

# Duncan Creek Park

## Master Plan

Gwinnett County Department of Community Services -  
Parks and Recreation Division

August 25, 2004



# ***Duncan Creek Park Master Plan***

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## *Executive Summary*

Duncan Creek Park is a 109.66-acre community park designed to serve as a “sister park” to Bogan Park in an effort to provide a wide variety of services to the citizens of northeast Gwinnett County. The “sister park” concept was proposed in the 1996 Gwinnett County Comprehensive Master Plan update so that community services could be offered in a given area, even if properties large enough to accommodate all the desired services were not available in a contiguous tract. The 1996 master plan update noted that community parks should be comprised of at least 150 acres in order to accommodate multiple active recreation facilities. Because neither Bogan Park nor Duncan Creek Park met this size criteria, the two were linked as “sister parks” offering all the facilities of a community park. In the “sister park” concept, active recreation opportunities offered by Duncan Creek Park will complement, not duplicate, services already provided in Bogan Park. Also included in the planning of the Duncan Creek Park site is the designation of a five-acre tract fronting Highway 124 suitable for the development of a future Gwinnett County library branch.

As in the design of all Gwinnett County parks, the citizen steering committee directed the program for development and a design process that ultimately led to the final master plan. Other important factors impacting the park design’s development were the rugged terrain and stream corridors. The eventual master plan incorporated a wide variety of active recreation opportunities on the site’s more developable land, as well as a few passive recreation facilities located in the more sensitive areas of the site.

Active recreation facilities in the final master plan include a prototypical football complex, four-field soccer complex, six-court tennis complex, and teen area with a skateboarding park, basketball courts, in-line hockey rink and sand volleyball courts. For those wishing a passive recreation experience, a network of walking trails (including a 12’-wide, multi-purpose, one-mile loop trail) circuits the park’s developed areas and leads park visitors into the site’s woodland and riparian zones. A large playground with multiple handicapped accessible features integrated into the overall layout is provided, along with a nearby children’s basketball court, rental pavilion and restroom facility. A picnicking area is also provided, including three open-air shelters, horseshoe pits, bocce courts and an open play lawn.

The Duncan Creek Park Master Plan makes smart use of a difficult site, while providing the citizens of this part of Gwinnett County with active recreational opportunities not found nearby in their community.

# Section I: Introduction



## *Introduction*

As noted in the 2004 Gwinnett County Comprehensive Parks and Recreation Master Plan, Gwinnett County, Georgia, is the 31st fastest-growing county in the United States. Its population increased from 352,910 in 1990 to 588,448 in 2000 (an increase of 67%). An outlook to the next ten years anticipates that the population of the section of Gwinnett County in which Duncan Creek Park lies is expected to increase from its current figure of 90,124 to 152,256 (an increase of 69%). Currently citizens of this portion of Gwinnett County rely on existing active recreation facilities designed to serve adjacent communities. The projected population increase will continue to place a strain on such existing active recreational facilities and stresses the need to develop active recreational facilities suited for the needs of the Duncan Creek Park community.

Gwinnett County initially developed a countywide comprehensive recreation master plan in 1986 and subsequently updated it in 1996 and then most recently in 2004. Other recommendations were added as part of the Gwinnett County Parks and Recreation Capital Improvements Plan in 2000 and the Open Space and Greenway Master Plan in 2002. The 1996 comprehensive plan recommended that in order to meet the goal of providing community parks with multiple athletic facilities, such parks should contain a minimum of 150 acres. The plan noted that if available tracts did not offer enough space for the development of all needed athletic facilities, smaller tracts, near to one another in the same community, should be acquired and grouped in clusters of “sister parks” where complementary facilities could be developed to fill the needs of the surrounding community. Duncan Creek Park, at 109.66 acres, was designated to be a “sister park” to Bogan Park, at 83.1 acres in order to provide 192.76 total community park acres for this section of Gwinnett County. Furthermore, the 2004 comprehensive master plan update also suggested that facilities at Duncan Creek Park should complement, not duplicate, the facilities already found in Bogan Park, which include baseball/softball, aquatics and a community center.



# Section II: Site Analysis



# Site Analysis

## Summary

The Duncan Creek Park site is located on Highway 124 (Braselton Highway) in northeast Gwinnett County (see Figure 1). The site is bordered by I-85 to the North, East Rock Quarry Road to the East and the Hamilton Mill at Duncan Creek shopping center to the West.

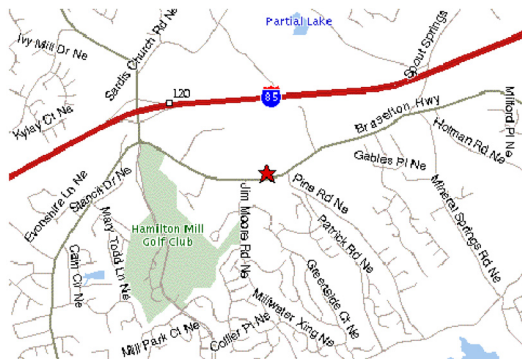


Figure 1

A Gwinnett County Public Safety Training Center divides the total park acreage into approximate 1/3 and 2/3 tracts. Consultations with representatives of the training center have led to an agreement for access easements crossing the center that would join the segregated park parcels. *If the final route of the crossing of the safety training center impacts the police firing range, there is the potential that environmental testing and permitting for the removal of lead debris would be required. During the construction document phase, the amount of testing and permitting required needs to be considered*

*when selecting a route for the crossing point.*

Highway 124 carries a significant amount of traffic and is the most logical location for an entrance. The Georgia Department of Transportation has noted that a traffic signal will be allowed at the Pine Road intersection, which could be utilized as a park ingress/egress signal as well if the signal is included in the first phase of the park development.

Water and power utilities are accessible nearby with major trunk lines running parallel to Highway 124. Sanitary sewer access is available via a current lift station located in the Hamilton Mill at Duncan Creek shopping center. Consultations with the Gwinnett County Department of Public Utilities have led to an agreement that would include the provision of a gravity sewer line from the current lift station to a new lift station located within the park, sized to accommodate both the park and the shopping center. The current lift station would then be converted to allow a new force main running from the park to connect to the current force main in the shopping center. The development of this sewer connection would be included in the first phase of park development.

The site's subsurface and topographic features create a challenging terrain for large athletic facility development. A large, relatively flat area lies between I-85 and Duncan Creek, and other relatively flat hilltops are segregated by large drainage swales.

The site's streams, including Duncan Creek and its smaller unnamed tributary, further divide the site into distinct zones for development. The underlying rock strata are relatively deep, allowing the potential for mass grading required for large facilities. Upland soils are suitable for development of all types, whereas soils located in the riparian zones of the site would allow only light development. As part of the master planning effort, a preliminary flood evaluation was performed that determined that it was possible to cross Duncan Creek and its tributary using standard bridge and culvert practices. It is also possible to cross the safety training center without impacting the floodplain. *A more detailed hydrologic study will be required for the permitting of such crossings during the construction document process.*

The site's vegetation cover consists of mostly a pine/hardwood mixture indicative of cutting and disturbance within the past 50 years. Concentrations of mainly hardwoods can be found along the stream corridors and the easternmost portions of the park. Some more recent disturbances along Highway 124 have allowed the invasion of kudzu and other exotics into more open areas.

Cultural impacts include the almost-constant traffic noise generated by I-85. This disturbance is most noticeable in the areas adjacent to the interstate right-of-way. Existing residential areas adjacent to the southeastern portions of the site have the potential to develop as commercial tracts and will require some buffering for increased privacy and security. Buffering around the training center will also increase security for the training center and safety for park visitors alike.

The following sections provide additional information and graphic representations for the categories of site climate, subsurface conditions, soils, topography, hydrology, environment, vegetation and cultural impacts.

## **Site Constraints and Opportunities Summary**

Overall, the main site constraint is the disconnectivity of the usable portions of the site. The sections best for development are separated by stream corridors, steep topography and the public safety training center. The required connections across these sensitive areas will necessitate special permitting and additional infrastructure costs. Another constraint is the lack of proximity to a gravity sewer line. The only viable solution for sewer access requires an expensive replacement of a lift station and a connection through an existing retail center.

On the other hand, many of the issues that cause constraints also make Duncan Creek Park an especially good location for a community park. The stream corridors offer an opportunity for passive trail development and environmental education alongside the large athletic facilities. The fact that the public safety training center is located within the park ensures a level of constant observation and security that other more remote

parks do not enjoy. Similarly, the inclusion of the library site will offer added security as well. The ability to connect the main park road to a major traffic corridor via a traffic signal will be especially important when large activities take place in the park.

## **Climate**

Gwinnett County has a humid, subtropical climate characterized by long, hot summers (average summer temperature of 77°) and influenced by moist, tropical air from the Gulf of Mexico. Winters are cool and moderate (average winter temperature of 44°), and significant cold spells generally last for only one or two days. Precipitation is heavy throughout the year and results mainly from afternoon thunderstorms. Total annual precipitation is slightly more than 50 inches.

## **Subsurface Conditions**

Geotechnical exploration and seismic refraction surveys were performed on the site by United Consulting Group, Ltd. in 1997 and 1998 when the property was under consideration for the new Hamilton Mill area high school and middle school. Additionally, the site's subsurface conditions were explored by Matrix Engineering Group in 2000 when the initial park planning study was conducted. The subsurface studies utilized multiple boring points across the site, and most were terminated at a depth of 20' without encountering significant bedrock. Similarly, seismic refraction studies determined that soil extended at least to a depth of 20' (and in some cases 25'). The result of these studies is that the mass grading of large facilities should not encounter significant rock and that utility trenching should be relatively easy.

## **Soils**

The underlying soils of the site consist of two main categories, upland loamy soils suitable for development and lowland loams and silts unsuitable for development due to poor strength or frequent flooding. The following Soils Analysis map (see Figure 2) was derived from the USDA and Soil Conservation Service soil survey of Gwinnett County. The Altovista, Chewacla and Congaree soils (noted as AKA, Cfs and Cos and colored blue-green) are the only soils on the site that would be poor for heavy development. The suitability for development of other soils shown is determined more by slope than by bearing capacity.

## **Topography**

The amount of change in elevation from the hilltops to the stream valleys, and their associated deeply cut channels, makes for a rugged terrain that is, for the most part, difficult for the development of large contiguous facilities. The site's highest point rises to an elevation of 1168', and the lowest stream valley falls to an elevation of 1050',



for a difference of 118' across the property. Figure 3 outlines the relatively flat areas and their relationship to the steeper areas of the site. A few areas, along I-85 right-of-way and between Duncan Creek and its tributary, contain large enough, relatively flat areas that allow the development of large athletic facilities. A few other hilltops and ridges also have the potential for smaller developments. Development of all of these areas will likely require the stepped terracing of flat areas in an effort to balance earth grading cut and fill.

## Hydrology

In addition to the large stream channels of Duncan Creek and its unnamed tributary, the hilltops and ridges are segregated by natural drainage swales that lead to the main stream corridors (see Figure 4). Flood-prone areas from FEMA mapping are noted on Figure 4, but are not exact as a detailed flood study has not been performed for this portion of Gwinnett County. As part of the site analysis for potential access routes, it was determined that Duncan Creek and its tributary could be spanned using standard bridge and culvert methods. A preliminary 100-year flood elevation was projected for several areas along Duncan Creek, including areas adjacent to the safety training center, and it was determined that the floodplain would not impact access across the training center property. *A more detailed flood study will be required as part of the construction documents for such crossings.* Surface runoff is currently slowed by the dense vegetation cover, and the development of facilities will likely increase runoff volume and reduce its quality.

## Environment

Preliminary environmental and wetland surveys were performed on the site by United Consulting Group, Ltd. in 1997 and 1998 when the property was under consideration for the new Hamilton Mill area high school and middle school. In this survey, it was determined that the likelihood of high radon content was greater than 50%. It was recommended that radon-shielding construction techniques be used for occupied buildings. No hazardous materials were found on the site as part of this survey. Although no contamination or leakages from upstream sources have yet been reported, upstream development should continue to be monitored for contamination potential. Several potential wetland locations were identified as part of the survey, including several pockets along the stream corridors (see Figure 5). *Detailed delineation and permitting of these wetland areas will likely be required as part of the construction drawing process.*

## Vegetation

Until the arrival of European settlers three hundred years ago, the Georgia Piedmont was predominately forested with mixed hardwoods. Subsequent agricultural practices have cleared the forested areas so often, allowing younger pine forests to grow back time and time again, that most people associate the pine forest as Georgia's dominant forest cover type. The sequential change in forest cover on the Duncan Creek Park site is the direct result of human intervention. Although there are pockets of older hardwood growth on the site, the evidence of farming terraces and sediment deposits in the creek channels is an obvious sign that the entirety of the park has been cleared in the not-too-distant past. Aerial photography dating back to the 1950s shows large portions of the site cleared and in heavy agricultural use. The following Figure 5 is a graphic representation of the vegetation composition of the site. The mixed pine/hardwood areas are those that were most recently under cultivation. These areas also contain pockets of invasive exotic plants such as honeysuckle, kudzu and Chinese privet. The predominately hardwood areas are older and contain pockets of mountain laurel and native azaleas along the stream channels. These hardwood areas are in good condition and should be retained, if possible, as the site develops.

## Cultural Impacts

Highway 124 (Braselton Highway) is a relatively old road that has served this area of Gwinnett County for decades. Several homes of varying condition front the right-of-way and have the potential to develop as commercial properties. East Quarry Road was connected to the northern part of Gwinnett County prior to the construction of I-85. A large parking area at the end of East Rocky Quarry Road now serves as a school bus depot. Because of its isolation, several home sites along its length have been abandoned. One home within the park property has been removed. The public safety training center is a heavily used facility that splits the park into two parcels. Heavy activity here requires additional buffering and security measures. Interstate 85 creates a large amount of road noise that is most noticeable in the areas adjacent to its right-of-way.

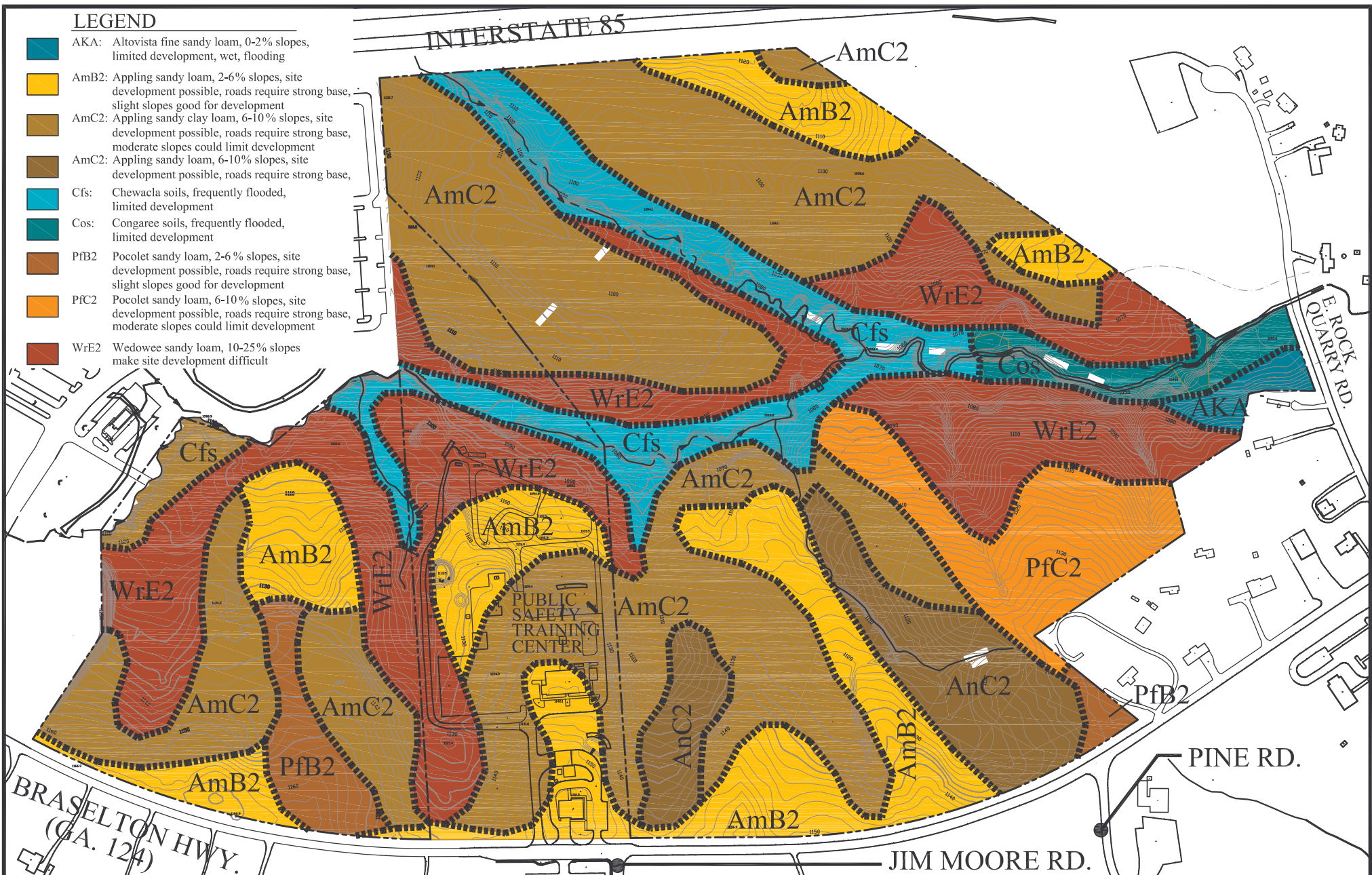
Garbage from dumping activities is prevalent across the site and will require cleaning. Garbage that washes down from the adjacent retail center will need to be removed on a regular basis.

Buffering by distance, retention of existing vegetation and planting of additional vegetation where needed will improve views into the adjacent facilities and will help to secure the proposed park facilities from future adjacent development.

The following Figure 6 is a graphic representation of the cultural impacts on the site.

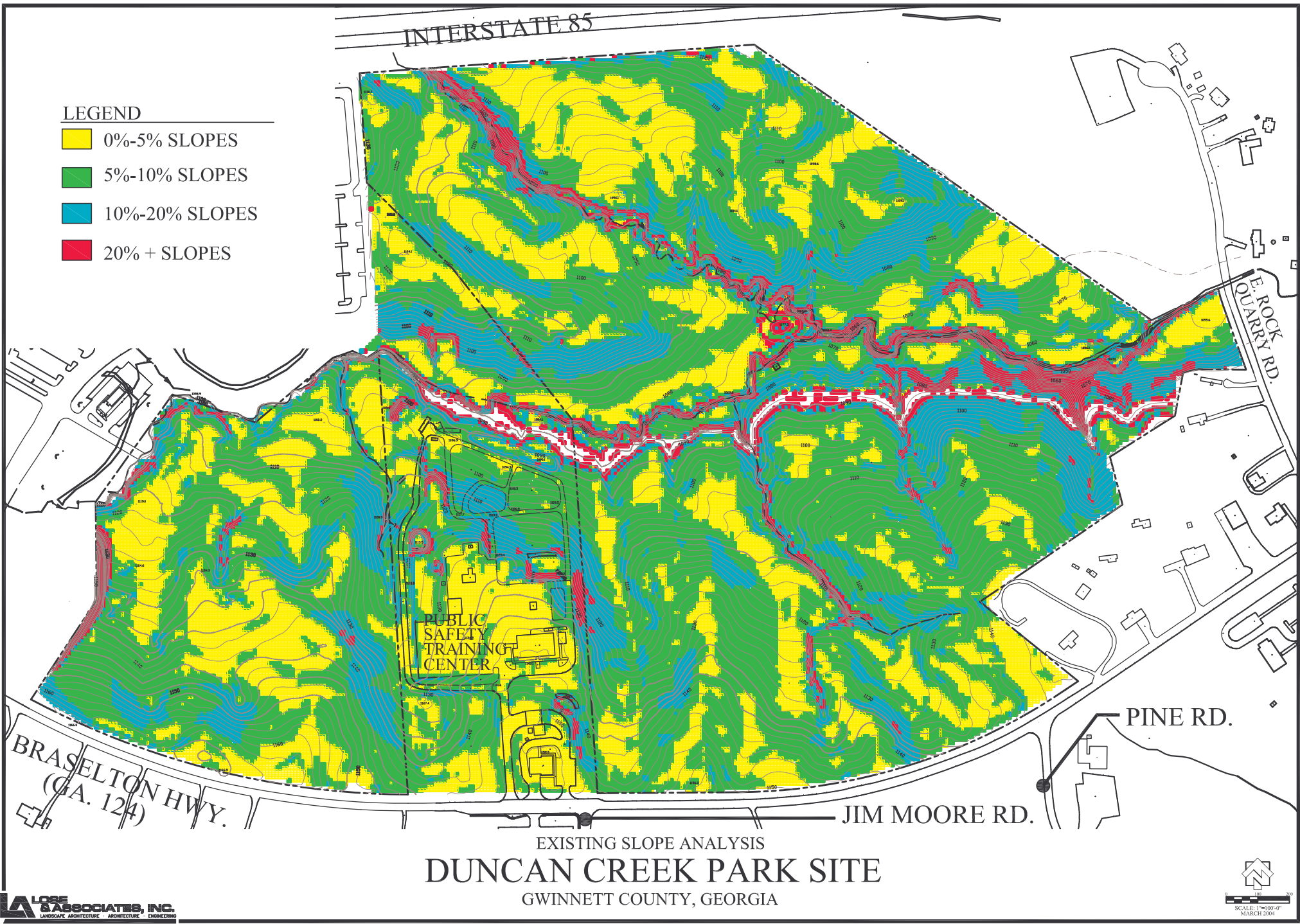
# LEGEND

- AKA: Altovista fine sandy loam, 0-2% slopes, limited development, wet, flooding
- AmB2: Appling sandy loam, 2-6% slopes, site development possible, roads require strong base, slight slopes good for development
- AmC2: Appling sandy clay loam, 6-10% slopes, site development possible, roads require strong base, moderate slopes could limit development
- AmC2: Appling sandy loam, 6-10% slopes, site development possible, roads require strong base, moderate slopes could limit development
- Cfs: Chewacla soils, frequently flooded, limited development
- Cos: Congaree soils, frequently flooded, limited development
- Pfb2: Pocolet sandy loam, 2-6% slopes, site development possible, roads require strong base, slight slopes good for development
- Pfc2: Pocolet sandy loam, 6-10% slopes, site development possible, roads require strong base, moderate slopes could limit development
- WrE2: Wedowee sandy loam, 10-25% slopes make site development difficult

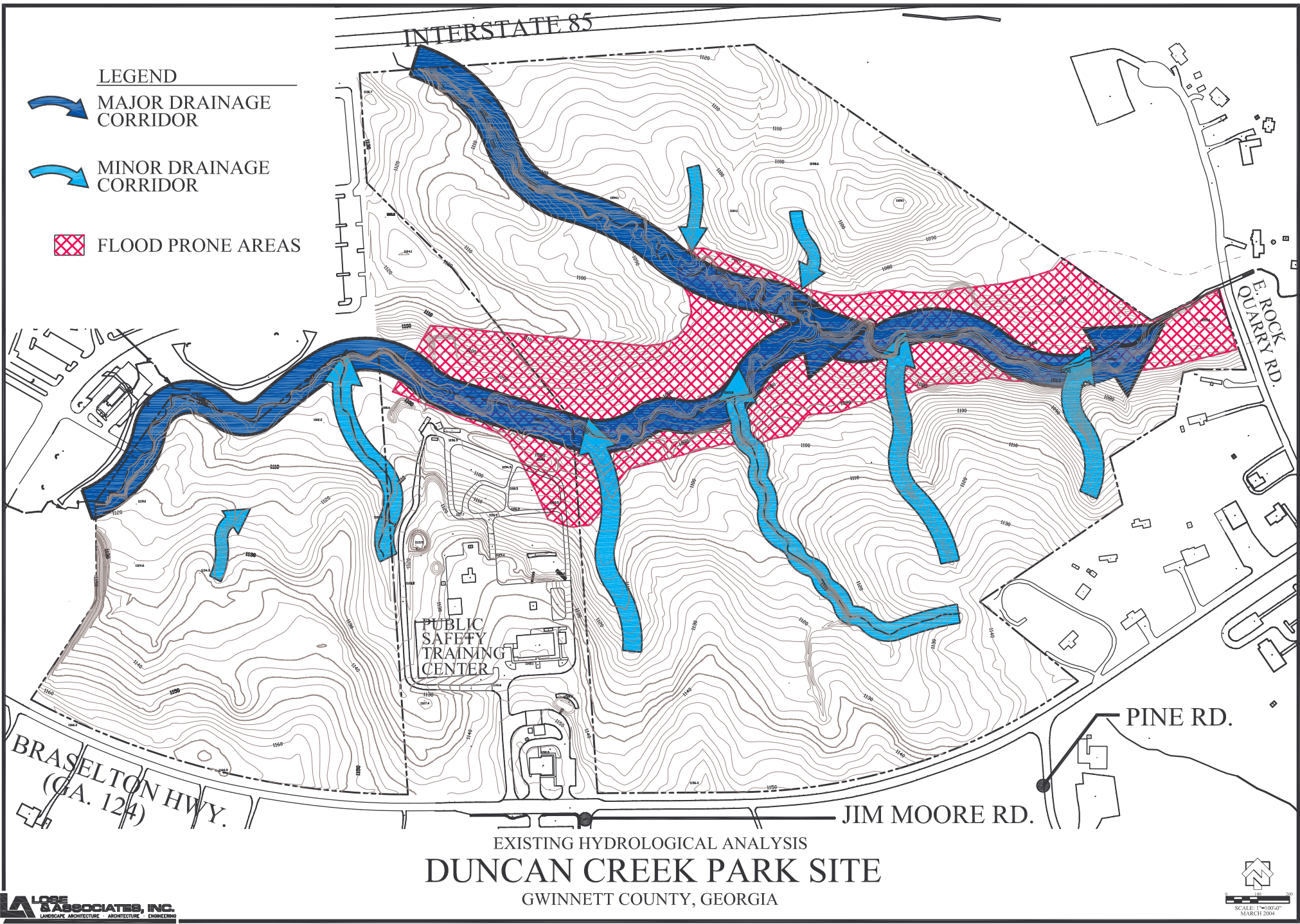


## EXISTING SOILS ANALYSIS DUNCAN CREEK PARK SITE GWINNETT COUNTY, GEORGIA











## LEGEND



### PINE FOREST

Relatively recent growth of Loblolly Pine includes occasional hardwood saplings. Common undergrowth includes smilax and exotic invasives.



### MIXED HARDWOOD FOREST

Relatively older growth of mixed Tulip Poplar, Oaks, Sweetgum, Beech, and others. Occasional pockets of older pine growth. Occasional undergrowth of invasive exotics.



### MIXED RIPARIAN ZONE

Mixed understory includes pockets of native deciduous azalea, ferns, mountain laurel, and other riparian related species associated with creekbanks.



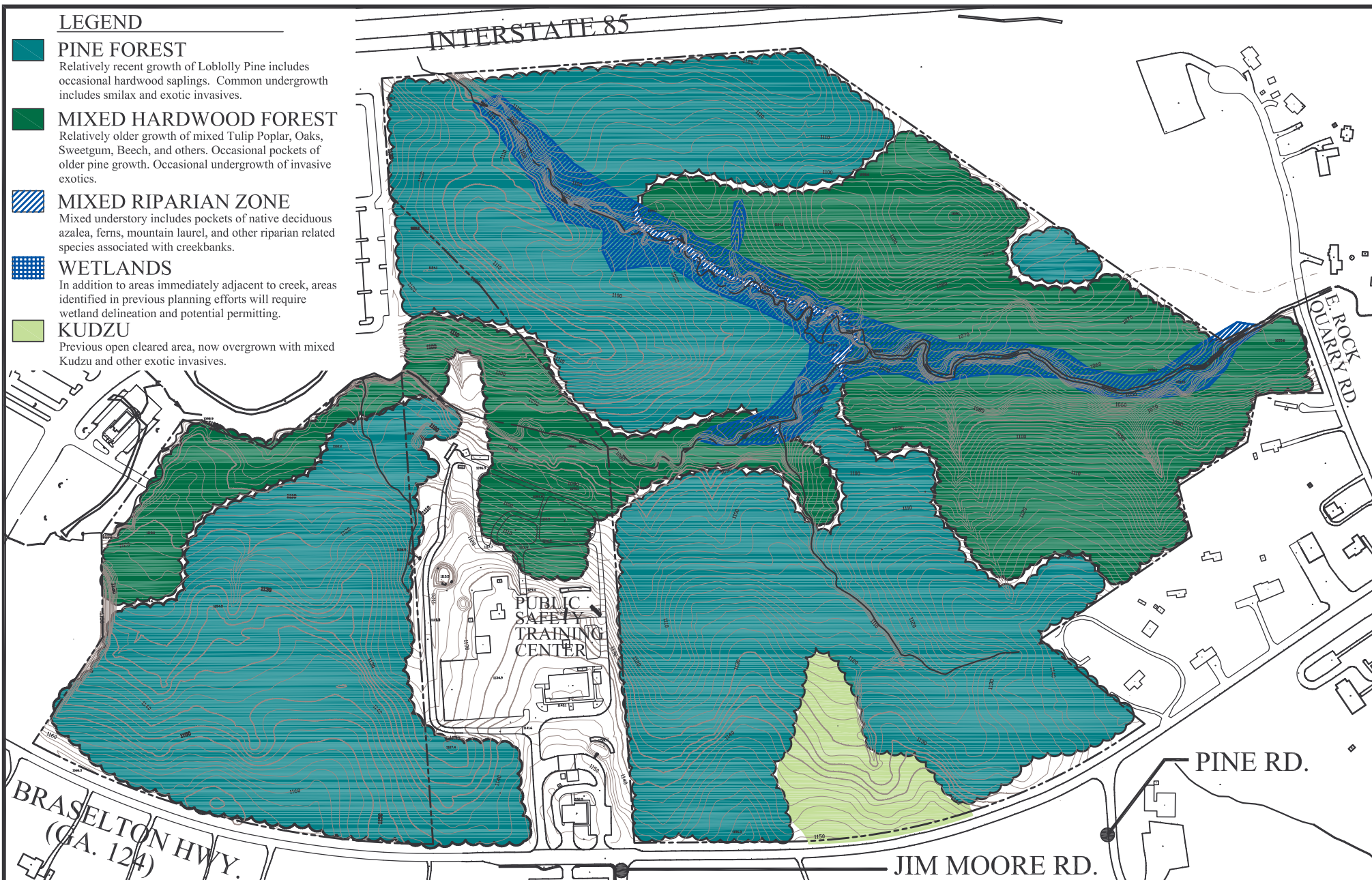
### WETLANDS

In addition to areas immediately adjacent to creek, areas identified in previous planning efforts will require wetland delineation and potential permitting.



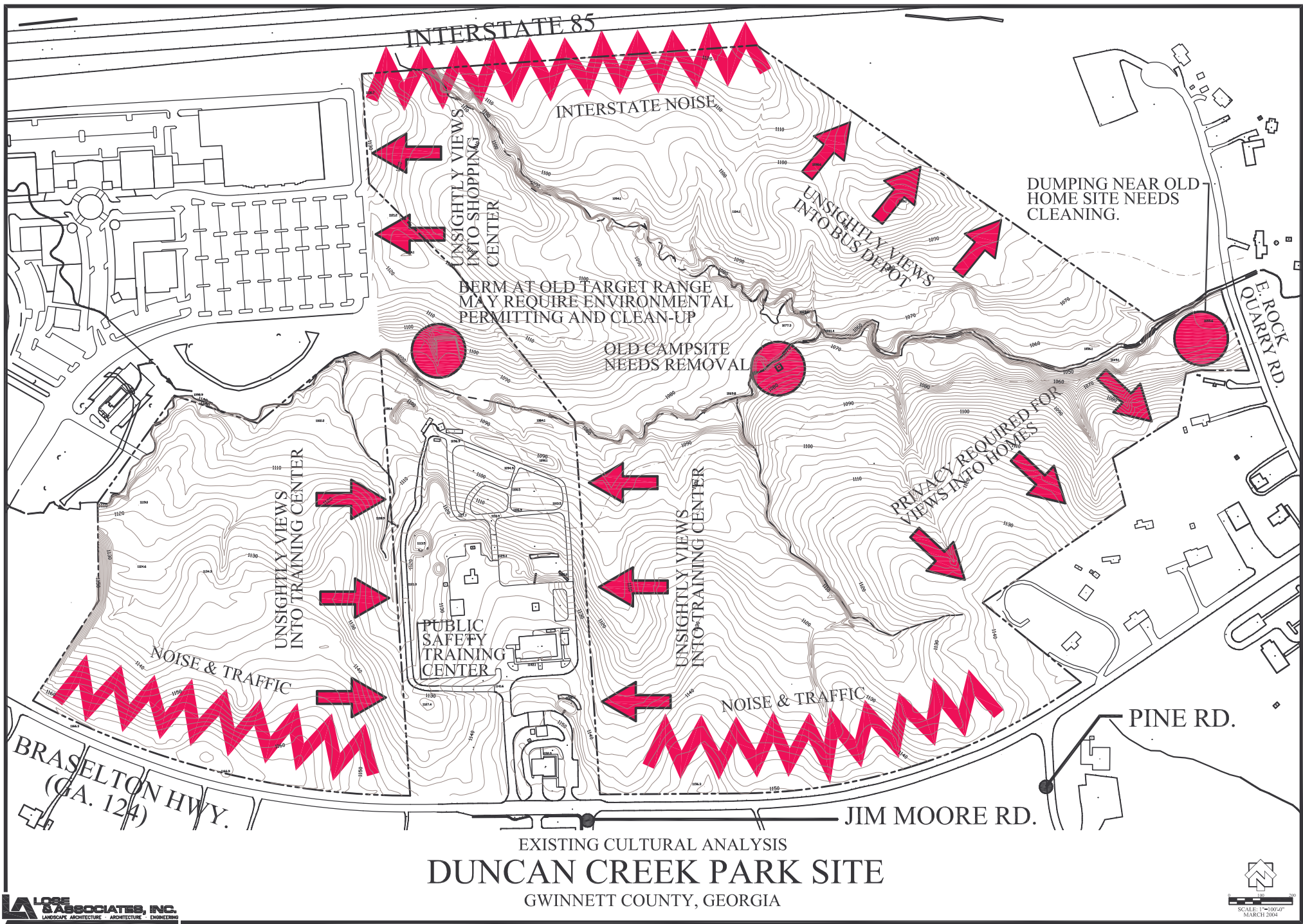
### KUDZU

Previous open cleared area, now overgrown with mixed Kudzu and other exotic invasives.



## EXISTING VEGETATION ANALYSIS DUNCAN CREEK PARK SITE GWINNETT COUNTY, GEORGIA







# Section III: Public Input



# Public Input

## Initial Program Development

To initiate the public input process, a meeting was held at Fort Daniels School to allow members of the community an opportunity to voice their desires for the Duncan Creek Park program. Gwinnett County officials presented a map of the park property, gave a brief history of how the park site was selected and explained the “sister park” concept of how Duncan Creek Park would complement Bogan Park (see introduction). Aerial photography dating back to the 1950s was also presented, demonstrating the amount of disturbance the site had experienced over the decades.

The group of citizens was asked to fill out a survey form outlining their wishes and concerns for the Duncan Creek Park development. They were also asked to rank, in order, the facilities they would most like to see included in the park. In order of importance, the citizens designated the items shown below as their top priorities.

Desired Program Elements	Number of Times Requested in Survey Responses
Teen area (roller blading/skate boarding/basketball/volleyball)	27
Playground	23
Baseball/softball fields	22
Football	20
Walking trails	19
Picnic areas with trees/covered pavilion	16
Soccer	16
Tennis	10
Open space	7
Community center	6
Bike trails	5
Dog park	5
Fishing	5
Restrooms	5
Aquatic center	4
Outdoor pool	3
Track	3
Concessions	2
Driving range	2
Gym	2
Handicapped playground	2

Senior center	2
Amphitheater	1
Cheerleading	1
Equestrian	1
Handball	1
Horseshoe pit	1
Indoor track	1
Library	1
Paddle boats	1
Parking	1
Racquetball	1

The group was also asked to list the things that most concerned them about the proposed park development, and the following is a list of their top concerns.

<b>Program Development Concerns</b>	<b>Number of Times Mentioned in Survey Responses</b>
Traffic, parking	29
Safety, patrolled park	4
Adequate sports fields	3
Ecology/noise control	3
Firing range	2
Handicapped accessibility	2
Playgrounds	2
Skatepark	2
Fees	1
Fishing	1
Lights	1
Open space	1
Restrooms	1
Separate facilities, younger, older	1
Handicapped playground equipment	1

Also at the meeting, the citizens were asked to volunteer for a steering committee to guide the design consultant and Gwinnett County officials in the program development and design of the park. The Citizen Steering Committee, as selected from the volunteer applications, was involved in all of the later programming and design review meetings.

## Site Analysis and Program Development Refinement

A few weeks later, the Citizen Steering Committee toured the Duncan Creek Park Site and several existing county parks led by Grant Guess and Rex Schuder, with the Gwinnett County Parks and Recreation Division, and Whit Alexander, with Lose & Associates, the park design consultant.

The group met near the bus depot at the end of East Rock Quarry Road. They walked into the Duncan Creek Park Site where Rex explained the difference in the forest habitats and the fact that they represented various ages, aggressive clearing in the past and erosion from previous agricultural activities. The group walked several existing woodland trails and reviewed potential sites for development. Interstate noise was noticed by the group. They also experienced the site's creek systems and noted that they would like to preserve the waterfall/shoals area. They further noted that they would like some sort of passive recreation experience near this area.

The group then embarked on a tour of the county's park system. The first stop was to see the Kohl's parking lot entrance drive, where vehicles could potentially access the site behind the fire training center.

The first park the group visited was Bay Creek Park. They toured the football facility and noted that they would like to see bleachers that were not divided. They toured the concessions building and noted that they would like the ability to have outdoor grilling. Rex noted to the group that the space needed for Bay Creek's football area (along with parking, cheerleading, detention, buildings, etc.) would also be required for Duncan Creek Park. The group also toured the playground at the center of the baseball complex. The group noted that they would like to see an ADA-accessible playground structure that would be built in conjunction with play activities for other children to encourage a joint play experience.

The group then toured Bethesda Park, where they saw how soccer fields are built in large terraces. The group also walked the park's multi-purpose trail and noted how the trail provides access to the various facilities, security due to constant foot-traffic and opportunities for passive recreation.

The group then toured Pinckneyville Park, where they saw a portion of a typical teen area, including a skateboard park and in-line hockey rink. They also saw how some soccer fields are developed independently from one another, in an effort to reduce site disturbance. At Pinckneyville Park, the group saw a standard picnic pavilion in conjunction with a standard playground development. They seemed to like the teen-area development and expressed a desire to see a similar development at Duncan Creek Park.

The group also toured Little Mulberry Park out of a desire to see the special features being developed near their neighborhoods.

Before the group dispersed, Rex took a poll to review the desired program based upon the facilities they had seen that day. The following is a refined list of the items the group unanimously outlined as the desired program elements.

- A Gwinnett County prototypical football complex
- A teen area with skateboarding, in-line hockey, basketball and sand volleyball
- A four-field soccer complex
- Multi-purpose trails
- A handicapped-accessible playground that integrates children of all ability levels
- Open space for passive play
- Tennis courts
- Outdoor classroom space in an environmental area

A few weeks after the site visits and program refinement, Lose & Associates prepared and presented the graphic site analysis (see Section 2) to the Citizen Steering Committee. Also presented were three alternative graphic concept master plans that placed the desired program into graphic plan relationships on the site. The following section describes these conceptual plans in more detail.



# Section IV: Alternative Conceptual Master Plans



# *Alternative Conceptual Master Plans*

## **Revised Program**

Based on the results of the initial community meeting and the refinements added by the Citizen Steering Committee after the tour of the various Gwinnett County facilities, a refined list of program elements emerged that was to be incorporated in the three alternative conceptual master plans. This list included the following:

- A Gwinnett County prototypical football complex
- A teen area with skateboarding, in-line hockey, basketball and sand volleyball
- A four-field soccer complex
- Multi-purpose trails
- A handicapped-accessible playground that integrates children of all ability levels
- Open space for passive play
- Tennis courts
- Outdoor classroom space in an environmental area

It was understood that each of the desired program elements would be developed to Gwinnett County standards, with all of the necessary parking and support buildings. Additionally, it was understood that the three alternative conceptual master plans would also consider a five-acre location for a new Gwinnett County Library branch fronting Highway 124, available points for vehicular connection, utility connection, overall infrastructure development, necessary storm detention ponds and the inclusion of a Gwinnett County prototypical maintenance compound.

## **Concept One** (see **Figure 7**)

### **Gwinnett County Library Branch**

A five-acre tract is located next to the public safety training center, along Highway 124, in an effort to provide good security, visibility and vehicular access.

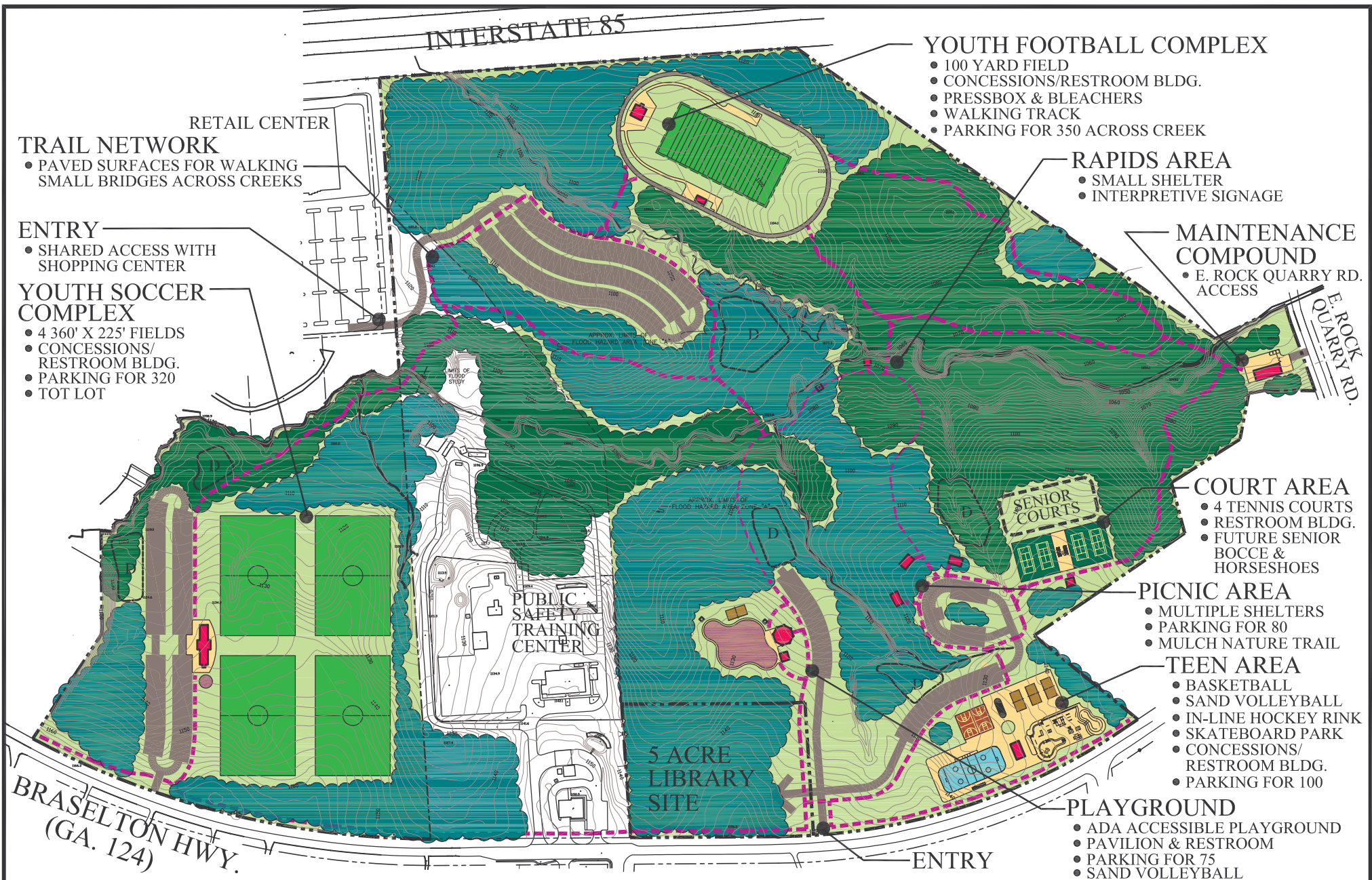
### **Overall Access and Circulation**

Vehicular access is divided into multiple points of entry in an effort to reduce the amount of traffic that would back up at any one exit point. Also, by dividing the access points, the overall lengths of entrance drives are reduced, which reduces the amount of required stream crossings. Vehicular access to the football complex is dependent on an access agreement being established with representatives from the Hamilton Mill at Duncan Creek shopping center.

### **Maintenance Compound**

A fenced maintenance compound, complete with dry storage bins and a Gwinnett County prototype maintenance building, would be accessible from East Rock Quarry Road. Access to the various park facilities would be required to use the system of multi-purpose trails.





CONCEPT PLAN #1  
**DUNCAN CREEK PARK**  
 GWINNETT COUNTY, GEORGIA

### **Football Complex**

The prototypical football complex, complete with a 100-yard lighted field, concession/restroom building with surrounding plaza, press box area, bleacher areas, space for teams and cheerleaders and surrounding walking track, is located in the northern section of the park, between the unnamed stream and I-85. This location was selected due to the relatively flat terrain that would make mass grading easier and the fact that the humming noise generated by I-85 would not likely disturb football games (and the noise they generate) as much as other more passive uses. The large parking lot (350 spaces minimum) for the football complex is located between Duncan Creek and its tributary on another relatively flat area of terrain and is accessible from the Hamilton Mill at Duncan Creek shopping center. If this vehicular access route can be established with representatives from the shopping center, it will provide a traffic signal for the discharge of vehicles after the games.

### **Teen Area**

The teen area is located adjacent to Highway 124 for good visibility and improved security. Located in this cluster of facilities is a free-skate area with a concrete street course and a bowl area as well. Skating activities are segregated based on ability level within this 20,000-square-foot facility. Also included in the teen area are an in-line hockey rink, two outdoor basketball courts and three sand volleyball courts. A concessions/restroom building and plaza area serves all the teen facilities. 100 parking spaces are available, and vehicular access is provided via the joint connection to Highway 124 shared by the playground and library areas.

### **Soccer Complex**

The prototypical soccer complex, complete with four adult-sized lighted soccer fields, concession/restroom building with surrounding plaza, bleacher areas and space for teams, is located in the western portion of the park between Duncan Creek and the public safety training center. Also included with the soccer plaza area is a small tot lot for smaller children. This location was selected due to the fact that it is actually the only space with enough contiguous acres to accommodate the footprint of the facility. Parking for 320 vehicles is provided, and vehicular access is direct to Highway 124 in an effort to reduce the amount of traffic exiting from any one point.

### **Multi-purpose Trails**

A network of multi-purpose trails for walking, strolling, bicycling, rollerblading, etc. is planned to link the various park facilities and provide opportunities for exercise. Routing the loop trails near the facilities provides additional security for them, with a constant pedestrian presence, even when the facilities are not in use. A combination of 12'-wide asphalt trails, sidewalks and mulch trails will be used in the network, with at least one paved 12'-wide loop for multi-purpose use.

Along the nature trail adjacent to Duncan Creek is a small interpretive area with environmental education signage and a small shelter that provides views and access to the Duncan Creek shoals area.

**Playground Area**

A large playground, with a play structure for older children, several sets of swings (including a set designed to accommodate children of various special needs), a larger toddler play structure with an emphasis on integration of handicapped-accessible play features, a shade structure near the handicapped-accessible features, and various smaller play elements, is incorporated in a development that also includes a large rental pavilion, small restroom building and sand volleyball court. Parking for 75 vehicles is accessed from the joint connection to Highway 124 shared by the teen and library areas.

**Picnic/Open Play Area**

A passive recreation area including three open-air picnic shelters is located with views to the forest and access to the multi-purpose trail network. Parking for 80 vehicles is accessed from the joint connection to Highway 124 shared by the playground, library and teen areas.

**Tennis Area**

Four tennis courts and an area for future senior activities, such as bocce courts and horse-shoe pits, is located on another small hilltop adjacent to the picnic/open play area. A small restroom structure is provided with the courts, and parking is shared with the picnic area.

**Concept Two** (see **Figure 8**)**Gwinnett County Library Branch**

A five-acre tract is located next to the public safety training center, along Highway 124, in an effort to provide good security, visibility and vehicular access.

**Overall Access and Circulation**

Vehicular access is divided into multiple points of entry in an effort to reduce the amount of traffic that would back up at any one exit point. Also, by dividing the access points, the overall lengths of entrance drives are reduced, which reduces the amount of required stream crossings. Vehicular access to the football complex is provided from East Rock Quarry Road and is not dependent on access from the Hamilton Mill at Duncan Creek shopping center.

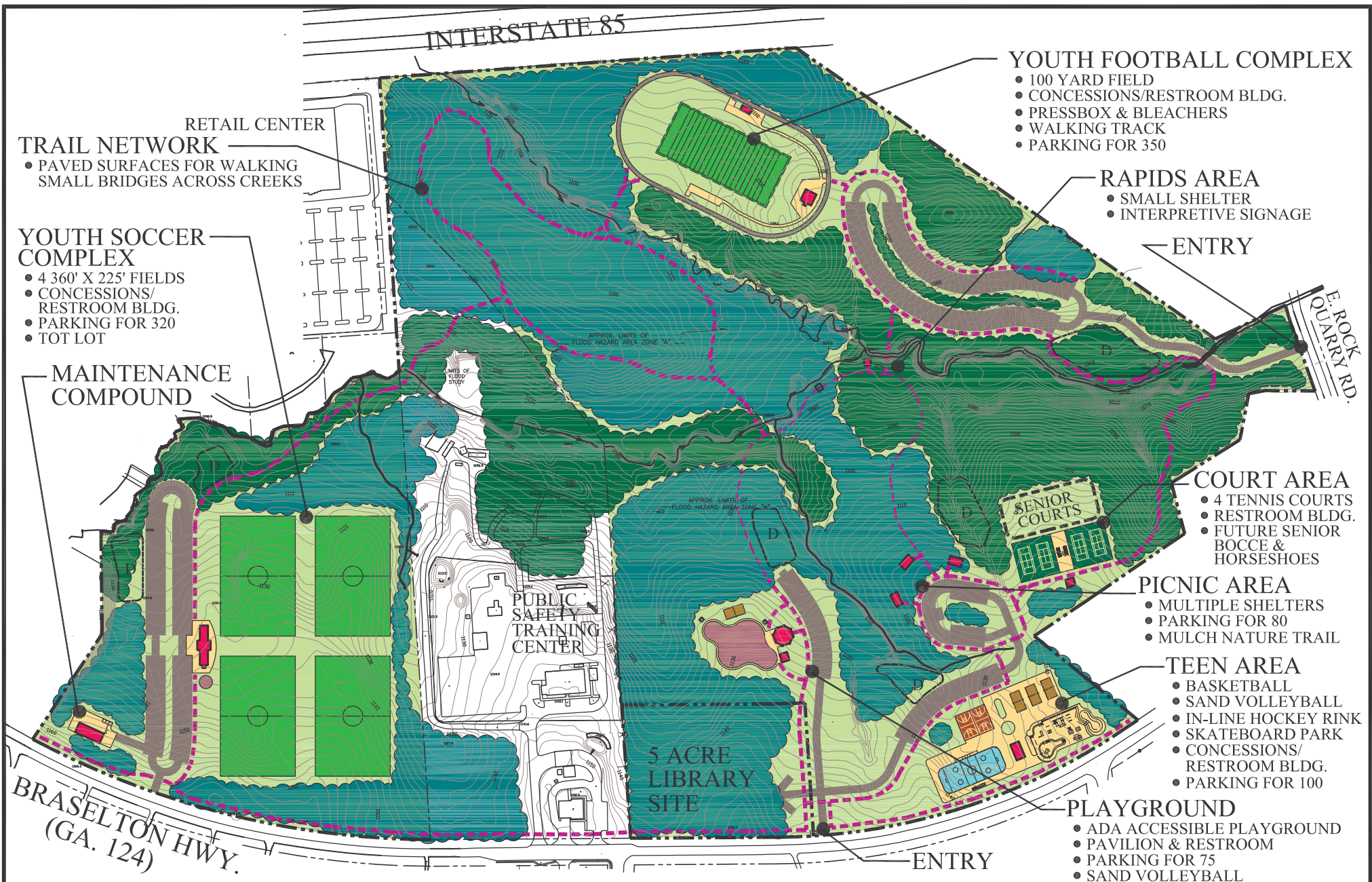
**Maintenance Compound**

A fenced maintenance compound, complete with dry storage bins and a Gwinnett County prototype maintenance building, would be accessible from the soccer complex parking lot.

**Football Complex**

The prototypical football complex, complete with 100-yard lighted field, concession/restroom building with surrounding plaza, press box area, bleacher areas, space for teams and cheerleaders and surrounding walking track, is located in the northern section of the park, between the unnamed stream and I-85. This location was selected due to the relatively flat terrain that would make mass grading easier and the fact that the humming noise generated by I-85 would not likely disturb football games (and the noise they gen-





erate) as much as other more passive uses. The large parking lot (350 spaces minimum) for the football complex is located adjacent to the football complex and is accessed from East Rock Quarry Road.

### **Teen Area**

The teen area is located adjacent to Highway 124 for good visibility and improved security. Located in this cluster of facilities is a free-skate area with a concrete street course and a bowl area as well. Skating activities are segregated based on ability level within this 20,000-square-foot facility. Also included in the teen area are an in-line hockey rink, two outdoor basketball courts and three sand volleyball courts. A concessions/restroom building and plaza area serves all the teen facilities. 100 parking spaces are available, and vehicular access is provided via the joint connection to Highway 124 shared by the playground and library areas.

### **Soccer Complex**

The prototypical soccer complex, complete with four adult-sized lighted soccer fields, concession/restroom building with surrounding plaza, bleacher areas and space for teams, is located in the western portion of the park between Duncan Creek and the public safety training center. Also included with the soccer plaza area is a small tot lot for smaller children. This location was selected due to the fact that it is actually the only space with enough contiguous acres to accommodate the footprint of the facility. Parking for 320 vehicles is provided, and vehicular access is direct to Highway 124 in an effort to reduce the amount of traffic exiting from any one point.

### **Multi-purpose Trails**

A network of multi-purpose trails for walking, strolling, bicycling, rollerblading, etc. is planned to link the various park facilities and provide opportunities for exercise. Routing the loop trails near the facilities provides additional security for them, with a constant pedestrian presence, even when the facilities are not in use. A combination of 12'-wide asphalt trails, sidewalks and mulch trails will be used in the network, with at least one paved 12'-wide loop for multi-purpose use.

Along the nature trail adjacent to Duncan Creek is a small interpretive area with environmental education signage and a small shelter that provides views and access to the Duncan Creek shoals area.

### **Playground Area**

A large playground, with a play structure for older children, several sets of swings (including a set designed to accommodate children of various special needs), a larger toddler play structure with an emphasis on integration of handicapped-accessible play features, a shade structure near the handicapped-accessible features, and various smaller play elements, is incorporated in a development that also includes a large rental pavilion, small restroom building and sand volleyball court. Parking for 75 vehicles is accessed from the joint connection to Highway 124 shared by the teen and library areas.

### **Picnic/Open Play Area**

A passive recreation area including three open-air picnic shelters is located with views to the forest and access to the multi-purpose trail network. Parking for 80 vehicles is ac-

cessed from the joint connection to Highway 124 shared by the playground, library and teen areas.

### **Tennis Area**

Four tennis courts and an area for future senior activities, such as bocce courts and horse-shoe pits, is located on another small hilltop adjacent to the picnic/open play area. A small restroom structure is provided with the courts, and parking is shared with the picnic area.

## **Concept Three** (see **Figure 9**)

### **Gwinnett County Library Branch**

A five-acre tract is located along Highway 124 in an effort to provide good visibility and vehicular access from either the Highway or Pine Road.

### **Overall Access and Circulation**

Vehicular access is divided into multiple points of entry in an effort to reduce the amount of traffic that would back up at any one exit point. Also, by dividing the access points, the overall lengths of entrance drives are reduced, which reduces the amount of required stream crossings. Vehicular access to the football complex is provided from East Rock Quarry Road and is not dependent on access from the Hamilton Mill at Duncan Creek shopping center.

### **Maintenance Compound**

A fenced maintenance compound, complete with dry storage bins and a Gwinnett County prototype maintenance building, would be accessible from tennis court/teen area.

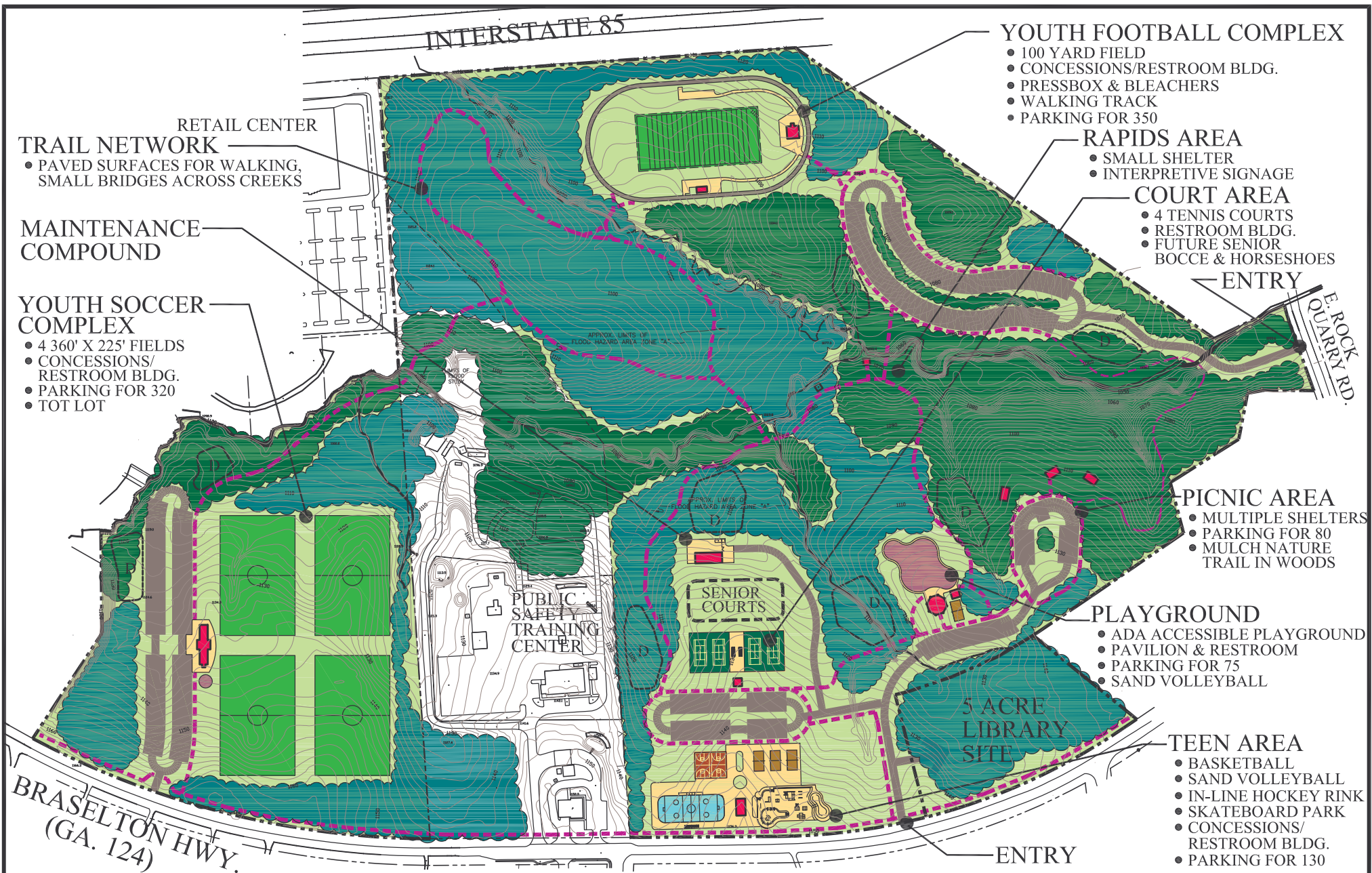
### **Football Complex**

The prototypical football complex, complete with 100-yard lighted field, concession/restroom building with surrounding plaza, press box area, bleacher areas, space for teams and cheerleaders and surrounding walking track, is located in the northern section of the park, between the unnamed stream and I-85. This location was selected due to the relatively flat terrain that would make mass grading easier and the fact that the humming noise generated by I-85 would not likely disturb football games (and the noise they generate) as much as other more passive uses. The large parking lot (350 spaces minimum) for the football complex is located adjacent to the football complex and is accessed from East Rock Quarry Road.

### **Teen Area**

The teen area is located adjacent to Highway 124 and between the public safety training center and the library for good visibility and improved security. Located in this cluster of facilities is a free-skate area with a concrete street course and a bowl area as well. Skating activities are segregated based on ability level within this 20,000-square-foot facility. Also included in the teen area are an in-line hockey rink, two outdoor basketball courts and three sand volleyball courts. A concessions/restroom building and plaza area serves all the teen facilities. 130 parking spaces are available, and vehicular access is provided via the joint connection to Highway 124 shared by the playground and library areas.





CONCEPT PLAN #3  
**DUNCAN CREEK PARK**  
 GWINNETT COUNTY, GEORGIA



### **Soccer Complex**

The prototypical soccer complex, complete with four adult-sized lighted soccer fields, concession/restroom building with surrounding plaza, bleacher areas and space for teams, is located in the western portion of the park between Duncan Creek and the public safety training center. Also included with the soccer plaza area is a small tot lot for smaller children. This location was selected due to the fact that it is actually the only space with enough contiguous acres to accommodate the footprint of the facility. Parking for 320 vehicles is provided, and vehicular access is direct to Highway 124 in an effort to reduce the amount of traffic exiting from any one point.

### **Multi-purpose Trails**

A network of multi-purpose trails for walking, strolling, bicycling, rollerblading, etc. is planned to link the various park facilities and provide opportunities for exercise. Routing the loop trails near the facilities provides additional security for them, with a constant pedestrian presence, even when the facilities are not in use. A combination of 12'-wide asphalt trails, sidewalks and mulch trails will be used in the network, with at least one paved 12'-wide loop for multi-purpose use.

Along the nature trail adjacent to Duncan Creek is a small interpretive area with environmental education signage and a small shelter that provides views and access to the Duncan Creek shoals area.

### **Playground Area**

A large playground, with a play structure for older children, several sets of swings (including a set designed to accommodate children of various special needs), a larger toddler play structure with an emphasis on integration of handicapped-accessible play features, a shade structure near the handicapped-accessible features, and various smaller play elements, is incorporated in a development that also includes a large rental pavilion, small restroom building and sand volleyball court. Parking for 75 vehicles is accessed from the joint connection to Highway 124 shared by the teen and library areas.

### **Picnic/Open Play Area**

A passive recreation area including three open-air picnic shelters is located with views to the forest and access to the multi-purpose trail network. Its location next to the playground area makes for a large passive-use development where shared parking and restroom facilities are possible. Parking for 80 vehicles is accessed from the joint connection to Highway 124 shared by the playground, library and teen areas.

### **Tennis Area**

Four tennis courts and an area for future senior activities, such as bocce courts and horseshoe pits, is located on another small hilltop behind the teen area. A small restroom structure is provided with the courts, and parking is shared with the teen area.

## Citizen Steering Committee Comments and Program Refinement

After the three alternative conceptual master plans were presented, the Citizen Steering Committee was asked for input. The following is a list of desired modifications to the three plans in an effort to create the preliminary master plan.

- **Library Location:** The committee preferred the easternmost site presented on Concept Plan #3. However, the committee understood that the library management staff would ultimately make the location selection.
- **Maintenance Compound:** The committee liked the central location of the maintenance compound on Concept Plan #3, which adds security to the day-use passive facilities around it, but the committee also understood that access to the large athletic facilities could be provided only by upsizing the trail routes and bridges linking the facilities to handle maintenance vehicle traffic.
- **Detention Basins:** The committee was concerned with the safety and aesthetic problems that they associate with detention basins. It was explained that the detention basins are required for these types of developments but that the preliminary master plan would address them in more detail with respect to size, location and clearing limits.
- **Football Complex:** The committee preferred the parking and vehicle access route as shown on Concept Plan #1, understanding that an access agreement would have to be developed with representatives of the Hamilton Mill at Duncan Creek shopping center. They preferred the field orientation of Concept Plan #3, with the provision that the concession/restroom building be moved closer to parking and that maintenance, vendor and emergency traffic be provided access to the facility and field. The group also asked that a small tot lot be added to this complex as well.
- **Teen Facilities Area:** The committee preferred that the facility be located where shown in Concept #3 for the added security it brings, with the only modification being that the basketball courts should be closest to the highway for better visibility.
- **Soccer Complex:** The committee liked the soccer complex in the location where shown with a standard concession/restroom building and tot lot.
- **Trails:** The committee understood that the conceptual plans noted potential trail routes but that a more detailed trail network would be developed after the larger facilities were located in the preliminary master plan.
- **Playground Area:** The committee asked for two to three acres of irrigated turf for free-play adjacent to the large playground.
- **Picnic/Open Play Area:** The committee preferred a solution like that in Concept Plan #3, where the playground pavilion and the three smaller open pavilions share a contiguous green space and are not separated by vehicular roadway or parking lots.

- **Tennis Area:** The committee preferred the location shown in Concept Plan #3, with the request that six unstaffed courts be shown. The committee also asked that the senior courts be addressed with respect to better proximity to parking.

After the presentation of the three alternative conceptual plans, Gwinnett County officials met with representatives of the Hamilton Mill at Duncan Creek shopping center to review the possibilities of a vehicular access agreement and with the Gwinnett Library to review the locations for their five-acre tract. Further discussions were undertaken with the Gwinnett Department of Transportation to re-visit the feasibility of a traffic signal at the Highway 124/Pine Road intersection for use as a main park entrance. When it was determined that the Georgia Department of Transportation would allow a traffic signal at the Pine Road intersection (as part of the park development) it was determined that a vehicular access route from the shopping center was not as desirable. Furthermore, the provision of a traffic signal at Pine Road led the Gwinnett County library representatives to prefer a five-acre tract similar to that shown in Concept Plan #3. As part of the decision-making process, Lose & Associates was asked to study in more detail the potential of crossing Duncan Creek, its tributary and the public safety training center with respect to flood elevations. Gwinnett County staff conversed with the Gwinnett County Department of Fire and Emergency Services to determine their requirements for allowing a potential crossing of their site. These studies concluded that it was possible to access the football and soccer facilities from the Pine Road intersection using typical bridge and culvert construction methods.

The decisions reached in this process led Gwinnett County representatives to decide that a Hybrid Conceptual Plan needed to be prepared for the Citizen Steering Committee review prior to advancement to the preliminary master plan level.

## Hybrid Conceptual Plan

The following is a description of the Hybrid Conceptual Plan (see **Figure 10**) that was presented to the Citizen Steering Committee.

### Gwinnett County Library Branch

A five-acre tract is located along Highway 124, in an effort to provide good visibility and vehicular access from the traffic signal at the Highway 124/Pine Road intersection. The potential for a four-way stop intersection across from the playground/picnic area would allow free access to the library, even when large activities were taking place in the park.

### Overall Access and Circulation

Vehicular access to the entire park is provided via a main entrance drive that intersects with Highway 124 at the Highway 124/Pine Road traffic signal. Turn lanes, the traffic signal and entrance signage would all be included as part of the first phase of the park development. The various facilities would each have an access drive that branched from the main entrance drive.

### Maintenance Compound

A fenced maintenance compound, complete with dry storage bins and a Gwinnett County prototype maintenance building, would be accessible from the football complex parking lot.

## MAINTENANCE COMPOUND

## RETAIL CENTER

## COURT AREA

- 6 TENNIS COURTS
- RESTROOM BLDG.
- FUTURE SENIOR BOCCIE & HORSESHOES

## TRAIL NETWORK

- PAVED SURFACES FOR WALKING
- SMALL BRIDGES ACROSS CREEKS,

## SOCCER COMPLEX

- 4 360' X 225' FIELDS
- CONCESSIONS/RESTROOM BLDG.
- PARKING FOR 320
- TOT LOT

INTERSTATE 85

## YOUTH FOOTBALL COMPLEX

- 100 YARD FIELD
- CONCESSIONS/RESTROOM BLDG.
- PRESSBOX & BLEACHERS
- WALKING TRACK
- PARKING FOR 350 ACROSS CREEK
- TOT LOT

## RAPIDS AREA

- SMALL SHELTER
- INTERPRETIVE SIGNAGE
- MULCH TRAIL CONNECTOR

## SEWER PUMP STATION

- E. ROCK QUARRY RD. ACCESS

E. ROCK  
QUARRY RD.

## PICNIC AREA

- PICNIC SHELTERS
- PARKING FOR 80
- OPEN PLAY LAWN

## PLAYGROUND

- ADA PLAYGROUND
- PAVILION & RESTROOM
- PARKING FOR 75
- SAND VOLLEYBALL
- OPEN PLAY LAWN

## TEEN AREA

- BASKETBALL
- SAND VOLLEYBALL
- IN-LINE HOCKEY RINK
- SKATEBOARD PARK
- CONCESSIONS/RESTROOM BLDG.
- PARKING FOR 125

## ENTRY

- DIVIDED MEDIAN
- TRAFFIC LIGHT

PUBLIC  
SAFETY  
TRAINING  
CENTER

SENIOR  
COURTS

5 ACRE  
LIBRARY  
SITE

BRASELTON HWY.  
(GA. 124)

# HYBRID CONCEPT PLAN DUNCAN CREEK PARK GWINNETT COUNTY, GEORGIA

**Sewage Lift Station**

As the planning progressed, it was determined that a lift station and force main sewage system would be required to provide service to the various park facilities. The lift station was located at the low end of the site, near East Rock Quarry Road, with the potential for providing a force main down Pine Road to access a gravity sewer line near an adjacent residential development.

**Football Complex**

The prototypical football complex, complete with 100-yard lighted field, concession/restroom building with surrounding plaza, small tot lot, press box area, bleacher areas, space for teams and cheerleaders and surrounding walking track, is located in the northern section of the park, between the unnamed stream and I-85. The facility is accessed from the parking lot via a culvert crossing of the Duncan Creek tributary. The parking lot (minimum 350 vehicles) is accessed from the main entrance drive that crosses Duncan Creek via a large culvert crossing.

**Teen Area**

The teen area is located adjacent to Highway 124 and between the public safety training center and the library for good visibility and improved security. Located in this cluster of facilities is a free-skate area with a concrete street course and a bowl area as well. Skating activities are segregated based on ability level within this 20,000-square-foot facility. Also included in the teen area are an in-line hockey rink, two outdoor basketball courts and three sand volleyball courts. A concessions/restroom building and plaza area serves all the teen facilities. 125 parking spaces are available, and vehicular access is provided via the main park entrance drive.

**Soccer Complex**

The prototypical soccer complex, complete with four adult-sized lighted soccer fields, concession/restroom building with surrounding plaza, bleacher areas and space for teams, is located in the western portion of the park between Duncan Creek and the public safety training center. Also included with the soccer plaza area is a small tot lot for smaller children. Parking for 320 vehicles is available, and vehicular access is provided across the public safety training center driver training course via the main park entrance drive. Replacement of a portion of the driving course will be required to make this connection.

**Multi-purpose Trails**

A network of multi-purpose trails for walking, strolling, bicycling, rollerblading, etc. is planned to link the various park facilities and provide opportunities for exercise. Routing the loop trails near the facilities provides additional security for them, with a constant pedestrian presence, even when the facilities are not in use. A one-mile, multi-purpose trail loop located in the easternmost portion of the park provides park visitors with a measurable track for exercise, while presenting them with views into the park's more special wildlife and forest habitats.

Along the nature trail adjacent to Duncan Creek is a small interpretive area with environmental education signage and a small shelter that provides views and access to the Duncan Creek shoals area.



### **Playground Area**

A large playground, with a play structure for older children, several sets of swings (including a set designed to accommodate children of various special needs), a larger toddler play structure with an emphasis on integration of handicapped-accessible play features, a shade structure near the handicapped-accessible features, and various smaller play elements, is incorporated in a development that also includes a large rental pavilion, small restroom building and sand volleyball court. A large open space provides opportunities for passive play such as Frisbee, kite-flying, etc. Parking for 75 vehicles is accessed via the main park entrance drive.

### **Picnic Area**

A passive recreation area including three open-air picnic shelters is located with views to the forest, an open play lawn contiguous with the playground area and access to the multi-purpose trail network. Its location next to the playground area makes for a large passive-use development where shared parking and restroom facilities are possible. Parking for 80 vehicles is accessed from the playground area.

### **Tennis Area**

Six tennis courts and an area for future senior activities, such as bocce courts and horseshoe pits, are located on another small hilltop behind the teen area. A small restroom structure is provided with the courts, and parking is shared with the teen area.

After the presentation of the Hybrid Conceptual Plan to the Citizen Steering Committee, the group had the following suggestions:

- The senior courts (horseshoes and bocce) should be relocated near the picnic pavilions, as these activities will enhance the picnic experience.
- The playground restroom should be moved to a central location to serve both the playground area and the picnic shelter area.
- Two half-court basketball courts should be added to the teen area to ensure a place for younger children to play when the larger courts are occupied.
- Sufficient picnic tables, benches, seat walls, etc. should be located near the concessions buildings, and as much shade as possible should be provided for the locations.
- The group also asked to explore adding a right-turn only exit from the soccer parking lot that could be gated when no tournaments are scheduled.

## **Revised Hybrid Conceptual Plan**

The revised hybrid conceptual plan (see **Figure 11**) was prepared to show a more centralized sewer lift station location for Gwinnett County officials to use in their discussions with Gwinnett Utilities. The relocation of the proposed lift station was necessitated by an effort to reduce the amount of disturbance to the stream valleys caused by sewer lines being routed to the East Rock Quarry Road area and to reduce the length of service lines to the various proposed facilities.

## MAINTENANCE COMPOUND

## COURT AREA

- 6 TENNIS COURTS
- RESTROOM BLDG.
- FUTURE SENIOR BOCCIE & HORSESHOES

## TRAIL NETWORK

- PAVED SURFACES FOR WALKING
- SMALL BRIDGES ACROSS CREEKS,

## SOCCER COMPLEX

- 4 360' X 225' FIELDS
- CONCESSIONS/RESTROOM BLDG.
- PARKING FOR 320
- TOT LOT

## RETAIL CENTER

INTERSTATE 85

## YOUTH FOOTBALL COMPLEX

- 100 YARD FIELD
- CONCESSIONS/RESTROOM BLDG.
- PRESSBOX & BLEACHERS
- WALKING TRACK
- PARKING FOR 350 ACROSS CREEK
- TOT LOT

## RAPIDS AREA

- SMALL SHELTER
- INTERPRETIVE SIGNAGE
- MULCH TRAIL CONNECTOR

## SEWER PUMP STATION

E. ROCK QUARRY RD.

## PICNIC AREA

- PICNIC SHELTERS
- PARKING FOR 80
- OPEN PLAY LAWN

## PLAYGROUND

- ADA PLAYGROUND
- PAVILION & RESTROOM
- PARKING FOR 75
- SAND VOLLEYBALL
- OPEN PLAY LAWN

## TEEN AREA

- BASKETBALL
- SAND VOLLEYBALL
- IN-LINE HOCKEY RINK
- SKATEBOARD PARK
- CONCESSIONS/RESTROOM BLDG.
- PARKING FOR 125

## ENTRY

- DIVIDED MEDIAN
- TRAFFIC LIGHT

PUBLIC SAFETY TRAINING CENTER

SENIOR COURTS

5 ACRE LIBRARY SITE

BRASELTON HWY.  
(GA. 124)

# HYBRID CONCEPT PLAN DUNCAN CREEK PARK GWINNETT COUNTY, GEORGIA



# Section V: Preliminary Master Plan



## ***Preliminary Master Plan***

After the Hybrid Conceptual Plan was presented, Gwinnett County officials met with representatives from Gwinnett Utilities, and it was determined that the current lift station in the Hamilton Mill at Duncan Creek shopping center would be converted to a connection point for the Duncan Creek Park force sewer main and that a gravity sewer line serving the shopping center would be run from the existing lift station location to the new central lift station in the park.

Using this new information, as well as comments gathered in the Hybrid Conceptual Plan presentation, the Preliminary Master Plan (see **Figure 12**) was developed. Conceptual grading of the facilities that balanced earth moving quantities was added to the plan to determine the necessary elevations of the park components, locations of ADA-accessible slopes and the need for retaining walls. The following is a listing of notable changes to the hybrid conceptual plan.

- The senior courts (horseshoes and bocce) were relocated near the picnic pavilions, as these activities will enhance the picnic experience.
- The playground restroom was moved to a central location to serve both the playground area and the picnic shelter area.
- Two half-court basketball courts were added to the teen area to ensure a place for younger children to play when the larger courts are occupied.
- More detail was added concerning site furnishings, shade trees, etc.
- The location for an additional exit for the soccer parking lot was explored but was determined not to be feasible due to the grade separation between Highway 124 and the parking lot.

For the preliminary master plan, a preliminary opinion of probable cost was prepared to assist with the decision-making process. The preliminary master plan was presented to the Citizen Steering Committee. The only comment from the group was to add a place for vendor vehicles to pull off the walking track to make deliveries to the football concession building. Gwinnett County officials asked that this drop-off area be sized to allow fire vehicles to turn around without having to circuit the football field on the walking track. Gwinnett County officials also asked that a portion of the football area sidewalk network be widened to 12' to match the adjoining multi-purpose trail.

The Citizen Steering Committee voted that the preliminary master plan, with the recommended changes, be advanced to become the final master plan.



INTERSTATE 85

MAINTENANCE  
COMPOUND

RETAIL CENTER

COURT AREA  
• 6 TENNIS COURTS  
• RESTROOM BLDG.

TRAIL NETWORK  
• 12' WIDE MULCH PATH  
THROUGH NATURAL AREAS  
• SMALL BOARDWALKS  
ACROSS CREEKS

DUNCAN CREEK

SOCCER  
COMPLEX  
• 4 360' X 225' FIELDS  
• CONCESSIONS/  
RESTROOM BLDG.  
• PARKING FOR 320  
• TOT LOT

YOUTH FOOTBALL COMPLEX

- 100 YARD FIELD
- CONCESSIONS/RESTROOM BLDG.
- PRESSBOX & BLEACHERS
- WALKING TRACK
- PARKING FOR 363 ACROSS CREEK
- TOT LOT

RAPIDS AREA

- SMALL SHELTER
- INTERPRETIVE SIGNAGE
- MULCH TRAIL CONNECTOR

LOOP MULTI-PURPOSE TRAIL

- 12' PAVED PATH
- 1 MILE LOOP

SEWER PUMP  
STATION

E ROCK  
QUARRY RD.

PICNIC AREA

- PICNIC SHELTERS
- PARKING FOR 56
- OPEN PLAY LAWN
- 2 HORSESHOE PITS
- 2 BOCCE COURTS

PLAYGROUND

- ADA PLAYGROUND
- PAVILION & RESTROOM
- PARKING FOR 75
- SAND VOLLEYBALL
- OPEN PLAY LAWN

TEEN AREA

- 2 FULL BASKETBALL COURTS
- 2 HALF BASKETBALL COURTS
- 3 SAND VOLLEYBALL COURTS
- RESTROOM/  
CONCESSIONS BLDG.
- IN-LINE HOCKEY RINK
- SKATEBOARD PARK
- PARKING FOR 127

5 ACRE  
LIBRARY  
SITE

PUBLIC  
SAFETY  
TRAINING  
CENTER

ENTRY DRIVE

- DIVIDED MEDIAN
- PARK SIGNAGE
- TRAFFIC LIGHT & TURN LANES
- 8' SIDEWALK ALONG MAIN ROUTE

BRASELTON HWY.  
(GA. 124)

PRELIMINARY MASTER PLAN  
**DUNCAN CREEK PARK**  
GWINNETT COUNTY, GEORGIA



# Section VI:

## Final Master Plan, Opinion of Probable Cost and Facility Prioritization



## ***Final Master Plan and Opinion of Probable Cost***

After the preliminary master plan was presented, the requested modifications were made to the plan, and the opinion of probable cost was developed. The following is a description of the final master plan.

### **Final Master Plan** (see Figure 13)

#### **Gwinnett County Library Branch**

A five-acre tract is located along Highway 124 in an effort to provide good visibility and vehicular access from the traffic signal at the Highway 124/Pine Road intersection. The potential for a four-way stop intersection across from the playground/picnic area would allow free access to the library, even when large activities were taking place in the park.

#### **Overall Access and Circulation**

Vehicular access to the entire park is provided via a main entrance drive that intersects with Highway 124 at the proposed Highway 124/Pine Road traffic signal. Turn lanes, the traffic signal and entrance signage would all be included as part of the first phase of the park development. The various facilities would each have an access drive that branched from the main entrance drive.

#### **Maintenance Compound**

A fenced maintenance compound, complete with dry storage bins and a Gwinnett County prototype maintenance building, would be accessible from the football complex parking lot.

#### **Sewage Lift Station**

As the planning progressed, it was determined that a lift station and force main sewage system would be required to provide service to the various park facilities. The lift station was located near the center of the site to provide easy gravity access for the various park facilities and to protect the lower stream valley from impacts. The lift station will pump sewage via a force main to connect to the current location of the lift station at the Hamilton Mill at Duncan Creek shopping center. The current shopping center lift station will be converted to a manhole connection, and the shopping center's sewage will be run via gravity lines back to the park's lift station.

#### **Football Complex**

The prototypical football complex, complete with 100-yard lighted field, concession/restroom building with surrounding plaza, small tot lot, pressbox area, bleacher areas, space for teams and cheerleaders and surrounding walking track, is located in the northern section of the park, between the unnamed stream and I-85. The facility is accessed from the parking lot via a culvert crossing of the Duncan Creek tributary. The parking lot (for 363 vehicles) is accessed from the main entrance drive that crosses Duncan Creek via a large culvert crossing. A vendor unloading zone that also helps fire vehicles turn around is located near the concession/restroom building.

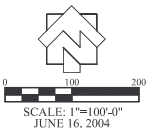




FINAL MASTER PLAN  
**DUNCAN CREEK PARK**  
GWINNETT COUNTY, GEORGIA

PARK ACREAGE SUMMARY: 109.66  
PARKING SUMMARY:

PARK AREA	# OF SPACES
FOOTBALL AREA	363
SOCCER AREA	320
PLAYGROUND AREA	75
PICNIC AREA	56
TEEN/TENNIS AREA	127
941 TOTAL SPACES	





### **Teen Area**

The teen area is located adjacent to Highway 124 and between the public safety training center and the library for good visibility and improved security. Located in this cluster of facilities is a free-skate area with a concrete street course and a bowl area as well. Skating activities are segregated based on ability level within this 20,000-square-foot facility. Also included in the teen area are an in-line hockey rink, two outdoor basketball courts, two half-court basketball courts and three sand volleyball courts. A concessions/restroom building and plaza area serves all the teen facilities. 127 parking spaces are available, and vehicular access is provided via the main park entrance drive.

### **Soccer Complex**

The prototypical soccer complex, complete with four adult-sized lighted soccer fields, concession/restroom building with surrounding plaza, bleacher areas and space for teams, is located in the western portion of the park between Duncan Creek and the public safety training center. Also included with the soccer plaza area is a small tot lot for smaller children. Parking for 320 vehicles is available, and vehicular access is provided across the public safety training center driver training course via the main park entrance drive. Replacement of a portion of the driving course and necessary security fencing, gates, etc. will be required to make this connection.

### **Multi-purpose Trails**

A network of multi-purpose trails for walking, strolling, bicycling, rollerblading, etc. is planned to link the various park facilities and provide opportunities for exercise. Routing the loop trails near the facilities provides additional security for them, with a constant pedestrian presence, even when the facilities are not in use. A one-mile multi-purpose trail loop located in the easternmost portion of the park provides park visitors with a measurable track for exercise, while presenting them with views into the park's more special wildlife and forest habitats.

Along the nature trail adjacent to Duncan Creek is a small interpretive area with environmental education signage and a small shelter that provides views and access to the Duncan Creek shoals area.

### **Playground Area**

A large playground, with a play structure for older children, several sets of swings (including a set designed to accommodate children of various special needs), a larger toddler play structure with an emphasis on integration of handicapped-accessible play features, a shade structure near the handicapped-accessible features, and various smaller play elements, is incorporated in a development that also includes a large rental pavilion, small restroom building and sand volleyball court. A large open space provides opportunities for passive play such as Frisbee, kite-flying, etc. Parking for 75 vehicles is accessed via the main park entrance drive.

### **Picnic Area**

A passive recreation area including three open-air picnic shelters is located with views to the forest, an open play lawn contiguous with the playground area, bocce courts,

horseshoe pits and access to the multi-purpose trail network. Its location next to the playground area makes for a large passive-use development where shared parking and restroom facilities are possible. Parking for 56 vehicles is accessed from the playground area.

### **Tennis Area**

Six tennis courts are located on another lower terrace behind the teen area. A small restroom structure is provided with the courts, and parking is shared with the teen area.

## **Opinion of Probable Cost**

An opinion of probable cost was prepared to assist the Citizen Steering Committee in making choices about phasing the various facilities and also in determining the limits of a phase-one development. (See Appendix A, Opinion of Probable Cost.) The cost figures include a 20% contingency to allow for construction document design fees, program management fees, unforeseen issues that will arise during construction document preparation and inflation between the master plan preparation and the future development of the various phases.

## **Facility Prioritization**

Having been presented with the final master plan and opinion of probable cost, the Citizen Steering Committee prioritized the various facilities in order of desired development. The group was first asked to vote to establish facility priorities, and the following is the result of the priority voting, with the highest-priority facilities listed first.

1. Youth Football Complex: lighted field, concession/restroom building, press box, walking track, parking and tot lot
2. Playground Area: ADA playground, pavilion, restroom building, parking, children's half basketball court and open play area
3. Teen Area: free skateboard area, basketball, in-line hockey rink, sand volleyball, concession/restroom building and parking
4. Soccer: four lighted soccer fields, concession/restroom building, parking and tot lot
5. Trail Network: one-mile, paved loop trail, natural surface Duncan Creek trail with interpretive area, connections to various facilities
6. Picnic Area: picnic shelters, parking, open play area, horseshoe pits and bocce courts
7. Tennis Area: six tennis courts, restroom building and parking

After the priorities were established, the opinion of probable cost and the funds available for the first phase of construction were explained to the Citizen Steering Committee. It was noted that approximately \$4.3 million are currently available for construction and



that if the 2005 SPLOST is passed, and expected revenues are dedicated to the Parks and Recreation Division, another potential \$3 million could be added, making the potential phase-one development budget \$7.3 million.

The cost figures for each of the previously prioritized facilities were explained, as they related to the budget. Before any facilities could be developed, it was explained that the sewer lift station, Highway 124 frontage trail/sidewalk, maintenance compound, traffic signal, main entrance, entrance drive (to the sewer lift station) and other various support utilities would have to be constructed to allow any other development to take place. After that, the remaining funds would be utilized to construct the various athletic facilities, as prioritized.

Once the committee reviewed these figures, the group discussed how the remaining prioritized list of facilities could be implemented using the remaining potential budget. It was explained that in the playground/picnic and teen/tennis areas the mass grading, utilities, etc. for all of the facilities in those clusters would be developed along with the first facility in each cluster. The group understood that the preliminary opinion of probable cost was a guide to direct the construction document process and that fine tuning of the costs, including eliminating portions of the recommended facilities (such as the tot lot at the football complex or a few of the basketball courts), could take place at the construction document level to bring better the first phase into the total available budget.

The group also wanted it understood that the prioritized list of facilities represented the preferred order of development. However, should funding become available that would allow a lower-prioritized facility to be built in its entirety, as opposed to allowing a more expensive facility higher on the prioritization list to be built only partially, consideration should be given to the lower-prioritized facility.

After discussion, the Citizen Steering Committee unanimously voted to approve the master plan and the facility prioritization.

**Figure 14** provides a summarized list of the costs, rounded for ease of discussion, associated with the prioritized facilities and those selected for phase-one development (initial overall development, youth football complex, playground area, playground/picnic infrastructure, teen area and teen infrastructure). Further details are included in Appendix A.

Duncan Creek Park Master Plan		
Summarized Final Opinion of Probable Cost – 6-24-04		
Recommended Phase-One Development		
PRIORITY RANKING	PARK FACILITIES	COST
	<b>Initial Overall Infrastructure Development:</b> Hwy 124 frontage trail, traffic signal, turn lanes, entry development, entry road, sewer lift station, maintenance compound	\$ 1,722,000.00
1	<b>Youth Football Complex:</b> lighted field, concession/restroom building, press box, walking track, parking and tot lot	\$ 2,840,000.00
2	<b>Playground Area:</b> ADA playground, pavilion, restroom building, parking, children's half basketball court and open play area	\$ 883,000.00
	<b>Playground/Picnic Area Infrastructure</b>	\$ 253,000.00
3	<b>Teen Area:</b> free skateboard area, basketball, concession/restroom building and parking	\$ 1,240,000.00
	<b>Teen/Tennis Area Infrastructure</b>	\$ 556,000.00
	<b>TOTAL</b>	<b>\$ 7,494,000.00</b>

Figure 14

# Section VII:

## Gwinnett County Recreation Authority and Gwinnett County Board of Commissioners Presentations



## ***Gwinnett County Recreation Authority and Gwinnett County Board of Commissioners Presentations***

After the final master plan was approved by the Citizen Steering Committee, it, along with the prioritized-facility and phase-one costs, was presented to the Gwinnett County Recreation Authority. The Authority Board also unanimously approved the final master plan.

On August 3, 2004, the final master plan and recommended phasing was presented to the Gwinnett County Board of Commissioners. The commissioners were pleased with the presentation and asked that the old cemetery at the front of the public safety training center be clearly delineated. The final master plan presented in this document reflects this modification.



# Section VIII: Cited Resources





## *Cited Resources*

### **Resource Documents**

Lose & Associates, Inc. Gwinnett County, Georgia, 1996 Comprehensive Parks and Recreation Master Plan. The Gwinnett County Department of Community Services. January 1996.

Lose & Associates, Inc. "Memorandum of Scope for Duncan Creek Park Master Plan, Gwinnett County, Georgia." 2004.

Matrix Engineering Group, Inc. "Subsurface Exploration for the Proposed Hog Mountain Park, Gwinnett County, Georgia." 2000.

Monteith Brown Planning Consultants and The Jaeger Company. Gwinnett County, Georgia, 2004 Comprehensive Parks and Recreation Master Plan. The Gwinnett County Department of Community Services. March 2004.

United Consulting Group, Ltd. "Probabilistic Seismic Hazard Analysis on the Hamilton Mill Area High School Site, Gwinnett County, Georgia." 1997.

United Consulting Group, Ltd. "Report of Geotechnical Exploration and Seismic Refraction Survey on the Hamilton Mill Area Middle School, Gwinnett County, Georgia." 1998.

United Consulting Group, Ltd. "Report of Phase I Environmental Assessment and Preliminary Wetland Investigation, Hamilton Mill Site – 133 Acre Tract, Proposed Police Training Facility, Gwinnett County, Georgia." 1997.

United Consulting Group, Ltd. "Report of Phase I Environmental Assessment, Preliminary Geotechnical Exploration and Seismic Refraction Survey on the Hamilton Mill Area High School, Gwinnett County, Georgia." 1997.

United Consulting Group, Ltd. "Report of Phase I Environmental Assessment, Preliminary Geotechnical Exploration and Seismic Refraction Survey – Addendum No. 1, Hamilton Mill Area High School Site – S.R. 124." 1997.

United Consulting Group, Ltd. "Report of Preliminary Geotechnical Exploration and Seismic Refraction Survey on the Hamilton Mill Area High/Middle School Site, Braselton Highway and East Rock Quarry Road, Gwinnett County, Georgia." 1998.

United Consulting Group, Ltd. "Report of Preliminary Wetland Investigation, Hamilton Mill School Site, Gwinnett County, Georgia." 1997.

## Resource Mapping

GIS and Aerial Photography. Digital format. Provided by Gwinnett County Department of Community Services, Planning Development and Special Operations.

Hayes, James & Associates. Composite Plat Prepared for the Gwinnett County Board of Commissioners and Board of Education. Digital format. Provided by Gwinnett County Parks and Recreation Division. October 9, 1998.

Hayes, James & Associates. Plat of the Linda Joyce Radford Property Prepared for Gwinnett County. Digital format. Provided by Gwinnett County Parks and Recreation Division. February 13, 1998.

United States Department of Agriculture Soil Conservation Service. An Update for the Soil Survey of Gwinnett County, Georgia. 1988.

United States Department of the Interior. "United States Geological Survey 7.5 Minute Series Topographic Mapping."

# Appendices



# ***APPENDIX A***





# Duncan Creek Park Master Plan

## Final Opinion of Probable Cost – 6-16-04

ITEM	QUA.	UNIT	COST/UNIT	COST w/ 10% mobilization, overhead, etc, and 20% contingency, A&E fees, and program management fees
<b>Football Area, Maintenance Area, Entrance Road, and Sewer Lift Station</b>				
Overall Development				
Layout survey	18	ac	\$ 350.00	\$ 8,316.00
Site geotechnical survey	1	ls	\$ 3,000.00	\$ 3,960.00
Vegetation clear & grub	18	ac	\$ 6,000.00	\$ 142,560.00
Tree protection & erosion control	1	ls	\$ 40,000.00	\$ 52,800.00
Balanced grading (approximate volume)	55000	cy	\$ 4.00	\$ 290,400.00
Storm drainage	1	ls	\$ 220,000.00	\$ 290,400.00
Mass seeding	10	ac	\$ 3,500.00	\$ 46,200.00
Sewer lift station	1	ls	\$ 250,000.00	\$ 330,000.00
Gravity sewer service from neighboring lift station	1600	lf	\$ 37.00	\$ 78,144.00
3" Sewer force main	1600	lf	\$ 25.00	\$ 52,800.00
Electrical service (including street lighting)	1	ls	\$ 50,000.00	\$ 66,000.00
6" Double detector check	1	ls	\$ 4,200.00	\$ 5,544.00
8" Fire water service (to intersection)	1600	lf	\$ 42.00	\$ 88,704.00
6" domestic water service (to intersection)	1600	lf	\$ 37.00	\$ 78,144.00
Domestic water meter	1	ls	\$ 8,000.00	\$ 10,560.00
Irrigation water meter	1	ls	\$ 13,000.00	\$ 17,160.00
1" Water service (to lift station)	175	lf	\$ 10.00	\$ 2,310.00
Gravity sewer from playground drive to lift station	1300	lf	\$ 37.00	\$ 63,492.00
			<b>subtotal</b>	<b>\$ 1,627,494.00</b>
<b>Entry Drive Development (to main intersection)</b>				
Entrance signage	1	ls	\$ 6,000.00	\$ 7,920.00
Entrance landscaping	1	ls	\$ 15,000.00	\$ 19,800.00
Entrance irrigation	1	ls	\$ 10,000.00	\$ 13,200.00
Entrance gates	1	ls	\$ 3,500.00	\$ 4,620.00
Traffic signal	1	ls	\$ 125,000.00	\$ 165,000.00
Asphalt – turn lanes & main drive to football parking (2" asphalt & 6" base)	43200	sf	\$ 1.60	\$ 91,238.40
Concrete curb & gutter – turn lanes & along main drive (includes courses & 6" aggr.)	3600	lf	\$ 9.00	\$ 42,768.00
8' Concrete sidewalk (to parking lot)	1230	lf	\$ 30.00	\$ 48,708.00
Entrance drive trees	34	ea	\$ 250.00	\$ 11,220.00
			<b>subtotal</b>	<b>\$ 404,474.40</b>

Football Area Development				
Asphalt – parking & main drive to football parking (2" asphalt & 6" base)	141100	sf	\$ 1.60	\$ 298,003.20
Concrete curb & gutter – parking & along main drive (includes courses & 6" aggr.)	7130	lf	\$ 9.00	\$ 84,704.40
8' Concrete sidewalk (to parking lot)	100	lf	\$ 30.00	\$ 3,960.00
12' Concrete sidewalk (to parking lot)	750	lf	\$ 42.00	\$ 41,580.00
Entrance drive trees	15	ea	\$ 250.00	\$ 4,950.00
Con/Span structure at creek crossing	1	ls	\$ 95,000.00	\$ 125,400.00
8" Fire water service (to fire hydrant)	1100	lf	\$ 37.00	\$ 53,724.00
Fire hydrant w/ fee	1	ls	\$ 2,600.00	\$ 3,432.00
2" Water service (to football bldg.)	1350	lf	\$ 20.00	\$ 35,640.00
Football backflow preventer	1	ls	\$ 1,500.00	\$ 1,980.00
6" Sewer service (from football bldg.)	1200	lf	\$ 35.00	\$ 55,440.00
Concrete wheelstops	312	ea	\$ 50.00	\$ 20,592.00
8' Concrete sidewalk (at parking lot)	870	lf	\$ 30.00	\$ 34,452.00
Striping	1	ls	\$ 2,000.00	\$ 2,640.00
Vehicular signage	1	ls	\$ 2,500.00	\$ 3,300.00
Parking lot trees	89	ea	\$ 250.00	\$ 29,370.00
Con/Span structure at creek crossing	1	ls	\$ 50,000.00	\$ 66,000.00
Conc. paving – sidewalks and plaza areas – 4"	18300	sf	\$ 3.50	\$ 84,546.00
Conc. paving – sidewalks and plaza areas – 6"	5800	sf	\$ 5.00	\$ 38,280.00
Stamped concrete patterning	3000	sf	\$ 1.50	\$ 5,940.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 6,600.00
Waste receptacle – double hung	2	ea	\$ 500.00	\$ 1,320.00
Waste receptacle – single hung	3	ea	\$ 260.00	\$ 1,029.60
Picnic tables	6	ea	\$ 1,500.00	\$ 11,880.00
Bike racks (single loop)	2	ea	\$ 200.00	\$ 528.00
Benches	4	ea	\$ 1,000.00	\$ 5,280.00
Small playground equip, mulch, drainage, res. tiles	1	ls	\$ 50,000.00	\$ 66,000.00
Park rules signage	1	ls	\$ 1,000.00	\$ 1,320.00
4' Chain-link fence @ football field	2100	lf	\$ 12.00	\$ 33,264.00
Lights (glare, skyglow control – spill to moonlight)	1	ls	\$ 200,000.00	\$ 264,000.00
Concession/Restroom	1	ls	\$ 285,000.00	\$ 376,200.00
Pressbox/Storage	1	ls	\$ 115,000.00	\$ 151,800.00
Bleachers – 10-rowX21'	4	ea	\$ 12,000.00	\$ 63,360.00
Team benches	4	ea	\$ 500.00	\$ 2,640.00
Football goals – pair	1	ls	\$ 4,000.00	\$ 5,280.00
Asphalt track @ football	21500	sf	\$ 1.60	\$ 45,408.00
Plaza planter curbing	150	lf	\$ 7.00	\$ 1,386.00
Plaza tree grates	10	ea	\$ 500.00	\$ 6,600.00
Sodded turf, including common areas	80000	sf	\$ 0.35	\$ 36,960.00
Irrigation system (sod/ lawn, planted areas)	85000	sf	\$ 0.40	\$ 44,880.00
Complex landscaping	1	ls	\$ 40,000.00	\$ 52,800.00
			<b>subtotal</b>	<b>\$ 2,172,469.20</b>
Maintenance Area Development				
2" Water service (to maintenance bldg.)	600	lf	\$ 20.00	\$ 15,840.00
Maintenance backflow preventer	1	ls	\$ 1,500.00	\$ 1,980.00
6" Sewer service (from maintenance bldg.)	600	lf	\$ 35.00	\$ 27,720.00
Maintenance building	1	ls	\$ 110,000.00	\$ 145,200.00
Maintenance storage bins	1	ls	\$ 4,000.00	\$ 5,280.00
Dumpster enclosure, inc. conc, fencing, bollards, and gate	1	ea	\$ 2,000.00	\$ 2,640.00
Asphalt – maintenance drive (2" asphalt & 6" base)	4500	sf	\$ 1.60	\$ 9,504.00
8' Chain-link fence @ maintenance	220	lf	\$ 20.00	\$ 5,808.00
			<b>subtotal</b>	<b>\$ 213,972.00</b>

<b>Soccer Area</b>				
Layout survey	21	ac	\$ 350.00	\$ 9,702.00
Site geotechnical survey	1	ls	\$ 3,000.00	\$ 3,960.00
Vegetation clear & grub	21	ac	\$ 6,000.00	\$ 166,320.00
Tree protection & erosion control	1	ls	\$ 30,000.00	\$ 39,600.00
Balanced grading (approximate volume)	97000	cy	\$ 4.00	\$ 512,160.00
Retaining wall – concrete unit gravity wall	3000	ff	\$ 25.00	\$ 99,000.00
Guardrail at top of retaining wall	340	lf	\$ 100.00	\$ 44,880.00
Storm drainage	1	ls	\$ 110,000.00	\$ 145,200.00
Mass seeding	5	ac	\$ 3,500.00	\$ 23,100.00
6" Double detector check	1	ls	\$ 4,200.00	\$ 5,544.00
8" Fire water service (to fire hydrant)	475	lf	\$ 42.00	\$ 26,334.00
Fire hydrant w/ fee	1	ls	\$ 2,600.00	\$ 3,432.00
Domestic water meter	1	ls	\$ 8,000.00	\$ 10,560.00
Irrigation water meter	1	ls	\$ 13,000.00	\$ 17,160.00
2" Water service (to soccer bldg.)	475	lf	\$ 20.00	\$ 12,540.00
Soccer backflow preventer	1	ls	\$ 1,500.00	\$ 1,980.00
6" Sewer service (from soccer bldg.)	1700	lf	\$ 35.00	\$ 78,540.00
Electrical service (including street lighting)	1	ls	\$ 40,000.00	\$ 52,800.00
Asphalt main drive – to soccer parking (2" asphalt & 6" base)	26500	sf	\$ 1.60	\$ 55,968.00
Concrete curb & gutter along main drive (Includes courses & 6" aggr.)	2200	lf	\$ 9.00	\$ 26,136.00
8' Concrete sidewalk (to parking lot)	1200	lf	\$ 30.00	\$ 47,520.00
Asphalt drives at safety training center	10000	sf	\$ 1.60	\$ 21,120.00
6' Fence at safety training center	1300	lf	\$ 15.00	\$ 25,740.00
Gate access at safety training center	1	ls	\$ 1,500.00	\$ 1,980.00
Entrance drive trees	49	ea	\$ 250.00	\$ 16,170.00
Asphalt parking (2" asphalt & 6" base)	130000	sf	\$ 1.60	\$ 274,560.00
Concrete curb & gutter (Includes courses & 6" aggr.)	5700	lf	\$ 9.00	\$ 67,716.00
Concrete wheelstops	218	ea	\$ 50.00	\$ 14,388.00
8' Concrete sidewalk (at parking lot)	525	lf	\$ 30.00	\$ 20,790.00
Striping	1	ls	\$ 1,800.00	\$ 2,376.00
Vehicular signage	1	ls	\$ 2,500.00	\$ 3,300.00
Parking lot trees	64	ea	\$ 250.00	\$ 21,120.00
Conc. paving – sidewalks and plaza areas – 4"	8000	sf	\$ 3.50	\$ 36,960.00
Conc. paving – sidewalks and plaza areas – 6"	3200	sf	\$ 5.00	\$ 21,120.00
Stamped concrete patterning	1200	sf	\$ 1.50	\$ 2,376.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 6,600.00
Waste receptacle – double hung	2	ea	\$ 500.00	\$ 1,320.00
Waste receptacle – single hung	5	ea	\$ 260.00	\$ 1,716.00
Picnic tables	12	ea	\$ 1,500.00	\$ 23,760.00
Bike racks (single loop)	2	ea	\$ 200.00	\$ 528.00
Benches	4	ea	\$ 1,000.00	\$ 5,280.00
Small playground equip, mulch, drainage, res. tiles	1	ls	\$ 50,000.00	\$ 66,000.00
Park rules signage	1	ls	\$ 1,000.00	\$ 1,320.00
4' Chain-link fence @ soccer field	3640	lf	\$ 12.00	\$ 57,657.60
Lights (glare, skyglow control – spill to moonlight)	1	ls	\$ 350,000.00	\$ 462,000.00
Concession/Restroom	1	ls	\$ 505,000.00	\$ 666,600.00
Soccer goals	8	ea	\$ 5,000.00	\$ 52,800.00
Team benches	8	ea	\$ 500.00	\$ 5,280.00
Bleachers – 4-rowX21'	4	ea	\$ 2,800.00	\$ 14,784.00
Plaza planter curbing	380	lf	\$ 7.00	\$ 3,511.20
Plaza tree grates	12	ea	\$ 500.00	\$ 7,920.00
Sodded turf, including common areas	530000	sf	\$ 0.35	\$ 244,860.00
Irrigation system (sod/ lawn, planted areas)	550000	sf	\$ 0.40	\$ 290,400.00
Complex landscaping	1	ls	\$ 25,000.00	\$ 33,000.00
Dumpster enclosure, inc. conc, fencing, bollards, and gate	1	ea	\$ 2,000.00	\$ 2,640.00
			<b>subtotal</b>	<b>\$ 3,860,128.80</b>

<b>Teen/Tennis Area</b>				
Mass Development				
Layout survey	9	ac	\$ 350.00	\$ 4,158.00
Site geotechnical survey	1	ls	\$ 2,000.00	\$ 2,640.00
Vegetation clear & grub	9	ac	\$ 6,000.00	\$ 71,280.00
Tree protection & erosion control	1	ls	\$ 10,000.00	\$ 13,200.00
Balanced grading (approximate volume)	39500	cy	\$ 4.00	\$ 208,560.00
Storm drainage	1	ls	\$ 92,000.00	\$ 121,440.00
Mass seeding	4	ac	\$ 3,500.00	\$ 18,480.00
8" Fire water service (to fire hydrant)	300	lf	\$ 42.00	\$ 16,632.00
Fire hydrant w/ fee	1	ls	\$ 2,600.00	\$ 3,432.00
8" sewer service (to parking area)	300	lf	\$ 42.00	\$ 16,632.00
Electrical service (including street lighting)	1	ls	\$ 30,000.00	\$ 39,600.00
5' Concrete sidewalk (to parking lot)	375	lf	\$ 30.00	\$ 14,850.00
Entrance drive trees	14	ea	\$ 250.00	\$ 4,620.00
Asphalt main drive – to parking (2" asphalt & 6" base)	6500	sf	\$ 1.60	\$ 13,728.00
Concrete curb & gutter along main drive (Includes courses & 6" aggr.)	560	lf	\$ 9.00	\$ 6,652.80
			<b>subtotal</b>	<b>\$ 555,904.80</b>
Tennis Development				
Retaining wall – concrete unit gravity wall	2200	ff	\$ 25.00	\$ 72,600.00
Guardrail at top of retaining wall	140	lf	\$ 100.00	\$ 18,480.00
2" Water service (to tennis restroom bldg.)	175	lf	\$ 20.00	\$ 4,620.00
Tennis restroom backflow preventer	1	ls	\$ 1,500.00	\$ 1,980.00
6" Sewer service (from tennis bldg.)	175	lf	\$ 35.00	\$ 8,085.00
Asphalt parking (2" asphalt & 6" base)	21700	sf	\$ 1.60	\$ 45,830.40
Concrete curb & gutter (Includes courses & 6" aggr.)	1000	lf	\$ 9.00	\$ 11,880.00
Concrete wheelstops	65	ea	\$ 50.00	\$ 4,290.00
Concrete sidewalk and plazas	10200	sf	\$ 3.50	\$ 47,124.00
Striping	1	ls	\$ 500.00	\$ 660.00
Vehicular signage	1	ls	\$ 750.00	\$ 990.00
Parking lot trees	10	ea	\$ 250.00	\$ 3,300.00
Lighted tennis courts – per two (acrylic surface over asphalt paving, fencing)	3	ls	\$ 75,000.00	\$ 297,000.00
Conc. stairs	1	ls	\$ 20,000.00	\$ 26,400.00
Stair/Ramp handrail	640	lf	\$ 80.00	\$ 67,584.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 6,600.00
Waste receptacle – single hung	2	ea	\$ 260.00	\$ 686.40
Bike racks (single loop)	1	ea	\$ 200.00	\$ 264.00
Park rules signage	1	ls	\$ 1,000.00	\$ 1,320.00
Tennis restroom	1	ls	\$ 95,000.00	\$ 125,400.00
Bleachers – 4-rowX21'	2	ea	\$ 2,800.00	\$ 7,392.00
Complex irrigation system	1	ls	\$ 5,000.00	\$ 6,600.00
Complex landscaping	1	ls	\$ 10,000.00	\$ 13,200.00
			<b>subtotal</b>	<b>\$ 772,285.80</b>



Teen Area Development				
2" Water service (to teen concession/restroom bldg.)	330	lf	\$ 20.00	\$ 8,712.00
Teen area backflow preventer	1	ls	\$ 1,500.00	\$ 1,980.00
6" Sewer service (from teen bldg.)	330	lf	\$ 35.00	\$ 15,246.00
Asphalt parking (2" asphalt & 6" base)	21700	sf	\$ 1.60	\$ 45,830.40
Concrete curb & gutter (Includes courses & 6" aggr.)	1000	lf	\$ 9.00	\$ 11,880.00
Concrete wheelstops	65	ea	\$ 50.00	\$ 4,290.00
8' Concrete sidewalk (at parking lot)	580	lf	\$ 30.00	\$ 22,968.00
Striping	1	ls	\$ 500.00	\$ 660.00
Vehicular signage	1	ls	\$ 750.00	\$ 990.00
Parking lot trees	9	ea	\$ 250.00	\$ 2,970.00
Lighted free-skate area (+/- 20,000 sf concrete pvmt)	1	ls	\$ 325,000.00	\$ 429,000.00
Lighted inline hockey rink (dasher boards, acrylic surface over asphalt paving)	1	ls	\$ 225,000.00	\$ 297,000.00
Basketball courts (acrylic surface over asphalt paving, fencing)	1	ls	\$ 75,000.00	\$ 99,000.00
Sand volleyball court	3	ls	\$ 3,000.00	\$ 11,880.00
Conc. paving – sidewalks and plaza areas – 4"	28000	sf	\$ 3.50	\$ 129,360.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 6,600.00
Waste receptacle – single hung	3	ea	\$ 260.00	\$ 1,029.60
Picnic tables	9	ea	\$ 1,500.00	\$ 17,820.00
Bike racks (single loop)	2	ea	\$ 200.00	\$ 528.00
Benches	3	ea	\$ 1,000.00	\$ 3,960.00
Park rules signage	1	ls	\$ 1,000.00	\$ 1,320.00
Teen area concession/restroom	1	ls	\$ 285,000.00	\$ 376,200.00
Bleachers – 4-rowX21'	2	ea	\$ 2,800.00	\$ 7,392.00
Plaza planter curbing	95	lf	\$ 7.00	\$ 877.80
Complex irrigation system	1	ls	\$ 20,000.00	\$ 26,400.00
Complex landscaping	1	ls	\$ 20,000.00	\$ 26,400.00
			<b>subtotal</b>	<b>\$ 1,550,293.80</b>

<b>Playground/Picnic Area</b>				
Mass Development				
Layout survey	7	ac	\$ 350.00	\$ 3,234.00
Site geotechnical survey	1	ls	\$ 2,000.00	\$ 2,640.00
Vegetation clear & grub	7	ac	\$ 6,000.00	\$ 55,440.00
Tree protection & erosion control	1	ls	\$ 10,000.00	\$ 13,200.00
Balanced grading (approximate volume)	16500	cy	\$ 4.00	\$ 87,120.00
Storm drainage	1	ls	\$ 30,000.00	\$ 39,600.00
Mass seeding	2	ac	\$ 3,500.00	\$ 9,240.00
Fire hydrant w/ fee	1	ls	\$ 2,600.00	\$ 3,432.00
Electrical service (including street lighting)	1	ls	\$ 30,000.00	\$ 39,600.00
			<b>subtotal</b>	<b>\$ 253,506.00</b>
Playground Area Development				
2" Water service (to restroom bldg.)	375	lf	\$ 20.00	\$ 9,900.00
Restroom backflow preventer	1	ls	\$ 1,500.00	\$ 1,980.00
6" Sewer service (from restroom bldg.)	375	lf	\$ 35.00	\$ 17,325.00
Asphalt parking (2" asphalt & 6" base)	25700	sf	\$ 1.60	\$ 54,278.40
Concrete curb & gutter (Includes courses & 6" aggr.)	1160	lf	\$ 9.00	\$ 13,780.80
Concrete wheelstops	39	ea	\$ 50.00	\$ 2,574.00
Striping	1	ls	\$ 1,000.00	\$ 1,320.00
Vehicular signage	1	ls	\$ 2,000.00	\$ 2,640.00
Parking lot trees	10	ea	\$ 250.00	\$ 3,300.00
Accessible playground area	1	ls	\$ 250,000.00	\$ 330,000.00
Playground area shade structure	1	ls	\$ 30,000.00	\$ 39,600.00
Half Basketball Court	1	ls	\$ 20,000.00	\$ 26,400.00
Conc. paving – sidewalks and plaza areas – 4"	6500	sf	\$ 3.50	\$ 30,030.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 6,600.00
Waste receptacle – single hung	2	ea	\$ 260.00	\$ 686.40
Picnic tables	8	ea	\$ 1,500.00	\$ 15,840.00
Bike racks (single loop)	2	ea	\$ 200.00	\$ 528.00
Benches	4	ea	\$ 1,000.00	\$ 5,280.00
Park rules signage	1	ls	\$ 1,000.00	\$ 1,320.00
Playground shelter	1	ls	\$ 105,000.00	\$ 138,600.00
Restroom building	1	ls	\$ 95,000.00	\$ 125,400.00
Sodded turf, including common areas	31000	sf	\$ 0.35	\$ 14,322.00
Complex irrigation system	40000	sf	\$ 0.40	\$ 21,120.00
Complex landscaping	1	ls	\$ 15,000.00	\$ 19,800.00
			<b>subtotal</b>	<b>\$ 882,624.60</b>

Picnic Area Development				
Asphalt parking (2" asphalt & 6" base)	20000	sf	\$ 1.60	\$ 42,240.00
Concrete curb & gutter (Includes courses & 6" aggr.)	1125	lf	\$ 9.00	\$ 13,365.00
Concrete wheelstops	23	ea	\$ 50.00	\$ 1,518.00
Striping	1	ls	\$ 1,000.00	\$ 1,320.00
Vehicular signage	1	ls	\$ 1,000.00	\$ 1,320.00
Parking lot trees	10	ea	\$ 250.00	\$ 3,300.00
Conc. paving – sidewalks and plaza areas – 4"	1900	sf	\$ 3.50	\$ 8,778.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 6,600.00
Waste receptacle – single hung	3	ea	\$ 260.00	\$ 1,029.60
Picnic tables	12	ea	\$ 1,500.00	\$ 23,760.00
Bike racks (single loop)	1	ea	\$ 200.00	\$ 264.00
Park rules signage	1	ls	\$ 1,000.00	\$ 1,320.00
Picnic shelter	3	ls	\$ 100,000.00	\$ 396,000.00
Bocce courts	1	ls	\$ 5,500.00	\$ 7,260.00
Horseshoe pits	1	ls	\$ 2,000.00	\$ 2,640.00
Sodded turf, including common areas	50000	sf	\$ 0.35	\$ 23,100.00
Complex irrigation system	50000	sf	\$ 0.40	\$ 26,400.00
Complex landscaping	1	ls	\$ 10,000.00	\$ 13,200.00
			<b>subtotal</b>	<b>\$ 573,414.60</b>

<b>Trail Network</b>				
<b>Hwy 124 Frontage Trail</b>				
Vegetation clear & grub	1.2	ac	\$ 6,000.00	\$ 9,504.00
Tree protection & erosion control	1	ls	\$ 15,000.00	\$ 19,800.00
Storm drainage	1	ls	\$ 5,000.00	\$ 6,600.00
Mass seeding	1	ac	\$ 3,500.00	\$ 4,620.00
8' wide asphalt trail	3350	lf	\$ 20.00	\$ 88,440.00
8' wide concrete sidewalk	375	lf	\$ 30.00	\$ 14,850.00
			<b>subtotal</b>	<b>\$ 143,814.00</b>
<b>Main Loop Trail</b>				
Vegetation clear & grub	2.5	ac	\$ 6,000.00	\$ 19,800.00
Tree protection & erosion control	1	ls	\$ 25,000.00	\$ 33,000.00
Storm drainage	1	ls	\$ 30,000.00	\$ 39,600.00
Mass seeding	0.5	ac	\$ 6,000.00	\$ 3,960.00
12' wide asphalt trails	4600	lf	\$ 25.00	\$ 151,800.00
12' wide asphalt trails-connector to restroom area	490	lf	\$ 25.00	\$ 16,170.00
12' wide wood boardwalk creek crossings	135	lf	\$ 450.00	\$ 80,190.00
Boardwalk abutments	4	ea	\$ 3,000.00	\$ 15,840.00
12' wide concrete sidewalk	60	lf	\$ 45.00	\$ 3,564.00
Waste receptacle – single hung	18	ea	\$ 260.00	\$ 6,177.60
Benches	18	ea	\$ 1,000.00	\$ 23,760.00
Trail regulatory signage	1	ls	\$ 4,000.00	\$ 5,280.00
			<b>subtotal</b>	<b>\$ 399,141.60</b>
<b>Duncan Creek Trail</b>				
Vegetation clear & grub	1	ac	\$ 6,000.00	\$ 7,920.00
Tree protection & erosion control	1	ls	\$ 15,000.00	\$ 19,800.00
Storm drainage	1	ls	\$ 10,000.00	\$ 13,200.00
12' wide mulch trails	2650	lf	\$ 10.00	\$ 34,980.00
5' wide concrete sidewalk & stair connection	1	ls	\$ 6,500.00	\$ 8,580.00
Waste receptacle – single hung	4	ea	\$ 260.00	\$ 1,372.80
Benches	4	ea	\$ 1,000.00	\$ 5,280.00
Trail regulatory signage	1	ls	\$ 2,000.00	\$ 2,640.00
Interpretive area shelter	1	ls	\$ 50,000.00	\$ 66,000.00
Interpretive area signage	1	ls	\$ 5,000.00	\$ 6,600.00
			<b>subtotal</b>	<b>\$ 166,372.80</b>
<b>Football Connector Trails</b>				
Vegetation clear & grub	0.5	ac	\$ 6,000.00	\$ 3,960.00
Tree protection & erosion control	1	ls	\$ 8,000.00	\$ 10,560.00
Storm drainage	1	ls	\$ 10,000.00	\$ 13,200.00
12' wide mulch trails	1500	lf	\$ 10.00	\$ 19,800.00
12' wide asphalt trails	180	lf	\$ 25.00	\$ 5,940.00
12' wide wood boardwalk creek crossings	64	lf	\$ 450.00	\$ 38,016.00
Boardwalk abutments	4	ea	\$ 3,000.00	\$ 15,840.00
Trail regulatory signage	1	ls	\$ 1,000.00	\$ 1,320.00
			<b>subtotal</b>	<b>\$ 108,636.00</b>
<b>Soccer Connector Trail</b>				
Vegetation clear & grub	0.25	ac	\$ 6,000.00	\$ 1,980.00
Tree protection & erosion control	1	ls	\$ 2,000.00	\$ 2,640.00
Storm drainage	1	ls	\$ 1,500.00	\$ 1,980.00
8' wide asphalt trail	375	lf	\$ 20.00	\$ 9,900.00
Trail regulatory signage	1	ls	\$ 500.00	\$ 660.00
			<b>subtotal</b>	<b>\$ 17,160.00</b>
			<b>TOTAL</b>	<b>\$ 13,701,692.40</b>



Duncan Creek Park Master Plan		
Summarized Final Opinion of Probable Cost – 6-24-04		
PRIORITY RANKING	PARK FACILITIES	COST
	<b>Initial Overall Infrastructure Development:</b> Hwy 124 frontage trail, traffic signal, turn lanes, entry development, entry road, sewer lift station, maintenance compound	\$ 1,722,000.00
1	<b>Youth Football Complex:</b> lighted field, concession/restroom building, press box, walking track, parking and tot lot	\$ 2,840,000.00
2	<b>Playground Area:</b> ADA playground, pavilion, restroom building, parking, children's half basketball court and open play area	\$ 845,000.00
	<b>Playground/Picnic Area Infrastructure</b>	\$ 253,000.00
3	<b>Teen Area:</b> free skateboard area, basketball, in-line hockey rink, sand volleyball, concession/restroom building and parking	\$ 1,550,000.00
	<b>Teen/Tennis Area Infrastructure</b>	\$ 556,000.00
4	<b>Soccer:</b> Four (4) lighted soccer fields, concession/restroom building, parking and tot lot	\$ 3,860,000.00
5	<b>Trail Network:</b> One-mile paved loop trail, natural surface Duncan Creek trail with interpretive area, connections to various facilities	\$ 691,000.00
6	<b>Picnic Area:</b> picnic shelters, parking, open play area, horseshoe pits and bocce courts	\$ 573,000.00
7	<b>Tennis Area:</b> Six (6) tennis courts, restroom building and parking	\$ 800,000.00
	<b>TOTAL</b>	<b>\$ 13,690,000.00</b>

Duncan Creek Park Master Plan		
Summarized Final Opinion of Probable Cost – 6-24-04		
Recommended Phase-One Development		
PRIORITY RANKING	PARK FACILITIES	COST
	<b>Initial Overall Infrastructure Development:</b> Hwy 124 frontage trail, traffic signal, turn lanes, entry development, entry road, sewer lift station, maintenance compound	\$ 1,722,000.00
<b>1</b>	<b>Youth Football Complex:</b> lighted field, concession/restroom building, press box, walking track, parking and tot lot	\$ 2,840,000.00
<b>2</b>	<b>Playground Area:</b> ADA playground, pavilion, restroom building, parking, children's half basketball court and open play area	\$ 883,000.00
	<b>Playground/Picnic Area Infrastructure</b>	\$ 253,000.00
<b>3</b>	<b>Teen Area:</b> free skateboard area, basketball, concession/restroom building and parking	\$ 1,240,000.00
	<b>Teen/Tennis Area Infrastructure</b>	\$ 556,000.00
	<b>TOTAL</b>	<b>\$ 7,494,000.00</b>

## ***APPENDIX B***



# DUNCAN CREEK PARK MASTER PLAN STEERING COMMITTEE ROSTER

February 20, 2004

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## ***APPENDIX C***



Duncan Creek Park Master Plan	
Community Input Meeting 1-29-04	
DESIRED PROGRAM ELEMENTS	
Category	Number of Times Requested in Survey Responses
Teen area (roller blading/skate boarding/basketball/volleyball)	27
Playground	23
Baseball/softball fields	22
Football	20
Walking trails	19
Picnic areas with trees/covered pavilion	16
Soccer	16
Tennis	10
Open space	7
Community center	6
Bike trails	5
Dog park	5
Fishing	5
Restrooms	5
Aquatic center	4
Outdoor pool	3
Track	3
Concessions	2
Driving range	2
Gym	2
Handicapped playground	2
Senior center	2
Amphitheater	1
Cheerleading	1
Equestrian	1
Handball	1
Horseshoe pit	1
Indoor track	1
Library	1
Paddle boats	1
Parking	1
Racquetball	1

PROGRAM CONCERNS	
Category	Number of Times Mentioned in Survey Responses
Traffic, parking	29
Safety, patrolled park	4
Adequate sports fields	3
Ecology/noise control	3
Firing range	2
Handicapped accessibility	2
Playgrounds	2
Skatepark	2
Fees	1
Fishing	1
Lights	1
Open space	1
Restrooms	1
Separate facilities, younger, older	1
Handicapped playground equipment	1

## ***APPENDIX D***





## MEMORANDUM

Date: 2-12-04

To: Rex Schuder

From: Whit Alexander

Re: Meeting 1-29-04

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On Thursday, January 29<sup>th</sup>, a meeting was held at the Ft. Daniel Elementary School to initiate the planning process for the Duncan Creek Park Master Plan. Representatives from Gwinnett County Department of Community Services, Division of Parks and Recreation, were on hand to present the public with the park's background and to ask them for their input concerning desired amenities to be included. Representatives from Lose and Associates, Inc., the master plan design consultant, were also on hand.

Rex Schuder presented the property's background and the reasons why this park was being developed. He explained that it would serve as a "sister park" to Bogan Park, where facilities would complement, not duplicate those at Bogan Park.

The citizens were presented with interest survey forms for them to record their list of desired facilities and their project concerns. The citizens were also asked if they would be interested in serving on an input steering committee that would help design the park.

The following is a record of the interest survey results, with facilities ranked in order of desired importance.

Thank you.

## **MEMORANDUM**

Date: 2-20-04

To: Duncan Creek Park Citizen Steering Committee

From: Whit Alexander

Re: Scheduling Meeting 2-17-04

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On 2-17-04, a meeting was held to schedule future meetings for the Citizen Steering Committee in Conference Room C of the Gwinnett Justice Center. Present were Kathy Banks, Al Cunningham, Mike Estep, Jeff Grier, Todd Hafner, Tammie Kimball, Candice Lange, Doug Lewis, Sara Nerenbaum, Lance Pettus, Rhonda Peyton, Kirk Preiser, Carey Smith, Kim Teschner, Rex Schuder and Whit Alexander.

Rex welcomed the group and read the results of the initial input meeting, outlining the requested park program elements, and describing their various aspects. He also read the census data, explaining to the group the population trends of the surrounding area. These items, along with a topographic map of the site, were passed out to the meeting participants.

The group prepared a schedule for future meetings based on everyone's schedules. A copy of this schedule is attached.

Thank you.

## MEMORANDUM

Date: 3-10-04

To: Duncan Creek Park Citizen Steering Committee

From: Whit Alexander

Re: Park Tour Meeting 3-6-04

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On 3-6-04, the citizen steering committee toured the Duncan Creek Park site and several existing county parks. Present were Kathy Banks, Jeff Little, Al Cunningham, Mike Estep, Jeff Grier, Todd Hafner, Bob Kimball, Mike Lange, Doug Lewis, Sara Nerenbaum, Lance Pettus, Rhonda Peyton, Kirk Preiser, Carey Smith, Kim Teschner, Grant Guess, Rex Schuder and Whit Alexander.

The group met near the bus depot at the end of East Rock Quarry Rd. The group walked into the Duncan Creek Park Site where Rex explained the difference in the forest habitats and the fact that they represented various ages, aggressive clearing in the past, and erosion from previous agricultural activities. The group walked several existing woodland trails and reviewed potential sites for development. Interstate noise was noticed by the group. The group also experienced the site's creek systems and noted that they would like to preserve the waterfall/shoals area. The group noted that they would like some sort of passive recreation experience near the waterfall/shoals area.

The group then embarked on a tour of the county's park system. The first stop was to see the Kohl's parking lot entrance drive, where vehicles could potentially access the site behind the fire training center.

The first park the group visited was Bay Creek Park. The group toured the football facility and noted that they would like to see bleachers that were not divided. They toured the concessions building and noted that they would like the ability to have outdoor grilling. Rex noted to the group that the space needed for Bay Creek's football area (along with parking, cheerleading, detention, buildings, etc.) would also be required for Duncan Creek Park. The group also toured the playground at the center of the baseball complex. The group noted that they would like to see an ADA-accessible playground structure that would be built in conjunction with play activities for other children as well to encourage a joint play experience.

The group then toured Bethesda Park, where they saw how soccer fields are built in large terraces. The group also walked the park's multi-purpose trail and noted how the trail provides access to the various facilities, security due to constant foot traffic and opportunities for passive recreation.

The group then toured Pinckneyville Park, where they saw a portion of a typical teen area, including a skateboard park and in-line hockey rink. They also saw how some soccer fields are developed independently from one another, in an effort to reduce site disturbance. At Pinckneyville Park, the group saw a standard picnic pavilion in conjunction with a standard playground development. The group seemed to like the teen-area development and expressed a desire to see a similar development at Duncan Creek Park.

The group also toured Little Mulberry Park out of a desire to see the special features being developed near their neighborhoods.

Before the group dispersed, Rex took a poll to review the desired program based upon the facilities the group had seen that day. The group unanimously agreed that a football complex, teen areas, soccer fields, multi-purpose trails, a handicapped-accessible playground and passive open space areas should be included in the park program. If a dog park and tennis courts needed to be included in the Sister Park Program, the group expressed a desire that the tennis courts be located at Duncan Creek Park. The group also expressed a desire to see an outdoor classroom/small amphitheater be included within the park.

The group dispersed with a reminder from Rex about the next meeting on 3/30 to review the three preliminary concepts prepared by Lose & Associates.

End of Memo

Thank you.



## **MEMORANDUM**

Date: 4-2-04

To: Duncan Creek Park Citizen Steering Committee

From: Rex Schuder, Whit Alexander

Re: Concept Review Meeting 3-30-04

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### **Duncan Creek Park Master Plan Meeting Notes – March 30, 2004**

**Attendees:**

Rex Schuder, Grant Guess, Whit Alexander

Mike Estep, Kathy Banks, Sara Nerenbaum, Doug Lewis, Todd Hafner, Al Cunningham, Casey T. Smith, Michael Lange, Kirk Preiser, Tammie Kimball

The Inventory/Analysis sheets were presented with few questions.

**Global Comments from Rex Schuder:**

- Locate route of the old roadbed from Rock Quarry Road to the football plateau so it can be evaluated for future use as vehicular or multi-purpose trail paved route.
- Show all proposed detention basins as un-irrigated grassed areas unless provisions have been specifically made to use a wall-weir solution that would allow for the retention of existing trees within the basin.
- Show, in a zone adjacent to the large playground, two to three acres of irrigated, graded (variable grade from two to five percent) turf with an irregular boundary and the opportunity for retained specimen trees or tree groupings within the space.
- Check to see if there are any plans to bring a gravity sewer line up the Duncan Creek Corridor. Confirm with the Department of Public Utilities that a lift

station will be the solution that they desire for the site. Show a location for a lift station for sanitary sewer service. Anticipate a route for the force main, and show that route as a cleared corridor on the site. See if the clearing associated with the force main route can provide double duty as either a trail corridor or road corridor.

- Eric Horne (Parks Grounds Maintenance Manager) mentioned that a 10' shed (roof and fenced sides with lockable gate) should be sited in the football complex. This will allow him to leave his gang reels at the football complex so he only has to drive the tractor along the multi-purpose trails and over a potential Duncan Creek multi-purpose trail bridge.
- Clearly show the out-parcel west of the Fire Station as "Not Park" by change of color or some such obvious visual clue.
- Please check the feasibility of connecting the soccer parking to the potential park entrance coming off of the Kohl's parking lot. If such a connection is feasible, and Kohl's entrance concept gels in our favor, we should consider flipping soccer parking to the east of the soccer fields to make the connection to the Kohl's entrance a shorter route. The county asks that the concession building be separated from the parking more than is shown as the plan develops to keep kids from running from the building zone straight into traffic lanes.

## **Comments from the Steering Committee**

- Football: Committee prefers parking as shown on Concept Plan #1, prefers field orientation as shown on Concept Plan #3, with provision that the resultant plan move the concession building to an optimal location with respect to vendor and fire service needs and that emergency, police and maintenance vehicles (for instance, the boom trucks needed to re-lamp the field lights) have access to the field. Add modestly sized tot lot playground to the football complex. Attempt grading solution that depresses the field with respect to I-85.
- Soccer: Committee accepts soccer complex in location as shown with standard concession building and tot lot.
- Teen Facilities: Committee prefers location next to the Fire Station and wants basketball placed along frontage of Hwy. 124, so flip the skate elements with the court elements.
- Tennis: Committee asked that we see if they can have six un-staffed courts instead of four.

- Playground: Committee asked for two to three acres of irrigated turf for free play adjacent to the large playground.
- Picnic Pavilions: Committee prefers a solution like on Plan #3 where the rental pavilion and first-come-first-serve pavilions share contiguous green space and are not separated by vehicular roadway or parking lots.
- Maintenance Compound: Committee likes the central location of maintenance on Plan #3 (which yields added security to the day-use amenities in the south-east of the park) but understands we will need a multi-purpose trail network (12' wide asphalt) to reach all park zones and that this network will include trails along the frontage of Ga. 124 (so the tractor can access the soccer complex) and a multi-purpose trail bridge over Duncan Creek sufficiently robust to handle the tractor.
- Senior Courts: Committee agrees that pairs of bocce and horseshoe courts should be added to the plan, but consideration should be given to their siting as special-needs and senior users may need to be more proximate to parking and need accessible slopes to facilities.
- Library Location: Committee prefers easternmost site presented so that the teen facilities can occupy the westernmost site. However, the committee understands that the library management has right of choice.
- Trails: The committee understands that the conceptual plans did not contain sufficient detail to warrant much comment on trails and that more scrutiny would occur when the Preliminary Master Plan is presented.
- Detention Basins: The committee was concerned with safety and aesthetic problems that they associate with detention basins. We will address those concerns in greater detail when the Preliminary Master Plan shows the grading and clearing associated with the consultant's siting of basins.

End of Memo

Thank you.

## MEMORANDUM

Date: 4-23-04

To: Duncan Creek Park Citizen Steering Committee

From: Whit Alexander

Re: Meeting 4-22-04

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On 4-22-04, a meeting was held to present the county's recent discussions concerning the planning of Duncan Creek Park to the Citizen Steering Committee in Conference Room A of the Gwinnett Justice Center. Present were Kathy Banks, Al Cunningham, Mike Estep, Todd Hafner, Tammie Kimball, Michael Lange, Lance Pettus, Rhonda Peyton, Kirk Preiser, Grant Guess, Kim Teschner, Rex Schuder and Whit Alexander.

Rex welcomed the group and noted the recent results of the county's efforts to achieve a traffic light and access to the soccer area. Rex presented an interim concept plan that represents the latest ideas for the park's plan and which incorporates as many of the committee's input comments as possible. Of note were the following changes: The library site is now located along the edge of the fire training facility, per the library's request. A traffic light is now planned for the Pine Rd. intersection, but the costs for this light and its surrounding traffic improvements will need to come from the park construction budget. According to a preliminary flood study performed by Lose & Associates, it is feasible to link the soccer area with the Pine Rd. traffic light through the driver training course. Rex noted that all of these improvements will impact the county's decision to link the football area with the Kohl's access drive. Rex noted that the Parks and Recreation director was to discuss options with the Kohl's developer but that an agreement might be difficult to achieve.

Rex noted that at our previously scheduled meeting on May 4, we would present a hybrid concept plan representing the latest design. He also noted that at this meeting, the group would reschedule the remaining meetings.

Thank you.

## MEMORANDUM

Date: 5-5-04

To: Duncan Creek Park Citizen Steering Committee

From: Whit Alexander

Re: Meeting 5-4-04

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On 5-4-04, a meeting was held to present the county's recent discussions concerning the planning of Duncan Creek Park to the Citizen Steering Committee in Conference Room C of the Gwinnett Justice Center. Present were Kathy Banks, Tammie Kimball, Doug Lewis, Kirk Preiser, Grant Guess, Phil Hoskins, Rex Schuder and Whit Alexander.

Rex welcomed the group and noted that since the last meeting, the library site had been relocated near the entrance based on requests from the library group. Whit presented the Hybrid Concept Plan that incorporated the group's suggestions to modify the interim concept plan presented at the last meeting. Whit and Rex noted the preliminary routing for the multi-purpose trail that would include an interior 1-mile loop. The trail network would also include a non-paved nature trail in its system. The vehicle crossing culvert at Duncan Creek provided the opportunity for a trail along Duncan Creek to pass underneath the main road. Rex also noted that sewer options and access points needed to be explored to reduce construction costs.

Of note, the group had the following comments and suggestions. The senior courts (horseshoes and bocce) should be relocated near the picnic pavilions, as these activities will enhance the picnic experience. The playground restroom should be moved to a central location to serve both the playground area and the picnic shelter area. Two half-court basketball courts should be added to the teen area to ensure a place for younger children to play when the larger courts are occupied. We should include sufficient picnic tables, benches, seat walls, etc. near the concessions buildings and provide as much shade as possible for the locations. The group also asked us to explore adding a right-turn only exit from the soccer parking lot that could be gated when no tournaments are scheduled.

The group determined that the presentation of the preliminary master plan would be on Thursday, June 3<sup>rd</sup>, at 7:00 p.m. in Conference Room A. The subsequent final master plan presentation would be on Wednesday, June 16<sup>th</sup>, at 7:00 p.m. in Conference Room A.

Thank you.



## MEMORANDUM

Date: 6-4-04

To: Duncan Creek Park Citizen Steering Committee

From: Whit Alexander

Re: Meeting 6-3-04

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On 6-3-04, a meeting was held to present the preliminary master plan and opinion of probable cost to the Citizen Steering Committee. Present were Kathy Banks, Kirk Preiser, Mike Estep, Doug Lewis, Kim Teschner, Al Cunningham, Tammie Kimball, Todd Hafner, Grant Guess, Rex Schuder and Whit Alexander.

Rex welcomed the group and noted that the library site had been relocated near the entrance to provide maximum accessibility to the entrance traffic signal.

Whit presented the preliminary master plan noting the few minor changes since the hybrid conceptual plan and explaining the amount of increased detail shown on the plan. Whit also explained that preliminary utility routes, grading and other infrastructure had been designed in an effort to determine the budget for each facility.

The group was asked for comments, and the following is a list of items discussed.

1. A turnaround other than the loop walking trail should be designed for the football concessions area.
2. A pull-off or larger paved pad should be shown near the football concessions area to accommodate occasional service traffic and to keep it from parking on the walking track.
3. The final narrative report should recommend further study for an exit-only route from the soccer parking area.

The preliminary opinion of probable cost was presented to the group, and it was explained that it was to be used at the next meeting for determining phasing priority. The group asked that the various facilities be shown separately in the cost figures.

Rex also noted that the final master plan should include a summary chart of park acreage and total parking by area. He reminded the group that at the next presentation on 6-16-04, the group would vote on facility phasing and priority and that attendance was very important.

Thank you.

## MEMORANDUM

Date: 6-18-04  
To: Duncan Creek Park Citizen Steering Committee  
From: Whit Alexander  
Re: Meeting on 6-16-04

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On 6-16-04, a meeting was held to present the final master plan and opinion of probable cost to the Citizen Steering Committee. Present were Kathy Banks, Rob Dollar (for Mike Estep), Kirk Preiser, Doug Lewis, Kim Teschner, Tammie Kimball, Todd Hafner, Rhonda Peyton, Grant Guess, Rex Schuder, Joe Hoyle and Whit Alexander.

Rex welcomed the group and noted that the committee would vote to establish the project development priorities, including their recommendation of which facilities should be constructed in the first phase.

Whit presented the final master plan noting the few minor changes implemented since the preliminary master plan presentation and explaining changes to the playground area, football area and tennis court area.

The group was asked first to vote to establish facility priorities, and the following is the result of the priority voting:

1. **Youth Football Complex:** concession/restroom building, press box, walking track, parking, and tot lot
2. **Playground Area:** ADA playground, pavilion, restroom building, parking, half basketball court and open play area
3. **Teen Area:** emphasis on the skateboard area first, concession/restroom building and parking
4. **Soccer:** Four (4) soccer fields, concession/restroom building, parking and tot lot
5. **Trail Network:** One-mile paved loop trail, natural surface Duncan Creek trail with interpretive area, connections to various facilities
6. **Picnic Area:** picnic shelters, parking, open play area, horseshoe pits and bocce courts
7. **Tennis Area:** Six (6) tennis courts, restroom building and parking

After the priorities were established, Whit explained the opinion of probable cost to the steering committee and the funds available for the first phase of construction. The following is a summary of the figures, rounded for ease of discussion.

The total probable cost for the park	<b><u>\$13.6 Million</u></b>
○ Current available construction budget	\$4.3 Million
○ Potential funding from 2005 SPLOST	<u>\$3.0 Million</u>
○ Potential budget	<b>\$7.3 Million</b>

Whit then presented the cost figures for each of the previously prioritized facilities, as they related to the budget. The following is a synopsis of each of the desired facility's costs rounded for ease of discussion.

Phase 1. Before any facilities could be developed, it was explained that the sewer lift station, Hwy. 124 frontage trail/sidewalk, maintenance compound, traffic signal, main entrance, entrance drive (to the sewer lift station) and other various support utilities would have to be constructed to allow any other development to take place. After that, the remaining funds would be utilized to construct the various athletic facilities, as prioritized by the steering committee.

○ Overall Site Infrastructure (as listed above)	\$1.8 million
○ Youth Football Complex Development (1 <sup>st</sup> on priority list)	<u>\$2.8 million</u>

<b>Subtotal</b>	<b>\$4.6 million</b>
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Once the committee reviewed these figures, the group discussed how the remaining prioritized list of facilities could be implemented using the remaining potential budget. It was explained that in the playground/picnic area and the teen/tennis area the mass grading, utilities, etc. for all of the facilities in those clusters would be developed along with the first facility in each cluster. The following is a summarized list of the costs associated with the prioritized facilities, rounded for ease of discussion.

○ Playground Area Development	\$1.1 million
○ Teen Area Development (Skateboard and Basketball only)	<u>\$1.8 million</u>

<b>Subtotal</b>	<b>\$2.9 million</b>
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<b>Total Recommended for Potential Phase 1 Budget:</b>	<b>\$7.5 million</b>
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The group further discussed the prioritization of the football complex, with some noting that the funds utilized for its development could be utilized to construct several of the other facilities. The group discussed this at length and ultimately decided to keep the phasing recommendation as previously noted, with football being first on the list for development.

The committee discussed the potential budget and the available budget with Rex, who explained that the \$4.3 million is currently available for initial construction. This process of planning, permitting, bidding etc. could take up to a year to have a contractor ready to begin. In the meantime, the rest of the potential future budget will be determined as part of the 2005 SPOST vote and potential allocation process. The group felt that the facilities marked for the phase 1 development could be refined during the construction document planning to reflect the actual budget once it was determined.

Rex discussed with the committee their recommendation for future phases of development. The committee noted that they would like the future funding to be used for finishing park facilities that were partially constructed in the first phase rather than starting a new facility such as the soccer complex.

Rex also discussed with the group their opinion of the master planning process. The group felt that it was a valuable process. The only change they would recommend would be for them to visit the existing parks in the Gwinnett County system first and then visit the park site to be master planned afterward for comparison.

Rex noted that the group was invited to attend the future presentations of the plan to various Gwinnett County officials and that notification would be mailed soon.

Thank you.

## MEMORANDUM

Date: 7-7-04

To: Duncan Creek Park Citizen Steering Committee

From: Whit Alexander

Re: Recreation Authority Meeting on 6-24-04

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At the June 24<sup>th</sup> Gwinnett Recreation Authority Meeting, Whit Alexander from Lose & Associates presented the Duncan Creek Park Master Plan and prioritization recommendations. In addition to the Recreation Authority, Todd Hafner, from the Duncan Creek Park Citizen Steering Committee, was in attendance.

At this meeting, Whit summarized the design process that lead to the plan, presented the plan and noted the following prioritization recommendations.

1. **Youth Football Complex:** lighted field, concession/restroom building, press box, walking track, parking and tot lot
2. **Playground Area:** ADA playground, pavilion, restroom building, parking, children's half basketball court and open play area
3. **Teen Area:** free skateboard area, basketball, in-line hockey rink, sand volleyball, concession/restroom building and parking
4. **Soccer:** Four (4) lighted soccer fields, concession/restroom building, parking and tot lot
5. **Trail Network:** One-mile paved loop trail, natural surface Duncan Creek trail with interpretive area, connections to various facilities
6. **Picnic Area:** picnic shelters, parking, open play area, horseshoe pits and bocce courts
7. **Tennis Area:** Six (6) tennis courts, restroom building and parking

Whit also presented a summarized opinion of probable cost and phase-one budget and scope. He also noted that the Input Committee had suggested that if a future budget figure became available that allowed a lower-prioritized facility to be built in its entirety, that consideration should be given to its development, over that of only partially funding a more highly prioritized facility.



The Recreation Authority asked Todd Hafner if there was any dissention between members of the Citizen Steering Committee over the final master plan and priority list. Mr. Hafner noted that the group felt their desires and needs were accommodated in the plan and that although there were some discussions, the group had unanimously approved the plan and priority list.

The Recreation Authority then voted unanimously to approve the master plan and prioritization.

End of Memo

Thank you