
SOUTH CAROLINA
STATE PARKS
COME OUT & PLAY
Black River State Park
LARC 3150 | Clemson University
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Regional Design and Analysis

Mission and Purpose

"The goal of the Black River Trail and Park Network is to meet the open space and access needs of communities along the water while creating nature-based tourism opportunities that boost the local economy."

Case Studies

Chattahoochee Riverlands

The Chattahoochee Riverlands is a developing project by SCAPE. It seeks to create 125 miles of uninterrupted multimodal trails that follow the Chattahoochee River. Similar to the process of the Black River project, SCAPE has held sessions with 290 groups through seven counties to get community members engaged with the design process.





The project puts an emphasis on the historic and cultural context of the region, connecting it to historic sites along the corridor. It also pays attention to the ecology and habitats that are unique to the Chattahoochee River, and aims to support these systems. It also focuses greatly on community, and hopes to further connect the Metro-Atlanta area.

Swamp Rabbit Trail

The Swamp Rabbit Trail is a 22 mile multimodal trail that runs along the Reedy River through Greenville, South Carolina. It is a great example of how pieces of the industrial past can be revived to benefit users of a community. The firmer railway was converted into a space where residents and visitors of Greenville can gather, exercise, and recreate in an abundance of ways.





This greenway connects the city of Greenville through schools, local businesss-es, and parks throughout the city. It has brought economic benefit to the area and created a unique outdoor space for the residents of the city. It also goes through historic parts of Greenville, highlighting ghe culture and history of the southern city. It is still continuing to grow, leaving the potential for even greater benefits throughout the area.

History



When Europeans first began to explore & settle in South Carolina, the Black River region was already inhabited by several small tribes of American Indians

1500's - 1600's



The first African slave was imported and on began the influx of enslaved labor in the Township

1730



The Black River became a focus area for inland settlement of the colony when the "Township Plan" was proposed

1736



Enslaved labor creates large scale rice cultivation up until the Civil War

1750



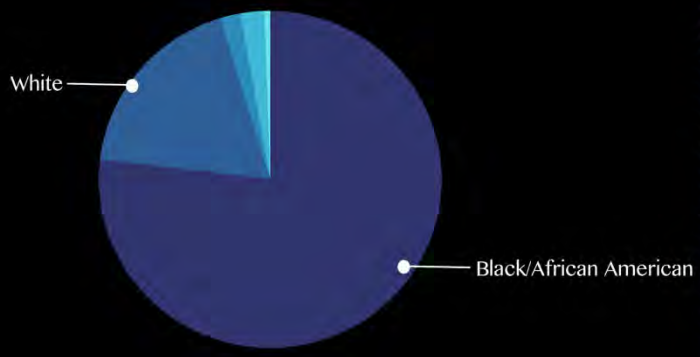
English exploration and colonization caused the declined of native people living in the region

1860

Demographic

Kingstree, South Carolina has the most significant difference in race & ethnicity than the other two towns in the region. In 2019, there were 4.18 times more Black/African American residents in Kingstree, SC than any other race or ethnicity.

Kingstree Race & Ethnicity



Kingstree	Andrews	Georgetown
Population	Population	Population
3,096+	2,964+	8,866+
Median Age	Median Age	Median Age
39.7	31.8	39.2
Median Income	Median Income	Median Income
$27,697	$33,125	$32,597
Poverty Rate	Poverty Rate	Poverty Rate
37.1%	25.6%	22.8%

Average of all three towns

Population	Avgerage Age	Average Household Income	Average Poverty Rate
4,975 +	36.7	$31,139	28.5%

Process

1. A survey was conducted by the Open Space institute to gather the thoughts and opinions of people that lived near the black river. Respondants included residents who owned land along the black river, residents who owned land in counties surrounding it, and visitors not native to the Black River area. The 1000+ respondants ranged in age, gender, race, ethnicity, and socioeconimic status. Some of the questions included the users relationship to the river, how they use the river and recreate in areas around it, what infrastructure they would like to see added to the river, and special memories they have associated with it

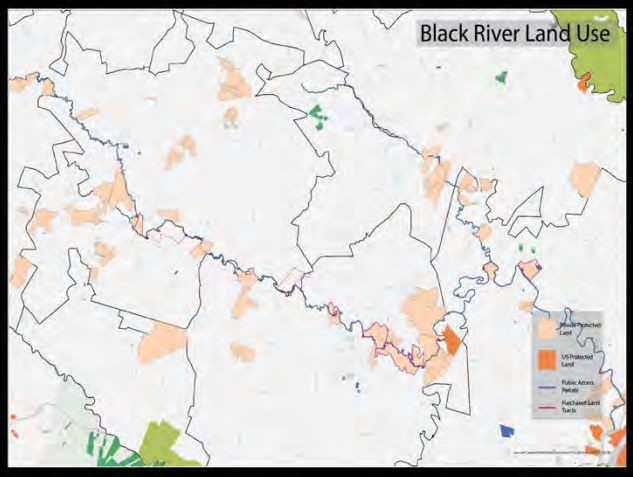
2. The survey results were taken into Excell where the data was analyzed and grouped by zip code to make it easier to evaluate and interpret. In order to simplify the results, the top 20 zip codes with the most reponses in the area were prioritized, and all future analysis was conducted within these zip codes. Pivot charts were used to assist with this.

3.After analyzing the results that were most pertinent to the future development of the project, simplified Excell sheets were brought into ArcGIS where they could be further interpreted. Created so the results could be visualized and easily understood by anyone who views it.

4. These charts were used in the development of the master plan, programming, and amenities were placed throughout the river based on which counties desired them most, and where they would best suit the user based on how they recreate.

Land Use and Circulation

Agriculture and forestry have remained the principal uses since European settlement. More recently, recreational use in the form of house ownership for the purposes of vacation and leasing lands for recreational hunting and fishing have become popular.







Concerns

1. Traditional land uses like agriculture, timber, and wildlife within the river corridor may disappear over time.

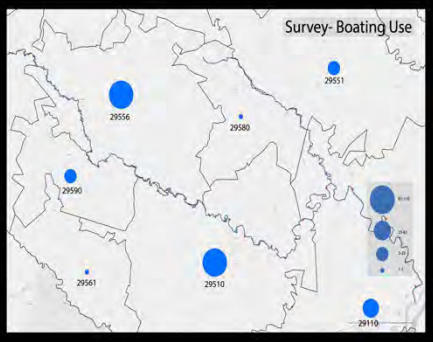
2. Population growth and expansion of surrounding areas in the coastal corridor will increase land development and change the rural character of the Black River watershed.

Land Use

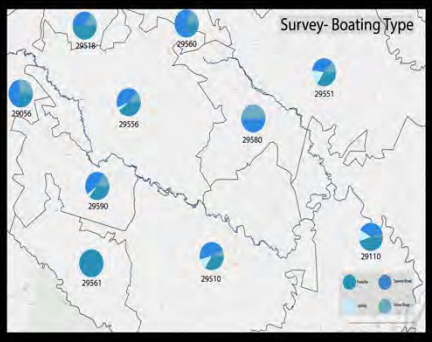
Desired Infrastructure



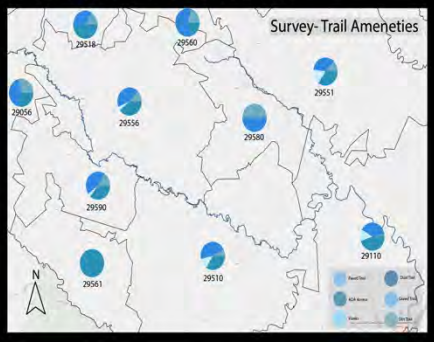
Boating Users



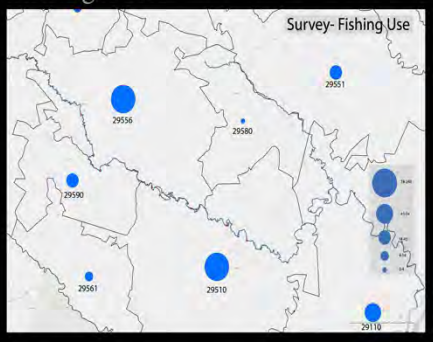
Boating Type



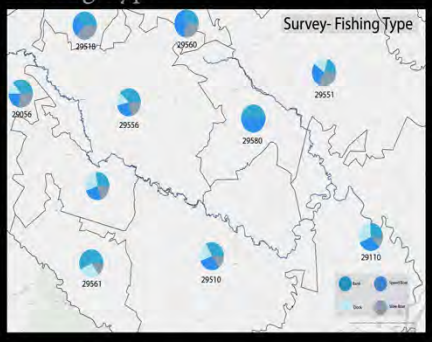
Desired Trail Ameneties



Fishing Users



Fishing Type



An extensive study was done to understand the wants, needs, and opinions of users of the future site. A survey was conducted to gather the thoughts of residents and visitors in counties that surround the black river. That data was then analysed and interpreted into graphs that show the results. The above charts depict a summary of the amenities users wish to see added, including infrastructure and trail ameneties. Studies were also done to understand how the users prefer to recreate along the river. This information was used to determine where ameneties should be placed to satisfy as many future users as possible.

Potential Connections

Downtown Kingstree

Downtown Kingstree, SC offers a comfortable feel for visitors. It hosts the Kingstree Historical District which contains a variety of interesting historical buildings and monuments. Downtown Kingstree hosts events such as the Pig Pickin' Festival, Millwood Oktoberfest, and the Pink Power Walk.





Potential Usage

Downtown Kingstree is positioned at the crown of the Black River scenic designation. This will allow for extensive relation of the new blueway to the downtown area. By finding ways to connect the nearby downtown area to the river will provide the park with ample visitors.

B.R. Cypress Preserve

The Black River Cypress Preserve is an incredible privately maintained resource. The site offers bike trails, walking trails, and easy river access. It contains bath-rooms, covered picnic spaces, and more. This is a beautiful resource for the community.





Potential Usage

Ample precedent can be taken from the Parkitecture of this site. The Cypress Preserve is a great example of how some of these future areas around the river should look. Additionally, the blueway should make a connection with this site, as users would love to experience the area.

Town of Andrews

The town of Andrews, SC contains a variety of historical sites for visitors. The small town has a fair amount of recreational complex's and is overall very quaint and peaceful. Andrews is a very small town, but with significant historical value.





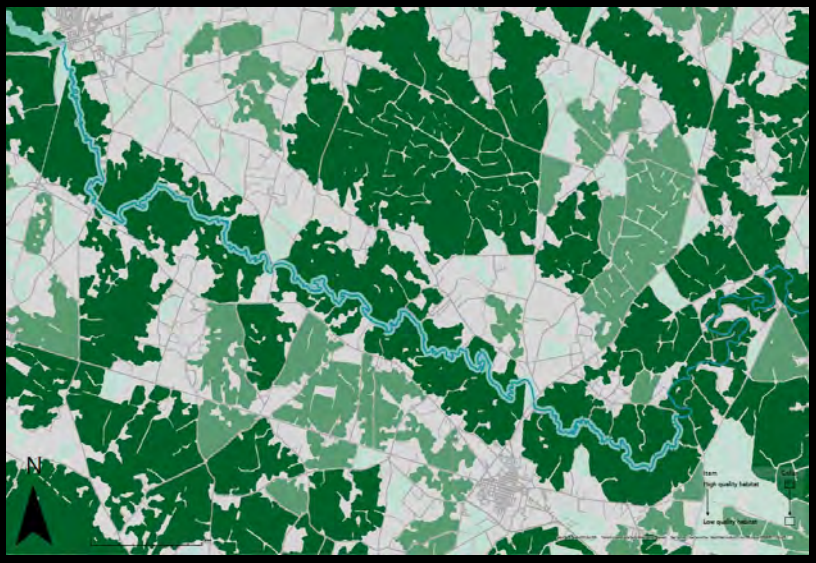
Potential Usage

Andrews is a nice town, but it may benefit from the additional visitors the blueway will attract. connections from surrounding trails to downtown Andrews should be made in order to encourage both usage from the residents and to bring the blueway visitor into the town to support its economy.

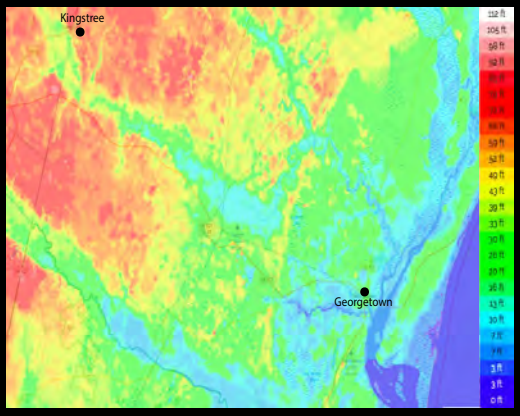
Ecological Communities and Corridor Study

The Scenic Black River corridor contains three broad groups of natural habitats based primarily on morphology and relative position to the Black River. These include riverine habitats, bottomland forest habitats, and adjacent upland habitats. Riverine habitats are associated with the river channel, proper, and adjacent riverbanks. Bottomland forest habitats encompass the river floodplain between the river channel and nearby uplands. Upland habitats of various types occur along the edge of the floodplain. The river hosts a wide variety of flora and fauna, including 158 tracked species and 3 federally endangered species.

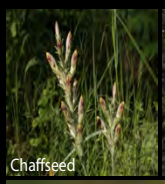
Core Habitats



Thermal Elevations

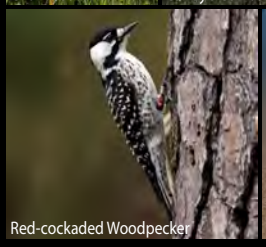


Endangered Species


Chaffseed


Canby's Cowbane


Atlantic Sturgeon


Red-cockaded Woodpecker


Shortnose Sturgeon

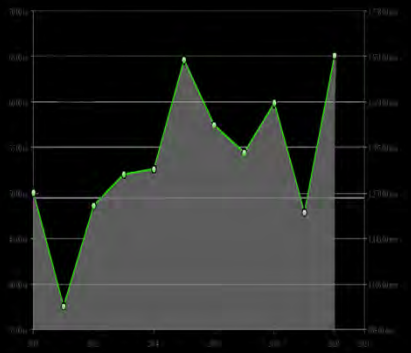
Environment

The environment surrounding the river is largely low lying swamp areas. These areas contribute greatly to the Black River's ecosystem and general function [see "Wetlands Map"]. The surrounding wetlands should remain mostly undisturbed by construction and human activity.

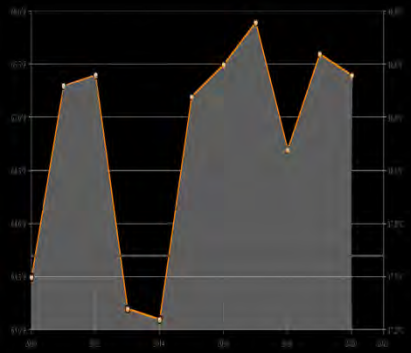
The plentiful wetlands in turn make true pathways difficult on the site, as the soils are mostly inept for any sort of building [see "Soils Map"]. Soils in the surrounding environment are often flooded and/or saturated which can make construction difficult. As shown on the map however, there are plenty of areas with suitable soil for construction.

Yearly average precipitation fluctuates a fair amount, however it remains higher than the U.S. average [see "Average Precipitation"]. This can obviously cause the river's water level to rise during certain seasons. Average temperatures stay fairly high in the region as well, yet again, there has been yearly fluctuation [see "Average Temperature"].

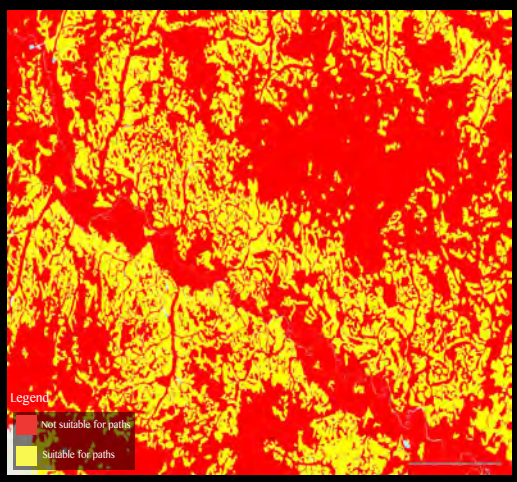
Average Precipitation



Average Temperature



Soils Map

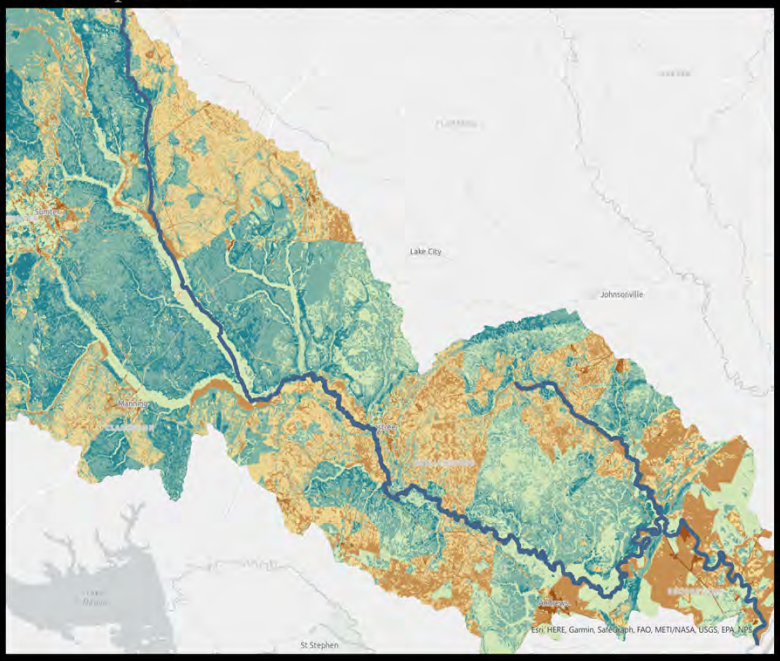


Wetlands Map

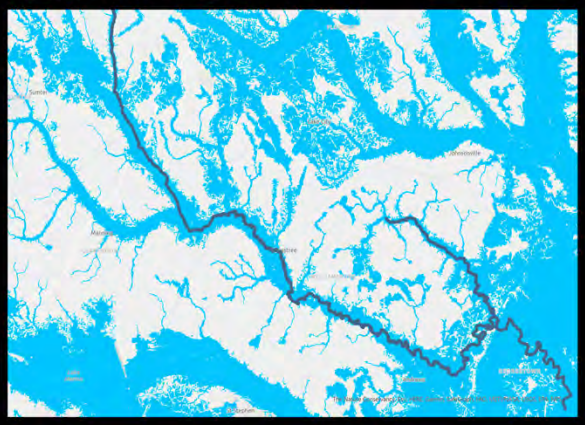


Hydrology

Flood Exposure



Active River Area



Watersheds



An essential part of the development of this project was understanding the hydrology of the river. The black river has water levels that frequently fluquate, and the vast majority of the project is located within the river's flood plain. The river can change in gage height as much as 8 feet ghroughout the year, with the height being as high as 27 feet in spring months, and as low as 19 feet in dry seasons. Analyzing the river qualities allowed us to find the most ideal locations for buildings and paths, and where intervention would be needed. One benefit of this river trait is the high quality and fertility of soils in this region.

Community Resources

Most of the Black River's points of interest are included in the towns of Kingstree, Andrews, and Georgetown. These towns provide historical interest as well as various restaurants and tour stops. Further connecting these areas with the Black River will create an incredible amount of benefit for both the towns themselves and the users. Additionally, new/redesigned sites like Hinds Canada, RMS South, Mead, and Rocky Point will provide users with interesting and recreational places to visit. The Black River Cypress Preserve is an existing site with extensive trails, amenities, and river access. However, the primary community resource is the Black River itself. Creating more access points and amenities along the river will allow more people to benefit from the recreational value it provides. Fishing, kayaking, tubing, site seeing, and wildlife observation are just a few of the possible activities along this immaculate river.








Black River Management Plan

The Black River is a rich part of South Carolina's history, and natural and cultural heritage. With the numerous ways humans use and interact with the river, along with its unique plant and wildlife ecology, maintaining the integrity of the river is a mission that all users are interested in. The main goals of the Black River Project are to increase awareness of the river and all it has to offer by adding recreation opportunties, while simultaneously making sure the river stays as prestine as it is today. In addition, the plan hopes to boost local economies thorugh ecotourism, and bring in visitors to experience the culture and history of this South Carolina landmark.

History

The project plans to connect the trail system with numerous historic sites and cultural resources located near the river to highlight the rich historic past of the Black River.

Wildlife Resources

The Black river is home to unique vegetative communities and natural habitats that have been created from the conditions of the river. Protection of these species is imperative, and the design will be tailored to helping protect and support these ecosystems.

Water Quality

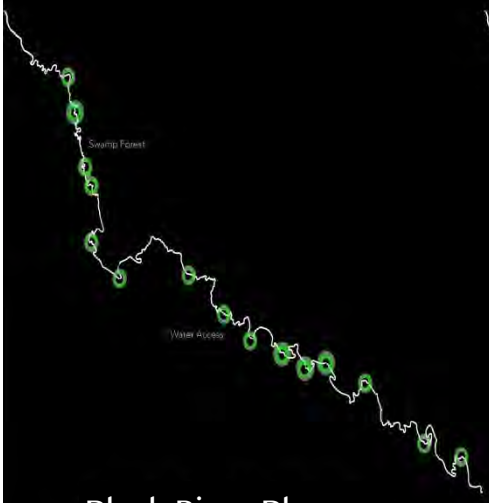
One of the most important steps in helping protect the ecostystems surrounding the river is to protect the river itself. High water quality must be maintained not only for human uses of the river, but for all species that rely on it to survive.

Recreation and Tourism

The best way to raise awareness and educate about the river are to get people on it and letting them experience it for themselves. A main goal of the project is to increase tourism and recreation so more people are visitng the river and creating unique memories there. This will also help to support local economies of towns around the river by bringing in business and opportunities associated with ecotourism.

Regional Design Breakdown

The Black River State Park design aims to increase public access to the river while still preserving its natural beauty. A multimodal, approx. 50 mile, greenway cautiously manuvers the rugged wilderness of the Black River while increasing interaction and amenity access along the blueway. The trail and park network will promote conservation while allowing more people to witness the beauty of the Black River.



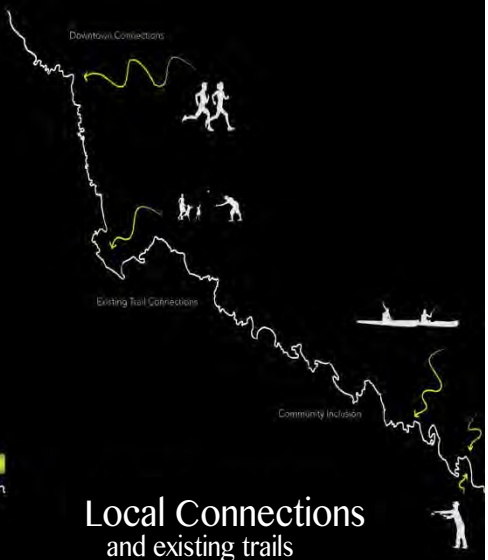
Black River Blueway
and access points

The 151 mile long river provides pristine views and experiences. The blueway project will provide more access points to cater to different river activities (kayaking, fishing, tubing, etc.). These new access points will also host a variety of amenities for lodging and gathering.



Greenway
and points of interest

The greenway aims to increase connectivity between public parks, existing trails, and the Black River. The greenway's layout was carefully determined so that it may not impede on the ecosystem or conserved land.



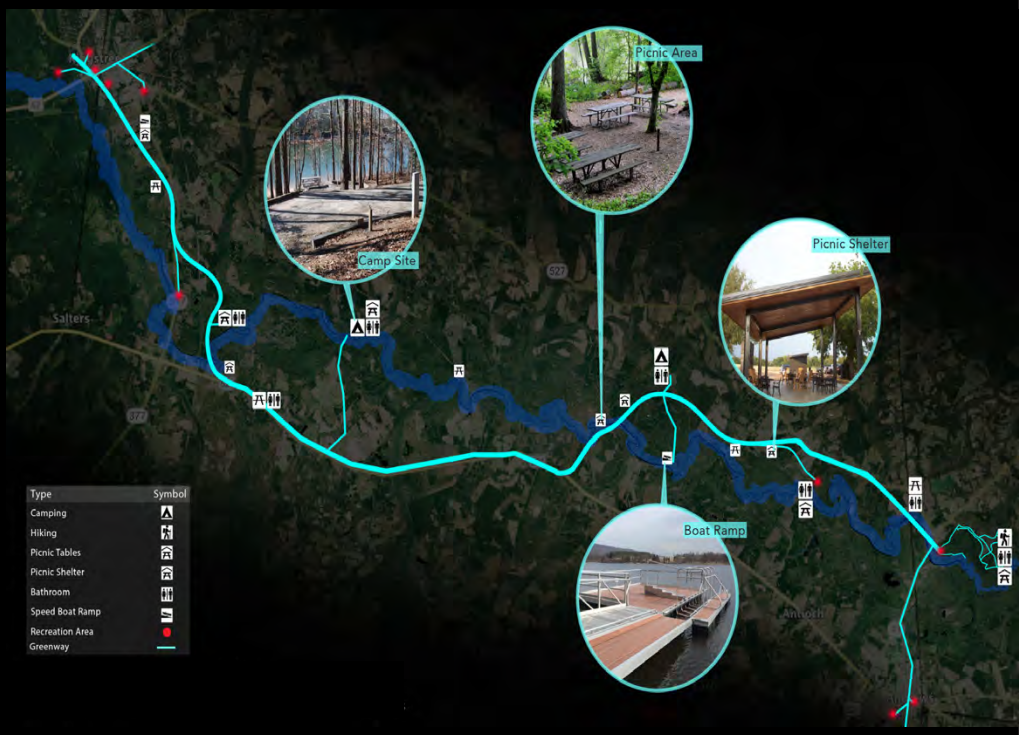
Local Connections
and existing trails

The design consciously pulls potential users to and from the centers of Kingstree and Andrews, while also connecting to existing trails and park systems. The goal is to allow these trails and parks to link with the greenway to bring people to the river.

Regional Design

Amenities were consciously layed out in accordance to researched data. Boat ramps, camp sites, picnic areas, and other amenities will be reasonably laid out to allow for all users to have their needs and desires met.

All built structures will follow the design concept of “Parkitecture” as to ensure they will blend in with the natural enviornment. This will create the proper aesthetic for the park.



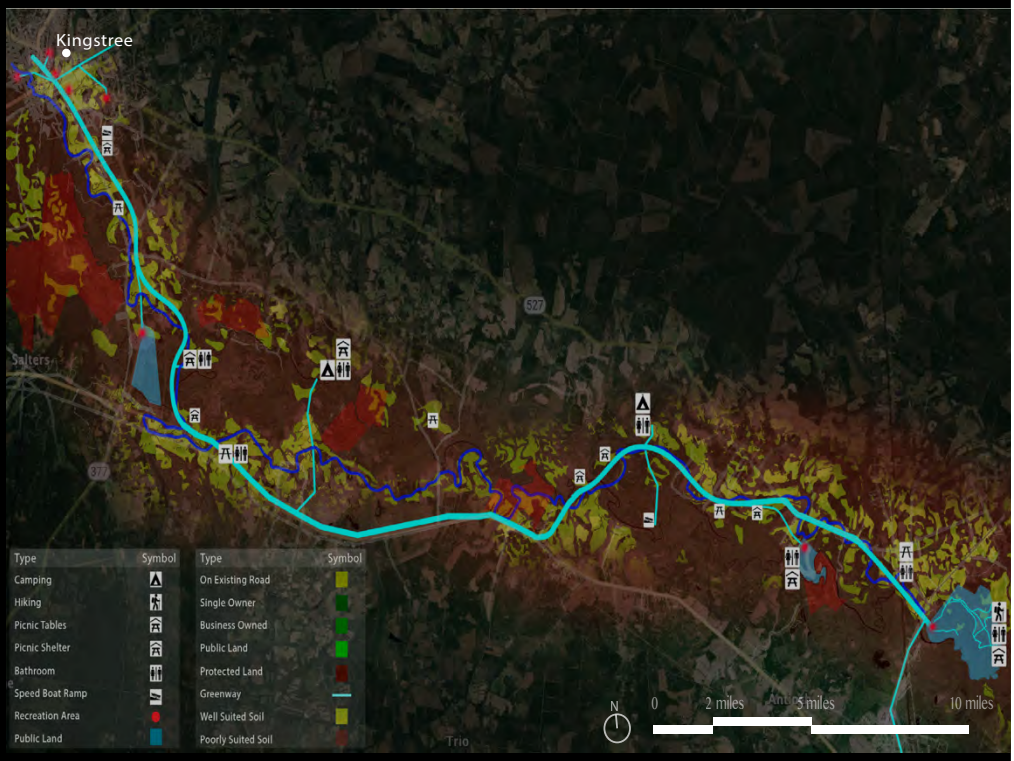
Greenway

The greenway design aims to safely weave through the Black River area in the most practical and effeective way possible.

The design consideres soil quality and topography which will allow the path to be more easily constructed. The end goal is that the greenway would require as little boardwalk as possible.

The design aims to weave around conserved land and not encroach on existing habitat.

Amenities are spaced fairly evenly throughout the design based on survey results and area needs.



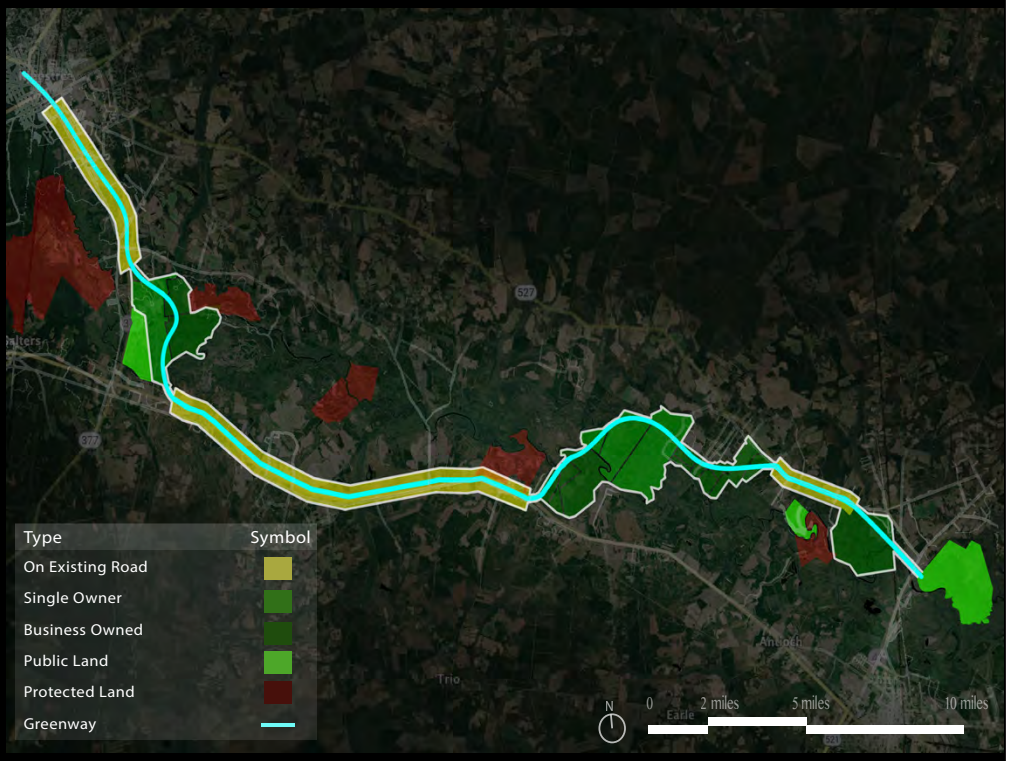
Greenway Route

The route of the greenway ensures that the design follows the most optimal path in regard to implementation.

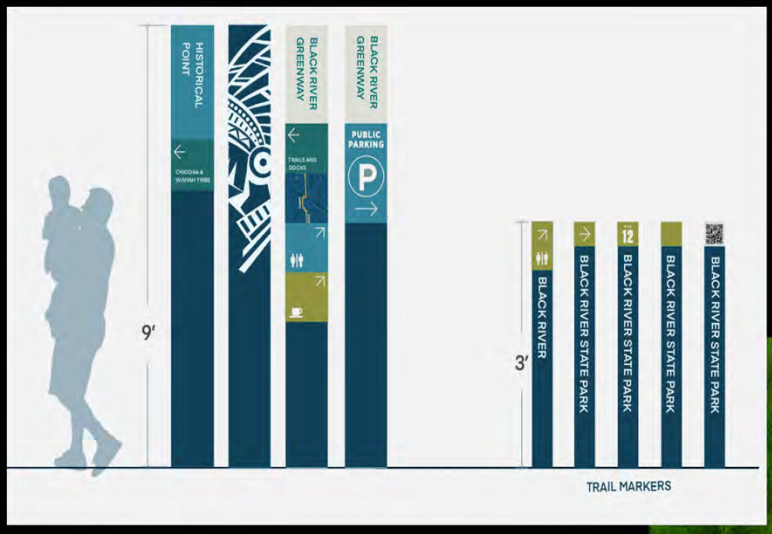
The greenway follows existing roads when possible, as the roads provide existing amenities and infrastructure.

The greenway avoids environmentally protected land at all costs, as the regional design must have a low impact on the enviornment.

The greenways attempts to infiltrate as little private land as possible. However the greenway must go through some business and privately owned lands.



Signage and Branding



Notability and Cohesion

These signs will not only increase the Greenway and Blueway's navigability but create a more cohesive signage that will ultimately promote brand recognition of the park throughout the region.

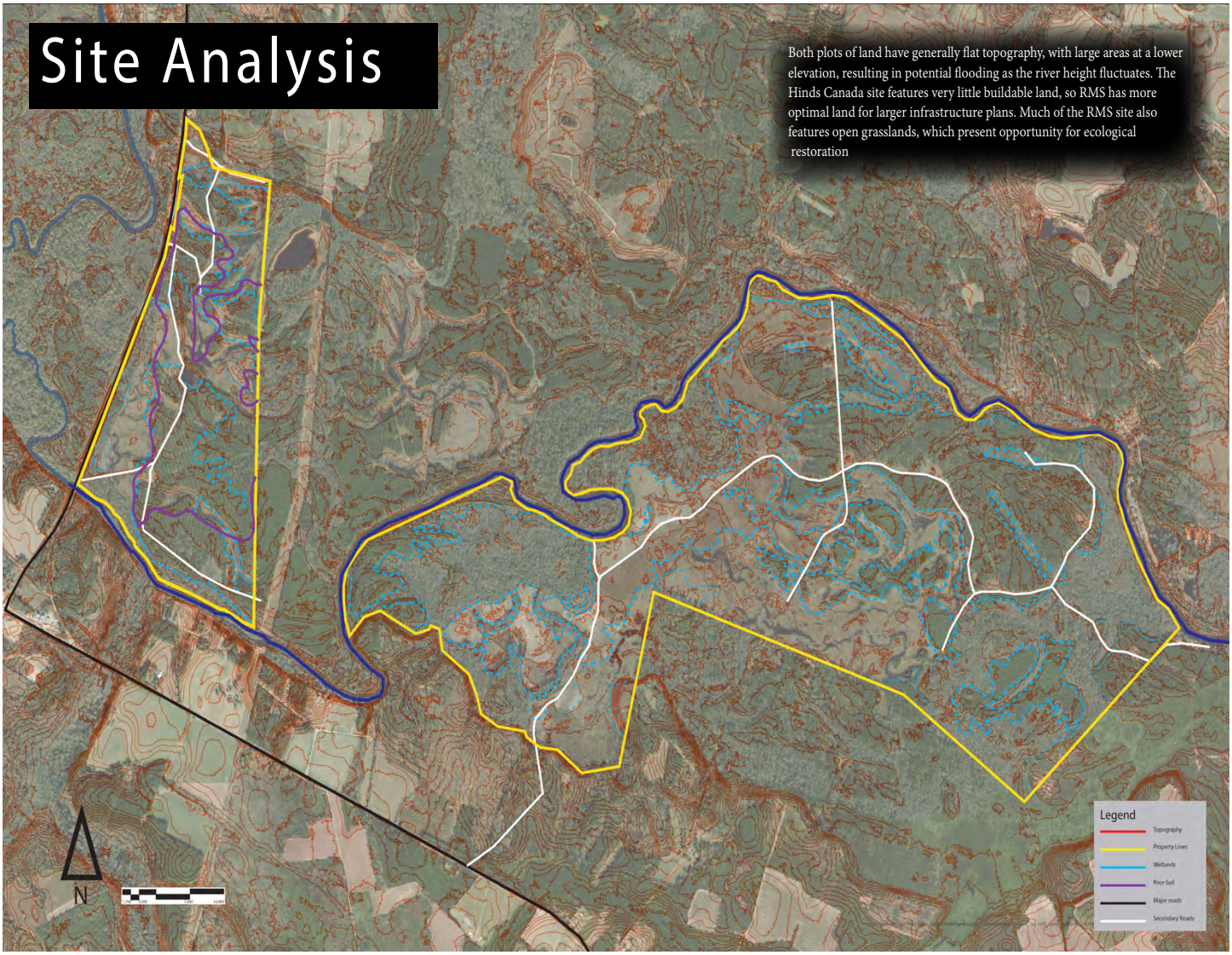
Signage and markers will follow Native American and other significant history themes. These 9' signs will notify users of important features, historical markers, and/or amenities from long distances.



Master Plan and Phasing Plan

RMS South and Hinds Canada

Site Analysis



Master Plan: Hinds Canada



Fishing Area
River Access
Trails
Roads

Due to the very strict soil conditions, the Hines Canada site is meant to be a minimalistic day use area for visitors passing through the nearby highways. Near the entrance of the site, users will approach an information center to learn more about the Hines Canada site, along with the other sites that are part of the larger project. This area will also include a picnic area and restrooms, with entrances to two short loop trails. Further down the site includes an additional parking lot, and a river access point with an area for fishing. Above the parking area is another picnic area. This day use site is intended for people stopping through during long road trips, providing visitors a place to stretch their legs and stop for a picnic. Other ameneties are intended for local users who wish to to take advantage of added river ameneties.

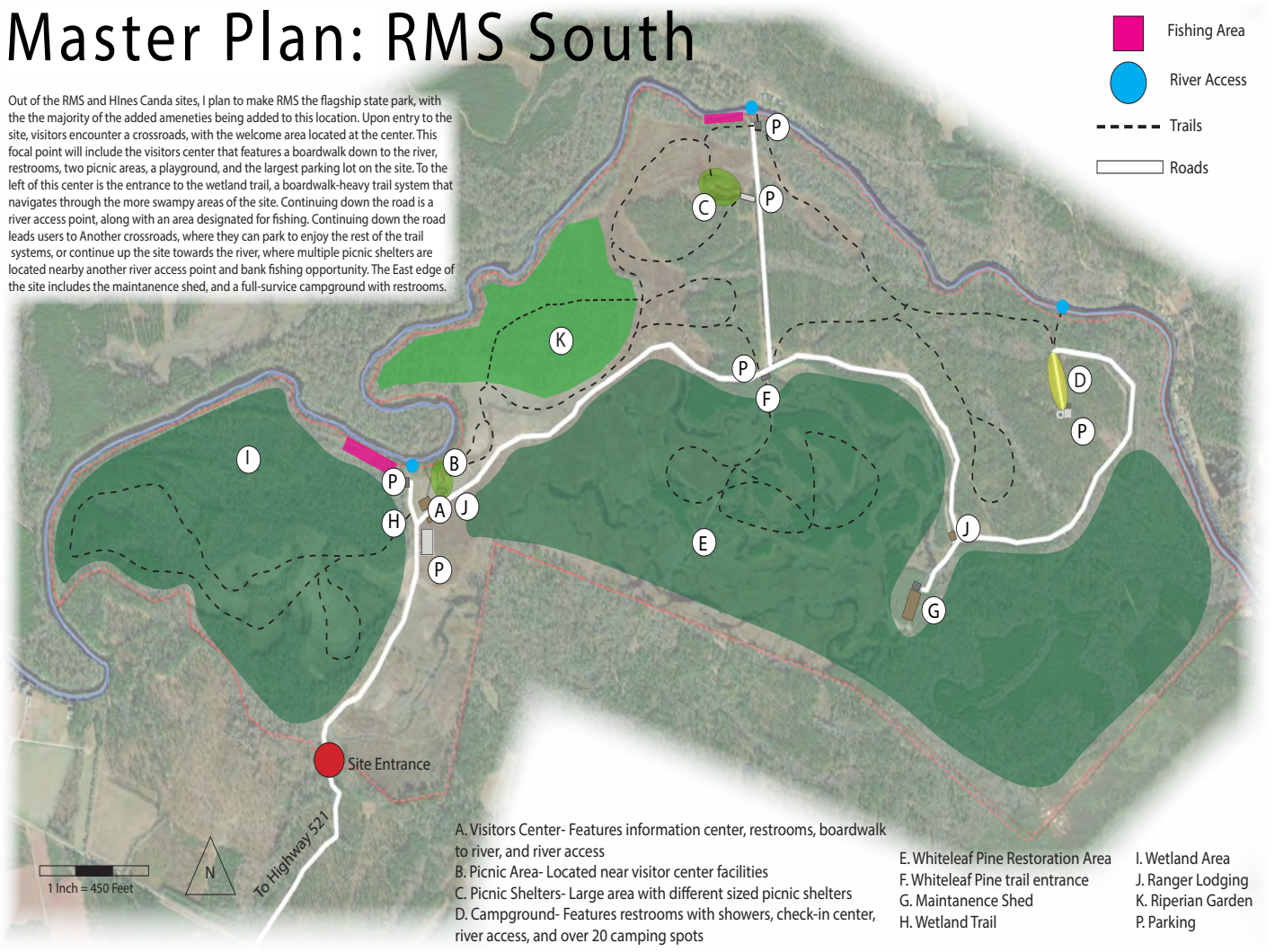
1 Inch = 450 Feet

N

A. Welcome Area- Features information center, parking, restroom facilities, picnic area, and trail entrances
B. Lower Area- Features parking, picnic area, river access, trail access, and bank fishing area

Master Plan: RMS South

Out of the RMS and HInes Canda sites, I plan to make RMS the flagship state park, with the the majority of the added ameneties being added to this location. Upon entry to the site, visitors encounter a crossroads, with the welcome area located at the center. This focal point will include the visitors center that features a boardwalk down to the river, restrooms, two picnic areas, a playground, and the largest parking lot on the site. To the left of this center is the entrance to the wetland trail, a boardwalk-heavy trail system that navigates through the more swampy areas of the site. Continuing down the road is a river access point, along with an area designated for fishing. Continuing down the road leads users to Another crossroads, where they can park to enjoy the rest of the trail systems, or continue up the site towards the river, where multiple picnic shelters are located nearby another river access point and bank fishing opportunity. The East edge of the site includes the maintanence shed, and a full-service campground with restrooms.



A. Visitors Center- Features information center, restrooms, boardwalk to river, and river access
B. Picnic Area- Located near visitor center facilities
C. Picnic Shelters- Large area with different sized picnic shelters
D. Campground- Features restrooms with showers, check-in center, river access, and over 20 camping spots

E. Whiteleaf Pine Restoration Area
F. Whiteleaf Pine trail entrance
G. Maintanence Shed
H. Wetland Trail

I. Wetland Area
J. Ranger Lodging
K. Riperian Garden
P. Parking

RMS Picnic Area

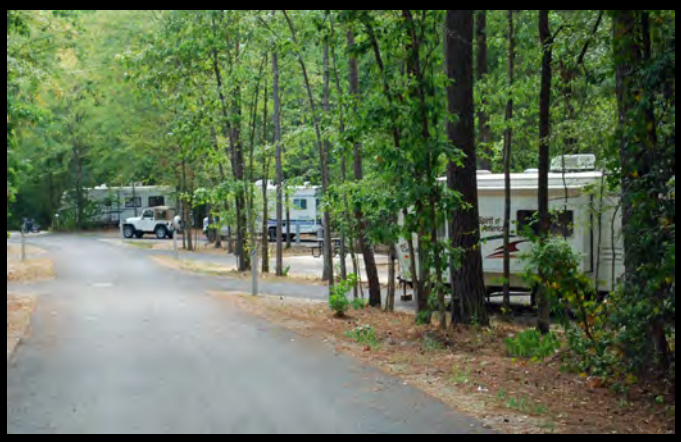






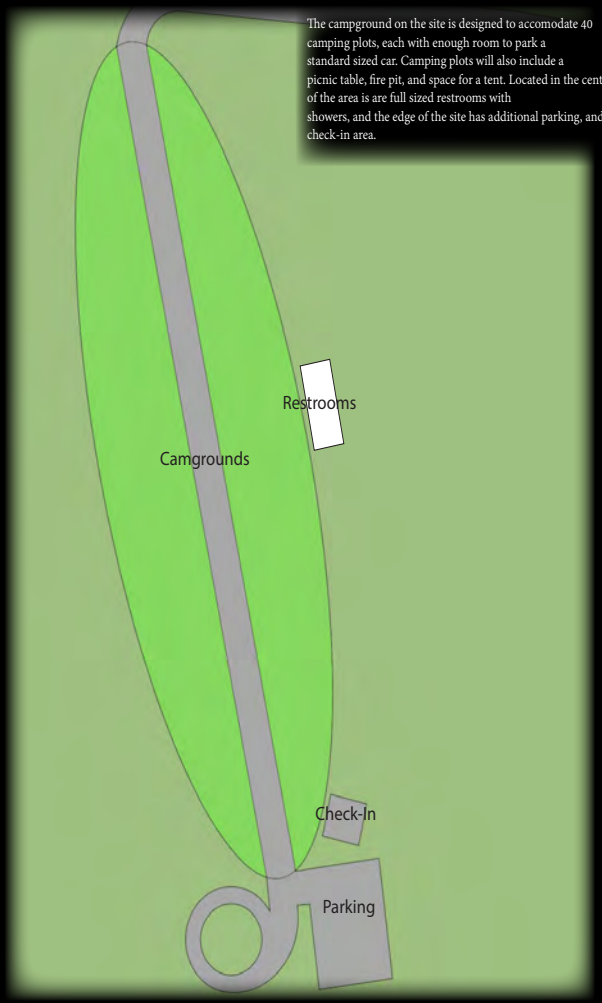


RMS Campgrounds





The campground on the site is designed to accomodate 40 camping plots, each with enough room to park a standard sized car. Camping plots will also include a picnic table, fire pit, and space for a tent. Located in the center of the area is are full sized restrooms with showers, and the edge of the site has additional parking, and a check-in area.



Phase 1





Phase 1 focuses on developing the majority of the Hines Canada Site, including building the information center and related ameneties including parking, along with the picnic area and kayak launch. Trail systems and signage are also to be added. On the RMS site the main picnic area along with parking are to be built, along with trails and an information kiosk to provide information before the RMS visitors center is to be built. Main roads within the site will also be redone to support vehicles efficently.

Phase 2





Phase 2 aims to continue developemnt of the RMS site, by constructing the visitors center, the picnic shelters located along the river, and adding the maintanence shed and housing for park rangers.

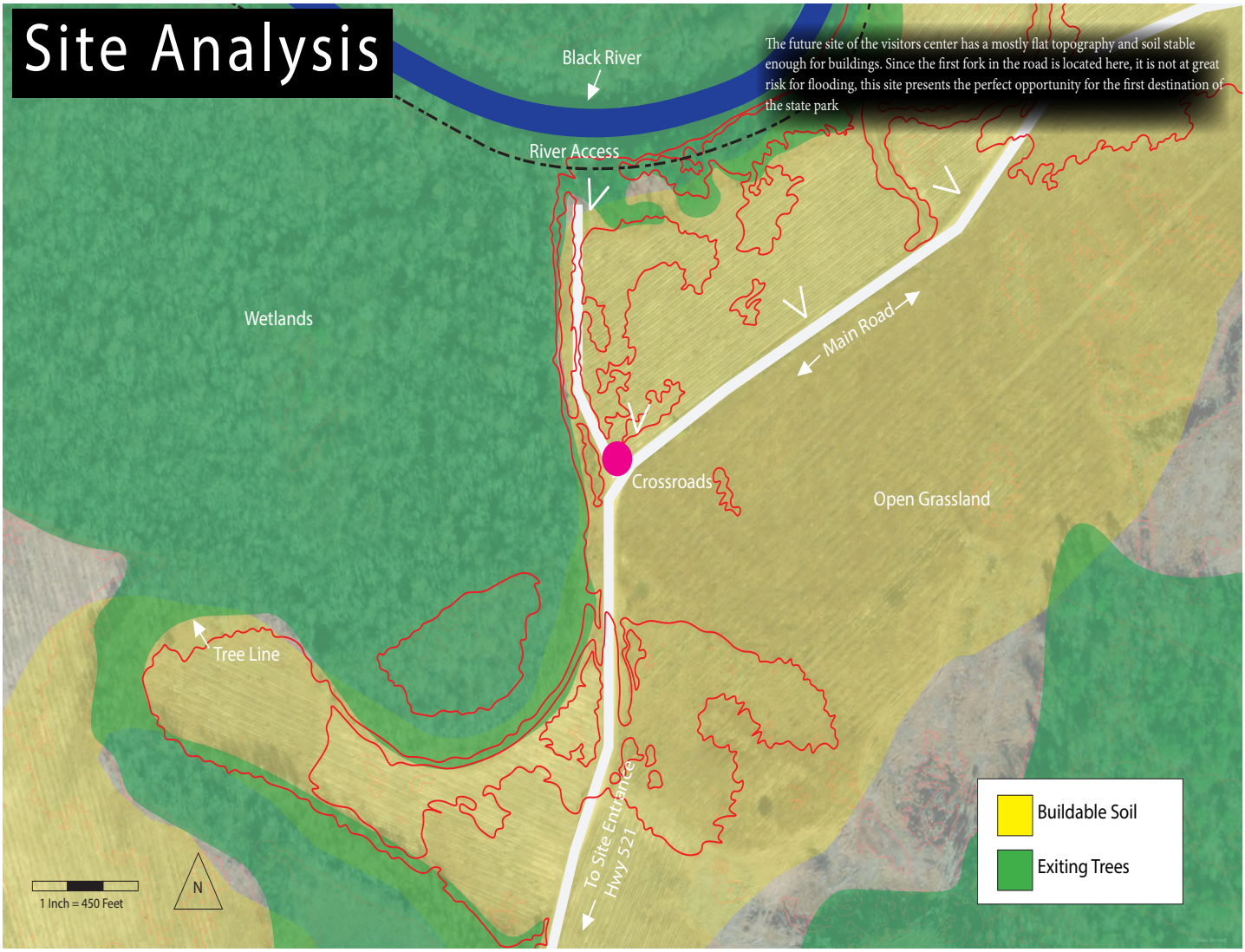
Phase 3





Phase 3, the final phase, finishes construction of the sites by adding the campground in the RMS site, along with the river boardwalk located by the visitors center, and developing areas along the river that are to be used for bank fishing.

Site Analysis

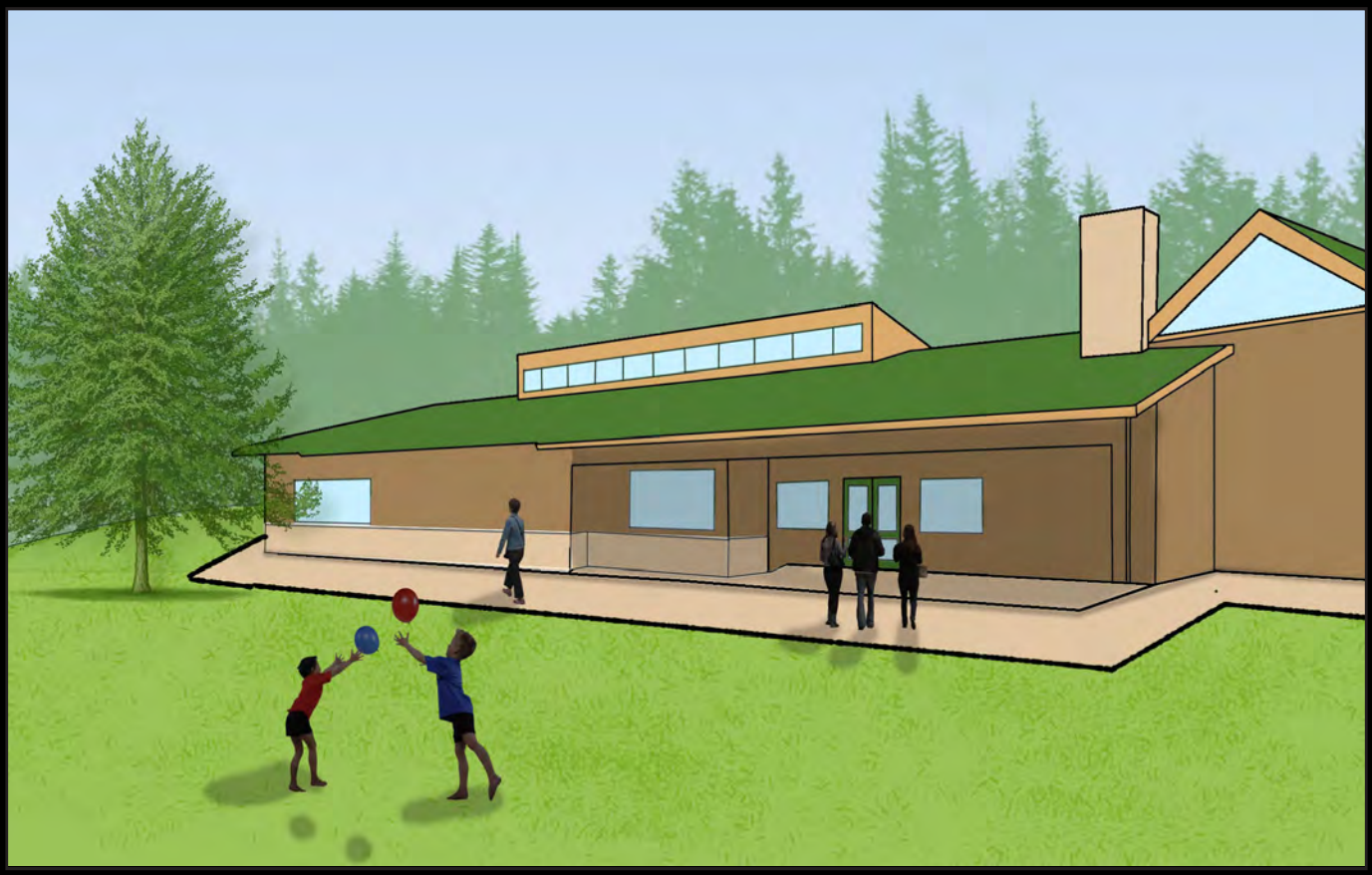


Visitors Center Master Plan

With a location at the intersection of roads within the park, this site will be the first impression of all the Black River has to offer. Upon parking, users will be introduced to the visitors center, where they can learn about the history and culture that makes the Black River so significant. As they follow the paved trail system, they will discover a functional day use area, which features a playground and short loop trails to start to explore the ecology of the Black River. Lawn spaces are also provided for more recreation activities, and a river access point allows users to get an up-close look at the river, where they can start a kayak journey, fish along the bank, or just enjoy the view at the overlook platform. The park will be decorated with plants native to the Black River, and use materials that are significant to the history of the land.



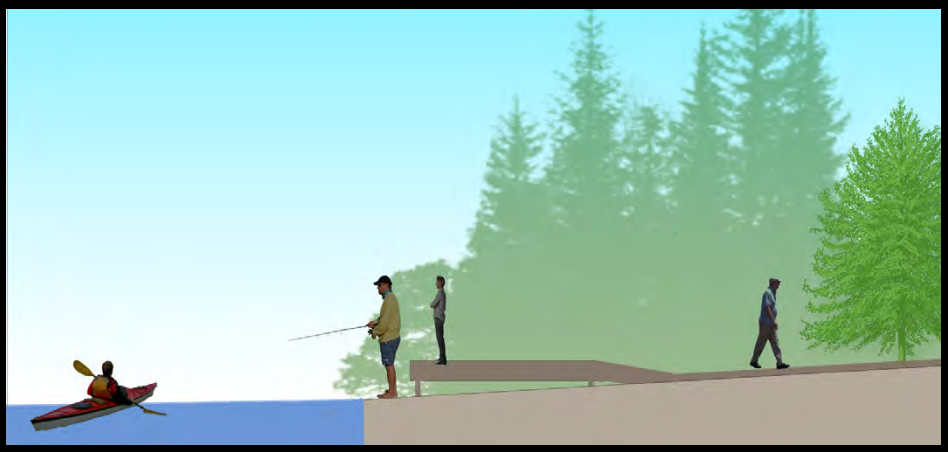
Visitors Center Perspective



Supporting Graphics



Playground Perspective



River Section

Character Board

Hardscape Material





Tabby Concrete and Limestone Pavers

Native Flowers





Native Wildflowers and Mairgold

Native Trees







Longleaf Pine, Black Tupelo, and Bald Cypress

Native Grasses



Bluestem
and Woolgrass



Mead Property Design and Analysis

Site Context

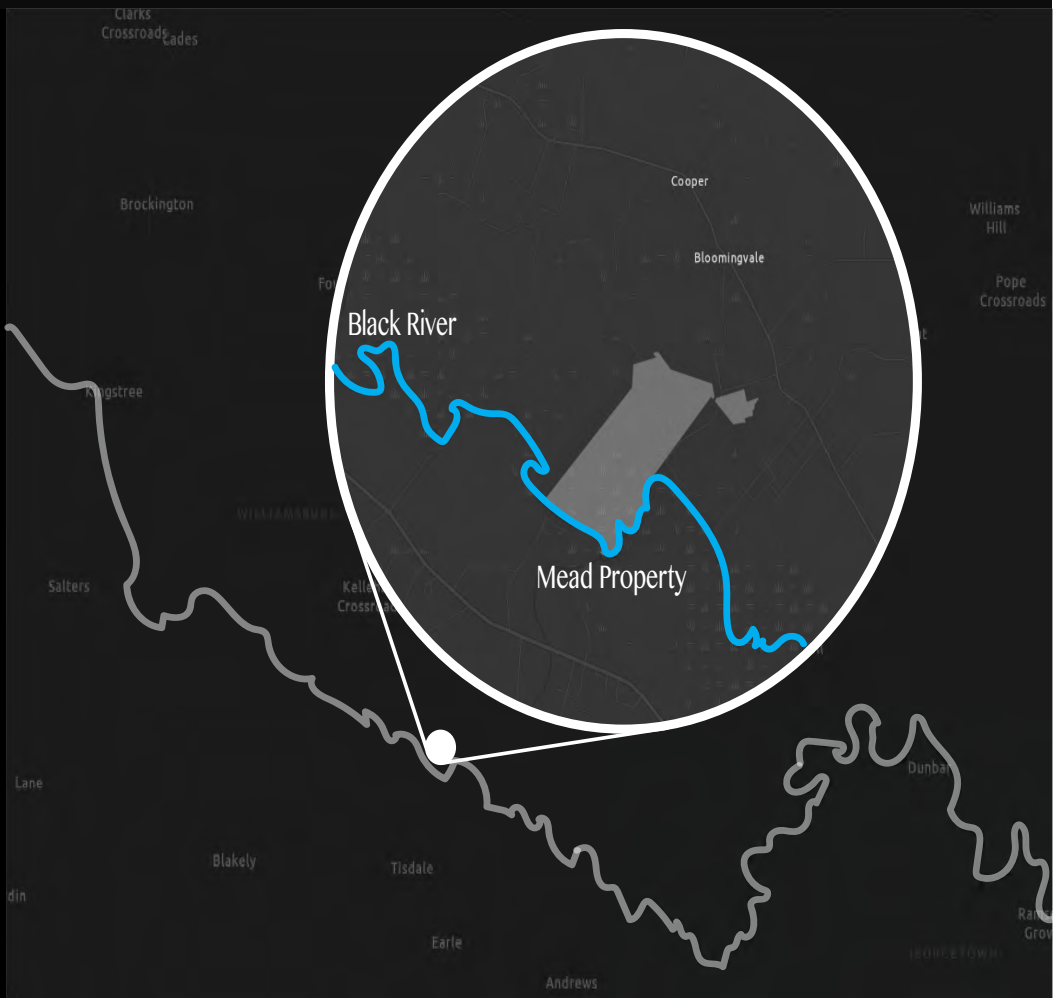
Takeaways

The Mead Property is located in Williamsburg County, SC

The site is 7 miles from downtown Andrews, SC and 14 miles from Kingstree, SC.

The Black River flows along the southern border of the site.

The site was formerly used for timber harvesting.



Existing Circulation

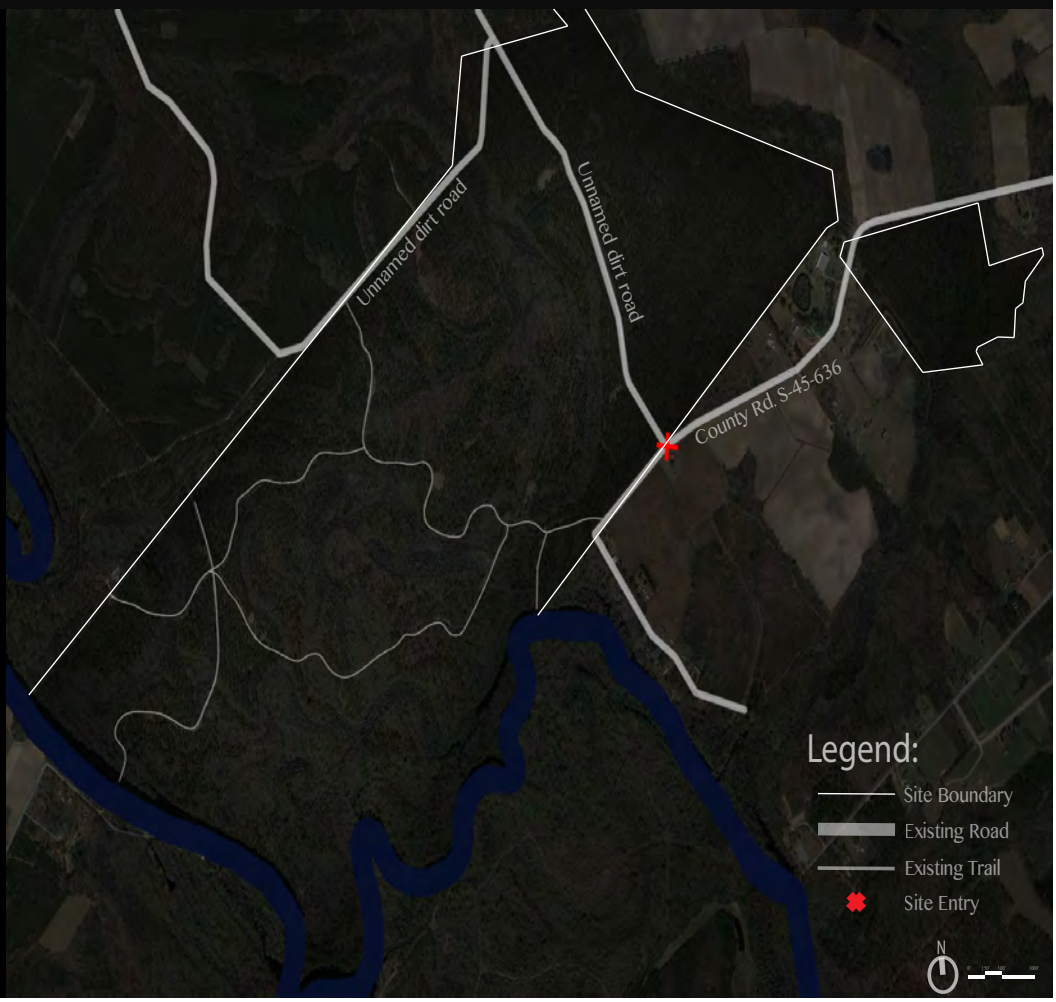
Takeaways

One county road (County Rd. S-45-636) borders the eastern portion of the Mead Property.

Multiple dirt roads formerly used for logging also exist on the site and could be easily paved and/or expanded.

Many smaller trails cut through various sections of the site.

One dirt road enters the site from the county road and offers a functional existing point of entry.



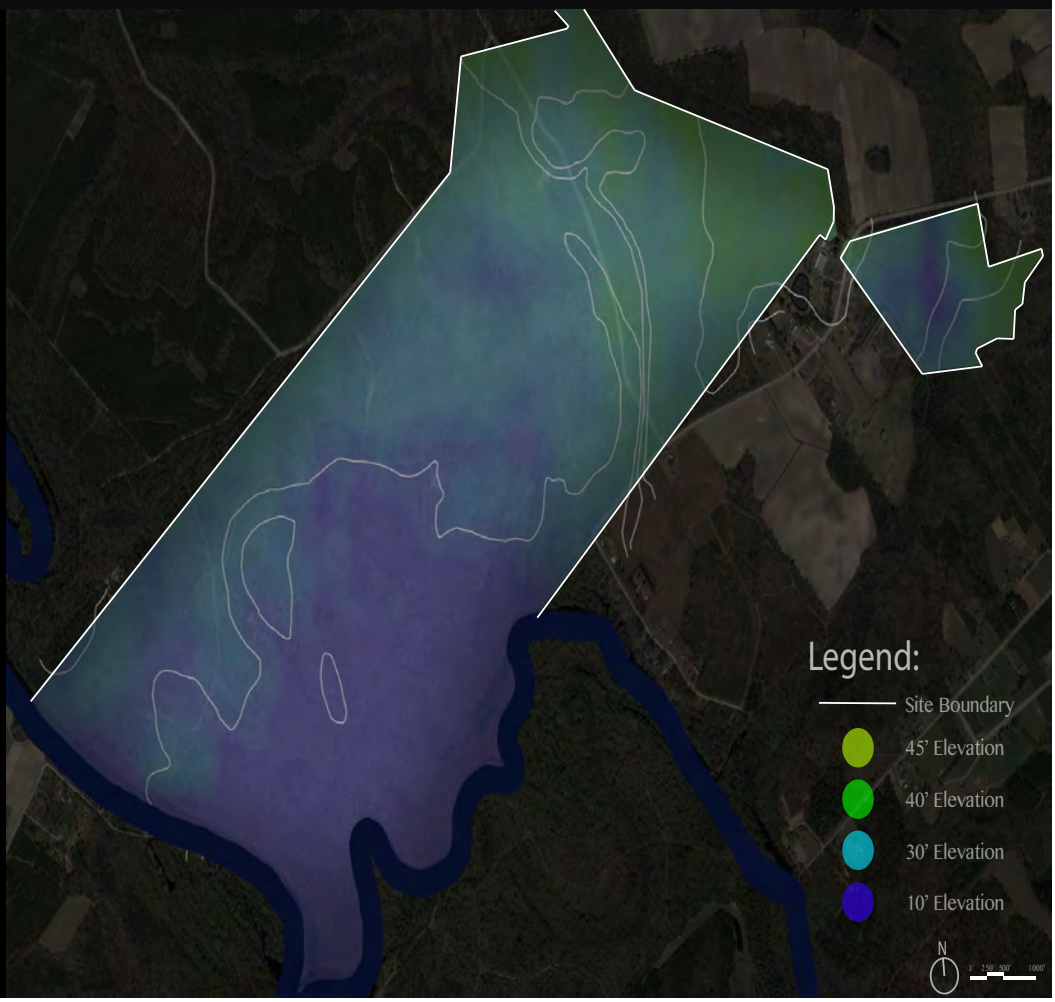
Topography

Takeaways

The Mead Property contains some interesting topography variation.

The southern portion of the site is very low lying and swampy, while the northern area higher in elevation.

The lower elevations by the river relate directly to potential flooding. Pathways near the river should be boardwalks in order to assure full access at all times.



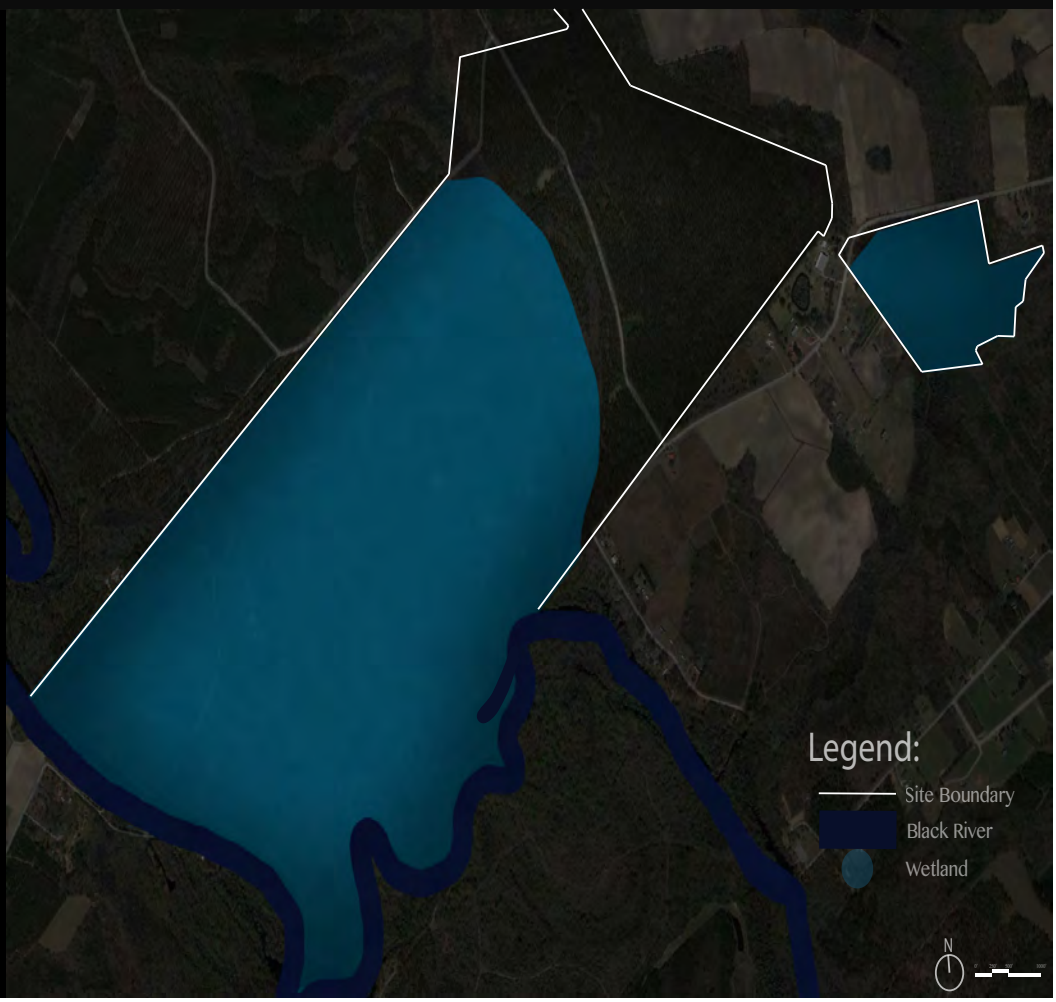
Wetlands

Takeaways

The low lying areas are considered wetlands. These areas have moist soils that will make construction difficult.

The Black River runs along the southern border of the property. An oxbow lake is located on the eastern portion of the site.

The northern portion of the site contains no wetland designation. Therefore this is the best area for potential building in regards to the wetlands on the site.



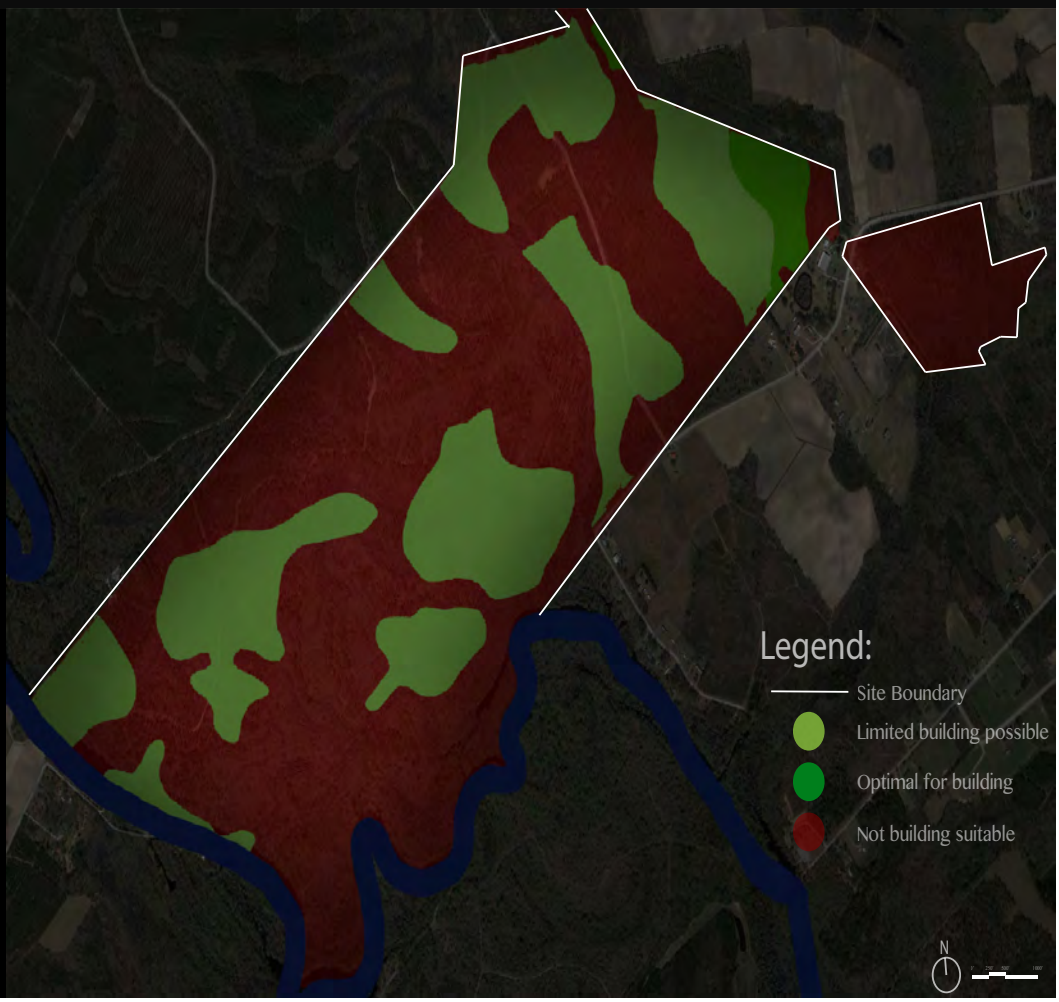
Existing Soils

Takeaways

The soils in the northeastern corner of the site are the only soils that will support extensive building.

Soils that are semi-suitable are scattered throughout the site. These soils will accommodate buildings that may require stilts or piers as foundation.

The majority of soils on the site will not accommodate any sort of built structure.



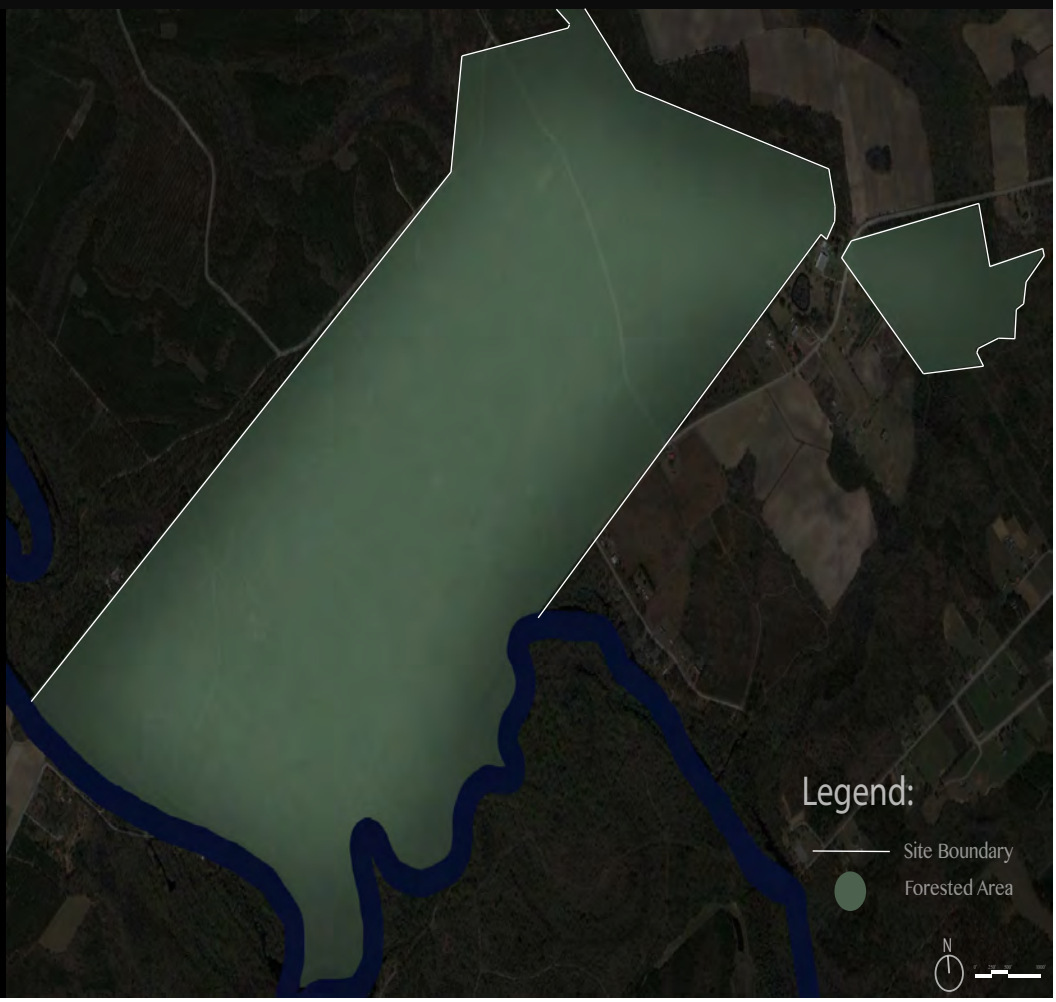
Existing Forest

Takeaways

The Mead Property is nearly completely forested. These forests provide valuable habitat for a large variety of plant and animal species. The forested areas should be preserved as much as possible.

Large construction that requires extesive land clearing should be limited. This will preserve as much habitat as possible.

Overall, the design must be low impact as a to not displace the existing flora and fauna that rely on the site's forested area.



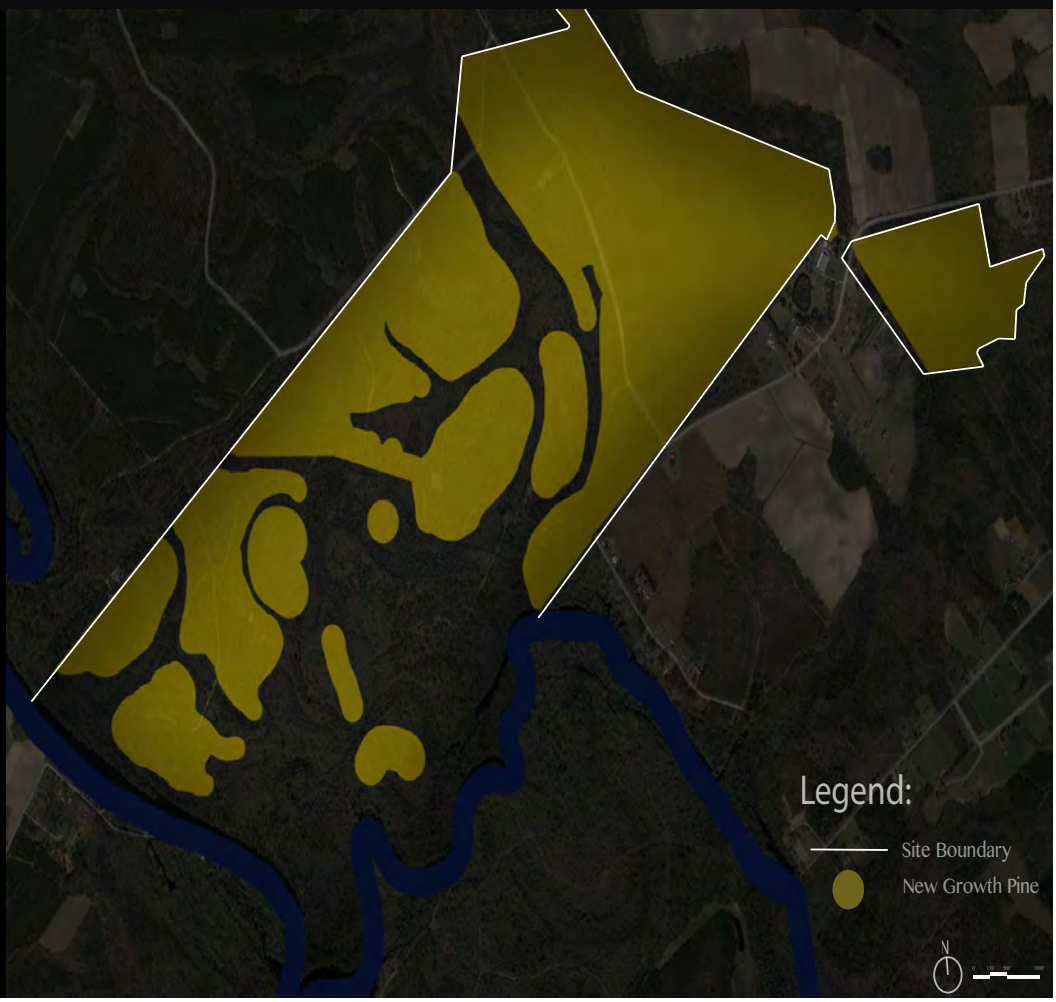
New Growth Forest

Takeaways

The Mead Property was formerly used for timber harvesting. Therefore, much of the site's trees were harvested, and then replanted. The yellow areas identify the younger tree population.

The younger tree growth areas are largely occupied by pine trees.

These areas provide habitat, however the habitat is obviously less established.



Project Statement

The Mead Property's site design will aim to provide daily and overnight use opportunities, while also preserving the area's wilderness. A variety of trails will weave through the site at various lengths. The trails will provide for both pedestrains and cyclists. Added Black River access points will allow for kayaking and tubing for users of all skill levels. An access point along the site's existing oxbow lake will provide an opportunity for inexperienced paddlers to learn their way around kayaking in the safely enclosed lake. Additional day use areas will be provided through recreational fields, playgrounds, and ropes courses. The site also presents significant opportunity for lodging. The design will provide a variety of lodging for families of any size, large groups, and individuals. Users will have the opportunity to to lodge by way of a tradtional campground, more secluded camping, RV camping, and cabin or treehouse living. Overall, the design will provide a dynamic area with a large variety of options for recreationa and lodging, while bosting limited encroachment on the existing wildlife habitats. The Mead Property will allow more potential users to appreciate the Black River's awe-inspiring beauty.

Master Plan

Notes:

The site entry exists off of the county road. From here the user can drive left to the first river access point or continue forward to the site's other features.

The multi-modal path is set up to accommodate for potential renvanue. Two complete laps on the trail is a 13.1 mile journey, which is a half-marathon.

The boardwalk is a pedestrain only path that will allow for a leisurly stroll along the river. Users can take their time and enjoy the Black River's peaceful views.

The biking only pathways transverse the more undulant topography of the site. Bikers can have their own pathways to enjoy the site's action potential.



RV Campsite

Notes:

The RV Campsite operates as a pull through site. RVs will circle the round-a-bout until they arrive to their site. They will then pull in and park, and easily pull their RV forward and around the far side of the round-a-bout to easily exit the site.

The campground will host up to 20 RVs.

The middle of the round-a-bout is an open area that will accomodate recreation and picnicing for campers.

Each site will be buffered from the others by existing forest vegetation. This will provide a more peaceful and secluded feel for users.



Campground

Notes:

The campgrond operates similarly to the RV campground. Users will drive along the circular road until they reach their site. They will exit the grounds via the same road.

A bath house is located in the middle of the circular road. It is additionally surrounded by an open recreation area.

The campground is purposefully located away from the river to ensure that little to no litter will enter the river. The camground is close enough to the river however to allow easy access.

The adjacent road from the circle will host more secluded campsite. These campers can still access the bathhouse. The sites are just more spread apart.



Camp Site

Notes:

Each camp site will have the same layout. The tent platform, parking, picnic platform, and fire pit are organized in a sensible fashion that will allow for easy function within the site.

The parking will accommodate 3 cars. It will also allow room for vehicles pulling trailors, which is common on camp sites.

The tent platform is 20'x20'.

Each site is buffered from the others with existing forest vegetation. This will allow as much privacy as possible.



Multi-Modal Trail



The multi-modal trail will have a visual barrier to safely separate cyclers and pedestrians.

Boardwalk



The boardwalk will venture along the river. This will allow all users to safely experience the beauty of the Black River.

Phase 1

Notes:

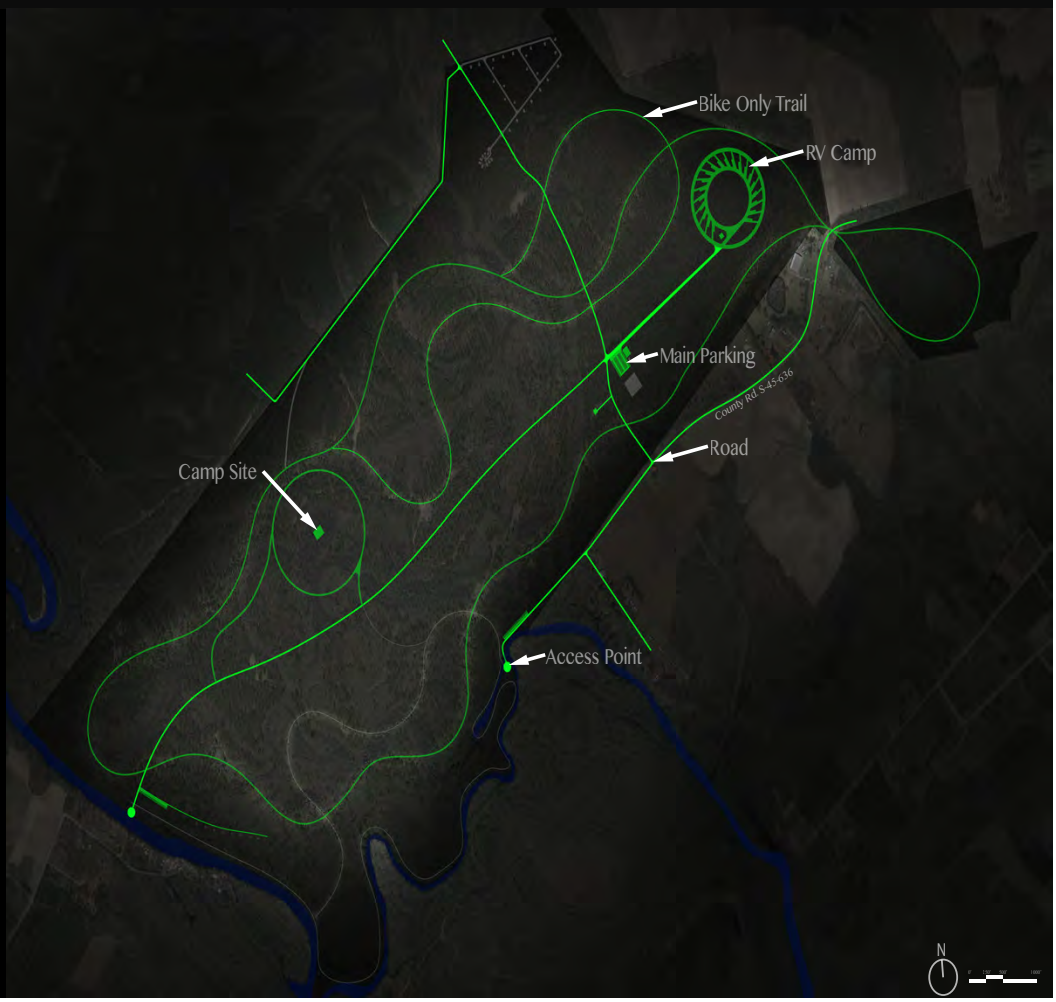
Phase 1 will implement the necessary features for the site's function.

This phase will include parking, roads, main trails, camping, access points, and necessary amenities.

Pathways are included as they are generally cheap to implement. They also provide significant recreation opportunity for the site.

The main campsite and RV campground will be implemented as they provide initial lodging opportunity.

The access points are the most important feature of the site, so they will be developed in phase



Phase 2

Notes:

Phase 2 will implement the boardwalk, an interpretive trail, and treehouses.

These features will increase the utilization of the Black River on the site.

The interpretive trail will connect to both the campsite and the boardwalk. It will include signage to provide the users with historical and ecological information regarding the site.

The treehouses will provide a beautiful experience for families and friend groups. The treehouses face the river for an all natural experience.



Phase 3

Notes:

Phase 3 will implement the cabins and ropes course. These amenities will provide the park with more opportunity for revenue while bringing more interest for potential users.

Phase 3 implements the least necessary elements. Though valuable elements that will increase revanue production and user enjoyment,

The ropes course will be located nearby the parking lot. It will provide daily recreation of varying time increments for users.



Detailed Site Plan: Cabin Neighborhood

Site Context

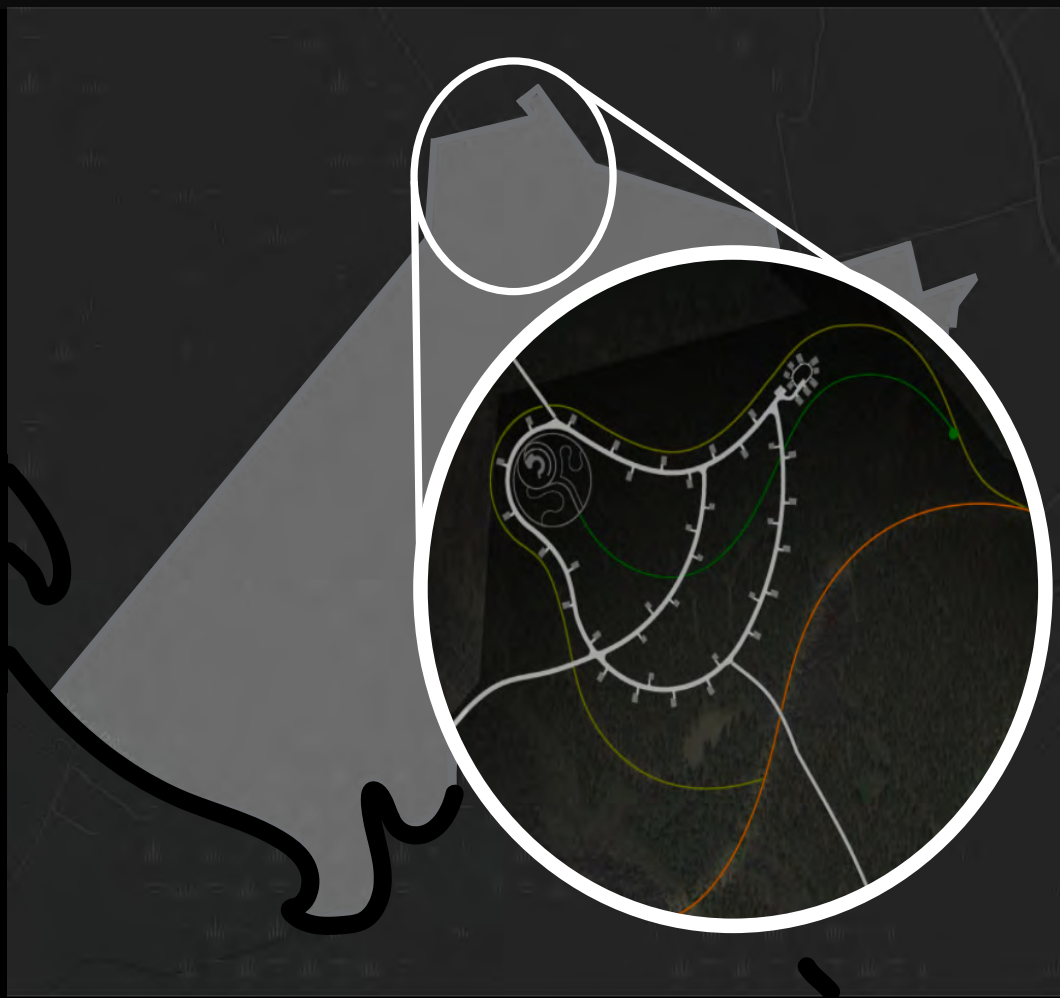
Takeaways

The detailed site design is located on the northweatern corner of the Mead Property.

This location was selected as it contains the most characteristics for supporting the building of cabins.

The site is located away from the Black River, as the chacateristics of the site near the river would not support building.

The sites location away from the river will also ensure that human activity in and around the cabins do not have a negative



Existing Circulation

Takeaways

There are two unnamed dirt roads on the northwestern portion of the Mead Property.

These dirt roads were formerlly used for logging could be easily paved over if neccessary.

Generally, this portion of the site has very little existing circulation. There are no existing pathways in this area.



Topography

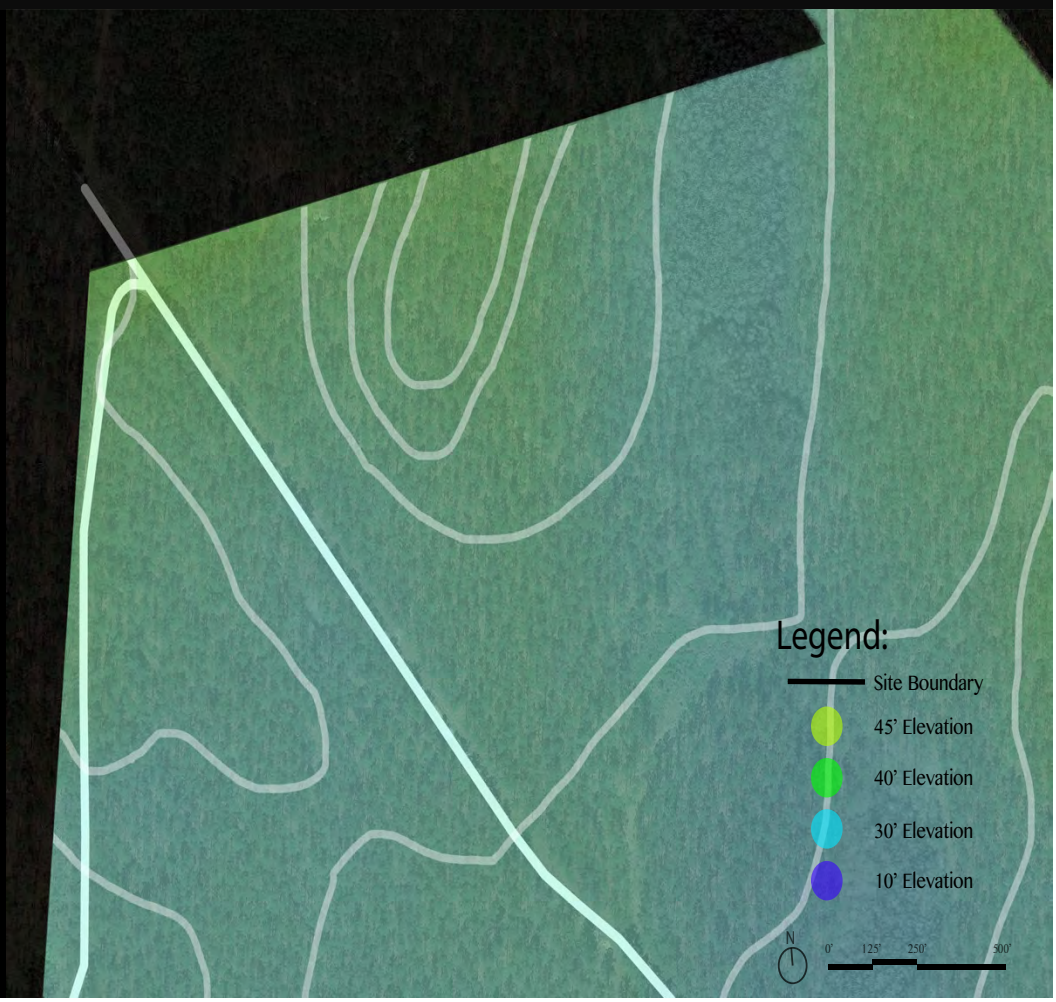
Takeaways

This portion of the Mead Property is the most elevated of all other areas of the site.

The higher topography equates to a lowered threat of flooding. The topography will accommodate for the built cabin structures.

This area also has an interesting topography variation that will equate to complex pathways for cyclists and pedestrians.

The waving topography of the area will allow for a more interesting site as a whole. It can also attribute to more privacy with cabins, as the cabins will be on different site levels as the land undulates.



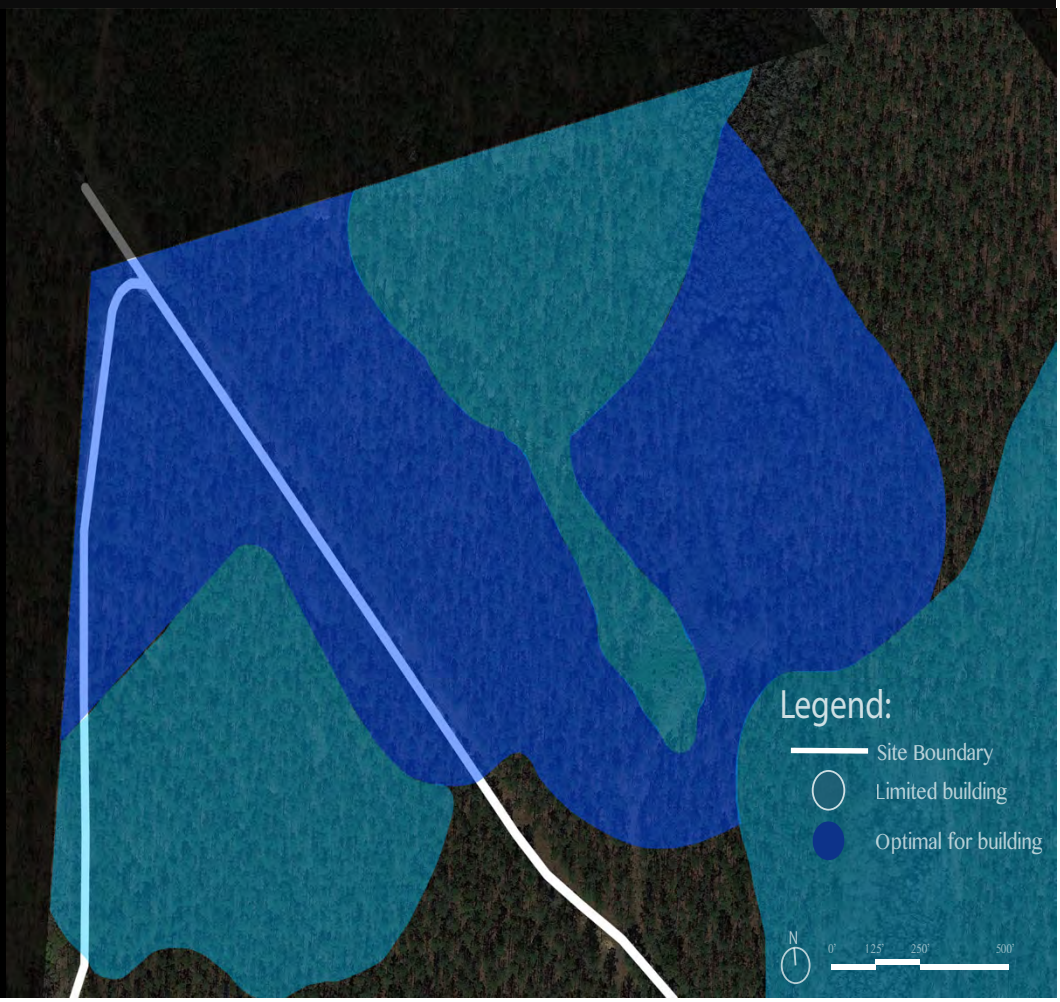
Existing Soils

Takeaways

The soils in the northwestern portion of the Mead Property are some of the few soils on the site that will mostly support building.

The soil characteristics of this portion of the site directly led to the decision to put a cabin neighborhood on the site.

The soils would additionally support new roads and pathways which is an important consideration for this area. There is little existing circulation, so new pathways must be created.



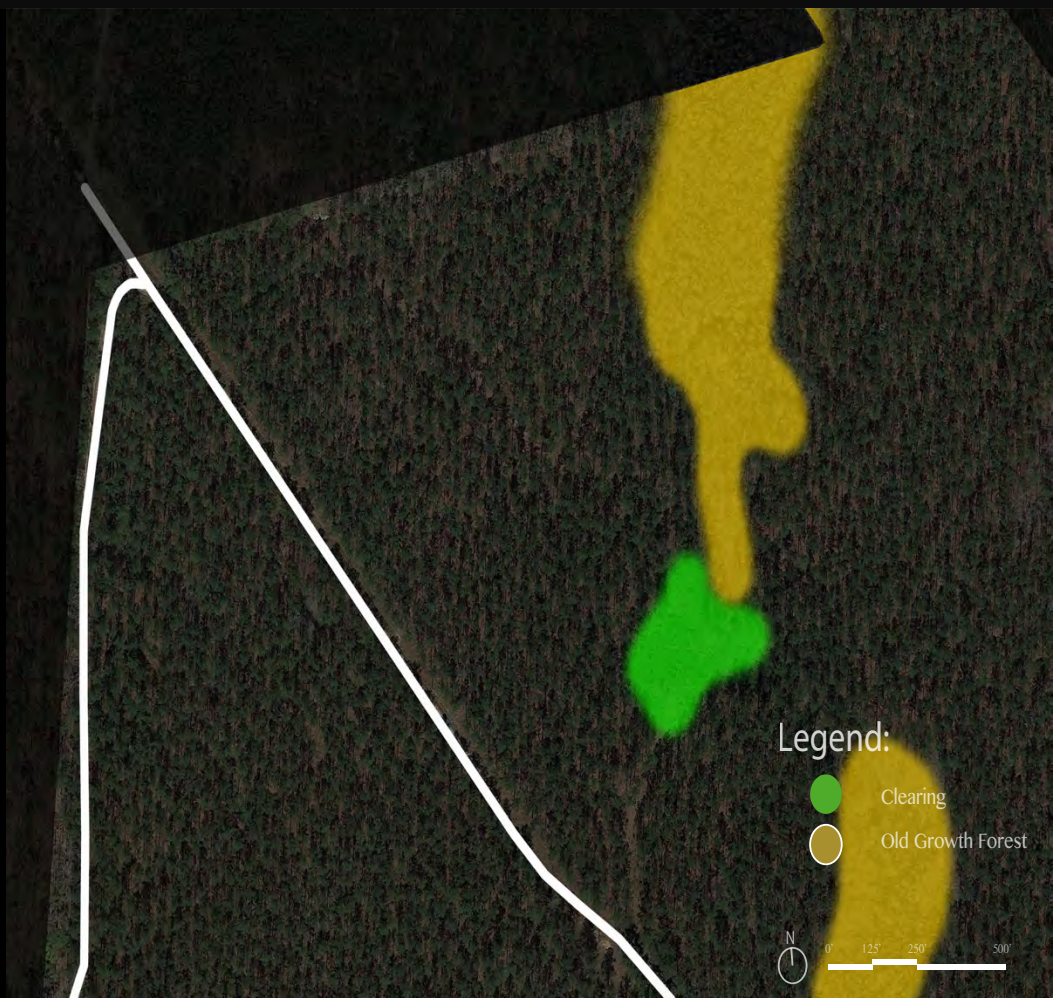
Existing Forest

Takeaways

Like the rest of the Mead property, this portion is nearly completely forested.

Most of this area is new growth pine forests that were planted after older trees were harvested for timber.

Similar to the rest of the site's design, this design must be low impact as to not disturb the flora and fauna that rely on the existing forest habitat.



Project Statement

The design of the cabin neighborhood within the Mead property aims to provide overnight use with nearby recreational interest. The design's northeast location positions it on the sturdiest soils offered by the site. Thus, buildings and cabins will be easily supported. The neighborhood will provide three distinct cabin lodging opportunities. Single bedroom cabins are available for small families and individuals. Proposed two story cabins will allow larger families and groups to utilize the site. Lastly, a cabin commune will host both one bedroom and two-story cabins in close proximity to one another to accommodate possible church groups, school groups, family reunions, etc. the commune will include a fireplace and easy access to surrounding trails. An interpretive trail will branch off the multi-modal path extension. This trail will begin with an entry space to provide seating surrounded by a mural covered wall that will illustrate the site's Native American history. As the user continues down the path, they will encounter additional site-specific educational signage and various resting places. The interpretive trail ends with a small park area that provides picnic areas, play space for all ages, and a dog park. The cabin neighborhood will generate much interest through recreational variety, accommodative lodging, and site-specific education.

Master Plan

Notes:

Most users will enter the site from the main road stemming off the county road.

The neighborhood layout allows for users to have easy access to the site's amenities, while also having enough space for privacy.

The multimodal path extends around the neighborhood to give users access to the path and its benefits. The path winds down toward the river, so users can easily hop on and ride bikes or walk down to the river.



Cabin Layouts

Notes:

The cabins themselves will provide for a variety of user groups.

Single bedroom cabins (colored orange in the image) will allow for individuals or couples to experience a relaxing weekend in the park. There is nearly 200 feet between each cabin, ensuring blissful privacy for occupants.

Family cabins (colored red in the image) will accommodate families and groups of larger sizes.

A cabin commune (colored yellow in the image) exists in the upper portion of the neighborhood.

Once again, the placement of the cabins will allow occupants easy access to surrounding trails and recreational spaces.



Cabin Commune

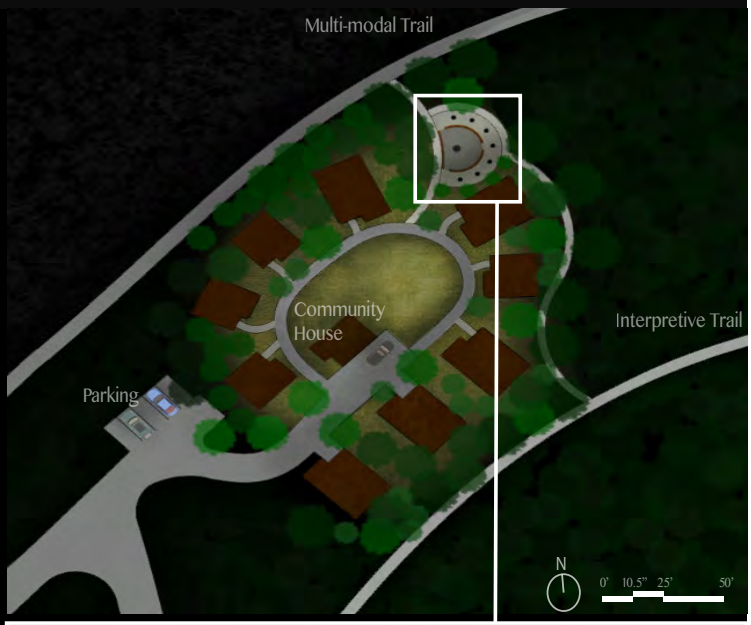
Notes:

The cabin commune is a small cabin neighborhood located within the larger site. This community would contain five family sized cabins and four single bedroom cabins to accommodate a variety of guests. The commune would be perfect for church groups, school groups, family reunions, etc.

The commune offers an open grass space in the middle of the cabins which is accompanied by a community house. The grass field would accommodate small recreation such as throwing the frisbee, games of tag, backyard football, or just picnicing. The community house would support indoor meetings of various types. Users could gather in the house to eat dinner, play card games, etc.

The commune also has easy access to both the interpretive trail and muti-modal trail.

The commune additionally contains its own outdoor meeting space. A fire pit would accommodate for outdoor meetings between users. Surrounding walls offer seating, and there is plenty of space nearby the fire pit for lawn chairs. Small picnic tables surround the outer area of the site as well.





Interpretive Trail

Notes:

The cabin neighborhood contains an interpretive trail that winds through the space. This trail will provide signage and outdoor art that illustrates the history of the site. Users will learn the site's Native American and plantation history.

The entry to the park is adjacent to the multi-modal path offshoot. The space contains a seating wall located beneth a tree to provide a comfortable resting point for trail users. Small tables surround the wall for trail users to eat a snack or socialize.

The wall surrounding the entry will have a mural painted on it to depict the site's rich Native American history. the mural will provide a glimpse of the trail's character and theme.



Interpretive Trail

Notes:

The interpretive trail will contain 3 primary resting points. These spots will have benches, swinging benches, and/or signage that depicts the site's history.

The trail is meant to be a relaxing walk through history for the users.

The trail cuts through the site's existing undulant topography to create further interest.



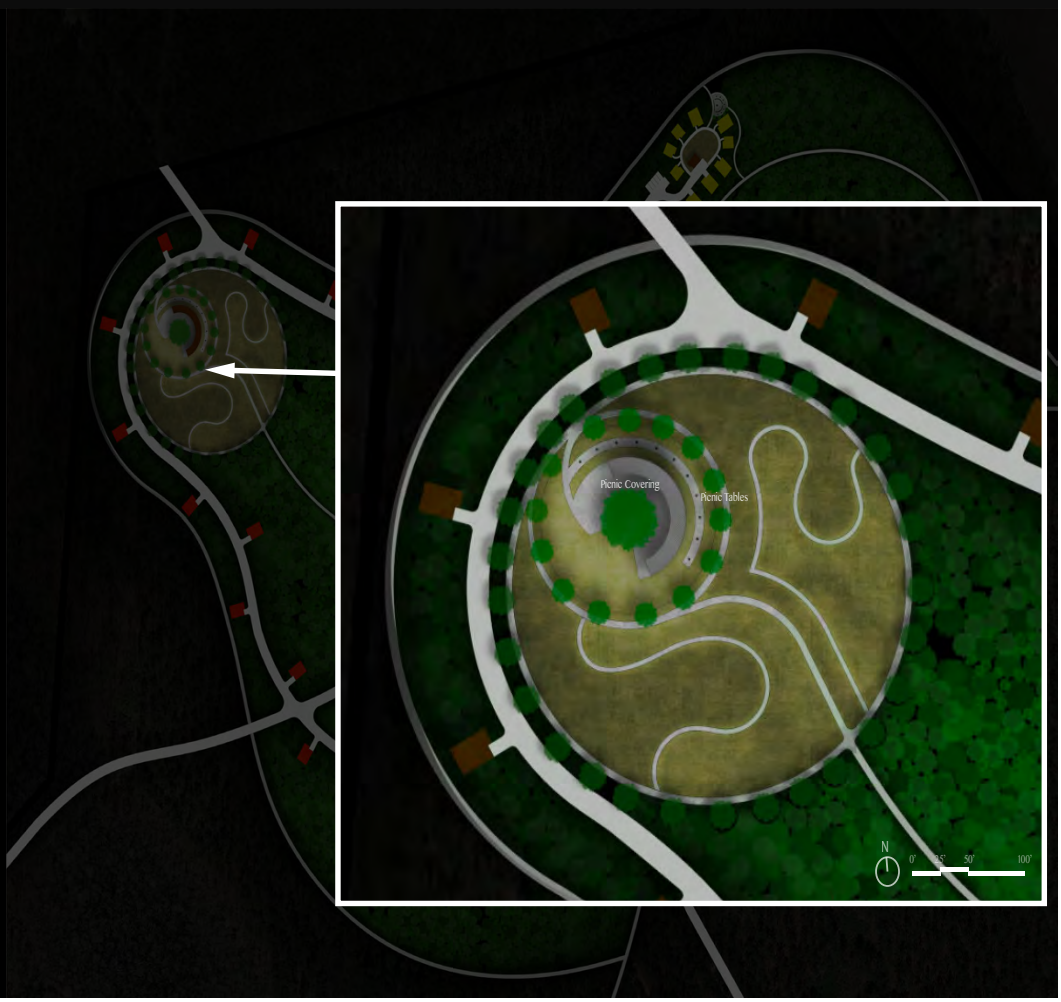
Neighborhood Park

Notes:

The interpretive trail ends with a neighborhood park space. This space will offer a variety of options for users.

A covered picnic area provides a place for seating and eating through rain or shine. Behind the picnic covering is a row of open picnic tables.

The park is an open grass field surrounded by existing forest. The open field offers a contrast to the site's heavy tree canopy. Users will be able to run around and recreate in the open space in a variety of ways.



Neighborhood Park

Notes:

The park is broken into three main space. The gathering space, nature playscape, and dog park.

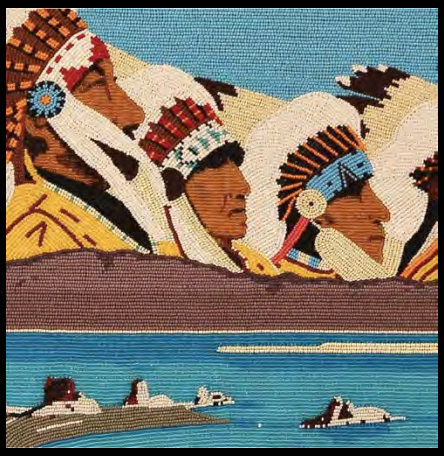
The gathering place was discussed on the previous page. It is a picnic space that supports sedentary activity.

The dog park is an open space for users to recreate with their dogs. Many people may being their pets with them to stay in the cabins, so a dog park is a nice accessory to the neighborhood.

Children could also be a common group in the cabin neighborhood, so they are provided with an aesthetic nature playscape.



Site Character



Native Art and Symbolization

Native American art styles and symbolization will be present on various structures and signage throughout the site. This will demonstrate to the user the site and Black River's importance to Native Americans.



Secluded Cabins

The cabins on the site will be secluded to provide a true wilderness feel for occupants. They will blend in with the surrounding forest to not appear dominant or out of place.



Rice Husk Ash Brick

Rice husk ash brice is a sustainable paving material that will be utilized in various areas throughout the site. This material represents the site's historical use as a rice plantation.

Site Character

The character of the site largely revolves around the site's history and existing aesthetic. Material selection will coincide with Native American and historical land use history. The existing natural character of the site will additionally be preserved.



Wood

Native Americans used wooded canoes to transverse the Black River. Therefore wood will be commonly used throughout the site. It will also blend with the surrounding forest.



Meaningful Signage

Signage of the site's history, wildlife, and saftey precautions will be common.



Pristine Forest

The site's existing forest will be preserved as much as possible. The natural setting offers immensive value to the site's character and wildlife. These pristene forests will be laregly intact for users to safely enjoy .

Master Plan and Phasing Plan

Rocky Point

Rocky Point Community Forest

Rocky Point Community Forest is a 680 acre park space located along the Black River. It sits south of the river in Georgetown, SC. What was once a rice plant plantation & segregated "Blacks Only" park is now utilized as a community forest with spaces for outdoor activities. It currently has two trails in use and a boat landing that is heavily used. Though the boat landing is one of the major access points, there is also direct access to the community center that above the site.

Existing Site Conditions



There are few existing pathways and roads throughout the site. The current picnic space is located near a kayak launch and boat access area that are heavily used but could be improved.

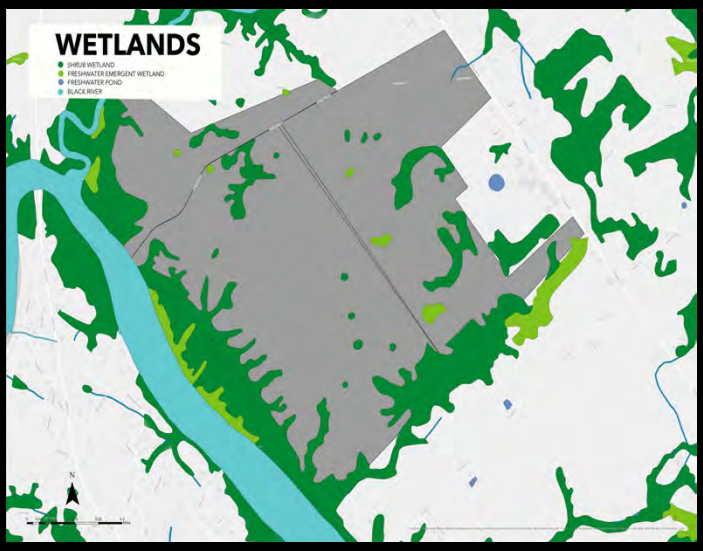
Site Analysis



The Rocky Point Property is divided amongst two owners with the Northern part of the property owned by Georgetown County. The West most part owned by the Winyah River Alliance. The portion of land owned by Georgetown county has some restrictions but can be built on. There is access to necessary utilities if parts of the land want to be built on in this area. The portion of the land owned by the Winyah River Alliance has strict restrictions on what can be built so It's important to focus on low impact here.

Site Analysis

A large portion of the site is covered by wetlands so the data shown below guided much of the design in finding what parts of the site were build-able. The wetlands also gave opportunity for using boardwalks as a way to access and use those parts of the land.

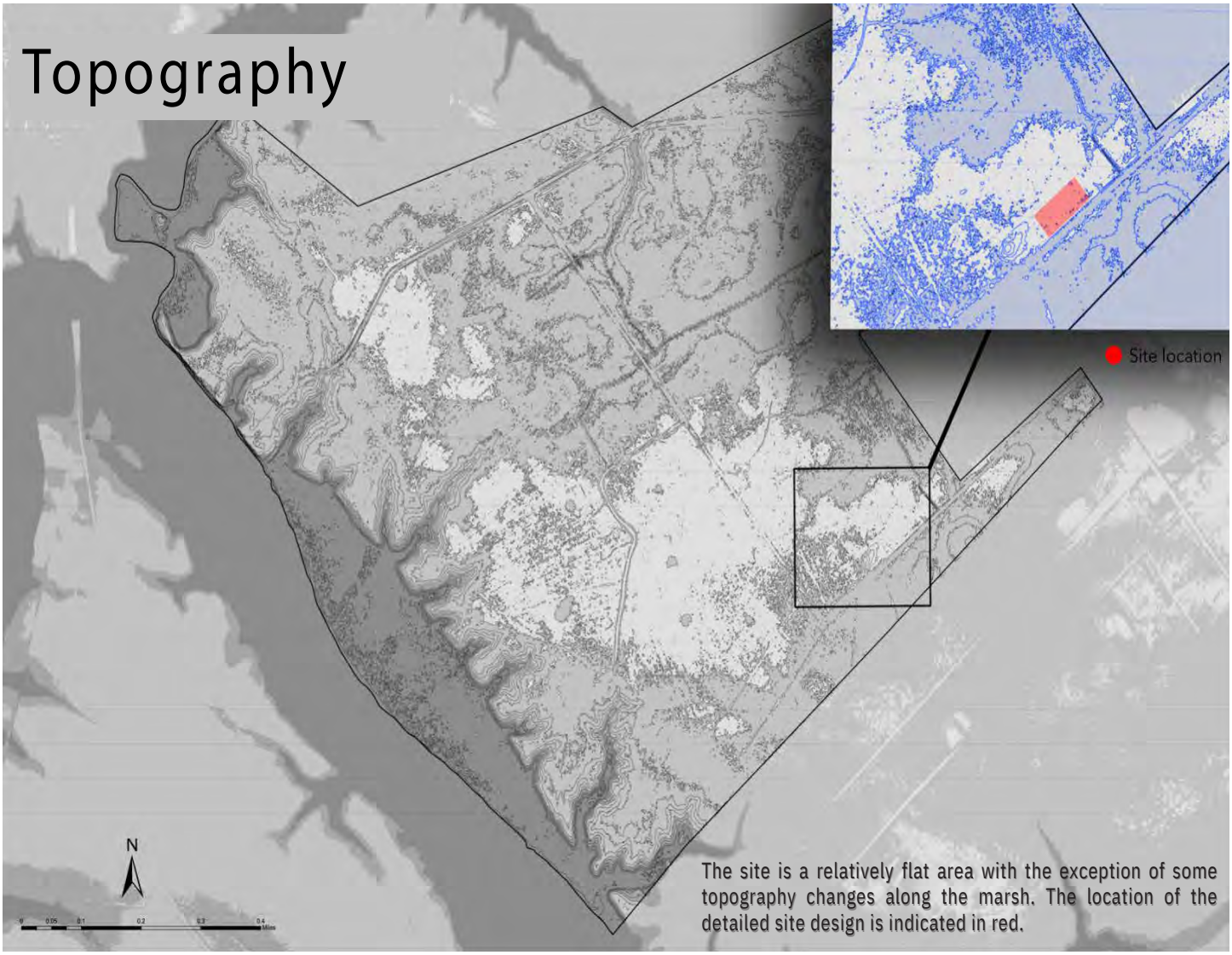


The rice field map and tribal territories map were used to aid as historical precedent. Noting where these rice fields once were as well as past territories helps to tie in the educational signage highlighted in the Black River Master Plan.





Topography



The site is a relatively flat area with the exception of some topography changes along the marsh. The location of the detailed site design is indicated in red.

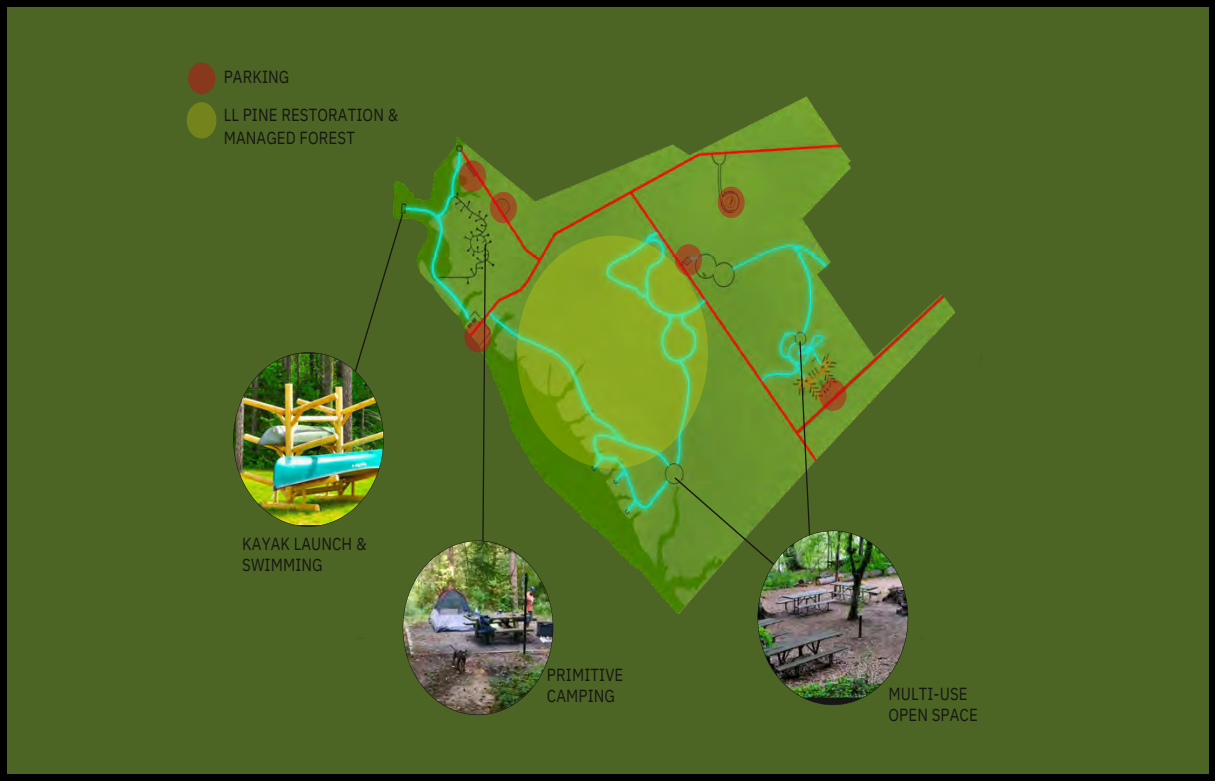
Rocky Point Master Plan

The Rocky Point Community Forest plan aims to create a communal and cohesive outdoor space for the community and visitors to enjoy. One of the primary goals was to prioritize the protection and interpretation of cultural resources along with the existing wildlife and corridors while connecting the communities along the Black River.



Rocky Point Master Plan

Parking is very important to accommodate for all ages and possible physical disabilities. Parking has been distributed throughout the site with walking distances accounted for depending on the activity and position on site. Large areas throughout the site will be dedicated to Long leaf pine restoration as well as managed forests.

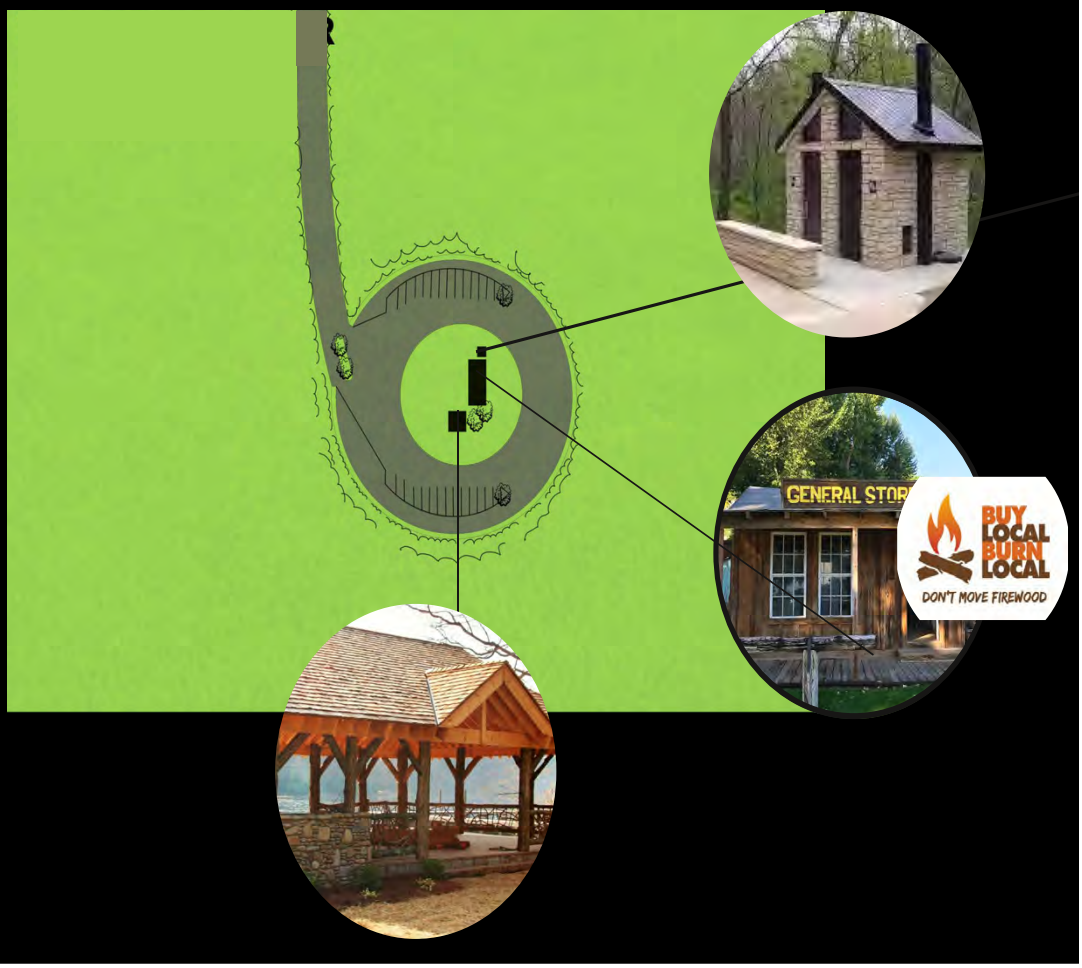


Welcome Center

The welcome center will be both a center for the community and visitors to check in if their using one of the camping sites and to pick up needed supplies from the general store. The general store will also sell and support buying local wood for those camping.

This style of restroom area is to be reflected throughout the site. Men, women, and family/handicap stalls are to be included in the restroom design so that the site is able to accommodate for all types of users.

Next to the welcome center will be a covered gathering area for families or groups to meet and convene before moving through the site for their chosen activities.

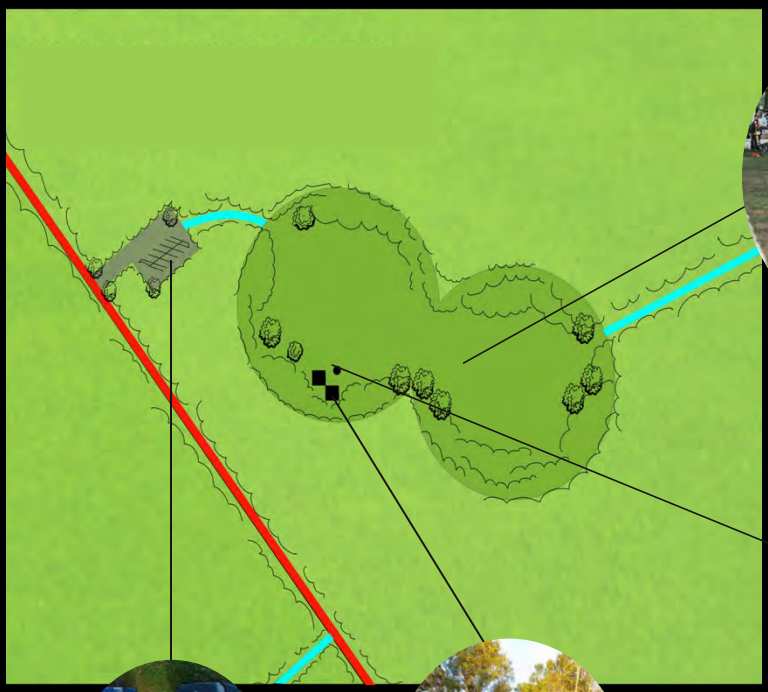


Chicora Headquarters

Low impact parking will be a trend throughout the site and will consist of natural soil pavement. Limited parking is near the site for those residing at the headquarters.

The Chicora "main house" mimics the structures built on the Bald Cypress Preserve and is meant to blend well with surrounding nature. The Chicora headquarters will mostly be an cleared space of land for events like pow wows that require large areas of space.

An area has been proposed to be designated specifically for fire pits. These pits are commonly used during native American rituals and other general uses









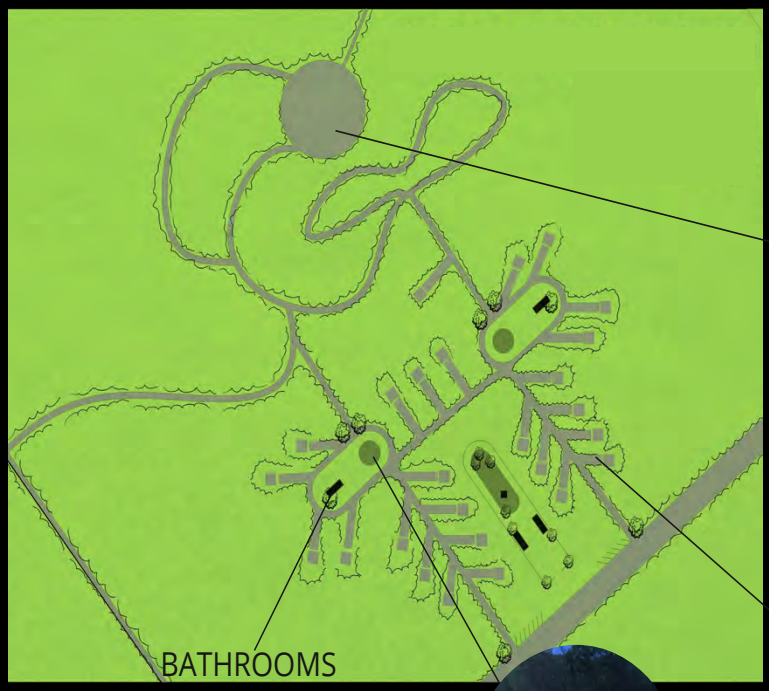


Proposed “Starter Camping”

High impact camping/ “Starter camping” is for communities that may have never had the opportunity to camp or have felt too far from "civilization" and safety to do so. There will be access to water and paved camping pads. Users will be able to pull into their camp site and set up immediately without the hassle of walking back and forth from your car.

An open space connecting the trail to the campsite will be an easy way for campers and people around the site to connect and enjoy a picnic.

Near both ends of the camp site will be community fire pits where campers can come together and mingle. Within this area will be restrooms for them to use as well.

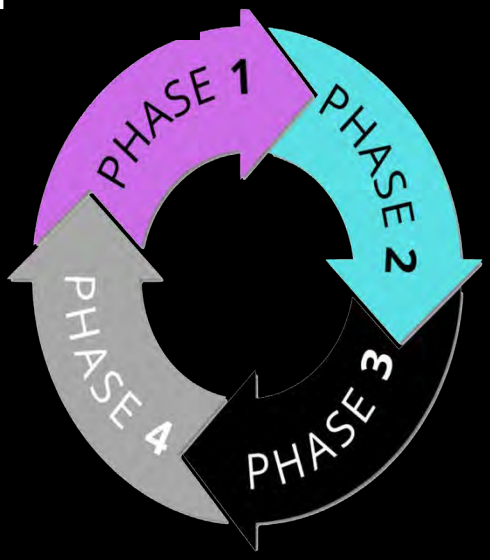








Phasing Plan



The phasing plan for this site has been broken up into four phases. The first phase will include all major trail systems as most of the trails will be extended from trails or paths that are existing and have already been cleared. Phase two will focus on completing all low impact activities like primitive camping and picnic spaces. The third and fourth phases will include the remaining trails and docks along with high impact activities like the “stater” camping.

Phase 1

Major Trail Systems
Low Impact Recreation
Remaining Trail Systems & Docks
High Impact Recreation



Major trails, picnic spaces and Chicora Headquarters are to be constructed and cleared during the first phase as they are apart of existing conditions and will have low construction cost.

Phase 2

Major Trail Systems
Low Impact Recreation
Remaining Trail Systems & Docks
High Impact Recreation



Primitive camping and an improved parking and picnic space towards the bottom of the property are to be included in the second phase.

Phase 3

Major Trail Systems
Low Impact Recreation
Remaining Trail Systems & Docks
High Impact Recreation



Any remaining trail systems and docks along the wetlands and campgrounds are to be included in the third phase.

Phase 4

Major Trail Systems
Low Impact Recreation
Remaining Trail Systems & Docks
High Impact Recreation

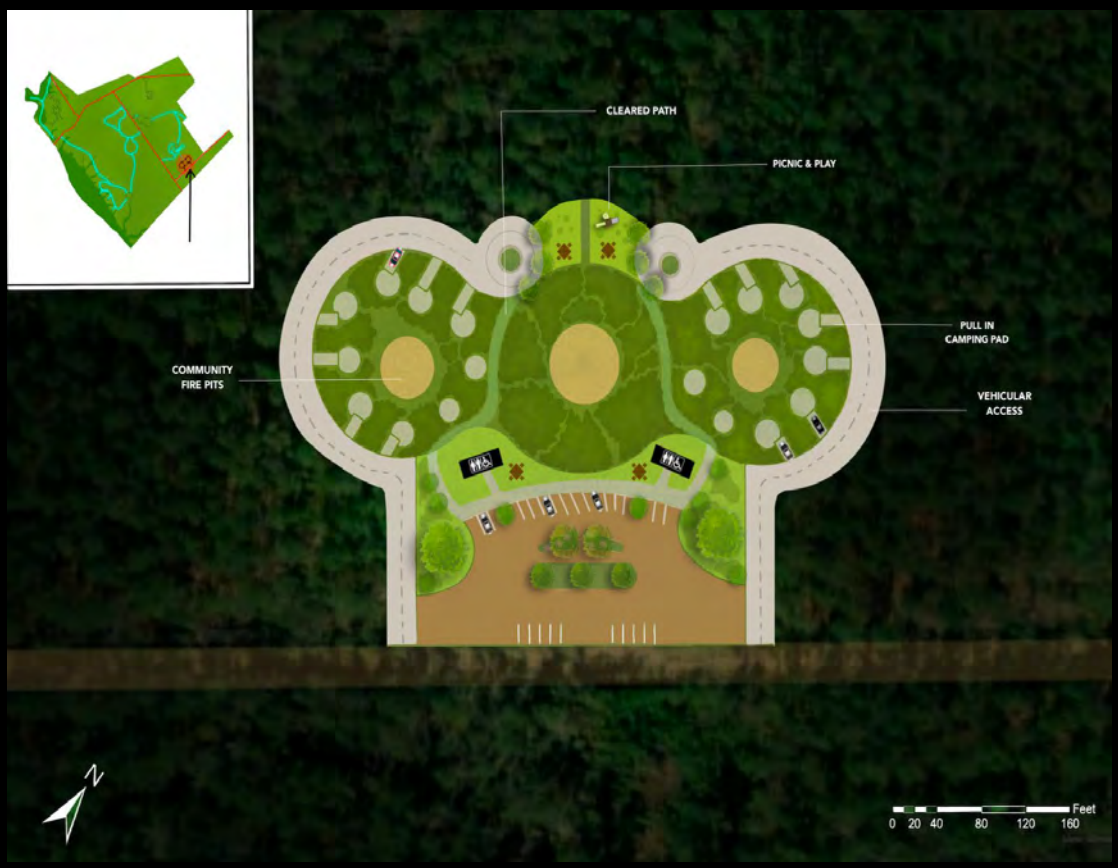


Remaining parking and high impact camping are to be completed during the second phase.

Detailed Site Design: “Beginner Camping”

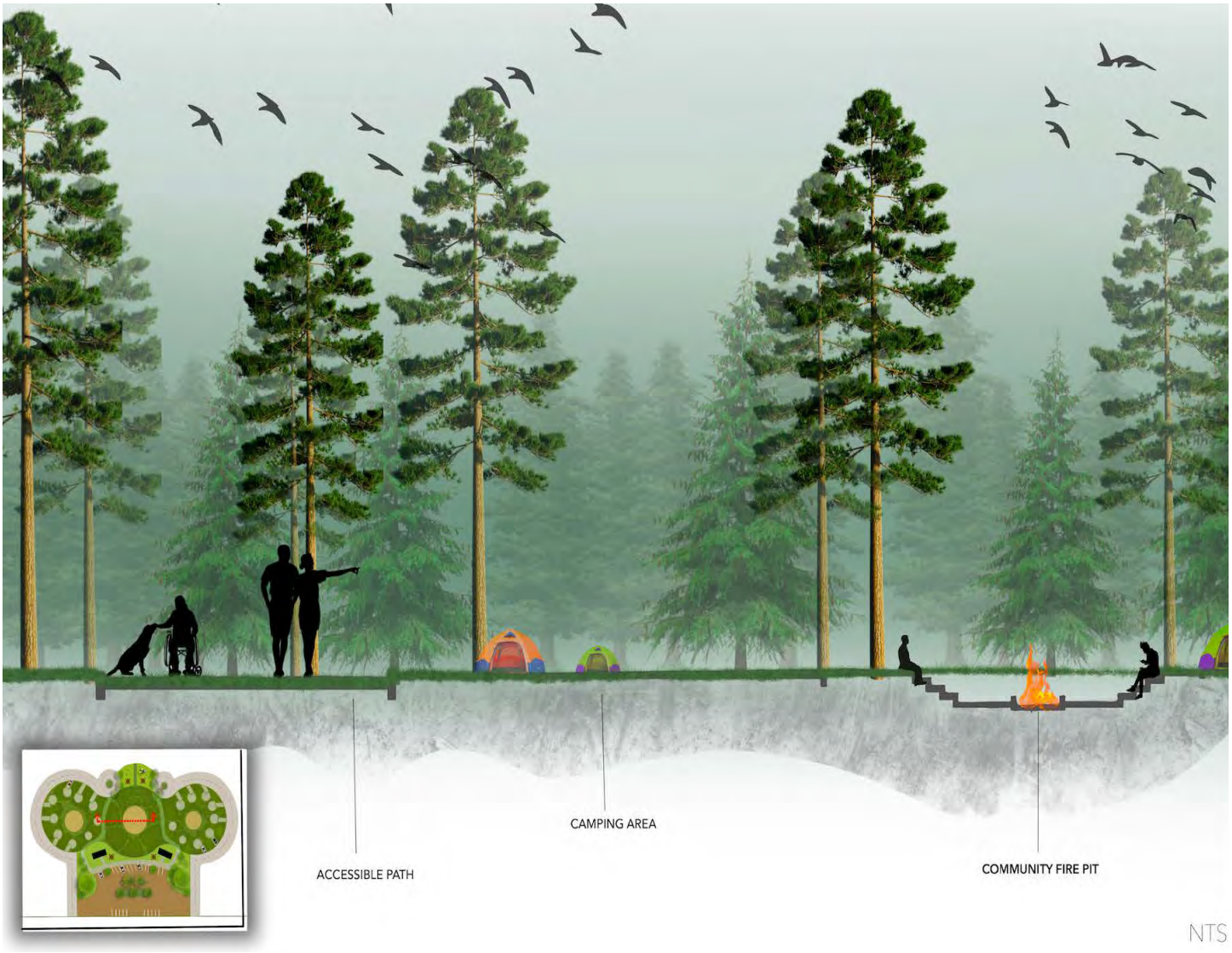
The Beginner Camp Site plan creates a space that promotes the use of an existing forest to connect people to both nature and others in the community. What is the cultural attitude this site promotes? This question drove the site's narrative and promoted the idea of combining histories and analysis of the region to create a more inclusive and rich in history campsite for all to enjoy. Through this inclusive design, we can eliminate differences within a space while preserving the history and existing conditions of the site.

Master Plan


CLEARED PATH
PICNIC & PLAY
PULL IN
CAMPING PAD
VEHICULAR
ACCESS
COMMUNITY
FIRE PITS
Feet
0 20 40 80 120 160

A mind map was created to detail the components needed to design a more inclusive outdoors. It's purpose is to guide designers and the community through the planning process.

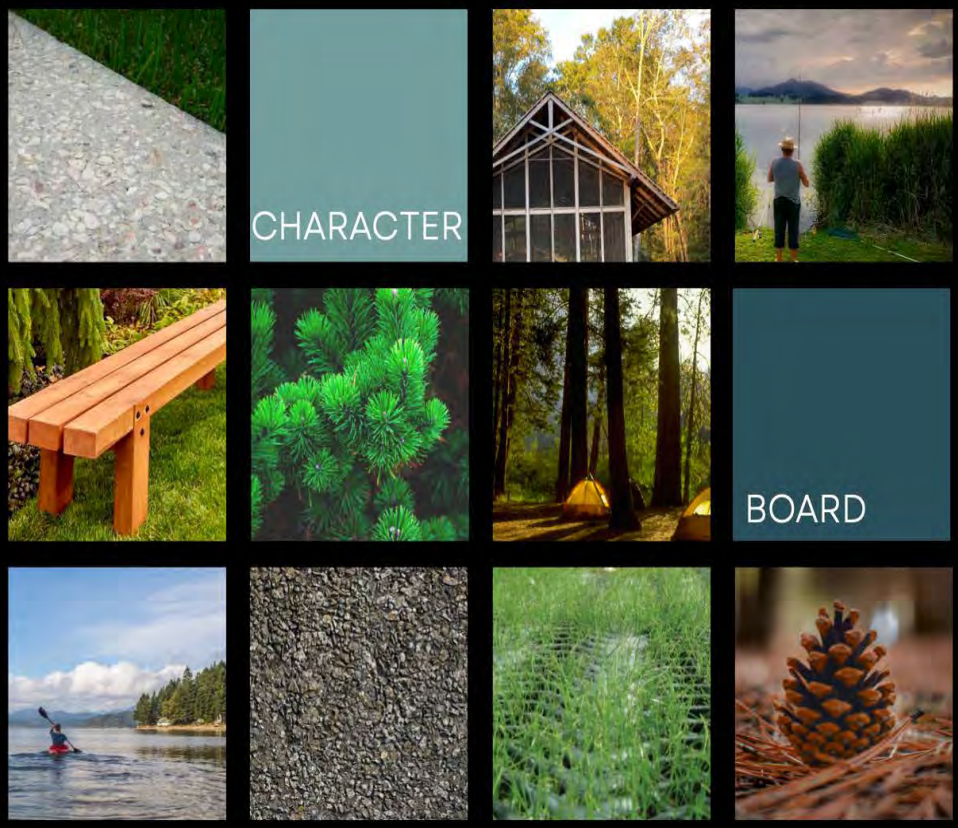




NTS







Tabby concrete, GrassMat, Gravel, and wood are the primary materials that are proposed to be on this site. The Tabby Concrete paved paths will represent the native history that is present along the river and using crushed oyster shells can be environmentally friendly and a safe alternative to asphalt.

GrassMat is another material specifically intended for this site to ensure a safe pathway for pedestrians, vehicles, wheelchair users and others that need an assisted access route. It also keeps existing grass protected from frequent movement.

clemson black heritage trail.

regional design. larc 3510. professor slyce.

team members.

sam bost. lily judd. shelbie hyland. janina mcduffie.

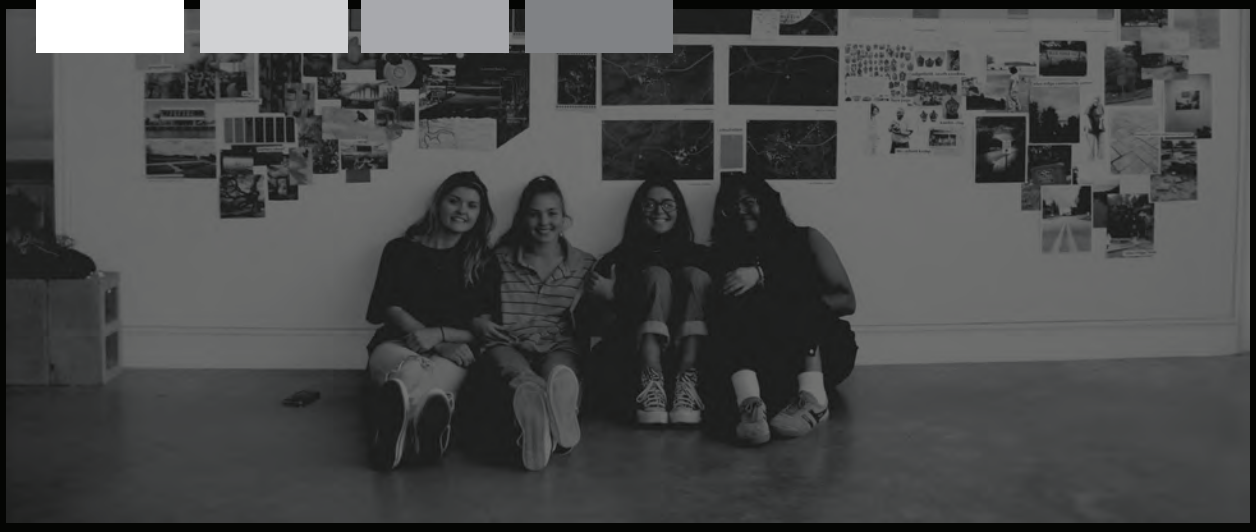


table of contents.

part one: regional analysis.

part two: regional site design.

part three: individual site design.

project brief.

Black Heritage Trails celebrate the contributions of Black Americans and encourage a deeper understanding of the significance of the region's cultural heritage in order to build more inclusive communities. These trails seek to connect cultural destinations through a single narrative and provide visitors will an interactive experience. A recent grant award from the Mellon Foundation will enable Clemson University to lead the creation of a Black Heritage Trail on campus and in the cities of Clemson and Seneca. The trail will feature walking paths that connect the heritage sites with interactive signage and artwork that document the stories of local Black history at significant historic sites. These site regions include but are not limited to:

Clemson University: 7 sites on campus with center at Woodland Cemetary
Seneca: trail connection from Blue Ridge Community Center to Blue Ridge Field
Clemson: Clemson Area African American Museum to other city-owned lands

The objective of this studio is to understand the history of the land from a regional perspective and find ways to connect each of these sites both physically and through a shared history and narrative.

Stakeholders include:
Clemson University – Rhondda Thomas, Faculty Director of Call My Name Research Project
Seneca – Shelby Henderson, City's Executive Director of Arts, History, and Culture
Clemson – Angela Agard, Executive Director of Clemson Area African American Museum
CAAC – Dan Harding, Professor of Architecture

design language.



Throughout our regional design processes we want to highlight themes of **connection, emotion, theory, and journey through time**, amongst others. our focus is to integrate our project sites into one coheseive plan that will attract users, and demonstarte our design intent: a metaphyscial connection. we will use color, texture, form, analysis, graphics, maps, timelines, and other info pertaining to the scope of the project. some of the projects we took inspirstion from play with form and texture, as well as story telling throughout. using certain elements to evoke emotion, while playing around with scale and dimensions to draw the user in. these projects include the International African American Museum (IAAM), and the National Memorial for Peace and Justice.

We will use a series of modes to represent out findings. A **mixed media** approach.
Uitlizing photography. collage making. materials. and diagrams.

regional analysis.

part one.

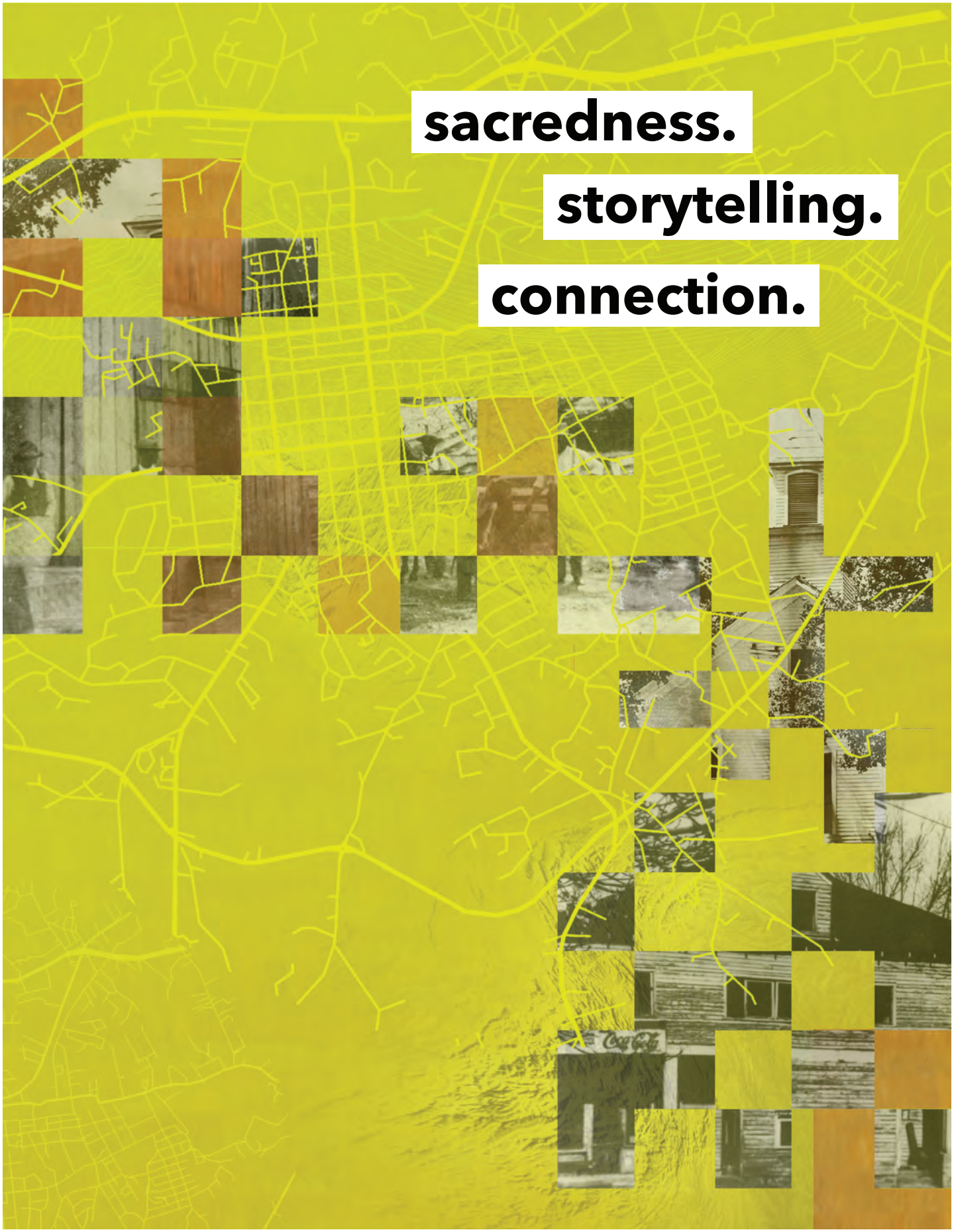

precedent.
inspiration.
imagery.
BLUE RIDGE COMMUNITY CENTER
Face jug
Not on view
Face jugs were made by African American slaves and freedmen working in potteries in the Edgefield District of South Carolina, an area of significant stoneware production in the nineteenth century. The distinctive features of the jugs, notably the kaolin inserts for the eyes, relate in style and material to ritualistic objects of the Congo and Angola region of western Africa, whence many slaves in South Carolina descended. This jug is missing its teeth and lips—a common loss, sometimes occurring as early as the firing stage.
BLUE RIDGE FI

concept development.

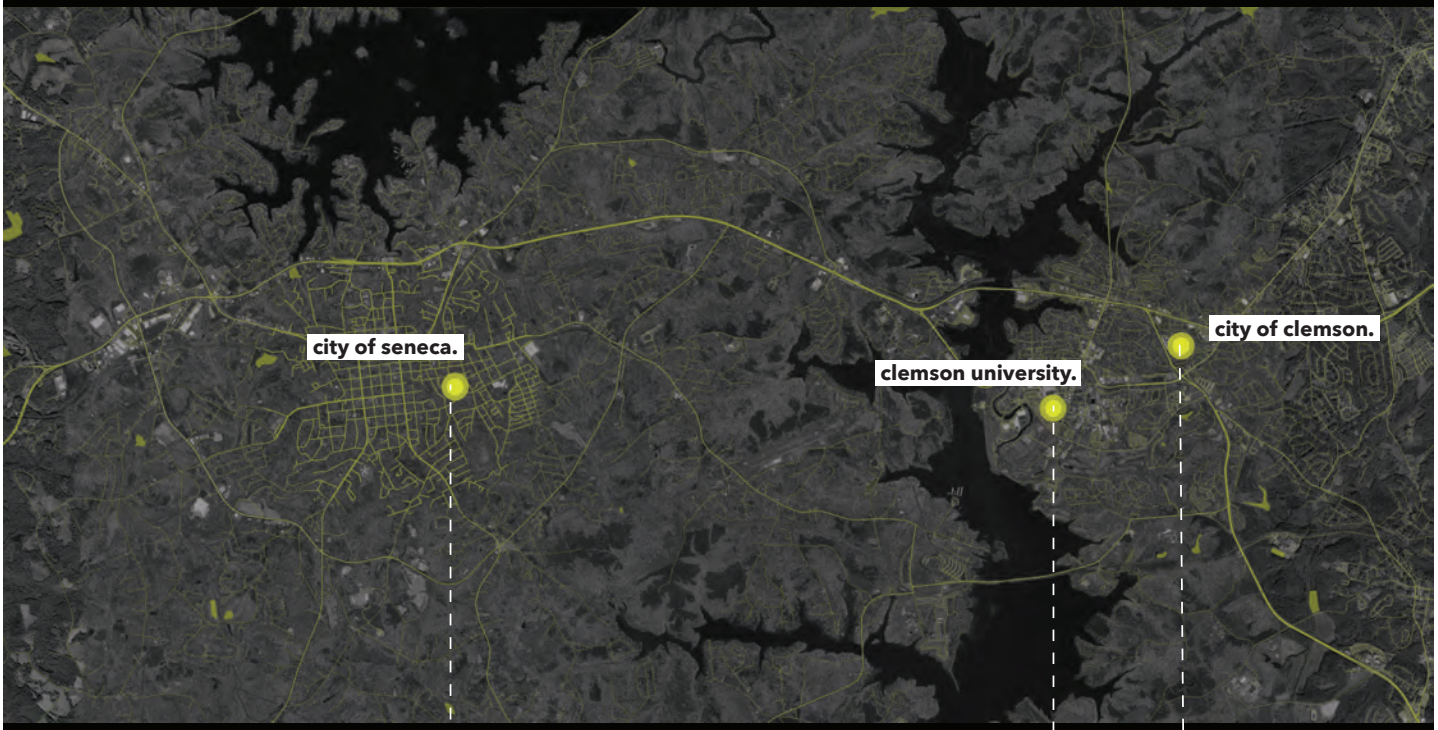
Mapping a network of sacred geographic locations through the use of storytelling. materials. and movement.

Our group was very inspired by the stories shared. stories listened to. and stories that have been hidden for a long time. The process of learning about these placed deemed historically significant and personal to cmmunity members in the surrounding areas, our concept was driven.

The goal was to create a metaphysical connection between all three sites, that would connect users through the shared histories of these places, but also in celebration of what is to come. Through materials and storytelling, we are able to create more concrete connections, while still acknowleging that metaphysical component.



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BLA



defining the region.

The first part of this project geared towards understanding the region we'd be working with. We conducted research on the region that overlaps Pickens and Oconnee Counties in order to document the historical and land use changes on the past and current use of the land. We utilized our understanding of GIS heavily during this portion of the regional planning. The **goal of part one is to understand the story of the regional landscape**.

- **A** **Seneca**: trail connection from Blue Ridge Community Center to Blue Ridge Field.
- **B** **Clemson University**: 7 sites on campus with center at Woodland Cemetary.
- **C** **Clemson:** Clemson Area African American Museum to other city-owned lands.

considering circulation.

A point of consideration during the research process was circulation. That includes the circulation people throughout the three sites, but also the circulation of vehicular traffic. Despite not intending for a physical connection between the sites, we thought it would be important to consider how people would get to the sites, or rather if there were opportunities for connection in that realm. We looked at circulation in all three areas, considering major existing roadways as well as current bus routes. .

Seneca: existing CAT bus route connecting Seneca to Clemson.

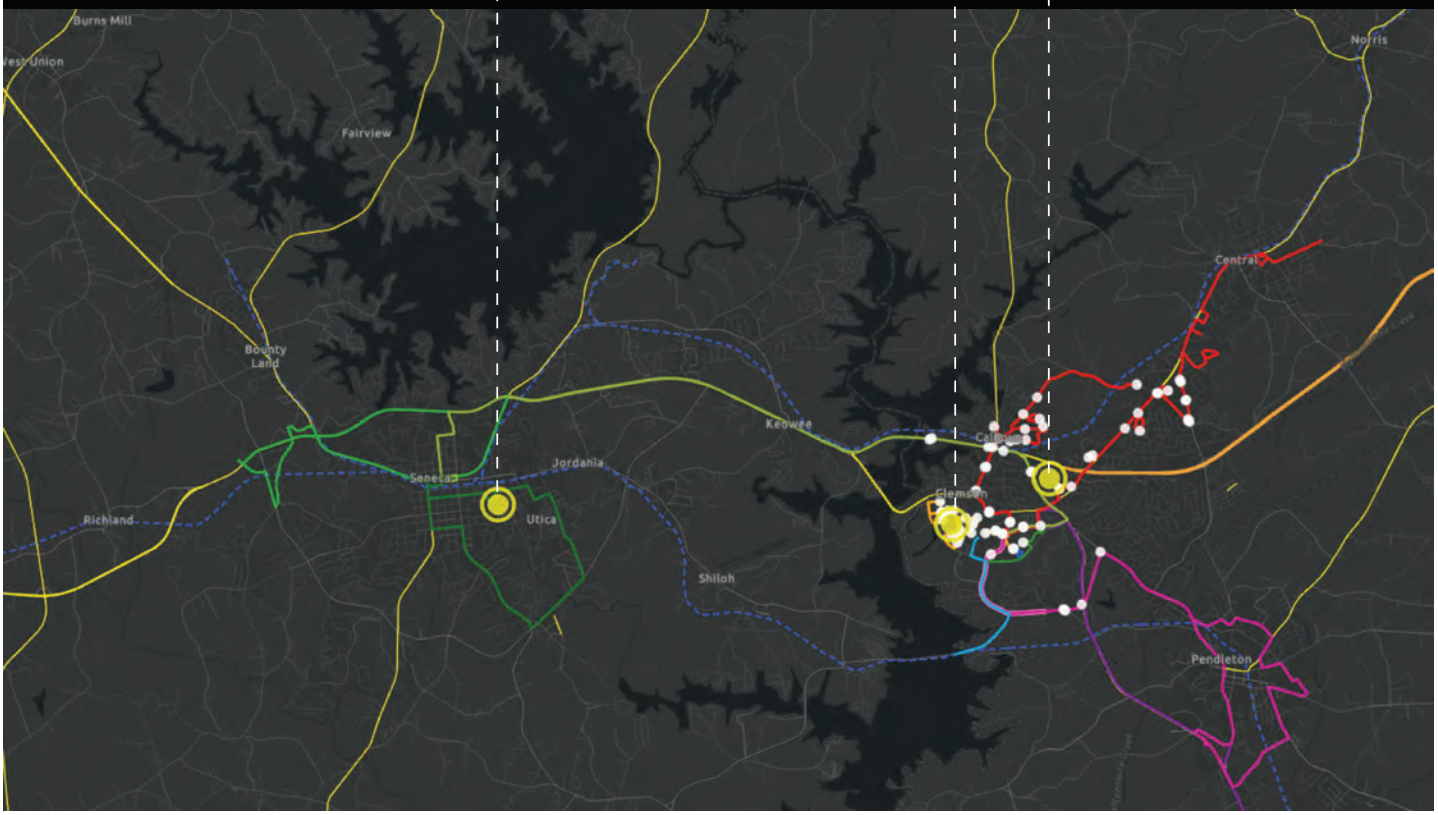
US Highway: existing major highways and roadways.

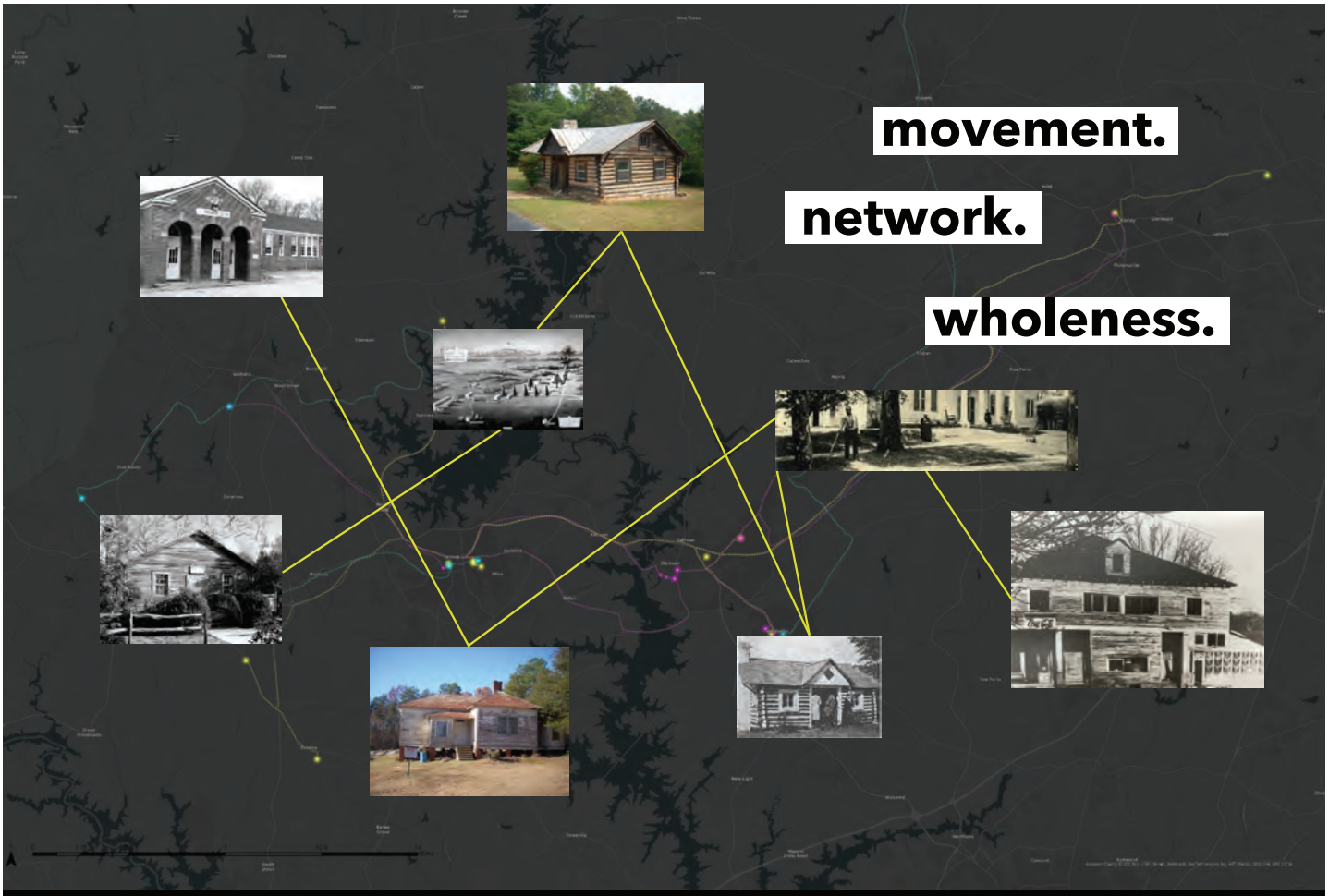
Clemson: existing city of clemson and clemson university CAT bus routes.

D

B

A





mapping sacredness.

A key factor for developing a metaphysical connection was establishing the grounds for that: storytelling. Through our research, we discovered that there were hundreds of stories told or untold nestled in pockets of communities within our regions. This includes connections between family lieneages, connections in infrastructure, and connections of past built environments. Much research was found on significant places that we deemed sacred based off of their significance and connections to other places. The focus remained largerly on educational and religious spaces, as well as other important community spaces.

Above, some of those historically significant places are mapped. They include several Rosenwald schools, that served primarily for education of African- American children in the early 20th century. Religious churches and memorial grounds were also mapped, due to their sacredness and ability to bring communities together. A huge part of this research was trying to gain tools to understand some of the histories of the land, but also what made these spaces so special to those who once lived there, and will continue to do so. The mapping of these sacred places served as groundwork for our regional master plan, to come in part three.

considering demographics.

Another point of consideration during the research process was demographics. Since our concept was centered largely about the storytelling of others, it was important to consider whose stories we would have the ability to share. We conducted a demographic analysis for each of the three sites, that helped inform some of our design decisions, and helped us gather better understanding of the people who this project might affect.

Some of the key things notes. In all three sites, the white, non- hispanic population was the greatest. In the City of Seneca, there was a much larger representation of African American folk, compared to the Clemson counterpart.

white. non- hispanic.

asian. non- hispanic.

black or african american. non- hispanic.

multi- racial. non- hispanic.

hispanic. or latino.

american indian + alaskan native.

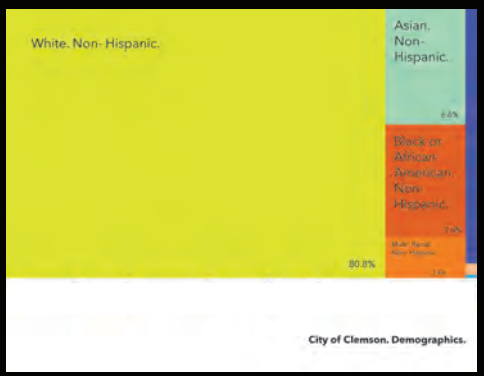
native hawaiian + other pacific islander.



Seneca. Demographics.



Clemson University. Demographics.



City of Clemson. Demographics.



clemson african american museum.



clemson university.



blue ridge community center.

considering the land.

The three sites chosen for this specific project are all different in terms of location, but they do share several natural land features as they are in the same region. One of the driving forces for the evolution of the Clemson Area in the last 150 years, was the creation of Lake Hartwell and the dam that prevents the city from flooding. It provided new connections between surrounding areas, and made the Clemson Area a hub for many things relating to aquatics. It is also worth noting that these sites share a deep rich history of soil and clay like materials throughout it's regions that helped fuel the art movement, and some of the manufacturing realms as well.

The photostrips represent the three distinct sites during different years.1995. 2005. 2008. and 2023 [bottom to top]. The Clemson African American Museum. Clemson University. and the Blue Ridge Community Center in the City of Seneca.

regional design.

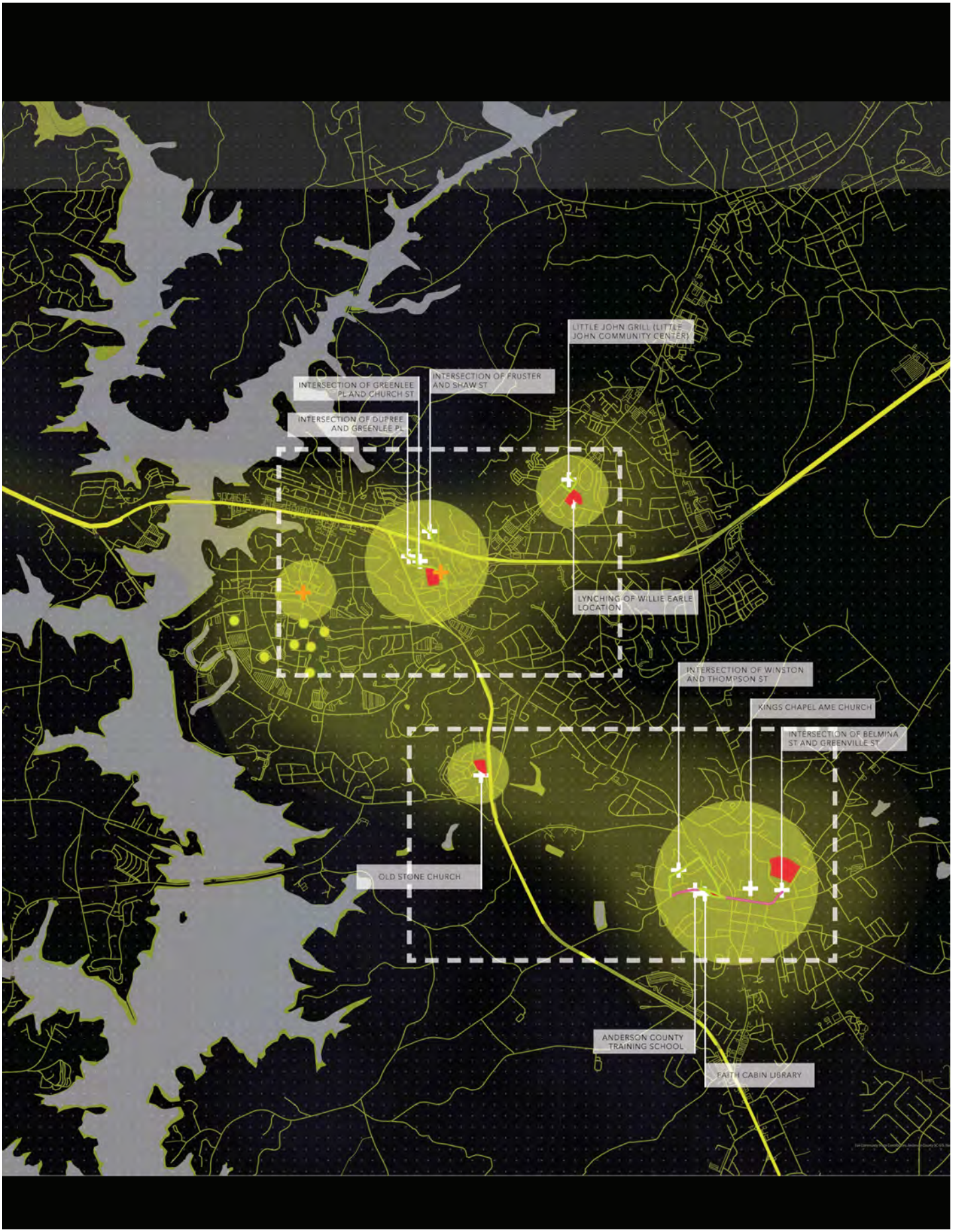
part two.

Part two involves creating an informed master plan that connects the heritage sites and shows compatible land use proposals around the sites. The **goal of part two is to tell the story of the land by respecting the past and celebrating the future**.

REGIONAL MASTER PLAN

Through thorough investigation and analysis, our team has determined a region outlined by significant places that correlate to the existing sites and African American heritage in the surrounding areas. Our region is composed of three micro regions that consist of significant sites connected through three typology interventions including: streetscapes, community spaces, and sacred places. This connection is achieved through the use of elements such as materials, plantings, and character design as well as physical connections for transportation.




LITTLE JOHN GRILL (LITTLE JOHN COMMUNITY CENTER)
INTERSECTION OF GREENLEE PL AND CHURCH ST
INTERSECTION OF FRUSTER AND SHAW ST
INTERSECTION OF DUPREE AND GREENLEE PL
LYNCHING OF WILLIE EARLE LOCATION
INTERSECTION OF WINSTON AND THOMPSON ST
KINGS CHAPEL AME CHURCH
INTERSECTION OF BELMINA ST AND GREENVILLE ST
OLD STONE CHURCH
ANDERSON COUNTY TRAINING SCHOOL
FAITH CABIN LIBRARY

creating typologies.

Through the regional design process, our team came up with three different typologies that could be used to improve the sites in different aspects. By incorporating knowledge of the past and present, we are able to inform the future through typology. These are merely interventions that can be used in the identified regions, to bring back memories of the past or induce new ones to be created. The typologies share our common goal of creating community through space and metaphysical connections.

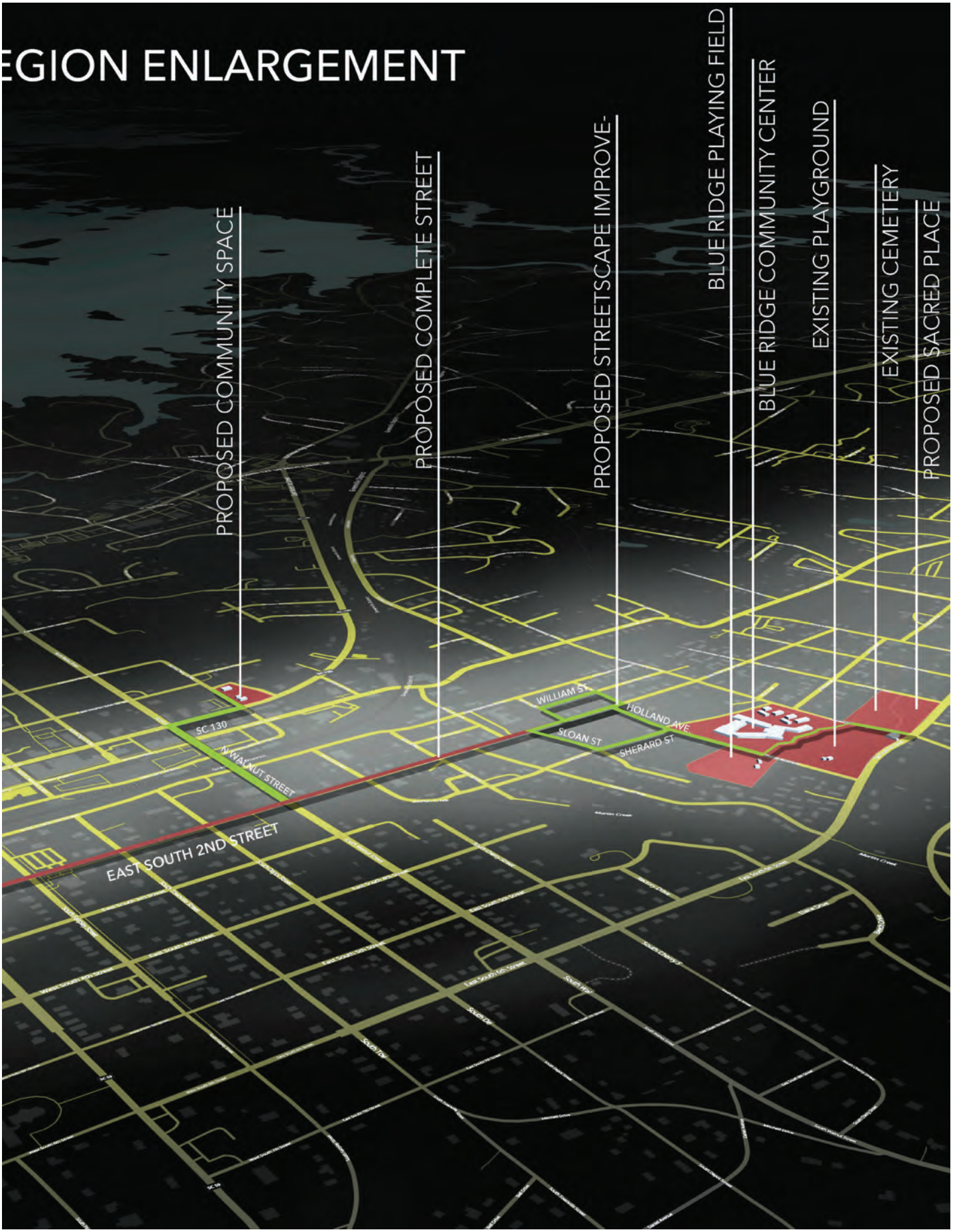
The three typologies are:

I **Community Spaces.**

II **Streetscapes**.

III **Sacred Spaces.**




EGION ENLARGEMENT
PROPOSED COMMUNITY SPACE
PROPOSED COMPLETE STREET
PROPOSED STREETSCAPE IMPROVE-
BLUE RIDGE PLAYING FIELD
BLUE RIDGE COMMUNITY CENTER
EXISTING PLAYGROUND
EXISTING CEMETERY
PROPOSED SACRED PLACE
WILLIAM ST
HOLLAND AVE
SLOAN ST
SHERARD ST
SC 130
N WALNUT STREET
EAST SOUTH 2ND STREET

TYPOLOGY I
STREETSCAPES

WHAT IS A STREETSCAPE?

A designed streetscape translates the identity of a place and the places that it connects. A good designed streetscape allows for all users to safely and conveneintly travel regardelss of age and mode of transportation.

Streetscapes can improve community connectivity between priamry community areas and can connect significant community spaces. As well as promoting walkability and pedestrian use.

CRITERIA

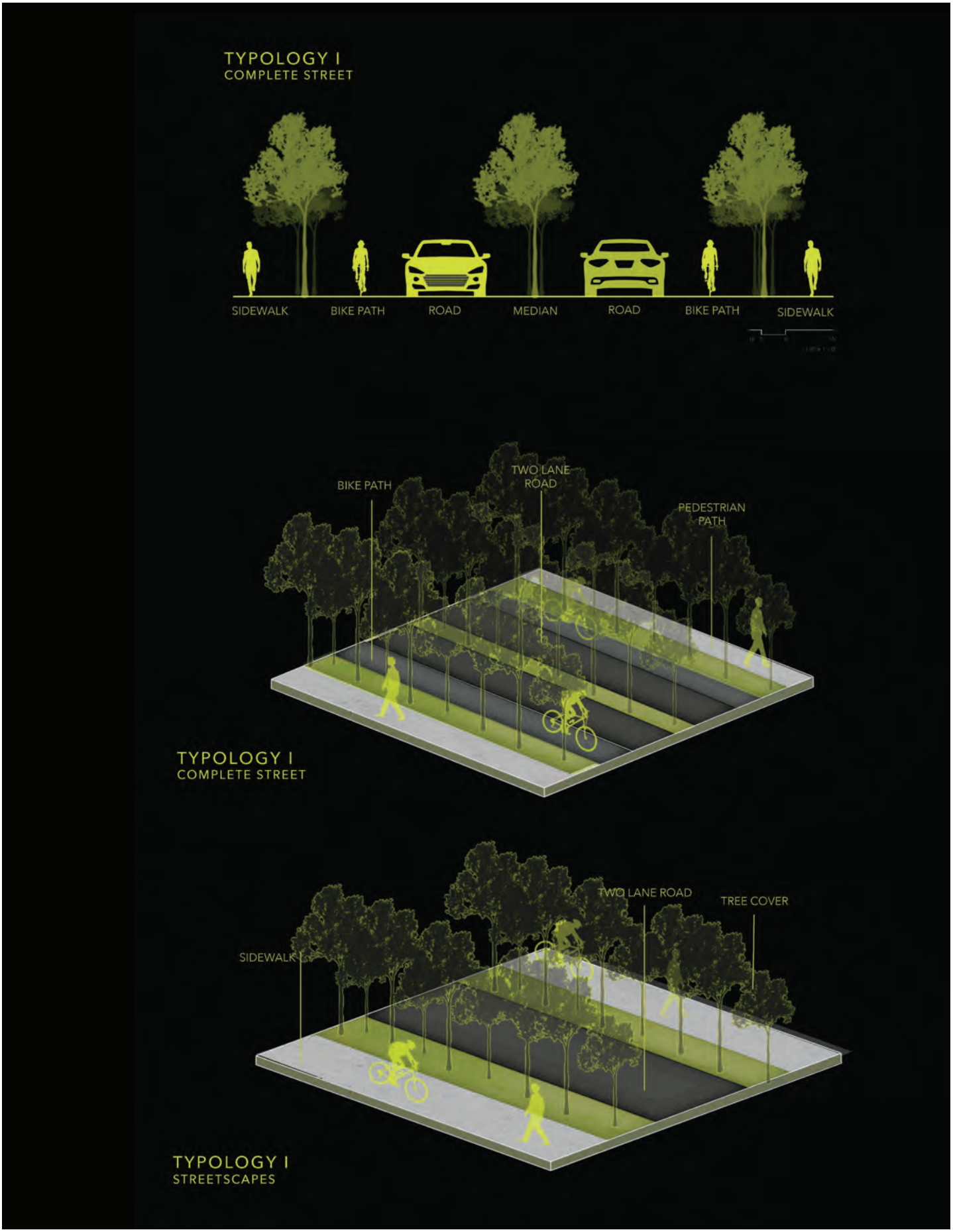
In choosing to implement each streetscape , certain criteria must be considered when determining best suited locations to implement streetscapes within our design. Criteria are listed to the right.

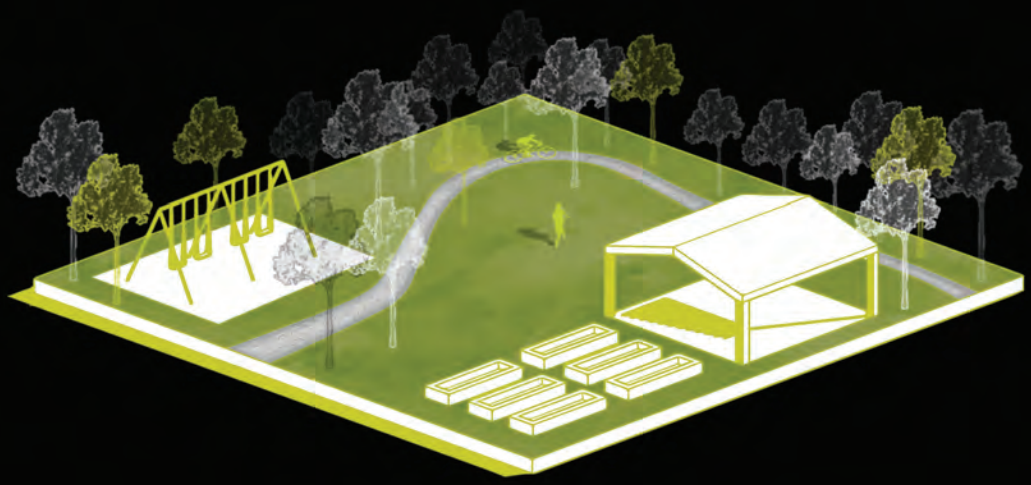
proximity to mapped sacred places
connectivity
accessibility
tree coverage
road width
level of classification
safety
community need

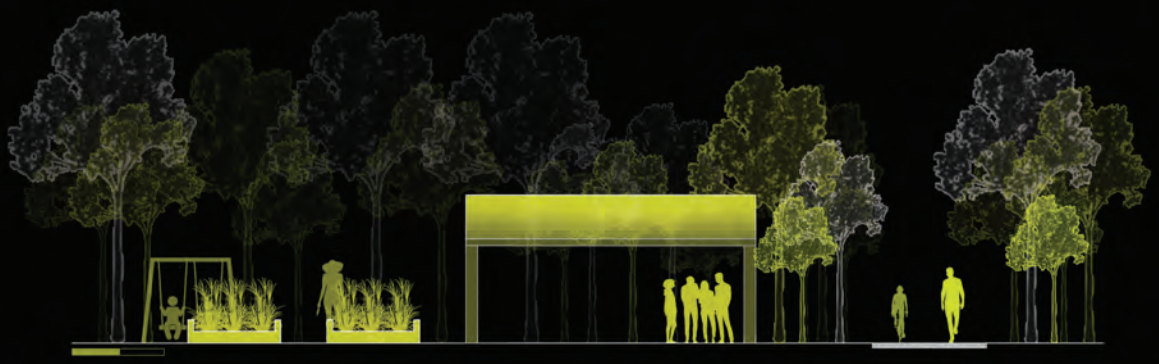
ELEMENTS



vehicular lanes | pedestrian path | seating areas | tree canopy


TYPOLOGY I
COMPLETE STREET
SIDEWALK
BIKE PATH
ROAD
MEDIAN
ROAD
BIKE PATH
SIDEWALK
BIKE PATH
TWO LANE ROAD
PEDESTRIAN PATH
TYPOLOGY I
COMPLETE STREET
SIDEWALK
TWO LANE ROAD
TREE COVER
TYPOLOGY I
STREETSCAPES







TYPOLOGY III

SACRED SPACE

WHAT IS A SACRED SPACE?

A Sacred space is a location that instills within one's self a feeling of reverence.

Reverence; A deep respect for somone or something.

A sacred space includes elements of the past while simbiotically housing the future.

CRITERIA

Sacred spaces occur naturally under the right conditions. To foster an environment for one to grow certain criteria must be provided;

longevity
accessibility
repitition
viewsheds
safety
identity
adaptability

ELEMENTS



paths | edge conditions | a lasting structure | lighting | open space
robust comunity | interactive plantings | a landmark within sight | time

TYPOLOGY III

SACRED SPACE

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CRITERIA

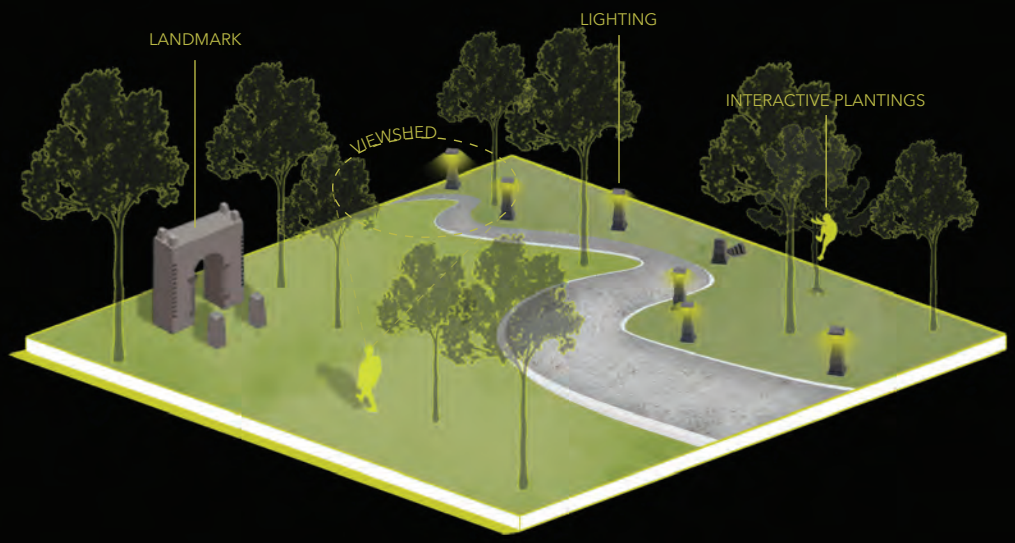
Sacred spaces occur naturally under the right conditions. To foster an environment for one to grow certain criteria must be provided;

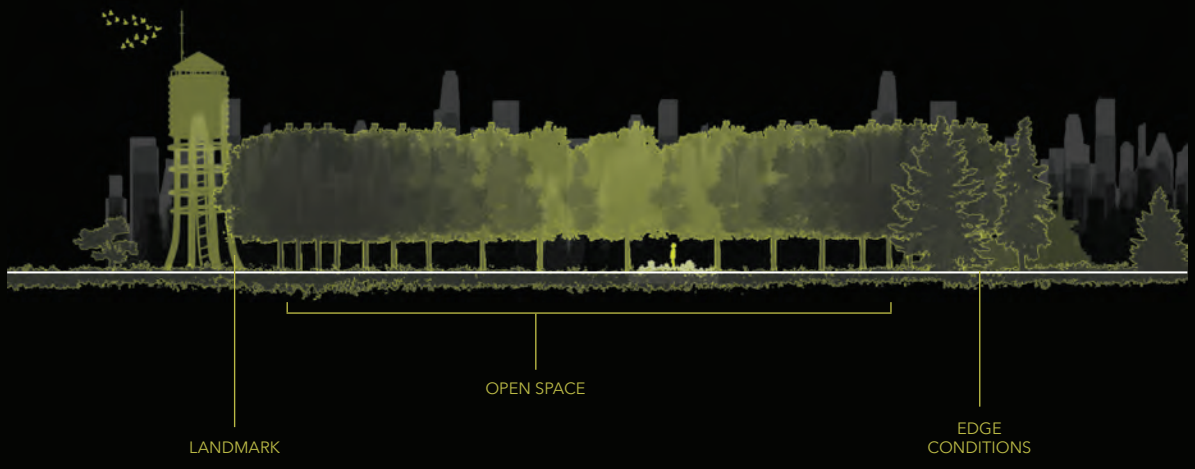
longevity
accessibility
repitition
viewsheds
safety
identity
adaptability

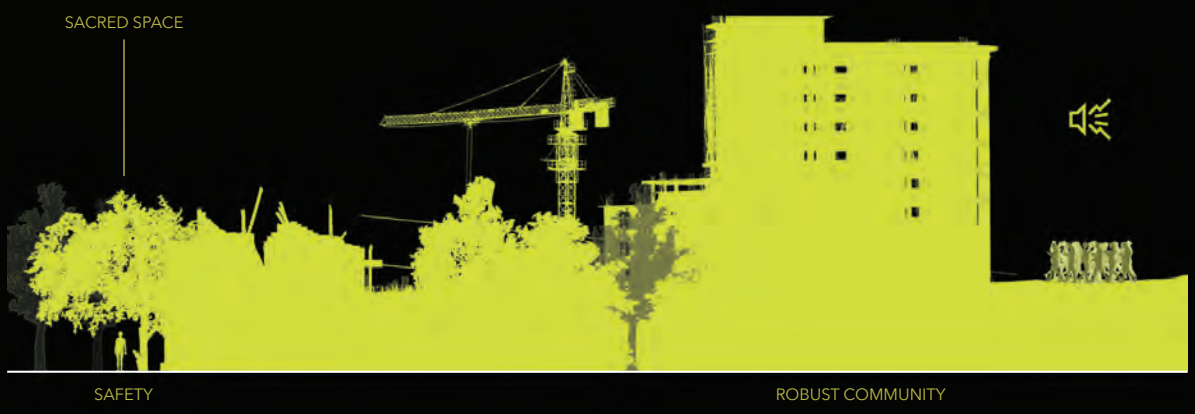
ELEMENTS



paths | edge conditions | a lasting structure | lighting | open space
robust comunity | interactive plantings | a landmark within sight | time


LANDMARK
LIGHTING
VIEWSHED
INTERACTIVE PLANTINGS


OPEN SPACE
LANDMARK
EDGE
CONDITIONS


SACRED SPACE
SAFETY
ROBUST COMMUNITY



Typology III

typologies in work.

This supporting graphic represents all three proposed typologies in one place. These typologies are not site specific, and act more as guidelines for potential improvement + intentional design in any site. They can all be utilized at once, as shown. Or used for specific purposed within a site. Here, all three work together.

I **Streetscapes**: improved. safer circulation.

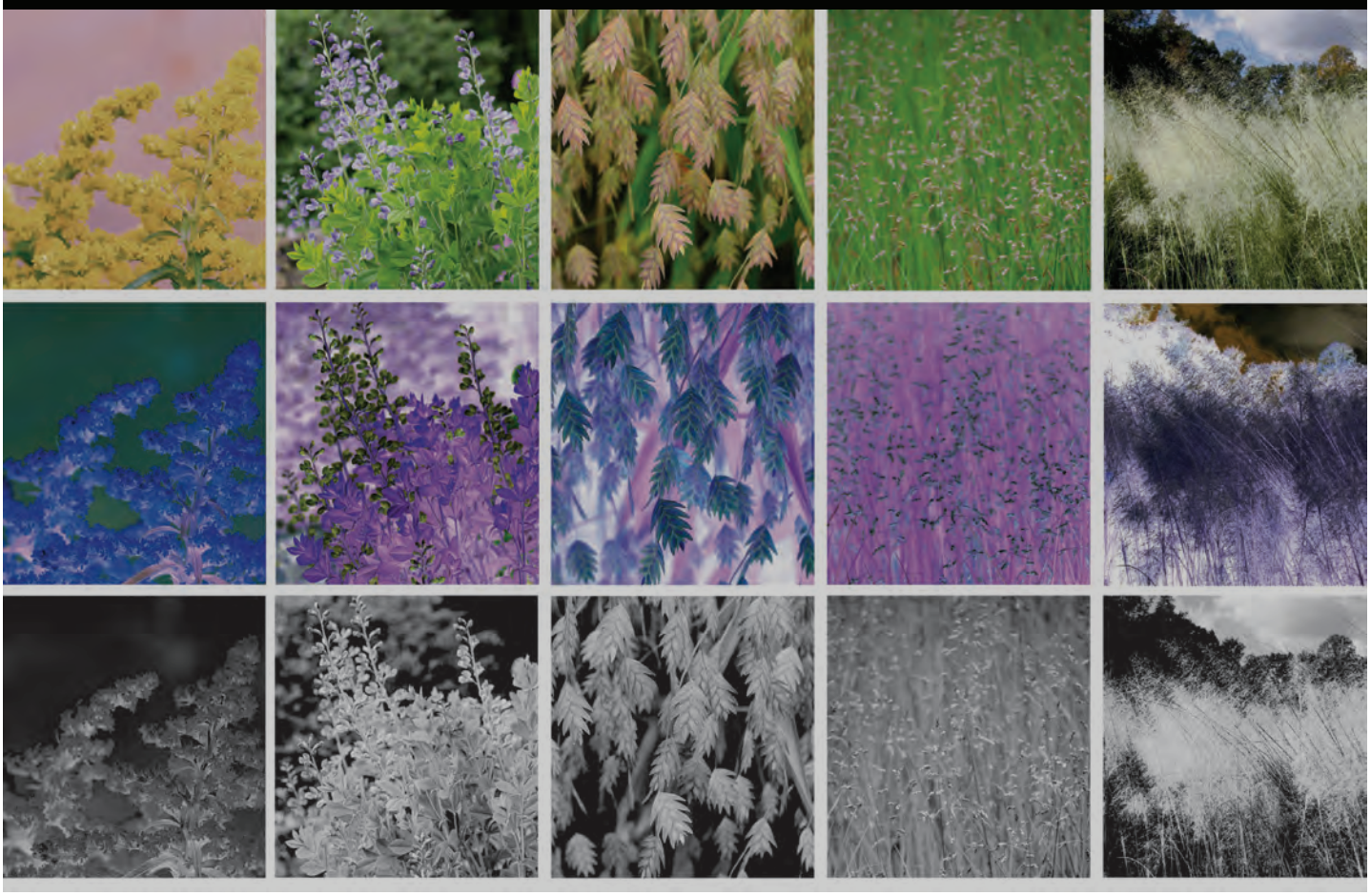
II **Community spaces**: community garden for residents + community members.

III **Sacred Spaces:** playground. also functions as community space.



planting selection.

Our group has decided to connect these sites metaphysically through storytelling. A large part of that story, is the regard for existing materials already located at the site. During part two : regional design, a loose planting palette was selected based off exsiting plants found throughout all three sites. This creates a physical connection by proposing a cohesive planting pallette throughout the sites. These plantings will be explored later on.





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BLA

individual site design.

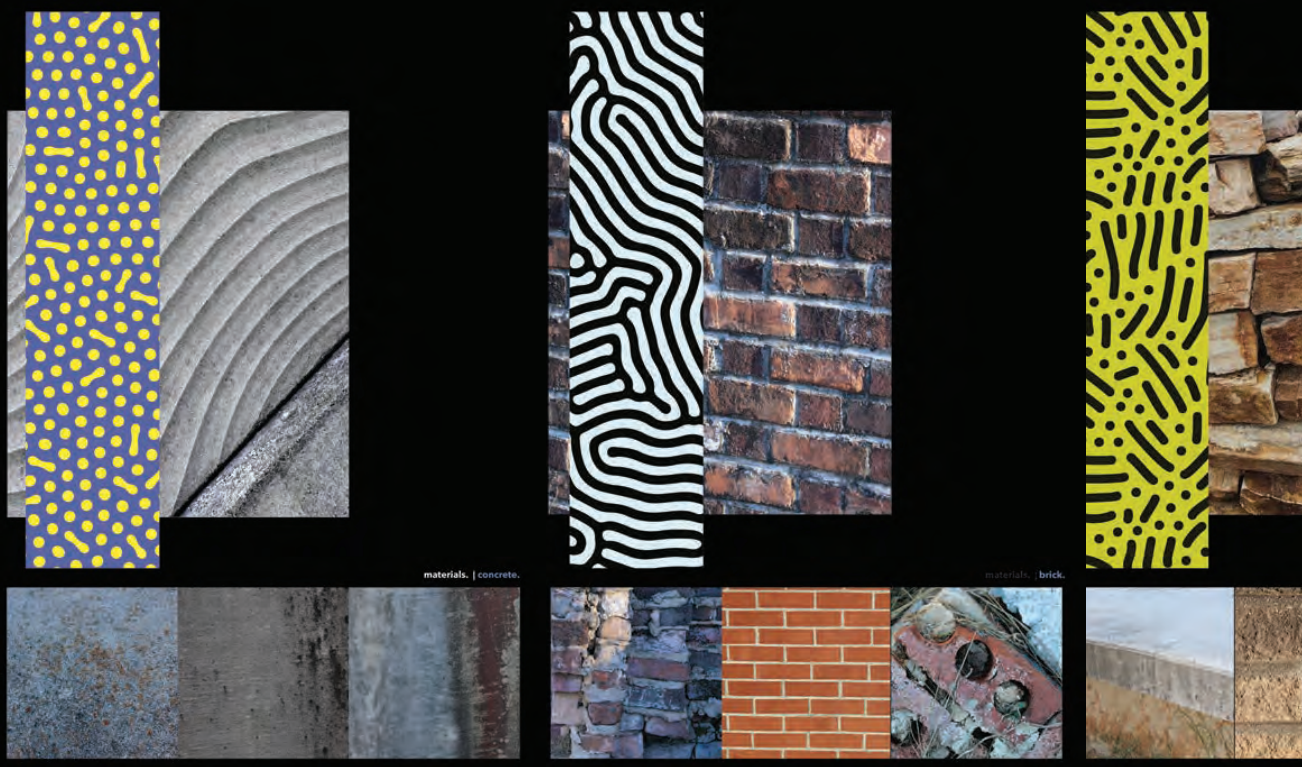
part three.

The g**oal of part three is to design a space that is reflective of the past and commemorates the community it is located within and the individuals that should be celebrated, while considering the users and their experience**. Team members were encouraged to use typologies created in part 02 to help inform their designs. An emphasis on materials and the planting palette is also examined.

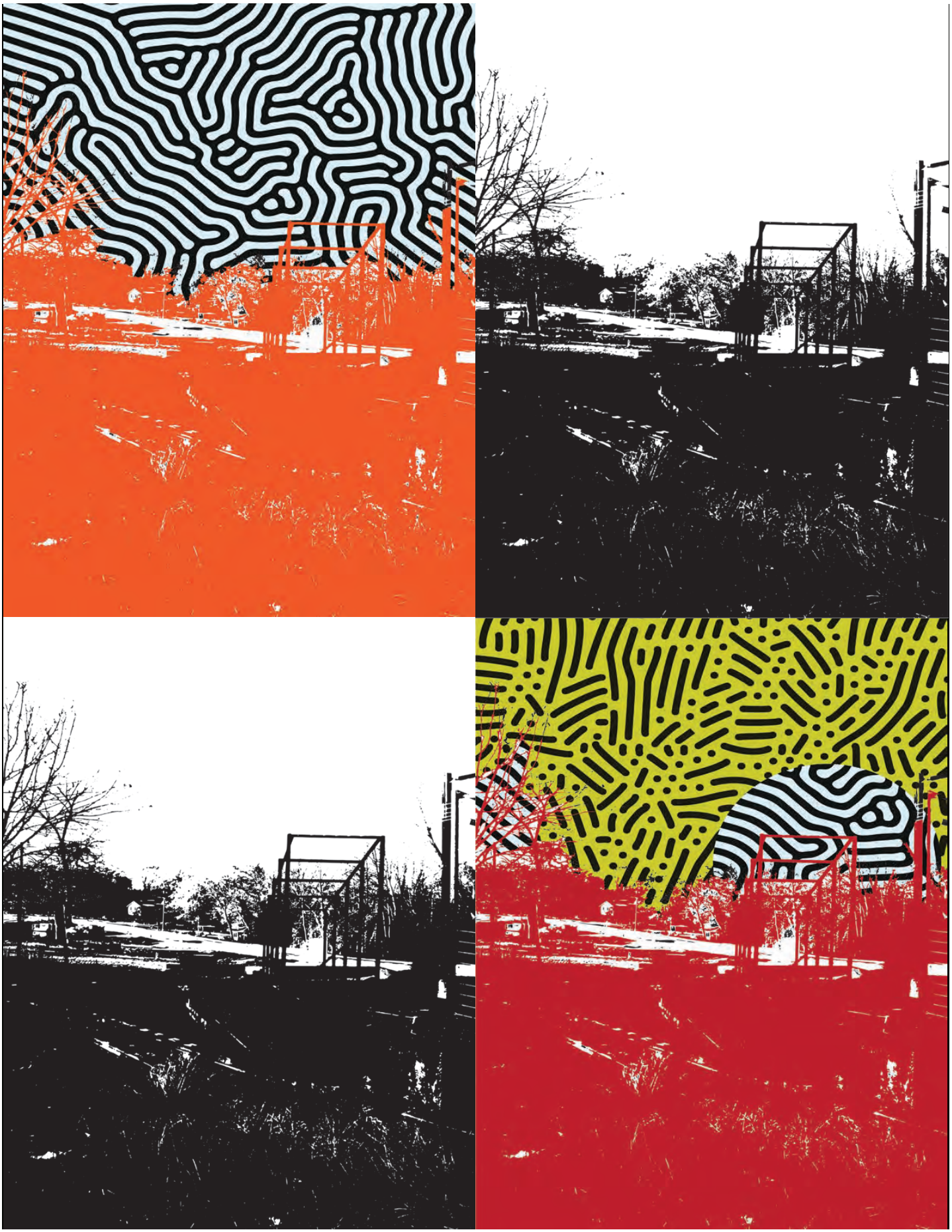
defining materials.

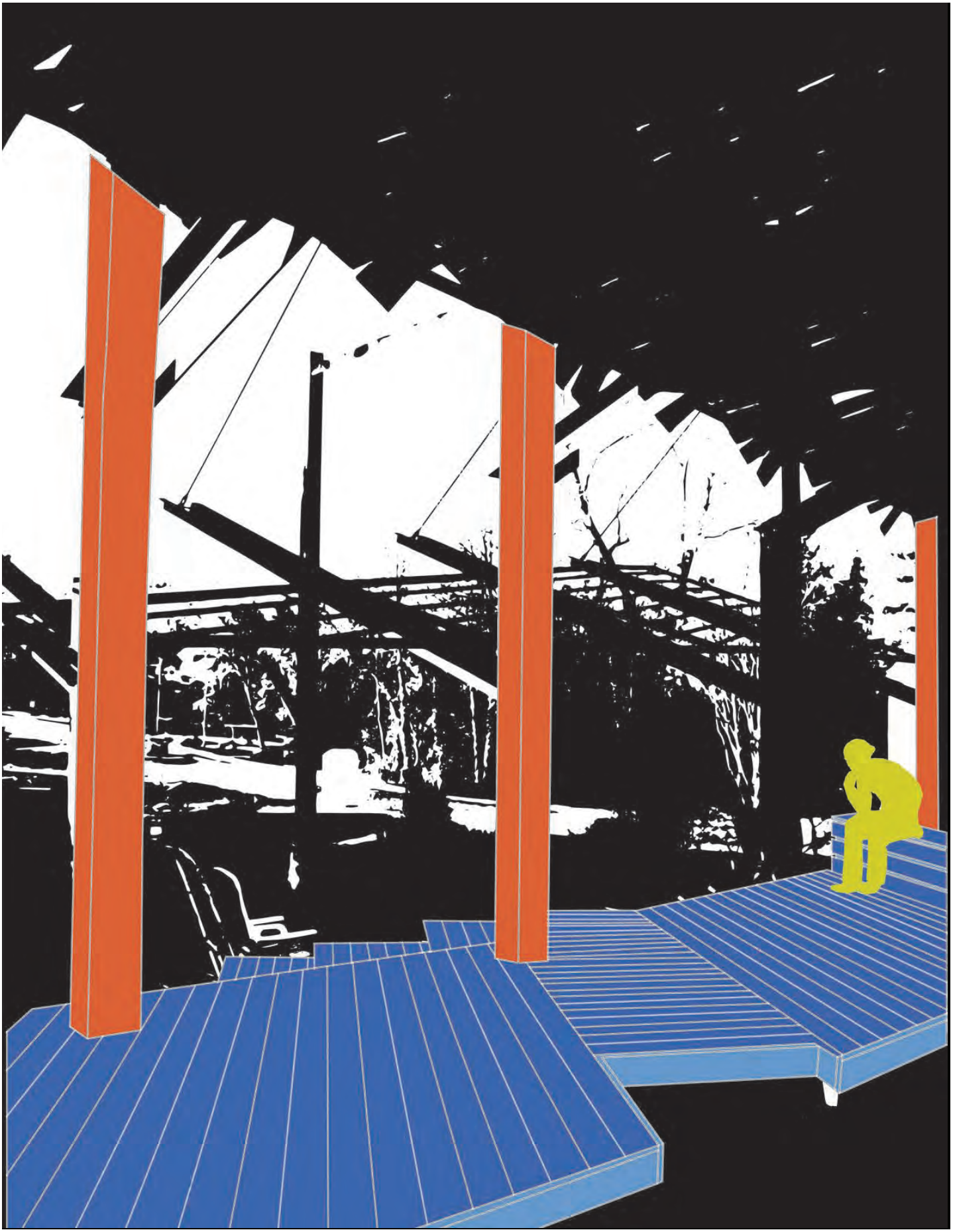
One way we are able to establish a metaphysical connection between the several identified micro- regions is through materiality. Through investigation and data collection, it was noted that a lot of these sites contain similar materials. We wanted to incorporate that into our individual designs, by using the same materials and planting palette, to help connect users through the senses.

A materiality study was done. Each one of the five chosen materials was designated a pattern, and used to reinterpret the built environment, to show existing conditions.

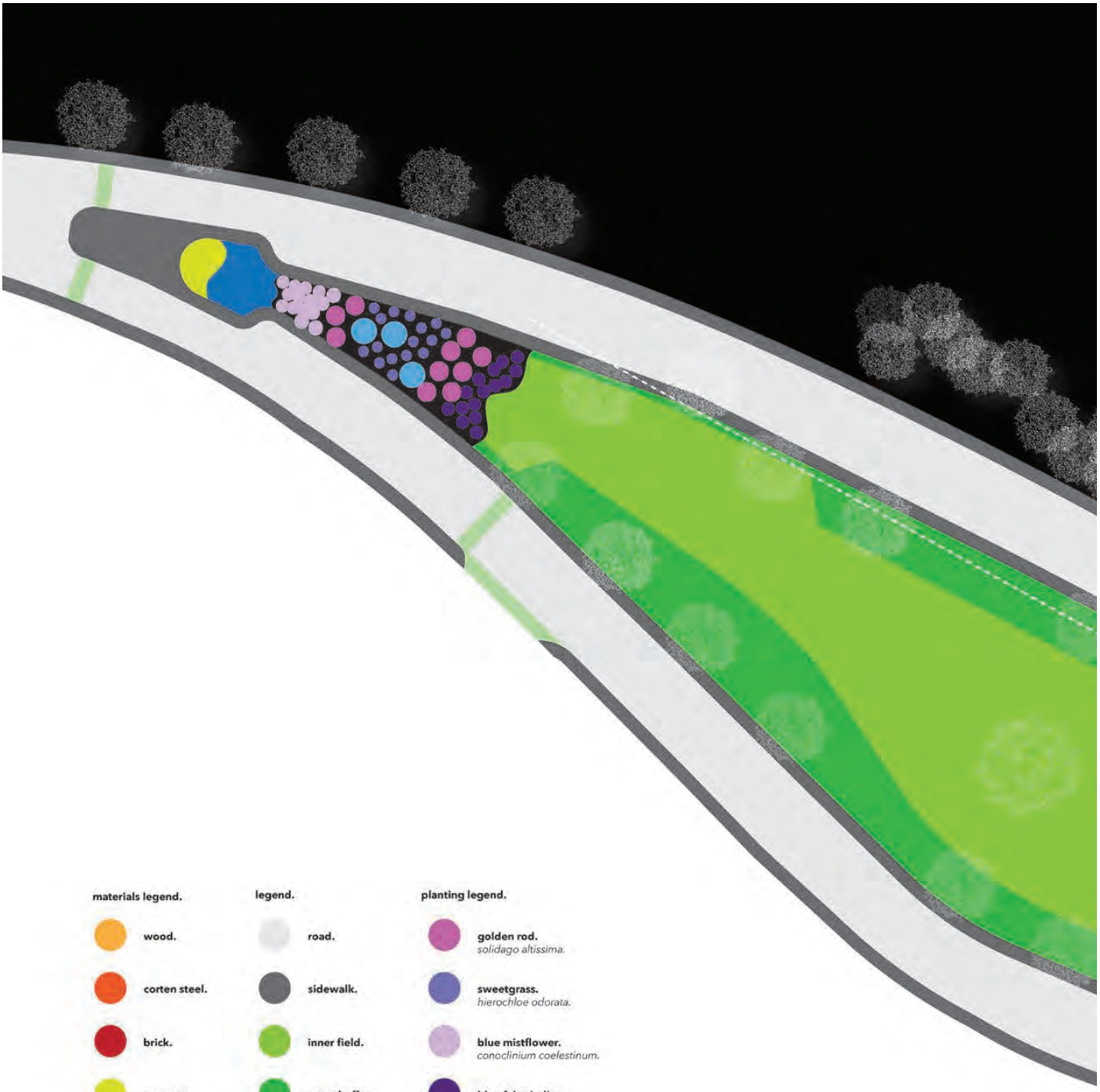



materials. | stone.
materials. | wood.
materials. | corten steel.





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BLA



materials legend.

- **wood.**
- **corten steel.**
- **brick.**
- **concrete.**
- **stone.**

legend.

- **road.**
- **sidewalk.**
- **inner field.**
- **outer buffer.**
- **crosswalk.**

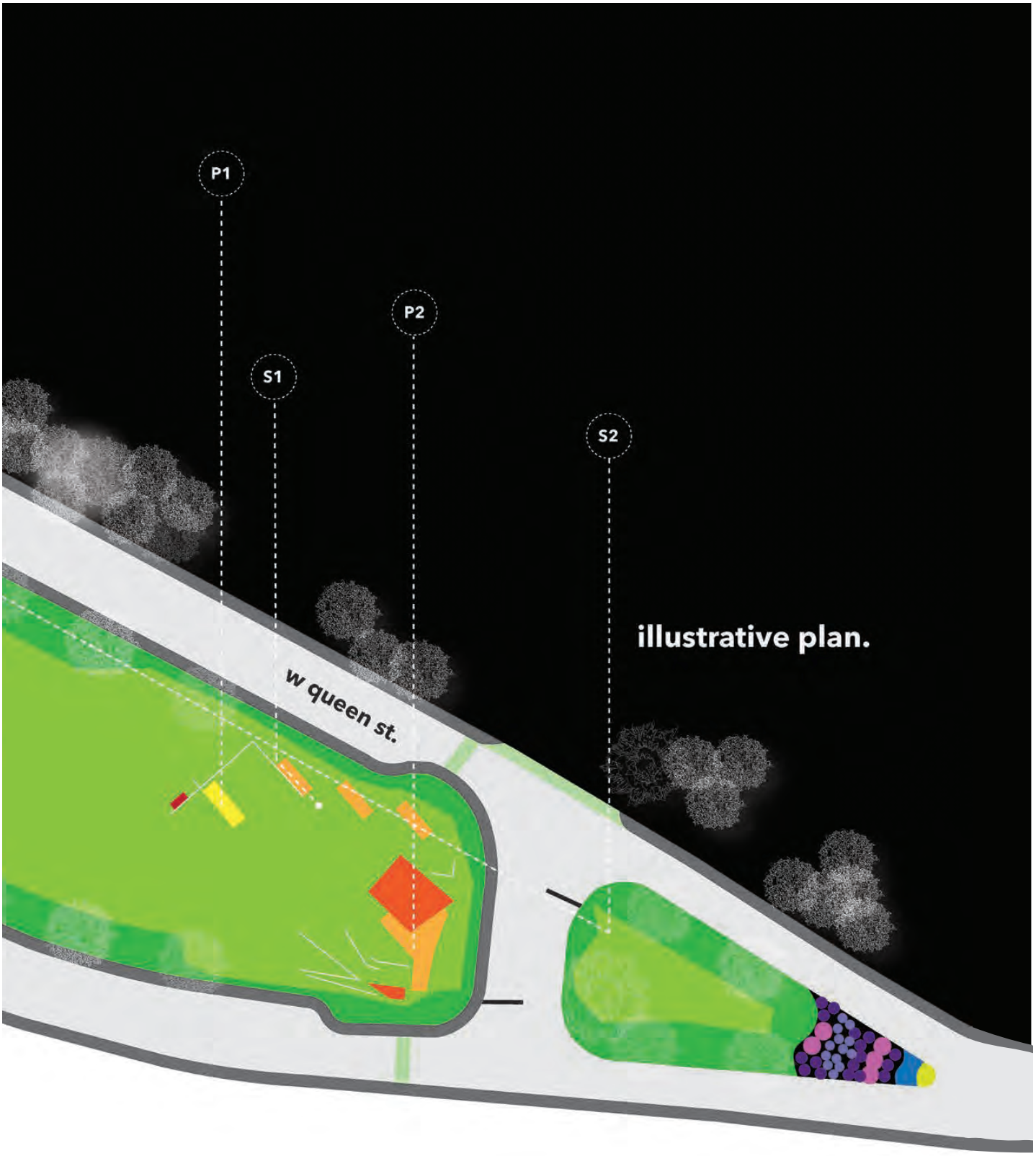
planting legend.

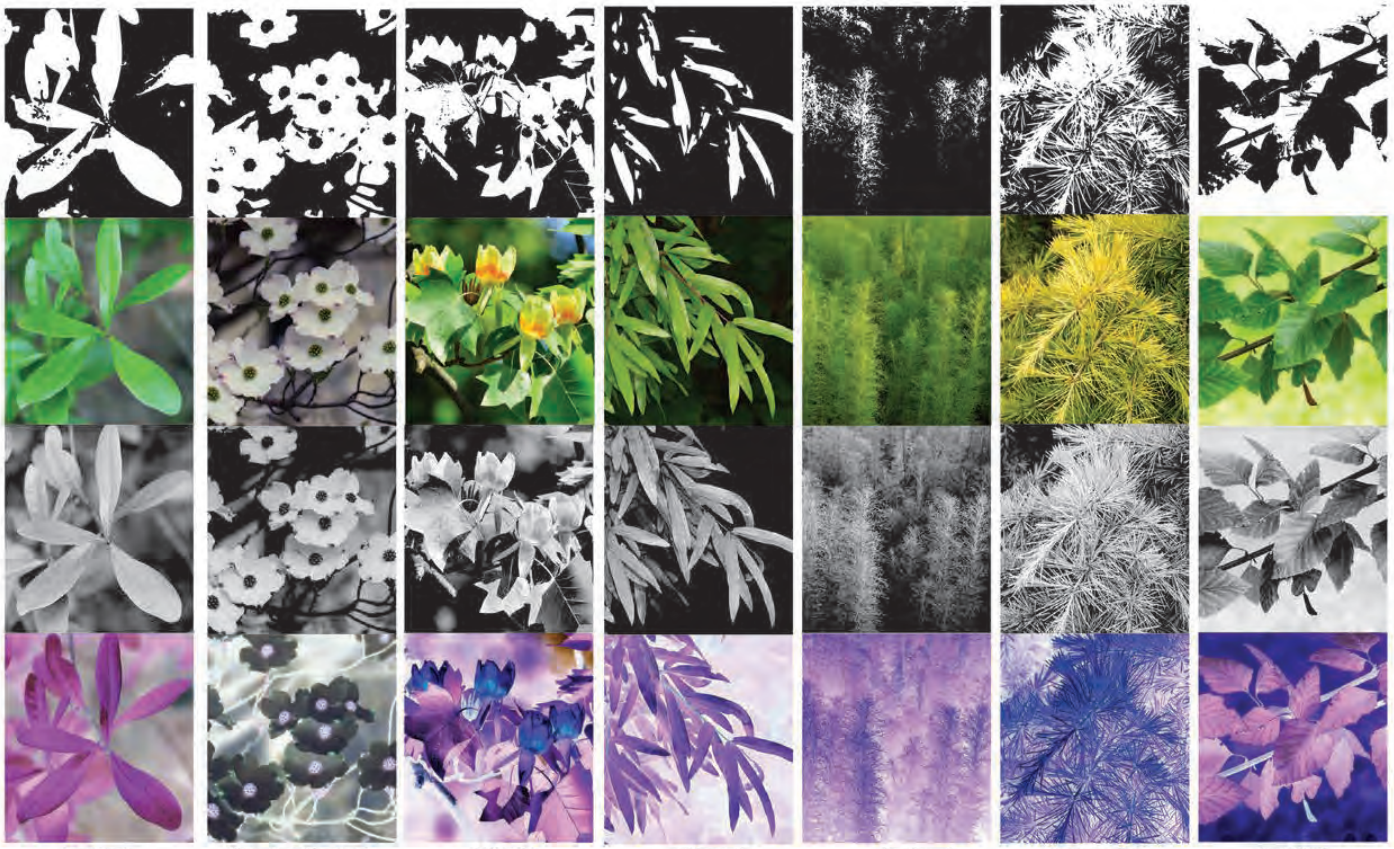
- **golden rod.** *solidago altissima.*
- **sweetgrass.** *hierochloe odorata.*
- **blue mistflower.** *conoclinium coelestinum.*
- **blue false indigo.** *batisia australis.*
- **muhly grass.** *muhlenbergia capillaris.*

0' 20' 30' 40'

scale. 1"= 20'- 0".

N


P1
P2
S1
S2
illustrative plan.
w queen st.



laurel oak.
quercus latifolia.

flowering dogwood.
cornus florida.

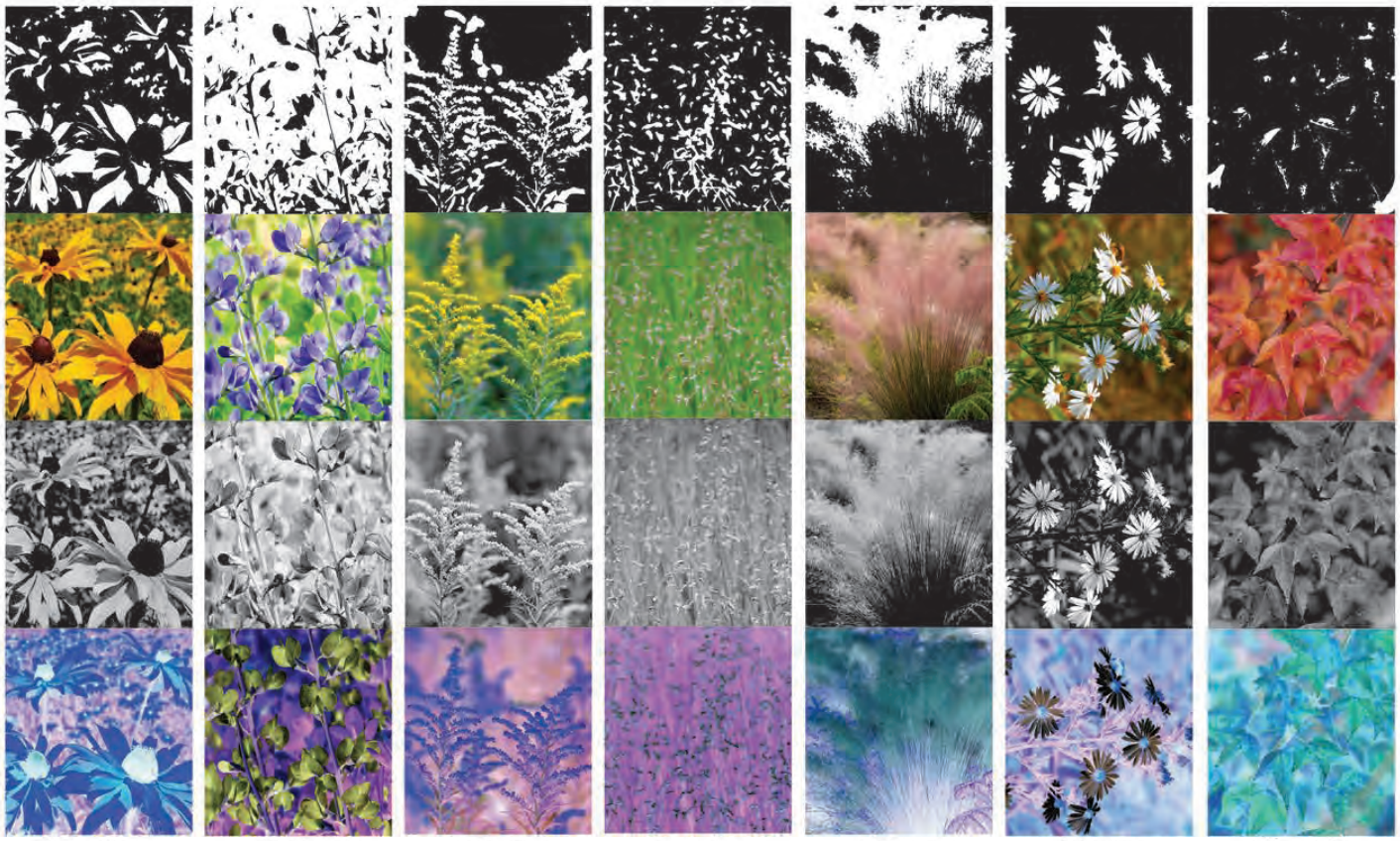
tulip tree.
liriodendron tulipifera.

willow oak.
quercus phellos.

dog fennel.
eupatorium capillifolium.

deodar cedar.
cedrus deodara.

river birch.
betula nigra.



black eyed susan.
rudbeckia hirta.

blue false indigo.
baptisia australis.

golden rod.
solidago altissima.

sweetgrass.
hierochloe odorata.

muhly grass.
muhlenbergia capillaris.

hairy aster.
symphyotrichum pilosum.

trident maple.
acer buergerianum.

planting palette.

As mentioned previously, our sites are connected through a metaphysical connection of storytelling and movement. With the proposal of three typology subgroups that coan be used to improve site conditions, also comes a planting palette. Staying true to the character of the individual sites, some commonalities were found. Lots of native grasses and vegetation that has seasonal interest, could be implemented at the different sites to create a familiar sense of feeling. smell. touch. which can be experienced through the different textures and forms of plantings.





1 clanceleaf tickseed.
coreopsis lanceolata.

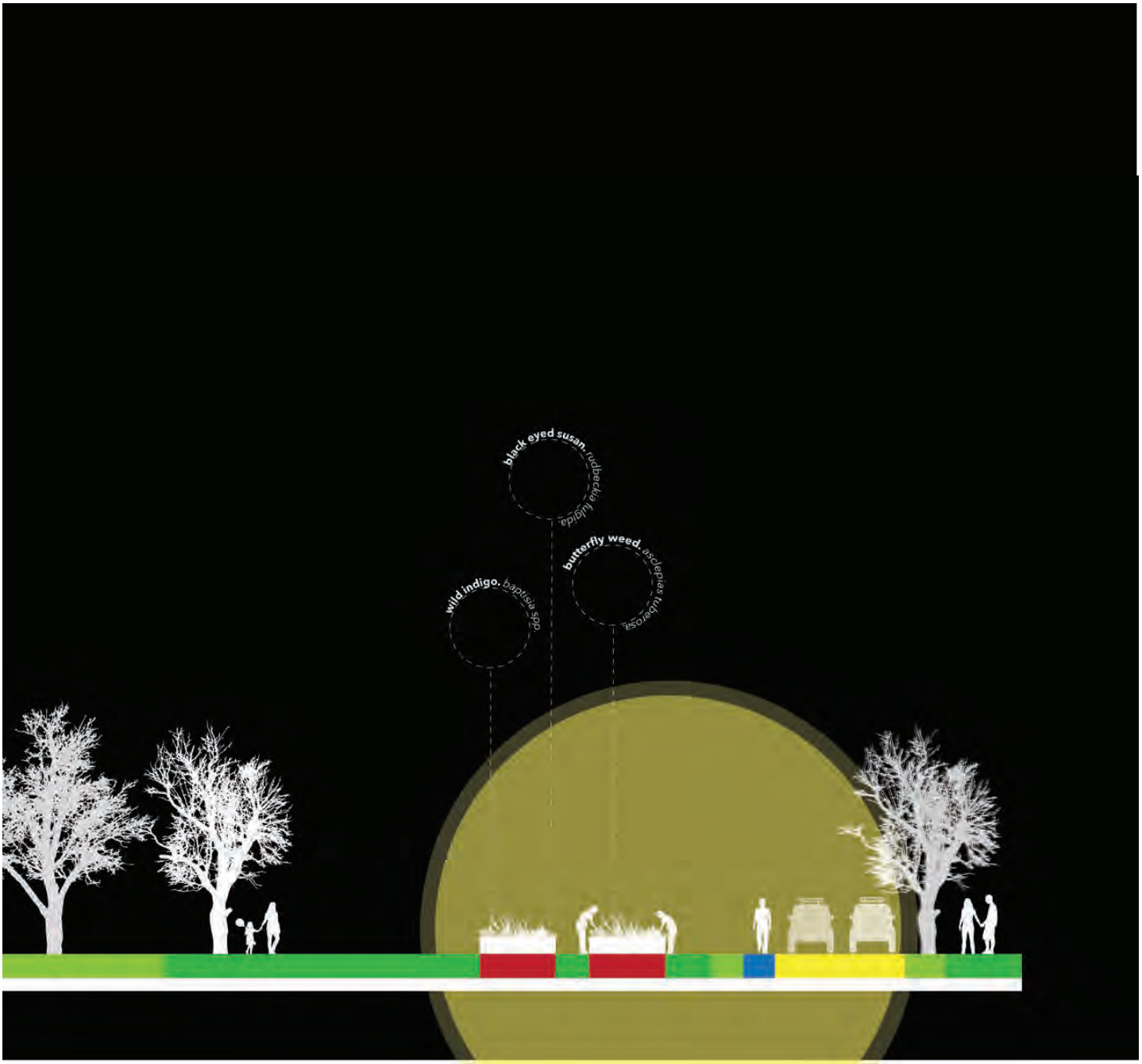


2 showy goldenrod.
solidago speciosa.



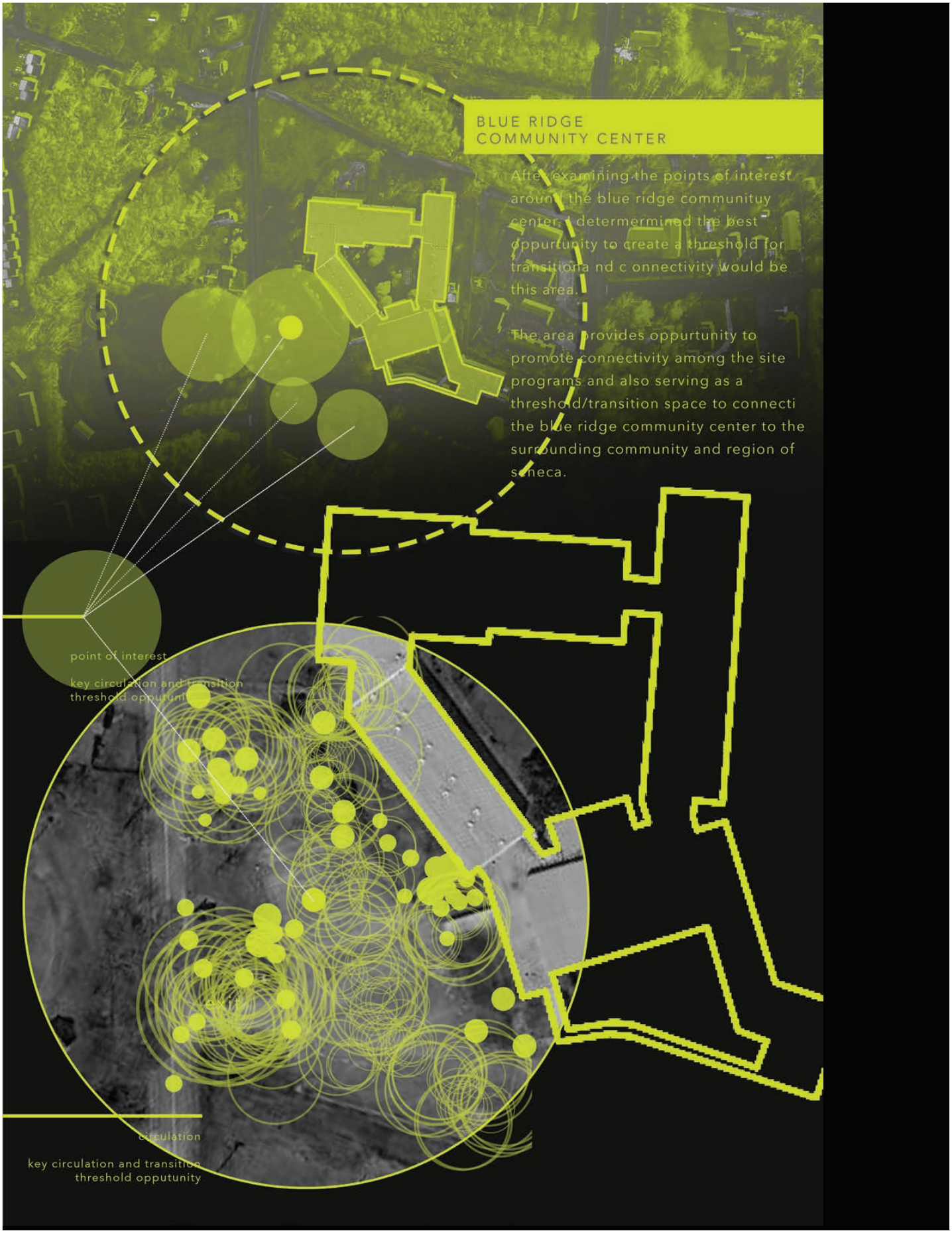
3 blue false indigo.
baptisa australis.

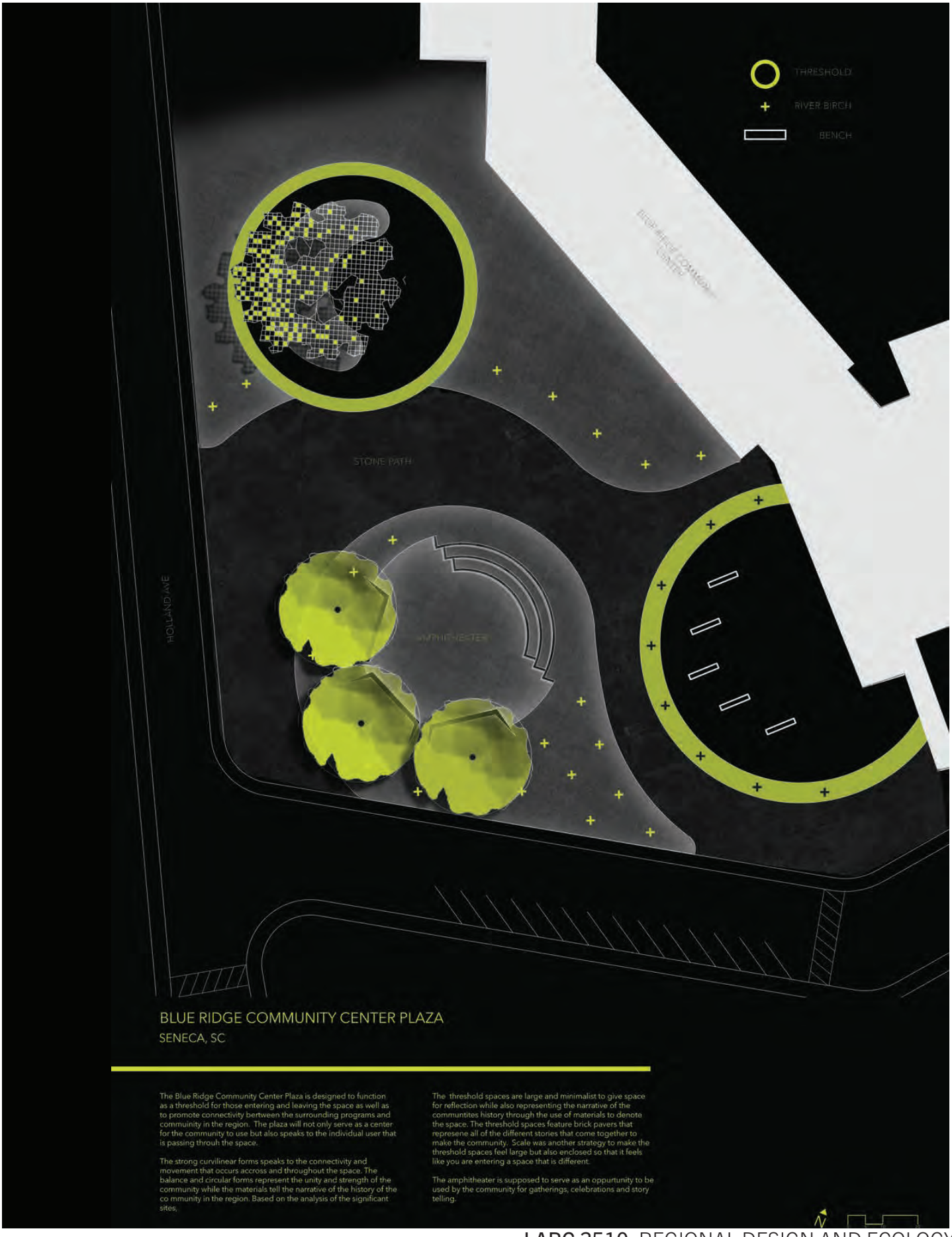

willow oak, quercus phellos
laurel oak, quercus laurifolia



legend.

- road.
- sidewalk.
- inner field.
- planting bed.
- outer buffer.


BLUE RIDGE
COMMUNITY CENTER
After examining the points of interest around the blue ridge communituy center, i determermined the best oppurtunity to create a threshold for transitiona nd c onnectivity would be this area.
The area provides oppurtunity to promote connectivity among the site programs and also serving as a threshold/transition space to connecti the blue ridge community center to the surrounding community and region of seneca.
point of interest
key circulation and transition threshold oppurtunity
circulation
key circulation and transition threshold opputunity



BLUE RIDGE COMMUNITY CENTER PLAZA

SENECA, SC

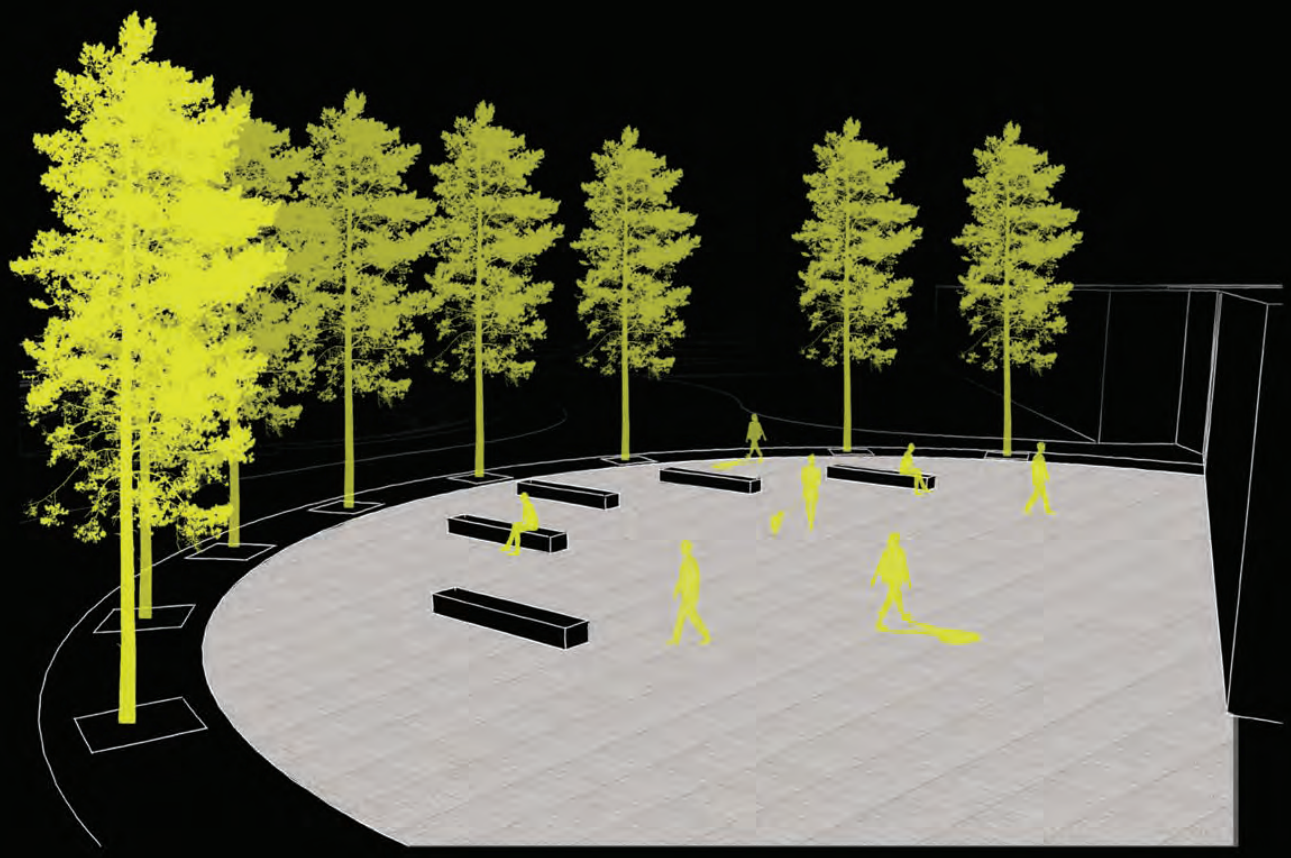
The Blue Ridge Community Center Plaza is designed to function as a threshold for those entering and leaving the space as well as to promote connectivity bertween the surrounding programs and commuinity in the region. The plaza will not only serve as a center for the community to use but also speaks to the individual user that is passing throuh the space.

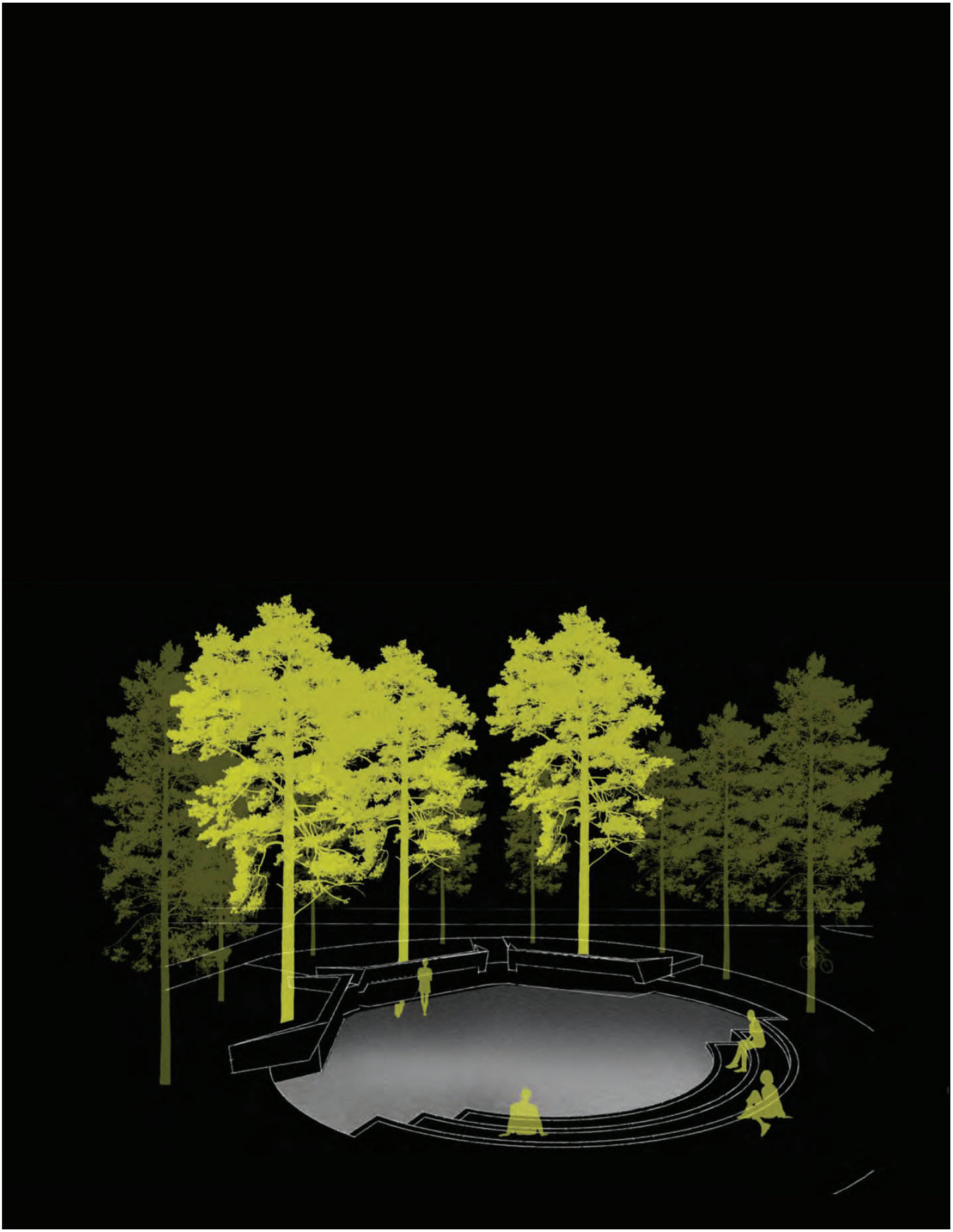
The strong curvilinear forms speaks to the connectivity and movement that occurs accross and throughout the space. The balance and circular forms represent the unity and strength of the community while the materials tell the narrative of the history of the co mmunity in the region. Based on the analysis of the significant sites,

The threshold spaces are large and minimalist to give space for reflection while also representing the narrative of the communtites history through the use of materials to denote the space. The threshold spaces feature brick pavers that represene all of the different stories that come together to make the community. Scale was another strategy to make the threshold spaces feel large but also enclosed so that it feels like you are entering a space that is different.

The amphitheater is supposed to serve as an oppurtunity to be used by the community for gatherings, celebrations and story telling.

supporting graphics.

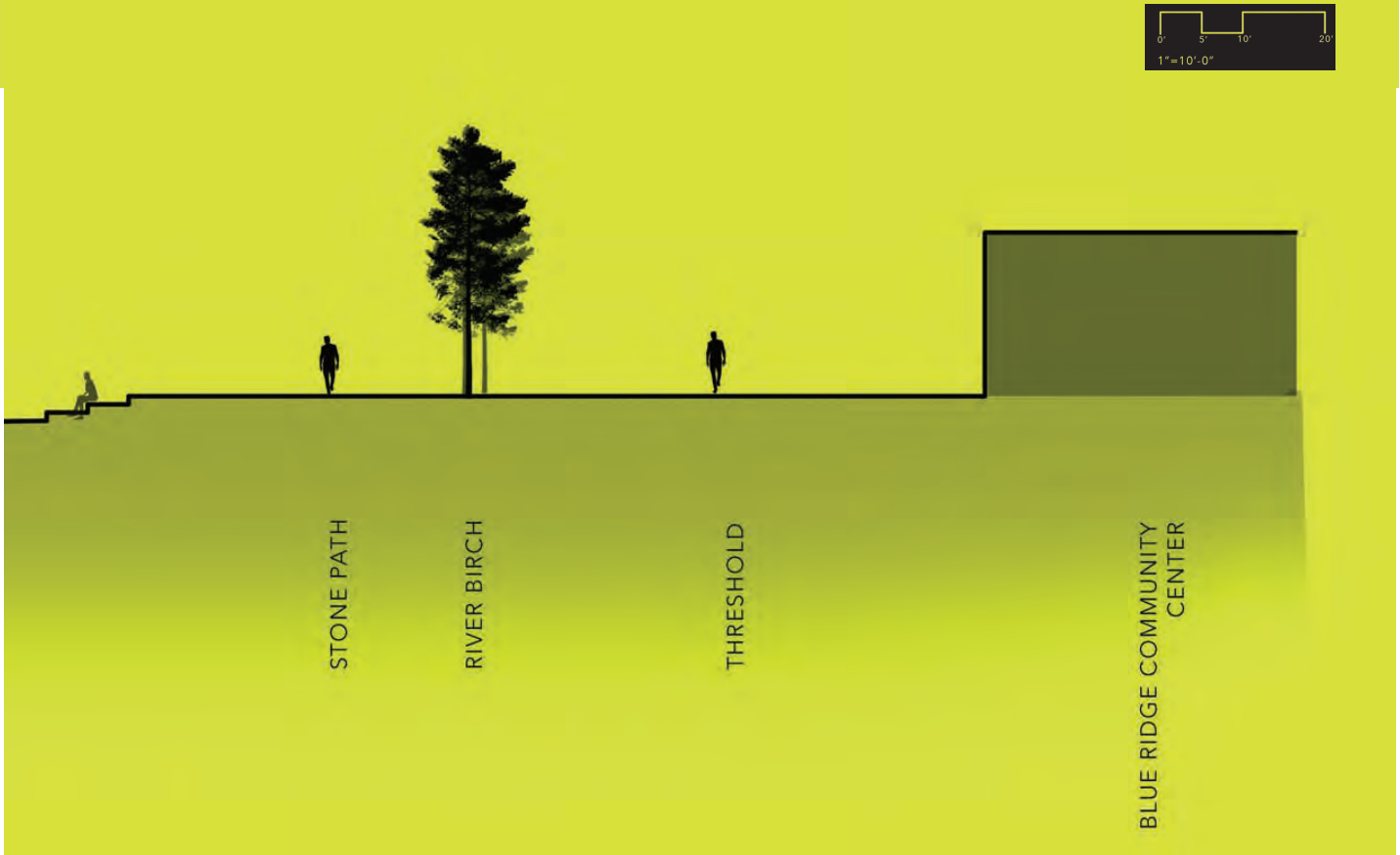




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TYPOLOGY I | STREETSCAPE

supporting graphics.



EXPERIENCE AND REFLECT

THE CALHOUN BRIDGE CENTER

A RENOVATED LANDSCAPE

ASSOCIATED WITH **THE AFRICAN AMERICAN HERITAGE TRAIL**

HONORING **AFRICAN AMERICAN HISTORY**
BY PSYCHOLOGICALLY MOVING INDIVIDUALS
PHYSICALLY AND SPIRITUALLY
THROUGH THE HILLS OF
CLEMSON SOUTH CAROLINA.

Material Selection



Noise level



Plantings

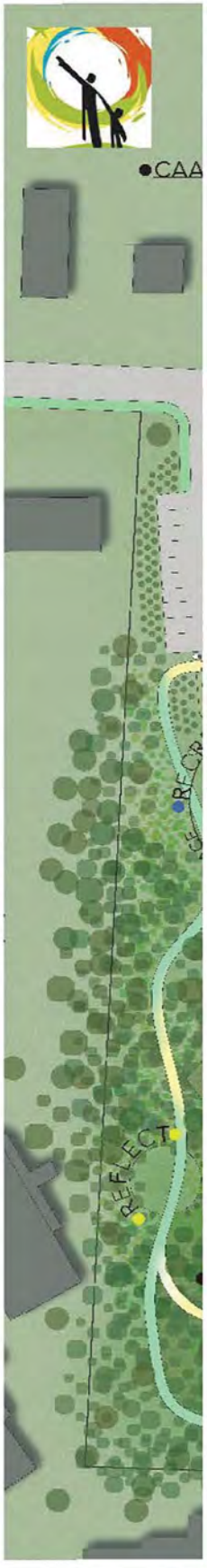


Colors

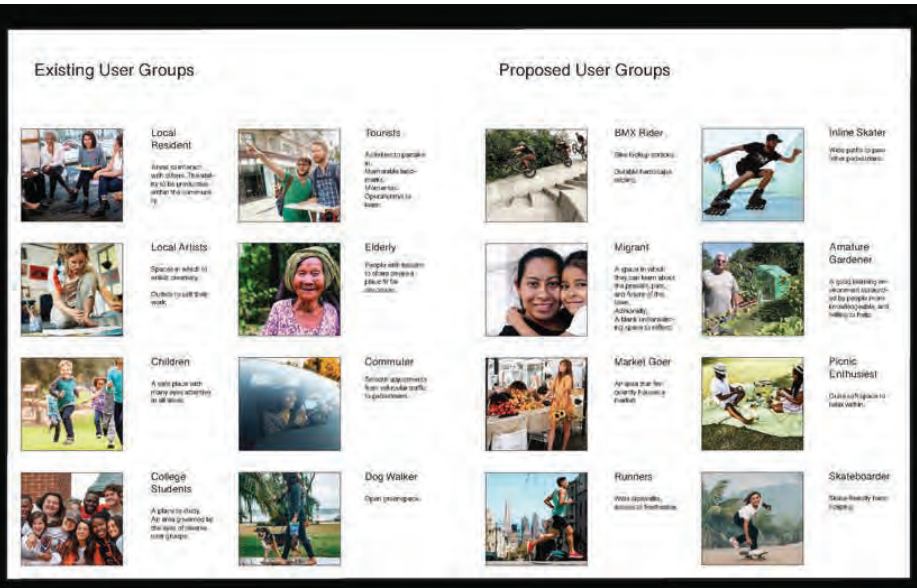


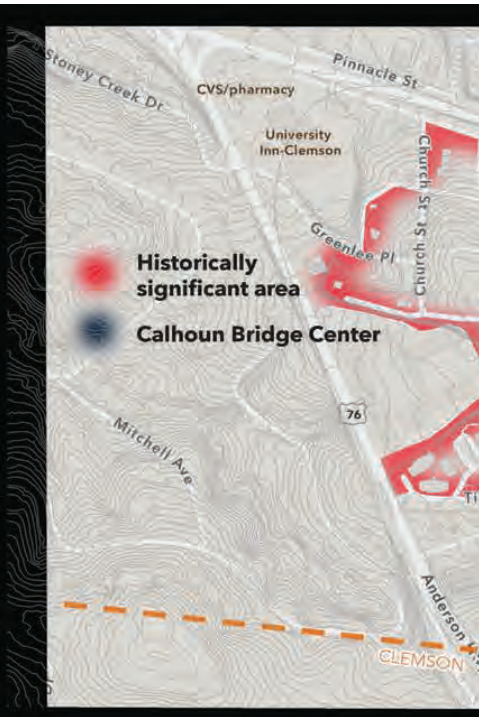
Lighting





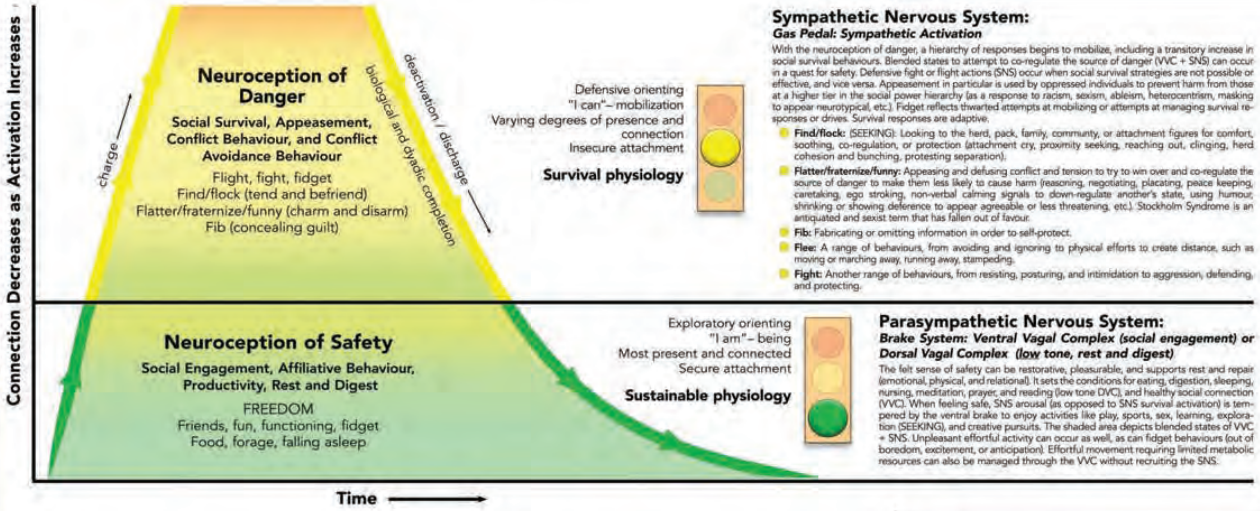

1 INCH = 40 FEET
N
SCALE
REFLECTION GARDEN
AM EXTENSION
BUTLER ST.
STREETSCAPE MODIFICATIONS
REFLECT
REFLECTION GARDEN
CAAAM
CLEMSON CHILD DEVELOPMENT CENTER
PARK
SACRED SPACE
EXPERIENCE
REFLECT
EDUCATION
EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE
REFLECTION
REFLECT REFLECT REFLECT REFLECT
SACREDNESS
EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE
RECREATION
REFLECT REFLECT REFLECT REFLECT
LILY JUDD | PROFESSOR SLYCE | REGIONAL DESIGN STUDIO | FALL 2023





"**The Polyvagal Theory** is a Neurophysiological relationship within ones nervous system."

-Stephen Porges writes in his book; *The Polyvagal Theory* (see citations)



Sympathetic Nervous System:

Gas Pedal: Sympathetic Activation

With the neuroception of danger, a hierarchy of responses begins to mobilize, including a transitory increase in social survival behaviours. Blended states to attempt to co-regulate the source of danger (VVC + SNS) can occur in a quest for safety. Defensive fight or flight actions (SNS) occur when social survival strategies are not possible or effective, and vice versa. Appeasement in particular is used by oppressed individuals to prevent harm from those at a higher tier in the social power hierarchy (as a response to racism, sexism, ableism, heterocentrism, masking to appear neurotypical, etc.). Fidget reflects thwarted attempts at mobilizing or attempts at managing survival responses or drives. Survival responses are adaptive.

- **Find/flock:** (SEEKING): Looking to the herd, pack, family, community, or attachment figures for comfort, soothing, co-regulation, or protection (attachment cry, proximity seeking, reaching out, clinging, herd cohesion and bunching, protesting separation).
- **Flatter/fraternize/funny:** Appeasing and defusing conflict and tension to try to win over and co-regulate the source of danger to make them less likely to cause harm (reasoning, negotiating, placating, peace keeping, caretaking, ego stroking, non-verbal calming signals to down-regulate another's state, using humour, shrinking or showing deference to appear agreeable or less threatening, etc.). Stockholm Syndrome is an antiquated and sexist term that has fallen out of favour.
- **Fib:** Fabricating or omitting information in order to self-protect.
- **Flee:** A range of behaviours, from avoiding and ignoring to physical efforts to create distance, such as moving or marching away, running away, stampeding.
- **Fight:** Another range of behaviours, from resisting, posturing, and intimidation to aggression, defending, and protecting.

Parasympathetic Nervous System:

Brake System: Ventral Vagal Complex (social engagement) or Dorsal Vagal Complex (low tone, rest and digest)

The felt sense of safety can be restorative, pleasurable, and supports rest and repair (emotional, physical, and relational). It sets the conditions for eating, digestion, sleeping, nursing, meditation, prayer, and reading (low tone DVC), and healthy social connection (VVC). When feeling safe, SNS arousal (as opposed to SNS survival activation) is tempered by the ventral brake to enjoy activities like play, sports, sex, learning, exploration (SEEKING), and creative pursuits. The shaded area depicts blended states of VVC + SNS. Unpleasant effortful activity can occur as well, as can fidget behaviours (out of boredom, excitement, or anticipation). Effortful movement requiring limited metabolic resources can also be managed through the VVC without recruiting the SNS.



By indirectly activating ones sympathetic nervous system we control how they emotionally react to their surrounding environment.

WHEN RELOCATING TO THE NEUROCEPTION OF SAFETY:

USERS BECOME MORE OPEN TO A CHANGED MINDSET.

STIMULI INCREASES ONES DESIRE TO CONNECT WITH OTHERS.

THE BODY BECOMES TEMPERED TO ENJOY ACTIVITIES LIKE LEARNING, EXPLORATION AND CREATIVE PURSUITS.

Current conditions within the site activate the sympathetic nervous system. By utilizing these conditions and contrasting with places of physiological safety we create **heavy, impact-full, educational experiences.**



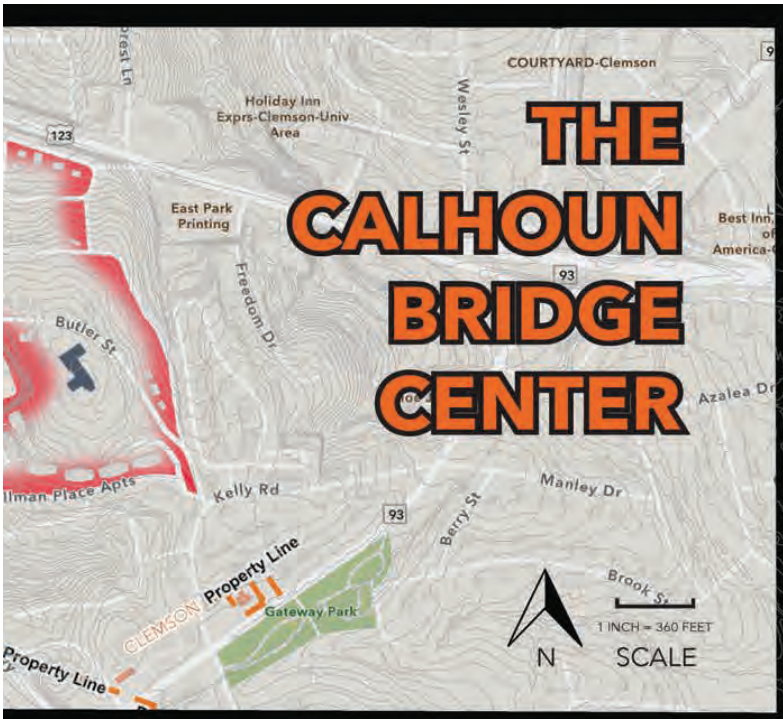


SI

Citations:

Porges, Stephen W. The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation. W.W.Norton, 2011.

"Robert Kemp's Story." Local History Matters, localhistorymatters.org/exhibits. Accessed 2 Dec. 2023.





TE ANALYSIS

Current Sympathetic Inducers;

Children
Barbed Wire
Vehicular Traffic
Dismal History
Overgrown Plantings

Current Parasympathetic Inducers;

Agape
Wooded Areas
Open Green Space
Connectivity
Persevering Structures







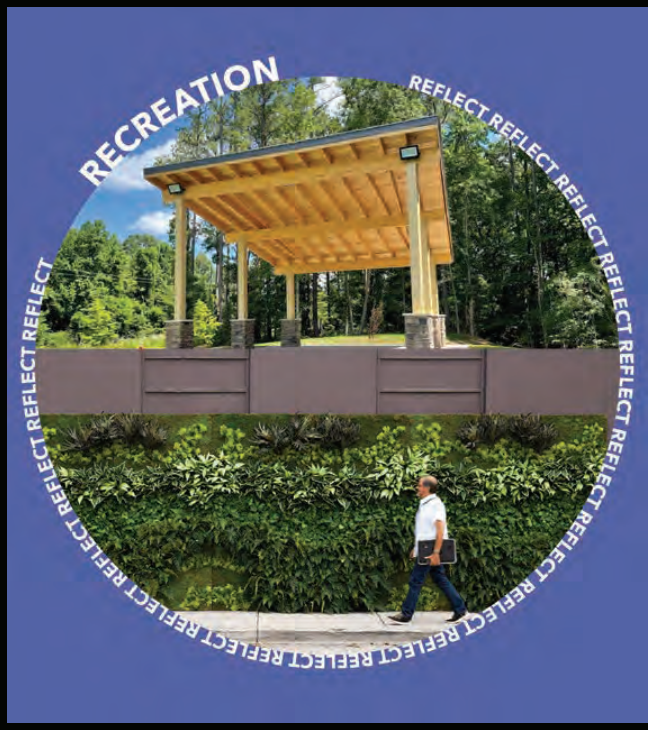


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EDUCATION
EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE


REFLECTION
REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT

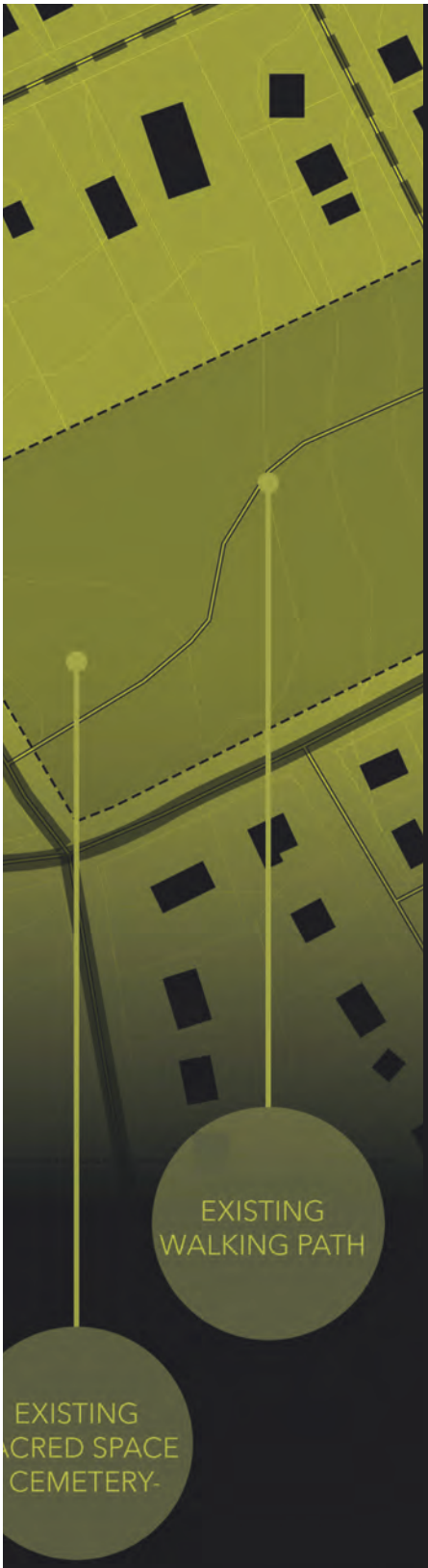

SACREDNESS
EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE EXPERIENCE


RECREATION
REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT REFLECT



BLUE RIDGE COMMUNITY PARK SITE ANALYSIS

The site I chose to focus on is the parcel were
stands - a relatively flat sight, surrounded by
The plot is adjacent to the old football
cemetery to the east, with the community
the site and the surrounding areas are lac
Surrounded by public spaces and residetial prop
be r



the current delapadated playground
vegetation and sufficient parking.
field and track to the west and the
center directly north. All parts of
king proper programming and design.
erties, this site is well suited to
edesigned for community recreation.



BLUE RIDGE COMMUNITY PARK | THE BASIN

THE CITY OF SENECA IS RICH IN HISTORY THAT IS DEEP ROOTED WITHIN THE AFRICAN AMERICAN COM
SITES ARE INTERWOVEN THROUGHOUT THE COUNTY LINES. THE BLUE RIDGE COMMUNITY CENTER, SF
CRO REGION THAT WE HAVE DESIGNATED 'THE SENECA SACRED REGION.' HERE LIES CHURCHES, CEM
AND COMMUNITY CENTERS. ALL PLACES THAT THE AFRICAN AMERICAN COMMUNITY IDENTIFY WITH A
MUNITY, THEIR HERITAGE, AND THEIR CULTURE.

I CHOSE TO DESIGN THE PARCEL OF LAND ADJACENT TO THE BLUE RIDGE COMMUNITY CENTER. THE I
RIDGE WAS TO CREATE A SEGWAY FROM THE ACTIVE COMMUNITY FIELD TO THE EAST AND THE CEME
EL OF THE SENECA RIVER FLOWS DOWN SITE TO 'THE BASIN' WHERE WATER COLLECTS. THIS MODEL R
TIME AND HISTORY AND RESEMBLES THE LANDFORM IN WHICH SENECA DERIVED ITS NAME FROM. TH
PATCHES OF NATIVE WILD GRASS MEADOWS. TOWARDS THE MIDDLE OF THE SITE IS A BRICK AND SAN
ING AS THE THRESHOLD FROM THE BASIN TO THE CEMETERY IS 'THE SACRED ALLEY.' HERE, A LATTICED
SPACE FOR VISITORS TO TRANSITION BETWEEN SITES. THIS IS A SPACE OF CALMNESS, REFLECTION, AN

THE BASIN IS A PLACE WHERE MEMBERS OF THE COMMUNITY CAN GATHER, REFLECT ON THE PAST, HO
THE CREATION OF NEW ONES.

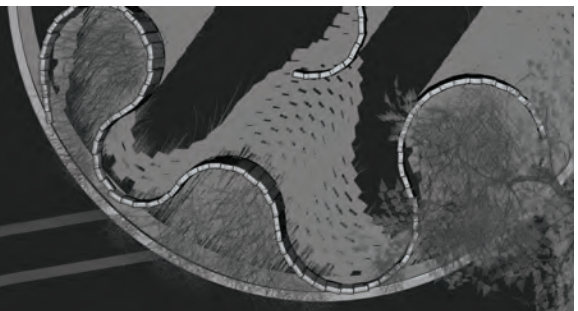


MMUNITY OF THE UPSTATE. MANY SACRED
PECIFICALLY, IS POSITIONED WITHIN A MI-
METERIES, MUSEUMS, SCHOOLS, LIBRARIES,
AND CHERISH AS A SYMBOL OF THEIR COM-

DESIGN INTENT FOR THE BASIN AT BLUE
TERY TO THE WEST. HERE, A SCALE MOD-
RESEMBLES THE MOVEMENT THROUGH
E INTERWOVEN PATHS ARE PAINTED WITH
ND PLAYGROUND. AT THE HIGHPOINT, ACT-
D PATTERNED BRICK STRUCTURE CREATES A
ND THOUGHT.

ONOR SACRED MEMORIES, AND FOSTER

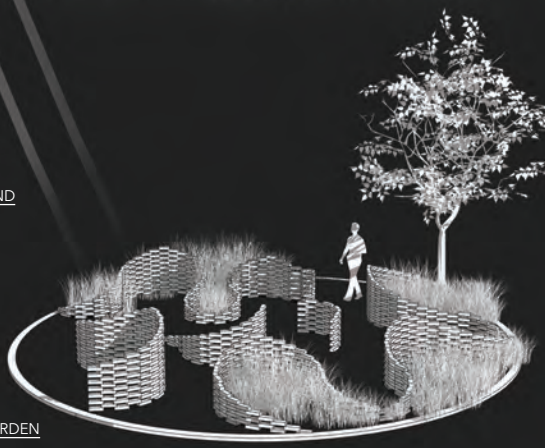
THE BASIN
AT BLUE RIDGE



SACRED ALLEY A SPACE TO PAUSE AND REFLECT



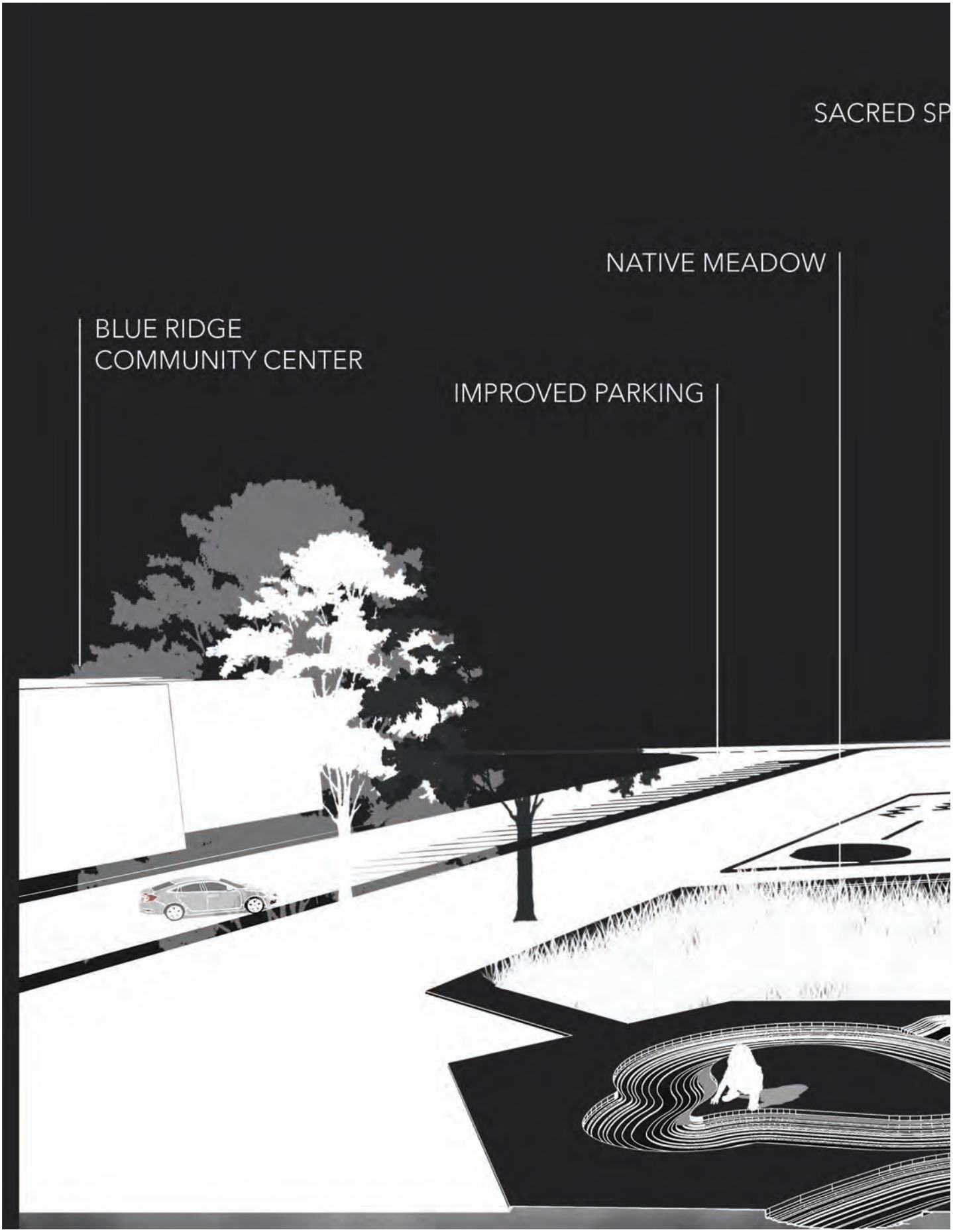




BRICK GARDENS SCULPTURAL ACCENTS INTERWEAVING HISTORIC MATERIALS AND A NATIVE PLANT PALLET



RIVERWALK AN INTERACTIVE AND SYMBOLIC SCALE REPLICA OF THE SENECA RIVER


SACRED SP
NATIVE MEADOW
BLUE RIDGE
COMMUNITY CENTER
IMPROVED PARKING


EXISTING TREE LINE
ACE THRESHOLD
BRICK LATTICE GARDENS
PLAY SPACE
CRAB ORCHARD STONE
PATH & RIVERBED


East Tennessee Highlands Trail
Kinzer Hurt, Jake Harrelson, Morgan Sisk
ROTARY PARK
TANNERY KNOBS
JOHNSON CITY
THE MALL
LIBERTY BELL SCHOOL COMPLEX
SUNSET PARK (proposed)
BOONES CREEK ELEMENTARY SCHOOL
CHEROKEE CREEK ELEMENTARY SCHOOL
JONESBOROUGH ELEMENTARY SCHOOL
STAGE ROAD PARK
JONESBOROUGH

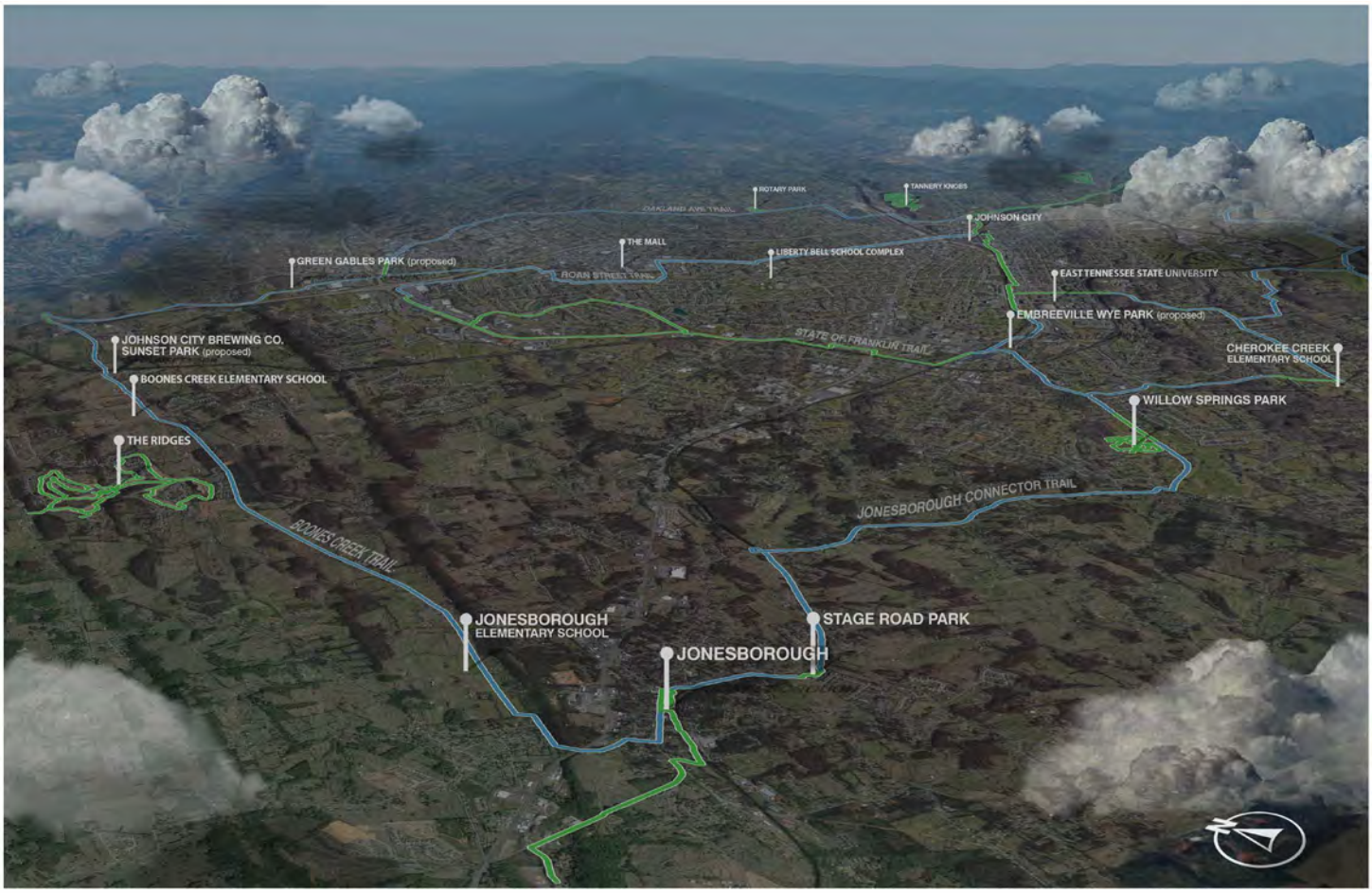

ROTARY PARK
TANNERY KNOBS
JOHNSON CITY
THE MALL
LIBERTY BELL SCHOOL COMPLEX
GREEN GABLES PARK (proposed)
EAST TENNESSEE STATE UNIVERSITY
EMBREEVILLE WYE PARK (proposed)
JOHNSON CITY BREWING CO.
SUNSET PARK (proposed)
STATE OF FRANKLIN TRAIL
CHEROKEE CREEK ELEMENTARY SCHOOL
BOONES CREEK ELEMENTARY SCHOOL
WILLOW SPRINGS PARK
THE RIDGES
JONESBOROUGH CONNECTOR TRAIL
BOONES CREEK TRAIL
JONESBOROUGH ELEMENTARY SCHOOL
STAGE ROAD PARK
JONESBOROUGH

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INTRODUCTION

This report catalogues, analyzes, and elaborates upon the proposed East Tennessee Highlands Trail and related proposed parks. This Regional Design project addresses the needs of Johnson City, Jonesborough, and Washington County. Located in the eastern Tennessee highlands, these municipalities have conveyed their desire to build upon their existing greenway network and connect multiple places of importance in the area.

Johnson City is well-known for its recreational opportunities and its up-and-coming downtown. As Johnson City and nearby Jonesborough are expected to grow, city leaders and stakeholders want to get ahead of the curve and implement a strong, successful network of greenways to support recreation and transportation in the area. This project aims to fulfill those goals through a series of multi-use paved recreational trails with ecological, economic, educational, and aesthetic components while ensuring the proposed greenway system is as feasible, appropriate, safe, and seamless as possible. The proposed trail network utilizes existing rights-of-way, vacant or undeveloped land, and municipal property to the fullest extent.



PLANNING DOCUMENTS

Existing Plans

Johnson City released a Bikeway-Greenway Plan in 2007 which addressed the health, economic, social, and environmental benefits of greenways. The plan also proposed several routes for trails.

- Existing Trail
- Proposed Johnson City Route
- Proposed Jonesborough Route

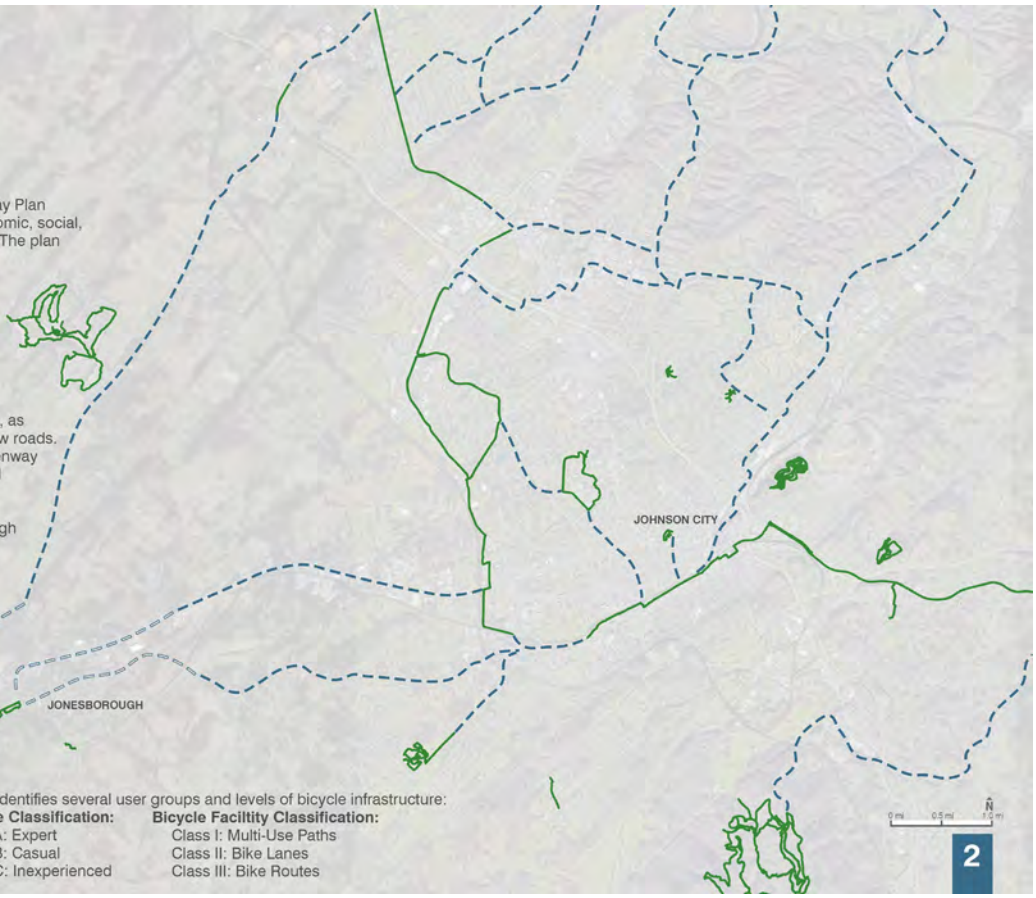
City Policy

It is the policy of the city to:

1. Retrofit existing streets to better accommodate bicycles and pedestrians, as well as include safe bikeways into all new roads.
2. Create a city-wide bicycle loop and greenway network, connecting high-use areas and destination points.
3. Remove barriers to non-motorized transportation and promote safety through educational programs.

Roadway Improvement Projects

1. Tennessee St Extension
2. Sunset Dr
3. Indian Ridge Rd
4. Knob Creek Rd Overpass
5. Lone Oak Rd Extension
6. Swadley Rd
7. Hopper Rd Extension
8. E Oakland Ave
9. E Main St
10. W Walnut St
11. Highland Church Rd
12. Milligan Hwy
13. Carroll Creek Rd
14. W Mountainview Rd
15. Browns Mill Rd
16. Boones Creek Rd



The plan identifies several user groups and levels of bicycle infrastructure:

User Type Classification:
- Class A: Expert
- Class B: Casual
- Class C: Inexperienced

Bicycle Facilitiy Classification:
- Class I: Multi-Use Paths
- Class II: Bike Lanes
- Class III: Bike Routes

HISTORY

This eastern Tennessee region was first inhabited by white frontier settlers just prior to the Revolutionary War. During the war, the state of North Carolina annexed the land occupied by the settlers and organized it as Washington County in 1777. Two years later, Jonesborough was founded as the county seat.

In 1784, local leaders, upset with their lack of representation in North Carolina's legislature, declared the region as the State of Franklin, independent from North Carolina. The State of Franklin was never recognized by Congress and was soon reclaimed by North Carolina in 1790. Just six years later, the land was included with the rest of the Southwest Territory in becoming the new state of Tennessee.

Remaining Cherokee natives were forcibly removed from the region as a result of the 1830 Indian Removal Act.

Johnson City was founded 1856 by settler Henry Johnson along a stagecoach route and mainline of the East Tennessee, Virginia, and Georgia Railway. Johnson started a hotel, general store, and railroad depot. The settlement, known as Johnson's Depot, became well-known and surpassed Jonesborough in size. The town was officially chartered as Johnson City in 1869 and Henry Johnson was elected as the first mayor.

As the intersection point of three major railroads (Southern, Clinchfield, and ET&WNC) and the nearest hub to mines in the central Blue Ridge region, Johnson City grew quickly and became Tennessee's fifth-largest city by 1930. Its population has not stopped growing since its founding.



Johnson City was at one point a strong economic connection to iron mines in the Blue Ridge Mountains of eastern Tennessee and western North Carolina. The East Tennessee and Western North Carolina Railroad connected mines in Cranberry and Boone, NC, to Johnson City, where it was headquartered.

1779 **Jonesborough** is founded as the county seat of Washington County, North Carolina

1784 Unhappy with their lack of representation in North Carolina's Congress, local leaders secede and form the **State of Franklin**

1790 The **State of Franklin** is reclaimed by North Carolina

1796 The **State of Tennessee** is created out of the Southwest Territory and land from North Carolina

1830 The **Indian Removal Act** forces all remaining Native Americans to leave the region

1856 **Johnson City** is founded by settler Henry Johnson, who built a hotel, general store, and railroad depot along the new right-of-way of the ET, VA, & GA Railway.

1861 **Tennessee** secedes from the Union

1866 The **ET&WNC (Tweetsie) Railroad** is created in Johnson City

1869 **Johnson City** is officially chartered with Henry Johnson elected as the first mayor

1911 **East Tennessee State University** is founded

1930 **Johnson City**, as a major railroad hub, becomes Tennessee's fifth-largest city



BRANDING & MARKETING

Each community in the corridor has its own identity and community. To maintain the individual identities of the communities, there should be a uniform trail system that includes unique aspects pertaining to each community. This can be done by having local shops and restaraunts along the trail featuring handmade local goods and cuisine, commissioning local artists for sculptures and murals, or featuring favorite local places along the trail. There should be clear definied spaces as one enters a new community along the trail. One example for doing this would be creating signage and thresholds to provide a better understanding to users.

STORYTELLING CAPITAL OF THE WORLD

Jonesborough



Jonesborough is the “Storytelling Capital of the World.” The big storytelling event happens every fall in Jonesborough and attracts people from all over the world. Jonesborough is also Tennessee’s oldest town, and Jonesborough is very history oriented. The town is referred to as a Tennessee “Hallmark Town.” It’s a small town where everybody knows everybody and is very family oriented.

GO ALL OUT

Johnson City



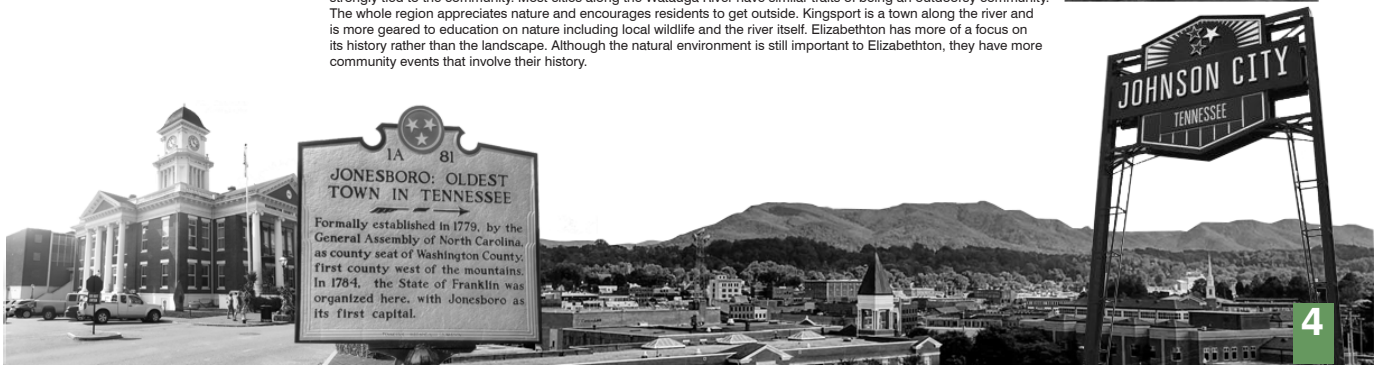
Johnson City’s slogan is “Go All Out.” The City is exploration oriented and encourages citizens to find their own way in life. They want people living in Johnson City to find themselves through nature and community and leaving no stone unturned. Johnson City describes itself as having big city amenities with a small-town feel. They try to brand themselves to appeal toward retirees and younger adults. The city is very tied to their rich history and tries to implement their history in new onstruction and their future branding.

ADVENTURE IS WAITING

Eastern Tennessee & Appalachian Region



This region is known for its outdoor recreation opportunities like hiking, biking, whitewater rafting, caving, fishing, etc. The region is also very appreciative of its landscape and its history. Cities and towns in this region appear to be very close-knit communities that are people oriented. Many cities seem to have a family-like relationship where they are strongly tied to the community. Most cities along the Watauga River have similar traits of being an outdoorsy community. The whole region appreciates nature and encourages residents to get outside. Kingsport is a town along the river and is more geared to education on nature including local wildlife and the river itself. Elizabethton has more of a focus on its history rather than the landscape. Although the natural environment is still important to Elizabethton, they have more community events that involve their history.



4

BRANDING MARKETING

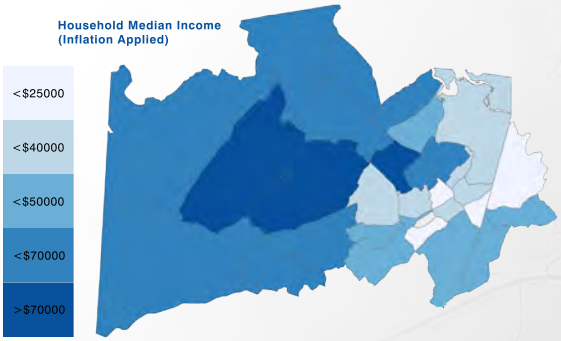
The most common similarity between different successful greenways branding is: One a recognizeable and simplistic logo with natural colors, and two a seperate website for the greenway itself rather than a subsection of a cities website being dedicated to it.



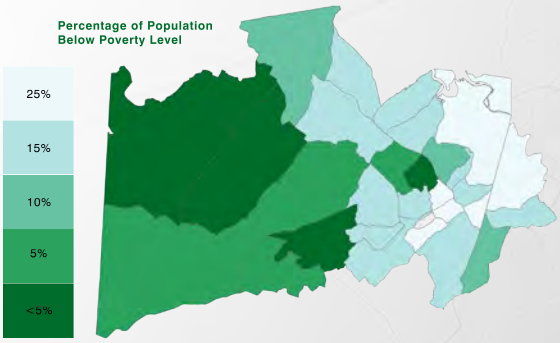
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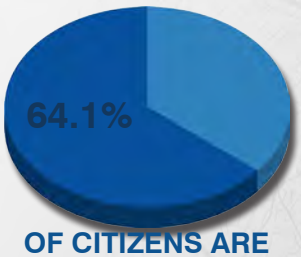
ECONOMY
TOURISM

Household Median Income
(Inflation Applied)



Percentage of Population
Below Poverty Level



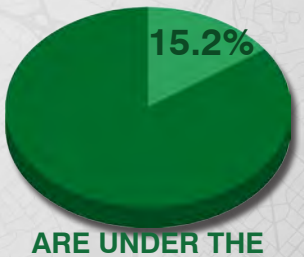


OF CITIZENS ARE HOMEOWNERS

Residential Property is taxed annually based on 25% of value times a rate set by the county.

30% Increase in tourism spending

Tourism Numbers rose in 2021 to almost equal what they were before the pandemic showing the eagerness to get back to Johnson City



ARE UNDER THE POVERTY LINE

$7.25 Minimum Wage

0% INCOME TAX

Washington County Industries



EVENTS

There's many events all year in North East Tennessee, Jonesborough, and Johnson City. Many events attract people from other states or parts of the world, and they are great for showcasing each community. Having events is important to marketing, branding, and bringing more people to the area. Implementing events into the corridor would be very beneficial for the economy, advertising, branding, and building the community. There's many events that could be connected to the proposed trail system. Sporting events and races would work very well along the corridor, and even special seasonal events.

Entertainment

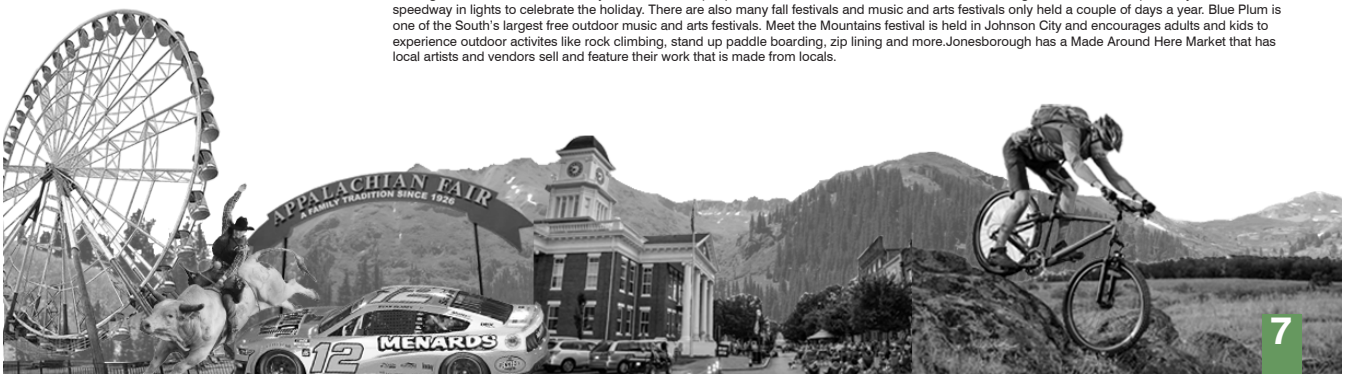
The Appalachian Fair and Fairgrounds in Gray, TN is important because of the abundance and variety of events they hold there. Events are held year round such as a Fall Festival, Haunted Grounds, gun shows, rodeo and cattle shows, food truck rallies, dance competitions, etc. Bristol Motor Speedway in Bristol, TN is a very popular speedway and attracts numerous amounts of people to the area. Along with racing, the speedway holds other events like truck races, the speedway in lights, and even has an ice rink in winter months. Freedom Hall in Johnson City is another popular center that puts on many events like ETSU Men's Basketball, circuses, concerts, and kid's shows. Jonesborough hosts Music on the Square, which is concerts held on main street in front of the courthouse with local restauraunts and food trucks. This occurs every Friday May through September. One of the main events is the National Storytelling Festical that is held every year in Jonesborough. People all over the country and parts of the World come to Jonesborough to listen stories and participate in workshops.

Sporting Events

Because northeast Tennessee is a very outdoorsy area, there are many sporting events held in the area. Morristown is Tennessee's disc golf capital and hosts the Tennessee state disc golf championship. Many half marathons are held year round in the area such as the Blugrass half marathon. On ETSU's campus, there is the Vet run that spreads awareness for military and veteran suicide. The Goliath at Doe River Gorge is northeast Tennessee's only Goliath. Contestants run over six miles and defeat many challenging obstacles. Tannery Knob in Johnson CIty hosts the Tannery Knob Enduro which is the only enduro-style mountain bike race in the tri-cities area. In downtown Johnson City, there is the Taco Trek Ride. This event is held every month July to October and encourages people of all ages to bike in downtown Johnson City and eat tacos at a local restaraunt.

Seasonal Events

In Johnson City, Jonesborough, and the surrounding area, there are many events for the main holidays each year. Some of these events include Easter celebrations and Easter egg hunts in Jonesborough, trick or treating in Jonesborough, and many festivals and events for Christmas. Halloween in Johnson CIty and Jonesborough is very big and includes many events geared towards children and adults. There's a Brews and Boos event for adults and trick or treating for the kids. There are many events in which people can walk or drive around to look at Christmas lights. bristol Motor Speedway holds the speedway in lights to celebrate the holiday. There are also many fall festivals and music and arts festivals only held a couple of days a year. Blue Plum is one of the South's largest free outdoor music and arts festivals. Meet the Mountains festival is held in Johnson City and encourages adults and kids to experience outdoor activites like rock climbing, stand up paddle boarding, zip lining and more.Jonesborough has a Made Around Here Market that has local artists and vendors sell and feature their work that is made from locals.



GROWTH PROJECTION

Population Growth
The population of Johnson City has grown consistently since its founding. This growth can be attributed to Johnson City's influence as a regional economic and industrial hub, as well as the city's policy of annexation.



Population Age
The median age of Johnson City residents has increased throughout the city's history. In 1970, the median age was 30.4, which increased to 36.9 in 2000. In 2020, the median age decreased to 35.6. The fastest population growth is seen in the 25-64 age group.

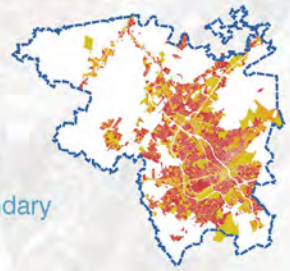
30.4 (1970) → **36.9** (2000) → **35.6** (2020)

Jonesborough has experienced less population growth relative to Johnson City, but growth nonetheless.

Geographic Growth
Johnson City has been following a policy of annexation since the mid-twentieth century and the city is expected to continue to grow in area.

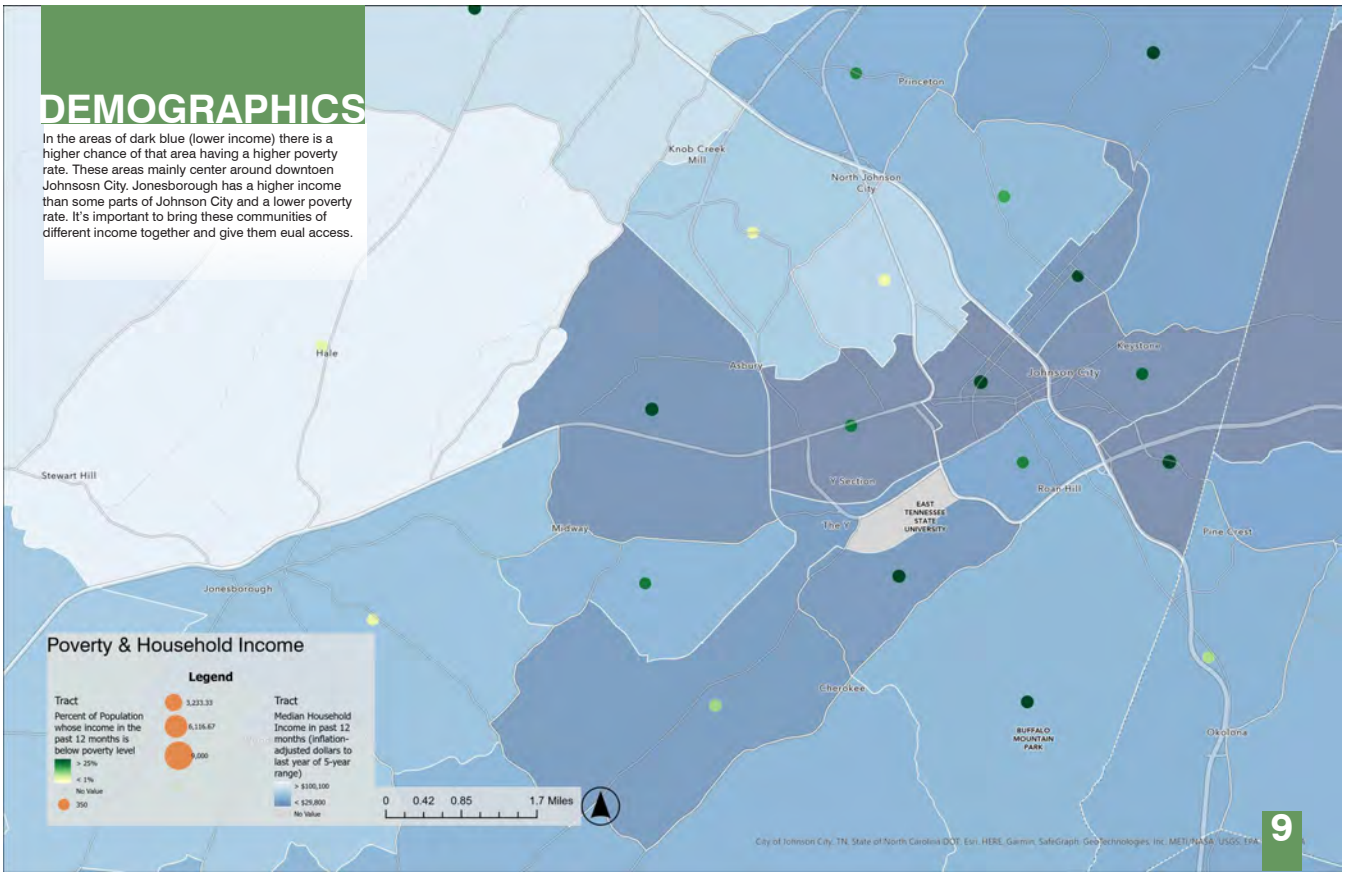
43.6 mi²
2020 City Limits

119.6 mi²
Urban Growth Boundary



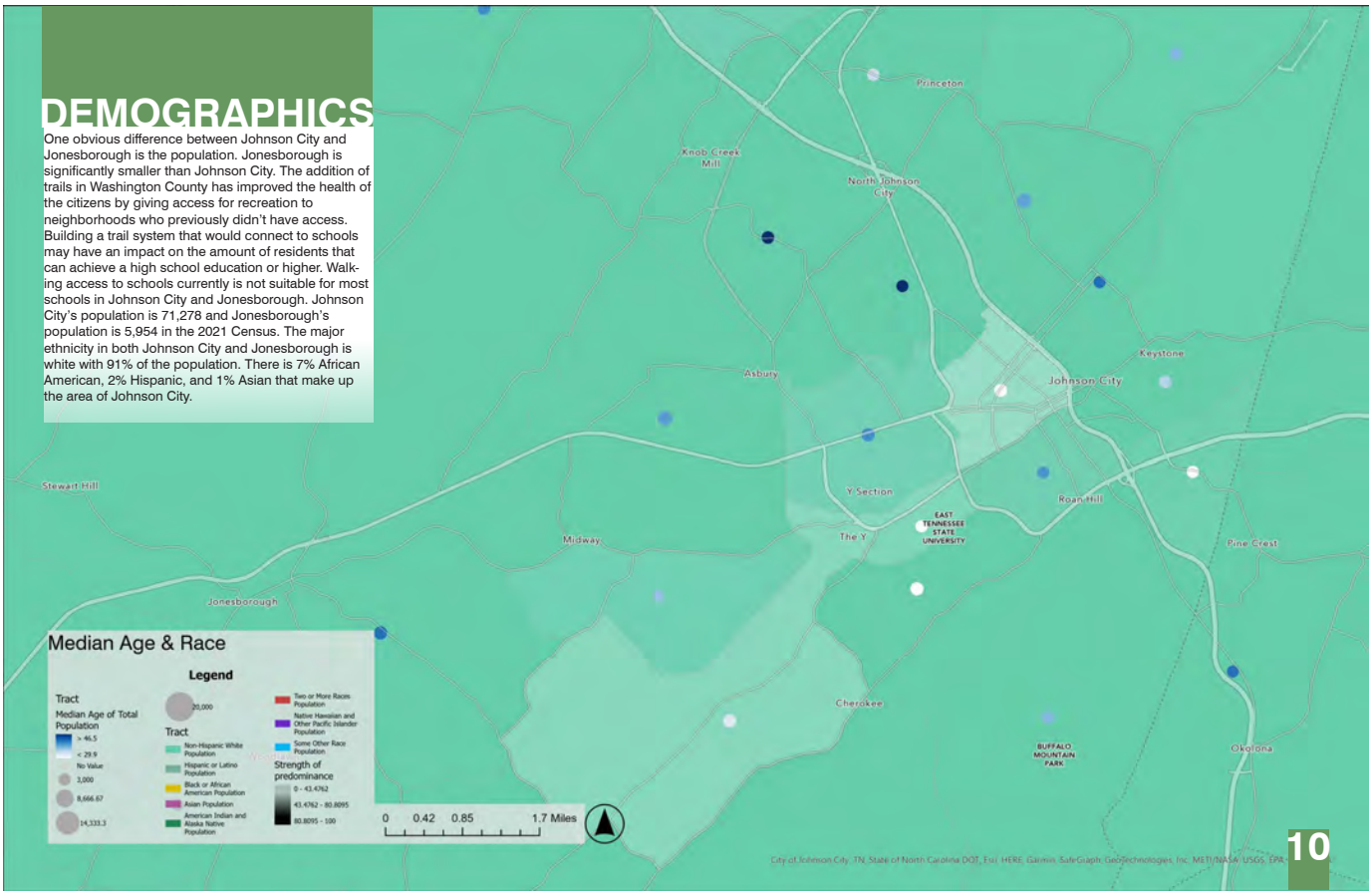
DEMOGRAPHICS

In the areas of dark blue (lower income) there is a higher chance of that area having a higher poverty rate. These areas mainly center around downtoen Johnsosn City. Jonesborough has a higher income than some parts of Johnson City and a lower poverty rate. It's important to bring these communities of different income together and give them eual access.



DEMOGRAPHICS

One obvious difference between Johnson City and Jonesborough is the population. Jonesborough is significantly smaller than Johnson City. The addition of trails in Washington County has improved the health of the citizens by giving access for recreation to neighborhoods who previously didn't have access. Building a trail system that would connect to schools may have an impact on the amount of residents that can achieve a high school education or higher. Walking access to schools currently is not suitable for most schools in Johnson City and Jonesborough. Johnson City's population is 71,278 and Jonesborough's population is 5,954 in the 2021 Census. The major ethnicity in both Johnson City and Jonesborough is white with 91% of the population. There is 7% African American, 2% Hispanic, and 1% Asian that make up the area of Johnson City.



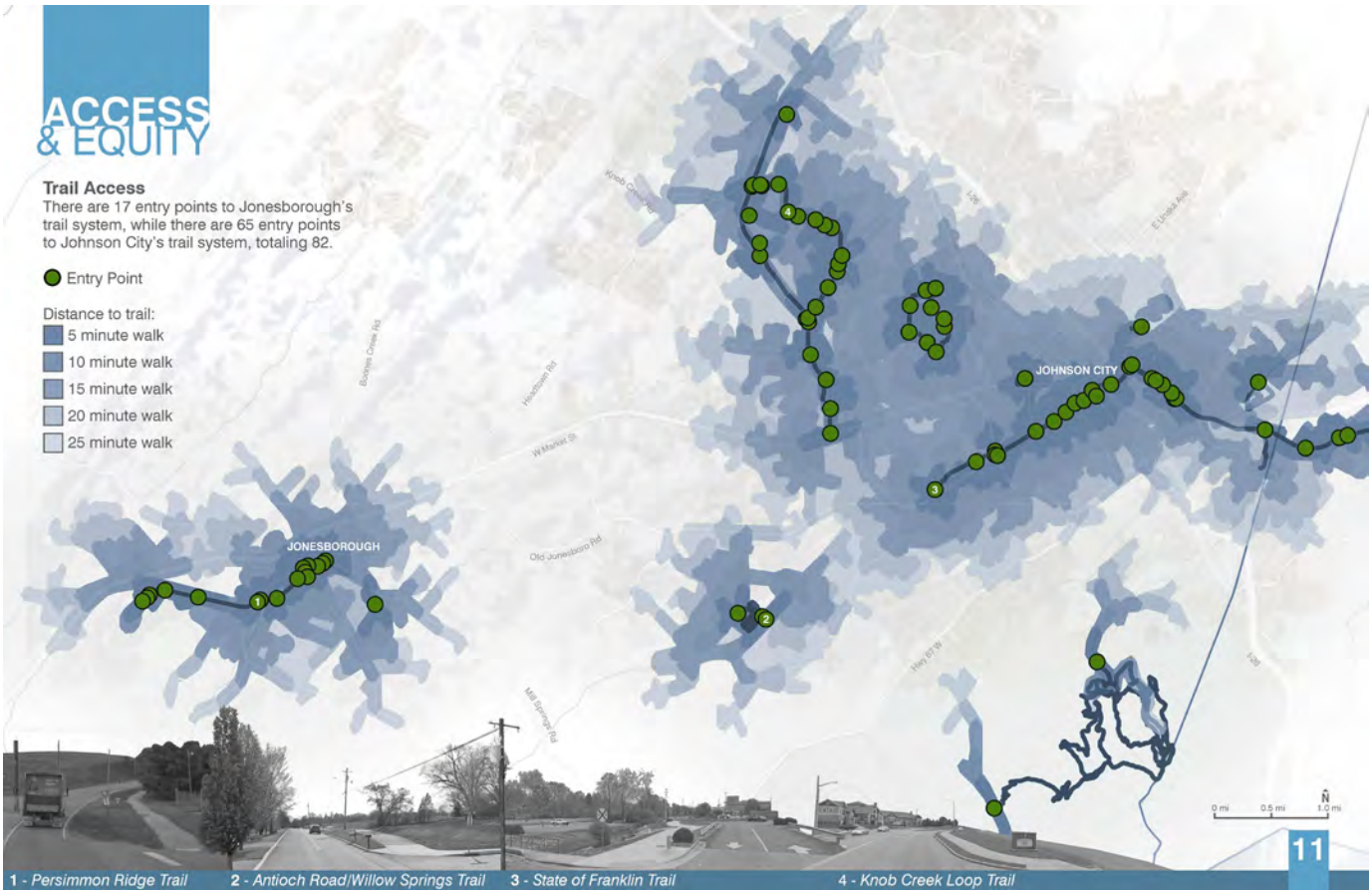
ACCESS & EQUITY

Trail Access

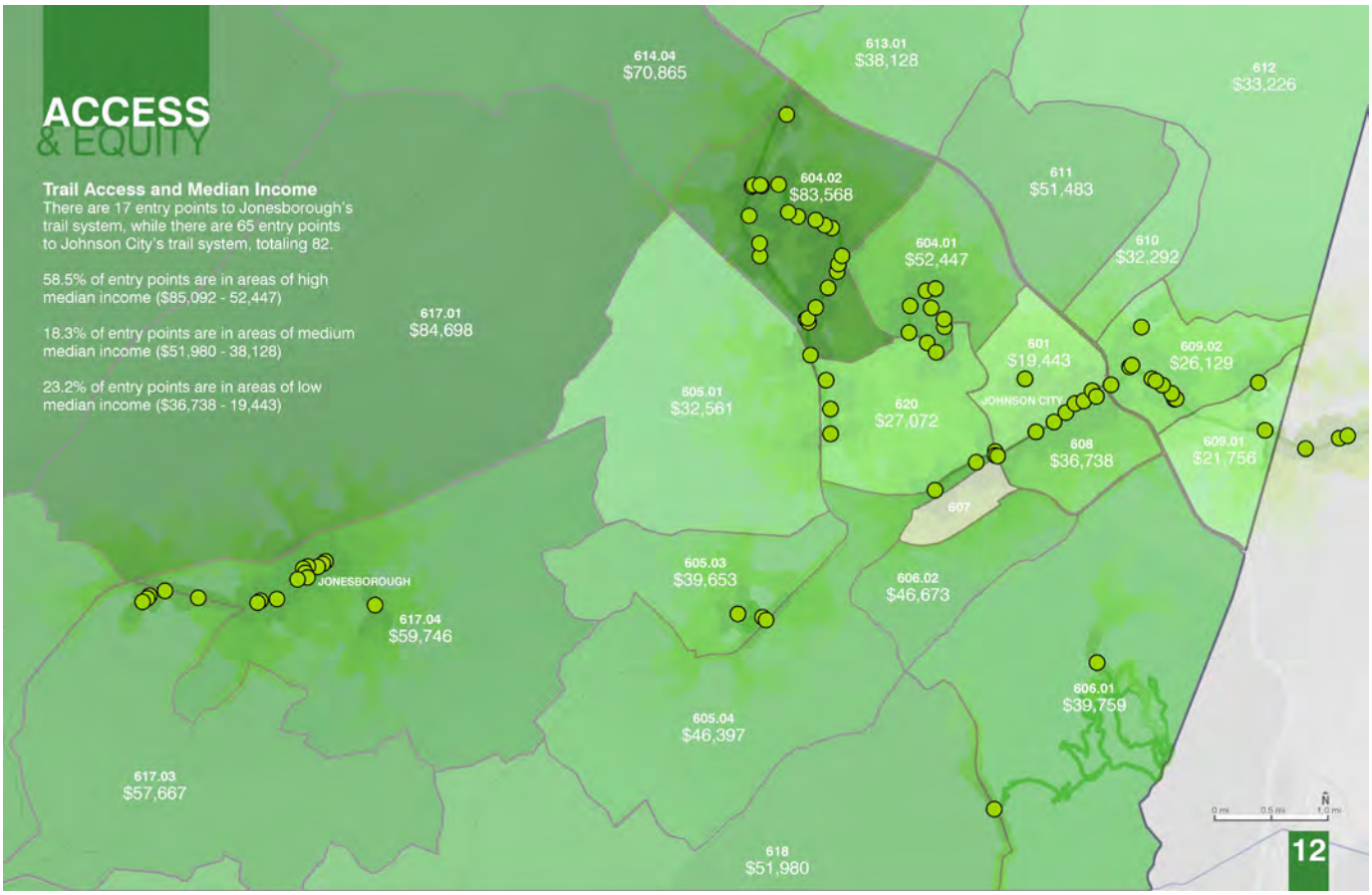
There are 17 entry points to Jonesborough's trail system, while there are 65 entry points to Johnson City's trail system, totaling 82.

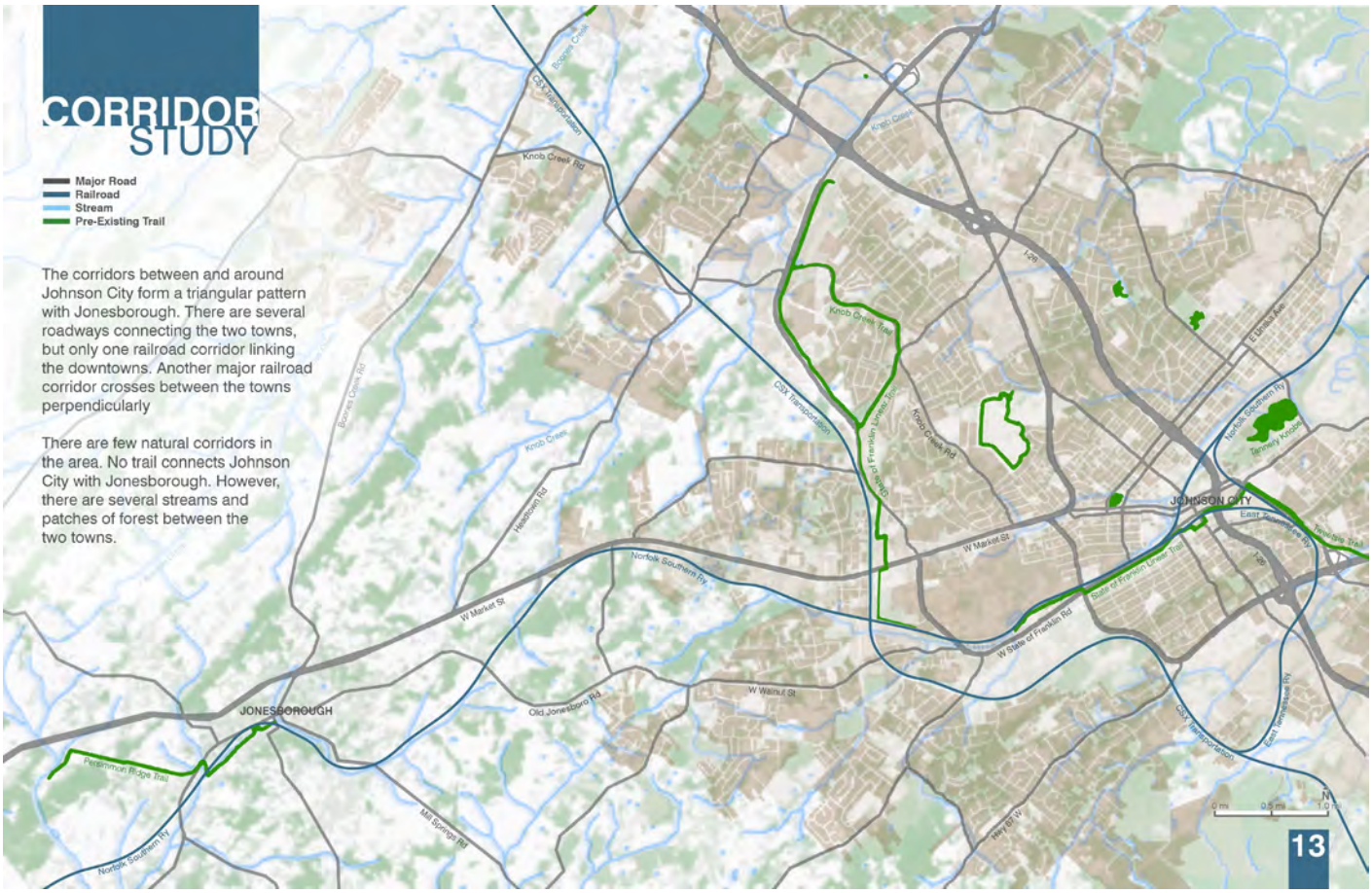
Entry Point

Distance to trail:
- 5 minute walk
- 10 minute walk
- 15 minute walk
- 20 minute walk
- 25 minute walk

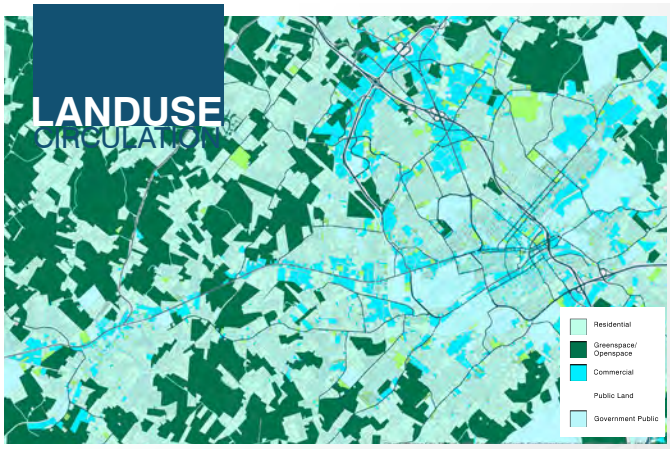


1 - *Persimmon Ridge Trail* 2 - *Antioch Road/Willow Springs Trail* 3 - *State of Franklin Trail* 4 - *Knob Creek Loop Trail*


ACCESS
& EQUITY
Trail Access and Median Income
There are 17 entry points to Jonesborough's trail system, while there are 65 entry points to Johnson City's trail system, totaling 82.
58.5% of entry points are in areas of high median income ($85,092 - 52,447)
18.3% of entry points are in areas of medium median income ($51,980 - 38,128)
23.2% of entry points are in areas of low median income ($36,738 - 19,443)
614.04 $70,865
613.01 $38,128
612 $33,226
604.02 $83,568
611 $51,483
604.01 $52,447
610 $32,292
617.01 $84,698
601 $19,443
609.02 $26,129
605.01 $32,561
620 $27,072
JOHNSON CITY
608 $36,738
609.01 $21,756
607
605.03 $39,653
606.02 $46,673
JONESBOROUGH
617.04 $59,746
606.01 $39,759
605.04 $46,397
617.03 $57,667
618 $51,980
12


CORRIDOR
STUDY
Major Road
Railroad
Stream
Pre-Existing Trail
The corridors between and around Johnson City form a triangular pattern with Jonesborough. There are several roadways connecting the two towns, but only one railroad corridor linking the downtowns. Another major railroad corridor crosses between the towns perpendicularly
There are few natural corridors in the area. No trail connects Johnson City with Jonesborough. However, there are several streams and patches of forest between the two towns.
JONESBOROUGH
JOHNSON CITY
W Market St
Old Jonesboro Rd
Knob Creek Rd
Norfolk Southern Ry
CSX Transportation
W Walnut St
W State of Franklin Rd
Persimmon Ridge Trail
Mid Springs Rd
Tweetsie Trail
13

LANDUSE
CIRCULATION



The Johnson City area is mostly comprised of almost no greenspace and is mostly urbanized developed land. As you stretch further towards Jonesborough that is where the greensapce starts to appear. This could be private farm land, vacant lots, anything that is primarily comprised of nature and undeveloped. The public land is spotted throughout the area as parks and recreational sites and the Government Public areas include ETSU and cemeteries as well as government owned bulidings.

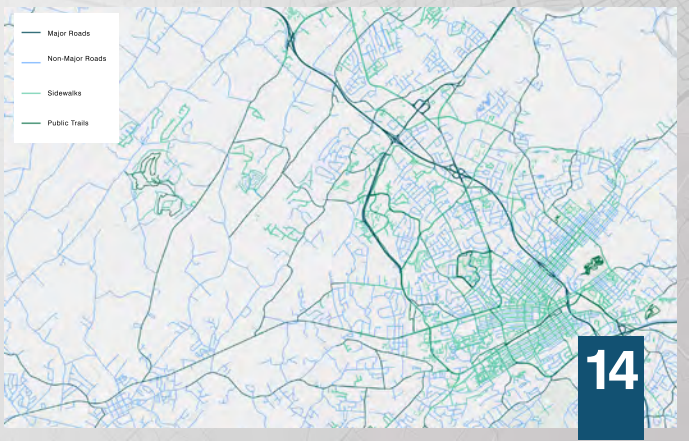


Utilty Easements defined by the dark space. Only real oppertunites are along the roads



Johnson City is like most cities with a very condensed road network in the city center that branches and thins out the farther away you travel. The major roads are the hotspots of commercial growth with residential areas taking up most of the space just beyond the commercial boundary. Sidewalks are almost onyl available within the city center while there are scare sidewalks splattered throughout. Walkability is very low other than in the city center as well as access to public trails as there is no sidewalks extending out to them. Also most of the trails available are more for biking rather than walking or running.

The transit in Johnson City is very viable as it can get you within walking distance of anything within Johnson City however Jonesborough does not have any access to public transit. Another factor with transit is that there are fares for every ride. It costs $1 per trip for an adult and that price is halfed for a Senior Citizen. ETSU Students ride for free and anyone can by monthly passes with unlimited rides.



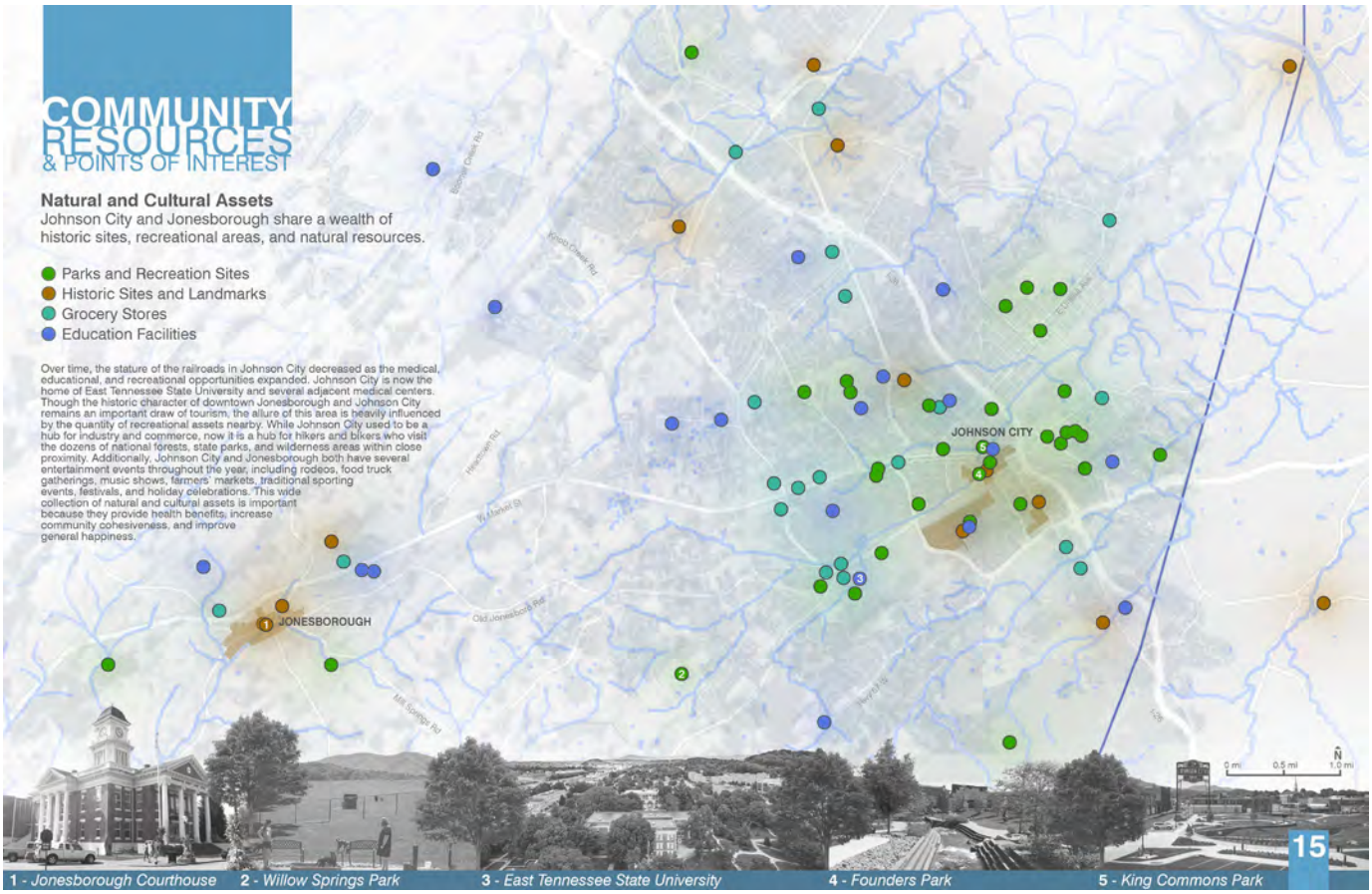
COMMUNITY RESOURCES
& POINTS OF INTEREST

Natural and Cultural Assets

Johnson City and Jonesborough share a wealth of historic sites, recreational areas, and natural resources.

- Parks and Recreation Sites
- Historic Sites and Landmarks
- Grocery Stores
- Education Facilities

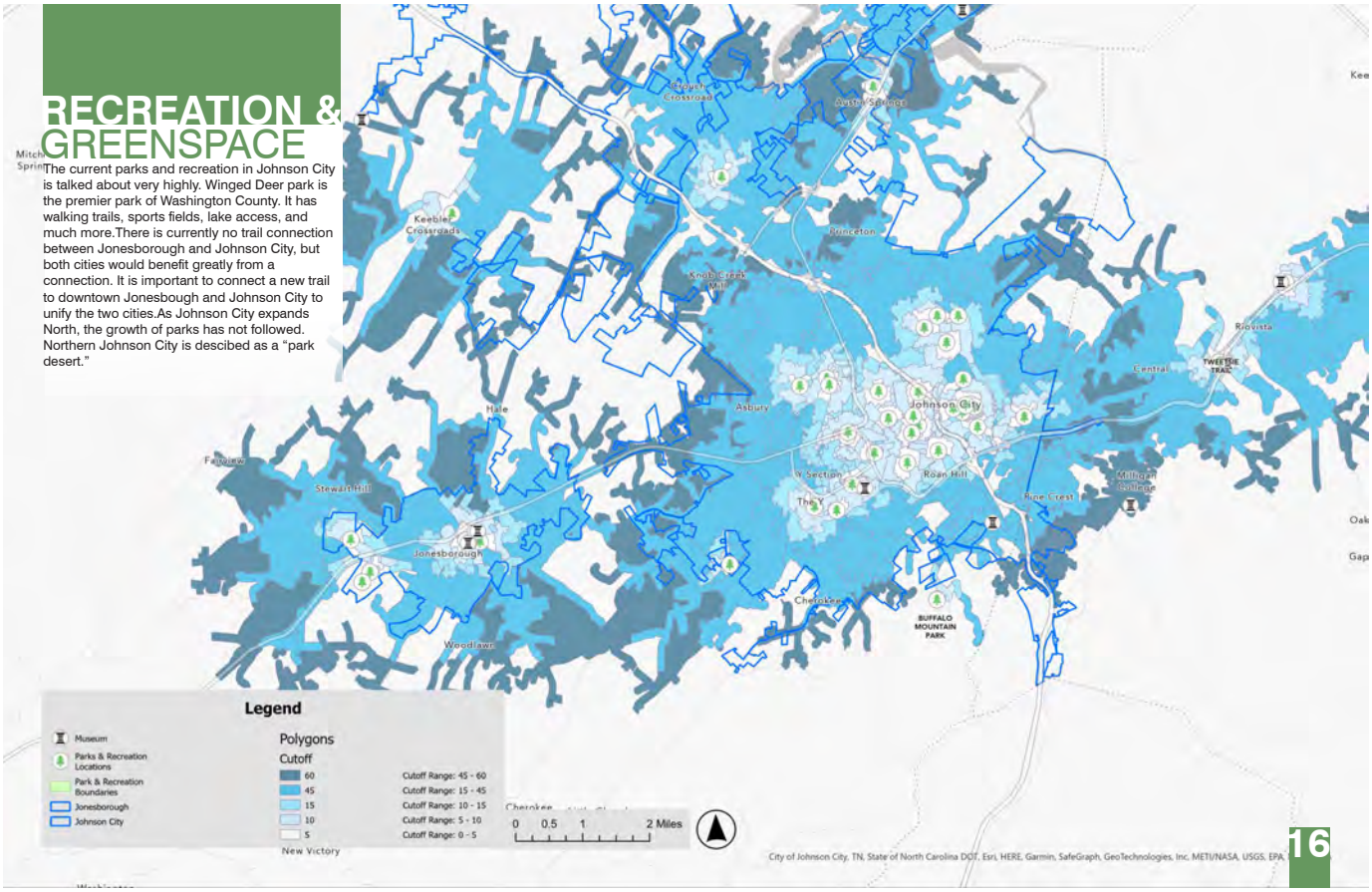
Over time, the stature of the railroads in Johnson City decreased as the medical, educational, and recreational opportunities expanded. Johnson City is now the home of East Tennessee State University and several adjacent medical centers. Though the historic character of downtown Jonesborough and Johnson City remains an important draw of tourism, the allure of this area is heavily influenced by the quantity of recreational assets nearby. While Johnson City used to be a hub for industry and commerce, now it is a hub for hikers and bikers who visit the dozens of national forests, state parks, and wilderness areas within close proximity. Additionally, Johnson City and Jonesborough both have several entertainment events throughout the year, including rodeos, food truck gatherings, music shows, farmers' markets, traditional sporting events, festivals, and holiday celebrations. This wide collection of natural and cultural assets is important because they provide health benefits, increase community cohesiveness, and improve general happiness.



1 - Jonesborough Courthouse 2 - Willow Springs Park 3 - East Tennessee State University 4 - Founders Park 5 - King Commons Park

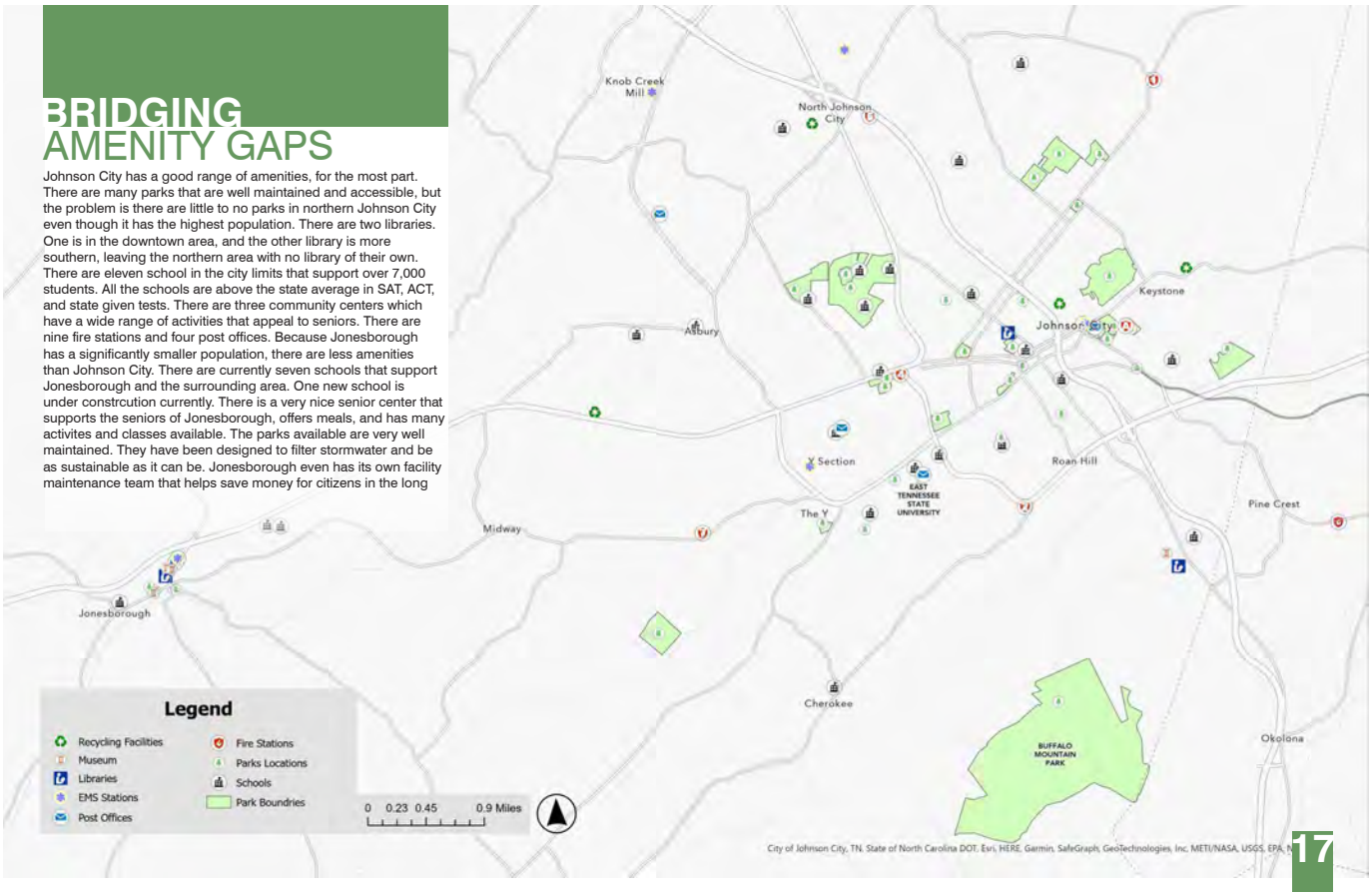
RECREATION & GREENSPACE

The current parks and recreation in Johnson City is talked about very highly. Winged Deer park is the premier park of Washington County. It has walking trails, sports fields, lake access, and much more.There is currently no trail connection between Jonesborough and Johnson City, but both cities would benefit greatly from a connection. It is important to connect a new trail to downtown Jonesbough and Johnson City to unify the two cities.As Johnson City expands North, the growth of parks has not followed. Northern Johnson City is descibed as a “park desert.”



BRIDGING AMENITY GAPS

Johnson City has a good range of amenities, for the most part. There are many parks that are well maintained and accessible, but the problem is there are little to no parks in northern Johnson City even though it has the highest population. There are two libraries. One is in the downtown area, and the other library is more southern, leaving the northern area with no library of their own. There are eleven school in the city limits that support over 7,000 students. All the schools are above the state average in SAT, ACT, and state given tests. There are three community centers which have a wide range of activities that appeal to seniors. There are nine fire stations and four post offices. Because Jonesborough has a significantly smaller population, there are less amenities than Johnson City. There are currently seven schools that support Jonesborough and the surrounding area. One new school is under constrcution currently. There is a very nice senior center that supports the seniors of Jonesborough, offers meals, and has many activites and classes available. The parks available are very well maintained. They have been designed to filter stormwater and be as sustainable as it can be. Jonesborough even has its own facility maintenance team that helps save money for citizens in the long



ECOLOGICAL COMMUNITIES

The main conservation efforts from Tennessee are through establishing natural areas. These natural areas are very important wildlife habitats to East Tennessee.IOne very important natural area is the Watauga River Bluffs. This is a 50 acre area along the Watauga River. This area supports the largest population of Carolina Pink in Tennessee. Some tree species found in this area are Dry Chestnut Oak, White Ash, Bitternut Hickory, Eastern Red Cedar, and Serviceberry. Both the Watauga River and Boone Lake are important places for game fishing. Boone Lake in particular has abundant and highly sought after populations of Largemouth and Smallmouth Bass. Northern Cherokee Forest is important to the area because of its dense tree cover and habitat for local wildlife.



Southern Pine Beetle

This small insect is very wide-spread and very destructive to pine trees.SInce 1998, this pest has destroyed over 350,000 acres of pine trees which is worth about $350 billion.

Thousand Cankers Disease & Walnut Twig Beetle

The Walnut Twig Beetle burrows in Black Walnut trees and carries the thousand cankers disease which leads to the tree's death.

Hemlock Woolly Adelgid

This pest is a small insect that attacks Eastern Hemlocks. The insects are spread by wind and migratory birds. Some scientists compare this epidemic to the Dutch Elm Disease.

Gypsy Moth

This pest attacks hardwood trees and rapidly eats the leaves of trees and shrubs. The damage can range from light leaf damage to complete defoliation.

Emerald Ash Borer

There's an estimated 271 million Ash trees that could be infested. This is about $11 billion at risk.

ENVIRONMENTAL Features

Floodplains and Forests

There is a large amount of forested land in th area as well as a lot of floodable land which is a result of the ridge and valley system throughout the area

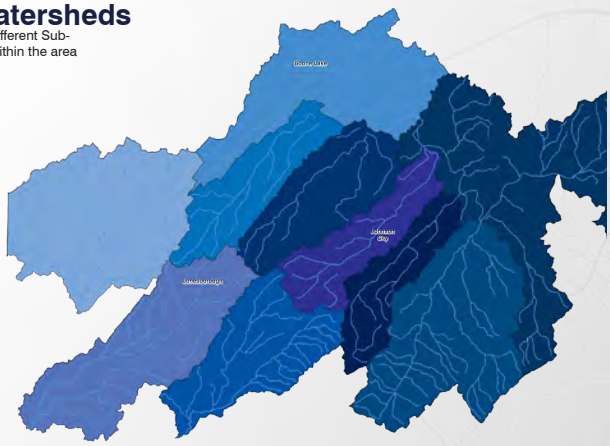
FOREST

FLOODPLAIN



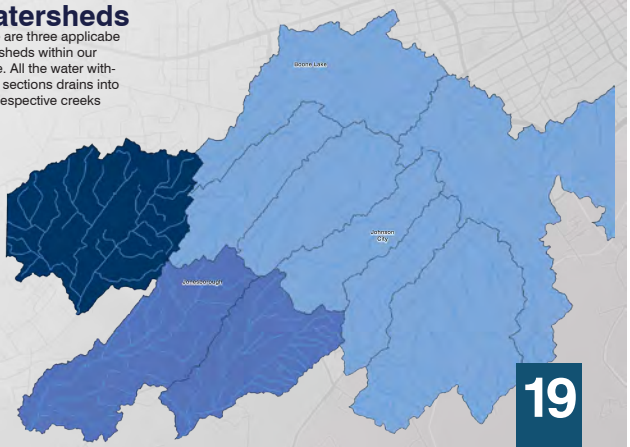
Subwatersheds

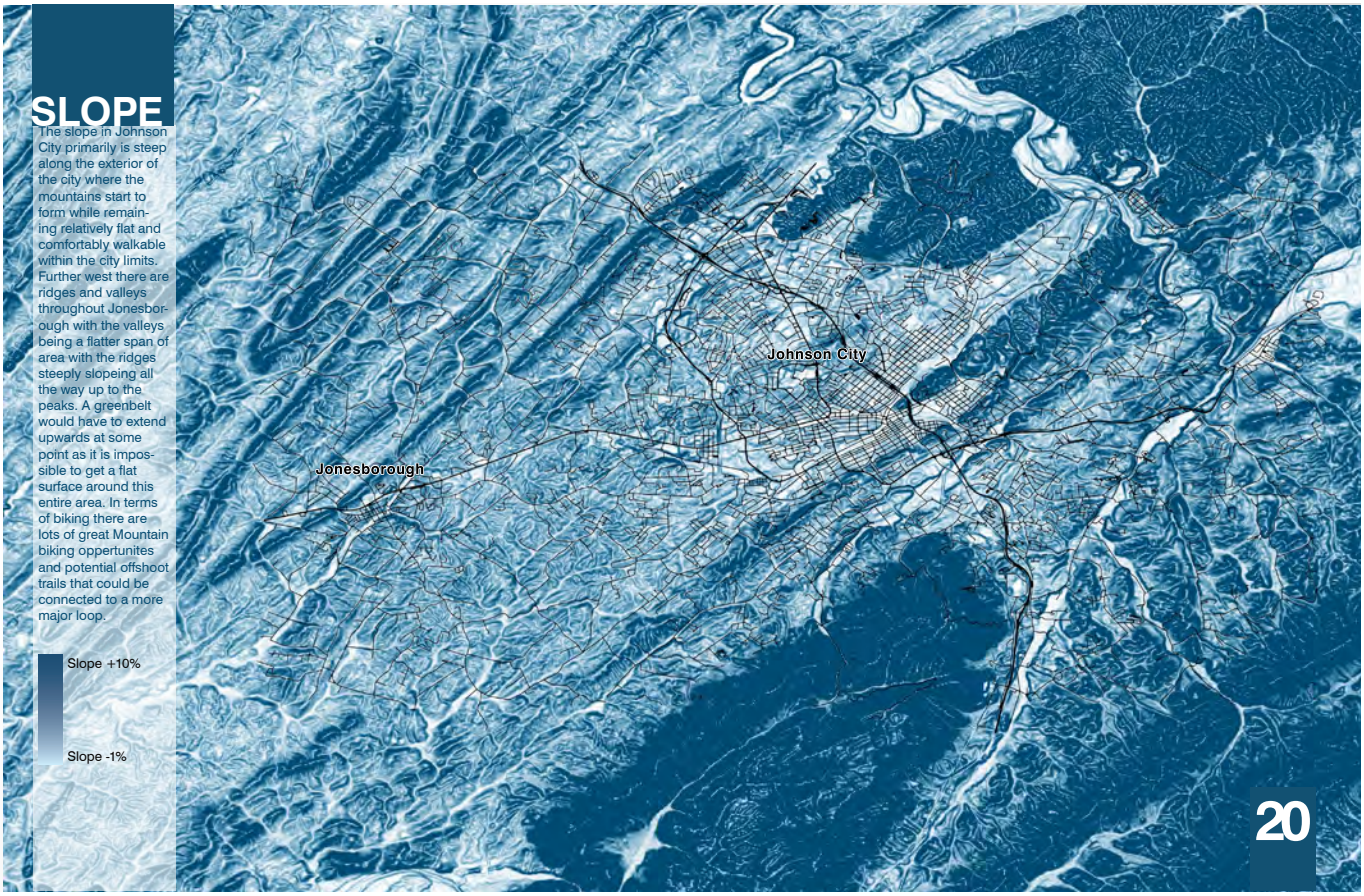
There are 9 different Subwatersheds within the area

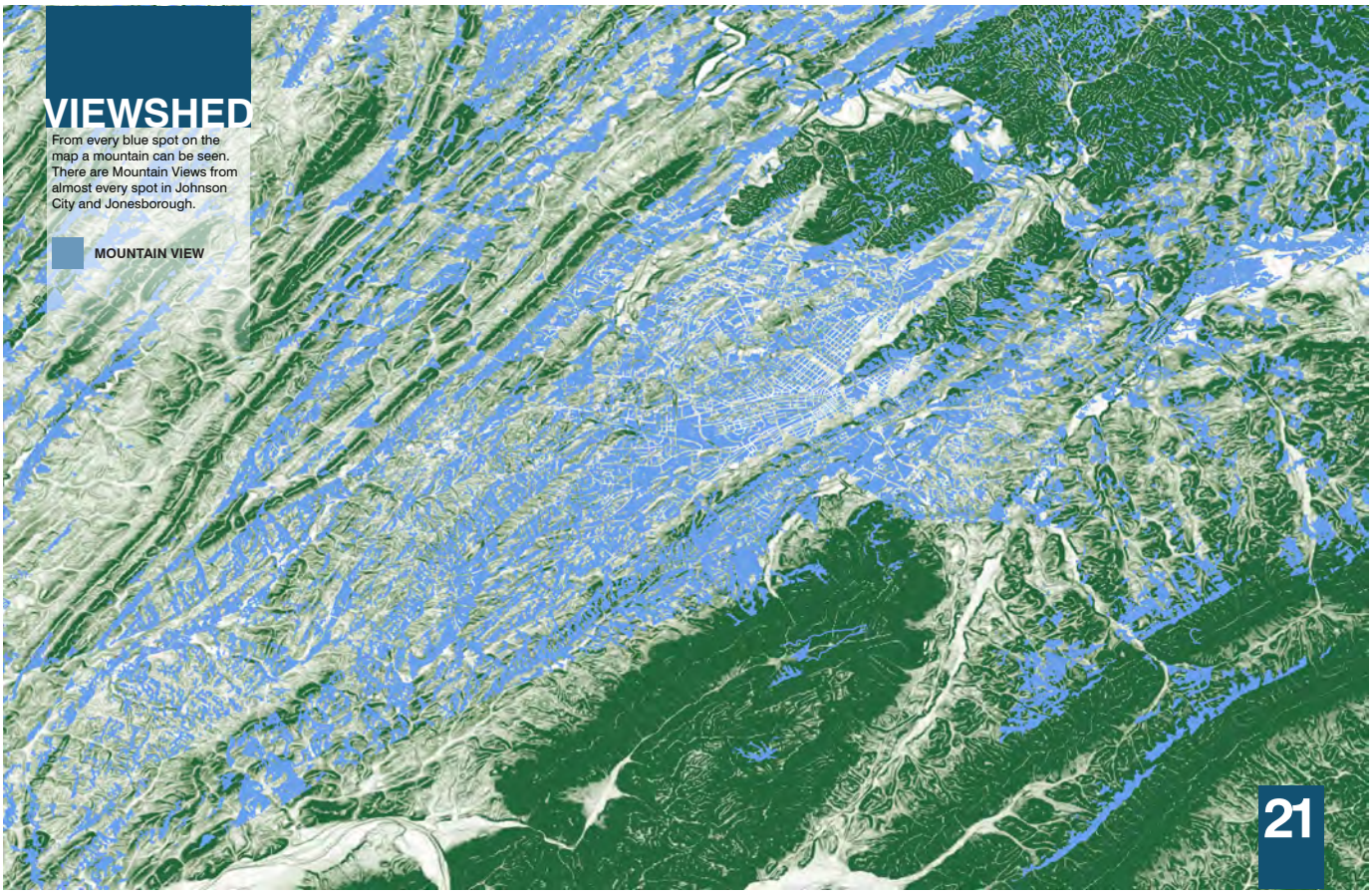


Watersheds

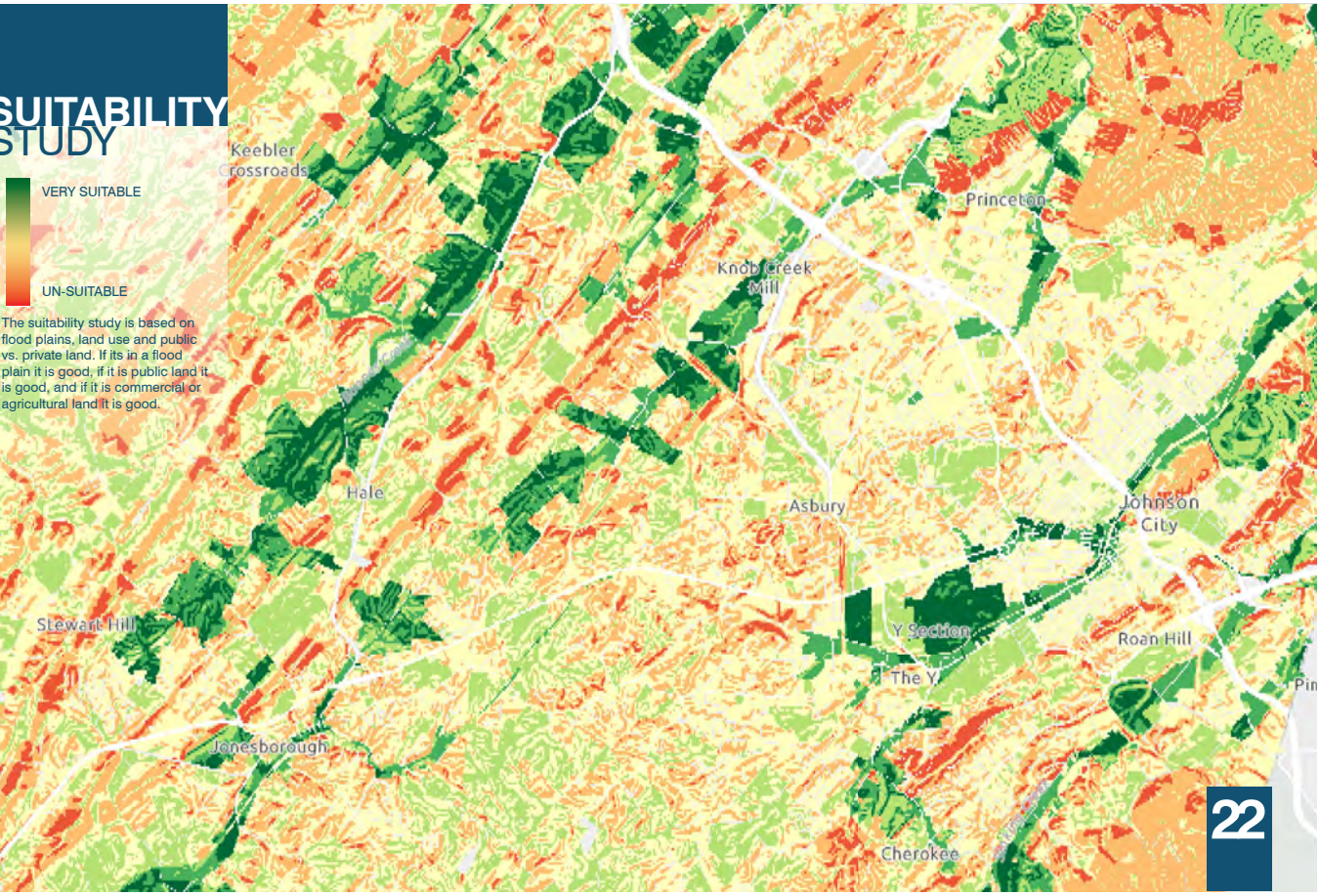
There are three applicabe watersheds within our scope. All the water within the sections drains into their respective creeks




SLOPE
The slope in Johnson City primarily is steep along the exterior of the city where the mountains start to form while remaining relatively flat and comfortably walkable within the city limits. Further west there are ridges and valleys throughout Jonesborough with the valleys being a flatter span of area with the ridges steeply sloping all the way up to the peaks. A greenbelt would have to extend upwards at some point as it is impossible to get a flat surface around this entire area. In terms of biking there are lots of great Mountain biking oppertunites and potential offshoot trails that could be connected to a more major loop.
Slope +10%
Slope -1%
Johnson City
Jonesborough
20


VIEWSHED
From every blue spot on the map a mountain can be seen. There are Mountain Views from almost every spot in Johnson City and Jonesborough.
MOUNTAIN VIEW
21

SUITABILITY STUDY



The suitability study is based on flood plains, land use and public vs. private land. If its in a flood plain it is good, if it is public land it is good, and if it is commercial or agricultural land it is good.

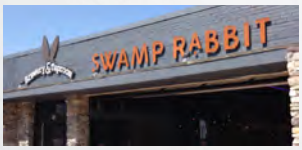
CASE Studies

Swamp Rabbit Trail
Greenville, SC

A 22-Mile multi-use trail that follows an old railway corridor to connect downtown Greenville, SC with the smaller town of Travelers Rest, SC.
The trail attracts users from all over the nation and since being created in 2009 has had an estimated economic impact of $7 million per year.
A bike shop along the trail reported they saw a 20% increase in annual growth after the first few years. The trail gave local businesses opportunity to grow and to maintain the small town character that makes it so popular.
The rails to trails model has been adopted and used in many different cases throughout the nation and is usually very successful










Pickens Doodle Trail
Pickens, SC

This is a rails-to-trails development that runs for 8.5 miles between the downtowns of Pickens, SC, and Easley, SC. At both ends of the trail there are parks with old railroad equipment, playgrounds, workout equipment, restrooms, and water fountains.
Over 7.5 miles of the trail was built on the former right-of-way of the Pickens Railroad. The remainder replaces the eastbound traffic lane on Wilbur Street.
Locals make up about 2/3rds of the total users.



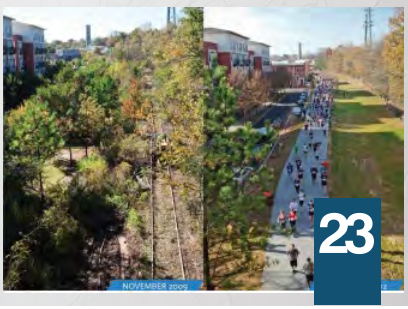






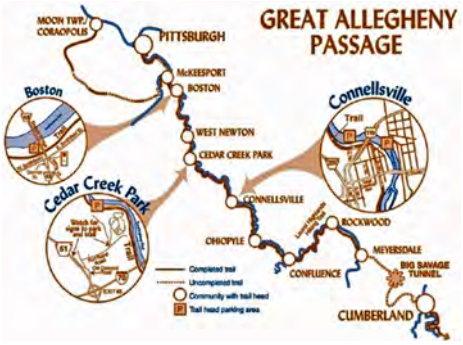

Atlanta Beltline
Atlanta, GA

This trail system will ultimately be a 33-mile loop trail. The trail is designed to be the same through each neighborhood it goes through yet still keeping the character of each place. Bikers, walkers, and runners use this paved trail very frequently. A lot of economic growth has come from the trail and has driven up prices in many areas the trail touches.

COMPARATIVE DATA





Great Allegheny Passage (GAP)
This trail is 150 miles long, and it connects Pittsburgh, PA to Cumberland, MD. The trail connects to other trail systems that ultimately go to West Virginia and Washington D.C. This trail, completed in 2013, attracted an estimmated 1.4 million visitors in 2021. Its popularity has spread its trail towns such as Ohiopyle, PA. Ohiopyle is a small town that contains Ohiopyle State Park. The state parks has many recreational activities such as whitewater rafting, hiking, and biking trails. Rockwood, PA is another town off GAP that collectively supports the trail. Camping, bike shops, and a hostel are located in Rockwood and welcome people from the trail to stop and rest.





Flagstaff Urban Trail System (FUTS)
This trail system goes through urban areas of Flagstaff, AZ while having different experiences along the trail. The trail connects urban spaces and amentities like schools, neighborhoods, and commercial areas to more natural spaces like the local national forest. The trail can serve as a route to work, recreational use, or a way to explore the city. Once completed, the trail will be 130 miles long. The trail has become a major asset to the city and the community.

Successful Trail Traits



Local Shops and Restaraunts
Supports local economy and creates a unique feel for tourists.



Recreational Opportunities Off the Trail
State parks, recreation, and other attractions bring people to trails and are more accessible.



Lodging
Allows for longer stays and benefits local economy.



Water - Rivers, Creeks, Lakes
People are attracted to water. Access to more activites and a scenic view.



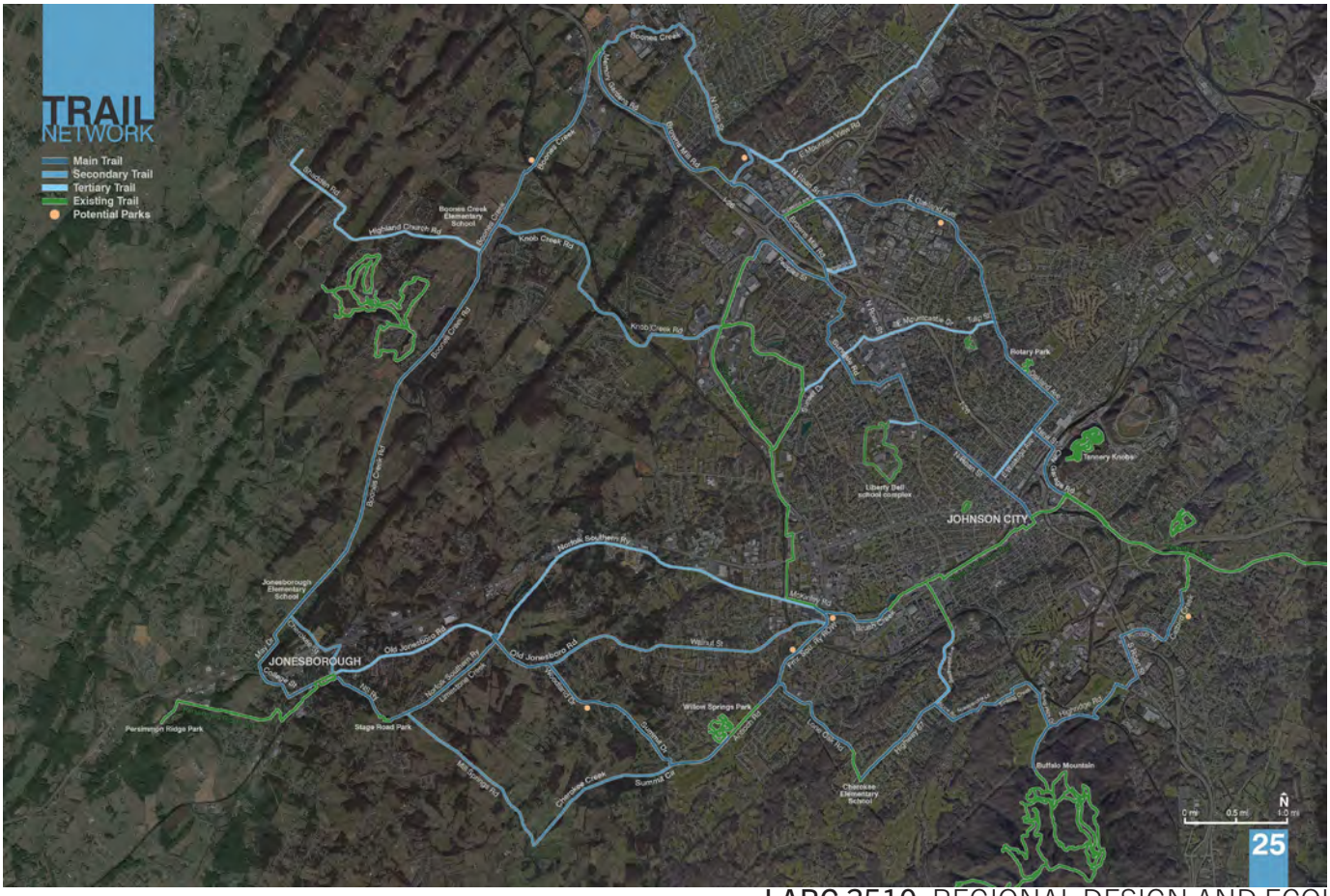
Races and Events
Races bring economic value and tourism while also connecting the community.



Multi-use Trails For People of All Ages
Accessible to all. Ultimately brings more people and creates a more cohesive community.



Views & Vistas
Attraction for people. Brings people from community and tourists to the trail.



TRAIL NETWORK CLOSE-UPS

Main Trail
Secondary Trail
Tertiary Trail
Existing Trail



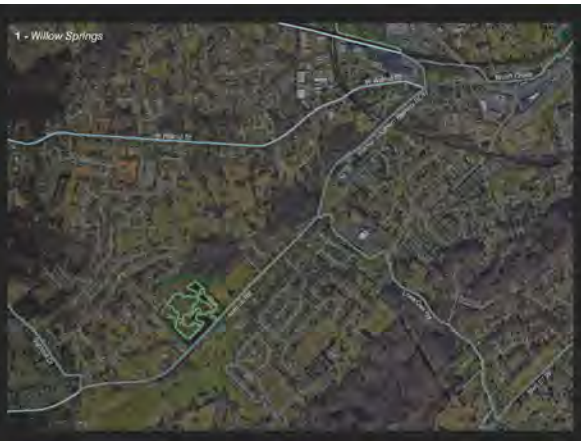

Summit Drive, facing north

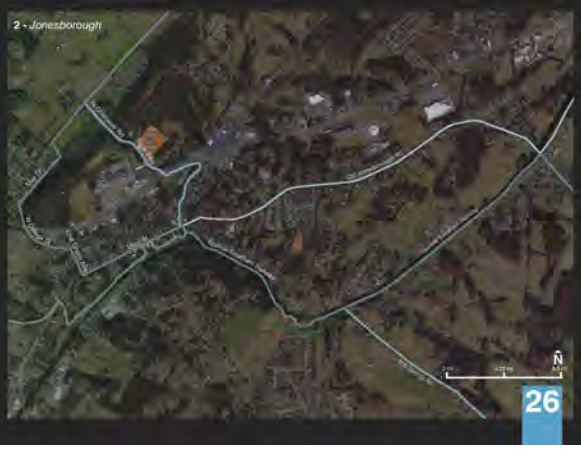
With a solid understanding of the region established, the proposed greenway alignments were then designed based on influence from Johnson City's own proposed trail and sidewalk plan, bikeway plan, future roadway improvement projects, a land use analysis, and corridor study of the region. The purpose of this trail network is twofold: to connect local hotspots with a continuous corridor of scenic urban recreation, and provide a transportation network for cyclists and pedestrians of all ages and abilities to travel safely and efficiently throughout the city. Starting in downtown Johnson City and proceeding through the network clockwise, the main greenway loop route originates on the State of Franklin Trail near ETSU. The proposed maintrail extends from the end of the State of Franklin Trail, crossing to the opposite side of Brush Creek where there is more open space. The proposed trail continues along Brush Creek, crossing it again to access city property to the north, where it parallels Norfolk Southern railroad tracks under the State of Franklin Road overpass. Still within city property, the trail approaches Burlington Park on McKinley Road, where it splits into three routes. This junction point is an ideal spot for a public park.

The upper route connects to the rest of the State of Franklin Trail and follows the same Norfolk Southern line west to Jonesborough. The middle route reaches Jonesborough via the south side of Walnut St. The lower route, which is the main route, follows the former Southern Railway right-of-way and Cherokee Creek. This route crosses Antioch Road, passing underneath the CSX Transportation plate girder bridge, where it enters an area which is currently being used for construction materials storage. This brownfield area and the adjacent forest split by Cherokee Creek have great potential to be a skate park or nature area. From this location, the route proceeds to Antioch Road where it soon joins the existing trail between Beechwood Drive and Willow Springs Park. From Willow Springs Park, the route follows the south side of Antioch Road to Summit Drive, utilizing the beautiful open fields. The main trail then continues to the northwest via Summit Drive, while a minor trail follows Summit Circle to Cherokee Creek and Mill Springs Road to Limestone Creek. The main route crosses to the west side of Summit Drive at Leach Circle where there is more room between the houses and the edge of Summit Drive. The route follows the west side of Summit Drive north until it reaches Matson Road, where it continues its trajectory into a linear patch of forest between backyards. This patch of forest leads to a large plot of undeveloped land owned by a revocable trust, which has potential to be yet another public park or natural area.

From here, the route follows the property line of this piece of land to Woodland Drive. The route then continues along the west side of Woodland Drive, up the long but gradual slope to Old Jonesborough Road, where it intersects with the middle route from Walnut Street. Both routes continue as one along the south side of the road to the bridge over Norfolk Southern Railway, which is leading the upper route from earlier. A minor route continues along Old Jonesboro Road to downtown Jonesborough, while the main route then descends to the edge of the Norfolk Southern right-of-way, following it along Limestone Creek to Stage Road Park, where the route connects with existing trails. From Stage Road Park, the route joins again with the edge of the Norfolk Southern right-of-way, skirting the slope through forested land until reaching Limestone Creek. The route then follows Limestone Creek, crossing under a Norfolk Southern bridge, finally reaching downtown Jonesborough near the Gazebo.

Once through downtown Jonesborough, the main route begins its northward progression via a detour along Main Street to Oak Grove Ave to College Street to May Dr, where it will connect with the future Jonesborough school as is planned by the town. An alternative route also connects downtown Jonesborough with the new school, running parallel to the creek behind the town administration building, climbing up to Jackson Boulevard and crossing at the future traffic circle at the intersection of Tiger Way, continuing along that road north to Cherokee Street and the school.





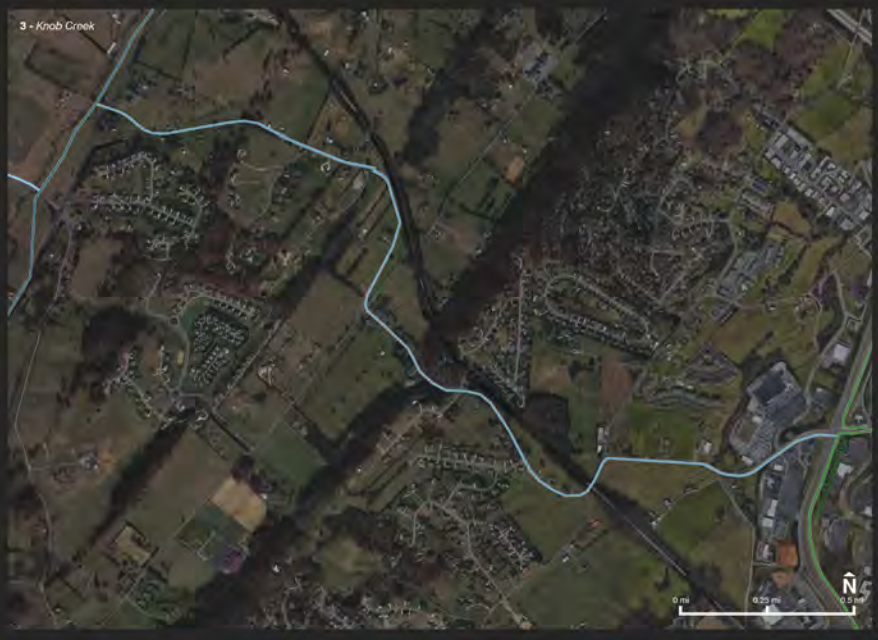
TRAIL NETWORK CLOSE-UPS

Main Trail
Secondary Trail
Tertiary Trail
Existing Trail



From the new school in Jonesborough, the main route parallels the west side of Boones Creek Road at a distance, replacing the seldom-used bike lanes and offering travelers beautiful views of the rural landscape. Once the route reaches Boones Creek Elementary School, there is another junction. A minor trail follows Highland Church Road and Shadden Road to the Boones Creek Museum and eventually the site of Keyfauver Farm Park. Another trail follows Knob Creek Road in the opposite direction from Boones Creek Elementary School. Starting at Boones Creek Road near Genesis Family Healthcare, this route goes through an empty field to minimize the steepness of the grade to Knob Creek Road. When the route reaches the road, it follows the north side until Sanctuary Court, where the trail moves to the other side of the road. This route is only viable when the Knob Creek Road railroad overpass project is complete, freeing up the existing one-lane tunnel under the CSX line to be used for the trail instead of car traffic. After passing under the railroad embankment, the route connects to the pre-existing State of Franklin Trail.

Meanwhile, the main route of the greenway network along Boones Creek Road drifts down the grade to Boones Creek itself once the trail reaches the elementary school. The route could not follow the creek until this point due to the obstruction of the Ridges neighborhood. However, from Highland Church Road to the Waffle House on Boones Creek Road, the main route follows the creek, utilizing the floodwater buffer zone and bringing focus to the revitalization of the riparian area along the creek. Along the way, the trail crosses Boones Creek Road twice, at Johnson City Brewing Company's location near the CSX trestle, and again near the recycling drop-off. The land at the base of the trestle is a good location for a railroad park or event space for the brewing company. Further north, when the main route connects with Boones Creek Road again near Waffle House, it continues for a short while until it connects with the existing multi-use trail at the double-diamond interchange with Interstate 26.




Boones Creek Road, facing north


Knob Creek Road tunnel, facing east


CSX trestle over Boones Creek Road

TRAIL NETWORK CLOSE-UPS



On the other side of I-26, the main route immediately turns south and follows the property line of Memory Gardens Cemetery. Past the cemetery, the route joins Bart Greene Drive and then follows the south side of Browns Mill Road all the way to the intersection with Oakland Ave. An alternative route from I-26 follows Boones Creek to Old Gray Station Road and North Roan Street, utilizing the open space to the west of Roan Street. Between Sequoya Drive and West Mountainview Road, the alternative route curves to the south, following the topography through forested land to the new traffic circle on Browns Mill Road. This forested land is an ideal spot for a natural park.

A minor trail branches off from this property, itself branching in two again. One branch goes north along East Mountain View Road to Winged Deer Park and the other branch continues along Roan Street, providing access to the commercial district, until reaching Springbrook Drive, where it ends at the main route again. The main route along Browns Mill Road and the alternative route along Roan Street are connected by an existing trail on West Oakland Ave. A proposed main route continues this trail to East Oakland Ave, following the south side of that road past Rotary Park and eventually to East Watauga Ave. The route connects to the Tweetsie Trail and the State of Franklin Trail via New Street, Johnson City Solid Waste Services property, and City Garage Road.

At the intersection of East Oakland Ave and Princeton Road, there is a 4-acre forested property in an area with sparse public green space that could be developed into a recreational area like Rotary Park. With the main loop complete, the internal network is bolstered with two perpendicular trails that meet near the Mall at Johnson City. The east-west route follows the south side of Sunset Drive, East Mountcastle Drive, and Tulip Street to meet with the main route on East Oakland Ave. The north-south route follows Browns Mill Road from Peoples Street to Roan Street, where it replaces the fragmented sidewalk on the east side of the road near the mall. There is also a small branch to access the Liberty Bell school complex. As the route approaches downtown Johnson City, the multi-use trail again replaces the sidewalk but also occupies some of the traffic lane, which will be adjusted with new striping. A minor trail connects this route with the main route on Watauga Ave.

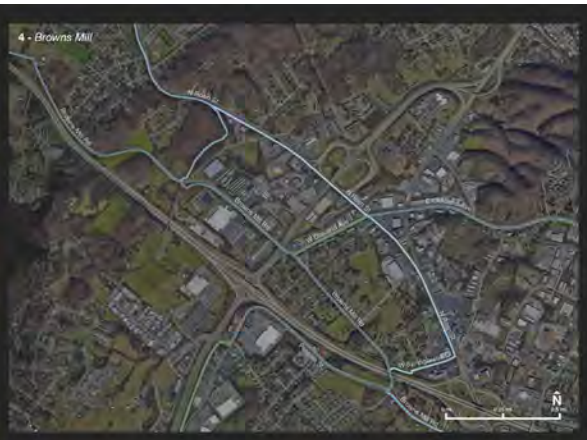

Memory Gardens Road, facing south

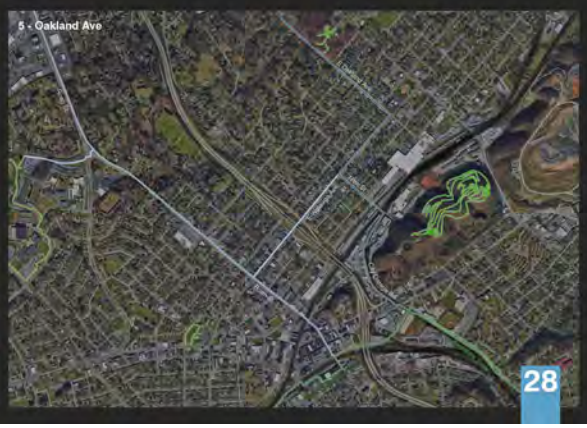

Browns Mill Road, facing south


East Oakland Ave, facing south


City Garage Road, facing east


North Road Street, facing south





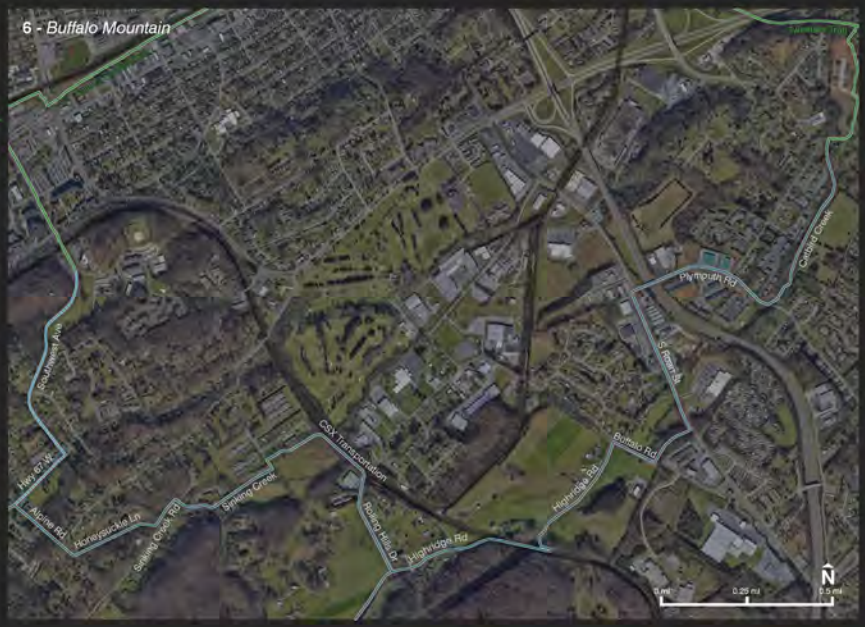
TRAIL NETWORK CLOSE-UPS



The final segment of this proposed network of the Johnson City greenway connects Buffalo Mountain Park with the Tweetsie Trail, ETSU, and Antioch Road. Beginning at the Tweetsie Trail, a branch was recently built by Hancock Ridge Apartments under the power line easement leading to Milligan Highway. The proposed route crosses the street and joins Catbird Creek, utilizing the buffer zone much like the route along Boones Creek. This route traces the creek south until Plymouth Road, where it follows the north side of that road across I-26 to Roan Street. The route crosses to the west side of the street, replacing the unusually wide shoulder and resolving the lack of a sidewalk.

When the route reaches the Tipton-Haynes Historic Site, it cuts through the forest on the property and jogs across Buffalo Road to Highridge Road. The route follows the east side of Highridge Road through beautiful farmland until after it crosses the CSX railroad tracks, where the route then follows the west side of the road to Rolling Hills Drive. At this point, one branch of the route continues on to the entrance of Buffalo Mountain Park, and another branch follows Rolling Hills Drive to the CSX embankment. From here, the route follows the edge of the railroad right-of-way past an open field, where it makes a left turn and eventually follows Sinking Creek to Hickory Springs Road.

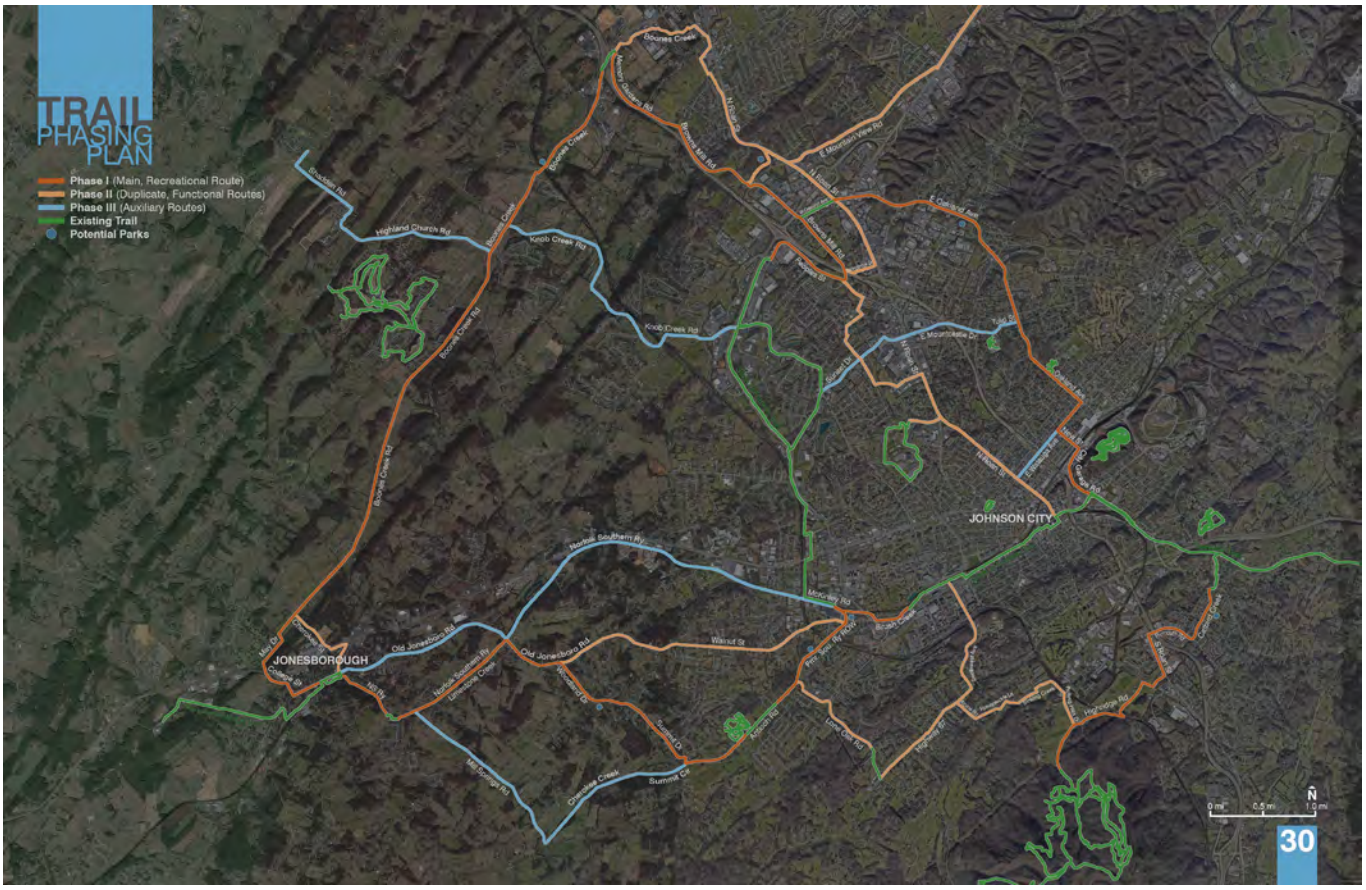
After a short stretch going west on Sinking Creek Road, the route follows Rustic Road and Honeysuckle Lane to Alpine Road. Where Alpine Road intersects with Highway 67, the trail branches again. One route goes north along the west side of Southwest Ave, joining with ETSU's sidewalks and eventually the State of Franklin Trail. The main branch of the trail follows Highway 67 west. The proposed trail utilizes existing sidewalk right-of-way on the south side of the road until Paty Drive, where the route crosses to the north side of the street to make use of some open space. The route then reaches Cherokee Elementary School and turns north along Lone Oak Road and a short section of existing trail. The route continues along the east side of Lone Oak Road until Greenwood Drive, where it crosses the street and cuts through Grace Fellowship Church property to connect with the main greenway route on Antioch Road.

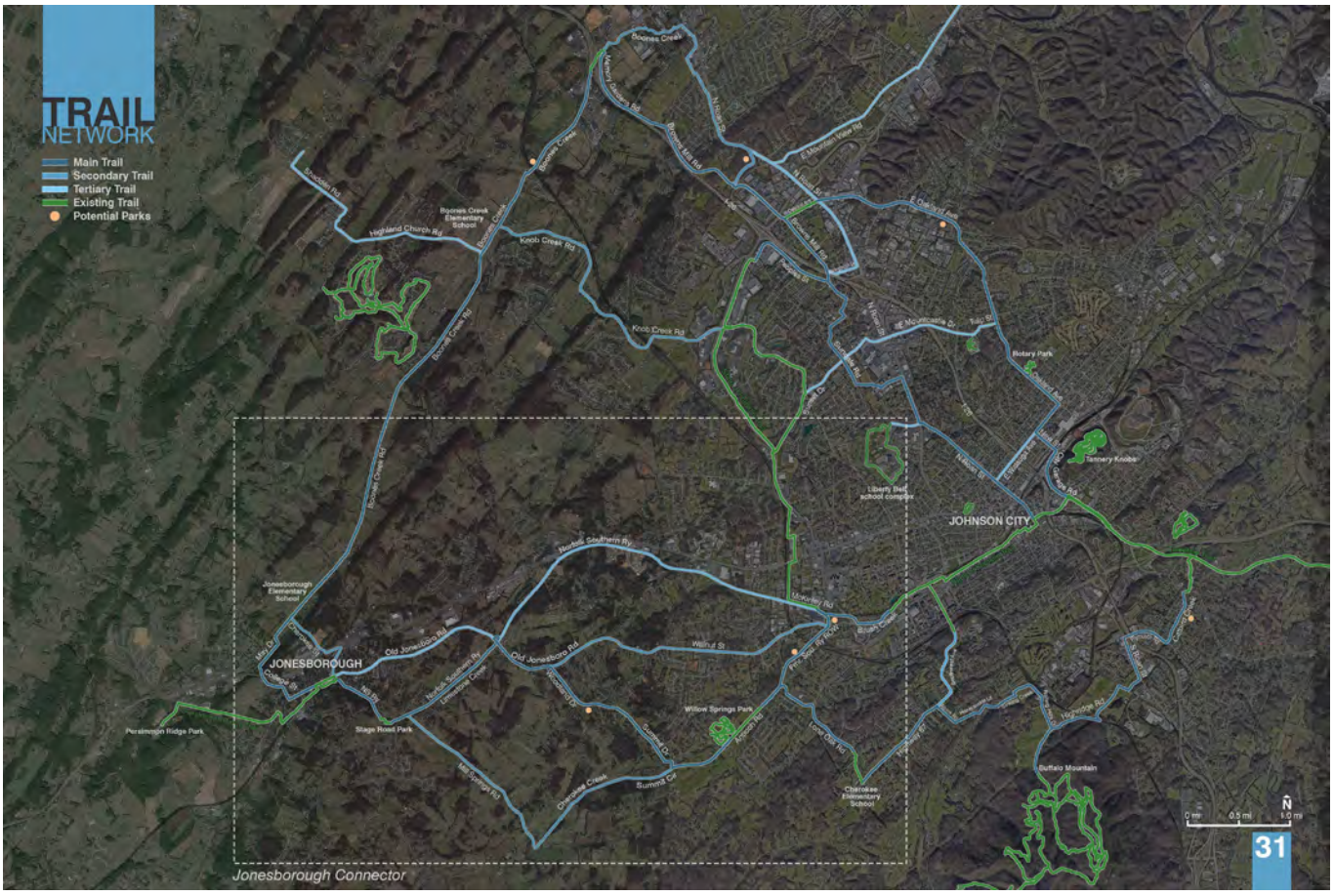



Highridge Drive, facing west

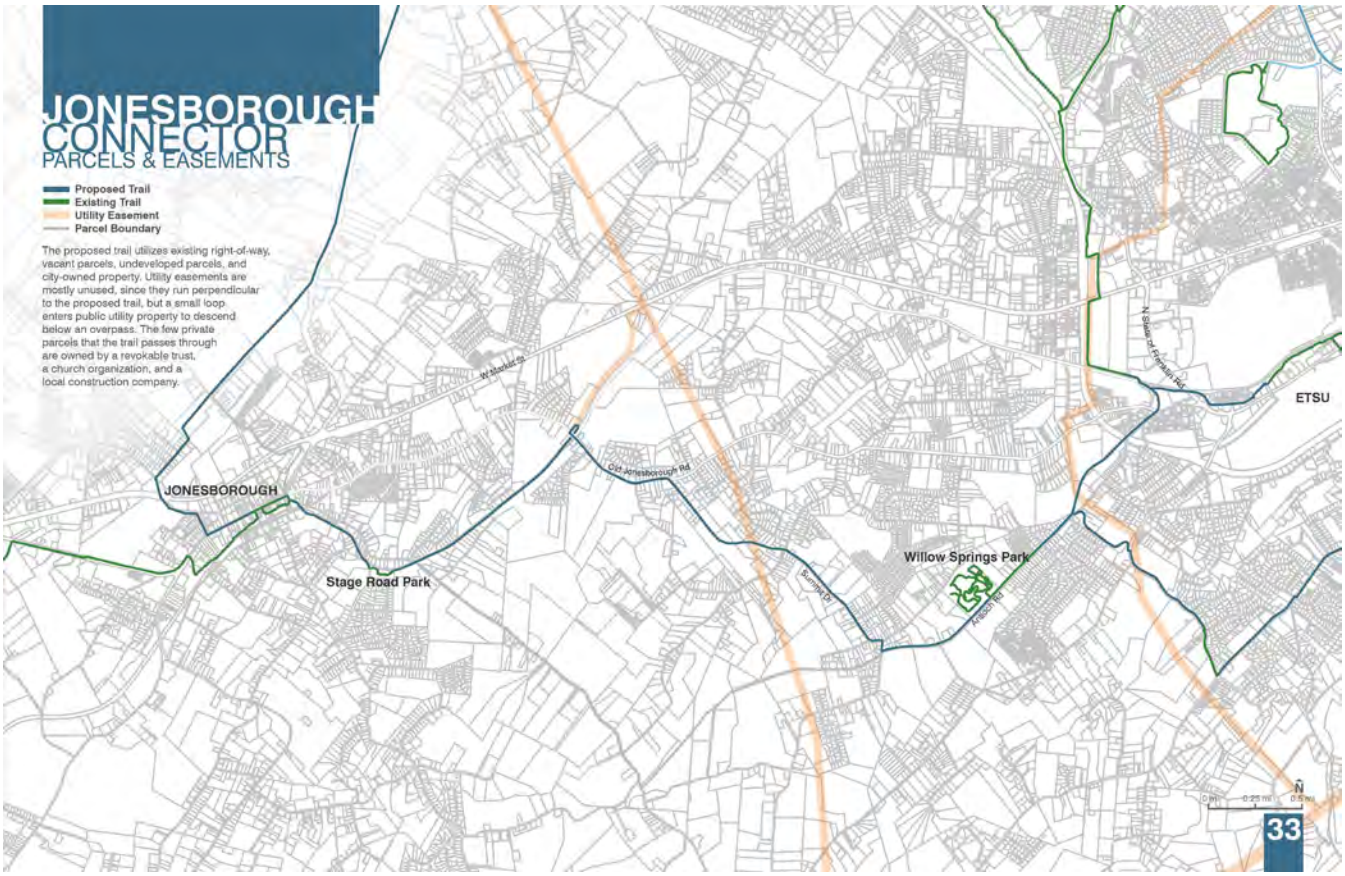

Highway 67, facing west

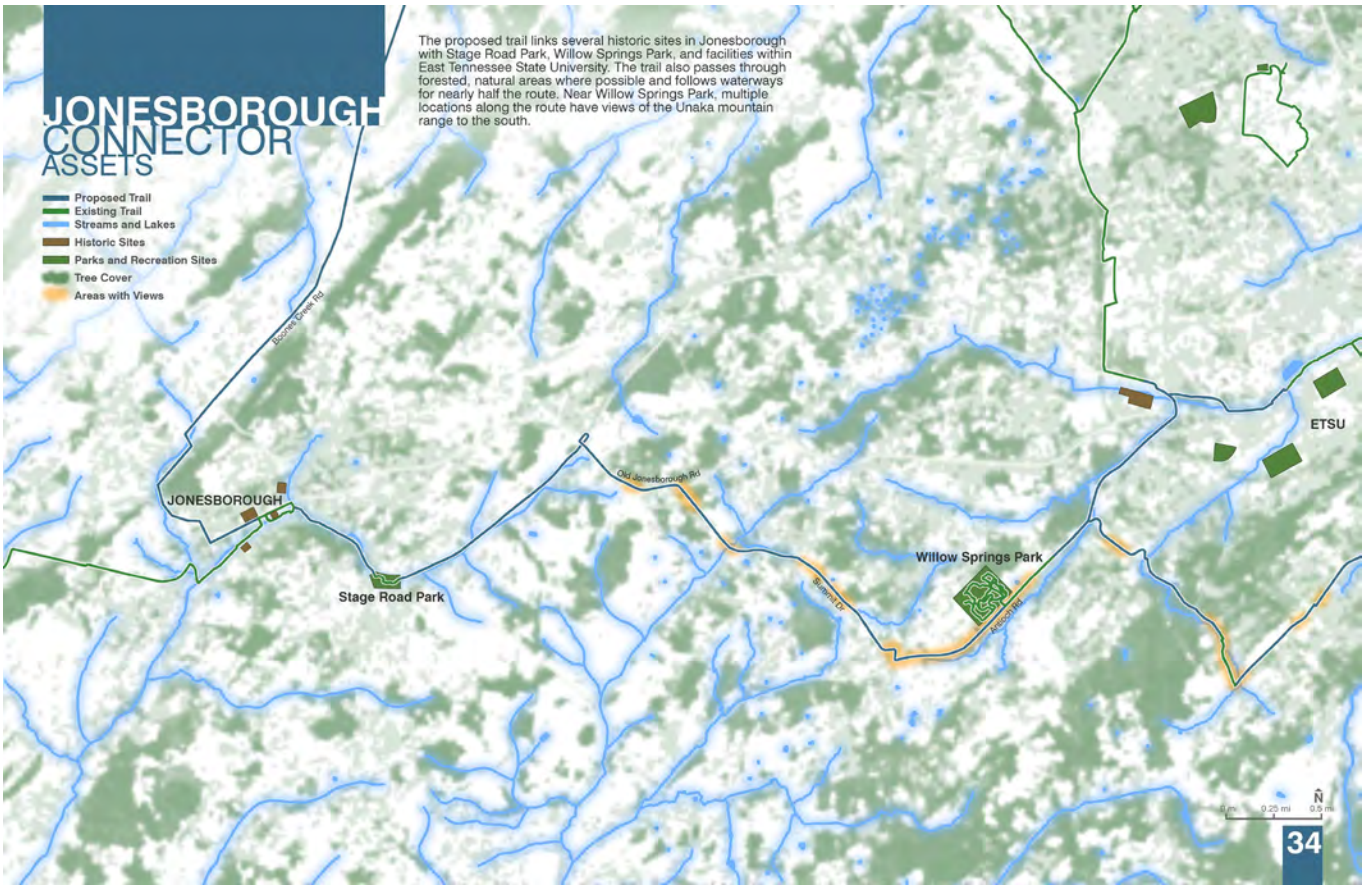

Lone Oak Road, facing north

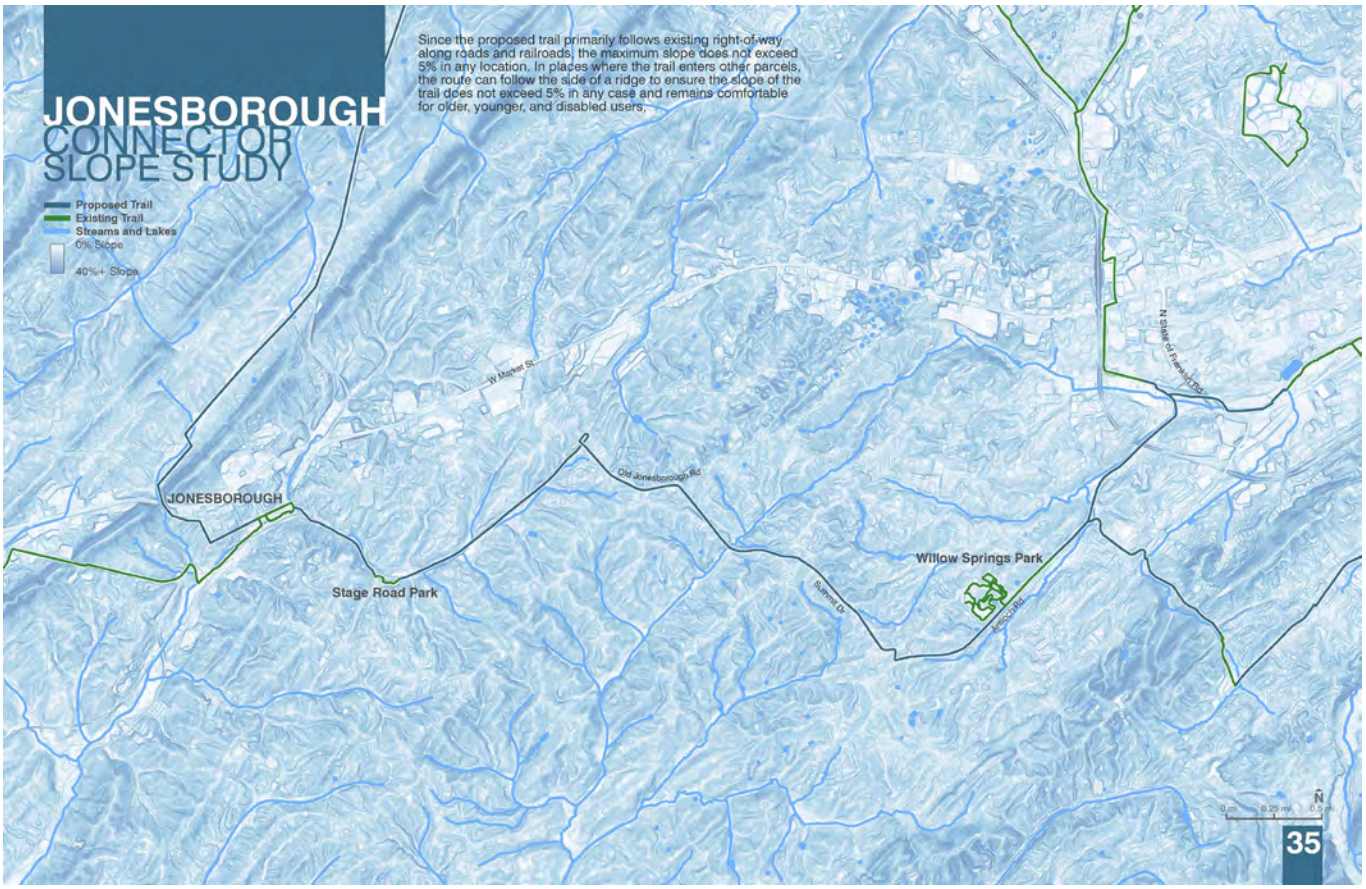

TRAIL
PHASING
PLAN
Phase I (Main, Recreational Route)
Phase II (Duplicate, Functional Routes)
Phase III (Auxiliary Routes)
Existing Trail
Potential Parks
JONESBOROUGH
JOHNSON CITY
Boones Creek
Highland Church Rd
Knob Creek Rd
Boones Creek Rd
Old Jonesboro Rd
Norfolk Southern Ry
Walnut St
Broad St
Main St
Watauga Ave
Tannery Knobs
Buffalo Mountain
0 mi
0.5 mi
1.0 mi
N
30


TRAIL
NETWORK
Main Trail
Secondary Trail
Tertiary Trail
Existing Trail
Potential Parks
JONESBOROUGH
JOHNSON CITY
Boones Creek
Highland Church Rd
Knob Creek Rd
Boones Creek Rd
Old Jonesboro Rd
Norfolk Southern Ry
Walnut St
Broad St
Main St
Watauga Ave
Rotary Park
Tannery Knobs
Liberty Bell school complex
Willow Springs Park
Stage Road Park
Persimmon Ridge Park
Buffalo Mountain
Jonesborough Connector
0 mi
0.5 mi
1.0 mi
N
31


JONESBOROUGH
CONNECTOR
Proposed Main Trail
Existing Trail
Proposed Park Parcels
The Jonesborough Connector Trail links downtown Jonesborough with the existing segments of the State of Franklin Trail in Johnson City. The route also utilizes existing trails in Stage Road Park and near Willow Springs Park. There are four parcels along the route which could become city parks.
JONESBOROUGH
Stage Road Park
4 - Limestone Creek
3 - Summit Drive/Woodland Drive
2 - Antioch Road/Summit Drive
1 - Chatoogta Creek
Willow Springs Park
32


JONESBOROUGH
CONNECTOR
PARCELS & EASEMENTS
Proposed Trail
Existing Trail
Utility Easement
Parcel Boundary
The proposed trail utilizes existing right-of-way, vacant parcels, undeveloped parcels, and city-owned property. Utility easements are mostly unused, since they run perpendicular to the proposed trail, but a small loop enters public utility property to descend below an overpass. The few private parcels that the trail passes through are owned by a revokable trust, a church organization, and a local construction company.
JONESBOROUGH
Stage Road Park
Willow Springs Park
ETSU
33


JONESBOROUGH
CONNECTOR
ASSETS
The proposed trail links several historic sites in Jonesborough with Stage Road Park, Willow Springs Park, and facilities within East Tennessee State University. The trail also passes through forested, natural areas where possible and follows waterways for nearly half the route. Near Willow Springs Park, multiple locations along the route have views of the Unaka mountain range to the south.
Proposed Trail
Existing Trail
Streams and Lakes
Historic Sites
Parks and Recreation Sites
Tree Cover
Areas with Views
Boones Creek Rd
JONESBOROUGH
Stage Road Park
Old Jonesborough Rd
Summit Dr
Willow Springs Park
Arrowood Rd
ETSU
0 m
0.25 mi
0.5 mi
N
34


JONESBOROUGH
CONNECTOR
SLOPE STUDY
Since the proposed trail primarily follows existing right-of-way along roads and railroads, the maximum slope does not exceed 5% in any location. In places where the trail enters other parcels, the route can follow the side of a ridge to ensure the slope of the trail does not exceed 5% in any case and remains comfortable for older, younger, and disabled users.
Proposed Trail
Existing Trail
Streams and Lakes
0% Slope
40%+ Slope
W Market St
N State of Franklin Rd
JONESBOROUGH
Old Jonesborough Rd
Stage Road Park
Summit Dr
Willow Springs Park
Arrowood Rd
0 m
0.25 mi
0.5 mi
N
35


CHEROKEE CREEK
Proposed Main Trail
Existing Trail
Proposed Park Parcel
Mary St
Brush Creek
Walnut Rd
State of Franklin Rd
Gilmer St
Section A
Embreeville Rd
Perspective
S Greenwood Dr
CSX Transportation
Cherokee Creek
Antioch Rd
36


CHEROKEE CREEK
At the beginning of the trail near East Tennessee State University, the route follows Cherokee Creek along the former Southern Railway right-of-way to Embreeville. Along this section, there is enough space to allow for a 12-foot shared-use path. Since this section closely parallels the creek, the brownfield parcels can be used for riparian restoration, beautification, and naturalization. The trail can also include amenities like benches for viewing thecreek, water fountains, dog waste stations, and bike repair stations.
12' Shared-Use Path
37


CLINCHFIELD
BRIDGE
BEFORE
38


CLINCHFIELD
BRIDGE
AFTER
The trail crosses Antioch Road just south of the Clinchfield Railroad bridge. To protect pedestrian safety, the crossing is a raised crosswalk with proper signage and islands for traffic calming. Since this portion of the trail follows the former Southern Railway branch to Embreeville, there are historical information signs to give pedestrians insight into the history of this area.
39

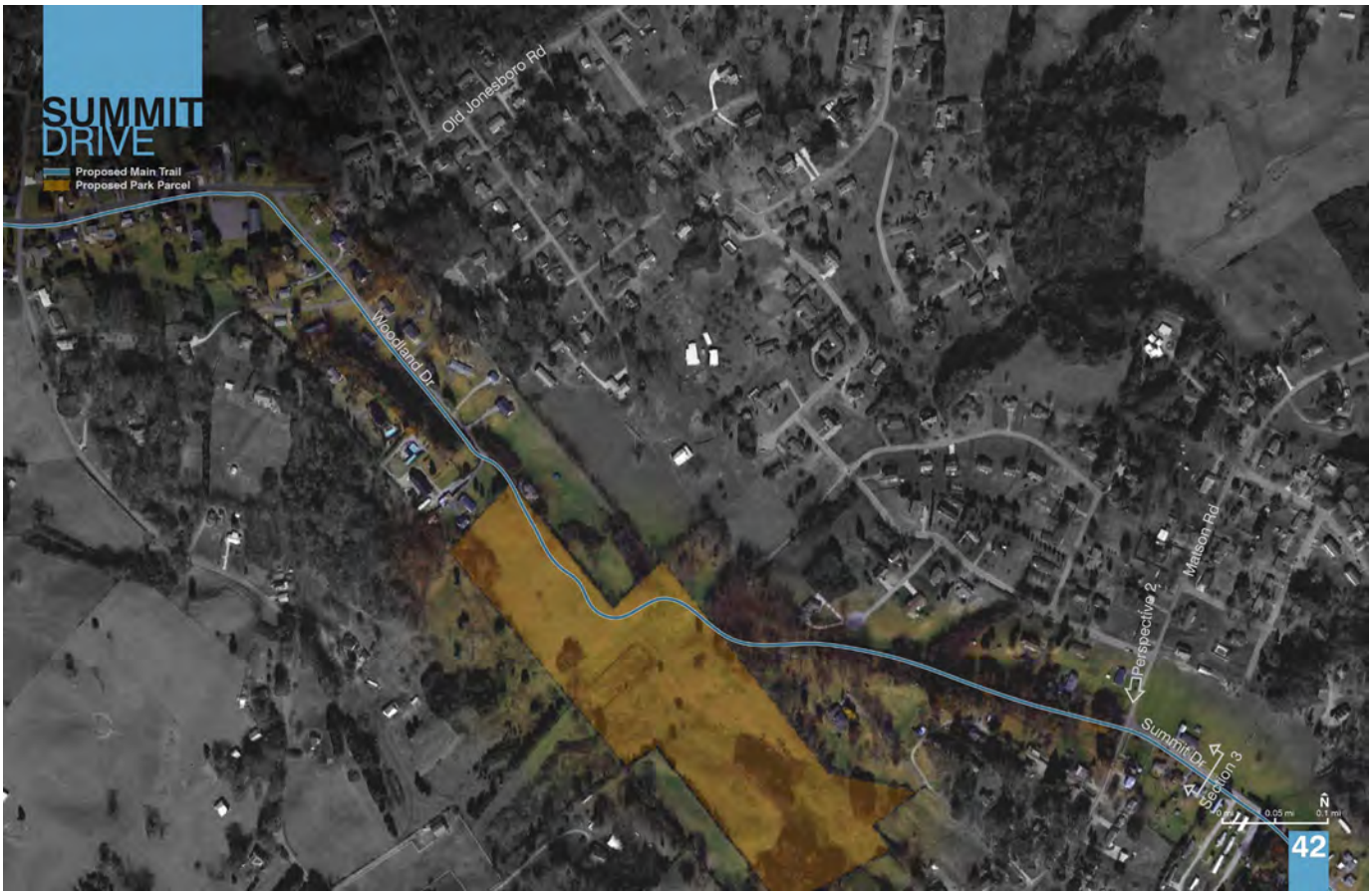


ANTIOCH ROAD

As the trail passes by Willow Springs Park, it joins the right-of-way of Antioch Road, following it to Summit Drive. In most places, the width of the right-of-way varies between 30 and 40 feet, which means the trail must be slightly narrowed to 10 feet in width to fit next to the road. Along this section, the trail is separated and protected from the road by a 3-foot buffer of dense Switchgrass. As the route gets closer to Summit Drive, the right-of-way narrows further, and the trail must encroach upon an empty field where the Southern Railway branch to Embreeville used to be.



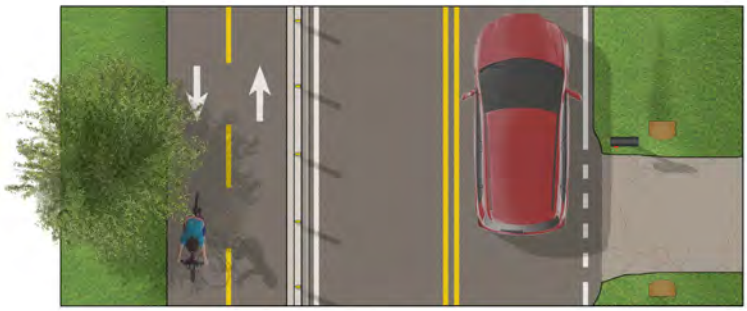




SUMMIT DRIVE

Along Summit Drive, the right-of-way is consistently less than 30 feet. To avoid having to acquire new property in this area, the trail compresses to 8 feet and closely follows the road. The trail is separated and protected from the road by a curb with reflective flexible delineators. There are curb cuts and appropriate signage where driveways intersect the trail, but most driveways are on the opposite side of the road. Since the trail is thinner here than in other areas, it is striped down the middle to differentiate between directions of travel.





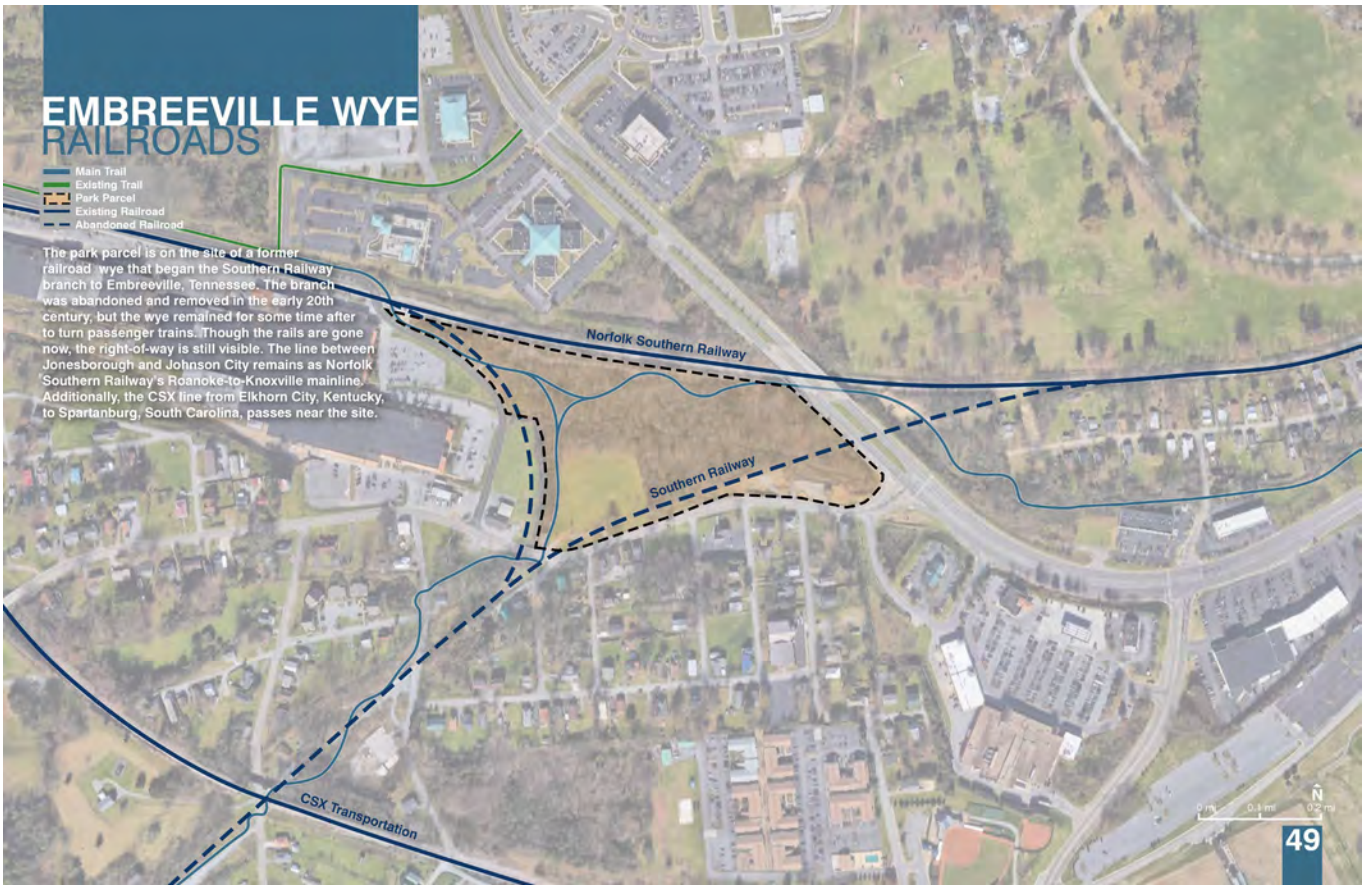

MATSON
ROAD
BEFORE
44

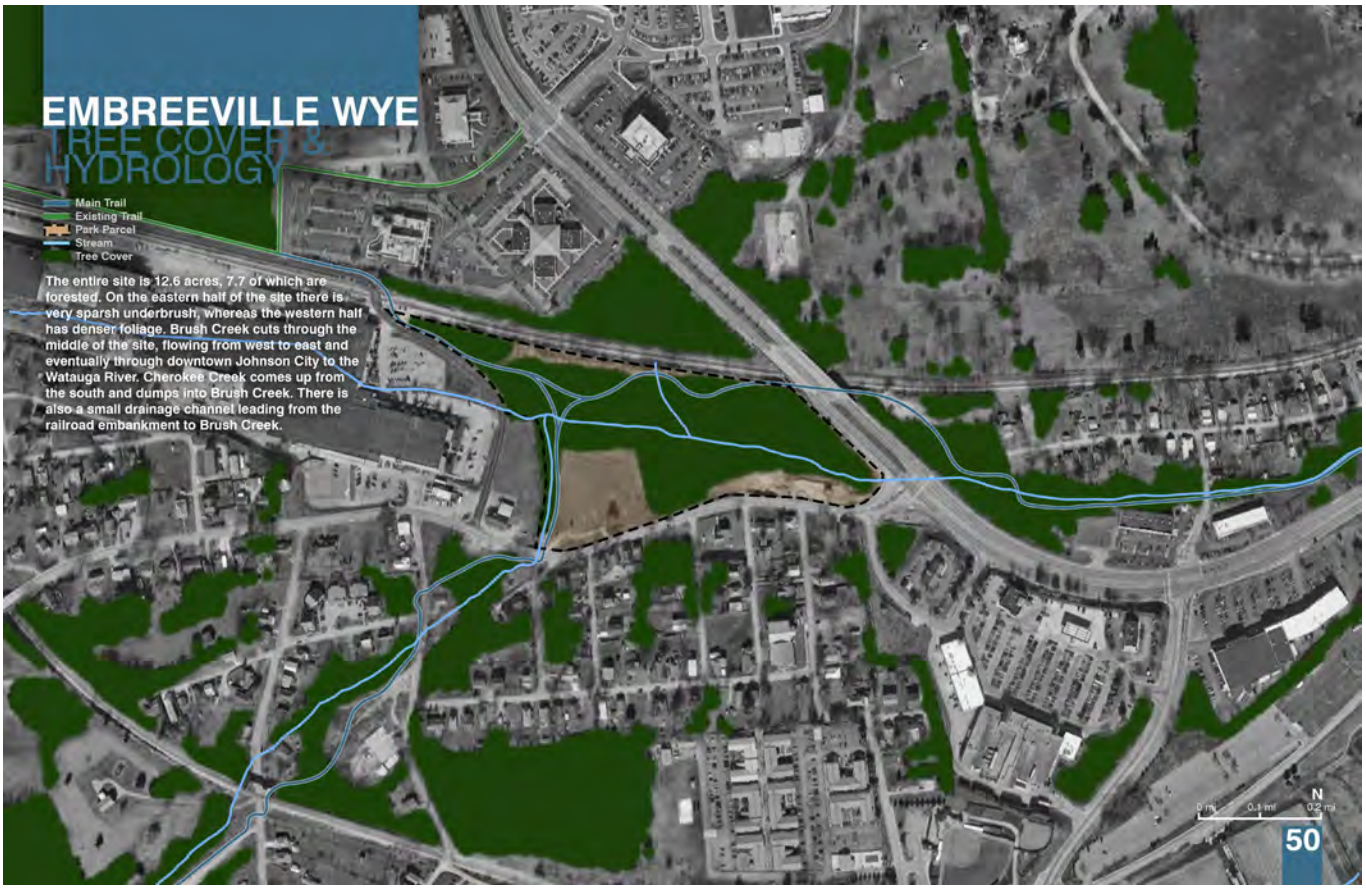

MATSON
ROAD
AFTER
JOHNSON CITY
JONESBOROUGH
The trail crosses Matson Road at the north end of Summit Drive, leaving the existing rights-of-way for the first time. Matson Road is converted to a three-way stop and there are added pedestrians signs and crosswalk markings. Additionally, warning text for pedestrians is printed on the path itself. Because space in this particular area is limited, the trail closely follows the road and cuts into the adjacent grades. Where retaining walls must be built, they are muralized for wayfinding and beautification.
45


LIMESTONE CREEK
Proposed Main Trail
Existing Trail
JONESBOROUGH
Limestone Creek
Spring St
Perspective 3
Norfolk Southern Railway
Old Jonesboro Rd
Stage Road Park
Stage Rd
Mill Springs Rd
0 mi
0.1 mi
0.2 mi
N
46

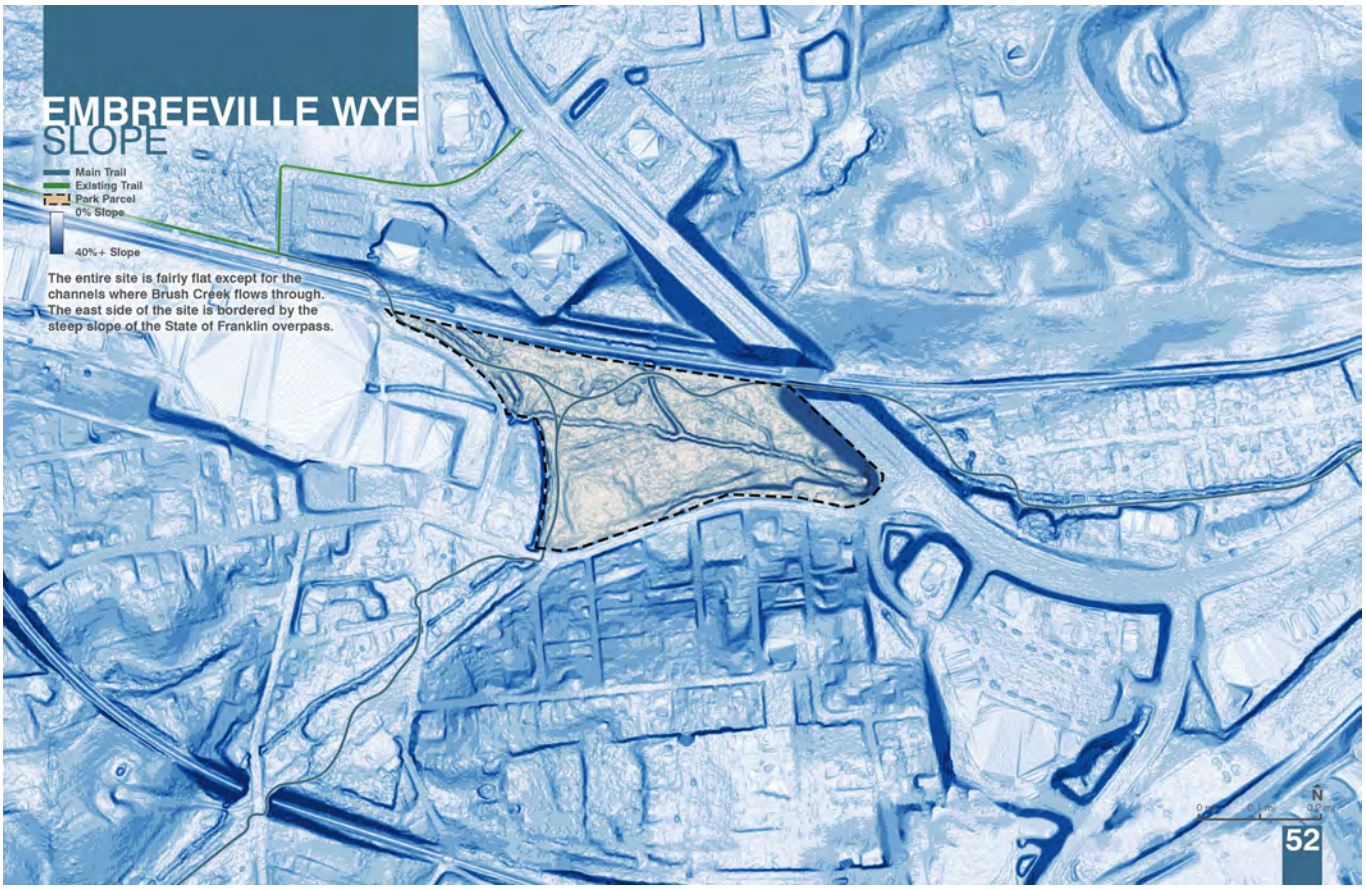

SPRING STREET BEFORE
RAILROAD CROSSING
STOP
47


SPRING STREET AFTER
RAILSING CROSSROAD
LOOK FOR TRAINS
RAILSING CROSSROAD
YIELD
LOOK FOR TRAINS
Near Spring Street just outside of Jonesborough, the trail crosses the tracks at grade at the only point in the entire network. The trail crosses the tracks in the same place as a private road, minimizing contact points for the railroad. There is adequate warning signage and text printed on the trail itself to improve pedestrian safety. Immediately after the grade crossing, the trail becomes a boardwalk to avoid disturbing Little Limestone Creek. Just beyond the boardwalk is Stage Road Park.
48


EMBREEVILLE WYE RAILROADS
Main Trail
Existing Trail
Park Parcel
Existing Railroad
Abandoned Railroad
The park parcel is on the site of a former railroad 'wye' that began the Southern Railway branch to Embreeville, Tennessee. The branch was abandoned and removed in the early 20th century, but the wye remained for some time after to turn passenger trains. Though the rails are gone now, the right-of-way is still visible. The line between Jonesborough and Johnson City remains as Norfolk Southern Railway's Roanoke-to-Knoxville mainline. Additionally, the CSX line from Elkhorn City, Kentucky, to Spartanburg, South Carolina, passes near the site.
Norfolk Southern Railway
Southern Railway
CSX Transportation
N
49


EMBREEVILLE WYE
TREE COVER & HYDROLOGY
Main Trail
Existing Trail
Park Parcel
Stream
Tree Cover
The entire site is 12.6 acres, 7.7 of which are forested. On the eastern half of the site there is very sparsh underbrush, whereas the western half has denser foliage. Brush Creek cuts through the middle of the site, flowing from west to east and eventually through downtown Johnson City to the Watauga River. Cherokee Creek comes up from the south and dumps into Brush Creek. There is also a small drainage channel leading from the railroad embankment to Brush Creek.
0 mi
0.1 mi
0.2 mi
N
50


EMBREEVILLE WYE
PARCELS
Main Trail
Existing Trail
Park Parcel
The park site occupies several parcels, all of which are owned by Johnson City. The trail segments leading up to the trail pass through some privately-owned lots, but they are all vacant, undeveloped, or brownfield sites.
City of Johnson City
City of Johnson City
Brumit Real Estate Co.
Brumit Co.
Bell, R.
Franklin Commercial LLC
Bakshi, S.
Kalogeros Family LLC
Stephen D.
Taylor, S.
Harrell, T.
Harrell, D.
Castle Wholesale Supply Co.
0 mi
0.1 mi
0.2 mi
N
51


EMBREEVILLE WYE
SLOPE
Main Trail
Existing Trail
Park Parcel
0% Slope
40%+ Slope
The entire site is fairly flat except for the channels where Brush Creek flows through. The east side of the site is bordered by the steep slope of the State of Franklin overpass.
N
52


THE WYE
MASTER PLAN
The Embreeville Wye Plaza and Nature Park fills the space of the former Southern Railway wye junction to Embreeville. This space, which is now city property, can instead perform as a junction for trails rather than rails. The railroad history is revived through a V-shaped station platform and paving stones which trace the location of the old rails. Boardwalks continue from the platform through a native wildflower meadow and the preserved woods to a train-watching platform by the tracks. Within the forest are hiking trails and nature observation platforms. This park site includes parking for the trail, restrooms, and covered event space.
To State of Franklin Trail
Platform
Perspective
N State of Franklin Rd
To Johnson City
McKinley Rd
W Walnut St
To Jonesborough
Path
N
0 mi
0.1 mi
0.2 mi
53

THE WYE
PERSPECTIVE



The station platform functions as a junction point for the Jonesborough Connector trail. It can also be used as event space for neighborhood gatherings, farmers markets, outdoor art shows, and more. There are restrooms, seating, and parking.

THE WYE
PERSPECTIVE



On the other side of the platform, boardwalks cut through a sea of native wildflowers and into the protected forest. Eventually, the boardwalks lead to a train observation platform on the Norfolk Souther mainline. The area between the platforms is focused on observing nature.

THE WYE SECTION



The boardwalk crosses over Brush Creek and its floodplain before connecting back to the north leg of the trail. At the northern terminus of the boardwalk is the train observation platform. The path on the north leg of the wye parallels the Norfolk Southern right-of-way but is separated from the tracks by grade and vegetation.

CHARACTER AND MATERIALS

Jonesborough Connector



Plant Palette
Quercus alba



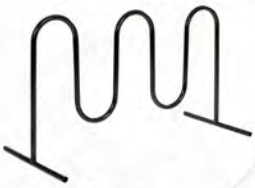
Rudbeckia hirta



Ratibida pinnata



Pycnanthemum virginianum



Bicycle Infrastructure
Modern Bike Rack - *$212*



Repair Station - *$755*



Trail Materials
Asphalt, *optional striping*



Red Brick Crosswalk



Historic Information Signage



Public Amenities
Water Fountain - *$4,600*



Modern Bench, from recycled materials - *$2,390*



Modern Trash Can



Public Restroom



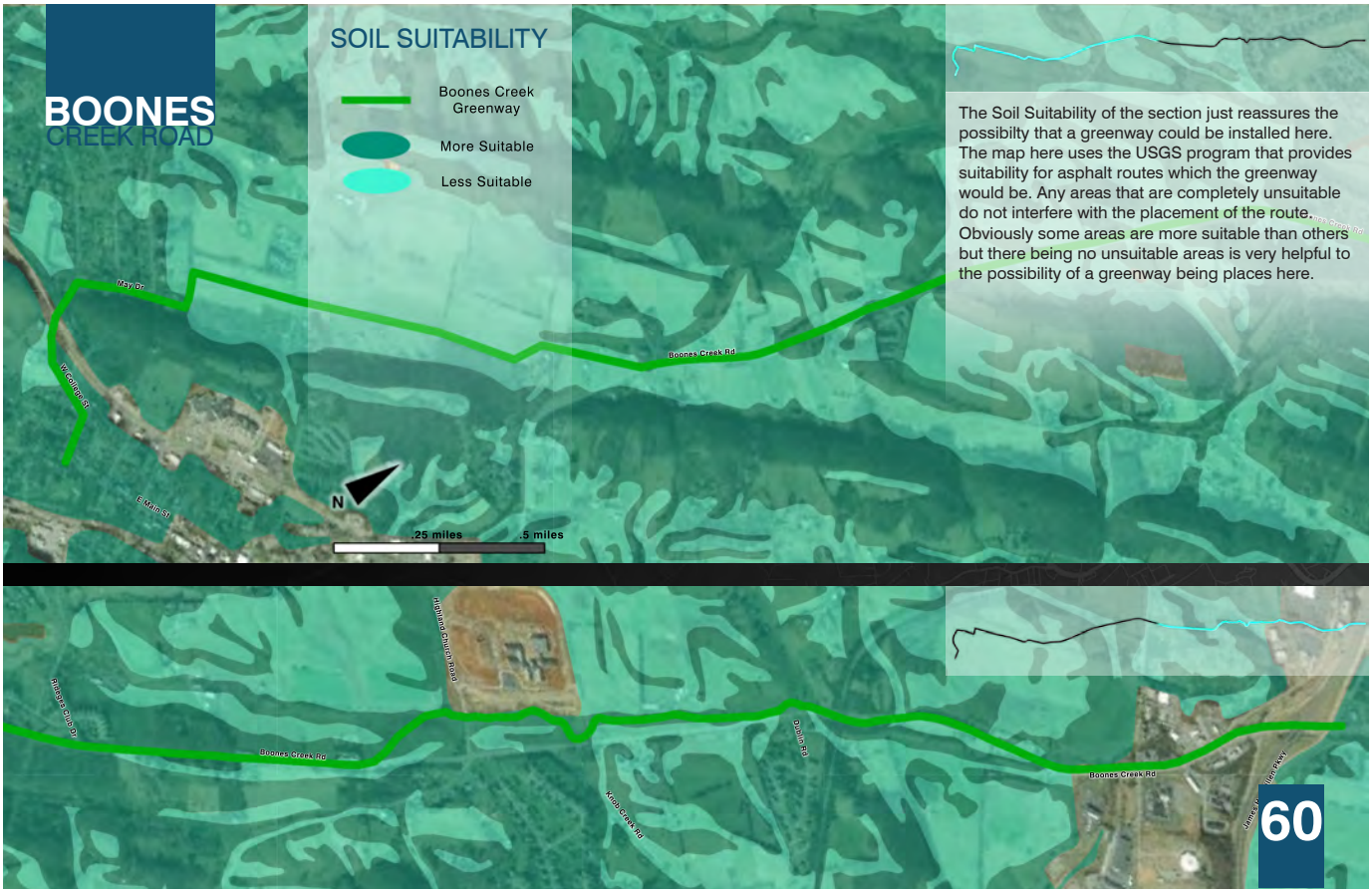
58



The Northwest Section of the East Tennessee Highlands Trail is proposed with nature views and creekside paths all while connecting the town of Jonesborough with the Northern side of Johnson City. The Trail follows the preexsiting route of Boones Creek Road for the majority of the section with certain route changes to account for slope or also to reach certain destinations such as Johnson City Brewing or to follow along Boones Creek away from the street. At the western side of the section, it starts in Jonesborough and follows main street west until it can travel North and pass under West Jackson Boulevard and onto May Drive. From that point on it passes by the new school and continues east from there until it runs into Boones Creek Road where it stays on the northern side of the road for the remainder.



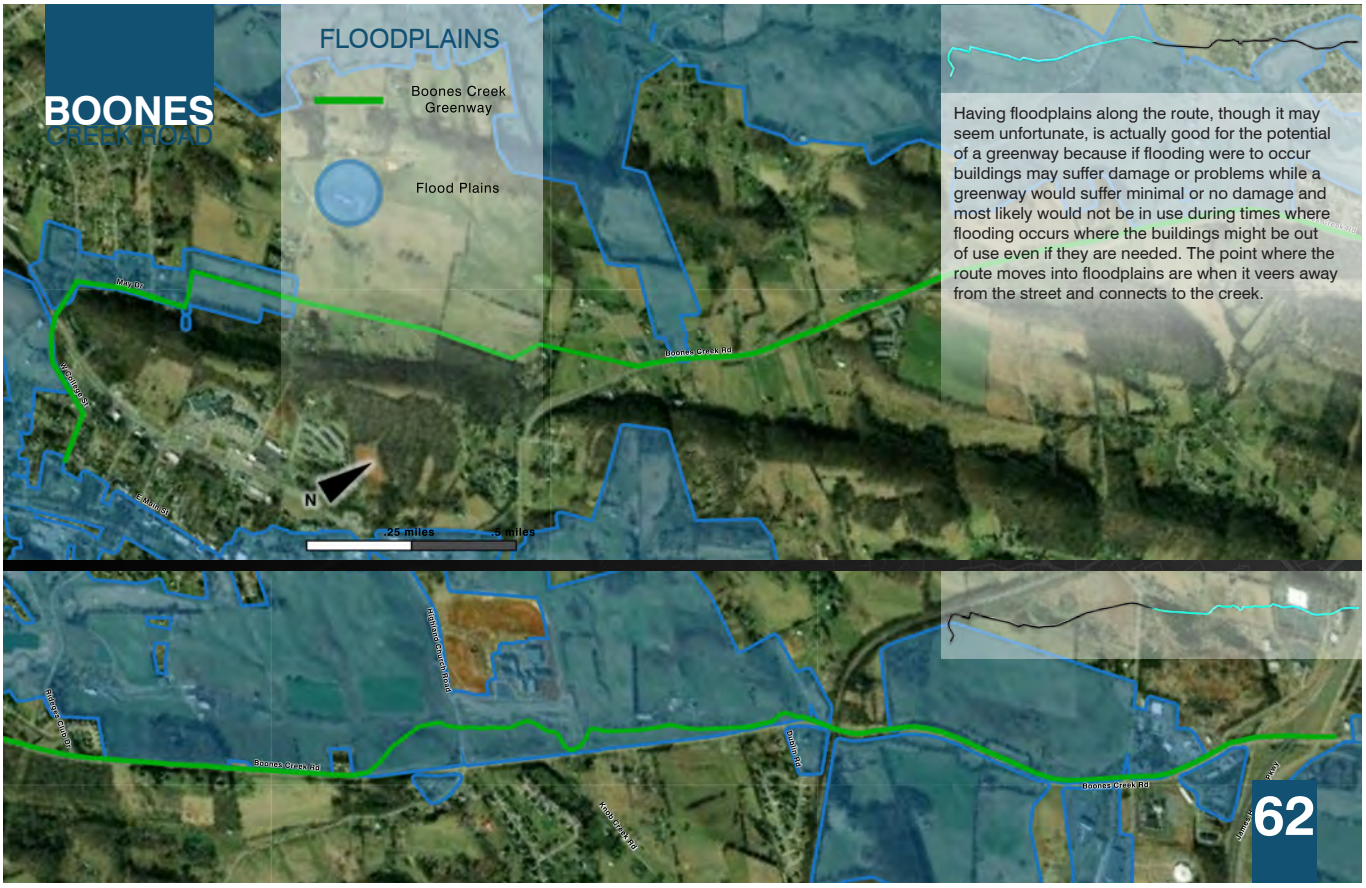
59



The Soil Suitability of the section just reassures the possibilty that a greenway could be installed here. The map here uses the USGS program that provides suitability for asphalt routes which the greenway would be. Any areas that are completely unsuitable do not interfere with the placement of the route. Obviously some areas are more suitable than others but there being no unsuitable areas is very helpful to the possibility of a greenway being places here.

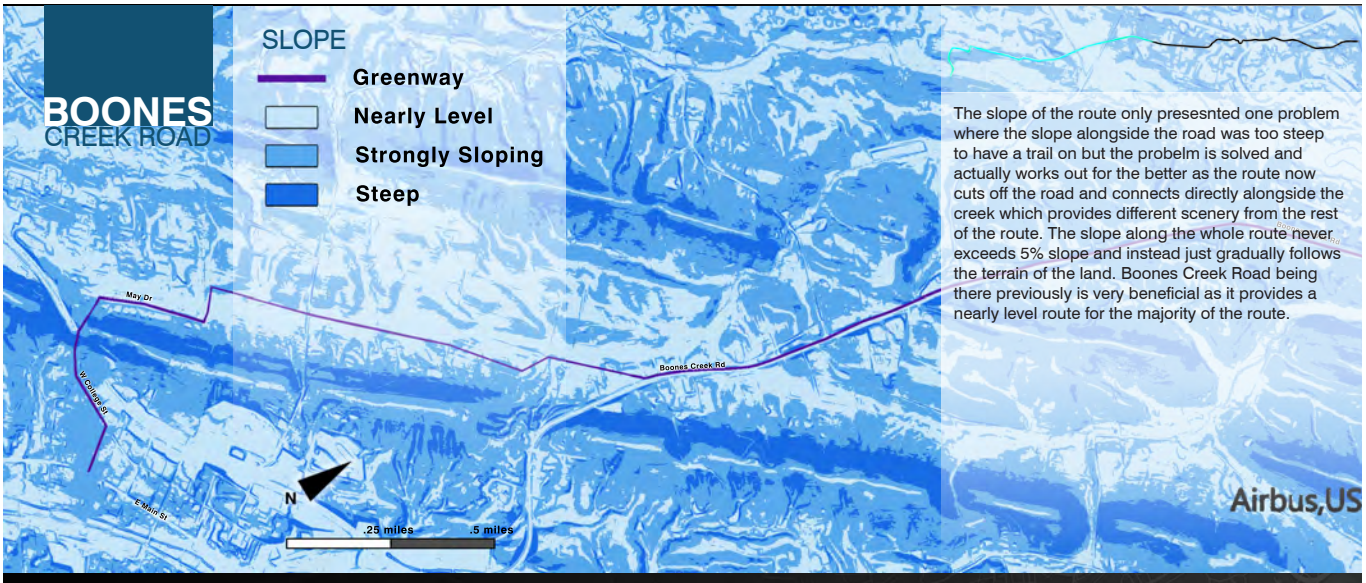


For the majority of the route it only travels through the road easements as it follows along Boones Creek Road. A few sections along the route closer to Jonesborough may require street lines to be repainted providing more space for the greenway to be installed. At one point in the route in the second half of it the route veers away from the road as the slope alongside of it is too steep to be built upon so the route then stretches towards Boones Creek and follows along the side of the creek for a section of the route before it jumps back up to the road when it reaches Johnson City Brewing providing a crosswalk for pedestrians to reach that potential hotspot of a destination. At the point where the route follows the creek is private land currently being used as pasture land for farm animals however the trail would be minimally invasive and attempts to hug the exterior of the property when at all possible.



Having floodplains along the route, though it may seem unfortunate, is actually good for the potential of a greenway because if flooding were to occur buildings may suffer damage or problems while a greenway would suffer minimal or no damage and most likely would not be in use during times where flooding occurs where the buildings might be out of use even if they are needed. The point where the route moves into floodplains are when it veers away from the street and connects to the creek.

62



The slope of the route only presesnted one problem where the slope alongside the road was too steep to have a trail on but the probelm is solved and actually works out for the better as the route now cuts off the road and connects directly alongside the creek which provides different scenery from the rest of the route. The slope along the whole route never exceeds 5% slope and instead just gradually follows the terrain of the land. Boones Creek Road being there previously is very beneficial as it provides a nearly level route for the majority of the route.

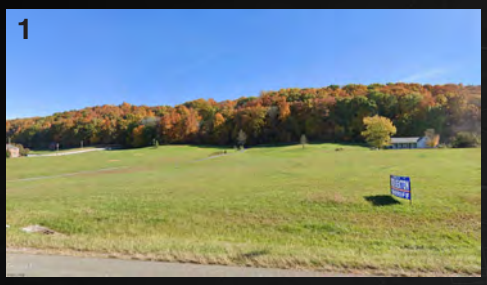


63

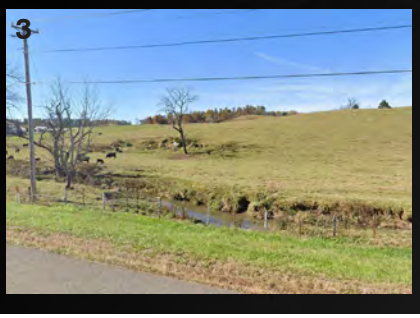


VIEWS & FOREST

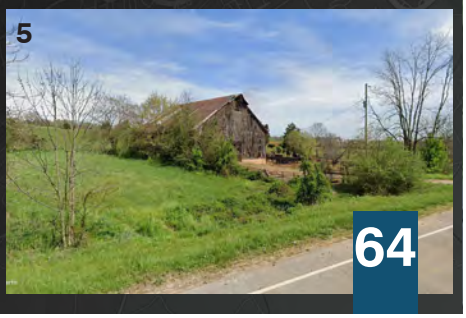
The main theme of the Northwest section of the East Tennessee Highlands is very rural. The route goes through the ridge and valley system of this area and mainly traces a valley giving the rolling hills view around it and the natural scenes along the route can be seen. The creek provides a different type of scene as well as some rustic points of interest as well. Throughout the route you are surrounded by the forests that follow the ridges of the mountians on either side of the road. A interesting railroad bridge passes over the route right after you pass Johnson City Brewing.







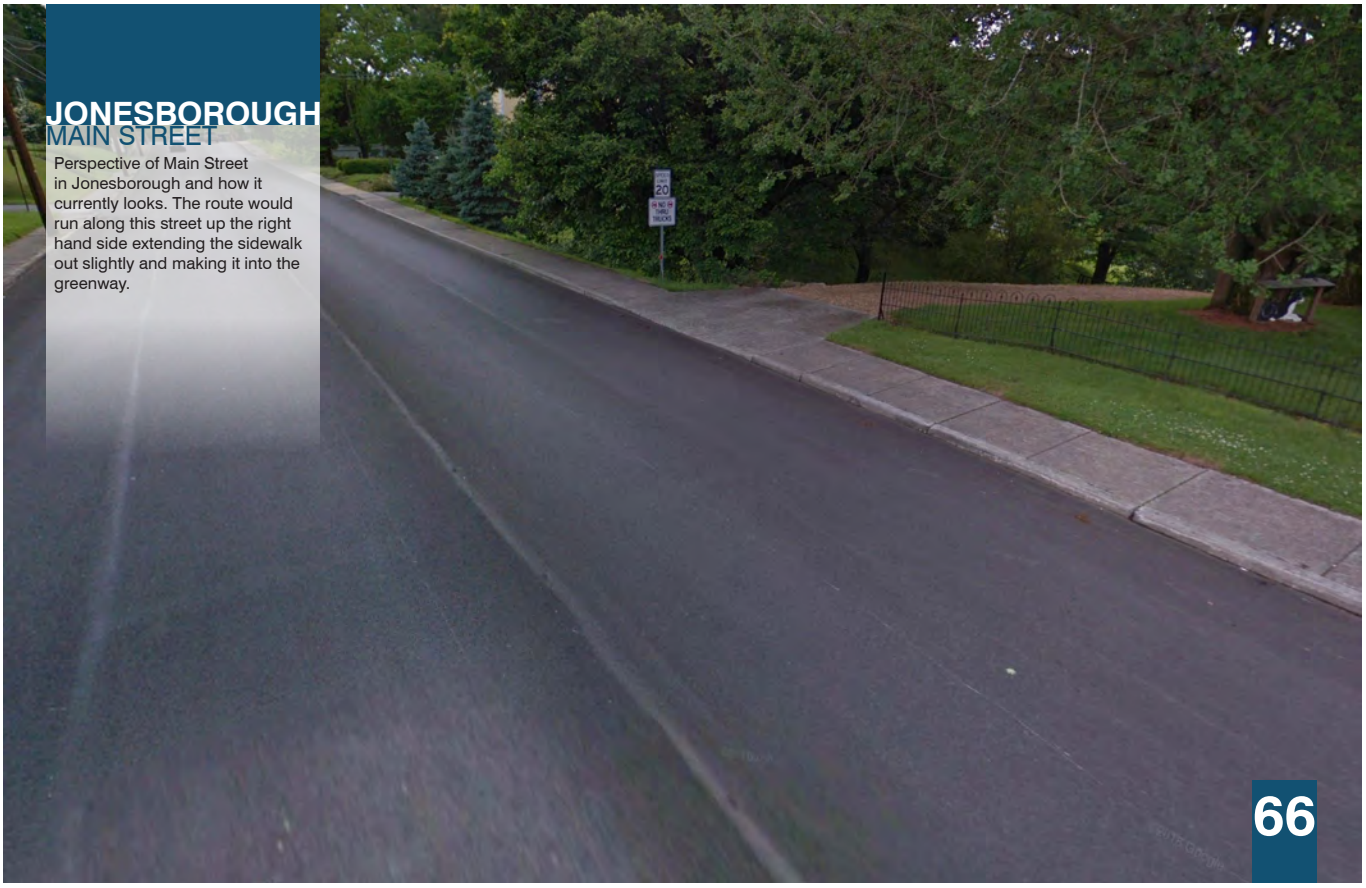






JONESBOROUGH MAINSTREET

Plan showing how the route connects into the exsisting route behind Jonesborough and follows along mainstreet. The brick patio at the bottom of the plan would act as a trail head area that would give a map and a desciption of the entire trail and directions to follow along it.



JONESBOROUGH
MAIN STREET

Perspective of Main Street in Jonesborough and how it currently looks. The route would run along this street up the right hand side extending the sidewalk out slightly and making it into the greenway.



JONESBOROUGH
MAINSTREET

This is how that route would look alongside the street. The lanes would be pushed over to provide the spacing but the road is plenty wide enough to accommodate for that change. A safety buffer would be put up between the route and the street with cutouts for driveways and roads and such.



Basic Imagery showing how the route would pass over connecting streets and drives, providing a crosswalk that is easily visible to all. The Street would get buffers along the road with street trees to provide shade and beautification to the area. The lower image is how the route veers away from the street and to the creek.



Before perspective showing how Boones Creek Road looks currently with plenty of space on either side of the road with potential to repaint lines.


BOONES
CREEK ROAD
Perspective showing how the majority of the route would look alongside Boones Creek Road with a buffer between the road and the greenway.
70


BOONES
CREEK ROAD
Section showing the spacing between the road and the greenway along Boones Creek Road.
12' Greenway
6' Buffer
32' Edge to Edge


71



RIDGES
ENTRANCE

The last plan is of the largest residential zone along the route which is the neighborhood and golf course The Ridges. The Ridges have sidewalks throughout their neighborhood but it ends right at the entrance so the idea is to seamlessly connect that sidewalk into the proposed route so residents and come and go and visitiors could also explore the neighborhood.

72



RIDGES
ENTRANCE

This is how the current entrance to The Ridges looks with the sidewalk just ending into the street being useless outside of the neighborhood.

73



RIDGES
ENTRANCE

Perspective showing the proposed connection between The Ridges and the East Tennessee Highland trail providing walkable connections to Johnson City and Jonesborough and all of their amenities.

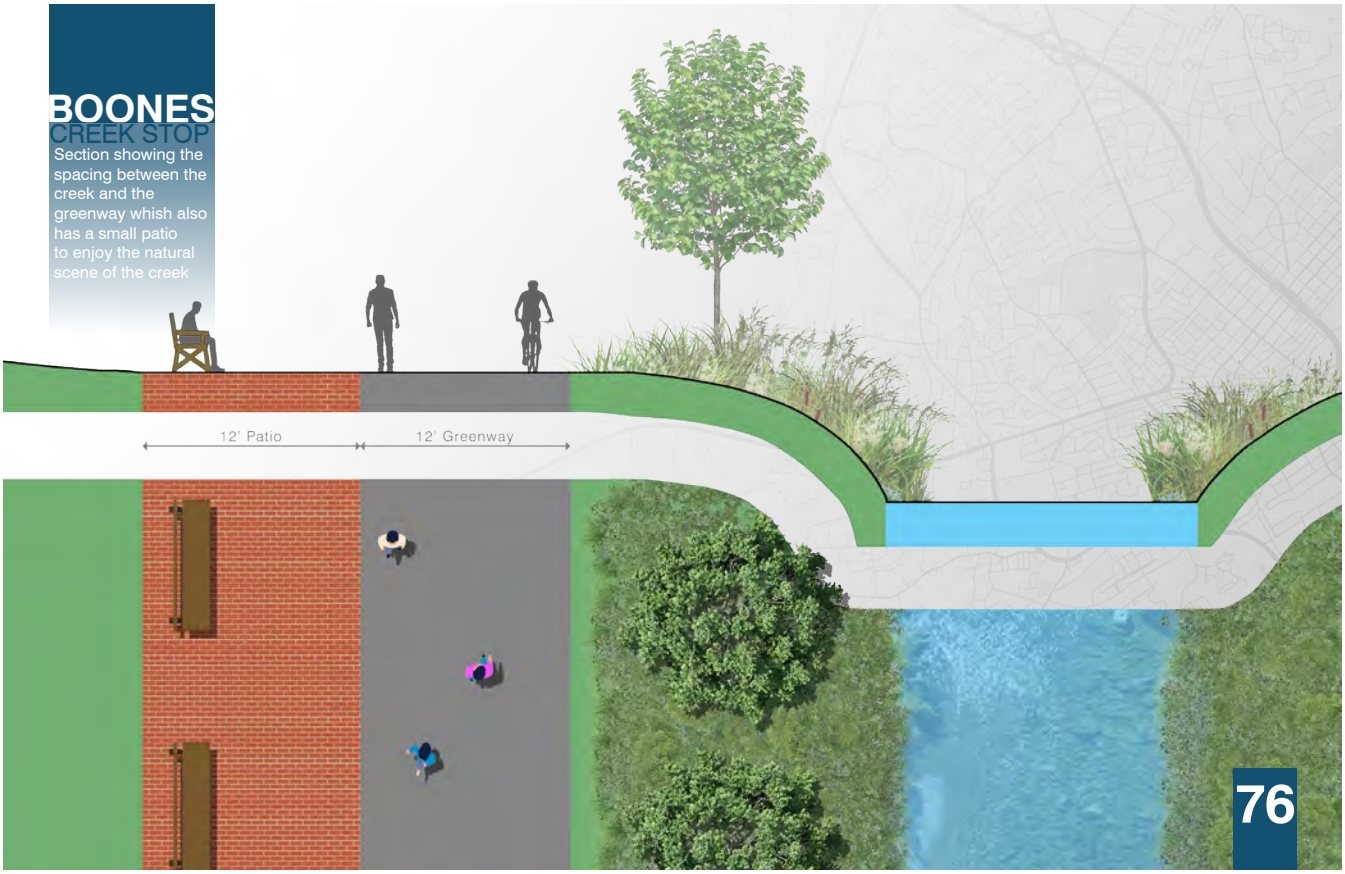


BOONES
CREEK ROAD

Plan showing how the route reconnects to Boones Creek Road and also provides a small patio area to enjoy the creek views and also a crosswalk that leads directly to Johnson City Brewing while maintaining its route along the road to North Johnson City.

BOONES
CREEK STOP

Section showing the spacing between the creek and the greenway whish also has a small patio to enjoy the natural scene of the creek



76

CROSSING
EXAMPLE

Here is an image of a crossing of a busy street on the Swamp Rabbit trail in Greenville S.C. The street here is much busier than Boones Creek Road and is a very successful crossing between Travelers Rest and downtown Greenville. Boones Creek Road could easily host this same type of crossing at required points.



77


BREWERY
CROSSING
This is the spot along Boones Creek Road where a crossing would make the most sense as Johnson City Brewing is straight across.
78


BREWERY
CROSSING
This is how that crossing might look with maybe lights substituting for the signs depending on what would work and look the best for the scenario.
79



SUNSET PARK
ANALYSIS

With the site being right behind a brewery the goal was to create a romantic esque site and what better way to involve that than with the sunset and watching it with a drink in hand. The sunpath analysis provided the location for the sunset throughout the year which in turn led to the locations for different viewing spots of the sunset.

80



SUNSET PARK
EXISTING CONTOURS

Based off the sunset analysis, I then looked at the exsisting topography to find spots where the sunset could be viewed from. The topography of the site is a hill from the brewery all the way up to the end of the site and it provides a natural ampitheatre view of the horizon where the sun sets.

81

SUNSET PARK
PROPOSED CONTOURS

Though the exsisting topography already had the desired hill to it, it needed to be turned towards the sunset. With that being said the site was regraded to provide extruded areas that more so face the sunset. Regrading the site provided 6 different potential areas to watch the sunset.



SUNSET PARK
DESIGN

Now that the site has been regraded the next task was to design around those sunset spots. Thinking with the brewery in mind, the design of the site was created to mimic the natural form of a hop, which is a crucial component to beer. Taking the natural form of the hop and overlaying it onto the site, different sections of planting with pathways inbetween are able to be drawn out.





SUNSET PARK
AT THE BREWERY

Concept Statement: The design for this site is based off of the path of the sun. Different nodes on the site provide natural allyways to view the sunset. The sites vegetation is based off the natural shape of a hop as the brewery provided a majority of the inspiration for this project.

LEGEND

1 **Johnson City Brewing**

2 **Sunset Bench Lower**

3 **Sunset Boulder**

4 **Native Planting Bench**

5 **Planting Buffer**

6 **Sunset Bench Upper**



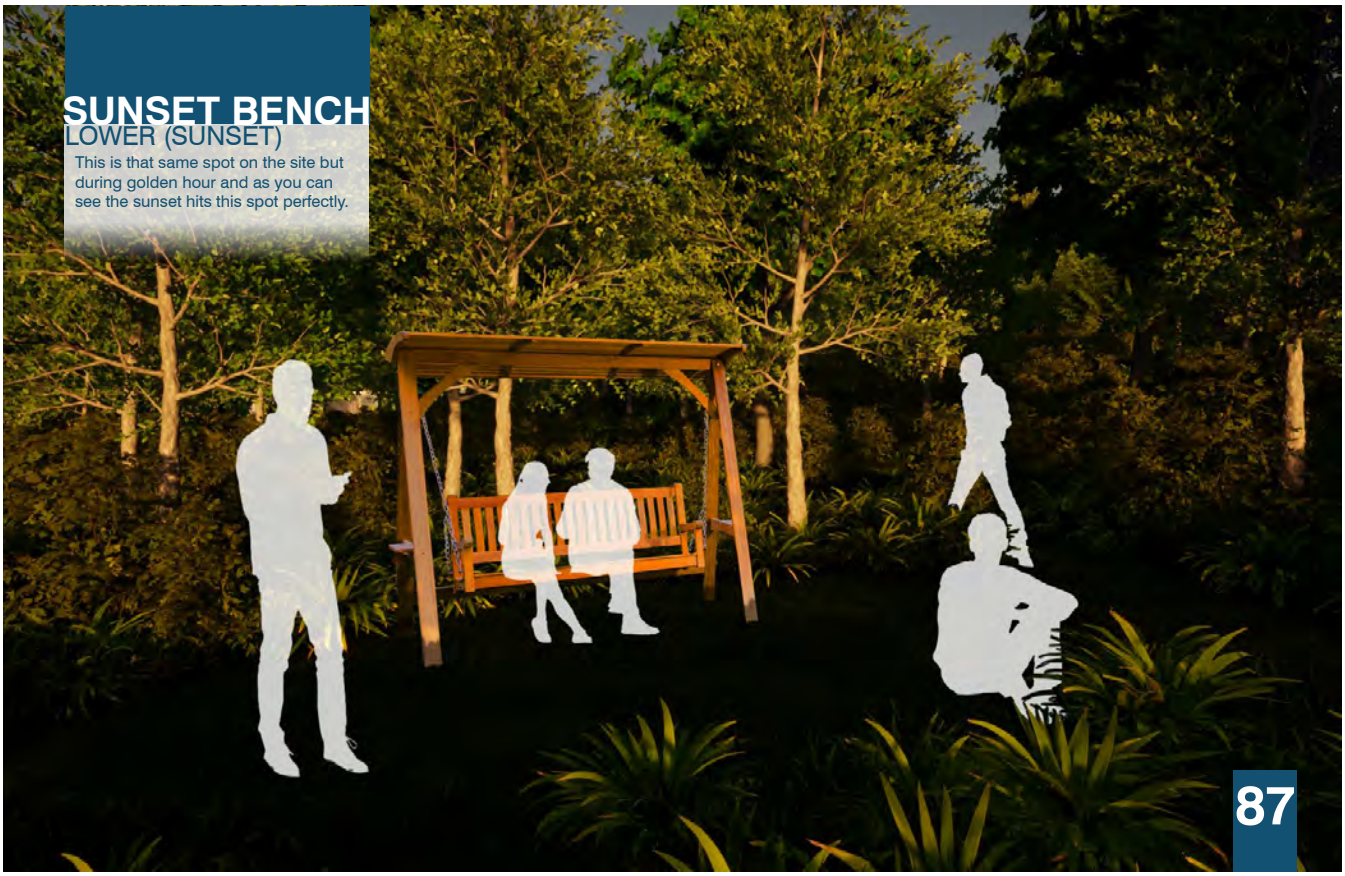
SUNSET PARK
SECTION

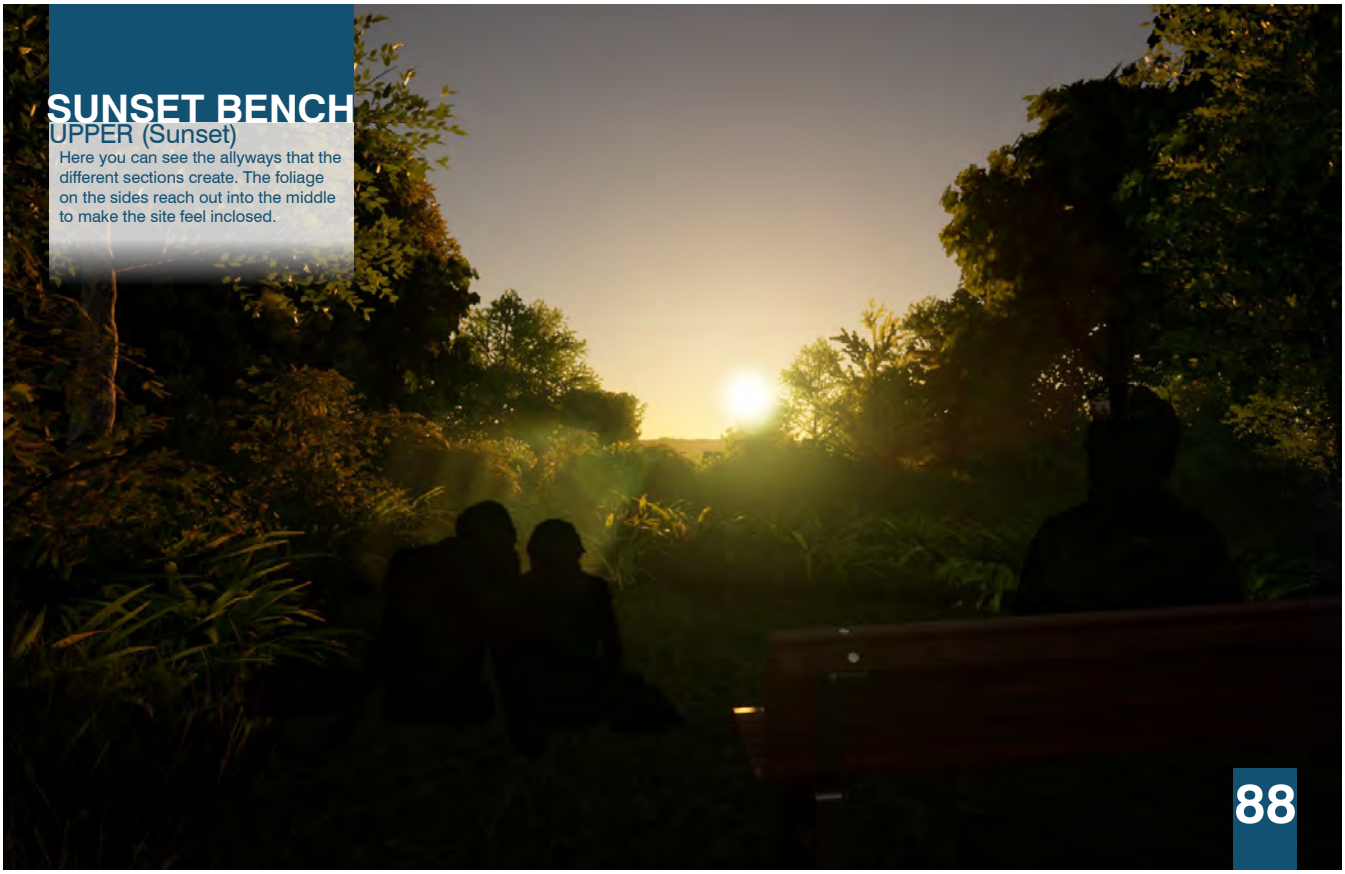


The way the site works is by having all of the different viewing site on different elevations. If two sites are on the same elevation then they are lined up on two seperate lines of the sunset so as to not be in each others line of sight. This creates different allyways throughout the sight that direct ones attention to the sunset in the distance.




SUNSET BENCH
LOWER (DAYTIME)
This is an image of the lowest viewing area on the site. The foliage around the sitting area creates a private like enclosure for small groups or couples watching the sunset together.
86


SUNSET BENCH
LOWER (SUNSET)
This is that same spot on the site but during golden hour and as you can see the sunset hits this spot perfectly.
87



SUNSET BENCH
UPPER (Sunset)

Here you can see the allyways that the different sections create. The foliage on the sides reach out into the middle to make the site feel inclosed.

CHARACTER
& MATERIALS

Example Bikerack



Example Trailhead



Example Trashcan



Trail Material Asphalt





Example Lightpost

Example Bench



The materials that this greenway would have are very rustic and natural. Things made out of wood that are not painted but are stained or have a natural finish like beeswax. Asphalt would be the material of greenway because of its versatility of diferent modes of use. Walkers, Bikers, and runner can all use asphalt without complaint.

PLANT & SIGNAGE
RECOMMENDATIONS





Simple signage like these two examples shown here would be the best suited for this greenway. Also keeping the colors natural with lots of greens and blues and browns would make this greenway feel the most complete. The trees that would act as great street trees are listed on the left. What makes them great for this project is their nativeness to Tennessee as well as their height not reaching much farther than 20 feet into the air.

STREET TREE RECOMMENDATIONS



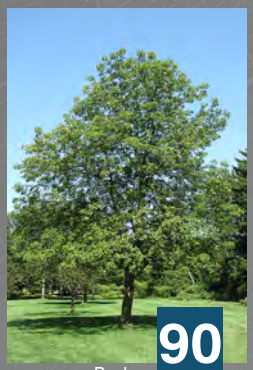
Striped Maple
Acer pennsylvanicum



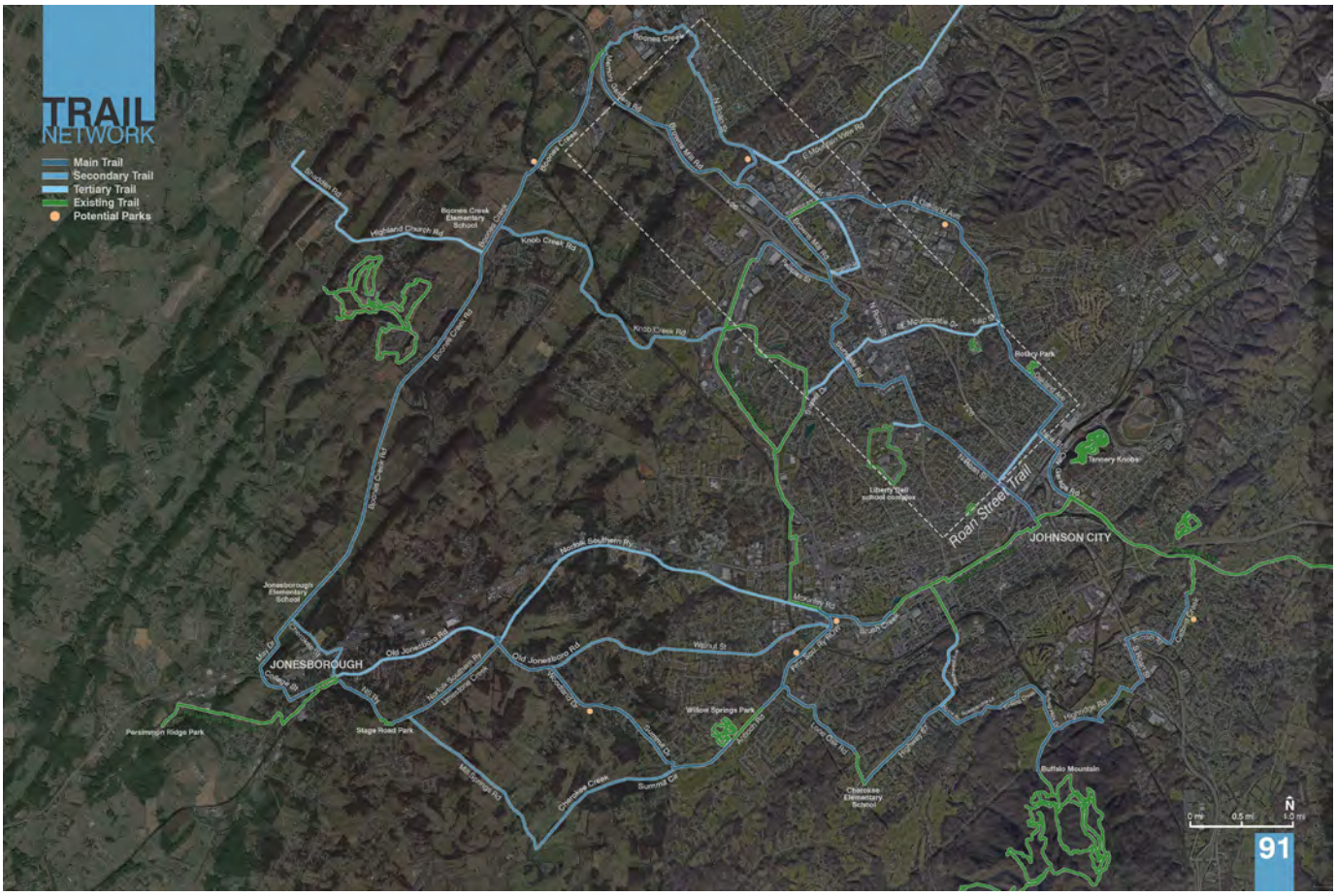
White Oak
Quercus alba

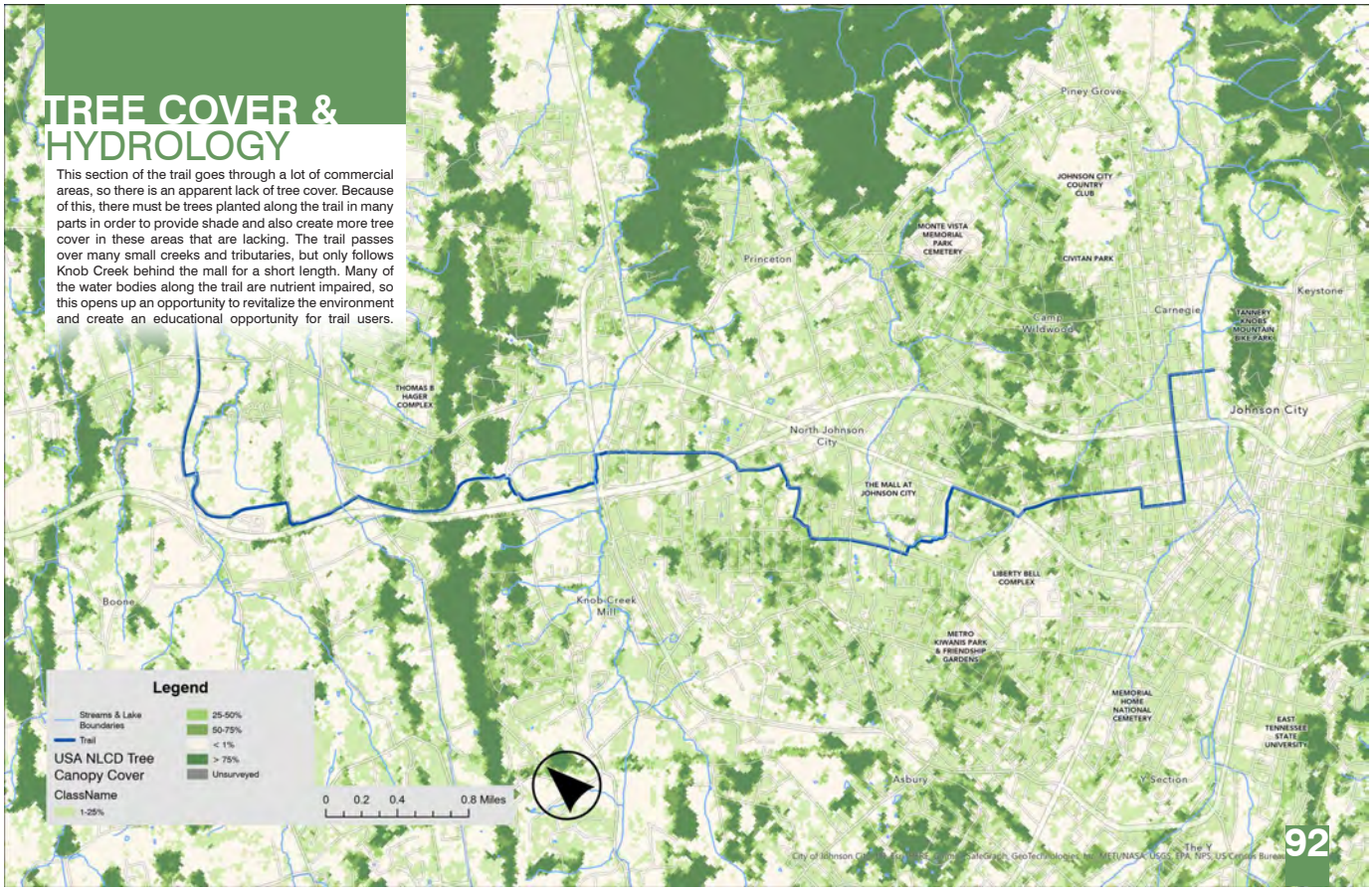


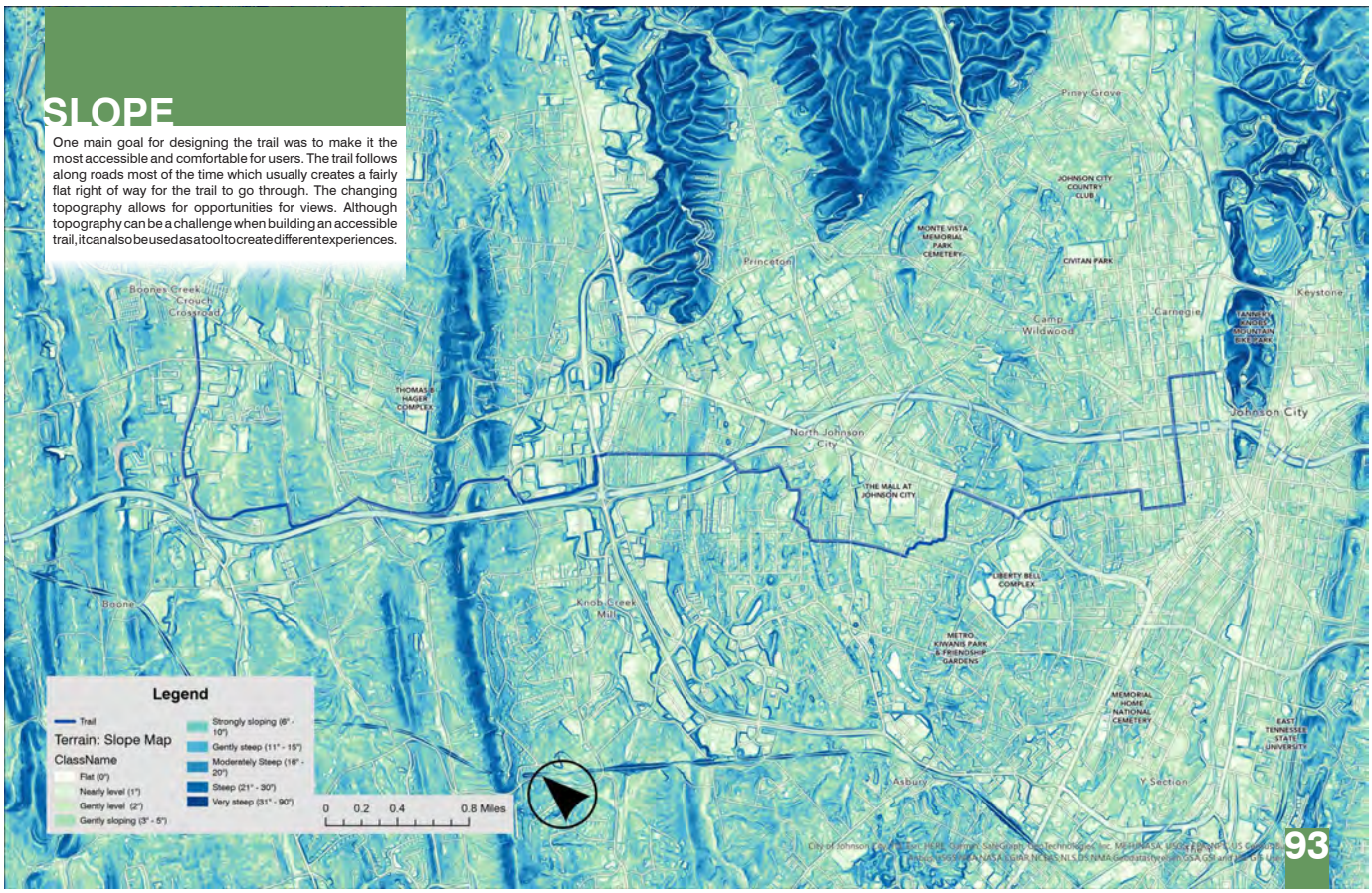
Hornbeam
Carpinus caroliniana



Buckeye
Aesculus spe

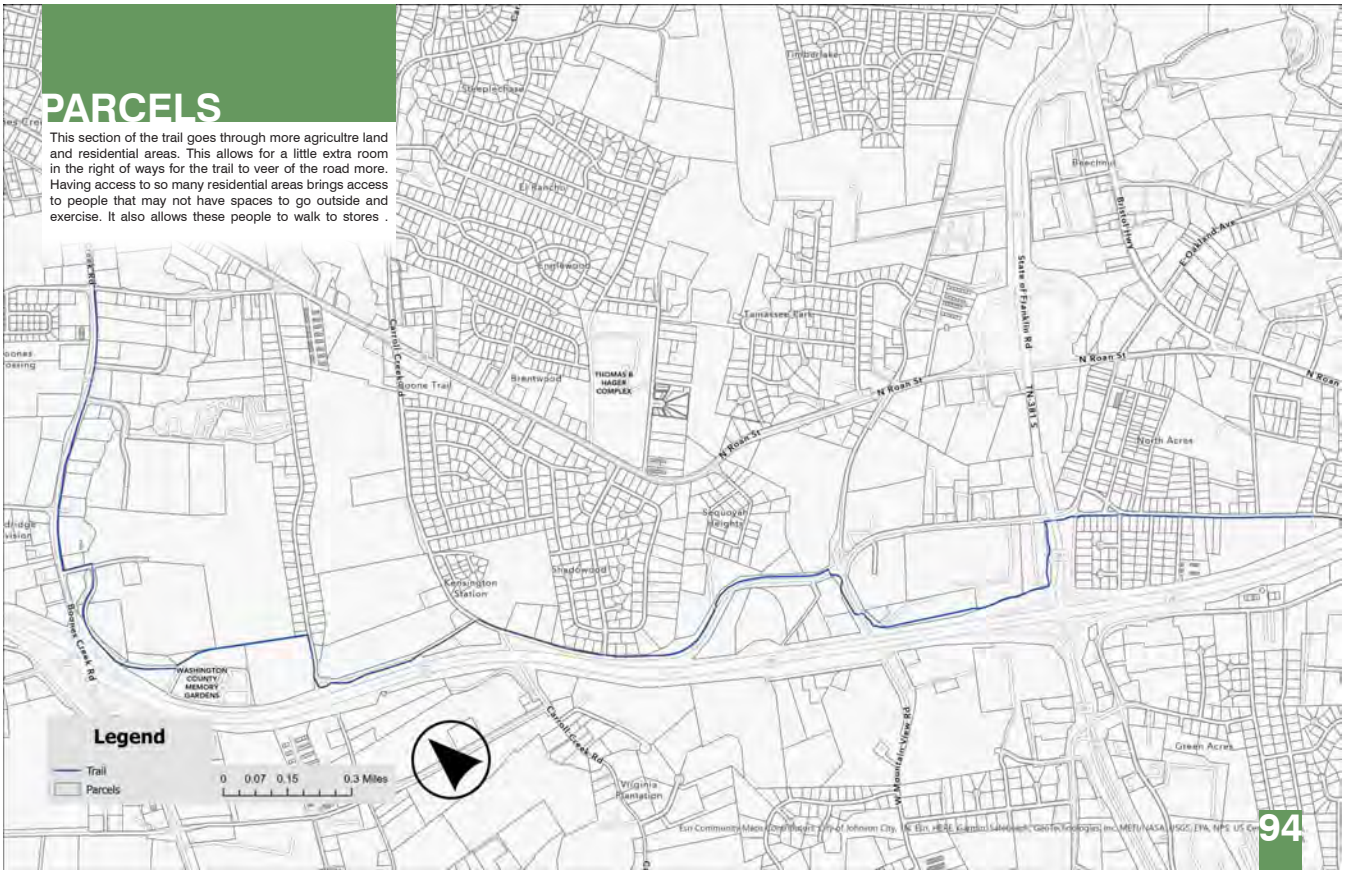



TREE COVER &
HYDROLOGY
This section of the trail goes through a lot of commercial areas, so there is an apparent lack of tree cover. Because of this, there must be trees planted along the trail in many parts in order to provide shade and also create more tree cover in these areas that are lacking. The trail passes over many small creeks and tributaries, but only follows Knob Creek behind the mall for a short length. Many of the water bodies along the trail are nutrient impaired, so this opens up an opportunity to revitalize the environment and create an educational opportunity for trail users.
Legend
Streams & Lake Boundaries
Trail
USA NLCD Tree Canopy Cover
ClassName
1-25%
25-50%
50-75%
< 1%
> 75%
Unsurveyed
0 0.2 0.4 0.8 Miles
Piney Grove
Princeton
Keystone
Carnegie
Camp Wildwood
Johnson City
North Johnson City
Boone
Knob Creek Mill
Asbury
Y Section
92


SLOPE
One main goal for designing the trail was to make it the most accessible and comfortable for users. The trail follows along roads most of the time which usually creates a fairly flat right of way for the trail to go through. The changing topography allows for opportunities for views. Although topography can be a challenge when building an accessible trail, it can also be used as a tool to create different experiences.
Legend
Trail
Terrain: Slope Map
ClassName
Flat (0°)
Nearly level (1°)
Gently level (2°)
Gently sloping (3° - 5°)
Strongly sloping (6° - 10°)
Gently steep (11° - 15°)
Moderately Steep (16° - 20°)
Steep (21° - 30°)
Very steep (31° - 90°)
0 0.2 0.4 0.8 Miles
Piney Grove
Princeton
Keystone
Carnegie
Camp Wildwood
Johnson City
North Johnson City
Boone
Knob Creek Mill
Asbury
Y Section
93

PARCELS

This section of the trail goes through more agricultre land and residential areas. This allows for a little extra room in the right of ways for the trail to veer of the road more. Having access to so many residential areas brings access to people that may not have spaces to go outside and exercise. It also allows these people to walk to stores .

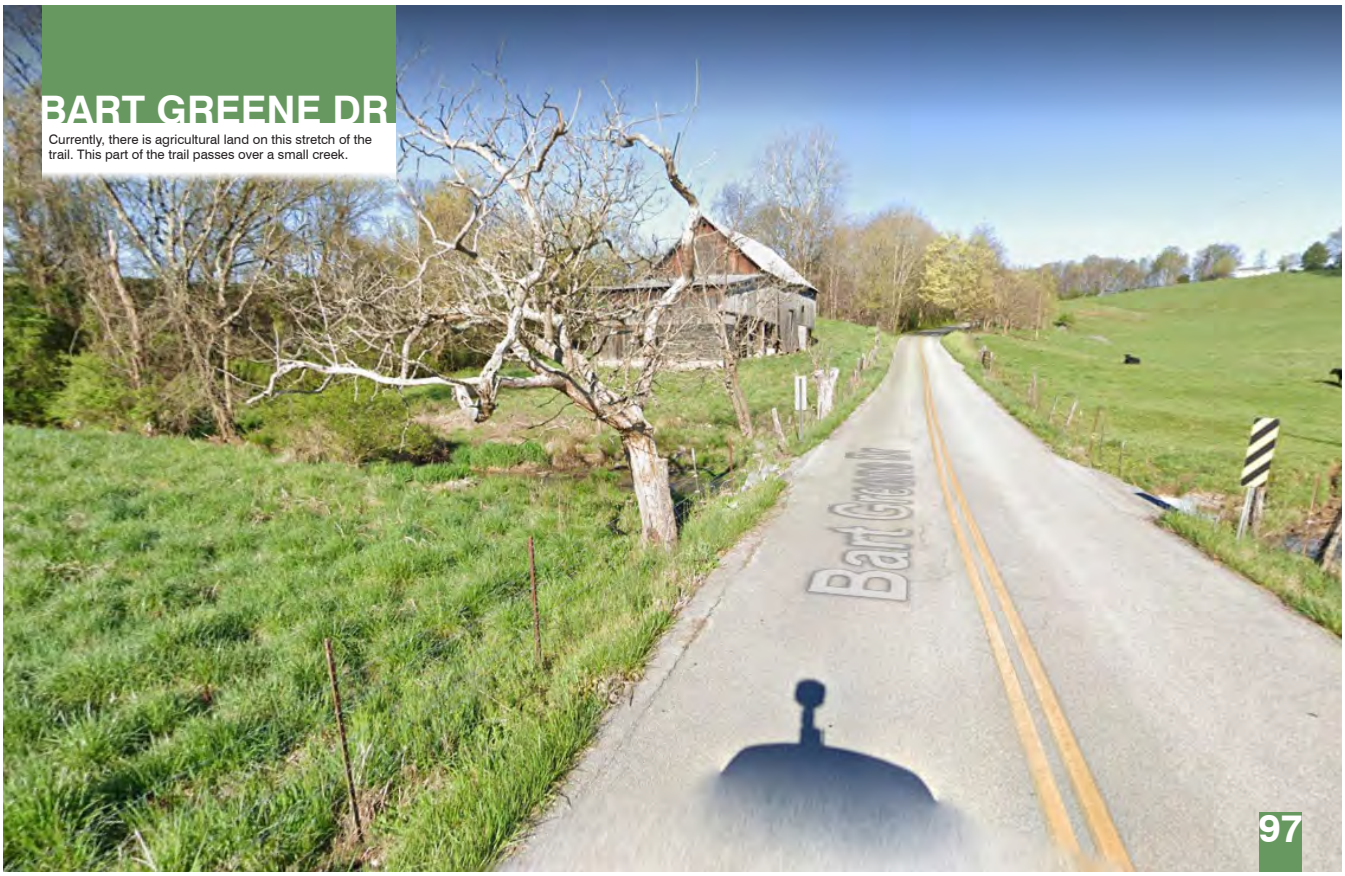


PARCELS

Parcels are important especially in this section of the trail because of the smaller right of ways through the commercial and residential areas. One tricky area was going through the mall area. Instead of following North Roan Street, the trail goes behind the mall to still provide access to the stores but have a better experience for the user.




BART GREENE DR
The plan shows a section that follows Bart Greene Drive and goes through the treeline along the cemetary. Because of some steeper topography, the trail curves to gain elevation slower to make it more accessible.
Bart Greene Dr
0'
100'
200'
N
96


BART GREENE DR
Currently, there is agricultural land on this stretch of the trail. This part of the trail passes over a small creek.
Bart Greene Dr
97

BART GREENE DR

This perspective shows the trail along Bart Greene Drive. The agriculatural land allows for cool views of the landscape and cattle.



THE MALL

This plan shows how the trail goes behind the mall to make the trail more comfortable and safer for users. An existing parking lot will provide parking for the trail. From North Roan Street, the trail goes through the utility right of way, behind the mall, and follows along Sundale Drive. Connecting the residential areas with the commercial areas will allow access to stores without having to drive.




BROWNS MILL RD
Starting to go through more commercial areas, this section of the trail will be less wide than those in more rural settings.
100


BROWNS MILL RD
Going under I26, the trail has to go down to eight feet wide instead of ten to accomadate the smaller space. Native plantings and murals from local artists provide a nice interest for users.
101

BROWNS MILL RD

This is another special situation in which topography provides a challenge but ended up becoming an opportunity to create an educational area. The trail climbs the topography steadily rather than straight up to make it accessible and user friendly.



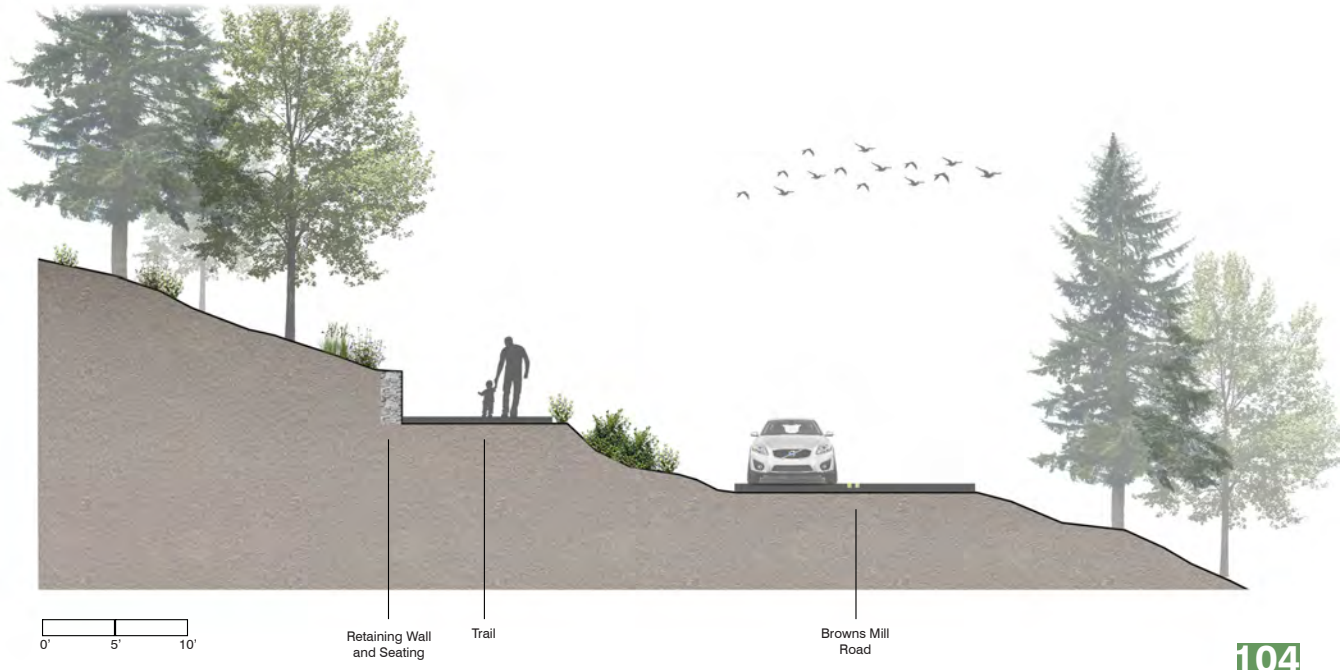
BROWNS MILL RD

This section cuts through the curving trails that are on plan four. This shows how rather than going straight up the steep hill, the trails gradually raise in elevation over a longer distance.



BROWNS MILL RD

Along Browns Mill Road, there's steep topography on either side, so building a retaining wall in the hillside was the best choice.



104

BROWNS MILL RD

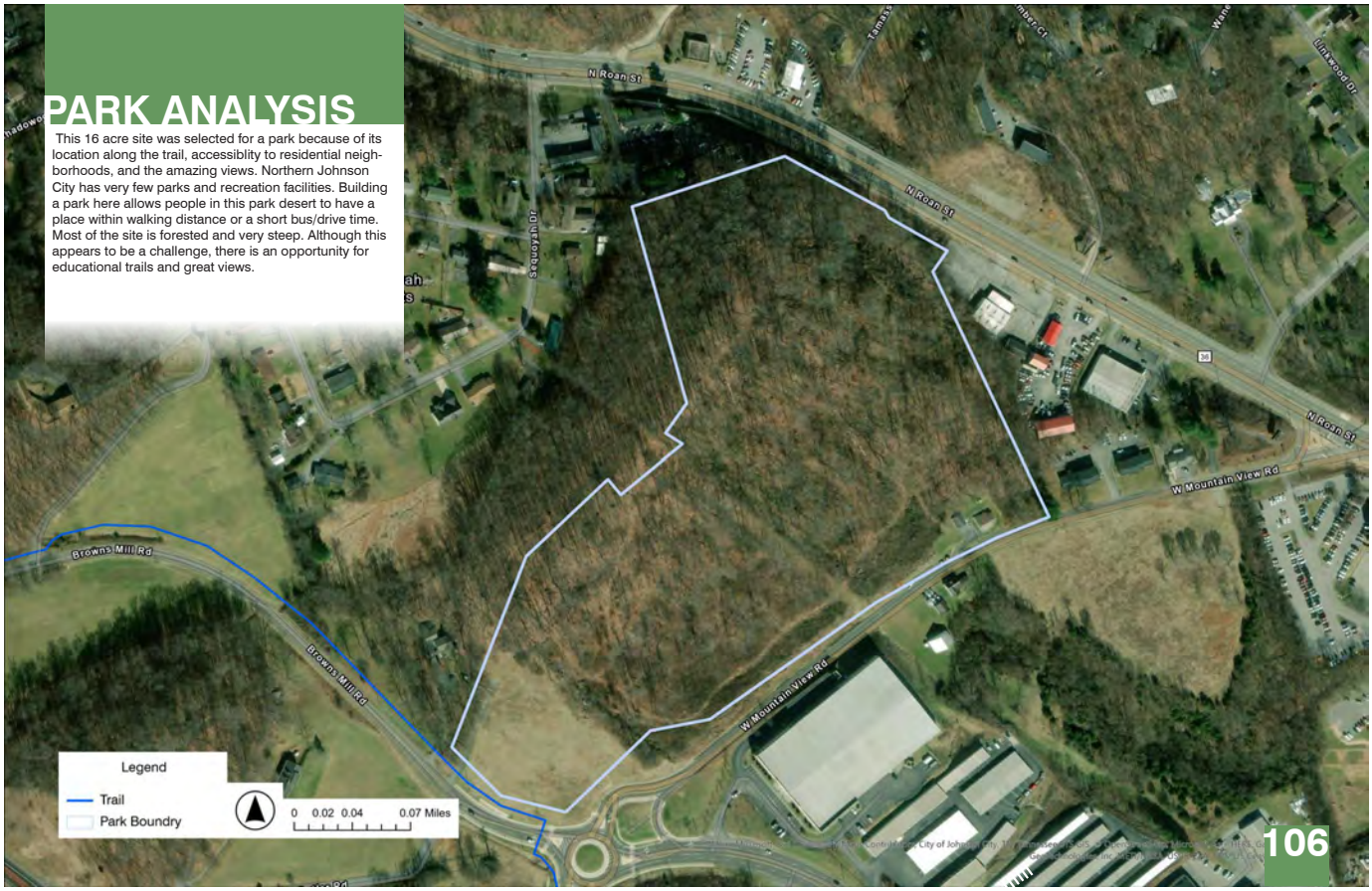
Going again behind commercial areas, the trail crosses over to West Mountain View Road where it crosses again to Browns Mill Road. This area has a wider right of way, so there is more room for the trail to veer away from the road. Green Gables Park will also be in the lot where the trail crosses over to Browns Mill Road.



105

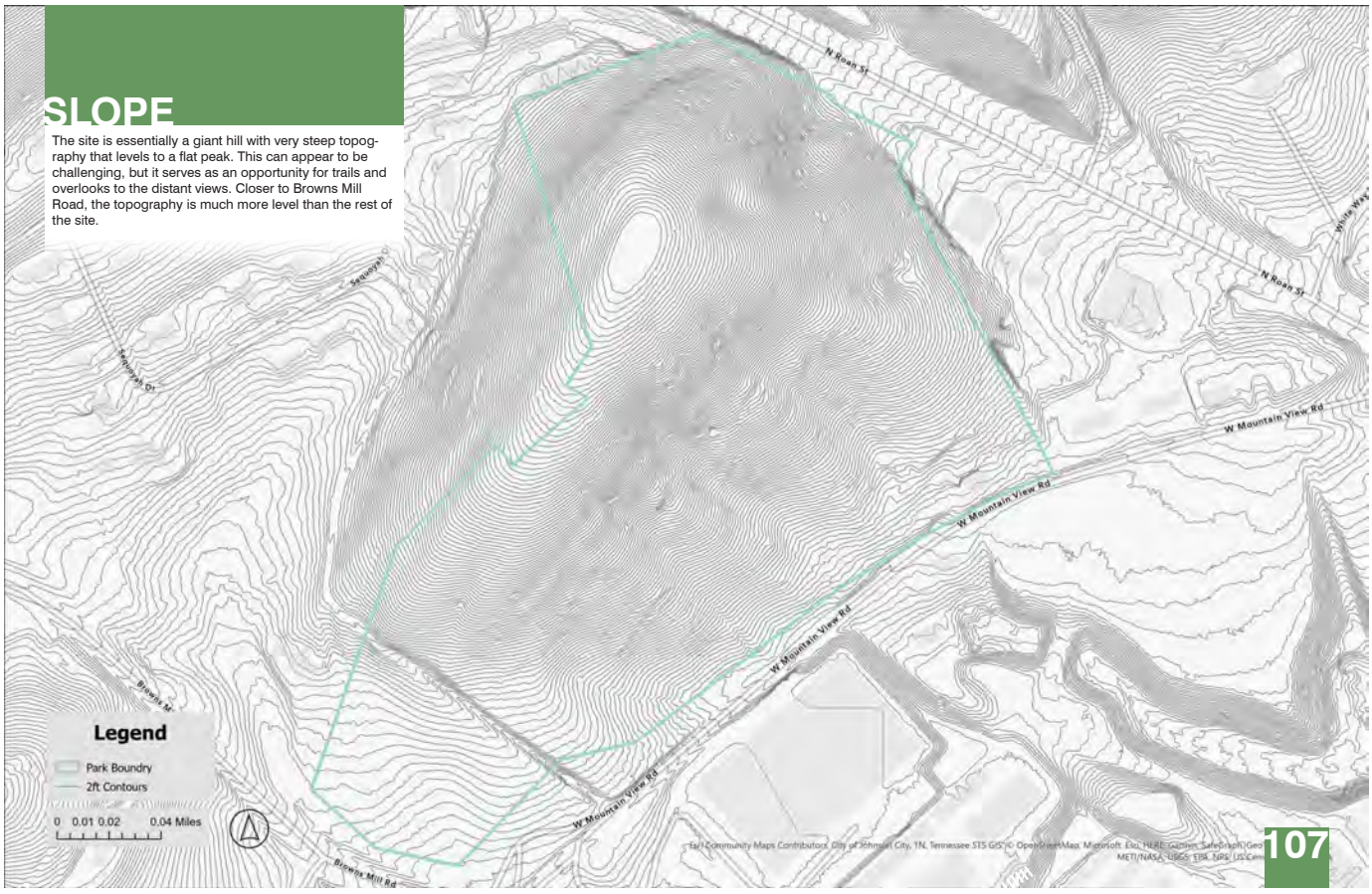
PARK ANALYSIS

This 16 acre site was selected for a park because of its location along the trail, accessiblity to residential neighborhoods, and the amazing views. Northern Johnson City has very few parks and recreation facilities. Building a park here allows people in this park desert to have a place within walking distance or a short bus/drive time. Most of the site is forested and very steep. Although this appears to be a challenge, there is an opportunity for educational trails and great views.



SLOPE

The site is essentially a giant hill with very steep topography that levels to a flat peak. This can appear to be challenging, but it serves as an opportunity for trails and overlooks to the distant views. Closer to Browns Mill Road, the topography is much more level than the rest of the site.



VIEWS

Thanks to the topography of the site, there are many places where there are great views. There is visibility of the mountains from many places on the site, and from other places downtown Johnson City is visible.







GREEN GABLES PARK PLAN

Named after the children's book, *Anne of Greene Gables*, this park serves to inspire imagination for people of all ages. It also plays off the mountains' "green gables" and inviting nature back into north Johnson City. The flatter topography towards the southern end of the site is where the playground, basketball court, skatepark, restrooms, and picnic shelters sit. Three trails, including 0.75 miles of mountain bike trails diverge at one picnic shelter and all lead up to a communcal greenspace overlooking downtown Johnson City and the mountains.

Legend

1 - Natural Playground, Skate Park, and Basketball Court.
2 - Restrooms and Covered Picnic Shelters
3 - Picnic Decks
4 - Accessible Trail
5 - Mountain Bike Parking
6 - Mountain Bike Trail
7 - Educational Trail
8 - Restrooms, Overlook Decks, Firepits

Bike Racks

Educational Signage

Park Signage







OVERLOOK

At the highest elevation of the park sits a grassy area with firepits and modern planters. Over look decks provide a scenic overlook that has views of the mountains and downtown Johnson City. This area engages adults and children as they all enjoy nature and their city.



PLAYGROUND

Natural playgrounds provide kids an experience where they can be imaginative and playful in a more natural setting. A basketball court and skate park in the background are geared more towards teens and young adults.

EDUCATIONAL TRAIL





This section shows the steep slope of the site and relation of how the trails are related. This section is of the educational trail and showcases a birdhouse grove. People can see birds as they go in and out the houses.

0' 5' 10'

112

GREEN GABLES PARK

Acer rubrum
Red Maple

Quercus phellos
Willow Oak

TREES



Gray Granite



Cushed Gravel



Wood



Rubber Playground Flooring

MATERIALS



Schizachyrium scoparium
Little Bluestem



Lantana 'Ham and Eggs'
Lantana 'Ham and Eggs'



Hydrangea serrata
Mountain Hydrangea



Ilex vomitoria
Yaupon Holly



Panicum virgatum 'Shenandoah'
Switchgrass 'Shenendoah



Forsythia 'Golden Peep'
Forsythia Golden Peep

SHRUBS & PERRENIALS

113

AFRICAN AMERICAN MEMORIAL

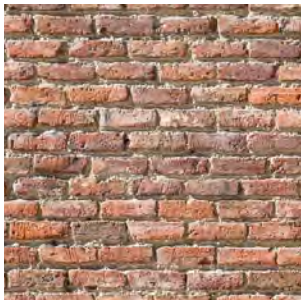
Harper Wilson - Designing a Narrative - LARC 3510

This design is inspired by "Call: The Twelve-Year-Old Felon" from *Call My Name, Clemson*. The user enters the space to either go to or leave class, but the focal point of the courtyard is the circular indention in the corner of the landscape. The surrounding landscape has large deciduous trees that are transparent, but the memorial that draws you in through the descended grade is hidden with dense evergreens, like the hidden history of slave labor used on Clemson's campus. When you enter the space, human-like figures emerging from the ground are revealed. These figures are faceless and abstract, but each is individual and unique. They are representative of the people who built Clemson because we may not know the details of who they were, but they were individuals whose stories are worth telling. The retaining wall around the space is sitting height, allowing a quiet space for rest and reflection.



MATERIALS PALETTE

Hardscape



Brick



Stamped Concrete



Black Granite

Plants



'Carolina Sapphire' Cypress



'Anny's Winter Orange' Dogwood



Darlington Oak



California Incense Cedar



Arborvitae



Wild Ginger

MASTERPLAN



PERSPECTIVE





BLACK RIVER WATER TRAIL AND PARK NETWORK

HANNAH FINLEY, BRYCE HARRIS, PEYTON STOKES

December 10, 2021

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REGIONAL ANALYSIS AND MASTER PLAN

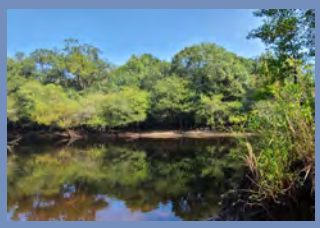
Bringing recreation and ecotourism to the community in historic Williamsburg and Georgetown counties.

PROJECT INTRODUCTION



The Black River is located between Georgetown and Williamsburg counties near coastal South Carolina. The proposed 70 mile water trail and park network corridor will protect this land and its rare ecosystem for current and future visitors, while creating more opportunities for ecotourism and recreation along the river. This project works to create public access along the scenic Black River, close the gap between SC state parks, and restore native forests, as well as other opportunities. Stakeholders include South Carolina State Parks, the Open Space Institute, The Nature Conservancy, Ducks Unlimited, the Butler Conservation Fund's Black River Cypress Preserve, the National Park Service, EarthDesign, Winyah Rivers Alliance, and South Carolina Conservation Bank.







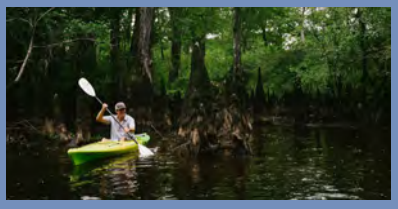
CASE STUDIES





TENNESSEE RIVER BLUEWAY
Chattanooga, TN

- 48 miles
- Canoeing and kayaking
- Day or overnight trips (5 camping sites)
- Trails from the water to the town
- Traveled by large barges or smaller water-craft
- For beginners & advanced paddlers
- Nice weather attracts all the tourists



TAKEAWAYS

- Restore and protect the environment
- Repurpose and utilize former transportation corridors
- Encourage outdoor recreation
- Economic opportunity
- Preserve the integrity of historical sites





SWAMP RABBIT TRAIL
Greenville, SC

- Boosted local economy by $6.7 million
- Connects Greenville County with schools, parks, businesses
- Art along the trail
- Annual 5k and half marathon
- Runs along the Reedy River

UNDERSTANDING THE BLACK RIVER

The Black River is a 151 mile long river through forests and swamps, and includes habitats for ancient cypress and tupelo trees, as well as longleaf pine. It is home to many rare and endangered species like red-coated woodpeckers, flatwoods salamanders, and Rafinesque's big-eared bat. The Black River has a rich Native American history, as well as being a former area of industry. Winyah, Santee, Pedee, Waccamaw, Sewee, and Wenee people used to inhabit the land. Areas near Georgetown were previously used as rice plantations and later for the timber industry.



PREVIOUS USES

- Source of drinking water, food, materials
- Route for travel and commerce
- Georgetown land was used as rice plantations
- Logged for the timber industry



CURRENT USES

- Place of refuge, rest, recreation
- Baptisms
- Kayaking
- Bank fishing
- Birdwatching



FUTURE USES

- Sustainably develop and preserve the land
- Protect the environment
- Lessen impacts of flooding
- Ecotourism
- Recreation and relaxation

BLACK RIVER CHARACTER







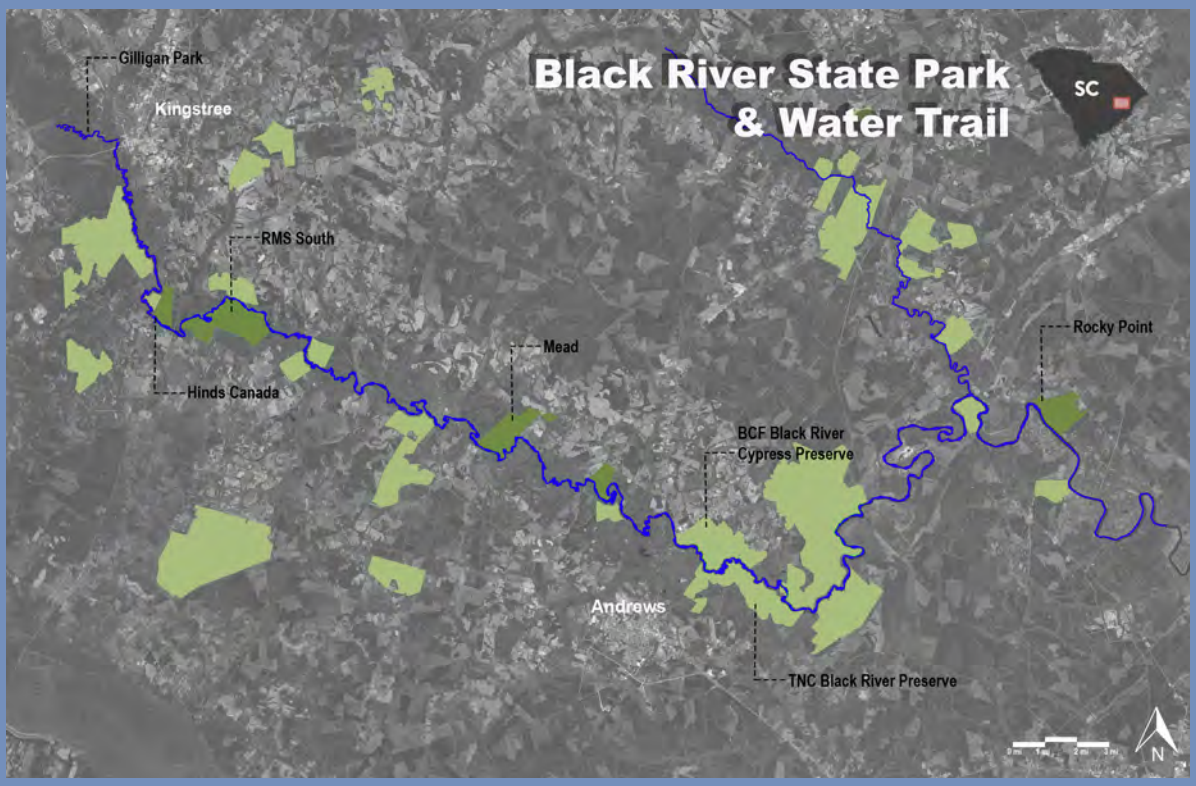







COMMUNITY CULTURE ECOLOGY SCENERY

7



This map indicates current tracts of land along the Black River. It is important to note that the light green areas are currently privately owned, while the dark green tracts are publicly owned.

8

EXISTING RECREATION AND RESOURCES

When considering the design of the area, the large-scale connections between the sites are vital to the Black River Trail's success. Distinctions should be made between more primitive versus more high use tracts along the river, with more amenities incorporated into high use tracts. Designations for shorter versus longer visits should be made to accommodate all visitors, whether they are coming for a half day float or for a multiple day trip all the way down the river (and anything in between).



GILLAND MEMORIAL PARK
- Access to a boating ramp
- Picnic shelter with tables and grills
- Playground
- Paved parking lot
- Short walking trail



KINGSTREE BLACK RIVER LANDING
- Waterfront park
- Kayak launch
- Walkable path to downtown Kingstree



BLACK RIVER CYPRESS PRESERVE
- Currently private
- Walking trail
- Kayaking
- Canoeing
- Paddling
- Birdwatching
- Photography viewpoints
- Restrooms



ROCKY POINT
- Boat ramp access
- Kayak launch
- Swimming dock
- Picnic area
- Hiking trail
- Cemetery

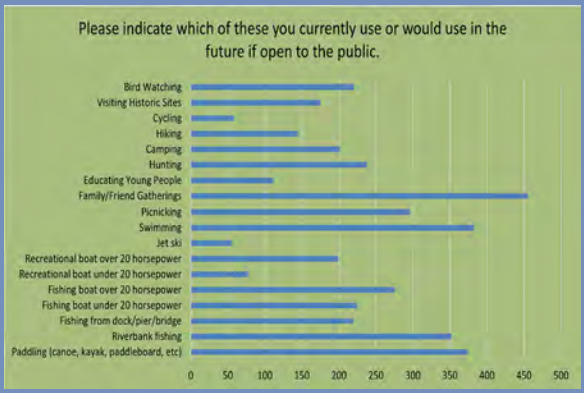
SURVEY DATA

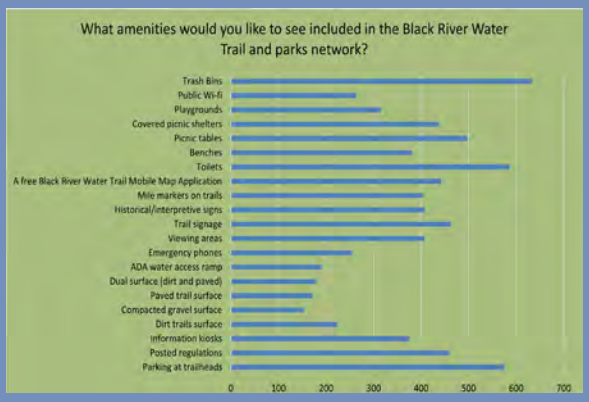


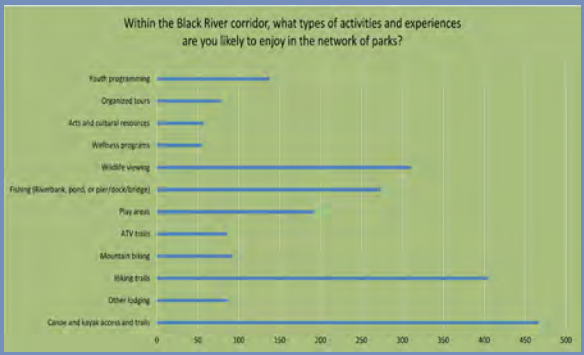
As a local resident or property owner, what does the Black River (both the water and the surrounding lands and communities) mean to you?

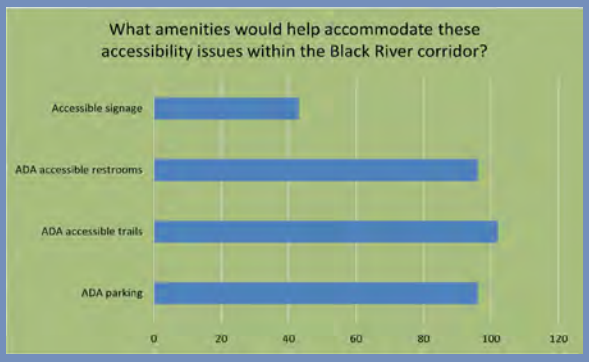
Community members who took the survey from the Story Map revealed that they would like amenities at the site such as trash cans, toilets, parking at trail heads, picnic tables, posted regulations, mile markers, and viewing points. Many have concerns about the quiet along the river being disturbed, habitat protection, rule enforcement, and litter. However, survey participants were excited about access for all, economic opportunities, and a design to keep the area clean and protect wildlife. The river holds memories and sentimental value to many people as they have spent time there over the years. Many have been baptized there, or have fond memories of swimming and fishing there as a child. This is why accessibility is a concern, as people would like the park to be for multigenerational use.

SURVEY DATA



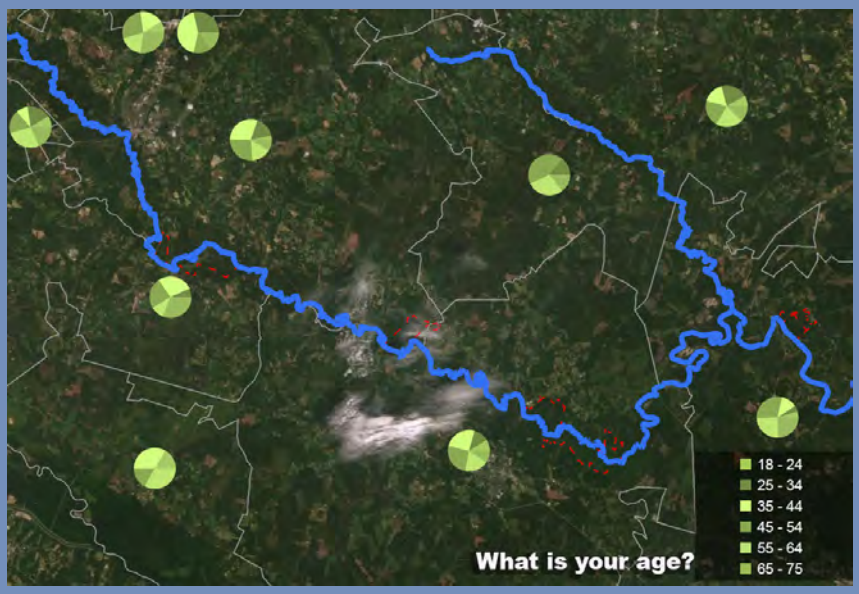






DEMOGRAPHICS BY ZIP CODE

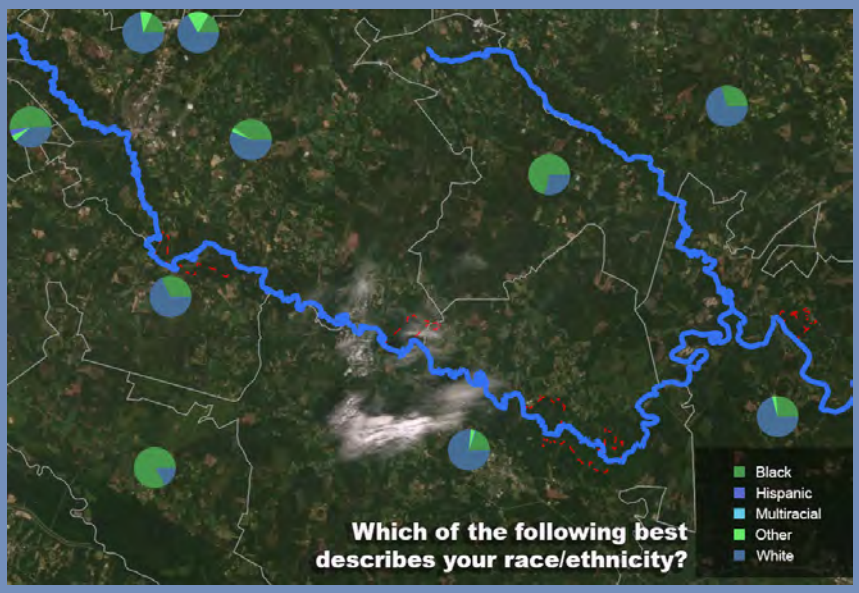
The survey was open from April to September 2021. There were a total of 1,485 respondants. Of those, we have graphed results to survey questions from top 10 responding zip codes.



- Multigenerational use
- Educational opportunity
- Memories and sentimental value

DEMOGRAPHICS BY ZIP CODE

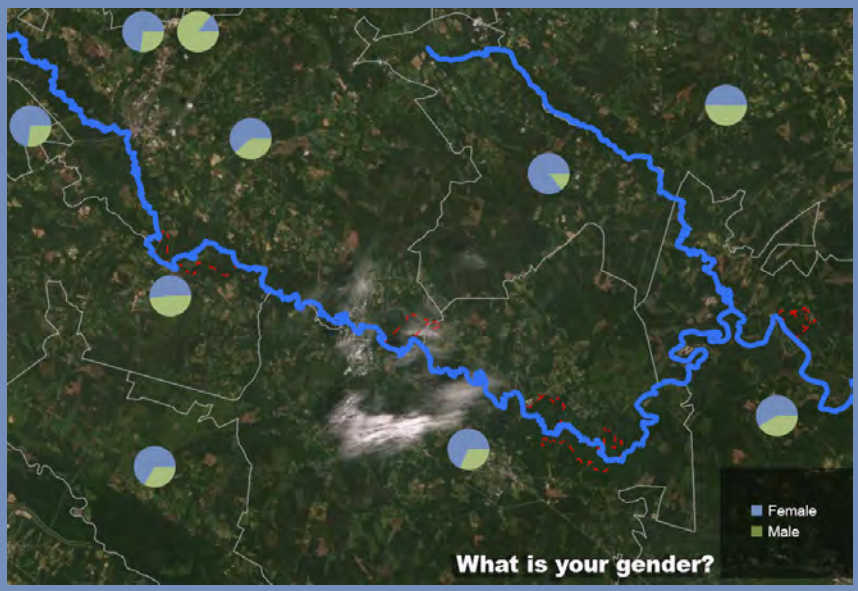
The survey was open from April to September 2021. There were a total of 1,485 respondants. Of those, we have graphed results to survey questions from top 10 responding zip codes.



- There's a large black population, and yet most do not own land along the river.
- "People who don't know somebody, or have some kind of right of privilege of going there, it just limits (access) too much… That's why the project is so important." - Georgetown native (Post and Courier)

DEMOGRAPHICS BY ZIP CODE

The survey was open from April to September 2021. There were a total of 1,485 respondants. Of those, we have graphed results to survey questions from top 10 responding zip codes.



- More female responses closer to the river
- More male responses further from the river

DEMOGRAPHICS BY ZIP CODE

The survey was open from April to September 2021. There were a total of 1,485 respondants. Of those, we have graphed results to survey questions from top 10 responding zip codes.



- County residents and visitors need public access points.
- Property owners have an interest in the ecosystem's health, potential noise pollution, and appearances.

DEMOGRAPHICS BY ZIP CODE

The survey was open from April to September 2021. There were a total of 1,485 respondants. Of those, we have graphed results to survey questions from top 10 responding zip codes.



- Georgetown County's median household income is $48,456.
- Williamsburg Coutny's median household income is $32,485.
- Despite wage difference, most people are not opposed to paying a fee because they understand the value of the Black River.



ACTIVE RECREATION AREAS
- Onsite amenities
- Shorter trips
- Soil profiles that are able to be built on
- Accessible



PASSIVE RECREATION AREAS
- More primitive landscapes
- Stops along the river for multiple-day trips
- Signage

ECOTOURISM ALONG THE BLACK RIVER

Growth around the river has potential to impact local restaurants, lodging, and other businesses, as well as create a market for outdoor recreation outfitters. For example, shuttle servicesto take visitors back to their car after floating on the river. The development of the Black River could also create an opportunity for children to have field trips or summer camp activities in the area. The younger generation could learn about the value of ecology, as well as the benefits of outdoor recreation. All in all, the blueway could be a connection from the beauty and outdoor recreation provided by the Black River to the communities of Andrews, Kingstree, and Georgetown. The connection could spark a rebranding of Kingstree into an ecotourism area with rich history. This can only be done by providing access and recreation opportunities to the river while protecting the culture, habitats, and scenic value of the Black River.

ECOLOGY

The Black River winds, creating several oxbows and swamp areas. These sites along the river create a habitat for many species, and create a sensitive environment. Visitors will be coming to view the precious species of flora and fauna of the area, but the influx of people should not have a negative effect on the environment. Because of this, it is essential that designers take into consideration how to sustainably develop and still preserve the natural environment. Within the last year, the Black River Scenic River Advisory Council and SCDNR created the Black River Scenic Management Plan, which guides the council to create goals for the river's regulations, as well as expresses concerns for historical and cultural resources, land utilization, wildlife, and water quality.

Upland pine forests can be restored from timber industry logging to a more native longleaf pine forest. Eventually, there is hope of natural regeneration of bald cypress and tupelo gum trees. Current species along the river area include River Birch, Sabal Minor, Witch Hazel, Roughleaf Dogwood, and Bloodroot. Some of the rare plant species currently in the Black River ecosystem include American chaffseed, Quillwort, and Silky Camellia. Animal habitats are also vital to the river ecosystem, especially with many rare species. Striped bass and American Shad are two of the many fish species that inhabit the river. Rare birds such as the Swallow-tailed Kite, Swainson's Warbler, and Wood Stork have made their home around the Black River, and they spark interest for birdwatchers.

BLACK RIVER BLUEWAY PLANT COMMUNITIES



Andropogon glomeratus



Ilex vomitoria



Cercis canadensis



Pinus palustris



Scirpus cyperinus



Hamamelis virginiana



Sabal minor



Quercus bicolor



Eutrochium maculatum

PERENNIALS



Myrica cerifera

SHRUBS



Nyssa sylvatica

TREES



Taxodium distichum

TREES

19

BLACK RIVER BLUEWAY RARE SPECIES



American Shad



Swainson's Warbler



Isoetes hymenalis



Schwalbea americana



Striped Bass



Swallow-tailed Kite



Macbridea caroliniana



Stewartia malacodendron



Sturgeon

FISH



Wood Stork

BIRDS



Collinsonia tuberosa

PLANTS



Gentian villosa

PLANTS

20

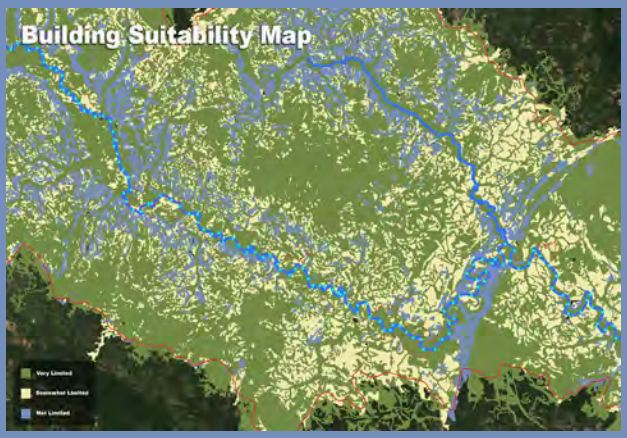
WATERSHED AND WETLANDS MAP



The Black River is a part of the third largest watershed in South Carolina. Areas along the river should be designed with flooding in mind, as they are wetlands and often underwater. It is important to note the presence of riverbank vegetation and forests often lessen impacts of flooding in these areas. These forested wetlands also have an important ecological function to protect and recharge clean water.

SITE CONDITIONS

Tracts along the Black River are characterized by their soil types and elevations: tidal freshwater forests, bottomland hardwood forests, and adjacent upland longleaf pine forests. It is important to note that further downstream, in areas such as Rocky Point, the Black River becomes tidal. The most common soil types along the river are mouzon or hobcaw, which can be described as poorly drained, fairly permeable soils that are typically developed within marine sediment. It is a fine sandy loam. Soils in the area can also be described as chipley sand in the area, which is very deep, poorly drained, permeable soil. Plant life near the river must be able to thrive in a floodplain.





STRENGTH	WEAKNESS	OPPORTUNITY	THREAT
Beautiful Views & Scenery	Restrooms & Trash Cans	Rebranding Kingstree & the Black River	Disturbance of Natural Environment
Tranquil Space	Parking	Accessibility	Increase in Littering
Spirituality	Lack of Signage	Wildlife Protection & Land Conservation	Disregardance of Park Regulation
Cultural History	Picnic Shelters	Education	Water Quality Pollution
Wildlife Habitats	Campsites	Economic Growth	Unbulidable Land
Rare Species	Disruption to Natural Areas by Timber Industry	Variety in Length of Trip	Flooding
Fishing	Sensitive Ecosystem	Multi-Generational Use & Interaction	Erosion

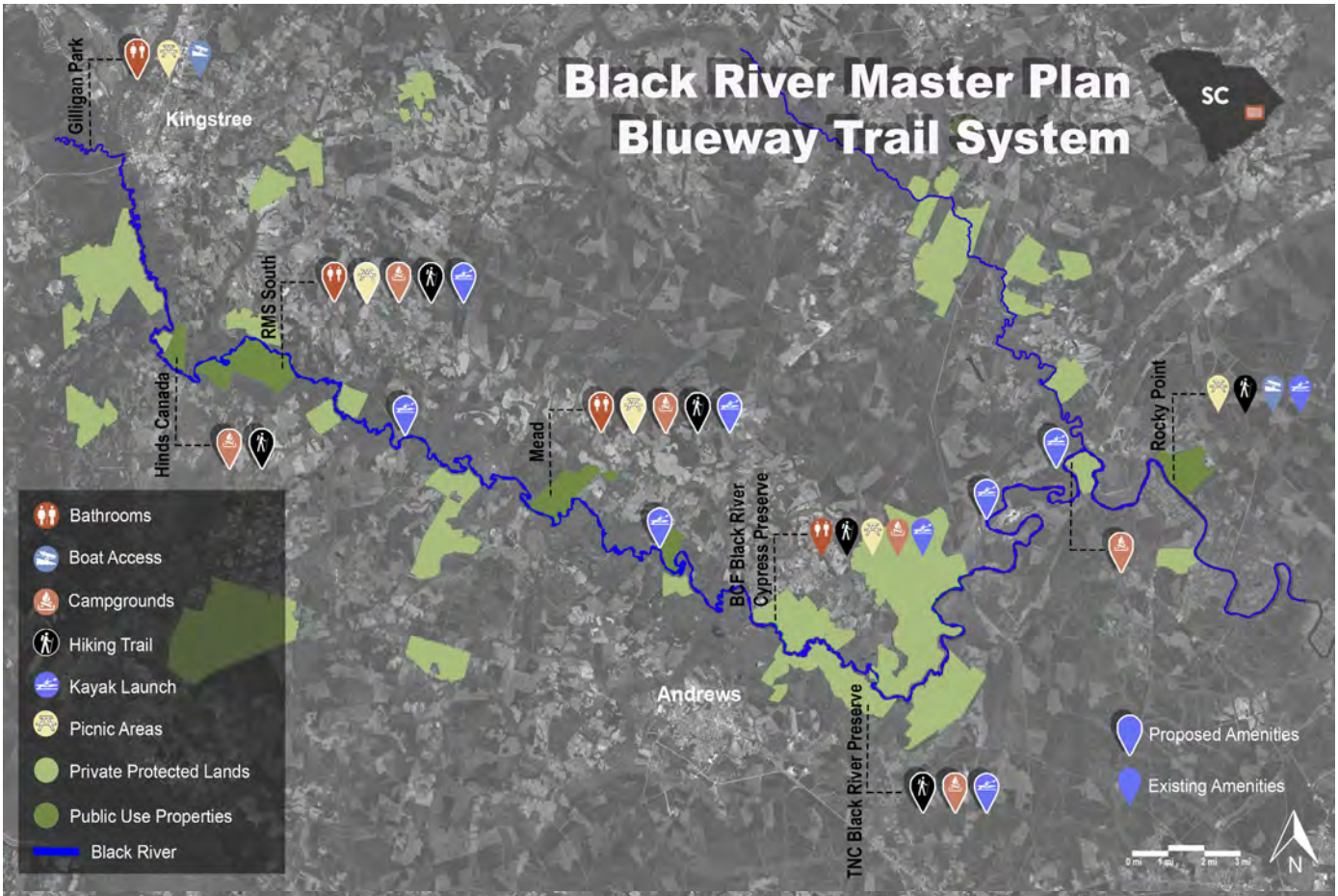
REGIONAL MASTER PLAN DESCRIPTION

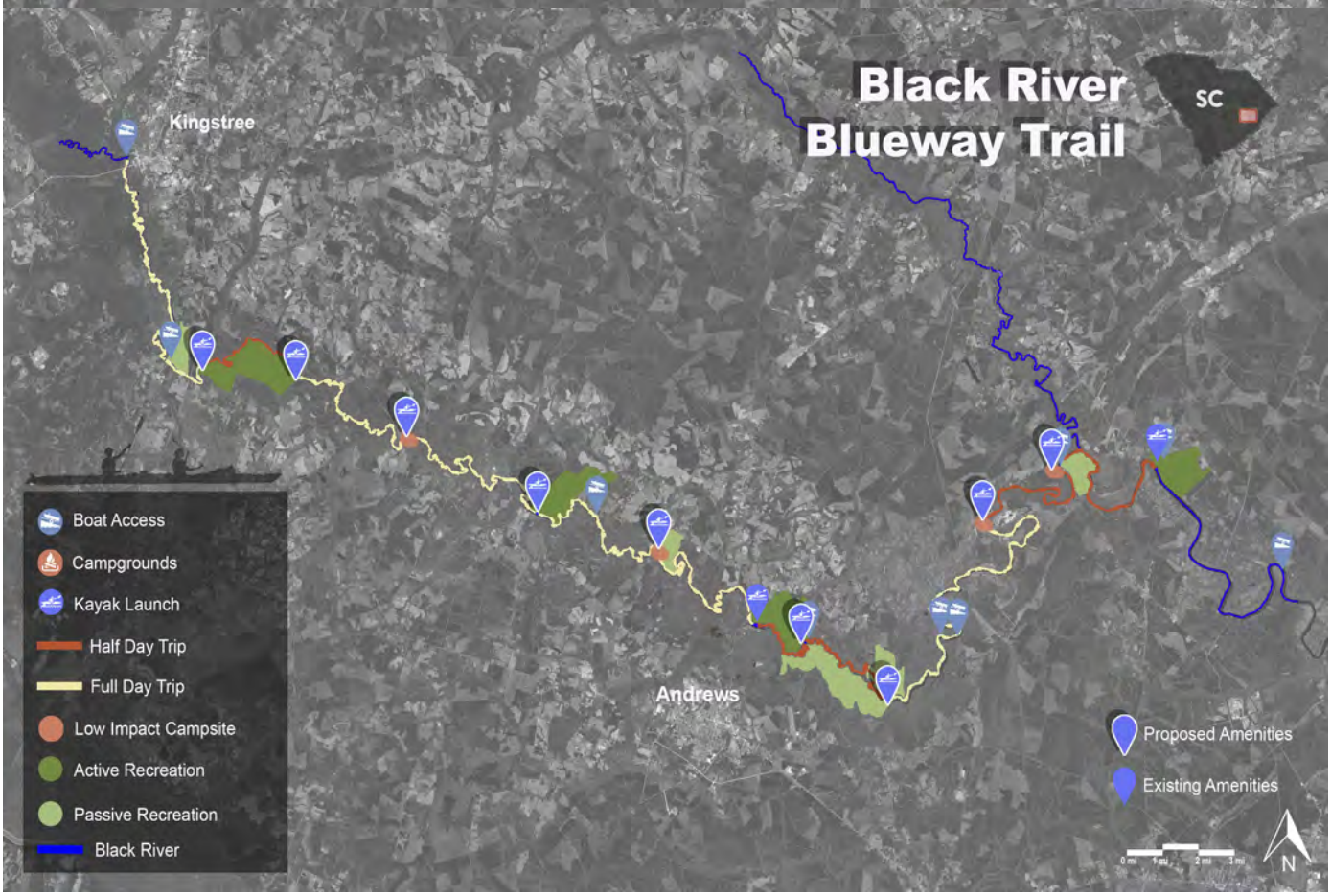
CONNECTION TO DOWNTOWN
Walkable access to the river
Gilligan Park and Kingstree Black River Landing

HIGH USE TRACTS
RMS South, Mead, BCF Black River Cypress Preserve (Currently private), Rocky Point
AMENITIES: Kayak launches, picnic areas, restrooms, camp sites, hiking trails, trash cans
No new boat access points at Meade and RMS so the site could be for non-motorized water recreation
Shorter trips

PRIMITIVE TRACTS
Hinds Canada, TNC Black River Preserve, Peninsula Campus
AMENITIES: Kayak launches, tent camping spots, hiking trails
Primarily for long trips

PROPOSED STOPS CURRENTLY ON PRIVATE LAND
Necessary for a full river float
AMENITIES: Kayak launch and a small clearing for camping
Little disturbance to the sites


Black River Master Plan
Blueway Trail System
SC
Gilligan Park
Kingstree
RMS South
Hinds Canada
Mead
BCF Black River
Cypress Preserve
Rocky Point
TNC Black River Preserve
Andrews
Bathrooms
Boat Access
Campgrounds
Hiking Trail
Kayak Launch
Picnic Areas
Private Protected Lands
Public Use Properties
Black River
Proposed Amenities
Existing Amenities
0 mi
1 mi
2 mi
3 mi
N


Black River
Blueway Trail
SC
Kingstree
Andrews
Boat Access
Campgrounds
Kayak Launch
Half Day Trip
Full Day Trip
Low Impact Campsite
Active Recreation
Passive Recreation
Black River
Proposed Amenities
Existing Amenities
0 mi
1 mi
2 mi
3 mi
N



PICNIC AREA PERSPECTIVE

This image is an example of what a picnic shelter could look like. These areas are throughout the design and provide an ideal gathering space. They would be covered, include picnic tables, grills, and be raised becasue of flooding concerns.



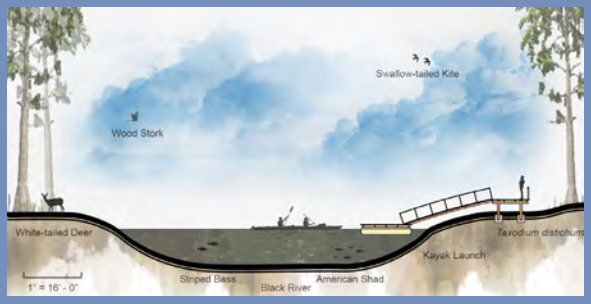
HIKING TRAIL PERSPECTIVE

This perspective is of one of the many hiking trails throughout the design. These trails would be in more primitive areas and are a dirt path through pine and swamp oak forests. Groundcovers include ferns, mosses, and the occasional rare plant, such as *Macbridea caroliniana.*



BOARDWALK SECTION

This is a section through a boardwalk in a floodprone area, such as in Hinds Canada. The boardwalk protects the sensitve forested wetlands, while still providing scenic views and access to these areas. Plants in the ecosystem include *Taxodium distichum, Betula nigra,* and *Sabal minor*. Rare wildlife species include Wood Stork and Swainson's Warbler.



KAYAK LAUNCH SECTION

This section shows a kayak launch, many of which are throughout the design. Access points along the river are vital to the Black River State Park's success as a blueway. The Black River also provides habitats for rare American Shad and Striped Bass.

BRANDING AND MARKETING

COLOR PALETTE

PRIMARY

CMYK: 56, 53, 0, 6
RGB: 105, 114, 240, 94

CMYK: 38, 25, 0, 26
RGB: 117, 141, 189, 74

CMYK: 17, 0, 49, 46
RGB: 115, 138, 70, 54

CMYK: 11, 0, 33, 26
RGB: 168, 189, 126, 74

CMYK: 0, 3, 28, 6
RGB: 240, 233, 173, 94

SECONDARY

CMYK: 0, 52, 70, 30
RGB: 179, 86, 54, 70

CMYK: 0, 36, 48, 22
RGB: 198, 127, 102, 78

CMYK: 0, 0, 0, 10
RGB: 0, 0, 0, 0

CMYK: 0, 0, 0, 0
RGB: 225, 225, 225, 100

SOUTH CAROLINA'S SCENIC
BLACK RIVER
UNSPOILED. UNMATCHED.

TYPOGRAPHY

UPPERCASE ARIAL BOLD - HEADING

UPPERCASE ARIAL - SUBHEADING

Arial - body

MISSION STATEMENT
Bringing recreation and ecotourism to the community in historic Williamsburg and Georgetown counties.

WEBSITE
https://www.exploreblackriversc.com

STORYMAP
https://storymaps.arcgis.com/stories/5b83c49e41614dfabd8c2a5e2b686a24

YOUTUBE
https://www.youtube.com/watch?v=1cvyF4KYuGs

INSTAGRAM
@blackriversc

RECOMMENDATIONS
Currently, the image in the center is the major branding element for the Black River. We like the design and recommend to change the colors to match the color palette we have created.

MASTER PLAN AND PHASING PLAN

Incorporating Hinds Canada and RMS South sites and amenities into the Black River Water Trail and Park Network.

HINDS CANADA AND RMS SOUTH SITE ANALYSIS



CIRCULATION

- On site, there are roadbeds from the timber industry.
- Access to site: Hinds Canada is at the intersection of two major highways, contributing to noise pollution and potentially increased traffic. This also means Hinds Canada could be branded as a "Gateway" to Myrtle Beach and Pawley's Island.



HISTORY

- The Lower Bridge at Hinds Canada was a place to ford the river before there were other access points across.
- There are artifacts that of oyster remnants along the river that indicate Native American activity in the area.
- Two battles were fought there, one during American Revolution and one during the Civil War.

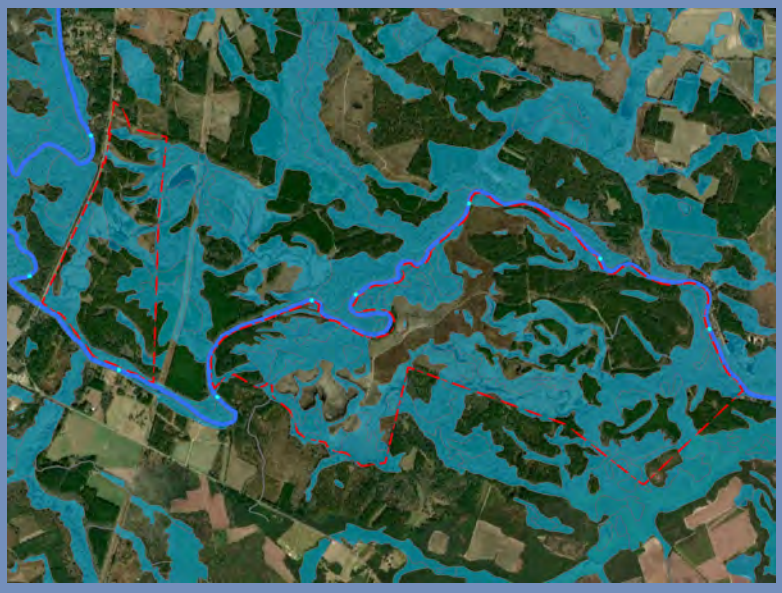




ECOLOGY

- Hinds Canada and RMS South are home to rare plant and animal species.
- There is opportunity for longleaf pine restoration.
- Successional forests can be managed through perscribed burns.

HINDS CANADA AND RMS SOUTH SITE ANALYSIS



WETLANDS

Hinds Canada is at a substantial risk for flooding, with the site being largely underwater most of the year. These wetlands are sensitive, as they are home to many rare and endangered species. Their health is an indicator of positive or negative changes in the environment, so these areas must be protected.

HINDS CANADA AND RMS SOUTH SITE ANALYSIS





EXISTING CONDITIONS
- Utility corridor at Hinds property edge
- Road noise
- Limestone rock beds above Hinds and RMS create habitat for distinct plant communities
- The river is more navigable in the wintertime, July/ August dries up
- Logs, trees, debris in water need to be cleaned up

TRAIL AND PATH SUITABILITY
- Mostly unsuitable for building trails
- Can follow existing roadbeds
- Boardwalks through unbuildable land

TOPOGRAPHY
- Hinds: in the floodplain, wetland areas
- Underwater most of the year (Swampy areas/ sloughs)
- RMS: higher areas in center can be built

BUILDING SUITABILITY
- Most area is not ideal for building
- A few areas at the top of and bottom of Hinds for building
- Large area in the middle of RMS suitable for building



AMENITIES INCLUDE

Parking, picnic shelters, restrooms, hiking trails and boardwalk systems through flood-prone areas, a historical marker for the Lower Bridge, kayak launches, swimming areas, tent camping platforms, a Discovery Center, and RV camping.



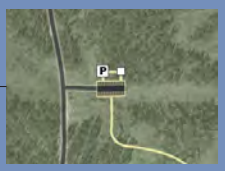






Hinds Canada is the first site along the river that is a part of the Black River State Park. At the top of the site is the entrance, which leads to two parking areas. The upper lot has a picnic and restroom area, and it also connects to primitive camping areas and the river through hiking trails. The lower lot is close to the pond, which features a boardwalk platform for bank fishing. On the lower western end of the site, there is a historical marker for the Lower bridge. Further down the river is a kayak launch and boardwalk overlook. This way, visitors can access the river through Hinds Canada, but Hinds Canada can also be accessed from people on the river. In the lower eastern corner of the site, there is an area for primitive camping. This area is furthest from the road, in an area suitible for building, and a short walk to river access. When considering ecological restoration of the site, former timber forests should be transformed to native long leaf pine forests over time. Common native plantings already onsite include Bushy Bluestem, Wool Grass, Dwarf Palmetto, Bald Cypress, and Swamp Oak. Successional forests are to be managed through controlled burns.

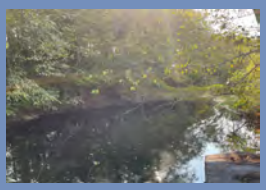






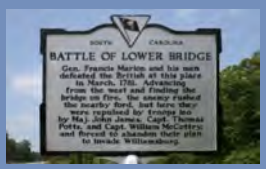
Picnic Shelter, Restrooms, and Parking



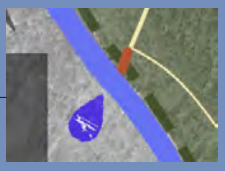


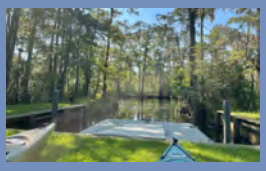
Pond, Boardwalk, and Parking





Lower Bridge Historical Marker and Boardwalk





Kayak Launch and Boardwalk





Primitive Tent Camping Platforms

PICNIC SHELTER AND RESTROOM ENLARGEMENT







At the entrance of Hinds Canada, there is a picnic shelter, restrooms, and parking. There is a hiking trail that leads to the pond, as well as all the way to the river and primitive camping area. The picnic shelter should be raised and covered because Hinds Canada is in the floodplain. Inspiration for the buildings could come from the architecture at the Black River Cypress Preserve, pictured in the lower right corner.

BOARDWALK ENLARGEMENT







A boardwalk at the pond could allow for highly requested bank fishing access, as well as be an overlook area for the scenic views of Hinds Canada. It is a short walk from the proposed parking area to the pond, while still being connected to trail systems, which allows access for a wide range of visitors.



RMS South is the second site along the river that is a part of the Black River State Park. Amongst large pine forests, this site includes tent camping platforms, restrooms, and parking on the west end. There are hiking paths along the river that lead to a Discovery Center, kayak launch/swimming area, picnic area and parking. This Discovery Center is a place for all ages to learn about nature, as well as conservation. Further along the road is housing for a ranger, as well as a maintenance area. And finally, the site features an RV parking lot, with amenities such as a picnic shelter, restrooms, and a kayak launch/swimming area for these visitors.

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Tent Camping Platforms, Restrooms, and Parking





Discovery Center, Natural Playground, Picnic Shelter, Parking, and Kayak Launch





RV Parking, Picnic Shelter, Restrooms, Kayak Launch and Swimming Area

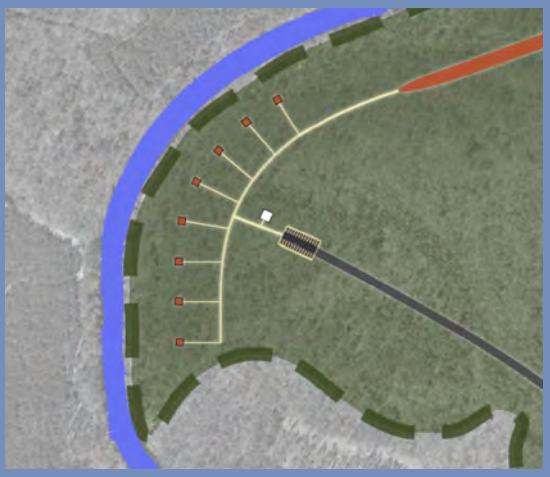




Park Ranger Housing and Maintenance Building

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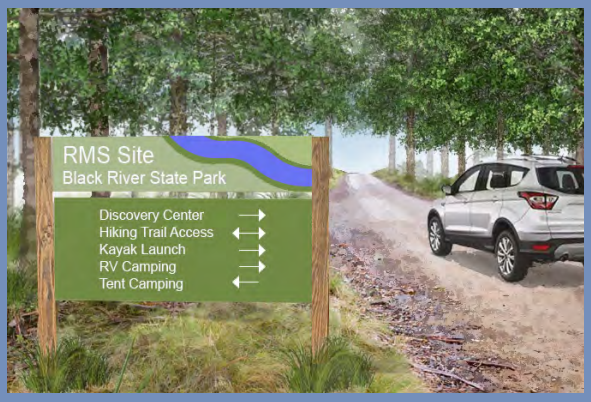
TENT CAMPING PLATFORM ENLARGEMENT







This tent camping area at RMS South provides space for 8 tent platforms along the river, as well as parking, restrooms, and access to hiking trails. The raised and covered platforms allow for camping, even if the area is experiencing wet conditions in the floodplain.



ENTRY SIGNAGE PERSPECTIVE

Upon arrival to RMS South, visitors could expect to see clear and accessible signage. They will travel along the road, going left towards tent camping platforms and the start of the hiking trail along the river, or right to the discoery center, kayak launch, and RV camping. The top part of the sign includes a blue line that alludes to the Black River.



TENT CAMPING PLATFORM PERSPECTIVE

When using a tent camping platform, visitors can expect them to be covered and raised. Raising the platforms allows for camping in these areas that are a part of the floodplain. The camping areas are in more secluded areas, while still being near the river. On the Hinds Canada site, visitors can expect primitive camping, away from parking and other amenities. On RMS, visitors will have nearby amenities such as restrooms and parking.



Phase 1 implements the major elements of this design (highlighted in orange). It begins with adding infrastructure such as roads, parking lots, and utilities. Many roads and hiking paths follow existing roadbeds, which allows them to more easily be implemented at the beginning phase of the project. At Hinds Canada, a boardwalk platform at the pond as well as on the river allow for bank fishing and a kayak launch. Adding housing for park rangers and a maintenance building on RMS is also necessary at this stage. Phase 1 would include a Discovery Center as a main programming element of the RMS site. There would also be visitor orientation, as well as restrooms, inside the Discovery Center. A picnic shelter, kayak launch and swimming area, and parking would be near this major element.

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Phase 2 (highlighted in orange) further develops the boardwalk systems on the sites, as well as creates spaces for camping. At the entrance of the site, there is a day use area with a picnic shelter, restrooms, and parking. There is also a hiking trail that leads to campsites. These campsites are primitive and at the lower east corner, along the river. At RMS Phase 2 adds tent camping platforms, restrooms, and parking on a bluff along the river on the west of the site.

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Phase 3 (highlighted in orange) is the final phase for this site design. It includes a lot for RV camping, big enough to fit 24 RVs. The rest of this phase provides amenities for those RV visitors. There would be a picnic shelter and restrooms near this RV lot. A short trail would connect these visitors to the water, where there will be a swimming area and kayak launch.

DETAILED SITE ANALYSIS AND DESIGN

Concept Statement: The Discovery Center and Natural Playground at RMS South aim to provide education, recreation, and exploration opportunities to all ages, as well as conserve and restore natural areas.

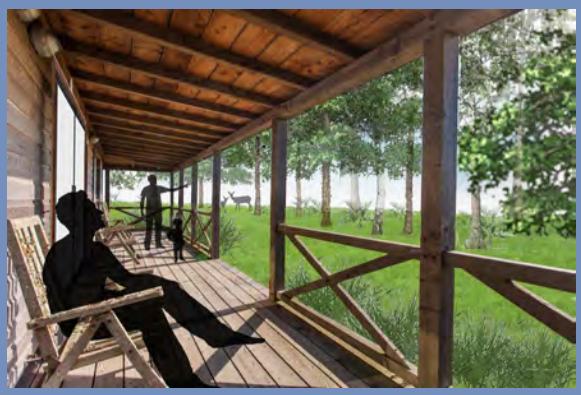
DISCOVERY CENTER SITE ANALYSIS



DISCOVERY CENTER MASTER PLAN



The Discovery Center is the main programming element at RMS South. Located a short drive from the southern entrance of the site and a short walk to the river or hiking trail, the Discovery Center contains interactive exhibits that demonstrate natural systems, as well as natural history of the area to educate all ages. The Discovery Center would act as a visitor center on RMS South and advocate for onsite conservation and restoration. The site also includes a natural playground area, which consists of a fort, sandbox, and other equipment that resemble environmental elements. This playground is in short proximity of a picnic shelter. Finally, there is onsite parking, which is a short walk to a kayak lanch and river access.



DISCOVERY CENTER WILDLIFE VIEWING PORCH

This perspective shows the back porch of the Discovery Center. Here, visitors can sit or stand and look out onto a forested area, where they can view the unique wildlife of the area.



NATURAL PLAYGROUND SANDBOX

This perspective drawing shows a view of the sandbox in the natural playground area. Here, children can play with the sand and water, as well as sit on limestone rocks, symbolic of the rockbeds above Hinds Canada and RMS.



NATURAL PLAYGROUND SECTION

This section shows a view of the natural playground, which is in close proximity to the Discovery Center and picnic shelter. The playground includes natural elements, such as wood, rock, water, and sand. Kids can climb onto a fort, crawl through a tunnel, or play in the sandbox, which includes a water feature that is symbolic of a river.

CHARACTER AND MATERIALS INSPIRATION











DISCOVERY CENTER | MATERIALS | NATURE PLAY

MASTER PLAN AND PHASING PLAN

Incorporating the Mead site and amenities into
the Black River Water Trail and Park Network.

MEAD SITE ANALYSIS



SITE CONDITIONS

The Mead site will be part of the new South Carolina State Park. This site is one of the ideal locations for a state park as it is one of the higher and drier sites. The property borders the river for two and a half miles, thus holding immense potential for river access. The site currently has a lot of hardwood forests with a plethora of Loblolly Pine Forests. Historically, the area was home to both rice and tobacco fields.



SOIL ANALYSIS

There is only one section of buildable soil (colored blue) at the northeast corner of the main site that is best for building. The site has scattered blotches of somewhat buildable soils (colored yellow) that would offer added building potential with some added precautions that would have to be considered. Finally, the green areas are considered not buildable soil meaning that we should avoid building any type of structures on those soil areas.

MEAD SITE ANALYSIS



TOPOGRAPHY

The site has a lot of vast topographic profiles that offer a wide variety of opportunities for user experiences. The site is at considerable risk for erosion, and thus the erosion mitigation tactics should be considered in the site design. The top of the main site has some interesting topography elements that could be attractive to mountain bikers looking for a natural BMX experience.

MEAD SITE ANALYSIS



WETLANDS

The site is at substantial risk for flooding, given its proximity to the river. Therefore, any building that would be on the site should be elevated to protect against possible flooding. The site is a marsh system, and the swamp is used for planting swamp ecosystems.

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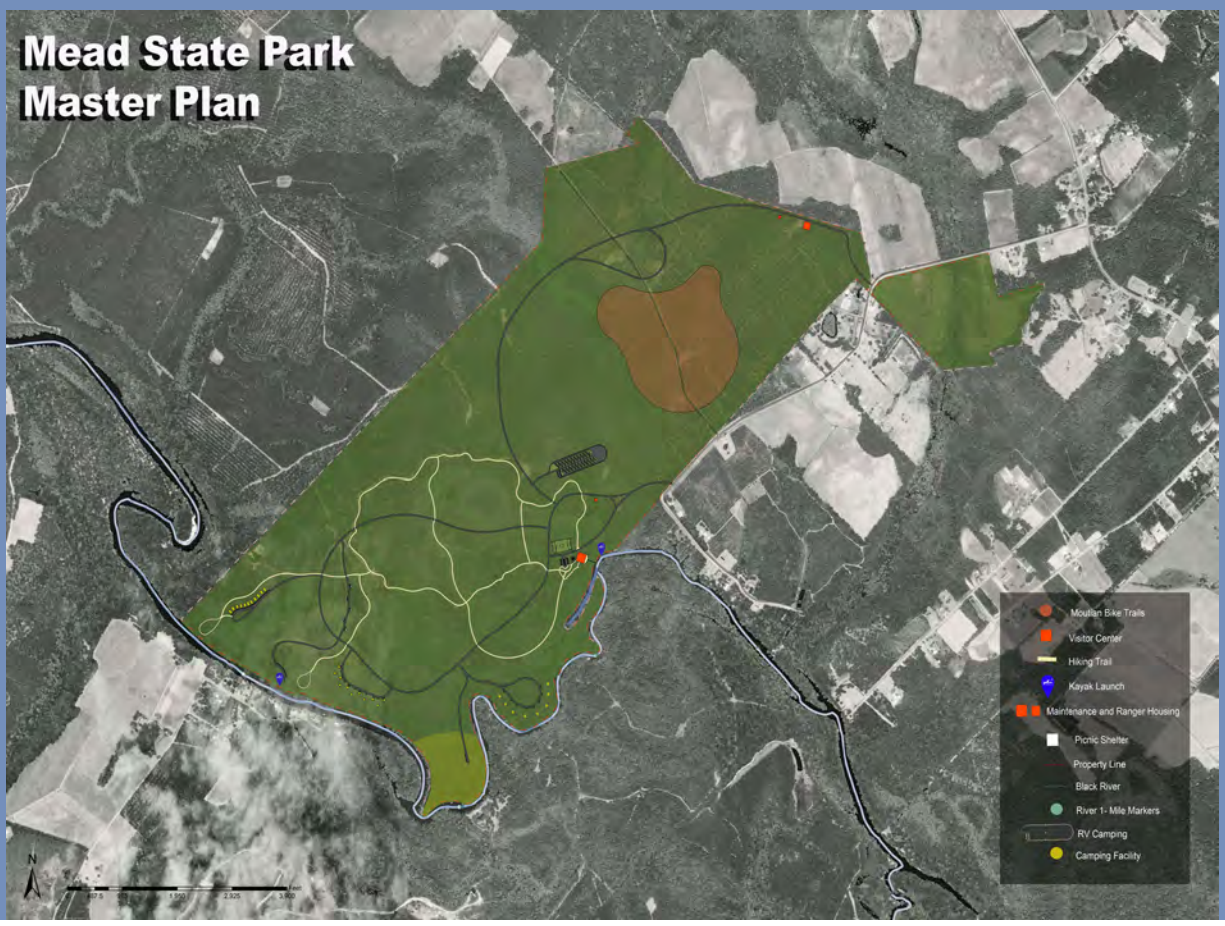


The site programming plan illustrates the vast array of programming for camping, day use, and park resources. All the light yellow bubbles are camping facilities, the light blue bubbles are day-use areas, the darker orange bubble is for mountain biking, and the red bubbles are state parks resources. Finally, the site disconnected from the main site would be protected as an ecological restoration field lab.

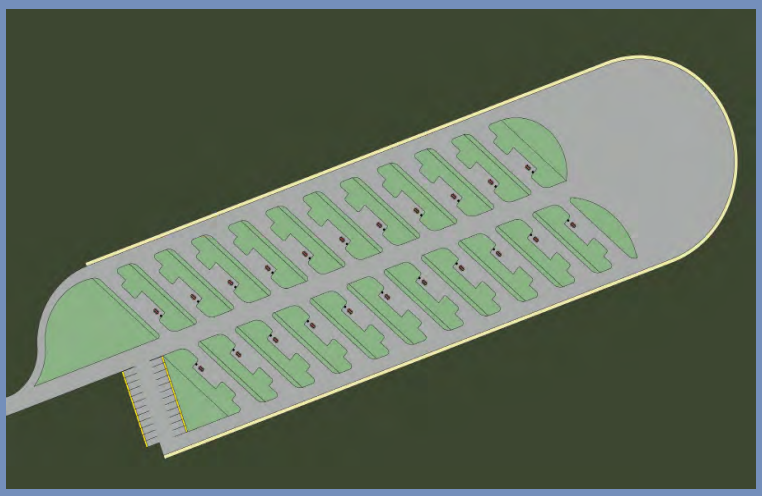
56

MEAD MASTER PLAN

The site entrance is on the east side about halfway down. The entrance has a traditional State Park gateway that would signal the user's entry into the site. The visitor follows the road to the day-use area that consists of the Visitors Center, kayak launch, gathering areas, athletic fields, and a youth play structure. This is the central element of the site designed for people who want to interact with the river without having to camp. This area is also the most accessible area for all users, which is why its proximity to the river and the site entrance are pivotal to the success of the day-use area; as the user continues down the road, they quickly hit the access to both the primitive camping area and the treehouse camping experience area. The treehouse experience is unique as it supplies a more structured living space near the river that feels both natural and secluded to the other users of the site. The primitive camping area is designed so that the user defines the experience as they choose their camping spot that more resembles a passive recreation camping experience where the only gear is what the user carries into the site. Further down the road is the traditional tent camping area of gravel platforms, which is ideal for pitching a tent. Nearby the tent camping area is the second kayak launch on the site. The road for the river access connects to a series of additional gathering areas for more day-use regions that are also connected to the river. The bottom west side of the main site has more traditional camping cabins that allow another type of user to access the river. Finally, the last camping amenity is an RV camping ground centrally located within site. In addition to camping, a mountain bike area (highlighted in orange) allows the unique user experience of mountain biking as another layer of attraction that the state park could use to bring in guests. The entire space is intended to be ecologically restored to its natural state.



RV CAMPING ENLARGEMENT







To accommodate the needs of RV camping, the park will include an RV park with twenty two pull-through plots. Each plot will feature utility connections (sewage, water, and power), a charcoal grill, a picnic table, a standard vehicle parking space, lots of green space, and a fire pit. The general area will also be equipped with additional parking spots and a typical bathhouse with formal bathrooms and laundry services.

TREEHOUSE CAMPING ENLARGEMENT



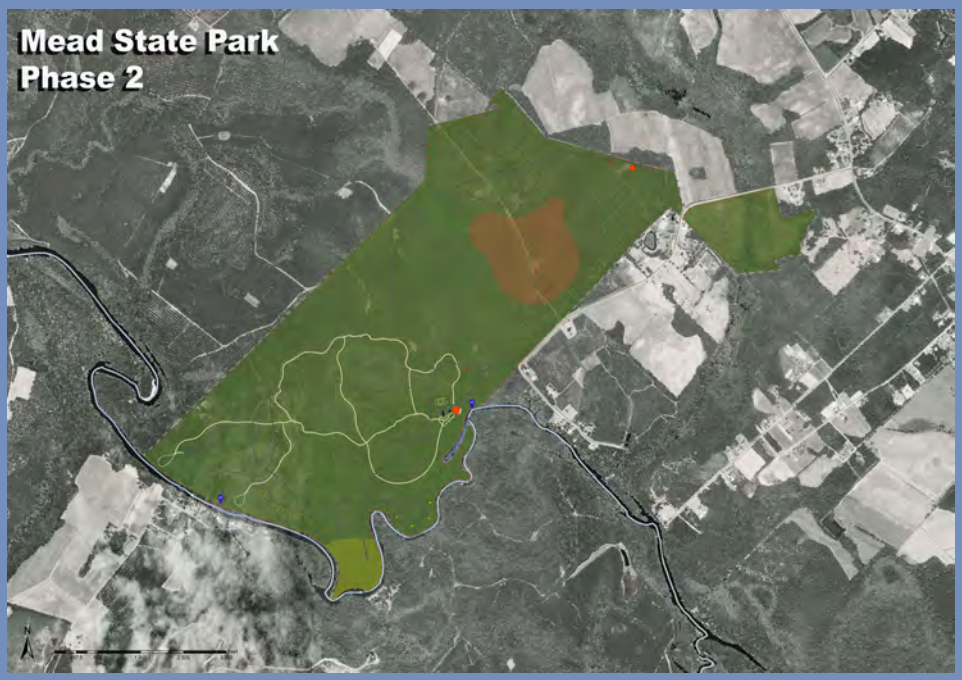




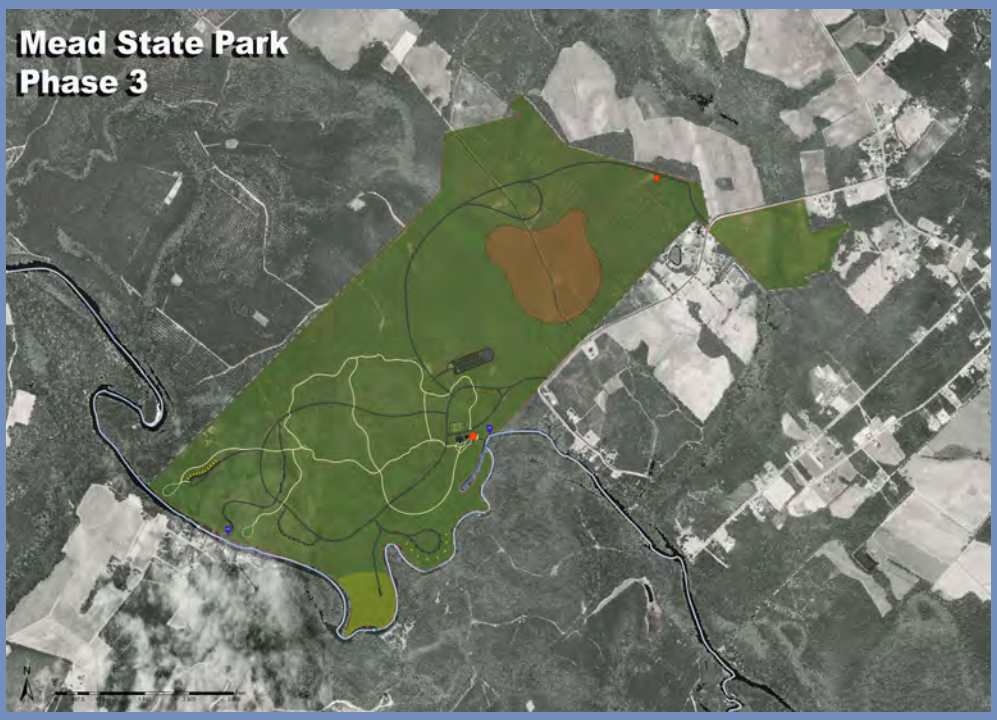
This treehouse camping area at Mead provides space for 8 treehouses along the river, as well as parking, restrooms, and access to hiking trails. These raised treehouses allow for a unique camping experience, even if the area is experiencing wet conditions in the floodplain.



Infrastructure would include the implementation of all roads, utilities, data communication, and any other resources that will be needed down the road. The Visitor's Center would be the axis for the site as it would be the area that all guests pass as they enter the site. The first Ranger Residence would be added to the site within the first phase to allow for immediate full-time staffing of the state park. Maintenance facilities would also be added to allow for rapid storage of all resources needed to maintain the site. Both kayak launches would be added to the site so guests could have immediate access to the river, which is the site's key feature. Tent Camping would be added as it is a low-cost camping style to implement that could begin the traffic to the site for those looking to camp in tents. Primitive camping would also be added in phase one as it too is a low-cost camping style to implement that would appeal to outdoor enthusiasts. Gathering Areas would also be added to the site in phase one as it will help give opportunities for day use and community gathering opportunities. 61



The second Ranger Residence would be added to the site as there would be a greater need for staff on-site as the park grows. The Hiking Trail Development would be an opportunity to get users in the natural area to don't damage the natural ecosystem. Development of Day Use Area will focus on the area around the visitor center. It will be the hub for single-day users by offering gathering areas, river access, sporting fields, a playground, and so much more. The Mountain Biking Trail System would be added because it would give the region a harder-to-find activity to the thrill-seeking bikers in the area. By beginning the treehouses, the park will be able to stretch the cost of the tree houses across two stages, but the first round would act as a proof of concept and help plan for stage three. Finally, they should begin the ecological restoration as it will be another layer in what makes the state park so unique. 62



Phase three would be the most expensive, and the following elements would be reserved until the park concept has been proven. The RV Campsite would be implemented to accommodate the travel trailers that need a place to stop. The Camping Cabins would allow for a more traditional travel experience where users would get to stay in an established structure while staying close to the river they came to visit. Additional Treehouses would be added to the units already implemented in stage two. Finally, there would be a further push for ecological restoration to restore the whole ecology to reflect the land before man touched it.

DETAILED SITE ANALYSIS AND DESIGN

Concept Statement: The day use area at Mead aims to provide education, natural recreation, and communal gathering opportunities to residents and visitors of the area, as well as highlight the conservation and restoration of natural areas.

DAY USE AREA MASTER PLAN





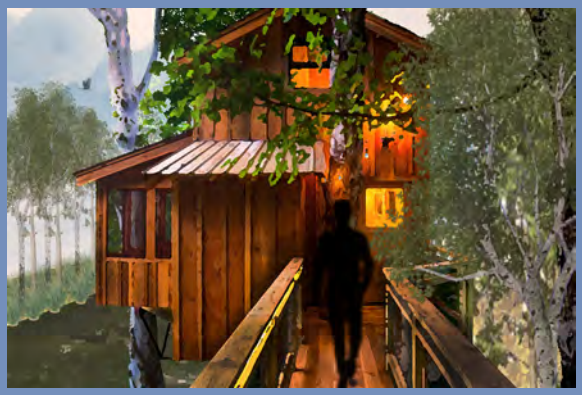
MAINTAINED RECREATION FIELD

This image shows a maintained recreation field, which is located in the day use area between the river and gathering areas. Versitile entertainment space could be vital to the Black River State Park's ability to host a variety of events.



NATURAL PLAYGROUND

This image shows a naturalistic playground, which would be located near the visitor center, within the day use area. This playground would feature a natural look that enables kids to play in a more natural looking setting to allow for a natural experience for those who are too young to utilize the other elements of the state park.



TREEHOUSE PERSPECTIVE

This image illustrates a treehouse elevated on the riverbank and shows the natural style similar to what would be found on the site.



MOUNTAIN BIKE PERSPECTIVE

This image illustrates two bikers traversing the mountain biking course and would be similar to what the actual site might look like to the user.



VISITOR CENTER DECK SECTION

This section shows the visitor center deck and ramp that leads to the river. This element would allow for anyone to have a river experience of some form by providing an accessible view of the river and an accessible ramp that gets visitors within one hundred feet of the river.

CHARACTER AND MATERIALS



MASTER PLAN AND PHASING PLAN

Incorporating the Rocky Point site and amenities into
the Black River Water Trail and Park Network.

ROCKY POINT SITE ANALYSIS



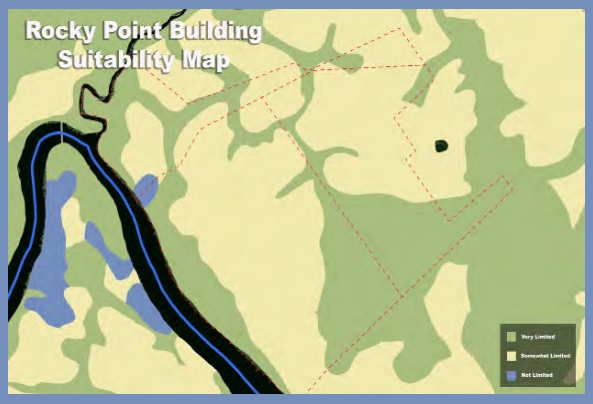


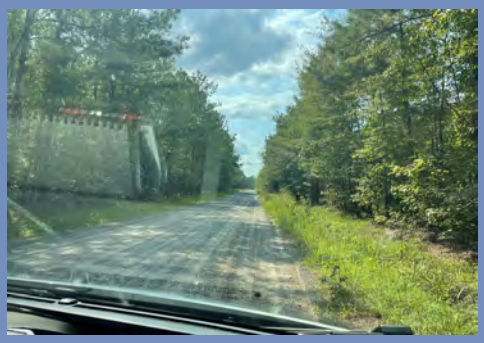


HISTORY

Rocky Point is a site with an abundance of historical culture. In the past, it was a rice plantation owned the Coachman family, who owned slaves as well as other land properties after the Revolutionary War. After the Civil War, free labor went away, and there was no way to maintain these plantations, so this culture of cultivating rice plantations tapered off. The plantations were the first to go because they were very expensive to maintain. This tract was also used as an African American only park area during segregation, as well as a spot for Native Americans throughout the past few centuries. The most prominent tribes that utilized this site were the Chicora and Waccamaw, and now they are looking for a space to gather and gain “recognized status”.

ROCKY POINT SITE ANALYSIS



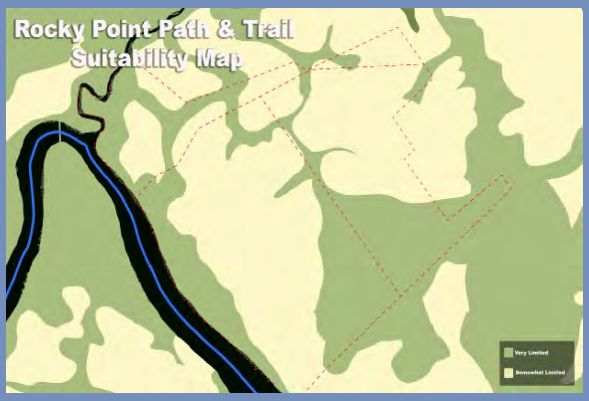


TOPOGRAPHY

Rocky Point is in the floodplain within wetland areas. It is important to note that the soil here is very unbuildable due to the wetland. There are restrictions on infrastructure and a good amount of things are prohibited from occuring such as removing water control, flattening the levee, obstructing wetlands, and clear-cutting. Knowing this, we must be mindful of what materials will be used and how they will withstand flooding.



ROCKY POINT SITE ANALYSIS







EXISTING CONDITONS

The Choppee Recreation Center is very close to the tract and is used for town events. Currently the parcel has a picnic area with parking and a boat access, as well as the historic Coachman Family cemetery. With the design in consideration, it is important to recognize the significance in preserving the Loblolly and Longleaf Pine ecological areas.

ROCKY POINT SITE ANALYSIS



OWNERSHIP

Georgetown County owns the Choppee Rec Center, the 200 acres behind it, and the top half of the tract, where as the Winyah River Alliance owns the bottom half and the side portion. It is significant to note that no building is allowed on the parts owned by the river alliance.

ROCKY POINT SITE ANALYSIS





HABITAT CONDITIONS

There are many native species and wildlife that call this site home. Nestled within the pine forest, there are a variety of species like Sweetgum, Water Oaks, Wax Myrtles, and Holly trees. Some animals that reside here are Swainson's Warbler, White-Tailed Deer, and the Woodstork.

ROCKY POINT SITE ANALYSIS



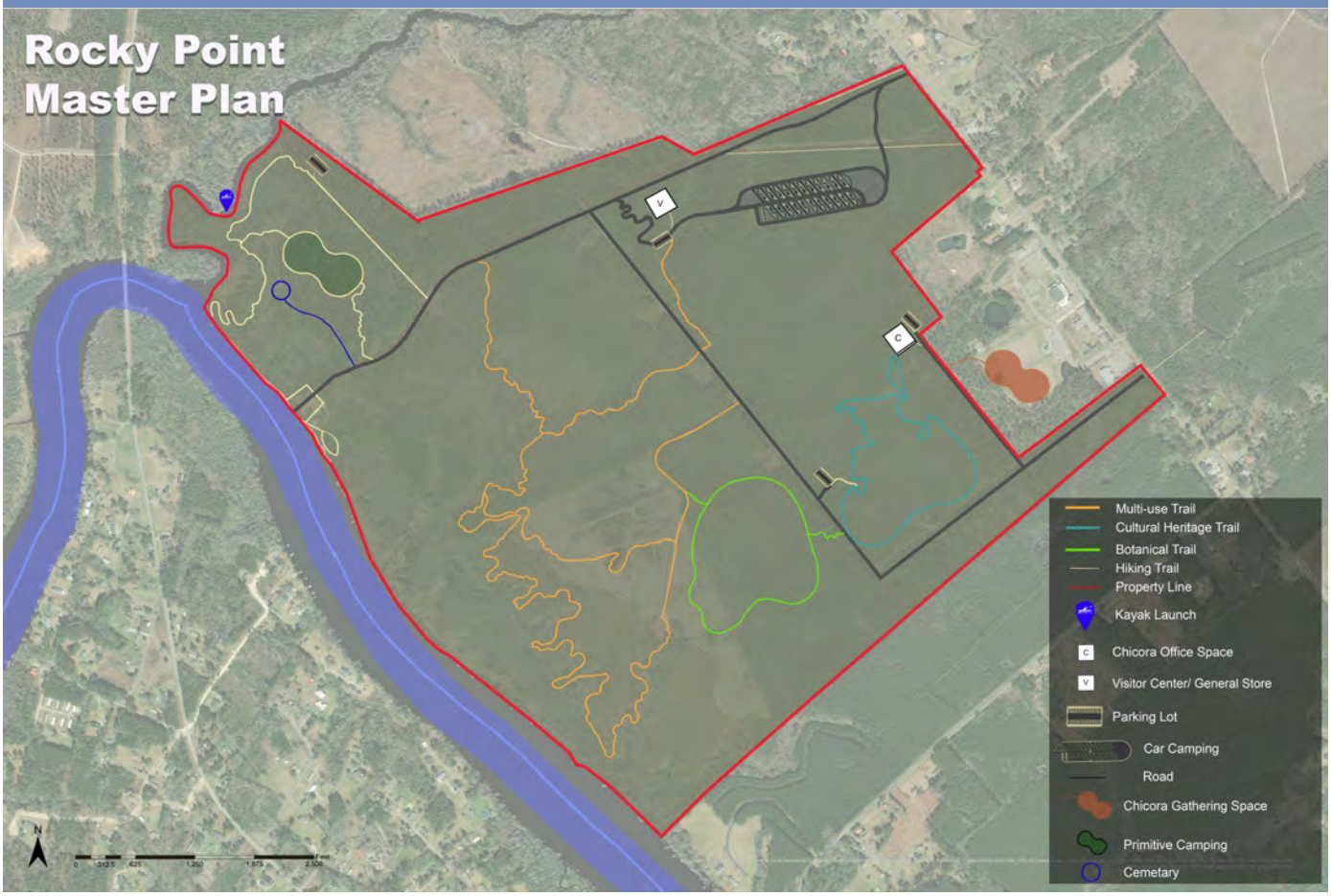


WETLANDS

The watershed within this site and the Black River is the 3rd largest in South Carolina. These wetlands were former rice plantations owned by the Coachmans, and it aids to why the land is unsuitable for buildings.

ROCKY POINT MASTER PLAN

As the visitor enters the site from Choppee Road onto Rocky Point Road, the first thing will be a visitor's center to the right. This encompasses not only a check-in for car camping, but also a general store that sells camping supplies or other items the visitor perhaps left at home, such as bug spray, sleeping bags, and life jackets. The general store would also sell seeds of the plant species that are along the botanical trail. The parking lot adjacent to the building is for family camping that includes individual car parking spots with access to grills and fire pits. From the parking lot located at the visitor center, it is a short bike ride to the first trail offered on the site, which is the scenic loop bike trail. This loop will take a cyclist through the wetlands of the Black River, and visitors are encouraged to take advantage of the precious viewsheds. A little deeper into the winding adventure, the user will come upon the ecological restoration of Loblolly and Longleaf pine trees. With the magical bright green trees looming above, the visitor will truly feel as if they are in another world. The user enters the pine forest on a multiuse trail. It is recommended to explore this trail on foot because it is a short bike ride of about half a mile, but it is an open possibility to cyclists. This compact trail is deemed the botanical trail. Here, it is all about learning and inquiring about the native flora and fauna of the Rocky Point tract and getting in tune with the natural environment that surrounds it. There are two exits to the trail, which are a loop that can take you back to the access road that leads you back to Rocky Point Drive or a short walking path to the cultural heritage trail. First off, towards Rocky Point Drive, the visitor can turn left to go to the existing boat launch and picnic area on the site. Down near this sector of the tract, there is the Coachman Cemetery as well. Right past the cemetery, there is a walkway that eventually leads to the primitive camping area that will be used by kayakers looking to stay overnight, boys scouts, and school groups. On the left side of the low-impact camping spot, there is a walkway that goes towards the water to a newly proposed kayak launch and swimming corridor. This is placed here to keep the motor boats and the kayaks separated, as well as providing a safe spot for swimming. If the user chooses to go along the walkway to the cultural heritage trail, they would end up in a forest with historical markers explaining the past uses of the sites, the history of the Coachman family, African Americans who used the site, and the culture surrounding the Chicora tribe. Around this leisurely trail, the visitor will take in a lot of knowledge that may have not been known before visiting this site. The final destination on the trail is the Chicora tribe headquarters that will accommodate an office space for formal meetings and parking for those utilizing this building.







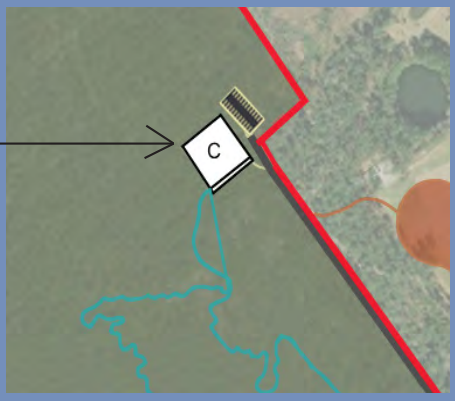




FAMILY CAR CAMPING ENLARGEMENT

The family camping area is a place for relaxation and gathering. Each plot offers a car parking spot, a grill, picnic table, and fire pit. It is meant to encourage higher impact camping for 3-5 days with a visitor center and general store close by. The store also has supplies available like bug spray, sleeping bags, and sunscreen.





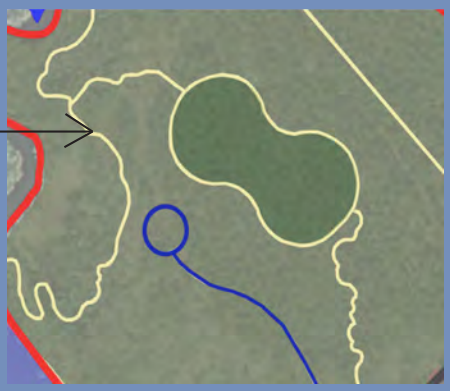




CHICORA OFFICE SPACE ENLARGEMENT

The Chicora Office is meant to be a place for gathering and housing important meetings. The tribe has been trying to receive recognized status for over thirty years now, and it is important to grant them the space they need. There is a wetland viewing deck here, as well as a trail right outside the office that leads to the land currently behind Choppee Rec Center for a potential pow wow area and the trail to the Cultural Heritage walk.









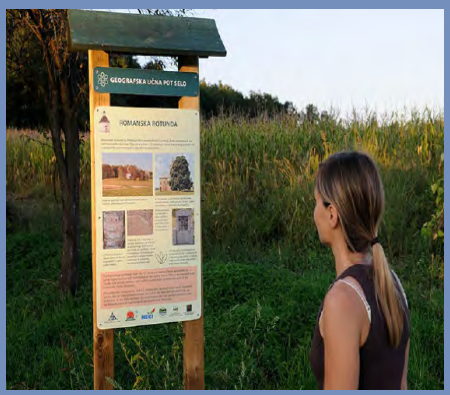
PRIMITIVE CAMPING ENLARGEMENT

The primitive campsite is a place where kayakers can jump right off their boats and have a spot to set up camp. It is meant to be very low-impact with the campers bringing their own supplies.









CULTURAL HERITAGE TRAIL ENLARGEMENT

Rocky Point has a lot of cultural history, so it is significant to highlight that within a leisurely walking trail. It will highlight the African American during segregation, the history of the Coachman family, as well as the Native American significance of the site.









BOTANICAL TRAIL ENLARGEMENT

Within the ecological pine restoration, there are a variety of plant species along the existing pathways. With the site having such a unique ecosystem, it was important to prioritize it. This trail would have signs indicating botanical names and information on the trees, shrubs, and flowering plants. The general store would sell seeds of some featured plant species so visitors could take a momento of Rocky Point home.



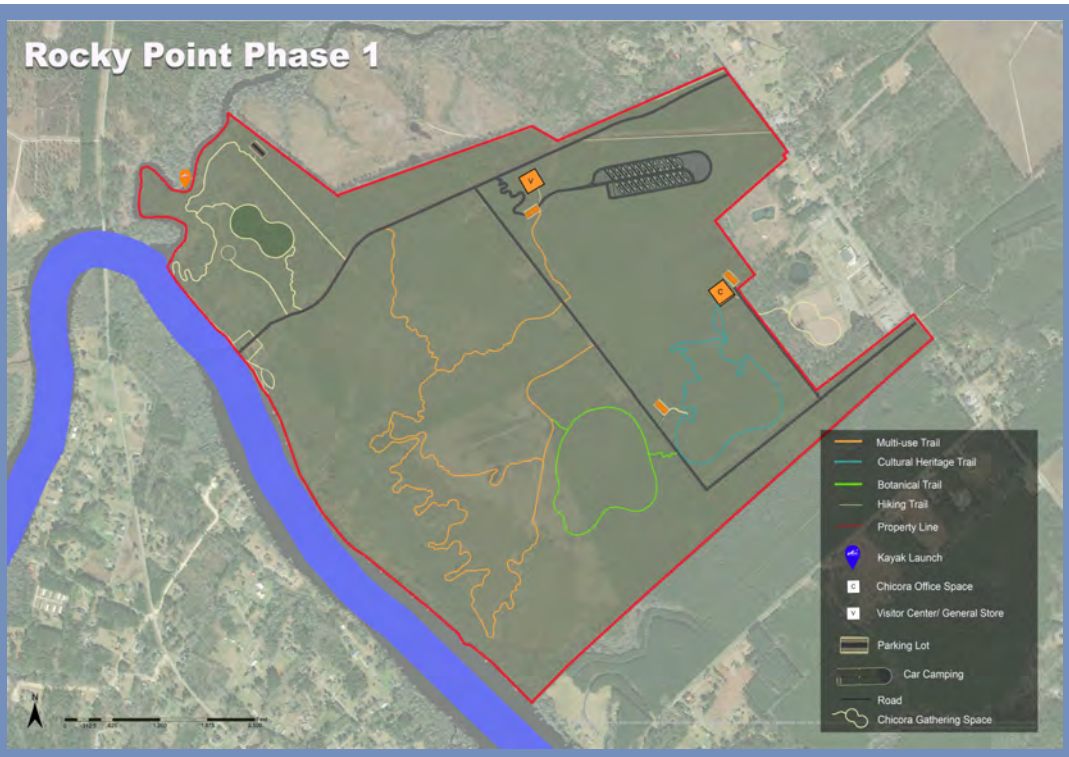




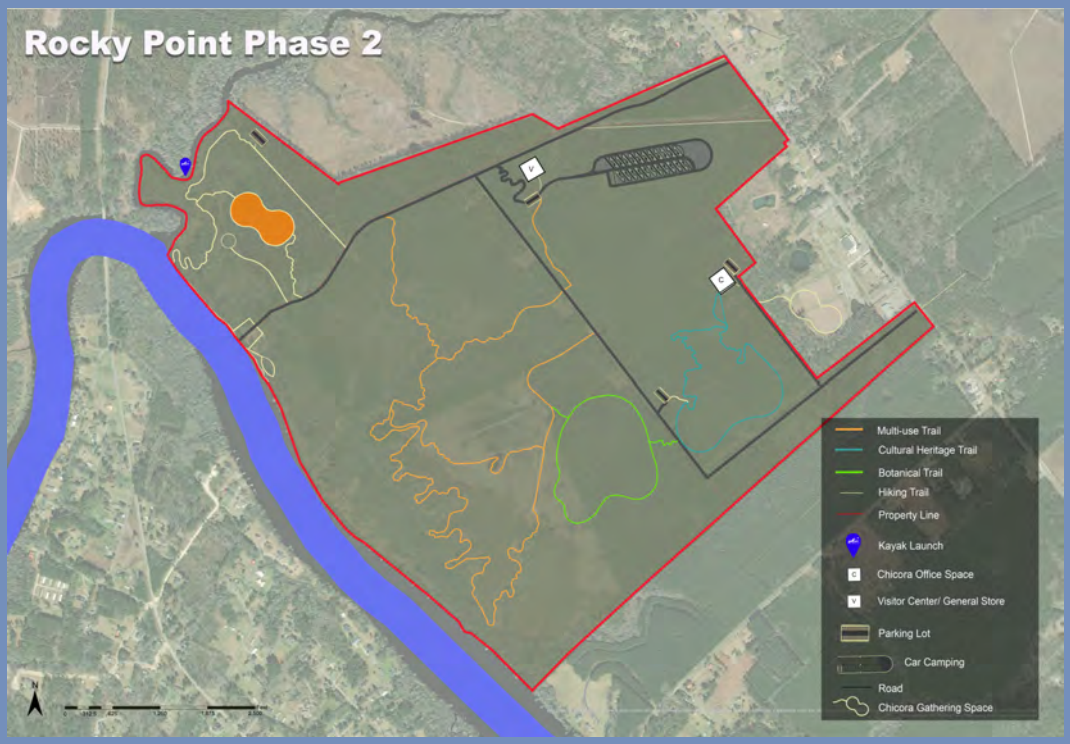


MULTI-USE TRAIL ENLARGEMENT

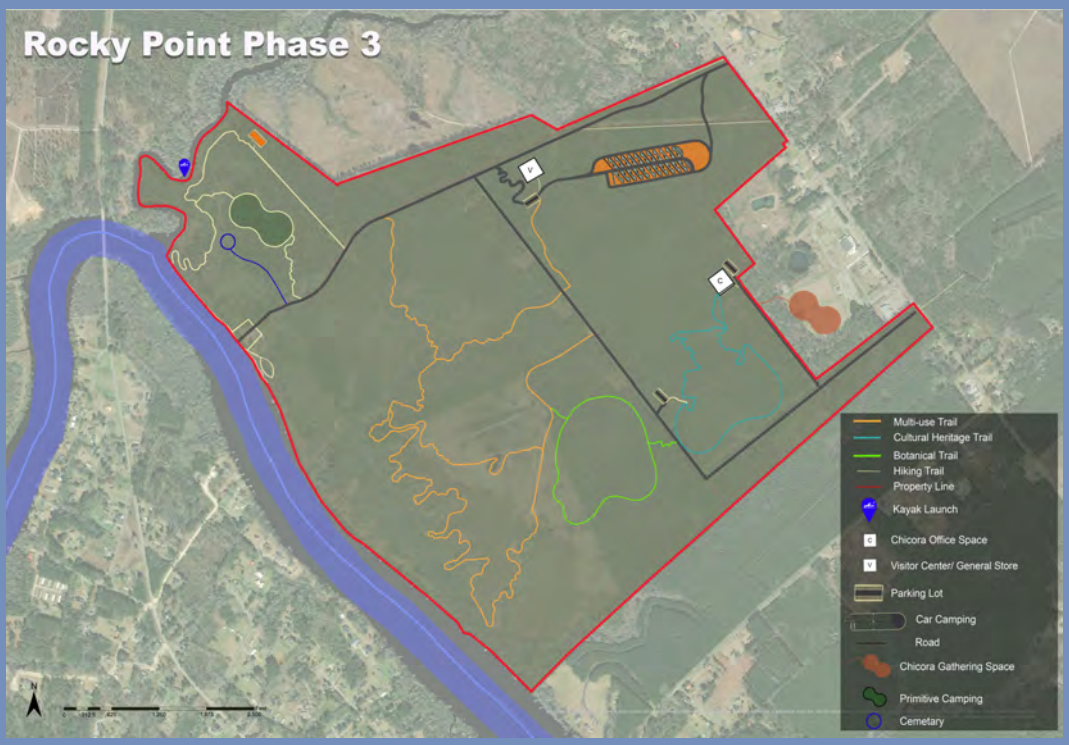
This trail will be utilized for bike riding along the ecological pine restoration as well as the cusp of the wetland. There will be one access to the bank fishing with lots of viewshed stops along the way.



Phase 1 includes the installation of additional main roads in order to allow visitors to get to the trail locations. After the vehicular circulation is added, the biking trail would ideally be the first trail to be formed, then the botanical trail, and then lastly, the cultural heritage trail. This phase also entails the creation of the visitor center because it will be the hub for people entering and exiting the site. The second piece of infrastructure that will be built is the Chicora tribe headquarters which will be right on the edge of the 200 acres where the Choppee Rec Center is currently. This office meeting space will connect via walking trail to the cultural heritage trail. With all of this, parking will be included at the visitor's center, botanical trail, and the Chicora space. The last feature of this phase would be the kayak launch along the Choppee River, which would separate the traffic between motor boats and kayaks. This would bring new visitors into the site at an additional entrance, and be an area for safe swimming with a platform dock.



Phase 2 includes the finalization of the trail systems that are not completed within Phase 1.The second and last amenity created on the parcel in this phase would be the primitive camping area. This space will be vital to people accessing the kayak launch, especially if they would like to pitch a tent overnight and travel the next day. This area will be extremely low impact, but also house groups like boys scouts,as well as individual campers.



The last phase will incorporate family style car camping plots and low-impact kayak parking. This will get more people involved with exploring the site for a couple of days rather than one, and involved in learning about all the cultural opportunities the site has to offer. The visitors center will be directly by the campsite in case anyone has last minute purchases and wants to wander through the extensive trail system. Lastly, the kayak parking will be added. This will be a dirt lot that has room for 5-10 cars and it will be utilized by people from the family campsite who do not necessarily want to drag their kayak gear across the whole tract.

PERSPECTIVES



CULTURAL HERITAGE TRAIL

This illustrates a person utilizing the trail to learn more about the cultural history and heritage that Rocky Point has to offer.



CHICORA OFFICE AREA

This illustrates the vision for the newly installed Chicora office space that will be used by the tribe to plan pow wows, meet about events that they have, and to enjoy the area near the Black River.

DETAILED SITE ANALYSIS AND DESIGN

Concept Statement: Rocky Point is a parcel of land located between Georgetown and Kingstree that is currently used for boating, picnics, and gathering. My intent is to enable a community that promotes gathering within nature and utilizes the existing environment to increase the activity of the tract. The design will stimulate people of all ages and backgrounds coming together to enjoy a shared space.

The intent for the plan is to have intimate experiences with family in nature. This area is meant to be secluded hence the large river birches bordering the entryway. There is a bioretention area along the parking lot to catch excess water, and to add foliage to the site. When entering the building to check in for camping, a visitor can be guided through a native planting garden or they can choose to take a break in the gathering area with tables and benches. This is convenient due to the family camping site being directly connected to the visitor's center. A special feature of the general store is the viewing deck, where guests can get a bite to eat and observe the natural ecological restoration area.











REGIONAL PLANT GARDEN ENLARGEMENT

This gravel pathway will be used an experience when walking up to the visitor's center entryway. It will feature native plantings from around the region that are mentioned in a later slide. This gives someone the chance to explore the tract and region at a deeper level, as well as study the indicator signage of the plant names and notable conditions.









GATHERING AREA ENLARGEMENT

This gathering area will be used for customers to wait for their camping reservations, and for people to relax while grabbing a bite to eat from the general store. It features a few tables with chairs for groups, as well as benches for individuals or couples. It's relatively open so people won't feel crowded.



GENERAL STORE VIEWING OBSERVATION DECK

This perspective illustrates people photographing and observing the Loblolly and Longleaf pine restoration areas. Here, people can get more in tune with other native plant species from the tract, and can take a breaking from hiking or checking into the camp ground.

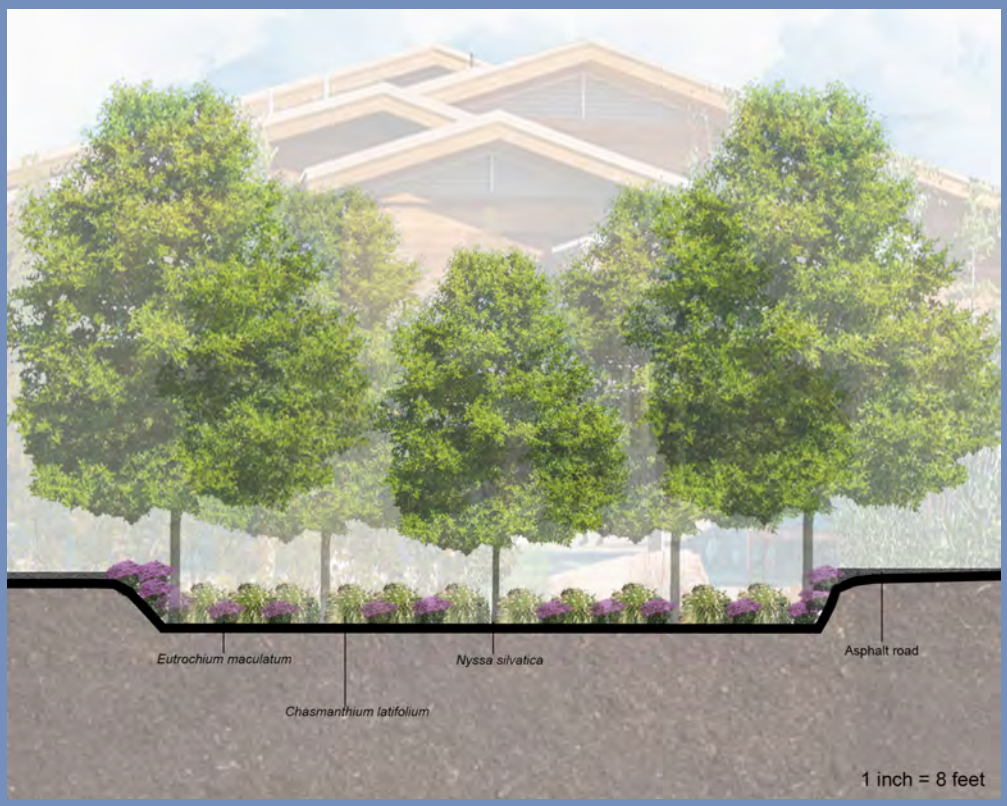


VISITOR'S CENTER REGIONAL PLANT PATHWAY

This perspective illustrates what a person may see when walking up to the visitor's center entrance and from the parking lot. The pathway features native plantings from the region such as Bushy Bluestem, Trident Maple, Wax Myrtles, Magnolias, and horsetails in the early successional stage.

BIORETENTION AREA SECTION

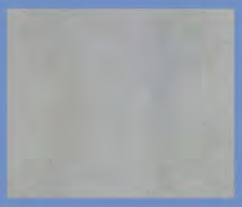
This section illustrates the bioretention area bordering the parking lot, which is used to catch excess water. The species used are Joe-Pye Weed, Northern Sea Oats, and Black Tupelo trees. The view of the visitor's center in the back is something one might see if they are standing in the parking area.



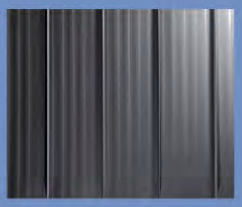
ROCKY POINT MATERIALS AND CHARACTER














MATERIALS CULTURE ECOLOGY VIEWS

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APPALACHIAN GREEN

Kay Rumsey and Riley Hays

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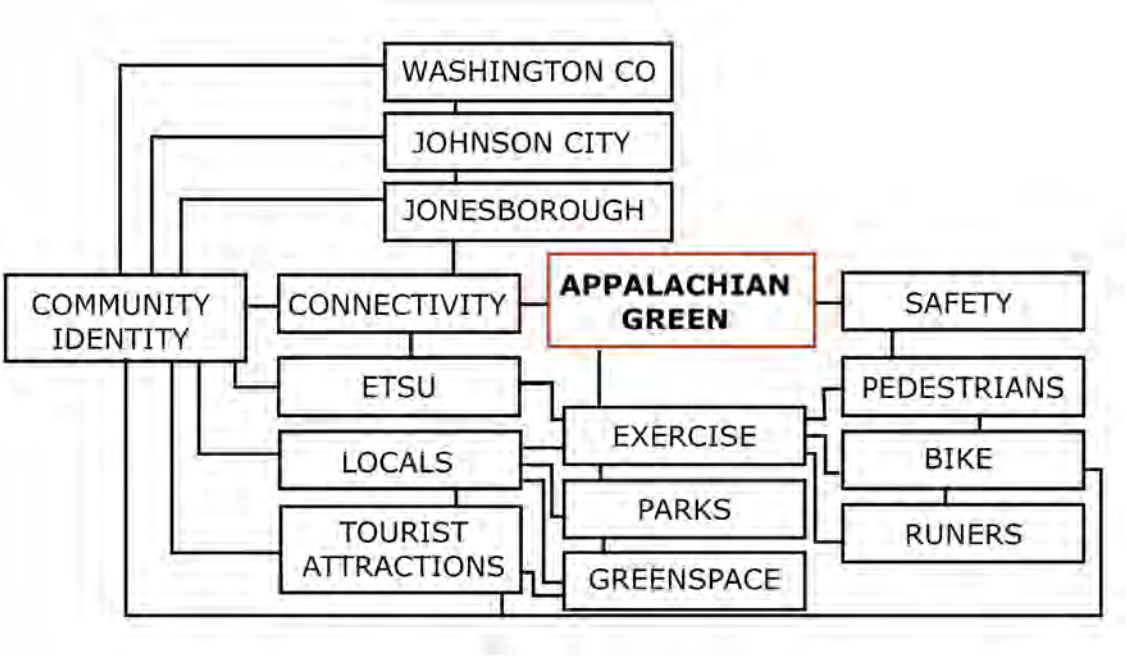
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INTRODUCTION

Washington County is located in the Northeastern corner of Tennessee. Our research mostly focuses on Johnson City and the nearby town of Jonesborough. Before visiting the area, we conducted research that provided us with general information on the region. On September 9th, our class was given the opportunity to meet with stakeholders and ask questions to the community that would influence our further research and trail designs. The meeting provided us with useful information about the needs and wants of the region. We found there was a large interest in improving connectivity within Washington County and make outdoor attractions such as Winged Deer Park and Buffalo Mountain Park more accessible. Another focus we took from the meeting was the desire to improve and beautify without turning Washington County into a major tourist attraction. We interpreted that there is a combination of desire to improve image and attractions while also keeping the design focused on locals. Johnson City, Jonesborough, and the entire Washington County have so much charm and it is our goal to design a greenway that enhances the region for the locals while attracting the right crowd of tourists.





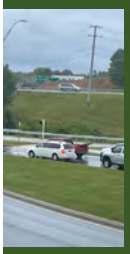

WASHINGTON CO
JOHNSON CITY
JONESBOROUGH
COMMUNITY IDENTITY
CONNECTIVITY
APPALACHIAN GREEN
SAFETY
ETSU
PEDESTRIANS
EXERCISE
LOCALS
BIKE
PARKS
TOURIST ATTRACTIONS
RUNERS
GREENSPACE

2



3

CONCEPT STATEMENT





The Appalachian Greenway emphasizes connectivity, unity, safety, and accessibility by encouraging both locals and tourists to utilize the amenities that Johnson City, Jonesborough, and Washington County have to offer. By creating multiple networks, this trail accommodates both visitors on foot and for sport. Bikers may loop around the entire area with regular access points to the inner trails, or choose to loop through an inner trail, shortening or lengthening their ride. Pedestrians can safely navigate the inner trails of the greenway that connect rural neighborhoods as well as downtown attractions.

By connecting existing trails and green space, this greenway utilizes the region's rich history and adds to the attraction of visiting Johnson City and the Appalachian Greenway.

ACCESS AND EQUITY

Commitment to accessibility prompts the city of Johnson City to use a tool for community members to use in the app form to report any ADA accessibility issues. The submittal can be anonymous, and the city uses the information to make repairs and additions to keep the city ADA compliant. Access to the Tweetsie Trail for lower-income housing, such as Dunbar Apartments, is an eleven-minute car ride, one hour and forty-nine-minute walk, or a 33 minute bike ride. In contrast, the higher socioeconomic status homes are further away from the trail. The top ten highest real estates situates in Johnson City's rural area.

Johnson City has created an ADA Acessibility Reporting map that entails where there is a lack of ADA accesible areas.w

In the late 1850s, Johnson City was established as a railroad station following the development of the East Tennessee and Virginia Railroad. Located in the northeast corner of Tennessee, Henry Johnson built the depot, post office, and general store at the junction of the proposed train line. The village quickly emerged and became known as Johnson's Depot until 1869 when the town received a state charter and was renamed Johnson City. With the turn of the century, Johnson City became more established as the mining industry thrived and infrastructure, enterprises, and railroad traffic increased. The early 1900s brought new banks, hotels, theatres, phone services, a public library, and the East Tennessee New School, which was later renamed East Tennessee State University and is now the largest higher education institution in the region.

One of the major characteristics that Johnson City and surrounding towns such as Jonesborough may be known for is the culture of old-time music. Frank Buckley Walker, from Colombia Records, conducted the recordings of and created the Johnson City Sessions, which played a major role in the development of what is considered country music.

As the first town established in Tennessee, Jonesborough is rich with some of America's oldest history. Established seventeen years before Tennessee was granted statehood, the town was named as the county seat of Washington County. The town took on the appalachian tradition of storytelling and became known as the Storytelling Capital of America with its center campus being the Mary B. Martin Storytelling Hall. The campus hosts an annual three day National Storytelling Festival beginning in October.





BOONES CREEK OPRY



TACO TREK RIDE

There are many musical events that take place around Johnson City and Jonesborough Tn. Down Home, located on 300 West Main Street, and Wild Wing Cafe, located at 71 Wilson Avenue, are some of the most popular venues that attract music lovers from all over Tennessee and Virginia. The Freedom Hall Civic Center is another popular multi-use venue, and starting in 2014, it is the official basketball venue for East Tennessee State University.



APPALACHAIN FAIRGROUNDS



DOWN HOME ECLECTIC MUSIC ROOM

Johnson City may also be known for their festivals and fairs. The Appalachain Fairgrounds hosts a fall fair beginning in August as well as a halloween themed park called The Haunted Grounds.



WILD WING CAFE



INTERNATIONAL STORYTELLING CENTER

EVENTS OF INTEREST

There are many attractions within and surrounding Johnson City that draws attention to the area. Visitors or locals in Washington County can reach many attractions in under two hours such as Pisgah Forest, Hendersonville, Blue Ridge Parkway, Brevard, and the Great Smoky Mountains. Within Washington County, there are many popular restaurants, bars, music venues, outdoor greenspaces, and public trails. Johnson City's attention to outdoor activities has given it a similar reputation as Asheville or Chattanooga. The Tweetsie Trail, for example, may represent the region's historical train system as well as the outdoor culture.

Johnson City locals hold much pride over their Tweetsie Trail, and many popular spots have been developed to be within walking distance of the trail.



Gives the opportunity to stand out compared to other cities

Easily recognizable

Rememberable and catchy

APPEAL

LOGO

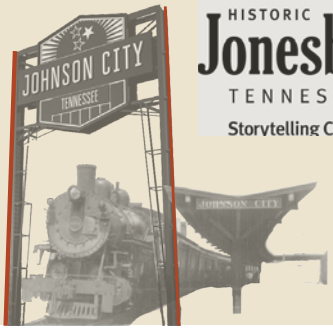
GREENWAY BRANDING

SLOGAN

WASHINGTON COUNTY

JOHNSON CITY

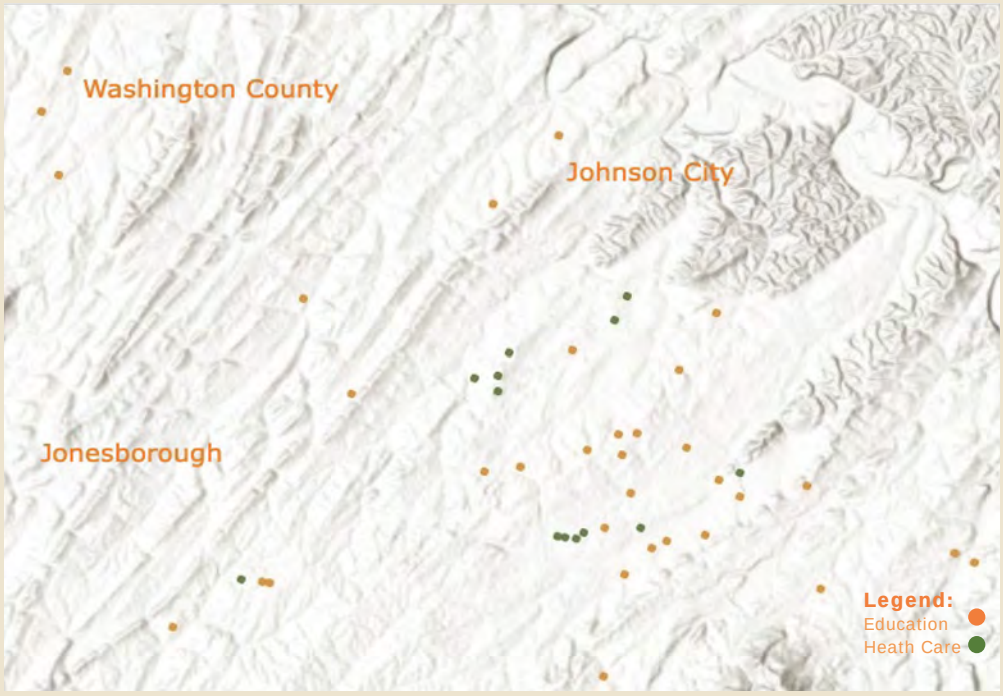
JONESBOUROUGH



BRANDING

In 2022 Johnson City adopted a new flag to represent the city's past, present, and future through symbolism and color to showcase prosperity, environmental stewardess, and unity. Jonesborough focuses on historic preservation as the oldest town in Tennessee. The Jonesborough Historic District, circa 1969, is more than 120 acres of 72 buildings that are part of the National Register of Historic Places. Known as the international storytelling center, Jonesborough continues to educate the process of Appalachian storytelling traditions during October. The architecture, heritage, and culture center the town's image to visitors. Overall both Jonesborough and Johnson City do a great job on branding, but they could improve by having a clear focus on how they want the world to see them. So instead of looking at the two towns as separate, having some sort of unity would make their ideas more cohesive. They are obviously two different places with unique quirks that make them stand out, but being able to find an in between would help Washington County with branding.

MAIN EMPLOYMENT INDUSTRIES



ECONOMIC DATA

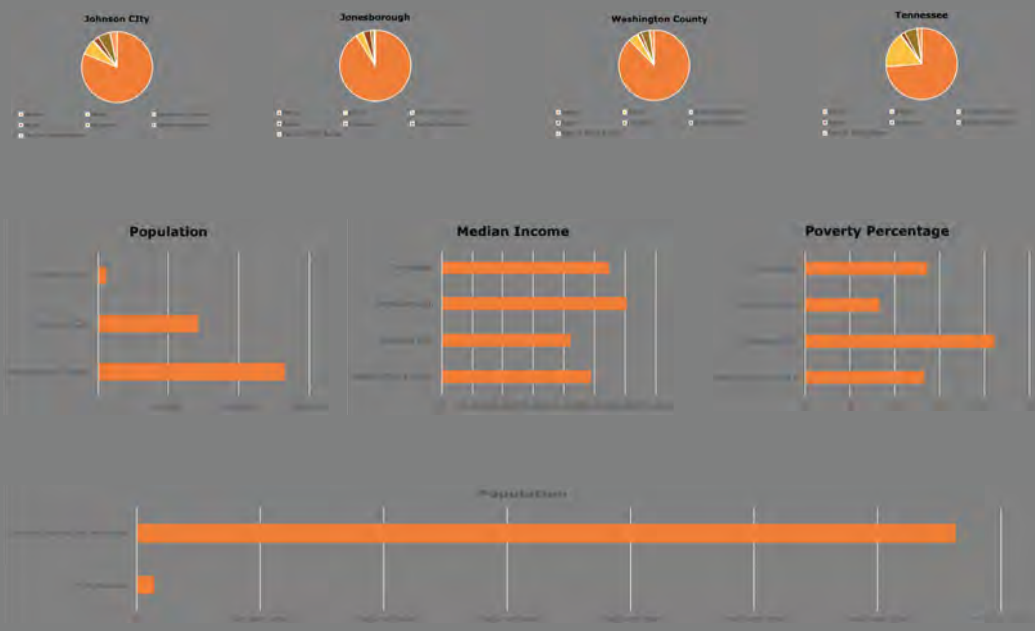
The top employers in Johnson City and Jonesborough are educational institutions and healthcare facilities. East Tennessee State University in Johnson City and Ballad Health provides the county with job opportunities. Higher than the state average, as well as nationally, societal members of Washington County (32.3%), Johnson City (39.0%), and Jonesborough (34%) have a bachelor's degree or higher. According to News Channel 11, 3,800 jobs in the county are directly or indirectly related to tourism. In 2021 tourism revenue generated 241 million dollars.







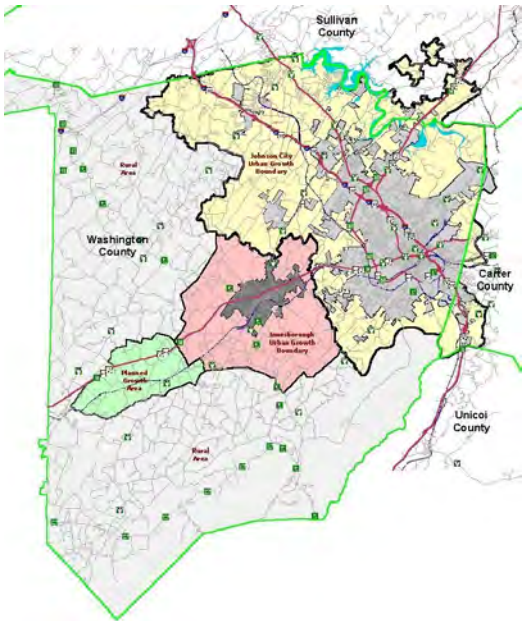
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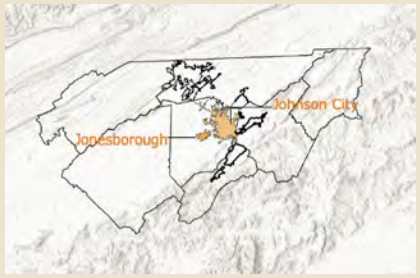
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DEMOGRAPHICS

In the Northeast corner of Tennessee, 330 square miles encompass Washington County, with a population of 134,236. Centrally located within the county, Jonesborough and Johnson City contribute 77,232 people. Demographically the racial make-up is predominantly white at a percentage of 88.6 compared to the state of Tennessee at 78.2% and the county at 91.2%. The median household income is higher in Jonesborough at $60,638, while Johnson City is significantly less at $42,174, and Washington County is $48,823 compared to the state of Tennessee at $54,833. Johnson City has the highest poverty percentage at 21.1%, with the state at 13.6% and nationally at 12.8%.

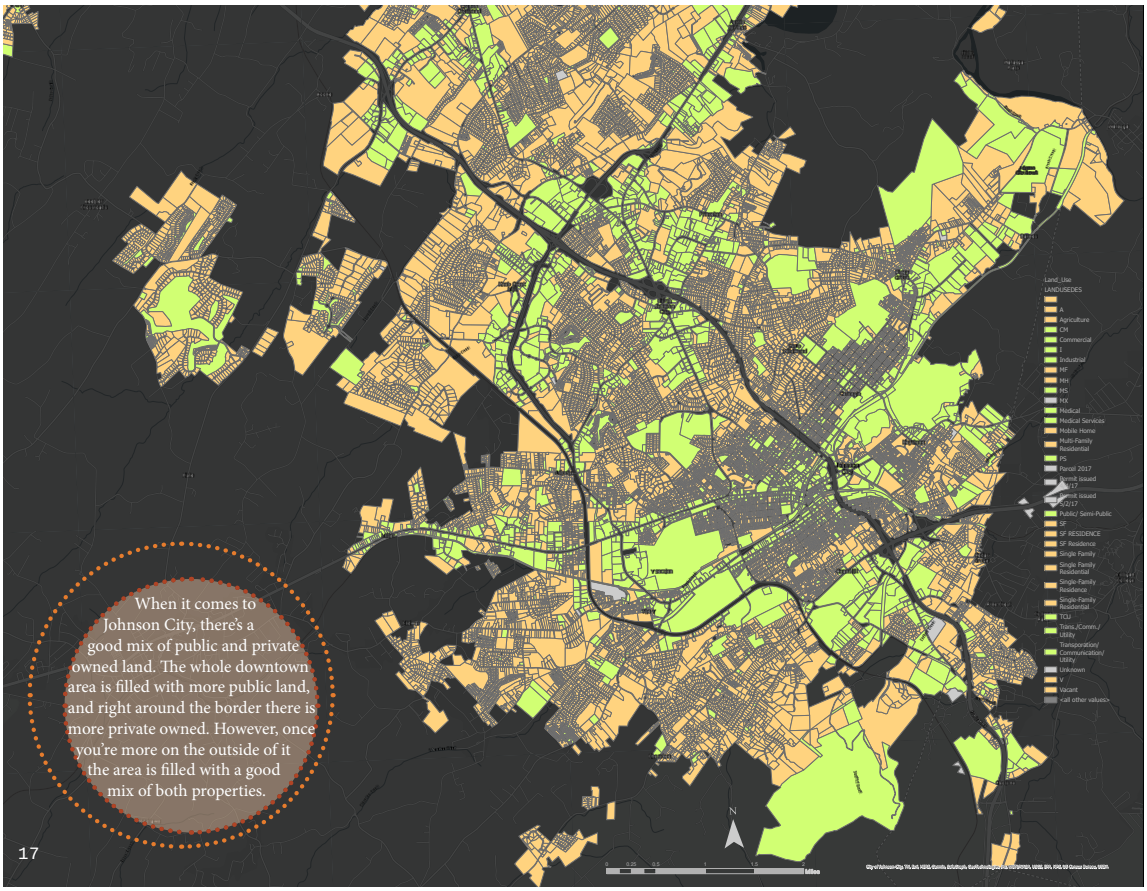






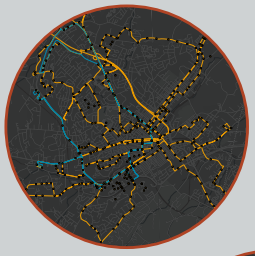
URBAN GROWTH

Growth projection for Johnson City is at a growth rate of 1.10%--this puts Johnson City eighth in the state of Tennessee and 549th in the USA. The mountains, lake, and Tweetsie Trail contribute to the population's increasing growth and projected growth, reaching 90,000-95,000 within ten years. The current administration is building on a solid foundation for the anticipated growth in water management and developing parks and schools to accommodate the projected needs. Improving the quality of life to offset the consequences of growth is at the forefront of the current city manager, Cathy Ball.



LAND USE

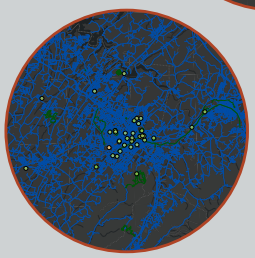
Throughout Washington County, there are a range of different types of land. To make this more visually appealing, the land use is organized as orange meaning private while anything that is green is public. The gray areas are unknown on which category they fit into. With this information, someone could interpret that the public lots are either located near the edge of the limits which are probably farm lands that aren't taken. Also any large lot that is located near downtown is owned by the public. Most of the smaller lots that are near downtown are private, which I can assume that they are owned by buisnesses. With this information it helps us navigate where we can place our ideal trail.



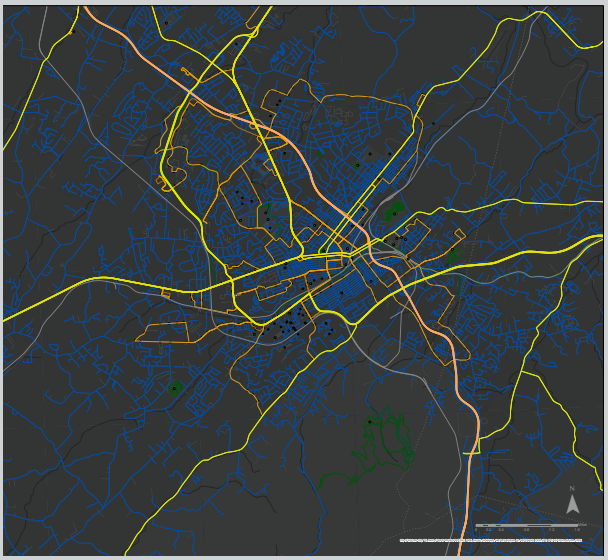
TRANSIT

MAIN STREETS





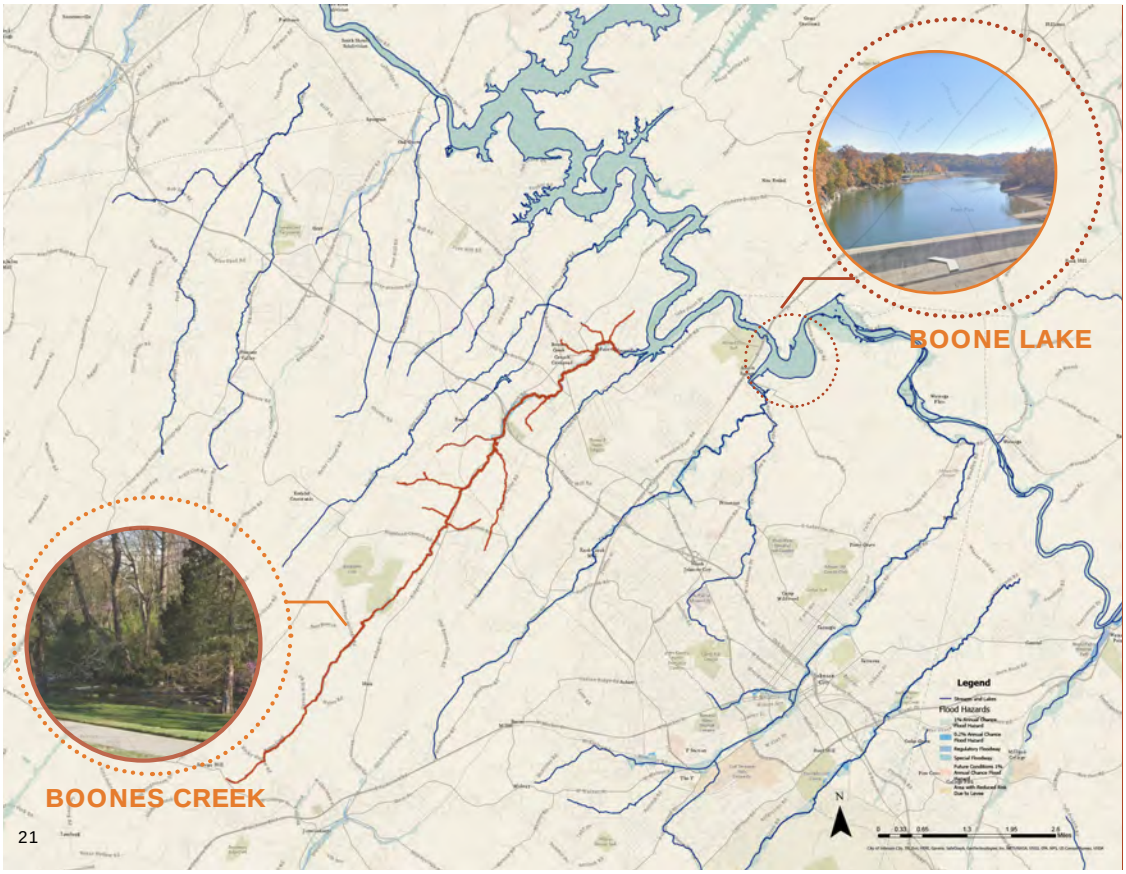
SIDE STREETS



All throughout Johnson City, people have multiple options to get around town. The one interstate, I-26, that goes through Johnson City, starts in Kingsport, Tennessee, goes through Asheville, NC, and then ends in Charleston, SC. Then perpendicularly south, the 321 goes into Johnson City, as well as Jonesborough, Tennessee.

CIRCULATION:
ROADS AND PUBLIC TRANSIT

Other than the main two highways, Johnson City has a various amount of main streets that people can use to navigate the town. The State of Franklin is one of the most known streets because it goes right through downtown. It is the home for many major stops such as East Tennessee State University. When it comes to Jonesborough, the only other main streets that is known is the Old Tennessee 34. This road goes through downtown and is known as one of the first streets and is very historical due to people traveling would use to get from the east to the west. When it comes to public transit, Johnson City gives the locals and public easy access to the whole town. Throughout the day someone can basically get anywhere they please. At night, the bus is limited to less routes. In Jonesborough, there isn't any access to public transportation. Typically if someone wants to get around they either have to walk, bike, or drive. So adding a trail system through Jonesborough is a neccessity.



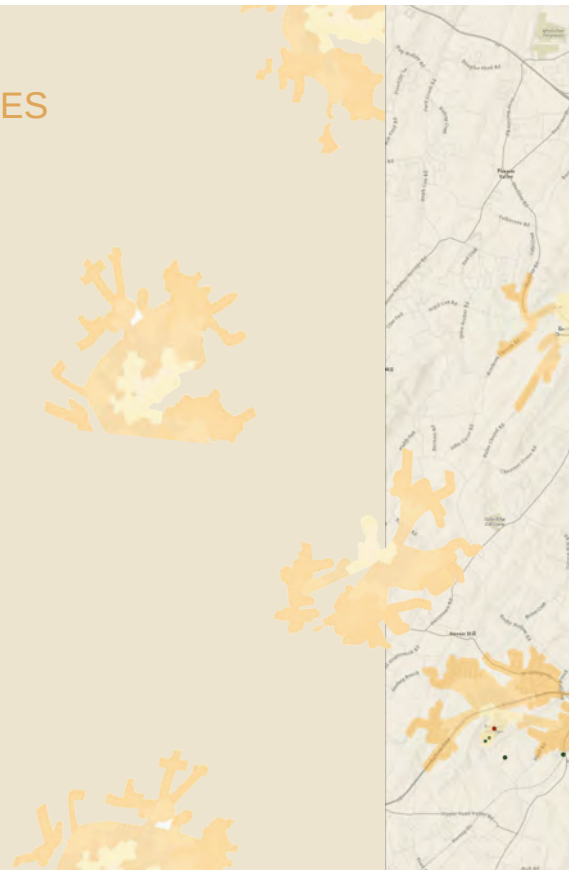
HYDROLOGY AND WATER QUALITY

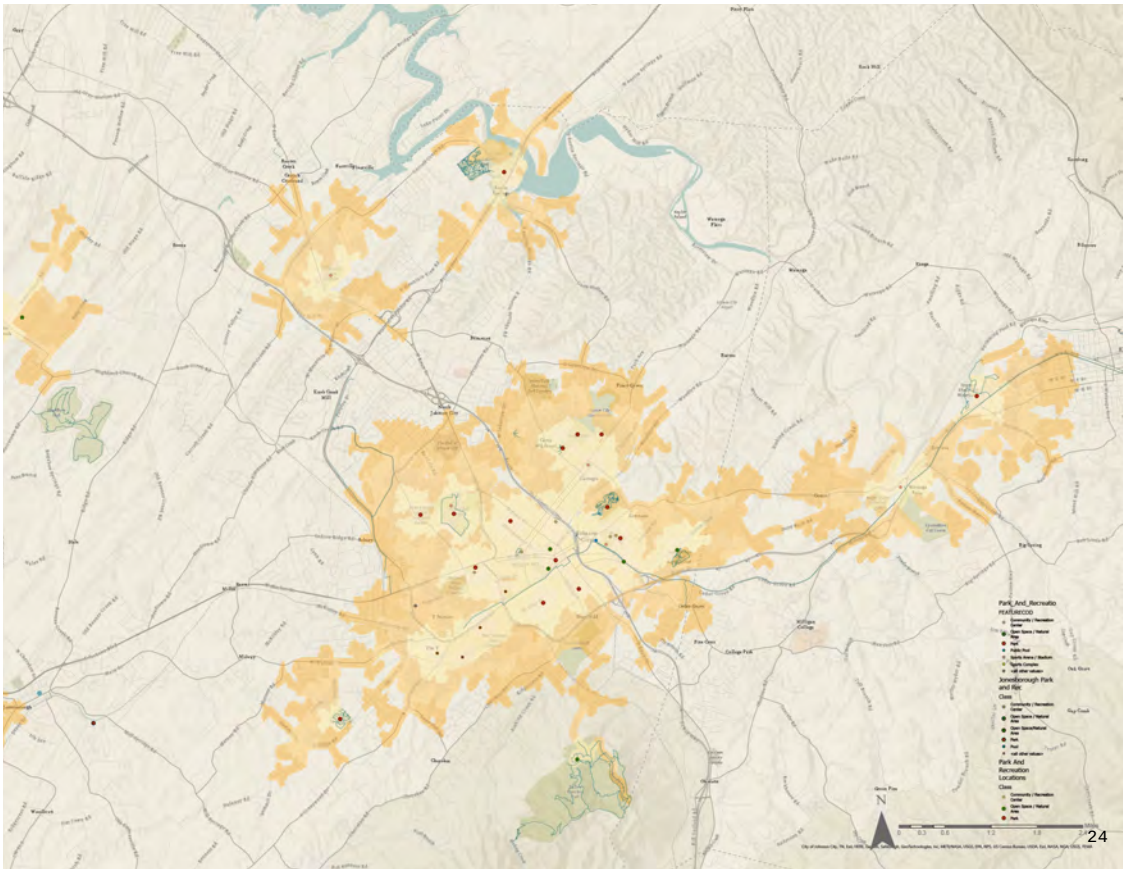
Throughout the Northeast Tennessee region, there are many resources of water from rivers, canals, creeks, and lakes. Specifically, Washington county does not lack in that category. All of the creeks feed from Boone Lake and surrounding lakes that are connected. Most importantly, this lake provides water into Boones Creek. This water isn't in the best condition due to animal waste near the surrounding farms all throughout the area. However, the open land creates an opportunity to make a trail for everyone. The main stream of creek has plentiful of existing trees acting as a buffer. Overall, the water in the region creates a naturalistic aesthetic

The main stream of creek has plentiful of existing trees acting as a buffer. Overall, the water in the region creates a naturalistic aesthetic that shouldn't be pushed aside.

RECREATIONAL AMENITIES AND GREENSPACE

Throughout Washington County, there is a trend of located green spaces in one general area and not spreading them out. For example, in the heart of Johnson City, they are a range of parks, open spaces, and community recreation areas. This creates lots of opportunities for the community that lives near downtown to host events and activities. One of the main areas that the public utilitizes use specifically is Founders Park. This place was designed to avoid severe flooding in the heart of downtown near all the restaurants, bars, parking spaces, and a railroad. Being able to create a place to enjoy walking paths and structures along the way. Then there is Tannery Knobs, which includes a pump track, as well as mountain bike





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RECREATIONAL AMENITIES AND GREENSPACE

trails that range from beginner courses to expert level excursions. Once someone leaves the heart of Downtown Johnson City, it becomes more difficult to access greenspaces on the north and south neighborhoods. On the south end there's an open space between Antioch and Huffins roads named Willow Springs Park. This open space includes a dog park, multiple pathways, children's park, and multiple workout opportunities. Being on 1.6 acres of land it gives the public many opportunities to use the space as they please. However, there isn't an easy way to access Willow Springs. Park unless someone uses a type of transportation.isn't an easy way to access Willow Springs Park besides by car. Other than that, there aren't any parks that the public can get to easily from downtown. When it comes to the South side of Johnson City, there is one major park, Winged Deer Park, that's a 12 minute drive from downtown. This location has a great accessibility to Boone Lake, 18 disc golf course, and multiple sports fields. Throughout the site, visitors have a variety of options on whether they want to take a scenic walking route or a paved fitness trail. This location is also the home of the Massengil Monument, which is Johnson City's oldest dwellings. Overall, this is a great outlet for locals to go to, but there isn't an easy way besides by car. When it comes to Jonesborough, they have Persimmon

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Ridge Park within a few blocks vicinity where they've placed community pools,recreational facilities, children's parks, and natural open space. Due to the inside knit of the historical area the heart of downtown, these spots were pushed more out to the outskirts of the area. It's only about a mile away from downtown.This space is over 130 acres with biking and hiking trails, water park, an 18 disc golf course, and a children's park. It's a great place for families to go to enjoy the natural outdoors. Overall, the greenspaces in Washington County have areas where there are multiple parks for people to enjoy. throughout the area.

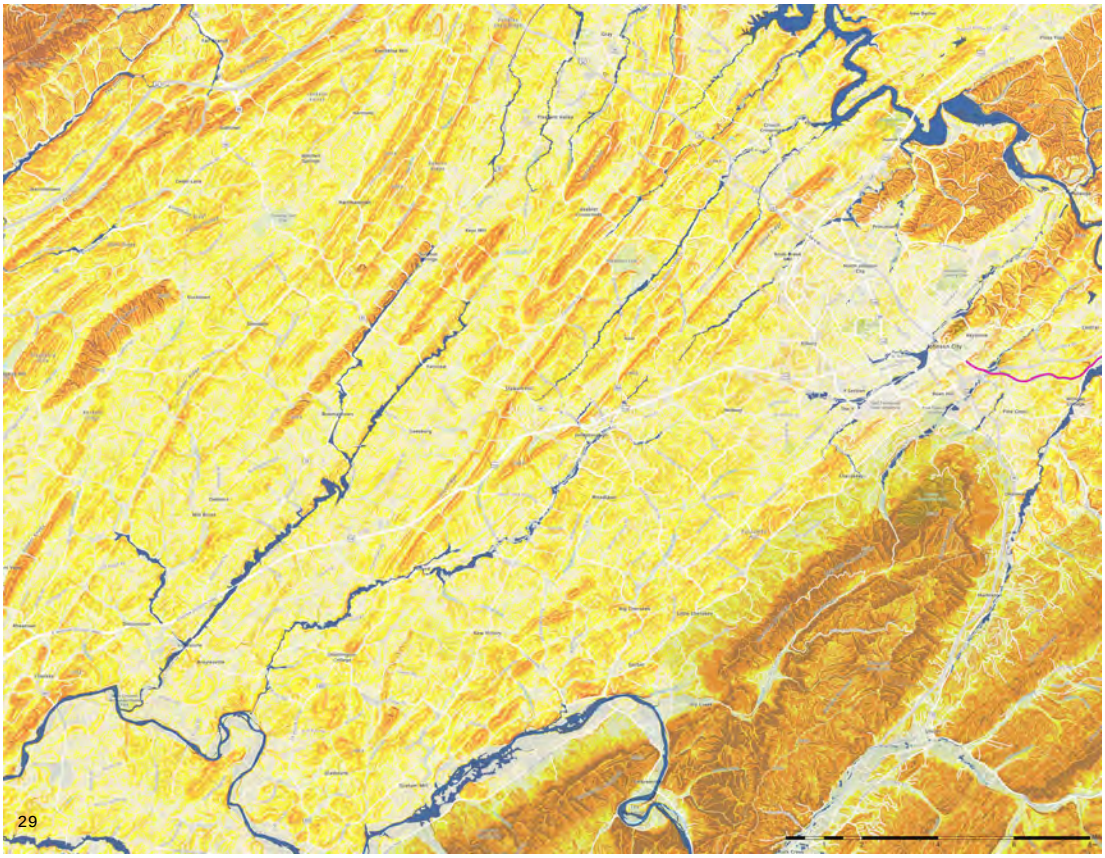
However, in the majority of the space, there are many park deserts throughout the area. With this information, Appalachian Green is making it a goal to make sure that locals have easy access to trails and parks.



VACANT LOTS

When it comes to vacant lots in Washington county, there's a large variety ranging from smaller house lots to an acre of land available. Around the heart of Johnson City, there are a plentiful number of smaller lots for houses across the town. Most of them are located near the lower income neighborhoods, which gives opportunities to create amenities for the community. Additionally, there are some near more of the restaurants and stores that could be used to create outdoor places that can grab more attention of visitors. In the south suburbs of Johnson City, they have vacant spaces that are spread all throughout. Some are larger and near the farmland, while others are in the neighborhoods with smaller lots.

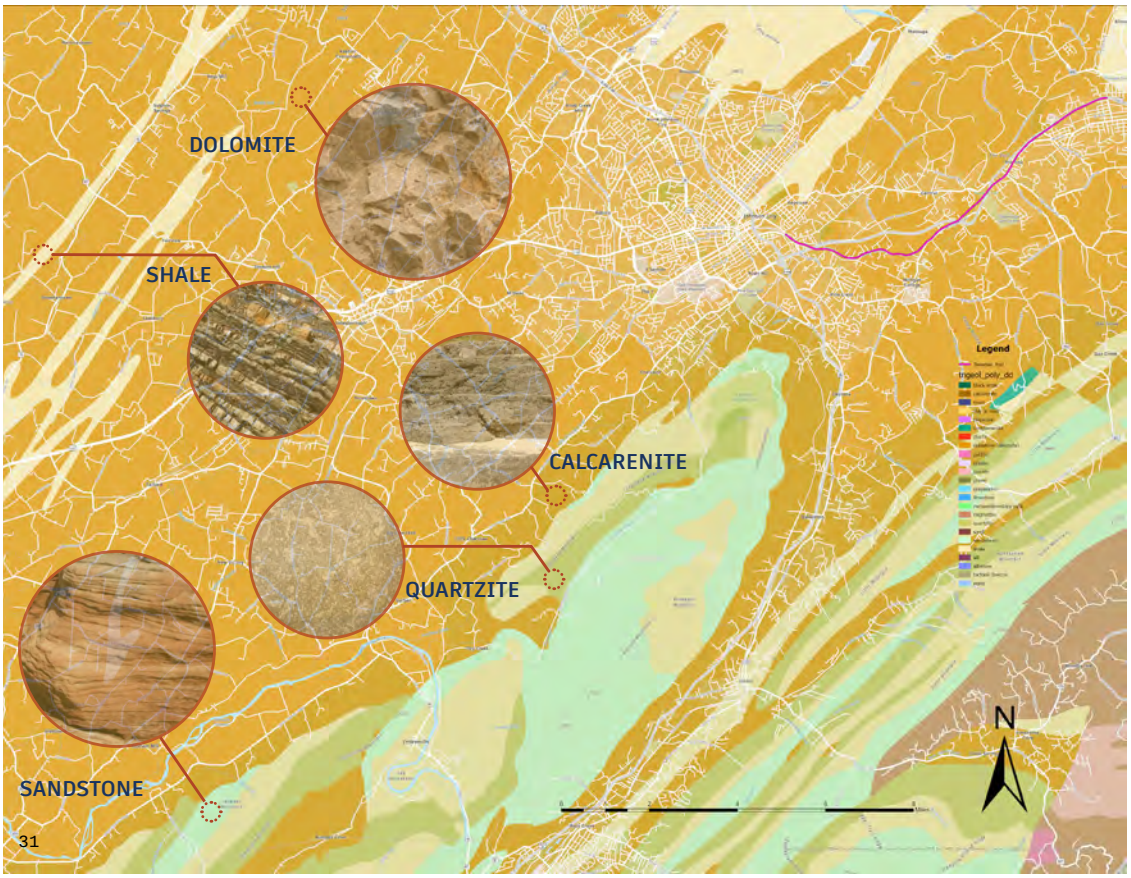
On the north side of the town by Winged Deer Park, there are lots of opportunities to create parks varying from different sizes. One of the most promising lots is located near Old Gray Station Road and Roan Street. This one lot has a section of Boones Creek, which could be a huge attraction for locals and visitors. It has a unique topography and existing trees that gives a site character. When it comes to Jonesborough most of the vacant lots known are located north of the historic downtown. The size of the lots vary, but the majority of them are smaller lots. This could be used as restroom stops and pocket parks for the locals to enjoy.





SLOPE AND FLOOD HAZARDS

The map illustrates the slope terrain and flood hazard area in the region. For reference, Tweetsie Trail is shown in the pink outline on the right. The color varies from darkest orange indicating very steep to light grey which indicating flat. When designing a greenway one of the factors that need to be considered is slope. Steep grades prohibit wheelchair access and makes bicycle access more difficult for unexperienced cyclists and it could result in a potential hazard. The flood hazard areas are shown in blue. These are typically rivers and streams. These can serve as guidance for greenways.



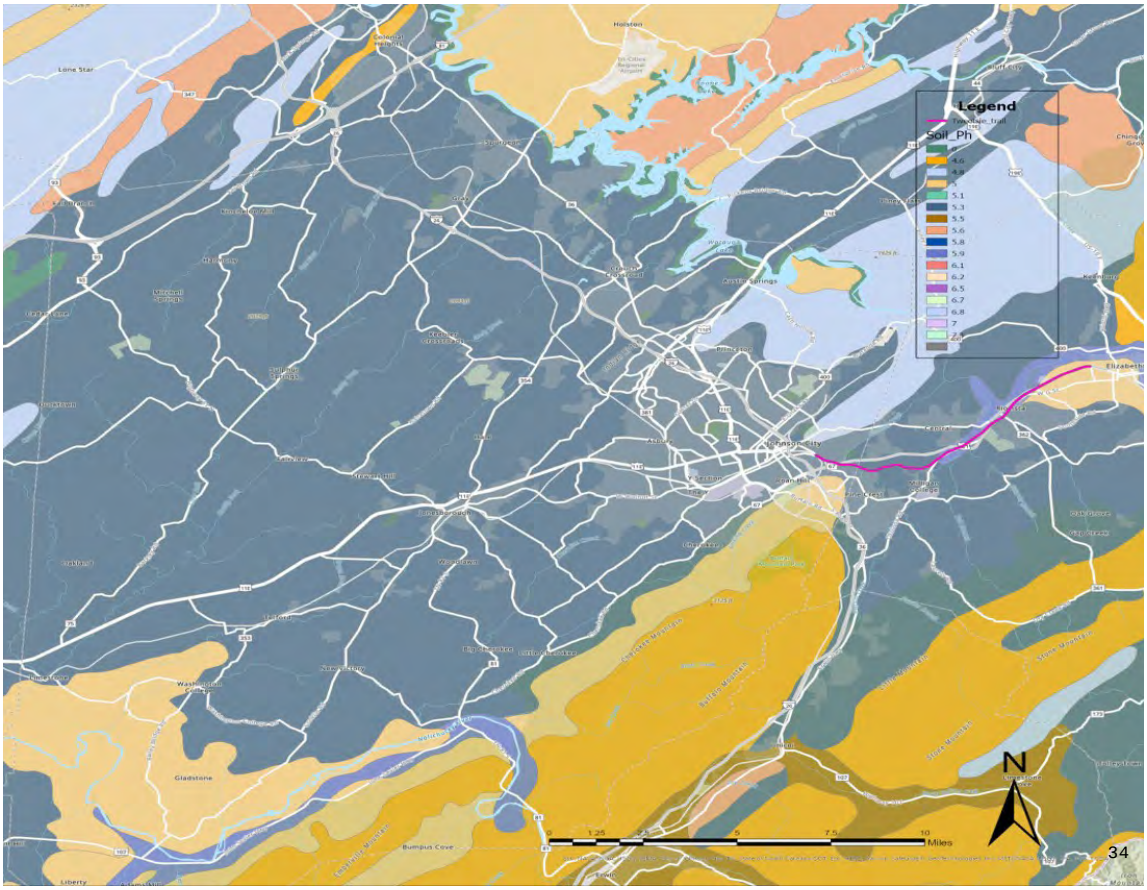
GEOLOGY

Most of the rock found in the region is dolomite followed by sandstone, shale, quartzite, and calcarenite. Rocks are important because they provide clues about what the Earth was like in the past. Rocks are categorized into three different categories: igneous, metamorphic and sedimentary. Igneous rocks form when molten rock cools and solidifies. Metamorphic rocks form when rocks undergo high heat, high pressure or are exposed to mineral rich fluids. Sedimentary rocks are rocks that are formed from pre-existing rocks of once-living organisms. Most of the rocks found in the region are sedimentary rocks which include dolomite (composed of mainly sedimentary rock and limestone). Limestone is a sedimentary rock formed primarily from calcium carbonate. Sandstone and shale are also a sedimentary rocks. Quartzite is a non-foliated metamorphic rock and calcarenite is a limestone rock.

SOIL pH

The pH of the region is 5.3 which is in between acidic and neutral. The pH of soils is an important factor to healthy plants. All plants have a pH level that they prefer and thrive better in. Placing plants in areas that are not suited with their pH preference can affect their growth depending on how sensitive the plant is. Some plants can adapt to different levels of pH. Some plants that do well in a 5.3 pH level include, apple trees (*Malus domestica*), Azalea (Rhododendron), Birch (genus *betula*), Blackberry (*Rubus fruticosus*), Blueberry (*Vaccinium sect. cyanococcus*), Dogwood (*Cornus*), Juniper (*Juniperus*), Mountain Laurel (*Kalmia latifolia*) , White Oak (*Quercus alba*), and Blue flag Iris (*Iris versicolor*).

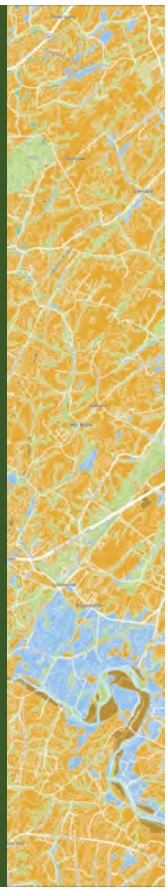


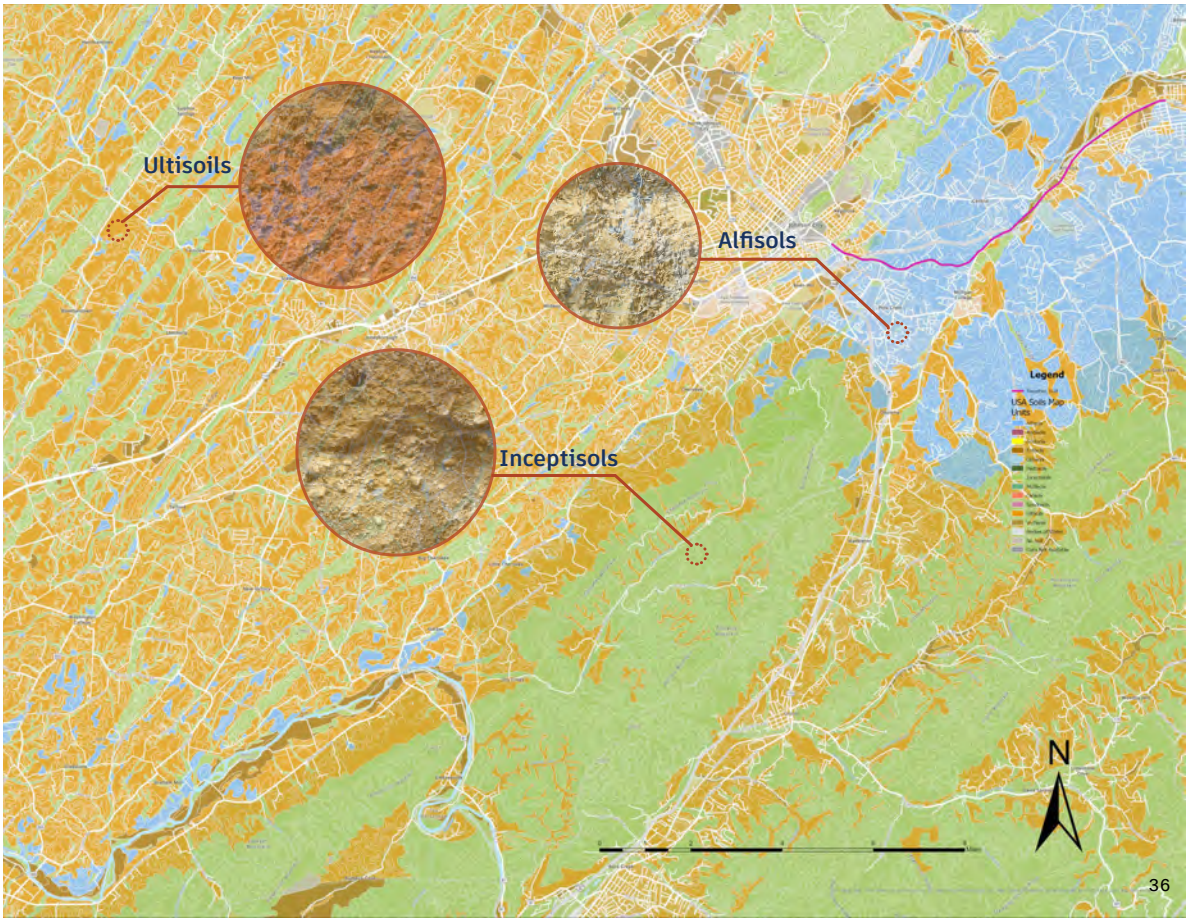


USA SOIL MAP UNITS

The types of soils mostly found in this region include Ultisols, Alfisols, and Inceptisols. Ultisols are reddish, clay rich acidic soils that are considered naturally suitable for forestry and are stable for construction projects. These soils are not agriculturally productive because they are deficient in major nutrients like calcium and potassium, but with the application of lime and fertilizers they can become productive. Alfisols are considered moderately leached soils. They are relatively highly fertile therefore are productive soils for both agriculture and silvicultural use which is the process of growing and cultivating forest crops.

Inceptisols are known to have the weakest appearance of horizons or layers. These types of soils are the most abundant on Earth more specifically in mountainous areas and are suitable forestry, recreation and watersheds.





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VIEWSHEDS



The region consists of mostly mountainous views. These viewsheds visualize the topographic characteristics of the ridges and valleys found here.

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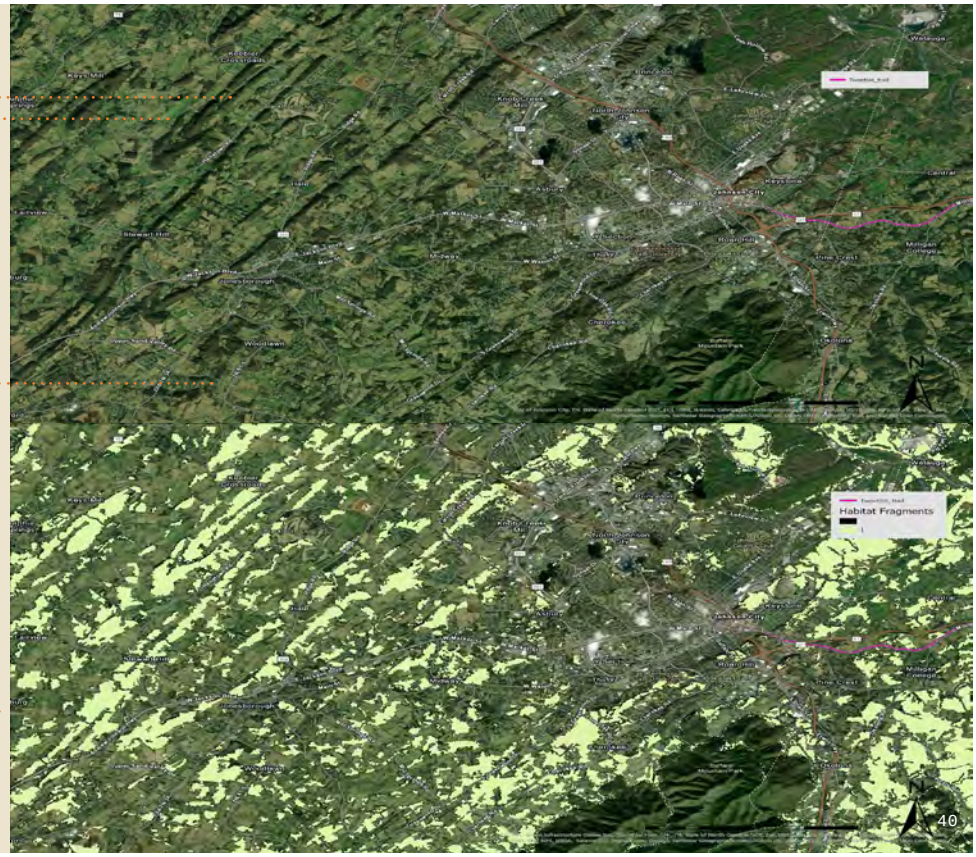
ENDANGERED SPECIES



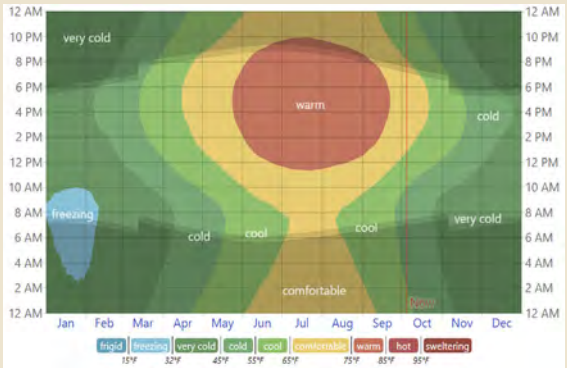
CORRIDOR STUDY AND HABITAT FRAGMENTATIONS



The corridor-matrix, patch model helps determine habitat connectivity and help in the conservation of biodiversity. Corridors are linear elements that serve as connectors for habitats, patches are nonlinear units that differ from its surroundings, and the matrix is the dominant element that connects the landscape. Habitat fragmentation occurs when a habitat is destroyed and broken down into pieces. The causes for habitat fragmentation include volcanic eruptions and fires, but mostly human activity. The major downside of habitat fragmentation is the limitation of wildlife mobility. This makes it hard for animals to move from one patch to another. This can lead to inbreeding and genetic diversity loss. As a result, there is a reduction in the long-term health of a population and an increase in vulnerability to disease and extinction. In the Johnson City to Jonesborough region, there is a large amount of habitat fragmentation. Although he ridges serves as corridors, there are plenty of patches that need to be connected. To avoid further fragmentation construction in between patches and corridors must be avoided, and instead help connect these by adding a medium of connectivity.



	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C (°F)	1.8 °C (35.2) °F	3.8 °C (38.8) °F	7.8 °C (46.1) °F	13.2 °C (55.8) °F	17.6 °C (63.8) °F	21.6 °C (70.8) °F	23.1 °C (73.5) °F	22.8 °C (73.1) °F	20.1 °C (68.1) °F	14 °C (57.2) °F	8 °C (46.3) °F	3.9 °C (39) °F
Min. Temperature °C (°F)	-1.9 °C (28.5) °F	-0.3 °C (31.5) °F	3.2 °C (37.7) °F	8 °C (46.3) °F	12.7 °C (54.8) °F	16.8 °C (62.2) °F	18.6 °C (65.5) °F	18.3 °C (64.9) °F	15.4 °C (59.8) °F	9.5 °C (49.1) °F	3.7 °C (38.7) °F	0.4 °C (32.7) °F
Max. Temperature °C (°F)	7.1 °C (44.8) °F	9.4 °C (49) °F	14 °C (57.2) °F	19.5 °C (67.1) °F	23.1 °C (73.6) °F	26.8 °C (80.3) °F	28 °C (82.4) °F	27.9 °C (82.2) °F	25.4 °C (77.7) °F	19.6 °C (67.2) °F	13.7 °C (56.7) °F	9 °C (48.2) °F
Precipitation / Rainfall mm (in)	116 (4)	99 (3)	126 (4)	113 (4)	114 (4)	111 (4)	115 (4)	102 (4)	96 (3)	86 (3)	86 (3)	115 (4)
Humidity(%)	68%	65%	68%	67%	71%	72%	75%	73%	70%	70%	71%	72%
Rainy days (d)	10	9	10	10	11	12	13	11	8	7	7	9
avg. Sun hours (hours)	5.4	5.8	7.0	8.7	9.4	10.1	9.7	9.3	8.1	6.9	6.4	5.4



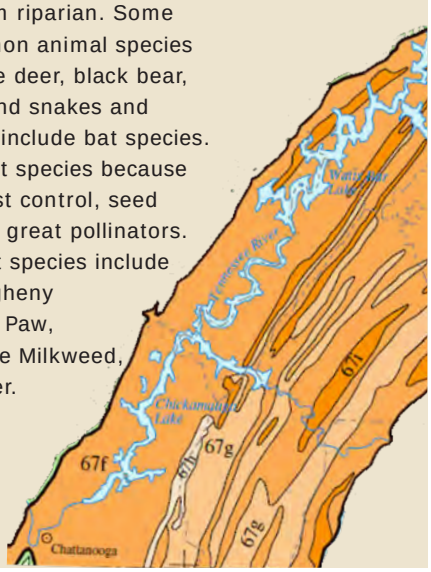
In Johnson City, the temperature year-round varies from 28°F to 84°F. Summers are normally warm, humid, and long while winters tend to be short, very wet and cold. The hottest month of the year is July with a minimum temperature of 65.5°F and highest at 82.4°F, which typically peaks around 4:00 pm. The coldest month in Johnson City is January with a minimum temperature of 28.5 °F which is considered “freezing” and a maximum temperature of 44.8°F. Freezing temperatures typically occur between 3:00 am to 8:00 am in January.

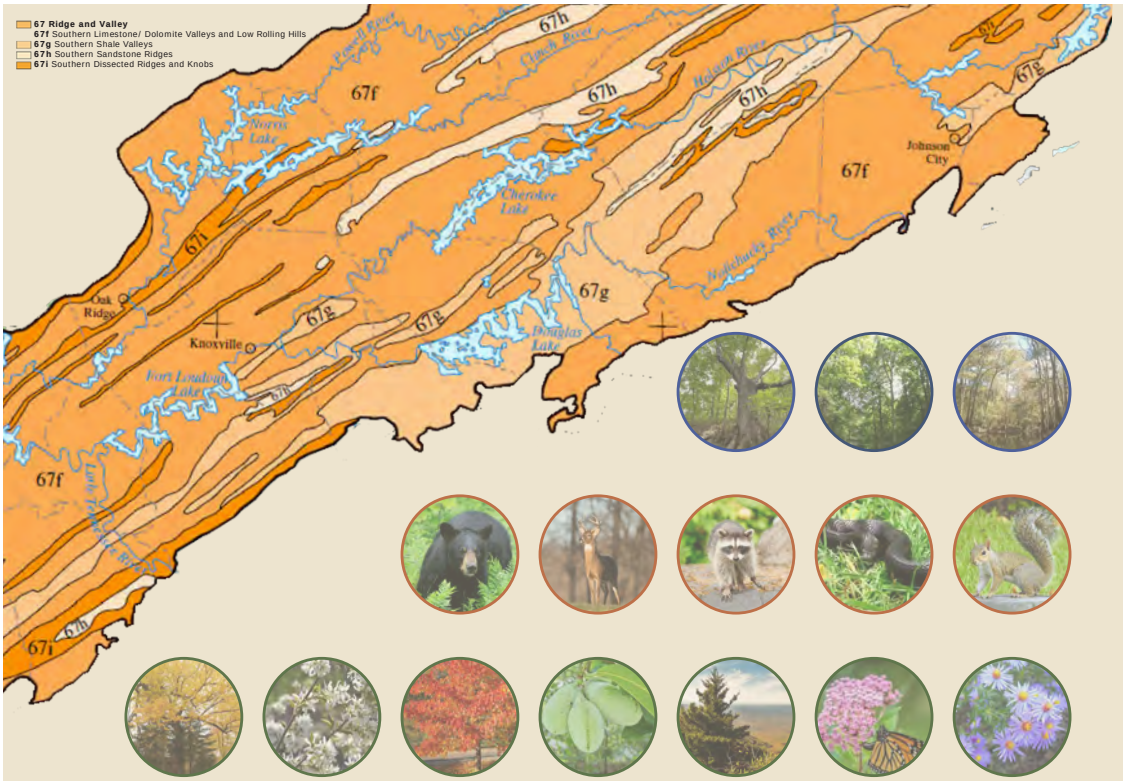
CLIMATE IN JOHNSON CITY

The month with the highest number of rainy days is July making it also the most humid month. The months with the least rainy days are October and November. The least humid month is February. The month with the highest sun hours is June and the months with the least sun hours are December and January. Climate is an important factor when trying to appeal to tourists. The best time for tourist to visit would be early June to late September. The sunlight hours and rainfall in Johnson City are enough for solar panels and water harvesting.

ECOREGIONS AND HABITATS

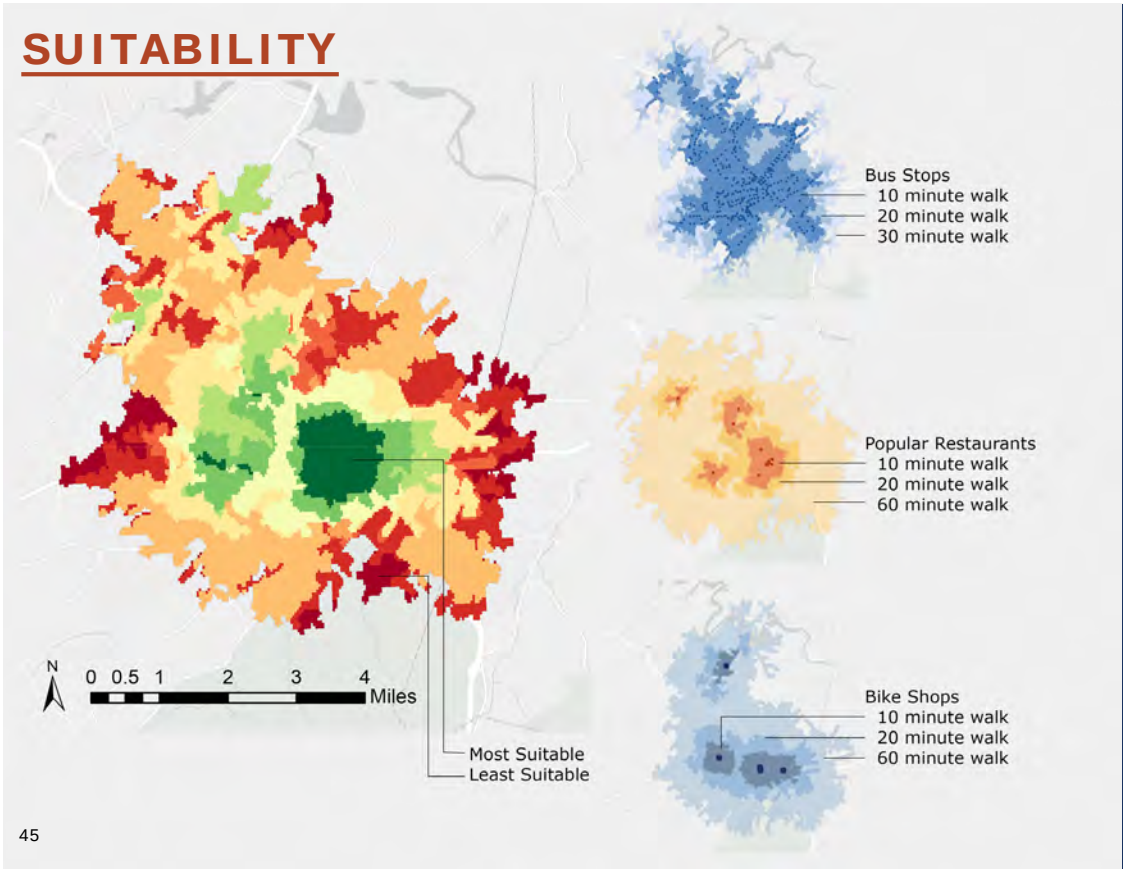
Johnson City is located in the Ridge and Valley of Tennessee. The Ridge and Valley consists of elongated ridges and long continuous valleys in between. The reason for this topographic characteristic trace back to the Paleozoic Era. Today's ridges and valleys used to be layers of alternating hard and soft sedimentary rock. These layers were deposited when the no longer existing Iapetus Ocean flooded North America during the Paleozoic Era which occurred 541-252 million years ago. Around this time, the North America continent was closer to the equator meaning that shallow marine environments were more common. This explains the presence of limestone and shales. As a result of erosion, the landscape began to take shape. The hard layers of sandstone remained, and the soft areas of shale and limestone eroded more easily. This process resulted in the formation of ridges and valleys that we see today. The types of tree forests found here include White Oak, Bottomland Oak, and Sycamore-ash-elm riparian. Some of the most common animal species found here include deer, black bear, racoon, squirrel and snakes and keystone animals include bat species. Bats are important species because they help with pest control, seed dispersal, and are great pollinators. Some native plant species include Yellow Birch, Allegheny Serviceberry, Paw Paw, Red Spruce, Purple Milkweed, and Sky-Blue Aster.





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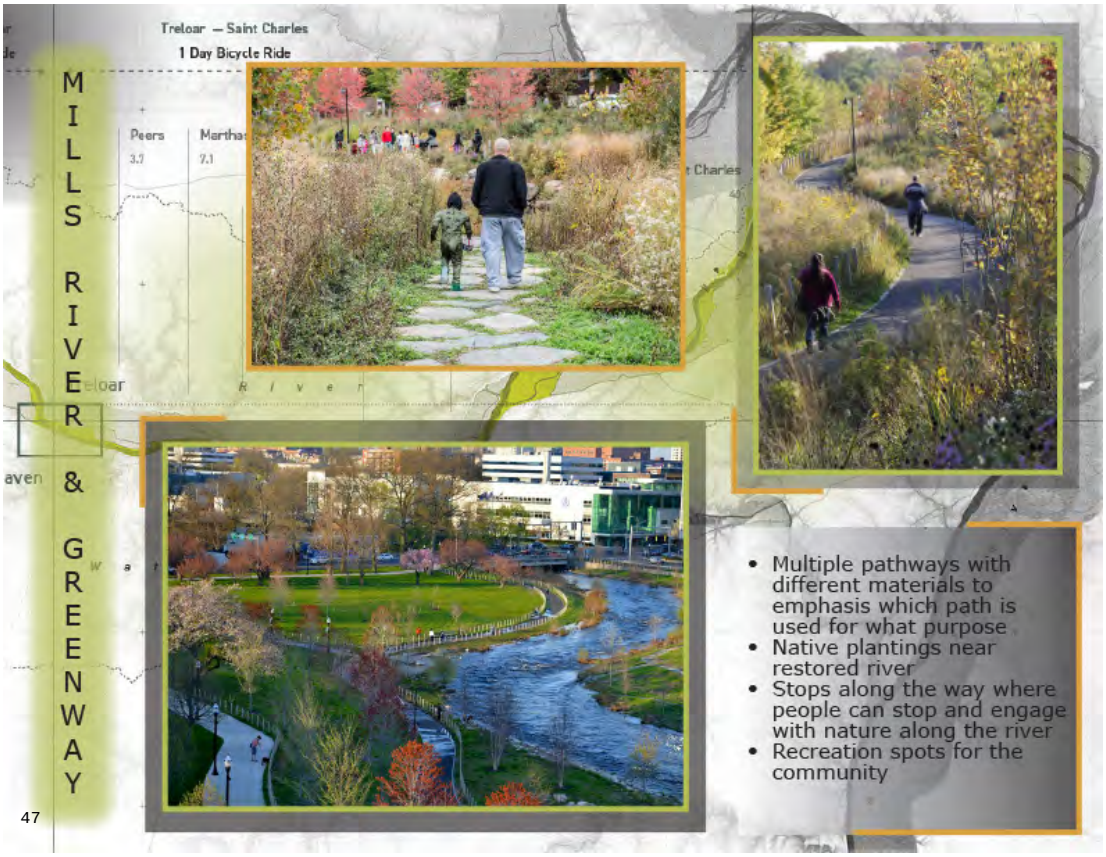
SUITABILITY



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SUITABILITY

The suitability map graphically displays Johnson City's restaurants, bars, green spaces, and other attractive amenities that are more or less suitable for the development of a greenway. After speaking with Johnson City officials and residents, it became clear that access to those popular amenities was necessary for the design of a greenway. The maps consist of data on Johnson City's land use, educational facilities, accessibility to public transportation, accessibility to parks, greenspaces, existing trails, the location of popular restaurants, bars, other attractive amenities, and lastly, the location of bike shops. The downtown and surrounding areas of the city are full of trails and greenspaces that locals and tourists find great pride in. The Tweetsie Trail, Tannery Knobs, and Winged Deer Park are just a few examples of outdoor spaces that proved to be necessary connections to our greenway. The required connection of trails and greenspaces, as well as the popularity and demand for bikes, directed us to further research bike shops in the area. Attracting both locals and tourists for repairs as well as rentals, bike stores in Johnson City are highly established shops that can be considered an attraction themselves. Running an analysis on the travel time required to access a bike shop, this map displays where bikers can easily access in under 10 minutes, in 20 minutes, and finally what is in the hour radius. Lastly, the majority of highly rated restaurants and bars are located within a two-mile radius of downtown. An analysis of the same type, displays the walking distance to and from those popular restaurants in under 10 minutes, in 20 minutes, and in 60 minutes. Our final maps proved to be useful, however, the process of researching and collecting data provided us with greater overall knowledge of the area as well as the identification of specific hot spot locations.



BURKE-GILMAN TRAIL

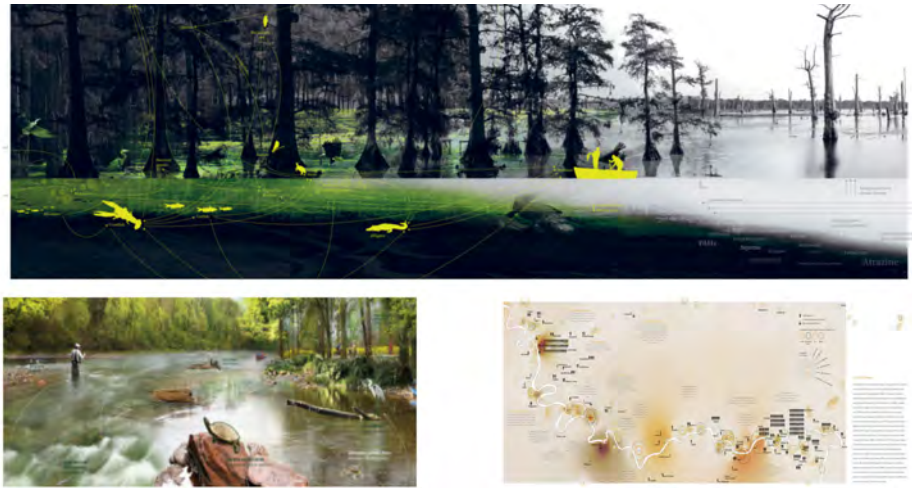
Seattle, WA



Located in King County Washington, this 27-mile multi use trail follows one of Seattle's first railroads: The Seattle, Lake Shore & Eastern Railway (SLS&E). The railway began slowly abandoning sections, the first abandoned is now the Burke-Gilman Trail. This trail connects users all over King County from Puget Sound to Lake Union, through Lake Washington, the University of Washington, straight into Seattle's Matthews Beach Park, and finally Log Boom Park. The trail is sprinkled with art instillations and offers specific sections painted for cyclists.



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Scape Studio's The Chattahoochee River Lands design is a precedent for the Washington County Greenbelt Project. Landscape Architect, Kate Orff, proposes a 125-mile trail to unite metro Atlanta with the river. One million people live within a 15-minute bike ride to the water's edge The design includes pocket stations along the trail to encourage the communities to reconnect with nature and promote environmental stewardship. Revitalizing habitats and ecosystems provide education and benefits to the area. Similarly, Washington County Greenbelt Project is on a path to incorporate design principles that benefit the current population and tourists.

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THE 606 (THE BLOOMINGDALE TRAIL)

-Chicago, Illinois, United States
-Designed by: Michael Van Valkenburgh Associates, Inc
-Client: Chicago Park District and The Trust for Public Land
-Abandoned elevated trail line
-2.7 miles long
-Access to 6 parks
-13 access points
-1 million + annual visitors
-$95 million project budget
-Connects 4 neighborhoods: Logan Square, Humboldt Park,-Bucktown, and Wicker Park
-Less than a 10-minute walk from home for 80,000 residents, including 20,000 children

PROJECT GOALS

CONNECTIVITY	STRATEGIC PLANTING
-Cyclists can traverse the city uninterrupted -Trail connects to major vehicular intersections, bus routes, CTA Blue line & Historic Humboldt Boulevard	-Continuous planting and variety of native plants -Plants are used purposefully (ex: tall evergreens used as sentries at entrances)
ACCESSIBILITY	**RECYCLED INFRASTRUCTURE**
-Various access ramps and stairs -Parks are tailored to meet needs of community	-Goal was to spend as little as possible so they recycled infrastructure (ex: bridges)







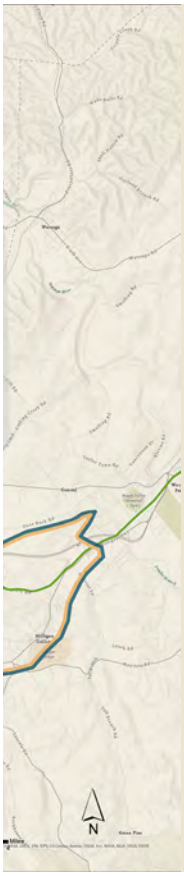


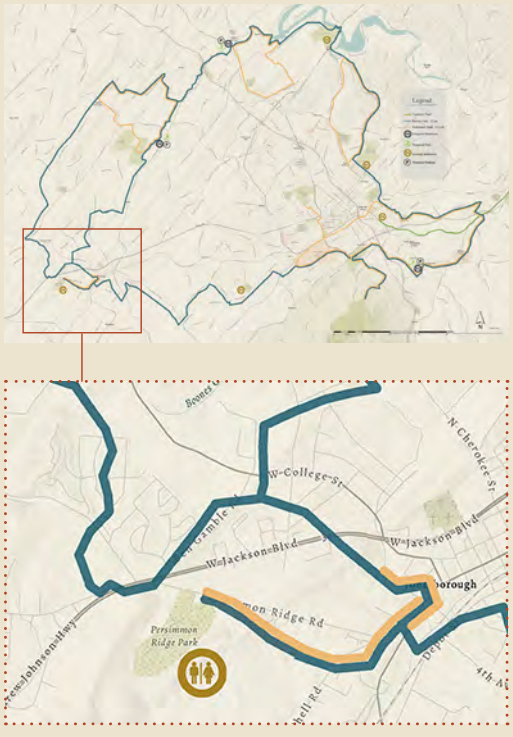




MASTER PLAN



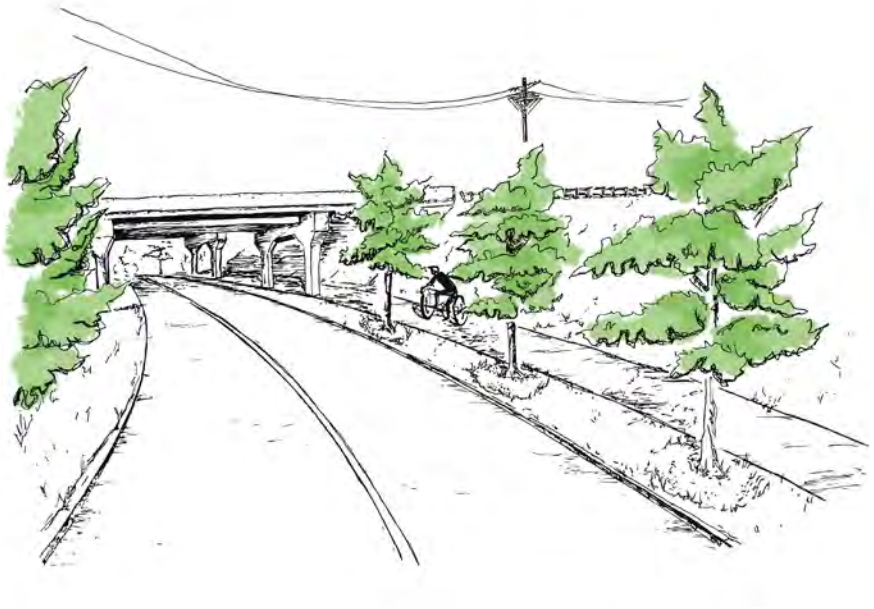




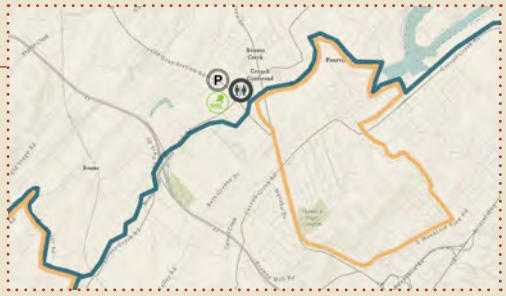
DOWNTOWN JONESBOROUGH

It's important to make sure that the Appalachian Green trail doesn't go through busy intersections where it would be impossible to cross. This perspective displays the entryway into Downtown Johnson City.

DOWNTOWN JONESBOROUGH ENTRTY



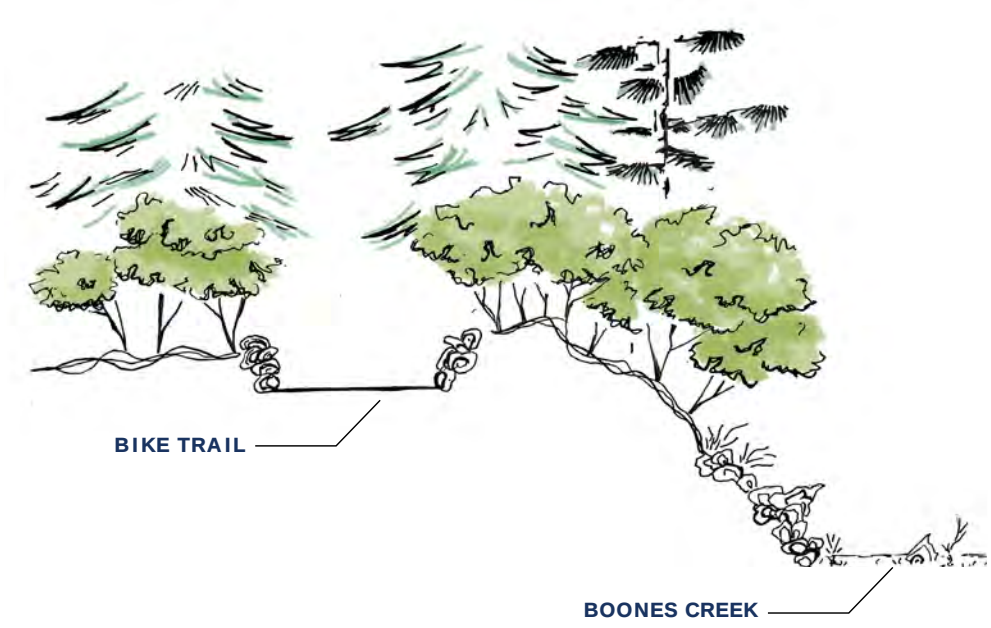




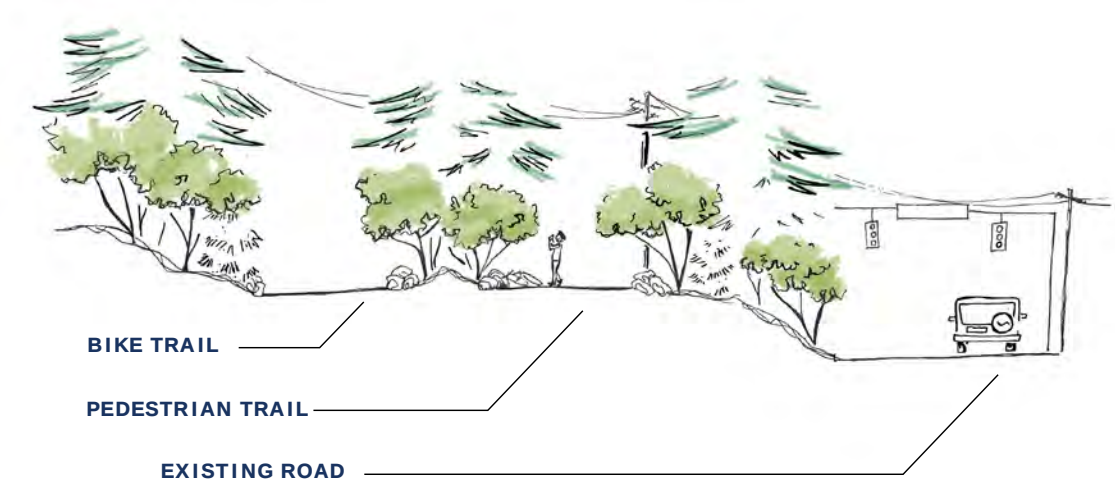
BOONES CREEK PATH CIRCULATION

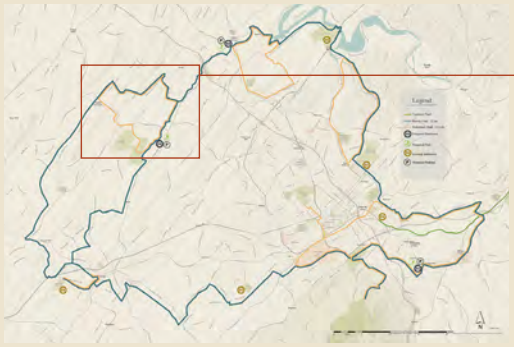
When it comes to the Trail on Boones Creek, it is ideal to make sure that the users are able to enjoy the scenary of the trail.

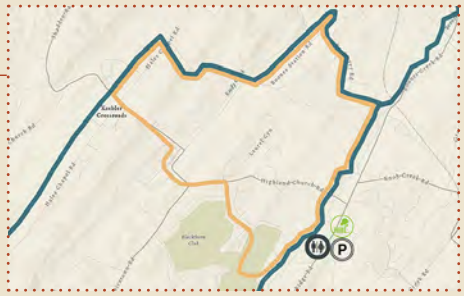
BOONES CREEK TRAIL



BIKE AND PEDESTRIAN TRAIL





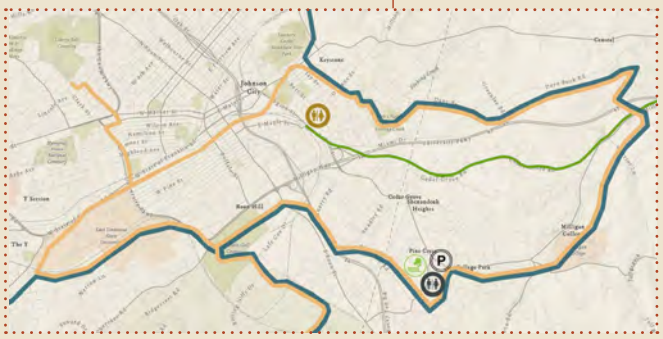


RURAL JONESBOROUGH

For the Bike and Pedestrian trail, its important to have the seperation between the two paths while still making sure that they're stil able to enjoy similar ammenitites.

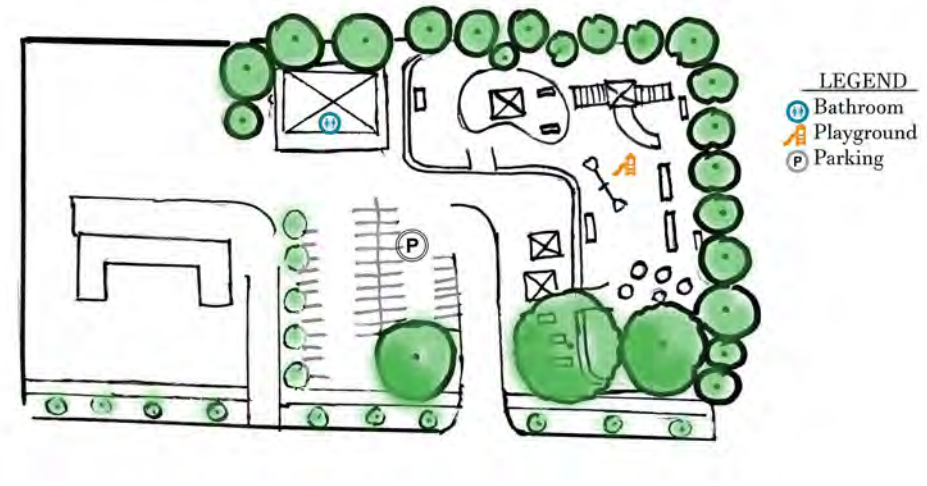


For everyones well-being, people should have access to outdoor spaces near there house within a ten minute walk. With the idea of focusing on locals and having easy access to green spaces, we want to include pocket parks throughout the trail. These can range have childrens playgrounds or just be an open field.



DOWNTOWN JOHNSON CITY CONNECTIONS

POCKET PARK EXAMPLE

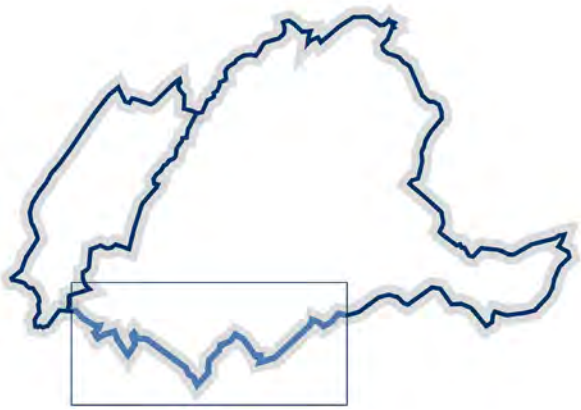


Johnson City to Jonesborough Connector

Kay Rumsey

THE BIG IDEA

Along the Appalachian Green, multiple pedestrian safe trails and loops have been created allowing runners, families, or any slower paced visitors to safely navigate the 32.5 total miles of inner network, connecting rural neighborhoods and greenspaces with regional attractions. The section highlighted inside the box is referred to as the Johnson City to Jonesborough Connector trail. This 8.6 mile trail is specifically designed for cyclists.





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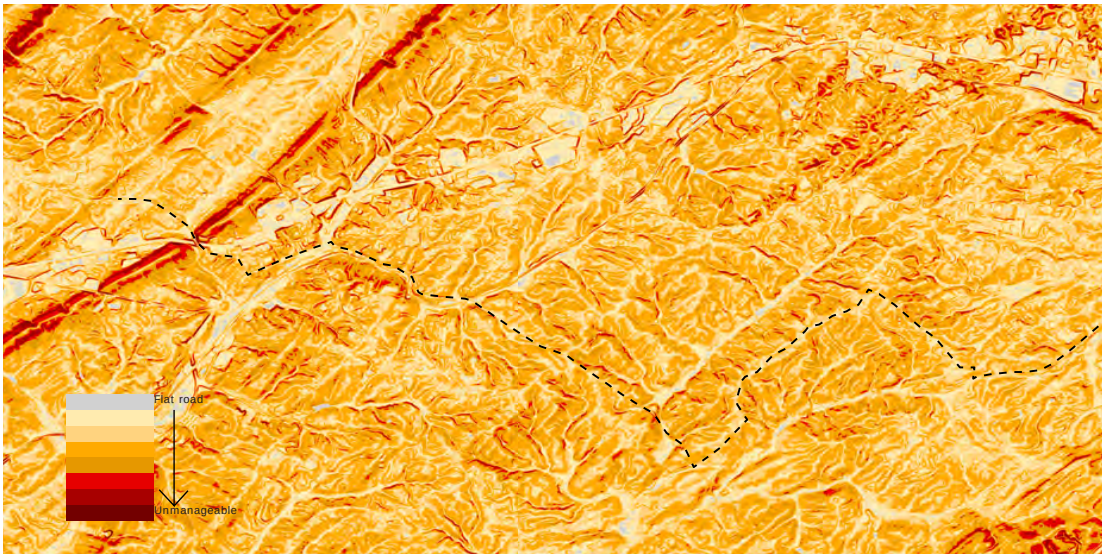


63



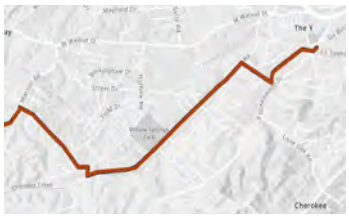
SURROUNDING AMENITIES

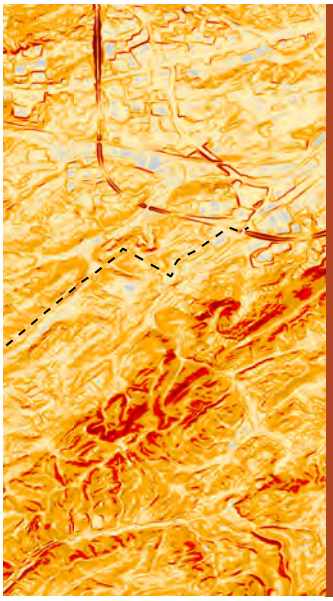
These images display some attractions and amenities accessible along this section of the Appalachian Green. The section begins at East Tennessee State University, allowing college students easy access to the greenway. The trail then connects through Willow Springs Park, where there are restrooms, playgrounds, park benches, and available parking spots. The trail then continues through Washington County, between the city limits of Johnson City and Jonesborough. As cyclists enter Jonesborough, they are riding past many classic Jonesborough attractions such as downtown restaurants, bars, shops, and historical buildings.











TOPOGRAPHY AND SLOPE ANALYSIS

Washington County is located in the mountainous northeastern part of Tennessee. The topography of the Johnson City to Jonesborough Connector is one of the flatter areas of the Appalachian Green. The topography map above, designed for cyclists' interest, displays slopes from flat to unmanageable. The trail is mostly mapped as a low-grade slope, with neither direction being tougher than the other.








WILDABOUT IN KING COMMONS

Adjacent to the Atlantic Ale House there is a large painted mural titled *Wildabout,* painted by Ian Brownlee. With energetic and bold colors, this mural reflects the native flora and fauna of the region while incorporating significant local architectural and city landmarks.



THE WILDABOUT WALKABOUT

In 2020, Johnson City Public Art collaborated with students from the ETSU Department of Art and Design, creating *The Wildabout Walkabout*, an animal sculpture scavenger hunt inspired by the *Wildabout* mural. Fiftee bronze sculptures were created by students and spread throughout downtown Johnson City, attracting visitors to explore the area on foot while educating them about the region.



BIENNIAL SCULPTURE EXHIBITION

Multiple unique sculptures, from various artists around the country, are placed on a two year rotational schedule and located around Founders Park in downtown Johnson City. Many of these pieces are available for purchase with 20% of the profit going to the city for future public art.

The Appalachian Green is very rural in this section of the trail. By implementing public art along the trail, this brings the character of the city out into Washington County and will attract visitors to these pieces.



This sculpture, titled “I Wanna Hug You” by Dave Eassa, is located in downtown Johnson City and is a piece in the biennual sculpture exhibition.



JOHNSON CITY TO JONESBOROUGH CONNECTOR

This section of the Appalachian Green allows cyclists to safely bike from city to city in under an hour. With the addition of local and student art intentionally spaced along the greenway, creative and profitable interest is introduced to an otherwise simple 8.6 mile connector. Taking inspiration from the Biennial Sculpture Exhibition in Founders Park, pieces on display along the trail are not permanent and may be purchased, some percentage of the profit going towards production of the greenway.

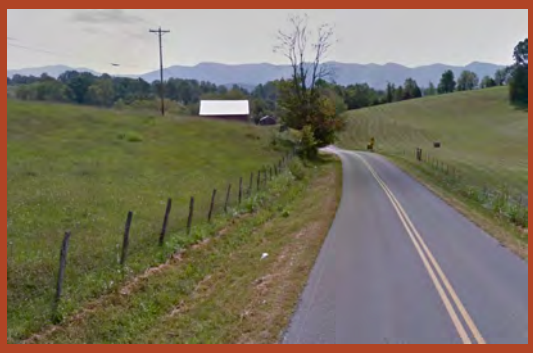
MILL SPRINGS ROAD



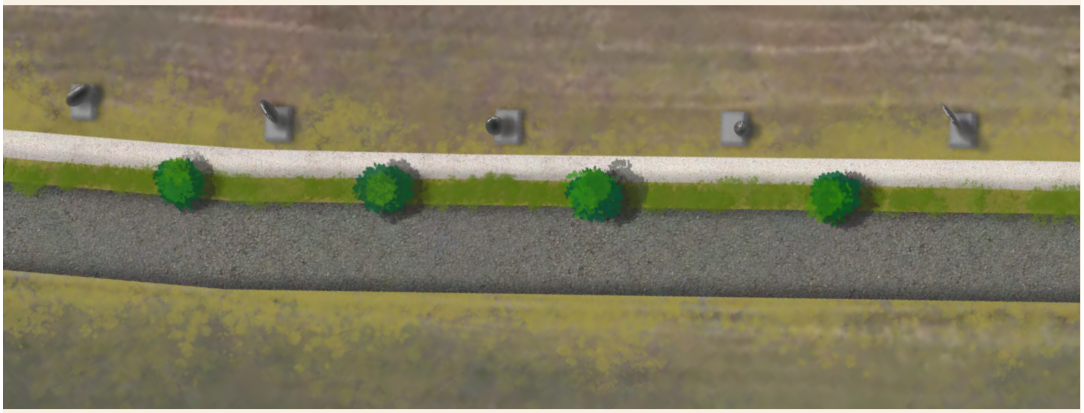


BEFORE IMAGES









ART IN THIS SETTING

By implementing sculptures along this section of the Appalachian Green, cyclists are greeted with a colorful visual break from what would otherwise be a rural bike ride through farmland in the countryside. While there is space designated for rest stops along the trail, the sculptures are designed to be appreciated from the active vantage point of the bike. As a visitor travels from Johnson City to Jonesborough, or vice versa, the art pieces are intentionally surprising and add a playful and creative element to the Appalachian Green.



74

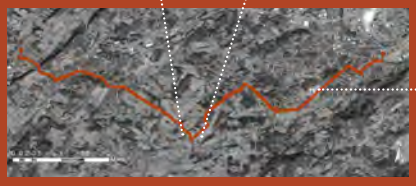


75



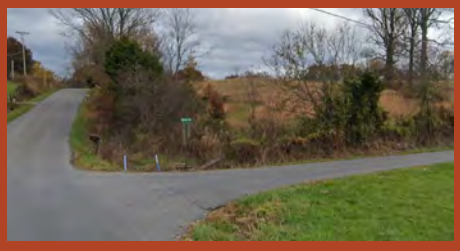
MILL SPRINGS ROAD AND MATSON ROAD

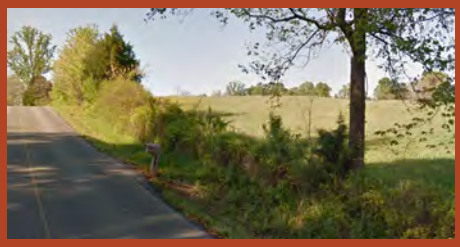




Restrooms and parking located at Willow Springs Park



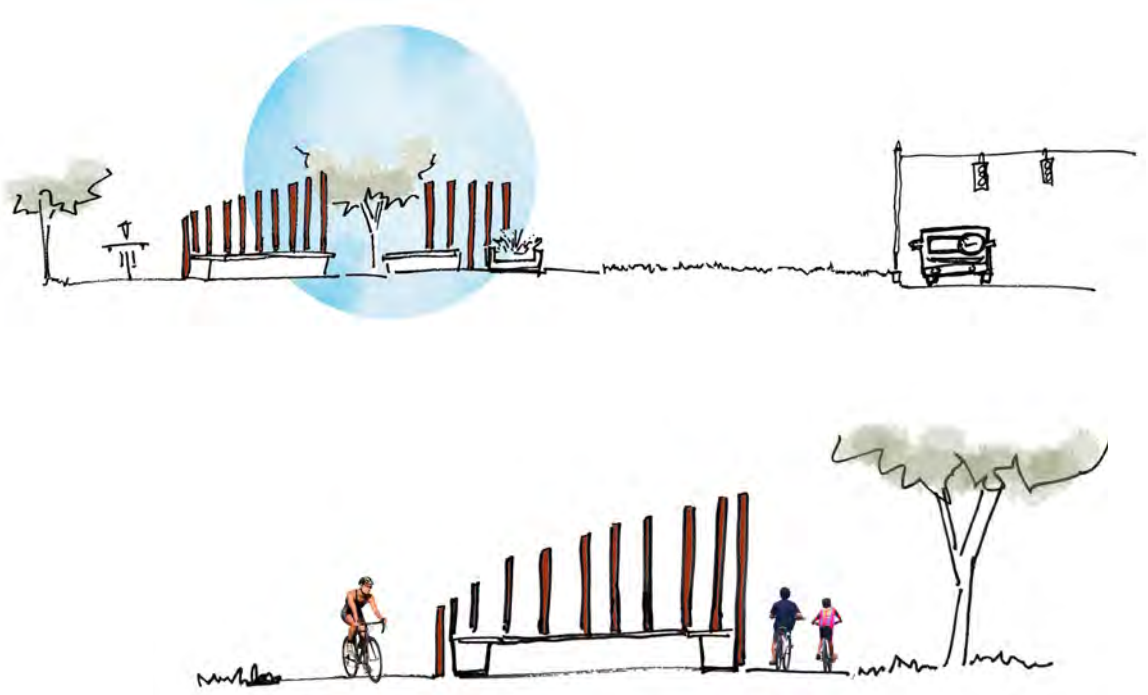




TURN REDESIGNED

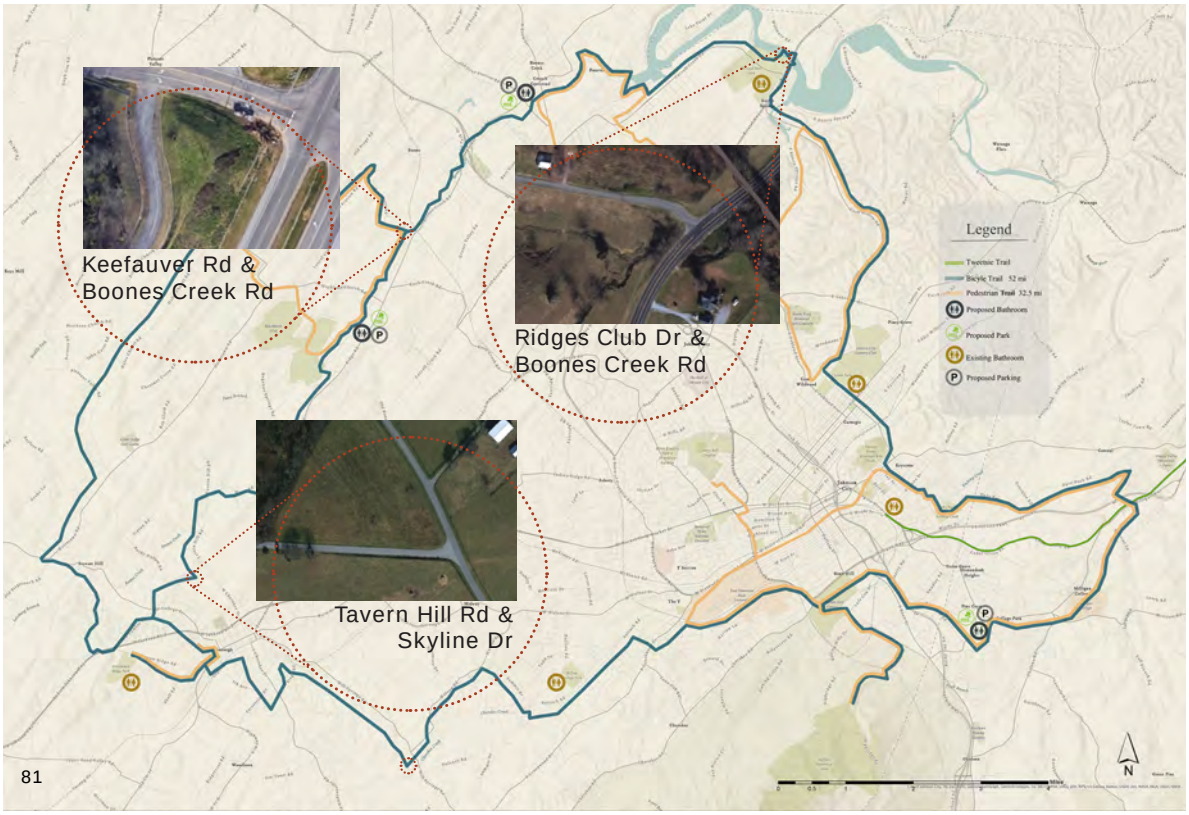
The circled portion of the Johnson City to Jonesborough Connector Trail's corner requires riders to make an extremely sharp bend. Although there are restrooms, benches, and other amenities at Willow Springs Park, which is close by, it seems vital for the Connector route to have its own designated rest place. By redesigning this corner, bikers may be able to make this abrupt bend in a graceful manner, having the option of staying on the route or dismounting in a specially designs rest area. Bike racks, bike repair stations, benches, and water fountains are just a few of the amenities that this redesigned space may include.





80

OTHER LOCATIONS FOR TURN REDESIGN



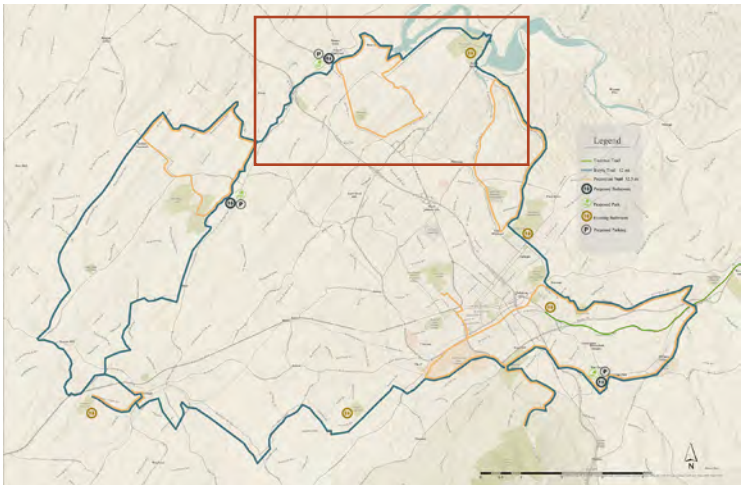
81

The circled areas on the map are sites that have been identified as sharp turns in the trail. The concept of the redesigned turn is to allow cyclists to navigate through the angle with the option to rest. These are locations where the design would be applicable and beneficial for visitors to the trail. Each of these sites have been identified as a good place for a rest stop. There are intentionally no identified locations close to downtown Johnson City due to the increase of public greenspace and infrastructure.

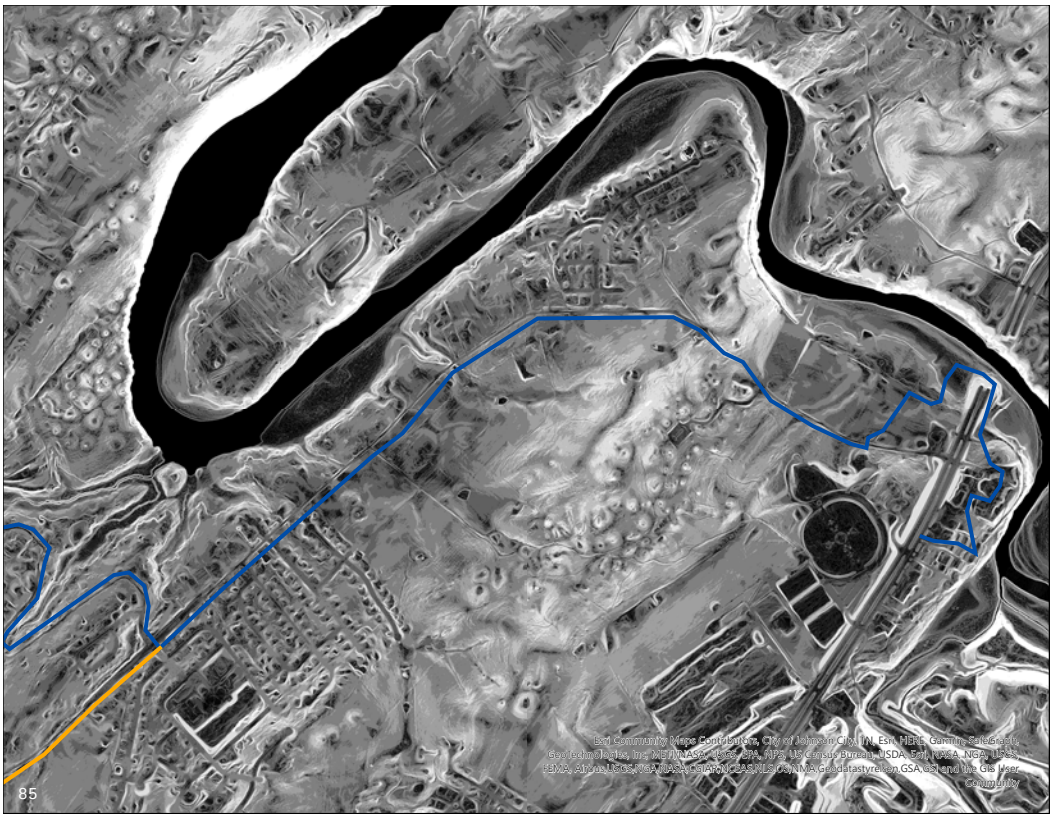
Creek to Park Trail

Riley Hays

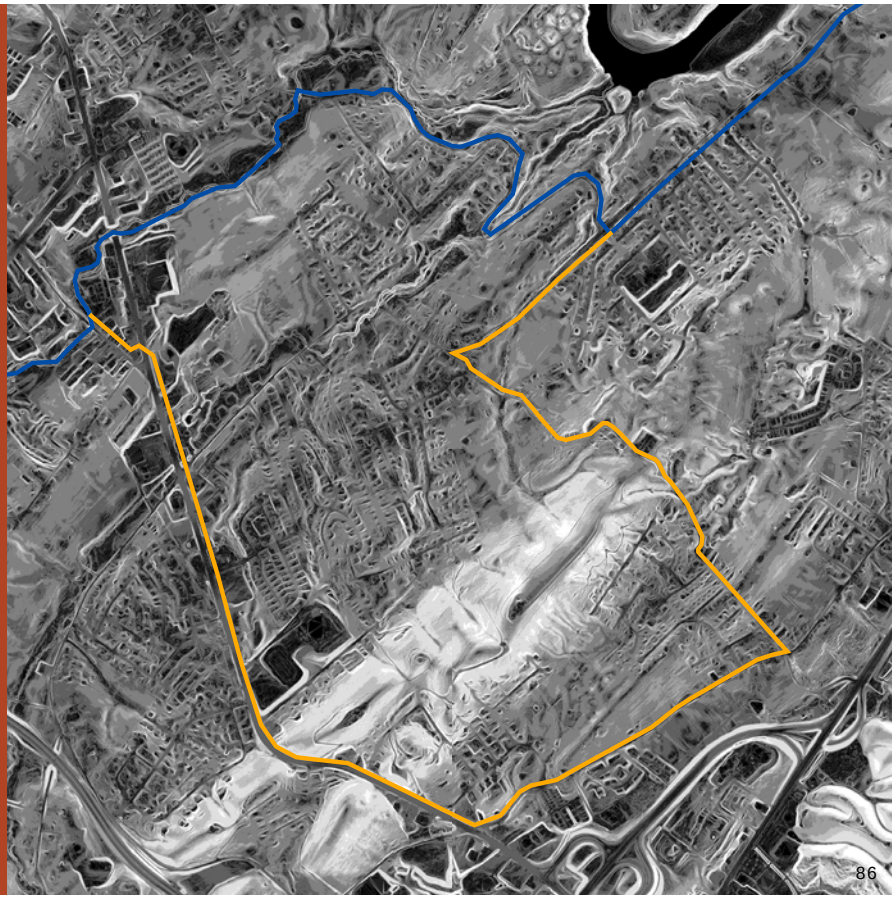
CREEK TO PARK TRAIL

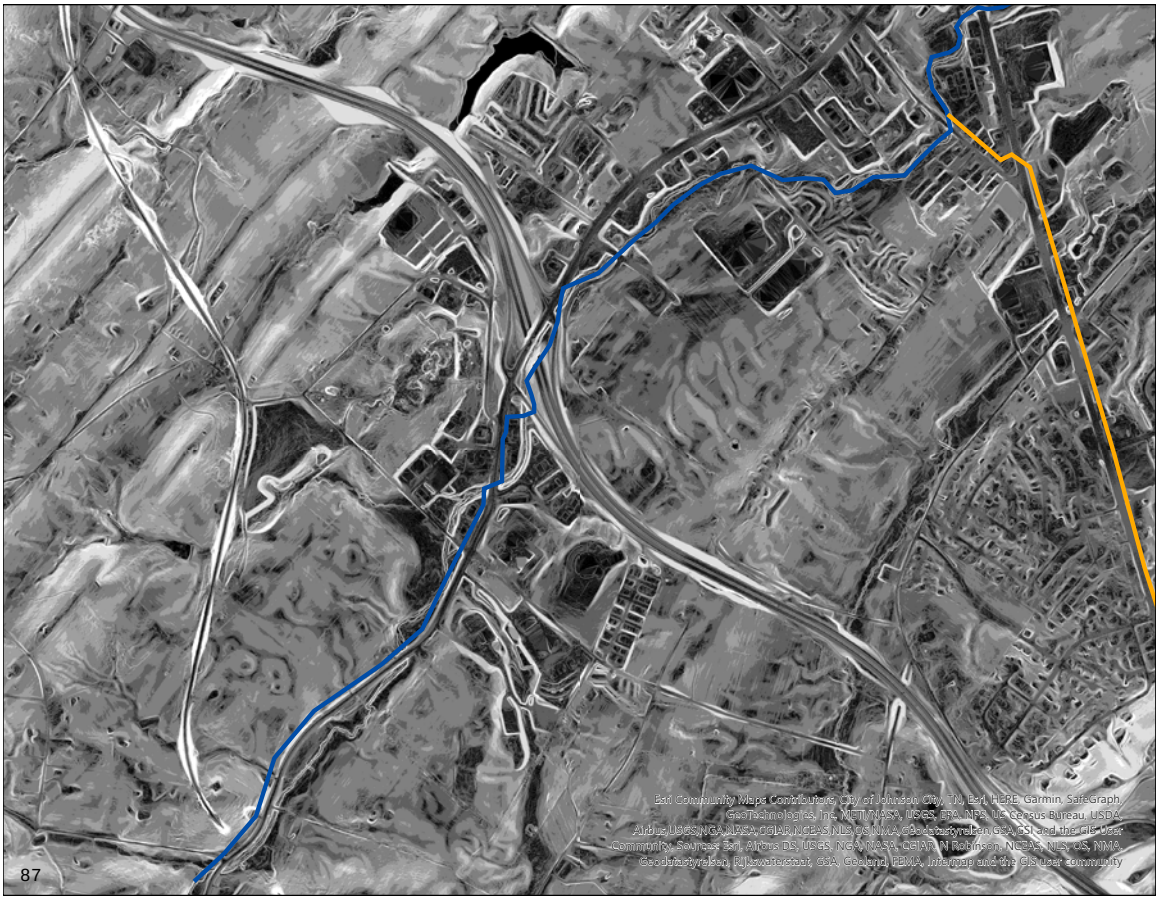


Appalachian Green is meant to be a trail for the locals to enjoy. Whether it is to get from one place to another, or using the trail as a form of exercise. In this specific section is located at the most North part of the trail. It starts at the popular Winged Deer Park at the east end, ending at the Johnson City Brewing Company located at the most west part of the section. With this area, visitors experience going through neighborhoods, creeks, and commercial areas. This route includes areas intended for only either bikers, only pedestrians, or both.



TOPOGRAPHY

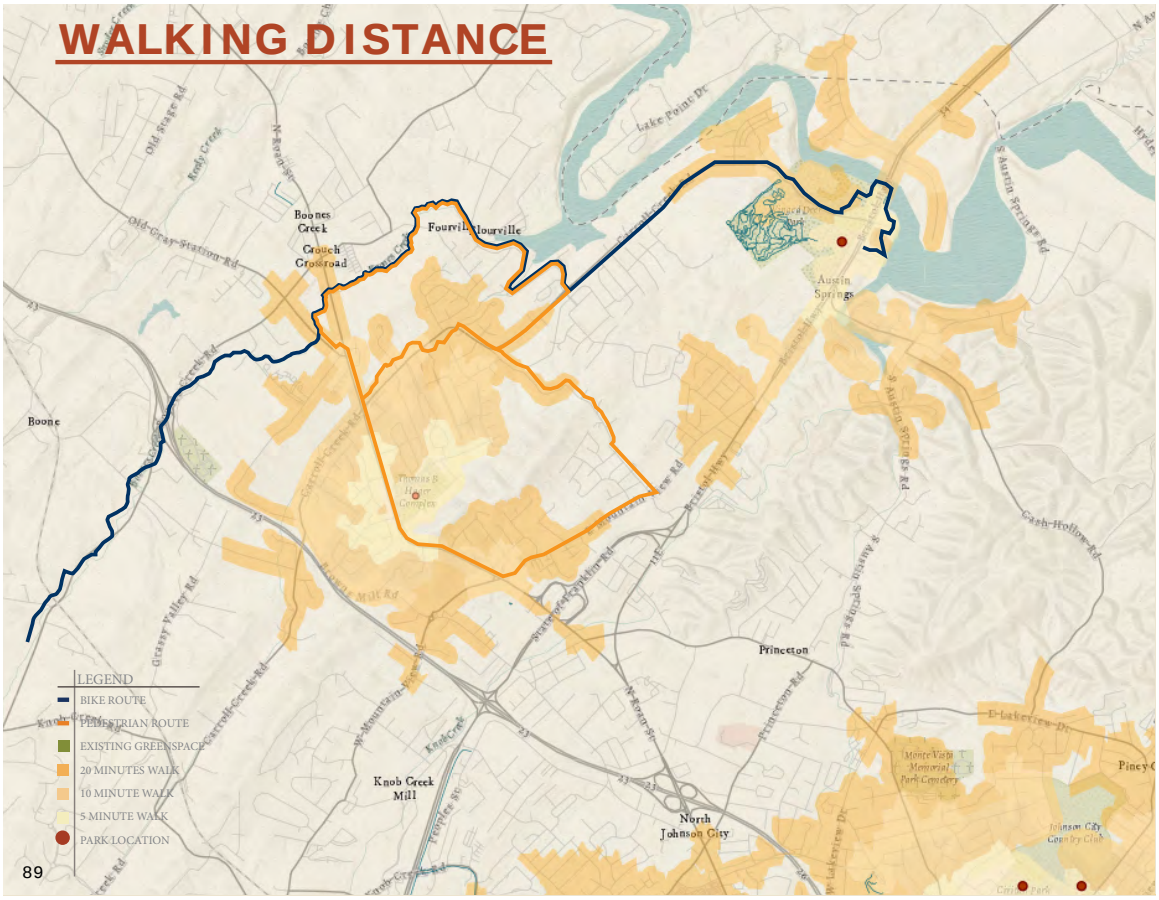



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TOPOGRAPHY

Initially when making the trail, it was ideal to avoid areas with steep topography. When aiming towards bikers and runners, its important to not make the trail too extreme where it isn't enjoyable for anyone. Overall the trail is relatively managable for people. Zooming in further, it became apparent that near Boones and Carroll Creek, there was a drastic drop off. This makes sense due to it being a creek, but after knowing this information helped with designing. I made sure that with the trail, its always a safe distance from the dropping point.

WALKING DISTANCE



WALKING DISTANCE

When it comes to more of the north side of Johnson City, there are apparent areas that are lacking greenspaces. The only ones within this neighborhood is Winged Deer Park and the Thomas B. Hager Complex. The outer layer of orange represents a 20 minute walk to access to greenspaces. So with this information, people can see that their are apparent park desserts. People should always should live within a ten minute walking distance of outdoor areas in order to destress from everyday life. With this information at hand, this section of the Appalachian Green needs more parks within the area.

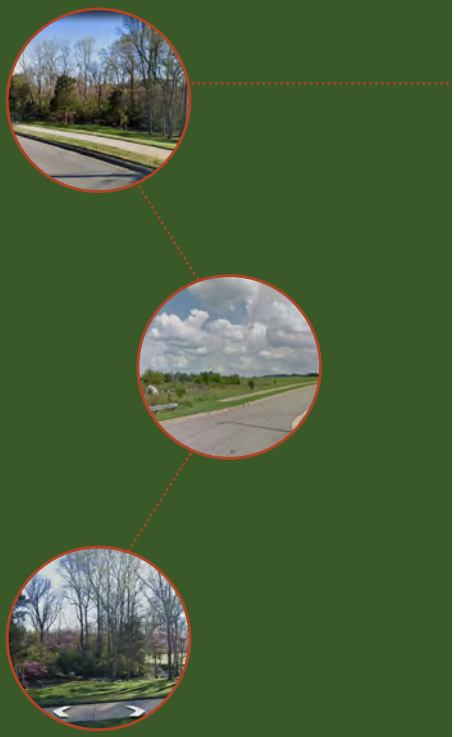
VACANT LOTS





VACANT LOTS

After analyzing where greenspaces currently exist in this part of the greenway, the next step was to find vacant lots that can be utilitzed as parks. There is a wide variety of sized lots within the area that works in the trail's favor. This creates opportunities to develop pocket parks within the neighborhoods. With the larger lots, it gives opportunities to make larger parks with plentiful parking lots. Larger parks has the opportunity to make a statement and create a space that enhances the area, as well as the county as a whole. When it comes to the lots on Boones Creek, this allows opportunities in the future to develop a stream connection of parks so if they wanted to make a more tourist attract look they could in the future.





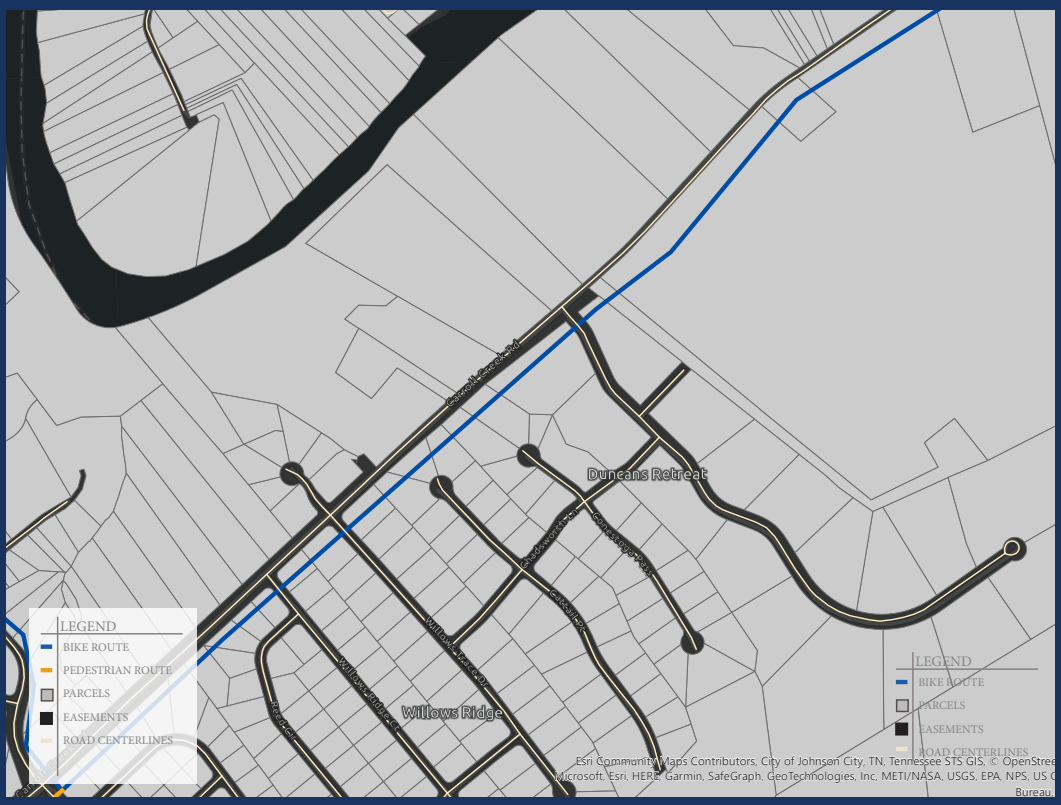
UTILITIES AND EASEMENTS

Lastly, looking at the easements helps make the decision whether or not the path we originally created is actually doable. All throughout the trail the size of the easements vary. When it comes to building near Boones Creek, people are allowed to build within the flood zone. It's important to take advantage of this space because being near a creek allows the users of the greenway to feel as if they aren't near the side of the road. It gives a sense of escaping the city without actually leaving. For the majority of trail, there aren't as many parts of the route where visitors be parallel to powerlines.

The only place where someone would be near them would be when the trail users are on Boones Creek Road. However, there would be fifty foot distance between the powerlines and the trail. Overall, the easements follow the trail that I already had set up.


Parc Place
Oliver Rd
Creek Rd
Carroll Creek Rd
Wingad
Deer Park
LEGEND
BIKE ROUTE
PARCELS
EASEMENTS
ROAD CENTERLINES
POWERLINES
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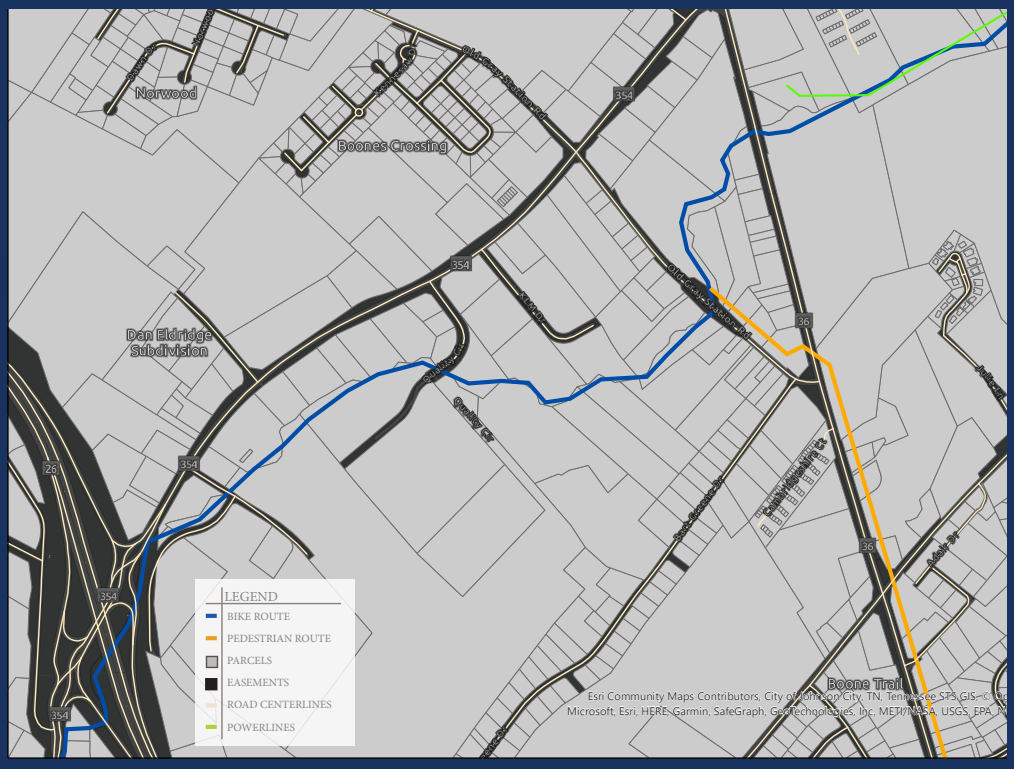
96


Carroll Creek Rd
Duncans Retreat
Willows Ridge
LEGEND
BIKE ROUTE
PEDESTRIAN ROUTE
PARCELS
EASEMENTS
ROAD CENTERLINES
LEGEND
BIKE ROUTE
PARCELS
EASEMENTS
ROAD CENTERLINES
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Bureau,

97


Kingston Hills
Crouch Crossroad
Fourville
Flourville
Hale Meade
Carroll Creek Estates
Lake Ridge Pointe
Steeplechase
36
LEGEND
BIKE ROUTE
PEDESTRIAN ROUTE
PARCELS
EASEMENTS
ROAD CENTERLINES
POWERLINES
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Burea

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Norwood
Boones Crossing
354
Dan Eldridge Subdivision
26
36
LEGEND
BIKE ROUTE
PEDESTRIAN ROUTE
PARCELS
EASEMENTS
ROAD CENTERLINES
POWERLINES
Boone Trail
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LEGEND
BIKE ROUTE
PEDESTRIAN ROUTE
PARCELS
EASEMENTS
ROAD CENTERLINES
POWERLINES
354
26
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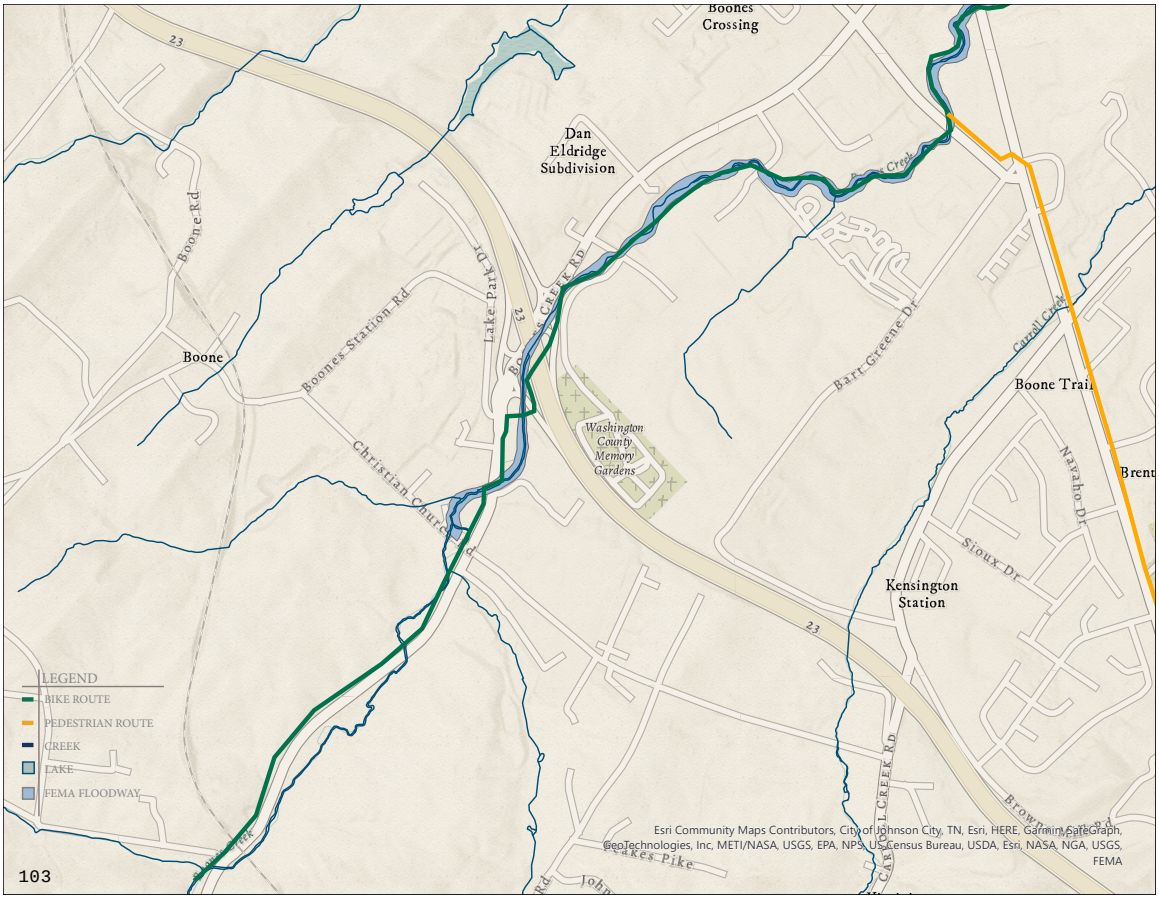
100


LEGEND
BIKE ROUTE
PEDESTRIAN ROUTE
CREEK
LAKE
FEMA FLOODWAY
LEGEND
BIKE ROUTE
PEDESTRIAN ROUTE
LAKE
Lake Point Dr
Watauga Lake
Willmary Rd
Parc Place
CARROLL CREEK RD
Winged Deer Park
Bristol Hwy
Duncans Retreat
Willows Ridge
Austin Springs
Lake Ridge Pointe
Lake Ridge
Green Valley
Grafton Ave
Esri Community Maps Contributors, City of Johnson City, TN, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

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HYDROLOGY


Boones Creek
Kingston Hills
Fourville
Flourville
Crouch Crossroad
Duncans Retreat
Hale Meade
Carroll Creek Estates
Willows Ridge
Lake Ridge Pointe
Lake Ridge
Green Vall
Grafton Ave
Cardinal Forest
Steeplechase
El Rancho
Boone Trail
Englewood
Timberlake
Whittling Wood
Brentwood
Thomas B Hager Complex
Kensington Station
Tamassee Park
Isaac Hammer House
Sequoyah Heights
Beechnut
Browns Mill Rd
LEGEND
BIKE ROUTE
PEDESTRIAN ROUTE
CREEK
LAKE
FEMA FLOODWAY
102


Boones Crossing
Dan Eldridge Subdivision
Boone
Boone Rd
Boones Station Rd
Lake Park Dr
Bart Greene Dr
Carroll Creek
Boone Trail
Washington County Memory Gardens
Christian Church Rd
Navaho Dr
Sioux Dr
Kensington Station
LEGEND
BIKE ROUTE
PEDESTRIAN ROUTE
CREEK
LAKE
FEMA FLOODWAY
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HYDROLOGY

After being assigned the site, it was crutial to look into where Boones Creek runs to, and if there was any other hydrology features that could be taken advantage of throughout this 7 mile bike ride. Once looking more intensly at the surrounding creeks, apparently there is another creek thats located a mile below Boones Creek names Carroll Creek. It partially goes through people's backyards, but then goes off into more public or empty lots, This opportunity gave an idea to create another smaller pedestrian trail. This allows people that don't want to take a eight mile run the opportunity to enjoy a four mile trail.

After all of the analysis based on the area of the trail, there is already so much character in the area where it would be a shame if it wasn't taken advantage of. With all of the existing trees around the region and the mountain views, this part of the trail should be an escape from the downtown area of Johnson City. So keep the feel of the area, it's important to use native plantings and natural riparian buffers throughout. With all of the great views, its ideal to create spots for people to take a break from walking and biking to enjoy the surrounding nature.

CHARACTER

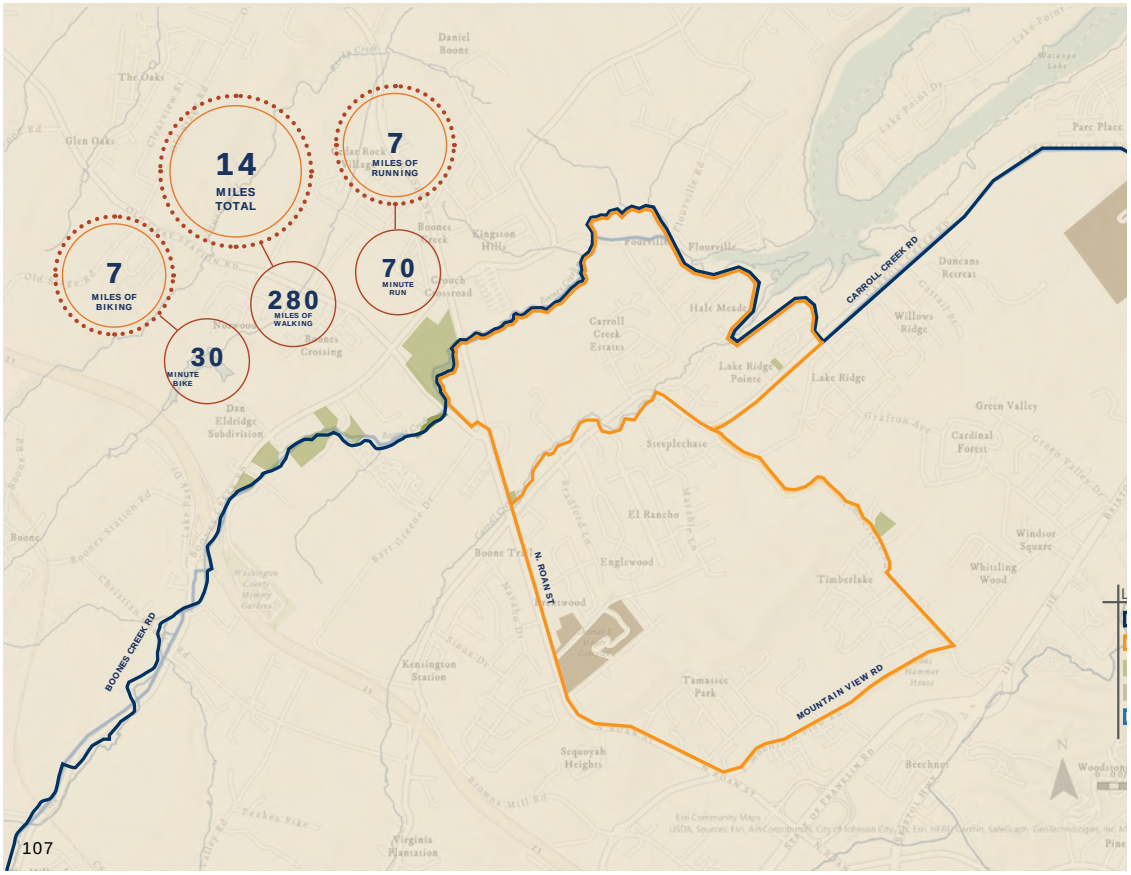











14
MILES TOTAL
7
MILES OF RUNNING
7
MILES OF BIKING
280
MILES OF WALKING
70
MINUTE RUN
30
MINUTE BIKE
CARROLL CREEK RD
N. ROAN ST
MOUNTAIN VIEW RD
BOONES CREEK RD

This section of the Appalachian Green is quite unique to the others. Within this area there is a route that is either designated for only bikers, only pedestrians, or meant for both all. Even though there are sections where its aimed towards both audiences, there is still seperate pathways for bikers and pedestrians so they can experience the space seperately. The most Northern part of the Appalachian Green creates an experiences for locals and visitors to take an escape from downtown Johnson City and enjoy the outdoors. This section encourages people to use the pedestrian routes for running or leisure. Giving the public two on foot paths with different milages gives the opportunity to decide what type of experience they would like to have.



RIPARIAN ROUTE
4.25 MI



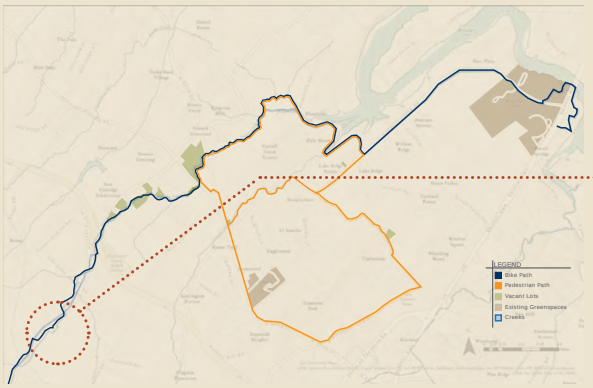
LONG LOOP
6.93 MI

CONSTRUCTION PLAN



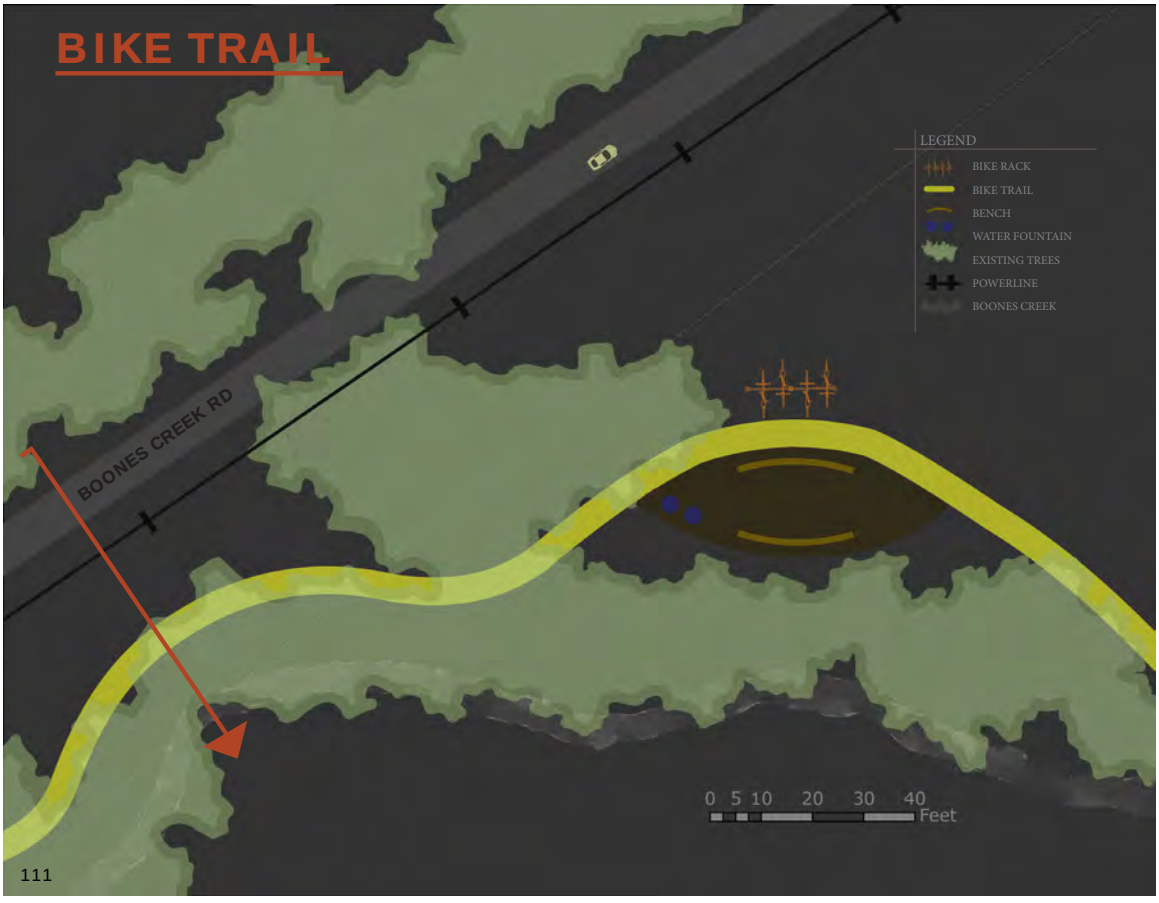
When it came to the pathways, it was important to identify where the paths were the existing that needed fixing, as well as areas that need new trails entirely. For the majority of this section, there will need to be construction for new pathways. Overall this part of the Appalachian Green is the most desired route that is most enjoyable and safe.

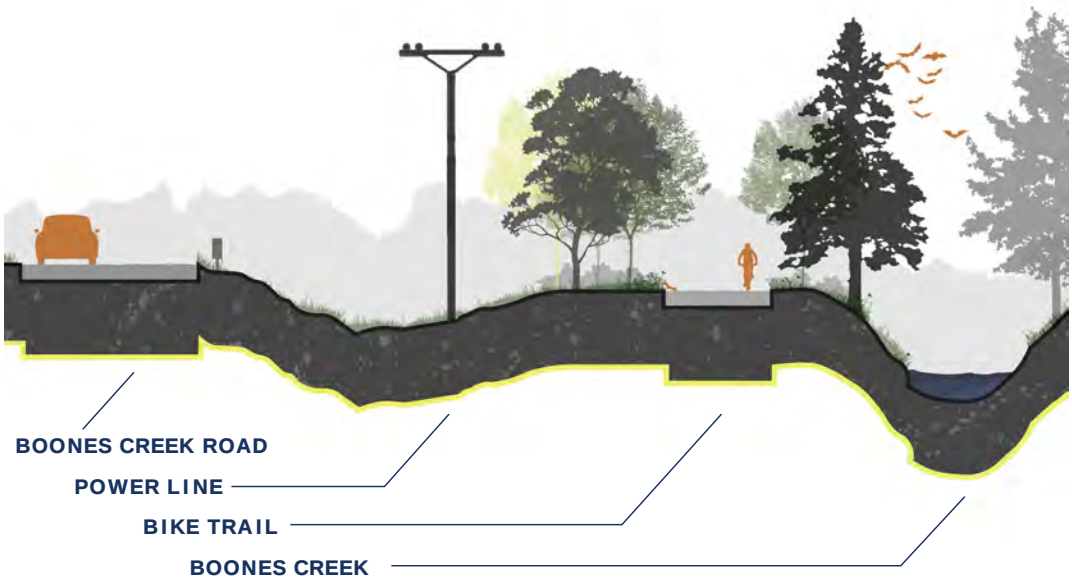
BIKE TRAIL



The goal is to create a path for the bikers in the the neighborhood to enjoy to get to one place to another without having to drive. It's important to remember that this section of the Greenway is near neighborhoods and sometimes people are going from point A to point B. Whether its getting from the Johnson City Brewing Company to home, or from their homes to the neares park. It's essential to remember to cater to the people that are coming through to enjoy the Appalachian Green as a whole.

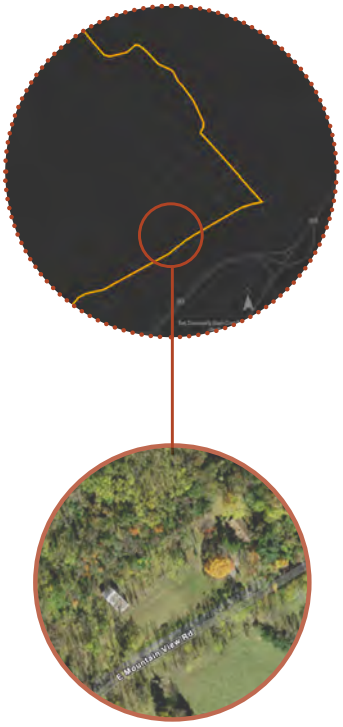






PEDESTRIAN TRAIL

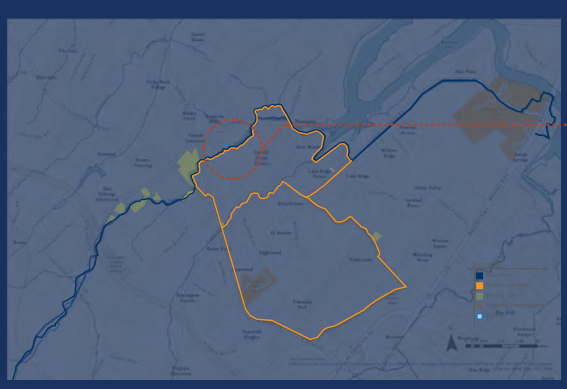




For the pedestrian trail, it's important to cater for the people that are using the trail for running or strolling. The shorter route that goes along Caroll Creek is four miles, while the larger trail is seven miles. Creating a trail intended for people on foot to have a pathway where they don't have to worry about bikers coming their way.



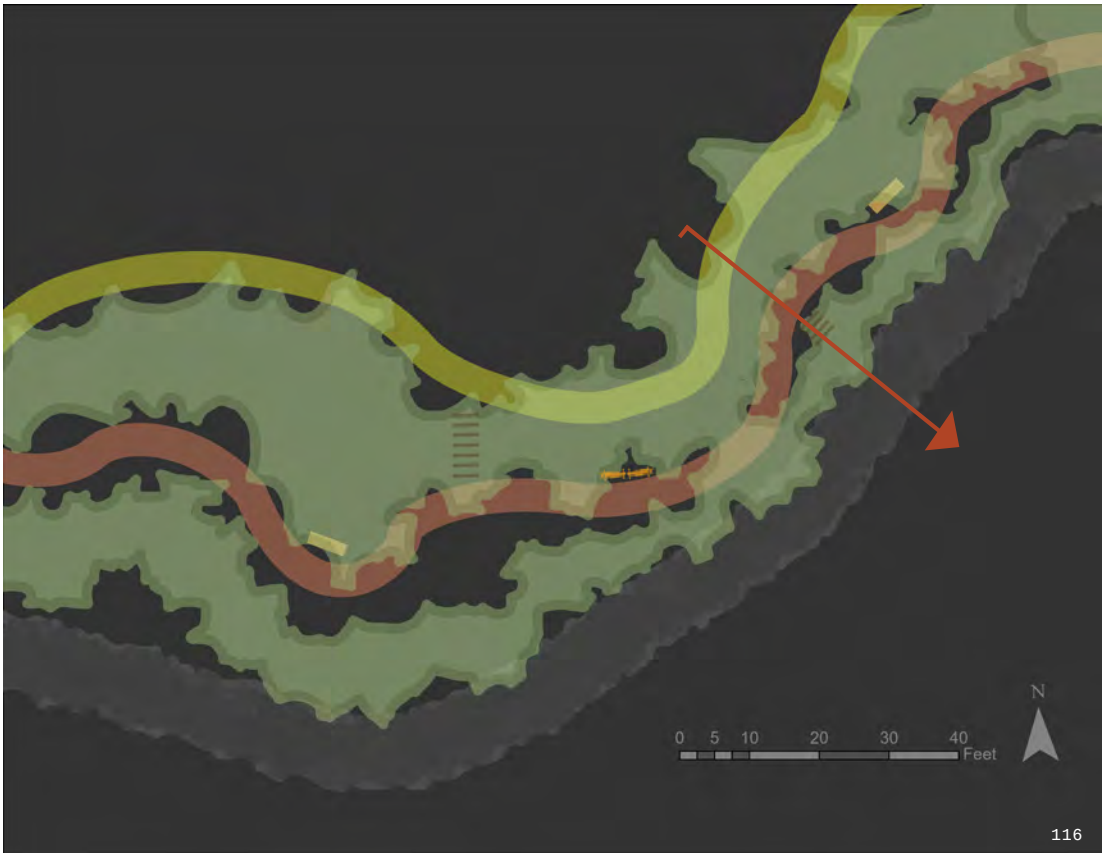
BIKE AND PEDESTRIAN TRAIL



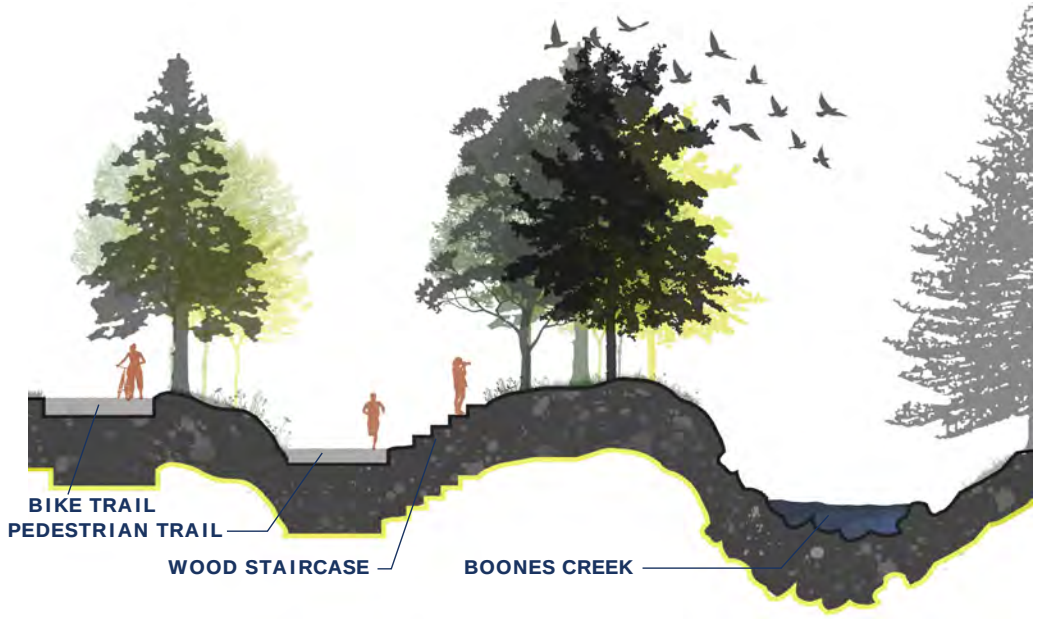




Both the bike and pedestrian trails are seperate, where the bikers are on the outside of the route while the pedestrian route is always the closest to Boones Creek. At points of the two paths they're farther away from eachother to keep the feel that their individual paths. However, they veer towards one another so the bikers can also enjoy the same views and amenities.



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With the differentiating topography, the two seperate biking and pedestrian trail have a different experiences from one another. They are still seperated, and yet they are close enough to where they easily go to the other and experience something new. At certain points of the trail, there are stairs that connect to the trail. To make sure that people obey the rules of only biking on the designated trail, there will be bike racks located right next to the staircase.

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Boones Creek Corridor

When considering which lot to choose to design, it was important to see what the areas looked like. When it came to this parcel, the land was beautiful on its own. Boones Creek goes along the edge of the site, so the trail that is being designed will go right through the site. People will be more likely to go through the designed park because they don't have to make a detour at all. Additionally, there are plentiful number of trees along most of the site. Having already fully grown healthy trees makes the process easier because it already comes with a gorgeous background. With all of the character that this place has, it's important to preserve what is there and focusing on that instead of making it something that it isn't already.

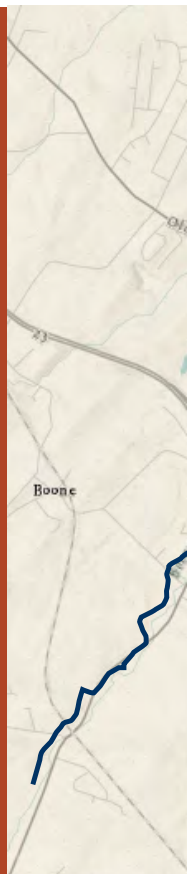


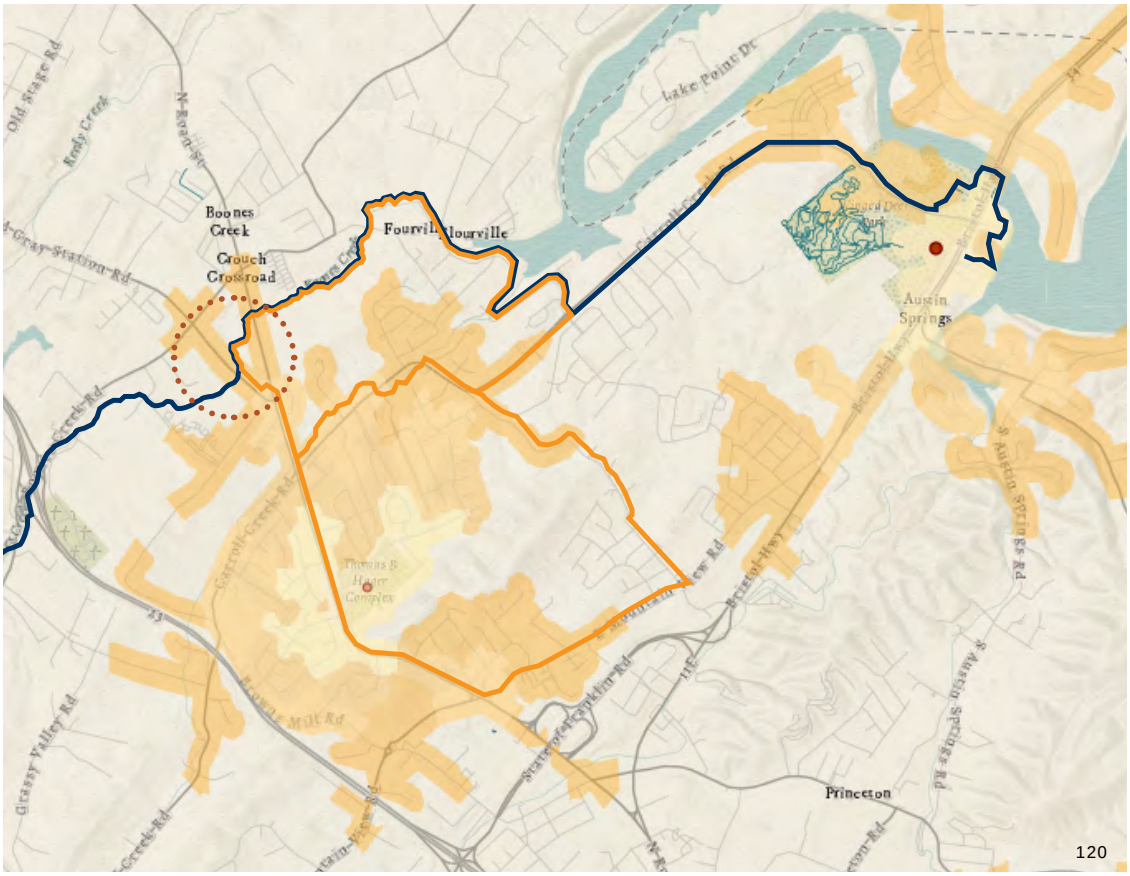




WALKING DISTANCES

When looking back at the preexisting parks and the walking distances from each, it was obvious that there was a needed park in the desired area that I chose. With this parcel being a twenty minute walk from the nearest outdoor space, it's important to give people easier access to another outdoor space. This spot being the meeting point of the three different types of paths makes it a great place to create a threshold entrance to each trail.




Boones Creek
Crouch Crossroad
Austin Springs
Princeton
Lake Point Dr
Bristol Hwy
Carroll Creek Rd
Grassy Valley Rd
Rocky Creek
Old Stage Rd
N Roan St
Gray Station Rd
Austin Springs Rd
S Austin Springs Rd
Princeton Rd

120


N
0 40 80 160 240 320
Feet

121

TOPOGRAPHY

Looking at the topography of the site, the highest contours near the road, and then going northeast, it has points where the space flattens, and then gradually goes down once again. With their being several different flat areas, it naturally creates outdoor spaces that can be used for different purposes. Along Boones Creek, the topography becomes a bit steeper, which is good because when the path is near the creek, people will be able to see the water easily from their perspective.

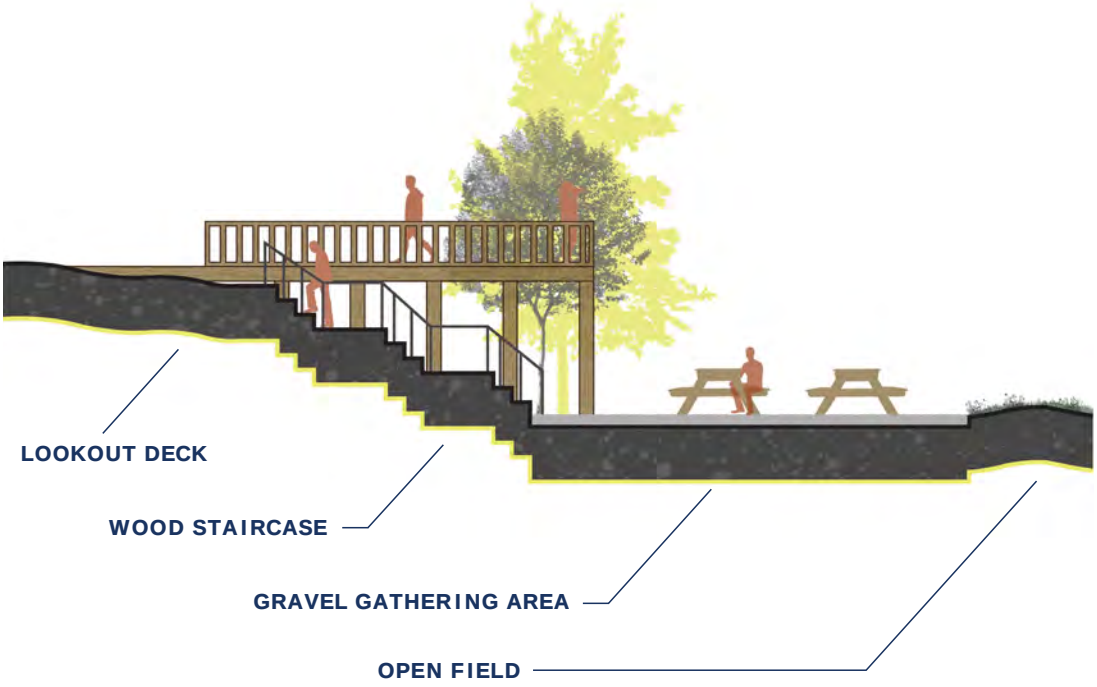
MASTER PLAN

With having one of the themes of the Appalachian Green Trail being connectivity, I really wanted to tune into that idea. To accomplish that, it was ideal to create an elegant path that connects to one another. With having three main paths, it's important to make sure they all have a different experience.

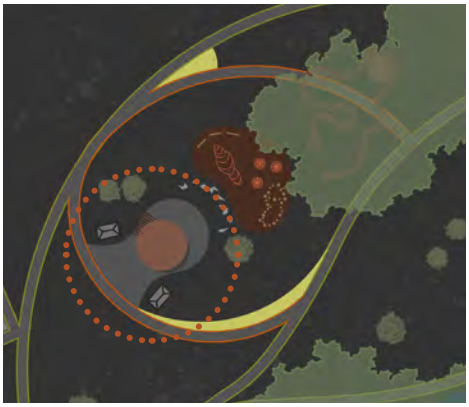
Whether someone is biking or walking, the path is 10 feet wide to create enough room for everyone. With the first path that's located on the most east end of the site, it goes through the outskirts of the park. It takes visitors through the forest where it stops at the net playground intended for all ages. Then it takes you upwards to the net themed playground and the overlook deck area. The middle path is more focused on having the flatter paths that includes planting beds throughout. Finally, the last path is focused on Boones Creek where it gives people a walk-through experience through the water and near the trees. Wherever visitors are walking throughout the park, it gives them an opportunity to enjoy the natural beauty of the site.


Net Playground
Circular Swings
Climbing Playset
Hammock Hangout
Natural Planting
LEGEND
EXISTING TREES
TREE CLUSTER
PLANTING BED
RESTROOM
LOOKOUT DECK
INTERACTIVE ROCKS
PLAYGROUND
STEPPING LOGS
BIKE + PEDSTRIAN TRAIL
PEDESTRIAN ONLY TRAIL
OLD GRAY STATION RD
N
200 FEET

124


LOOKOUT DECK
WOOD STAIRCASE
GRAVEL GATHERING AREA
OPEN FIELD

125



LOOKOUT DECK

With the rolling topography and scenic view, this creates a great opportunity to install a lookout deck. This area would give the visitors of the park a one-hundred-and-eighty-degree view. This space makes people stop and enjoy the outdoors. On one side of the deck there is a staircase that leads the guests to a picnic area where people can gather and hang out on. With this area being close to the park and an open field, it's a space where parents could hang out and see their kids play without being right next to the park. Visitors can also take advantage of this space and use it as a party area for larger events. With the gravel space only having the picnic tables, it doesn't distract people from the upper deck.







NET PLAYGROUND

This part of the park is kind of wild and out there. This type of design is intended for people to experience a playground through the trees which gives people a new perspective. It has been a new concept that has been shown Japan and France called the Parcabout. Typically, this concept is more on a large scale where it includes multiple different areas such as climbing areas and baseball courts. The intention of having this installation would be for people to get a new outlook that's a unique place that also wouldn't distract the existing view for others. What's cool about this net playground is that people of all ages can interact with the nets and walk through the trees.



NET PLAYGROUND ENTRANCE

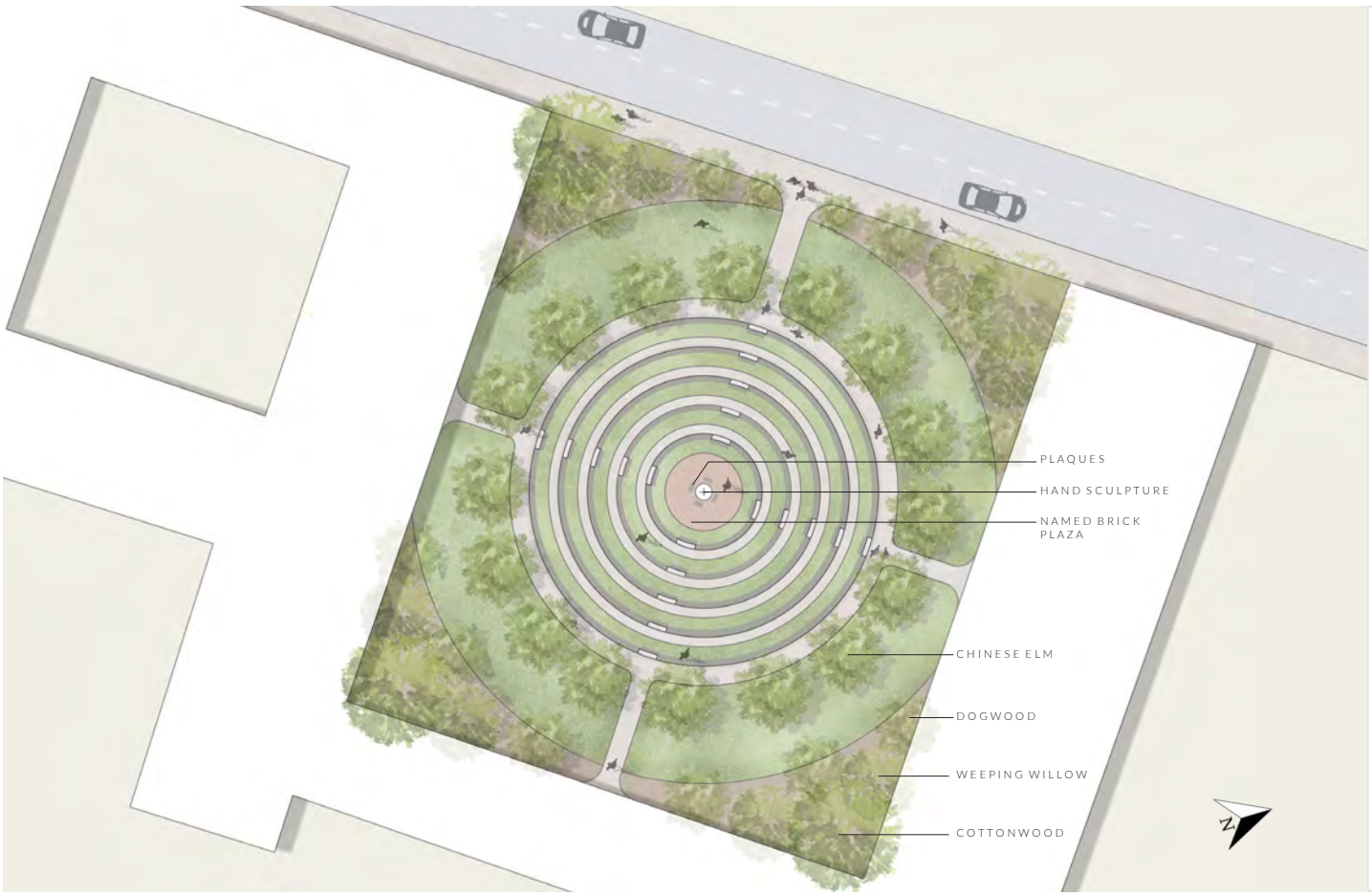
EXISTING TREES

NET RAMP

NO END

'THE UNTOLD STORY OF 'THE TWELVE YEAR OLD FELON'

ISABEL BAGHDADY
"CALL MY NAME CLEMSON"
LARC 3510





MATERIALS

HARDSCAPE	SOFTSCAPE
CONCRETE	CHINESE ELM (inner strength, harmony)
BRICK	FLOWERING DOGWOOD (renewal, rebirth, hope)
CORTEN STEEL	NARROWLEAF COTTONWOOD (change, healing)
	WEEPING WILLOW (grief, mourning, rebirth)



Narrative: "The Twelve-Year-Old Felon" by Rhondda Robinson Thomas

"The Twelve-Year-Old Felon" tells the story of a young inmate boy sent to Clemson's campus as a forced laborer to build some of Clemson's most iconic landmarks. The goal of this design is to tell Simon Davis's story and increase awareness of all the other's whose stories never got told. The multitude of paths that encircle themselves signify how Davis' story has no ending or conclusion like many of the other laborers who worked on Clemson's campus. The entire axis points toward the center point/ the bottom of the amphitheater where a stark corten steel working hands sculpture sits to catch the eye of all who enter the site. The bricks laid at the bottom of the amphitheater under the sculpture symbolize the extremely strenuous work of many black men and women on Clemson's campus. Brick was used for almost all the projects that were worked on. Many names of these individuals will be recorded here on these bricks. Everything in this design is on a radial axis to help reflect this idea that all these stories that are being uncovered about Clemson's dark history are all connected and deserve to be told. The plaques located by the hand sculpture tell what is known about Simon Davis and encourages visitors to seek more information about Clemson's history.







EMERGING OPPORTUNITIES: THE BLACK RIVER WATER TRAIL AND PARK NETWORK

LARC 3510 | CLEMSON UNIVERSITY
Haylee McManus • Emma Strong • Jamari Evans

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PROJECT OVERVIEW

The Black River, home to history and ecology alike, is a place thought highly of by residents of the surrounding counties of Williamsburg, Georgetown, and Andrews, South Carolina. This river and its abutting geography were utilized by a multitude of Native American tribes. Some of the most prevalent include Pee Dee, Santee, and Winyah. Later on, the surrounding lands of the Black River were best known for their timber, rice, and indigo fields. Some still stand to this day. Timber, however, is not harvested on the land plots designed in this project but provided a livelihood for those that worked in the timber industry.

In 2001, seventy-five miles of the Black River in Clarendon, Williamsburg, and Georgetown counties became a State Scenic River. This river not only holds historical significance, but it also holds an ecological purpose. Numerous species live along this corridor and contribute to the balance that makes up the ecosystems of the river. To this day, the people of this region live along the river and continue to be impacted by it. The importance of the Black River Water Trail and Park Network is to combine historical, cultural, and ecological aspects surrounding the river as well as create a space where both tourists and residents can enjoy the natural beauty of the river.

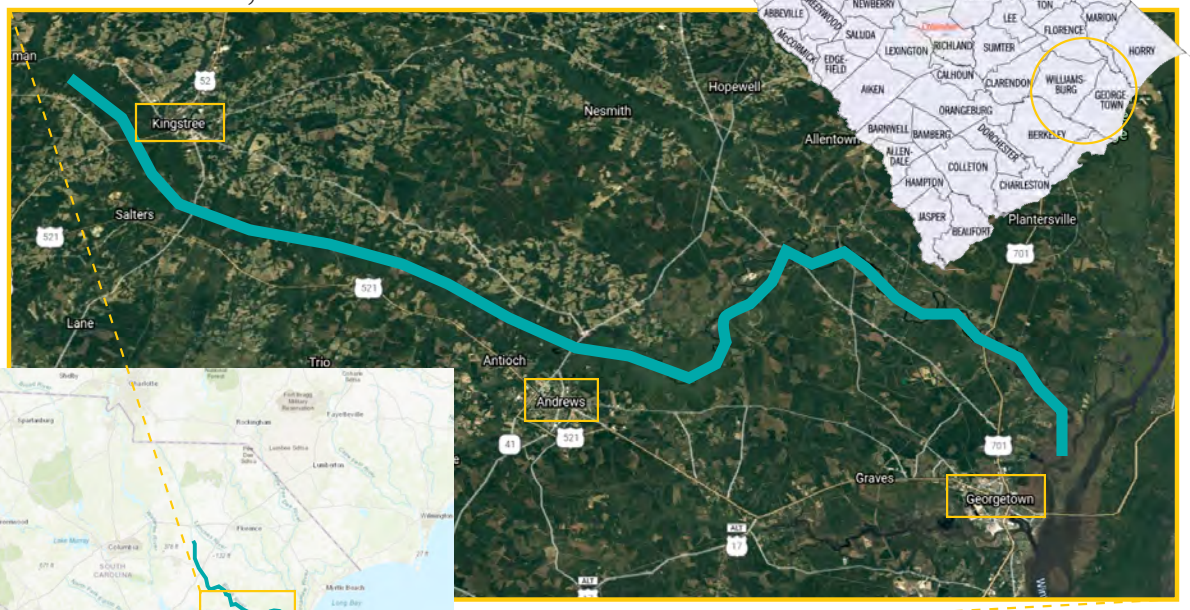
Existing trail towns, blueways, and greenways will be studied to better understand how the Black River Water Trail and Park Network should accommodate both humans and nature without disturbing the existing ecological processes. We were tasked with designing our sites as they pertain to the existing ecological functions. We chose to incorporate a multitude of features that will draw in visitors whilst simultaneously and cohesively blending man and nature in ways that protect and revitalize the beauty that is the Black River corridor.

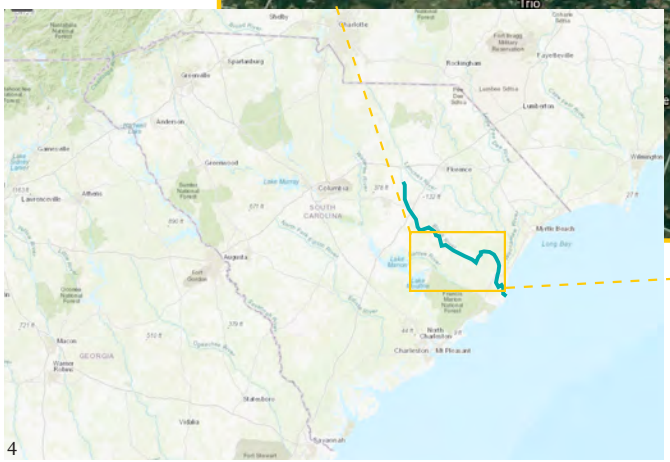
PROJECT LOCATION

The Black River flows through Williamsburg and Georgetown counties.



THE BLACK RIVER, SC





PROJECT SCOPE

THE PROPOSED BLACK RIVER WATER TRAIL AND PARK NETWORK FLOWS THROUGH THE TOWNS OF KINGSTREE, ANDREWS, AND GEORGETOWN.

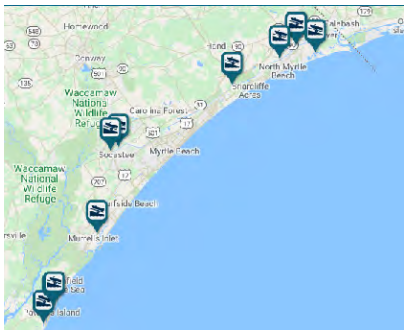


The Black River corridor has a lot of opportunity for growth and development. The parcels of land that are to be a part of the design include Hinds Canada, RMS South, Mead, and Rocky Point. The lands Hinds Canada, RMS South, and Mead will be turned into state parks while Rocky Point is jointly owned by Georgetown County and the Winyah Rivers Alliance and will be used as an educational space for the community. The Black River Cypress Preserve and the TNC Black River Preserve are also highlighted. These two parcels will not be a part of the design process but will serve as character inspiration for the other parcels and may have potential access in the future.

BEGINNING THE PROJECT

STUDYING COMMUNAL AND ECOLOGICAL DESIGN METHODS

BLUEWAYS, GREENWAYS, AND TRAIL TOWNS



BLUEWAY

A designated route designed for small, non-motorized watercrafts such as kayaks, canoes, and paddleboards.

The map above shows the Murrells Inlet and Grand Strand (Coastal) blueway that stretches from Pawley's Island to North Myrtle Beach. Here are opportunities to paddle in tidal creeks and the intracoastal waterway.



GREENWAY

A corridor of open space that enables a visitor to move through the landscape. Greenways narrow and widen to allow for a complex experience with nature.

The image above shows the Chattahoochee River Greenway. The goal is to link suburban, urban, and rural communities into a continuous public realm that centers the river as a regional resource and was done by linking several linear networks.



TRAIL TOWN

A town along or next to an extensive trail. Communities like these are developed by the attraction of their trails and natural features.

The image above shows the Jamestown Trailtown. Along this trail town, users are able to interact with Lake Cumberland by staying at the State Resort Park and visiting the various trail systems. Hikers and bikers can utilize the
surrounding trail systems while users who enjoy the waters can paddle down the Blue Water Trail.

Environmentally, blueways, greenways, and trail towns are important because they connect federal, state, and local parks. These systems provide visitors with diverse cultural, historical, and environmental education opportunities. An effective park system needs to achieve these design aspects while also helping visitors feel safe and welcome. Historically, they give communities the opportunity to connect to their local heritage and can help enforce the protection and preservation of archaeological and historic sites.

CASE STUDIES

THE CHATTAHOOCHEE RIVERLANDS by SCAPE

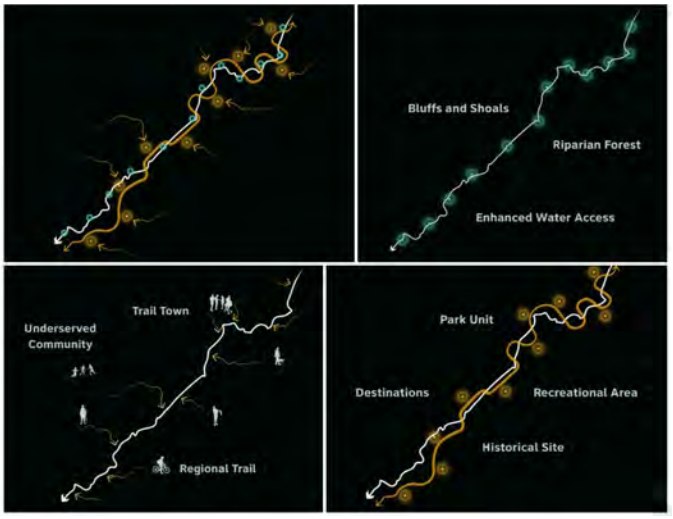
The goal of the Chattahoochee RiverLands was to link suburban, urban, and rural communities into a continuous public realm that centers the river as a regional resource.

This is done by linking several linear networks of greenways, blueways, and parks to encourage the movement towards a new trail town system.



The project aimed to bring people to the water's edge by the encouragement of fishing, swimming, and kayaking to promote conservation and environmental awareness.

The project also focused on the species that live along the river. The organisms there are important to the history of the region and its preservation was a priority.



Analysis and design approach





Community involvement

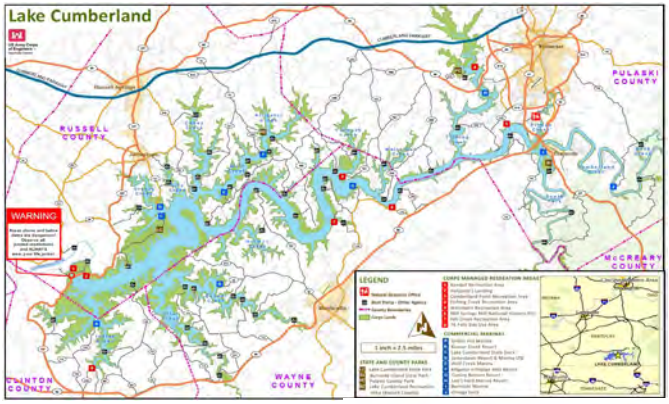
CASE STUDIES

JAMESTOWN TRAIL TOWN by Kentucky State Parks

Along this trail town, users are able to interact with Lake Cumberland by staying at the State Resort Park and visiting the various trail systems. Hikers and bikers can utilize both the Lake Cumberland State Resort Park Trail System and the Kendall Recreation Area Trail System while users who enjoy the waters can paddle down the Blue Water Trail.



Lake Cumberland's trail systems are a great way for families to enjoy the outdoors together while The Blue Water Trail can be for those who love to spend time in the water.







REGIONAL ANALYSIS

UNDERSTANDING THE LAND AND COMMUNITY

HISTORICAL TIMELINE

NATIVE AMERICANS - Inhabitants of the Black River include the Winyah, Santee, Pedee Waccamaw, Sewee, and Wenee tribes

1730 - The Black River became a focus for inland settlement of the South Carolina colony

1732 - Georgetown develops a port of entry

1740s - Rice and indigo become very profitable; cultivating rice was also common amongst the Native Americans. Large-scale rice cultivation was made possible by African enslaved labor.

1750s - Indigo becomes the most profitable crop

1780 - Georgetown falls to the British

1807 - Atlantic slave trade is closed

1866 - Kingstree is established

1917-1919 - The timber industry becomes a source of livelihood for residents along the river. The logging of these timber fields led to large, privately held and managed lands.

2001 - Seventy-five miles of the Black River in Clarendon, Williamsburg, and Georgetown Counties became a State Scenic River

2015 - The 1,000 year flood occurred on the Black River, causing the river to crest at 22.65'

WILLIAMSBURG DEMOGRAPHICS

CULTURALLY: Black - 76.91% (SC 27.3% and US 13.4%); White - 18.38% (SC 68.5% and US 72.0%); Other - 2.26%

POPULATION (2021) - 3,097; SC 2021 - 5.2million people; USA 2021 - 333.3 million people

DENSITY (square miles) - 973.80/sq mi; SC 2021 - 153.9/sq mi; USA 2021 - 33.86/sq mi

GROWTH RATE (Population Growth in past year) - 0.55%; SC 1.06% (18 th in country); USA 0.35%

MEDIAN AGE - 39.7; Male - 44.8; Female - 36.2; 709/2,240 Senior Citizens (0.32)

SEX RATIO: Male - 47.48%; Female - 52.52%

HOUSEHOLD TYPES: Family - 51%; Non-Family - 47.6%; (Marriage Rate 36.5%)

HOUSEHOLD SIZE: 3.01 Average Family Size; 2.08 Average Household Size

EDUCATION: High School - 31.84%; Associates Degree - 12.66%; Bachelor's Degree - 10.63%; Graduate Degree - 9.47%

LANGUAGE: Only English - 97.9%; Spanish - 0.4%; Other Indo-Euro - 1.5%

INCOME: Families - 70k; NonFamilies - 19k; Households - 45k

LAND USE AND CIRCULATION

LAND USE:

Currently, much of the development along the corridor consists of large timber tracts and private residences. Several conservation easements also occur along this corridor.

Even though this is a state-designated scenic river, the development of large private properties and timberlands within the corridor, will change the natural and aesthetic aspects of the land over time.

Increased population along the watershed will increase the challenge of managing wastewater (sewage) in the region.
.

TRANSPORTATION AND ACCESS POINTS

Some of the major roads along the corridor include Martin Luther King Jr. Avenue and Thorntree Road. Both of these roads help access the Hinds Canada tract. People driving along these roads commonly visit Cooper's Country Store which serves as a gas station as well as a restroom and store.

Those visiting the beach can access this location by highway 521 off Thorntree Road.

ENVIRONMENT

GENERAL ENVIRONMENT

The Black River is a free-flowing Coastal Plain river bordered by a rural landscape of forests and farmlands. The zone it rests in is humid and subtropical. The river corridor presents a ribbon of dense swamp forests, dark waters, and white sandbars.

HISTORICALLY BEFORE DEVELOPMENT

The river has been a source of drinking water, food, and materials; a route for travel and commerce; and a place of refuge and rest. In the 1730s, the Black River became a focus area for inland settlement of the South Carolina colony. Another notable feature of the Black River landscape is the presence of roughly five thousand acres of former rice plantations in Georgetown County.

The river and adjacent lands provide a corridor of high quality habitat for a variety of plants and animals including some rare species such as American chaffseed and the swallow-tailed kite, and some very old species such as the bald cypress trees growing near The Nature Conservancy's Black River tract east of Andrews.

HYDROLOGY AND WATER QUALITY

HYDROLOGY OF THE REGION

The Black River drains into the Great Pee Dee river, a major water source of the region. Tannins from leaf litter in water stain water brown, giving the water its well-known color.

In 2015, the Black River had 1,000 year flood which ultimately led the river to crest at 22.65'.

HYDROLOGY

The Black River watershed occupies 232,756 acres of the Lower Coastal Plain and Coastal Zone regions of South Carolina. Land use or land cover in the watershed includes 46.0% forested land, 32.9% forested wetland, 11.7% agricultural land, 4.1% non forested wetland, 3.5% urban land, 1.6% water, 0.2% barren land.

Significant water resources include: The Great Pee Dee River and the Waccamaw River

There are three South Carolina Department of Health and Environmental Control (SCDHEC) monitoring sites along this lowest section of the Black River, and recreational uses are fully supported at all sites.

POINT POLLUTION

Examples of point pollution is when a contaminant enters the water through a distinct point like a pipe.

Many companies and industries discharge to the Black River through single points. In the past, many of these discharges contributed large volumes of impurities to the waterways; however, with the enacement of the Clean Water Act, all discharges are regulated according to permits issued by SCDHEC. These permits help control the quality of the discharges and do not allow the discharges to contain pollutant levels that will exceed state standards in the waterway.

NON-POINT SOURCE POLLUTION

Nonpoint source (NPS) water pollution, also known as polluted runoff, generally comes from diffuse and numerous sources. Runoff occurring after a rain event may transport 1) sediment from plowed fields, construction sites or logging operations; 2) pesticides and fertilizers from forests, farms, lawns and golf courses; 3) motor oil, grease, and toxic material deposited on roads and parking lots; or 4) waste containing bacteria from pets, agricultural animal facilities or malfunctioning septic systems. The rain moves the pollutants across the land to the nearest waterbody or storm drain where they may impact the water quality in creeks, rivers, lakes, estuaries, and wetlands. NPS pollution may also impact groundwaters when it is allowed to seep or percolate into aquifers.

ECOLOGICAL COMMUNITIES

CURRENT CONSERVATION EFFORTS ACCORDING TO THE SC DEPARTMENT OF NATURAL RESOURCES:

1) Protecting and enhancing water quality in the scenic river will require attention to the watershed, especially to upstream activities affecting the flow of water and materials in tributaries connected to the scenic river section.

2) Maintaining healthy fish and wildlife habitat within the scenic river corridor will require keeping functional habitat connections to areas beyond the scenic river; thus there is interest in regional land conservation efforts and protection of the aquatic habitat connections to upstream tributaries and downstream to Winyah Bay and the Atlantic Ocean.

3) Encourage protection of a riparian buffer of natural forest vegetation with a minimum-width buffer zone of 100 feet from the Black River and 50 feet from its tributaries.

4) Avoid development within the river floodplain and associated impacts to natural habitats.

5) Prevent the spread of invasive and non-native species and eliminate them where possible. Start by increasing awareness among landowners and the public about the threats posed by invasive plants.

6) Encourage measures aimed at maximizing harvest of flathead catfish and blue catfish; angler education may be needed to demonstrate the more effective techniques for catching these fish.

7) Streamflow is of interest because conserving sufficient volumes of water in the river and seasonal variations in flow are essential to fish and wildlife resources and traditional river uses for water supply and recreation.

8) Seek assistance from the USDA Natural Resources Conservation Service in addressing agricultural runoff issues and related nutrient and contaminant loading to streams in the watershed.

9) Address streamflow interest by participating in public planning and permitting activities affecting water use and withdrawals. Provide input to public decisions as appropriate to conserve flow conditions needed for the ecological health of the Black River system.

ECOLOGICAL COMMUNITIES

COMMUNITIES OF THE REGION

The Black River corridor contains three groups of natural habitats based on morphology and position to the Black River: riverine habitats, bottomland forest habitats, and adjacent upland habitats. Riverine habitats are associated with the river channel, proper, and adjacent riverbanks. Bottomland forest habitats encompass the river floodplain between the river channel and nearby uplands. Upland habitats of various types occur along the edge of the floodplain.

CYPRESS TUPELO SWAMP is the most flooded of the Black River floodplain communities. They are dominated by bald cypress and water or swamp tupelo. These areas contain other flood-tolerant species including red maple, sweetgum, green ash, planer tree, and Carolina ash. Cypress-tupelo swamps include sloughs and swales, guts, oxbow lakes, and other backwater areas where water remains throughout much of the year.



Cypress Tupelo Swamp

SHOAL/STREAM BAR also referred to as sand bars or point bars, is a sandy area within the Black River. There is considerable variation in the size and persistence of these areas. Trees and shrubs are usually not allowed to reach large sizes in these areas due to the flooding dynamics of the river. Common plant species occurring in these habitats where less frequently flooded are tag alder, river birch, willows, black haw, planer tree, mayhaw, and saplings of canopy species such as American sycamore. Shoals that are exposed only in summer at low water levels support a diverse, but short-lived community of annual herbs and graminoids (grasses).

RARE PLANT SPECIES

There are at least 16 rare plant species within the corridor. These rare species are listed under the U.S. Endangered Species Act or are tracked as Critically Imperiled, Imperiled, or Rare by SCDNR.

Two species listed as Federally Endangered have been found in, or within 0.5 miles of, the river floodplain: Chaffseed and Canby's Cowbane. Another Federal At-Risk species, Carolina Birds-in-a-Nest, has been found at several locations along the river on the edge of its floodplain.



Chinese Pivet

INVASIVE PLANT SPECIES

Exotic invasive plant species pose a major threat to native plant communities along the Black River. Chinese privet is an extremely aggressive shrub that forms dense, impenetrable thickets that can alter the native species composition and community structure in forested wetland areas.

Japanese stilt-grass is also an aggressive invader along the Black River.

Aquatic invasive plants, such as water hyacinth may be found in the river channel or with larger populations protected from river flows.

ECOLOGICAL COMMUNITIES

PLANT AND WILDLIFE COMMUNITIES:

According to the SC Department of Natural Resources, this river is home to many ecological treasures. Most notably is the oldest bald cypress tree in the world which can be approached by kayak along the Black River. The river is also home to rare fish species such as the Santee chub and broadtail madtom and numerous rare mussels like the Cape Fear spike. Many wildlife species inhabit the river's floodplain, including bobcat, river otter, black bear, and neotropical songbirds like the prothonotary warbler and yellow-throated vireo.

GAME SPECIES:

Common game species include large game such as whitetail deer, hogs, and wild turkey; small game including squirrels, rabbits, raccoons and opossum; and game birds such as ducks, quail, mourning doves, and the underutilized snipe and woodcock.

BIRDS:



White Ibis

Some of the birds found along the Black River corridor include colonial wading birds (the great blue heron, American and snowy egret, white ibis, American bittern, little blue and green herons, and the rare wood stork), migratory and resident waterfowl (the wood duck, mallards, pintails, blue and green-winged teal, and black ducks), songbirds (northern cardinal, painted bunting, eastern bluebird, Acadian flycatcher, Carolina wren, Carolina chickadee, tufted titmouse, blue-grey gnatcatcher and several species of warblers, vireos, nuthatches and finches), birds of prey, and woodpeckers.

MAMMALS:

Aquatic mammals of the Black River include beaver, otter, mink, and muskrat. The Black River floodplain is utilized by both the aquatic and upland species such as raccoons, opossums, bobcat, squirrels, red and gray fox, coyote, marsh rabbit, cotton mouse, and wood rat. Small fossorial mammal predators include the southeastern shrew and eastern mole. The river corridor also harbors several species of bats such as the big brown bat, and tri-colored bat.

FISH:

American eel, American shad, blueback herring, and Atlantic and shortnose sturgeon use the river for an essential part of their life cycle. Aquatic invertebrates found in the Black River basin include the black mottled crayfish, Pee Dee lotic crayfish, cedar creek crayfish, the coastal plain crayfish, Santee crayfish, and invasive red swamp crayfish. Some of the freshwater mussels within the river consist of the Carolina slabshell, Eastern elliptio, variable spike, Carolina lance, Eastern pondhorn, and pond lance.

AMPHIBIANS AND REPTILES:

Amphibians commonly associated with the adjacent floodplain and forested wetlands include the dusky salamander, southern cricket frog, little grass frog, and southern toad.

Reptiles include the river cooter, yellow-bellied slider, spiny softshell, snapping turtle, mud turtle, brown water snake, and banded water snake are common residents of the Black River. Reptiles common to the adjacent forested river floodplain include eastern cottonmouth, black racer, southern ringneck snake, copperhead, eastern glass lizard, green anole, and brown-headed skink.



Yellow-bellied Slider

COMMUNITY RESOURCES & POINTS OF INTEREST

Located twenty minutes north of Georgetown and Highway 17, the 650-acre Rocky Point Community Forest is home to a boat ramp, kayak launch, dock, picnic area, and a small network of hiking trails. After being a segregated African American's only park, Rocky Point closed in 2006. The Winyah Rivers Alliance saved the land in 2015 with funding and support from The Nature Conservancy and the Open Space Institute.

Historically, the seat of Williamsburg County, Kingstree, was founded at the site of a large white pine tree up on the cast bank of the Black River. It is said that an early explorer in 1730 chopped the shape of the kings arrow onto the tree to keep others from cutting it down, marking it as the “King’s Tree”.

RECREATIONAL AMENITIES

CURRENT AMENITIES include the Gilland Memorial Park and Landing, Mill Street Landing, Ervin Park and Landing, Pump House/ Reds Landing, Pine Tree Landing, Pea House Landing, and the Rocky Point Community Center.

EXISTING DESTINATIONS include East Bay Park, and Morgan Park (both in Georgetown).

STRENGTHS
The surrounding towns have small-town appeal which pull in tourists and allow them to immerse themselves in the culture and history of the towns.

Currently, the Black River offers tubing and kayaking down a 41 mile low country stream. The float time for this portion of the Black River is approximately 10 hours. There are also trails throughout for hiking, mountain biking, walking, horseback riding, atv and other activities to be enjoyed at Ervin Park and Landing as well as campgrounds. Key features of the trails include camping, information signs, handicap access, picnic areas, pet allowance, scenic observations, exercise stations, parking, restrooms, boat launches, playgrounds, visitor centers, waterfalls, and a trailhead.

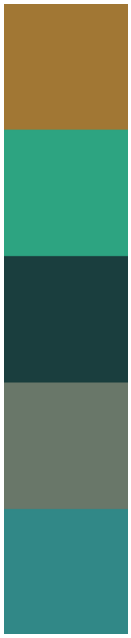
MISSION OF THE BLACK RIVER

According to the Department of Natural Resources Black Scenic River Management Plan, the goals of the Black River Water Trail and Park Network are: to meet the space and access needs of the community whilst simultaneously creating recreation for both tourists and the surrounding communities to enjoy, to intertwine the needs of both humans and the surrounding ecological systems in a cohesive manner, and to protect and enhance the natural beauty of the ecosystems within and around the Black River. The culmination of these aspects boosts the local economy and invites travelers to immerse themselves in the beauty of the Black River and the surrounding towns.

BRANDING AND MARKETING

COLOR PALETTE

primary



secondary



These two color palettes have very earthy tones of green and blue. The primary color palette was chosen because the statement color, yellow, stood out more than the muted red tone of the second palette.

TYPOGRAPHY

TITLE
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SUBHEADING
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BODY
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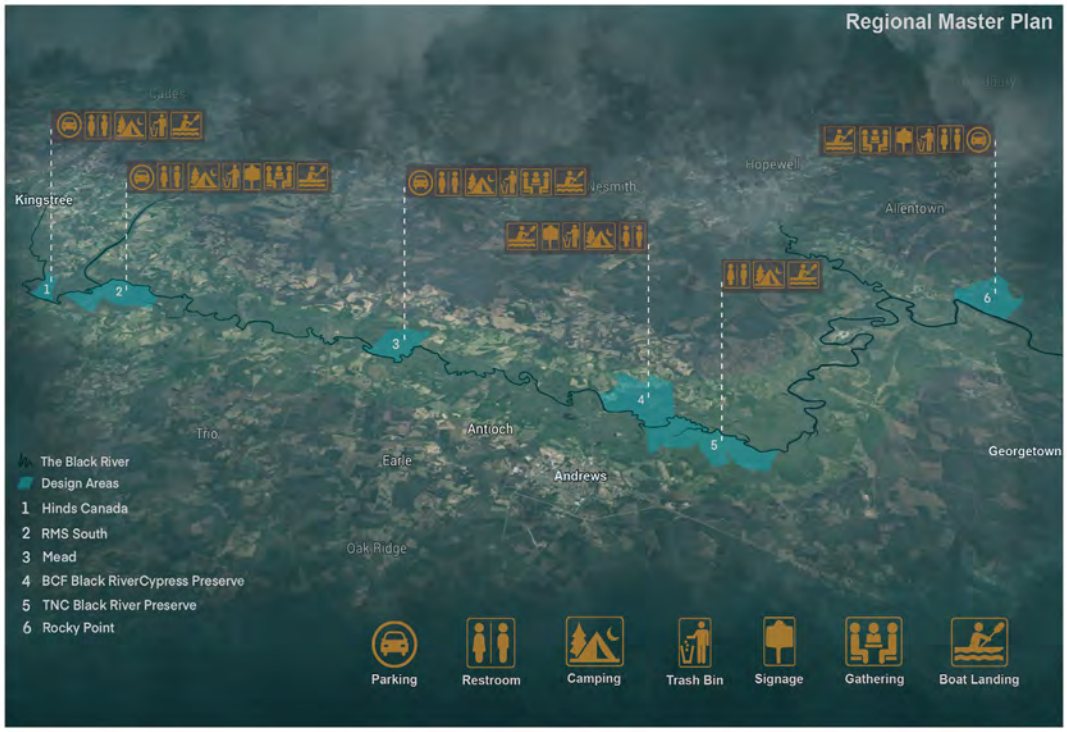
SIGNAGE/ICONS



DESIGN PHASE 1

REGIONAL SCALE DEVELOPMENT

REGIONAL MASTER PLAN



The regional master plan for the Black River corridor addresses what is needed for each site. Many of the parcels will need new amenities such as restrooms, parking, trash bins, signage, gathering areas, kayak launches, and camping. Both the Black River Cypress Preserve and TNC Cypress Preserve were also considered for adjustments and new amenities but will not be a part of the final design process.

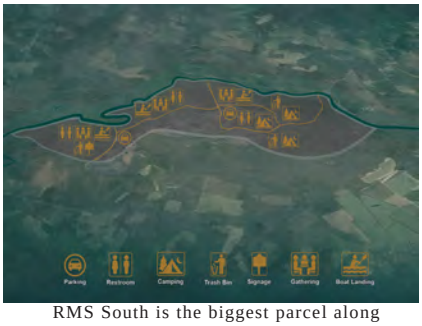
SITE PLAN INTRODUCTORY IDEAS

HINDS CANADA



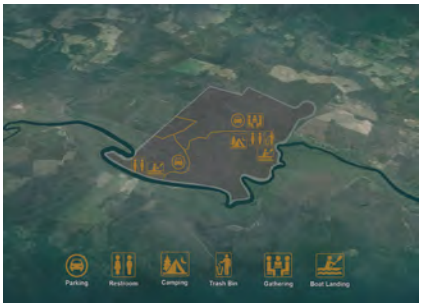
Hinds Canada contains a lot of wetlands so the initial ideas were to keep the site centered around camping that is kept away from the waters and a primary trail that will lead visitors to the river.

RMS SOUTH



RMS South is the biggest parcel along the corridor and has a lot of potential for development. Therefore, most all of the new amenities were considered for this site.

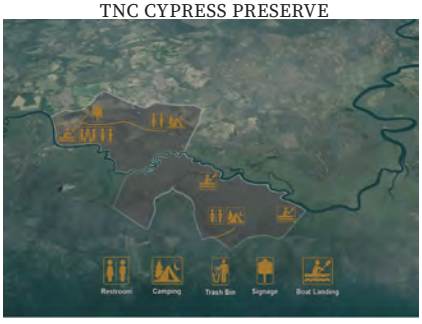
MEAD



Mead is a site that has a lot of opportunity for water access and family gathering. Thus, water and community oriented amenities were considered for this site

BLACK RIVER CYPRESS PRESERVE & TNC CYPRESS PRESERVE

Though these two sites will not be a part of the final design, many new adjustments were considered for existing amenities on the site. These parcels have been used as a way to inspire design for the other parcels.



ROCKY POINT



Rocky Point holds a lot of history and is currently available to the public. Low impact is key to this site therefore, only a few new amenities were considered to revamp this site.

DESIGN PHASE 2

SITE PLAN DEVELOPMENT

HINDS CANADA & RMS SOUTH

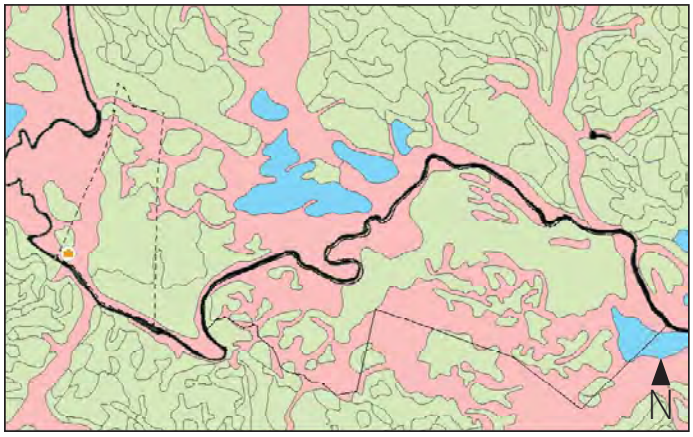
SITE PLAN DEVELOPMENT

CONCEPT STATEMENT

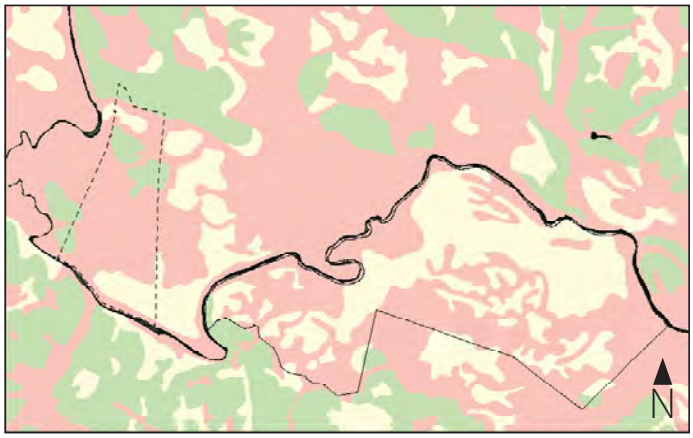
This design is meant to immerse the visitors in the natural beauty of the Black River corridor. A culmination of primitive campsites, picnic areas, wooden bench swings, and a campfire provide multiple activities for visitors to partake in. The addition of the boardwalk adjacent to the river is meant to provide foot traffic circulation towards these primitive campsites and to draw in the views from the river.

As the viewer moves throughout the site, they will pass five nodes along the boardwalk. Each node leads to three primitive camping platforms. A total of fifteen separate camping sites each roughly two-hundred feet apart sit towards the bottom of Hinds Canada and can be accessed by those who visit the site.

SITE ANALYSIS



KEY
- RMS SOUTH
- HINDS CANADA
- HISTORICAL AREA
- FREQUENT FLOODING
- RARE FLOODING
- NO FREQUENT FLOODING



KEY
- RMS SOUTH
- HINDS CANADA
- NOT LIMITED FOR BUILDING
- SOMEWHAT LIMITED FOR BUILDING
- VERY LIMITED FOR BUILDING

SITE CONTEXT:
- THE BATTLE OF THE LOWER BRIDGE OCCURED IN THE AREA MARKED 'HISTORICAL AREA' IN MARCH OF 1781.
- BOTH OF THESE SITES SIT UP AGAINST THE RIVER.
- HINDS CANADA USED TO BE LOGGED FOR TIMBER BETWEEN 1917 AND 1919.
- RMS SOUTH IS MAINLY FORESTED WETLANDS.

EXISTING CONDITIONS








TAKEAWAY

This area is comprised of wetlands and multiple species that pertain to the Black River corridor. Elements such as the Bald Cypress and the Swamp Tupelo provide homes for many of the wildlife, the White Ibis being a bird that dwells in this environment. It only floods on the southern portion of the site. This site is best for wildlife restoration.

PROPOSED CONCEPT

CONCEPT 1



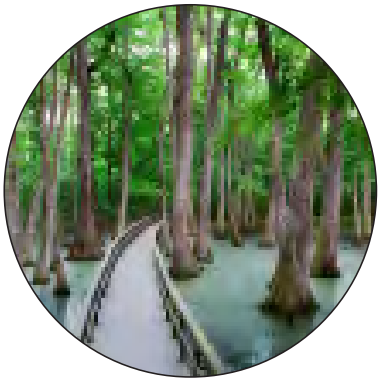
MINIMUM DISTANCE BETWEEN PLATFORMS
- 20'x20' wooden primitive camp platform
- platforms to be minimum 30' apart and maximum 60'-70' apart
- kayaks can approach platform when river is flooded
- possible flotation device
- attach to 2-3 surrounding trees

CONCEPT 2



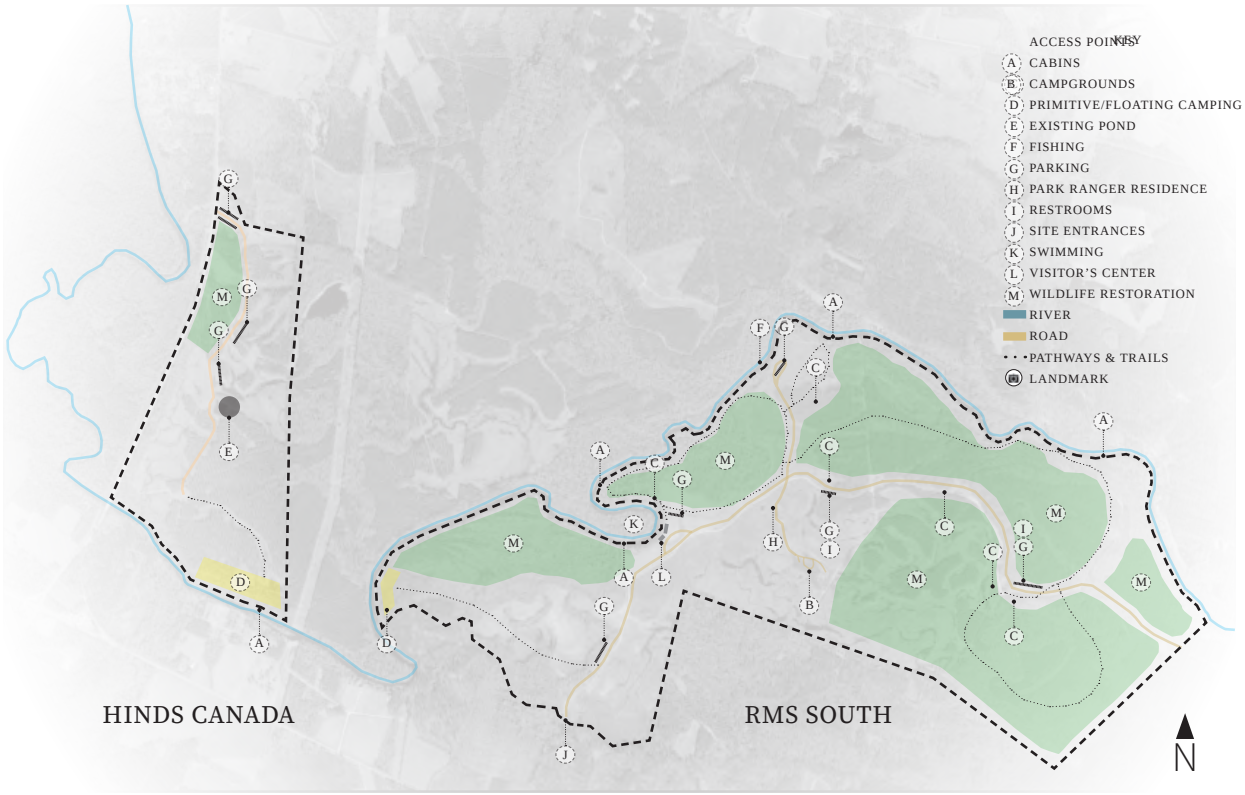
MAXIMUM DISTANCE BETWEEN PLATFORMS
- 20'x20' wooden primitive camp platform
- platforms to be minimum 200' apart and maximum 300' apart
- (kayaks can approach platform when river is flooded)

CONCEPT 3



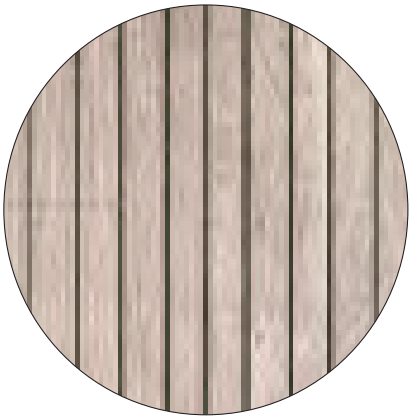
BOARDWALK ADJACENT TO RIVER
- 6' wide
- approximately .7 miles long
- sits adjacent to river
- made of wood and has wooden railings
- connects to each primitive camp platform

MASTER PLAN


KEY
ACCESS POINTS
A CABINS
B CAMPGROUNDS
D PRIMITIVE/FLOATING CAMPING
E EXISTING POND
F FISHING
G PARKING
H PARK RANGER RESIDENCE
I RESTROOMS
J SITE ENTRANCES
K SWIMMING
L VISITOR'S CENTER
M WILDLIFE RESTORATION
RIVER
ROAD
PATHWAYS & TRAILS
LANDMARK
HINDS CANADA
RMS SOUTH
N


A PRIMITIVE CAMP LOCATION
B SECONDARY BOARDWALK
C NODE
BLACK RIVER

CHARACTER BOARD



WOOD

This material is used in the boardwalks, nodes, and primitive camping platform.

The benches around the campfire, swings, and picnic tables are made of this material.



GRAVEL

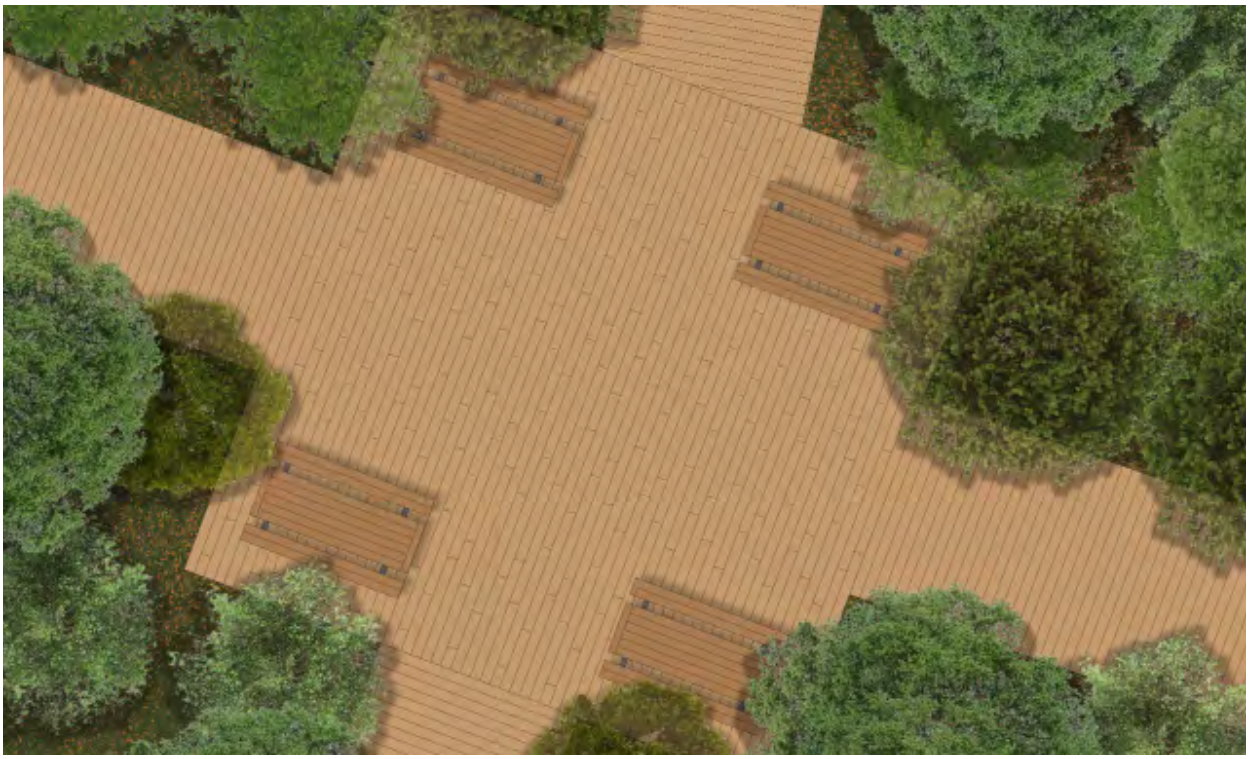
This material is used on the path that leads to the boardwalk on the southeastern area of the Hinds Canada property.



STONE

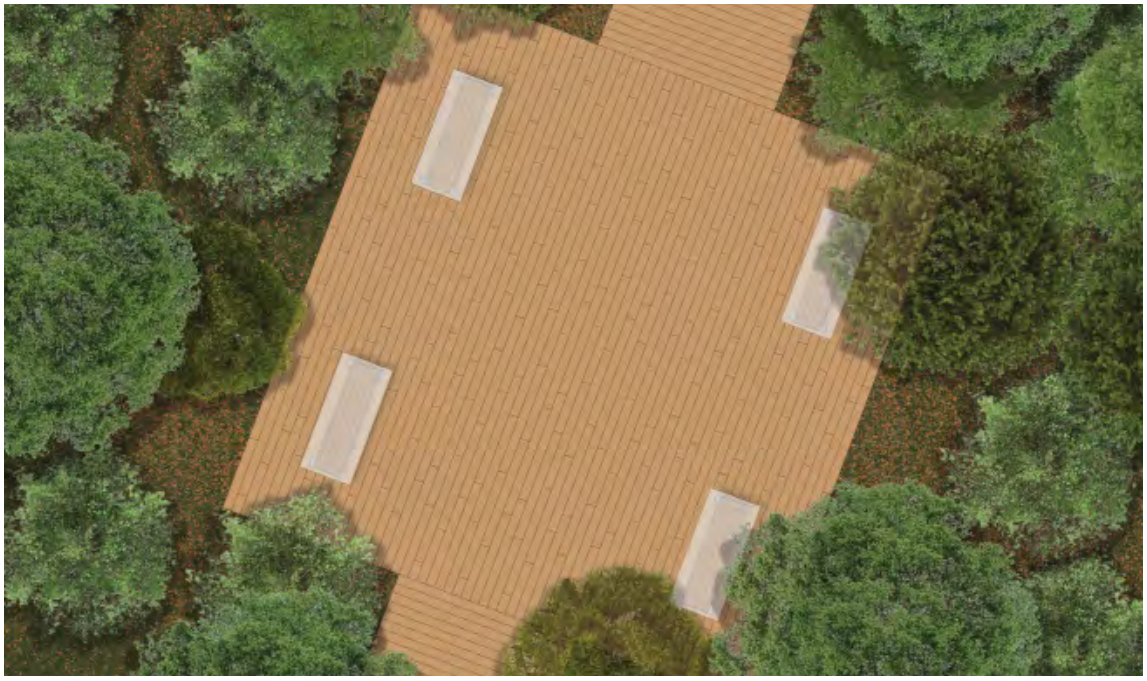
The wall of the fire pit is made of stone. The wall itself is six inches thick and is ten feet wide.

PICNIC TABLE ENLARGEMENT



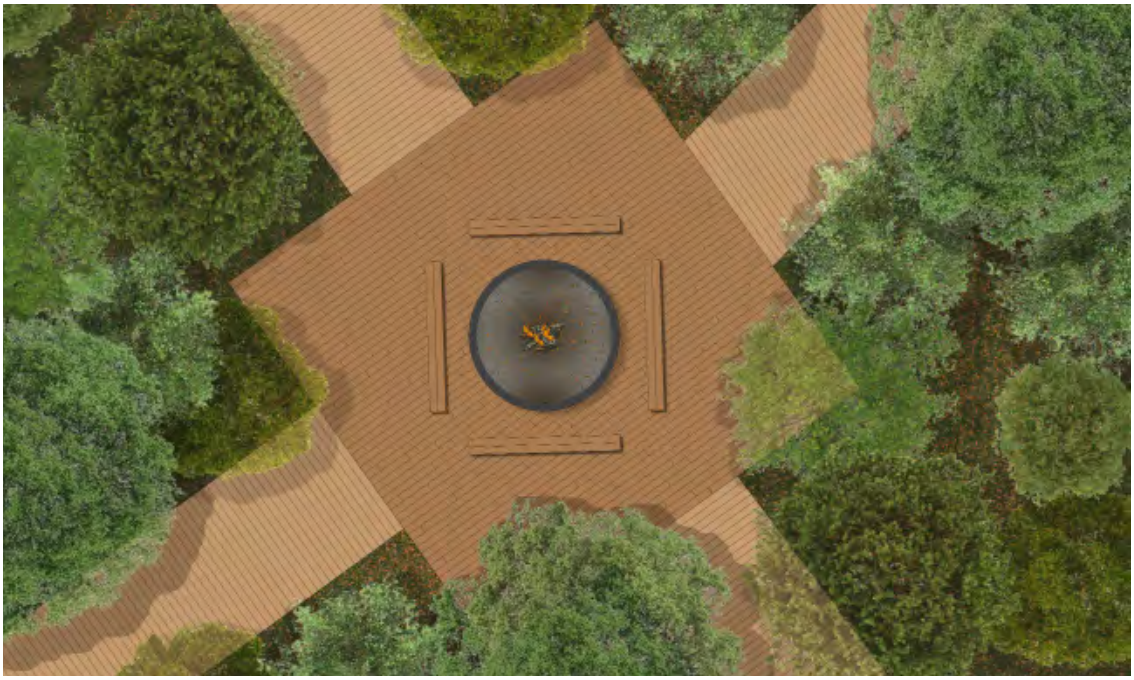
This area is 30’x30’ and displays four picnic table areas for sitting, rest, and relaxation. This is one of the five nodes connected to the boardwalk. Two of the five nodes contain four picnic tables each. As the visitor passes through this node, they walk down a series of boardwalks to get to one of three primitive camping platforms.

SWINGING BENCH ENLARGEMENT



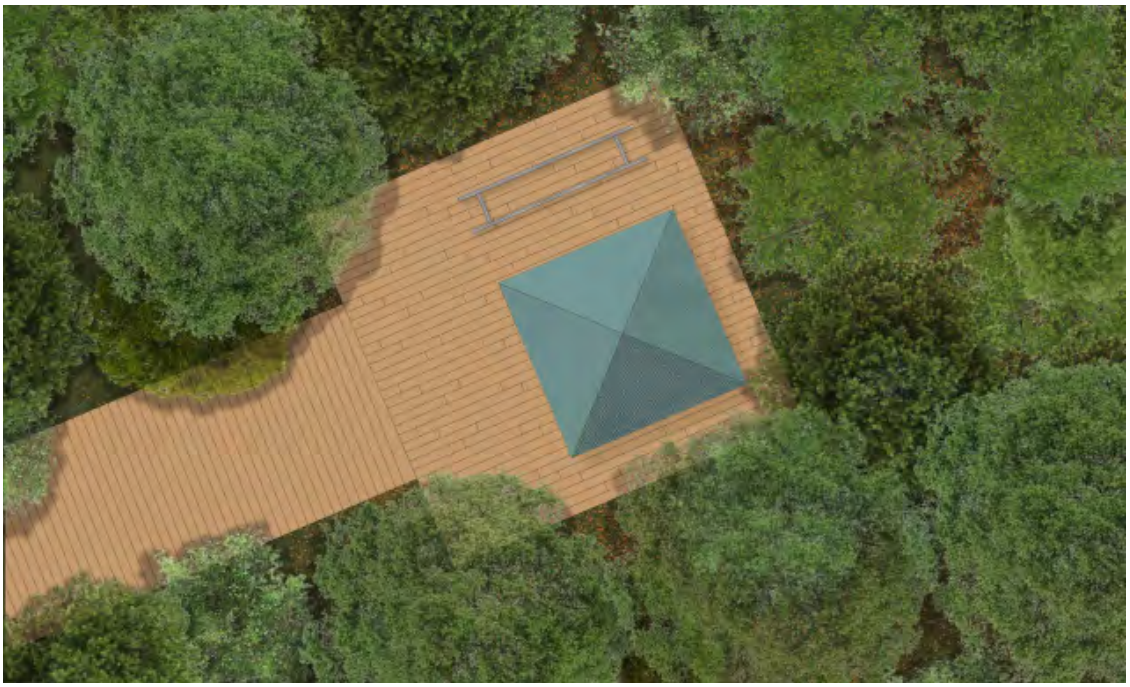
This area is 30’x30’ and displays four swinging benches to be utilized by visitors for enjoying the serene and peaceful, undisturbed landscape of the Black River habitat. This is another of the five nodes connected to the boardwalk. Two of the five nodes contain four swinging benches each. They are made of wood and are covered by a cloth canopy. As the visitor passes through this node, they walk down a series of boardwalks to get to one of three primitive camping platforms.

FIRE PIT ENLARGEMENT



This area is 30’x30’ and displays four wooden benches surrounding a stone fire pit. This fire pit is roughly ten feed wide. This is center of the five nodes connected to the boardwalk. This is the only node with a fire pit. As the visitor passes through this node, they could walk down one of three tertiary boardwalks to get to their camping platform.

PRIMITIVE CAMPING PLATFORM ENLARGEMENT



This area is 20’x20’ and displays one tent and one rack to hold a kayak. This is an example of how a primitive camping location would look to the visitor. The platforms are made of wood and can be accessed by kayak if this area floods. As the visitor arrives at the platform, they could experience peacefulness and seclusion since each platform is approximately 200’ away from the next.

MEAD

SITE PLAN DEVELOPMENT

MEAD SITE ANALYSIS

Community History
- Native Americans were here for thousands of years
- Rice fields (built $ for the low country) - abandoned now
- Marsh system
- Swamp system used for planting
- Inland - tobacco fields
- Cypress trees were cut 100 years ago

Existin Conditions
- Hardwood forest
- Large trees on site(200-300 years old)
- Current problems with erosion
- Loblolly pine forests (thousands of acres)

1. They want these fields planted back with longleaf pines
- Seed bank is important and will revegetate very quickly
- Swamp system used for planting
- Views
- Protect areas by only allowing people to view it
- Keep access safe



SITE ANALYSIS

Flooded Exposure



Industrial Forest



USA Wetlands



Forested Wetland



TNC Resilience Data



MASTER PLAN



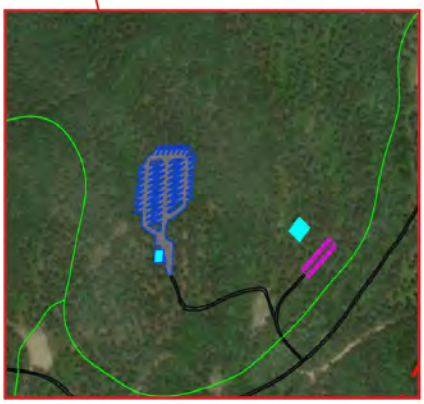
LEGEND

- Parking Lot
- Hiking/Mountain Bike Trail
- Vehicular Circulation
- Boardwalk
- Cabins
- Buildings
- Restrooms
- River Access
- Campgrounds
- Treehouses

Most users of the site will enter the site from the main road. Once you enter there are two roads that allow you to access the site. The first access you will encounter if you turn left will be the visitor center and RV parking. The visitor center provides information about the area park features and their locations.The RV parking is an area that allows people with recreational vehicles to stay overnight in allotted spaces. The second access point along that road is the river access and the treehouses. The river access allows visitors to go fishing, kayaking, canoeing, or just relax in nature's beauty. The treehouses allow tourists to stay overnight and get a good feel of nature and the environment. In front of the treehouses is a boardwalk that you can also walk on to see part of the black river. The third amenity on the road is the primitive campground. The campground allows you to park your car down the road and walk to the camping gear with your stuff. The fourth amenity is cabins. The cabins are used for a peaceful getaway from the noise of everyday life. The fifth amenity is a parking lot that leads to more treehouses. The treehouses also have a boardwalk in the front to look at the environment around you. The last access point is another river access that allows you to do a short float entirely on the Mead property. Near the access point are a pavilion and a restroom. The pavilion area is there if you wanted to have a picnic or just hang out. On the northeast of the site, there are two roads, the one left leads to the maintenance facility and the one on the right leads to a hiking /mountain bike trail. Throughout this site, there is a trail almost everywhere.

RV & Vistor Center Zoom In



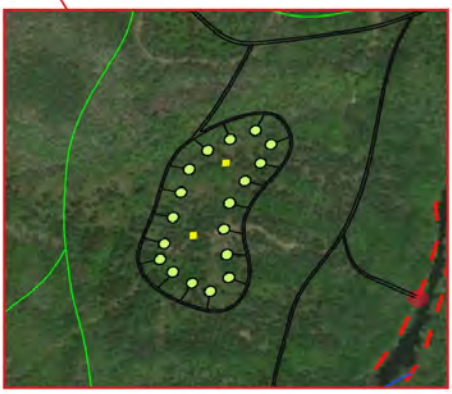






Campground Zoom In









43

Tree Houses & Boardwalk Zoom In



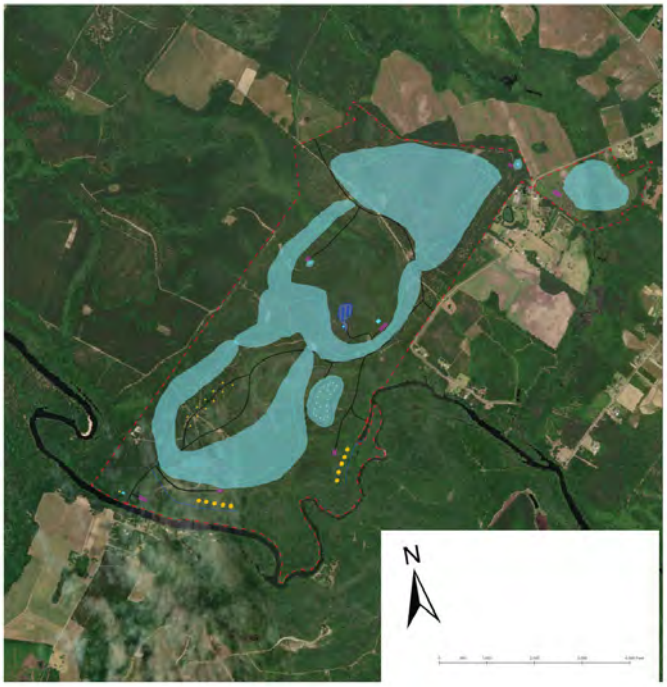






44

PHASING 1

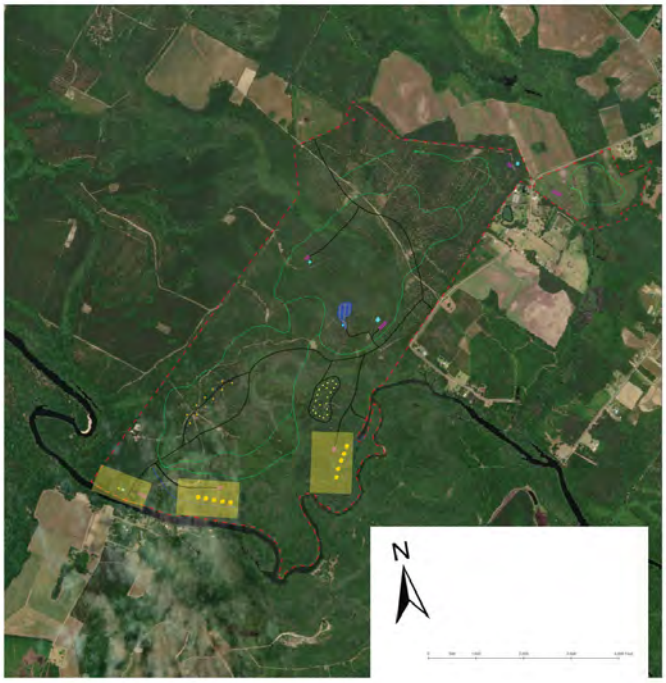


LEGEND

- Parking Lot
- Hiking/Mountain Bike Trail
- Vehicular Circulation
- Boardwalk
- Cabins
- Buildings
- Restrooms
- River Access
- Campgrounds
- Treehouses

Phase 1
This phase extends the campgrounds and the cabins allowing you to walk or ride your bikes on the nearby trail. The campgrounds are a easy access area. The cabins are also they allow visitors to move freely.

PHASING 2

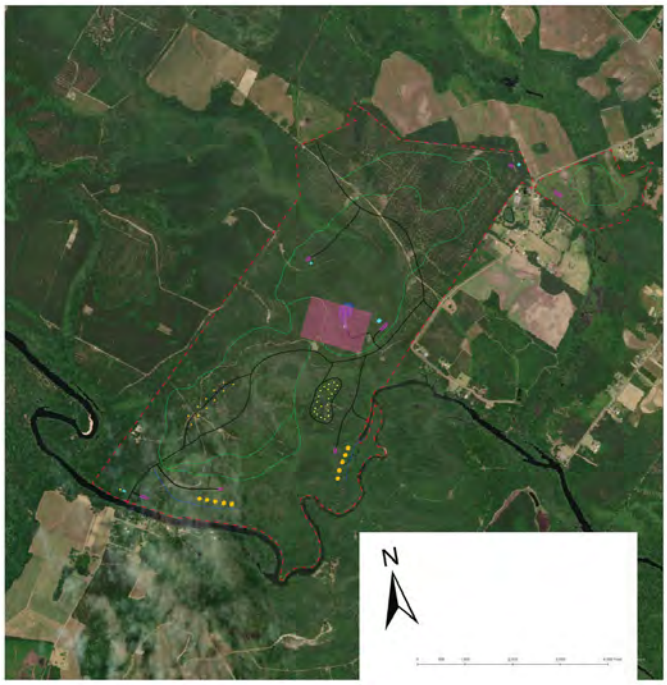


LEGEND

- Parking Lot
- Hiking/Mountain Bike Trail
- Vehicular Circulation
- Boardwalk
- Cabins
- Buildings
- Restrooms
- River Access
- Campgrounds
- Treehouses

Phase 2
This phase involves the river access, the pavilion area, and the tree houses. The boardwalks are close to this area. Which allows guest to have different views.

PHASING 3



LEGEND

- Parking Lot
- Hiking/Mountain Bike Trail
- Vehicular Circulation
- Boardwalk
- Cabins
- Buildings
- Restrooms
- River Access
- Campgrounds
- Treehouses

Phase 3
This phase includes the visitor center and the RV parking. The visitor center will provide information about area and also have items that you can buy. The RV parking is for visitors to stay overnight.



This image shows kids excitment and adults walking around in the RV camping area. Some RV campsites come with very limited space. If you have kids in your party or a group that likes to be active, consider looking for a campsite with either grassy areas you can play in.

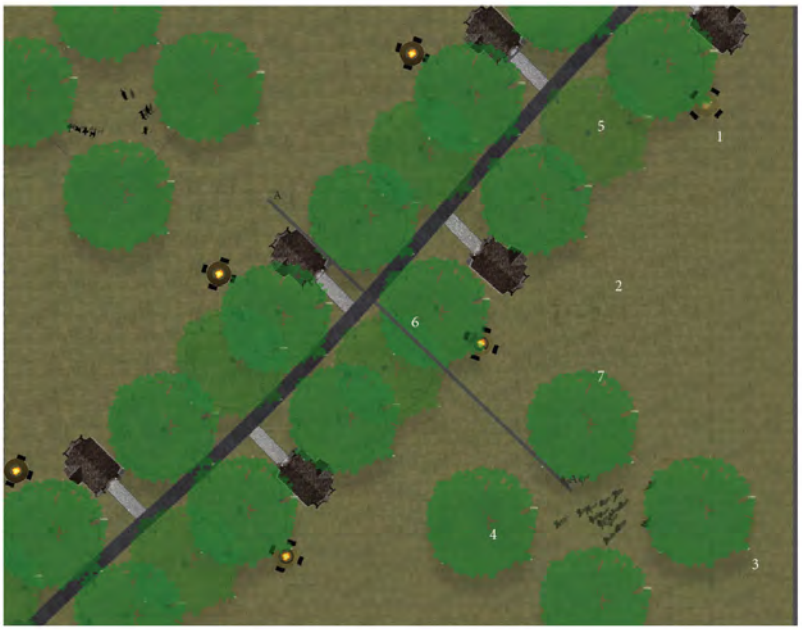


This image shows a view of the primitive camping area. When you camp primitive-style, you have freedom to choose your destination and freedom from common distractions, so you can enjoy nature on a different level.

CONCEPT STATEMENT

The intent of this design is to allow visitors to have some excitement when visiting the site. The mission is to enhance or conserve the natural, historical, cultural, and wildlife resources through good stewardship while providing quality outdoor recreation experiences. Exploring the different amenities on the site, such as the visitor center, RV parking, primitive campgrounds, cabins, gathering areas, access points to the river, hiking and mountain bike trails, and treehouses.

ILLUSTRATIVE MASTER PLAN



Legend

1.Gravel Road
2.Asphalt Road
3.Gathering Area
4.Cabins
5.Fire Pit
6.Benches
7.White Oak Tree

MATERIAL BOARD


Gravel


Asphalt


Stone Bench


Outdoor Stone Fire Pit


Wood Cabins


White Oak Tree



This image shows a view of people in front the cabin. The cabin has 4 rooms and can hold a large amount of people.



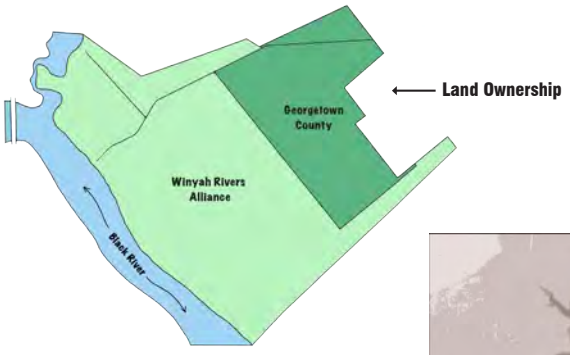
This image shows people wondering area in the gathering area. The gathering area is for the people that staying at the cabins.



ROCKY POINT

SITE PLAN DEVELOPMENT

SITE CONTEXT & ANALYSIS



Rocky Point has two land owners that manage the site: Georgetown County and Winyah Rivers Alliance. The land under the Winyah Rivers Alliance had many design restrictions that included low impact principles and educational opportunities. During the charrette, we learned that the land to the right of Choppee Creek was unable to have water or electricity. On the other hand, Georgetown County was more open to land development and impact on the site.

Below is a topography map generated from GIS. The Rocky Point site is much more elevated than the other sites along the corridor. Rocky Point contains a very steep bluff along the river and has uniquely shaped landforms high above the waterline.



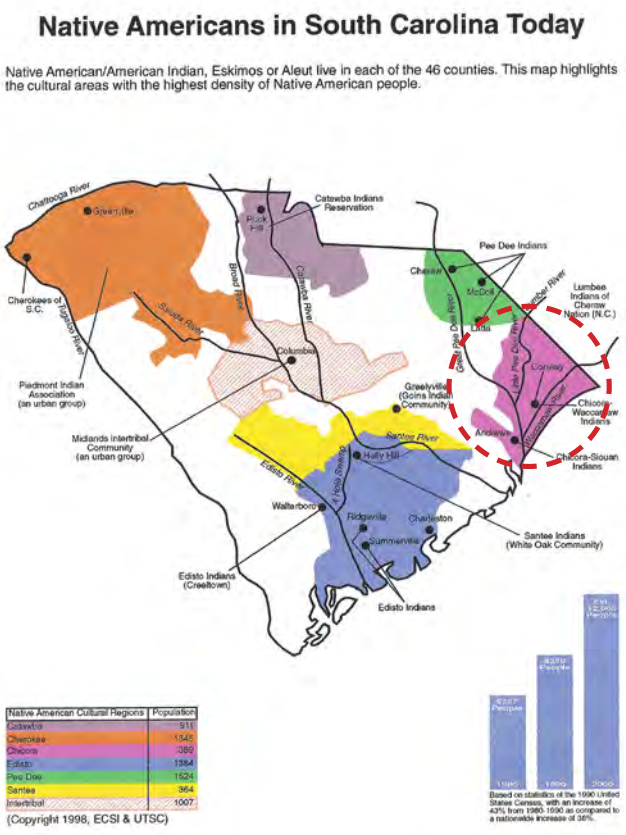
BRIEF HISTORY

Rocky Point has been home to several Native American tribes including the Chicora, Winyah, and Waccamaw. To the right is a map that shows the location of the tribes as they once rested close to the Black River.

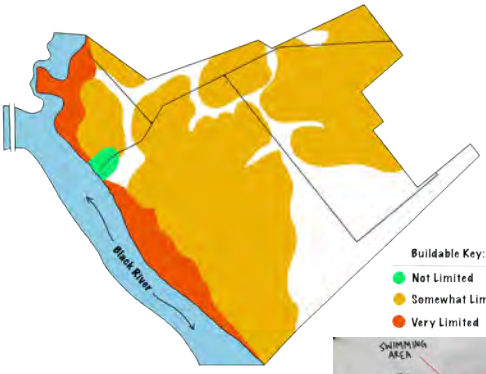
In the 1800's the land was used as a rice plantation and was owned by the Coachman family. The Coachmans owned African American slaves that worked on the rice fields. To this day, several of the Coachman family members are buried on the site in a fenced-in cemetery. Below, is a photo of the cemetery in its current state.

After the civil war, the plantation started due to a shift in the economy. The site was then turned into an African American's only park for a period of time. The land was later turned over to Georgetown Parks and Recreation to keep it maintained and open to the public.

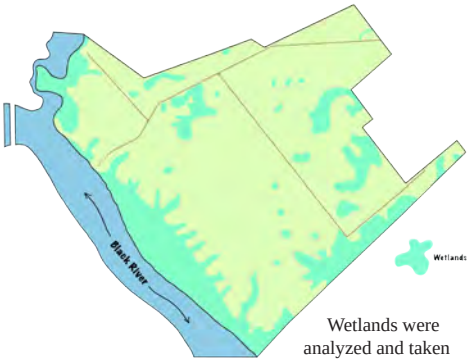




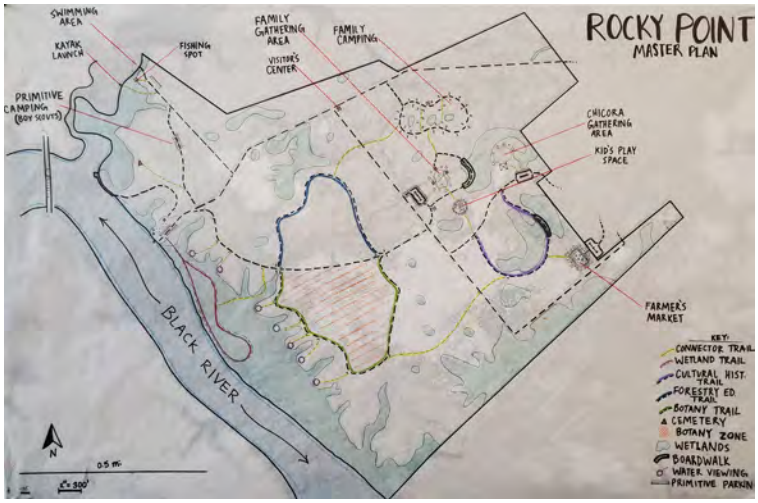
SITE CONTEXT & ANALYSIS



Buildability was also very important to the site due to the high water content. When adding building amenities, soils need to be able to withstand the weight of built structures. Wet soils will cause structures to sink



Wetlands were analyzed and taken into account due to the Black River's tendency to flood. Wetlands exist throughout the site but are especially concentrated along the river



Initial ideas were mapped out and existing features were taken into consideration during the beginning stages of design. This map locates the Coachman cemetery, notable viewing locations for the river, and existing roads.

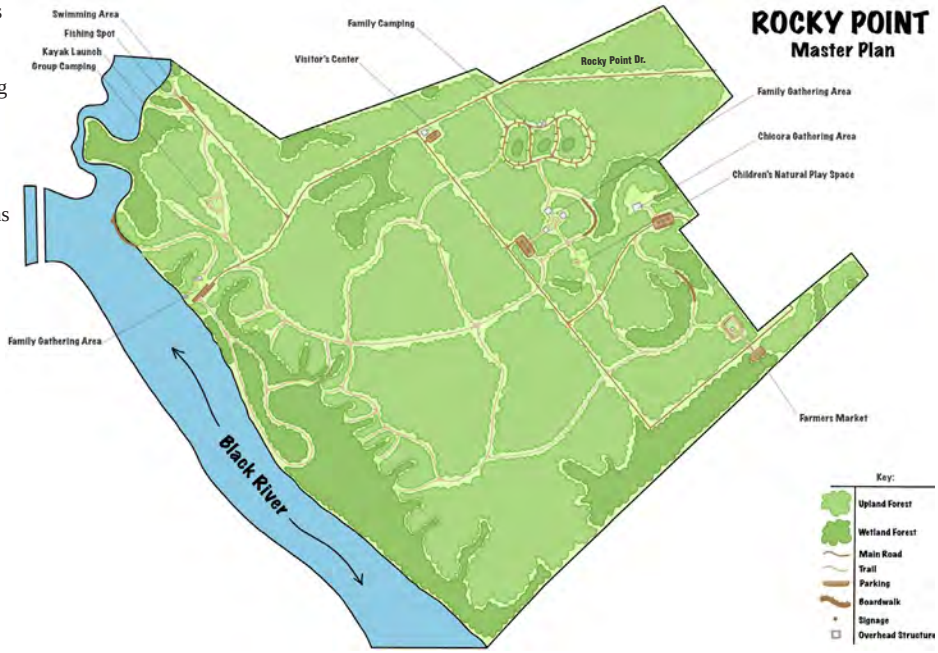
ROCKY POINT MASTER PLAN

When designing the site, creating spaces that allow visitors to enjoy the view of the Black River and also be able to gather with the community was top priority. Revitalizing the existing gathering area and adding an additional space for gathering in the upper region of the site has been proposed.

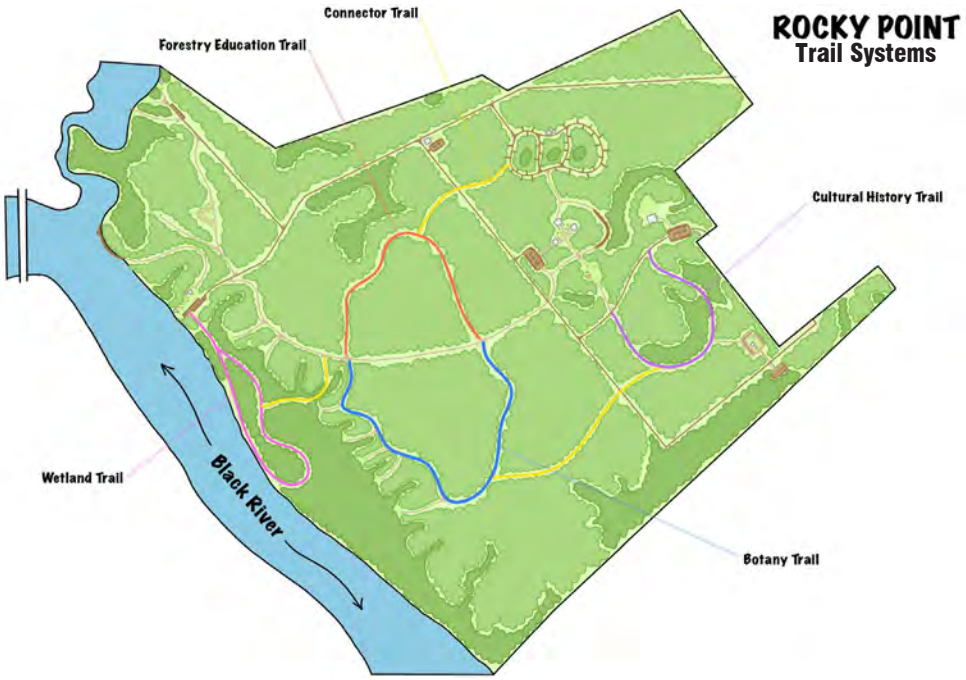
Several amenities have been added such as family camping, group camping, a cultural center, a visitor's center, a farmer's market, and a natural play space for children.

In this design, the boat landing issue was addressed as well. At the charrette, we learned that the boats in this region are very loud and the waters can get very crowded. There is currently a boat landing and kayak launch directly beside one another and it causes issues being so close together. The issue has been solved by moving the kayak launch along Choppee Creek and keeping the boat landing in its existing location.

Additionally, several trail systems have been added that offer educational opportunities.

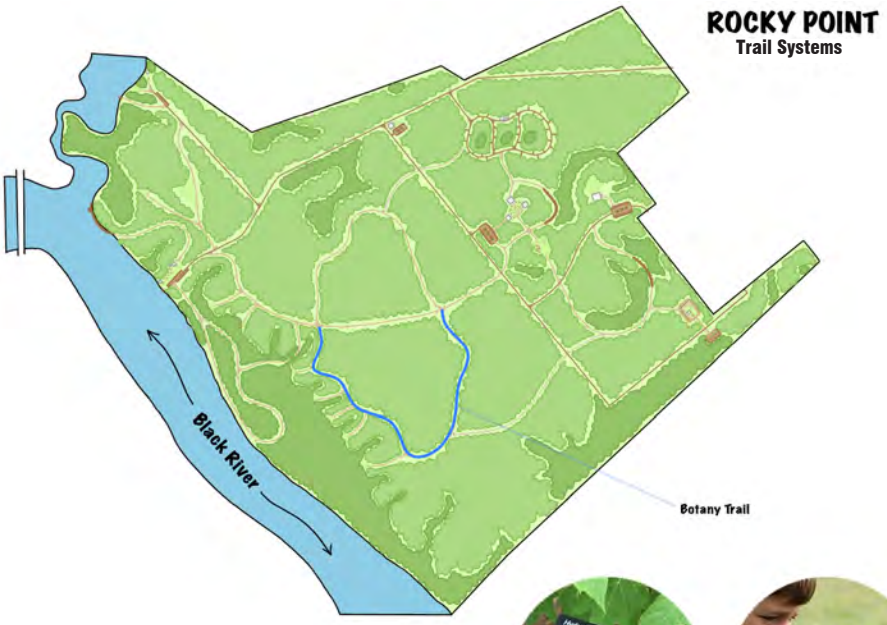


TRAIL SYSTEMS



Shown above is a system of proposed trails. During the design process, each trail aimed to serve a purpose. The forestry education, botany, and cultural history trails provide significant educational opportunities to the public while the connector trails and wetland trail direct visitors around the site using signage and captures views of the river.

BOTANY TRAIL



The botany trail will educate the local community about native plants and their unique features. Signage will be incorporated to allow visitors to read about the site's ecology.







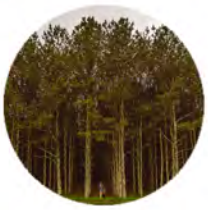
FORESTRY EDUCATION TRAIL



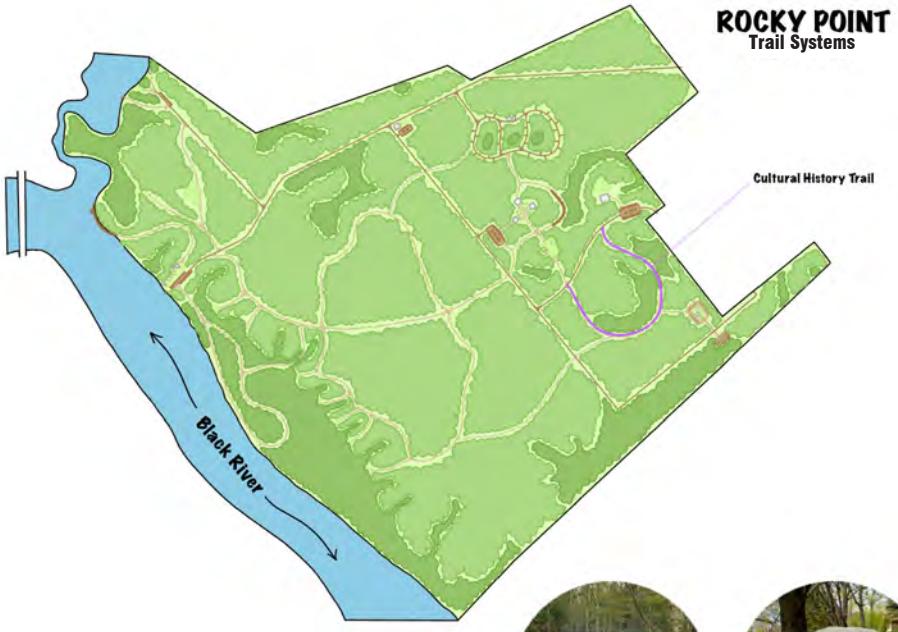
The forestry education trail will teach visitors about forest management by using signage and group tours. This allows visitors the opportunity to see how the forestry process works and why it is important to the site. Several stopping points along the trail will be added to allow dynamic views of the community forest.







CULTURAL HISTORY TRAIL



The cultural history trail will be dedicated to the African American and Native American cultures that thrived on this land. History about the land is told as a visitor walks the trail. It is important to note that this trail connects the cultural center to the farmer's market. This connection is symbolic as culture can be celebrated and bring together the community.







WETLAND TRAIL



The wetland trail will provide significant views of the Black River and allow people to get close to the water. This trail will have very low impact on the land and help preserve the beauty of the wetland zone. The path will be lightly cleared and flooded at certain times of the year. During flood season and high tide, the trail will be underwater and visitors will instead use the higher ground trails.



CONNECTOR TRAILS



These trails are small paths that connect to larger trails. They contain trail signs that allow visitors to choose their exploration without getting lost. These smaller systems help with the flow from trail to trail.



FAMILY CAMPING

Families are able to drive in, park, and set up tents in camping designated spaces. A bathroom and bathhouse is made available at the top of the looped trail system. Each camping spot is expected to have a fire pit with a grill and picnic table. Families are also able to explore the wetlands close to the site.







FAMILY GATHERING AREAS







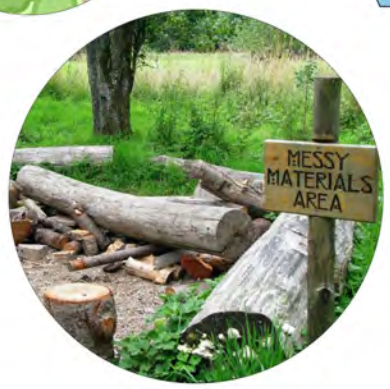
These areas allow families to have outdoor gatherings with an overhead structure and tables. Here, the community can host small events like fundraisers or celebrations. Trails are also connected to these areas to allow families to explore the rest of the site.

CHILDREN'S NATURAL PLAY SPACE

Children are able to enjoy the natural environment and play with materials that are made from natural elements. Benches will be provided for parents and family members to observe and this space is connected by trail to the family gathering area.







CHICORA GATHERING AREA/ CULTURAL CENTER

This area is a place for both indoor and outdoor events. A building will be provided that connects to the outside surroundings and will have offices for the Chicora tribe to use. A large outdoor space is made for cultural events and gatherings.





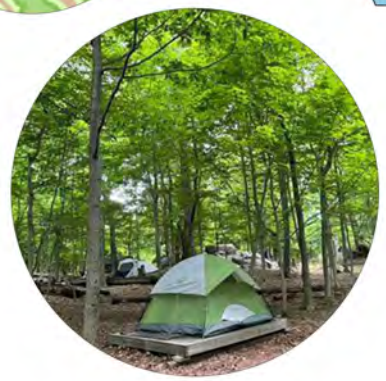


GROUP CAMPING

Primitive group camping is made available for educational purposes. This space will be great for local boy scouts or community groups. The goal of these camping spaces is to be low impact and contain a communal space for education and gathering.







FARMERS MARKET

With a farmers market the community is able to interact together in a common space. It provides a way to attract new visitors to the site and help them explore the trails that are easily connected. It can also boost the economy by helping local farmers and vendors.





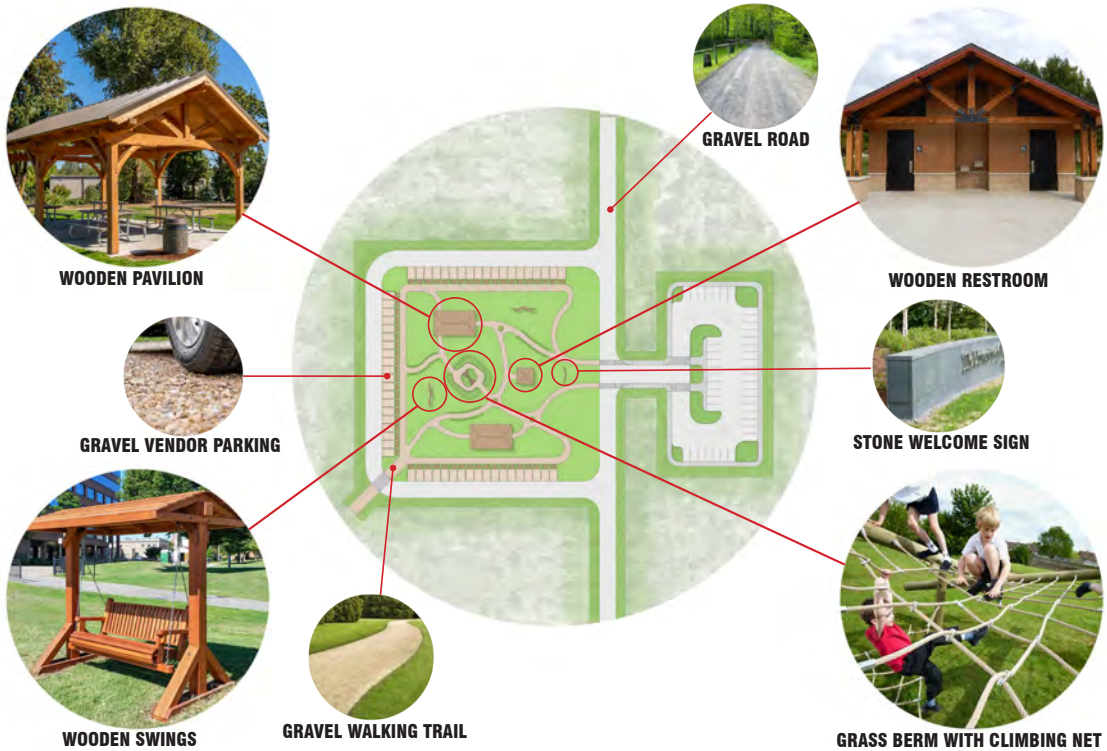


FARMERS MARKET MASTER PLAN



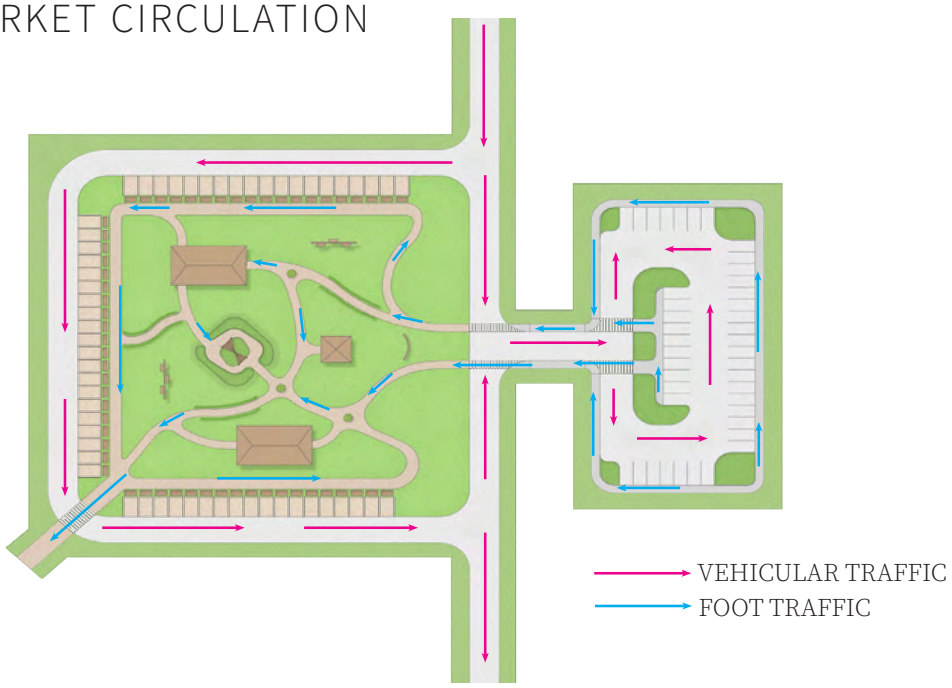
The farmer's market is great way to bring people together while also supporting local vendors. This design works as a loop system where vendors are able to drive in and park into a designated vendor spot. Visitors will be able to park to the right of the farmers market and walk a short distance to the community space. Inside this loop is a gathering space with pavilions and a children's play area. The play area is a set of elevated grass berms with a climbing net. Surrounding the play area is a path system that takes you around the site and can lead visitors to the cultural history trail. A restroom is also provided to accommodate the visitor's stay.

FARMERS MARKET AMENITIES & MATERIALS



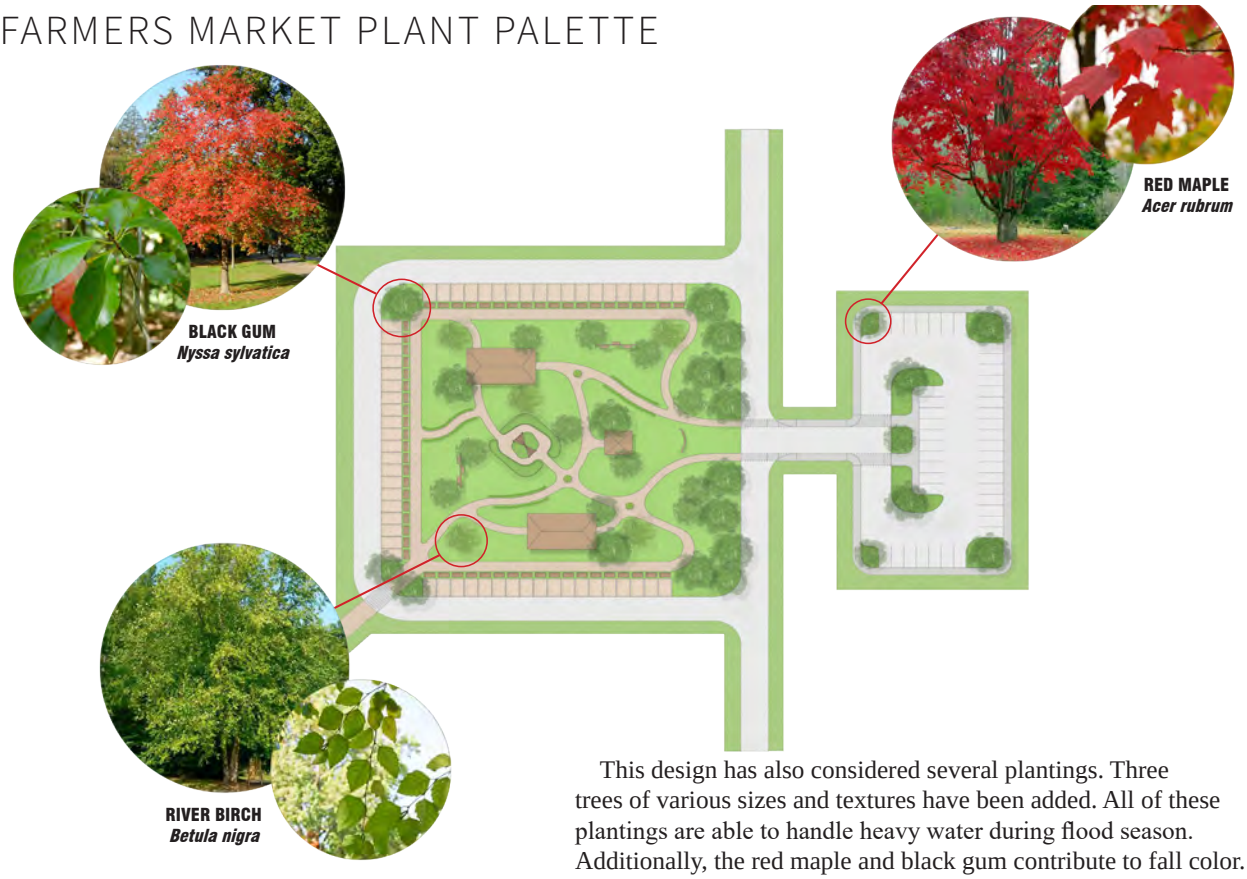
The goal of this design was to keep the amenities and materials very simple. Wooden features connect the built to the environment and the various gravel paths keep the site at a low impact on the land. The space needs to be both inviting yet enclosed to create an experience for the common visitor.

FARMERS MARKET CIRCULATION



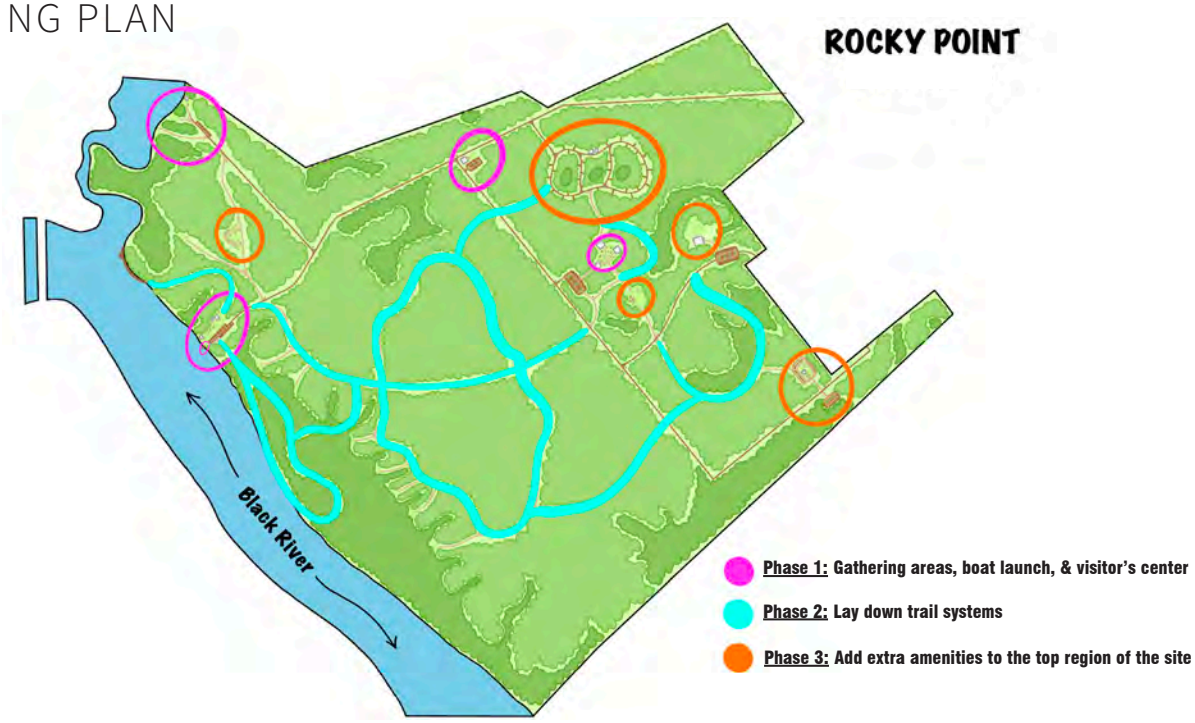
It is important to note the circulation of the site to be sure it functions correctly and that both vendors and visitors will use the site in harmony. Vendors will use the looped road system while visitors are able to park and walk to the market's center.

FARMERS MARKET PLANT PALETTE



This design has also considered several plantings. Three trees of various sizes and textures have been added. All of these plantings are able to handle heavy water during flood season. Additionally, the red maple and black gum contribute to fall color.

PHASING PLAN



Phasing this design started with the existing features. Revitalizing the current gathering area with additional benches and restrooms, fixing the boat landing/kayak launch issue, and adding a visitor's center was top priority. Secondly, the trail systems should be added for visitors to explore the site and enjoy the view of the Black River. Lastly, the extra amenities such as the family camping, family gathering areas, Chicora cultural center, farmers market, and the children's natural play space should be added. Placing new amenities help keep people interested and coming back to the site to enjoy.

THANK YOU!

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