



## LENORA PARK MASTER PLANS

LENORA PARK IS COMPOSED OF MULTIPLE PARCELS ACQUIRED OVER A DECADE OR SO THAT COMBINED TOTAL 178.39 ACRES. THE INITIAL LAND ACQUISITION AND PARK DEVELOPMENT WAS APPROXIMATELY 85 ACRES, FOLLOWED BY THE ACQUISITION OF THE ADJACENT PARCEL TO THE NORTH OF APPROXIMATELY 27 ACRES, AND CONCLUDING WITH THE ACQUISITION OF THE PARCELS ACROSS LENORA CHURCH ROAD OF APPROXIMATELY 66 ACRES.

THE FIRST PHASE OF LENORA PARK WAS MASTER PLANNED BY EDAW IN 1991. IT INCLUDED A 6-FIELD BASEBALL-SOFTBALL COMPLEX, GYM, MULTI-PURPOSE TRAIL LOOP, PICNIC PAVILION AND PLAYGROUND. YEARS AFTER THE FIRST PHASE WAS CONSTRUCTED, PROPERTY WAS ACQUIRED ACROSS LENORA CHURCH ROAD FOR PARK EXPANSION. THIS EVENT REQUIRED THE DEVELOPMENT OF THE 2003 MASTER PLAN BY jB+a. THE SECOND PHASE OF PARK CONSTRUCTION ADDED OUTDOOR FAMILY AQUATICS AND MULTI-PURPOSE FIELD COMPLEXES, ADDITIONAL PAVED AND NATURAL SURFACE TRAILS AND A MAINTENANCE COMPOUND.

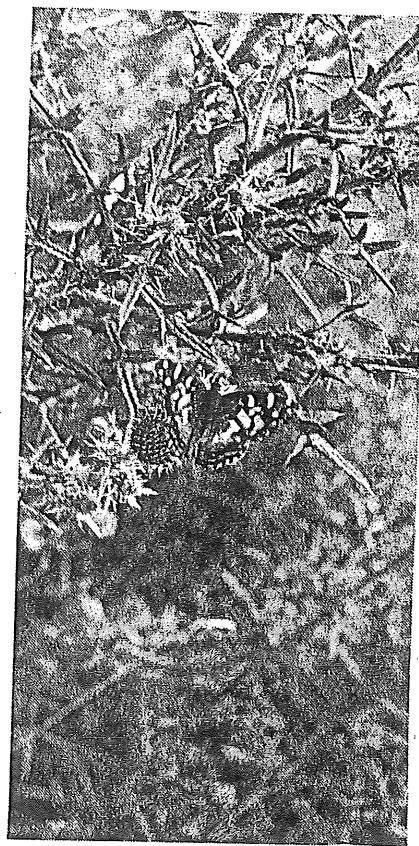
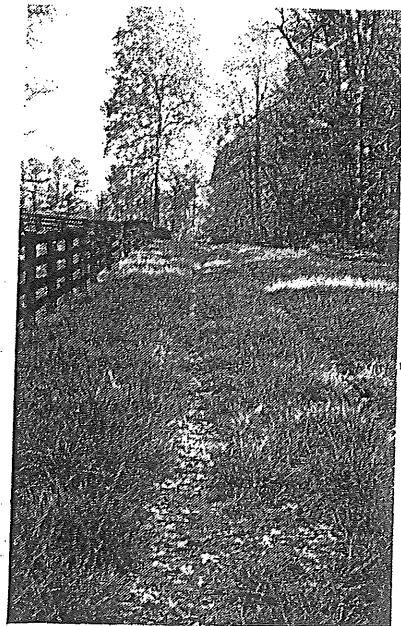




## **Master Plan**

### **Lenora Community Park**

prepared by  
**EDAW, Inc.**



for the  
**Gwinnett County  
Board of Commissioners**

**Department of  
Human Services  
Parks Development  
Division**

**August 1991**



---

# **Master Plan**

## **Lenora Community Park**

prepared by  
**EDAW, Inc.**

for the  
**Gwinnett County  
Board of Commissioners**

**Department of  
Human Services  
Parks Development  
Division**

**August 1991**



## Table of Contents

---

### *Table of Contents*

	<u>Page</u>
<b>The Master Planning Process .....</b>	<b>1</b>
<b>Park Program .....</b>	<b>3</b>
The Community Park Prototype .....	3
Community Input .....	3
<b>Site Inventory, Analysis and Programming .....</b>	<b>6</b>
Soils and Geology .....	6
Subsurface Rock .....	6
Soils .....	8
Soil Suitability for Septic Field Development .....	9
Vegetation .....	10
Hydrology .....	12
Slope .....	13
Viewshed Analysis .....	15
Lake Viewshed .....	15
Lenora Church Road Viewshed .....	15
Use of Viewshed Analysis Findings .....	15
Site Analysis Summary .....	18
Site Development Program .....	20
Site Related Functional Analysis .....	22
<b>Master Plan .....</b>	<b>25</b>
Illustrative Summary .....	25



## Table of Contents

---

### *List of Figures*

	<u>Page</u>
Figure 1. Topography and Boundary Information . . . . .	14
Figure 2. Lake Viewshed . . . . .	16
Figure 3. Lenora Church Road Viewshed . . . . .	17
Figure 4. Site Analysis Summary . . . . .	19
Figure 5. Site Characterization Diagram . . . . .	23
Figure 6. Master Plan Rendering . . . . .	26

### *List of Tables*

Table 1. Process of Master Planning . . . . .	1
Table 2. Goals of the Planning Process . . . . .	2
Table 3. Community Park Prototype . . . . .	4
Table 4. Program Elements . . . . .	21
Table 5. Developmental Suitability Matrix . . . . .	24
Table 6. Site Development Cost Analysis . . . . .	27

### *List of Photographs*

Photo 1. EDAW staff develop design concepts at the project site . . . . .	2
Photo 2. The northern pasture vista, taken from the lake . . . . .	5
Photo 3. Highest ground on the property . . . . .	7
Photo 4. The flat areas surrounding the stable building . . . . .	7
Photo 5. Trees at pasture fence reinforce lake viewshed boundary . . . . .	10
Photo 6. [photo 6 removed]	
Photo 7. Naturalized oaks and dogwoods at northwest corner of property	11
Photo 8. Mature red oaks surround the lake . . . . .	11
Photo 9. Sedge and sweet gum add a soft edge to the lake . . . . .	11
Photo 10. Mature spreading oak provides shade . . . . .	11
Photo 11. Small, man-made lake is a central element of the property . . . . .	12
Photo 12. Driveways provide access throughout the property . . . . .	13
Photo 13. A 50-foot median separates pastures from subdivision lots . . . . .	18



### *The Master Planning Process*

The Parks and Recreation Division of the Gwinnett County Department of Human Services applies a uniform process to the planning of recreation facilities in the county. The process allows for the complete and thoughtful development of outdoor recreation facilities throughout the county, provides for community input to assure development of needed facilities, and provides a review process to address management issues through design. The sequence of tasks required to develop a park master plan is outlined in Table 1.

**Table 1.**  
**Process of Master Planning**

- County requests proposals for professional design services from qualified consultants.
- County evaluates proposals and Board of Commissioners approves recommended consultant.
- County and consultant introduce key players and discuss process.
- First public meeting announces planning process and requests facility programming input.
- Design team develops conceptual plans based on County-Wide Recreation Plan, public input, and county participation.
- Parks and Recreation Division and Recreation Authority Review Committee review concepts; consultant revises as necessary.
- Second public meeting presents preliminary master plan for citizen review and input.
- Consultant presents preliminary master plan to Recreation Authority Review Committee; revises as necessary.
- Consultant presents final master plan to Recreation Authority for adoption; Authority recommends adoption to Board of Commissioners.

The basis of recreation facility planning in Gwinnett County is the County-Wide Recreation Master Plan developed in 1986. The county park system is composed of four park types: regional, community, neighborhood, and special purpose. The County-Wide Master Plan describes prototype facilities to be used as a general guide for development of recreation facility plans. Through public meetings, design process, and interaction between design consultants and county administrators, the prototype is fine-tuned to apply to specific sites and community needs.



## The Master Planning Process

---



*Photo 1. EDAW staff develop design concepts at the project site*

The master planning process includes thorough consideration of the goals to be achieved by the facilities developed. Balancing the various passive and active recreation requirements of the community park prototype within the constraints of the proposed site presents a challenge in the park master planning process. The goals for the development of Lenora Community Park are outlined in Table 2.

**Table 2.**  
**Goals of the Planning Process**

- Provide safe, secure facilities
- Preserve environmental quality
- Enhance aesthetic value
- Balance passive and active facilities
- Provide ease of maintenance
- Provide cost efficiency
- Provide efficiency of operations



### *Park Program*

#### ***The Community Park Prototype***

The County-Wide Recreation Master Plan (CRMP) for Gwinnett County, Georgia provides direction for the development of appropriate parks and recreation facilities within rapidly developing Gwinnett County.

Of the four park types within the Gwinnett County Park System, community parks are the backbone of the system. They are designed to provide a broad spectrum of team and individual recreation opportunities, both active and passive, for a wide range of age groups. The CRMP established 11 community park service areas to meet the needs of the entire county and proposed a community park prototype which represents a minimum development program for community parks (see Table 3). The prototype serves as a development guide to be combined with an understanding of specific local needs as well as site opportunities and constraints in defining site-specific development for individual parks.

#### ***Community Input***

With the community park prototype as a tentative development model, a series of public meetings was held to discuss the public's needs and desires for recreation facilities.

Two public meetings for Gwinnett County at large were held to secure public input in the planning process. The first meeting provided an opportunity to discuss the planning process, the community park prototype, and specific recreation needs for the service area. Responses generally supported the community park prototype and the concept of a mix between active and passive recreation activities. Specific requests were received for activities not within the prototype, such as equestrian trails and event staging areas.

Following the first public hearing, youth athletic associations in Gwinnett County were asked to describe their group's characteristics, existing facilities, and needs and also to provide design criteria relating to operations, management and maintenance of new facilities.

## Park Program

**Table 3.**  
**Community Park Prototype**

Average Size:	50-100 acres (75 acres target size)		
General Physical Concept:	Predominantly natural area that provides active recreation, picnicking and other passive activities. Cultural needs served by general purpose building.		
General Purpose:	To serve the full range of community area recreation needs (daylight and evening use).		
Program:	Passive enjoyment of natural landscaped areas, lakes and woods, large meetings, sports competitions, exhibitions; day and evening use of facilities; all age groups.		
Park Facilities and Group Served:	<u>Qty.</u>	<u>Facility</u>	<u>Age Group</u>
	(3)	Lighted softball fields	6-65 & up
	(2)	Lighted youth baseball fields	6-14
	(6)	Lighted tennis courts	6-65 & up
		Football/soccer field	6-65 & up
	(4)	Basketball/multi-purpose courts	6-65 & up
	(4)	Horseshoe courts	6-65 & up
		Picnic area	1-65 & up
		Children's play area	1-6
		Apparatus area	6-14
		Community center building with gym and pool	1-65 & up
		Maintenance storage building	N/A
		Lake	1-65 & up
		Parking, roads & sanitary facilities	N/A
		Landscaping & fencing	N/A
		Utilities	N/A

Generally, the youth associations expressed the need for additional team sports facilities, including basketball, baseball, football and soccer fields and related site improvements such as lighting, parking, concession/rest room structures, and bleachers. A frequently expressed priority was for play area, parking and concession facility improvements to support adjacent sports facilities.

The second public meeting presented a draft master plan for citizen review. The character, number, and distribution of facilities was described and discussed in open



## Park Program

---

forum, and comments and suggestions of the participants were received. The community was generally supportive of the master plan.

The final review process, including presentation to the Recreation Authority and the Board of Commissioners, concluded the master plan process. Specific comments were addressed, and the master plan was formally adopted.



*Photo 2. The northern pasture vista, taken from the lake*

### *Site Inventory, Analysis and Programming*

In order to establish a workable development plan based on the community park prototype and community input, knowledge of the park site's character, suitabilities and capacities is required. The analysis of existing conditions combined technical data, such as soil and topographic surveys and aerial photography, with field inventories to investigate soils and geology, degree of slope, vegetation and hydrology. Unique site features such as pastoral viewsheds, ponds and farm structures were also considered.

#### ***Soils and Geology***

Knowledge of soils and subsurface geology are key determinants of site planning decisions when locating large "footprint" facilities, such as athletic fields. The performance of a thorough geotechnical analysis early in the master plan process is an essential first step in developing this necessary understanding. Facilities sited in inappropriate portions of the site can add significant costs to the project if soils are unsuitable or large quantities of rock are encountered in excavation.

A geotechnical evaluation of the site has been performed by ATEC Associates on behalf of the county. The key findings of this study are graphically incorporated into the general site analysis diagram (Figure 4 on page 19).

#### ***Subsurface Rock***

The ATEC geotechnical study revealed that the subsurface rock strata include granite and a related group of granitic materials. Some of this granite is thought to be highly weathered and therefore easily excavated. The need to blast rock during site development can generally be forecast from the ATEC study and can more precisely be determined upon performance of additional borings or soundings. The location of very shallow subsurface rock is indicated on Figure 4. One large subsurface rock mass is located on the high central knoll adjacent to the barn. Another large subsurface rock mass is located to the west of the stable. Utility trench excavation or any mass excavation which requires lowering the prevailing grade in these areas will almost certainly necessitate rock excavation.

Fortunately, the ATEC study has indicated that the large knolls at the north property line and the large knoll in the center of the southern half of the site are relatively free



## Site Inventory and Analysis

---

of shallow rock, with both borings and traverse tests indicating that rock may not be reached above a depth of 30 deep in these areas.



*Photo 3. The highest ground on the property sits upon a mass of granitic rock. Note the trees along an old driveway and a more recent (post 1950s) barn, which is dilapidated and has no foundation. The pasture fencing parallels all site frontage on Lenora Church Road.*



*Photo 4. The flat areas surrounding the existing stable building sit upon a large mass of shallow granitic rock. This area is well suited to development which does not require extensive excavation or deep trenching.*

## Site Inventory and Analysis

---

### ***Soils***

Historically, studies of site soils have focused upon the review of published USDA Soil Conservation Service (SCS) maps for the county. This data includes recommendations of suitability which are heavily skewed towards suitability of the native soil where little earthwork is expected to occur. This type of information becomes less pertinent when large "footprint" facilities such as athletic fields, pools and parking lots are proposed on a sloping Piedmont terrain. The high volume of earthwork associated with such activities completely obliterates the topsoil and subsurface soil horizons upon which the SCS recommendations of suitability are based. The reference to SCS data is a more useful tool in analyzing the suitability of small footprint site features which do not require significant earthwork. Accordingly, this analysis effort relies upon the recommendations of the ATEC geotechnical consultant for determination of soils bearing capacity and upon the efforts of a county and state approved "Soil Scientist" who determines suitability for septic field development.

*Topsoil.* The soils associated with the site have previously been exposed to erosion. Remnant topsoil depths of four inches predominate. This material may range in thickness from two to eight inches. Much of the site has previously been cultivated. The cultivated soil horizon has been subjected to significant erosion in previous decades which explains the thin topsoil layer thickness. All non-wooded portions of the site are presently developed as horse pasture. While erosion has been controlled through the implementation of pasture management, it is anticipated that the topsoil organic content shall be unsatisfactory for turfgrass development at athletic fields or at open lawn areas. This organic deficiency implies future reliance upon an artificial nutrient program or incorporation of significant quantities of imported organic amendment to sustain high quality turfgrass.

The topsoil layer provides the optimal surface for vegetated portions of the site; therefore, special techniques will be employed during site development to prevent loss of topsoil. Topsoil will be recycled on site through the process of topsoil striping and stockpiling. Topsoil striping and stockpiling involves the careful removal of topsoil from areas to be disturbed by grading so that it may be replaced after development to facilitate the rapid development of vegetative cover.

*Subsoil.* The subsoil consists of a variety of residual clay and clay loam soils associated with the weathering of subsurface granitic rock. Such high clay content soils are generally suited to development of buildings, roads and athletic fields when managed in an optimal moisture regime. Unfortunately, when this material is



## Site Inventory and Analysis

---

disturbed during periods of heavy rain, the moisture content rises to the point that the material can not be placed and compacted properly or efficiently. During the construction process, the completion of earthwork activities is expected to cease after heavy rain events until the soil moisture content returns to an optimal level.

*Unsuitable Soils.* Previous development of a small lake and a small pond embankment dam has created an artificial collection point for silts and organic material deposited through natural erosion processes. This material has remained in a supersaturated condition due to the ponding of water above the dam. This material is unsuitable for use as construction fill. If excavation or filling is required in this area to support any pavements, buildings or athletic fields, this material shall have to be removed and spread in thin layers on passive portions of the site or otherwise be wasted in burial pits. When the existing small lake dam is reconstructed, some of this unsuitable fill material is expected to be encountered and removed.

The existing earth embankment dam associated with the larger pond has been determined by visual analysis to be in poor condition. Further geotechnical analysis was required to determine the extent of structural repairs needed. As this dam is constructed of native site subsoil, specific locations of suitable embankment construction materials have been identified by the geotechnical consultant to facilitate proper reconstruction.

Field reconnaissance has resulted in the identification of two deep pits in the southwest corner of the site where debris has been buried. The previous owner, Mr. Buchanan, was interviewed and provided general information about the pits. The pits are thought to be ten feet deep and may cover several thousand square feet. The debris is thought to consist of trees and building debris associated with structures on the site. These pits represent a safety hazard, as the thin soil cover over them is washing into voids between the debris, resulting in deep holes and collapses. The pits are unsuitable for development and must be excavated and the debris properly disposed of.

### ***Soil Suitability for Septic Field Development***

Presently, there are several active leach fields on the site which have not been appropriately charted. This indicates an historic suitability for the development of septic leach fields. From review of soils and terrain data, it is not anticipated that leach field development will prove to be a limitation on site carrying capacity. Further, the leach fields can be constructed within the flat athletic field surfaces.



*Photo 5. A row of trees at an existing pasture fence reinforces the boundary of the lake's viewshed, buffering the lake from the relatively developable pasture to the right.*

### ***Vegetation***

The extent and composition of existing vegetation was determined through on-site investigations and analysis of aerial photography. Several acres of the southern end of the park site are forested with pine and mixed hardwood. This particular stand is of low quality and occupies some of the flattest terrain of the site. Accordingly, this area has been determined to be suitable for clearing and new construction.

Two isolated stands of pine and oak, covering less than one acre each, are located north of the central high knoll on a steep slope and centered on top of the knoll at the north property line (see Photo 2). Special efforts to preserve these small stands are encouraged. The most distinctive vegetation consists of large specimen-grade oak and pecan trees located in the flatter pastures adjacent to Lenora Church Road (see Photos 3, 4, and 10) and at the margins of the pond (see Photo 7). These trees are specimens, and extraordinary efforts are encouraged to avoid their disturbance.

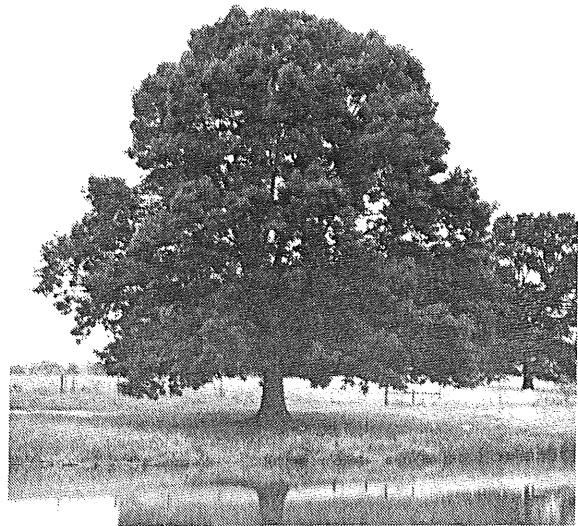
Large trees growing along pasture fence rows also serve to buffer the pastoral lake area from the flatter pastures at the southwest quadrant of the site, facilitating the potential separation of active and passive areas (see Photo 5).

## Site Inventory and Analysis

---



*Photo 7. Naturalized oaks and dogwoods provide a pleasant grove at the northwest corner of the property.*



*Photo 8. Mature red oaks surround the lake, growing at two to three feet above lake level.*



*Photo 9. Naturalizing growth of sedge and sweet gum add a soft edge to the lake.*



*Photo 10. A mature spreading oak provides shade and punctuates the pasture north of the lake.*

In two areas of the site, vegetation more characteristic of natural succession occurs at areas surrounding the lake (see Photo 9) and on a knoll in the northwest corner of the property, where an understory of dogwood creates a more natural appearance (see Photo 7).



### *Hydrology*

A one-acre lake at the center of the property's western boundary is the present destination for most of the property's stormwater runoff. Several acres of the southwest corner exit the property through a drainage easement which crosses a residential lot adjacent to the southwest corner. Approximately the first 100 feet of the property which parallel Lenora Church Road drain to the north and south of the site following drainage swales adjacent to the road.

Measures to accommodate runoff will be required. Typically, most of the runoff will be channeled toward the pond at the western edge of the property.

The existing embankment dam at the lake will be reconstructed to facilitate use of the pond as a stormwater control feature. Additional small ponds will be required upstream of the small lake to reduce the load of sediment and organic debris. Ideally, the upstream impoundments will be capable of detaining most of the first one inch of runoff for over 24 hours, allowing aquatic vegetation in the ponds to partially filter the stormwater runoff before it reaches the lower lake.



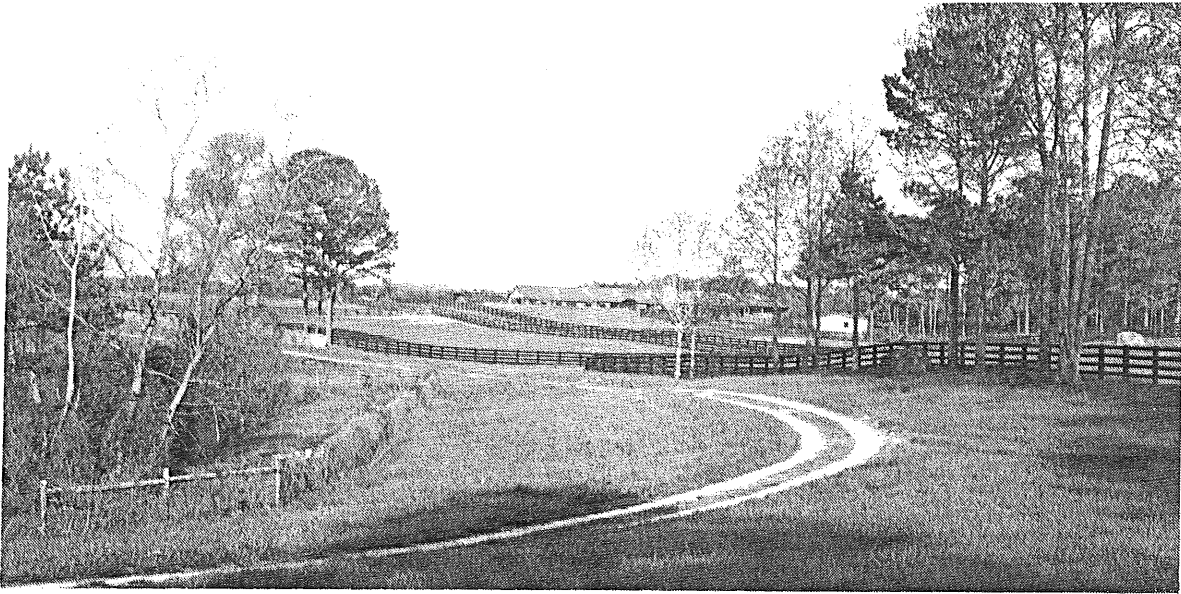
*Photo 11. A small, man-made lake is surrounded by mature oaks which frame vistas of surrounding pastures. Folklore has evolved about the size of fish in this lake.*

## Site Inventory and Analysis

---

### *Slope*

An aerial topographic survey was commissioned by Gwinnett County and provided to the park planners for use in this analysis (see Figure 1). Study of contour interval and frequency revealed the relative degree of slopes within the property and confirmed findings from the on-site investigation.



*Photo 12. A well-defined system of driveways (unpaved) provides excellent access throughout the gently sloping property.*

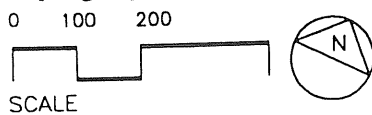
The terrain is gently rolling (see Photo 12). Several minor ridges within the park boundary offer large areas within the 5 to 15 percent range, but their sizes do not limit development potential when regrading is considered. Slopes of 10 to 20 percent are rare on the site and are associated with the slope below the highest central knoll and the slope below the knoll centered on the north property line (see Photo 2).

Large, exceptionally flat expanses (slopes under 5 per cent) grace both the northeast and southeast corners of the property adjacent to Lenora Church Road (see Photo 4).

## Site Inventory and Analysis



**Figure 1.**  
**Topography and Boundary Information**





## Site Inventory and Analysis

---

### ***Viewshed Analysis***

For purposes of this report, a viewshed is defined as all which can be seen from a given viewpoint. Charting the limits of a viewshed indicates which elements of the site contribute to the visual experience of that particular place. A stated project goal has been the successful preservation of the pastoral quality of the landscape. Due to the barely perceptible north-south ridge line which parallels Lenora Church Road, the site's pastoral landscape is effectively partitioned into two separate viewsheds.

#### ***Lake Viewshed***

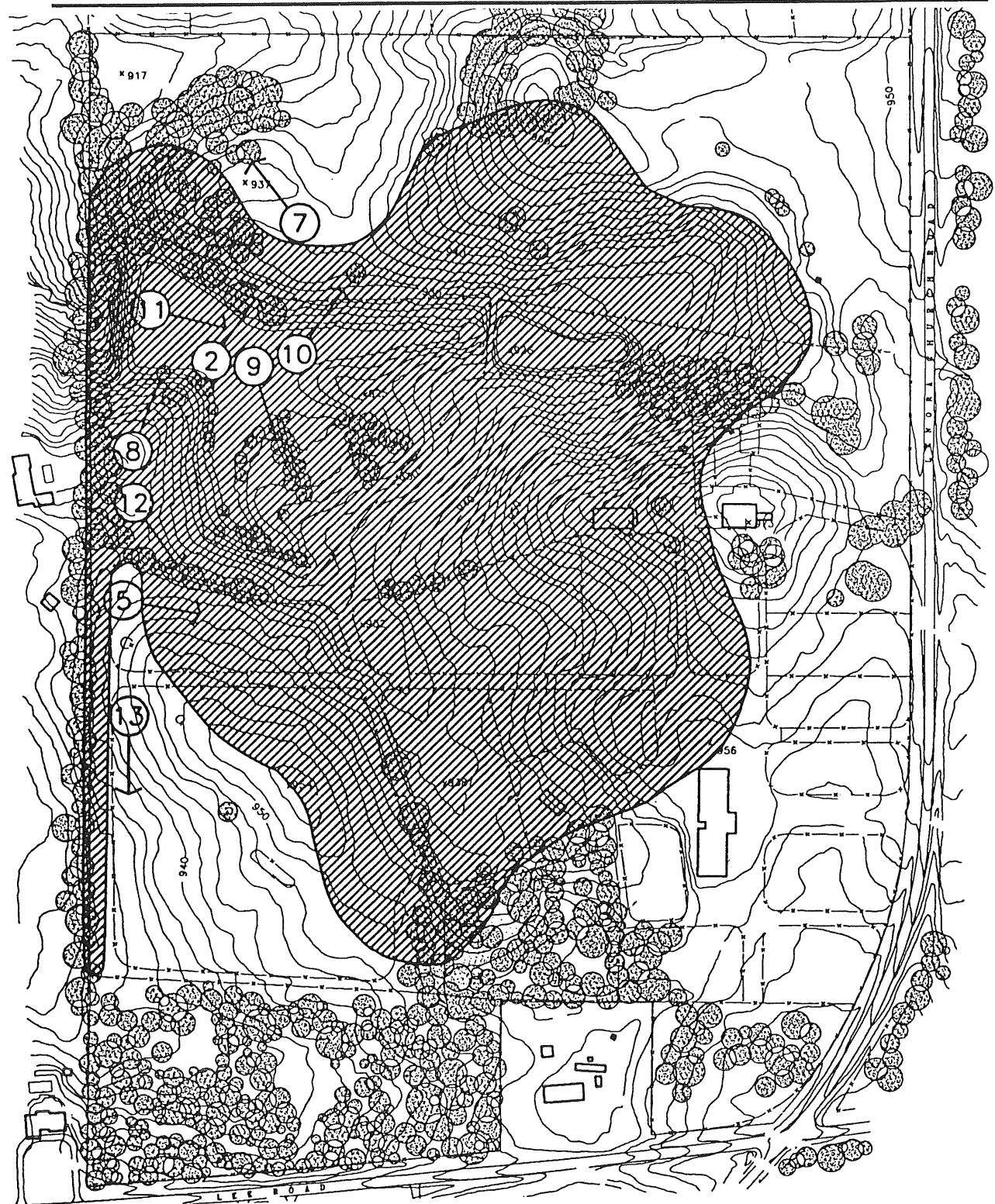
The lake viewshed surrounds the pond (see Figure 2). The viewshed includes the pond and the pastures ascending the ridge to the east, terminating abruptly at the treelines abutting the west property lines. The ridgeline limits the eastern range of the viewshed. The only building dominant in the viewshed is the steel dog kennel; the other buildings are minor elements at the edge of the viewshed. Off-site neighboring properties and roads are not readily apparent.

#### ***Lenora Church Road Viewshed***

The second viewshed includes all site features visible from Lenora Church Road. The viewshed includes all the fenced pastures fronting on the road, terminating on the site at the north-south ridgeline which parallels Lenora Church Road. Refer to Figure 3 for a representation of the limits of the Lenora Church Road viewshed.

#### ***Use of Viewshed Analysis Findings***

Viewshed mapping facilitates evaluation of the likelihood of proposed facilities to either enhance or detract from the pastoral quality of the site. Further, viewshed analysis can indicate those portions of the site which are not within either viewshed, such as the northwest corner of the site. Knowing when a certain area of the site is not readily visible aids in determining siting suitability for certain objectionable facilities. Potentially unattractive athletic fields, parking lots and buildings can either be developed as intentional features within these viewsheds or can be sited unobtrusively within the viewsheds by modifying the natural grade or installing screen plantings. Viewshed analysis also aids in determining compatibility with the park's neighbors. Two homes in the Innsbrook subdivision, bordering the western site property line, can potentially view elements within the lake viewshed. Similarly, two residences to the north can potentially view elements within the Lenora Church Road viewshed.



**Figure 2.**  
**Lake Viewshed**

0 100 200



SCALE





**Figure 3.**  
**Lenora Church Road Viewshed**

0 100 200



SCALE



VIEWSHED BOUNDARY



PHOTOGRAPH VIEW

## Site Inventory and Analysis

---

### *Site Analysis Summary*

The site analysis summary includes information derived from the observation of vegetation, hydrology and slope. Additionally, the site analysis charts observations derived from site visitation. Important views, entries, relationships to adjacent land uses, landscape character, and environmental factors are among the existing characteristics charted on the site analysis summary drawing (see Figure 4).



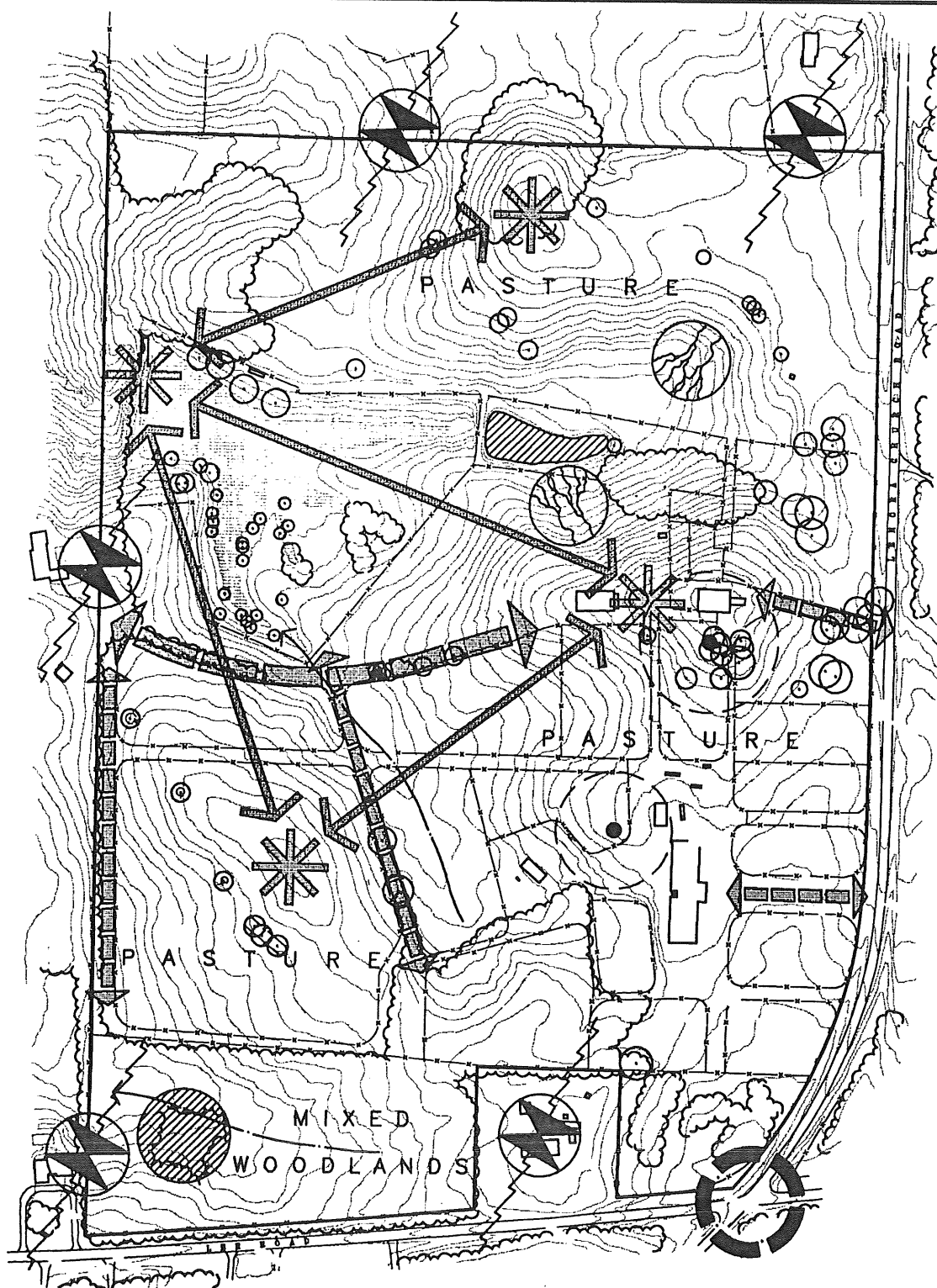
*Photo 13: A 50-foot grass median with driveway separates the southwest pastures from adjacent Innsbrook subdivision lots.*

The site analysis facilitates the derivation of responsible recommendations for development. Among the observations, which provide guidance during the design process, are the identification of requirements for roadway alignment, preservation of existing trees, safety, and delineation of geotechnical considerations.

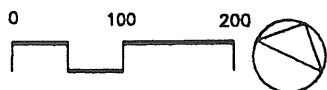
The components of the Community Park Prototype will be carefully situated on the property in response to the above variables. Optimal and responsible use will be made of the property given the constraints encountered.












# Site Inventory and Analysis



**Figure 4.**  
**Site Analysis Summary**



- |   |                            |   |                        |
|---|----------------------------|---|------------------------|
|  | SHALLOW ROCK LEDGE         |  | STRONG PATH CONNECTION |
|  | UNSUITABLE FILL            |  | IMPORTANT VIEW POINTS  |
|  | HIGHLY EROSIVE SOILS/SLOPE |  | STRONG VISUAL LINK     |
|  | SWALE                      |  | CIRCULATION NODE       |
|  | CONFLICTING OFF-SITE USE   |   |                        |

### ***Site Development Program***

The complete program for the development of the property is indicated in Table 4. The list evolved through conferences with a variety of athletic associations and individual citizens' input collected at the two public hearings. Furthermore, equestrian program input was solicited through a direct mail questionnaire.

The following notes highlight the additions and deletions from the prototypical community park program.

1. Softball use not provided at this facility due to: (a) insufficient interest in this portion of the county, and (b) sufficient available fields at other parks in this portion of the county.
2. Bicycle and equestrian trails not provided due to conflict with pedestrian uses and small size of site. Bicycle access to the site is encouraged on vehicular drives. Equestrian trailer access to the practice ring is accommodated through a small parking area adjacent to the practice ring.

# Site Inventory and Analysis

---

**Table 4.**  
**Program Elements**

Lighted Youth Baseball Fields:	<ul style="list-style-type: none"><li>• (2) 120' fields</li><li>• (1) 180' field</li><li>• (1) 200' field</li><li>• (1) 225' field</li><li>• (1) 310' field</li><li>• adjacent rest room/athletic storage/concession building</li><li>• adjacent play area (multi-age)</li></ul>
Lighted Tennis Courts:	<ul style="list-style-type: none"><li>• 8 to 16 courts</li><li>• central rest room/control structure</li><li>• adjacent parking, 4 cars per court = 32-64 spaces</li></ul>
Lighted Football Fields:	<ul style="list-style-type: none"><li>• (2) full-size fields</li><li>• adjacent grandstands/press box</li><li>• adjacent rest room/athletic storage/concession building</li><li>• adjacent parking, 75 cars per field = 150 spaces</li><li>• adjacent play area (multi-age) and picnic area</li></ul>
Soccer Fields:	<ul style="list-style-type: none"><li>• (2) full-size soccer fields</li><li>• (1) junior-size (practice) field</li><li>• adjacent parking, 75 cars per field = 150 cars</li><li>• adjacent play area (multi-age) and picnic area</li></ul>
Basketball:	<ul style="list-style-type: none"><li>• (2) exterior lighted courts</li><li>• (2 to 4) interior courts (see gymnasium)</li><li>• adjacent parking, 50 cars per court (can overlap with other programs)</li><li>• adjacent rest room</li><li>• away from play areas</li></ul>
Gymnasium:	<ul style="list-style-type: none"><li>• two-court interior basketball (full court), expandable to 4 (14,000 to 24,000 SF)</li><li>• parking for 100 cars</li><li>• space for rest rooms/lockers/showers/storage/office</li><li>• fully conditioned HVAC environment</li></ul>
Aquatics Facility:	<ul style="list-style-type: none"><li>• space for various interactive aquatics/play features, or can accommodate a covered 50-meter pool</li><li>• adjacency to gym for control/rest rooms</li><li>• adjacent parking for 200 cars</li></ul>
Passive Area:	<ul style="list-style-type: none"><li>• lake and surrounding open space capable of supporting various unprogrammed activities</li><li>• adjacent parking for 40 to 60 cars (can overlap with other programs)</li><li>• shelters: (1) large group; (1) small group</li><li>• play areas for multi-age users</li><li>• walking paths</li></ul>
Equestrian Area:	<ul style="list-style-type: none"><li>• small, fenced practice ring, adjacent to grassed trailer parking for 6 to 7 trailers</li></ul>
Jogging Trail:	<ul style="list-style-type: none"><li>• resilient surface trail, marked for distance, capable of supporting high school cross-country events; minimize driveway crossings</li></ul>
Utilities/Infrastructure:	<ul style="list-style-type: none"><li>• gates at all entries, standard signage system, stormwater detention,</li><li>• paved driveways and pedestrian walkways between activity areas</li><li>• piped water distribution with connection to county mains</li><li>• electrical distribution system (Walton EMC to provide)</li><li>• septic fields for sanitary distribution, telephone lines extended onto site</li><li>• reconstruction of old dam at lake</li><li>• (1) 5,000 SF maintenance/storage building (housed at existing stable building)</li></ul>

### ***Site Related Functional Analysis***

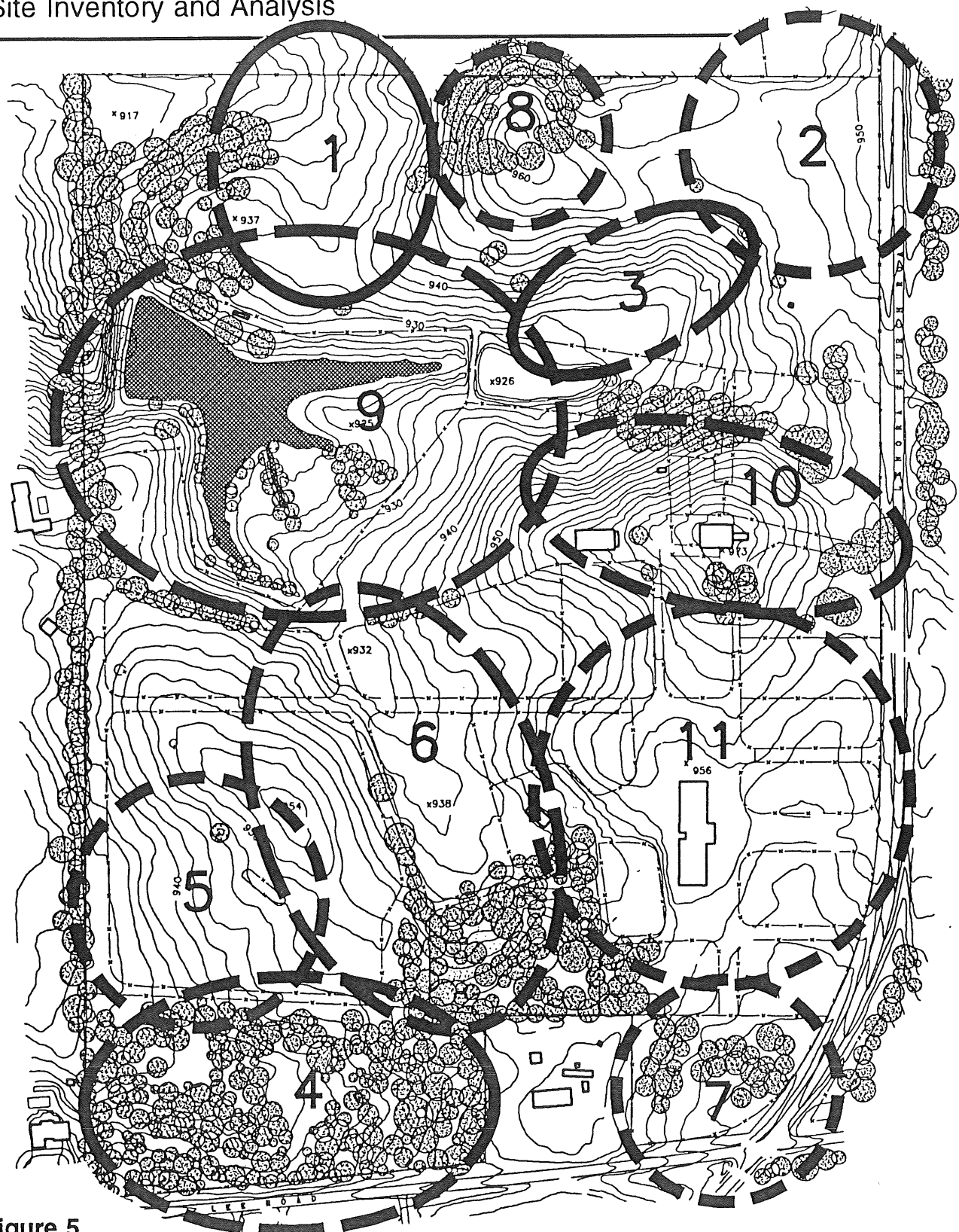
Following completion of the analysis phase, a Site Characterization Diagram (Figure 5) was prepared which indicates the discrete geophysical areas of the site. These areas include the lake, various pastures, knolls, flats and wooded areas. Use of these "area names" facilitates specific reference to the property when reviewing the suitability of siting the "footprints" of various program elements.

A Developmental Suitability Matrix (Table 5) ranks the ability of the various areas of the site to accommodate the community park program elements. The major factors in ranking include the following:

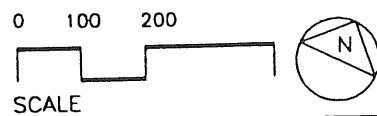
- Specimen tree disturbance avoidance
- Mass excavation reduction/balance
- Subsurface rock avoidance
- Unsuitable soils avoidance
- Pastoral viewshed compatibility
- Utility development cost
- Adjacent land use compatibility
- Vehicular site distance/travel time
- Septic field adjacency
- Appropriate adjacency (i.e., shelter to lake or parking to fields)
- Athletic field light glare (outfield poles located to reduce glare upon neighbors or adjacent roads)


Comparison of the program list with the Site Characterization Diagram and Development Suitability Matrix reveals that no additional facility development beyond that indicated in the master plan could be effected without harming the property's pastoral or functional characteristics. The individual program elements can be increased or new program elements added if other program elements are decreased or deleted.





**Figure 5.**  
**Site Characterization Diagram**



 SITE CHARACTERIZATION ZONE  
(KEYED TO TABLE 5)

## Site Inventory and Analysis

**Table 5.**  
**Developmental Suitability Matrix**

	Gymnasium	Parking	Picnic Shelter	Rest Room	Playground	Basketball	Tennis	Youth Baseball	Soccer	Football	Driveway	Entrance	Open Space/ Equestrian
1. N.W. Pasture	○	○	○	○	○	●	●	●	○	○	○	○	■
2. N.E. Terrace	■	●	●	●	●	●	●	■	■	■	●	●	■
3. N.E. Pasture	●	■	●	●	●	●	●	●	●	■	●	○	■
4. S.W. Woods	■	●	●	●	■	■	■	■	■	■	●	○	■
5. S.W. Pasture	■	●	●	■	■	■	■	■	■	■	●	○	■
6. Central Pasture	●	■	●	■	■	■	■	■	■	■	■	○	■
7. Corner Pasture	○	●	○	○	○	○	○	○	○	○	○	○	■
8. North Knoll	○	○	■	●	■	●	○	○	○	○	○	○	■
9. Lake/Meadow	○	○	■	●	■	●	●	○	○	○	○	○	■
10. Central Knoll	○	○	■	○	●	○	○	○	○	○	●	○	■
11. S.E. Pasture	●	●	○	○	○	●	●	●	○	●	■	■	■

○ - Low Suitability

● - Moderate Suitability

■ - High Suitability

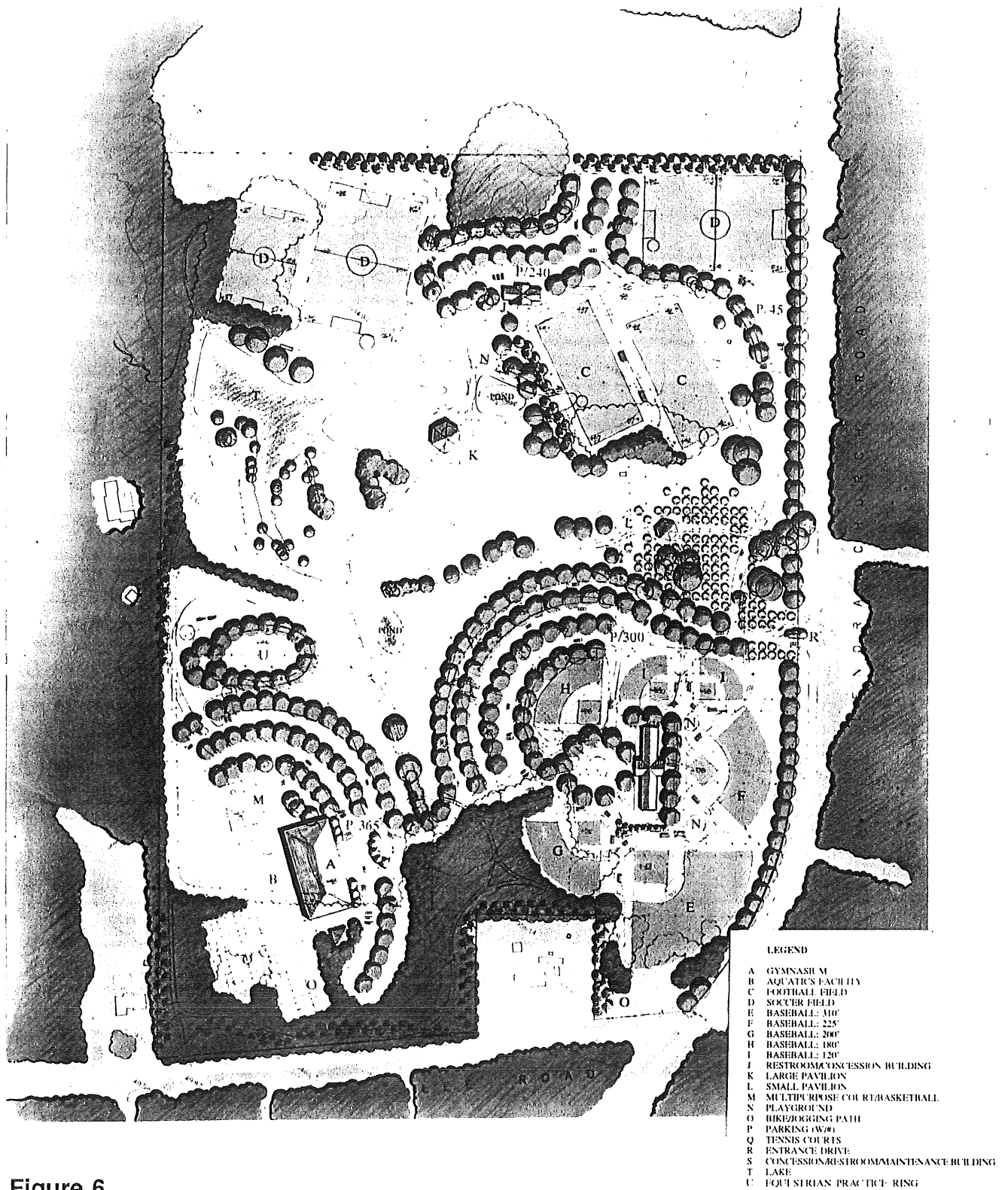
### *Master Plan*

#### ***Illustrative Plan Summary***

As illustrated on Figure 6, a plan was prepared to express the program requirements and site constraints developed previously in the planning process. Each of the activities listed on Table 4 (page 21) has been accommodated in a manner which results in the preservation of the site's pastoral qualities. The pastoral landscape surrounding the existing lake has been earmarked for preservation, endowing the park with a 25-acre passive core. A 1.5-mile jogging and walking path through the perimeter of the site and additional paths exceeding 1.5 miles link the various active and passive use areas. Comparison of Figure 6 (Master Plan Rendering) with Figure 2 (Lake Viewshed) allows insight into the process used to delineate the passive core.

Most of the active and lighted sports facilities are located adjacent to Lenora Church Road, a location overwhelmingly favored by the body of the community present at public hearings. The pastoral qualities of the road frontage, while threatened by the sports facilities, will be maintained through the preservation and repair of all wood pasture fencing on the road frontage, supplemented by the development of screen plantings in the 100-foot transition zone between the pasture fencing and any athletic field edges.

A summary of estimated development costs to accompany the illustrative plan is shown on Table 6. For purposes of discussion, items have been designated Phase 1 or Phase 2 to facilitate reviews involving county staff and recreation authority members.



**Figure 6.**  
**Master Plan Rendering**



Table 6.  
Site Development Cost Analysis

I. Youth Athletic Field Complex

Item/Unit	Phase	Qty.	Unit Price	Cost
<b>A. 120 T-Ball</b>				
Backstop	1	1	7,500	7,500.00
Fences/LF	1	430	9	3,870.00
Dugouts	1	2	3,000	6,000.00
Infield	1	1	1,500	1,500.00
Sprig Outfield/SF	1	10,000	.12	1,200.00
Lights/PA System	1	1	20,000	20,000.00
Irrigation	1	1	2,500	2,500.00
Earthwork/CY (cut/fill)	1	1,500	1.60	2,400.00
<b>Subtotal</b>				<b>44,970.00</b>
<b>Subtotal (for 2 fields)</b>				<b>89,940.00</b>
<b>B. 180' Baseball</b>				
Backstop	1	1	7,500	7,500.00
Fences/LF	1	740	9	6,660.00
Dugouts	1	2	3,000	6,000.00
Infield	1	1	1,500	1,500.00
Sprig Outfield/SF	1	21,200	.12	2,544.00
Lights/PA System	1	1	35,000	35,000.00
Irrigation	1	1	6,500	6,500.00
Earthwork/CY (fill)	1	6,500	1.60	10,400.00
<b>Subtotal</b>				<b>76,104.00</b>

Table 6.  
Site Development Cost Analysis (continued)

I. Youth Athletic Field Complex (continued)

Item/Unit	Phase	Qty.	Unit Price	Cost
<b>C. 200' Baseball</b>				
Backstop	1	1	7,500.00	7,500.00
Fences/LF	1	820	9.00	7,380.00
Dugouts	1	2	3,000.00	6,000.00
Infield	1	1	1,500.00	1,500.00
Sprig Outfield/SF	1	27,200	.12	3,264.00
Lights/PA System	1	1	45,000.00	45,000.00
Irrigation	1	1	6,500.00	6,500.00
Earthwork/CY (cut/fill)	1	4,000	1.60	6,400.00
<b>Subtotal</b>				<b>83,544.00</b>
<b>D. 225' Baseball</b>				
Backstop	1	1	7,500.00	7,500.00
Fences	1	920	9.00	8,280.00
Dugouts	1	2	3,000.00	6,000.00
Infield	1	1	1,500.00	1,500.00
Sprig Outfield	1	39,100	.12	4,692.00
Lights/PA System	1	1	55,000.00	55,000.00
Irrigation	1	1	7,000.00	7,000.00
Earthwork (cut)	1	2,500	1.60	4,000.00
<b>Subtotal</b>				<b>93,972.00</b>

**Table 6.**  
**Site Development Cost Analysis (continued)**

**I. Youth Athletic Field Complex (continued)**

Item/Unit	Phase	Qty.	Unit Price	Cost
<b>E. 310' Baseball</b>				
Backstop	2	1	10,000	10,000.00
Fences/LF	2	1,100	9	9,900.00
Dugouts	2	2	3,000	6,000.00
Infield	2	1	1,500	1,500.00
Sod Outfield/SF	2	76,250	.12	9,150.00
Lights/PA System	2	1	65,000	65,000.00
Irrigation	2	1	7,500	7,500.00
Earthwork/CY (cut/fill)	2	9,000	1.60	14,400.00
<b>Subtotal</b>				<b>123,450.00</b>
<b>F. Parking / Access Drive</b>				
- Drive/SY (asphalt)	1	2,000	9.00	18,000.00
- Parking lot/SY (asphalt)	1	9,000	9.00	81,000.00
- Curb at drive/LF	1	1,650	6.00	9,900.00
- Curb at parking lot/LF	1	2,900	6.00	17,400.00
- Earthwork/CY	1	7,500	1.60	12,000.00
<b>G. Heavy Duty Concrete Paving/SF</b>	1	25,000	2.75	68,750.00
<b>H. Light Duty Concrete Paving/SF</b>	1	10,000	1.75	17,500.00
<b>I. Play Area</b>	1	1	18,000.00	18,000.00
<b>J. Misc. Landscape/Hydroseed</b>	1	1	30,000.00	30,000.00
<b>K. Demolition (fences, buildings)</b>	1	1	25,000.00	25,000.00
<b>L. Main Building Partial Rehab</b>	1	1	200,000.00	200,000.00
<b>M. Storm Water Drainage/LF</b>	1	500	25.00	12,500.00
<b>N. Water Distribution (line)/LF</b>	1	1,000	20.00	20,000.00
<b>O. Water Dist. (fire hydrants)</b>	1	4	700.00	2,800.00
<b>P. Telephone Distribution</b>	1	1	5,000.00	5,000.00
<b>Q. Septic Field</b>	1	1	40,000.00	40,000.00
<b>Subtotal (Items F-Q)</b>				<b>577,850.00</b>
<b>TOTAL SECTION I</b>				<b>1,044,860.00</b>

Table 6.  
Site Development Cost Analysis (continued)

II. Football/Soccer Fields (continued)

Item/Unit	Phase	Qty.	Unit Cost	Cost
<b>A. Football Fields</b>				
Fences/LF	2	1,100	9.00	9,900.00
Sod Field/SF	2	68,400	.12	8,208.00
Lights/PA System	2	1	65,000.00	65,000.00
Irrigation	2	1	7,000.00	7,000.00
Earthwork/CY	2	25,000	1.60	40,000.00
<b>Subtotal</b>				<b>130,108.00</b>
<b>Subtotal (for 2 fields)</b>				<b>260,216.00</b>
B. Scoring Shelter (press box)	2	1	20,000.00	20,000.00
C. Rest Room/Concession	2	1	150,000.00	150,000.00
D. Play Area	2	1	18,000.00	18,000.00
<b>E. Parking</b>				
Access Drive/SY (asphalt, 1 field only)	2	3,050	9.00	27,450.00
Parking Lot/SY (asphalt)	2	6,111	9.00	55,000.00
Curb & Gutter/LF	2	4,700	6.00	28,200.00
Road Lighting	2	10	1,500.00	15,000.00
Earthwork/CY	2	7,000	1.60	11,200.00
F. Heavy Duty Concrete Paving/SF	2	12,000	2.75	33,000.00
G. Light Duty Concrete Paving/SF	2	7,000	1.75	12,250.00
H. Demolition/Clearing	2	1	5,000.00	5,000.00
I. Landscape/Hydroseed	2	1	25,000.00	25,000.00
J. Storm Water Drainage/LF	2	1,800	25.00	45,000.00
K. Water Distribution/LF	2	1,500	20.00	30,000.00
L. Water Dist. (fire hydrants)	2	4	700.00	2,800.00
M. Septic Field	2	1	40,000.00	40,000.00



Table 6.  
Site Development Cost Analysis (continued)

II. Football/Soccer Fields (continued)

Item/Unit	Phase	Qty.	Unit Cost	Cost
N. Soccer Field A				
Fences/LF	2	1,300	9.00	11,700.00
Sprig Fields/SF	2	93,100	.12	11,172.00
PA/Score	2	1	6,000.00	6,000.00
Irrigation	2	1	7,500.00	7,500.00
Earthwork/CY	2	2,500	1.60	4,000.00
O. Soccer Field B				
Fences/LF	2	1,300	9.00	11,700.00
Sprig Fields/SF	2	93,100	.12	11,172.00
PA/Score Electric	2	1	6,000.00	6,000.00
Irrigation	2	1	7,500.00	7,500.00
Earthwork/CY	2	7,400	1.60	11,840.00
P. Jr. Soccer Field				
Fences/LF	2	880	9.00	7,920.00
Sod/SF	2	39,200	.12	4,704.00
Irrigation	2	1	3,000	3,000.00
Earthwork/CY	2	7,400	1.60	11,840.00
Q. Fence Reconstruction/LF	2	1,200	10.00	12,000.00
R. Phone Line	2	1	3,000	3,000.00
Subtotal (Items B-R)				648,948.00
TOTAL SECTION II				909,164.00

**Table 6.**  
**Site Development Cost Analysis (continued)**

**III. Passive Area Development/Miscellaneous**

Item/Unit	Phase	Qty.	Unit Price	Cost
Granite Dust Path/SY	1	2,600	4.00	10,400.00
Asphalt Jogging Path/SY	1	8,333	9.00	75,000.00
Heavy Duty Concrete Path/SF	1	8,000	2.75	22,000.00
Small Shelter	1	2	25,000.00	50,000.00
Large Shelter	1	1	70,000.00	70,000.00
Landscape	1	1	25,000.00	25,000.00
Fence Reconstruction/LF	1	1,500	9.00	13,500.00
Water Distribution/LF	1	500	10.00	5,000.00
Lighting (by Walton EMC)	1	14	0.00	0.00
Signage Package (Vehic=D.O.T.)	1	1	25,000.00	25,000.00
Lake Reconstruction (+ 2 ponds)	1	1	35,000.00	35,000.00
Equestrian Ring/Parking	1	1	20,000.00	20,000.00
<b>TOTAL SECTION III</b>				<b>350,900.00</b>

**IV. Tennis Center**

Item/Unit	Phase	Qty.	Unit Price	Cost
Tennis Courts (4 lighted)	1	1	66,000.00	66,000.00
Tennis Courts (8 lighted)	2	1	132,000.00	132,000.00
Clearing/Grading/Walks	1	1	6,000.00	6,000.00
Clearing/Grading/Walks	2	1	12,000.00	12,000.00
Control Building	2	1	75,000.00	75,000.00
Landscape	2	1	8,000.00	8,000.00
<b>TOTAL SECTION IV</b>				<b>299,000.00</b>

Table 6.  
Site Development Cost Analysis (continued)

V. Gymnasium/Aquatics Center

Item/Unit	Phase	Qty.	Unit Price	Cost
A. Building (12,000 SF)	1	1	560,000.00	560,000.00
B. Aquatics Area	2	1	1,100,000.00	1,100,000.00
C. Heavy Duty Concrete/SF	1	13,000	2.75	35,750.00
D. Parking/Access Drive				
Access Drive/SY (asphalt)		2,000	9.00	18,000.00
Parking/SY (asphalt)		8,850	9.00	79,650.00
Access Drive Curb/Gutter/LF		1,650	6.00	9,900.00
Parking Curb/Gutter/LF		2,300	6.00	13,800.00
Lighting (by Walton EMC)		9	0.00	0.00
Earthwork/CY		12,000	1.60	19,200.00
Parking Subtotal				140,550.00
Phase 1 Portion	1			46,850.00
Phase 2 Portion	2			93,700.00
E. Basketball Courts	1	2	12,500.00	25,000.00
F. Water Distribution				
Pipe/LF	1	800	20.00	16,000.00
Fire Hydrants	1	2	700.00	1,400.00
G. Storm Water/LF	1	300	25.00	7,500.00
H. Septic Field	1	1	40,000.00	40,000.00
I. Landscape	1	1	15,000.00	15,000.00
TOTAL SECTION V				1,941,200.00
GRAND TOTAL SECTIONS I - V (Total Buildout)				4,545,124.00
Total Phase 1				2,091,810.00
Total Phase 2				2,453,314.00

# **LENORA PARK MASTER PLAN**



**GWINNETT COUNTY DEPARTMENT  
OF COMMUNITY SERVICES, PARKS  
DIVISION**

**JULY, 2003**

# **Lenora Park Master Plan**

## **Gwinnett County, Georgia**

Prepared For:  
Gwinnett County Department of Community Services  
Parks Division  
75 Langley Drive  
Lawrenceville, Georgia 30245-6900

Prepared By:  
jB+a Park Design Studio  
jon Benson + associates, inc.  
2900 Paces Ferry Road  
Building B, Suite 120  
Atlanta, Georgia 30339

July, 2003





---

## lenora park master plan document

---

The Lenora Park Master Plan was prepared with the participation and guidance of the Master Plan Steering Committee members. We appreciate their time and efforts:

<i>Robert Black - S.A.A. - Basketball</i>	<i>Alisa Pereira, Recreation Authority</i>
<i>Glenn Cooper- S.A.A. - Football</i>	<i>Barbara Richards - S.A.A.- Cheerleading</i>
<i>Terry Ford</i>	<i>Kathy Robinson</i>
<i>John Gardiner</i>	<i>Judy Rowe</i>
<i>Herb Gibson</i>	<i>Nelson Sechrist</i>
<i>Edna Isaacs</i>	<i>Pamela Thompson</i>
<i>Michael Jones - S.A.A. - Softball</i>	<i>Marilee Wright</i>
<i>Wesley Mathews</i>	<i>Tammie Zeigler</i>
<i>Crystal-Odum-Ford</i>	<i>Bill Zuber - S.A.A. - Baseball</i>
<i>Ann Overbeck</i>	

Special thanks to the Gwinnett County Board of Commissioners for their support and vision:

Chairman:	Wayne Hill
District 1:	Marcia L. Neaton
District 2:	Bert Nasuti
District 3:	John Dunn
District 4:	Kevin Kenerly
County Administrator:	Charlotte Nash

## TABLE OF CONTENTS

SECTION 1.0	PROJECT GOALS / OBJECTIVES	PAGE 5
SECTION 2.0	PROJECT UNDERSTANDING	PAGE 5
SECTION 3.0	PROJECT APPROACH	PAGE 5
SECTION 4.0	SITE INVENTORY & ANALYSIS (graphics pages 11-13)	PAGE 9
SECTION 5.0	PROGRAM OPTIONS	PAGE 14
SECTION 6.0	PROGRAM DEVELOPMENT	PAGE 15
	6.1 Concept Development (graphics pages 17-20)	page 15
	6.2 Program Elements	page 21
	6.3 Preliminary Master Plan (graphic page 29)	page 26
	6.4 Master Plan (graphic page 30)	page 27
	6.5 Revised Master Plan (graphic page 31)	page 28
SECTION 7.0	APPENDIX	PAGE 32
	7.1 Cost Estimate	
	7.2 Parking Calculations	
	7.2 Sewer Service	
	7.3 Borings Report	
	7.4 Community Input Mtg. Results	

## SECTION **PROJECT GOALS AND OBJECTIVES**

- 1.0 According to the 1996 Gwinnett County Comprehensive Parks and Recreation Master Plan the County intended for community parks to provide primary park facilities and services. Community Parks should balance active and passive recreation uses, and serve all age groups. The prototype for a community park is 100 or more acres, preferably 140 acres, and includes facilities and park elements to meet diverse recreational needs for both families and individuals. Facilities to be included in the standard community park are adult and youth sports fields, picnic areas, trails, community centers, and family aquatics facilities as well as passive open space. Significant parking must be a high priority as well to accommodate simultaneous peak use of multiple activities.

This report addresses the need for additional community park facilities in the southern region of Gwinnett County on two recently acquired tracts, a 28-acre addition and a 66-acre tract of land across Lenora Church Road. The goals driving this master plan include the following:

- Address need for additional community park facilities
- Realize goals of 1996 Comprehensive Plan and the 2000 CIP Plan
- Expand Lenora park and bring it up to "Ideal" Community Park acreage (140 acres)
- Provide a wide range of park uses which will serve all age groups.
- Provide multiple athletic complexes within the park.
- Provide buffers between lighted park elements and adjacent residential areas
- Maintain a consistent pastoral image into the additional acreage and provide significant passive recreation acreage.

## SECTION **PROJECT UNDERSTANDING**

- 2.0 This very popular park is set on the pastoral landscape of a horse farm and maintains a pastoral image as it provides walking/jogging trails, disc golf, picnic facilities and a small scenic lake carefully linked to an active athletic complex. The additional 28-acre tract is congruent with the original park land and was a double residential site. The additional 66 acres that has been acquired is farm land that is gently rolling and scenic. This acreage is separated from the original Lenora Park acreage by Lenora Church Road, which is a relatively active two-lane road. Lenora Church Road appears to be the only vehicular access onto the 66 acre site.

## SECTION **PROJECT APPROACH**

- 3.0 Using a standard Master Planning project approach toward the Lenora park project, the project passed through a series of design stages before a final Master Plan was approved. The following represent the milestones completed along the way.

- Notice to proceed issued to jon Benson + associates
- Flyers advertising public Meeting distributed, Public meeting sign erected.
- Public Input meeting, committee interest forms and Steering Committee Membership applications distributed.
- Steering Committee Scheduling Meeting
- Steering Committee Park Tour with Consultant and County Representatives
- Inventory / Analysis, Conceptual Plans Presentation to Steering Committee
- Hybrid Plan Presentation to Steering Committee.
- Preliminary Master Plan and Cost Estimate Presentation to Steering Committee
- Final Master Plan Presentation w/ Phasing prioritization
- Presentation to Gwinnett County Recreation Authority
- Presentation to Gwinnett County Board of Commissioners.

The following provides a brief description and timeline of sequence of Meetings:

### **Preparation of Base Information**

jon Benson + associates prepared AutoCAD base information utilizing GIS files and existing Lenora Park survey, obtained from Gwinnett County.

### **Community Interest Meeting**

The first Public Meeting was held at Shiloh High School on March 6, 2002, with presentation of park Boundary Survey, description of Community Park type, description and receipt of Community Interest form survey and Steering Committee Applications

### **Scheduling Meeting**

Steering Committee members met with Consultant and Gwinnett County officials to schedule all meetings for the Lenora Park Master Planning Process on March 14, 2002.

### **Park Site Visit and Tour of County Parks**

Steering Committee members, Consultant and Gwinnett County representatives walked the Lenora Park site on April 13, 2002 and discussed the various park issues. A field trip of additional parks throughout the county was also conducted to illustrate the park elements that were included in a County Community Park. Parks visited included Dacula Park, Rabbit Hill Park, Pinckneyville Park and Rhodes Jordan Park. The facilities that were discussed at each park were primarily the Football Complex at Dacula Park, the soccer complex at Rabbit Hill Park, the group pavilions, playground and skate park at Pinckneyville Park, and the Family Aquatic Center and Community Center at Rhodes Jordan Park. Following the park tour, discussion commenced on program options. Steering Committee members reviewed and voted on which options were most important for the site.

### **Inventory / Analysis, Concept Presentation**

Consultant presented Park Site Inventory & Analysis diagrams on April 16, 2002 including, Slope and Hydrology analysis, soils analysis, and vegetation analysis, plus 3 Alternative Concept Plans to the Steering Committee. Steering Committee requested development of a Hybrid Conceptual Plan reflecting their comments on the alternatives presented.

### **Hybrid Plan Presentation**

The Consultant presented the Hybrid Conceptual Plan on May 1, 2002 having adjusted locations of all major park elements. The Steering Committee by majority vote agreed for the Hybrid Conceptual Plan to be refined into the Preliminary Master Plan.

### **Preliminary Master Plan**

The Consultant presented the Preliminary Master Plan graphic and cost estimate on May 22, 2002. A number of comments from the Committee and staff were taken and the consultant was asked to incorporate the comments into the Final Master Plan.

### **Final Master Plan Presentation**

Consultant presented Final Master Plan graphic and cost estimate to the Steering Committee on June 12, 2002. By majority acclamation the Steering Committee accepted the Master Plan as shown in the graphic dated June 12, 2002 (6.12.02 Plan). The Committee then assigned priority numbers to all major elements shown on the plan by means of discussion and majority vote. The proposed priority list associated with the budget for the next phase of development was further refined by referencing the consultant's cost estimate. The Steering Committee then voted to submit the Master Plan (6.12.02 Plan) and their development priorities to the Recreation Authority for their acceptance.

### **Presentation to Recreation Authority**

The Steering Committee recommendations were presented to the Gwinnett County Recreation Authority on June 27, 2002. The plan (6.12.02 Plan) was presented by the consultant with several committee members present. The Recreation Authority heard both the pros and cons of the Committee recommendations amidst discussion focused on the park's designation as an Active Park and potential impact of public address systems for football. The Recreation Authority voted unanimously to recommend the plan endorsed by the Steering Committee to the Board of Commissioners.



### **Presentation to Board of Commissioners**

Based on the Recreation Authority's endorsement, the plan (6.12.02 Plan) was presented to the Gwinnett County Board of Commissioners on August 6, 2002. Several members of the community and a few from the Steering Committee were present. After the presentation some of the community members voiced concern that the plan included elements for which they were not in favor. The Board requested that additional public input be gathered on the proposed Lenora Park Master Plan.

### **Community Input Meeting - Whispering Pines and Innsbrook Neighborhoods**

These meetings were with the home owners from the Whispering Pines Subdivision and the surrounding area (held on August 28, 2002) and the residents from the Innsbrook Subdivision (held August 29, 2002). The Whispering Pines group is located south of the newest park land acquisition of 66 acres. Innsbrook lies to the west of the existing park land. The meetings with these two groups focused in on their concerns with the proposed Master Plan. Concerns were discussed and listed at each meeting. Once the list of issues was completed, the attendees were given five votes each that they could spend on one or more of the issues. The result of these meetings is collected in the *Tabulation of Issues and Concerns* (RE: Appendix).

### **Community Input Meeting - Lenora Park Gymnasium**

A general public drop-in meeting was held at the Lenora Park Gymnasium on September 19, 2002. The public drop-in review of the proposed plan was from 4:00 PM to 8:30 PM. Various graphics of the park plan and proposed features were present. Additionally there were several staff members and a representative from jon Benson + associates available to answer questions concerning the plan. The attendees were then given a form to express their priorities and concerns. Both adults and children were given these forms so that they could express their opinions. A tabulation of the priorities is in this report (RE: Appendix) and a complete listing of all of the comments is available for review at the Department of Community Services in the *Tabulations of the Park Facilities Development Priorities Survey and the Request for Comments Concerns and Perceived Problems*.

### **Recreation Authority Presentation**

jB+a tabulated and collated the results of the Community Input meetings. The Department of Community Services copied and transmitted the information to the Recreation Authority for review. The Recreation Authority met and requested a series of plan revisions that would respond to the comments received in the public input process. (Refer to Section 6.4 for list of revisions)

The Department of Community Services requested that jB+a make the necessary revisions on October 10, 2002.

### **Presentation to Board of Commissioners**

Based on the Recreation Authority's endorsement, the revised plan dated January 7, 2003 (1.07.03 Plan) was presented to the Gwinnett County Board of Commissioners. Several members of the community and a few from the Steering Committee were present. The Board heard comments from the public about the Master Plan and determined to await further comments on the revised plan from the community.

### **Recreation Authority Presentation**

The Department of Community Services staff again presented the revised Master Plan (1.07.03 Plan) on April 17, 2003. Members of the community were present and discussions regarding the outstanding issues commenced. Many of the issues were resolved by clarifying the design intent. Result of the presentation was the resolution of the majority of the outstanding issues and the Recreation Authority's vote to allow the execution of the plan to proceed.

## **SECTION 4.0 SITE INVENTORY AND ANALYSIS**

### **4.0**

Prior to concept development a series of analyses were conducted. The following is a summary of these analyses, a graphic diagram accompanies each summarization.

### **Slope**

The site is comprised of a ridge and valley terrain, with the eastern 66-acre tract being much flatter than the majority of the park. Several ridges cut through the site, diverting surface water in various directions. The highpoint on the eastern part of the site lies at an elevation of about 960. The western section of the site displays several isolated highpoints ranging in elevation from 960, 941, 939, 938. respectively. The majority of the site slopes at grades between 2% and 5% which will accommodate the new activity fields with minimal grading (RE: Graphic 11)

The steeper slopes 5% to 15% will accommodate the multipurpose and cross country trails with very little grading and will offer additional interest and challenge for the anticipated user.

### **Hydrology**

Due to the ridge and valley terrain, the Lenora Park site exhibits positive drainage. (RE: Graphic 11) Roughly half of the Western portion of the site drains toward 2 existing ponds. The remainder of the site follows its natural drainage pattern and drains off site, four new detention ponds will be needed to manage this runoff. One is to be located in

the northwest quadrant, another in the southwest quadrant. The eastern portion of the site drains toward the northeast and southeast quadrants. It is in these locations where two other detention ponds will need to be located.

Groundwater measurements were taken during boring operations. The stabilized groundwater depths on the site were 14 feet and 9.5 feet below the existing surface at test borings B14 and B17.

Stormwater treatments (culverts, swales, etc.) will be placed where proposed trails or park facilities interrupt the natural drainage ways.

### **Soils**

Also important in evaluating a site are the soil types which help to determine the types of construction that can occur on those soils. (RE: Graphic 12) The capacity of the soil to hold water, support vegetation, or to compact will determine the feasibility of each area for various type of recreation facilities. The soils within the Lenora Park site are generally loam type soils exhibiting sandy, clay, or cobbley characteristics.








Soil test borings were conducted at 21 locations throughout the site, it was determined that the capacity of the foundation soils are adequate for supporting lightly loaded building types on a shallow foundations. The residual soil is also suitable for use as a structural fill.

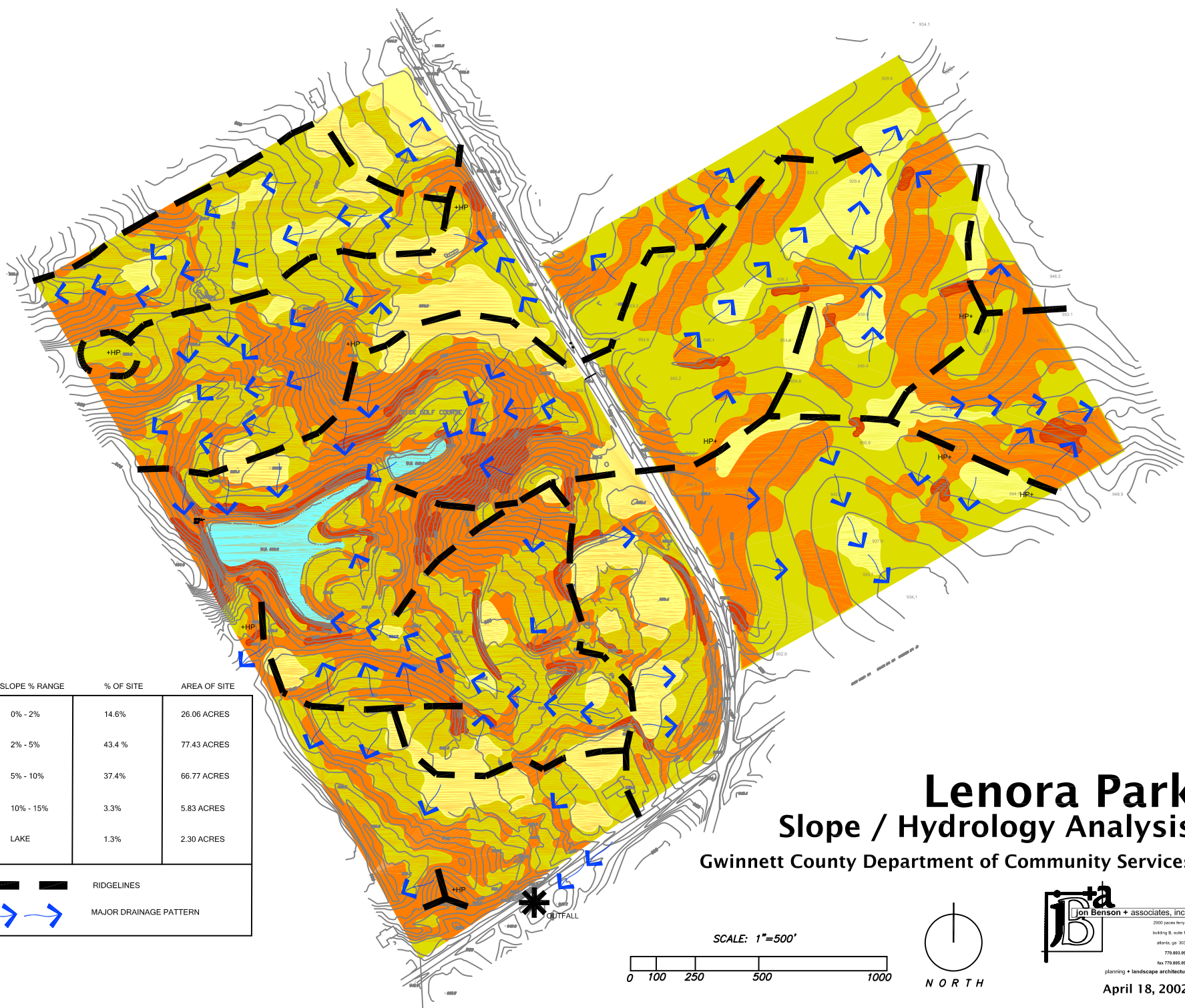
### **Vegetation**

Vegetation across the site was analyzed and located on the Vegetation Analysis map (RE: Graphic 13). The Existing western portion of Lenora Park hosts predominantly hardwoods and pockets of pine / hardwood mix among vast areas of open space. The grassy open areas include an existing disc golf area, and ball fields. Specimen trees are dotted throughout this section of the park and are located with asterisks on the graphic.

The Eastern portion of the site is wooded more heavily displaying various stages of growth. The central portion of the site has been in regular crop rotation, and the site also includes a former tree farm with trees remaining. The eastern section lays predominantly in pines with smaller pockets of hardwoods. The southwestern most corner of this section will be retained in it's current form, although pines will be thinned to encourage the health of the hardwoods and allow for a multiuse path experience.

Banks along the existing pond are lacking vegetation and will require reforestation or bank revitalization and stabilization to help improve the quality of the water, and cut down on erosion from foot traffic.

KEY	SLOPE % RANGE	% OF SITE	AREA OF SITE
	0% - 2%	14.6%	26.06 ACRES
	2% - 5%	43.4 %	77.43 ACRES
	5% - 10%	37.4%	66.77 ACRES
	10% - 15%	3.3%	5.83 ACRES
	LAKE	1.3%	2.30 ACRES
 RIDGELINES  MAJOR DRAINAGE PATTERN			



# Lenora Park

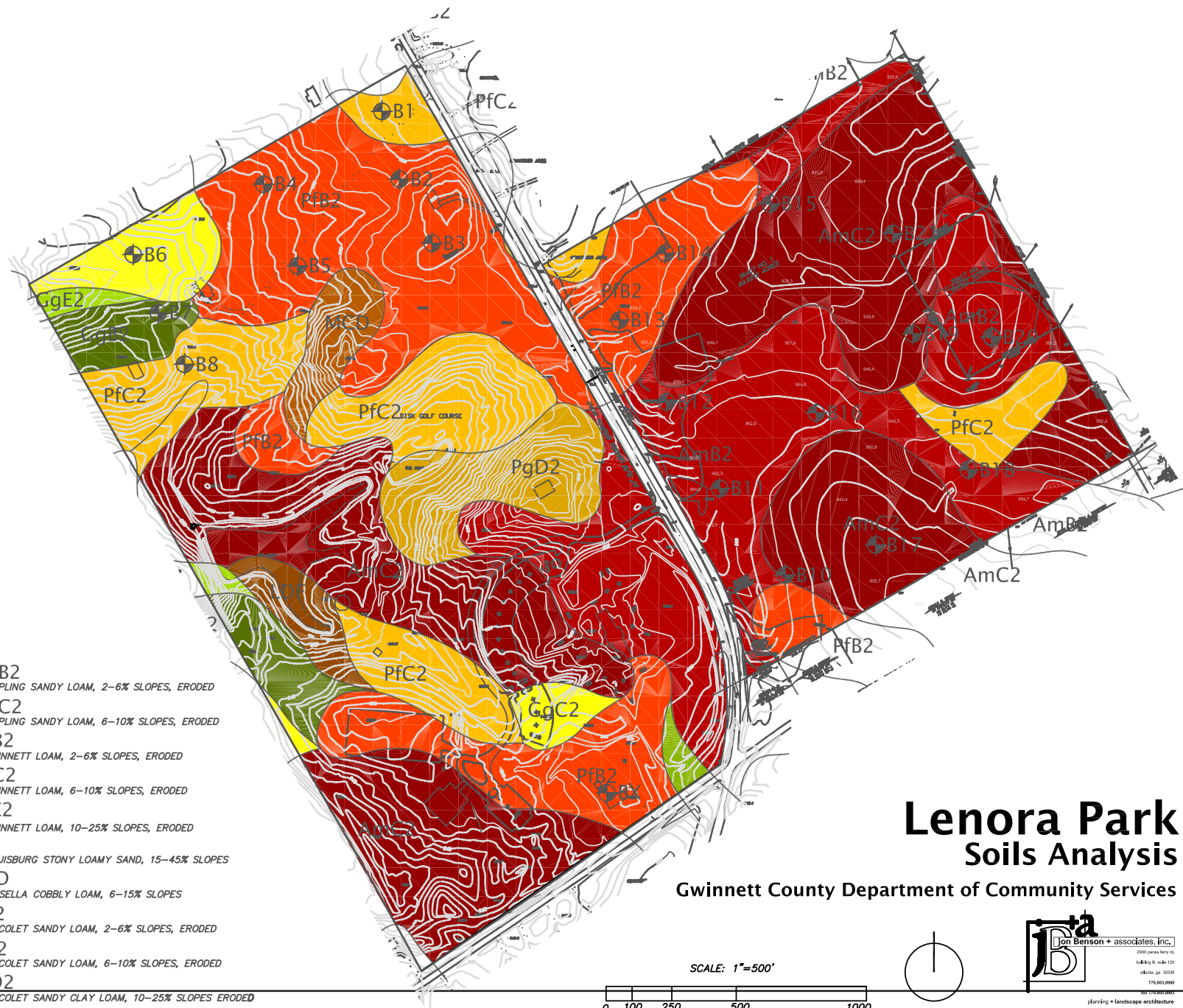
## Slope / Hydrology Analysis

Gwinnett County Department of Community Services



April 18, 2002



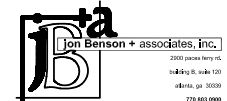
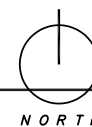
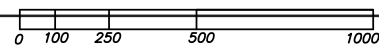


- AmB2  
APPLING SANDY LOAM, 2-6% SLOPES, ERODED
- AmC2  
APPLING SANDY LOAM, 6-10% SLOPES, ERODED
- GgB2  
GWINNETT LOAM, 2-6% SLOPES, ERODED
- GgC2  
GWINNETT LOAM, 6-10% SLOPES, ERODED
- GgE2  
GWINNETT LOAM, 10-25% SLOPES, ERODED
- LDF  
LOUISBURG STONY LOAMY SAND, 15-45% SLOPES
- MCD  
MUSSELLA COBBLY LOAM, 6-15% SLOPES
- Pfb2  
PACOLET SANDY LOAM, 2-6% SLOPES, ERODED
- Pfc2  
PACOLET SANDY LOAM, 6-10% SLOPES, ERODED
- PgD2  
PACOLET SANDY CLAY LOAM, 10-25% SLOPES ERODED

# Lenora Park Soils Analysis

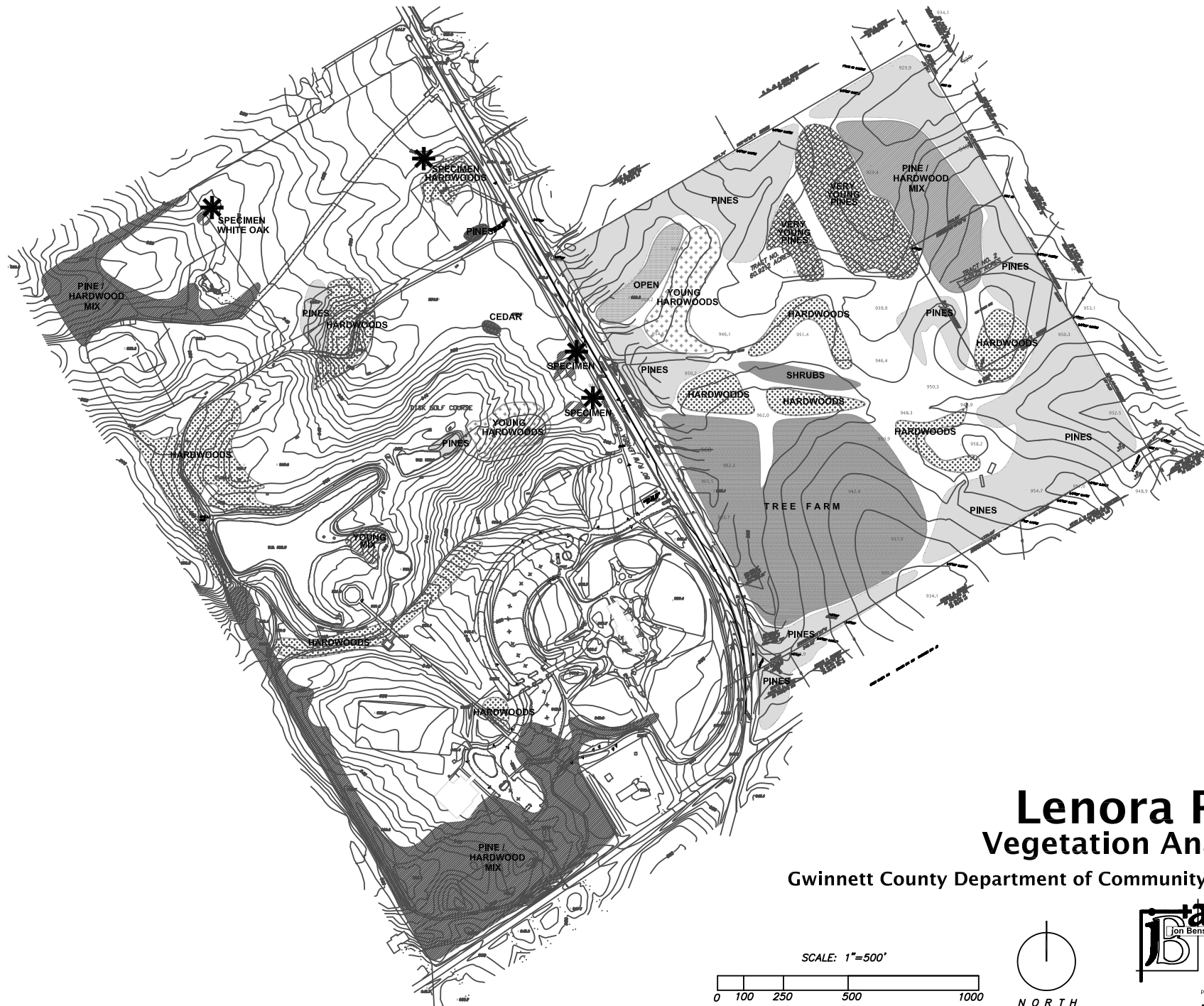
Gwinnett County Department of Community Services

SCALE: 1"=500'



planning + landscape architecture  
April 18, 2002

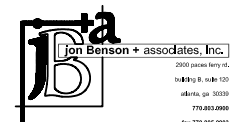
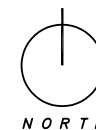
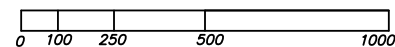




# Lenora Park Vegetation Analysis

Gwinnett County Department of Community Services

SCALE: 1"=500'



planning + landscape architecture

April 18, 2002

## SECTION **PROGRAM OPTIONS**

### 5.0

In order to understand the changing needs and new recreation trends in the community, the Gwinnett County Department of Community Services developed a Public Interest Form to distribute at the first Public Input meeting held on March 6, 2002. These forms are used to assess the needs and wants of the local community. The interest forms are then collated, and tabulated. The information in the appendix contains the complete results.

Top five community interests are as follows:

1. Trails - Walking, Biking, Rollerblading, Nature
2. Swimming Pool
3. Picnic Pavilion & Family Picnic Areas w/ grills
4. Tennis
5. Dog Park

The results of the interest forms are then included in the Park program for consideration in light of the County's definition of a Community Park as well as the 1995 Countywide Needs Assessment Survey, and the 1999 Teen Recreation Survey. This information, supported by input from staff and Steering Committee members yielded the program of additional facilities that the Consultant was tasked with adding to the existing park and newly acquired park acreage. The program elements included the following:

- Trail system improvements and expansion
- Picnic / Playground sites
- Family Aquatics Center
- Preserved Woodlands and field
- Community Center
- Football Complex
- Soccer Complex
- Dog Park
- Tennis Courts
- Teen Facilities (Skate Park, Rollerblade Hockey, Basketball, Volleyball)
- Parking Improvements
- 7th Baseball field
- Miscellaneous improvements to the existing park
- Maintenance Compound

## SECTION **PROGRAM DEVELOPMENT**

### 6.0

Working with the Steering Committee, and representatives from Gwinnett County, the consultant, Jon Benson + associates developed a program outline. What follows is the design stage progression from concept through the final master plan design. A description of each of the stages is included.

## SECTION **Concept Development**

### 6.1

A total of three concept plans were prepared and presented to the Steering Committee. Each concept was depicted utilizing bubble diagrams and they each followed the same program requirements. They differed only through spatial relationships and layout locations. Having presented each of the Concepts (RE: Graphics 17-20) it was requested by the Steering Committee that a Hybrid Concept be developed. The Hybrid Concept would be a modification of the layouts from Concept 2 and Concept 3. Modifications were as follows.

### ***Hybrid Concept***

#### North West Quad - Utilize Concept 2 road / parking layout.

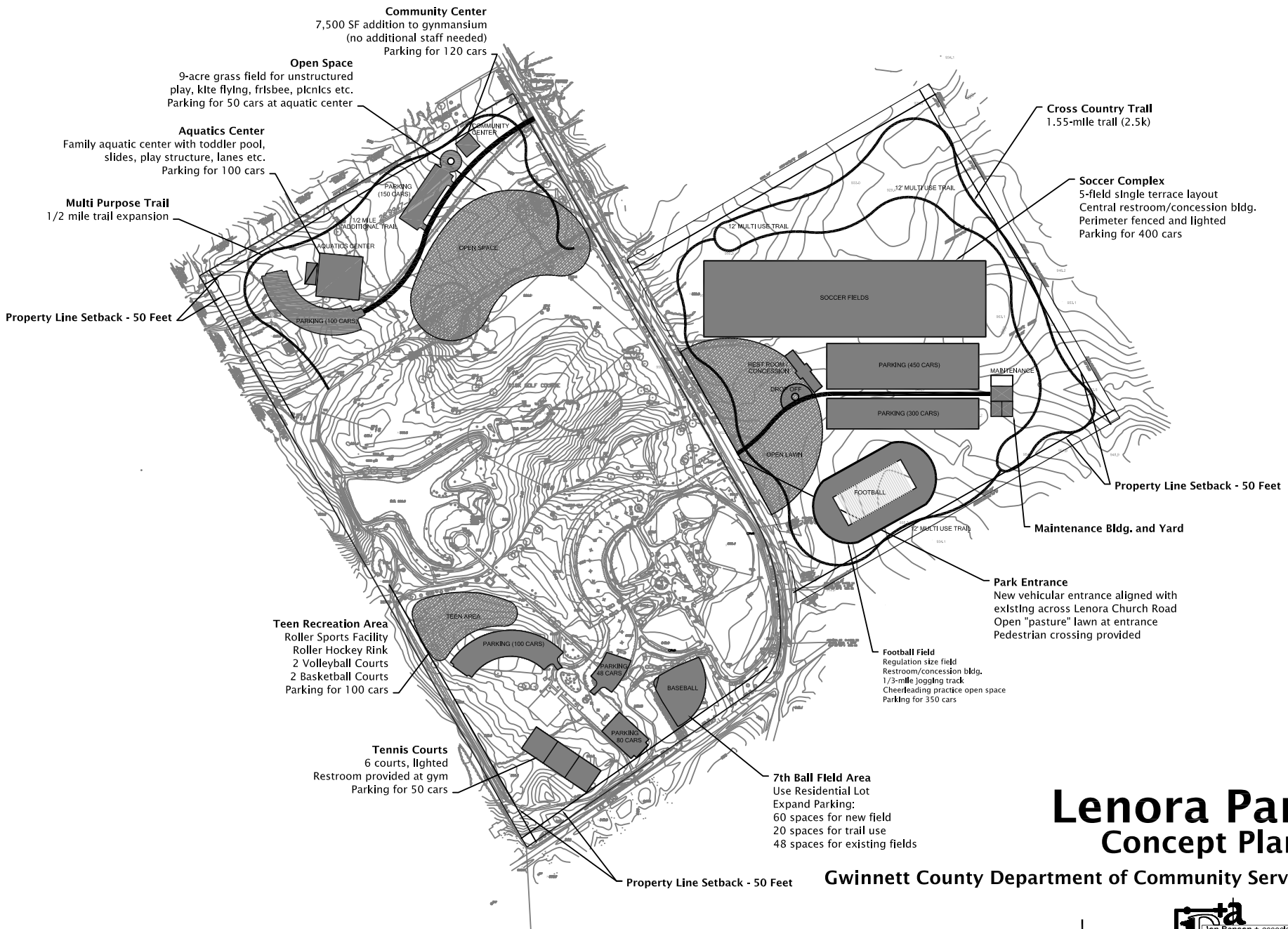
- Teen Center: Relocate to North east corner of North west quad, utilized existing hillside as overlook to skate park. Locate benches and tables below existing trees, include parking for 100 cars.
- Tennis Courts: Relocate to South west quad. Include parking for 32 cars.
- Playground & Restroom: Locate playground on existing highpoint in north west quad. 30' group pavilion to be associated with playground. Maintain access to restroom building and multi-use trail. Allow space for 50 cars.
- Dog Park: Place 2 acre fenced dog park to the west of open space, just north of existing bosque of trees. Maintain trees.
- Multi-use Trail: Adjust 12' multi-use trail so that pedestrian and vehicular traffic remain separate.

South West Quad - Utilize Concept 3 Layout

- Community Center Parking: Realign parking at southern end of parking lot into a more curve form to soften hardscape, and increase size to accommodate 150 cars.
- Aquatics Center: Rotate facility so that pump building 180 degrees. Increase parking area allotted for Aquatics center to accommodate 168 cars.
- Community Center: Increase size of facility to 9200sf and add parking to accommodate 150 cars.

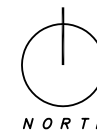
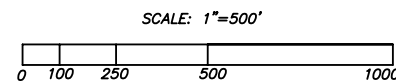
East Side of Park - Utilize Concept 2 Layout

- Football Field: Rotate football field for a north west / south east orientation. Allow space for 350 cars.
- Maintenance Complex: Relocate maintenance complex to service football field.
- Tree Farm Area: Save tree farm area to be used as an open space area, selectively thin trees. Relocate parking areas to flank Concessions / Restroom building.
- Playground: Locate playground at tree farm area. 30' group pavilion to be associated with playground, Provide parking for 75 cars.



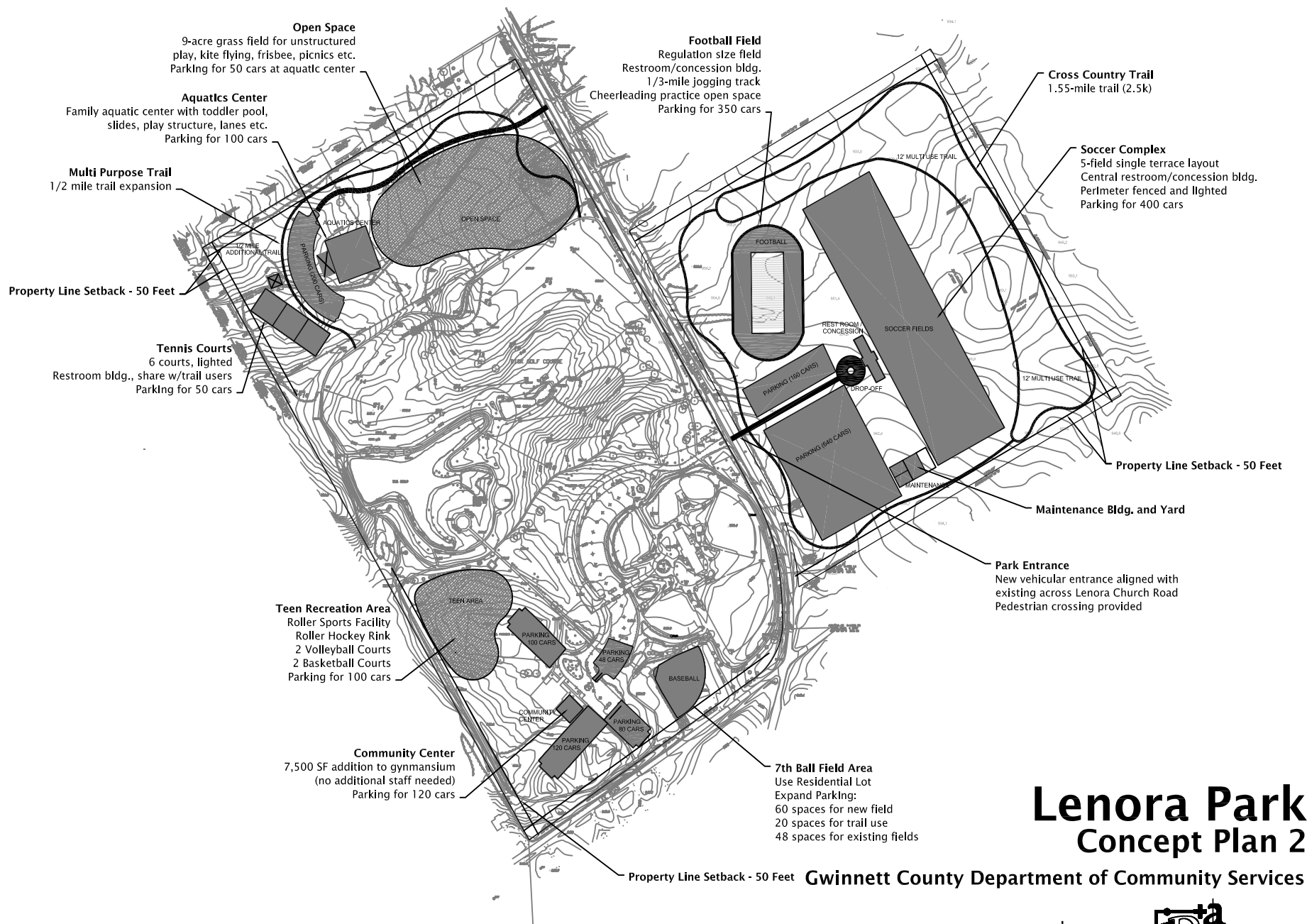
# Lenora Park Concept Plan 1

Gwinnett County Department of Community Services



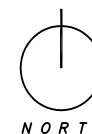
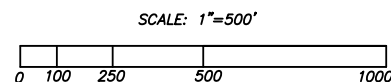
April 18, 2002



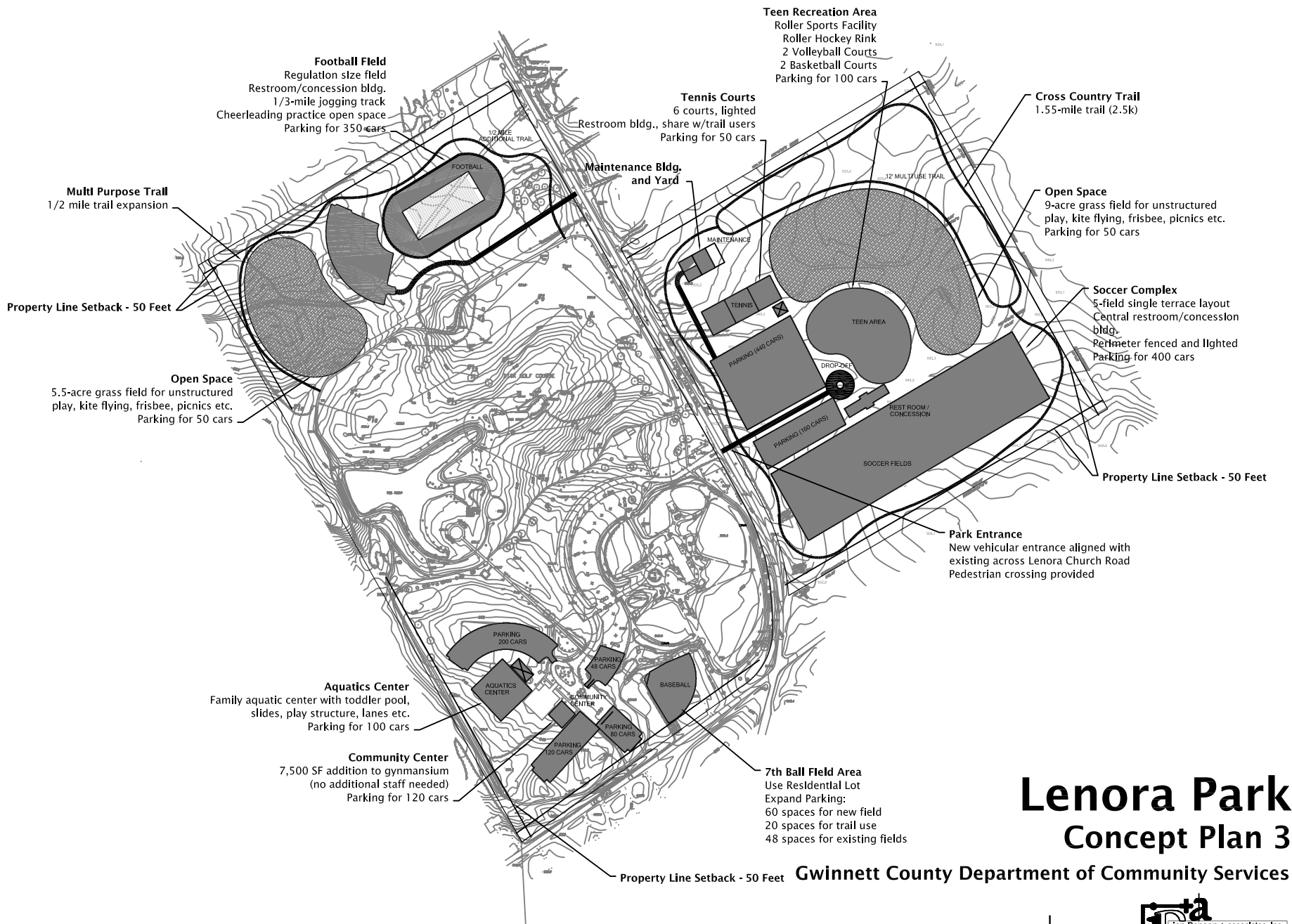


# Lenora Park Concept Plan 2

Gwinnett County Department of Community Services



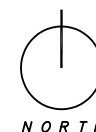
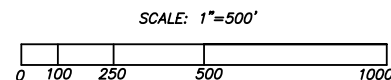
April 18, 2002



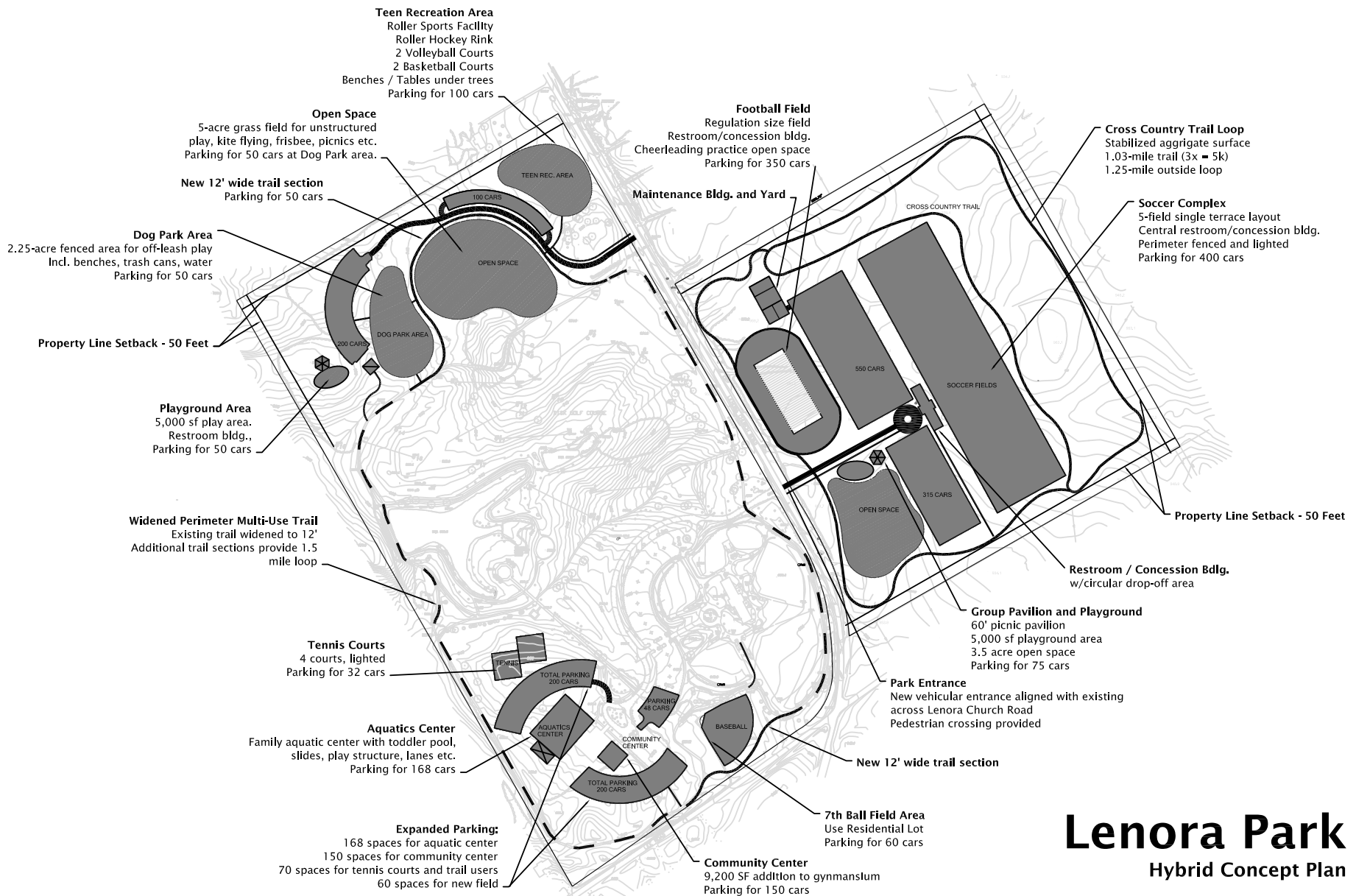
# Lenora Park

## Concept Plan 3

Gwinnett County Department of Community Services



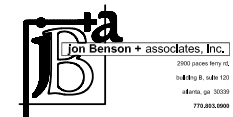
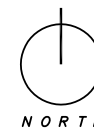
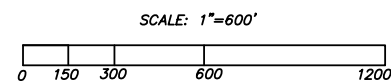
April 18, 2002



# Lenora Park

## Hybrid Concept Plan

Gwinnett County Department of Community Services



May 1, 2002



Using the spatial bubble diagrams of the Hybrid Concept Plan, real diagrammatic form was given to each of the park program elements. A description of the park elements follows.

## SECTION **Program Elements**

### 6.2

#### **Architectural Elements**

##### **Restroom**

Standard Gwinnett County Restroom buildings will be located throughout the park. Two stand-alone 580-square foot (approx.) restrooms will provide three commodes / urinals per sex, for a total of 6 fixture units, sinks and diaper changing stations will also be provided. The footprint will include a small supply closet incorporated into the plumbing chase with an access door between the men's and women's restrooms. Facilities are to be sited so that doors face the most active areas of the park

##### **Concessions / Restroom Building**

The new Concessions / Restroom Building will be located on the eastern portion of the site and serve as the terminus at the circular drop-off area near the soccer field.

##### **Community Center**

A standard Gwinnett County community center will serve as an addition to the existing gymnasium. The center will have meeting rooms, classrooms, dance room (sprung floor) a potters room and kiln area. A exterior plaza will link the community center to the parking lot. New parking areas associated with the community center will also be provided.

##### **Aquatics Center**

The aquatics center is intended to serve the local community . The design will include a variety of water related activities appropriate for a several age groups. The family aquatics center with zero depth entry, may include a toddlers zone, water slides, play structures and designated lanes for lap swimming. A large pool deck will supply area for sunbathing and gathering. Support buildings, including pump house and bath house will also be sited. All regulations set forth by the County health department will need to be adhered to.

The County will develop rules for pool usage and will employ lifeguards for additional safety. The aquatics center will be fence with locking gates.

##### **Maintenance Facility**

A fenced and paved yard will be located near the football and soccer complexes. The maintenance yard will support a maintenance building and adequate parking for park maintenance vehicles. Immediate access to the multi-use trail and surrounding park will be through double gates.

### **Active Recreation**

#### **Ball Field**

A seventh (7th) ball field is planned for the existing 6 field baseball / softball complex. The ball field will have a 200' outfield fence line, and will be dimensioned per Dixie youth regulations. Ball field will be graded per Gwinnett County Standard.

The field will be connected to the complex via an 8' connector trail. Parking will be provided to accommodate this additional field

#### **Teen Recreation Area**

The teen area will support several facilities geared toward teenagers. A skate park or roller sports facility will serve the local community. The design will be a bowl shape and should include a variety of concrete and metal fabrications suitable for skateboards and in-line skates. A roller hockey rink will also be located in this area, as well as two (2) full court basketball courts. Court fencing color, equipment will be regulation and County Standards.

Teen area facilities will be connected with a concrete sidewalks and plaza area for socializing. An overlook sited on an adjacent hill will provide a gathering space for spectator view. A restroom facility, picnic tables under trees and benches will also be provided.

#### **Football Field**

A football field, based on the Shorty Howell Park prototype with considerable additional turf to support cheerleading, will be located on the eastern side of the site. The field will be surrounded by a .33 mile jogging loop and fence. The jogging loop will be independently lighted for evening use. Bleachers with press box and concession building will also be provided. Concession area will include a hardscape plaza. Football field is to be sited with a northwest, southeast orientation.

#### **Soccer Complex**

The soccer complex will provide 4 regulation fields in a single terrace layout around a centrally located restroom / concession building. In order to provide sewer service to the concession restroom building it will be necessary to connect to the existing line that is located at the low end of the lake in the original part of the park. To accomplish this deep trenching will be necessary to provide a gravity line. Soccer fields will be fenced and lighted. Connection to parking lot and building via 8' wide connector trails. Soccer fields are to be graded out using the engineered soil profile concept utilized at Rabbit Hill Park (sand profile with complete subsurface drainage).

### **Tennis Courts**

Four (4) lighted courts will be provided. Court fencing color, equipment will be regulation and County Standards.

### **Sand Volleyball Courts**

Two (2) sand volleyball courts will be located at the open space area on in the Northwestern quad. Subsurface drainage will be provided to remove excessive water. Base is to be a deep sand base contained by a timber edge. Net and dimensions will be per County Standard.

### ***Passive Recreation***

#### **Group Pavilion / Playground facilities**

Two new combined group Pavilion and playground facilities are planned. The first will be located on the north western portion of the site on the newly acquired 26-acres on a highpoint that allows for an overlook of the park. A 60' group pavilion and restroom building will be associated with the playground and will be available for reservation through the county. The second playground will be located on the eastern portion of the site on the newly acquired 66-acres adjacent to the tree farm area. A 60' group pavilion and restroom building will be available at this location as well. Both new pavilion / playground zones will have ample associated open space and parking.

The north end of the existing baseball / softball, concession / restroom building is to be renovated and utilized as a covered picnic shelter. This modification will serve the newly constructed playground adjacent to that building. The existing playground near the existing pond will be enhanced with an arbor shade structure and landscape improvements.

All playgrounds will include a variety of prefabricated play equipment including: swings, compound structures, and free standing equipment. Play equipment will be separated into zones for toddlers and K-6 age groups. ADA compliant transfer stations will also be provided on each of the compound structures.

Subsurface drainage will be provided under dense wood chip mulch playground safety surface. "Wear areas" such as under swings, slides will need additional coverage.

### **Multi-use Trails**

The master plan calls for a 12' wide paved trail that connects all elements of the park. The 1.5 mile trail loops around the entire perimeter of the park. Spur trails connect this loop to the individual activity areas. Existing trails are widened to 12 for continuous access



throughout the park. The multi-use trail winds throughout the park, allows for a variety of park experiences and views.

### **Cross Country Trail**

A 1.03 mile trail (3x = 5K) will be featured on the eastern portion of the site. The cross country trail will be constructed out of a stabilized aggregate surface and will be available for cross country practice and meets. This trail will allow for serious and not so serious runners to exercise in comfort. The material used to construct the trail will allow for less impact on the joints of the body.

### **Dog Park Area**

The dog park is a 2.6 acre fenced area that allows people and their dogs to play together without the restriction of leashes. This area also allows dogs to socialize with other dogs and owners with fellow owners. The dog park will feature a 6' black vinyl fence with double gates. It will be cordoned off into three sections; a dog run, an area for all dog play and an area for small dogs. A Kiosk displaying dog park rules, benches, trash cans and water fountains for both owners and dogs will also be located.

### **Open Space / Play field**

Located on the western portion of the site, this 5 acre grass field will be regraded and irrigated. The open area will provide park users with a place for unstructured play, kite flying, pick-up games of football, throw a frisbee, as well as a place to sun bathe or read a book. The entire area will be seeded with turf grass and irrigated to insure that the grass survives the heat of a Georgia summer.

### **Pond**

The existing pond will be managed as a visual amenity, and storm water management facility, provided the storage volumes remain compatible with safe public access to pond edge. Pond volume will be governed using outfall system. The outfall will be sited to minimize the obtrusiveness of the engineering structure.

Materials will be used to help stabilize pond banks. Native plant materials will be installed to help filter pond water, revegetate slopes, and provide shelter and fodder for wild life habitats.

### **Tree Farm**

Tree farm area is to be maintained as a 3.5 acre open space. Existing trees are to be thinned to promote the health of the hardwoods. A 8' wide paved trail is to be field located to minimize the disturbance of the existing trees and to promote the best "tree grove" experience.

### **Infrastructure**

#### **Paved Asphalt Parking**

Current Lenora Park entrance drive at Southern portion of site will remain. Existing parking will also remain but will be extended to provide additional parking for the new 7th ball field (Total 430 cars). New parking areas will be added to accommodate the large number of cars associated with the proposed community center (Total 161 cars).

At the northern portion of the site, a new tree lined "boulevard" entrance drive will separate lots which will provide parking for both the Teen Center (Total 100 cars) and Aquatics Center (Total 171 cars). Additional parking serving passive recreation (trail, playground, open space) will extend deeper into the site and will terminate with a turn around.

A new entrance with circular drop off will extend into the eastern portion of the site. Two (2) parking lots will flank the entrance drive and provide parking for both the football (Total 354 cars) and soccer (Total 330 cars) complexes.

Parking associated with multi-use trail, volleyball, dog park, playgrounds / pavilions, tennis, etc. will be accounted for at all parking areas (Total 346 cars) Curb and gutter will be provided throughout the park. Total parking, including existing parking, will accommodate 1892 parked cars.

#### **Parking Expansions**

Provide additional parking (Total 70 cars) including striping to accommodate new 7th ball field.

#### **Deceleration Lanes**

Two new deceleration lanes will be located at each of the park entrances, for a total of three (3). Decel Lanes are to follow all guides and regulations set forth by the Georgia Department of Transportation and all county regulations.

#### **Site Lighting**

Lighting will be provided for all active areas of the park site, including parking lots. Sports lighting will be provided for all sports fields. The multi-use trail will not be lighted.

### **Irrigation system**

All sports fields, the dog park and the new 5-acre open space are to be irrigated. Use economical large diameter turf irrigation heads. All controllers heads, piping, irrigation emitters and supporting elements will be per Gwinnett County standard.

### **Improvements**

#### **Concession / Restroom Bldg.**

The existing Concession / restroom building, located in the ball field complex is to remain. The north end of the building is to be renovated for use as a covered picnic shelter.

#### **Park Signage**

Provide two (2) standard Gwinnett County Park entrance signs. One sign should be located at the new entrance to the Eastern entrance to the park, the other will be located at the entrance drive to the aquatics zone. Signs should be visible to motorists but not encroach on sight triangles. Internal directional, vehicular and posted park rules will also be per County standard.

#### **Frontage Fence**

Existing perimeter equestrian style frontage fence will be removed and replaced along Lenora Church and Lee Roads with a low maintenance fence. A matching fence will be located along the Lee Road frontage of the eastern park extension.

#### **Site Amenities**

Benches are to be located along the entire length of the multi-purpose trail at a rate of 1 per every 3000'. Picnic tables, benches, trash receptacles are to be located at each facility. Water fountains are to be freeze thaw resistant and located in high activity areas.

## **SECTION 6.3 Preliminary Master Plan**

After presentation of the Preliminary Master Plan on May 22, 2002, the Final Master Plan (6.12.02 Plan) was developed by incorporating the comments received from the Steering Committee and staff. The comments from the Preliminary Master Plan Presentation are as follows:

- Reduce the number of regulation soccer fields from five (5) to four (4). Center Soccer complex in allotted space with one field centering on the proposed Concession / Restroom building.
- Rotate the proposed seventh (7th) ball field clockwise 90 degrees so that it has north-south orientation.
- Show pump house and pool house associated with aquatics center. Access to pool area should be through pool house.

- Relocate the Tree Farm Pavilion / Playground and add a supporting restroom building.
- Show 8' wide trail through tree farm area associated with Playground / Group Pavilion.
- Relocate Football field concession building.

## SECTION **Master Plan**

### 6.4

The Master Plan (6.12.02 Plan) was presented to and approved by the Steering Committee on June 12, 2002 and the Recreation Authority on June 27, 2002. At the plan's presentation to the Board of Commissioners on August 6, 2002, the Department was asked to seek additional public input on the plan. Based on that additional public input the Recreation Authority requested that a number of changes be incorporated into a revised plan. The requested changes are as follows:

- Relocate Dog Park to area behind existing Gymnasium and proposed Community Center.
- Relocate Aquatics Center and support buildings to area currently serving as open space on the northern portion of the site. Provide drop off area and temporary parking at front of pool house. Adjust Multi-use trail so it passes behind pool area for continuous trail supervision.
- Move open space and Volleyball Courts to former Dog Park location.
- Relocate Tennis courts to Northern edge of tree farm. Provide access to sidewalk.
- Adjust all parking lots accordingly, maintaining parking count.
- Replace the equestrian fence along park property frontage
- Stabilize and re-vegetate the bank edge of the existing pond
- Provide bench swings at existing pond
- Construct shade arbor at the existing playground near park pond, include additional trees.
- Replace the light fixtures at the existing Ball field complex with High cut-off fixtures
- Upgrade the existing multi-purpose trail system to create a 12' wide perimeter trail, add benches and bollards.
- Pave existing gravel parking lot near gym.
- Include in cost estimate the cost for the design of the PA system for the football complex in order to provide sound reduction.

SECTION **Revised Master Plan**

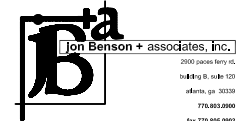
- 6.5 jon Benson + associates prepared a revised Final Master Plan graphic. The Final Master Plan dated January 7, 2003 and cost estimate (RE: Appendix) were presented to the Board of Commissioners on January 7, 2003. The Commissioners determined to provide time to hear additional public comment.

The Final Master Plan (1.07.03 Plan) was presented to the Recreation Authority on April 17, 2003. After discussion and clarification of plan elements, the Recreation Authority voted to accept the Master Plan as the guiding document for the further development of Lenora Park.

# Lenora Park

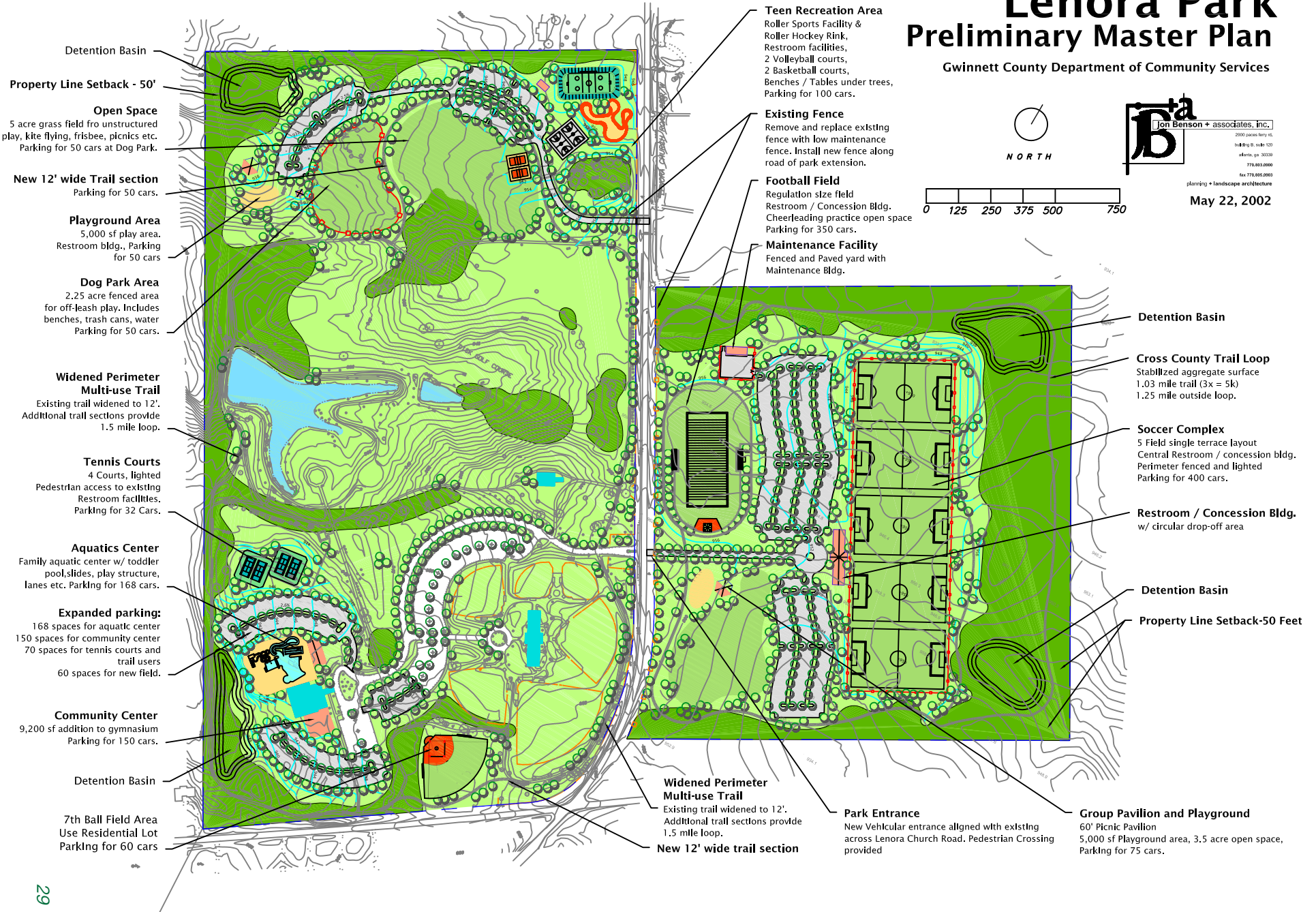
## Preliminary Master Plan

Gwinnett County Department of Community Services



planning + landscape architecture

May 22, 2002



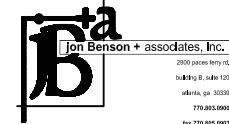
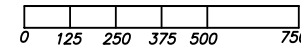


# Lenora Park Master Plan

Gwinnett County Department of Community Services



NORTH



June 12, 2002



<b>TOTAL SITE - 178.3964 acres</b>
<b>PARKING SUMMARY</b>
350 Cars - Football Complex
320 Cars - Soccer Complex
420 Cars - Baseball / Softball Complex (Including existing)
300 Cars - Community Center / Gym / Aquatics Center
32 Cars - Tennis Courts
180 Cars - Pavilion / Playground Complexes (3)
100 Cars - Teen Recreation Facilities
179 Cars - Trail & Passive Recreation Uses
<b>1881 Cars - Total Parking Spaces</b>

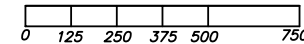


# Lenora Park Final Master Plan

Gwinnett County Department of Community Services

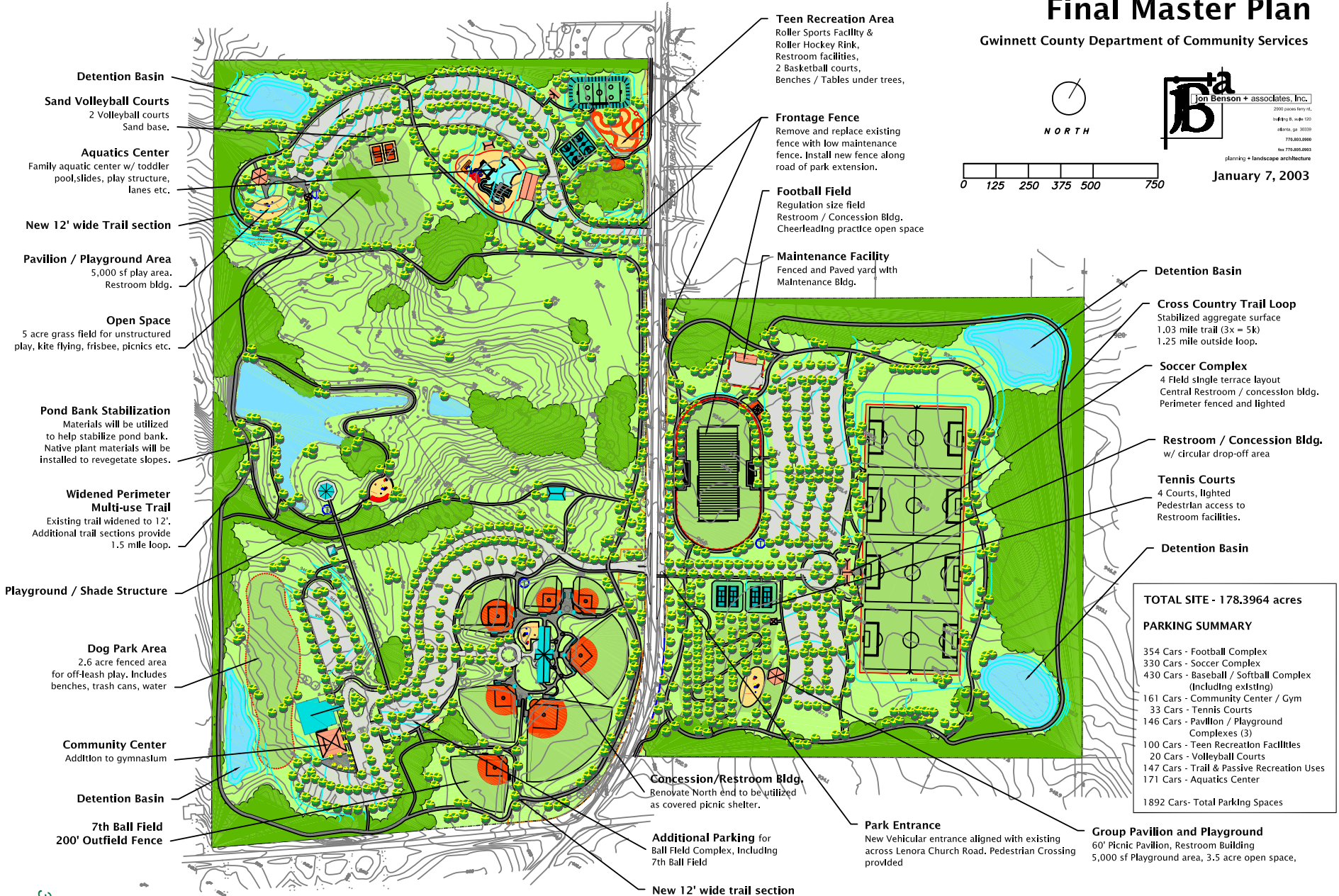


NORTH



planning + landscape architecture

January 7, 2003



SECTION **APPENDIX**

7.0

- 7.1 Cost Estimate
- 7.2 Parking Calculations
- 7.3 Sewer Service Area Graphic
- 7.4 Community Input Mtg. Results
  - a. Community Interest Form Tabulations - March 6, 2002
  - b. Community Interest Form Concerns - March 6, 2002
  - c. Whispering Pines Concerns - August 27, 2002
  - d. Innsbrook Concerns - August 28, 2002
  - e. Lenora Community Priorities - September 9, 2002

## SECTION 7.1



### **COST ESTIMATE FOR LENORA PARK GWINNETT COUNTY DEPARTMENT OF COMMUNITY SERVICES**

January 7, 2003

p h a s e   o n e   p a r k   e l e m e n t s				
<i>AQUATICS CENTER</i>	# OF UNITS	UNITS	COST/UNIT	ITEM TOTAL
GRADING	1	LS	\$ 3.00	\$167,340.00
TREE PROTECTION FENCING	1,000	LF	\$4.00	\$4,000.00
EROSION CONTROL FENCING	1,400	LF	\$2.00	\$2,800.00
CONCRETE CURB & GUTTER	2,639	LF	\$ 11.00	\$29,029.00
PARKING LOTS - ASPHALT (2" ASPHALT & 6" BASE)	108,313	SF	\$ 1.60	\$173,300.80
PARKING STRIPING	3,708	LS	\$ 0.25	\$927.00
PARKING LIGHTING	5	EA	\$ 1,500.00	\$7,500.00
POOL RECREATION COMPLEX (INCLUDES BUILDING AND DECKING)	1	LS	\$1,600,000.00	\$1,600,000.00
PERIMETER LIGHTING	1	LS	\$20,000.00	\$20,000.00
10' BLACK VINYL FENCING (PERIMETER)	650	LF	\$25.00	\$16,250.00
DEDUCT -- INSTALL ONLY ONE OF TWO WATER SLIDES PHASE ONE	1	LS	\$90,000.00	-\$90,000.00
EMERGENCY PHONE KIOSK	1	EA	\$3,500.00	\$3,500.00
<i>AQUATIC CENTER / TEEN CENTER ROAD</i>				
DECELERATION LANES	1	LS	\$20,166.50	\$20,166.50
ROAD GRADING	1	LS	\$3.00	\$73,050.00
CONCRETE CURB & GUTTER	2,646	LF	\$11.00	\$29,106.00
ASPHALT (2" ASPHALT & 6" BASE)	31,752	SF	\$1.60	\$50,803.20
ROADWAY STRIPING	1,323	LS	\$0.25	\$330.75
ROADWAY LIGHTING	2	LS	\$1,500.00	\$3,000.00
<i>WATER MANAGEMENT</i>				
BMP SETTLING POND	1	LS	\$8,000.00	\$8,000.00
DETENTION POND	1	LS	\$20,000.00	\$20,000.00
GRADING	1	LS	\$3.00	\$28,875.00
<i>SITE UTILITIES</i>				
SITE ELECTRICAL	1	LS	\$25,000.00	\$25,000.00
WATER METER	1	EA	\$1,200.00	\$1,200.00
PIPE	600	LF	\$22.00	\$13,200.00
FIRE HYDRANTS	1	EA	\$2,000.00	\$2,000.00
6" SEWER SERVICE	850	LF	\$18.00	\$15,300.00
FITTINGS, ATTACHMENTS, ETC (15% TOTAL)	1	LS	\$2,295.00	\$2,295.00
<b>AQUATIC CENTER SUBTOTAL</b>				<b>\$2,226,973.25</b>
<i>FOOTBALL FIELD</i>	# OF UNITS	UNITS	COST/UNIT	ITEM TOTAL
GRADING	1	LS	\$ 3.00	\$202,125.00
TREE PROTECTION FENCING	1,200	LF	\$4.00	\$4,800.00
EROSION CONTROL FENCING	2,600	LF	\$2.00	\$5,200.00
CONCRETE CURB & GUTTER	6,845	LF	\$ 11.00	\$75,295.00
PARKING LOTS - 2" ASPHALT	167,624	SF	\$ 1.05	\$176,005.20
PARKING LOTS - GRAVEL 6" BASE	167,624	SF	\$ 0.55	\$92,193.20
PARKING STRIPING	9,450	LS	\$ 0.25	\$2,362.50
PARKING LIGHTING	6	EA	\$ 1,500.00	\$9,000.00
VEGETATIVE CLEAR & GRUB	15	AC	\$4,600.00	\$66,700.00
RESTROOM / CONCESSION BUILDING (FOOTBALL FIELD)	1	LS	\$250,000.00	\$250,000.00

FIELD LIGHTING	1	LS		\$150,000.00	\$150,000.00
6' GALVANIZED PERIMETER FENCING (INCLUDING GATES)	1,588	LF		\$8.00	\$12,704.00
BLEACHERS / SEATING	2	EA		\$25,000.00	\$50,000.00
TRASH RECEPTACLES	6	EA		\$450.00	\$2,700.00
WATER FOUNTAIN (FREEZE RESISTANT)	2	EA		\$2,000.00	\$4,000.00
SOD	134,866	SF		\$0.40	\$53,946.40
INTERIOR ASPHALT WALK (8' WIDE, 2" ASPHALT - 6" BASE)	8,000	SF		\$1.60	\$12,800.00
FOOTBALL FIELD IRRIGATION	1	LS		\$15,000.00	\$15,000.00
DESIGN OF FOOTBALL SOUND SYSTEM	1	LS		\$8,000.00	\$8,000.00
DEDUCT -- REDUCE PARKING BAYS FROM 4 BAYS 3, 2" ASPHALT	41,906	SF	\$	1.05	-\$44,001.30
DEDUCT -- REDUCE PARKING BAYS FROM 4 BAYS 3, 6" BASE	41,906	SF	\$	0.55	-\$23,048.30
<i>MAINTENANCE COMPOUND</i>					
10' HIGH GALVANIZED PERIMETER FENCE w/ PRIVACY SLATS	438	LF		\$16.75	\$7,336.50
10' HIGH x 12' WIDE DOUBLE HUNG GATES - GALVANIZED w/ PRIVACY SLATS	2	EA		\$1,000.00	\$2,000.00
CONCRETE CURB & GUTTER	507	LF	\$	11.00	\$5,577.00
PARKING LOTS - ASPHALT (2" ASPHALT & 6" BASE)	11,410	SF	\$	1.60	\$18,256.00
PARKING STRIPING	180	LS	\$	0.25	\$45.00
<i>MAINTENANCE SITE UTILITIES</i>					
SITE ELECTRICAL	1	LS		\$5,000.00	\$5,000.00
PIPE	175	LF		\$22.00	\$3,850.00
<i>FOOTBALL / SOCCER ROAD</i>					
ROAD GRADING	1	LS		\$32,340.00	\$32,340.00
CONCRETE CURB & GUTTER	1,638	LF		\$11.00	\$18,018.00
ASPHALT (2" ASPHALT & 6" BASE)	27,420	SF		\$1.60	\$43,872.00
ROADWAY STRIPING	852	LS		\$0.25	\$213.00
ROADWAY LIGHTING	3	LS		\$1,500.00	\$4,500.00
DECELERATION LANES	1	LS		\$20,166.50	\$20,166.50
<i>WATER MANAGEMENT</i>					
BMP SETTLING POND	1	LS		\$8,000.00	\$8,000.00
DETENTION POND (S)	1	LS		\$20,000.00	\$20,000.00
GRADING	1	LS		\$28,875.00	\$28,875.00
<i>SITE UTILITIES</i>					
SITE ELECTRICAL	1	LS		\$25,000.00	\$25,000.00
WATER METER	1	EA		\$1,200.00	\$1,200.00
IRRIGATION METER	1	EA		\$1,200.00	\$1,200.00
PIPE	450	LF		\$22.00	\$9,900.00
FIRE HYDRANTS	1	EA		\$2,000.00	\$2,000.00
6" SEWER SERVICE	3,000	LF		\$18.00	\$54,000.00
TRENCHING (DEEP)	3,000	LF		\$70.00	\$210,000.00
FITTINGS, ATTACHMENTS, ETC (15% TOTAL)	1	LS		15.00%	\$45,495.00
<b>FOOTBALL FIELD SUBTOTAL</b>					<b>\$1,692,625.70</b>
<i>ADDITIONAL PARKING at EXISTING BASEBALL FIELDS</i>					
GRADING	1	LS		\$10,725.00	\$10,725.00
CONCRETE CURB & GUTTER	1,060	LF	\$	11.00	\$11,660.00
PARKING LOTS - ASPHALT (2" ASPHALT & 6" BASE)	20,780	SF	\$	1.60	\$33,248.00
PARKING STRIPING	1,030	LS	\$	0.25	\$257.50
PARKING LIGHTING	1	EA	\$	1,500.00	\$1,500.00
<b>ADDITIONAL PARKING at EXISTING BASEBALL FIELDS</b>					<b>\$57,390.50</b>
<i>TRAIL SYSTEM</i>					
12' WIDE - NEW ASPHALT TRAIL SECTION	33,600	SF		\$1.60	\$53,760.00
WIDENED PERIMETER EXISTING TRAIL (FROM 8' TO 12') - ASPHALT	20,480	SF		\$1.60	\$32,768.00
CONCRETE PATHWAYS, 6 FT WIDE	38,325	SF		\$3.38	\$129,538.50
TRAIL EDGE BENCHES	10	EA		\$450.00	\$4,500.00
REMOVABLE BOLLARDS	8	EA		\$125.00	\$1,000.00
<b>TRAIL SYSTEM SUBTOTAL</b>					<b>\$221,566.50</b>



<i>RENOVATIONS / IMPROVEMENTS</i>	<i># OF UNITS</i>	<i>UNITS</i>	<i>COST/UNIT</i>	<i>ITEM TOTAL</i>
LAKE EDGE STABILIZATION	10,500	SF	\$3.50	\$36,750.00
IMPROVE TREES AT PLAYGROUND	1	LS	\$2,500.00	\$2,500.00
NEW ARBOR AT PLAYGROUND	1	LS	\$10,000.00	\$10,000.00
BENCH SWINGS @ LAKE AREA	3	EA	\$1,500.00	\$4,500.00
CONSTRUCTION SIGN	1	LS	\$400.00	\$400.00
NEW PARK ENTRANCE SIGN	2	LS	\$5,000.00	\$10,000.00
SIGNAGE (PARK RULES, TRAFFIC-PARKING)	10	EA	\$400.00	\$4,000.00
LANDSCAPE (TREES, SHRUBS, GOUNDCOVERS, MULCH)	1	LS	\$150,000.00	\$150,000.00
COMMON AREA IRRIGATION	1	LS	\$25,000.00	\$25,000.00
UPGRADE LIGHTS AT EXISTING BALLFIELDS	122	EA	\$420.00	\$51,240.00
REMOVE EXISTING FIXTURES AND INSTALL NEW	122	EA	\$45.00	\$5,490.00
<b>RENOVATIONS / IMPROVEMENTS SUBTOTAL</b>				<b>\$294,390.00</b>
<i>PARKING FOR EXISTING PAVILION/PASSIVE RECREATION</i>	<i># OF UNITS</i>	<i>UNITS</i>	<i>COST/UNIT</i>	<i>ITEM TOTAL</i>
GRADING	1	LS	\$57,750.00	\$57,750.00
CONCRETE CURB & GUTTER	2,175	LF	\$ 11.00	\$23,925.00
PARKING LOTS - ASPHALT (2" ASPHALT & 6" BASE)	53,065	SF	\$ 1.60	\$84,904.00
PARKING STRIPING	3,258	LS	\$ 0.25	\$814.50
PARKING LIGHTING	2	EA	\$ 1,500.00	\$3,000.00
<b>PARKING FOR EXISTING PAVILION/PASSIVE RECREATION</b>				<b>\$88,718.50</b>
<i>PARK EDGE EQUESTRIAN FENCE</i>	<i># OF UNITS</i>	<i>UNITS</i>	<i>COST/UNIT</i>	<i>ITEM TOTAL</i>
REMOVAL OF EXISTING FENCE	2,900	LF	\$1.50	\$4,350.00
CONCRETE FENCE POSTS, BLACK - 12' O.C.	385	EA	\$60.00	\$23,100.00
EQUESTRIAN RAIL FENCE, BLACK - TREX LUMBER	4,650	LF	\$17.50	\$81,375.00
<b>PARK EDGE EQUESTRIAN FENCE SUBTOTAL</b>				<b>\$108,825.00</b>
<b>PHASE ONE ELEMENTS -- GRAND SUBTOTAL</b>				<b>\$4,690,489.45</b>
MOBILIZATION, FEES, BONDS, ETC. (10% TOTAL)				\$469,048.95
<b>SUBTOTAL</b>				<b>\$5,159,538.40</b>
15% CONTINGENCY FOR PRELIMINARY PLAN LEVEL COST ESTIMATE				\$773,930.76
<b>SUBTOTAL</b>				<b>\$5,933,469.15</b>
12% DESIGN, ENGINEERING AND PROGRAM MANAGEMENT FEES				\$712,016.30
<b>PROJECT TOTAL</b>				<b>\$6,645,485.45</b>

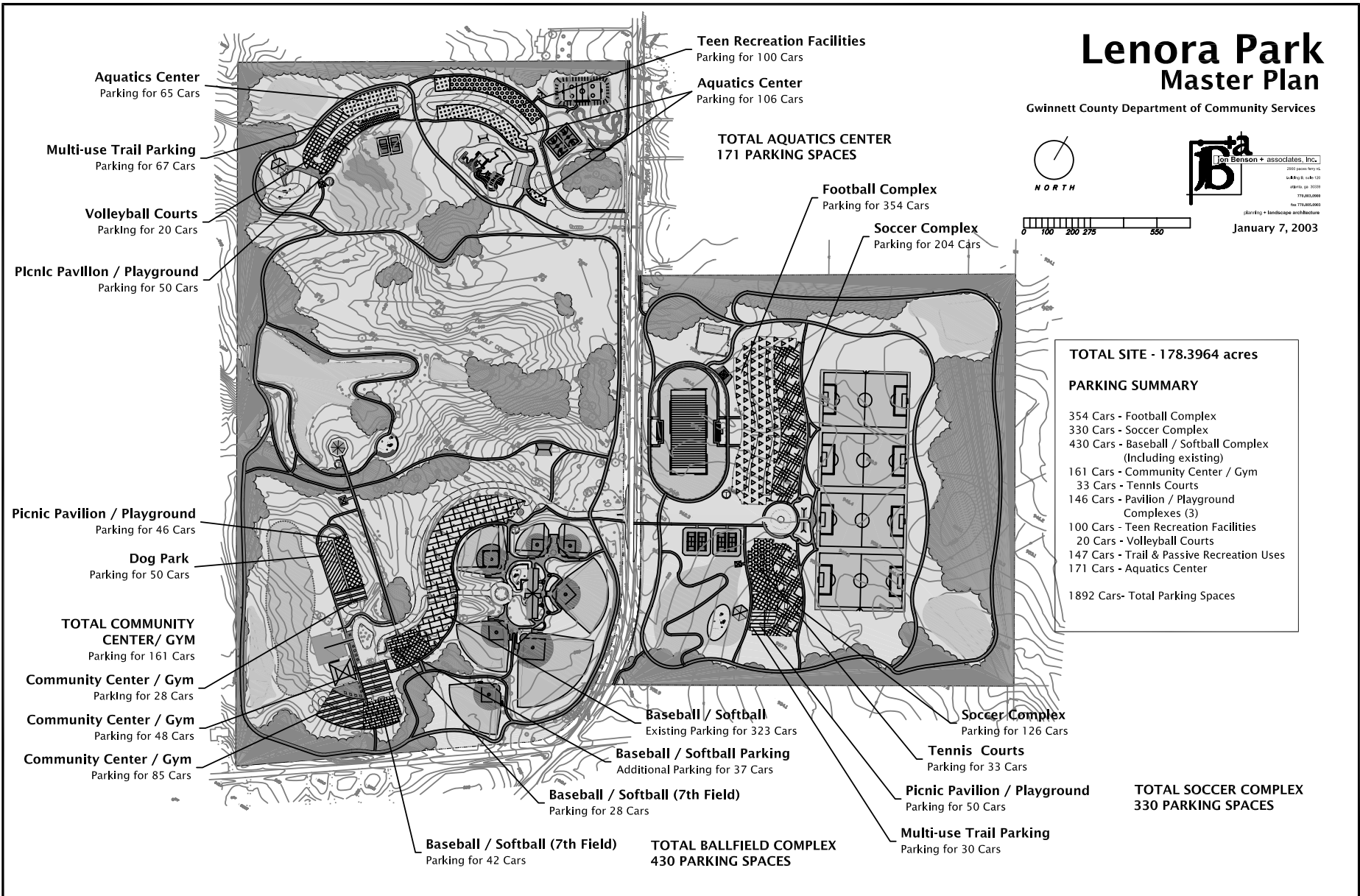
future phases park elements				
OFF-LEASH DOG PARK	# OF UNITS	UNITS	COST/UNIT	ITEM TOTAL
SEEDING - OPEN SPACE AREAS	113,256	SF	\$0.07	\$7,927.92
6' BLACK VINYL PERIMETER FENCING (INCLUDING 2 GATES)	1,255	LF	\$15.50	\$19,452.50
WATER FOUNTAIN W/ DOGGIE DISH FILLER (FREEZE RESISTANT)	1	EA	\$2,000.00	\$2,000.00
BENCHES	8	EA	\$500.00	\$4,000.00
INFO KIOSK w/ BAG DISPENSER	1	LS	\$1,000.00	\$1,000.00
TRASH RECEPTACLES	2	EA	\$450.00	\$900.00
SEEDING FOR TURFGRASS	98,000	SF	\$0.07	\$6,860.00
OFF-LEASH DOG PARK SUBTOTAL				\$42,140.42
TREEFARM PLAYGROUND AREAS / PICNIC AREAS	# OF UNITS	UNITS	COST/UNIT	ITEM TOTAL
60' PICNIC PAVILION	1	EA	\$50,000.00	\$50,000.00
PLAY STRUCTURES	1	EA	\$60,000.00	\$60,000.00
ENGINEERED WOOD CHIP MULCH - 6" DEPTH	5,000	SF	\$2.00	\$10,000.00
RESTROOM BUILDING (TREE FARM AREA)	1	LS	\$110,000.00	\$110,000.00
6" SEWER SERVICE	350	LF	\$18.00	\$6,300.00
SITE ELECTRICAL	1	LS	\$5,000.00	\$5,000.00
TRASH RECEPTACLES (2 @ EACH PLAYGROUND)	2	EA	\$450.00	\$900.00
PICNIC TABLES (12 @ EACH PAVILION)	12	EA	\$500.00	\$6,000.00
BENCH SWINGS @ TREE FARM AREA	3	EA	\$1,500.00	\$4,500.00
BIKE RACKS (1 @ EACH PLAYGROUND)	1	EA	\$200.00	\$200.00
GRILLS (6 @ EA PLAYGROUND)	6	EA	\$200.00	\$1,200.00
WATER FOUNTAIN W/ DOGGIE DISH FILLER (FREEZE RESISTANT) (1 EA.PC	1	EA	\$2,000.00	\$2,000.00
BENCHES ( 4 @ EACH PLAYGROUND)	4	EA	\$500.00	\$2,000.00
RELOCATE TREES FROM TREE FARM	300	EA	\$250.00	\$75,000.00
REMOVE TREES FROM TREE FARM	500	EA	\$50.00	\$25,000.00
TREEFARM PLAYGROUND AREAS / PICNIC AREAS SUBTOTAL				\$358,100.00
TENNIS AREA	# OF UNITS	UNITS	COST/UNIT	ITEM TOTAL
TENNIS COURTS (INCLUDES EQUIPMENT)	2	PAIR	\$54,500.00	\$109,000.00
SITE ELECTRICAL	1	LS	\$10,000.00	\$10,000.00
10' BLACK VINYL PERIMETER FENCING (INCLUDING GATES)	830	LF	\$25.00	\$20,750.00
COURT LIGHTING	2	PAIR	\$15,000.00	\$30,000.00
8' SIDEWALK CONNECTION TO FACILITIES - ASPHALT	3,200	SF	\$1.60	\$5,120.00
WATER FOUNTAIN (FREEZE RESISTANT)	1	EA	\$2,000.00	\$2,000.00
TENNIS AREA SUBTOTAL				\$176,870.00
TRAIL SYSTEM	# OF UNITS	UNITS	COST/UNIT	ITEM TOTAL
12' WIDE - NEW ASPHALT TRAIL SECTION	64,116	SF	\$1.60	\$102,585.60
10' WIDE CROSS COUNTRY TRAIL - STABILIZED AGGREGATE	54,750	SF	\$2.50	\$136,875.00
BENCHES (APPROX. 1 EVERY 3000')	50	EA	\$450.00	\$22,500.00
REMOVABLE BOLLARDS	8	EA	\$125.00	\$1,000.00
TRAIL SYSTEM SUBTOTAL				\$262,960.60
COMMUNITY CENTER	# OF UNITS	UNITS	COST/UNIT	ITEM TOTAL
GRADING	1	LS	\$57,750.00	\$57,750.00
CONCRETE CURB & GUTTER	2,309	LF	\$ 11.00	\$25,399.00
PARKING LOTS - ASPHALT (2" ASPHALT & 6" BASE)	58,560	SF	\$ 1.60	\$93,696.00
PARKING STRIPING	3,600	LS	\$ 0.25	\$900.00
PARKING LIGHTING	3	EA	\$ 1,500.00	\$4,500.00
COMMUNITY CENTER BUILDING	9,200	SF	\$125.00	\$1,150,000.00
VEGETATIVE CLEAR & GRUB	7	AC	\$4,600.00	\$29,900.00
DEDUCT -- REDUCE BUILDING SIZE TO 4800 SF	4,400	SF	\$125.00	-\$550,000.00

<i>WATER MANAGEMENT</i>				
BMP SETTLING POND	1	LS	\$8,000.00	\$8,000.00
DETENTION POND (S)	1	LS	\$20,000.00	\$20,000.00
GRADING	1	LS	\$28,875.00	\$28,875.00
<i>SITE UTILITIES</i>				
SITE ELECTRICAL	1	LS	\$10,000.00	\$10,000.00
FIRE HYDRANTS	1	EA	\$2,000.00	\$2,000.00
FITTINGS, ATTACHMENTS, ETC (15% TOTAL)	1	LS	15.00%	\$1,800.00
<b>COMMUNITY CENTER SUBTOTAL</b>				<b>\$882,820.00</b>
<i>MAINTENANCE COMPOUND</i>				
MAINTENANCE BUILDING	1	LS	\$220,000.00	\$220,000.00
<b>MAINTENANCE COMPOUND SUBTOTAL</b>				<b>\$220,000.00</b>
<i>7th BASEBALL FIELD</i>				
HARDSCAPE	2,500	SF	\$10.30	\$25,750.00
DEMOLISH HOUSE AT 7TH BALL FIELD	1	LS	\$6,000.00	\$6,000.00
GRADING	1	LS	\$19,722.00	\$19,722.00
CONCRETE CURB & GUTTER	1,175	LF	\$ 11.00	\$12,925.00
PARKING LOTS - ASPHALT (2" ASPHALT & 6" BASE)	22,511	SF	\$ 1.60	\$36,017.60
PARKING STRIPING	1,080	LS	\$ 0.25	\$270.00
PARKING LIGHTING	1	EA	\$ 1,500.00	\$1,500.00
FIELD PREPARATION	1	LS	10,000	\$10,000.00
10' GALVANIZED PERIMETER FENCING	150	LF	\$13.50	\$2,025.00
6' GALVANIZED PERIMETER FENCING (INCLUDING GATES)	670	LF	\$8.00	\$5,360.00
DUGOUTS	2	EA	\$1,500.00	\$3,000.00
BLEACHERS / SEATING	4	EA	\$2,000.00	\$8,000.00
BACKSTOP	1	LS	\$4,000.00	\$4,000.00
FIELD LIGHTING	1	LS	\$113,000.00	\$113,000.00
SITE ELECTRICAL	1	LS	\$10,000.00	\$10,000.00
MAINTENANCE BINS	2	EA	\$700.00	\$1,400.00
SOD	37,800	SF	\$0.40	\$15,120.00
BASEBALL FIELD IRRIGATION	1	LS	\$18,000.00	\$18,000.00
<b>7th BASEBALL FIELD SUBTOTAL</b>				<b>\$292,089.60</b>
<i>PLAYGROUND AREAS / PICNIC AREAS</i>				
60' PICNIC PAVILION	1	EA	\$50,000.00	\$50,000.00
PLAY STRUCTURES	1	EA	\$60,000.00	\$60,000.00
ENGINEERED WOOD CHIP MULCH - 6" DEPTH	5,000	SF	\$2.00	\$10,000.00
RESTROOM BUILDING (DOG PARK / PLAYGROUND AREA)	1	LS	\$110,000.00	\$110,000.00
6" SEWER SERVICE	500	LF	\$18.00	\$9,000.00
PIPE	650	LF	\$22.00	\$14,300.00
FIRE HYDRANTS	1	EA	\$2,000.00	\$2,000.00
PIPE	960	LF	\$22.00	\$21,120.00
TRASH RECEPTACLES (2 @ EACH PLAYGROUND)	2	EA	\$450.00	\$900.00
PICNIC TABLES (12 @ EACH PAVILION)	12	EA	\$500.00	\$6,000.00
BENCH SWINGS @ TREE FARM AREA	3	EA	\$1,500.00	\$4,500.00
BIKE RACKS (1 @ EACH PLAYGROUND)	1	EA	\$200.00	\$200.00
GRILLS (6 @ EA PLAYGROUND)	6	EA	\$200.00	\$1,200.00
WATER FOUNTAIN W/ DOGGIE DISH FILLER (FREEZE RESISTANT) (1 EA.PC	1	EA	\$2,000.00	\$2,000.00
BENCHES ( 4 @ EACH PLAYGROUND)	4	EA	\$500.00	\$2,000.00
SEEDING - OPEN SPACE AREAS	382,500	SF	\$0.07	\$26,775.00
DEMOLISH 3 WALLS @ EXISTING CONCESSION BUILDING (SHADE AREA)	1	LS	\$15,000.00	\$15,000.00
<b>PLAYGROUND AREAS / PICNIC AREAS SUBTOTAL</b>				<b>\$319,995.00</b>

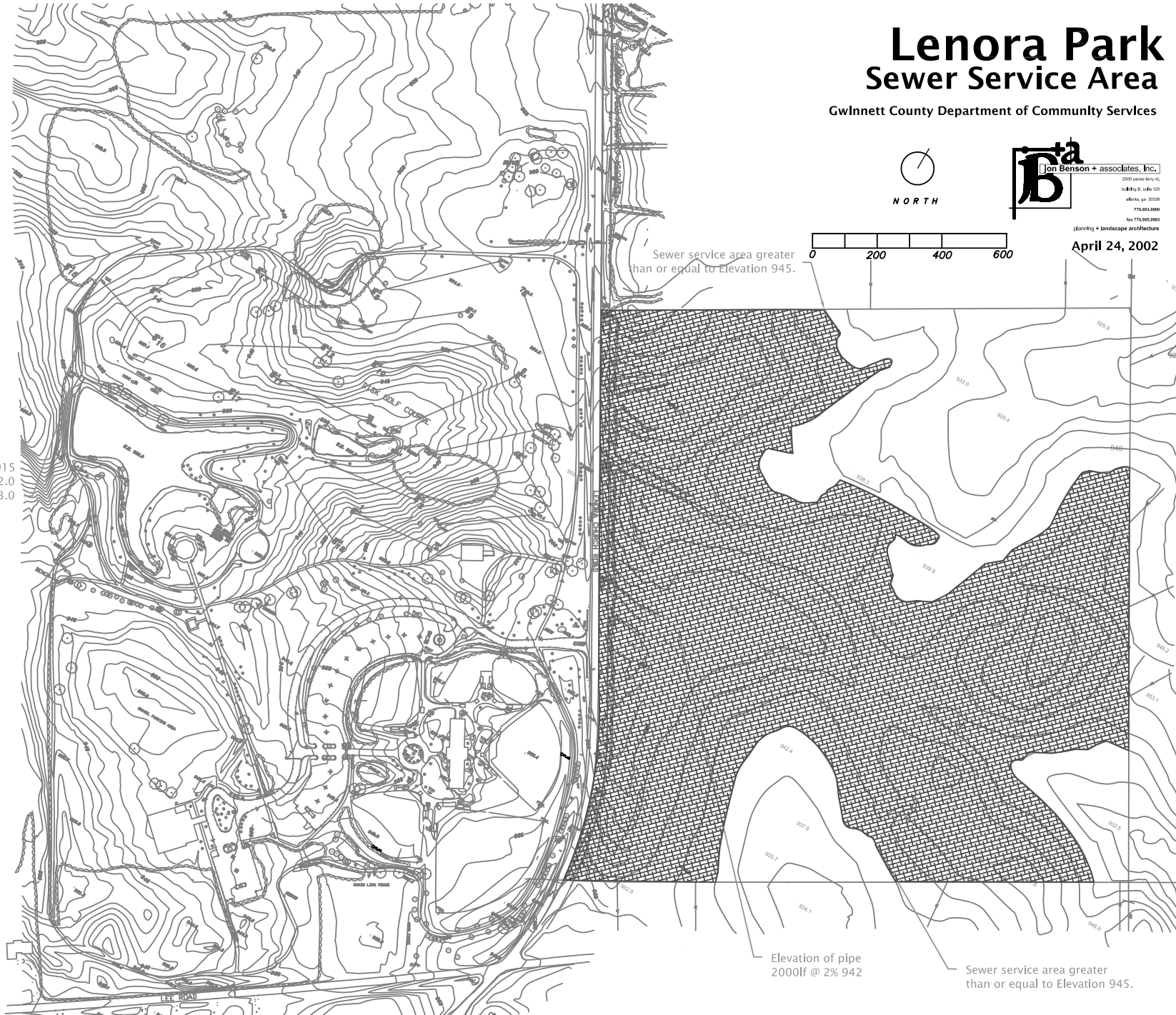
<i>TEEN RECREATION AREA</i>	# OF UNITS	UNITS	COST/UNIT	ITEM TOTAL
GRADING	1	LS	\$57,750.00	\$57,750.00
CONCRETE CURB & GUTTER	2,795	LF	\$ 11.00	\$30,745.00
PARKING LOTS - ASPHALT (2" ASPHALT & 6" BASE)	44,544	SF	\$ 1.60	\$71,270.40
PARKING STRIPING	2,142	LS	\$ 0.25	\$535.50
PARKING LIGHTING	3	EA	\$ 1,500.00	\$4,500.00
RESTROOM BUILDING	1	LS	\$110,000.00	\$110,000.00
ROLLER HOCKEY RINK	1	LS	\$250,000.00	\$250,000.00
FREESTYLE SKATING AREA	15,212	SF	\$10.00	\$152,120.00
BASKETBALL COURT (INCLUDES EQUIPMENT)	1	EA	\$25,000.00	\$25,000.00
SAND VOLLEYBALL COURT	2	EA	\$15,000.00	\$30,000.00
CONCRETE PLAZA & SIDEWALKS	5,500	SF	\$2.50	\$13,750.00
CONCRETE PAVERS - PLAZA	15,000	SF	\$3.50	\$52,500.00
HOCKEY RINK LIGHTING	1	LS	\$18,000.00	\$18,000.00
FREE SKATE LIGHTING	1	LS	\$15,000.00	\$15,000.00
PICNIC TABLES	4	EA	\$500.00	\$2,000.00
BENCHES	6	EA	\$500.00	\$3,000.00
BIKE RACKS	3	EA	\$200.00	\$600.00
TRASH RECEPTACLES	6	EA	\$450.00	\$2,700.00
WATER FOUNTAIN (FREEZE RESISTANT)	1	EA	\$2,000.00	\$2,000.00
EMERGENCY PHONE KIOSK	1	EA	\$3,500.00	\$3,500.00
<i>SITE UTILITIES</i>				
SITE ELECTRICAL	1	LS	\$25,000.00	\$25,000.00
6" SEWER SERVICE	300	LF	\$18.00	\$5,400.00
FITTINGS, ATTACHMENTS, ETC (15% TOTAL)	1	LS	15.00%	\$4,560.00
<b>TEEN RECREATION AREA SUBTOTAL</b>				<b>\$879,930.90</b>
<i>SOCCER COMPLEX</i>	# OF UNITS	UNITS	COST/UNIT	ITEM TOTAL
GRADING	1	LS	\$346,500.00	\$346,500.00
TREE PROTECTION FENCING	3,000	LF	\$2.00	\$6,000.00
EROSION CONTROL FENCING	6,000	LF	\$2.00	\$12,000.00
CONCRETE CURB & GUTTER	3,044	LF	\$ 11.00	\$33,484.00
PARKING LOTS - ASPHALT (2" ASPHALT & 6" BASE)	71,448	SF	\$ 1.60	\$114,316.80
PARKING STRIPING	4,140	LS	\$ 0.25	\$1,035.00
PARKING LIGHTING	4	EA	\$ 1,500.00	\$6,000.00
VEGETATIVE CLEAR & GRUB	23	AC	\$4,600.00	\$103,500.00
MAIN RESTROOM / CONCESSION BUILDING (INCLUDING PLAZA)	1	LS	\$300,000.00	\$300,000.00
SOCCER FIELD IRRIGATION	5	EA	\$15,000.00	\$75,000.00
SUBSURFACE DRAINAGE - SAND	5	EA	\$6,000.00	\$30,000.00
6' BLACK VINYL PERIMETER FENCING (INCLUDING GATES)	3,348	LF	\$15.50	\$51,894.00
MAINTENANCE BINS	2	EA	\$700.00	\$1,400.00
SOCCER GOALS	12	EA	\$2,000.00	\$24,000.00
8' WIDE CONNECTOR TRAIL - STREET PRINT ASPHALT	19,104	SF	\$2.50	\$47,760.00
10' WIDE CROSS COUNTRY TRAIL - STABILIZED AGGREGATE	54,750	SF	\$2.50	\$136,875.00
FIELD LIGHTING	5	EA	\$82,500.00	\$412,500.00
WATER FOUNTAIN (FREEZE RESISTANT)	1	EA	\$2,000.00	\$2,000.00
SOD	5	EA	\$33,200.00	\$166,000.00
<i>WATER MANAGEMENT</i>				
BMP SETTLING POND	1	LS	\$8,000.00	\$8,000.00
DETENTION POND (S)	1	LS	\$20,000.00	\$20,000.00
GRADING	1	LS	\$28,875.00	\$28,875.00
<i>SITE UTILITIES</i>				
SITE ELECTRICAL	1	LS	\$25,000.00	\$25,000.00
6" SEWER SERVICE	750	LF	\$18.00	\$13,500.00
FITTINGS, ATTACHMENTS, ETC (15% TOTAL)	1	LS	\$2,025.00	\$2,025.00
PIPE	950	LF	\$22.00	\$20,900.00
<b>SOCCER COMPLEX SUBTOTAL</b>				<b>\$1,988,564.80</b>
<b>TOTAL MASTER PLAN – GRAND SUBTOTAL</b>				<b>\$10,113,960.77</b>
MOBILIZATION, FEES, BONDS, ETC. (10% TOTAL)				<b>\$1,011,396.08</b>

	<b>SUBTOTAL</b>	<b>\$11,125,356.85</b>
15% CONTINGENCY FOR PRELIMINARY PLAN LEVEL COST ESTIMATE		<b>\$1,668,803.53</b>
	<b>SUBTOTAL</b>	<b>\$12,794,160.37</b>
12% DESIGN, ENGINEERING AND PROGRAM MANAGEMENT FEES		<b>\$1,535,299.24</b>
	<b>PROJECT TOTAL</b>	<b>\$14,329,459.62</b>





MH 12 - Elevation 915  
Invert 1 Elevation-902.0  
Invert 2 Elevation-903.0



# Lenora Park Master Plan

## Community Interest Form Tabulations

March 6, 2002

Gwinnett Dept. of Community Services

jB+a park design studio

Program or Facility	Times Mentioned	Ranking					
		First	Second	Third	Fourth	Fifth	No Rank
Trails, Walking, Biking, Rollerblading, Nature	38	16	12	7	3		
Swimming Pool	25	15	3	2	1	2	2
Picnic Pavilion & Family Picnic Areas W/ Grills	19		1	8		1	9
Tennis	18	2	3	5	2	3	3
Dog Park	13	6		5	2		
Soccer Field	13	4	6		3		
Disk Golf	11	10	1				
Restrooms	8		3	1	2	2	
Playground	7		1	1	3	1	1
Gardens	5	2	2			1	
Baseball Field	4	1		1		1	1
Fitness Center	4	1	1		1	1	
Football Field	4	3		1			
Leave as is	4	3	1				
R/C Track	4	4					
Benches around Park	3		2				1
Senior Facility	3	1					2
Skate Park	3	1	1		1		
Volleyball	3	1		2			
Amphitheater	2	2					
Basketball	2					1	1
BBQ Pits	2					2	
Concession Stand	2			1			1
Historic Sign	2		1		1		
Horseshoe Pits	2					1	1
Putt-Putt	2						2
Stocked Lake	2		1		1		
Youth Building	2						2
Boy Scout Facility	1			1			
Community Center	1					1	
Drinking Fountains	1						1
Equestrian	1						1
Large Fountain	1				1		
Peach Orchard	1					1	
Rock Climbing	1		1				
Roller Hokey	1						1
Water Park	1		1				

# **Lenora Park Master Plan** **Park Concerns Form Tabulations**

March 6, 2002

Gwinnett Dept. of Community Services

jB+a park design studio

Community Concern	Times Mentioned	Ranking
Vehicular Traffic	14	1
Noise Level	9	2
Adequate Buffers / Loss of Privacy	9	2
Grading and Drainage	9	2
Security/Lighting	9	2
Glare of Lights	8	3
Keeping Park Clean	8	3
Amount of Trees Removed	7	4
Want to Leave as is	5	5
Removal of Golf Disc Course	3	6
Location of Parking	1	7
Ped. Traffic	1	7



# **Lenora Park Master Plan** **Neighborhood Master Plan Concerns**

Gwinnett Dept. of Community Services

August 27, 2002 at Whispering Pines

jB+a park design studio

<b>Top Ranked</b>	<b>Issue or Concern</b>	<b># times voted one of top four concerns</b>
1	Too concentrated vs. distributed facilities	18
2	Eastern Parcel too "Active"	10
3	Use Deshong Park	5
4	Football Field	4
5	Out of Area Participation	2
5	Traffic	2
6	Sound System	1
	Crime	
	Don't tear down officer's residence	
	Don't widen path - provide separate use paths	
	Enforce light cutoff time - 10 PM	
	Existing light glare/spill on current fields	
	Lights	
	More enforcement	
	More supervision	
	Move aquatic center to east side	
	Noise	
	Site not zoned for park	



# **Lenora Park Master Plan** **Neighborhood Master Plan Concerns**

Gwinnett Dept. of Community Services

August 28, 2002 at Walton EMC (Innsbrook neighbors)

jB+a park design studio

<b>Top Ranked</b>	<b>Issue or Concern</b>	<b># times voted one of top four concerns</b>
1	No further expansion of park facilities	53
2	Shift sewer line into park via Lee Road	29
3	Don't want the teen center	28
3	Move all new 66-acre facilities & aquatic to another site	28
4	Increased water runoff	10
5	Move pool; to 28-acre site, in place of teen center	9
6	Don't want football	5
7	Don't want active rec. on 66-acres	4
8	Pool; lights, noise	3
8	Shift football field southward	3
8	Tennis courts; lights, noise	3
9	Traffic impact study needs to be done	2
10	Add fence along sewer line and signage	1
10	Move active rec. to Deshong Park	1
	Crime from kids near residences	
	Don't want sewer line	
	Increases non-resident use	
	Move football to Deshong (or other land)	
	No P.A. even if football	
	Provide separate use trails	
	Too many facilities	
	Traffic increase	
	Want full time park police	

**According to the tabulations (270 forms were submitted), the surveys indicated the priorities in the following order:**

1.	Construct the Family Aquatics Center	1067
2.	Construct the Football Complex with Maintenance Compound	1325
3.	Construct the Package of Total Trail Improvements	1370
4.	Construct the Community Center	1582
5.	Existing Park Improvements Package	1631
6.	Construct the Teen Recreation Area	1755
7.	Construct a Picnic Pavilion in the North End of the Existing Ballfield Concession/Restroom Building	1826
8.	Construct the Soccer Complex	1866
9.	Construct Four Tennis Courts	1958
10.	Construct the Tree Farm Pavilion/Playground with Restroom Building and Tree Farm Improvements	1970
11.	Construct the Seventh Ballfield	2088
12.	Construct the Dog Park and Associated Pavilion with Playground and Restroom Building	2128