

# HICKORY FLAT AREA PARK MASTER PLAN

DATE:  
FEBRUARY 2024  
(APPROVED: FEBRUARY 20, 2024)

PREPARED FOR:  
CHEROKEE COUNTY

Cherokee  
County  
1831  
GEORGIA



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# Hickory Flat Area Park

## Master Plan

February 2024

Cherokee County  
Cherokee Recreation and Parks

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Board of Commissioners**

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# 1

Section

## Introduction

The Cherokee Board of Commissioners recently acquired 40.27 acres situated on East Cherokee Drive for approximately \$3.2 million, earmarked for the prospective development of a park within the Hickory Flat area. Cherokee Recreation and Parks has long sought a suitable land parcel in this area for this purpose. This particular parcel, positioned east of East Cherokee Drive adjacent to Hickory Flat United Methodist Church, primarily consists of well-maintained pasture, complemented by a forested area, and features two intermittent streams and wetlands nestled in the Northeast corner.

The current state of the property is vividly depicted in the aerial map (**Figure 1.1**) and through panoramic site images (**Figure 1.2**) captured during recent visits. Input and insights gathered from stakeholders and the wider community during meetings will significantly inform the creation of park concepts, the crafting of a preliminary master plan, and ultimately, the presentation of a finalized master plan to the Board of Commissioners.

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# HICKORY FLAT AREA PARK MASTER PLAN AERIAL MAP

CHEROKEE COUNTY, GEORGIA

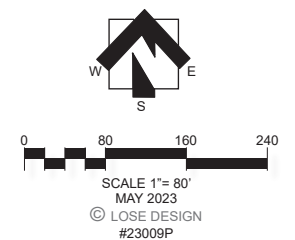


Figure 1.1- Current Aerial

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# 2

## Section

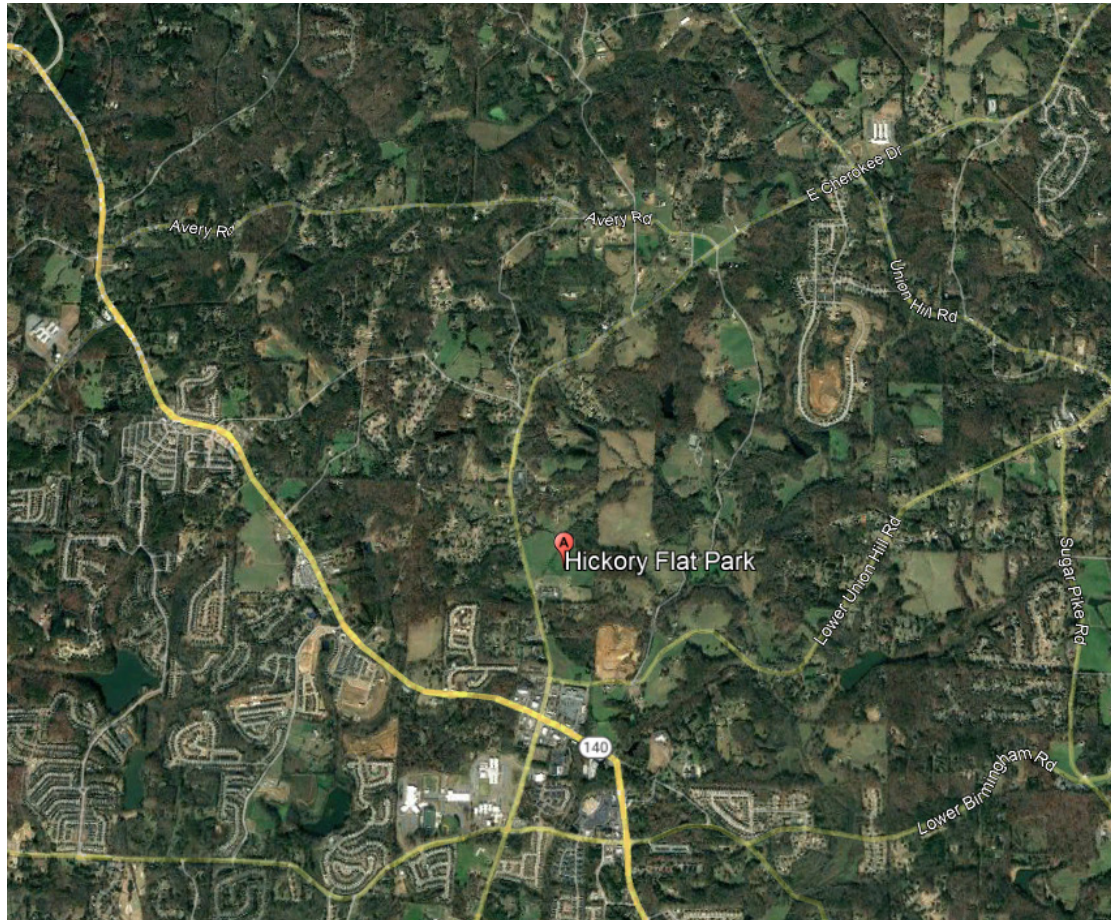
# Site Analysis

### 2.1 Location

The subject property is located on the east side of East Cherokee Drive, north of and adjacent to the Hickory Flat United Methodist Church. **(Figure 2.1)**. The parcel is bordered by single-family residential areas to the north and east, while to the west lies East Cherokee Drive, and to the south it is adjacent to the Hickory Flat Methodist Church. Additionally, the eastern perimeter is marked by a combination of single-family residential plots and agricultural properties.

### 2.2 Climate

Cherokee County in Georgia boasts a humid subtropical climate, characterized by mild to occasionally cool winters and warm, humid summers. With an average annual precipitation of nearly 50 inches, the majority of rainfall is concentrated between April and September. While snow accumulation tends to be light to moderate during the winter months, occasional snowfalls are possible from November through February. Temperature fluctuations are notable, with average highs reaching around 85°F in July and lows dipping to approximately 33°F in January.



**Figure 2.1 - Vicinity Map**

## 2.3 Topography

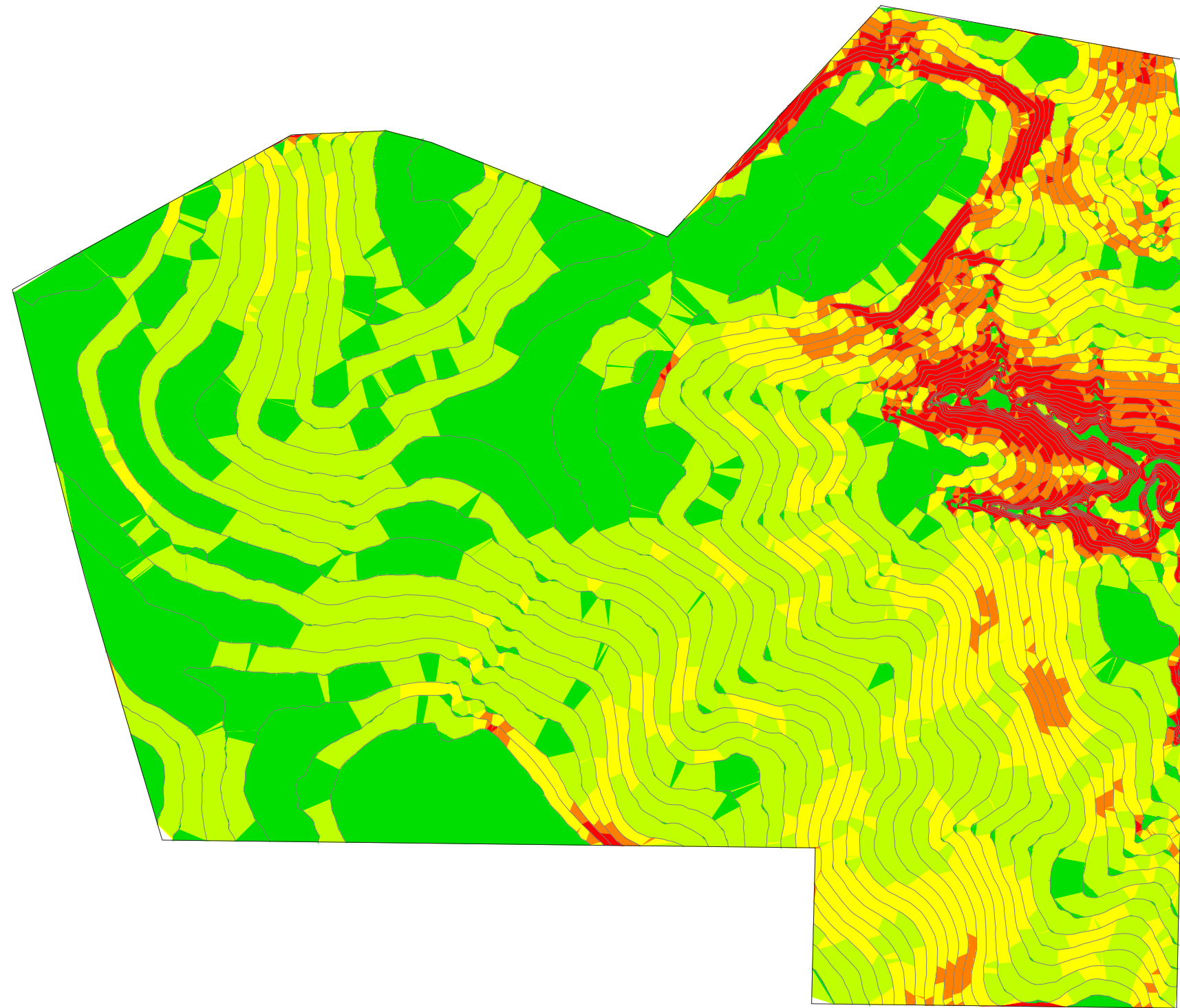
The topography of the site showcases a varied landscape characterized by ridges and swales, exhibiting a diverse range of slopes. Across the entire property, the elevation change measures approximately 70 feet, featuring slopes that range from gentle inclines of 0 to 10 percent on the west side to steeper gradients of 10 to 20+ percent on the east side, particularly near the streams (**Figure 2.3**). To accommodate substantial facilities, significant areas of cut and fill will be necessary, dictating their suitable placement on the site along with other park amenities. Retaining walls will be essential along the southern boundary, where steep cut and fill slopes are unfeasible. The site's topography allows for the positioning of most expansive active recreation facilities on the west side. However, the east side offers opportunities for preserving natural spaces accessible through trail networks and other passive recreation options.

## 2.4 Hydrology

The property's drainage, influenced by its topography and streams as depicted on the hydrology analysis map (**Figure 2.3**), predominantly directs water flow towards the north and the eastern region of the site. Based on this drainage pattern, it's advisable to consider placing potential stormwater management facilities at the northwest corner of the property and in proximity to the streams situated on the eastern side.

## 2.6 Jurisdictional Waters Findings Report

Corblu Ecology Group conducted a survey at the Hickory Flat Site to identify jurisdictional waters in compliance with U.S. regulations like the Clean Water Act (**Appendix B**). Through field surveys following USACE and Georgia EPD guidelines, they discovered maintained pasture, a forested area, and various vegetation. Two intermittent streams (I1 and I2) and two wetlands (W1 and W2) were identified, falling under USACE regulation, requiring approval for any impacts under Section 404 of the Clean Water Act. Federal permits demand USACE approval (Pre-Construction Notification) for proposed impacts to these waters, following guidelines of Nationwide Permit No. 42 (NWP 42) for recreational facilities. Compensatory measures are required for larger impacts. State and local rules mandate a 75-foot buffer for intermittent streams under Georgia EPD and Cherokee County regulations, while wetlands do not need buffers. Encroachments on protected stream buffers require approval via a Stream Buffer Variance (SBV) application, which involves public comments in the review process.



LEGEND:

- 0% - 5% SLOPES
- 5% - 10% SLOPES
- 10% - 15% SLOPES
- 15% - 20% SLOPES
- 20% + SLOPES

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HICKORY FLAT AREA PARK MASTER PLAN  
SLOPE ANALYSIS  
CHEROKEE COUNTY, GEORGIA

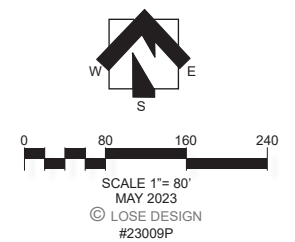
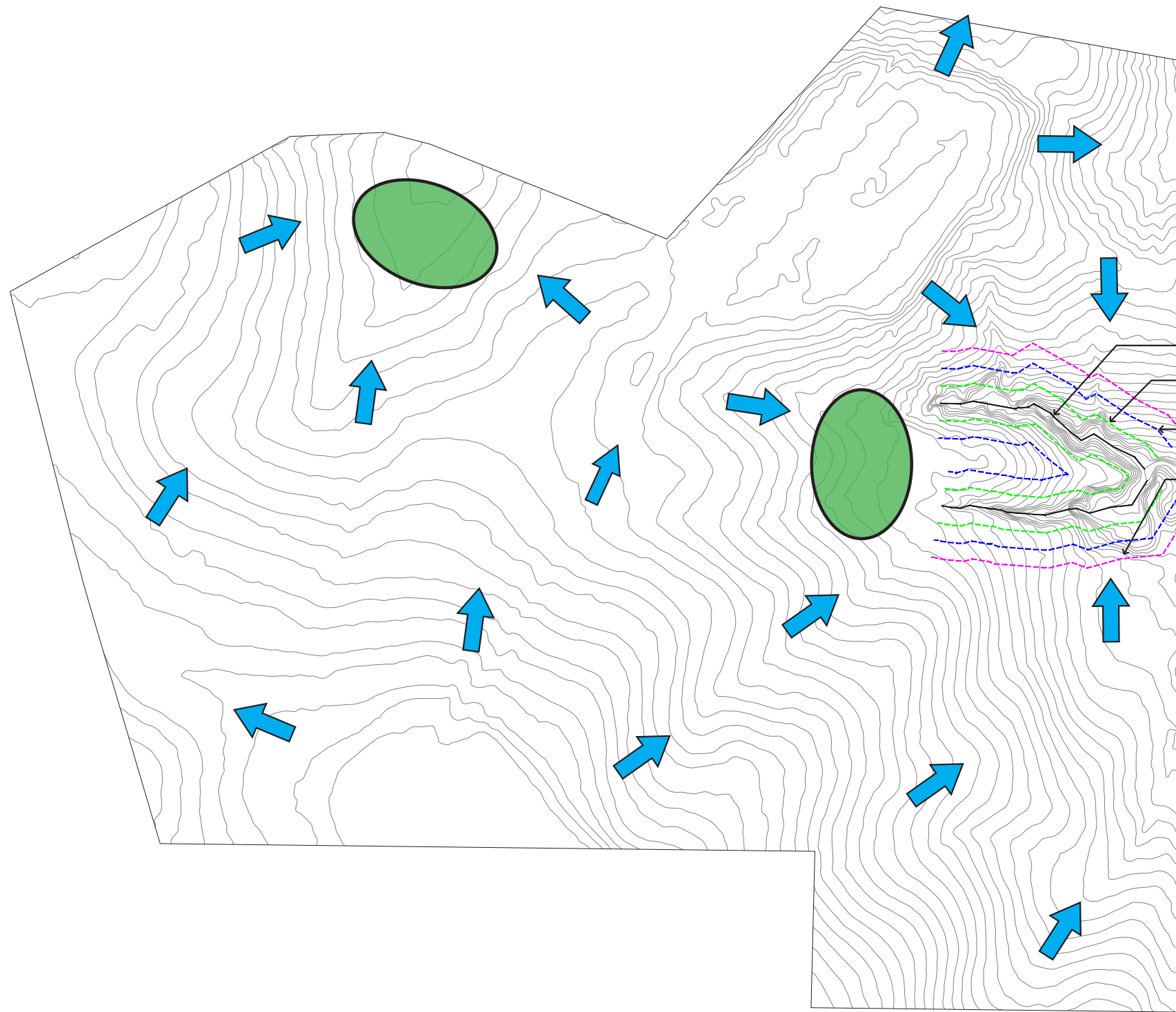


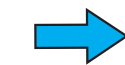

Figure 2.2 - Slope Analysis Map

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LEGEND:

-  DIRECTION OF SITE DRAINAGE
-  POTENTIAL STORM WATER MANAGEMENT FACILITY

- STREAM
- 25' STATE OF GEORGIA STREAM BUFFER
- 50' CHEROKEE COUNTY UNDISTURBED BUFFER
- 75' IMPERVIOUS SETBACK



HICKORY FLAT AREA PARK MASTER PLAN  
 HYDROLOGY ANALYSIS  
 CHEROKEE COUNTY, GEORGIA

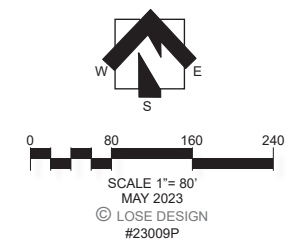


Figure 2.3 - Hydrology Analysis Map

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# 3

## Section

# Initial Public Input

### 3.1 Initial Public Input Summary

A public meeting was held at the Hickory Flat Gym on 5/18/2023 from 6:30pm-8:30pm. Approximately 68 community members participated in the meeting. Multiple stations were presented to collect input, including: Site Assessment and Analysis Boards, Facility Voting Boards (Indoor Recreation and Outdoor Recreation), and a Comment Card Station. Participants were also able to engage with design team members and representatives of the Cherokee Recreation & Parks to discuss questions and concerns about the proposed project. Participant voting responses were recorded to assist in ranking their preferences for potential facilities on the site.

Immediately following the public input meeting, Lose Design hosted an online public input platform through SocialPinpoint.com. This website offered the same format of input as the in-person meeting, including an online survey where participants were asked to rank their top indoor and outdoor facility preferences. This online survey was open to the public until 6/15/2023. **Data entry results showed that 1,518 visitors participated in the survey.** Those survey results have been compiled and shown how they compare to the input from the in-person meeting. The results are shown below in (Figure 3.1 & 3.2).

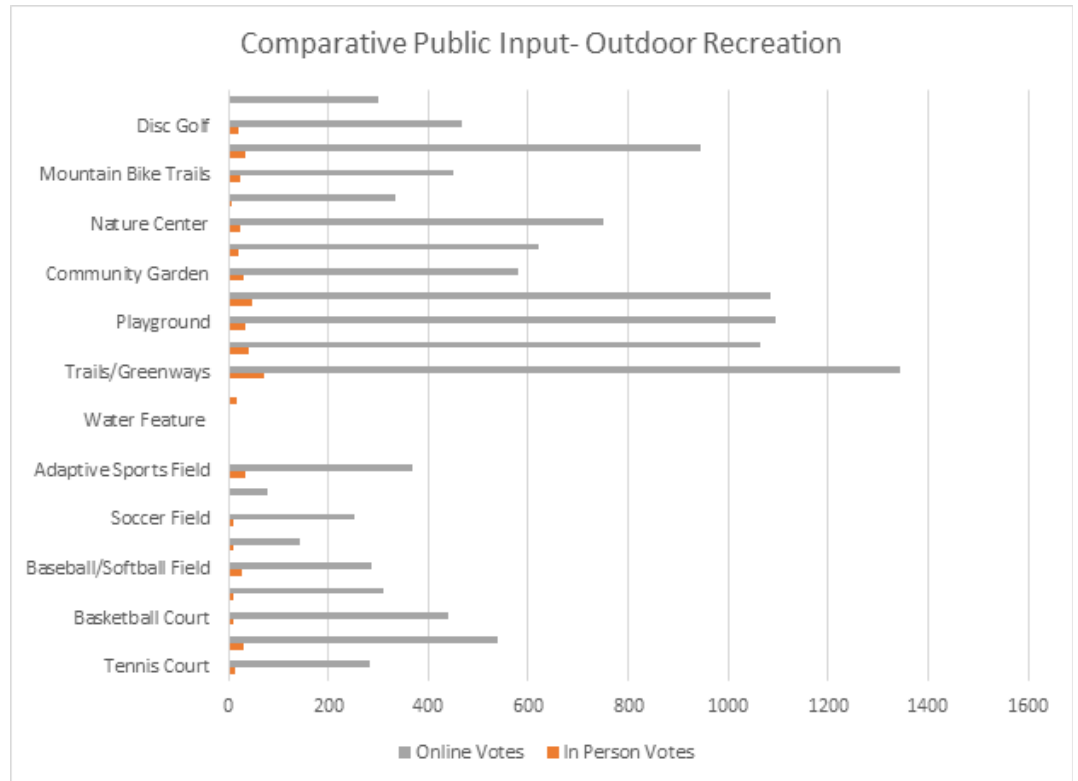
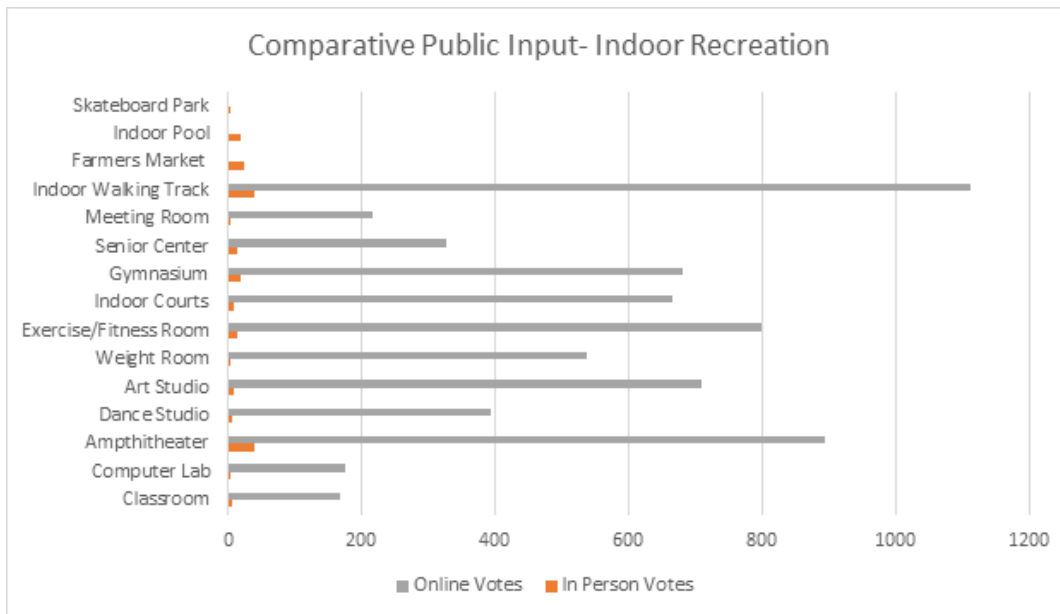


Figure 3.1 - Comparative Public Input - Outdoor Recreation



**Figure 3.2 - Comparative Public Input - Indoor Recreation**

Concurrent with the online survey, CRP staff and Lose Design facilitated 14 online focus group interviews. Interviewees included elected officials, local residents, local business owners, and athletic programming groups. The following is a summary of the requests and insights that these groups provided:

- Nearly all participants agreed that the park must include a blend of passive and active recreation facilities.
- An indoor recreation facility should also be planned to serve both current and future community needs. This would include meeting/activity rooms, a gymnasium (with indoor walking track), as well as exercise/fitness space.
- Pickleball courts and walking trails were the most frequently requested facilities for the park. There was some discussion of developing a “destination” pickleball facility that would draw visitors from outside of the immediate service area.
- Some participants requested that there be opportunities in the plan to convey the story/history of the Hickory Flat area. This could be achieved through architectural designs and informative signage.
- There was no real concern about the park development drawing in people from outside of the local community. Most participants noted that the community need for additional facilities outweighs the desire to limit the development of the park to a public greenspace.
- Diamond Fields- Two 300' fields were requested for implementation. The design should allow flexibility to program multiple age groups. Artificial turf surfacing was also recommended.
- Rectangle Fields- Three multipurpose fields were requested for implementation. There was a preference to have these fields designed as one large consolidated field area that can be programmed for multiple sports and field sizes. Additional space outside the area of play was also requested for practices and cheerleading programs. Artificial turf was requested for this facility.
- Tennis- 6 courts were requested. Pickleball- 12 dedicated pickleball courts were requested.

### 3.2 Community Needs Assessment

The planning team referenced the 2019-2028 Cherokee County Recreation, Parks, Greenspace, and Trails Master Plan to identify County-wide facility deficits to help inform the programming of this new park. A summary chart of these needs is shown below in (Figure 3.3).

Figure 3.4 Community Standards, Facility Supply & Needs					
Facility Type	Cherokee County Standard	2017 Supply	2019 Need	2028 Need	Additional Needed by 2028
Public Parks	NA	49	---	---	<i>Special</i>
Acres	10.1 per 1,000	2,796	2,500	3,190	394
Adaptive BB/SB Diamond	1 per 150,000	1	2	2	1
Baseball/Softball Diamond	1 per 4,500	65	55	70	5
Basketball, Outdoor	1 per 30,000	9	8	11	2
Batting Cages	1 per BB/SB Field	53	65	70	17
BMX Bike Track	1 per 150,000	0	2	2	2
Boat Ramp/Canoe Launch	<i>See Table 3.5</i>	10	---	---	<i>Special</i>
Campgrounds	NA	3	---	---	<i>Special</i>
Disc Golf	1 per 75,000	2	3	4	2
Dog Park	1 per 60,000	2	4	5	3
Equestrian Trails (miles)	NA	15	---	---	<i>Special</i>
Football Fields	1 per 40,000	5	6	8	3
Greenways	1 per County	3.5	---	---	<i>Special</i>
Inline Hockey Rink	1 per 150,000	1	2	2	1
Mountain Bike Trails (miles)	NA	29	---	---	<i>Special</i>
Athletic Fields	1 per 7,500	36	33	42	6
Nature Trails (miles)	1 Trail per Passive Park	30.2	---	---	<i>Special</i>
Park Walking Trails (miles)	1 Trail per Park	9.1	---	---	<i>Special</i>
Pickleball	1 per 20,000	7	12	16	9
Picnic Shelters	1+ per Park	50	---	---	<i>Special</i>
Playgrounds	1+ per Park	33	---	---	<i>Special</i>
Recreation Center/Gym	1 per 75,000	2	3	4	2
Running Track	1 per 150,000	0	2	2	2
Skate Park	1 per 100,000	1	2	3	2
Splash Pad	NA	1	---	---	<i>Special</i>
Swimming Pool Complex	1 per 100,000	2	2	3	1
Tennis Courts	1 per 8,000	32	31	39	7
Volleyball Courts, Outdoor	1 per 60,000	0	4	5	5

**Figure 3.3 - Community Standards, Facility Supply & Needs**

Based on input from the community, it appears that many of the County's current facility needs can be accommodated to some degree. Lose Design recommends that CRP staff evaluate the community input that has been received and compare it to the overall County needs to develop a comprehensive list of desired facilities to be explored for planning of the Hickory Flat Area Park.

# 4

## Section

# Preliminary Master Plan Concept

## 4.1 Preliminary Master Plan Concept Development

After the first public input meeting was held and all forms of public input data had been gathered, the Lose Design design team worked to implement all facilities and programs that were voted for by the community into a concept master plan (**Figure 5.1**) along with a high level opinion of probable cost. At a meeting on May 18, 2023 at Hickory Flat Fym, the concept master plan was presented to members of the Cherokee County community as well as Cherokee County staff members. After making the group aware that the concept master plan was derived from the public input information gathered from this meeting, as well as multiple design studies performed by the design team based on this public input information, the following revisions were discussed for each area:

### **Pickleball Complex**

- The community expressed interest in proceeding with incorporating the future pickleball phase into the final master plan.

### **Community Garden**

- Added Community Garden

### **Multi-Purpose Sports Complex**

- The community expressed interest in providing a plaza space in between multi-purpose sports fields for concessions/ pavilions/ and restroom facilities.

### **Trail System**

- The group expressed interest in extending the trail system to incorporate more of the total site as well as providing a longer route.

### **Open Lawn**

- The community expressed interest in removing the amphitheater seating in order to make more space for open lawn activities/events.

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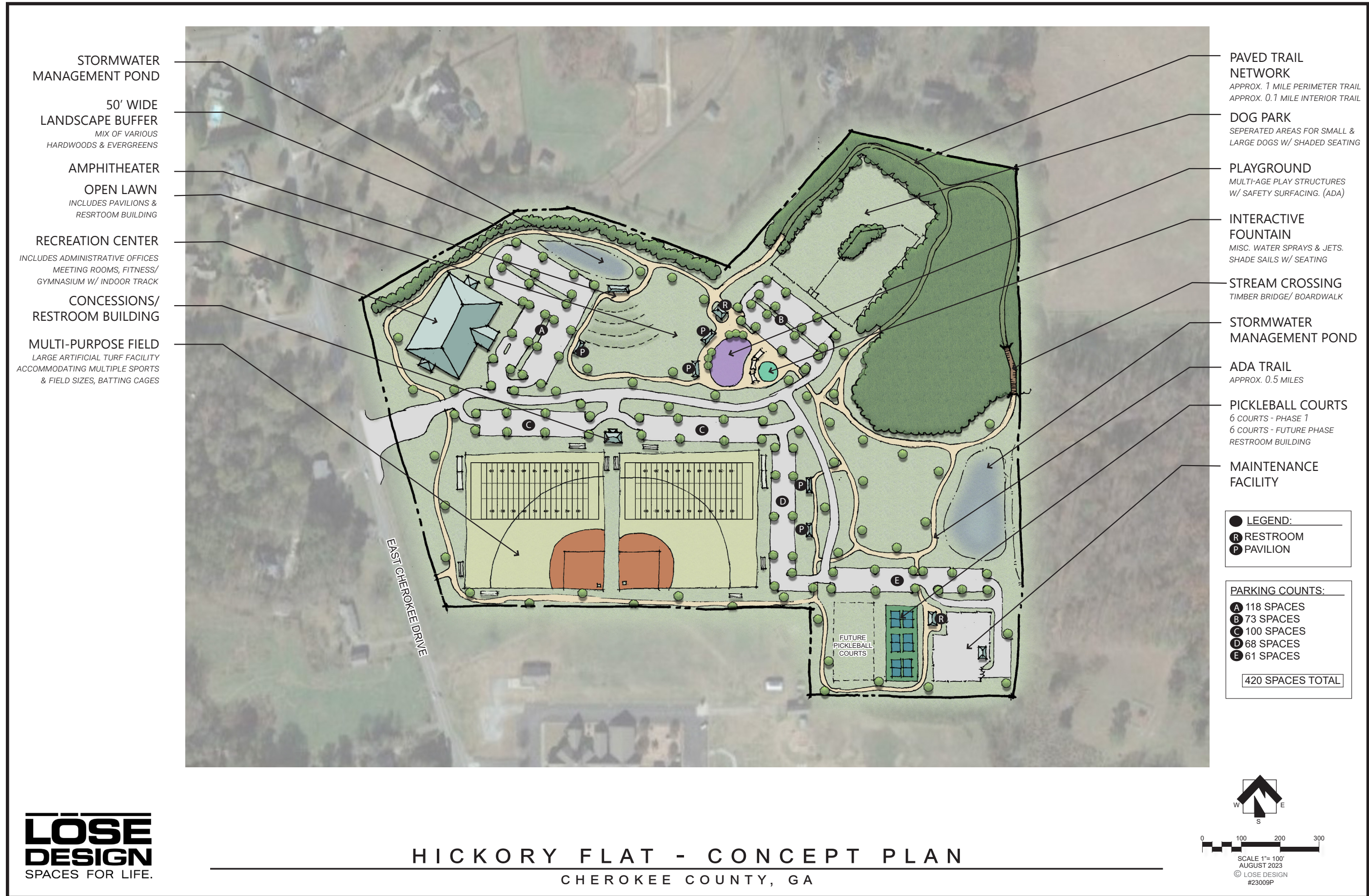


Figure 4.1 - Concept Master Plan



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# 5

## Section

# Final Master Plan

## 5.1 Final Master Plan Development

After the preliminary was presented, the requested modifications were made and a final master plan (**Figure 5.1**) and an opinion of probable cost were developed. The final master plan was presented to the members of the community and Cherokee County staff members on November 11, 2023 during a meeting at Hickory Flat Gym. Following is a description of the components of the final master plan

### Recreation Center

A recreation center, located at the entrance of the park site, that consists of many facilities/programs that were voted on by the community. This recreation center consists of a fitness center/gymnasium that also incorporates an indoor track for alternative cardio activities. The facility also includes meeting rooms that can be utilized for community events, numerous classrooms for additional learning opportunities, and administrative offices for recreation center staff. Parking for this recreation center begins at the southwest entrance of the recreation center and follows the building up to the northeast corner. A path around the building is also provided for delivery services as well as fire access.

### Dog Park

A fenced-in area (approximately 2 acres) that consists of two large, separated open areas for small and large dogs to be able to play with no worries from the owner's. Dog owner's are provided with shade structures, bench seating, as well as water fountains with a dog bowl attachment. Parking is located on the southwest corner of the dog park, sharing a lot with the Open Lawn section.

### Pickleball Complex

A pickleball complex that consists of twelve (12) pickleball courts, area for spectator seating, pavilion and restroom buildings, as well as a parking lot to the north of the courts. The pickleball courts also provide immediate access to the trail system on-site.

### Community Garden

A community garden where members of the surrounding area can use garden plots for propagation of flowers, produce, and other plants. This area also incorporates a garden maintenance shed that can be used by community members to store supplies.

## Multi-Purpose Field Complex

Located at the entrance of the park are two (2) artificial turf multi-purpose sports fields that include four (4) 215' baseball/softball fields, two (2) 300' baseball fields, and two (2) rectangular sports fields. A pedestrian plaza with a restroom and concessions building, multiple pavilions running along the main corridor of the plaza, as well as proposed batting cages for each field. Parking wraps the north and east sides of the multi-purpose field complex to provide ease of access. Due to excessive existing grade change in the area, the south side of the fields are met with an 8'+ retaining wall that can be utilized for spectator seating as well as an opportunity for future art installations.

## Trail System

A sprawling trail system that spans the entirety of the site to provide access to all amenities of the site as well as to provide an ample amount of trail (approximately 1.2 miles) to ensure that community members can utilize the space to exercise effectively. This trail system links up with all major amenities on-site as well as traveling through the wooded area on site and providing an ADA sub-loop at the open lawn area. The wooded portion of the trail also provides a boardwalk over the existing creek on-site.

## Open Lawn

The Open Lawn consists of a large open area fit for many uses such as exercise, community events, and concerts. On the northwest portion of the Open Lawn area sits a hybrid pavilion that can be used for rentals as well as a stage for outdoor events. Towards the southeast location of the Open Lawn sits multiple pavilions with an accompanying restroom building that can be used by individuals enjoying the Open lawn. A 10,000 sq. ft. playground and 2,000 sq. ft. splash pad are also located southeast of the Open Lawn.

## 5.2 Final Master Plan Presentation

A meeting was held November 11, 2023 at Hickory Flat Gym with members of the community and Cherokee County Staff for the planning team to present and discuss the final master plan (**Figure 5.1**) and opinion of probable cost. During this meeting a voting exercise took place to understand the priorities of the community and what they prioritize for their park. This voting exercise also extended to an online platform where a larger portion of the community could be reached to better understand the preferences of the citizens throughout the county.

The planning team presented the group with a final opinion of probable cost (**Appendix A**) for the remaining property development, and after reviewing the costs, the group participated in a program prioritization process whereby elements of the park could be phased for development. Results from the voting exercise during the meeting on November 11, 2023 were reviewed by the county and taken into consideration to develop a final phasing plan. After discussion between Cherokee County officials and Lose Design, a phased development plan for the park was established as follows:

### **Phase 1**

1. Overall site work / utilities (required for other phases of work to be implemented)
2. Open Lawn
3. Dog Park
4. Community Garden
5. Trail System
6. Pickleball Courts (6 Courts)
7. Maintenance Building/Yard

### **Phase 2**

8. Multi-Purpose Sports Field + Parking
9. Splash Pad

### **Phase 3**

10. Recreation Center + Parking
11. Pickleball Courts (6 Courts) + Parking

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- STORMWATER MANAGEMENT POND
- 50' WIDE LANDSCAPE BUFFER  
MIX OF VARIOUS HARDWOODS & EVERGREENS
- OPEN LAWN  
INCLUDES PAVILIONS & RESRTOOM BUILDING
- RECREATION CENTER  
INCLUDES ADMINISTRATIVE OFFICES  
MEETING ROOMS, FITNESS/  
GYMNASIUM W/ INDOOR TRACK
- CONCESSIONS/  
RESTROOM BUILDING
- MULTI-PURPOSE FIELD  
LARGE ARTIFICIAL TURF FACILITY  
ACCOMMODATING MULTIPLE SPORTS  
& FIELD SIZES, BATTING CAGES
- FENCE

- LEGEND:**
- RESTROOM
  - PAVILION

- PARKING COUNTS:**
- A 152 SPACES + 6 ADA
  - B 213 SPACES + 7 ADA
  - C 88 SPACES + 4 ADA
  - D 20 SPACES + 1 ADA
  - E 35 SPACES + 2 ADA
- 528 SPACES TOTAL



- PAVED TRAIL NETWORK  
APPROX. 1 MILE PERIMETER TRAIL  
APPROX. 0.2 MILE ADA TRAIL
- DOG PARK  
SEPERATED AREAS FOR SMALL &  
LARGE DOGS W/ SHADED SEATING
- PLAYGROUND  
MULTI-AGE PLAY STRUCTURES  
W/ SAFETY SURFACING. (ADA)
- INTERACTIVE FOUNTAIN  
MISC. WATER SPRAYS & JETS.  
SHADE SAILS W/ SEATING
- STREAM CROSSING  
TIMBER BRIDGE/ BOARDWALK
- COMMUNITY GARDEN
- STORMWATER MANAGEMENT POND
- MAINTENANCE FACILITY
- PICKLEBALL COURTS  
12 COURTS W/  
RESTROOM BUILDING



HICKORY FLAT AREA PARK - MASTER PLAN  
CHEROKEE COUNTY, GA

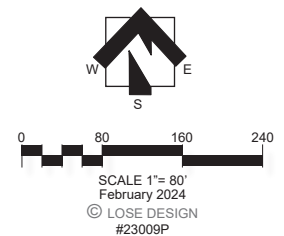


Figure 5.1 - Amended and Approved Final Master Plan

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# 6

## Section

# Final Master Plan Presentations

## **6.1 Cherokee County Recreation and Parks Advisory Board Presentation and Recommendation**

On February 7, 2024, the final master plan was presented to the Cherokee County Recreation and Parks Advisory Board for their consideration.

After discussion, the members of the Recreation and Parks Advisory Board unanimously voted to recommend that the Hickory Flat Area Park project be presented to the Cherokee County Board of Commissioners for adoption.

## **6.2 Cherokee County Board of Commissioners Presentation and Adoption**

On February 20, 2024, the final master plan was presented to the Cherokee County Board of Commissioners for their consideration.

After discussion, the members of the Board voted to adopt the Hickory Flat Area Park Master Plan as the guiding document for future development of the property.



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# Appendix A

## Opinion of Probable Cost

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**HICKORY FLATS PARK - CHEROKEE COUNTY**  
 OPINION OF PROBABLE COST - DESIGN DEVELOPMENT

			GENERAL SITE		PLAYGROUND		SPLASH PAD		DOG PARK		PICKLEBALL COURT		COMMUNITY GARDEN		BUILDINGS		MULTI-USE FIELDS			
AREA SUBTOTAL:			\$ 9,260,590.00		\$ 1,730,950.00		\$ 1,543,700.00		\$ 331,058.00		\$ 1,205,400.00		\$ 82,010.00		\$ 12,891,635.00		\$ 5,833,530.00			
DIV.	ITEM	UNIT PRICE	UNIT	QTY.	UNIT TOTAL	QTY.	UNIT TOTAL	QTY.	UNIT TOTAL	QTY.	UNIT TOTAL	QTY.	UNIT TOTAL	QTY.	UNIT TOTAL	QTY.	UNIT TOTAL	QTY.	UNIT TOTAL	
<b>1</b>	<b>GENERAL REQUIREMENTS</b>																			
	SURVEY	\$ 500.00	AC	40	\$ 20,150.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	CONSTRUCTION SIGN (BUDGET)	\$ 2,500.00	EA	1	\$ 2,500.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	CONSTRUCTION WASTE DISPOSAL (BUDGET)	\$ 45,000.00	LS	1	\$ 45,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	EROSION CONTROL (BUDGET)	\$ 10,000.00	AC	35	\$ 350,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	GRADING / EARTHWORK (BALANCED)	\$ 6.00	CY	60,000	\$ 360,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	HAUL-OFF	\$ 30.00	CY	10,000	\$ 300,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	ROCK REMOVAL (BUDGET)	\$ 100,000.00	LS	1	\$ 100,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	INTERSECTION IMPROVEMENTS	\$ 25,000.00	LS	1	\$ 25,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
<b>2</b>	<b>EXISTING CONDITIONS</b>																			
	CLEARING & GRUBBING (LIGHT DUTY)	\$ 7,500.00	AC	20	\$ 150,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
<b>3</b>	<b>CONCRETE</b>																			
	RETAINING WALL 8'+	\$ 750.00	CY	900	\$ 675,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	RETAINING WALL VENEERS	\$ 25.00	SF		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	SEATWALL	\$ 750.00	CY	75	\$ 56,250.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	CONCRETE CURBING @ PLAYGROUND SURFACE	\$ 30.00	LF	376	\$ 11,280.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
<b>5</b>	<b>BUILDINGS</b>																			
	COMMUNITY BUILDING (ENCLOSED)	\$ 450.00	SF		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ 25,000	\$ 11,250,000.00		\$ -
	COMMUNITY BUILDING (COVERED)	\$ 250.00	SF		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$ -		\$ -
	CONSESSION/RESTROOMS BUILDING	\$ 380.00	SF		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ 2,000	\$ 760,000.00	2,000	\$ 760,000.00
	RESTROOMS	\$ 250,000.00	LS		\$ -	1	\$ 250,000.00		\$ -		\$ -	1	\$ 250,000.00		\$ -		\$ -		\$ -	
	MULTI-USE PAVILION	\$ 300,000.00	LS	1	\$ 300,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	LARGE PAVILION	\$ 200,000.00	LS	1	\$ 200,000.00	1	\$ 200,000.00		\$ -		\$ -	1	\$ 200,000.00		\$ -		\$ -		\$ -	
	SMALL PAVILION	\$ 100,000.00	LS		\$ -	2	\$ 200,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
<b>10</b>	<b>SPECIALTIES</b>																			
	SIGNS - VEHICULAR (BUDGET)	\$ 200.00	EA	30	\$ 6,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	SIGNS - PARK RULES SIGN	\$ 350.00	EA	2	\$ 700.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	SIGNS - TRAIL RULES SIGN	\$ 350.00	EA	3	\$ 1,050.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	SIGNS - RULES SIGN	\$ 350.00	EA		\$ -	1	\$ 350.00	1	\$ 350.00	1	\$ 350.00	1	\$ 350.00	1	\$ 350.00		\$ -	1	\$ 350.00	
	SIGNS - DIRECTIONAL SIGN	\$ 350.00	EA	5	\$ 1,750.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
<b>11</b>	<b>EQUIPMENT</b>																			
	MISC - BENCH - BACK (6' L)	\$ 1,000.00	EA	4	\$ 4,000.00	3	\$ 3,000.00	3	\$ 3,000.00	4	\$ 4,000.00	6	\$ 6,000.00	2	\$ 2,000.00	4	\$ 4,000.00	4	\$ 4,000.00	
	MISC - PICNIC TABLE	\$ 2,500.00	EA	6	\$ 15,000.00	5	\$ 12,500.00		\$ -		\$ -	3	\$ 7,500.00	1	\$ 2,500.00		\$ -		\$ -	
	MISC - TRASH RECEPTACLE	\$ 900.00	EA	4	\$ 3,600.00	1	\$ 900.00		\$ -	1	\$ 900.00	2	\$ 1,800.00	1	\$ 900.00		\$ -	2	\$ 1,800.00	
	MISC - SHADE STRUCTURE	\$ 35,000.00	EA		\$ -	3	\$ 105,000.00	3	\$ 105,000.00		\$ -		\$ -		\$ -		\$ -		\$ -	
	MISC - DRINKING FOUNTAIN WITH PET FOUNTAIN	\$ 7,500.00	EA	1	\$ 7,500.00	1	\$ 7,500.00		\$ -	1	\$ 7,500.00	1	\$ 7,500.00	1	\$ 7,500.00		\$ -	1	\$ 7,500.00	
	MISC - PAW WASH	\$ 2,000.00	EA		\$ -		\$ -		\$ -	1	\$ 2,000.00		\$ -		\$ -		\$ -		\$ -	
	MISC - PET WASTE STATION	\$ 700.00	EA	5	\$ 3,500.00		\$ -		\$ -	2	\$ 1,400.00		\$ -		\$ -		\$ -		\$ -	
	MISC - DUMPSTER ENCLOSURE (SINGLE)	\$ 15,000.00	EA	1	\$ 15,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	MISC - HANDRAILS	\$ 200.00	LF		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	MISC - CROSSWALK STRIPING	\$ 10.00	LF	160	\$ 1,600.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	MISC - STOP BAR	\$ 100.00	EA	21	\$ 2,100.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	MISC - TRAFFIC TABLE	\$ 7,500.00	EA	3	\$ 22,500.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	MISC - YARD HYDRANT/ HOSE BIB	\$ 500.00	EA	8	\$ 4,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	MISC - PLAYGROUND EQUIP. BUDGET	\$ 1.00	LS		\$ -	500,000	\$ 500,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
	MISC - BASES (1-SET INCLUDING ANCHORS) (SOFTBALL)	\$ 400.00	EA		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	2	\$ 800.00	
	MISC - BASES (HOMEPLATE) (SOFTBALL)	\$ 400.00	EA		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	2	\$ 800.00	
	MISC - PITCHING RUBBER (SOFTBALL)	\$ 500.00	EA		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	2	\$ 1,000.00	
	MISC - BATTING CAGE	\$ 4,500.00	EA		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	2	\$ 9,000.00	
	MISC - BAT RACK (BUDGET)	\$ 100.00	EA		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	4	\$ 400.00	
	MISC - SCORING TABLE	\$ 400.00	EA		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	4	\$ 1,600.00	
	MISC - TEAM BENCH	\$ 2,000.00	EA		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	8	\$ 16,000.00	
	MISC - 4 ROW BLEACHER	\$ 3,500.00	EA		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	4	\$ 14,000.00	
<b>13</b>	<b>SPECIAL CONSTRUCTION</b>																			
	INTERACTIVE FOUNTAIN	\$ 1,200,000.00	EA		\$ -		\$ -	1	\$ 1,200,000.00		\$ -		\$ -		\$ -		\$ -		\$ -	
	BOARDWALK - STREAM CROSSING	\$ 500.00	LF	100	\$ 50,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	
<b>26</b>	<b>ELECTRICAL</b>																			
	ELECTRICAL SERVICE	\$ 50,000.00	LS	1	\$ 50,000.00		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	





## HICKORY FLATS - CHEROKEE COUNTY

OPINION OF PROBABLE COST - SCHEMATIC DESIGN

10/6/2023

Project No. 23009

DESCRIPTION	RAW SUBTOTAL	Raw Subtotal with 10% Contractor overhead and profit/fees	20% Contengency	TOTAL
Base Bid	\$ 32,878,873.00	\$ 36,166,760.30	\$ 7,233,352.06	\$ 43,400,112.36

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# Appendix B

## Jurisdictional Waters Findings Report



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June 9, 2023

Mr. Bryan Reynolds  
Community Services Agency Director  
Cherokee County  
1130 Bluffs Pkwy  
Canton, GA 30114

**VIA EMAIL**

**Subject: Jurisdictional Waters Findings Report  
Hickory Flat Site  
Cherokee County, Georgia  
Corblu Project No. 02-022807**

Dear Mr. Reynolds:

Corblu Ecology Group, LLC (Corblu) is pleased to present this report regarding the delineation of jurisdictional waters of the U.S. within the Hickory Flat Site. The approximately 40.27-acre site is located on East Cherokee Drive north of Hickory Flat United Methodist Church. (Figure 1). Corblu conducted the field survey on June 2, 2023.

### **Methods**

Jurisdictional waters of the U.S., including streams and wetlands, are defined by 33 CFR Part 328.3, and are protected by Section 404 of the Clean Water Act (33 USC 1344), which is administered and enforced by the U.S. Army Corps of Engineers (USACE). Waters of the State of Georgia, including streams and ponds, are defined by Chapter 391-3-7-.01(aa) of the Georgia Department of Natural Resources (GDNR), Environmental Protection Division (EPD) Rules for Erosion and Sedimentation Control. Jurisdictional waters were delineated in the field using the 1987 USACE Wetlands Delineation Manual<sup>1</sup> and the regional supplement for the Eastern Mountains and Piedmont<sup>2</sup>. The referenced manuals use a multi-parameter wetland identification process, including positive evidence of three criteria: 1) hydrophytic vegetation; 2) hydric soils; and 3) wetland hydrology. Any areas exhibiting all three criteria for wetland determination, as well as seasonal streams and ponds are considered jurisdictional waters regulated by the USACE.

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<sup>1</sup> *Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. U.S. Army Corps of Engineers, Washington D.C. 100 pp. plus appendices*

<sup>2</sup> U.S. Army Corps of Engineers. 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0*, ed. J. F. Berkowitz, J. S. Wakeley, R. W. Lichvar, C. V. Noble. ERDC/EL TR-12-9. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

## Results

The Hickory Flat Site is primarily comprised of maintained pasture with a pine and mixed hardwood forest in the northwestern corner. The project site is dominated by perennial ryegrass, Chinese privet, sweet gum, tulip poplar, loblolly pine, box elder, and American beech. Soils on the project site are mapped by the U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS) as Gwinnett loam (GgB2), Hayesville sandy clay loam (HJE3), and Hayesville fine sandy loam (HIC and HIE) (Figure 2). None of the above listed soil types are considered hydric.

During the field investigation Corblu personnel observed two intermittent streams and two wetlands within the project site (Figure 3).

Intermittent stream I1 originates on site at a headcut in the eastern portion of the project site (Photograph No. 1). I1 flows for approximately 237 linear feet (LF) before exiting the site underneath a barbed wire fence (Photograph No. 2). Wetland W1 (0.09-acre) is located at the headwaters of intermittent stream I1. (Photograph No. 3). Wetland W2 (0.04-acre) is located northwest of W1 and I1 and forms the headwaters of intermittent stream I2 (Photograph No. 4). I2 flows to the southeast for approximately 265 LF before conjoining intermittent stream I1 (Photograph Nos. 5 - 6). The remainder of the project site is comprised of uplands (Photograph No. 7).

## Discussion

Based on USACE guidance, intermittent and perennial streams are considered relative permanent waters (RPW), which are considered jurisdictional waters of the U.S. and are regulated by the USACE under Section 404 of the Clean Water Act. Wetlands directly abutting RPWs are also regulated by USACE. All waters identified on Figure 3 are expected to be regulated by USACE but are subject to verification by the USACE for final determination. Impacts to the delineated jurisdictional areas will require USACE approval prior to disturbance.

### Federal Permitting Requirements

If stream or wetland impacts are proposed, Nationwide Permit No. 42 (NWP 42) – *Recreational Facilities*, authorizes the construction of recreational facilities (i.e., playing fields and courts, hiking trails, bike paths, golf courses, ski areas, nature centers, campgrounds, etc.). Additionally, NWP 42 authorizes the construction of small support facilities (i.e., parking lots, maintenance and storage buildings related to the recreational activity). A Pre-Construction Notification (PCN; i.e., permit application) must be submitted and approved by the USACE, Savannah District if impacts to jurisdictional waters are proposed. Impacts associated with this permit cannot exceed 0.5 acre of wetlands or 0.05 acre of streambed. Compensatory mitigation is normally required for activities that result in impacts greater than or equal to 0.01 acre of streambed or 0.10 acre of wetland. A NWP 42 PCN requires one to two weeks to prepare upon

receipt of engineering design plans, and typically will require a 45-day review period by the USACE and other regulatory agencies to obtain approval assuming no significant concerns with protected species or cultural resources are encountered.

### State and Local Permitting Requirements

The delineated intermittent streams will require a 75-foot buffer, which includes the state's 25-foot undisturbed vegetated buffer, as well as Cherokee County's 50-foot undisturbed vegetative buffer and a 25-foot non-impervious setback. Wetlands do not require a buffer. Protected buffers are regulated by Georgia EPD and Cherokee County [Local Issuing Authority (LIA)] and we recommend coordination with the LIA prior to any land disturbing activities.

If any encroachment on protected stream buffers are proposed, Georgia EPD must approve a stream buffer variance (SBV) application, unless the activity is exempt (i.e., utility and road crossings). SBV applications will be reviewed by the Director only where the applicant provides reasonable evidence that impacts to the buffer have been avoided or minimized to the fullest extent and only when specific qualifying criteria are met. Once a SBV application is submitted to the EPD they have 60 days to review the application to determine that the application is complete. EPD often request additional information with respect to the erosion and sedimentation control and post-development stormwater controls. Once the application has been determined to be complete, the application is placed on a 30-day public notice requesting comments on the application. If comments are received, the EPD will require the applicant to resolve any relevant concerns. SBV application approval typically requires 4 - 5 months from the date of submittal to obtain.

### **Conclusion**

Corblu appreciates the opportunity to assist you with this project. We can provide a proposal for a NWP 42 PCN and/or EPD stream buffer variance if impacts to jurisdictional waters or protected buffers are proposed. If you have any questions regarding this report, please contact us at (770) 591-9990.

Sincerely,

CORBLU ECOLOGY GROUP, LLC

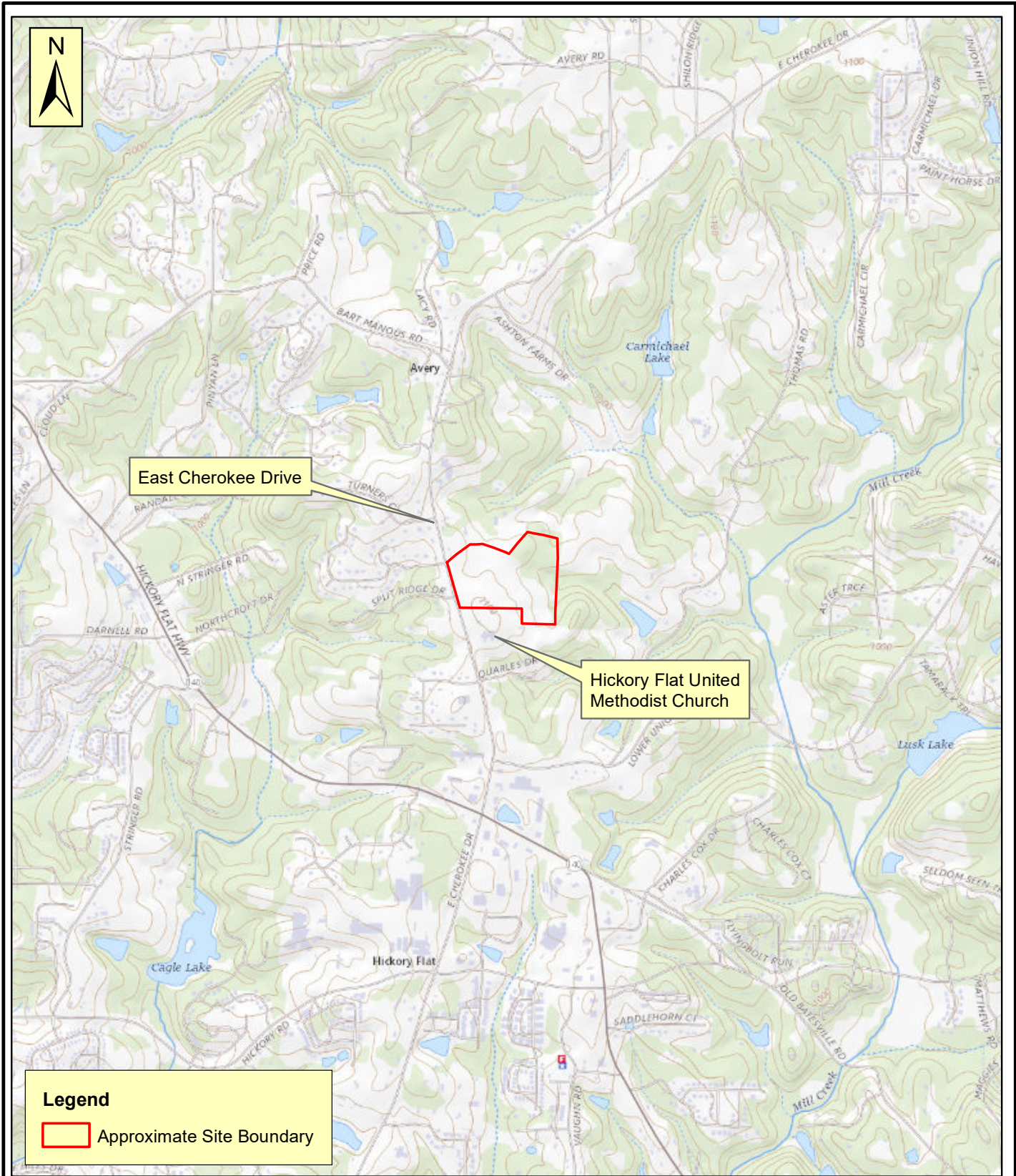


Nicholas T. Jenkins  
Staff Ecologist



Neil E. Blackman, CWB  
Senior Principal

Enclosures:    Figure 1 – Site Location  
                     Figure 2 – Site Soils  
                     Figure 3 – Site Waters  
                     Photograph Nos. 1 - 7



Base Map Source: USGS Topographic Map

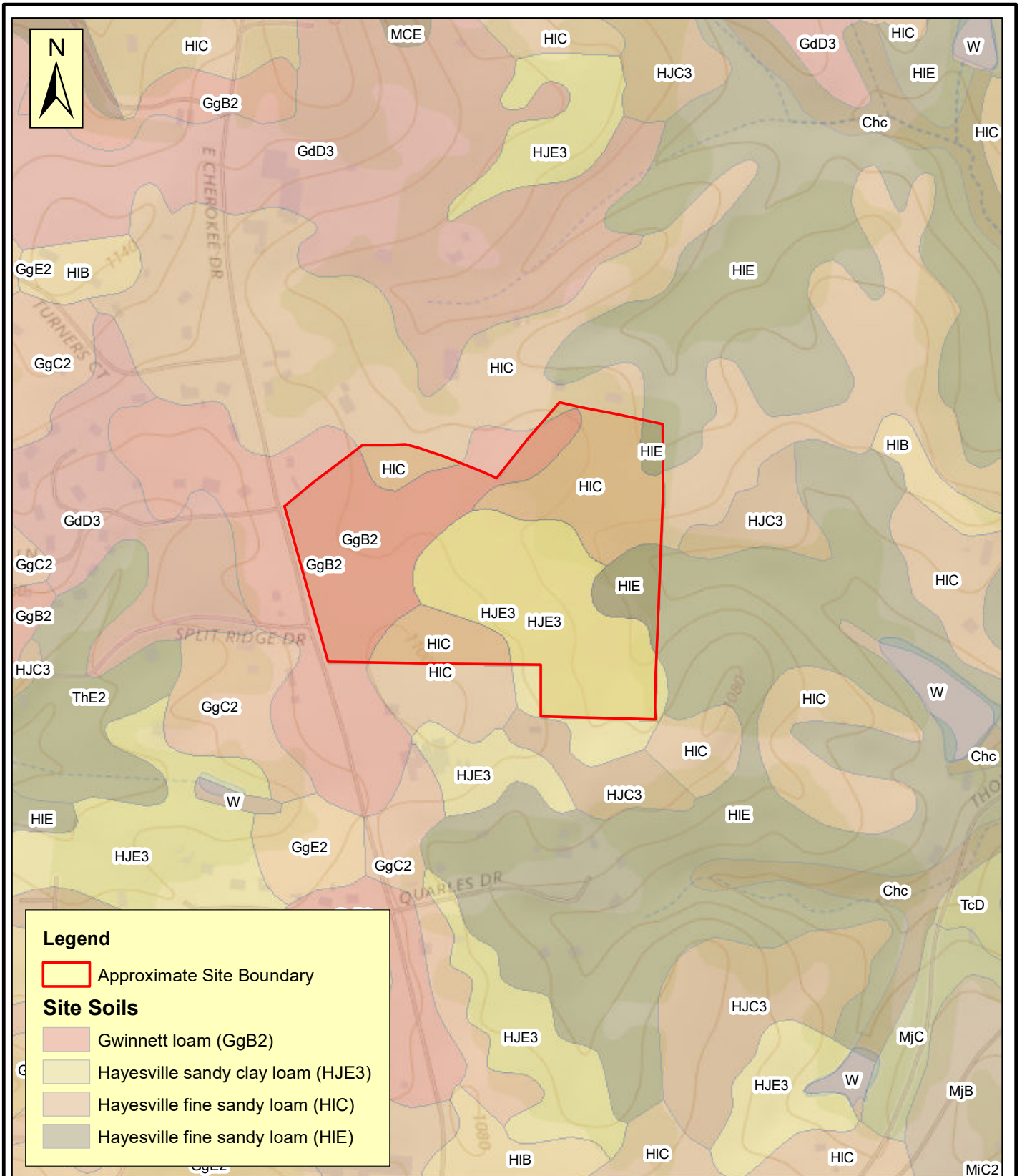
1:24,000

0 1,200 2,400 4,800 Feet

**Cherokee Co. Community Services**  
**Southwest Cherokee Park**  
**Cherokee County, Georgia**



**Figure 1**  
**Site Location**  
**Project No. 02-022807**



Base Map Source: USGS Topographic Map  
 Soil Data Source: USDA Web Soil Survey

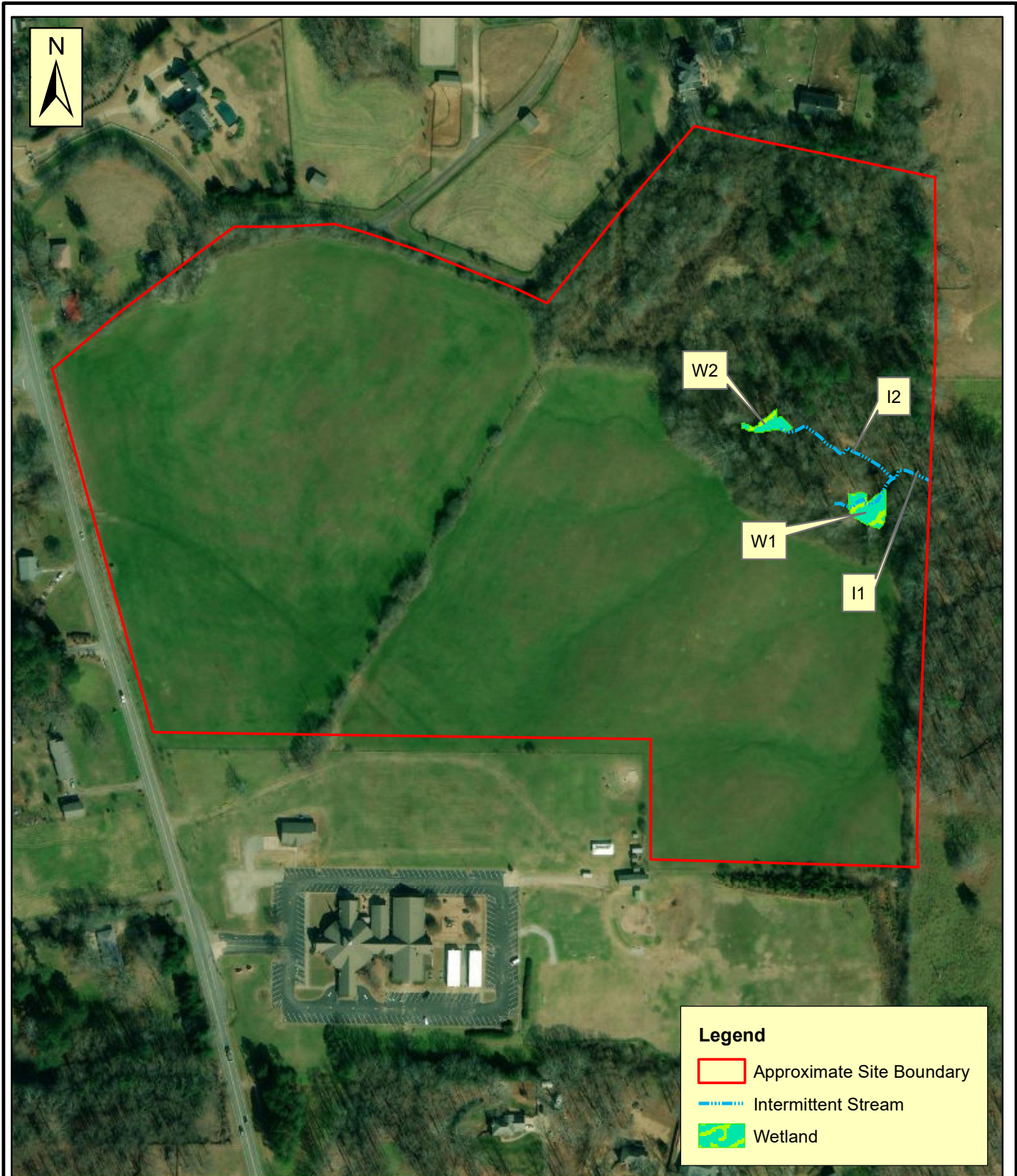
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0 350 700 1,400 Feet

**Cherokee Co. Community Services**  
**Southwest Cherokee Park**  
**Cherokee County, Georgia**



**Figure 2**  
**Site Soils**  
**Project No. 02-022807**



Base Map Source: ESRI Aerial Imagery  
 GPS Data Collected: 6/2/2023

1:3,000

0 150 300 600 Feet

**Cherokee Co. Community Services**  
 Southwest Cherokee Park  
 Cherokee County, Georgia



**Figure 3**  
 Site Waters  
 Project No. 02-022807



**Photograph No. 1:** Representative view of intermittent stream I1.



**Photograph No. 2:** View of intermittent stream I1 at the property boundary.





**Photograph No. 3:** Representative view of wetland W1.



**Photograph No. 4:** Northwest facing view of wetland W2.



**Photograph No. 5:** Representative view of intermittent stream I2.



**Photograph No. 6:** View of the confluence of intermittent streams I1 and I2.



**Photograph No. 7:** View of typical uplands located on the project site.

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**LOSE**  
**DESIGN**  
SPACES FOR LIFE.