

Hazard Conceptual Design: Coal Miners Memorial, Pathfinders Greenway, and Various Parks



Prepared for The City of Hazard

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College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University



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In collaboration with the Kentucky Division of Forestry

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The City of Hazard

Pathfinders of Perry County

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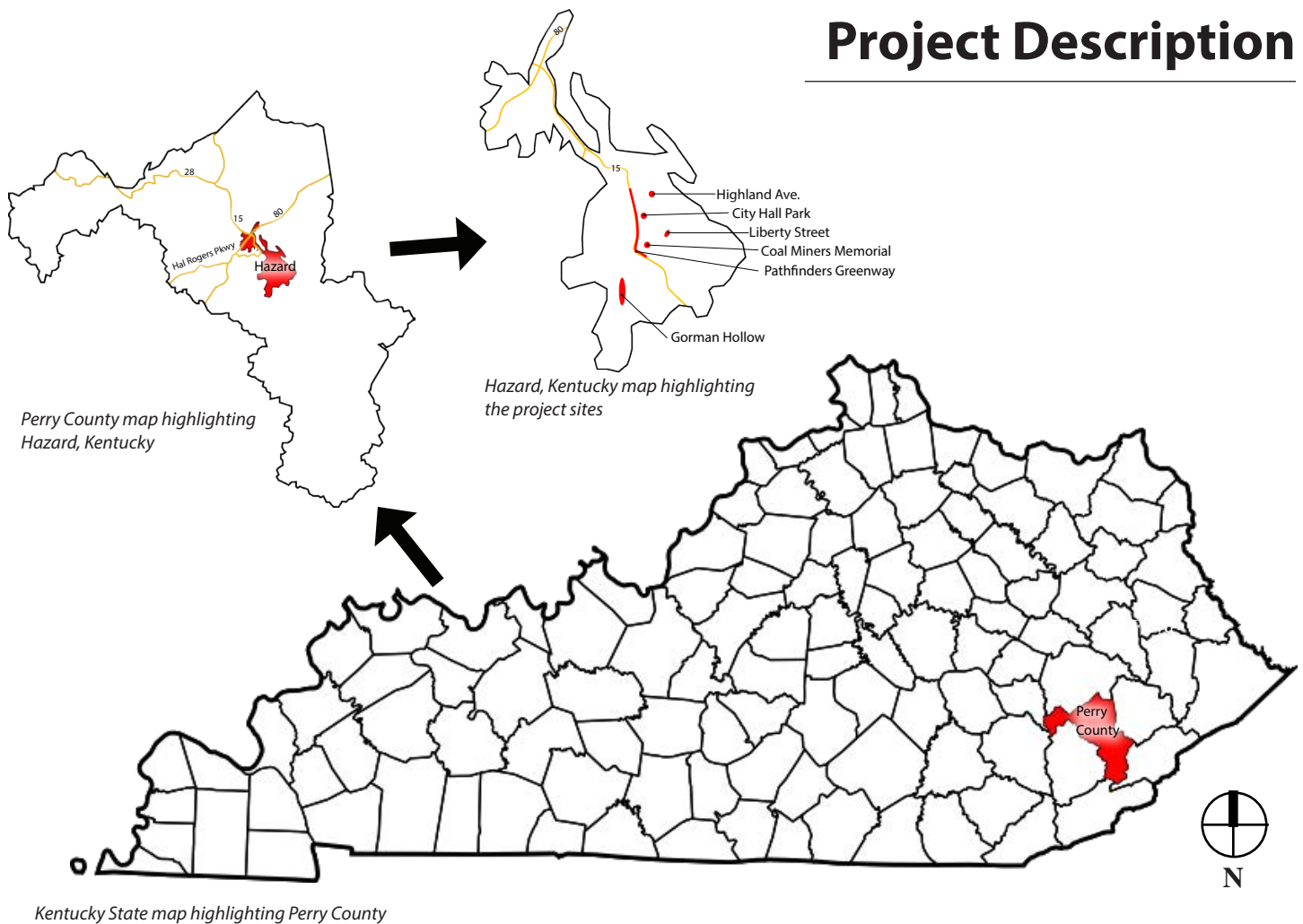
Jamie Ratliff, Alpha Natural Resources, Enterprise Mining Co. Mine #9

Don Chester, Kentucky River Area Development District

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Project Description



Hazard, KY is the seat of Perry County, the 68th county of Kentucky, established in 1821. The city is located in the center of the county right off Kentucky Route 15. Hazard's current population of 4,465 has steadily been declining since the 1950s due to the decline in coal mining in the area, although it proudly keeps its motto, "Queen City of the Mountains."

Hazard grew slowly during its early years. Laid out in 1824, it was isolated by mountains, and the only access to the valley in which it sits was through a 45 mile stretch of the Kentucky River or a long journey over the mountains. The primary economic focus of the city was lumber until the railroad arrived in 1912. After the arrival of the railroad, coal mining surpassed logging, and in the 1920s, Hazard became the major mining center in the southeastern coalfields. Although Hazard has suffered a steady decline in its population since the 1950s, it has recently started to work on a downtown renaissance plan to improve the quality of life for its residents and stimulate economic growth.

Project Description



The Community Design Assistance Center (CDAC) was asked to develop conceptual designs for five sites and a greenway in Hazard. The sites varied in both size and function and included City Hall Park, a coal miners memorial, and parks on Liberty Street, Highland Avenue, and Gorman Hollow Road. The conceptual design improvements for City Hall Park creates a gathering space for both small scale and large events and includes the renovation of an amphitheater and the creation of a performance stage. The design for a coal miners memorial at the triangle by the Gorman Bridge transforms an empty grass lot into a town square with symbolic features paying tribute to Hazard's coal mining past. The designs for improved basketball courts and playgrounds on Liberty Street and Highland Avenue improve existing and introduce new outdoor recreation opportunities for the neighborhoods. Finally, the conceptual design for Gorman Hollow improves the overall quality of the housing development by providing new outdoor recreation opportunities for its residents and improving the aesthetics of its outdoor spaces.

Design Process



The CDAC team is given a walking tour of the proposed pathfinders greenway route through Hazard during their initial site visit.



CDAC team member Harley Walker presents design concepts for the proposed coal miners memorial.

The design process began with an initial site visit to Hazard in January, 2013. The CDAC design team walked the greenway route and various project sites, gathering information about the landscape that would later influence the design concepts. By touring the sites, the team was able to establish a first-hand understanding of the site conditions, including both opportunities and constraints, which were documented on a series of analysis maps.

The site visit also provided the opportunity to meet with residents and representatives of the City of Hazard and other organizations involved in the process, such as the Pathfinders of Perry County. The team met with these representatives to hear their vision for the project and worked collectively to establish a list of goals. With the project objectives in mind and an understanding of the sites' opportunities and constraints, the CDAC team developed a set of preliminary conceptual design alternatives.

A community meeting was held in March 2013 at City Hall. The purpose of this meeting was to present the preliminary design concepts and to collaboratively move closer toward a set of final conceptual master plans. The site analysis information of the project sites and the two preliminary design concepts for each site were presented to the Hazard community. Pros and cons of each design were discussed and the CDAC team worked with the community representatives to select which elements from each design were desirable so they could later be combined into final plans. The design alternatives were then revised and combined into a final conceptual master plan based on the comments made at the meeting. The final master plan was presented at a second and final community meeting.

The following pages outline the site analysis, preliminary conceptual designs, and the final conceptual designs for each of the project sites.

Project Objectives

Members of the community and the CDAC team worked together to create a list of objectives during the initial site visit.

- Tie the new picnic shelter plans into the conceptual design for City Hall Park
- Restore the old amphitheater at City Hall Park
- Create a coal miners memorial that functions as much as a park as it is a memorial
- Symbolically tie the coal miners memorial into Hazard's mining past
- Create new recreation opportunities at Liberty Street and Highland Avenue and Gorman Hollow
- Bring life to the Liberty Street basketball court
- Make the pocket park on Highland Avenue more accessible
- Revitalize the Gorman Hollow basketball court
- Improve connectivity to various destinations along the river's edge such as City Hall Park, the parking garage, and the peace gardens utilizing the Pathfinders Greenway
- Create a loop trail with a river crossing

City Hall Park

The CDAC team was asked to redesign City Hall Park, located adjacent to City Hall. It was requested that the design provide a visual connection to the Kentucky River and incorporate the existing amphitheater, fountain, and the existing plans for a new picnic shelter. During their initial site visit, the CDAC team conducted an in-depth inventory and analysis. They took photographs, measurements, and collected soil samples that would later be compiled into an inventory and analysis drawing. Several constraints were identified during the site inventory and analysis. Power lines run along the southern edge of the amphitheater, ultimately limiting tree plantings below. Also, the concrete surface at the base of the amphitheater is currently a dead space too large to serve any specific function. During the initial site visit, City Hall Park was identified as an ideal place to locate a city Christmas tree. This area is a place of great activity during events and is in the heart of downtown. At Christmas time, it is also the location where the city hands out candy to children. For this reason, the design team felt that it was an ideal location for the city Christmas Tree. The current city tree is located at triangle park, the site of the proposed coal miners memorial.

Two preliminary design concepts were developed for City Hall Park. Concept A includes a raised stage for community gatherings and performances. The stage acts as a focal point for the amphitheater and reduces the amphitheater's large concrete surface, allowing for the performance area to be reduced in scale to a more appropriate size and increasing the area for spectator seating. The ground in front of the stage is a small grass lawn which provides the opportunity for informal seating during community events. Sitting walls are located throughout the park to help define the edges of paths and to provide additional seating. The city Christmas tree is located between the sidewalk and park path. This location provides a great view of the tree from the road, yet keeps it away from the path where it has room to grow and is better protected. Finally a small overlook with three picnic tables is located adjacent to the new picnic shelter. This overlook has a good view and creates a strong visual connection between the park and the Kentucky River.

Concept B shares many of the same features as concept A due to the fact they are based on the same site inventory and analysis; however, there are a few key differences. This concept includes a multi-purpose pavilion as a place to hold performances and gatherings. This flexible space would include a removable canopy, allowing it to transform for various functions. A shaded rest area is located along the edge of the site nearest city hall. This space provides a place for residents and town employees to take a break out of the sun. Finally, the Christmas tree is located in a much more accessible place in this design. It is in the center of a hardscape where the local community can easily gather around it for holiday events.

During the first community meeting, Concepts A and B were presented with the goal of identifying key features the community desired to keep and discard from each. The result was a list of elements from both concepts that would be combined into a single final conceptual master plan. The final plan combined the performance stage, amphitheater renovations and small grass lawn from Concept A with the shaded rest area, overlook, and Christmas tree placement from Concept B. The final conceptual master plan was presented at the second and final community meeting. The following pages contain the drawings from this process including the photo inventory, site analysis, preliminary concepts, the final concept, and a planting plan for the final concept.



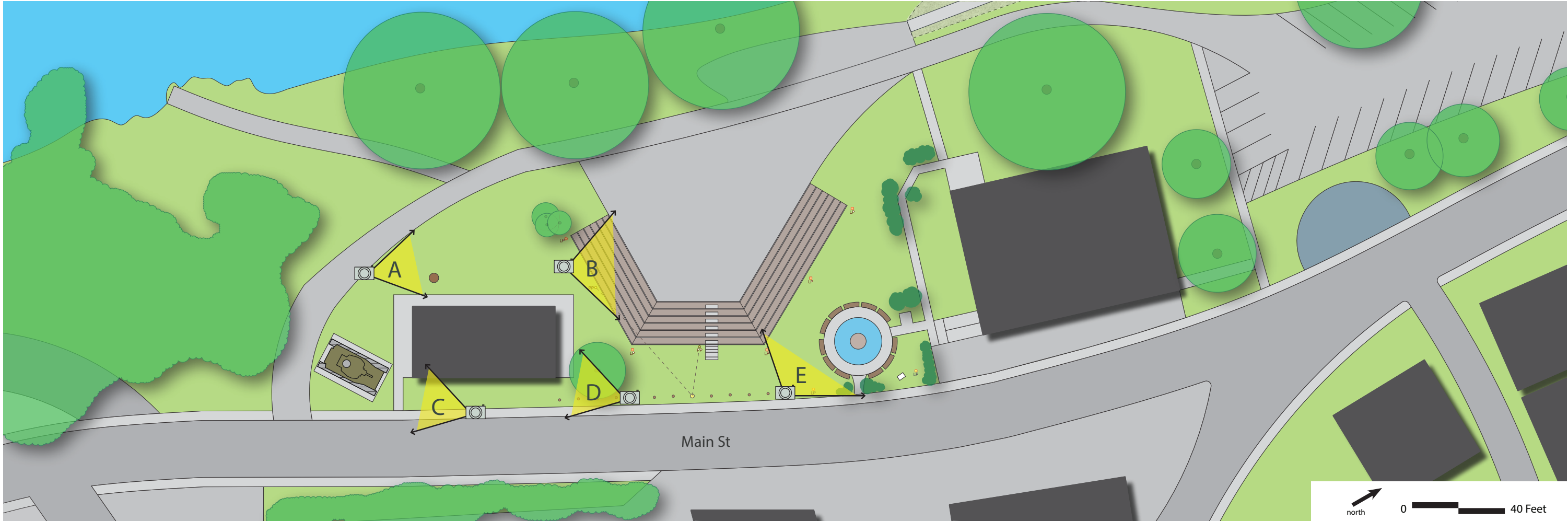
City Hall Park

Photo Inventory

cd community design
ac assistance center

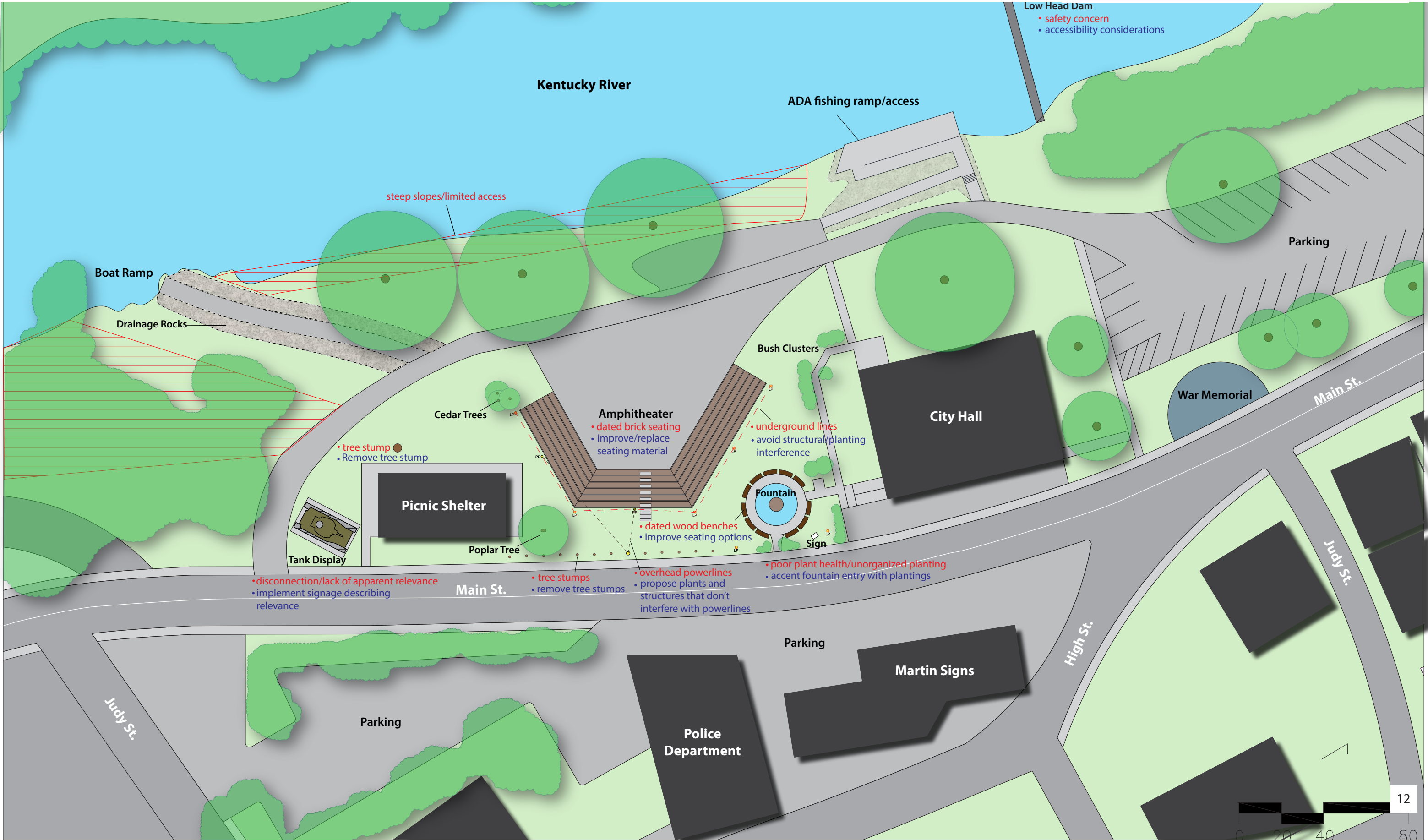
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City Hall Park

Site Inventory and Analysis





City Hall Park

Preliminary Design Concept A

1. Performance Stage

The stage provides a space to host performances such as plays, speeches, and concerts. Its surface is two feet higher than the surrounding grade, visually and physically designating it as a performance space.

2. Sitting Lawn

The lawn extends around from the side of the amphitheater and creates a differentiation of space between the stage and amphitheater. Paths cross the grass in the form of spaced concrete slabs influenced by stepping stones. These stepping stones provide a walking path that doesn't split the lawn up into separate parts.

3. Amphitheater

The amphitheater is restored using permeable pavers and concrete slabs for seating. A sitting wall runs along the back edge of the amphitheater, providing an extra place to sit and watch a performance while acting as a buffer between the walking path and amphitheater.

4. Planter

A planter is located at each of the two ends of the amphitheater. The form of this feature steps down in the same fashion as the amphitheater while the vegetation planted within cascades down the sides.

5. Fountain

The fountain is improved with new permeable paving, new benches, and a brick sitting wall that strengthens the circular geometry.

6. Christmas Tree

The community Christmas tree has been moved to a small lawn along the edge of the park. This location provides clear visibility of the tree from the road while creating a strong connection between the holiday symbol and City Hall.

7. Picnic Shelter

The picnic shelter keeps the design proposed by Daniel Roll. The brick columns match new brick sitting walls proposed throughout the rest of the park.

8. Overlook

The overlook provides a place to sit and look out over the river. Occupants can sit at fixed, outdoor tables and benches.

City Hall Park

Preliminary Design Concept A



City Hall Park

Preliminary Design Concept B

1. Multi-Purpose Pavilion Space

This space is kept both level and open to accommodate for a variety of events and large groups of people. A removable pavilion can shelter bands and vendors during events. The two circular patterns allow for different scales of use. The larger ring could be the boundary for larger events such as concerts, plays, movies, etc. Meanwhile, the smaller inner circle could be used for smaller activities such as dance classes and bake sales.

2. Amphitheater

Restored with new brick seating, the amphitheater could be brought back to life to provide seating during large community events. Planter walls border the last row to provide a sense of enclosure and comfort for users.

3. Shaded Overlook

The overlook serves as both an extension of the picnic shelter and an overlook to the pavilion. Picnic tables sit beneath shade trees, providing shelter on hot days.

4. Picnic Shelter

The picnic shelter will maintain the physical properties as designed by Daniel Roll. Brick columns supporting the shelter will match those within the amphitheater for continuity. The shelter area is kept open for continued support of seasonal functions.

5. Christmas Tree

The community Christmas tree could be placed here to better serve community functions. Christmas events could be hosted at City Hall Park and the Christmas tree could supplement these events.

6. Tank

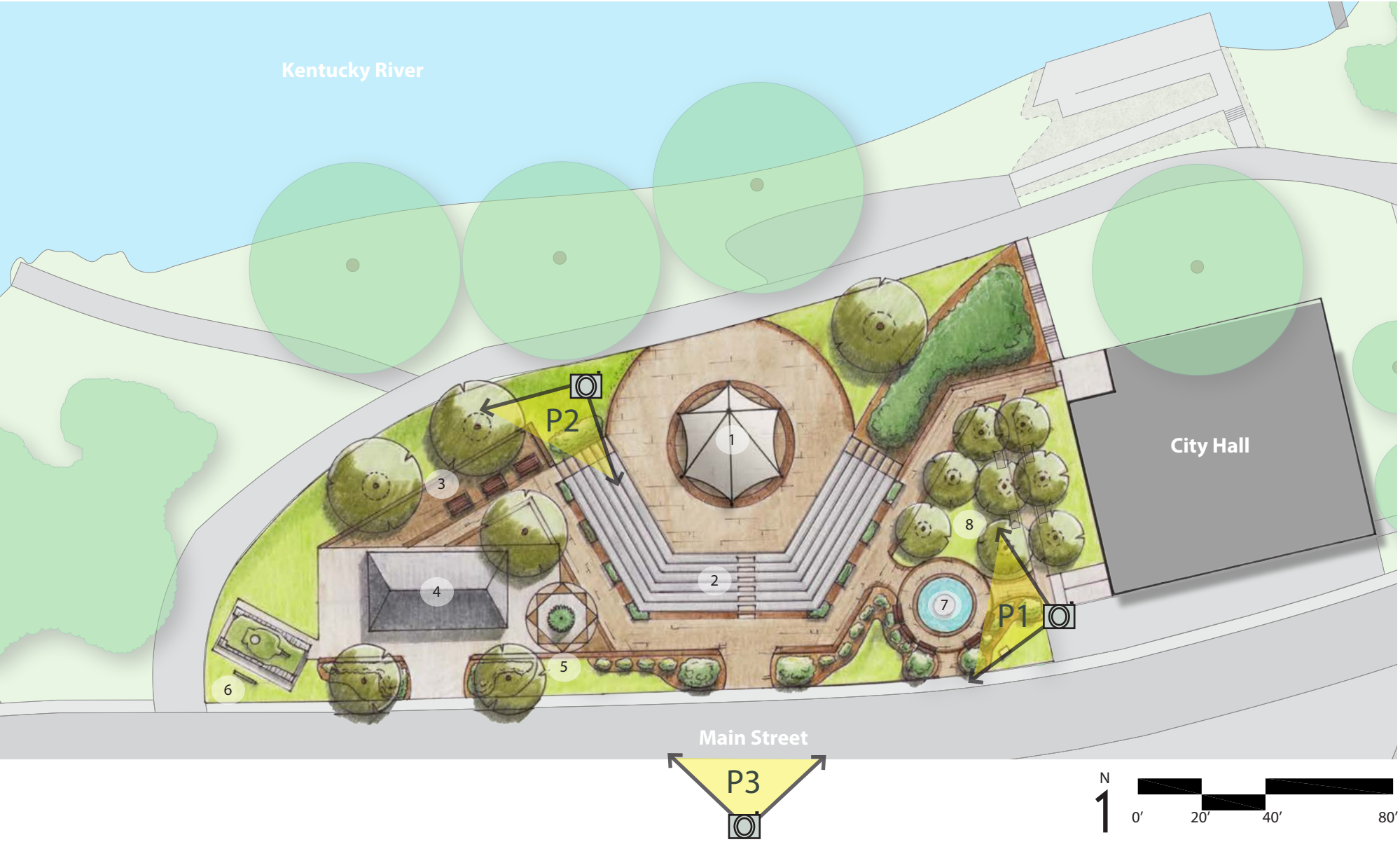
The tank remains in the same location, but a new sign depicting its history and relevance is placed adjacently.

7. Fountain

New pavers highlight this space while the North side is opened up to the shaded rest space.

8. Shaded Rest Space

This area serves both as a shaded rest space for City Hall employees and as a shaded area to view the rest of the park.



Multi-Purpose Use Examples

Dancing



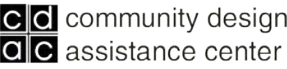
Movies in the Park



Outdoor Concerts



Seasonal Events



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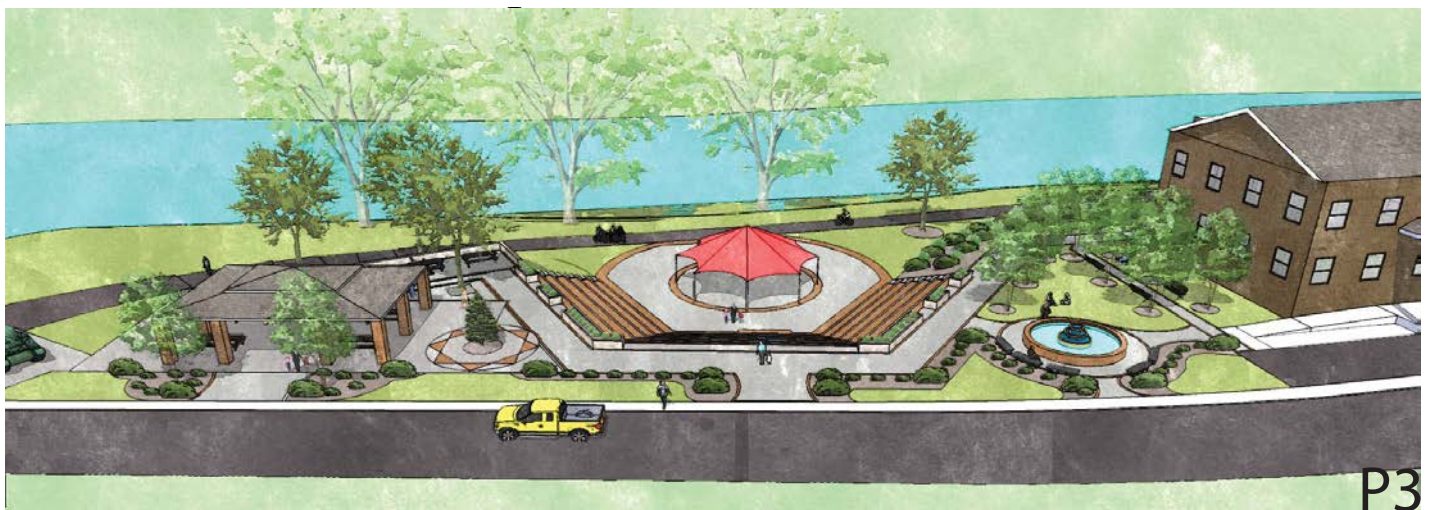
City Hall Park

Preliminary Design Concept B

P1



P2



P3

1. Performance Stage

The stage provides a space to host performances such as plays, speeches, and concerts. Its surface is two feet higher than the surrounding grade, visually and physically designating it as a performance space.

2. Sitting Lawn

The lawn extends around from the side of the amphitheater and creates a differentiation of space between the stage and amphitheater. Paths cross the grass in the form of spaced concrete slabs influenced by stepping stones. These stepping stones provide a walking path that doesn't split the lawn up into separate parts.

3. Amphitheater

The amphitheater is restored using permeable pavers and concrete slabs for seating. A sitting wall runs along the back edge of the amphitheater, providing an extra place to sit and watch a performance while acting as a buffer between the walking path and amphitheater.

4. Fountain

New pavers highlight this space while the North side is opened up to the shaded rest space.

5. Shaded Rest Space

This area serves both as a shaded rest space for City Hall employees and as a shaded area to view the rest of the park.

6. Christmas Tree

The community Christmas tree could be placed here to better serve community functions. Christmas events could be hosted at City Hall Park and the Christmas tree could supplement these events.

7. Picnic Shelter

The picnic shelter will maintain the physical properties as designed by Daniel Roll. Brick columns supporting the shelter will match those within the amphitheater for continuity. The shelter area is kept open for continued support of seasonal functions.

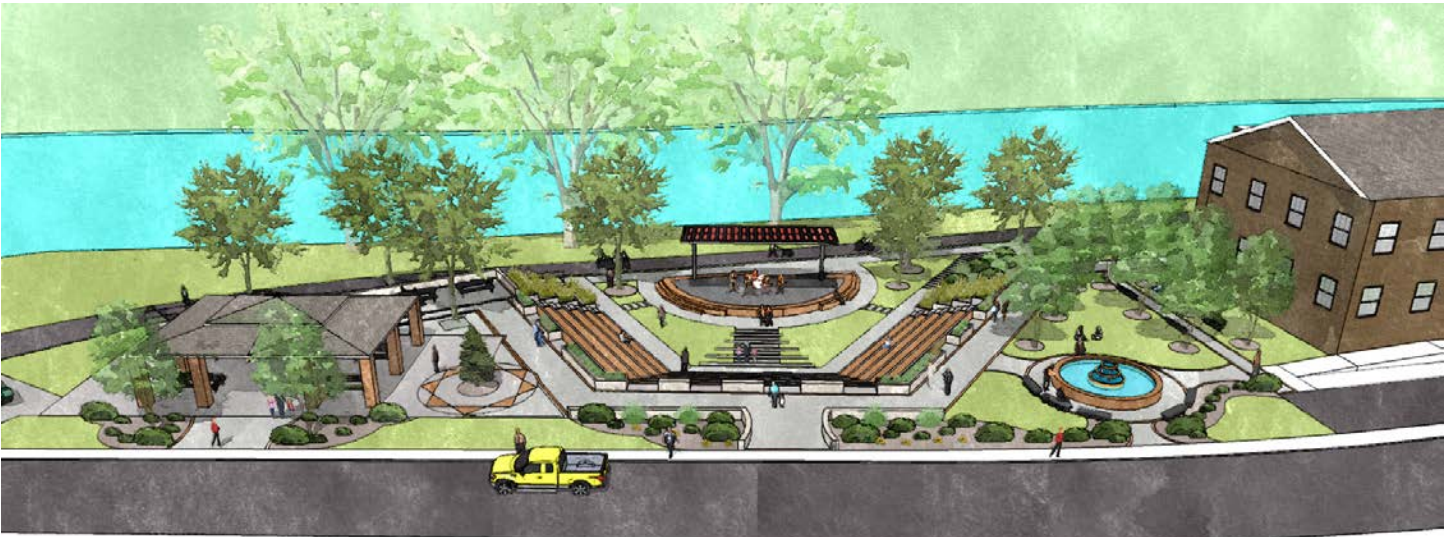
8. Overlook

The overlook serves as both an extension of the picnic shelter and an overlook to the pavilion. Picnic tables sit beneath shade trees, providing shelter on hot days. An ADA compliant ramp provides access down to the lower portion of the site.



City Hall Park

Final Design Concept



P1

Overhead View Of The Final Design Concept For City Hall Park



P2

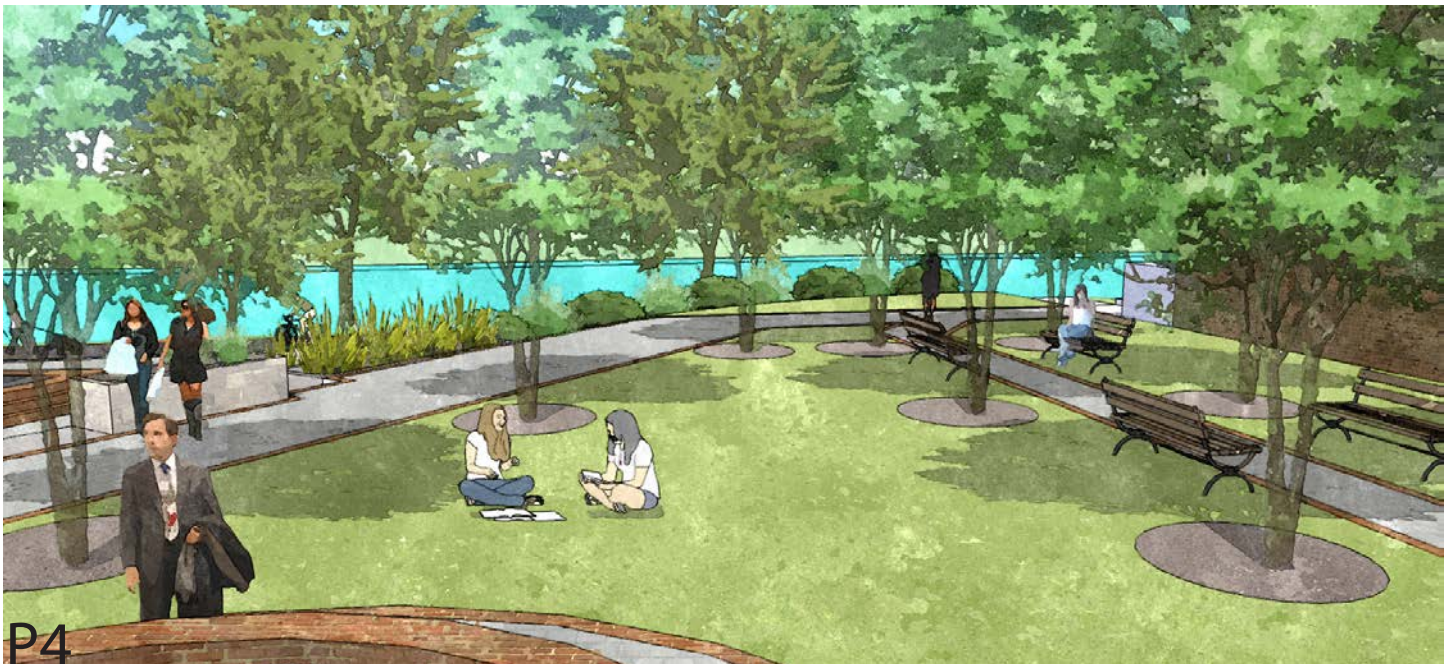
Entry Into The Picnic Pavilion

City Hall Park

Final Design Concept



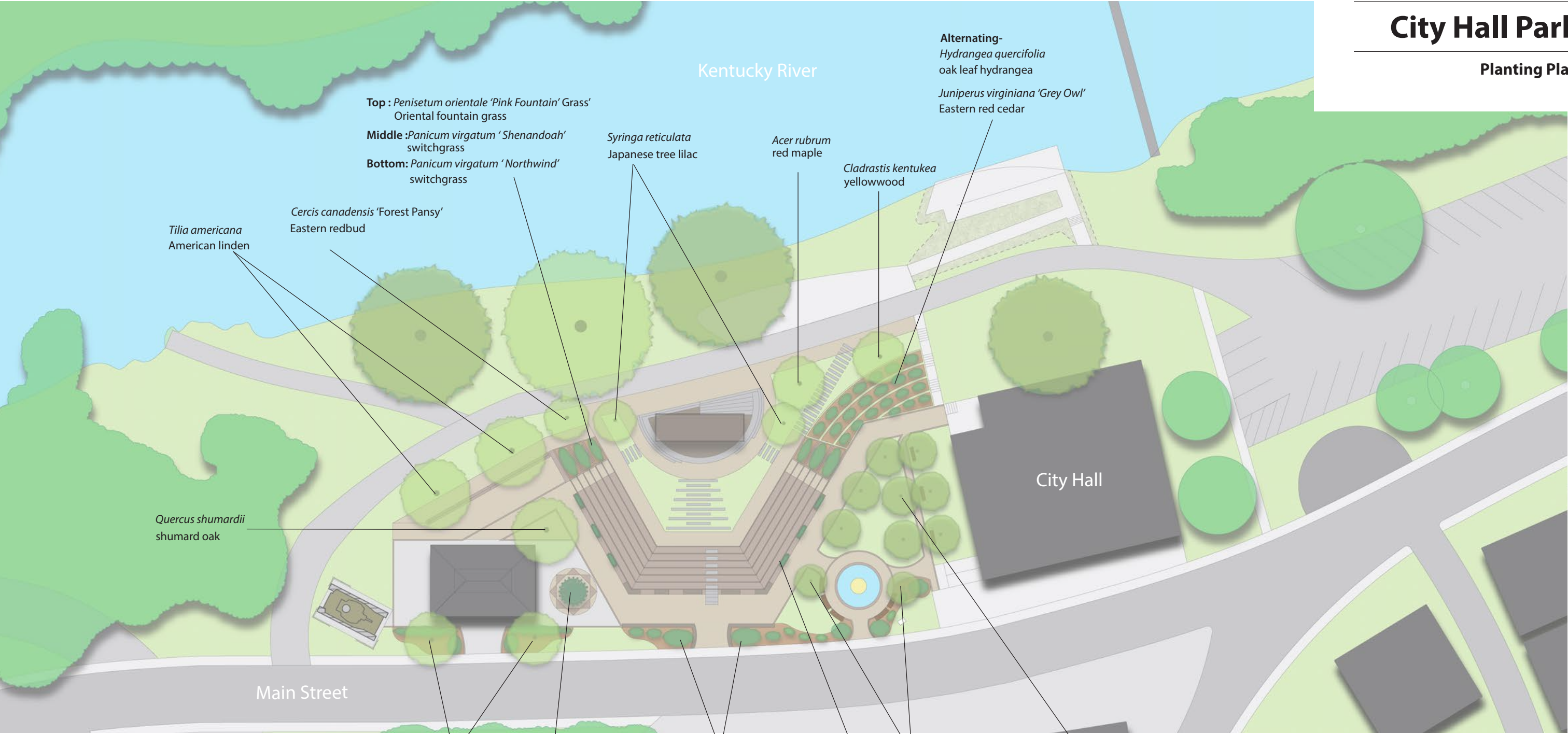
The design for City Hall Park is completely ADA accessible



A shaded rest area provides the opportunity to sit and relax on the lawn

City Hall Park

Planting Plan



Acer buergerianum
trident maple

Picea pungens 'Sester's Dwarf'
Colorado spruce

Cornus sericea 'Allemans Compact'
redtwig dogwood

Schizachyrium scoparium
little bluestem
Annual Flower Mix

Cercis canadensis 'Forest Pansy'
Eastern redbud

Alternating-
Syringa reticulata
Japanese tree lilac
Cornus kousa
kousa dogwood

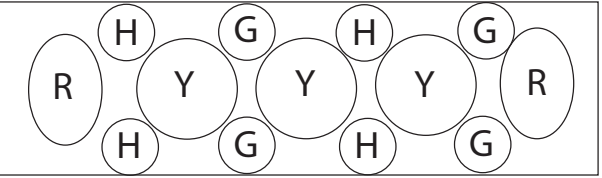
H = *Heuchera micrantha*
coral bells

R = *Rosa* 'Meidrifora'
Coral Drift® rose

Y = *Yucca filamentosa* 'Gold Sword'
yucca

G = *Geranium* x 'Rozanne'
rozanne cranesbill

Amphitheater Wall Planter Boxes



Coal Miners Memorial

The CDAC team was tasked with designing a coal miners memorial at Triangle Park by the Gorman Memorial Bridge to pay tribute to miners lost in the line of work. During their initial site visit, the CDAC team conducted a site inventory and analysis. Currently Triangle Park is an open lawn bordered by a sidewalk. Three young ginkgos are planted along the southern edge of the park which should be preserved. The site has a steady slope facing toward the north that could be either a constraint or opportunity for design. It was also requested that the team address a narrow strip of soil by the tobacco store north of the park that has unhealthy vegetation that should be replaced with shrubs that can survive in harsh urban conditions. Finally, the team analyzed the area around the memorial sign for the Gorman Bridge for potential improvements.

As part of the research process, the CDAC team visited and toured an active deep coal mine. The purpose of this trip was to understand how a deep coal mine works and how it feels to be in such a space. The result was a better understanding of how deep mines are organized and worked in. Information gathered in the coal mine was depicted in symbolic ways in the memorial conceptual designs.

Two preliminary design concepts were developed by the CDAC designers. Concept A took the approach to create a landscape that serves as both a park and a memorial. By creating a space that provides interest for children, families, and coal miners, the memorial park becomes a place that is frequented and encourages visitors to return regularly. The form of Concept A was influenced by the structure of a deep coal mine. Grids at various scales are used in the memorial park to represent the layout of a deep coal mine. For example, paving patterns are used to represent the different types of deep coal mining and the grid of the memorial park itself is reminiscent of room and pillar mining. Sculptures and murals are scattered around the memorial park, each representing a significant technological advancement or symbol that is important to the history of coal mining. Imprints of fossils are hidden throughout the landscape much like those found trapped in the walls of deep coal mines. This provides a small game for children to hunt and play. Finally, the memorial structure is located at the center of the park. A small ramp allows visitors to step down a couple feet into the ground where they can interact with two stone walls carved with the names of lost coal miners. Descending down into this space represents coal miners descending down into a mine. This creates an area that is visible for safety, but also slightly removed from the rest of the memorial park for privacy and introspection.

Concept B takes a different approach than A. This design serves primarily as a memorial rather than a park. The design is centered around a sculpture of a coal miner that doesn't just act as a means to remember those lost on the job, but to celebrate them and the profession as a whole. Four granite panels and two glass ones etched with the names of fallen coal miners are located beneath a structure of metal beams. This structure represents the timber and metals beams found in a deep mine used to stabilize the ceiling. When a visitor visits this memorial and reads the names off the panels, there will be a sense of an enormous weight overhead.

At the first community meeting both Concepts A and B were presented to local residents. Concept A was selected as the preferred direction and was further developed into a final conceptual master plan.



The CDAC design team on their visit to a deep coal mine





Coal Miners Memorial

Photo Inventory

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Coal Miners Memorial

Site Inventory and Analysis





A Mule Pulling Cart



B Stack of Timbers



C Joy Loader



D Roof Bolt Sculpture



E Miner-Sitting on Bench



Coal Miners Memorial

Preliminary Design Concept A

Primary Features

1. Memorial Structure

The memorial structure is influenced by the experience of entering a deep coal mine. The ground slopes downward into the structure as if descending into the mine. Steel beams overhead reflect the support structures found underground. They are bent as if buckling under an enormous weight. Two memorial walls covered in names sit at the back of the structure.

2. Room and Pillar Paving

The paving in this 15' x 25' area symbolizes the map of a room and pillar coal mine. This is an underground mining system in which the mined material is extracted across a horizontal plane making horizontal arrays of rooms and pillars.

3. Longwall Paving

The paving in this 15' x 25' area represents the map of a longwall coal mine. This is a form of underground coal mining where a long wall of coal is mined in a single, continuous cut.

4. Surface Mining Planter Wall

The form of this planter wall is influenced by the section view of a surface mine.

5. Gorman Bridge Sign

Formal plantings of ornamental shrubs and flowers frame and beautify the Gorman Bridge memorial sign.

Sculptures

5 sculptures throughout the plaza stand as symbols representing a few of the significant icons and advancements that have taken place in the coal mining industry.

Fossils

Much like those found in a deep mine, fossil imprints are hidden throughout the plaza on a number of different surfaces. Children can interact with the landscape by hunting for these hidden treasures on the ground or along planter walls.



Coal Miners Memorial

Preliminary Design Concept A



Coal Miners Memorial

Preliminary Design Concept B

1. Coal Miners Memorial

The memorial isn't just about remembering those killed in the industry, it is also about the celebration of the industry to the region. The centerpiece of this memorial is a statue of a coal miner walking out of a "mine". Behind him is the mine structure with four granite panels holding the names of fallen miners. Adjacent to the memorial panels are four additional glass panels etched with local mining history to educate future generations on both deep and surface mining. Square granite blocks provide seating and break the formal geometry of the site.

2. Fallen Miners Memorial Sign

A sign is placed here depicting a fallen coal miners symbol. The purpose of this sign is to inform those passing by in their vehicles about the relevance of this site.

3. Hillside Plantings

Shrubs are planted along this hill to provide aesthetic improvements.

4. Memorial Bridge Sign

The existing fence is shortened to make the memorial sign visible.

5. Additional Shade Plantings

The surrounding area is mostly paved or built up. The existing parallel parking could be removed and replaced with a linear planting bed for shade trees that will soften the overall area while shading the sidewalk.



Example Photos

Miner Statue



Miner Statue



Etched Glass



Etched Glass



Memorial Pavers



Fallen Miners Memorial Sign



Granite Panels



Coal Miners Memorial

Preliminary Design Concept B



Coal Miners Memorial

Final Design Concept

1. Memorial Structure

The memorial structure is influenced by the experience of entering a deep coal mine. The ground slopes downward into the structure as if descending into a mine. Steel beams overhead reflect the support structures found underground. They are bent as if buckling under an enormous weight. Two memorial walls with names engraved sit at the back of the structure.

2. Room and Pillar Paving

The paving in this 15' x 25' area symbolizes the map of a room and pillar coal mine. This is an underground mining system in which the mined material is extracted across a horizontal plane making horizontal arrays of rooms and pillars.

3. Longwall Paving

The paving in this 15' x 25' area represents the map of a longwall coal mine. This is a form of underground coal mining where a long wall of coal is mined in a single, continuous cut.

4. Surface Mining Planter Wall

The form of this planter wall is influenced by the section view of a surface mine.

5. Gorman Bridge Sign

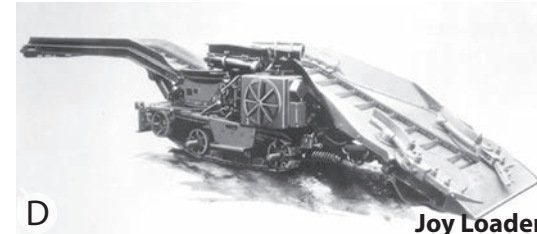
Formal plantings of ornamental shrubs frame and beautify the Gorman Bridge memorial sign. The chain link fence has been removed or moved behind the sign and is replaced with a more aesthetic fence.

Sculptures

Five sculptures placed throughout the park stand as symbols representing a few of the significant icons and advancements that have taken place in the coal mining industry. Interpretive signs give viewers a description of the historical significance of these symbols.

Fossils

Much like those found in a deep coal mine, fossil imprints are hidden throughout the park on a number of different surfaces. Children can interact with the landscape by hunting for these hidden treasures on the ground or along walls.



Sculptures

Coal Miners Memorial

Final Design Concept



P1
View of the Coal Miners Memorial from the north. A mural wall runs along the northern edge of the site, creating a flat surface for the memorial park.



P2
A planter on the eastern side of the park represents surface mining. Stacked slabs of light and dark stone represent the terraced form of surface mining and the layers of coal beneath.

Coal Miners Memorial

Final Design Concept



Symbols are hidden throughout the park in the form of sculptures, planters and paving patterns. This paving pattern represents the room and pillar method of deep coal mining.



The grid that structures the memorial park consists of a number of different materials including dry-laid pavers, mulch, concrete planters and small grass lawns.

Coal Miners Memorial

Final Design Concept



The memorial structure steps down into the ground where visitors can read the names of fallen coal miners off two stone slabs. Water flows down the face of the stone slabs similar to water seeping from the face of a mine, encouraging visitors to reach out and touch the carved names, creating an intimate, tactile experience.



Picnic tables and benches are located in shady spots throughout the park, providing a number of places to sit and rest.

Coal Miners Memorial

Planting Plan



Liberty Street

The CDAC team was asked to design a pocket park on Liberty Street at the site of an old basketball court and empty lot across the street. During their initial site visit where they conducted an inventory and analysis, the team identified the need for an additional design to improve the landscape in front of Liberty Street's community center. During the site inventory, a number of opportunities and constraints were identified. The old basketball court has the opportunity to be renovated, however the stone cliff that runs along its northern edge does create a constraint by physically limiting the space. City gas lines and meters are located on the western side of the courts. These create a constraint because they are unattractive and should be masked with vegetation yet must remain accessible for maintenance. Finally, a small space east of the court could be an ideal location for shaded seating.

The empty lot across the street provides the opportunity to bring a new program into the area. There is a lack of playgrounds in Hazard for the various neighborhoods and the empty lot provides an ideal location to place one for the Liberty Street neighborhood. Its only constraint is compacted soil.

The community center is centrally located on Liberty Street, but the appearance of the center and its surroundings could be improved. It currently has no landscaping other than a few railroad ties used to define the edge of the entry walkway. There is a big opportunity to plant specimen shrubs to bring life and color to this community center.

Only one concept was developed for the Liberty Street design. The basketball court is resurfaced and repainted, and the park is enhanced with a few ornamental plantings. Along the court's northern edge a steep rock face touches down to a wooden bench that runs the entire length of the basketball court. The use of ornamental grasses and shrubs just behind the bench will help soften this edge and make the court more visually pleasing. Two picnic tables and grills are located in the shaded space to the east of the basketball court. This provides a place for friends to sit and watch a pick-up game or families to gather and grill out. Moveable bleachers are used to cover city gas lines and meters and provide seating for people to watch basketball games.

The empty lot across the street is the ideal place to locate a playground. The design concept focuses on children aged 2-12 and provides a place for climbing, sliding, and socializing. Swings and a sandbox are included for a variety of different play opportunities, while shaded picnic tables and benches allow parents to sit and watch their children.

The design for the community center removes the railroad ties and replaces them with ornamental shrubs and small shade trees. A shed is located in the backyard to provide storage for play and maintenance equipment.

This design concept was presented at the first community meeting where it was positively accepted. During the meeting it was requested that the sandbox in the playground be removed and replaced with a playground specific for toddlers. These changes were made and adopted into the final conceptual master plan.

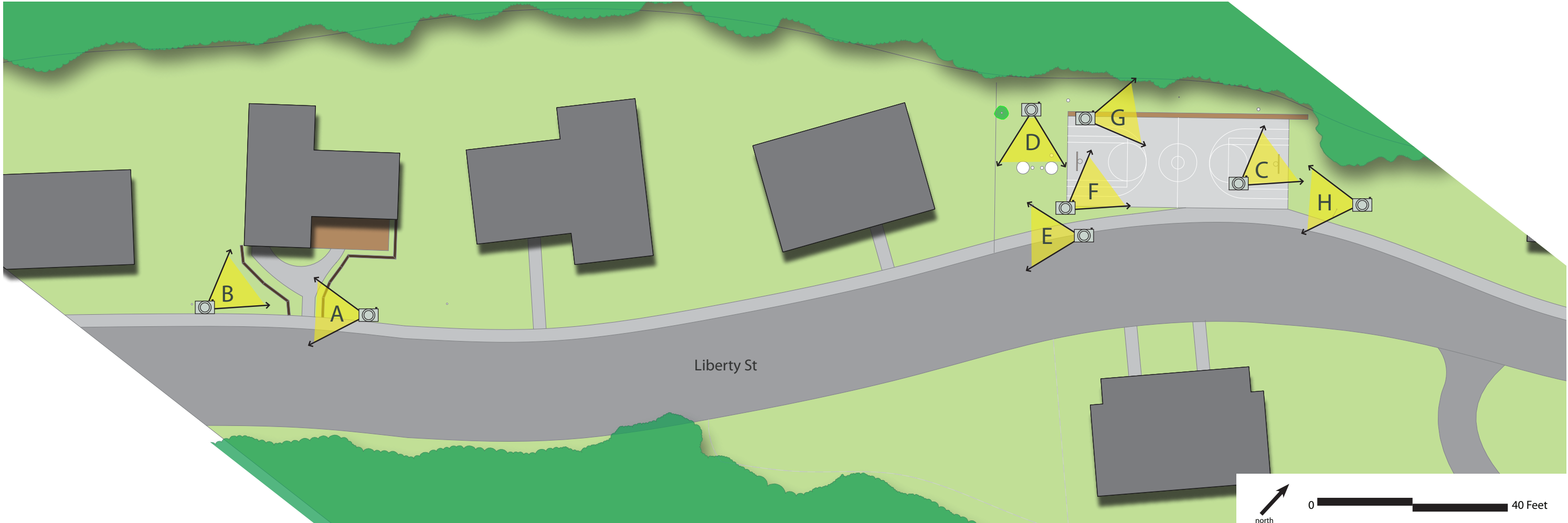


Liberty Street

Photo Inventory

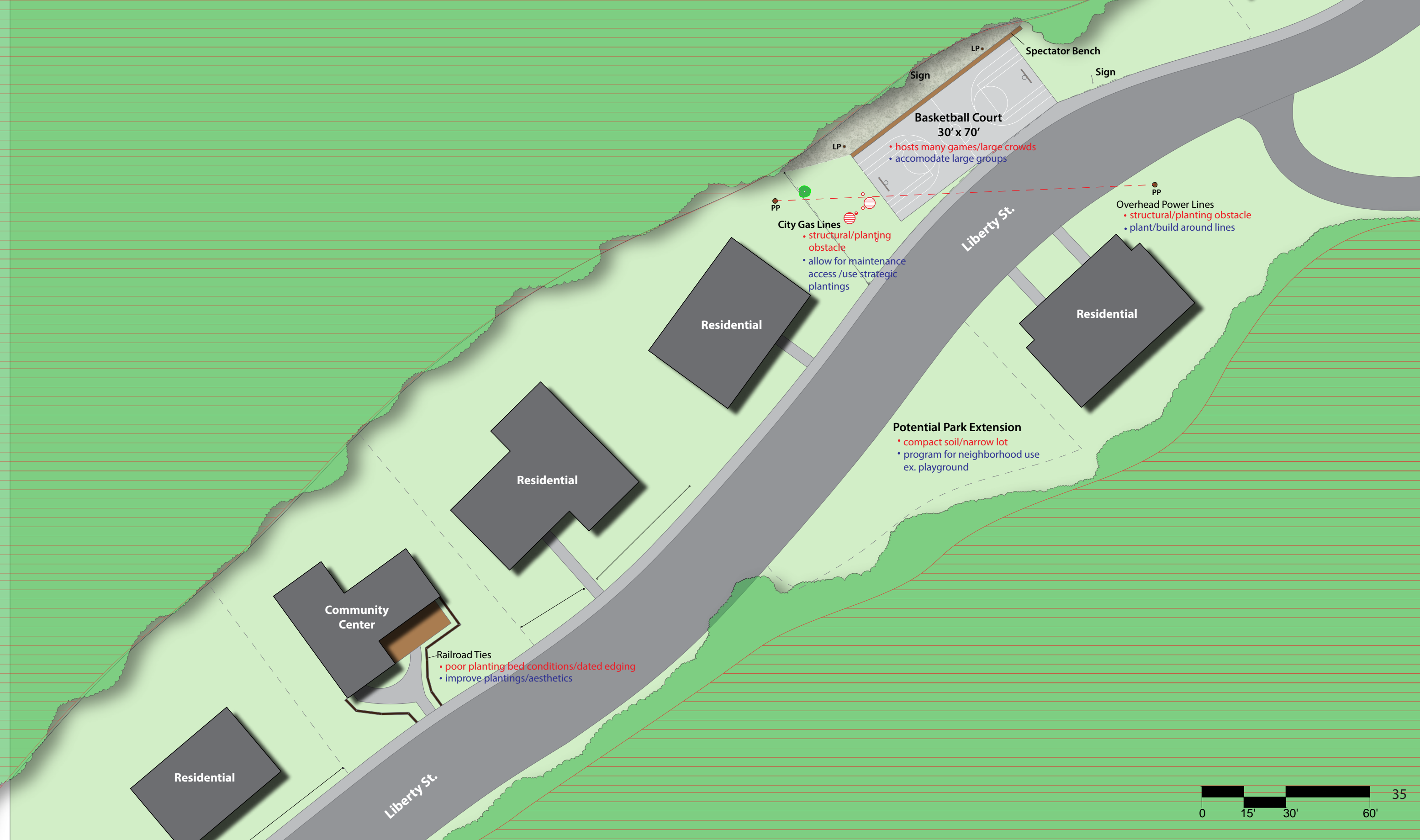
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Liberty Street

Site Inventory and Analysis



Primary Features

1. Community Center

2. Basketball Court

3. Picnic Area

4. Playground



Play Structure



Shaded Picnic Space



Swings



1. Community Center

Plantings are incorporated to enhance the community center. Railroad ties are removed and replaced with flowering shrubs to enhance the entryway. Small trees are incorporated to provide shade and improve aesthetics. A storage shed is placed in the back to store tools and equipment.

2. Basketball Court

Bleachers are added to provide additional seating for games. Shrubs and trees are placed to frame the space and improve aesthetics.

3. Picnic Area

A shaded picnic area is placed beside the court to serve as an extension to community events at the court or for family picnics.

4. Playground

The large play structure at the northern end of the playground is sized for ages under twelve. It provides climbing, sliding, and social opportunities. Swings separate the larger play structure from a smaller toddler play structure at the southern end of the playground. The toddler play zone includes small rubber mounds to climb and a small structure that encourages imaginative play. Two backless benches and two picnic tables provide parents with a place to sit and watch their children.



Liberty Street

Final Design Concept



Ornamental plantings are placed along the northern edge of the basketball court to soften the hard edge of the stone cliff face.



Picnic tables and grills are located in a shaded area east of the court.

Liberty Street

Final Design Concept



The playground includes shaded seating for parents to watch their children. Two backless benches are located at a central location in the playground where parents can sit and face either direction.



The toddler playground is designed to function with children ranging from ages 2 to 5.

Liberty Street

Final Design Concept



The community center's entrance is improved with a new sign and plantings of ornamental shrubs and trees.

Liberty Street

Planting Plan



Highland Avenue

The Community Design Assistance Center was asked to design a pocket park at the site of an old half-basketball court on Highland Avenue. During the initial site visit, an inventory and analysis were conducted where the design team took photos and measurements, sketched, and spoke with neighboring residents. The need for a playground was expressed by several representatives of the area because there are a large number of families with young children in the neighborhood who feel there is nowhere for young kids to play. There is a park in a nearby school yard, but it is targeted more toward older children and is difficult to access due to steep grade changes. The pocket park sits on the side of a mountain, looking down over most of Hazard. The northern edge of the site quickly steepens into a large slope. A fence is needed here for safety and to catch basketballs. In addition, a small, steep slope separates the street and sidewalk from the basketball court. This slope creates an opportunity for spectator seating along the edge of the court. To access the pocket park, one must walk down a steep set of stairs, limiting access for those with physical challenges. There is a need to make the pocket park ADA accessible. Finally, during the initial site visit, a load of wet concrete was dumped on the site which must be removed before new features may be brought in.

Only one concept was developed for the Highland Avenue Pocket Park design. The half-basketball court is resurfaced, and new terraced, bleacher-like seating is cut into the side of the slope adjacent to the ball court. The top of the slope is planted with shrubs to create a buffer between the sidewalk and bleacher seating.

The concept also includes a new playground on the eastern half of the small pocket park. Sized for ages 5-12, the playground provides a place for climbing, sliding, and running and includes interactive learning features for small children. Educational panels create the opportunity for children to learn while they play and move around the playground (an image of an educational panel can be found at the bottom of page 45). A rubberized track circling the play structure creates the opportunity for children to run and ride tricycles or small bikes. Shrubs are planted along the northern and eastern edges of the playground to safely enclose the play space while maintaining visual sight lines. Finally, two backless benches are located between the ball court and playground where parents can either sit and watch their children play basketball or on the playground.

The design concept was presented at the first community meeting where it was positively accepted by the community. No changes were requested and the design was further developed and adopted into the final conceptual master plan.



Brad Davis and Sarah Gracey collect soil samples to test pH levels.



Harley Walker writes down measurements taken during the site visit.

Highland Avenue

Photo Inventory

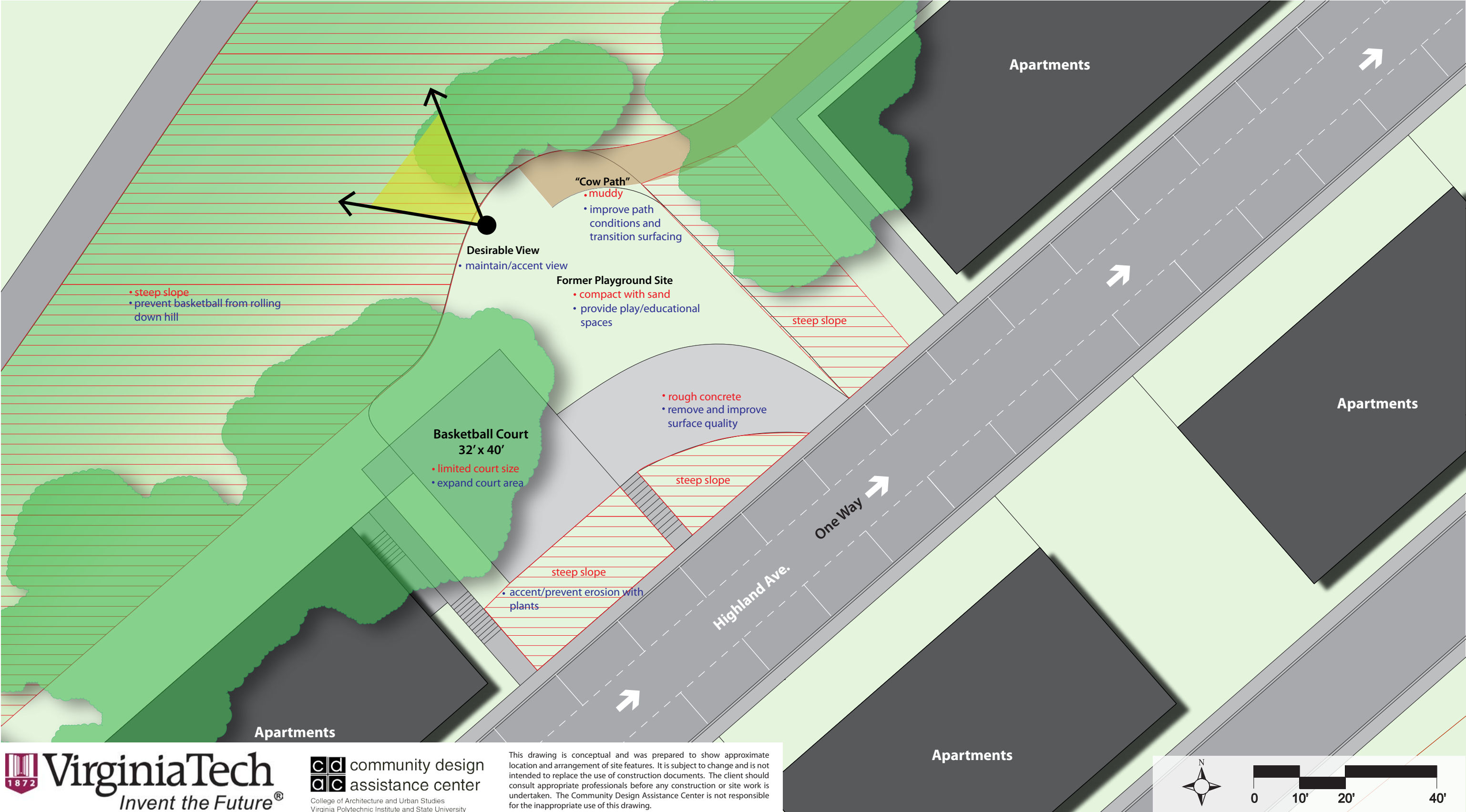
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Highland Avenue

Site Inventory and Analysis



Highland Avenue

Preliminary Design Concept

- 1. Basketball Court
- 2. Terraced Seating
- 3. Benches
- 4. Ramp
- 5. Playground



Safe Equipment

Equipment is certified for 5 to 12 year-olds and provides important physical challenges such as climbing, sliding, and crawling.



Educational Panels

Educational panels are both a fun way to play and educate as well as a strong tool that allows the disabled the same opportunities as others.

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1. Basketball Court

At half-court size, this can still be utilized for both informal and organized play. A chain link fence is placed along the edge of the site to prevent basketballs from rolling down the steep slope.

2. Terraced Seating

This terraced seating area is large enough to accommodate larger groups during organized play and small enough for a place to sit and read.

3. Benches

Two benches are located in the center of the site where parents can watch their children play or friends can watch a basketball game.

4. Ramp

The ramp provides wheelchair accessibility into the site so that no one is excluded from engaging in activity.

5. Playground

The playground structure is sized for ages 5 to 12 and provides climbing, sliding, and educational opportunities. Educational panels provide a fun way to learn through play. The checkerboard patterned ground surface adds a fun elements for children to explore. A rubberized track provides a place to walk, run, or ride. Shrubs surround the area to give a sense of enclosure and to keep children within the play space.



Highland Avenue

Final Design Concept



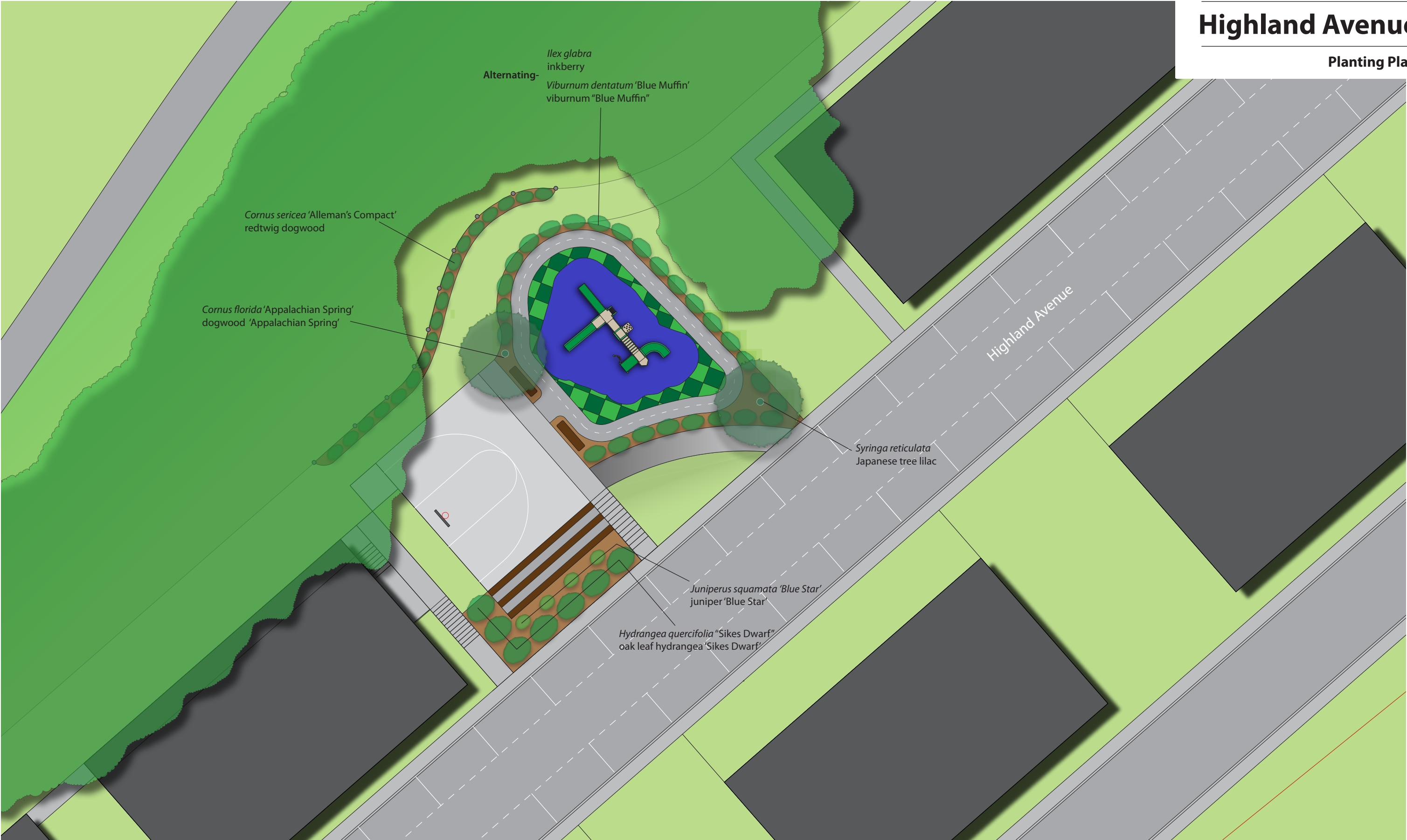
Though the pocket park is small, it can support new uses such as a playground.



Terraced bleacher-like seating is cut into the slope between the ball court and sidewalk, an ideal spot for spectating.

Highland Avenue

Planting Plan



The CDAC team was asked to improve the outdoor space in the Gorman Hollow housing development so that it better serves its residents. During their initial site visit, the design team conducted a site inventory and analysis where they took photos and measurements, spoke with residents, and identified potential opportunities and constraints. One of the first things identified on the initial visit was the poor condition of all the play equipment and amenities in Gorman Hollow. The team also noted that residents let their pets use all open green spaces in the development to go to the bathroom, including the play areas. It was clear there was a strong need for a dog park to keep other grassy areas free of pet waste. The tennis courts were overgrown with kudzu and hardly used. Residents requested that they be converted back into basketball courts. A mountain backs up behind the buildings in Gorman Hollow. At one point a large retaining wall spans the gap between two buildings which provides an opportunity to create a chalk wall for children.

One concept was developed for the Gorman Hollow development improvements. With Gorman Hollow's spread out, linear form, the design concept utilizes all open space by scattering various programs along the corridor of the development. Basic outdoor amenities such as shaded seating areas, however, are conveniently located near every building to encourage outdoor use of the site by everyone. The design incorporates a small dog park located in the lot at the northernmost edge of the street where pet owners can let their dogs loose to socialize. Spaced toward each end of the development, the design also incorporates two recreational picnic areas that have picnic tables, outdoor grills, a horseshoe pit, and a fixed cornhole set. In addition, the design incorporates a number of playgrounds targeting a variety of age groups, including a toddler playground, a pre-school playground, and a school-aged playground. Each playground is surrounded by a fence for safety and to prevent dogs from using the area. The toddler playground encourages exploration and imaginative play. Small rubberized mounds create a safe area for climbing and a rubberized track for tricycles encircles the space. The pre-school playground encourages social interaction between children by overlapping play areas for climbing, balancing, running, and riding bikes, while the school-aged playground provides children with more physical challenges and social interaction than the previous two playgrounds. This play area also utilizes the large retaining wall for children to use as an art canvas. The design also incorporates a swing set and small basketball court for children. Lastly, the tennis court is resurfaced and converted back into a basketball court.

The design concept for Gorman Hollow was presented at the first community meeting where it was positively accepted. No changes were requested by the community so the design was further developed and adopted into the final conceptual master plan.



Gorman Hollow

Photo Inventory

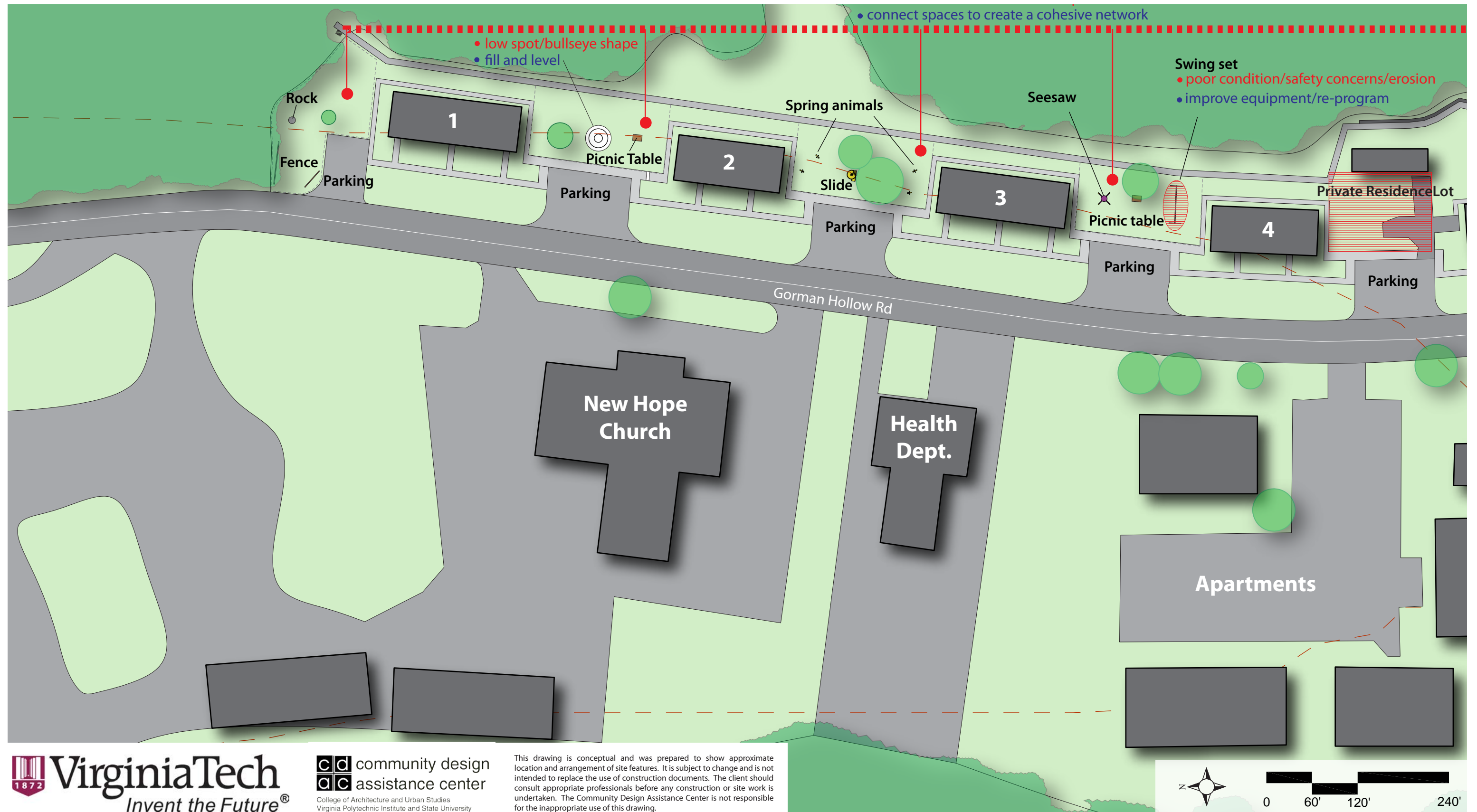
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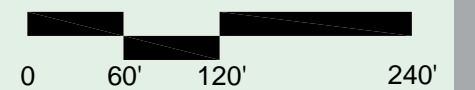
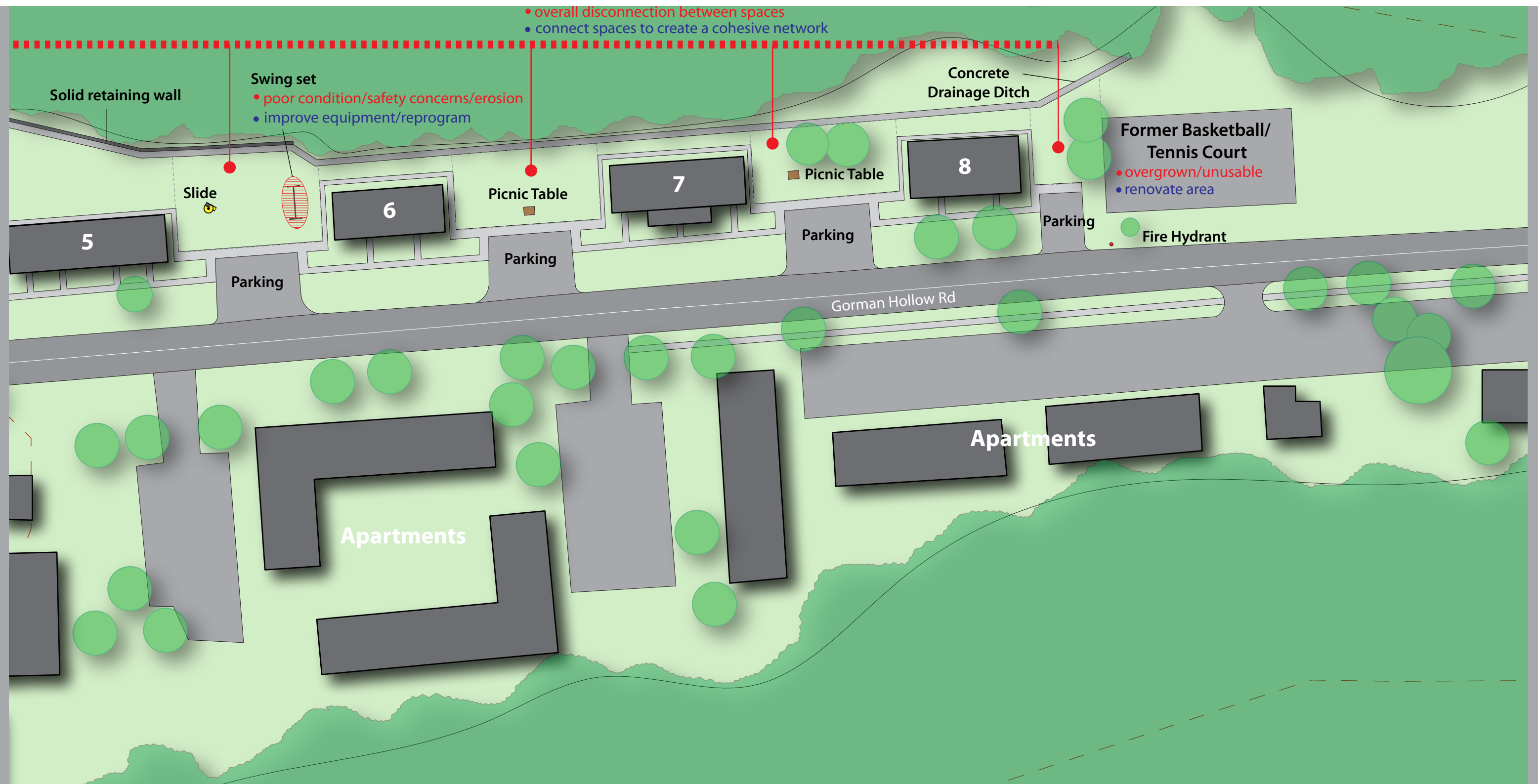
Gorman Hollow

Site Inventory and Analysis



Gorman Hollow

Site Inventory and Analysis





Primary Features

1. Dog Park



2. Recreational Picnic Area



3. Toddler Playground



4. Pre-School Playground





Primary Features

5. School Age Playground



6. Swings



7. Recreational Picnic Area



8. Small Basketball Court



9. Renovated Basketball Court



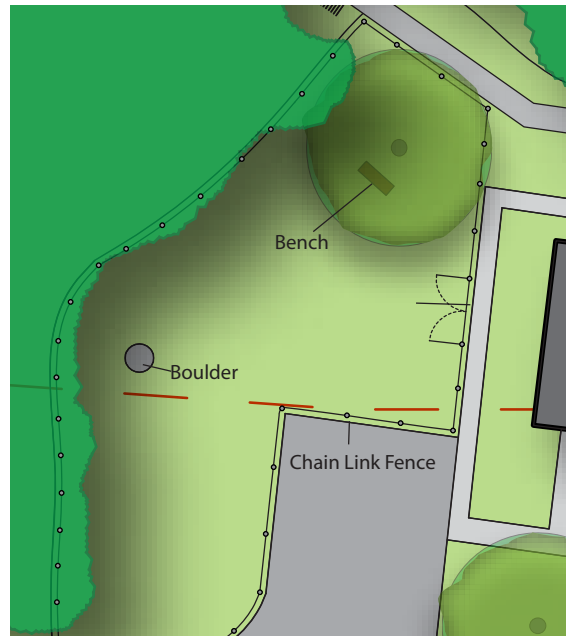
Gorman Hollow

Final Design Concept



Gorman Hollow

Final Design Concept



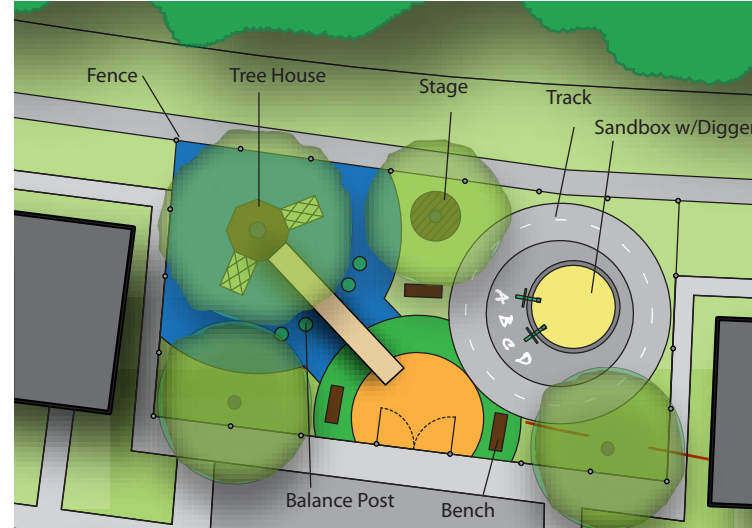
Dog Park

A small dog park would allow users the ability to let pets run free and socialize with other pets within a fenced in area. This would also help control and minimize random animal waste in other spaces.



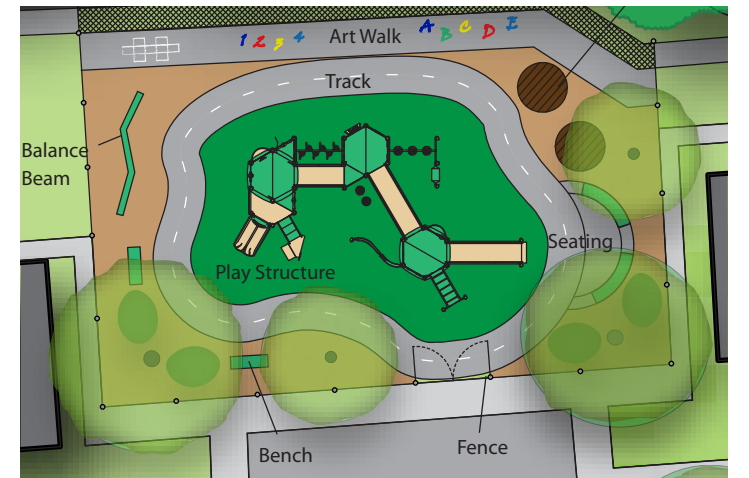
Toddler Playground

The toddler playground provides children with a safe environment to explore. At this age, they love sand, so a large sandbox is placed here to provide them with adequate space for play. A small house with a slide is incorporated to allow an area for imaginative play. Additionally, small rubberized mounds provide a safe area for climbing. Encompassing the entire area is a rubberized track for riding small vehicles.



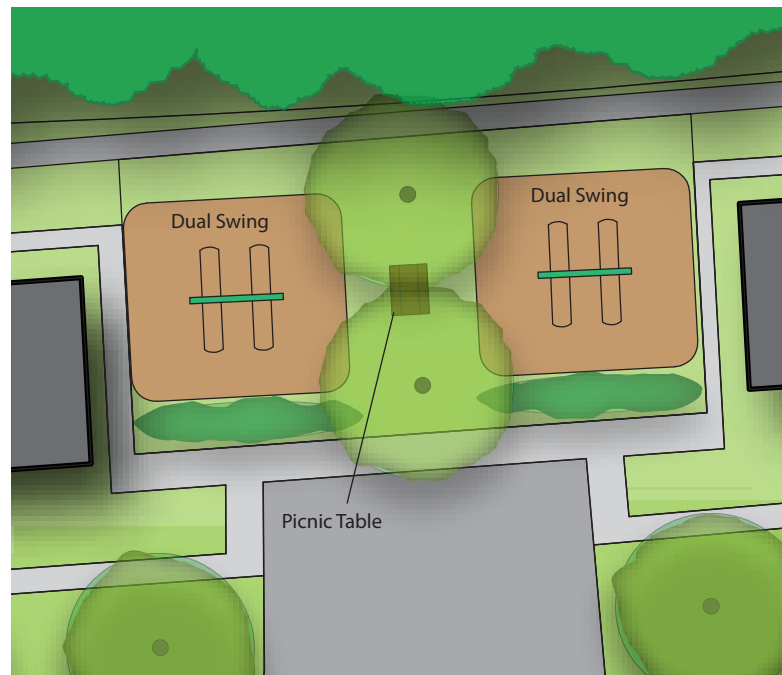
Pre-School Age Playground

At the ages of 3 to 6, children begin to socialize with other children and begin to make sense of their world. Play at this age may help with skills in speech, physical agility and small muscle coordination. This playground is designed to encourage socialization through overlapping play areas. Physical needs are met through climbing nets, balance posts, and space for both riding and running. Play activities are also inclusive for the disabled so that all children have the ability to play together.



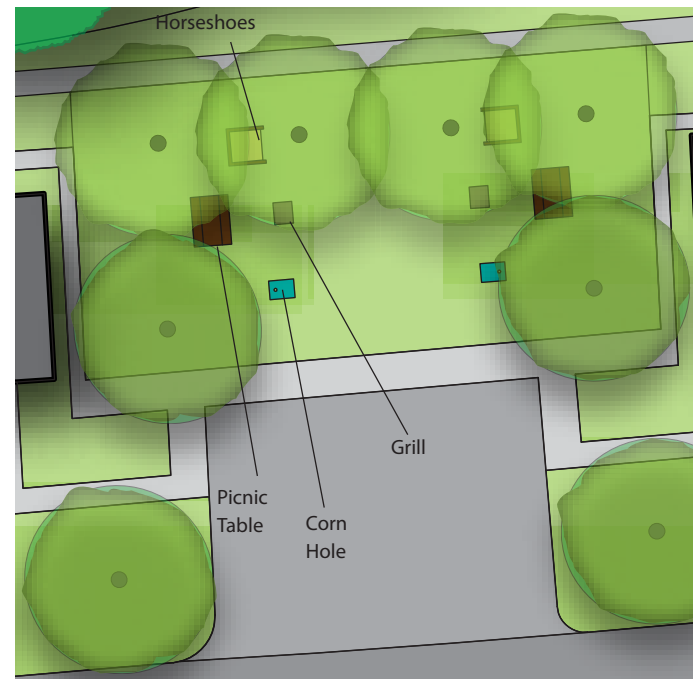
School Age Playground

At the age of 6 to 12, children need a wide range of activities to meet their physical and emotional needs. This particular playground aims to meet physical challenges such as climbing, running, and balancing through inclusive play equipment. Small raised platforms aid in fantasy play while an art wall provides an area to unleash creativity. A track also meanders through the site serving as a place to run, walk or ride.



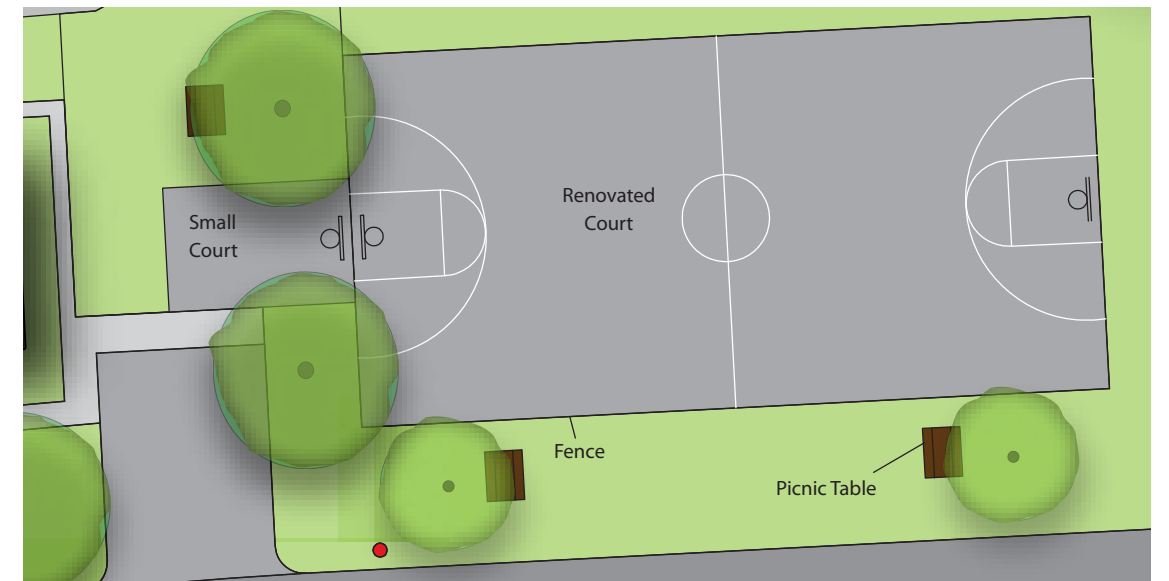
Swings

This space is dedicated to swings since the other play grounds couldn't accommodate both equipment and swing fall zones.



Recreational Picnic Areas

Two picnic areas provide users with built-in grills and picnic tables as well as recreational games such as horseshoes and corn hole. This provides adults with a social space for both family and friends.



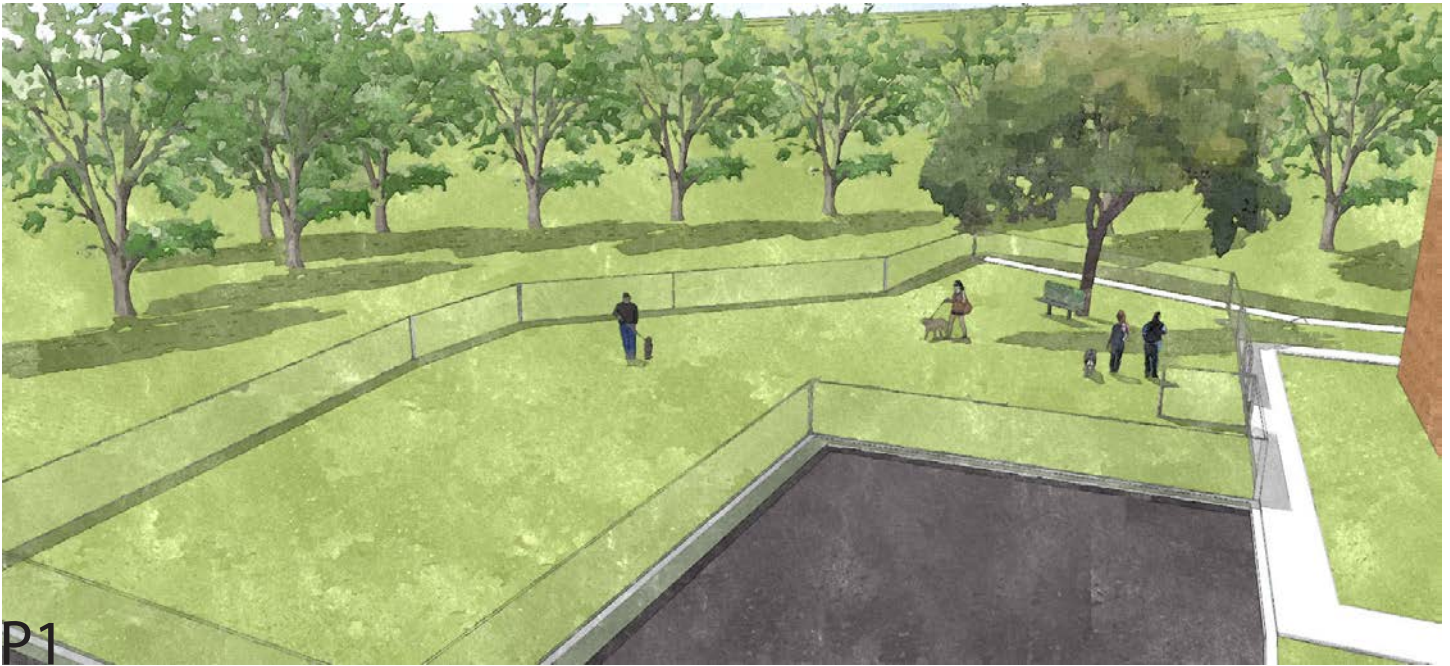
Renovated Basketball Court

Once renovated, the old court could become a vital element in the community, providing teens with a recreational opportunity. Located adjacent to the large basketball court, is a small court consisting of a small concrete pad and a portable goal to allow younger children a place to practice.

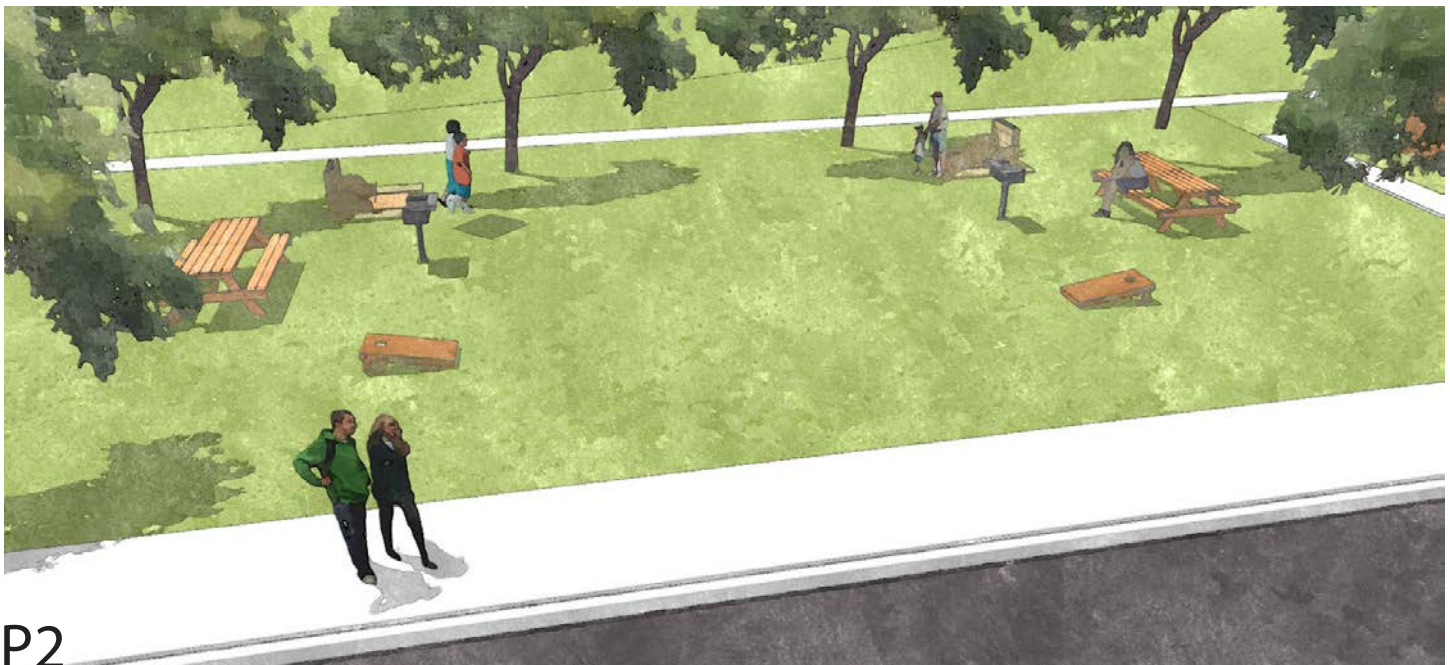


Gorman Hollow

Final Design Concept



The dog park provides a space for residents to let their dogs out to run and socialize.



The recreational picnic areas let residents grill outside and play horseshoes or simply sit in the shade.

Gorman Hollow

Final Design Concept



P3

The toddler playground includes a large sandbox, rubberized climbing mounds and a small playhouse to encourage imaginative play.



P4

The pre-school aged playground includes a small tree house, stage, sandbox, and balance posts that are in overlapping play areas to encourage social interaction.

Gorman Hollow

Final Design Concept



The school aged playground includes a large play structure, balancing beam and raised platforms to help children develop coordination.



Two dual swing sets are located in their own open space to achieve their necessary fall zones.

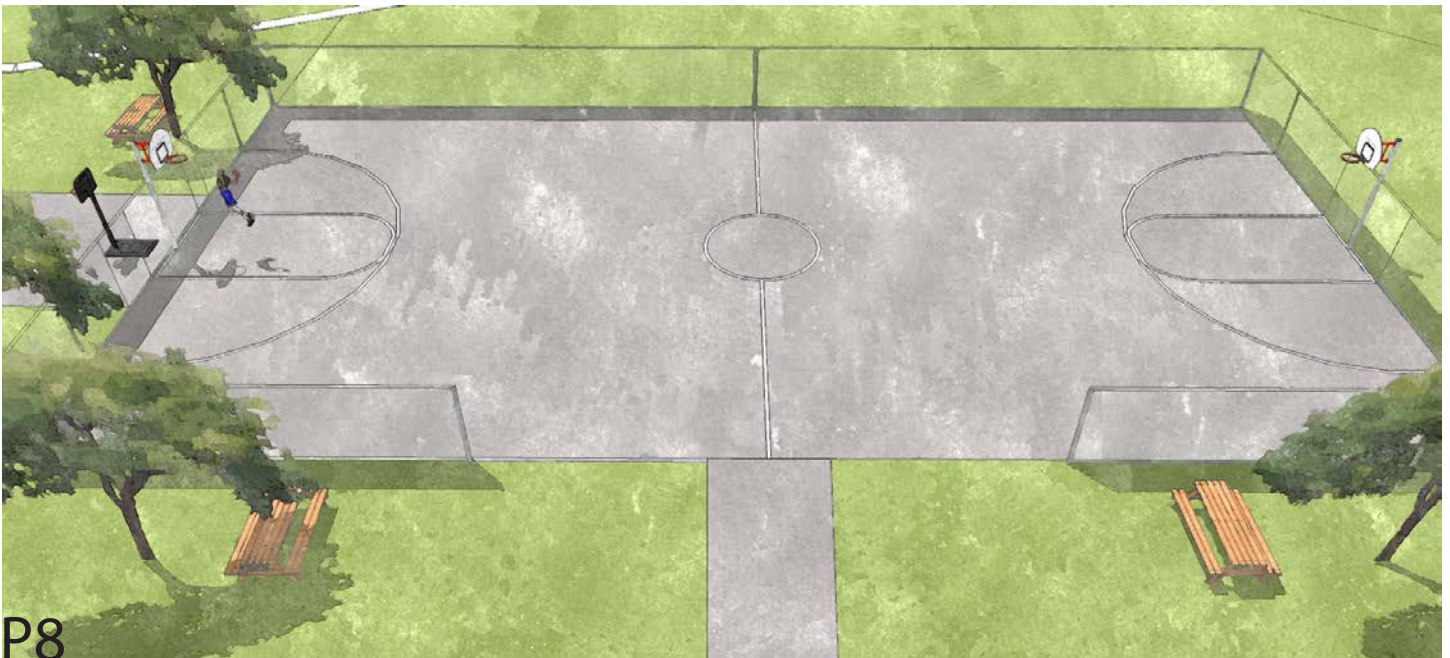
Gorman Hollow

Final Design Concept



P7

Small children can play on the small half-court while watching the big kids play through the fence.



P8

The tennis court is cleaned up and restored as a basketball court. Two picnic tables provide a place to sit and watch.

Gorman Hollow

Planting Plan



Pathfinders Greenway

The Community Design Assistance Center was asked to design a greenway for the Pathfinders of Perry County. During their initial site visit, the team walked the greenway corridor and identified potential locations for features, such as gathering spaces, river crossings, and ramps to reach the river's edge. Several opportunities and constraints were identified during the visit. For example, the change in grade that marks the river's floodway is an obstacle that must be overcome if the greenway is to follow the river's edge for a short stretch. An access road across the river provides an opportunity to loop the trail back the direction it came, however a river crossing would need to be built to create the loop. The main opportunity identified during the visit is the space beneath the parking garage. With a wonderful view of the river, this space is currently used as a shelter by the homeless, yet it has the potential to become an interesting space unlike any other in the area. Other opportunities and constraints can be found on the following page.

One concept was developed for the Pathfinders Greenway. Designed as a complete loop, the preliminary conceptual trail terminus is located at the peace garden in the form of a loop circling the garden. The trail runs south along the river outside of the floodway. From the peace garden, the greenway travels behind the basketball courts where the chain link fence must be moved back one post (one fence section) away from the river to allow for room. Just below the basketball courts, a new bridge creates a river crossing that allows the greenway to become a loop trail. Beyond the bridge on the same side of the river, the trail continues south to the City Hall parking lot where it takes the form of a boardwalk structure to survive in the river's flood zone. Behind City Hall, it meets up with the existing driveway and runs through City Hall Park until it branches off toward the parking garage. The greenway then travels beneath the parking garage, overlooking the river. Colored lighting, tumbled glass, and murals transform this space into a fun, unique setting that is unlike anywhere else in the area. Just south of the parking garage, the trail ramps down to the river's edge. Here it once again takes the form of a boardwalk to withstand the potential currents of the floodway. After running through the river's floodway for a stretch, the trail ramps back up the slope and utilizes the pedestrian sidewalk of the Gorman Memorial Bridge to cross the river. On the opposite side of the river, the trail runs along the shoulder of a low-traffic access road parallel to the train tracks. The new proposed bridge will connect the trail back across the river.

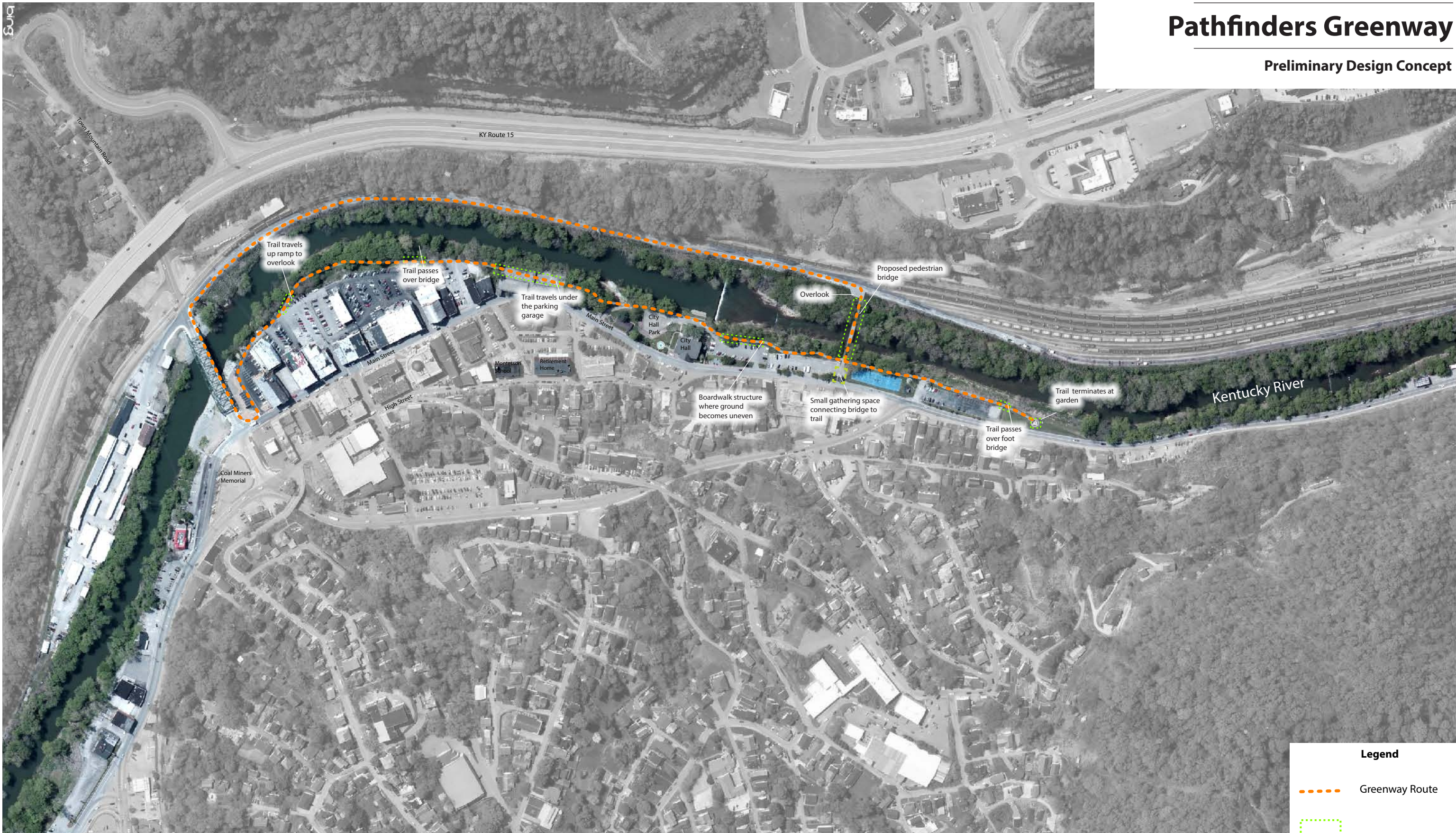
The design concept for the Pathfinders Greenway was presented at the first community meeting. A few changes were suggested for the final conceptual master plan. The first change was to extend the trail terminus north from the peace garden up to the gas station. The second change that was requested was to design a small gathering and resting space where the new proposed bridge connects back to the east side of the river. These two changes were included in the final design concept and presented at the final community meeting.

Inventory and Analysis



Pathfinders Greenway

Preliminary Design Concept

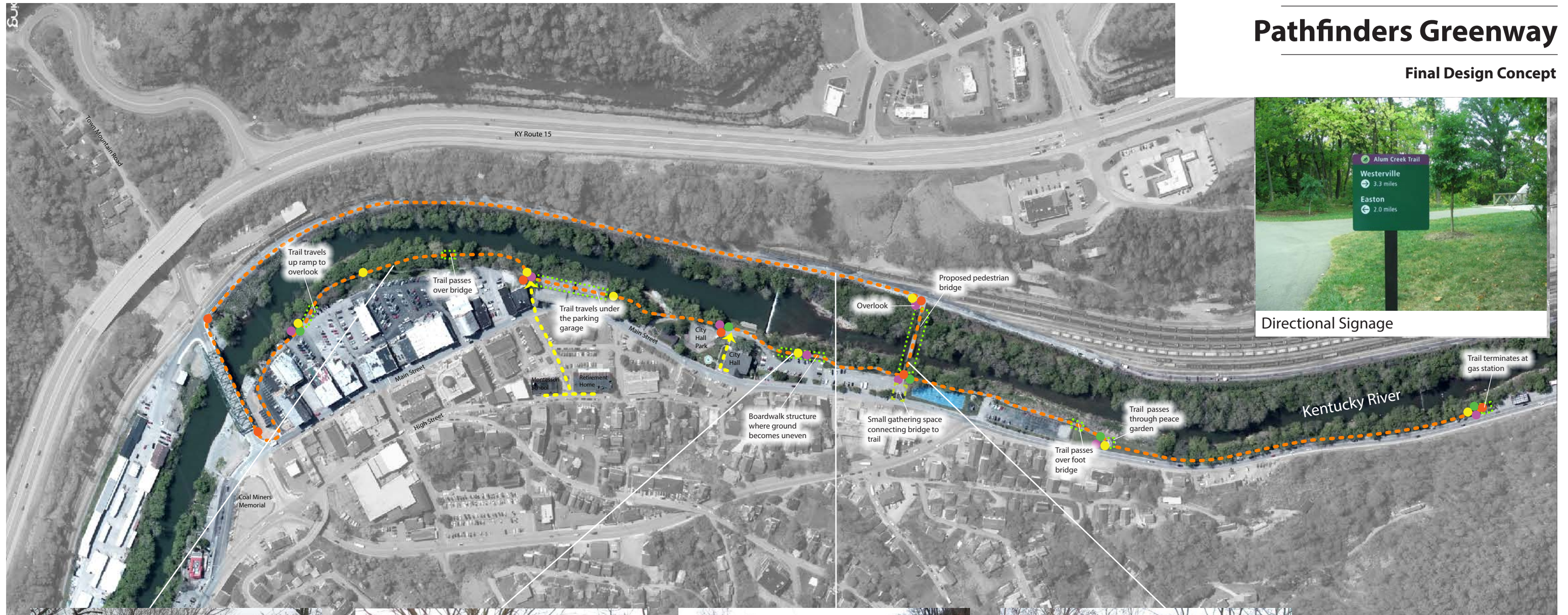


Legend

- Greenway Route
- Greenway Feature
- Connection to Greenway

Pathfinders Greenway

Final Design Concept



Directional Signage



Along The River



Potential Overlook by City Hall



Roadside Trail Location



Potential Bridge Location

Legend

- Bike Rack
- Garbage Can
- Bench
- Sign

--- Greenway Route

--- Greenway Feature

--- Connection to Greenway

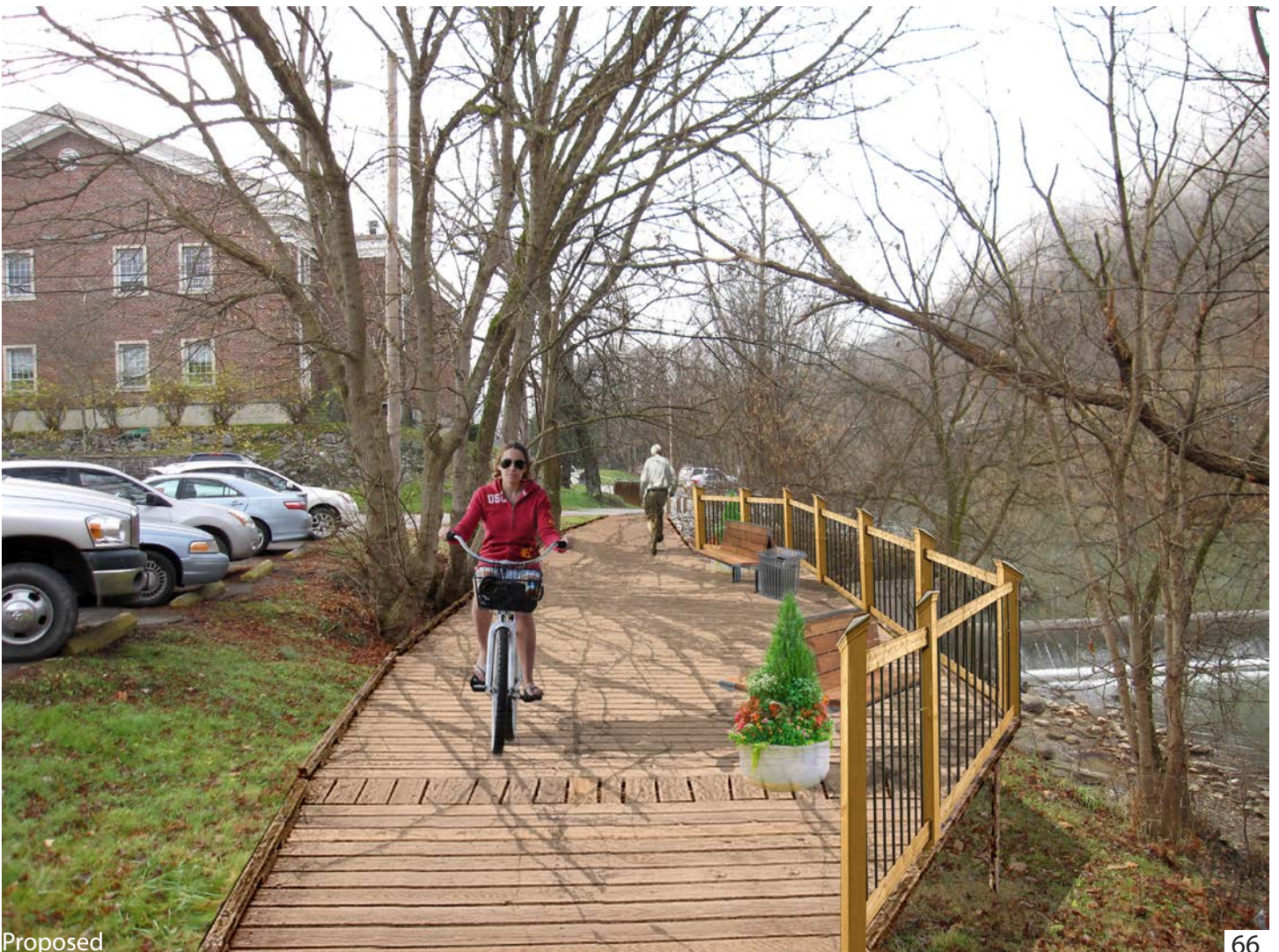
Pathfinders Greenway

Final Design Concept

The proposed greenway trail passes through several areas that are prone to severe flooding. Traditional trail surfaces tend to have shorter lives when they are subjected to frequent flooding. Raised boardwalks are used to create a greenway surface that can withstand severe conditions. The boardwalk shown below even includes an overlook for residents to enjoy the river.



Existing



Proposed

Pathfinders Greenway

Final Design Concept

As the trail ramps down to run along the river's edge in the floodway, it will be exposed to the most flooding. A boardwalk structure will be located here as well.



Existing

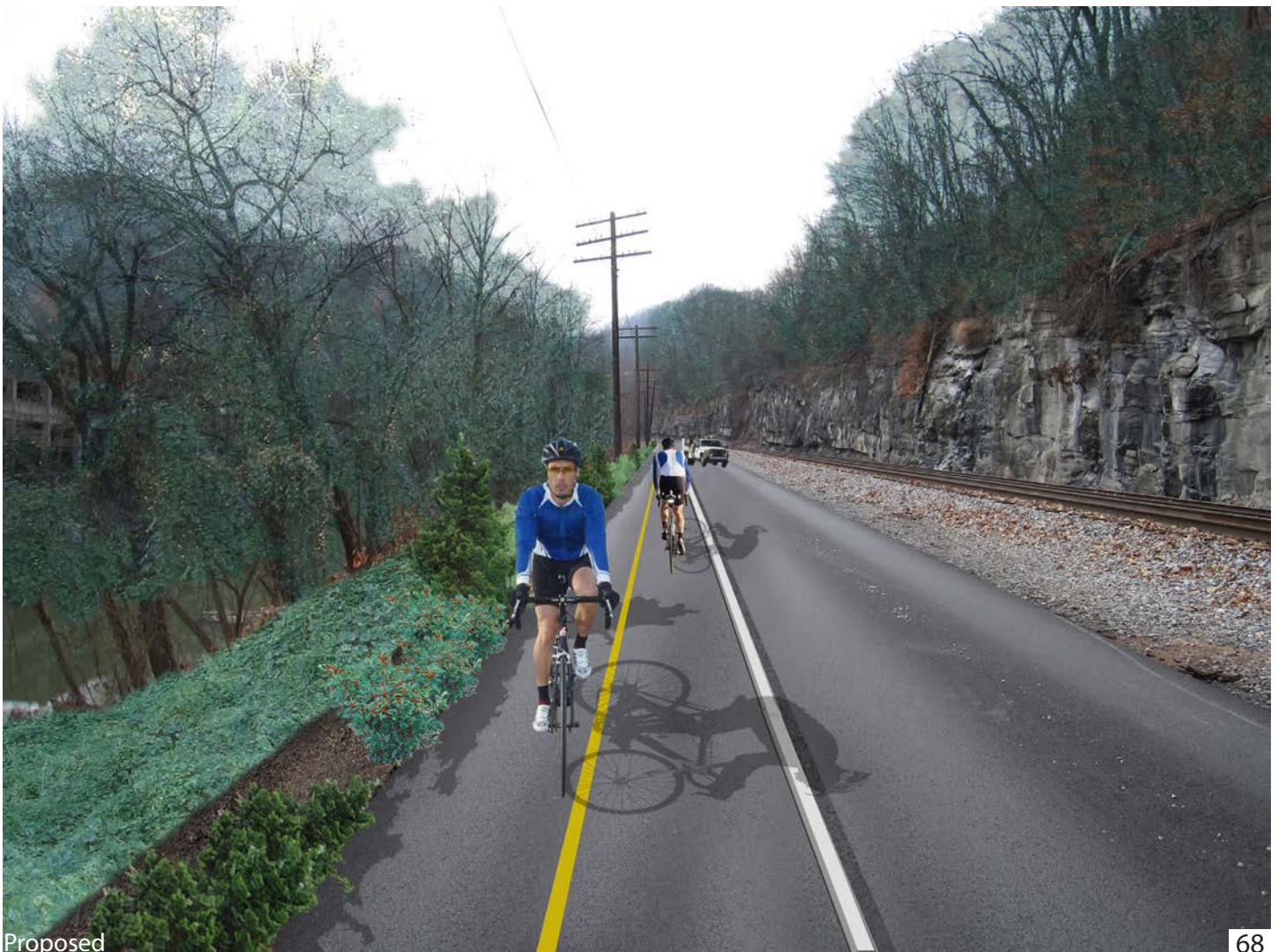


Proposed

Pathfinders Greenway

Final Design Concept

The trail will run along the shoulder of a low traffic access road across the river. Here the trail will be marked with painted lines and a raised curb that vehicles can still drive over if they need to allow someone else to pass. Low maintenance plantings will run along the edge of this portion of the trail.



Pathfinders Greenway

Final Design Concept

A new bridge must be built to create a loop trail. This river crossing is located at the same spot as the old pedestrian bridge that crossed the Kentucky River.



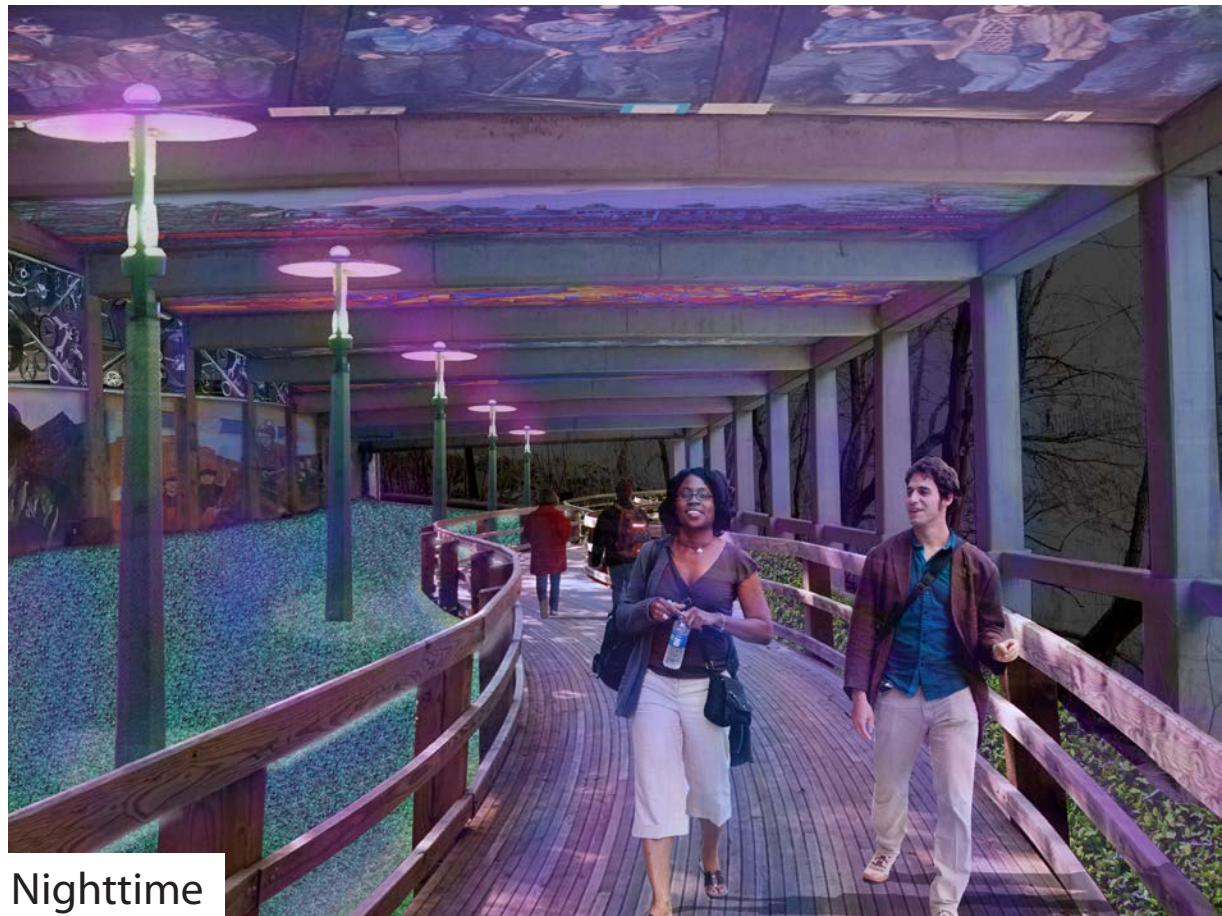
Existing



Proposed



Daytime



Nighttime



Lighting
Colored lighting brings life to bleak, undesirable spaces. It creates unique environments that stand out from the surrounding world.



Murals
Murals cover the walls of the space beneath the parking garage. They introduce color and interesting detail into the tunnel-like corridor.



Tumbled Glass
Tumbled glass covers the ground beneath the parking garage. It reflects light shone upon it and brightens the space with even more color

Pathfinders Greenway

Parking Garage

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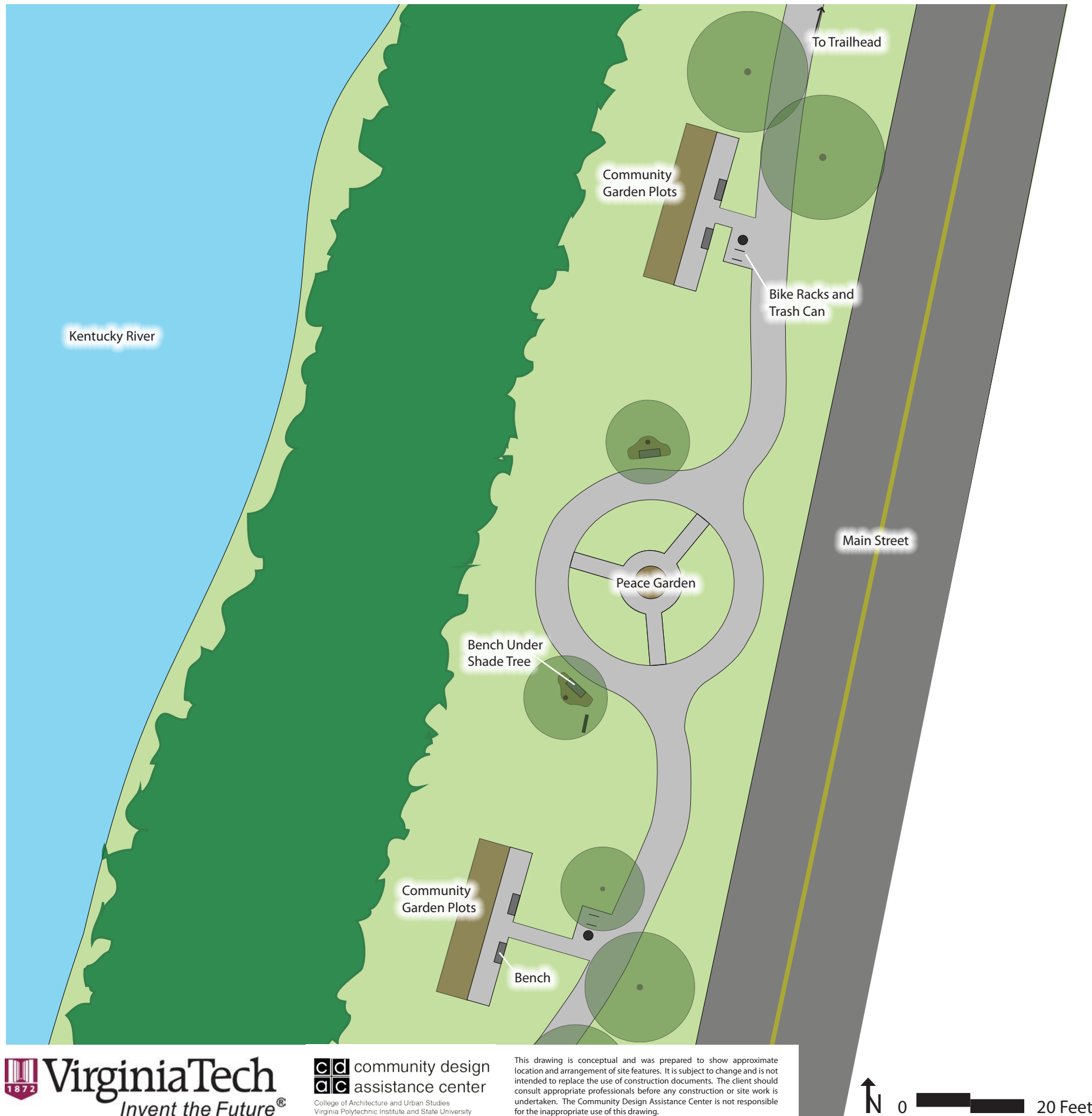
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Case Study

In 2006 Houston Texas transformed a number of spaces beneath a series of highways into a linear park. The Buffalo Bayou Promenade runs along a flood-prone river that has been abused and treated as an open storm sewer for years. Over a couple decades and with the help of several architects this desolate space is now a valuable waterfront resource. One issue that designers faced was how to make the space beneath the bridges feel safe and inviting. They solved this with colored lights that change with the moon cycle. These dark, gray tunnel-like spaces were transformed into a colorful, fun trail with nothing else quite like it in the city.

The space beneath the parking garage in Hazard can benefit from the same design strategy. Colored lighting and a defined trail corridor will create a safe, fun environment that stands out from the landscape around it.

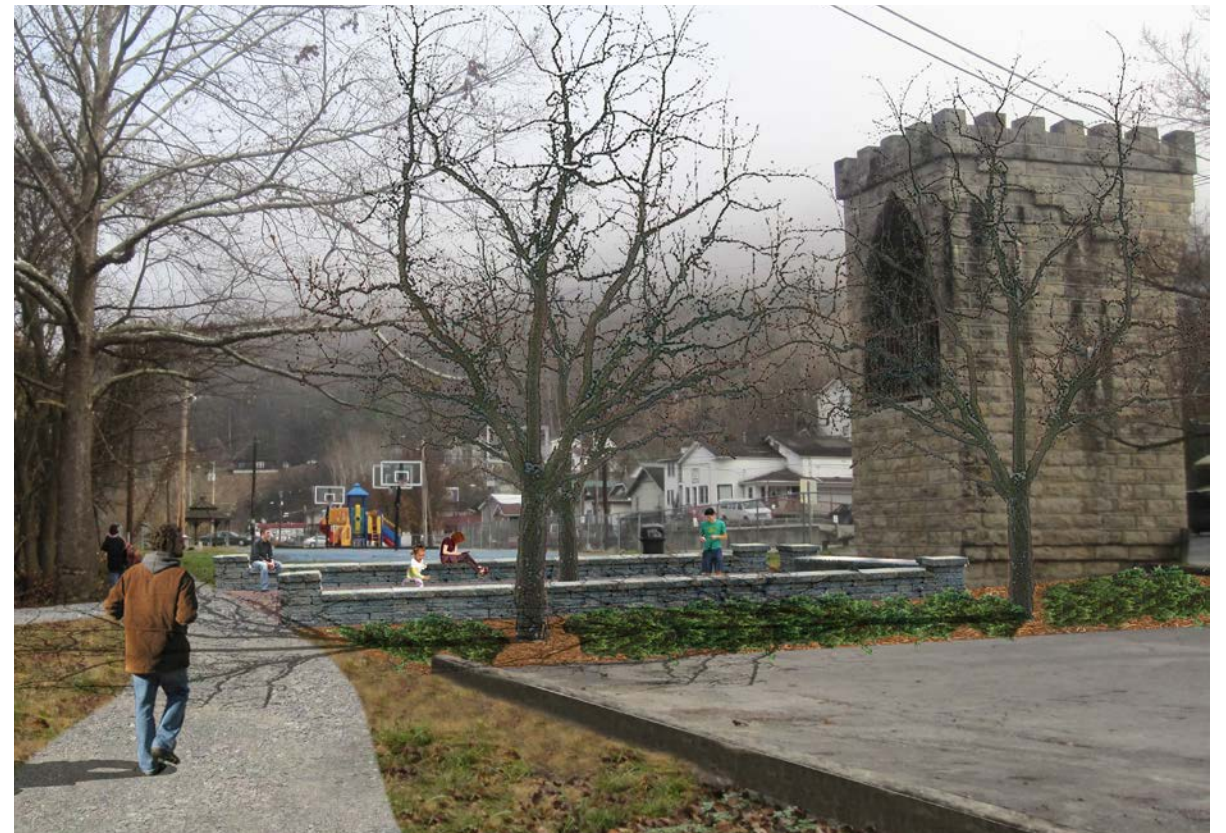


Pathfinders Greenway

Peace Garden



The greenway trail passes through the peace garden.



A small gathering space is located where the proposed bridge will connect to the East side of the river.

Conclusion

Hazard, Kentucky is a small city full of character. Its local shops, friendly restaurants, and sense of community create a very welcoming place to live. Hazard residents form an active community that regularly participates in local events and gatherings such as the Perry County Bluegrass Festival and the Black Gold Festival. While its people are a valuable resource, Hazard's lack of public park space is unfortunate. More green spaces could further aid in building the City's character and supporting its community.

The conceptual master plan to develop a number of pocket parks and the Pathfinders Greenway aims to strengthen Hazard's park system and improve the daily lives of its residents. Playgrounds provide safe places for children to play while new basketball courts encourage youth and young adults to participate in active recreation. Shaded green spaces create relaxing locations for reading, studying, or simple passive recreation. The Pathfinders Greenway provides a new, outdoor exercise opportunity following the edge of the beautiful Kentucky River while connecting several key public destinations in Hazard. It is our hope that this master plan will help the City of Hazard reach out and receive funding to make their community's vision a reality.

Appendices

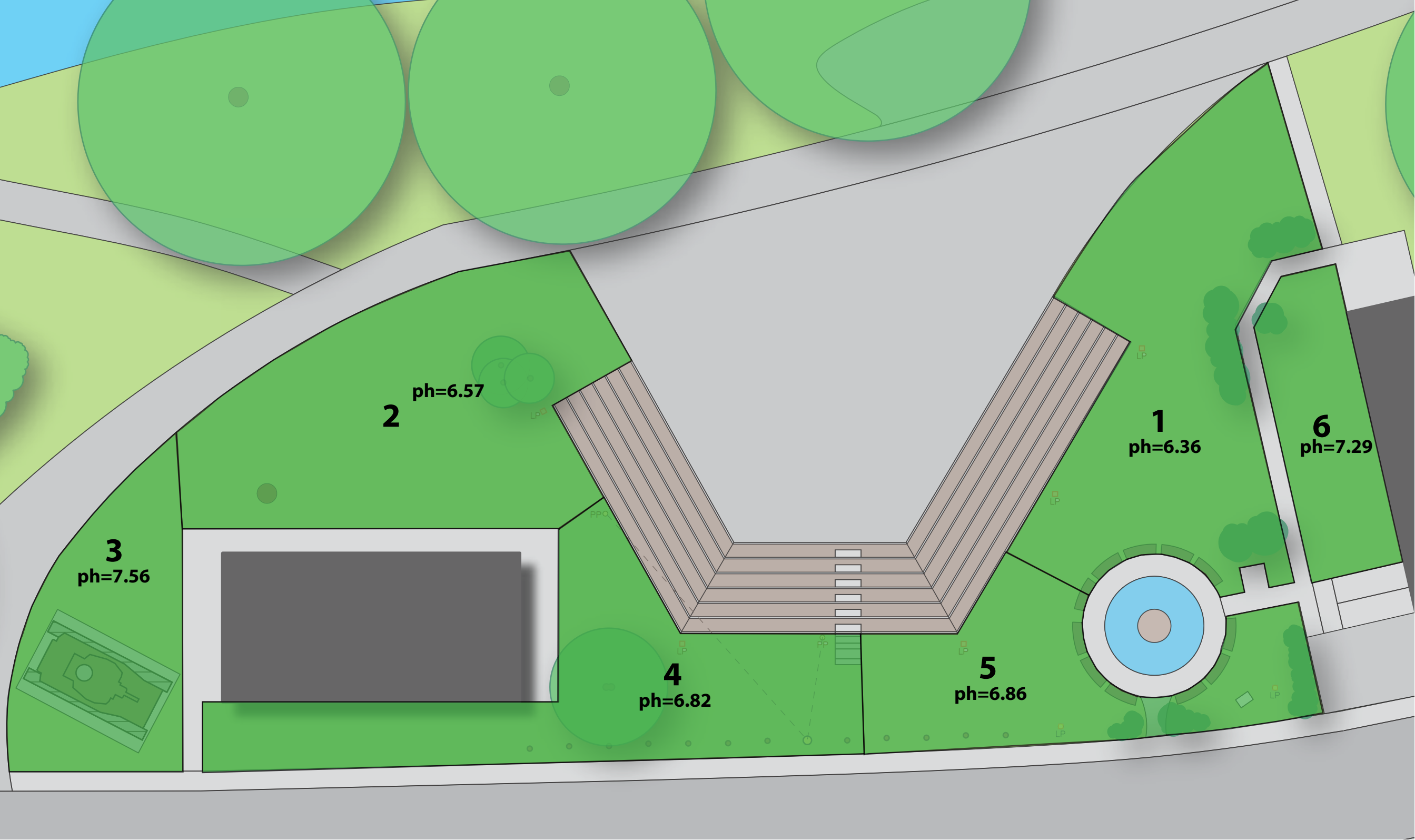
Appendix A - Soil Test Results----- 74

Appendix B - Tree List for Proposed Planting Plan----- 43

Appendix A: Soil Test Results

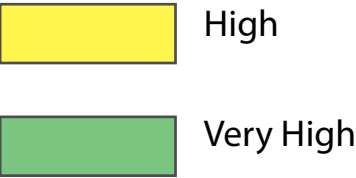
City Hall

Organic Matter



Appendix A: Soil Test Results

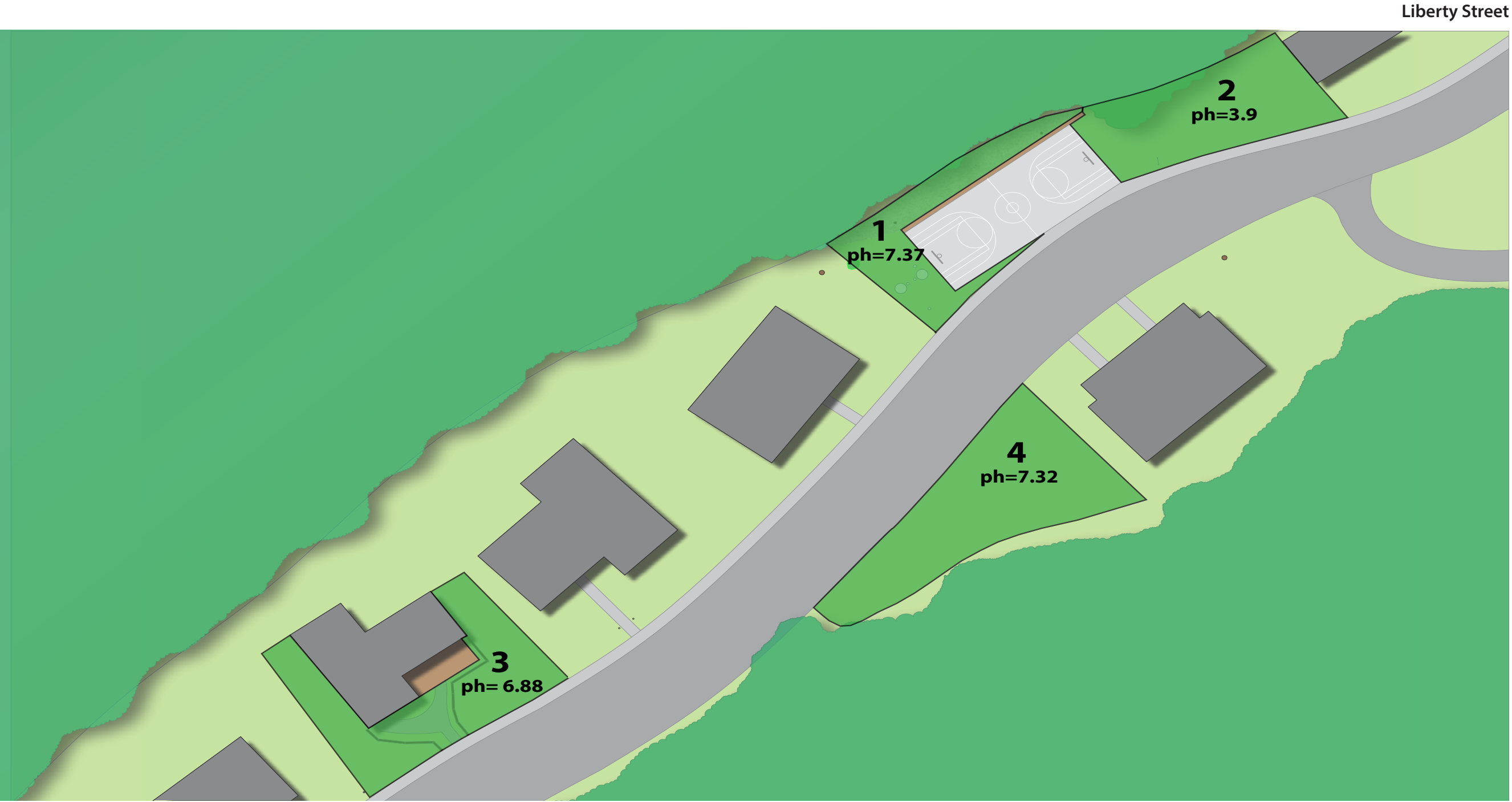
Organic Matter



Appendix A: Soil Test Results

Organic Matter

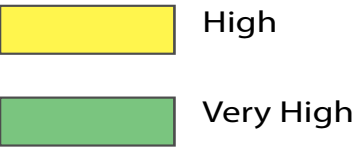
- High
- Very High



Appendix A: Soil Test Results

Gorman Hollow A

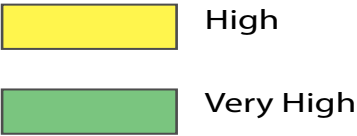
Organic Matter



Appendix A: Soil Test Results

Gorman Hollow B

Organic Matter



Appendix B: Tree List for Proposed Planting Plan City Hall Park

NAME	Quantity
<i>Acer buergerianum</i>	2
trident maple	
<i>Acer rubrum</i>	1
red maple	
<i>Cercis canadensis</i> 'Forest Pansy'	3
riverbirch	
<i>Cladrastis kentukea</i>	1
yellowwood	
<i>Cornus kousa</i>	4
kousa dogwood	
<i>Picea pungens</i> 'Sester's Dwarf'	1
Colorado spruce	
<i>Quercus shumardii</i>	1
shumard oak	
<i>Syringa reticulata</i>	6
Japanese tree lilac	
<i>Tilia americana</i>	2
American linden	
Total	21

Appendix B: Tree List for Proposed Planting Plan Coal Miners Memorial

NAME	Quantity
<i>Acer griseum</i>	3
paperbark maple	
<i>Carpinus caroliniana</i>	3
American hornbeam	
<i>Cercis canadensis</i> 'Forest Pansy'	3
riverbirch	
<i>Cladrastis kentukea</i>	2
yellowwood	
<i>Corylus colurna</i>	2
Turkish hazel	
<i>Ginkgo biloba</i>	2
ginkgo (male)	
<i>Gleditsia triacanthos</i> var. <i>inermis</i> 'Skyline'	2
thornless honeylocust	
<i>Prunus serrulata</i> 'Kwanzan'	3
Japanese cherry	
<i>Syringa reticulata</i>	5
Japanese tree lilac	
<i>Zelkova serrata</i>	3
Japanese zelkova	
Total	28

Appendix B: Tree List for Proposed Planting Plan Liberty Street

NAME	Quantity
<i>Acer buergerianum</i>	1
trident maple	
<i>Cercis canadensis</i> 'Forest Pansy'	2
riverbirch	
<i>Cladrastis kentukea</i>	1
yellowwood	
<i>Cornus florida</i> 'Appalachian Spring'	1
flowering dogwood	
<i>Ginkgo biloba</i>	1
ginkgo (male)	
<i>Liriodendron tulipifera</i>	1
tulip tree	
<i>Magnolia x</i> 'Galaxy'	1
galaxy magnolia	
<i>Quercus bicolor</i>	1
swamp white oak	
<i>Quercus macrocarpa</i>	1
bur oak	
<i>Syringa reticulata</i>	3
Japanese tree lilac	
<i>Tilia cordata</i>	3
littleleaf linden	
Total	16

Appendix B: Tree List for Proposed Planting Plan Highland Avenue

NAME	Quantity
<i>Cornus florida</i> 'Appalachian Spring'	1
flowering dogwood	
<i>Syringa reticulata</i>	1
Japanese tree lilac	
Total	2

Appendix B: Tree List for Proposed Planting Plan

Gorman Hollow

NAME	Quantity
<i>Acer buergerianum</i>	1
trident maple	
<i>Acer griseum</i>	2
paperbark maple	
<i>Acer saccharum</i>	1
sugar maple	
<i>Cercis canadensis</i> 'Forest Pansy'	4
riverbirch	
<i>Cladrastis kentukea</i>	3
yellowwood	
<i>Ginkgo biloba</i>	3
ginkgo (male)	
<i>Magnolia virginiana</i>	1
sweetbay magnolia	
<i>Magnolia x</i> 'Galaxy'	13
galaxy magnolia	
<i>Nyssa sylvatica</i>	3
black gum	
<i>Parrotia persica</i>	9
Persian parrotia	
<i>Quercus bicolor</i>	4
swamp white oak	
<i>Tilia americana</i>	13
American linden	
Total	57