amount of multi-purpose trail. All shall be natural surface, and place alignment in areas anticipated to be dry and operable most of the time.

Future trail linkages are shown. The first to Palm Creek and Tribble Mill Parks is at northwest park corner on Alcovy River. The second is west of Cedar Creek on Indian Shoals. A third is shown at the northwestern frontage on Luke Edwards. A fourth is tentatively indicated to link to the eastern boundary at the Georgia Power ROW approaching Luther Wages Road.

PICNIC SHELTERS

One larger pavilion is indicated to serve as a gathering place for school groups. This would be the same size as the one at Tribble Mill Park.

Several smaller picnic shelters are indicated, some placed further into the park in association with the meadow, for use on a first-come-first-served basis.

RESTROOM

County Standard – Similar to that at Graves Park with small storage area.

CHILDRENS PLAY AREA

MEADOW

Similar to Plan B only smaller 18-24 acres.

TEEN AREA

Teen Area shall be as indicated in Plan B (not closely surrounded by parking).

DOG PARK

The dog park, approximately 4.5 acres, located near NW frontage of Luke Edwards Road, in an area that is currently very young pines. It is located away from the playground because some children are scared of dogs and most people are willing to walk their dogs.

PARKING/DRIVES

Parking lot location as shown in either of Plans A or B. Location takes advantage of existing intersection geometry to minimize need for decel lane. Keep quantity of spaces in range of 200 paved, 250 grassed-gravel overflow.

A separate parking lot for equestrians is located off Indian Shoals Road. This is to provide a quiet place for loading and unloading horses. There are 20 pull through spaces amply sized for vehicle and trailer. A green dotted line indicates access through Walton Co. property for temporary construction access (to build the bridge across the Alcove River) and emergency vehicles.

MAINTENANCE COMPOUND

Place well back from road, behind the dog park at the north-west frontage of Luke Edwards Road. Provide lift station to pump wastewater to a better septic field location.

SEPTIC FIELDS

Provide septic fields in areas reserved from the good to adequate capability soils per the soil analysis diagram.

BUDGET

Original Phase 1 in SPLOST: \$2,870,000 including AE, Excluding PM

Agenda Item for May – Add \$1,859,000 (includes PM say 6-8%) approx \$1,728,000 less PM (confirm late May)

Total Budget = \$4,598,000

**HARBINS ALCOVY RIVER PARK SITE MASTER PLAN
STEERING COMMITTEE MEETING MINUTES**

Preliminary Master Plan

Date: Tuesday, May 3, 2005

In attendance:

Steering Committee Members:

Bill Bennett	Sean Shively
Marcie Diaz	Kim Shupenia
Marta Garland	Evelyn Sims
Susie Geyer	Sharon Smith
Craig Hall	Eric Spencer
Sharon Hendrix	Jan Sweeney
Margaret Nguyen	Tom Vail
Jessie Parker	Ginny Van Oostrom
Pilar Quintero	Senita Wooten

Aaron Boggs, neighbor
Grant Guess, Gwinnett County Department of Community Services (GCDCS)
Rex Schuder, GCDCS
John Gnoffo, CERULEA
Kim Reid, CERULEA

Key

- ? indicates a question from a Committee Member
- indicates a comment from a Committee Member

Meeting called to order at 7:10 p.m. by Rex Schuder (hereinafter RS).

Introduction of Preliminary Master Plan

John Gnoffo (hereinafter JG) presented how the compromise preliminary master plan was developed.

Vehicular arrival is located at the intersection of Luke Edwards and Indian Shoals Roads. The plan shows 200 paved parking spaces and 260 gravel with grass. The equestrian parking lot is accessed off Indian Shoals Road. The maintenance area is located off Luke Edwards Road in the north west corner of this part of the site, tucked back and sheltered by trees. The teen area is not encircled by parking. The size of the meadow is about 20 acres; about half of the acreage would be irrigated turf. The senior area is shown with shade. The children's area is about the same. The configuration of the dog park was modified to follow the ridge line.

He indicated that the trails had changed the most. The total lengths of each trail system are in line with the consensus quantity from the last meeting. The paved multi-purpose trail did not have a target length, but rather must access appropriate parts of the site for security and maintenance purposes. Trails were

looped as much as possible. Additionally, as much as possible, trails, particularly the equestrian and mountain biking trails, were kept out of soft and wet floodplain terraces.

There is 6.9 mi of walking trail. It comes off the meadow, goes to a nice overlook of the west valley, through holly forest, and down to the boardwalk over the mossy rock outcrop. From there you proceed easterly with two options: take the trail to a high view or take the trail along the Alcovy River, past the ruins of a home site, up into the cove woods and back. The total length of trail north of the river is about 5 miles. The current budget almost certainly will not afford the bridge over the Alcovy River. Remember, the natural surface walking trail is the community's top priority trail category.

The mountain biking trail has three components. The eastern section heads for a wet ford at Cedar Creek. The west loop follows Luke Edwards Road creating the opportunity to hop across the road to access possible future trails developed in the balance of the park acreage. The trail alignment goes adjacent to rock ledges, offering cyclists the option of a technical challenge of vertical rock ledges, if they so choose. Signage will alert riders to the difficulty levels. A third loop lies south of the river – across the bridge. Seven miles of mountain biking trail are sited north of the river.

The equestrian trail system is shown at 8.9 miles. None of these trails are south of the Alcovy River. There was not room to accommodate more trails approaching the river bridge. Additionally, the bridge expense to accommodate horses would be much greater as the bridge would have to be wider and the side rails much higher. As shown, the equestrian trail system routes through less sensitive terrain. In addition, we have provided grade-separated crossings at two critical locations.

JG With regards to the restoration of damaged lands, I will probably have another opportunity to go out and delineate these areas more closely. In this Preliminary Master Plan, I have allowed for 25 acres. Restoration will include rebuilding soil profiles, change drainage flows, and revegetation. The core area grading plan allows for up to 121,000 excess cubic yards of earth excavation to provide for backfill needs in eroded areas.

Discussion

? Why is the horse trail shown ending in the west corner at Luke Edwards Road?

JG A spur is provided for future access to park acreage across the road.

? But the area north of the road is supposed to be for active recreation.

JG There are 700 acres with lots of rock. 700 acres are not all going to be active recreation, thereby leaving plenty of room for more trails.

RS The areas of active recreation will be spotty with ballfields developed in the areas most suitable. Trails can be developed in between. In all likelihood, there will be areas of 10 acres or more which will not be developed for active recreation. At a minimum, we will be looking for corridors to get to other parks. Keep in mind with these park linkages that there are public roads which must be crossed. The north part of the park site is in multiple parcels with several roads passing through.

RS It has come to my attention that mountain bikers, in particular, may like to have a changing station to put on their special apparel.

JG What is the footprint?

Grant Guess (hereinafter GG) We'll get you that.

RS Recalling the high point where the 4-wheeler tracks came together, a small meadow could be added there to provide views to the distance and a place to stop along the mountain bike trail.

► I think this plan is showing too much total trail. Additionally, the mountain biking trail needs to be all together, not in two sections, and the eastern section is not a loop.

? What is the multi-purpose trail type south of river?

RS It's a construction road to get the bridge built. This may be left as gravel only for the maintenance staff and the police to access south of the river. It is not meant to create a trail for specific usage.

? So that trail mileage is not included in the trail lengths?

JG Yes, it is because it has to be built and must be considered in the budget.

? Did Grant find out about Luther Wages access via the power line easement?

GG The power line does intersect the road. This route is shown on County corridor plans that we're working on. The re-zoning approval requires that the subdivision plan include provision for a trail corridor easement in compliance with the County's Open Space and Greenways Plan.

JG We haven't handed out the Cost Estimate yet, but painful decisions about what's going to get built in Phase I have to be made.

? The mountain bike trail could be built by volunteers.

RS When we look at the budget, look at what must get built by a contractor.

? What about getting the trails staked?

GG Yes, we'll have to set aside some money for staking, and remember when selecting trail sections, there are bridges and volunteers can't build bridges.

RS Think about for the next meeting. If there's just one loop and you can only build half, then you've got two dead end partial trails. That is why the Preliminary Plan has several separate loops. If you can only afford a portion, at least the portion you get makes more sense from a user's perspective. Some subsidiary loops have bridges and some don't. Volunteers will be better equipped to work on the lengths without bridges. In that sense Phase one should include trail lengths which require bridges that can be built by the contractor.

? Is Mr. Ritter [a trail construction professional] going to be working with the County?

JG He alone can't handle the size of this project, but he could be brought in as a sub-contractor to the general contractor.

RS Also, in any specifications we need to add 'or equal;' there are other trail building specialists out there.

? With all these types of natural trails, people could get lost.

JG We have a significant budget for trail markings.

GG Would it be good to have a map at each intersection?

► For signage, use horseshoes to mark the equestrian trails.

RS Worldwide, trail marks are color coded.

? Where is the place where we drove across the water?

JG On the east side of the Plan, where the multi-purpose trail and mountain bike trail are shown crossing the creek that runs north/south. Without a bridge in Phase I, this can be crossed by mountain bikers.

GG Can a plaza or something be provided as a stopping place there?

JG There really isn't room exactly there, but perhaps at the old road and ruined bridge abutments.

GG If I ride my street bike down there and I want to walk to the old mill ruins, won't I need to park my bike?

JG There's not going to be space there even the size of this room. Because of the 75' buffer, we may only be able to pave the trail with gravel.

RS Aren't we getting boardwalk decks on the Chattahoochee?

GG This is a drinking water creek and the 75' buffer is inviolable.

RS We are having our law department come up with some policies. Folks in the community have family in the cemetery. The County needs a strategy to accommodate future graves. This may require more archaeological research. It's against the law to disinter someone while trying to bury someone in a new grave.

? As a mountain biker, I wasn't happy at first, but as we're talking I'm getting to understand it more. Especially, once we can get south of the river. At Tribble Mill, we [SORBA?] are trying to get bikers off the paved trail because of the high speeds. Is it possible to get to the mountain biking trail south of the river without using the multi-purpose trail?

RS There are going to be road bikes on the multi-purpose trail, and they are an intended user of the paved trail even if mountain bikers do not want to use it. The multi-purpose trail is where families bring their bikes and parents ride with their children.

JG Can we loop mountain bikes back to west with a section of mountain bike trail benched in with the hiking trail? Or can we make a narrow loop of the eastern section of trail?

? Can we make a smaller sub-loop with the eastern section of mountain bike trail?

JG Yes.

► We can just eliminate the mountain bike trail south of the river because we won't want to use the multipurpose paved trail to get there.

JG Are we still shooting for no more total trail mileage than what is shown on the Plan. I'm afraid that volunteers are going to ask to have more mileage if they build it themselves.

► Agreement from the Committee to keep the mileage caps in the program (no dissent).

JG Do any of the walkers feel slighted?

► But walkers can walk the equestrian trail

? Is the mountain biking trail too close to the multipurpose trail on the east side running parallel to Cedar Creek? We don't want to encourage crossing over between the trails.

JG There's 200 feet which is plenty.

RS We haven't talked about the potential location of a police residence. Gwinnett County has for other County parks retained or brought in a house for a police office to live in so that a police presence is highly visible in the park.

JG We had talked about putting it on the north side of the road.

Consensus

► Eliminate all mountain biking trail south of river and instead create loops of eastern trail section, generally as marked on plan by JG and Committee members during the meeting.
VOTE on this change: 14 in favor.

? Are we cutting into the habitat too much?

JG As long as we leave the core valley with no additional impact, the habitat most likely will not be affected.

? Does this looping of the mountain biking trail create more horse trail crossings by bikers?

JG Yes, at least 1 additional.

JG The area where the mountain biking trail is located south of the river can be used to expand the natural surface walking trail. Additionally, possibly, a lighter duty, less expensive pedestrian bridge can now be substituted to cross the Alcovy River.

VOTE on adding a changing station (additional building) for mountain bikers and joggers? 0 in favor.

VOTE for adding a meadow (at most, 2 acres) at the high point of the mountain biking trail to open up a view to the distance: majority in favor by show of hands.

GG Unless the multipurpose trail gets there, there's no way to mow it.

RS There are two road cuts into it. Ultimately could be accessed from the power line easement.

► The meadow isn't very desirable because the mountain bikers are not going to stop to enjoy the view.

Due to the more complex nature of this issue, the Committee generally was not in support of adding this meadow at that location.

RS Unless there are any additional changes someone would like to see made to this Preliminary Master Plan, this plan with the mountain biking trail modification will now become the Final Master Plan.

Does anyone have any further comments or objections?

There were no additional comments.

Cost Estimate

The Master Plan Cost Estimate, dated May 3, 2005, was handed out.

GG We have about \$4–4.2 million for Phase I from the 2001 SPLOST (Special Local Option Sales Tax).

JG made the following comments about specific line items:

- Premium, higher cost site stabilization is shown. This requires moving top soil to replace that which has eroded, adding stabilizing fabric, and re-vegetation with bare-root seedlings.
- A maintenance building and its associated line items may or may not be required in Phase I.
- Site lighting is shown done inexpensively using County provided lights that will not burn from dusk to dawn.
- Core parking: It is possible to only build half the parking if we're only building half the park. The rustic timber barricades keep unauthorized vehicles off the park trails and meadows, but you could opt to not include these in Phase I.

- The cost of the building a sidewalk along the road has not been included, but may be required. We have shown the multipurpose trail close to the road which may be allowed as a substitute for a sidewalk directly adjacent to the road.

JG For the Steering Committee, your job now is to prioritize the order in which sections of the various trails will get built. The representatives of the mountain biking association should be prepared to propose how much and which parts the association could build.

JG For the next meeting, we will be sure to make clear which line items must be included in Phase I. For instance, the core area must have a restroom building and playground for security purposes as discussed at a previous meeting. Staff may require pavilion, but smaller picnic shelters are not necessary in Phase I. Irrigation of the meadow perhaps is not necessary. Fencing, critical at the dog park, has become very expensive because of the cost of steel.

RS Let's discuss aesthetics. At Little Mulberry Park, the pavilion areas have stone and heavy timber that harkens back to the historic architecture of the national parks. This is more expensive than poured concrete like we do at ball field complexes. Do we want the nicer details typical of open space parks? We are not trying to duplicate what was done at Little Mulberry Park or at McDaniel Farm Park, each of which is unique, but rather to allocate the funds and indicate the desire to spend the money needed to give the architects the latitude to design something within the historic and cultural context of the site. The architecture would be unique to this site, but it costs a little more.

► But if construction costs are expensive and we're not able to build even half the park in Phase I, we should consider cheaper alternatives like stamped concrete instead of stone.

? What about McDaniel?

JG McDaniel looks simpler, particularly the picnic pavilion, but it was very complex to build and the contractor indicated that he underbid the job.

GG The middle ground was taken at Tribble Mill Park.

► We need something that looks nice with some splash for people to want to fund future phases.

JG We have twice the budget for Phase I Harbins than was had for Phase I Little Mulberry. In order to build as much as possible with the given budget, but leave open the opportunity for premium building materials, one of things we can do is bid as alternates the materials upgrades. I can add a column to the Cost Estimate to give a range. However, we're spending a lot of time talking about architectural details when this is relatively small (about 5%) percentage of the whole budget. The cost of earthwork has doubled in the last couple of years because of fuel costs and other factors. The cost of the façade of the building is relatively minor.

? What happens if prices go sky high beyond what we decide at the next meeting?

RS We bid using lots of alternates. If there's a good bidding environment, then we get lots more, but if prices are high, we have to make cuts. Staff decides based on the priorities decided by the committee.

RS The 'have to haves' will be clear at the next meeting so that we won't spend time debating them. We may not need all of the parking but we must have some parking and the required deceleration lanes. However, the grading is usually done all at once – it's very inefficient and costly to do this in phases. Primary utility infrastructure such as water and electricity must be provided in the first phase. It is very likely that staff will demand that some features must be added in phase one. Likely candidates are some parking, the restroom building, the playground and some picnic pavilion. We will have to see if parks maintenance needs the maintenance compound built in the first phase. The committee will determine by

vote if the dog park and teen areas are to be included in phase one, as well as the extent of phase one trail construction.

JG Take a marker and on the plan highlight the loops that you want, keeping in mind which sections require bridges.

? What schedule is anticipated for opening?

GG To the next meeting, I'll bring a schedule, but it'll be two years.

Meeting adjourned at 9:25

The next meeting of the Harbins/Alcovy River Steering Committee to present the Final Master Plan and to determine construction prioritization will be held on Tuesday, May 17, 2005 **at Rhodes-Jordan Park** at 7:00 p.m.

**HARBINS ALCOVY RIVER PARK SITE MASTER PLAN
STEERING COMMITTEE MEETING MINUTES**

**Master Plan and Cost Estimate
Phase I Prioritization**

Date: Tuesday, May 17, 2005

Location: Rhodes-Jordan Park Community Center

In attendance:

Steering Committee Members:

Bill Bennett

Sean Shively

Marta Garland

Kim Shupenia

Susie Geyer

Evelyn Sims

David Green

Michael Smith

Jeff Jacenty

Eric Spencer

Margaret Nguyen

Jan Sweeney

Pilar Quintero

Ginny VanOostrom

Donna Sheldon

Clint Wauters

Senita Wooten

Aaron Boggs, neighbor

Stephen Konigsberg

Phil Hoskins, Gwinnett County Department of Community Services (GCDCS)

Grant Guess, GCDCS

Rex Schuder, GCDCS

Mark Patterson, GCDCS

John Gnoffo, CERULEA

Kim Reid, CERULEA

Key

? indicates a question from a Committee Member

► indicates a comment from a Committee Member

Meeting called to order at 7:15 p.m. by Rex Schuder (hereinafter RS).

Introduction of the Master Plan

John Gnoffo (hereinafter JG) presented the revisions to mountain biking trail as discussed at the end of the previous meeting and the addition of a residence for a park police officer on the north side of Luke Edwards Road. The mountain biking trail has been moved north of the Alcovy River in its entirety. The equestrian trail moved a little for safety reasons. Additionally, the Master Plan graphic shows the approximate 1 acre boundaries of the cemetery.

Walking trails now total 8.3 mi. due to added trail length south of the river. For the lengths of the other specific use trails, refer to the Trail Key on the Master Plan graphic.

? Is the mileage indicated how long one would go traveling all the way along a trail route?

JG: The mileage indicated is footage of treadway. The loops you chose to travel would determine your total mileage.

? Is there any way for people to cut across from the asphalt trail to the other trails – they seem awfully close together?

JG: The asphalt trail looks close to the bike trail, but this trail is not shown to scale. It had to be highlighted for it to show on the graphic, but in actuality there are at least 50 ft.

? Is the cemetery surrounded by woods so that it is secluded? Yes.

? Will there be an access road to the cemetery?

RS: Yes, there will be some sort of vehicular access for internment, not open to the public except by special arrangement. There will always be pedestrian access.

? What about security?

RS: There are 6 to 8 park police officers to who cover all of the Gwinnett County parks in 3 shifts. This park will get the same security as all of the other parks in the system.

? Are the mountain biking trails single track?

JG: Yes, they are expected to be. They can be a minimum 12 in. width of trail surfacing within a wider clearing. Something like Ritter's method would have to be used to build it.

VOTE to adopt Master Plan as presented: 14 members yea, 1 visitor yea. Motion passes.

Phase I Plan and Cost Estimate

RS: At the end of the last meeting John was asked to come up with a reasonable Phase I plan as a departure point.

JG: Starting with trails, in Phase I, there is no bridge over the Alcovy River, nor are there boardwalks or bridges east of Cedar Creek. I show the high viewpoint walking trail option. The narrower pedestrian-only boardwalk is included with the wider boardwalk bid as an alternate. Note that Phase I does include boardwalk over rock and sensitive areas. Half of the multi-purpose asphalt trail is needed to access the walking trail.

For the equestrian trail, a shortened loop is shown on the west side – ultimately, this loop would be lengthened to access the connection to other parks. All of the equestrian trail is located in high dry areas, but within a variety of habitats.

The mountain biking trail has a wet crossing at Cedar Creek. This could ultimately be retired when a bridge is built in a later phase or could be left as an option.

? The equestrian trail is not shown connecting to the power line easement on the east side.

JG: This after Phase I would require wet crossing.

Grant Guess (hereinafter GG): These access issues cannot be resolved at this time. Wording can be added in the Master Plan narrative that requires that Plan not foreclose on the option for horse access on the east side of the park.

RS: I was arguing for providing the 1-mile asphalt loop around the meadow. John argued for accessing the rock outcrop at Cedar Creek because it is an unusual feature and shows off a nice part of the property. John prevailed.

JG: Here are some of the things not being done in Phase I. The parking is being cut in half, half of the paved spaces, half of the grassed spaces. The entire parking area will be graded, but half will not be paved. There will be no Seniors or Teen Activity Areas or Dog Park; no small picnic shelters; and only 4 acres of the meadow will be installed.

RS: Since we are not providing a full maintenance compound (which saved \$231,000 and allowed the inclusion of much of the equestrian and mountain biking trail), we need to cut down on the amount of maintenance intensive venues, like mown meadow.

Additionally, this cost estimate does not include any volunteer building. Kim Jones went to SORBA and Georgia Horse Riders Assoc. for participation in this master planning process. It will be two years before volunteer build can be started after the general contractor is finished and off site.

GG: We need to run a water line to the maintenance area.

? Is there water at the equestrian parking?

RS: This is not currently shown; it needs to be added.

JG: Do we need to provide a 6'x6' compost bin for horse manure like at Little Mulberry? This is a \$4,000 line item (*corrected - \$2500*). Can we get by with just an area to create a pile?

JG: Continuing, in Phase I, 2/3 of playground will be built and a mid-size pavilion.

Charlotte Nash (hereinafter CN): How are we protecting the cemetery?

RS: Phil (Hoskins) has asked the legal department to come up with a policy. We need to be particularly cautious to not disinter anyone. Archaeologists were contracted this morning to locate all of the graves and to delineate any available space. I will go to the community to gather up names and find families with an interest in the cemetery. Then Mike will be in a position to proceed.

? Is any physical protection proposed?

JG: We are providing a large rustic gate to block vehicular access.

RS: This is a long term commitment. We need to encourage the formation of a Shady Grove Association and look into how to best convey the history of African-Americans in Gwinnett County. We could link fundraising to the Gwinnett Parks Foundation tax free status. Evelyn Sims of the committee is a member of this community.

CN: What is the funding needed for Rex's daydream of nice fencing?

JG: Vinyl-clad, galvanized 4' chain-link would be about \$8,000 (for about 400 feet). Wrought iron would be three times that.

RS: We must allow pedestrian access so that families can come. We cannot fence the area in a way that prohibits all access.

CN I have a funding source. Add it to the budget.

? Does the 1-acre site include just the cemetery or also the school and/or the church?

RS: The acre is just the burial area and some surrounding woods.

RS: We need to restrict vehicular access. Demarcation shows that this area has not been abandoned and should reduce any vandalism.

CN: We need to do this as an appropriate way of showing the appropriate amount of respect.

RS: This is an important part of the historical fabric of this area. Signage of distinct sites can refer back to these areas. Sidewalk which is required along the road right-of-way will carry people to a trail spur, then it is about 400 ft. to the cemetery.

? Elijah Wynn house organization seems very involved. Could they be contacted?

RS: Charlotte seems to have an idea.

CN: There is still some money in an historic preservation fund.

RS: Another use for historic preservation moneys could be to put interpretive signage back into Phase I.

GG: Concerning the mill that's off the property, can the Committee make some sort of recommendation about pursuing access?

RS: A portion of the mill elements are in Gwinnett County but the 3 mill walls are in Walton County on 18 acres owned by Prestwick Development. \$85,000 for the entire site is the amount assessed for tax purposes. Perhaps Gwinnett County commissioners could be persuaded to purchase land in Walton Co.? Prestwick has no intention or desire to disturb that area.

MOTION: We, the Harbins/Alcovy River Park Citizen Steering Committee request Gwinnett County to pursue access to the complete mill ruins for the purposes of preservation and citizen access.

VOTE: by show of hands, a majority are in favor.

? Why is such a small portion of the mountain biking trail put in towards maintenance area?

JG: This is a very nice area with ledges.

? Will the bikers really use this piece of trail or can we defer building of this little piece and put the money towards something else?

RS This is just the beginning that gets them started with their volunteer build in an area that doesn't interfere with any other park users. The same goes with the equestrians.

? Does Phase I include the cost of staking out the volunteer build trail sections?

JG: We would liquidate some of the trail cost from the contractor after an association is confirmed.

RS: Or, during design or construction, funds would be reassigned. Plastic pipes can be pounded into the ground by someone already laying out trails.

? We are providing trail sections in case the bike community comes forward, we're providing trail sections in case the horse riders come forward. Could we provide other more general use items instead of these trail sections?

► We have chopped what were the top 2 priorities, walking and asphalt trails in half, but we've kept 75% of special use trails. There's nothing for teens, seniors, or the dog park in Phase I.

RS: The extent of the walking trail is very reasonable for Phase I. We've met the needs for walking. There is about 2 miles of asphalt trail one way going towards Cedar Creek (*John was mistaken when he said 3.5 miles*). This is an open space park and it is one of the few that we can do special use trails.

? How much horse trail is there in Tribble Mill Park?

RS: There are 3-5 miles, but these were not planned and mountain bikers are using the same trails.

► Speaking as a horse rider and a Gwinnett tax payer, Rex is right – there is no place to ride. Little Mulberry is not built yet.

► But if you have a dog, you have to go to Ronald Reagan or Athens. The seniors would have to go to Rhodes-Jordan.

JG: We can't even begin to build a dog park because of the \$250,000 price tag.

RS: Additionally, a maintenance facility would have to be added back in.

JG: From the public surveys completed at the public meeting, a teen area and a senior area were a low priority.

- However, the special interest groups were highly represented as opposed to the general public.
- I see this plan as opening the park up. These other elements are in the Master Plan and will be built eventually.
- Remember that we're going to be requesting more SPLOST funds and we need to consider the reaction of the public.

JG: This is a very similar mix to Little Mulberry which has had very positive reaction.

RS: If we didn't have playground, pavilion, walking trail, then I would be concerned about public reaction, but we have all of these.

JG: There are picnic tables and benches for people to enjoy the property.

- I am very pleased to see this much trail. Generally, there are no sidewalks along the roads so we need a place to ride bikes and walk.

RS: The draft Phase I plan that had to include the maintenance compound had very little trail. Maintenance staff has conceded the compound. We need more staff at Tribble Mill.

Donna Shelton, state rep for the area, introduced herself. Thanks to everyone on the Committee for all the work and she's sure the public will enjoy the new park.

? Is a pay phone necessary? Yes, for calls to 911.

VOTE: Are the Phase I plan funding recommendations that John has presented acceptable?
14 in favor; the motion passes.

Conclusion

Rex Schuder handed out a letter inviting each member of the Committee to Recreation Authority and Board of Commissioners meetings to support Master Plan as approved and adopted during this meeting. Commissioners are interested in seeing community and steering committee support.

RS: Any other comments? No

RS: What do think of the process and is there anything you would do to change it?

- I think the process would be greatly improved if the documents could be mailed out to be had a week in advance because there's a lot of information to process during a two hour meeting.
- John did an excellent job on the quality of the information presented.
- Field trips were good. I appreciated seeing how people use the parks.
- It would be helpful to understand the consequences of issues voted on – particularly at the beginning before going through the whole process. For example, the vote on the rock about priorities was confusing at the time.
- It is disappointing that the number of Committee members participating has dwindled. Is there any way to get more people to be involved?

RS: This commonly happens. We've actually had very good participation for this park.

Meeting adjourned at 8:40 p.m. with the thanks of the Parks & Recreation Department being extended to the members of the Steering Committee.

Harbins-Alcove River Park Site Master Plan

Appendix E: Conservation Easement

BK41222 PG.0015 FILED AND RECORDED Return to Law Dep't.
CLERK, SUPERIOR COURT
GWINNETT COUNTY, GA

STATE OF GEORGIA

COUNTY OF GWINNETT

05 JAN -6 PM 2:00

TOM LAWLER, CLERK

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 **1183.7498** acres located in Gwinnett County, Georgia and known as **Harbins/Alcovy River 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

003287

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.

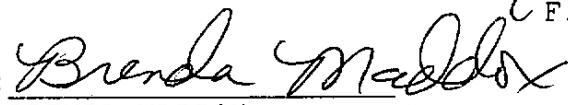
IN WITNESS WHEREOF, the parties have caused these presents to be executed under seal as of the date first-above written.

GWINNETT COUNTY, GEORGIA

By:

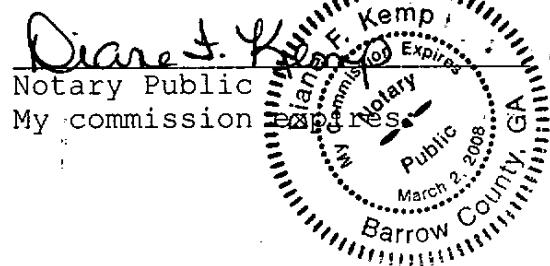
F. WAYNE HILL, CHAIRMAN

ATTEST:


BRENDA MADDOX
COUNTY CLERK

Signed, sealed and delivered
in the presence of:

Unofficial Witness



(Signatures continued on following page)

BK41222PG0024

GWINNETT
AUTHORITY

COUNTY

RECREATION

By: Phylecia Wilson
PHYLECIA WILSON, CHAIRPERSON

ATTEST: Samuel Reiter, SECRETARY

Signed, sealed and delivered
in the presence of:

Unofficial Witness
Eleanor H. Garbarini
Notary Public
My commission expires: 12-10-07

APPROVED AS TO FORM:

Sue Ann
SR. ASSISTANT COUNTY ATTORNEY

LEGAL DESCRIPTION

All that tract or parcel of land lying and being in land lots 253, 259, 260, 284, 285, 286, 291, 292 & 318 of the 5th District, Gwinnett County, Georgia and being more particularly described as follows:

Beginning at the land lot corner common to Land Lots 260, 261, 284 and 285; thence from said **POINT OF BEGINNING**, as thus established, along the land lot line dividing land lots 261 and 284, N29°43'45"W, a distance of 886.29 feet; thence N37°19'07"E, a distance of 1265.13 feet to a point on the westerly right of way of Luke Edwards Road (having an 80 foot right of way); thence along said right of way, following a counterclockwise curve with an arc distance of 104.33 feet, having a radius of 813.27 feet, subtended by a chord bearing and distance of S44°50'20"E 104.25 feet; thence S48°30'50"E, a distance of 57.27 feet; thence following a counterclockwise curve with an arc distance of 317.22 feet, having a radius of 3616.46 feet, subtended by a chord bearing and distance of S51°01'37"E, 317.12 feet; thence following a counterclockwise curve with an arc distance of 269.74 feet, having a radius of 1076.63 feet, subtended by a chord bearing and distance of S60°43'02"E, 269.03 feet; thence S67°53'40"E, a distance of 226.57 feet; thence following a clockwise curve with an arc distance of 214.91 feet, having a radius of 1782.20 feet, subtended by a chord bearing and distance of S64°26'24"E, 214.78 feet; thence S60°59'07"E a distance of 146.84 feet; thence following a counterclockwise curve with an arc distance of 165.62 feet, having a radius of 1119.91 feet, subtended by a chord bearing and distance of S65°13'20"E, 165.47 feet; thence S69°27'32"E, a distance of 42.28 feet; thence following a clockwise curve with an arc distance of 236.13 feet, having a radius of 692.86 feet, subtended by a chord bearing and distance of S59°41'44"E, 234.98 feet; thence S49°55'57"E, a distance of 106.21 feet; thence following a clockwise curve with an arc distance of 16.83 feet, having a radius of 108.22 feet, subtended by a chord bearing and distance of S45°28'41"E, 16.81 feet to a point on the southerly right of way of Indian Shoals Road; thence N58°50'48"E, a distance of 128.86 feet; thence following a clockwise curve with an arc distance of 214.21 feet, having a radius of 5699.58 feet, subtended by a chord bearing and distance of N59°55'24"E, 214.19 feet; thence N61°00'00"E, a distance of 395.03 feet; thence following a clockwise curve with an arc distance of 300.13 feet, having a radius of 5699.58 feet, subtended by a chord bearing and distance of N62°30'31"E, 300.10 feet; thence N64°01'01"E, a distance of 1003.94 feet; thence following a counterclockwise curve with an arc distance of 258.73 feet, having a radius of 1462.39 feet, subtended by a chord bearing and distance of N58°56'55"E, 258.39 feet; thence N53°52'49"E, a distance of 134.58 feet; thence S36°07'11"E, a distance of 25.00 feet; thence N53°53'17"E, a distance of 28.25 feet to a point in the centerline of Cedar Creek and Old Run; thence along said centerline the following courses and distances, S17°23'27"E, a distance of 82.51 feet; thence S18°12'49"W, a distance of 48.15 feet; thence S23°03'57"E, a distance of 29.09 feet; thence S19°52'58"E, a distance of 77.55 feet; thence S72°59'19"E, a distance of 73.10 feet; thence S48°16'42"E, a distance of 103.90 feet; thence S35°46'20"E, a distance of 155.44 feet; thence S26°36'58"E, a distance of 122.18 feet; thence S13°21'49"E, a distance of 51.57 feet; thence S65°40'00"E, a distance of 117.35 feet; thence S26°13'45"E, a distance of 186.15 feet; thence S05°17'41"E, a distance of 106.10 feet; thence S57°25'24"E, a distance of 32.03 feet; thence N61°02'58"E, a distance of 35.42 feet; thence S66°21'34"E, a distance of 25.47 feet; thence S44°23'17"E, a distance of 65.66 feet; thence S62°51'18"E, a distance of 47.63 feet; thence S31°28'55"E, a distance of 107.90 feet; thence S00°26'16"W, a distance of 39.00 feet; thence S43°15'57"E, a distance of 48.09 feet; thence

S21°46'57"E, a distance of 33.01 feet; thence S29°52'39"E, a distance of 62.11 feet; thence S02°42'00"W, a distance of 78.00 feet; thence S45°58'18"E, a distance of 33.81 feet; thence N75°33'02"E, a distance of 41.44 feet; thence N82°38'16"E, a distance of 23.78 feet; thence S02°58'08"W, a distance of 25.86 feet; thence S37°35'53"W, a distance of 27.61 feet; thence S47°16'45"E, a distance of 51.62 feet; thence S35°04'10"E, a distance of 73.01 feet; thence S29°47'23"E, a distance of 51.50 feet; thence S23°01'24"E, a distance of 38.78 feet; thence S44°57'59"E, a distance of 41.40 feet; thence S31°17'14"E, a distance of 77.09 feet; thence S47°36'45"E, a distance of 36.10 feet; thence S32°12'57"E, a distance of 101.87 feet; thence N72°27'05"E, a distance of 32.48 feet; thence S56°51'35"E, a distance of 43.73 feet; thence S23°51'34"E, a distance of 66.88 feet; thence S56°41'50"E, a distance of 55.31 feet; thence S32°14'48"E, a distance of 157.01 feet; thence S38°44'49"E, a distance of 68.60 feet; thence S70°54'38"E, a distance of 52.23 feet; thence N64°37'09"E, a distance of 24.78 feet; thence S48°10'58"E, a distance of 34.62 feet; thence S05°02'23"W, a distance of 21.97 feet; thence S52°53'54"W, a distance of 20.44 feet; thence S04°34'05"W, a distance of 58.23 feet; thence S86°07'48"E, a distance of 29.85 feet; thence N56°10'27"E, a distance of 80.16 feet; thence S02°06'52"W, a distance of 101.63 feet; thence S75°23'17"E, a distance of 41.26 feet; thence S39°37'43"E, a distance of 80.26 feet; thence S69°17'01"E, a distance of 123.20 feet; thence S36°00'57"E, a distance of 43.53 feet; thence S36°22'19"W, a distance of 34.69 feet; thence S37°04'07"E, a distance of 70.79 feet; thence N58°32'29"E, a distance of 21.76 feet; thence N03°12'53"W, a distance of 31.55 feet; thence N72°38'15"E, a distance of 53.46 feet; thence S29°09'52"E, a distance of 35.25 feet; thence S28°04'34"W, a distance of 30.24 feet; thence S21°05'50"E, a distance of 18.02 feet; thence S79°30'16"E, a distance of 12.71 feet; thence S31°37'46"E, a distance of 58.75 feet; thence S07°39'26"E, a distance of 30.17 feet; thence S66°13'22"E, a distance of 65.02 feet; thence S46°29'10"E, a distance of 24.54 feet; thence S10°02'34"W, a distance of 11.55 feet; thence S40°51'07"E, a distance of 67.75 feet; thence S13°22'17"E, a distance of 182.56 feet; thence N89°30'56"E, a distance of 62.13 feet; thence S62°19'18"E, a distance of 52.08 feet; thence S08°02'09"W, a distance of 12.58 feet; thence S38°57'43"W, a distance of 45.90 feet; thence S20°41'03"W, a distance of 67.73 feet; thence S15°55'14"E, a distance of 71.62 feet; thence S35°01'52"E, a distance of 81.07 feet; thence N17°36'59"E, a distance of 60.01 feet; thence N13°06'31"E, a distance of 42.49 feet; thence N33°31'06"W, a distance of 24.99 feet; thence N00°55'30"W, a distance of 41.29 feet; thence N07°48'59"W, a distance of 47.97 feet; thence N40°11'00"E, a distance of 28.05 feet; thence N23°18'28"W, a distance of 19.70 feet; thence N29°27'36"W, a distance of 44.40 feet; thence N12°52'40"W, a distance of 53.70 feet; thence N27°34'29"E, a distance of 90.89 feet; thence N56°59'44"E, a distance of 50.72 feet; thence N03°27'37"W, a distance of 48.71 feet; thence N79°23'59"E, a distance of 92.65 feet; thence N23°01'32"E, a distance of 62.55 feet; thence N30°53'00"E, a distance of 172.03 feet; thence S85°20'37"E, a distance of 55.43 feet; thence N62°53'05"E, a distance of 55.38 feet; thence N21°48'16"E, a distance of 36.90 feet; thence N71°05'14"E, a distance of 183.57 feet; thence S75°29'07"E, a distance of 45.88 feet; thence N60°35'51"E, a distance of 19.51 feet; thence N01°49'23"E, a distance of 31.44 feet; thence N89°19'59"E, a distance of 43.81 feet; thence N50°31'12"E, a distance of 61.58 feet; thence N29°53'17"E, a distance of 46.14 feet; thence N62°42'22"E, a distance of 128.48 feet; thence N02°51'07"E, a distance of 73.76 feet; thence N44°24'48"E, a distance of 189.92 feet; thence N70°32'43"E, a distance of 52.06 feet; thence N18°00'51"E, a distance of 40.43 feet; thence N52°39'19"E, a distance of 130.63 feet; thence N01°52'31"W, a distance of 25.29 feet; thence N55°47'22"E, a distance of 11.75 feet; thence leaving said centerline, S29°51'48"E, a distance of

1246.61 feet; thence N60°24'04"E, a distance of 1316.65 feet; thence N60°23'29"E, a distance of 651.01 feet; thence N60°19'35"E, a distance of 238.11 feet; thence S46°07'52"W, a distance of 4393.94 feet; thence S12°33'33"E, a distance of 3.70 feet; thence S89°16'02"E, a distance of 123.37 feet; thence S47°48'18"W, a distance of 1403.31 feet; thence N29°47'52"W, a distance of 50.31 feet; thence S46°07'52"W, a distance of 1649.08 feet to a point in the centerline of Alcovy River; thence along said centerline, N69°29'37"W, a distance of 28.77 feet; thence N82°24'05"W, a distance of 50.05 feet; thence S89°24'05"W, a distance of 19.16 feet; thence leaving said centerline, S58°07'59"W, a distance of 3316.67 feet; thence N10°37'16"W, a distance of 585.38 feet to a point in the centerline of a ditch; thence along said centerline, N82°43'21"W, a distance of 30.65 feet; thence S80°26'03"W, a distance of 59.47 feet; thence S88°25'47"W, a distance of 44.33 feet; thence S50°14'29"W, a distance of 79.41 feet; thence S31°50'16"W, a distance of 30.35 feet; thence S16°03'27"W, a distance of 40.20 feet; thence S50°41'06"W, a distance of 64.53 feet; thence S38°17'10"W, a distance of 61.27 feet; thence S67°56'46"W, a distance of 71.27 feet; thence S35°48'22"W, a distance of 21.91 feet; thence S68°22'18"W, a distance of 9.25 feet; thence leaving said centerline, N30°35'13"W, a distance of 1324.44 feet; thence N03°25'23"E, a distance of 957.37 feet to a point in the centerline of Alcovy River; thence along said centerline the following courses and distances; S58°13'27"W, a distance of 43.02 feet; thence S70°51'58"W, a distance of 67.58 feet; thence S82°29'39"W, a distance of 60.73 feet; thence N73°27'45"W, a distance of 48.71 feet; thence N81°09'10"W, a distance of 44.24 feet; thence N65°47'55"W, a distance of 54.30 feet; thence N77°59'29"W, a distance of 170.32 feet; thence S83°33'10"W, a distance of 38.42 feet; thence N78°51'58"W, a distance of 101.65 feet; thence N83°10'54"W, a distance of 138.52 feet; thence N72°35'29"W, a distance of 98.27 feet; thence N56°27'02"W, a distance of 120.76 feet; thence N38°23'38"W, a distance of 89.73 feet; thence N55°42'58"W, a distance of 56.70 feet; thence N36°02'39"W, a distance of 43.97 feet; thence N15°22'04"E, a distance of 45.46 feet; thence N45°00'26"E, a distance of 38.99 feet; thence N18°09'42"E, a distance of 29.54 feet; thence N32°04'04"W, a distance of 43.24 feet; thence N56°35'45"W, a distance of 43.33 feet; thence N73°50'00"W, a distance of 102.48 feet; thence N50°32'41"W, a distance of 84.52 feet; thence N48°35'37"W, a distance of 138.91 feet; thence N47°44'04"W, a distance of 159.40 feet; thence N76°32'46"W, a distance of 143.73 feet; thence S60°43'01"W, a distance of 104.03 feet; thence S81°29'45"W, a distance of 136.98 feet; thence N82°50'17"W, a distance of 209.90 feet; thence N83°52'35"W, a distance of 102.00 feet; thence N72°33'40"W, a distance of 144.93 feet; thence N41°26'56"W, a distance of 128.42 feet; thence N48°26'02"W, a distance of 146.90 feet; thence N33°47'24"W, a distance of 110.11 feet; thence N58°30'23"W, a distance of 129.70 feet; thence N06°28'53"W, a distance of 75.77 feet; thence N13°45'12"W, a distance of 87.70 feet; thence N60°37'42"W, a distance of 46.99 feet; thence N82°12'08"W, a distance of 25.64 feet; thence S71°31'30"W, a distance of 119.47 feet; thence S85°33'01"W, a distance of 43.59 feet; thence N28°35'03"W, a distance of 69.43 feet; thence N17°35'44"W, a distance of 112.41 feet; thence N59°04'59"W, a distance of 118.80 feet; thence N27°39'31"W, a distance of 87.70 feet; thence N45°49'06"W, a distance of 110.09 feet; thence N57°08'57"W, a distance of 68.05 feet; thence N40°06'23"W, a distance of 46.24 feet; thence N53°31'35"W, a distance of 96.45 feet; thence N33°27'58"W, a distance of 103.45 feet; thence N57°26'13"W, a distance of 139.48 feet; thence S73°17'36"W, a distance of 72.56 feet; thence N55°58'54"W, a distance of 40.83 feet; thence N35°50'30"W, a distance of 114.82 feet; thence N42°26'58"W, a distance of 65.71 feet; thence N55°58'55"W, a distance of 85.81 feet; thence N71°55'45"W, a distance of 77.58 feet; thence N33°36'45"W, a distance of 138.69 feet; thence N20°25'30"W, a distance of 69.01 feet; thence N30°42'34"W, a distance of 34.87 feet; thence N42°08'37"W, a distance of 15.38 feet; thence

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leaving said centerline, N61°42'27"E, a distance of 873.93 feet; thence N60°29'21"E, a distance of 537.84 feet; thence N60°28'00"E, a distance of 1629.08 feet; thence N60°04'05" E, a distance of 670.03 feet to the land lot corner common to Land Lots 260, 261, 284 and 285 being THE POINT OF BEGINNING.

The above described property is shown on a Conservation Easement Exhibit, Harbins / Alcovy River Park Site, Drawn for: Gwinnett County Department of Community Services containing 1183.7498 Acres prepared by Hannon, Meeks, and Bagwell, Inc. dated November 15, 2004.

November 16, 2004
Written by jb@hmb

EXHIBIT A
4 of 4

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

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F. Information Kiosks

