



City of Hickory

Parks & Recreation

# CLONINGER MILL PARK

## MASTER PLAN UPDATE

### ADDITION OF 10 ACRE PARCEL

Plan Update February 16, 2016  
Original Master Plan March 10, 2009

Cloninger Mill Park was renamed to Bruce Meisner Park  
by Hickory City Council on February 16, 2016



# CITY OF HICKORY ACKNOWLEDGMENTS

## Mayor and Council Members

Mayor Rudy Wright  
Ward 1 Councilman Brad Lail  
Ward 2 Councilman Vernon Tarlton  
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*Falling Creek adjacent to proposed additional property*

## PLANNING OVERVIEW

The vision for Cloninger Mill Park began in 1979 with the completion of the City of Hickory's first comprehensive parks and recreation master plan. The 79 acres of beautiful property at the intersection of NC 127 and Cloninger Mill Road was first identified as the site for a future city park in this planning document. This unique property contains almost a half mile of Falling Creek and provides views to Lake Hickory. After careful consideration, City leaders decided to preserve the majority of the property (63 acres) as a City park, while allocating several parcels of the property to be sold for residential and commercial use.

In 2009 the City began work on a Master Plan for the 63 acre park site. The Master Plan was developed with the assumption the City would sell portions of the property along the eastern boundary for residential development. Similarly a 10 acre portion of the property adjacent to the NC 127/Cloninger Mill intersection was marketed for commercial development. In March of 2009, the City Council adopted a Master Plan for the 63 acre park site.

In 2015, Outward Bound of North Carolina came to the City with an exciting offer. Recognizing the value of this important open space for both conservation and recreation, they offered to donate \$900,000 to the City so the 10 acre commercial property could be reserved for park use. Recognizing the importance this 10 acre parcel could play in the overall park use, the City initiated a second master planning process for this additional acreage. City staff and the Parks and Recreation Commission were charged with determining a program for property development and creating a plan for incorporating the new parcel into the 63 acres of the original park Master Plan.

This updated planning document begins with the findings from this latest planning effort focused on the 10 acre parcel. The section on the new property includes a site analysis of the 10 acre property, a review of the two workshops held with the Parks and Recreation Advisory Commission to determine a program for development and to review plans. Finally, a plan for park development for the new property, and projected costs for park construction are provided. In addition to the information on the 10 acre parcel, this planning document includes the previous adopted 2009 Master Plan (see Appendix).

# SITE ANALYSIS

The 10 acre parcel previously marketed for commercial property is ideally suited for recreational use. The natural and man made features that make it ideal for recreational use include:

## Man Made Features

### Accessibility

Located at the intersection of NC 127 and Cloninger Mill Road, this part of the park property has excellent vehicular access from two major thoroughfares. Unlike sections of the park property to the east and south, visitors to the park can easily reach the park without having to drive through residential neighborhoods. Based on this direct access to major thoroughfares, this area of the park should be used as the park's primary entrance.

### Zoning/Parking/Setbacks

This portion of the park is zoned Neighborhood Commercial (NC). Parks and playgrounds, and public facilities are permitted in this NC zoning classification.

Parking requirements for park facilities are established as P-L Schedule B of the City of Hickory Land Development Code. Under Schedule B the Code recognizes the difficulty in establishing parking demand for certain uses such as parks. The parking requirements for parks and open areas are established by the Planning Director. Based on the proposed recreational uses shown on the Master Plan, the Planning Consultant, with input from Planning staff, and the Parks and Recreation Commission has determined the proposed parking demand for the 10 acre parcel to be ±110 cars. In addition to the parking required for outdoor recreational activities, future development must also provide parking for any indoor facilities developed on the park site at a rate of 3 spaces/1,000 SF.

The western boundary of the 10 acre parcel runs along Cloninger Mill Road; a major thoroughfare. A 110' wide future right-of-way is associated with this major thoroughfare. In addition to the future right-of-way, the Neighborhood Commercial zoning has a 10' front setback. Rear and side setbacks for this parcel are not applicable since this property will be incorporated into the 63 acres park site.

### Utilities

The 10 acre parcel is well served by public utilities. Twelve inch water mains are located within the right-of-ways of both NC 127 and Cloninger Mill Road. The 12" main in Cloninger Mill Road is located on the western side of the street. Connection to this main will require boring under the street. An 8" sanitary sewer line is also located on Cloninger Mill Road adjacent to the property. One issue with regards to the sanitary sewer service of any proposed buildings on the parcel will be elevation. With the site falling in elevation away from the street, any proposed buildings with restrooms must be located relatively close to Cloninger Mill Road to facilitate sewer connections to allow gravity flow. If finish floor elevations of the proposed building(s) are located below the road elevation, it may become difficult to connect the building to the sanitary sewer line without providing a pump station.



*Intersection of NC 127 and Cloninger Mill Road*



*In addition to utilities located along adjacent streets, several utility lines cross the park property*

There are no existing fire hydrants along Cloninger Mill Road or NC 127. A fire hydrant will be required for fire protection of any park buildings.

In addition to water and sewer lines, a 6" gas line runs along the east side of Cloninger Mill Road.

## Natural Features

### *Vegetation/Wildlife*

The natural features of the 10 acre parcel make it an ideal setting for a wide range of outdoor recreational activities. The majority of the site is covered in mixed hardwoods; providing a nice canopy of shade for outdoor recreation activities. One area (approximately 3 acres) of the parcel adjacent to Cloninger Mill Road has been previously cleared. This area, which is located on one of the flattest areas of the entire park, is ideal for any active recreational uses (open play, court games, etc.). As identified in the original Master Plan, the wooded areas of this site offer a wide variety of vegetation (maple, oaks, pine, etc.). In turn, the wooded areas offer a wonderful habitat for a wide variety of birds and animals (see site analysis from original Master Plan).



*A wide variety of trees and under story vegetation exist on the site*

### *Topography*

An important aspect of the natural features of this 10 acre parcel is the relatively flat slopes over much of the parcel. As noted in the original Master Plan, much of the overall site (72%) contains slopes greater than 10%. Even low impact recreational development is very restricted on slopes over 10%. In contrast to the overall site, slopes on much of the 10 acre parcel are in the 5% range. Development of roads, parking, open play space and active recreation areas will be much less challenging on this parcel; another reason to focus much of the park development in this area of the park.

### *Soils/Hydrology*

The 10 acre parcel is comprised of Pacolet soils with relatively flat slopes. As noted in the Site Analysis section of the original Master Plan, these soils are well drained, gravelly fine sandy loam. The Pacolet soil group will support recreational use and is well suited for development of parking areas, walking trails, and outdoor recreation.

There are no significant Hydrological features on the 10 acre parcel. The lack of streams, drainage features, wetland, etc. make this the most developable area of the entire 73 acre site.



*A large area (±3 acres) adjacent to Cloninger Mill Road was cleared by the previous owner*

# PUBLIC INPUT

As noted in the original Master Plan document, several public workshops were held to discuss park development as the 2009 Master Plan was being developed. Through that process, the public was very clear on the desired program for development for this park. That program statement included the desire for a predominately passive park that respected the natural features of the site and respected the privacy of adjacent residences. The resultant program included areas for picnicking, walking/hiking, nature study, disc golf, mountain bike trails, and passive recreation.

Based on this strong voice for low impact park development in the initial public workshops and the desire to ensure the general program of development be carried over to the new park acreage, it was decided that the planning process for the additional 10 acres of park property could best be facilitated through the City's Parks and Recreation Commission; a committee of citizens charged with providing guidance to City staff on park and recreation matters. An important aspect of the planning process for the additional 10 acre parcel was the decision that the Master Plan Update would focus almost entirely on the additional property and would not attempt to re-design or re-plan other areas of the park. The proposed improvements shown on the original 63 acres of park property would remain significantly the same as shown on the 2009 Plan.

With this general approach to public engagement, a park planning session was held with the Parks and Recreation Commission on September 8, 2015. The purpose of this planning session was to discuss park development with citizen Commission members and gather input on how best to use the additional 10 acres. Prior to the September 8th meeting, Commission members took a group tour of the park site so they would be familiar with the property.

The planning session began with a review of the previous planning process and the Master Plan for the park. Several Commission members had questions about the original Master Plan and more specifically about ensuring adjacent residences along the park's northern and eastern boundaries are protected from park development. As noted above, Commission members were assured adequate buffers would be maintained along park boundaries adjacent to residential properties and those areas on the 2009 Master Plan would not be changed as part of this Master Plan Update.

Focusing on the proposed plans for the 10 acre parcel, Commission members expressed the following desires:

- Several Commission members suggested maintaining the existing vegetation as much as possible. Locating any active recreation activities in the area previously cleared.
- Everyone felt this area should be the park's main entrance and largest activity area, further reducing demand on those recreational areas located off 9th Street NE.
- Several Commission members expressed a desire for an open grassed area to be used for family recreation. Accessible walking trails were another element suggested by several Commission members.
- The need for adequate parking was stressed. Parking for over 120 cars was suggested.
- Several Commission members expressed the need for adequate restrooms and picnic facilities.

Following a general discussion on park development, Commission members were asked to vote on recreational activities they felt were appropriate and needed for park development. The following recreational activities were listed as priorities:

Open Play Areas	Bocce Courts
Walking/Jogging Trails	Children's Bike Training
Disc Golf Course	Sand Volleyball
Natural Areas	Horseshoe Pits
Picnic Area	Environmental Education Areas
Playground	Mountain Bike Trail

The input gathered from this planning session was used in the development of the program for park improvements for the 10 acre parcel. See the Appendix for detailed minutes from this meeting.

# CONCEPT DEVELOPMENT

Based on the Parks and Recreation Commission’s input, the program for development suggested a family oriented park area that would provide opportunities for walking, biking (and learning to bike), play areas, picnicking, and family games (volleyball, bocce, etc.). An important feature suggested by Commission members was an informal lawn area for family activities (informal catch, frisbee throwing, flag football, etc.).

The proposed concept for the 10 acre parcel utilizes the previously cleared area of the site to develop an open lawn area surrounded by a paved walkway. The paved walkway provides opportunities for walkers, strollers, and a bicycle training area.

Located along the perimeter of the informal lawn area are several picnic shelters, a playground (with natural themed play equipment), and court games (volleyball and bocce). One of the proposed picnic shelters will include restrooms.

Access to this park activity node will be from an entrance drive on Cloninger Mill Road located approximately 450 feet from the NC 127/Cloninger Mill intersection. The location of this main park entrance drive was selected because it places the entrance drive adequate distance from the major intersection and aligns it across from an existing drive to commercial property on Cloninger Mill Road. Preliminary review with City Transportation staff indicates no roadway improvements (left turn lane, deceleration lane, etc.) will be required along Cloninger Mill Road.

Parking for 109 cars and three school buses is provided in a centrally located parking lot immediately upon entering the park. This parking area will be paved and will have curb and gutter to control vehicles; keeping them off lawn areas.

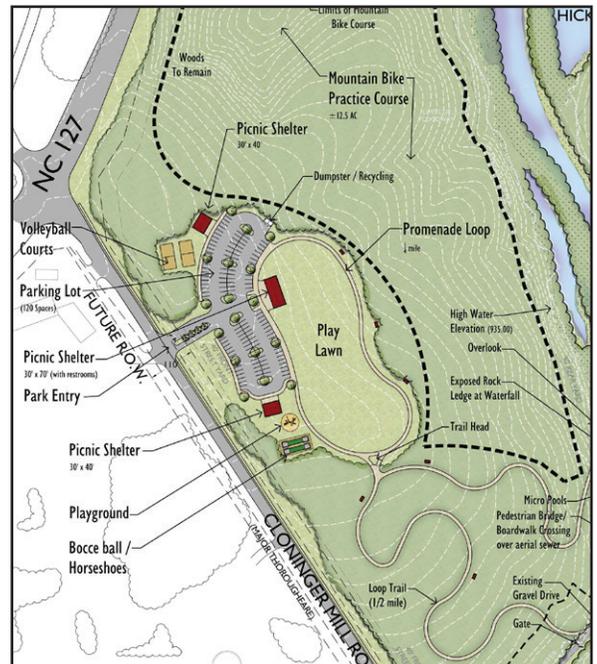
In addition to the quarter mile paved walking trail, there will be unpaved natural trails that will lead to Falling Creek and the overlook at Lake Hickory. This activity node will also provide access to the proposed mountain bike trails to be located between this activity node and Falling Creek. The addition of the 10 acre parcel will allow the mountain bike trails to be expanded from the original Master Plan.



Natural play equipment will be utilized in the park



A paved walking trail with lawn area will provide opportunities for informal play



Initial Concept Plan

# CONCEPT DEVELOPMENT

## Staff Review

Following the development of the conceptual plan, the plan was submitted to City staff (Parks and Recreation as well as other City departments). As part of that review, the Public Services Department identified the desire to include a future Water Resources Learning Center on the park property. The initial concept for the Center is a 7,500-10,000 SF building that will house educational exhibits and serve as an educational center for Public Services. In this facility the public will be educated on concepts such as:

- The water cycle
- How water gets to your faucet
- What happens down the drain (wastewater treatment)
- Ways to protect the environment
- How to be water smart

The display area of the center will include interactive displays like:

- Pumping water uphill
- Testing water quality
- Locating an underground pipe
- Following a robotic camera into a sewer manhole
- Turning valves and hydrants

In addition to the display area and interactive education opportunities, the Learning Center will house a multi-purpose room and kitchen that will accommodate special events and educational sessions. When not used by Public Services, there will be opportunities for park programs in this unique community room.

The Learning Center could easily be designed to incorporate covered outdoor space for expansion of programs. Likewise, this building could be designed to incorporate restrooms that opened to the outside; allowing them to serve park users.

Based on Zoning requirements, the Learning Center will require three parking spaces per 1,000 SF of floor space; therefore a 7,500-10,000 SF building that will require 21-30 spaces. The park Master Plan includes a parking area for the future building. This future parking area, along with the building, will be developed as a separate project initiated by the Public Services Department. In the interim, the area for the future Learning Center and parking area will be graded and seeded. This area will provide an overflow parking area for the park.

In addition to the Learning Center, Public Service staff also had several comments on trail layout modifications to provide adequate buffer around the existing pump station on Cloninger Mill Road and smaller pump station located internally on the site.

The initial concept plan was revised based on these comments.

## Parks and Recreation Commission Review

On December 8, 2015 the revised plan was submitted to the Parks and Recreation Commission for their review and comments. Commission members expressed strong support for the concept. The planning consultant was instructed to develop a cost estimate and phasing strategy for the proposed plan; incorporating all of this information into an updated Master Plan for the entire park. The Parks and Recreation Commission, at their January 12, 2016 meeting, unanimously accepted the final updated master site plan.

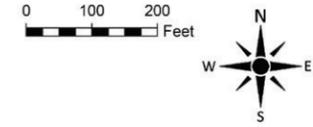
# UPDATED MASTER PLAN ENLARGEMENT



# Cloninger Mill Park | Overall Updated Master Plan

City of Hickory, North Carolina

City of Hickory Parks and Recreation | 12.30.2015



# CONSTRUCTION COST/PHASING

The original Master Plan identified a phasing strategy that divided the park into two phases of development. The first phase of development recommended in the 2009 Plan was focused on improvements on the western side of the park site along Cloninger Mill Road. This area was selected as the area for initial development because it was easily accessible from Cloninger Mill Road and would have less impact on adjacent residences.

This same phasing strategy is appropriate for the Updated Plan. Under this scenario the park development node located on the newly incorporated 10 acre parcel will be constructed first. This phase of construction will include:

- Access drive and parking (109 cars and 3 buses)
- Picnic shelter with restroom
- 2 open air picnic shelters
- Playground
- Paved walking trail around play lawn
- Open play lawn
- Outdoor exercise equipment
- 2 sand volleyball courts
- 2 bocce courts
- Gravel walking trails through the woods
- Walking trail to Lake Hickory scenic overlook
- Mountain bike trails

**Anticipated construction cost based on 2016 cost figures for phase one development is \$2,386,803.41. See Appendix for detailed cost breakout.**

The second phase of development will focus on proposed improvements located on the eastern section of the park. These improvements will include:

- Access drive and parking (±25 spaces)
- Picnic shelter with restrooms
- Playground
- Outdoor classroom
- Disc golf course
- Walking trails

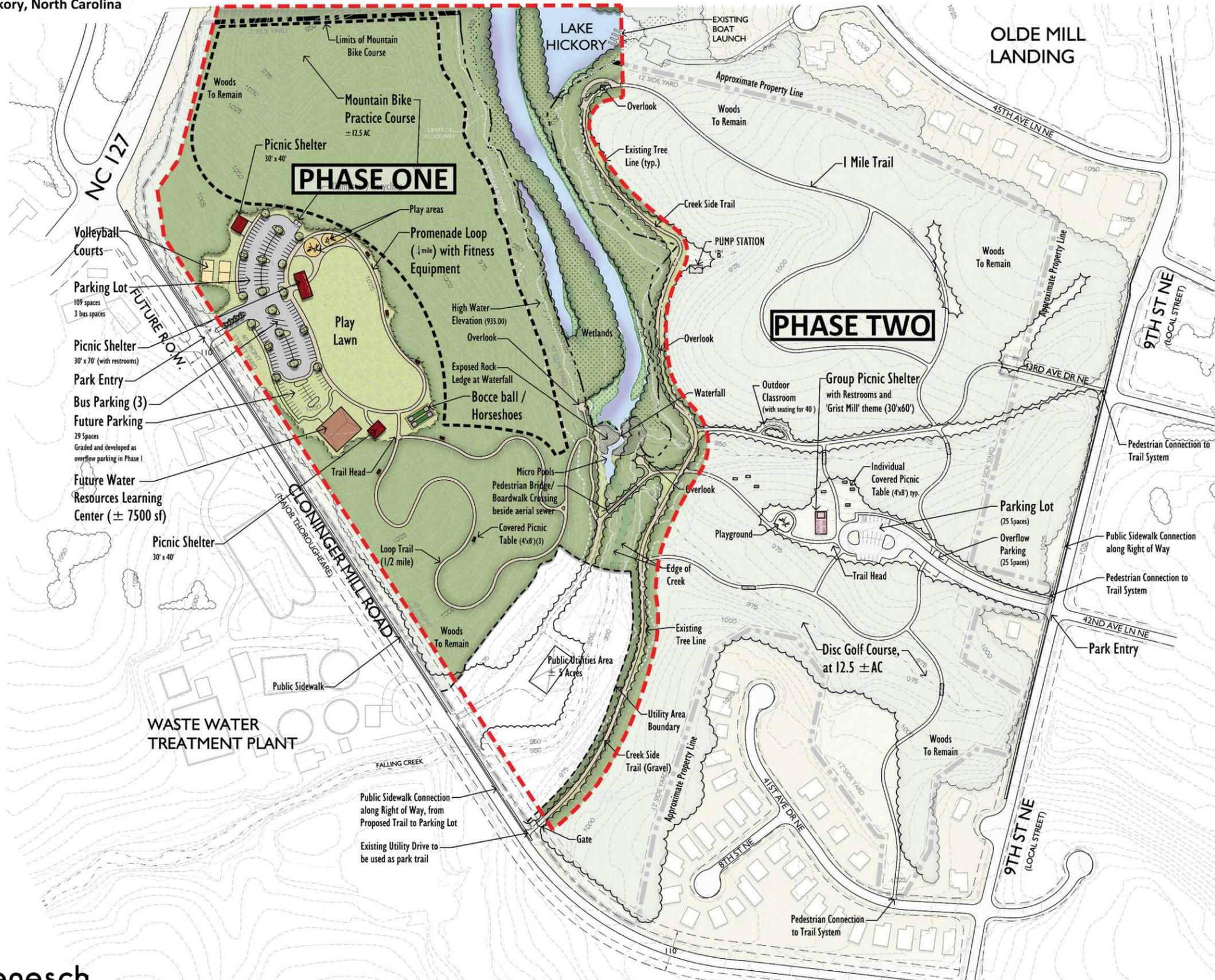
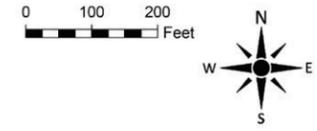
**The anticipated construction cost for phase two development is \$1,541,200.17.**

**If the entire park were constructed in one phase, the total construction cost would be \$3,928,003.58.**

This estimate does not include the cost of the Water Resource Learning Center (\$1,934,185.00).

# Cloninger Mill Park | Phasing Plan

City of Hickory, North Carolina



# APPENDIX

# Cloninger Mill Park Master Plan



City of Hickory  
Parks and Recreation Department

March 10, 2009



# City of Hickory

## ACKNOWLEDGEMENTS

### **Mayor and City Council**

Mayor Rudy Wright  
Brad Lail, Ward 1  
Bruce Meisner, Ward 2  
Danny Seaver, Ward 3  
Z. Ann Hoyle, Ward 4  
Sally Fox, Ward 5  
Jill Patton, Ward 6

### **Parks and Recreation Commission**

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Ken Sigler  
Junior Hedrick  
Sylvia Ramseur  
Addison Fox  
Kelley Hurley, Vice-Chair  
Elaine Seaver  
Harriet Smith  
Jeff Henson  
Tracy Hall  
Amanda Edwards  
Youth Council Representative Bailey Sigler

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Mack McLeod, Parks and Recreation Director  
Donna Andrews, Assistant Parks and Recreation Director  
Michele Wilkerson, Recreation Supervisor  
Eric Starnes, Parks Maintenance Supervisor  
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Todd Hefner, Community and Economic Development Manager  
Paul Solomon, Water Distribution Manager

### **Planning Consultant**

Site Solutions  
sitesolutionspa.com





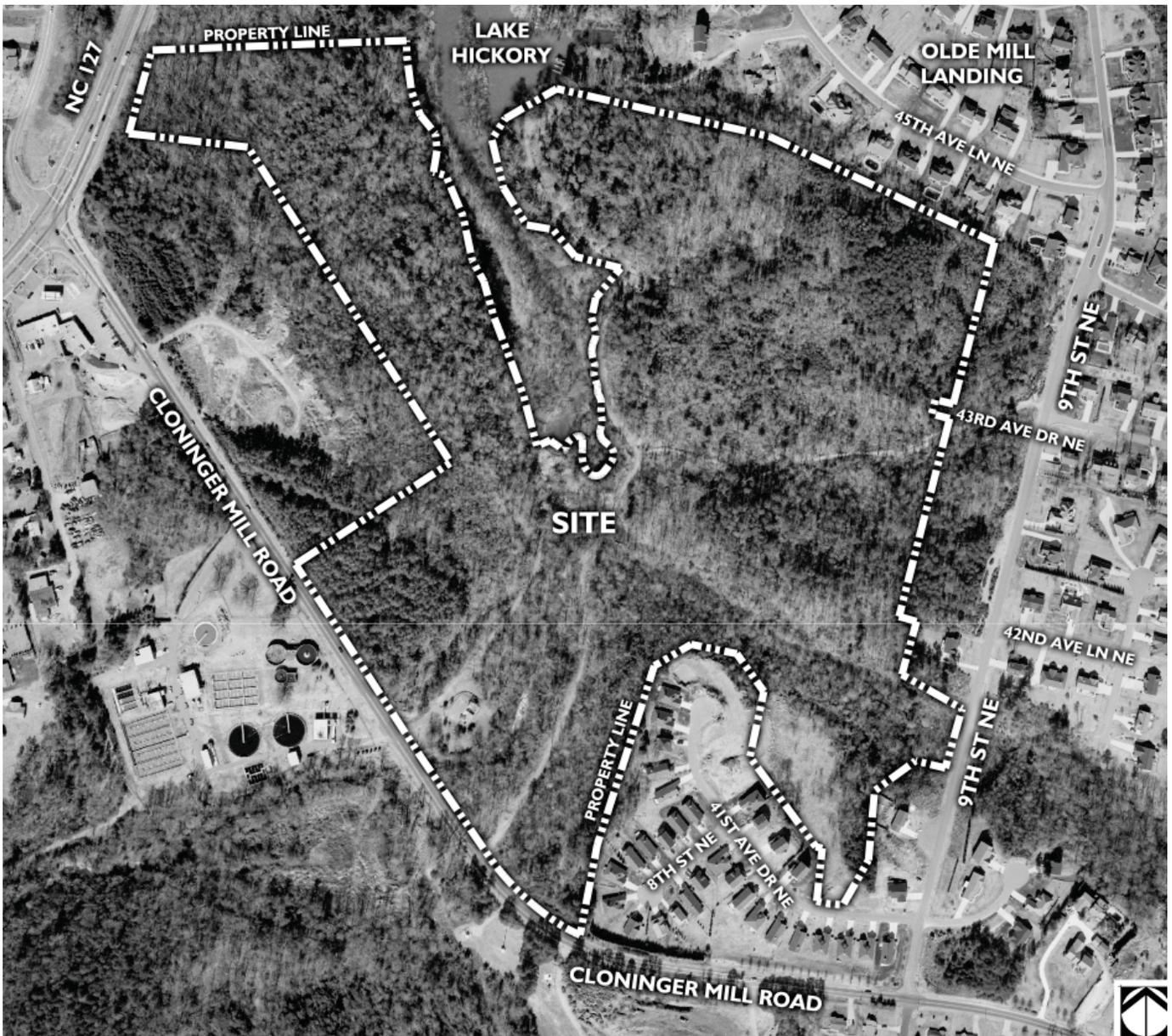
## PROJECT OVERVIEW

Recognizing the need for open space and passive recreation, the City of Hickory identified approximately 79 acres of city owned property at the intersection of NC 127 and Cloninger Mill Road to be set aside for future park development. Following an assessment of the property, it was determined that portions of the site were best suited for commercial and residential use. With this realization, the City identified a 10 acre parcel adjacent to the intersection of Highway 127 and Cloninger Mill Road that was best suited for commercial development. Likewise, an analysis of the property identified land adjacent to 9th Street NE that was well suited for residential use. Based on the decision to utilize portions of the site for non-park use, the park property was reconfigured to include just over 63 acres.

In 2002, the City began a search for a planning consultant to assist in the development of a master plan for the property. Other budget priorities, and a desire to determine the best overall use of the property, resulted in a delay in the park planning study. In the spring of 2008, the City initiated the planning effort to develop a master plan for the site by contracting with Site Solutions, a Charlotte based park planning firm.

The planning process began in August of 2008 with a program meeting with the Park Planning Committee; a committee of city staff representing several City departments (Parks and Recreation, Engineering, Planning,

# Project Overview



Public Utilities, Economic Development, and the City Manager's office). This meeting allowed Site Solutions and city staff to share information about site features and programming for the park.

In September of 2008, a public meeting was held to discuss park development. Over fifty citizens attended this meeting. The purpose of this meeting was to share information regarding site features with the citizens, and for citizens to voice their opinions regarding park development. The meeting, which lasted almost two hours, provided an open forum for both park planners and citizens to express goals for the park. Many of those in attendance were residents of the Olde Mill Landing subdivision and expressed concern over traffic, noise, and vandalism. Site Solutions and City staff addressed adjacent neighbors' concerns and expressed an understanding of the importance of sensitivity toward adjacent residences in the development of plans for the park. Appendix One includes detailed minutes from the first public meeting.

## Project Overview

Based on the information gathered from the site analysis, the first public meeting, and input from city staff, Site Solutions developed several options for park development. Each option contained approximately the same program elements, but varied considerably in the location of these program elements; particularly group picnicking and parking areas. Each of the options varied on the proximity of park development to adjacent property owners. A meeting with the Park Planning Committee was held to discuss the merits of each option. Following this meeting, and subsequent review by city staff, it was determined that only two concepts were valid and should be considered.

In January of 2009, a second public meeting was held to review the park options and obtain the public's input. Like the first public meeting, this second workshop was attended by over fifty citizens; many of them residents of Olde Mill Landing. Concerns were expressed over traffic, crime, and park users trespassing on private property. Appendix Two includes the minutes from this meeting.

The meeting began with a presentation of findings from the site analysis plan and a presentation of the two proposed options for park development. As noted in the minutes, attendees were asked to select one of the two park options. Those present almost unanimously supported Option Two, but many in the group expressed a desire to see the City pursue a third option for park development. This third option would eliminate the sale of the commercial property on Cloninger Mill Road and place all parking for the park on the western portion of the site. As noted in the minutes, this desire for park development was recorded, but it was also noted that changes to the City's plans to sell the property were highly unlikely.

The second public meeting established a very clear direction with regard to which of the two options was preferred by citizens. With this direction, the master plan was finalized, master plan document completed, and presentation to City Council and the Parks and Recreation Commission scheduled.

## SITE ANALYSIS: NATURAL FEATURES

The Cloninger Mill site is a beautifully wooded property with a unique natural feature; Falling Creek and its beautiful waterfall. In addition to the Falling Creek waterfall, the site offers a wide variety of vegetation, wildlife, and ecological habitat. These natural features provide a wonderful setting for passive recreation and the preservation of open space. The following natural features were identified as part of the Site Analysis:

### SOILS

The soil composition of the site is comprised of three soil types. The western portion of the site contains Pacolet Gravelly Sandy Loam. These well drained soils have some development limitations, but will support recreational development in areas with manageable slopes. The majority of the eastern portion of the site is comprised of Madison Gravelly Sandy Loam. Like the Pacolet Gravelly Sandy Loams, Madison Gravelly Sandy Loams will support recreational development where slopes allow. The third soil type found on the site is Chewacla Loam. This poorly drained floodplain soil runs through the center of the site along Falling Creek. This soil is subject to frequent flooding, has a seasonally high water table, and is not suitable for development beyond trails and passive recreation.

The USDA National Resources Conservation Service soil survey for Catawba County defines the soils found on site as follows:

#### Cw - Chewacla Loam

- Poorly Draining
- Seasonally high water table
- Depth to water table: 1'
- Unsuitable for use or development
- Subject to frequent flooding

#### MgC2 - Madison Gravelly Sandy Loam

- 6-10% slopes
- Well Drained
- Suitable for recreation uses
- Unsuitable for structural fill

#### MgB2 - Madison Gravelly Sandy Loam

- 2-6% slopes
- Moderate erosion hazard
- Well suited for recreation uses
- Unsuitable for structural fill

#### MgE2 - Madison Gravelly Sandy Loam

- 10-25% slopes
- Well Drained

- Terrace or carefully locate any development in areas that have steep slopes
- Unsuitable for structural fill

#### PaF - Pacolet Gravelly Sandy Loam

- 25-45% slopes
- Well drained
- Unsuitable for structural fill
- Area has very steep slopes

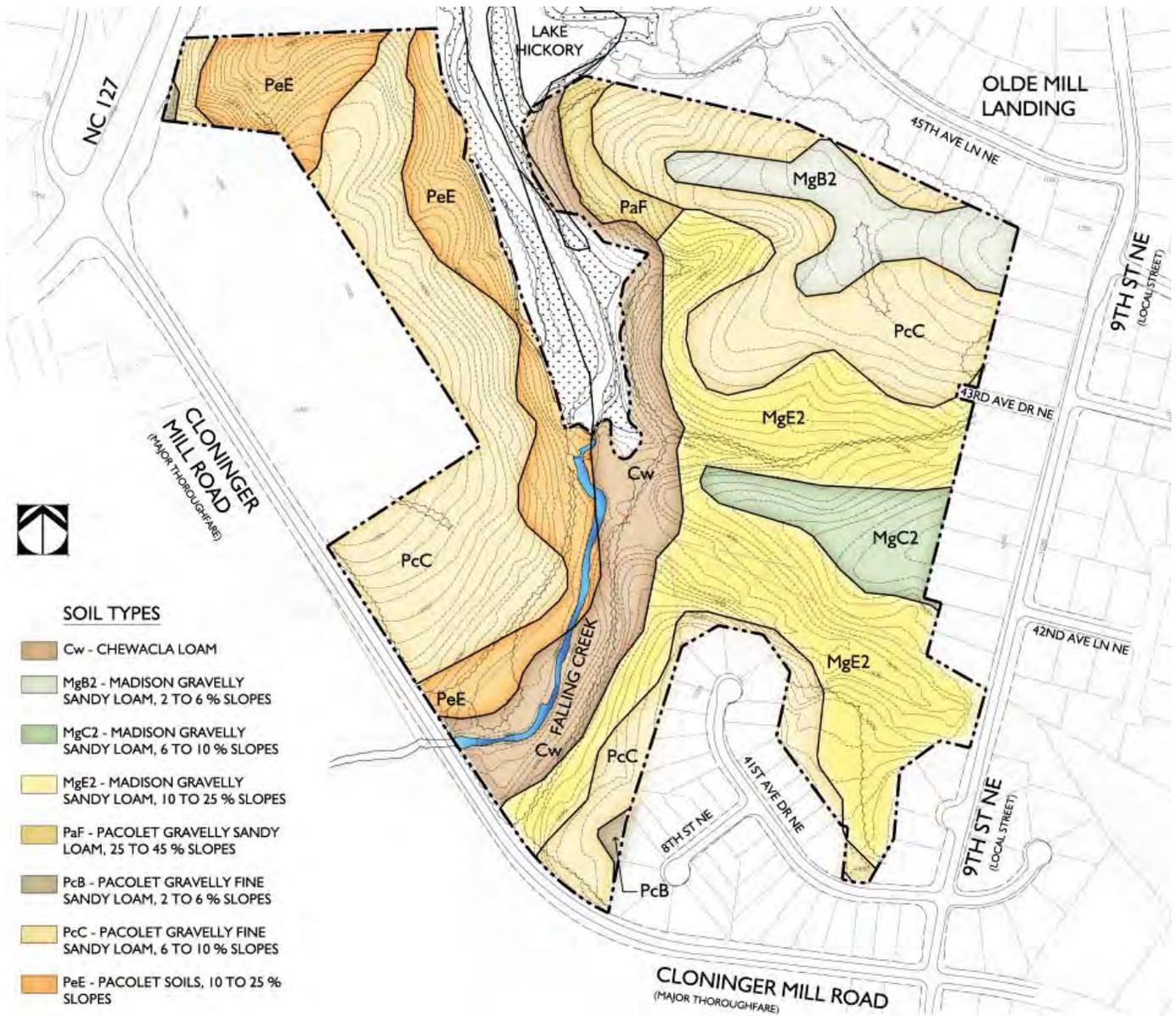
#### PcB - Pacolet Gravelly Fine Sandy Loam

- 2-6% Slopes
- Well Drained
- Unsuitable for structural fill
- Suitable for recreation uses

#### PeE - Pacolet Soils

- 10-25% Slopes
- Suitable for structural fill, areas have steep slopes
- Recreation development should be terraced or carefully located to mitigate slopes

# Site Analysis: Natural Features



While the majority of the site is comprised of soils that will support recreational development (including the construction of roads, parking areas, small structures), the Chewacla Soils which run through the center of the site greatly impact the development of the site. These soils, along with the hydrological and environmental challenges of crossing Falling Creek, divide the site into two distinct park areas (east and west).

## Site Analysis: Natural Features

### HYDROLOGY

Perhaps the most significant feature of the site is hydrology. Falling Creek is a significant creek that flows through much of Hickory and Catawba County. Falling Creek flows from south to north through the center of the site, emptying into Lake Hickory along the northern boundary of the park. As a major drainage way, Falling Creek is a Federal Emergency Management Act (FEMA) regulated waterway and has a floodway associated with it. In addition to the FEMA floodway, Falling Creek is protected by a Streamway Protection Buffer of 50 feet. Trails are allowed in this floodway and buffer, but construction of roads, parking, and structures are not generally allowed in these areas. The development restrictions associated with the floodway and buffers form a development barrier that runs north/south through the entire park site; dividing the property into two distinct areas (east and west).



*Rock outcropping adjacent to Falling Creek*

While Falling Creek is the most dominant hydrological feature of the site, it is not the only hydrological feature that influences park development. In addition to Falling Creek, there are three perennial streams [or perennial Relatively Permanent Waters (RPW)] and one seasonal RPW found on the site. These streams flow east to west and drain into Falling Creek and are regulated waterways by the US Corps of Engineers. Under these regulations, development impacts are limited.

As part of the planning process, a wetlands investigation was conducted to identify regulated waterways and areas of wetlands. In addition to the streams which drain the site, several areas of jurisdictional wetlands are found on the property adjacent to Falling Creek and the borders of Lake Hickory. Very strict development/filling regulations are associated with these wetlands. These regulations reinforce the development limitations

associated with Falling Creek, and highlight the division of the park site into eastern and western areas of development.



*View of Lake Hickory from the site*

The final hydrological feature of the site is its access to Lake Hickory. There is limited shoreline access (+/- 200 linear feet) to the lake along the park's northern property line. In addition, portions of the lake's regulatory boundaries extend into the park site along Falling Creek. All of the area adjacent to the lake is regulated by Duke Energy Shoreline Management. This point of contact with the lake occurs at the end of one of the lake's southern coves. While access to Lake Hickory

## Site Analysis: Natural Features

provides a valuable visual amenity to the park and offers opportunities for a scenic overlook and potentially some environmental education opportunities, the limited access to the lake, coupled with shallow water depth in this area, significantly limits the water access for the park. Boating, fishing, and other water activities are not viable at this location.

### TOPOGRAPHY

In addition to hydrology, the site's landform, or topography, presents a very strong natural feature that dictates park development. The park site is essentially a valley. Falling Creek, which runs through the center of the site in a north/south direction, creates a low point between two ridges to the east and west. The tops of both ridges are relatively flat, but slope dramatically to the creek. The fall in elevation on the western portion of the site is approximately 100 feet (elevation 1050 to 950), the change in elevation on the eastern side is somewhat less (80 feet), but still significant.

This rolling landform results in almost three quarters (72%) of the site being a gradient greater than 10%. Land with slopes greater than 10% has limited development potential. While these areas are suitable for low impact recreational uses (trails, passive recreation, etc.), the construction of roads, parking areas, buildings, etc. is limited due to the amount of grading and tree removal that would be required to build these improvements.

Land with slopes less than 10% are better suited for development of roads, parking, picnic areas, playgrounds, etc. Land with these more gentle slopes occurs on the site in two places. Portions of the flood plain associated with Falling Creek are relatively flat, but (as noted in the sections of soils and hydrology) these areas contain other hydrological and soil characteristics that limit development. The other area that exhibits flatter, more developable grades are two ridge areas on the eastern side of the site.



*Steep slopes provide development challenges*

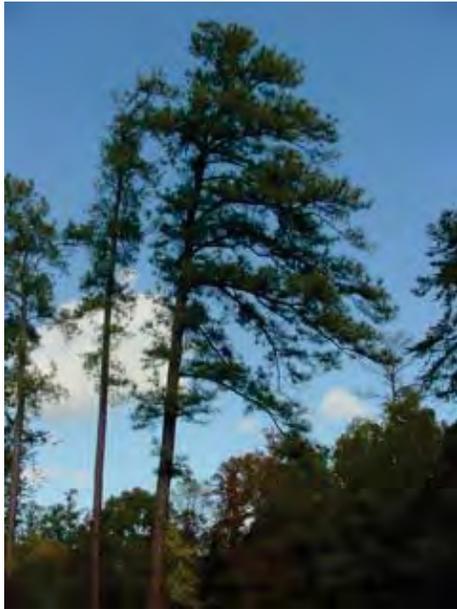
# Site Analysis: Natural Features



# Site Analysis: Natural Features

## VEGETATION

The Cloninger Mill Park site is almost entirely wooded with a wide variety of vegetation. The site's rolling topography provides a perfect habitat for both lowland and wetland species as well as upland vegetative communities, the following tree types are found on the site:



*Loblolly Pine*

- Red Maple
- White Oak
- Northern Red Oak
- Cottonwood
- Green Ash
- Water Oak
- Willow Oak
- Sycamore
- Red Oak
- Loblolly Pine
- Shortleaf Pine
- Virginia Pine
- White Pine
- Sweetgum
- Yellow Poplar



*Yellow Poplar*



*Sweetgum*

## WILDLIFE

In addition to a diverse vegetative community, the site provides a wonderful habitat for a variety of birds and animals. The following species are found on the site:

- Deer
- Quail
- Fox
- Doves
- Rabbits
- Squirrels
- Non-game birds
- Mink
- Raccoon
- Muskrat
- Opossum
- Black Ducks
- Mallard Ducks
- Widgeon Ducks
- Wood Ducks
- Ring Neck Ducks
- Green Wing Teal Ducks



*Widgeon Ducks*

The diversity of plants and animals on the site is one of the defining values of this site as a park. With that understanding, it is important that plans for park development respect the natural features of the site and minimize construction that will require the removal of significant areas of canopy and tree cover.

# Site Analysis: Man Made Features

## SITE ANALYSIS: MAN MADE FEATURES

In addition to the site's natural features, there are a number of man made features that impact the development of the site. These features include:

### ZONING

The park property is located on the northeastern edge of the City of Hickory. As a City owned property, the entire property has been annexed into the city, but portions of the site are surrounded by property that is not incorporated. The site is regulated by the City of Hickory Land Development Code. The property is zoned R-1 and R-3 (residential district). Portions of the eastern quadrant are zoned R-1, while the western quadrant is zoned R-3. Recreation is a permitted use in both zoning classifications.

### SETBACKS

A 40 foot front street yard is required along Cloninger Mill Road. A 12 foot side yard setback is required along all other property lines. A 40 foot rear yard setback runs along the property line adjacent to portions of Lake Hickory.



# Site Analysis: Man Made Features

## SURROUNDING LAND USE

Cloninger Mill Road forms the site's western and southern borders. The property across Cloninger Mill Road is predominately non-residential. Neighborhood commercial development occupies the property across Cloninger Mill Road adjacent to Highway 127. Further to the south across Cloninger Mill Road is the City's wastewater treatment facility and compost facility.

Single Family Residential property borders the park site to the north, east, and southeast. Over twenty homes back up to the park along its northern border (Olde Mill Landing) and the southeast corner of the property (41st Avenue Drive NE/8th Street NE). Park development should be sensitive to these residential properties and park plans should provide adequate buffering along these properties.

## UTILITIES

The park site is well served by all required utility services. A 12 inch water main runs along the west side of Cloninger Mill Road and a 12 inch water main is located along NC 127. There is an 8 inch domestic water line on 9th Street NE and an 8 inch domestic line in 41st Avenue Drive NE. These existing public lines will provide adequate water service for both domestic water needs and fire protection.

A 42 inch sanitary sewer outfall line runs through the site parallel with Falling Creek. This line crosses Falling Creek with an aerial crossing just south of the waterfall. Two 8 inch sanitary sewer lines run from 9th Street to this trunk line. One of these sanitary sewer lines will provide sanitary sewer service for any park restroom facilities. A 4 inch force main runs from the small pump station located east of Falling Creek to Cloninger Mill Road. In addition to the sanitary sewer line running through the property, an 18 inch sanitary sewer line runs along Cloninger Mill Road.

Single phase power is available in Cloninger Mill Road and along 9th Street NE. In addition underground electrical services to power the pump stations run along the existing maintenance trail.



*Existing sanitary sewer easements provide open areas for trail alignment*



*Cloninger Mill Road near the entrance of the wastewater treatment plant and the pump station*

## ROADS/ACCESS

The site is bordered to the northwest by Highway 127, although grade conditions in this area will make direct access to Highway 127 very difficult and expensive. Likewise, NCDOT will not likely support a driveway access to the park in this area because of its close proximity to the intersection of Cloninger Mill Road.

The site has 1,275 linear feet of direct access to Cloninger Mill Road along its southwest boundary. Cloninger Mill Road is a major thoroughfare and while currently a two lane road, widening of Cloninger Mill Road is anticipated.

## Site Analysis: Man Made Features

A 110 foot wide future right of way will be required along this thoroughfare. The majority of this roadway frontage is taken up by the area designated by Public Utilities for its pump station operations. Much of this area has poor sight lines because of the sag in the road and a hard curve condition. These two conditions prohibit any direct vehicular park access to Cloninger Mill Road from the eastern half of the site. While the majority of the site's frontage along Cloninger Mill Road is not accessible for a driveway access, there is one section, just south of the commercial outparcel, that would provide access to the western quadrant of the site.

The intersection of 9th Street NE and Cloninger Mill Road is not signalized. Based on public comment during the public meetings, traffic backs up on 9th Street NE during peak traffic time in the mornings. As part of the analysis process, the North Carolina Department of Transportation (NCDOT) was contacted to discuss this issue. It was noted that NCDOT has no plans for signalizing this intersection, but stated that a signal would be considered if traffic counts or safety issues warranted.

The eastern portion of the site has direct and indirect access from 9th Street NE. This access comes from an existing right of way (ROW) at 43rd Ave Dr NE. In addition to this established ROW, access from 9th Street NE to the eastern half of the site could be achieved by reconfiguring the proposed residential lots the City plans to sell along 9th Street NE. A third option for access from 9th Street NE would be a +/- 170 linear foot section of park property that abuts 9th Street NE at the park site's southeast boundary. While this access point may be used for a pedestrian connection, the development of vehicular access at this location would be difficult due to changes in elevation and drainage issues and is not recommended.

### EXISTING STRUCTURES

The only man-made improvements on the site are the existing sanitary sewer lines and two pump stations. The larger of the two pump stations is located just west of Falling Creek approximately 200 feet off Cloninger Mill Road. This facility includes a paved driveway and turnaround from Cloninger Mill Road and a fenced in service area with a small masonry structure. A second, smaller fenced pump station area is located on the east side of Falling Creek in the northern section of the site approximately 500 linear feet south of Lake Hickory. A gated gravel and earthen drive provide maintenance access to this facility. Public Utilities staff have requested this drive be paved to facilitate maintenance access.



*Access drive from Cloninger Mill Road to the pump station*

**CONCEPT DEVELOPMENT**

With the completion of the detailed site analysis, and the input gathered from the first public meeting, plans for park development were begun. Utilizing information from the site analysis, public input sessions, and program information provided by city staff, the following program elements were identified as appropriate for park development:

- Picnicking (group and individual)
- Walking, jogging, biking trails
- Play areas
- Disc golf
- Mountain bike trails
- Environmental education
- Exercise stations

Utilizing this program for park development, the park planners developed two options for park development. While both options were similar in program elements and development impacts, they varied in the location of facility layout.

Based on the construction, environmental, and permitting issues associated with providing a vehicular crossing over Falling Creek, both options provided separate vehicular access and parking facilities for the eastern and western portions of the park. Access to the western quadrant of the site was directly off Cloninger Mill Road, just south of the commercial outparcel. This entrance location provides the best sight lines for a driveway entrance and takes advantage of the relatively flat slopes found in this area. While there are variations in the layout of this node on each of the two options, the program elements for this node are similar on both options. The western activity node includes a small parking area (+/- 25 spaces), a small family picnic shelter and several individual covered shelters. This park node also provides a trail head for trails leading into the park and for access to the mountain bike practice course.

In **Option One**, vehicular access and the proposed activity node for the eastern side of the site comes from the existing right of way at 43rd Ave Drive. In this option, a park entrance drive and a parking area for 25 spaces (and 25 grassed overflow parking spaces) will be developed from this existing right of way. The activity node associated with this parking area includes a group picnic shelter with restroom, individual covered picnic tables, playground, and trail head. In addition to activities immediately adjacent to the parking area, the plan for the eastern quadrant includes a disc golf course, small outdoor classroom, and scenic overlooks at both the waterfall and at the edge of Lake Hickory.



Preliminary Master Plan  
Option #1



**Option Two** provides almost identical program elements as Option One on the western half of the site, but offers a different location for park access and the proposed activity areas on the eastern side of the park. In this option, vehicular access is moved south to 42nd Ave LN NE, and the activity node is located in the central area of the eastern quadrant.

Both options for park development include an extensive system of trails for walking, jogging, and biking. A variety of trail types will be utilized. Portions of the trail adjacent to Falling Creek will be paved to facilitate heavy park use and maintenance access to the Public Utilities' pump station. The majority of the park's trails will be gravel to allow a stable trail surface while minimizing environmental impact to the site. In addition to the paved and gravel trails, some areas of the park will contain a natural trail system for more passive areas.



The Final Master Plan for Cloninger Mill Park provides a guide for park development that will result in an outstanding passive park. A park that will conserve a unique water feature (the falls at Falling Creek), preserve over 60 acres of woodlands, and provide limited access to Lake Hickory.

The development of the park will likely require the collaboration of the City's Parks and Recreation Department and the Public Utilities Department. Likewise, funding for park improvements could come from a number of state and federal sources. This master plan document has been developed to comply with the Parks and Recreation Trust Fund (PARTF), Land and Water Conservation Fund (LWCF), and Clean Water Management Trust Fund (CWMTF) requirements. The City will seek partnership opportunities with these and other public and private agencies in the construction of this park.

The overall theme of the park will be rustic, passive recreation. Taking a hint from the site's history, all architectural components will be designed with a grist mill theme. All park improvements will be developed with underground electrical service to minimize visual impact and to comply with state and federal requirements.

Based on the very strong input received from citizens at the second public meeting, Option Two was utilized as the basis for the Final Master Plan. As suggested in the public comments from the second meeting, Option Two was slightly modified by increasing the parking and emphasizes of the activity node adjacent to Cloninger Mill Road. The Final Master Plan expanded parking for this node from 25 spaces to approximately 50 spaces. A small playground area and restroom were added to this node as well. These improvements were proposed because of the node's direct access to Cloninger Mill Road, and in an effort to reduce traffic impacts to the neighbors along 9th Street NE and Olde Mill Landing.

A second modification of Option Two was a slight expansion of the outdoor classroom area. Originally proposed to accommodate fifteen to twenty students, this area was expanded to provide space for thirty to forty students. This change will allow the outdoor classroom to accommodate classroom outings from local schools.



Final Master Plan



## CONSTRUCTION COST

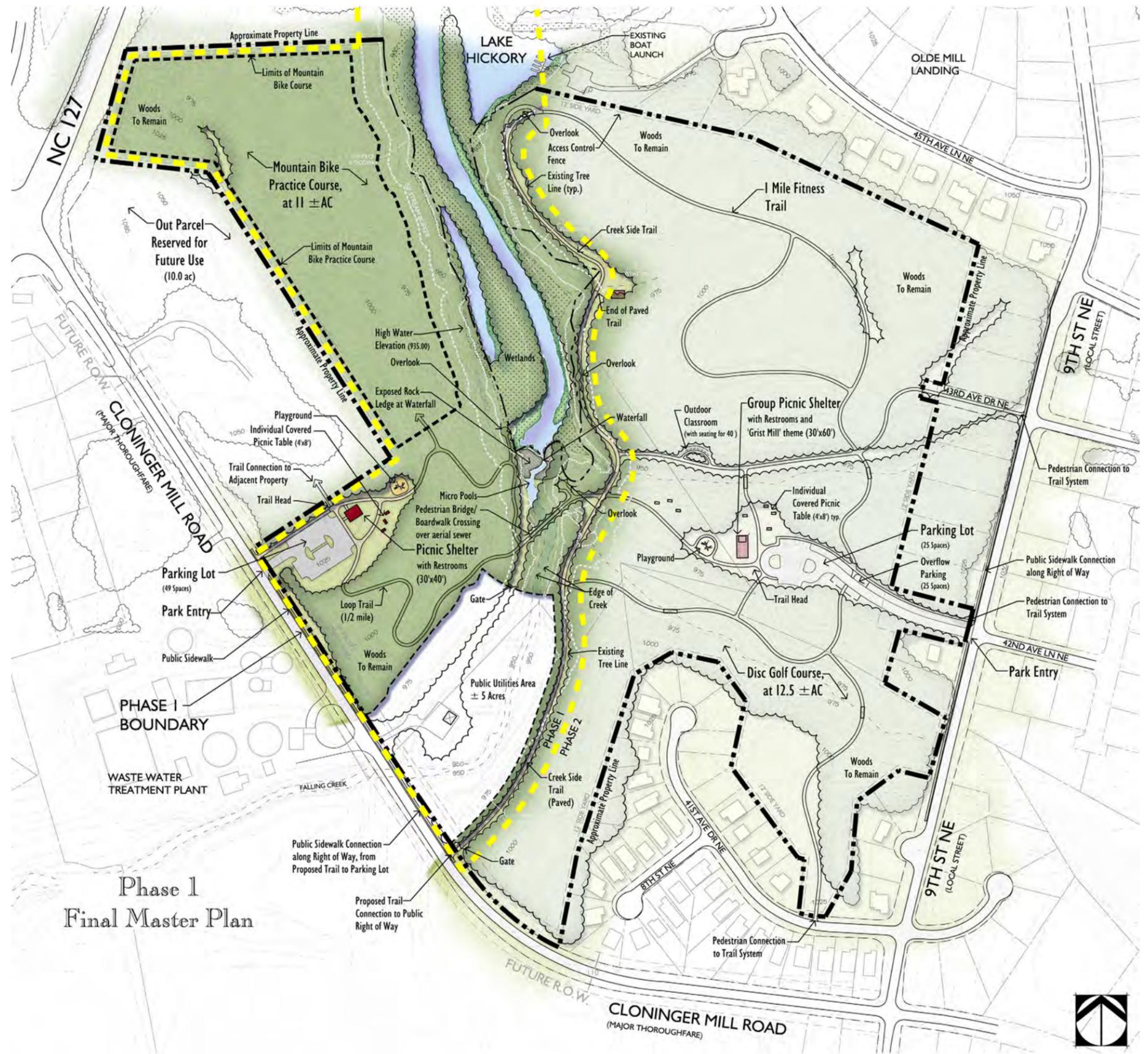
The development of a 63.3 acre municipal park is no small undertaking, even a park dedicated to passive recreation. While the development of detailed plans (architectural, grading, drainage, etc.) is beyond the scope of this planning report, the master plan that has been established provides a basis for preliminary cost estimation. Based on the Final Master Plan, the anticipated cost of the project (in 2009 dollars) is approximately \$2.8 million. A summary of these costs are as follows:

Clearing Budget	\$39,000.00
Grading/ Erosion Control Budget	\$373,943.85
Storm Sewer Budget	\$120,790.00
Paving Budget	\$241,655.00
Public Sidewalk Budget	\$54,828.00
Utilities Budget	\$80,040.00
Picnic Shelters and Site Furnishing Budget	\$682,660.00
Landscaping Budget	\$24,696.00
Entrance Gates and Signage Budget	\$72,000.00
Trail Budget	\$359,700.00
Mountain Bike Practice Course Budget	\$30,000.00
<u>Disc Golf Course Budget</u>	<u>\$15,000.00</u>
<b>Sub-Total Project Construction Budget</b>	<b>\$2,094,312.85</b>
Contractor overhead and general conditions (14%)	\$293,203.80
<b>Total Project Construction Budget</b>	<b>\$2,387,516.65</b>
Contingency (10%)	\$238,751.66
<b>Project Development Budget</b>	<b>\$2,626,268.31</b>
Planning, Geotechnical, and Design Services (10%)	\$262,626.83
<b>Total Estimated Project Cost</b>	<b>\$2,888,895.15</b>

A more detailed breakout of the project cost is found in Appendix Three.

**PHASING**

With a construction cost of \$2.8 million, the City may decide to build the park in phases. The nature of the park layout lends itself to development in multiple phases. As noted throughout the master plan, the park is divided into two separate nodes. The two nodes are connected by trails. One simple phasing strategy would be to construct the western node (access from Cloninger Mill Road) as the initial phase. The development of the parking areas, playground, picnic shelter with restrooms, and portions of park trails would provide a Phase One Development package that would cost approximately \$1.3 million. Phase Two development would include construction of the eastern node of the park.



Phase 1  
Final Master Plan



## Cloninger Mill Park Order of Magnitude Budget Estimate February 24, 2009

### PHASE ONE

Item	
Clearing Budget	\$19,500.00
Grading/ Erosion Control Budget	\$163,598.00
Storm Sewer Budget	\$44,690.00
Paving Budget	\$99,995.00
Public Sidewalk Budget	N/A
Utilities Budget	\$38,025.00
Picnic Shelters and Site Furnishing Budget	\$262,130.00
Landscaping Budget	\$12,148.00
Vehicular Entrances, Gates, Signage and Buffers Budget	\$31,200.00
Trail Budget	\$254,400.00
Mountain Bike Practice Course Budget	\$30,000.00
Disc Golf Course Budget	N/A
<b>Sub-Total Construction Budget</b>	<b>\$955,686.00</b>
 Contractor overhead and general conditions (14%)	 \$133,796.04
 <b>Total Project Construction Budget</b>	 <b>\$1,089,482.04</b>
 Contingency - (10%)	 \$108,948.20
 <b>Project Development Budget</b>	 <b>\$1,198,430.24</b>
 Planning, Geotechnical and Design Services - (10%)	 \$119,843.02
 <b>Total Estimated Project Cost</b>	 <b>\$1,318,273.27</b>

## Cloninger Mill Park Order of Magnitude Budget Estimate February 24, 2009

### PHASE TWO

Item	
Clearing Budget	\$19,500.00
Grading/ Erosion Control Budget	\$210,345.85
Storm Sewer Budget	\$76,100.00
Paving Budget	\$141,660.00
Public Sidewalk Budget	\$54,828.00
Utilities Budget	\$42,015.00
Picnic Shelters and Site Furnishing Budget	\$420,530.00
Landscaping Budget	\$12,548.00
Vehicular Entrances , Gates, Signage and Buffers Budget	\$40,800.00
Trail Budget	\$105,300.00
Mountain Bike Practice Course Budget	N/A
Disc Golf Course Budget	\$15,000.00
<b>Sub-Total Construction Budget</b>	<b>\$1,138,626.85</b>
 Contractor overhead and general conditions (14%)	 \$159,407.76
 <b>Total Project Construction Budget</b>	 <b>\$1,298,034.61</b>
 Contingency - (10%)	 \$129,803.46
 <b>Project Development Budget</b>	 <b>\$1,427,838.07</b>
 Planning, Geotechnical and Design Services - (10%)	 \$142,783.81
 <b>Total Estimated Project Cost</b>	 <b>\$1,570,621.88</b>

# APPENDIX

City of Hickory  
Parks and Recreation Department  
**Cloninger Mill Park**  
**Public Meeting No. 1**  
Meeting Minutes  
September 23, 2008

The first public meeting to discuss plans for Cloninger Mill Park was held on September 23, 2008 at the Highland Recreation Center. Forty citizens attended the meeting.

Parks and Recreation Director Mack McLeod called the meeting to order and thanked everyone for coming. He explained how the Cloninger Mill site fits into the overall parks system, and how the Comprehensive Master Plan designates this site to be developed into a passive park. Next he explained portions of the original park parcel would be developed for commercial and residential uses in the future. Mack introduced Derek Williams of Site Solutions and turned the meeting over to him.

Derek stated his presentation by explaining the public input process, the purpose of the meeting, the ground rules, and then turned the meeting over to Jeff Ashbaugh of Site Solutions. Jeff presented an aerial photo, site inventory, and the existing conditions for the site. Following the presentation, the attendees were given a chance to ask questions about the project. The following is a general summary of the discussion:

Q: What is the size of the parking lot? Will there be 85-90 spaces like Geitner or Hilton Park?

A: We do not know at this time. The number of spaces will be determined when the activities for the park are determined. Typically you might expect 40-50 spaces based on a park of this type. The designer encouraged the attendees to come to the next meeting when actual concepts are presented to learn more.

Q: What are the hours of operation?

A: Similar to other parks, dawn to dusk.

Q: What was the process for determining where the commercial tracts were located?

A: It was based on City of Hickory internal staff discussion. The designer stated the commercial tract is located near the Highway 127 and Cloninger Mill intersection for curb appeal, adjacent zoning, and suitable terrain.

Q: Where would the park entrance be located?

A: The designer informed the group the primary entrance would most likely be from 43<sup>rd</sup> Avenue Drive. Several members of the group stated they preferred an access from Cloninger Mill Road. One person suggested an entrance on the southern end of the commercial tract. Another member suggested the existing dirt road from Cloninger Mill Road and south of Falling Creek be used.

Comment: Several members of the group mentioned there is heavy traffic on both Cloninger Mill Road and 9<sup>th</sup> Street in the morning during school hours. They feel the addition of the park will increase traffic. The designer stated typically the peak time for park use is during the evening and weekends when school is not in session.

Comment: One member of the group shared concerns about the existing Olde Mill Landing boat launch (located off site in the subdivision beside the park tract) being used by the public and is periodically a nuisance to the neighborhood. Boaters have parked on neighborhood streets, young people gather and socialize. The park will increase this activity. Security is a concern.

Comment: One person stated she has security concerns. She mentioned crime is a problem in the neighborhood. Also, she mentioned young people gather along Falling Creek and socialize. A park will only attract more people. What is being done for security?

A: The Police Department will provide bike patrols like other parks. Another member of the group suggested the neighborhood form a community watch group or the Parks Department can form a park watch group.

Q: One person asked if a traffic light could be added at the intersection of Cloninger Mill Road and 9<sup>th</sup> Street.

A: NCDOT will determine if a signal is needed.

Q: What kind of buffer will be provided between the park and neighborhood?

A: The zoning ordinance requires 12 feet. However the City may provide a wider voluntary buffer. Typically a 50-foot strip of existing vegetation would be preserved and used as a buffer. One homeowner suggested a fence be erected for her property.

Comment: One neighbor that lives near the existing Olde Mill Landing boat dock mentioned as information to the City that there is very little opportunity for boat access from a short stretch of park property fronting the lake. He stated the lake in that area is generally dry, marsh like, without enough water for boating. He shared the neighborhood periodically pays to have this portion of the lake dredged enough to launch boats.

Q: One person asked what could be done to keep teenagers out of her backyard? This citizen prefers tall barriers.

A: A fence could be installed.

Q: What is the carrying capacity/number of users expected for this site?

A: This information is not available at this time.

Q: Can this site be used as a transit center or commuter lot? The citizens could ride the Piedmont Wagon to the site instead of driving.

A: Suggestion was acknowledged.

Q: Has there been a detailed historical analysis done on the site?

A: Not at this time. It is possible one will be performed with the utility improvement project.

Q: Has a detailed flora and fauna inventory been done?

A: Not at this time.

Comment: Parks are a positive thing for our community and will help raise property values.

Comment: The designer asked the group if they were in favor of public access to the Olde Mill Landing boat dock. Several attendees stated no.

Comment: One person stated there were crime problems associated with parks. Another citizen disagreed and suggested residents around other City parks be polled to see if crime was a problem. He feels crime is not a problem around parks.

A: The designer mentioned the safest parks are parks that are used, have people in them, and visible from adjacent businesses and residences. The group was challenged to use the park to make it safe.

Q: Will the park be lighted?

A: The parking lot may be lighted. No other parts of the park will be lighted.

After the question and answer session Derek asked the group what recreation activities would they like to see in the park? While the group was thinking about this question, Derek presented several slides of typical activities found in a passive park. Several individuals in the group suggested the following activities:

- Paved and unpaved trails
- Performance space – concerts
- Picnicking
- Frisbee golf
- Concessions/food

Following a group discussion on potential recreation activities for the park, participants were given the opportunity to express their views and were given 4 dot stickers each for voting on recreation activities they desired to see developed in the park.

The following results were noted:

<u>Description</u>	<u>No. of Votes</u>
Walking Trails	27
Exercise Stations	8
Mountain Bike Trails	12
Picnic Shelters	9
Playground	5
Water Access	2
Fishing Pier	3

Nature Boardwalk/Observation Deck	6
Outdoor Education/Nature Center	6
Disc Golf	6
Community Garden	0
Performance Space/Outdoor Classroom	5

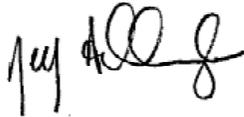
Generally the majority of the group would be supportive of the park provided access was from Cloninger Mill and majority of activity was centered on the Cloninger Mill side of the property.

Participants were thanked for their involvement and told that information gained during this workshop will be used in designing preliminary plans for the park.

A second public meeting will be scheduled and is to be announced.

Meeting adjourned.

By:



Jeff Ashbaugh, ASLA

cc: Mack McLeod

City of Hickory  
Parks and Recreation Department  
**Cloninger Mill Park**  
**Public Meeting No. 2**  
Meeting Minutes  
January 15, 2009  
Highland Recreation Center

The second public meeting to discuss plans for Cloninger Mill Park was held on January 15, 2009 at Highland Recreation Center. Approximately fifty people attended the meeting; more than half of those in attendance had been at the first public meeting in September 2008.

Parks and Recreation Director Mack McLeod opened the meeting by welcoming everyone and thanking them for their attendance on a very cold January evening. He then provided a brief description of the history of the park, its role in the overall city park system, and plans for constructing the park. Following this brief overview the planning consultant, Site Solutions, made a presentation on the proposed concepts for park development.

Derek Williams began the presentation with a review of the planning process and explained that two concepts for park development would be presented for citizen review and discussion. He told attendees they would be asked to comment on the two options for park development and would ultimately be asked to “vote” for their preferred concept.

Since many in the audience did not attend the first public meeting, Mr. Williams briefly reviewed the findings from the extensive site analysis conducted as part of the planning process. The findings from this site analysis concluded:

- The site’s trees provide a valuable asset (and habitat) and should be preserved.
- Falling Creek, with its beautiful waterfall, is the primary feature of the site and should be preserved. Falling Creek, and the associated floodplain, buffers, and wetlands provide a very strong physical barrier through the center of the site creating eastern and western quadrants of the park. While trails and pedestrian bridges may be used to cross the creek, a vehicular crossing (roads) is not feasible.
- Topography on the site is steep. Almost three quarters of the site has a gradient greater than 10%. While trails can traverse these areas exceeding 10%, park development (parking, playgrounds, picnic shelters, etc.) should be limited to areas less than 10%. This dictates much of the park layout.
- The site is bordered to the north and west by single family residences. Park development should be sensitive to adjacent homes.

Following this description of the site analysis findings, Mr. Williams reviewed the comments from the first public meeting. It was noted that considerable discussion/concern was expressed in the first public meeting over:

- Traffic signal at 9<sup>th</sup> Street NE
- Security
- Buffers
- Park Entrance Locations

It was noted that both concepts were designed to address these concerns and minimize their impact on surrounding neighbors.

Jeff Ashbaugh, of Site Solutions, then presented the two concepts for park development. Both concepts were similar in their development impacts and both plans avoided major park development that negatively affects Falling Creek or the site's tree canopy. Both concepts provided facilities for walking/jogging, picnicking, children's play, and environmental education. Both concepts provided two park entrances; one directly from Cloninger Mill Road. This entrance will serve the eastern portion of the site. The location of the second entrance defines the two concepts. In Concept One, the western park entrance is shown coming from the existing right of way at 43<sup>rd</sup> Avenue NE. This concept provides a small parking area (25 paved spaces and 25 overflow spaces) and activity node with a group picnic shelter, playground, individual picnic facilities, and trailhead.

Concept Two is very similar to Concept One, but the location of the entrance drive is directly off of 9<sup>th</sup> Street NE at 42<sup>nd</sup> Avenue NE; south of the entrance shown in Concept One. In essence, Concept Two provides a greater buffer between the park's vertical construction and the residences in Olde Mill Landing.

With the presentation of the two concepts, the meeting was opened for public comment and question. Many of the approximately fifty people in attendance offered comments and/or questions. In general, those present felt the park was a positive initiative and many in the audience encouraged the City to proceed with construction ASAP. Overall the group seemed satisfied with the development program for both concepts. No proposed park activities were viewed as inappropriate. Likewise, no additional park activities were advocated; although someone suggested the park trails be utilized for high school cross country meets.

Most controversial, and most discussed, was the issue regarding vehicular access; particularly to the west side of the park. Many of those present were adamantly opposed to any vehicular entrance from 9<sup>th</sup> Street NE. Concerns over traffic in the neighborhood, pedestrian safety, and congestion at the 9<sup>th</sup> Street and Cloninger Mill Road intersection were expressed.

Several people suggested eliminating the vehicular entrance from 9<sup>th</sup> Street NE and expanding the parking and park development immediately off Cloninger Mill Road. Likewise, several people recommended that the City not sell the ten acres at Cloninger Mill Road and Highway 127 and use that area for park development in lieu of the area west of Falling Creek and closer to the Olde Mill Landing subdivision.

Others in the group felt providing an access on the western part of the site would provide greater access to the site and open the park to those not living in the immediate neighborhoods surrounding the park. Several also expressed support for selling the commercial property because revenue from that sale would provide a funding source for park development.

In addition to this general summary of public discussion, the following specific comments were made:

- Traffic and speeding is currently a concern on 9<sup>th</sup> Street NE. Traffic signs with the posted speed limit and warnings for caution are needed. Speed bumps, which have been previously discussed by neighbors, should be considered.
- Sidewalks are needed along 9<sup>th</sup> Street, and into the park.
- Expanding parking and facilities at the Cloninger Mill Road entrance could allow reduced parking on the western portion of the site.
- Consider all sources for park funding, including Duke Energy.
- Safety and operation were discussed by several people. It was stated that the park will be open from dawn to dusk; therefore actual opening/closing times will coincide with daylight. It was also reiterated that police will patrol the park from the parking lots. If problems arise, a park watch program will be developed.
- A concern was expressed over access to the boat ramp and parking areas at Olde Mill Landing. It was suggested that a fence and barrier be constructed in this area to keep park users from private property.
- One homeowner asked if the City would build a fence to protect adjacent property owners. It was noted that while possible, the construction of a fence would require the removal of vegetation along those property lines.

Open discussion was held on the two concepts for over an hour. Once everyone had their opportunity to speak (many in the audience spoke repeatedly), everyone was asked to select one of the two options presented. One of those in attendance stated that neither Option One or Two reflected their preferred park development option. Instead, many felt the City should not sell the ten acres dedicated for commercial development and place most park development on this area of the park; eliminating any development (beyond trails) on the western portion of the site. By show of hands, thirty-four of the approximately fifty present supported this concept.

With that vote, it was explained that while the voice of the public in the design of the park is valued (as evidenced by the two public meetings), this park serves the entire City and is being designed in that context. While that vote will be recorded and acknowledged, the vote of these thirty-four people does not dictate that City will choose this option in the development of this park. With that understanding, participants were asked to select one of the two proposed concepts by attaching a purple adhesive dot to the plan of their choice. Attendees almost unanimously voted for Option Two; the option that proposed a second park entrance directly off 9<sup>th</sup> Avenue NE.

Attendees were again thanked for taking the time to share their thoughts on park development.

Respectfully Submitted,

SITE SOLUTIONS



Derek C. Williams, ASLA  
President

S I T E  
  
S O L U T I O N S

**Hickory Parks and Recreation Commission**  
**Tuesday, September 8, 2015, 12:00 Noon**

A regular meeting of the Hickory Parks and Recreation Commission was held on Tuesday, September 8, 2015, 12:00 Noon, in the Highland Recreation Center Community Room.

**Members Present:** Lloyd Coley, Jim Powers, Lanie Wood, Angie Aycock, Joyce Beard, Dean Proctor, Junior Hedrick, David Crosby, Landen Wood and Susan Sigler

**Members Absent:** Allen Mitchell Jr.

**Guests Present:** Derek Williams, Alfred Benesch & Co.

**Others Present:** Parks & Recreation Director Mack McLeod, Assistant Parks & Recreation Director Donna Andrews, Recreation Supervisor Michele Wilkerson, Parks Maintenance Supervisor Eric Starnes, Assistant Parks Maintenance Supervisor Robert Bishop, Assistant City Manager Rodney Miller, HPD Chief Tom Adkins, City Council member Hank Guess, Communications Intern Madison Whisnant and Minutes Clerk Anne Starnes

**Call to Order:** Lloyd Coley, Chair, called the meeting to order at 12:05 pm. A quorum was present.

**Introduction of Guests:** Mr. Coley introduced all guests attending the meeting.

**Introduction of New Commission Member:** Mr. Coley welcomed the Commission's new At-Large member, Angie Aycock. She introduced herself to members.

**Approval of August 11, 2015 Meeting Minutes:** Minutes of the previous meeting were distributed to members in advance. No changes or corrections were stated. Dean Proctor moved, seconded by Joyce Beard, to approve the August 11, 2015 minutes as presented. The motion carried unanimously.

**Department Reports:** The Director's Report and Facility Attendance Report for August 2015 were included in the agenda packet.

**Cloninger Mill Park Master Plan Update:** Copies of the Final Master Plan map, dated February 13, 2009, were distributed. Mr. McLeod said the main purpose of the meeting was to begin the planning process to update the master site plan for Cloninger Mill Park. He said a 10-acre commercial site was originally set aside for development, and was on the market for a couple of years. An area for residential development was also set aside on the property, while all remaining property was designated for park use. He said Outward Bound of NC had donated \$900,000 to the City of Hickory so the designated 10-acre commercial tract could be returned to the park, increasing the size from 63-acres to 73-acres.

Mr. McLeod said the City of Hickory has retained the services of consulting firm Alfred Benesch & Company, formerly known as Site Solutions. Their firm will update both the original Cloninger Mill Park Master Plan and site development costs for the entire park. The original planning process was 9-10 months, but the update process will likely take only 4-5 months. He reminded members that this meeting, with their input, would be the official planning process for the park master plan update.

Mr. McLeod introduced Derek Williams of Alfred Benesch & Co. Mr. Williams discussed the original master plan. He does not envision a major change to the 2009 plan, but said the City now has a wonderful opportunity to add 10 more acres of land to the park, which are probably the easiest ones on the site to develop. He

explained the firm's site analysis and process for creating the initial master plan from 2008-2009. He noted members had toured the park last week, so they are familiar with the site.

Mr. Williams discussed the natural features at the park site. He said Falling Creek runs directly through the center of the site and divides it into two areas. He noted the visual beauty of Falling Creek, with its waterfall, rapids, plunge pools and boulders. He said this area also has limitations, with a flood plain along the creek, wetlands, and stream restrictions. During the last planning process, his firm considered if the creek could be crossed, and determined it was not advisable. Mr. Williams said another natural feature is the steep slope of 10% or greater, especially going deeper into the park. He said the sloping land does not lend itself to ball fields or similar activities, a reason they and Parks & Rec staff both recommended it be a passive park. Two public workshops were initially held and 40-50 people attended, including people living in single-family housing along the edge of the park, most of whom wanted the park kept natural.

Mr. Williams said their firm had developed a low-density, low-impact plan for the park, with entrances on two sides – one on Cloninger Mill Road and one on 9<sup>th</sup> Street NE. He described the parking lots, picnic areas, restroom facilities, and various recreation activities proposed in the original master plan. An outdoor classroom was planned, with the parking lot areas off 9<sup>th</sup> Street designed for school bus access. As a passive park, he said the walking trails, mountain bike trails, and disc golf course were the most active recreation activities planned. He said their plan was to make some of the trails ADA-accessible, or at least on one loop trail. Some of the trails will be paved, and some not.

Mr. Williams said the cost estimate they completed in 2008 estimated \$2.8 to \$2.9 million for the total construction, carried out in two phases – Phase I would address the Cloninger Mill Road side of the park, and Phase II, the 9<sup>th</sup> Street side. He said the years of 2008-2009 had been difficult economically, and the economy has grown since then. He said they expect there might be some escalation of costs, but unless something major changes, the cost estimate should be in the same general range.

Mr. Williams asked for questions regarding the original master plan.

Mr. Proctor asked the nature of a disc golf course. Mr. Williams explained that disc golf is a very low impact game, played with Frisbees. It can be played in the open or in woods, but it is not played on a traditional golf course.

Mr. Coley asked what barriers or protections are planned on the Olde Mill Landing side. Mr. Williams said that both fencing and landscaping were proposed for that side, to protect the backyards adjacent to the park.

Ms. Beard said that, considering what they saw during their tour last week, more parking would be needed to accommodate what she assumes would become a very popular park. Mr. Williams said this has been suggested by others, also. He said the small parking lot sited along Cloninger Mill Road would be on steep property, and it could possibly be moved toward Hwy. 127, to a much flatter portion of the 10-acre out parcel.

Ms. Sigler asked if some of the parking designated for the 9<sup>th</sup> Street NE side could be relocated to the other side of the park. She said 9<sup>th</sup> Street is a more of a small lane, not a typical marked street, and it is already congested from local residential traffic. She also noted there is no traffic light at the intersection, and there have already been numerous accidents. Mr. Williams said moving some parking spaces might be possible.

Mr. Proctor asked what the interior along the 9<sup>th</sup> Street side would look like, noting the map says trails and woods, and does that mean all of the vegetation would be cleared. Mr. Williams said it is heavily wooded, and they would clear only what is needed to create the trails and other amenities, but they would not open it up. He said they would do very selective clearing and remove some undergrowth brush, but their original intention was to keep it as natural as possible.

Mr. McLeod said he concurred with Mr. Williams' comments, and there would be no clear-cutting of trees; they will only remove trees to create the trails, while maintaining the park's natural setting. Mr. Williams said the trails are located 125-150 feet off the property line, in all cases. Mr. McLeod said this was a request made by the Olde Mill Landing neighbors during the initial planning process.

The discussion transitioned to how to use the additional 10-acres of land the City received for the park, including other uses and/or activities that should be added or expanded in the park.

Mr. Powers said the 10-acres is relatively flat, and could easily be left as an open, grassy meadow area for picnics, volleyball, or just enjoying nature. He said he liked the idea of moving the main entrance and parking lot up closer to the intersection, since it will be a very dangerous road to get on and off as it is planned now. Mr. Crosby agreed, and further suggested using an area near Hwy. 127 North as the park entrance, instead of the entry from Cloninger Mill Road sited on the master plan map. Mr. Williams said his firm plans to contact the NC Dept. of Transportation (NCDOT) for advice on where that park entrance driveway should be located. He said the driveway shown on the plan could definitely be moved, including toward the Hwy. 127 intersection. In addition, Mr. Williams says he understands a future expansion of Cloninger Mill Road has been discussed. He will ask NCDOT for an update on future road expansion plans, and tie any new information into his planning process.

Mr. Powers said it would be nice if the tree line along Cloninger Mill Road could be maintained.

Mr. Powers suggested a safe, flat area, or a trail, for families to take their kids and teach them how to ride a bicycle. Mr. Williams said a recent suggestion made for a Chapel Hill park was to include relatively straight trails, not only switchbacks, in their trail system.

Ms. Sigler commented that she agreed with the idea to maintain a large, open grassy area. She suggested putting a bike trail around the flat area on the 10-acres, and parents could sit and watch children loop around the open meadow area. She asked if the Mountain Bike Practice Course area was an adequate size. She suggested expanding this course onto the 10-acres, but also use the land for open space, surrounded by a children's bike trail, as was discussed.

Mr. Powers suggested a small dog park.

Mr. Proctor asked if the lake would be visible from the left side of the park, looking down through the woods. Mr. Williams was not certain, but said there are open spots in places. He noted it may be necessary to clear trees to have a good lake view, and said they would take a closer look at that area. Mr. Proctor suggested that, rather than being completely wooded, having some views of the lake from the trails would be nice.

Ms. Beard suggested an area for horseshoes, croquet, volleyball, badminton, etc., some of which are played during the annual Senior Games. Mr. Williams said families holding group events in the park would also appreciate these activities. Ms. Beard expects the park will be enormously popular and used constantly by residents, which should be an advance consideration for planning parking lots and facilities.

Ms. Sigler noted there are two picnic shelters planned, and asked how many individual covered picnic tables would be in the park. Mr. Williams said there would be 8-9 other picnic tables. Ms. Sigler agreed with Ms. Beard, saying the park will be extremely popular, and suggesting more picnic tables be added, as many as possible, to accommodate families.

Ms. Beard asked if there would be grills available for cookouts. Mr. McLeod said grills would be available for use at the picnic shelters.

Mr. Williams presented his list of potential park recreation activities, prepared in advance. He noted that most of these same activities were suggested by members during their discussion. He asked members to vote for the activities they would choose for the park, and suggest new ones. The activities and results were as follows:

<b>Hickory Parks &amp; Recreation Commission Meeting</b>	
Tuesday, September 8, 2015	
<b>CLONINGER MILL PARK EXPANSION DISCUSSION</b>	
≈ Potential Park Recreation Activities ≈	
<b>Suggested Recreation Activity</b>	<b># of Votes for Activity</b>
Open Play Area	11
Walking & Jogging Trails *	11
Community Garden	0
Outdoor Fitness Stations	6
Disc Golf Course	10
Sand Volleyball	9
Shuffleboard Courts	2
Horseshoe Pits	8
Natural Areas	10
Picnic Areas (to increase the # currently proposed)	10
Dog Park	6
Sprayground/Splash Pad	1
Playground	10
Mountain Bike Trails (to expand currently proposed trails)	10
Environmental Education areas	10
Bocce Courts	10
Children's Bike Training Course	10
* 1 member left the meeting & total # present dropped to 10; the City's Communications Intern also participated	

Comments made during the activities discussion and voting included:

- All of the Community Garden spots available in Civitan Park and Taft Broome Park sold out during the past two years; there is no waiting list, so it appears that enough are available.
- Fitness Stations seem out of place; the focus should be more on nature trails and places to relax.
- A Splash Pad project is currently being developed at another City park, and the Friends of Hickory are planning one in their proposed downtown park.
- Mr. Williams said the smaller playground planned near the parking lot off 9<sup>th</sup> Street would remain; the one planned near the parking lot off Cloninger Mill Road could be moved onto 10-acre site, and possibly enlarged. Mr. McLeod said the staff requested that Mr. Williams develop nature-themed playgrounds for the park.
- The Mountain Bike Trail should be expanded.
- Interpretive signage should be posted in the environmental education areas.
- A suggestion was made to cover the Bocce Courts, but Mr. McLeod said most of the ones he has seen were not covered.

There was no additional discussion of specific park activities.

Mr. Coley suggested a protection plan should be put in place to keep children away from the large black pipe that runs through the park, since it would be hard to resist walking along the pipe, if they could get on it.

A suggestion was made that additional restrooms will be needed. Mr. McLeod said that, years ago, a grist mill was located on the park site, and they would like one restroom facility designed accordingly. Mr. Williams said restroom facilities are expensive to build, but he expects there will still be two of them, one on each side of the park. He noted that increasing the number parking spaces would increase the need for additional fixtures inside the restroom facilities. Mr. McLeod said the staff plans to share the Kiwanis Park restroom facility plan with Mr. Williams.

Councilman Hank Guess asked which of Hickory's parks is the largest. Mr. McLeod said Glenn Hilton and Geitner-Rotary Park, combined, would be approximately 96 acres, and Glenn Hilton Park alone is 74 acres. He said the additional 10-acres would bring Cloninger Mill Park to 73-acres, very similar in size to Glenn Hilton Park, which has 81 parking spaces now and another 47 planned, for 128 total parking spaces. Mr. Guess said 128 parking spaces would be the minimum needed to start operations of Cloninger Mill Park. Mr. McLeod said he and Mr. Williams have already discussed increased parking, and a recommendation would be included in the new conceptual plan.

Mr. Crosby said he understands that people will not be able walk easily from one side of the park to the other, and that the park would be built in two phases. Mr. McLeod said this is currently an unfunded project, but once funded, it will be developed in phases. Mr. Crosby said if the main entrance is off Cloninger Mill Road, it seems the majority of parking should be located there. Mr. Williams said any expanded parking added would be along Cloninger Mill Road, not on 9<sup>th</sup> Street. He said that adding more parking spaces creates more storm water runoff; it also increases funds needed for curb and guttering, etc. He suggested creating a flexible plan, and building in either parking expansion or overflow parking. Mr. McLeod said overflow parking lots did not need to be paved, and either grass or gravel could be used.

Mr. Powers asked if the Pedestrian Bridge/Boardwalk Crossing over the creek was still included in the plan, saying it appears to connect the two sides. Mr. Williams said it does, for pedestrians.

Mr. Proctor asked if the trails could be built and opened on the 9<sup>th</sup> Street side, with the restroom facility and parking lot added later. Mr. Williams said the process could be done in phases.

Mr. Powers asked for opinions from Hank Guess and Rodney Miller. Mr. Guess said it was a good process, but his main concern is having adequate parking. He said at the City's most popular parks, available parking is always an issue, especially when school groups arrive in buses. Mr. Miller said he also has parking concerns. He said one of his observations was if the Disc Golf Course is on the right side, with only 25 parking spaces, how would people park on the left side and get to the course; he suggested looking at the current Disc Golf Course numbers at Glenn Hilton Park to track usage. Mr. Miller's other observation was regarding costs; he thinks the construction phasing is a good idea. He said whatever amenities are located on the 9<sup>th</sup> Street side of the park need to match up well with the 25 spaces provided.

Mr. Williams said there is \$900,000 available to spend, and these funds could have a big impact on the initial park construction, including restrooms, parking, trails, infrastructure, etc. He said \$900,000 does not go very far toward building sports facilities, with parking and grading, storm drainage, utilities, etc. He said this park has a lot of flexibility, and if it has to be partially built, and then added onto later, that could be done.

There were no additional comments or suggestions.

Mr. Williams said the next step would be for his firm to develop a conceptual plan for the 10-acres and present it to Commission members. He said the new plan should be ready before the end of the year. Mr. McLeod suggested his presentation be put on the Commission's meeting agenda for Tuesday, December 8. He thanked Mr. Williams for attending and conducting the discussion, and asked members to e-mail him with any further ideas for park activities.

**Matters Not on the Agenda:** Mr. McLeod noted that City Communications Intern Madison Whisnant was preparing a press release on the Bill McDonald Scholarship Fund.

Mr. McLeod said he advised members at their previous meeting of the City's new animal ordinance. Chief Adkins presented it at the previous City Council meeting, and it passed on first reading. The second reading will be next week. Chief Adkins said once the ordinance is adopted, they would begin pushing information out to the public through flyers and would ease into enforcing it. He hopes for voluntary compliance, and noted the ordinance applies only to special events.

Landen Wood reported the Hickory Youth Council's first meeting of the year was held last week. He said they typically choose a theme each year. Their members chose the theme of community service this year, and they will each do as much community service as possible throughout the school year.

Mr. McLeod said the project to increase parking at Glenn Hilton Park goes back to City Council for approval on second reading next week, and then they will proceed. They expect the additional 47 overflow parking spaces will be ready prior to spring 2016, when park attendance increases.

Joyce Beard said a tour of all parks would be helpful to new members. Mr. McLeod said to expect a parks tour during the fall.

**Next Meeting:** The next meeting will be on Tuesday, October 13, 2015, 12:00 Noon, in the Community Room at Highland Recreation Center.

**Adjourn:** Mr. Coley thanked everyone for attending. There being no further business, the meeting adjourned at 1:15 pm.

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Lloyd Coley, Chair  
Hickory Parks and Recreation Commission

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Anne Starnes, Minutes Clerk  
City of Hickory

**Cloninger Mill Park**  
**Order of Magnitude Budget Estimate**  
**January 4, 2016**

**PHASE TWO**

Item	
Clearing Budget	\$21,000.00
Grading/ Erosion Control Budget	\$271,769.50
Storm Sewer Budget	\$96,845.00
Paving Budget	\$112,760.00
Paving Budget - Public Sidewalks Within Right-Of-Way	\$36,360.00
Utilities Budget	\$51,222.00
Picnic Shelters and Site Furnishing Budget	\$389,130.00
Landscaping Budget	\$23,960.00
Entrances, Gates, Trails, Mountain Bike, Disc Golf Budget	\$32,800.00
Trail Budget	\$66,451.00
Disc Golf Course Budget	\$15,000.00
<b>Sub-Total Construction Budget</b>	<b>\$1,117,297.50</b>
Contractor overhead and general conditions (14%)	\$156,421.65
<b>Total Project Construction Budget</b>	<b>\$1,273,719.15</b>
<b>Contingency - (10%)</b>	<b>\$127,371.92</b>
<b>Project Development Budget</b>	<b>\$1,401,091.07</b>
<b>Planning, Geotechnical and Design Services - (10%)</b>	<b>\$140,109.11</b>
<b>Total Estimated Phase Two Park Project Cost</b>	<b>\$1,541,200.17</b>

**Clearing**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Clearing & Grubbing Wooded Area	acre	3.0	\$7,000.00	\$21,000.00
				Clearing Cost	<b>\$21,000.00</b>

**Grading/ Erosion Control**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Construction Layout and Mobilization	acre	3	\$3,800.00	\$11,400.00
2	Diversion Ditch	lf	800	\$4.00	\$3,200.00
3	Rock Check Dam	ea	8	\$550.00	\$4,400.00
4	Silt Fence	lf	6,480	\$6.00	\$38,880.00
5	Sediment Basin-riser type	ea	1	\$12,500.00	\$12,500.00
6	Sediment Trap, small	ea	4	\$6,100.00	\$24,400.00
7	Temporary Ring Filters	ea	1	\$550.00	\$550.00
8	Bulk Grading -Cut	cy	11,000	\$6.00	\$66,000.00
9	Bulk Grading - Fill	cy	11,000	\$6.00	\$66,000.00
10	Strip Topsoil, 6"	cy	2,420	\$5.00	\$12,100.00
11	Inlet Protection	ea	4	\$250.00	\$1,000.00
12	Fine Grade Roads/ Parking	sy	3,005	\$2.00	\$6,010.00
13	Fine Grade Trail	sy	6,053	\$1.50	\$9,079.50
14	Temporary Construction Entrance	ea	1	\$1,800.00	\$1,800.00
15	Temporary Matting	sf	7,500	\$1.50	\$11,250.00
16	Temporary Grassing	acre	2	\$1,600.00	\$3,200.00
				Grading & Erosion Control Cost	<b>\$271,769.50</b>

**Storm Sewer**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Catch Basin/ Yard Inlets-std	ea	4	\$1,980.00	\$7,920.00
2	12" RCP	lf	175	\$24.00	\$4,200.00
3	15" RCP	lf	70	\$30.00	\$2,100.00
4	15" FES	ea	1	\$440.00	\$440.00
5	24" RCP	lf	75	\$39.00	\$2,925.00
6	24" FES	ea	1	\$900.00	\$900.00
7	36" RCP	lf	120	\$63.00	\$7,560.00
8	36" FES	ea	2	\$2,000.00	\$4,000.00
9	15" RCP Trail Culverts	lf	600	\$30.00	\$18,000.00
10	15" FES For Trail Culverts	ea	40	\$440.00	\$17,600.00
11	Fittings	ls	1	\$1,000.00	\$1,000.00
12	Wet Detention Allowance (plants and pipe)	ls	1	\$25,000.00	\$25,000.00
13	Riprap	ton	80	\$65.00	\$5,200.00
				Storm Sewer Cost	<b>\$96,845.00</b>

**Paving - Roads & Sidewalks**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Asphalt Paving (Roads & Parking), 2"	ton	308	\$125.00	\$38,500.00
2	ABC (Roads & Parking), 6"	ton	840	\$25.00	\$21,000.00
3	Pavement Markings and ADA Signage	ls	1	\$2,500.00	\$2,500.00
4	Curb and Gutter, 1-6"	lf	1,500	\$18.00	\$27,000.00
5	Concrete Sidewalk	sy	620	\$38.00	\$23,560.00
6	Precast Conc. Wheelstops	ea	2	\$100.00	\$200.00
				Paving Cost	<b>\$112,760.00</b>

**Paving - Public Sidewalks within Right-of-Way**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	9th Street, Conc Sidewalk (5' @ 1475 LF)	sy	820	\$38.00	\$31,160.00
2	9th Street Sidewalk Preparation	ls	1	\$5,200.00	\$5,200.00
				Public Sidewalk Cost	<b>\$36,360.00</b>

**Utilities**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	2" Domestic Water	lf	720	\$12.00	\$8,640.00
2	2" Meter and Tap	ea	1	\$5,099.00	\$5,099.00
3	2" RPZ Backflow Preventer	ea	1	\$6,000.00	\$6,000.00
4	4" Sanitary Tap	ea	1	\$11,608.00	\$11,608.00
5	4" PVC Sanitary Sewer	lf	225	\$14.00	\$3,150.00
6	Valves, Tees, Connections	ls	1	\$1,900.00	\$1,900.00
7	4" PVC Cleanouts	ea	3	\$275.00	\$825.00
8	Manual Yard Hydrant	ea	1	\$1,500.00	\$1,500.00
9	Drinking Fountain, Service Line, Assemblies	ea	1	\$7,500.00	\$7,500.00
10	Secondary Electrical Service	ls	1	\$5,000.00	\$5,000.00
				Utilities Cost	<b>\$51,222.00</b>

**Picnic Shelters and Furnishings**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Picnic Shelter (30'x70') w/ Restroom	ls	1	\$250,000.00	\$250,000.00
2	Bench	ea	12	\$800.00	\$9,600.00
3	Grill	ea	3	\$960.00	\$2,880.00
4	Trash Receptacles	ea	4	\$700.00	\$2,800.00
5	Bike Rack for 7 on Concrete Pad	ea	1	\$1,000.00	\$1,000.00
6	Play Equipment Allowance	ls	1	\$35,000.00	\$35,000.00
7	Playground Surfacing	cy	250	\$31.00	\$7,750.00
8	Playground Site Preparation	ls	1	\$8,000.00	\$8,000.00
9	Picnic Tables	ea	8	\$1,200.00	\$9,600.00
10	Covered Picnic Tables on Concrete Pad	ea	7	\$3,000.00	\$21,000.00
11	Message Center	ea	1	\$1,500.00	\$1,500.00
12	Wood Fence	lf	600	\$20.00	\$12,000.00
13	Outdoor Classroom	ls	1	\$28,000.00	\$28,000.00
				Amenities Cost	<b>\$389,130.00</b>

**Landscaping**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Planting Allowance	ls	1	\$20,000.00	\$20,000.00
2	Permanent grassing	ac	2	\$1,980.00	\$3,960.00
				Landscaping Cost	<b>\$23,960.00</b>

**Entrances, Gates, and Signage**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Stained Wood Fence, 4 rail	lf	400	\$32.00	\$12,800.00
2	Metal Service Gate	ea	2	\$3,000.00	\$6,000.00
3	Sign Allowance (2 entrances)	ea	2	\$7,000.00	\$14,000.00
				Entrance Cost	<b>\$32,800.00</b>

**Trails - 6,810 linear feet**

Selective Clearing / Grading / Drainage Costs Allocated In Other Cost Estimate Categories

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Gravel Trail 5" (2" crushed fines/portland cement and 3" portland cement/ABC)	ton	1,513	\$27.00	\$40,851.00
2	Boardwalks	lf	120	\$175.00	\$21,000.00
3	Bollards	ea	6	\$200.00	\$1,200.00
4	Bollards, Removable	ea	4	\$400.00	\$1,600.00
5	Trail Markers	ls	12	\$150.00	\$1,800.00
				Trail Cost	<b>\$66,451.00</b>

**Disc Golf Course** (Allowance)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Disc Golf Equipment -18 holes	ls	1	\$10,000.00	\$10,000.00
2	Concrete Pads, selective clearing	ls	1	\$5,000.00	\$5,000.00
				Course Cost	<b>\$15,000.00</b>

**Cloninger Mill Park**  
**Order of Magnitude Budget Estimate**  
**January 4, 2016**

**PHASE ONE**

Item	
Clearing Budget	\$49,000.00
Grading/ Erosion Control Budget	\$348,075.00
Storm Sewer Budget	\$149,155.00
Paving Budget	\$260,868.00
Paving Budget - Public Sidewalks Within Right-Of-Way	\$46,824.00
Utilities Budget	\$112,802.00
Picnic Shelters and Site Furnishing Budget	\$440,358.00
Landscaping Budget	\$32,324.00
Vehicular Entrances, Gates, Signage and Buffers Budget	\$10,000.00
Trail Budget	\$201,297.00
Mountain Bike Practice Course Budget	\$36,000.00
Bocce Courts Budget	\$5,000.00
Volleyball Courts	\$20,617.00
Outdoor Fitness Stations	\$18,000.00
<b>Sub-Total Construction Budget</b>	<b>\$1,730,320.00</b>
Contractor overhead and general conditions (14%)	\$242,244.80
<b>Total Project Construction Budget</b>	<b>\$1,972,564.80</b>
Contingency - (10%)	\$197,256.48
<b>Project Development Budget</b>	<b>\$2,169,821.28</b>
Planning, Geotechnical and Design Services - (10%)	\$216,982.13
<b>Total Estimated Phase One Park Project Cost</b>	<b>\$2,386,803.41</b>

**Clearing**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Clearing & Grubbing Wooded Area	acre	7.0	\$7,000.00	\$49,000.00
				Clearing Cost	<b>\$49,000.00</b>

**Grading/ Erosion Control**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Construction Layout and Mobilization	acre	7	\$3,800.00	\$26,600.00
2	Diversion Ditch	lf	2,400	\$4.00	\$9,600.00
3	Rock Check Dam	ea	15	\$550.00	\$8,250.00
4	Silt Fence	lf	4,542	\$6.00	\$27,252.00
5	Sediment Basin-riser type	ea	1	\$12,500.00	\$12,500.00
6	Sediment Trap, small	ea	2	\$6,100.00	\$12,200.00
7	Temporary Ring Filters	ea	0	\$550.00	\$0.00
8	Bulk Grading - Cut	cy	16,250	\$6.00	\$97,500.00
9	Bulk Grading - Fill	cy	16,250	\$6.00	\$97,500.00
10	Strip Topsoil, 6"	cy	5,102	\$5.00	\$25,510.00
11	Inlet Protection	ea	7	\$250.00	\$1,750.00
12	Fine Grade Roads/ Parking	sy	6,254	\$2.00	\$12,508.00
13	Fine Grade Trail	sy	2,370	\$1.50	\$3,555.00
14	Temporary Construction Entrance	ea	1	\$1,800.00	\$1,800.00
15	Temporary Matting	sf	4,500	\$1.50	\$6,750.00
16	Temporary Grassing	acre	3	\$1,600.00	\$4,800.00
				Grading & Erosion Control Cost	<b>\$348,075.00</b>

**Storm Sewer**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Catch Basin/ Yard Inlets-std	ea	10	\$1,980.00	\$19,800.00
2	12" RCP	lf	120	\$24.00	\$2,880.00
3	15" RCP	lf	470	\$30.00	\$14,100.00
4	18" RCP	lf	90	\$36.00	\$3,240.00
5	24" RCP	lf	180	\$39.00	\$7,020.00
6	24" FES	ea	2	\$900.00	\$1,800.00
7	24" RCP Driveway Culvert	lf	90	\$39.00	\$3,510.00
8	36" RCP	lf	130	\$63.00	\$8,190.00
9	36" FES	ea	1	\$2,000.00	\$2,000.00
10	15" RCP Trail Culverts	lf	540	\$30.00	\$16,200.00
11	15" FES For Trail Culverts	ea	36	\$440.00	\$15,840.00
12	Fittings	ls	1	\$1,000.00	\$1,000.00
13	Wet Detention Allowance (plants and pipe)	ls	1	\$50,000.00	\$50,000.00
14	Riprap	ton	55	\$65.00	\$3,575.00
				Storm Sewer Cost	<b>\$149,155.00</b>

**Paving - Roads & Sidewalks**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Standard Duty Asphalt Paving, 2"	ton	645	\$125.00	\$80,625.00
2	ABC (Parking), 6"	ton	1,743	\$25.00	\$43,575.00
3	Pavement Markings and ADA Signage	ls	1	\$2,500.00	\$2,500.00
4	Curb and Gutter, 1-6"	lf	2,442	\$18.00	\$43,956.00
5	Concrete Sidewalk / Promenade Loop	sy	2,374	\$38.00	\$90,212.00
6	Precast Conc. Wheelstops	ea	0	\$100.00	\$0.00
				Paving Cost	<b>\$260,868.00</b>

**Paving - Public Sidewalks within Right-of-Way**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Cloninger Mill, Conc Sidewalk (5' @ 1886 LF)	sy	1,048	\$38.00	\$39,824.00
2	Cloninger Mill, Sidewalk Preparation	ls	1	\$7,000.00	\$7,000.00
				Public Sidewalk Cost	<b>\$46,824.00</b>

**Utilities**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	2" Domestic Water	lf	320	\$12.00	\$3,840.00
3	2" Domestic Water Meter and Tap Fee	ea	1	\$5,099.00	\$5,099.00
4	2" RPZ Backflow Preventer	ea	1	\$6,000.00	\$6,000.00
5	Valves, Tees, Connections	ls	1	\$1,900.00	\$1,900.00
6	Manual Yard Hydrant	ea	1	\$1,500.00	\$1,500.00
7	6" Fire Water Line	lf	135	\$25.00	\$3,375.00
8	6" RPZ	ea	1	\$12,000.00	\$12,000.00
9	6" Fire Water Tap Fee and Meter	ea	1	\$33,340.00	\$33,340.00
10	Fire Hydrant Assembly	ea	1	\$4,000.00	\$4,000.00
11	Bore Pit	ea	1	\$3,000.00	\$3,000.00
12	Jack and Bore	lf	40	\$40.00	\$1,600.00
13	Casing	lf	40	\$45.00	\$1,800.00
14	4" Sanitary Tap	ea	1	\$11,608.00	\$11,608.00
15	4" PVC Sanitary Sewer	lf	685	\$14.00	\$9,590.00
16	4" PVC Cleanouts	ea	6	\$275.00	\$1,650.00
17	Drinking Fountain, Service Line, Assemblies	ea	1	\$7,500.00	\$7,500.00
18	Secondary Electrical Service	ls	1	\$5,000.00	\$5,000.00
				Utilities Cost	<b>\$112,802.00</b>

**Picnic Shelters and Furnishings**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Picnic Shelter (30'X70') w/ Restroom	ls	1	\$250,000.00	\$250,000.00
2	Picnic Shelter (30'x40')	ea	2	\$18,000.00	\$36,000.00
3	Bench	ea	8	\$800.00	\$6,400.00
4	Grill	ea	4	\$960.00	\$3,840.00
5	Trash Receptacles	ea	4	\$700.00	\$2,800.00
6	Bike Rack for 7 on Concrete Pad	ea	1	\$1,000.00	\$1,000.00
7	Play Equipment Allowance	ls	1	\$75,000.00	\$75,000.00
8	Playground Surfacing	cy	278	\$31.00	\$8,618.00
9	Playground Site Preparation	ls	1	\$12,000.00	\$12,000.00
10	Picnic Tables	ea	16	\$1,200.00	\$19,200.00
11	Covered Picnic Tables on concrete pad	ea	3	\$3,000.00	\$9,000.00
12	Message Center	ea	1	\$1,500.00	\$1,500.00
13	Dumpster Fence and Gate	ls	1	\$15,000.00	\$15,000.00
14	Outdoor Classroom	ls	N/A	\$28,000.00	\$0.00
				Amenities Cost	<b>\$440,358.00</b>

**Landscaping**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Planting Allowance	ls	1	\$20,000.00	\$20,000.00
2	Permanent grassing	ac	3	\$1,980.00	\$5,940.00
3	Open Play Lawn Seeding	sf	79,800	\$0.08	\$6,384.00
				Landscaping Cost	<b>\$32,324.00</b>

**Entrances, Gates, and Signage**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Metal Service Gate	ea	1	\$3,000.00	\$3,000.00
2	Sign Allowance (1 entrance)	ls	1	\$7,000.00	\$7,000.00
				Entrance Cost	<b>\$10,000.00</b>

**Trails - 3,268 linear feet**

Selective Clearing / Grading / Drainage Costs Allocated In Other Cost Estimate Categories

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Gravel Trail 5" (2" crushed fines/portland cement and 3" portland cement/ABC)	ton	911	\$27.00	\$24,597.00
2	Boardwalks	lf	N/A	\$175.00	\$0.00
3	Pre-Engineered Bridges and Abutments	lf	110	\$1,500.00	\$165,000.00
4	Access Control Fence	lf	250	\$34.00	\$8,500.00
5	Bollards	ea	4	\$200.00	\$800.00
6	Bollards, Removable	ea	3	\$400.00	\$1,200.00
7	Trail Markers	ls	8	\$150.00	\$1,200.00
				Trail Cost	<b>\$201,297.00</b>

**Mountain Bike Practice Course** (Allowance)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Mtn. Bike Practice Course (1+/- mile trail)	ls	1	\$36,000.00	\$36,000.00
				Course Cost	<b>\$36,000.00</b>

**Bocce Courts**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Bocce Court	ea	2	\$2,500.00	\$5,000.00
				Bocce Cost	<b>\$5,000.00</b>

**Volleyball Courts**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Sand, USGA	ton	543	\$25.00	\$13,575.00
2	Fabric	sy	824	\$1.75	\$1,442.00
3	Sub-drain System (collector only)	lf	120	\$5.00	\$600.00
4	Nets, Post, Equipment	ea	2	\$2,500.00	\$5,000.00
				Volleyball Cost	<b>\$20,617.00</b>

**Fitness Equipment**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Fitness Equipment - 3 Stations	ea	3	\$6,000.00	\$18,000.00
				Fitness Equipment Cost	<b>\$18,000.00</b>

**Cloninger Mill Park**  
**Order of Magnitude Budget Estimate**  
**January 4, 2016**

**PHASE TWO**

Item	
Clearing Budget	\$21,000.00
Grading/ Erosion Control Budget	\$271,769.50
Storm Sewer Budget	\$96,845.00
Paving Budget	\$112,760.00
Paving Budget - Public Sidewalks Within Right-Of-Way	\$36,360.00
Utilities Budget	\$51,222.00
Picnic Shelters and Site Furnishing Budget	\$389,130.00
Landscaping Budget	\$23,960.00
Entrances, Gates, Trails, Mountain Bike, Disc Golf Budget	\$32,800.00
Trail Budget	\$66,451.00
Disc Golf Course Budget	\$15,000.00
<b>Sub-Total Construction Budget</b>	<b>\$1,117,297.50</b>
Contractor overhead and general conditions (14%)	\$156,421.65
<b>Total Project Construction Budget</b>	<b>\$1,273,719.15</b>
<b>Contingency - (10%)</b>	<b>\$127,371.92</b>
<b>Project Development Budget</b>	<b>\$1,401,091.07</b>
<b>Planning, Geotechnical and Design Services - (10%)</b>	<b>\$140,109.11</b>
<b>Total Estimated Phase Two Park Project Cost</b>	<b>\$1,541,200.17</b>

**Clearing**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Clearing & Grubbing Wooded Area	acre	3.0	\$7,000.00	\$21,000.00
				Clearing Cost	<b>\$21,000.00</b>

**Grading/ Erosion Control**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Construction Layout and Mobilization	acre	3	\$3,800.00	\$11,400.00
2	Diversion Ditch	lf	800	\$4.00	\$3,200.00
3	Rock Check Dam	ea	8	\$550.00	\$4,400.00
4	Silt Fence	lf	6,480	\$6.00	\$38,880.00
5	Sediment Basin-riser type	ea	1	\$12,500.00	\$12,500.00
6	Sediment Trap, small	ea	4	\$6,100.00	\$24,400.00
7	Temporary Ring Filters	ea	1	\$550.00	\$550.00
8	Bulk Grading -Cut	cy	11,000	\$6.00	\$66,000.00
9	Bulk Grading - Fill	cy	11,000	\$6.00	\$66,000.00
10	Strip Topsoil, 6"	cy	2,420	\$5.00	\$12,100.00
11	Inlet Protection	ea	4	\$250.00	\$1,000.00
12	Fine Grade Roads/ Parking	sy	3,005	\$2.00	\$6,010.00
13	Fine Grade Trail	sy	6,053	\$1.50	\$9,079.50
14	Temporary Construction Entrance	ea	1	\$1,800.00	\$1,800.00
15	Temporary Matting	sf	7,500	\$1.50	\$11,250.00
16	Temporary Grassing	acre	2	\$1,600.00	\$3,200.00
				Grading & Erosion Control Cost	<b>\$271,769.50</b>

**Storm Sewer**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Catch Basin/ Yard Inlets-std	ea	4	\$1,980.00	\$7,920.00
2	12" RCP	lf	175	\$24.00	\$4,200.00
3	15" RCP	lf	70	\$30.00	\$2,100.00
4	15" FES	ea	1	\$440.00	\$440.00
5	24" RCP	lf	75	\$39.00	\$2,925.00
6	24" FES	ea	1	\$900.00	\$900.00
7	36" RCP	lf	120	\$63.00	\$7,560.00
8	36" FES	ea	2	\$2,000.00	\$4,000.00
9	15" RCP Trail Culverts	lf	600	\$30.00	\$18,000.00
10	15" FES For Trail Culverts	ea	40	\$440.00	\$17,600.00
11	Fittings	ls	1	\$1,000.00	\$1,000.00
12	Wet Detention Allowance (plants and pipe)	ls	1	\$25,000.00	\$25,000.00
13	Riprap	ton	80	\$65.00	\$5,200.00
				Storm Sewer Cost	<b>\$96,845.00</b>

**Paving - Roads & Sidewalks**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Asphalt Paving (Roads & Parking), 2"	ton	308	\$125.00	\$38,500.00
2	ABC (Roads & Parking), 6"	ton	840	\$25.00	\$21,000.00
3	Pavement Markings and ADA Signage	ls	1	\$2,500.00	\$2,500.00
4	Curb and Gutter, 1-6"	lf	1,500	\$18.00	\$27,000.00
5	Concrete Sidewalk	sy	620	\$38.00	\$23,560.00
6	Precast Conc. Wheelstops	ea	2	\$100.00	\$200.00
				Paving Cost	<b>\$112,760.00</b>

**Paving - Public Sidewalks within Right-of-Way**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	9th Street, Conc Sidewalk (5' @ 1475 LF)	sy	820	\$38.00	\$31,160.00
2	9th Street Sidewalk Preparation	ls	1	\$5,200.00	\$5,200.00
				Public Sidewalk Cost	<b>\$36,360.00</b>

**Utilities**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	2" Domestic Water	lf	720	\$12.00	\$8,640.00
2	2" Meter and Tap	ea	1	\$5,099.00	\$5,099.00
3	2" RPZ Backflow Preventer	ea	1	\$6,000.00	\$6,000.00
4	4" Sanitary Tap	ea	1	\$11,608.00	\$11,608.00
5	4" PVC Sanitary Sewer	lf	225	\$14.00	\$3,150.00
6	Valves, Tees, Connections	ls	1	\$1,900.00	\$1,900.00
7	4" PVC Cleanouts	ea	3	\$275.00	\$825.00
8	Manual Yard Hydrant	ea	1	\$1,500.00	\$1,500.00
9	Drinking Fountain, Service Line, Assemblies	ea	1	\$7,500.00	\$7,500.00
10	Secondary Electrical Service	ls	1	\$5,000.00	\$5,000.00
				Utilities Cost	<b>\$51,222.00</b>

**Picnic Shelters and Furnishings**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Picnic Shelter (30'x70') w/ Restroom	ls	1	\$250,000.00	\$250,000.00
2	Bench	ea	12	\$800.00	\$9,600.00
3	Grill	ea	3	\$960.00	\$2,880.00
4	Trash Receptacles	ea	4	\$700.00	\$2,800.00
5	Bike Rack for 7 on Concrete Pad	ea	1	\$1,000.00	\$1,000.00
6	Play Equipment Allowance	ls	1	\$35,000.00	\$35,000.00
7	Playground Surfacing	cy	250	\$31.00	\$7,750.00
8	Playground Site Preparation	ls	1	\$8,000.00	\$8,000.00
9	Picnic Tables	ea	8	\$1,200.00	\$9,600.00
10	Covered Picnic Tables on Concrete Pad	ea	7	\$3,000.00	\$21,000.00
11	Message Center	ea	1	\$1,500.00	\$1,500.00
12	Wood Fence	lf	600	\$20.00	\$12,000.00
13	Outdoor Classroom	ls	1	\$28,000.00	\$28,000.00
				Amenities Cost	<b>\$389,130.00</b>

**Landscaping**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Planting Allowance	ls	1	\$20,000.00	\$20,000.00
2	Permanent grassing	ac	2	\$1,980.00	\$3,960.00
				Landscaping Cost	<b>\$23,960.00</b>

**Entrances, Gates, and Signage**

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Stained Wood Fence, 4 rail	lf	400	\$32.00	\$12,800.00
2	Metal Service Gate	ea	2	\$3,000.00	\$6,000.00
3	Sign Allowance (2 entrances)	ea	2	\$7,000.00	\$14,000.00
				Entrance Cost	<b>\$32,800.00</b>

**Trails - 6,810 linear feet**

Selective Clearing / Grading / Drainage Costs Allocated In Other Cost Estimate Categories

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Gravel Trail 5" (2" crushed fines/portland cement and 3" portland cement/ABC)	ton	1,513	\$27.00	\$40,851.00
2	Boardwalks	lf	120	\$175.00	\$21,000.00
3	Bollards	ea	6	\$200.00	\$1,200.00
4	Bollards, Removable	ea	4	\$400.00	\$1,600.00
5	Trail Markers	ls	12	\$150.00	\$1,800.00
				Trail Cost	<b>\$66,451.00</b>

**Disc Golf Course** (Allowance)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Disc Golf Equipment -18 holes	ls	1	\$10,000.00	\$10,000.00
2	Concrete Pads, selective clearing	ls	1	\$5,000.00	\$5,000.00
				Course Cost	<b>\$15,000.00</b>

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