



CLAYTON COUNTY'S GREENWAY TRAIL MASTER PLAN

February 24, 2015

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Prepared for the Clayton County Department of Parks and Recreation's Greenspace Division

Prepared by the PATH Foundation and KAIZEN Collaborative



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Executive Summary

Historically, Clayton County resembled every other close-in metro Atlanta county in that it catered to vehicular-based development while forgetting to include pedestrians and cyclists. Over the years, a few neighborhoods and arterials have been retrofitted with sidewalks to try to fill the void, but overall, little has been done to accommodate pedestrians and cyclists within the public right-of-way.

However, by 2013, the leadership of Clayton County recognized the need to join the national movement embracing non-vehicular transportation modes by providing infrastructure making it safe and enjoyable to get around without a car. Clayton County's leadership realized it needed a comprehensive trail system to encourage non-motorized travel and promote a healthier, happier lifestyle for residents throughout the county. Therefore, stakeholders from key Clayton County government departments, public entities, and private businesses met with The PATH Foundation and KAIZEN Collaborative in March 2014 to address this missing piece. Clayton Connects, a 21st century multi-use trail master plan executed by PATH and KAIZEN Collaborative, is the result of that first meeting. It establishes the infrastructure vision necessary to thrust this densely populated county to the forefront of Metro Atlanta counties.

The *Clayton Connects* master plan identifies 112 miles of linear parks and trails that will weave through Clayton County connecting parks, schools, businesses, and neighborhoods. The plan also recommends initial segments of the trail system in each commission district to be built immediately. Building a 'model mile' in four locations will help kick start implementation of the entire system. Such a springboard will certainly lead to more non-vehicular commuting, a healthier community, and additional funding for future trail segments.

The *Clayton Connects* master plan also includes estimates for completing the four model miles along with a unit pricing matrix for future segments. With Clayton County SPLOST money in hand, an adopted plan in place, and a committed private partner with experience building trails, there is no reason why Clayton County cannot have a world class trail system in place within ten years.



Trail users enjoy the Panola Mountain State Park greenway trail across Alexanders Lake.

1.0 Introduction

Most Clayton County neighborhoods enjoy a relaxed, small town feel as if they were miles from the city that spawned their existence. In reality, these neighborhoods are minutes away from major highways, thriving employment centers, exceptional education facilities, and Hartsfield Jackson International Airport, making them very desirable places to live. Virtually every amenity desired in a major city is a short car ride away from these neighborhoods.

The Clayton County Commissioners and staff recognize the need to establish a greenway trail network to ease dependency on the automobile and promote a healthier, happier lifestyle for their constituents. Younger generations and health conscious citizens are migrating toward communities where they can walk and bike rather than drive a car. Employers are choosing to locate in communities with a large population of young, educated employees. Clayton County must provide the infrastructure to facilitate walking and biking in order to compete for business and industry that will employ today's generation of workers.

The *Clayton Connects* Master plan proposes a network of greenways and shared-use trails that will connect neighborhoods to schools, shopping, employment centers and parks. Neighborhoods and destinations previously divided by major highways, railroads, and waterways will be connected at a human level, promoting car-free travel, neighborhood cohesiveness, and a healthier citizenry. The trail system will provide the opportunity for a more active lifestyle in communities previously isolated from neighboring parks, schools and employment centers. The trail system proposed herein will make the County more competitive in the global, national, and local market for new businesses and the workers they seek to employ.

This document details opportunities to retrofit the County with a 112 mile trail system that takes advantage of existing public greenspace, parks, land owned



The 200th mile of trail constructed by the PATH Foundation on April 10, 2014.

by major institutions, and undevelopable land that should be available for trail corridors. The county's Special Local Option Sales Tax (SPLOST) fund can be a major source of funding to kick start implementation of the plan. With a comprehensive plan in place and plans to build the first miles of the system in place, the County is poised to attract their share of new generation businesses and workers.

Let's get busy Connecting Clayton!

2.0 Methodology

2.1 PATH/Clayton County Master Agreement

On August 20, 2013, the Clayton County Commission approved a master agreement with the PATH Foundation to provide planning, design, and construction oversight for the development of the County's greenway trail system. The PATH team was selected based on their experience building over 220 miles of similar trails in adjoining counties. The County viewed PATH as a desirable partner because of their expertise and the potential funding the organization may contribute to the trails they build.

The master agreement executed in 2013 allows the partnership to develop individual projects using a simple project agreement that briefly describes the project, the estimated cost, and the funding sources for the project. The partnership anticipates utilizing parks and greenspace SPLOST, private sector funding through PATH, and other public and private funding to build the system of trails.

In January 2014, Clayton County executed the first project agreement to hire the PATH Foundation to prepare a county-wide greenway trail master plan. PATH chose KAIZEN Collaborative to help create the plan represented by this document.

2.2 Planning Process

The *Clayton Connects* document is intended to serve as the blueprint for Clayton County's greenway trail development for the next 20+ years, a streamlined planning process was initiated with an on-the-ground approach to assessing feasible trail corridors. PATH began the planning process by introducing the benefits of greenway trails, forming a steering committee, and establishing overall goals for the greenway trail system. Data collection and field work was followed by the development of branding options, design standards, and a preliminary greenway trail master plan. Each step in the process was vetted with the steering committee and the adjacent neighborhoods.

chapter two



The 2013 Silver Comet Trail Economic Impact Analysis and Planning Study reported \$60 million dollars annually were spent with the three counties along the greenway trail.

2.3 Steering Committee

The *Clayton Connects* Steering Committee was first convened on March 12, 2014. Clayton County Parks and Recreation Department and Greenspace Division identified Steering Committee representatives from the following departments, organizations, and municipalities:

- Clayton County Board of Commissioners
- Clayton County Board of Health
- Clayton County Community Development
- Clayton County Department of Transportation
- Clayton County Office of Economic Development
- Clayton County Police
- Clayton County Public Schools
- Clayton County Water Authority
- Clayton State University
- Greenspace Trust Board

- Southern Regional Medical Center
- City of College Park
- City of Jonesboro
- City of Lovejoy
- City of Morrow
- City of Riverdale
- Lake City

(A list of individual Steering Committee Members is included as the Appendix)

The first meeting was structured as a work session to present examples of multi-use trail projects, discuss benefits of greenway trails, and introduce proposed standards for the Clayton County trail system. The primary goals for creating the greenway trail system presented during the work session were:

- Create a viable network for walking and biking to key destinations
- Provide opportunities for improving health and wellness
- Increase real property values and tourism
- Extend, improve, and brand existing trails within the county
- Protect the quality of natural areas, creeks, and river corridors

After spending several months collecting field data, PATH's design team reconvened the Steering Committee to review the proposed trail corridors and offer feedback. The design team also revealed the proposed trail system logo, *Clayton Connects*, along with trail amenity options for the Steering Committee's consideration. The Steering Committee then selected trail design standards in order to create an identity for the *Clayton Connects* trail system.

After meeting individually with each County Commissioner and additional stakeholders identified along the proposed trail routes, and completing additional field work, PATH's design team presented the Steering Committee with the final master plan, implementation strategy, and final trail design standards.



The Clayton Connects Steering Committee initial meeting was held in March 2014.

2.4 Data Collection and Analysis

Using the County GIS data and the 2008 *Comprehensive Trail Plan*, analysis of existing and proposed trail connections within Clayton County focused on the following criteria:

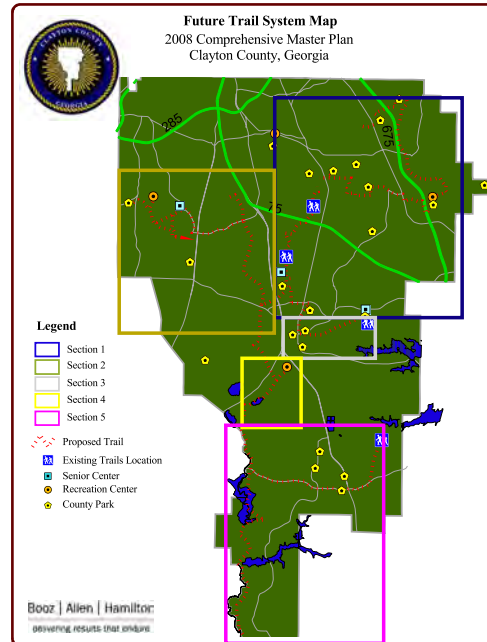
- Is the trail route feasible for construction?
- Is the trail route appealing to all users?
- Is the trail route perceived as safe?
- Is the trail route connecting desirable destinations?

Over a three-month period, PATH's design team spent 200+ hours conducting field work and analyzing data to determine if the trail routes were feasible, appealing, safe, and destination driven. The design team recorded and transferred all information onto field maps and into ArcGIS once they validated all the routes.

2.5 Greenway Trail Development

Steering Committee input, assessment of field data, and analysis of GIS data (aerial photography, elevation contours, rivers, flood plains, and property ownership) led to outlining the following elements used to develop the *Clayton Connects* plan:

- Extend and strengthen existing trails within Clayton County.
- Connect major destinations to encourage use as transportation corridors including:
 - College Park
 - Lovejoy
 - Ellenwood
 - Morrow
 - Forest Park
 - Rex
 - Jonesboro
 - Riverdale
 - Lake City
- Connect existing parks and greenspace to provide linear park corridors for recreation including:
 - 670 acres of park land
 - 35 county parks
 - various city parks
 - 2.5 miles of existing greenway trails
- Identify regional connections to the City of College Park, City of Atlanta, and DeKalb County.



The 2008 Comprehensive Parks and Recreation Master Plan was the only document outlining the future trail system for Clayton County. Each proposed trail segment was assessed and altered to meet the Clayton Connects trail system goals and criteria.

2.6 Public Meeting

The PATH Foundation and KAIZEN Collaborative presented the *Clayton Connects* plan at a public meeting coordinated and hosted by Clayton County Department of Parks and Recreation (CCDPR) at International Park on November 17, 2014. During the meeting, the design team outlined the benefits



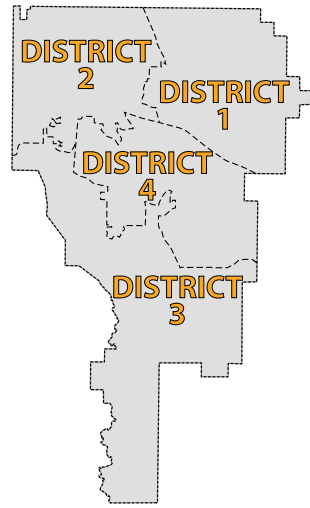
November 17th Public Meeting at the International Park

of trails and shared the master planning process for the *Clayton Connects* trail system, then presented the master plan and design standards. The second half of the meeting focused on implementation of the first segment of the system at International Park. The vast majority of the attendees were supportive of the plan and the initial segment at International Park.

3.0 Clayton Connects Master Plan

3.1 Overview

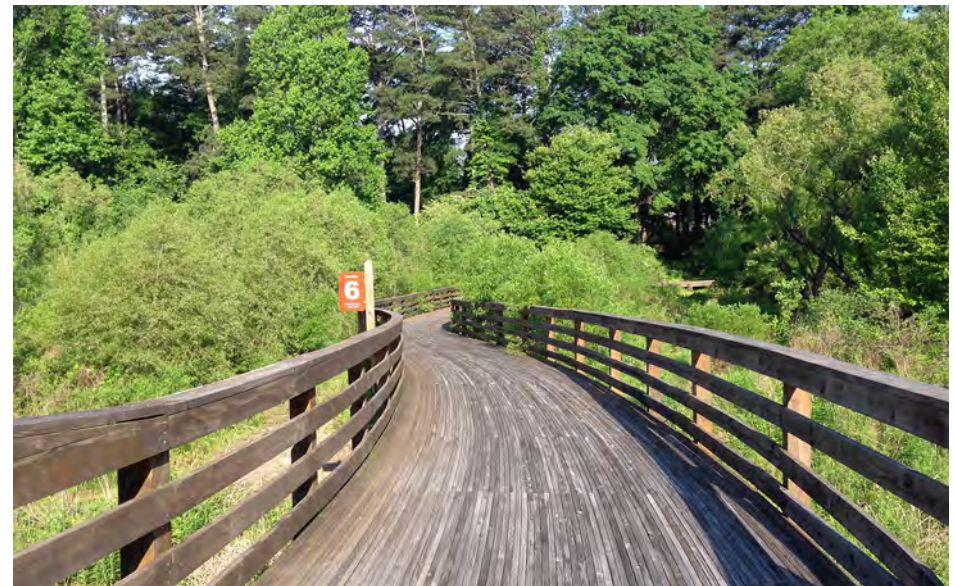
The *Clayton Connects* plan identifies 112 miles of greenway trail opportunities within Clayton County (page 23). PATH's design team divided the master plan into the four County Commission Districts with trail segments slated for early implementation outlined in each district. County Commissioners reviewed and selected the proposed initial trail segments based on ease of development and stand-alone feasibility. Implementation of the initial trail segments will follow the *Clayton Connects* plan adoption as described within the following pages.



The City of College Park's Greenway Trail along the abandoned railbed at the tunnel under I-85.



Existing trails within a neighborhood in Ellenwood.



The boardwalk at mile-marker 6 along the City of Morrow's Greenway Trail.

3.2 Jesters Creek Greenway Assessment

During the planning process of the *Clayton Connects* plan, the Steering Committee and attendees to the public meetings expressed concerns associated with the Jesters Creek Greenway Trail. Concerns were primarily focused on perceived safety issues and the lack of sufficient maintenance. PATH's design and construction team conducted a thorough assessment of the trail and proposed improvements that will enhance the connectivity and public's perceptions of the trail. The items for improvement were:

- Installing *Clayton Connects* trail signage and amenities
- Reestablish vegetative clear zone along the trail corridor
- Maintaining boardwalks and replacing rotten boards
- Improve access with additional trailheads and spur trail connections

A comprehensive list of suggested improvements and estimated costs will be presented to the County in conjunction with the adoption of the *Clayton Connects* plan.



Reestablishing the “clear zone” can be accomplished by trimming vegetation over and near the trail.



The *Clayton Connects* branding will be installed along the Jesters Creek Greenway to provide new look for the greenway trail system and to improve the overall appearance of the existing trail.



The assessment provided a list of improvement items including erosion control and proposed changes to the maintenance program.

3.3 District 1 Greenway Trails

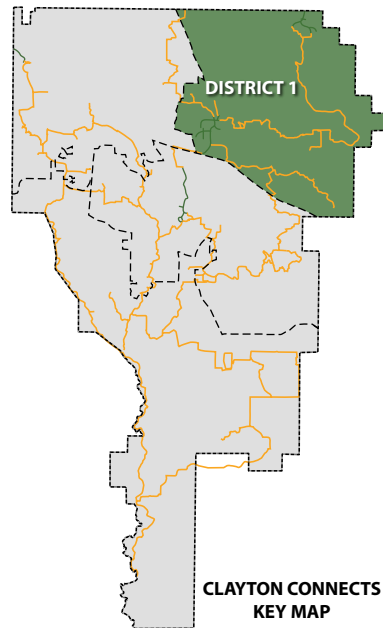
Description

Proposed trails in District 1 provide most of Clayton County's greenway connections east of Interstate 75. The design team proposes the utilization of the shoulder of the Rex Road bridge as the trail route connection over I-675.

Trails proposed within District 1 connect the Village Crossing and Village Park neighborhoods in Ellenwood and within the City of Morrow. The proposed trails will provide strong connectivity for both recreation and transportation by connecting county greenspace, city and county parks, and multiple schools. Clayton State University is located along the central east-west trail segment in this District. The University will be a key partner in order to develop the east-west routes proposed in this plan along with Lake City, the City of Morrow, and the communities of Ellenwood and Rex.

PATH's design team has identified 24 miles of multi-use trails within District 1 within the *Clayton Connects Greenway Trail System*. Destinations and features connected by the greenway trail system within District 1 include:

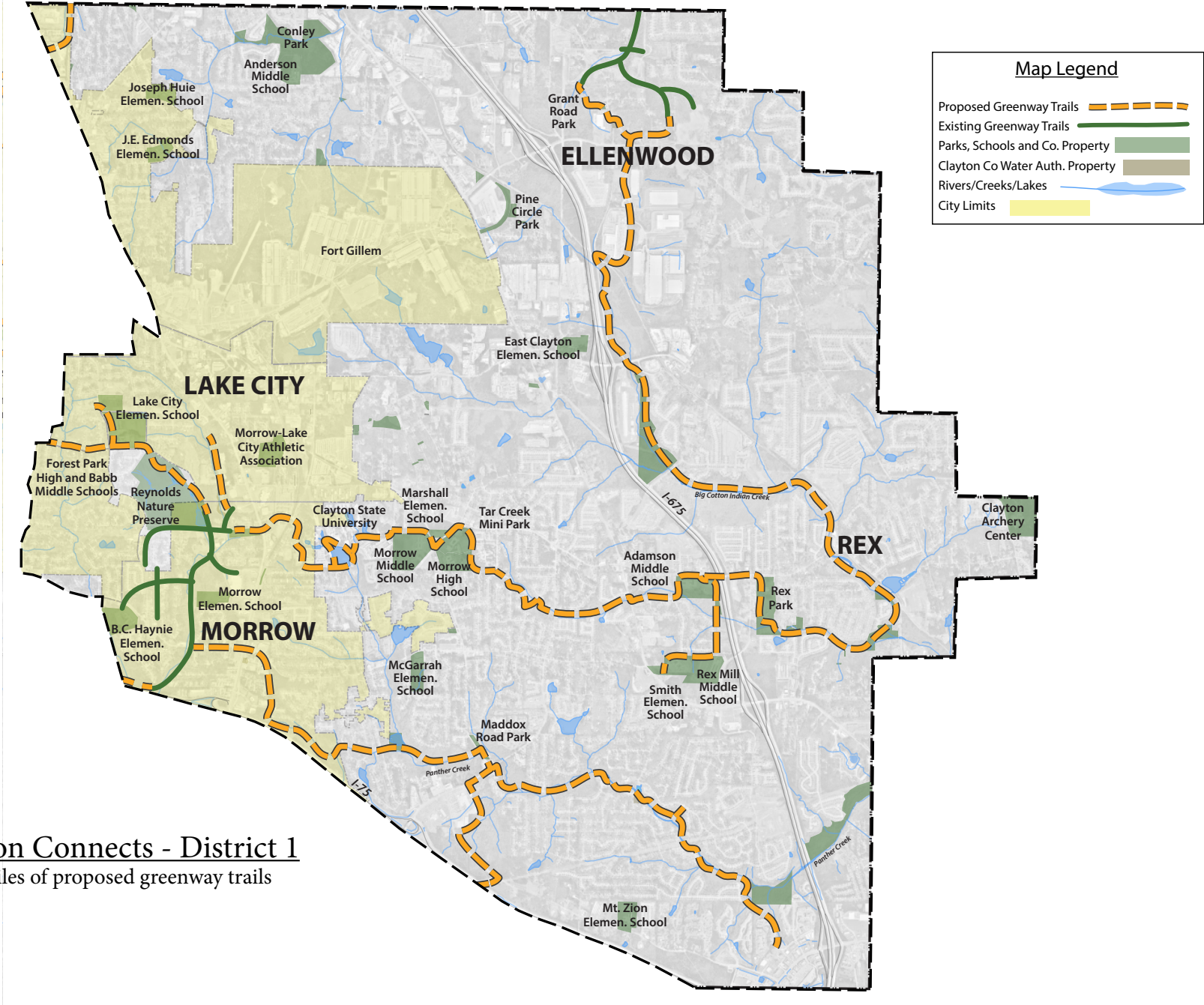
- City of Morrow Greenway trails
- City of Morrow and Lake City
- Clayton State University
- Communities of Ellenwood and Rex
- Reynolds Nature Preserve



Historic destinations located along the proposed Clayton Connects Greenway Trail System.



Land containing maintenance roadbeds within District 2 are ideal for greenway trails.



3.4 District 1 - Initial Trail for Implementation

Description:

The initial trail segment proposed for District 1 has been a vision of Clayton County for many years. The trail segment is approximately 2 miles and will connect Rex Road pedestrian corridor through Rex Park along tributaries and greenspace to the historic Rex Village.

Overview:

Begins: Sidewalk along Rex Road entering into Rex Park

Ends: Historic Rex Village

Distance: 10,650 lf (2.0 miles)

Acquisition: Clayton County Greenspace Division has been acquiring easements shown as greenspace holdings on the following graphic. Easements needed are:

Parcel #12136C A092 - (this is greenspace holdings adjacent to the Crooked Creek subdivision)

Parcel #12136D A021 - greenspace

Parcel #12136B A030 - greenspace

(these two parcels have same ownership)

Parcel #12135C B005 & B007 - 400 lf easement

Parcel #12153D B004 - greenspace

Recommendations: During implementation of this trail segment, Clayton County should acquire the above 'greenspace' parcels fee simple.

Trail Segment Specifications				
	Quantities	Cost (2014)	Unit	Total
General Conditions	-	7.5%	construction cost	\$137,360.63
Concrete trail complete (12' wide)	10,650 lf	\$40.00	linear foot	\$426,000.00
Shared-use trail (within right-of-way)	-	\$100.00	linear foot	-
Bridge	(7) 60' structure	\$1,000.00	linear foot	\$420,000.00
Structural Slabs 12'x5'	10,650 lf	\$2.00	linear foot	\$21,300.00
Boardwalk	500 lf	\$600.00	linear foot	\$300,000.00
Clearing/grading	8.8 acres	\$50,000.00	acre	\$440,000.00
Stormwater pipe and drainage structures	10,650 lf	\$8.50	linear foot	\$90,525.00
Intersections: 6 bollards & 2 ADA pavers	-	\$5,000.00	each	-
Rest Areas and Pocket Parks (1-2 per mile)	4	\$12,000.00	each	\$48,000.00
Trailheads	1	\$75,000.00	lump sum	\$75,000.00
Trail Signage	10,650 lf	\$1.00	linear foot	\$10,650.00
At-grade crossing (Rapid Flashing Beacon)	-	\$60,000.00	each	-
At-grade crossing (Hawk Signal)	-	\$120,000.00	each	-
Total Construction Costs				\$1,968,835.63
Acquisition				
25' permanent easement / 50' temporary easement	400 lf	\$5.00	linear foot	\$2,000.00
Fee simple purchase	18.5 acres	\$5,000.00	acre	\$92,500.00
Total Acquisition Costs				\$94,500.00
Design for Construction				
Surveying	24.5 acres	\$1,000.00	acre	\$24,500.00
Design and Engineering	-	6%	construction cost	\$118,130.14
Permitting	-	\$10,000.00	lump sum	\$10,000.00
Construction Management	-	6%	construction cost	\$118,130.14
Total Design Costs				\$270,760.28
Misc.				
Contingency	-	10%	total cost	\$233,409.59
Inflation for 2014 price adjustment	-	4%	annual compounding	-
Total Cost Estimate				\$2,567,505.49



Clayton Connects - District 1 Initial Trail Segment

2.0 miles connecting Rex Park, neighborhoods, and Historic Rex Village

3.5 District 2 Greenway Trails

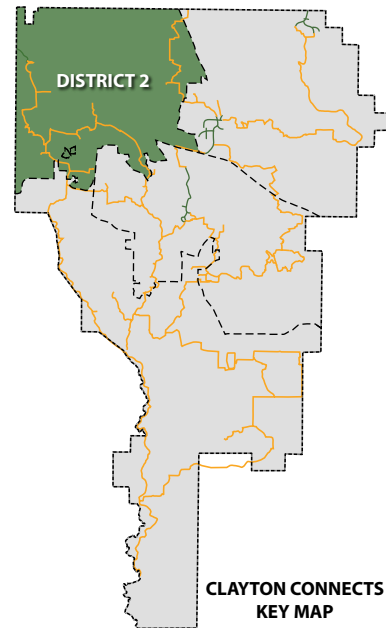
Description

Proposed trails in District 2 provide the primary connection to Hartsfield Jackson Airport and the existing trail system in the City of College Park. College Park plans to eventually connect their trails to the Atlanta BeltLine Trail.

With opportunities to connect three parks and ten schools, the trails will provide the residents in the area new opportunities for recreation and transportation. The Flint River makes for an ideal north-south trail corridor that would allow for the long-term protection of its natural environment within the county. The City of Riverdale is the central destination within the District 2 trail network.

PATH's design team has identified 19 miles of multi-use trails within District 2. Destinations and features connected by the greenway trail system within District 2 include:

- Cities of College Park, Forest Park, and Riverdale
- Frank Bailey Senior Center
- Flint River
- Hartsfield Jackson Airport
- Virginia Gray Recreation Center



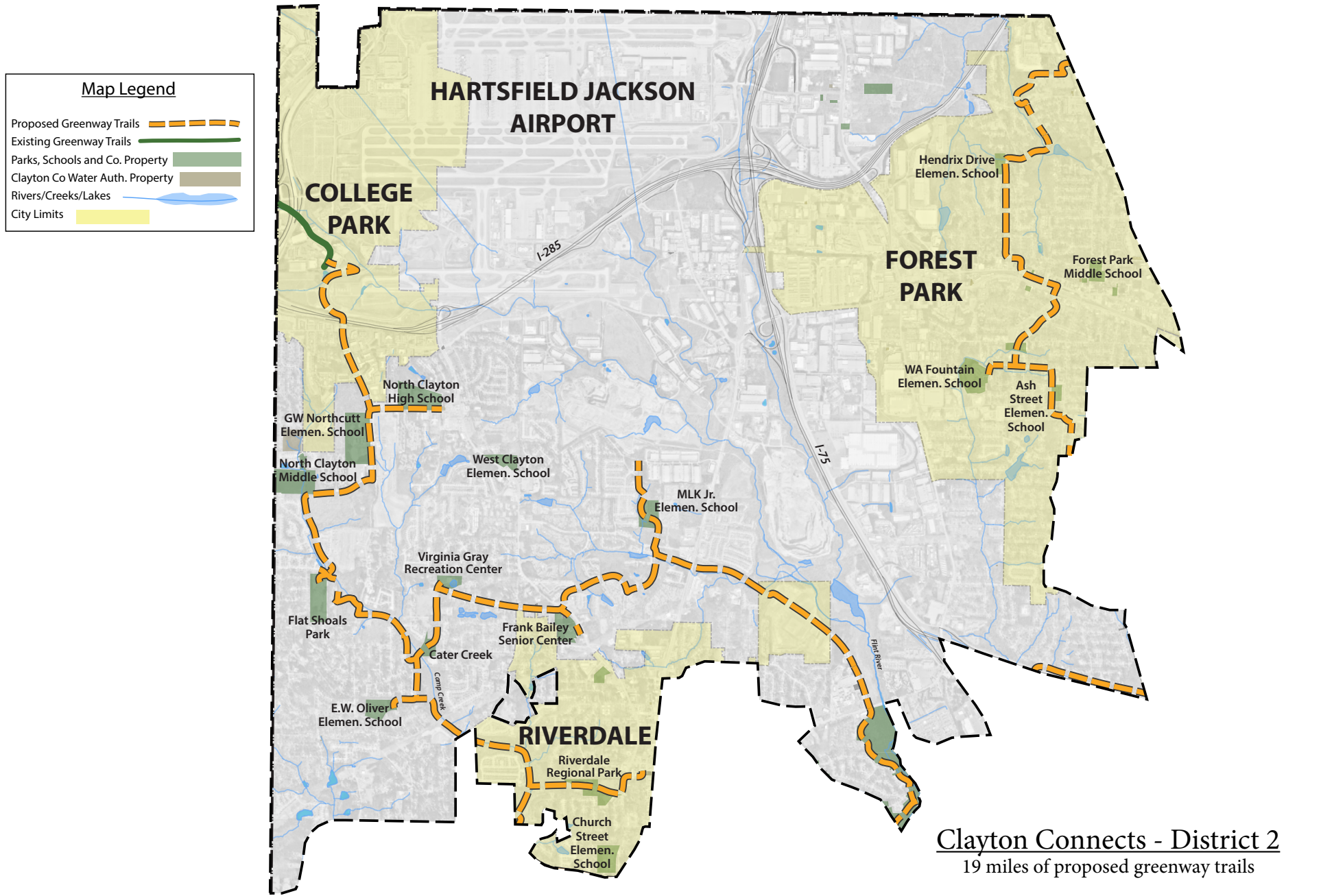
District 2 trails provide connectivity to schools such as Charles R. Drew High School.



Main Street in Riverdale provides an opportunity for the trail system to revitalize the area.



Clayton Connects Greenway System interconnects both county and city parks and greenspace.



3.6 District 2 - Initial Trail for Implementation

Description:

The initial trail segment for District 2 will connect Virginia Gray Recreation Center to E.W. Oliver Elementary School.

Overview:

Begins: Virginia Gray Recreation Center

Ends: E.W. Oliver Elementary School

Distance: 5,760 lf (1.1 miles)

Acquisition: Easements needed from eleven private property owners and Clayton County Board of Education.

Parcel #13135D A008

Parcel #13135D A005

Parcel #13135D A006

Parcel #13135D A001

Parcel #13135D A009

Parcel #13135D A010

Parcel #13135B B031

Parcel #13135B A009

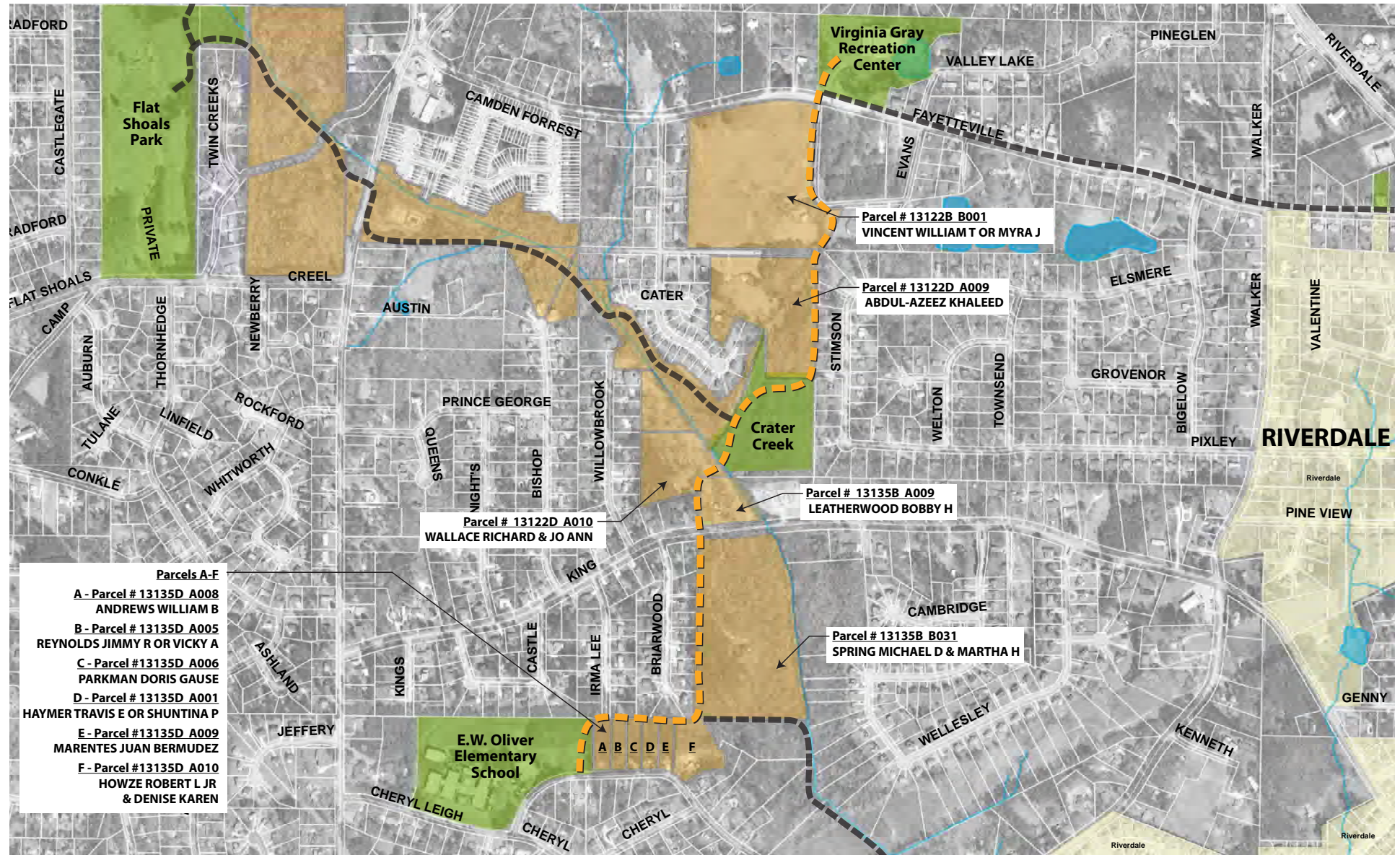
Parcel #13122D A010

Parcel #13122D A009

Parcel #13122B B001

Recommendations: During implementation of this trail segment, PATH's design team suggests Clayton County partner with the City of Riverdale to begin the trail connection from Virginia Gray Recreation Center to Frank Bailey Senior Center along Fayetteville Road.

Trail Segment Specifications				
	Quantities	Cost	Unit	Total
General conditions	-	7.5%	construction cost	\$54,648.00
Concrete trail complete (12' wide)	5,760 lf	\$40.00	linear foot	\$230,400.00
Shared-use trail (within right-of-way)	-	\$100.00	linear foot	-
Bridge	(1) 100' structure	\$1,000.00	linear foot	\$100,000.00
Structural Slabs 12'x5'	5,760 lf	\$2.00	linear foot	\$11,520.00
Boardwalk	-	\$600.00	linear foot	-
Clearing/grading	4.76 acres	\$50,000.00	acre	\$238,000.00
Stormwater pipe and drainage structures	5,760 lf	\$8.50	linear foot	\$48,960.00
Intersections: 6 bollards & 2 ADA pavers	2	\$5,000.00	each	\$10,000.00
Rest Areas and Pocket Parks (1-2 per mile)	2	\$12,000.00	each	\$24,000.00
Trailheads	-	\$75,000.00	lump sum	-
Trail Signage	5,760 lf	\$1.00	linear foot	\$5,760.00
At-grade crossing (Rapid Flashing Beacon)	1	\$60,000.00	each	\$60,000.00
At-grade crossing (Hawk Signal)	-	\$120,000.00	each	-
Total Construction Costs				\$783,288.00
Acquisition				
25' permanent easement / 50' temporary easement	4,250 lf	\$5.00	linear foot	\$21,250.00
Fee simple purchase	-	\$5,000.00	acre	-
Total Acquisition Costs				\$21,250.00
Design for Construction				
Surveying	13 acres	\$1,000.00	acre	\$13,000.00
Design and Engineering	-	6%	construction cost	\$46,997.28
Permitting	-	\$10,000.00	lump sum	\$10,000.00
Construction Management	-	6%	construction cost	\$46,997.28
Total Design Costs				\$116,994.56
Misc.				
Contingency	-	10%	total cost	\$92,153.26
Inflation for 2014 price adjustment	-	4%	annual compounding	-
Total Cost Estimate				\$1,013,685.82



Clayton Connects - District 2 Initial Trail Segment

2.4 miles connecting E.W. Oliver Elementary School and Virginia Gray Rec. Center

3.7 District 3 Greenway Trails

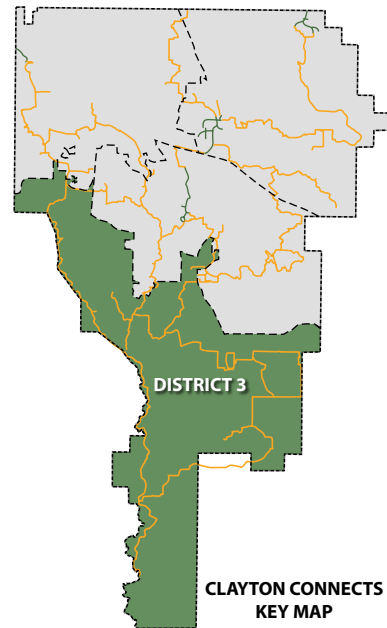
Description

Proposed trails in District 3 provide connectivity to Clayton County's less developed 'Panhandle' area filled with natural woodlands, greenspace, rivers, and creeks. The proposed trails will connect from the rural areas into Riverdale, Jonesboro, and Lovejoy, providing opportunities for passive recreation and commuter transportation.

The vast amount of Clayton County Water Authority properties are located within District 3. These CCWA properties provide unparalleled opportunities for land preservation, public access, and water treatment education. The wetlands created for water treatment and local reservoirs offer unique destinations along the trail.

Along the western edge of the county, a proposed trail follows the Flint River and provides greenspace protection for the river corridor. PATH's design team proposes 49 miles of multi-use trails within District 3. Destinations and features connected by the greenway trail system within District 3 include:

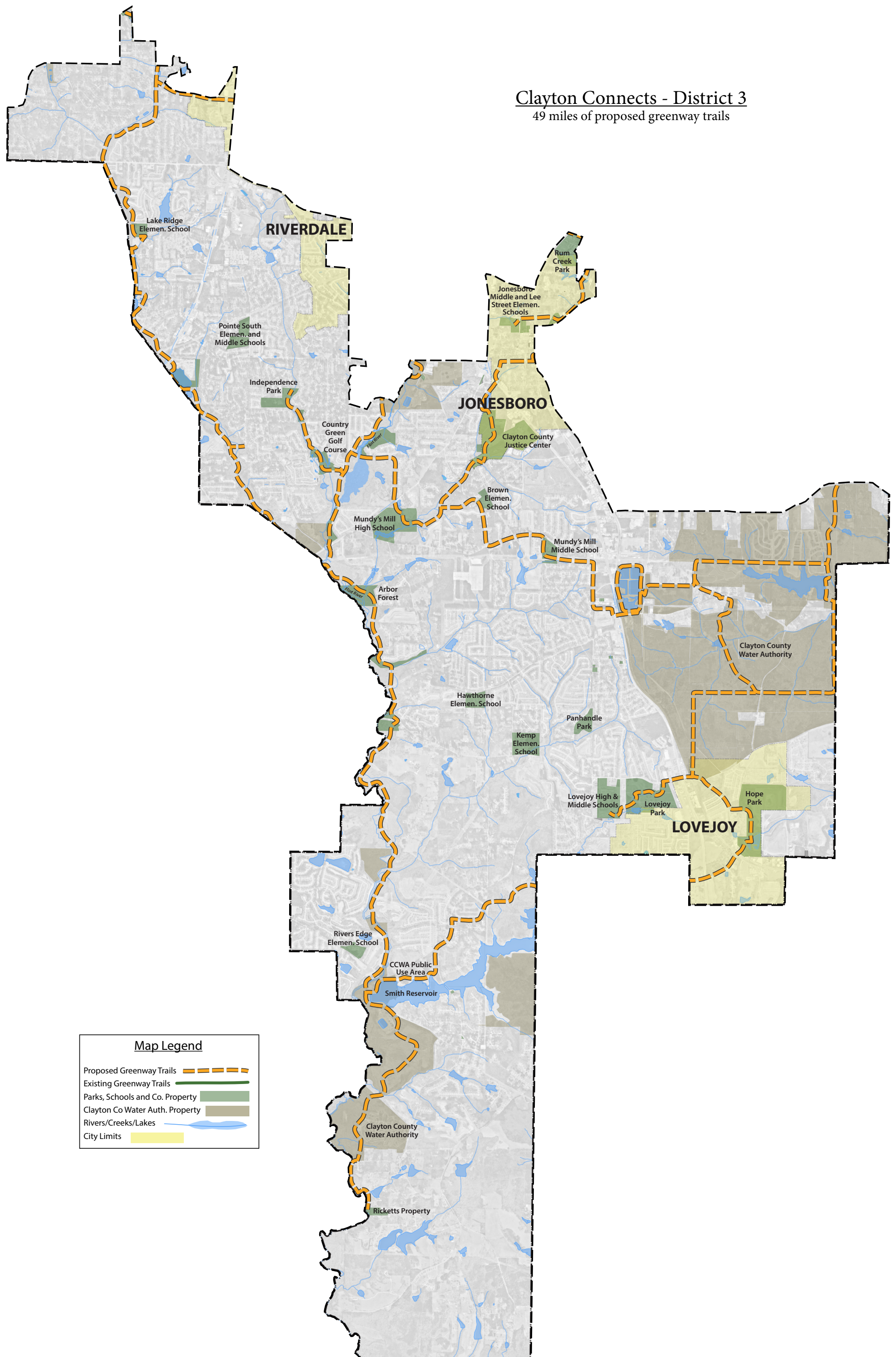
- Cities of Riverdale, Jonesboro and Lovejoy
- Clayton County Water Authority properties
- Smith Reservoir and the CCWA Public Use Area
- Flint River and tributaries



Clayton County Water Authority properties within District 3 preserves the areas rural character.



The Clayton County Water Authority Wetland Nature Center is a destination within District 3.



3.8 District 3 - Initial Trail for Implementation

Description:

The initial trail segment for District 3 will connect a new trailhead proposed at Roberts Road to Mundy's Mill High School. The segment will connect neighborhoods and greenspace along the Flint River.

Overview:

Begins: Roberts Road (new trailhead)

Ends: Mundy's Mill High School

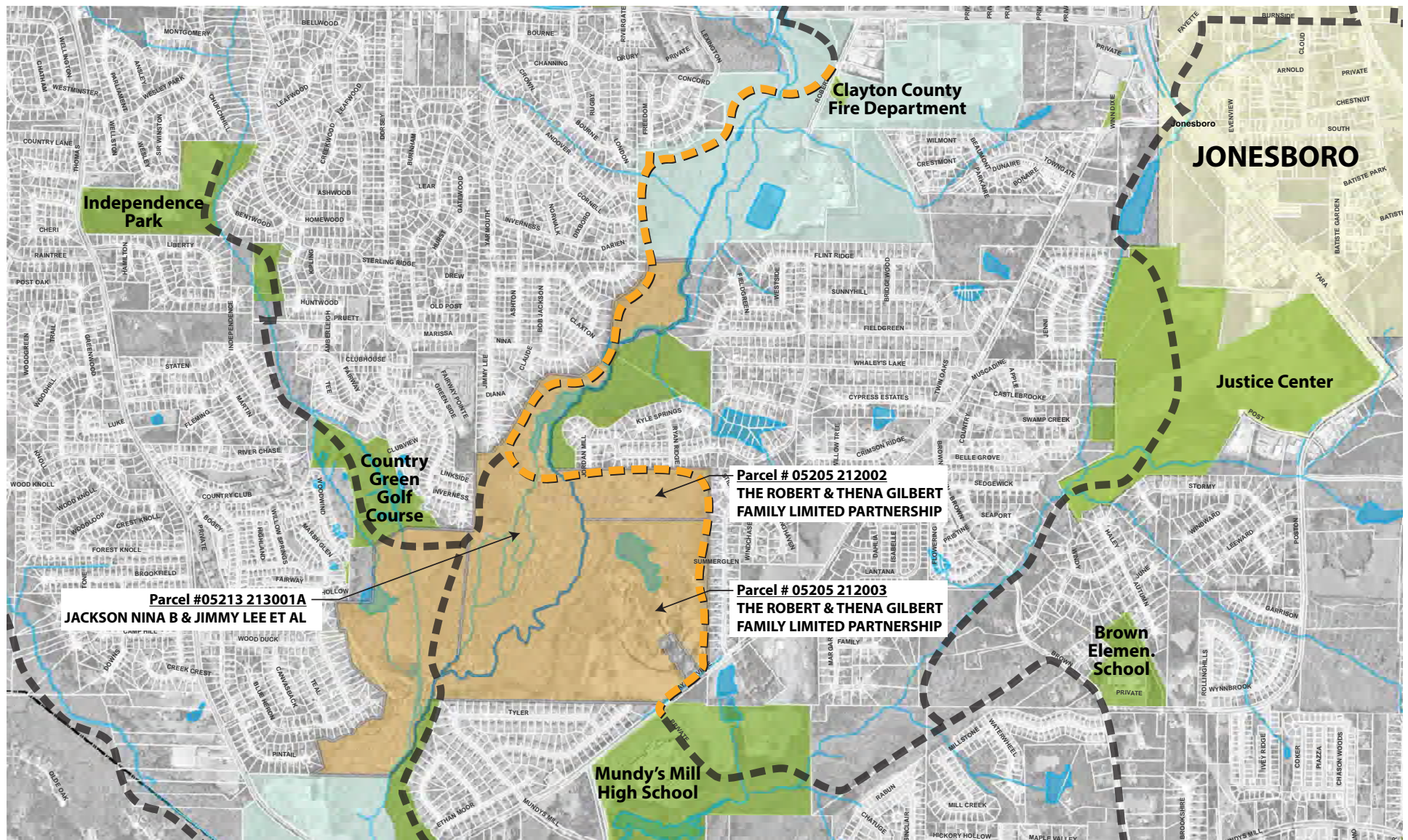
Distance: 14,594 lf (2.8 miles)

Acquisition: Easements needed from three parcels, Clayton County Board of Education, and Clayton County Water Authority.

Parcel #05205 212003
Parcel #05205 212002
Parcel #05213 213001A

Recommendations: During implementation of this trail segment, PATH's design team suggests Clayton County acquire additional greenspace for protection of the Flint River and creation of a greenspace park.

Trail Segment Specifications				
	Quantities	Cost	Unit	Total
General conditions	-	7.5%	construction cost	\$167,969.33
Concrete trail complete (12' wide)	14,594 lf	\$40.00	linear foot	\$583,760.00
Shared-use trail (within right-of-way)	-	\$100.00	linear foot	-
Bridge	(4) 100' structure	\$1,000.00	linear foot	\$400,000.00
Structural Slabs 12'x5'	14,594 lf	\$2.00	linear foot	\$29,188.00
Boardwalk	500 lf	\$600.00	linear foot	\$300,000.00
Clearing/grading	12 acres	\$50,000.00	acre	\$600,000.00
Stormwater pipe and drainage structures	14,594 lf	\$8.50	linear foot	\$126,049.00
Intersections: 6 bollards & 2 ADA pavers	2	\$5,000.00	each	\$5,000.00
Rest Areas and Pocket Parks (1-2 per mile)	4	\$12,000.00	each	\$48,000.00
Trailheads	1	\$75,000.00	lump sum	\$75,000.00
Trail Signage	14,594 lf	\$1.00	linear foot	\$14,594.00
At-grade crossing (Rapid Flashing Beacon)	1	\$60,000.00	each	\$60,000.00
At-grade crossing (Hawk Signal)	-	\$120,000.00	each	-
Total Construction Costs				\$2,407,560.33
Acquisition				
25' permanent easement / 50' temporary easement	8,625 lf	\$5.00	linear foot	\$43,125.00
Fee simple purchase	-	\$5,000.00	acre	-
Total Acquisition Costs				\$43,125.00
Design for Construction				
Surveying	33.5 acres	\$1,000.00	acre	\$33,500.00
Design and Engineering	-	6%	construction cost	\$144,453.62
Permitting	-	\$10,000.00	lump sum	\$10,000.00
Construction Management	-	6%	construction cost	\$144,453.62
Total Design Costs				\$332,407.24
Misc.				
Contingency	-	10%	construction cost	\$278,309.26
Inflation for 2014 price adjustment	-	4%	annual compounding	0
Total Cost Estimate				\$3,061,401.82



Clayton Connects - District 3 Initial Trail Segment

2.8 miles connecting Mundy's Mill High School along the Flint River to a new trailhead at Roberts Road

3.9 District 4 Greenway Trails

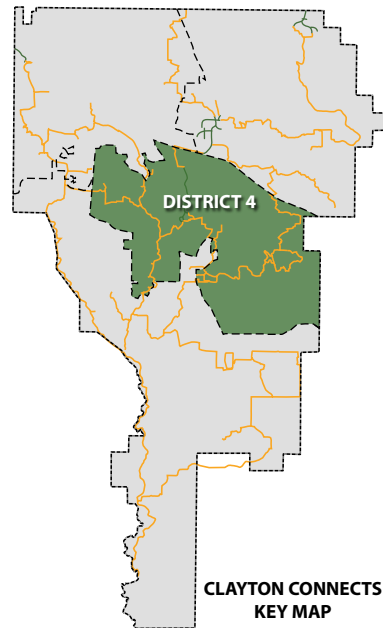
Description

Proposed trails in District 4 provide connectivity to central Clayton County. The existing Jesters Creek Greenway Trail will extend through the proposed trail segments to connect to the City of Morrow's trail system and to the cities of Riverdale and Jonesboro.

With opportunities to connect International Park, Reid Stephens Park and eleven schools, the trails provide opportunities for pedestrians, runners, commuters, and cyclists of all ages to use the trail for recreation, education, or commuter transportation.

PATH's design team proposes 24 miles of multi-use trails for District 4. Destinations and features connected by the greenway trail system within District 4 include:

- Cities of Riverdale, Jonesboro and Morrow
- International Park and Reid Stephens Park
- Jesters Creek Greenway
- Numerous Clayton County schools

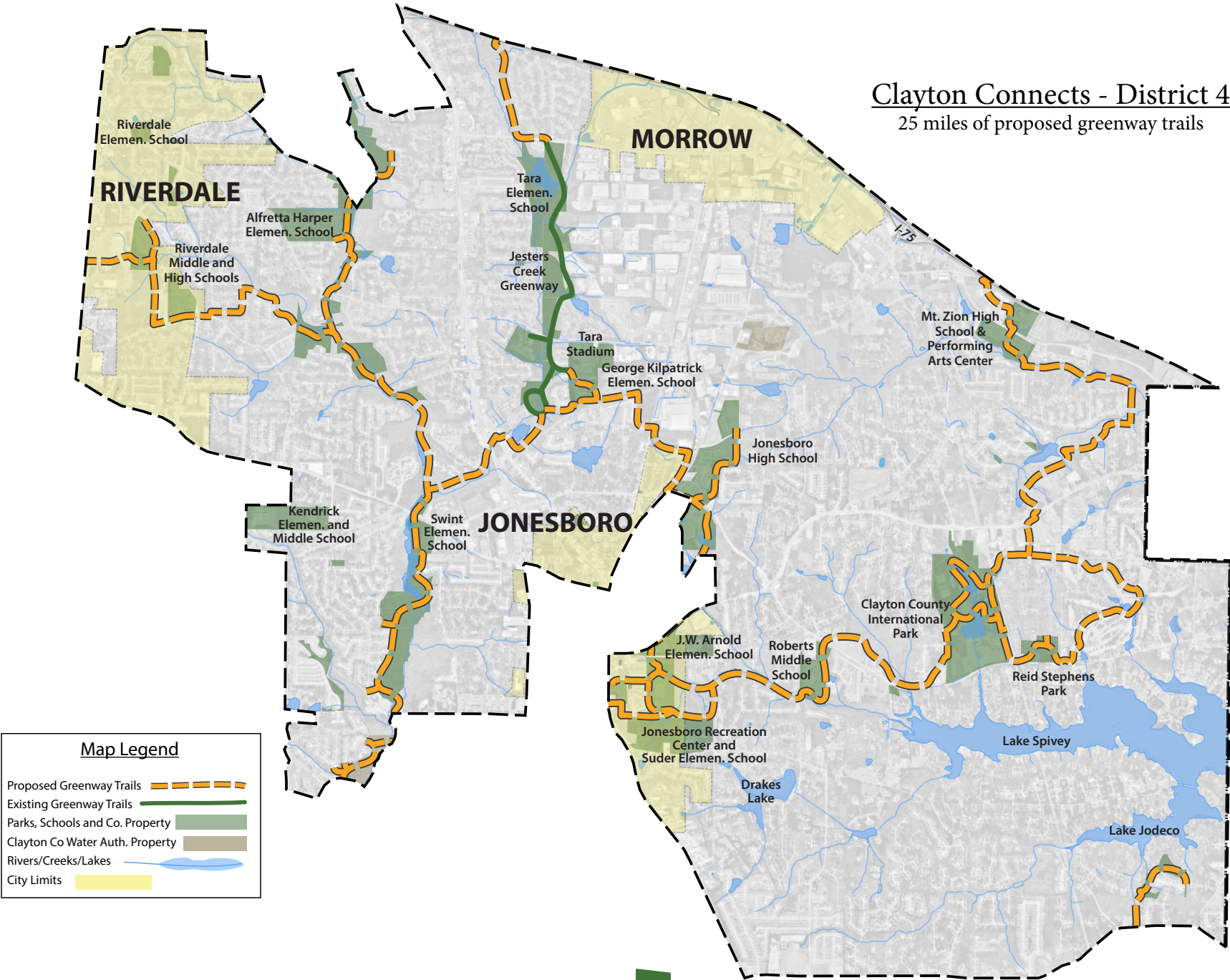


The Clayton Connect Greenway Trail System will connect to employment destinations and promote health and wellness in the community.



Abandoned golf cart path within the Lake Spivey Neighborhood to be used for a greenway trail route.

Clayton Connects - District 4
25 miles of proposed greenway trails



3.10 District 4 - Initial Trail for Implementation

Description:

The initial trail segment for District 4 will connect International Park and Reid Stephens Park to Lake Spivey Golf Club's clubhouse and neighborhood.

Overview:

Begins: International Park

Ends: Lake Spivey Golf Clubhouse and neighborhood

Distance: 16,640 lf (3.1 miles)

Acquisition: Easements needed from Lake Spivey Golf Club, one private property owner and Georgia Power.

Parcel #12012A B004

Parcel #12011A A001

Recommendations: PATH's design team suggests Clayton County perform upgrades to the existing Jesters Creek Greenway Trail system to bring it up to *Clayton Connects* standards before the initial trail segment in District 4 is open to the public.

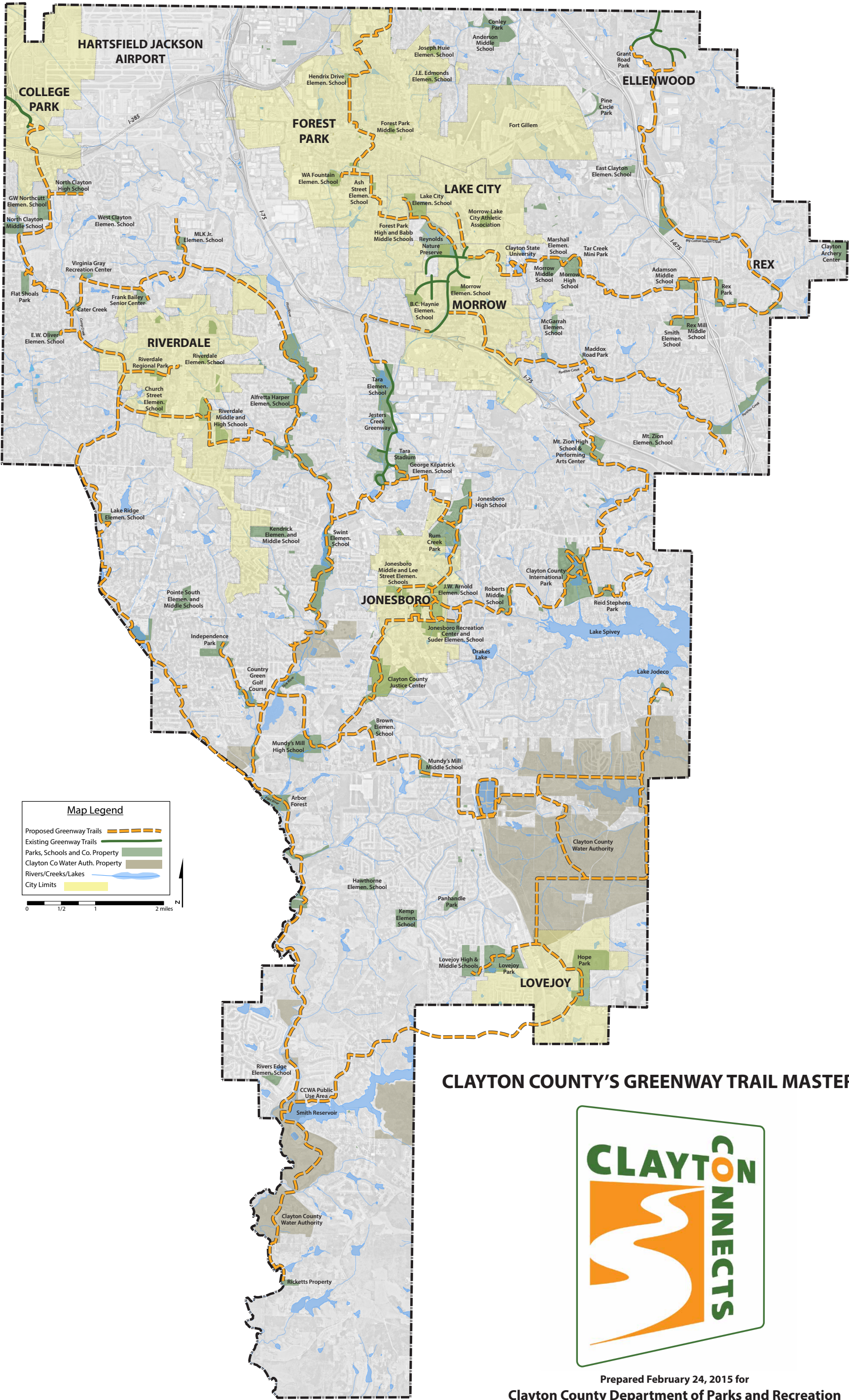
Trail Segment Specifications				
	Quantities	Cost	Unit	Total
General conditions	-	7.5%	construction cost	\$163,449.71
Concrete trail complete (12' wide)	16,453 lf	\$40.00	linear foot	\$658,120.00
Shared-use trail (within right-of-way)	-	\$100.00	linear foot	-
Bridge	(1) 200' structure (1) 180' structure	\$1,000.00	linear foot	\$380,000.00
Structural Slabs 12'x5'	16,453 lf	\$2.00	linear foot	\$32,906.00
Boardwalk	300 lf	\$600.00	linear foot	\$180,000.00
Clearing/grading	13.6 acres	\$50,000.00	acre	\$680,000.00
Stormwater pipe and drainage structures	16,453 lf	\$8.50	linear foot	\$139,850.50
Intersections: 6 bollards & 2 ADA pavers	4	\$5,000.00	each	\$20,000.00
Rest Areas and Pocket Parks (1-2 per mile)	6	\$12,000.00	each	\$72,000.00
Trailheads	-	\$75,000.00	lump sum	-
Trail Signage	16,453 lf	\$1.00	linear foot	\$16,453.00
At-grade crossing (Rapid Flashing Beacon)	-	\$60,000.00	each	-
At-grade crossing (Hawk Signal)	-	\$120,000.00	each	-
Total Construction Costs				\$2,3422,779.21
Acquisition				
25' permanent easement / 50' temporary easement	4555 lf	\$5.00	linear foot	\$22,775.00
Fee simple purchase	-	\$5,000.00	acre	-
Total Acquisition Costs				\$22,775.00
Design for Construction				
Surveying	37.8 acres	\$1,000.00	acre	\$37,800.00
Design and Engineering	-	6%	construction cost	\$140,566.75
Permitting	-	\$10,000.00	lump sum	\$10,000.00
Construction Management	-	6%	construction cost	\$140,566.75
Total Design Costs				\$328,933.51
Misc.				
Contingency	-	10%	total cost	\$269,448.77
Inflation for 2014 price adjustment	-	4%	annual compounding	0
Total Cost Estimate				\$2,963,936.49



Clayton Connects - District 4 Initial Trail Segment

3.1 miles connecting International Park, Reid Stephens Park, and Lake Spivey Golf Club and adjacent neighborhoods

3.11 Clayton Connects Greenway Trail System



Prepared February 24, 2015 for
Clayton County Department of Parks and Recreation
by PATH Foundation and KAIZEN Collaborative

3.12 Implementation Strategy

To help identify the next trail segment for implementation within each District, the following considerations should be discussed:

- Extending existing trail segments to provide greater trail use and connectivity
- Responding to public sentiment to determine the most desired trail connection within the district
- Locating desired destinations at each end of the trail segments
- Determining the level of complexity and property acquisition
- Requiring private developments located along a proposed trail segment to include construction of the trail segment within the developer's project

The goal within each district will be to always have one trail segment within acquisition, design, permitting, and construction at all times.

CCDPR Greenspace Division should provide a district trail segment implementation summary to each County Commissioner bi-annually. An example of the summary follows and would contain a list of the district's active trail projects with a timeline outlining acquisition, surveying/design, permitting, and construction.

For planning purposes, the following time should be allocated for each implementation step:

Acquisition - 3 to 6 months depending on the number of parcels, surveying time for creating easement plats and legal descriptions, and obtaining property value assessments.

Surveying/Design/Engineering - 2 to 3 months for surveying, 3 to 6 months for complete design and engineering.

District # Trails - 2015 Summary												
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Trail #1												
Acquisition (complete)												
Surveying/Design (complete)												
	Permitting											
					Construction							
Trail #2												
Acquisition (complete)												
	Survey/Design											
					Permitting							
								Construction				
Trail #3												
				Acquisition								
							Survey/Design					
											Permitting	
Construction - 2016												
Trail #4												
							Acquisition					
											Survey	
Permitting - 2016												
Construction - 2016												

Example of district trail segment implementation bi-annual summary.

Permitting - 3 to 6 months for county and state permits.

Construction - 6 months for Clayton County procurement process and 4 to 6 months for complete construction.

(Note: All estimates above assume local and private funding. If federal or state funding is allocated for a trail segment, the allocated times above should be multiplied by 3.)

3.13 Cost Estimate Matrix

As each trail segment is identified for implementation, CCDPR will need to generate a cost estimate for budgeting purposes. The following matrix is applied to each district's initial trail segment outlined in this plan.

Additional trail elements requiring budget allowances are outlined below for planning purposes. Estimating costs for each of these elements, PATH's design team will work directly with Clayton County to assist in establishing a project specific cost.

- Traffic Control
- Retaining Wall
(\$500/yd)
- Fence - 2 panel wood
(\$14/lf)
- Pavement Striping
- Utility Relocation
- Environmental Permitting
(State Stream Buffer Variance
- \$6,000.00; ACOE Wetlands Permit
- \$10,000.00)
- Insurance/Bonds
- Demolition
- Asphalt
- Curb and gutter

Trail Segment Specifications				
	Quantities	Cost	Unit	Total
General conditions		7.5%	construction cost	
Concrete trail complete (12' wide)		\$40.00	linear foot	
Shared-use trail (within right-of-way)		\$100.00	linear foot	
Bridge		\$1,000.00	linear foot	
Structural Slabs 12'x5'		\$2.00	linear foot	
Boardwalk		\$600.00	linear foot	
Clearing/grading (36' wide corridor)		\$50,000.00	acre	
Stormwater pipe and drainage structures		\$8.50	linear foot	
Intersections: 6 bollards & 2 ADA pavers		\$5,000.00	each	
Rest Areas and Pocket Parks (1-2 per mile)		\$12,000.00	each	
Trailheads		\$75,000.00	lump sum	
Trail Signage		\$1.00	linear foot	
At-grade crossing (Rapid Flashing Beacon)		\$60,000.00	each	
At-grade crossing (Hawk Signal)		\$120,000.00	each	
Total Construction Costs				
Acquisition				
25' permanent easement / 50' temporary easement		\$5.00	linear foot	
Fee simple purchase		\$5,000.00	acre	
Total Acquisition Costs				
Design for Construction				
Surveying	-	\$1,000.00	acre	
Design and Engineering	-	6%	construction cost	
Permitting	-	\$10,000.00	lump sum	
Construction Management	-	6%	construction cost	
Total Design Costs				
Misc.				
Contingency	-	10%	total cost	
Inflation for 2014 price adjustment	-	4%	annual compounding	
Total Cost Estimate				

4.0 Design Standards

4.1 Introduction

In order to excite and alert trail users to the new trail system, it needs to have a crisp, clean brand and an inviting amenity package. To create this sense of excitement and pride, the PATH design team developed a logo stating what the trail system does while implying the County understands the need for developing the system. The accompanying amenity package was designed with comfort and sustainability in mind.

Greenway trails should be designed and constructed in accordance with certain guidelines developed by various governmental agencies. All standards proposed for the *Clayton Connects* system are intended to meet or exceed the guidelines listed below:

- AASHTO Guide to Development of Bicycle Facilities, 1999
- MUTCD (Manual on Uniform Traffic Control Devices), 2009
- ADA (Americans with Disabilities Act) requirements
- NACTO Urban Bikeway Design Guide, 2011

4.2 Clayton Connects Logo

To reinforce the *Clayton Connects* identity, PATH's design team developed the logo as the first branding component of the greenway trail system. The logo development began by considering various graphic icons and words reflective of the county. As the design evolved, it became obvious that citizens of Clayton County understood the significance of trail connectivity throughout the county. This understanding of the importance of trail connectivity lead to the wording '*Clayton Connects*' within the logo's design and the trail icon followed to reflect a continuous, connected greenway trial system.

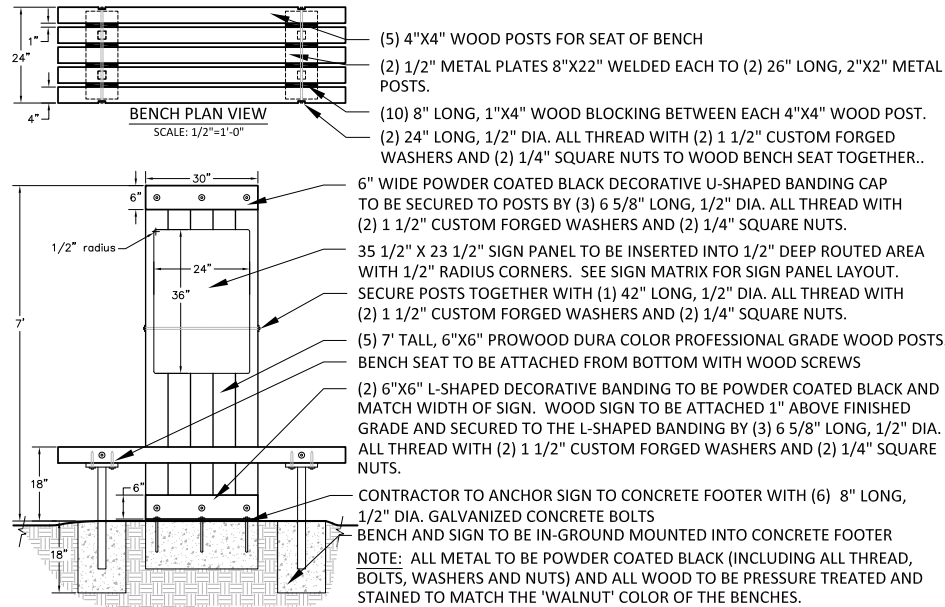


4.3 Trail Signage Standards

After finalizing the trail logo, the design team created the trail signage. The sign types for the **Clayton Connects** trail system are information kiosks, secondary identification signs, regulatory signs, and mile marker signs. The sign style established by the Steering Committee uses wood and metal in the sign structure to allow for the sign to be in character with both the urban and rural areas of Clayton County. The following rendering of the trail signage conveyed the overall design intent which developed further into construction details.

- **Kiosk Signs** – these are information signs to be placed at trailheads along the **Clayton Connects** trail system. The sign panels will provide information on trail rules, trail etiquette, recognition/acknowledgment, and/or a trail map showing the entire trail system.
- **Secondary Identification Signs** – these are signs for identifying access points to the trail system from spur trails to existing neighborhoods, commercial areas, or shared use parking areas. The sign panels will contain the **Clayton Connects** logo and provide directional information.
- **Regulatory Signs** – these are the most frequent signs along the greenway trail system. The sign panels will vary depending on information needed for the trail user to safely navigate the greenway trail system.
- **Mile Marker Signs** – these are located at each one-mile distance along the trail and will have the **Clayton Connects** logo. The sign panel will show the distance in miles and kilometers and also include the elevation of the trail at that location.



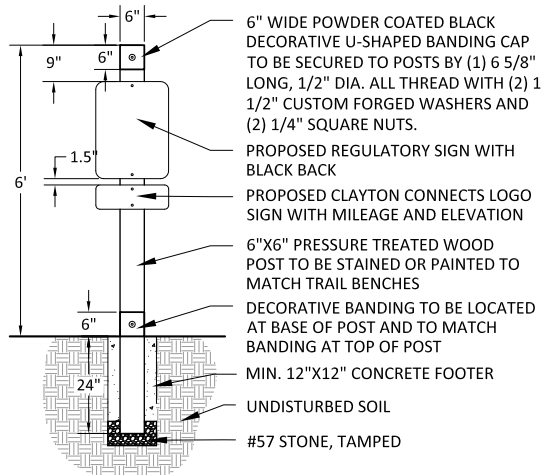


INFORMATION SIGN/BENCH

SCALE: 1/2" = 1'-0"

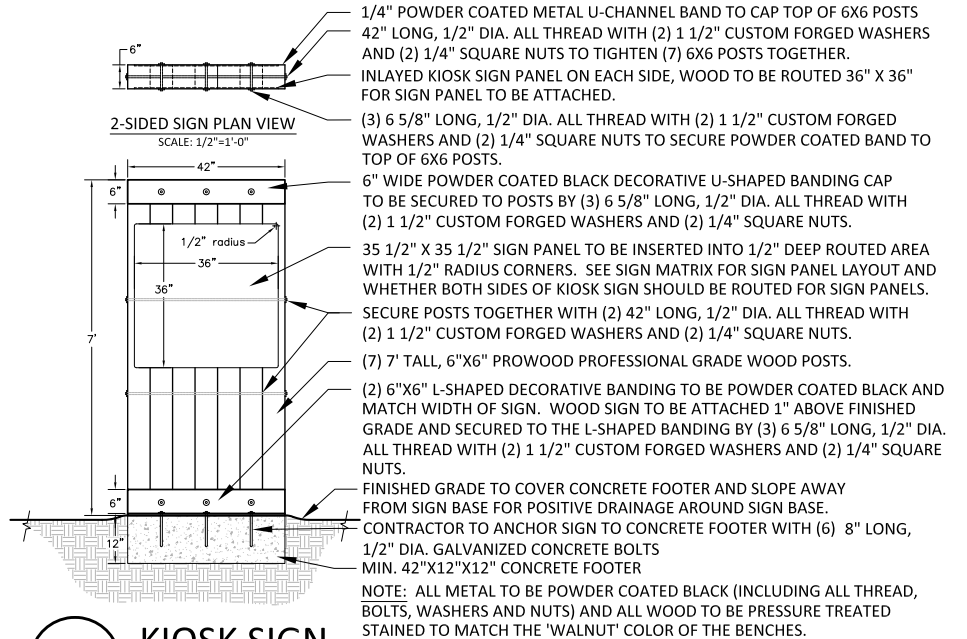
NOTES:

1. PATH FOUNDATION TO DETERMINE IN FIELD THE APPROPRIATE SIGN TO BE UTILIZED BASED ON FIELD CONDITIONS AND AVAILABLE SPACE FOR SIGNAGE.
2. ALL SIGNS SHALL BE LOCATED WITH 2'-0" CLEAR AREA FROM EDGE OF TRAILWAY TO EDGE OF SIGN.
3. ALL SIGNS TO BE ATTACHED TO SIGNPOST USING 4" LONG, 1/4" DIAMETER, STAINLESS STEEL LAG BOLTS.
4. ALL METAL TO BE ALUMINUM UNLESS OTHERWISE SPECIFIED AND POWDERCOATED BLACK.



REGULATORY SIGN

SCALE: 1/2" = 1'-0"

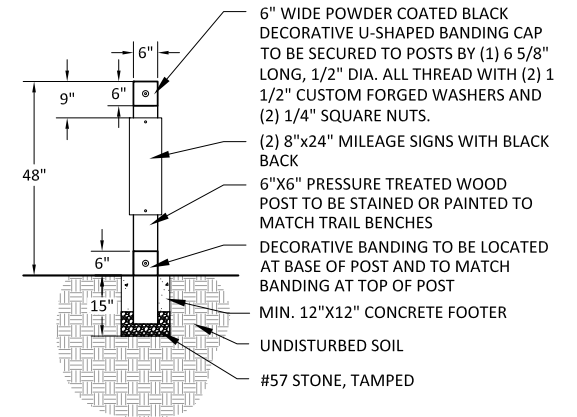


KIOSK SIGN

SCALE: 1/2" = 1'-0"

NOTES:

1. PATH FOUNDATION TO DETERMINE IN FIELD THE APPROPRIATE SIGN TO BE UTILIZED BASED ON FIELD CONDITIONS AND AVAILABLE SPACE FOR SIGNAGE.
2. ALL SIGNS SHALL BE LOCATED WITH 2'-0" CLEAR AREA FROM EDGE OF TRAILWAY TO EDGE OF SIGN.
3. ALL SIGNS TO BE ATTACHED TO SIGNPOST USING 4" LONG, 1/4" DIAMETER, STAINLESS STEEL LAG BOLTS.
4. ALL METAL TO BE ALUMINUM UNLESS OTHERWISE SPECIFIED AND POWDERCOATED BLACK.



MILE MARKER SIGN

SCALE: 1/2" = 1'-0"

4.4 Trail Amenities

As a complement to the trail signage, the trail amenities chosen for the *Clayton Connects* trail system are made with a similar metal and wood combination. The metal selected is a powder coated black color and the wood is a walnut colored recycled plastic slat. Both promote sustainability and insuring longevity of the furnishings. The trail system's amenities include:



Greensites Series by Victor Stanley

model #CM-324
Description: 6-foot bench, walnut recycled plastic slat seat, ductile iron end frame powder coated black, and surface mounted.



Greensites Series by Victor Stanley

model #CM-314
Description: 6-foot backless bench, walnut recycled plastic slat seat, ductile iron end frame powder coated black, and surface mounted.



Cycle Sentry Series by Victor Stanley

model #BRWS-101
Description: standard u-shaped bike rack, in-ground mount, and steel powder coated black.



Greensites Series by Victor Stanley

model #RTH-36
Description: 36-gallon capacity trash receptacle, walnut recycled plastic side slats, standard tapered form lid powder coated black, black plastic liner, and surface mounted.



Greensites Series by Victor Stanley

model #RTH-36
Description: recycle lid decal and custom band decal to allow standard trash receptacle to be a recycle receptacle.



Bollard by Fair Weather SF

model #SB-1

Description: black powder coated square steel bollard with pyramidal cast steel top, removable or in-ground mount.



Black Pet Waste Station by HD Supply

model #116156

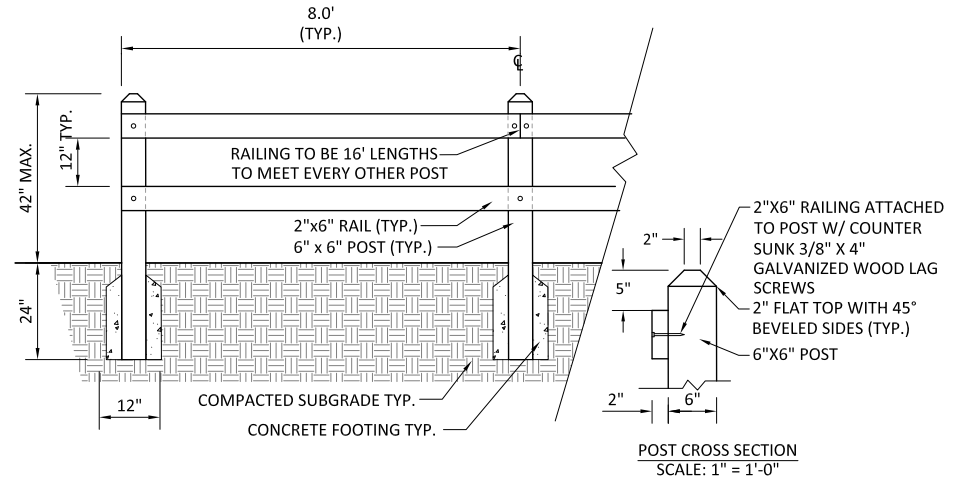
Description: black powder coated steel dispenser with lock, 12"x18" sign and 8' post, holds 2 rolls of 200 bags.
www.hdsupplysolutions.com



Water Fountain by Haws

model #3500D

Description: vandal-resistant, barrier-free, square pedestal dual level drinking fountain, powder coated black.

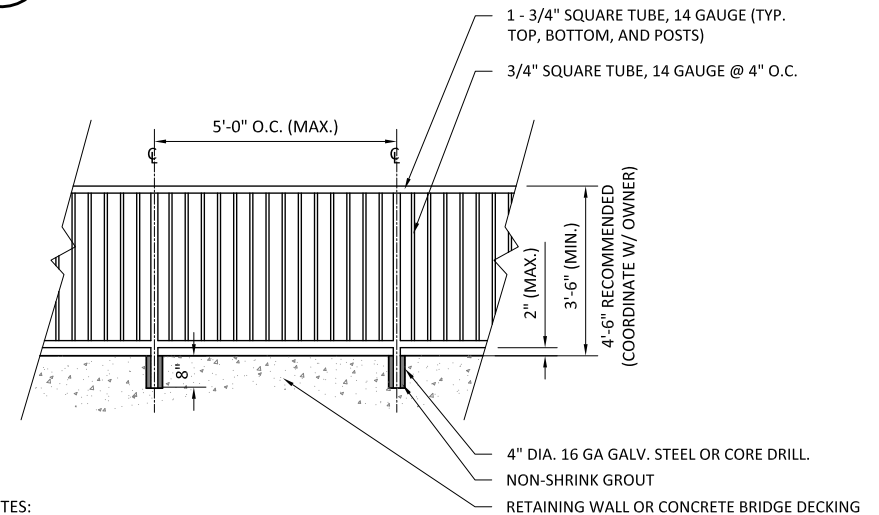


NOTES:

1. FENCE TO BE CONSTRUCTED WITH PRESSURE TREATED WOOD.
2. RAILING TO MEET FLUSH WITH OUTSIDE EDGE OF LAST POST.
3. REFER TO CONSTRUCTION PLANS FOR FENCE LOCATIONS.

2 PANEL WOOD FENCE

SCALE: 1/2" = 1'-0"



NOTES:

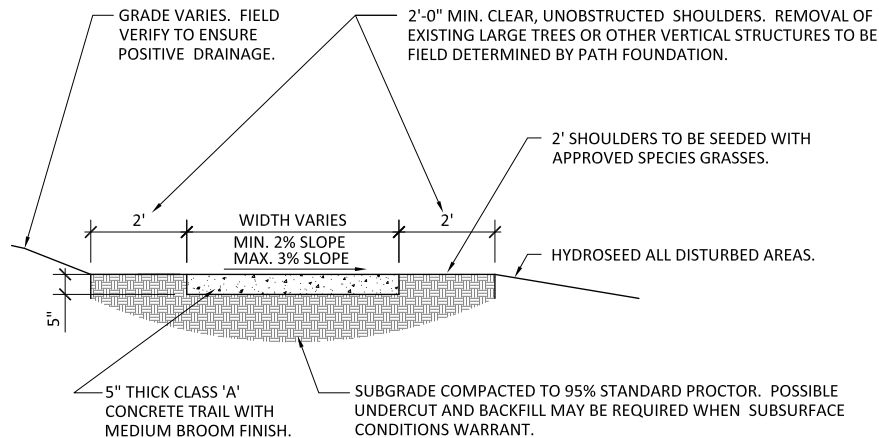
1. ALL STEEL TO BE POWDER COATED BLACK.
2. ALL POSTS SHALL BE PLUMB AND RAILS PARALLEL TO THE GROUND.

HANDRAIL DETAIL

SCALE: 1/2" = 1'-0"

4.5 Construction Details and Standards

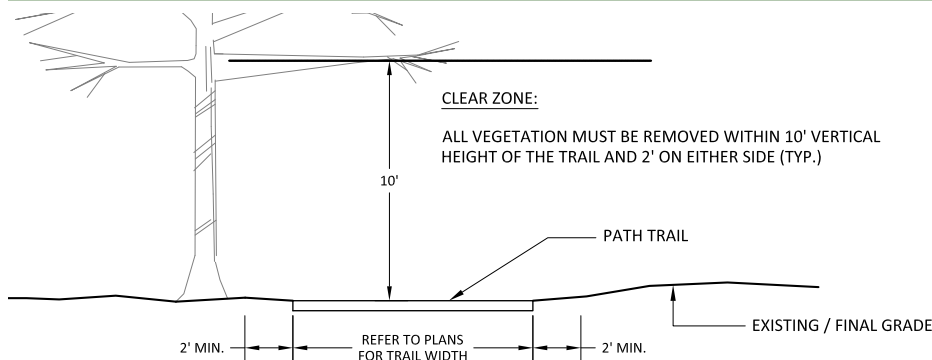
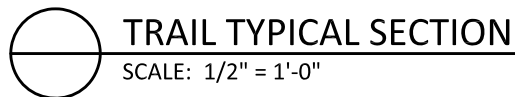
The *Clayton Connects* greenway trail system is proposed as a 12-foot wide, concrete paved, multi-use trail typically located in natural areas to create linear parks. Standard details for the construction of the trail system are included within the following pages.



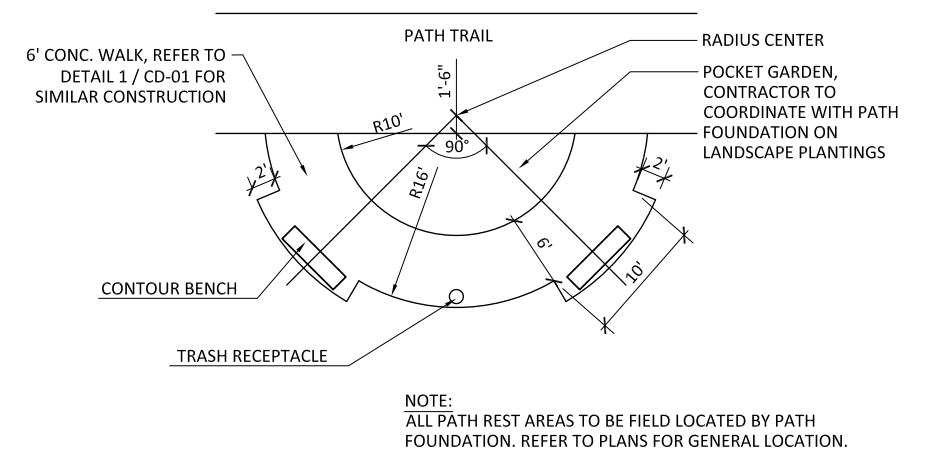
NOTE:
CONTRACTOR TO SAW CUT CONTROL JOINT AT LEAST 1/4 DEPTH OF SLAB ACROSS ENTIRE WIDTH OF TRAIL. CONTROL JOINTS TO BE LOCATED THE SAME DISTANCE APART AS THE WIDTH OF TRAIL (I.E. 12' WIDE TRAIL TO HAVE CONTROL JOINTS EVERY 12' ALONG TRAIL). CONTRACTOR REQUIRED TO REMOVE SAW DUST AFTER CUTTING.



Multi-use trails with a 12-foot wide concrete surface provide for low long-term maintenance.



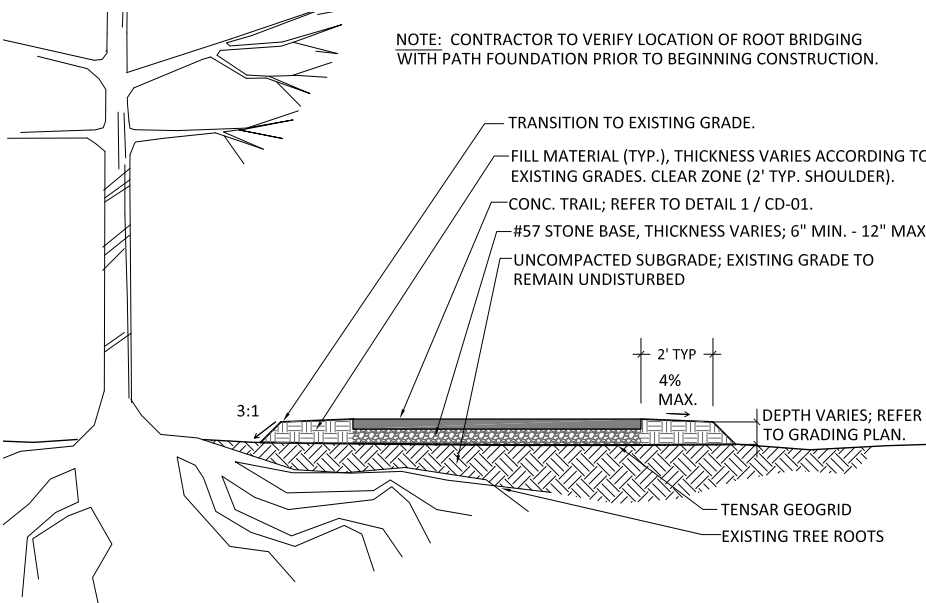
Multi-use trail through existing box culvert requires a 7'6" minimum vertical clearance.



POCKET PARK
SCALE: 1/8" = 1'-0"



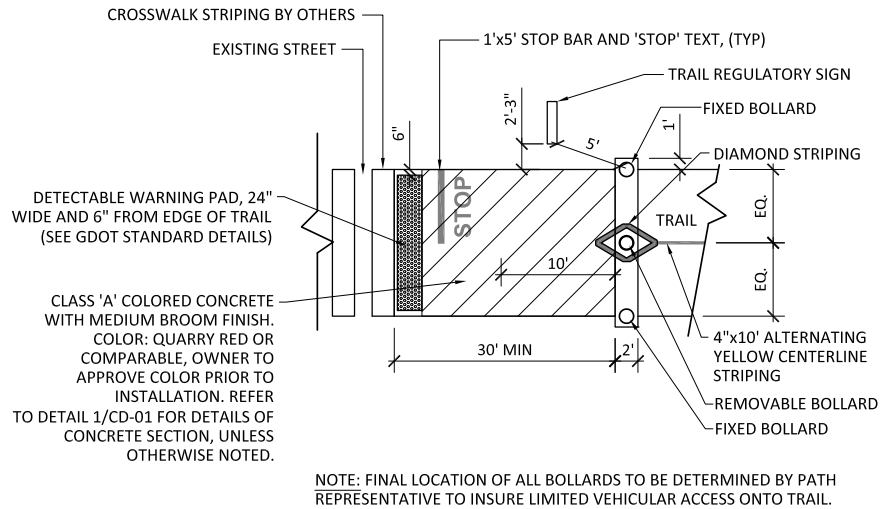
Pocket parks provide opportunities for trail users to enjoy time with friends and neighbors.



ROOT BRIDGING DETAIL
SCALE: 1/4" = 1'-0"



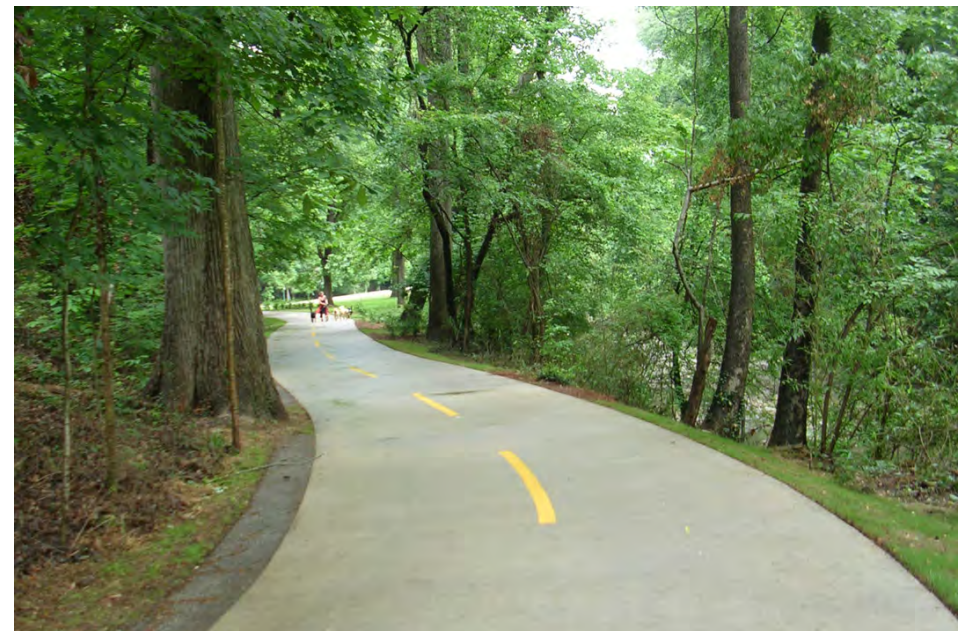
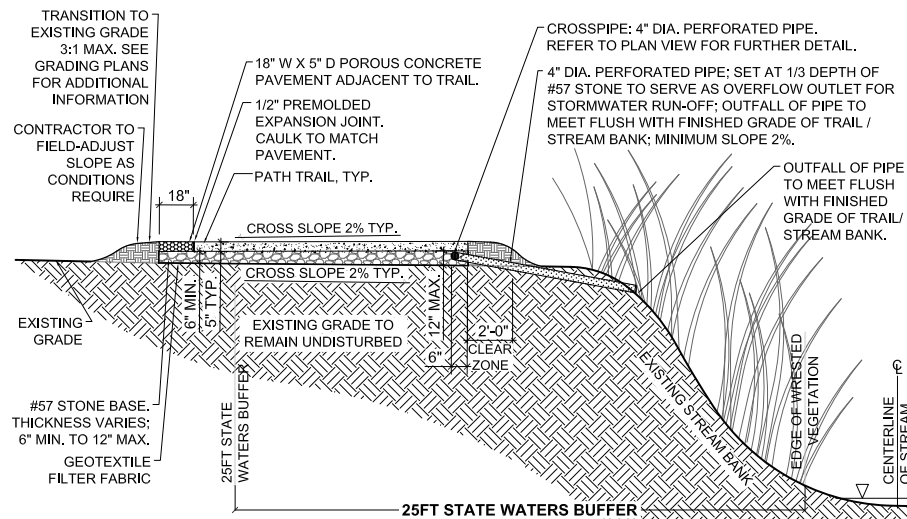
Root bridging insures protection of existing trees and allows the trail to blend into a wooded setting.



Typical trail intersection with signage, bollards, and pavement striping.

STANDARD INTERSECTION: PLAN VIEW

SCALE: 1/8" = 1'-0"



Sloping trail away from nearby creek into a gravel drain allows runoff to infiltrate under trail prior to entering creek.

INFILTRATION DETAIL

SCALE: 1/4" = 1'-0"



Wooden Boardwalk structure for crossing lakes and wetlands.



Custom steel bridge structures allow the trail to naturally blend into wooded areas.



Within highly developed areas, shared lane striping 'sharrows' will be used for short connections.



Prefabricated steel bridges allow trail to cross above existing roadways.

5.0 Maintenance & Operations

5.1 Management Plan

To insure the resources and facilities associated with the *Clayton Connects* trail system are kept in a good, usable condition, a management plan should be established by the entities responsible for maintaining the greenway trail system. The management plan should outline the specific day-to-day operations required for long-term maintenance and should be updated annually. Comprised of tasks, operational policies, standards, and routine and remedial maintenance goals, the management plan should engage community groups, residents, business owners, developers, and other stakeholders in the long term stewardship of the greenway trail system. Maintained as a public resource, the management plan should include regular inspections of the greenway trail system.

The management plan should also provide for both routine and remedial maintenance of the greenway trail system to keep the facility in a good, usable condition. The longevity of the concrete multi-use trail system is +20 years, while the boardwalk sections are 10-20 years. The *Clayton Connects* design standards have been chosen to provide longevity and minimal repair or replacement which will result in reduced maintenance costs for the County.

Routine Maintenance Activities (activities performed on a regular basis):

- Mowing / blowing
- Removing trash
- Trimming and pruning trees and shrubs
- Edging
- Controlling invasive species

Remedial Maintenance Activities (activities performed on an as needed basis):

- Replacing and repairing concrete
- Removing debris along trail edges
- Regrading to eliminate drainage issues
- Repairing bridges, boardwalks, retaining walls, etc.



Lack of routine maintenance has resulted in the public's perception of the Jesters Creek Greenway being unsafe.

5.2 Operation Responsibilities

Clayton County Department of Parks and Recreation is responsible for 670 acres of parkland. In addition to the operations and maintenance of these parklands, the majority of the greenway planning, operations and maintenance will be the responsibility of CCDPR. In order to increase the revenue generated for operations and maintenance of the greenway system, the following actions should be considered:

- Organize an "Adopt-a-Trail" program
- Hire one new maintenance crew person for every 15 miles of trail developed
- Purchase necessary equipment to properly maintain trail and trail amenities

5.3 Trail Security

In order to attract large numbers of users to the **Clayton Connects** trail system, there must be a perception of safety on the trails. The PATH design team suggests increased visibility of the Clayton County Police Department to assure a higher level of trail user safety including a bicycle patrol within CCDPR as the County begins implementation of the **Clayton Connects** greenway trail system plan. Many examples of bicycle patrols implemented in the Metro Atlanta area exist and could serve as models for Clayton County. In addition, motorcycle policemen and officers on four-wheelers can be utilized to satisfy the public's request for police presence on the trails

The County should also educate trail users about personal safety through various media and signage. Safety tips for trail users include the following:

- Be aware of your surroundings - wearing earphones while on the trail may prevent you from sensing nearby dangers.
- Carry a cell phone - cell phones provide a quick response from emergency officers to assist a hurt trail user or to respond to suspicious activity
- Be prepared - cyclists should carry spare tubes and tools for unforeseen bicycle maintenance.
- Stay hydrated - carry water to prevent dehydration while exercising on the trail
- Follow trail rules and etiquette - all trail rules are posted at each trailhead



Police Departments patrol trails on bicycle and ATV to insure trail safety for all trail users.

6.0 Master Plan Recommendations

6.1 Land Development Regulations

In order to establish the needed regulatory framework for promoting the implementation of the *Clayton Connects* plan, PATH's design team suggests approving changes to the Clayton County Code of Ordinances to add wording containing greenways development, protection, and support for the *Clayton Connects* trail system. The wording should reflect a similar statement as below:

"In any case in which a greenway is indicated on an adopted plan of Clayton County as being located on lands proposed for development, such greenway shall be dedicated and developed."

This requirement should be inserted into Clayton County's Land Development Regulations to insure the greenway improvement is required and should be included within the Code of Ordinances as a new "Greenways" section. As the Land Development Regulations generally outline provisions for sidewalks, streets, and other required improvements, greenways should be no different in this respect and should be dedicated upon development.



Implementation steps are critical for Clayton County to get their trail system

6.2 'Next Steps' Checklist

As implementation begins for the *Clayton Connects* plan, the following checklist should be followed:

- Adoption of *Clayton Connects* master plan by the Clayton County Commission
- Designation of a Greenway Trail Committee by the CCDPR Greenspace Division
- Promotion of the greenway system through CCDPR and the Greenway Trail Committee marketing
- Promotion of the *Clayton Connects* plan by Clayton County to insure its integration with other planning efforts
- Maintaining and updating existing greenway trails and installing new signage and amenities increasing visibility of the trail system
- Committing local funding by Clayton County and identifying private funding sources by Greenway Trail Committee
- Implementing initial trail projects in each commission district
- Acquiring greenspace properties and trail easements through the CCDPR Greenspace Division
- Developing and implementing education, encouragement, and awareness programs through the Greenway Trail Committee
- Evaluating and updating the *Clayton Connects* implementation plan as needed by the CCDPR Greenspace Division and Greenway Trail Committee

Appendix: Steering Committee Members

- Detrick Stanford, Director, Clayton County Department of Parks & Recreation
- Nathan Parrott, Clayton County Department of Parks & Recreation Greenspace Division
- Dr. Ryan Adams, Kiwanis Club
- Arrelle Anderson, Clayton County Chief Operating Officer
- Joe Baker, Southern Regional Medical Center
- Jean Pierre Bourget, Clayton Resident
- Katrina Brantley, Clayton County Board of Health
- Corlis Cummings, Clayton State University
- Angelo Daniel, Clayton County Police
- Joy B. Day, City of Jonesboro
- Dr. Evelyn Wynn Dixon, City of Riverdale
- Michael Edmonson, Clayton County Board of Commissioners
- Patrick Ejike, Clayton County Community Development Department
- Joe Hamilton, Lake Spivey Golf Club
- Jeoff Hamilton, Lake Spivey Golf Club
- Ronick Joseph, Clayton County Public Schools
- Bill Keir, Clayton County Office of Economic Development
- Greg Kirkland, Clayton County Public Schools
- William Lytton, Clayton County Department of Parks & Recreation
- Jeff Metarko, Clayton Transportation & Development
- Nathaniel Mingo, City of Riverdale
- Jackson Myers, College Park
- Kevin Osbey, Clayton County Water Authority
- Willie Roswalt, Lake City
- David Rutledge, Clayton County Department of Transportation
- Mike Thomas, Clayton County Water Authority
- Libby Torbush, Greenspace Trust Board
- Robert Tumlin, Clayton County Police
- Jeffrey Turner, Clayton County Board of Commissioners
- Ed McBrayer, PATH Foundation
- Jonathan McCaig, PATH Foundation
- Greta deMayo, KAIZEN Collaborative