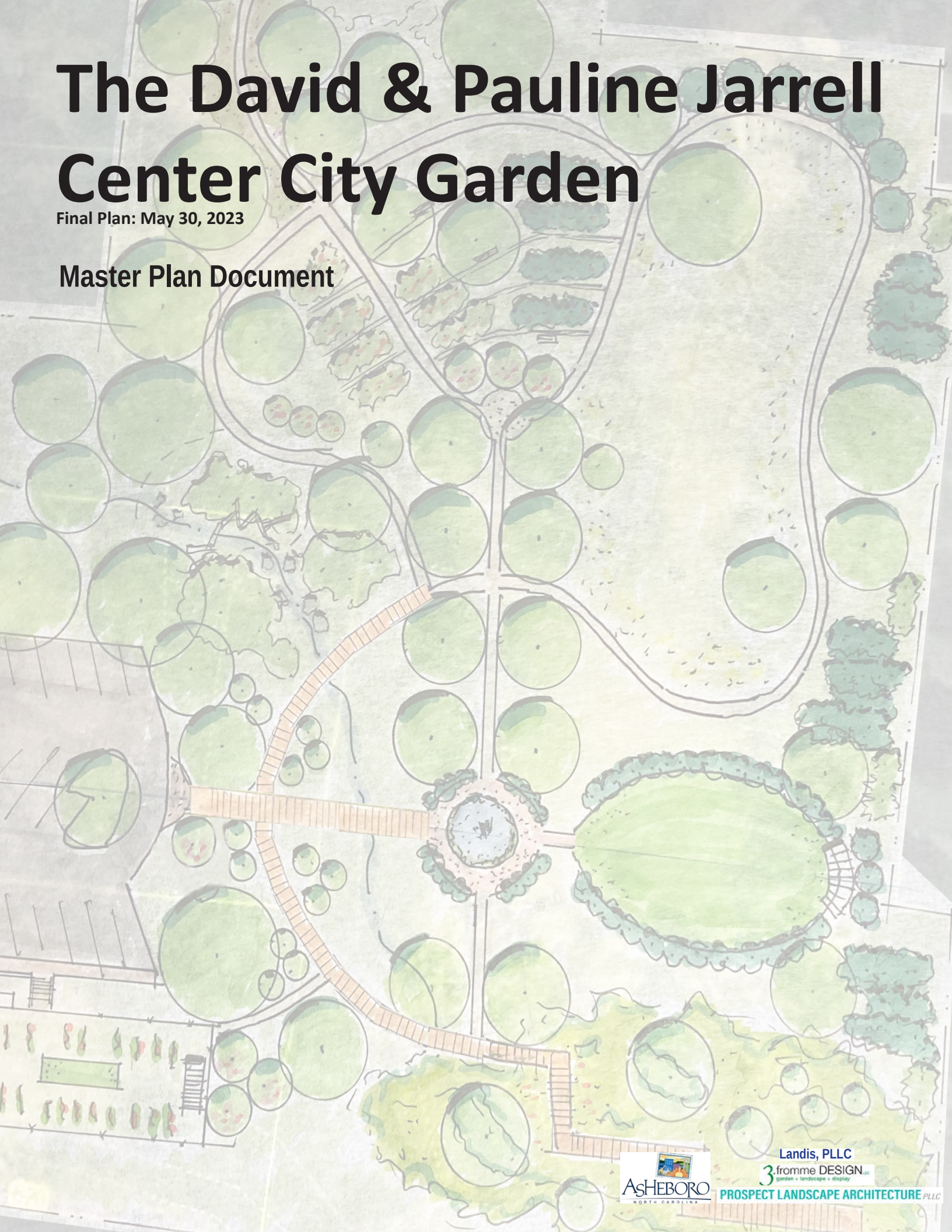


The David & Pauline Jarrell Center City Garden

Final Plan: May 30, 2023

Master Plan Document



Acknowledgments

Thanks to the City of Asheboro for their vision and dedication in creating a beautiful and historically respectful public park for its community.

City Staff

John Ogburn, City Manager
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Jonathan Sermon, Recreation Services Director
David Hutchins, Public Works Director
Andrew Connor, Assistant Public Works Director
Justin Luck, Planning & Zoning Administrator
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Elected Officials

Mayor David Smith
Mayor Pro Tempore Walker Moffitt
Council member Clark Bell
Council member Eddie Burks
Council member Linda Carter (former)
Council member Kelly Heath
Council member Jane Redding
Council member Bill McCaskill
Council member Katie Snuggs (former)
Council member Charles Swiers

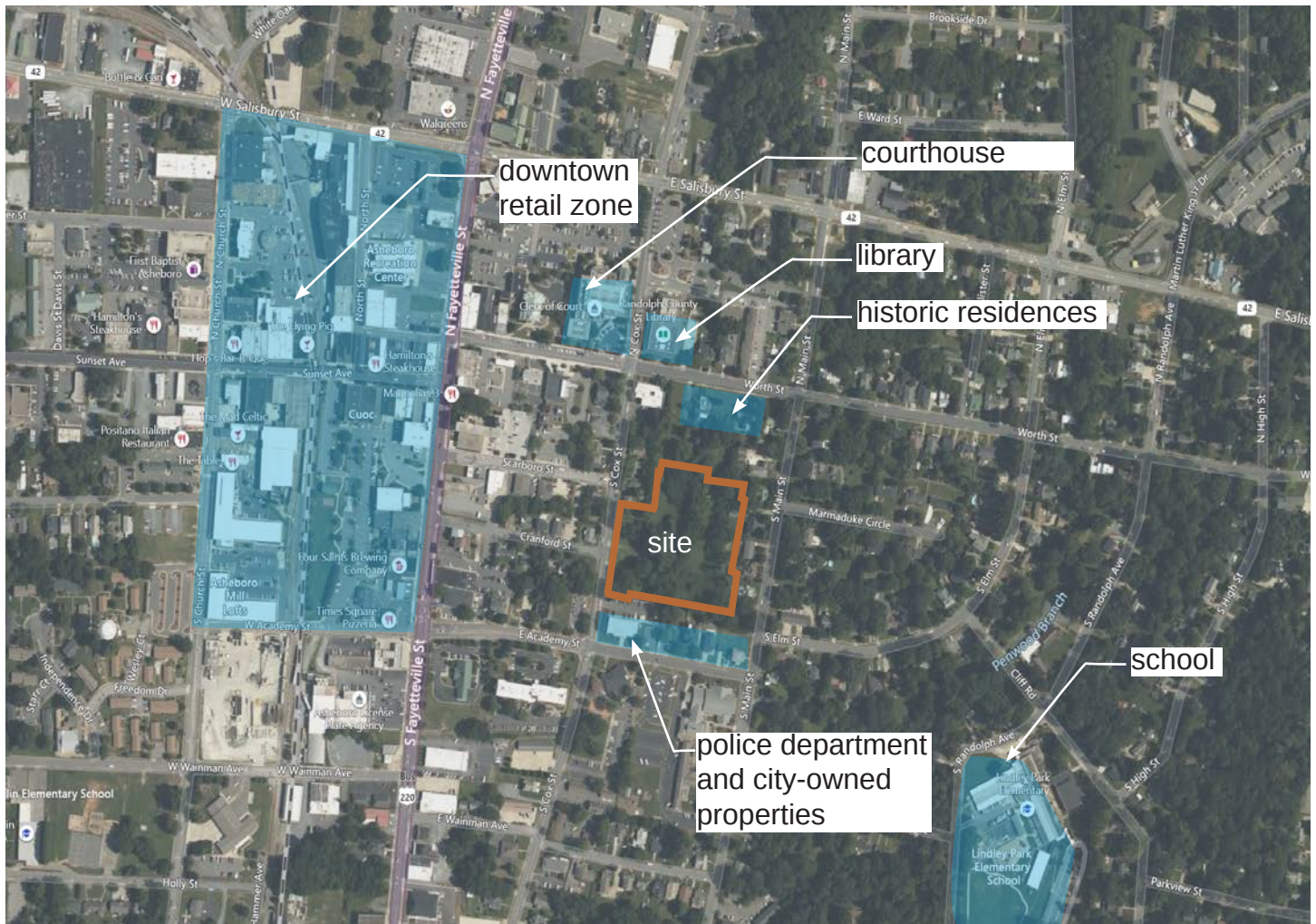
Community Groups

Fundraising Committee
NC State Cooperative County Extension Office
Native Plant Habitat Certification
Neighbors and Community members

Design Consultants

Jennifer Wagner, Prospect Landscape Architecture
Tres Fromme, 3.Fromme Design
Patrick Larkin, 3.Fromme Design
Barrett Kays, Landis Design





Project Introduction & Executive Summary

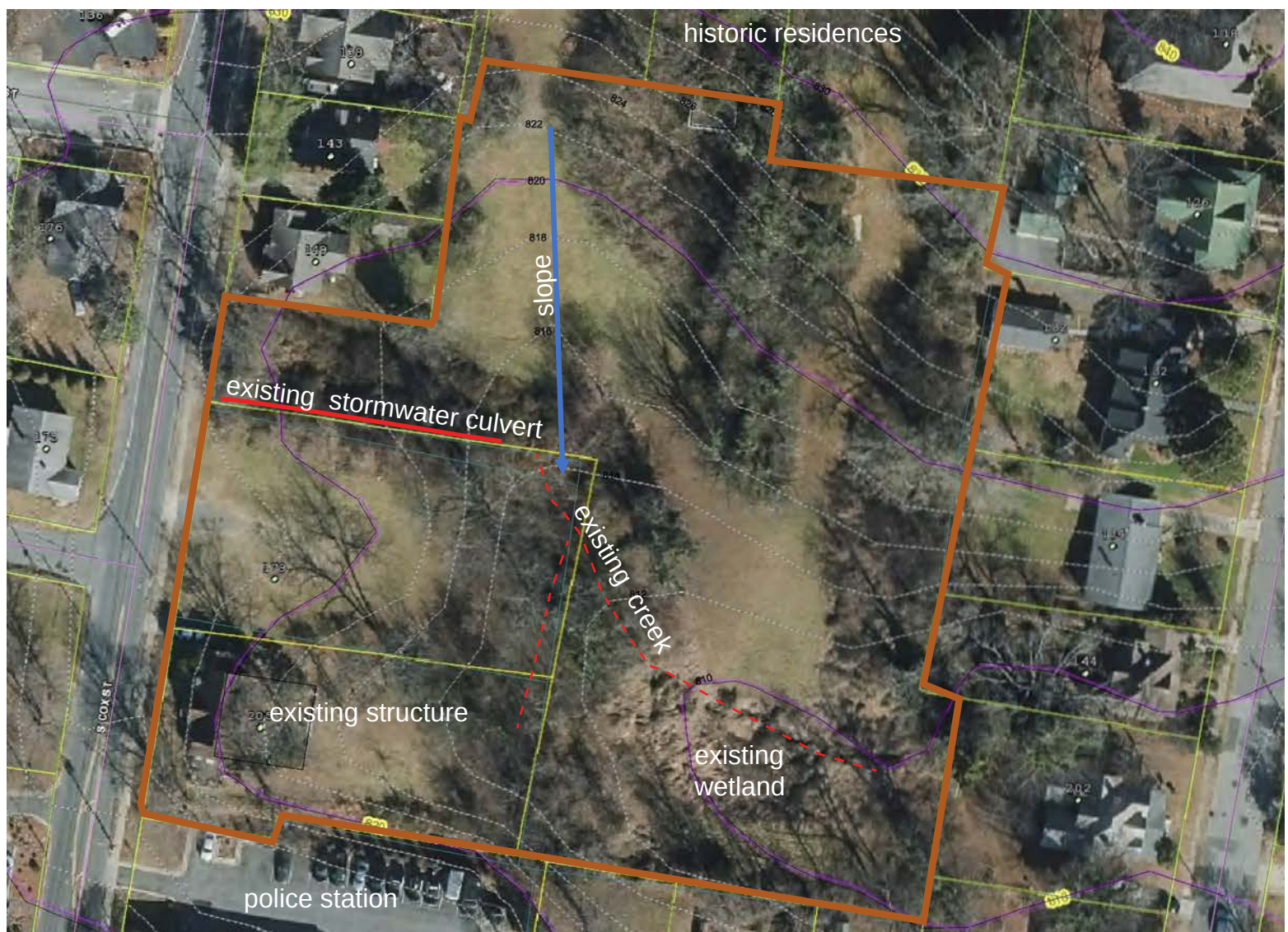
The location for the David & Pauline Jarrell Center City Garden is walkable to downtown businesses, and tucked in a historic neighborhood. An elementary school is in walking distance and the public library is nearby. This ideal location makes for a centrally located park that will become a valuable amenity for residents and visitors alike. The park's namesakes are the former Mayor of Asheboro Mr. David Jarrell and his wife Pauline. The couple were instrumental in creating a place for the park by purchasing much of the land and selling it to the City at an affordable price. With the land secured, the community rallied around the idea of a public park and garden in this location and were able to have a successful fundraiser to kick-off the project.

The land was formerly owned by Governor Jonathan Worth in the mid-1800's. The estate originally consisted of several lots, containing about 10 acres total, with an orchard of more than 200 fruit trees and a meadow. The city's intent is to have a public open space that will include gardens, parking, a visitor center, and references to the historic site.

Project Information

The public garden site is approximately three-acres and includes pockets of mature trees, an expansive meadow, wetlands, a creek, and remnants of previous built objects. With its location near downtown, the site is very walkable to shops and restaurants, a local school, the public library, the police department, and many residences.

The aerial image below indicates how the topography slopes from the north to the south of the site, culminating in a wetland at the southern end of the parcel. A creek and a culvert capture stormwater from surrounding streets and convey the water to the wetland.



VALUABLE PROPERTY FOR SALE.

THE undersigned having recently undertaken public duties, incompatible with proper attention to the property hereinafter described, will sell at Auction, for Cash, (currency,) at 12 o'clock M., on the 29th Jan'y next, (unless sooner disposed of at private sale,) his Tract of LAND in Moore County, on the Fayetteville and Western Plank Road, about half way between Carthage and Asheboro', containing about 607 Acres, of which some 60 or 65 acres is probably cleared, and well fenced, and some four acres good Meadow. It has on it a comfortable DWELLING, Kitchen, Smoke House, Barn, Store House, spacious Stables, &c.

The sale will be made at the premises, and immediate possession will be given to the purchaser.

He will also sell, at private sale, his Lots and Residence in the town of Asheboro', with, or without Two Farms, near the village. One of the farms about a mile from the village, contains about 100 acres, 80 acres of which is in cultivation. It has on it some 8 or 10 acres of good meadow. About 40 acres is seeded, in good order, with a superior variety of wheat, and with rye and winter oats. The remainder is in good condition for a corn crop. Three-fourths of the outside fence of this place is built of stone. The other tract, about 3 miles from the village, contains 305 acres; about 60 acres in cultivation—some 15 acres of which is seeded in winter oats—the rest intended for corn next year.

The property in Asheboro' consists of several contiguous lots, containing about 10 acres, all of which is in excellent condition; has on it an orchard of more than 200 trees, in bearing condition—consisting of choice varieties of apple, peach, pear, cherry and other fruit trees;—about 3 acres of highly fertilized and productive meadow.

The dwelling is 52 x 20 feet, with a wing 18 x 26 feet, both two stories high. The rooms of the main building are all plastered in plain hard finish style; four of them spacious and with good fire places; one a dormitory, without fire place, and one a library room, fitted up with moveable shelves, &c. The wing has two rooms with fire places, a dining room and one room without a fire place, with fixed wardrobes, and a spacious and dry cellar under the building. The out-buildings consist of a kitchen, three negro houses with two rooms in each of them, four of the rooms having each a fire place, and one of them a stove; well house with pantry, a large smoke house, carriage house, wood house, two offices, each with two rooms and one fire place; a framed barn 54 x 30 feet, with stable room for 8 horses, space for sheaf wheat enough to produce 500 bushels; two ceiled garner capable of holding each 600 bushels of grain, with a basement story to shelter cattle; and also separate cow houses; a stone milk house supplied with a constant stream of cool spring water. The buildings are all in excellent condition, and have been recently painted.

Persons desirous to make further inquiries, can apply to me at Raleigh, to my son or brother residing in Wilmington, my brother in Fayetteville, or to my son-in-law S. S. Jackson in Asheboro', who is duly empowered to make a sale.

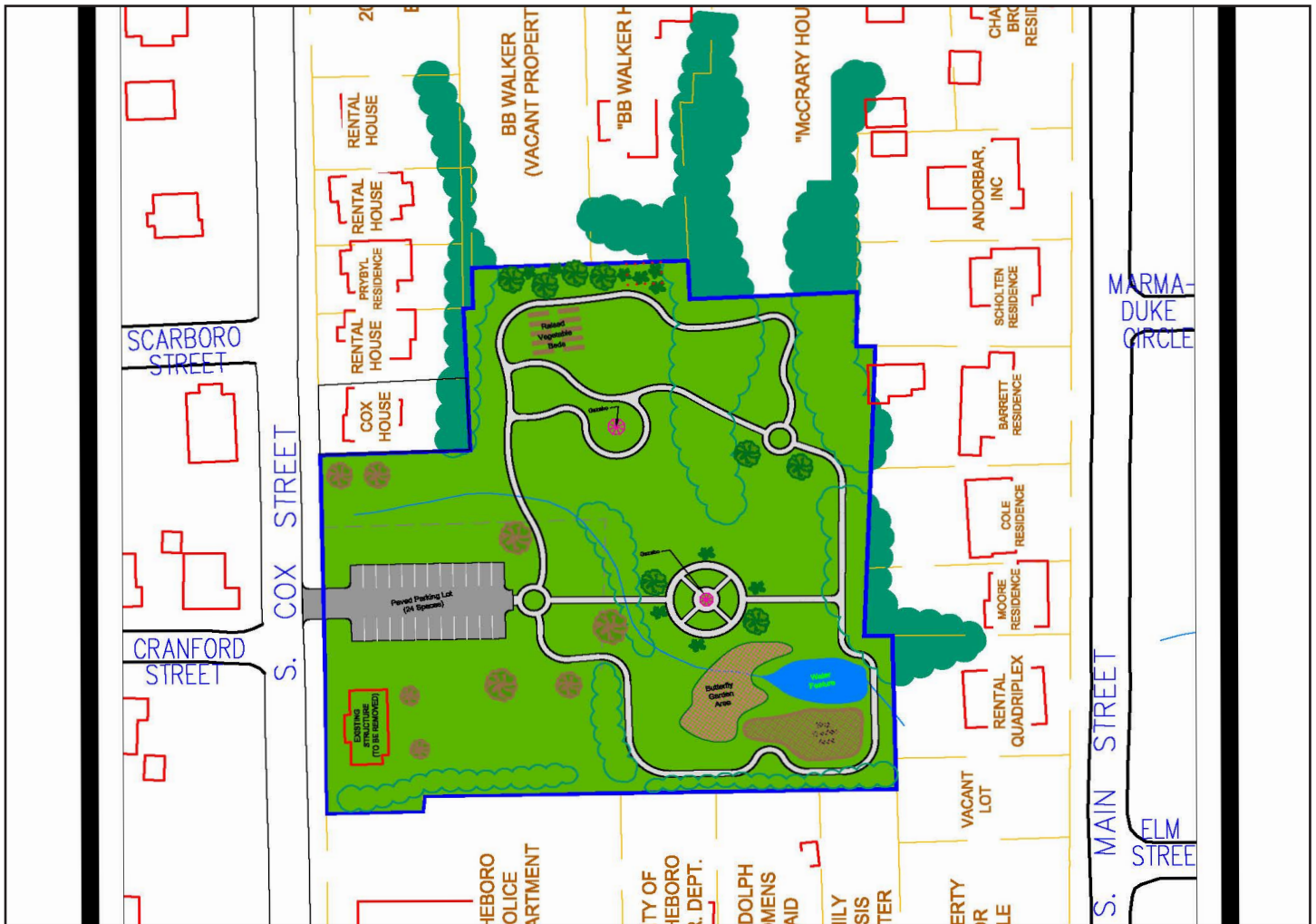
As I am about to remove to Raleigh I can give immediate possession.
Dec'r 27, 1862 JONATHAN WORTH 90-129J

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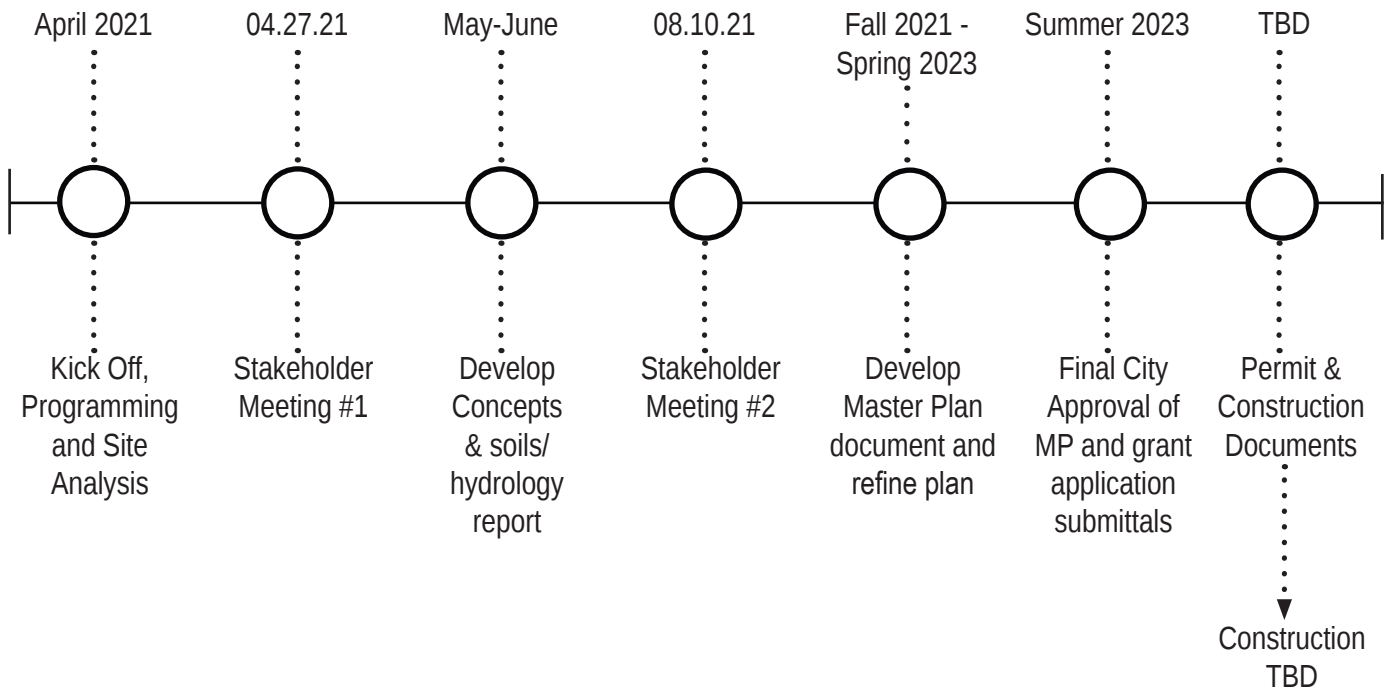
This 1862 ad ran in the newspaper by Jonathan Worth to sell his properties when he was moving to the Governor's mansion in Raleigh. The portion in the red box (enlarged) describes some of the property where this park will reside.

Source: Asheboro Public Library



In an effort to gain community support, the City created an early concept plan for the site, shown here. The concept includes different types of gardens, including a bog/wetland, walking paths, a gazebo and parking. This concept was used as a starting point in the master planning process.

Source: City of Asheboro



Project Process

The project includes opportunities for input by stakeholders, including city staff and engaged citizens. These periodic check-ins allow for a more comprehensive and thorough design that incorporates aspects of the site's history and the community's desires. The master planning design and documentation process was complete by the end of Fall 2021. Additional refinements related to land acquisition, grant research, survey development and archaeological review were completed in 2023.

An additional public meeting to obtain final master plan approval from the Asheboro City Council is planned prior to Summer 2023. After final City approval and budget determination, the design team will move quickly into detailed design for permit and construction documents.

Site Inventory & Analysis

Site Photos/Plant Inventory

To begin the design process, a thorough site inventory was conducted of the three-acre site to understand existing conditions and help determine the best places to build the program elements to reduce impact to the environment, maximize the City's project budget, and to preserve existing vegetation. The following diagrams and photos illustrate the inventory and analysis conducted.

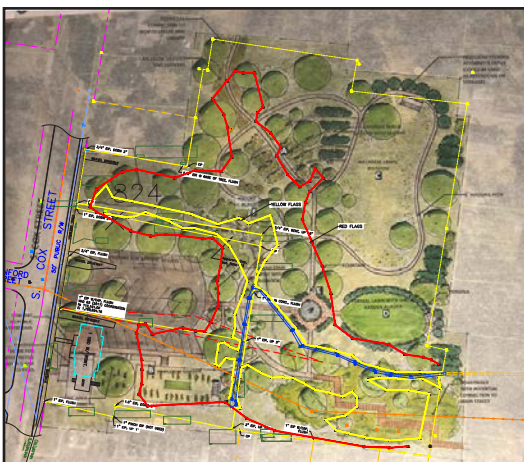
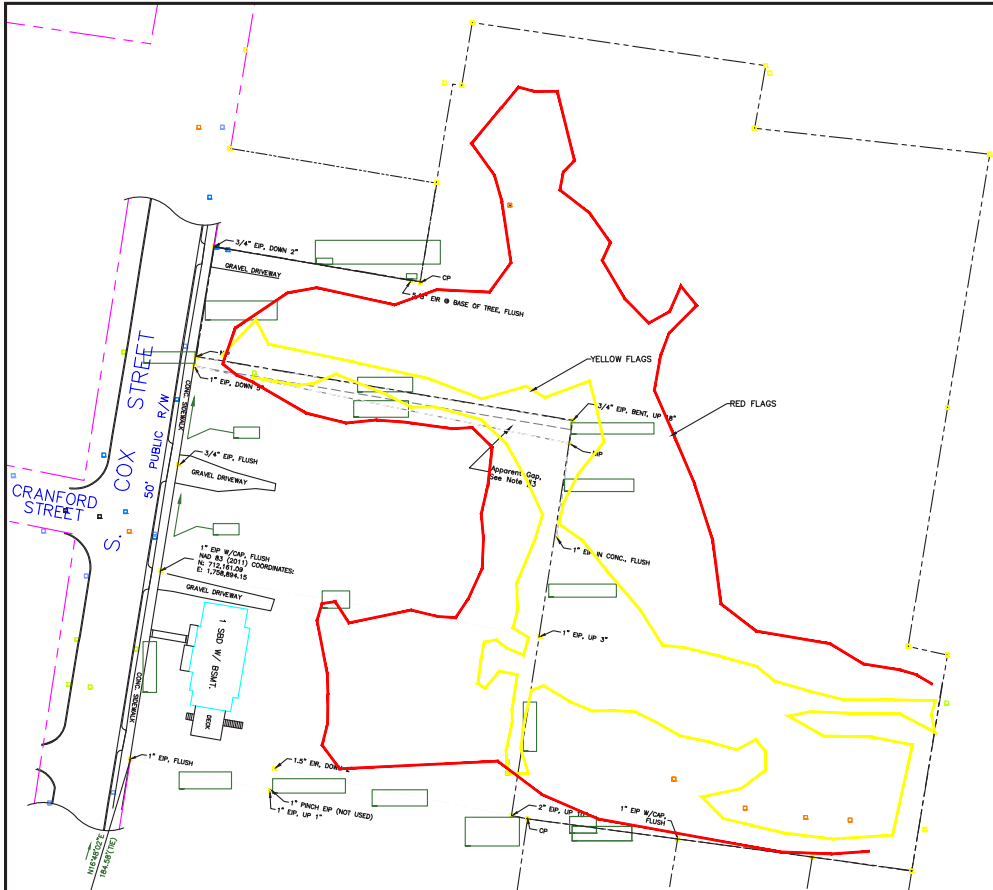
The site slopes from the northwest to the southeast, ending in a creek (A) and wet area (C). The panoramic views across the site create beautiful vistas framed by mature trees. The grouping of trees is a remnant of the previous golf course the owner had created onsite.



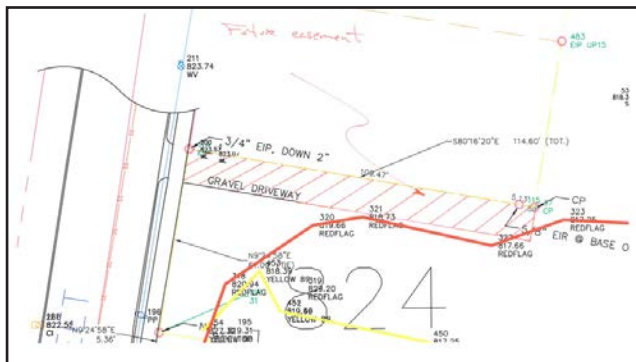
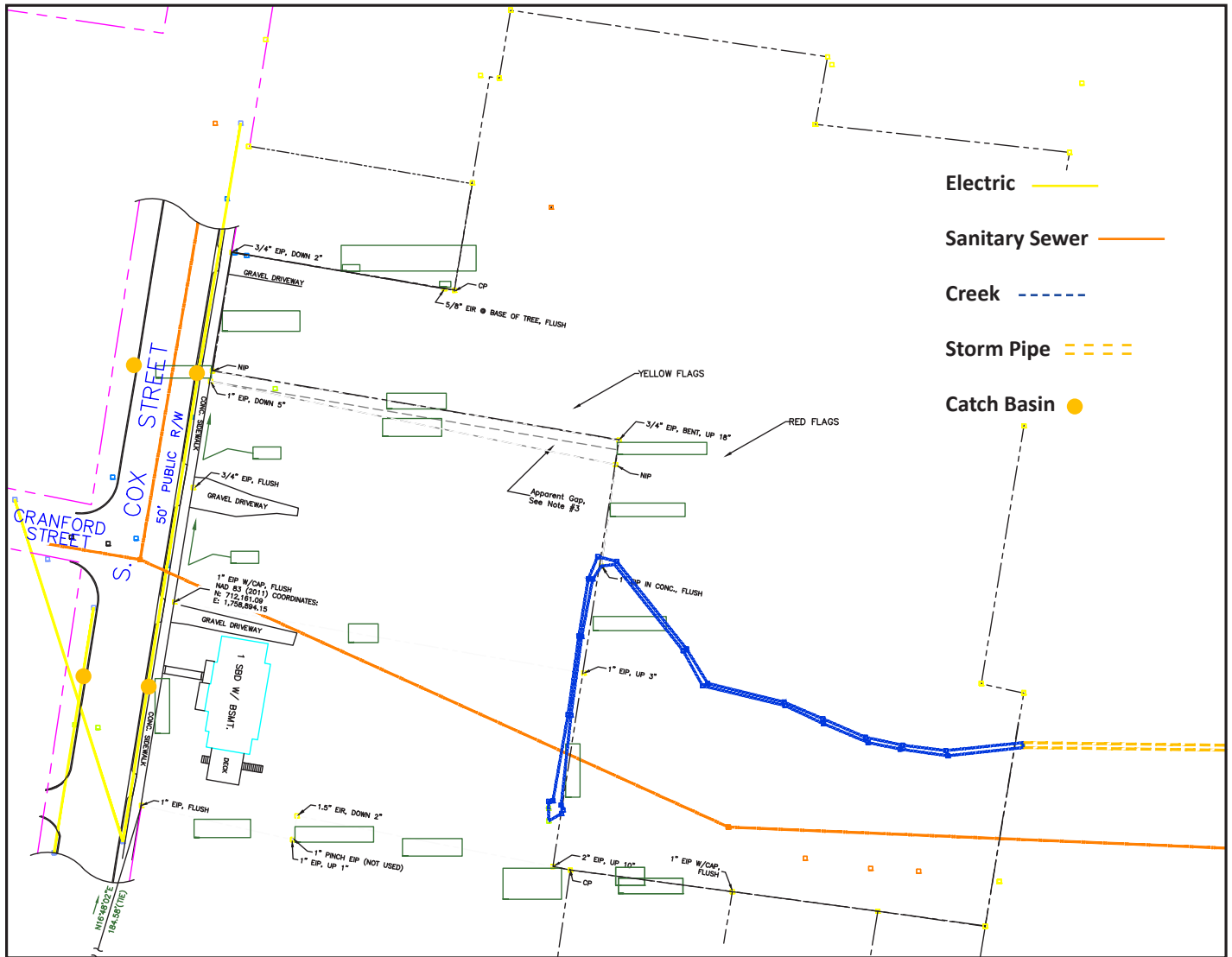
Hydrology

The site was walked by the soils and hydrology consultant to determine floodprone areas (red line) and potential wetland areas (yellow line). The City's surveyor picked up these red and yellow flags to help the design team determine where features and built elements can be placed. The floodprone areas will affect planting typologies and what types of built elements are introduced, but the yellow wetlands area will greatly affect the overall layout of the garden. A large portion of the site will need to be built above a certain elevation and wetland crossings will need to be limited in order to meet state guidelines.

As the design team worked through early concepts, overlaying the wetlands on the drawing was critical to its success.



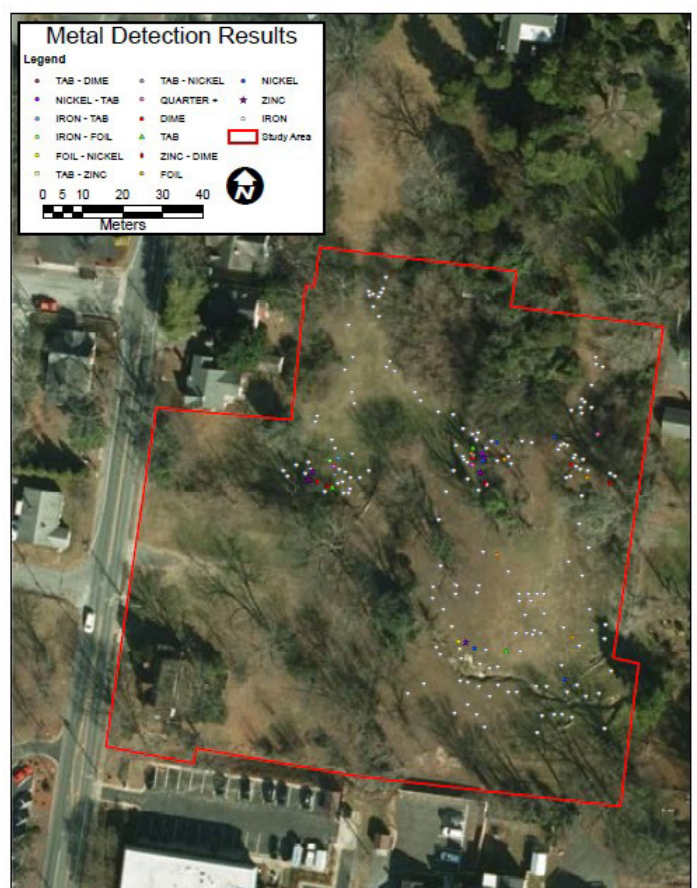
The below image shows utility access for the parcel. Due to its proximity to downtown and its location in a built neighborhood, water, sanitary sewer and power are all readily available. The image at the bottom shows an easement that will be required for the adjacent property to continue use of their driveway that is located along the property line.



Archaeological Investigation

In 2023, the city commissioned an archaeological survey of the property to determine if, given the history of the property, intact and significant historical or cultural artifacts may be present. The city's consultant excavated 47 shovel tests and conducted a comprehensive metal detection survey of the lot (see below). Ten positive shovel tests were excavated. All 10 shovel tests contained historic artifacts dating to the early to late twentieth century. The artifacts included wire nails, bolts, whiteware, container glass, and modern refuse. The metal detection survey resulted in 185 locations, 52 of which were excavated. Artifacts recovered from the metal detection survey included modern soda cans, bottle caps, bolts, miscellaneous metal hardware, zinc squeeze tubes, iron wire, iron piping, and other modern refuse.

There is no evidence to suggest that intact significant archaeological sites are present, and no additional investigation is planned.





Stakeholder Meeting #1

The first stakeholder meeting was held on April 27, 2021 with city staff. Staff represented Planning & Zoning, Engineering, Recreation & Parks, Public Works, and Survey departments. The City Manager and Mayor were also in attendance. The meeting was held onsite and the design consultants ran a workshop to gather the following from those present:

- Establish a guiding philosophy for the garden.
What are the garden's core functions?
What are the goals for the garden?
What are the garden's goals in the community?
- Describe the "ideal" visitor experience.
List the anticipated garden audiences.
Envision the ideal visitor experience.
Brainstorm gardens, amenities, features to support the visitor experience.
- Define the garden's identity.
Describe the garden's ideal "look and feel".
Identify the garden's unique characteristics on which to build.

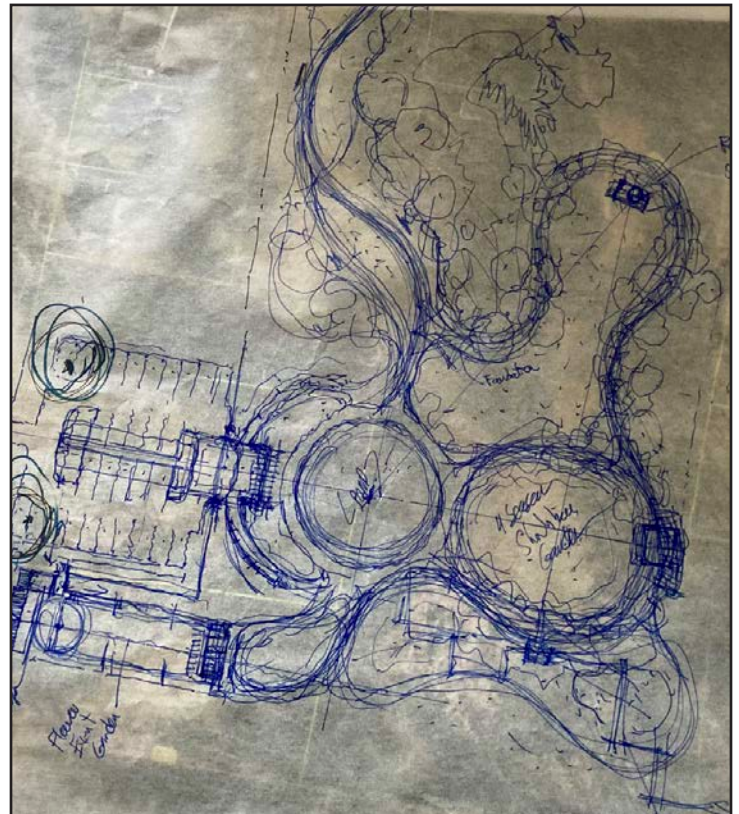
After gaining insight from the stakeholders, the design team walked the site to review site conditions and test ideas. The design team then developed site diagrams and concepts while onsite.

Programming and Initial Park Concepts

From conversations with the city, site analysis and the first stakeholder meeting, the following program for the garden was developed.

- Bird and wildlife attracting plants
- Fragrant plants
- Gardens: apiary, bog, butterfly, rose, shade
- ADA path system
- Places to sit
- Water features
- Gazebo or pavilion – possible small wedding venue
- Amenities: restrooms, hydration stations, emergency call box
- Parking for approx. 24-30
- Power for events and possible holiday light show
- Lighting for safety, path, parking
- Water for drinking and irrigation
- Use existing home onsite for visitor center
- Be mindful of the wetlands on site.

The design team developed the below initial concept studies to capture initial ideas and programmatic elements.





option A



option B

Refined Concepts

The above refined concepts were developed from the initial concept diagramming onsite with the design team. These concepts contain the program items that were gained from the stakeholder meeting, along with additional site analysis, particularly considering potential wetland locations and constraints.

The two concepts were presented to city staff for input.

Option A includes an axis with a grand stair entry, a central fountain feature, and a formal lawn with a pergola. Native plant gardens are off of winding paths elsewhere in the garden, a small perennial garden is located near the visitor's center and a boardwalk takes visitors through the wetlands. Connections to the north and east are shown to provide better connectivity, but would require the purchase of additional parcels. The historic attorney's office is proposed as a "folly" in the landscape.

Option B provides a skewed axis that allows visitors to view the overall garden from a lookout toward the formal lawn in the upper corner of the parcel. Terraced shrub gardens flank the walkway to the lawn, a bridge crosses the enhanced creek and a pond is shown for potential water collection. The garden near the visitors center allows for heirloom plantings and provides a place for the historic attorney's office. Additional data about the onsite wetland determined the pond was likely not feasible in this scenario.

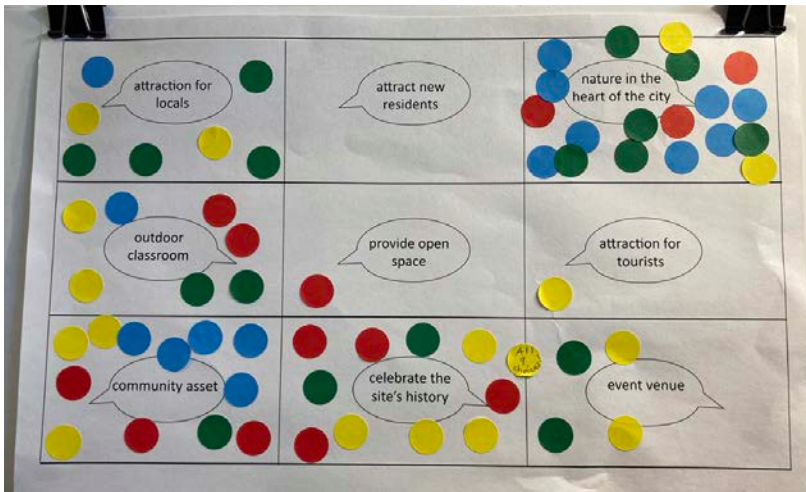
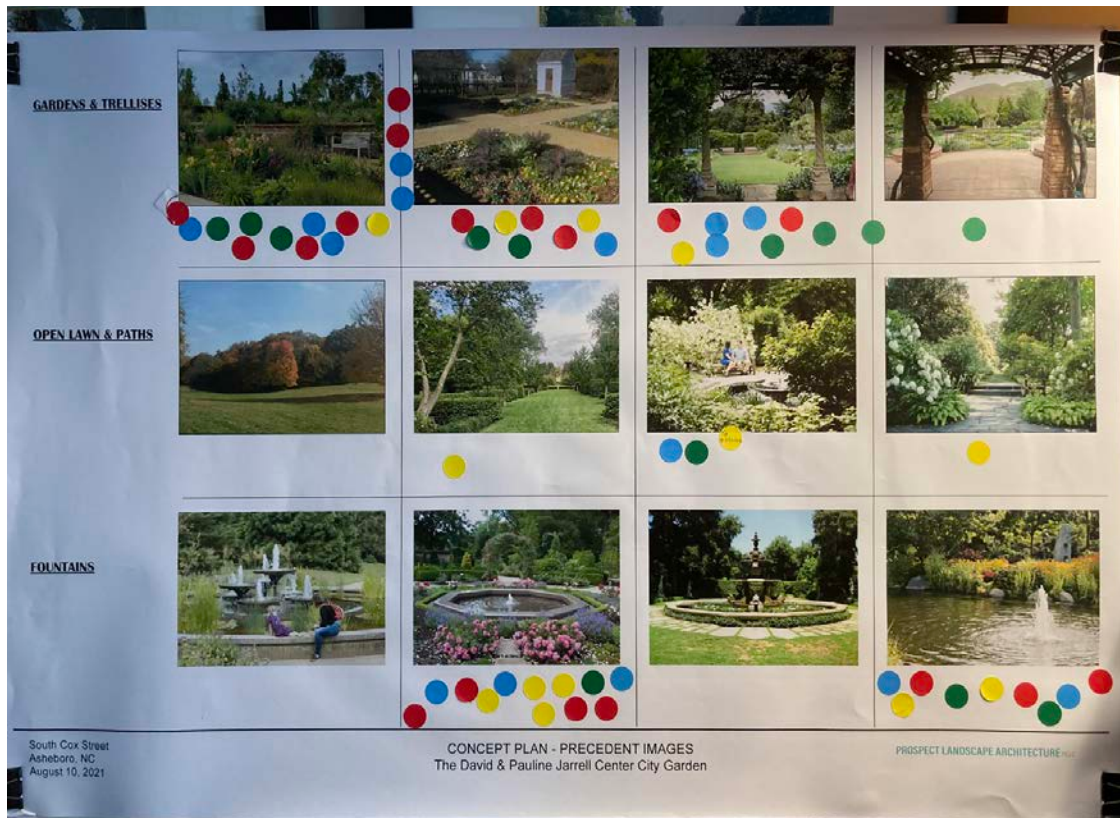
Both options allow for approximately 30 parking spaces and the location of a visitor's center with restrooms, per City staff direction.

Stakeholder Meeting #2

The design team received input from the City on the refined concepts, with a preference for Option A. The design team studied the layout, especially with regard to potential wetlands ramifications and made adjustments and refinements for the next public meeting. The final concept, along with precedent images, were shown at the public stakeholder meeting to receive input.

The stakeholder meeting was held on August 10, 2021 and included invited members of the public who were instrumental in raising funds for their park and showing their interest and support. A great crowd turned out with approximately 30 people in attendance and another 5-10 City staff.





Stakeholders expressed support for the refined concept presented and offered their preferences on the proposed elements, including the fountain, pergola and walkways. Members of the stakeholder meeting offered their assistance with identifying and maintaining native plant materials, raising monetary and in-kind donations and providing input on the history of the site.

As noted in the dot preference studies above (colors have no bearing, only quantity of dots), the top three statements preferred by stakeholders as guiding principles for the park were:

- “nature in the heart of the city”
- “community asset”
- “celebrate the site’s history”



Final Concept Plan with precedent imagery



Final Concept Plan with zones

A revised concept plan received comments at the second stakeholder building, resulting in moving the historic attorney's office to the heirloom garden. Stakeholders also preferred plenty of seating opportunities and a simple, low-maintenance fountain.

Three types of spaces comprise the overall David and Pauline Jarrell Center City Garden:

A - The Welcome Gardens lie to the west off of South Cox Street, offering amenities and orienting visitors to the property;

B - The Display Gardens sit within the central portion of the property, providing Classical outdoor spaces and manicured plantings of native and adapted non-invasive species; and

C - The Naturalistic Gardens occupy the southeastern, northeastern, and northwestern areas, offering relaxed landscape scale plantings of southeastern native plants.

WELCOME GARDENS

Welcome Center & Entry

The main entry to the gardens is from Cox Street with a parking lot and appropriately scaled visitor center with public restrooms, small staff office, flex/educational space, and storage. The generous tree-shaded Entry Plaza fronts the restrooms. An ADA accessible ramp and stairs lead from the Plaza down into the Heirloom Garden.

There are a few possibilities for the visitor's center. The former home along Cox Street or a new building built in the same location could serve this purpose. Public sentiment, however, is strong that the former home should be preserved. Many citizens believe that the house reflects the neighborhood's architecture, and perceive it is of adequate size to meet the minimum public needs for the Garden. Recognizing the community's support for repurposing this structure, the city hired an engineering firm to perform a non-invasive visual inspection. The results of that inspection reveal that, while feasible, a conversion will be costly, and the layout may limit optimal functionality. This plan recommends that the city secure the services of an architect to evaluate options and prepare plans to meet public space needs.

Parking & Entry

Conveniently located adjacent to South Cox Street the paved lot accommodates 30 cars and two planter islands with shade trees. Parking is at the same elevation as the Welcome Center Plaza, making access easy and convenient.

The Grand Entry and Overlook sit on the parking lot's eastern edge as a dramatic entrance to the Garden. A terrace (at the lot's elevation) and boardwalk entry lie on the centerline of both the lot and the Formal Lawn and Shrub Border to the east. The boardwalk system keeps the sidewalk out of the floodzone and wetland area, while providing views and access to the garden. The boardwalk will ramp down to create accessible entry to the gardens. This vista encompasses a fountain in the middle distance and an elliptical lawn terminated with a vine covered pergola as a focal point – an irresistible destination - in the background. Groves of asymmetrically placed small flowering trees subtly emphasize the axis while canopy trees shade the Overlook.

Picnic Area

East of the Welcome Center a majestic existing canopy tree shades groupings of moveable furniture, an appealing place to rest and refresh on the way into or out of the Garden. The paving design reduces pressure on the Tree's root zone to preserves its health and longevity. Ideally, the Picnic Area contains a hydration station, in addition to trash cans.



Heirloom Garden

East of and on the same east-west axis as the Picnic Area lies a wall or hedge enclosed rectangular garden room subdivided into smaller rectangular beds. A lawn on the central axis supports small events and programs. The overall design intent is of a crisply designed but exuberant cottage garden visitors will relate to immediately.

Plantings showcase heirloom and traditional southern species with ornamental value, cultural associations, and edible parts (although the edible plants are all perennials or woody plants to reduce maintenance).¹ Something is in bloom or showing interest every day of the year.

¹ Local gardeners might consider adopting some of the beds and showcasing annual edible crops or herbs.

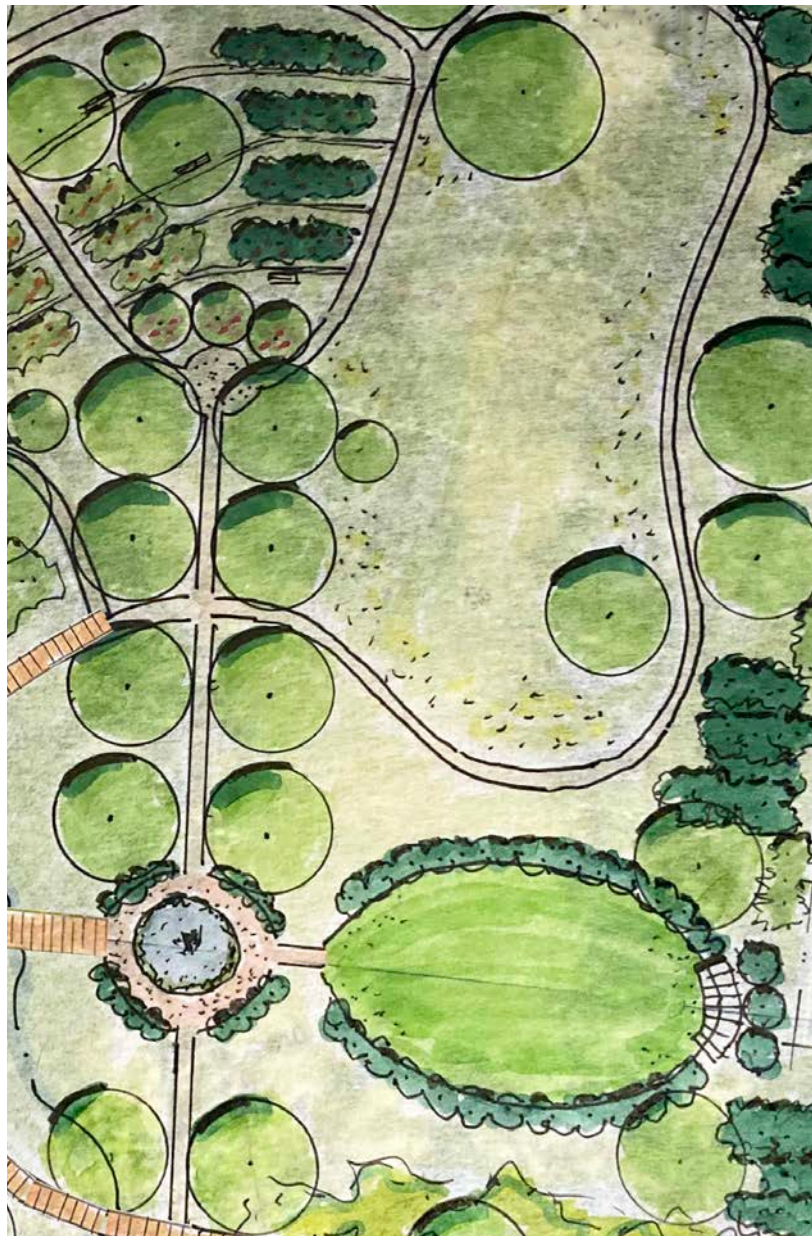
DISPLAY GARDENS

Formal Lawn and Shrub Garden Border

A central east-west axis connects the Welcome Gardens' Overlook and boardwalk with a large circular fountain, spacious turf ellipse, and borders of ornamental shrubs and small ornamental trees. These spaces are the heart of the overall Garden.

The Fountain sits at the intersection of four major paths leading into and through the property on the four cardinal directions. A wide plaza backed with small trees, ornamental shrubs, evergreens, and bulbs encircles the water feature. The water source might be as simple as one to several vertical jets or as grand as a sculpture or group of sculptures within the basin. The intent is to use a minimal amount of water to create the optimal effect to assure safety.

The elliptical Formal Lawn's long axis runs east-west, creating a perfect space for al fresco events, programs, and rentals. The Shrub Garden Border encloses the Lawn's north and south sides, providing interest from flowers, fragrance, foliage, fruit, and twigs year-round. The intent is to provide a horticultural showpiece of adapted non-invasive species capable of delighting, inspiring, and educating visitors to use the plants on their own properties.



Small ornamental trees reinforce the elliptical space, adding vertical interest and horticultural variety to the shrub palette. Evergreens generate a year-round backbone to the other plantings. Perennializing bulbs emerge in various seasons from beneath the shrubs, particularly in spring.

The arcing Pergola wraps around the Lawn's eastern end and showcases flowering vines. The structure is an ideal "stage" for wedding parties, small performances, and visitors who want to linger in the shade and enjoy the gardens. Large evergreens back the Pergola and screen views east to the neighbors. Canopy trees symmetrically flank the Pergola to the north and south.

Flowering Shrub Garden

An ascending northward path passes under an allee of shade trees with ornamental trees between them, connecting the Fountain with the Flowering Shrub Garden. Several native stone walls form a series of level terraces from which the most ornamental of Southeastern native shrubs grow. The species also have wildlife value as sustenance or shelter.

Benches nestle amongst the foliage, encouraging people to stop, linger, and rest. Native small ornamental trees add seasonal accents; native canopy trees offer shade for both people and plants in the long term.

Meadow Grasses and Flowers in large-scale

designed drifts and sweeps surround the continuation of the path through the Flowering Shrub Garden as it moves north. If possible, this path should continue to Worth Street in order to create a strong connection between civic properties of the library and the garden.² The plant species along the path are southeastern natives, water-wise, and provide a mosaic of colors and textures in as many seasons as possible. The plants also are of use to pollinating insects and birds.

Native evergreen shrubs and ornamental trees spill over from the Flowering Shrub Garden and create loose walls enclosing the Meadow. A few strategically-placed native shade trees stand as sentinels within the space but have sufficiently open canopies to let the grasses and forbs thrive.

NATURALISTIC GARDENS

Nature Play

Southwest of the Flowering Shrub Garden nestled among shade trees are areas for children to discover and manipulate their environment. Log balance beams, tree trunk section steppers, rope bridges, and other rustic constructions encourage active exploration. Loose parts of natural materials – branches, bark, et al. – invite youngsters to build loose structures in which to play.



Benches and clear site lines assure adults are comfortable as their children play. Ideally a hydration station satisfies the inevitable thirst from various activities.

Wetland Garden

An expansive low lying moist to wet area supports a diversity of southeastern native wetland herbaceous vegetation planted in large drifts and sweeps to emphasize the species' ornamental value – flower, fruit, twig, and foliage. Masses of water loving shrubs form smaller rooms within the larger space. Small hillocks create varying planting depths, allowing for trees to help shade the walkway. Ornamental trees create vertical interest as do solitary specimen canopy trees. The intent is to maintain the area for sun-loving species.



A path leads directly south from the Fountain to the beginning of the Boardwalk. The rectilinearly zigzagging walk immerses people within the wetland environment and includes built-in seating. Ideally this elevated path links with a path leading to Main Street.³ This would create an ideal connection to the nearby elementary school.

² It is recommended that the City work with property owners to acquire land or an easement for a pedestrian connection to the north on Worth Street.

³ It is recommended that the City work with property owners to acquire land or an easement for a pedestrian connection to the east on Main Street.

Informal Lawn/Meadow

A rolling hill slopes from north to south above the Formal Lawn and Shrub Garden Border. A gently winding path wraps the space's perimeter, weaving through canopy and ornamental trees. An arbor or pergola at the top may invite people to linger and enjoy the spectacular vista to the south. This is also a great photo opportunity. Large evergreens screen the property's edges, softening the transition between the Garden and adjacent neighborhoods.

Seasonally mown "casual" turf covers the hillside in rolling waves. This could include clover and masses of naturalizing Daffodils that emerge in the spring to create a bejeweled tapestry. The City might also mow a creative maze or labyrinth patterns in the long turf to create a yearly changing experience for the public.



This informal meadow will be the perfect place to spread a blanket for a picnic or toss a frisbee with friends.

Maintenance & Operations Recommendations

The purpose of this section is to guide the City’s leadership and staff in implementing the Masterplan and understanding some of the operational considerations before construction even begins. These recommendations and suggestions should be reviewed and updated by leadership as implementation begins because conditions may have changed, impacting the recommendations presented.

Visitor Experience

At its core the Garden is envisioned as a destination. As such, keeping the guest experience front and center will be critically important to ensuring repeat visitation and ongoing use and support by the community. Additionally, being a destination implies that someone is making an informed and conscious choice to visit, as opposed to serendipitously discovering the property and then choosing to go. To that end, ensuring that there is the support with regard to awareness-raising will be critically important to ensuring the Garden is meeting its mission.

Being a destination also means that there is something compelling to see and experience. The Master Plan develops captivating garden spaces and event facilities and provides for additional activities that will keep visitors and community members engaged and encourages them to return. Investments by the city in the spaces and staffing necessary to establish and maintain these investments properly ensures ongoing engagement.

A garden requires gardeners and tending of plants. The Garden is positioning itself as horticultural and educational displays for the public. Providing visitors with an attractive landscape is central to the mission. Being able to manage gardens and landscapes – from trimming lawns and hedges to installing perennials and pruning woody plants – are all necessary skills and capacities. As both an art and a science, horticultural expertise is acquired through many years of training and experience. Staff should be hired or trained specifically to maintain the gardens through proper techniques.



City of Raleigh electric mowers



Conservancy Staff removing trash in Central Park



Staff pruning at the Des Moines Garden



Staff removing trash at a Fort Collins park

Source: Google Images

As the Garden is planned and developed, trained staff should be planned as part of an overall function of the operation. The recommendations below are based on the level of intensity of gardens that are installed. It does not take into account additional curatorial nor plant records needs.

Creating and formalizing a volunteer gardening program will be very helpful to assist City staff with some of the particular pruning, mulching and weeding needs of the more maintenance-heavy portions of the garden. These volunteers can also be advocates for the park to help fundraise, spread awareness and create enthusiasm for the gardens.

WELCOME GARDENS

The Welcome Gardens are primarily higher input gardens and park spaces, which, once established require regular care and attention on a daily basis. Because these garden spaces are the first ones that visitors encounter, are designed to be intensively planted, and contain event spaces, they will need to look presentable at the highest level year-round. Additionally, daily maintenance and attention to the visitor amenities, including the trash cans and restrooms is a priority. The fruits from edible plants should be removed in a timely basis to reduce attracting pests.

DISPLAY GARDENS

These will be the most heavily used spaces on both a formal and informal basis. As such, prompt attention to areas of regular wear by the visiting public will ensure that the gardens remain looking attractive year-round, reducing the need for disruptive renovations or interventions later. Developing an annual lawn maintenance schedule that includes aerating and over-seeding of the formal lawns reduces compaction from foot traffic and maintains the desired well-kept aesthetic.

Mulching the garden beds annually to ensure 2-3 inches of organic mulch reduces the growth of weeds and the associated labor necessary to remove them. The mulch also provides a more formal definition between the garden beds and the lawn. Mulching and weeding perennial and display gardens is a perfect activity to engage volunteer gardeners. The skill level is low for these activities, but the time and effort is high.



© Janet Davis – All Rights Reserved

volunteer gardeners at the Toronto Botanical Gardens

Source: Google Images

The native and meadow plants maintenance should keep with the intent of having these plants to attract pollinating insects and birds. That is, unlike other areas of the Garden, these plants should be allowed to go to seed rather than being cut back once flowers fade. This differentiation of maintenance allows for visitor understanding of how various maintenance regimes will impact attracting and supporting wildlife throughout the year. Educational signage and events to raise awareness of the purpose and benefit of the gardening techniques should be promoted.

NATURALISTIC GARDENS

Care in these spaces present the unique challenge of looking naturalistic and informal while still requiring care to prevent nature from overtaking them and allowing them to continue as cultivated spaces.

Staff will need to regularly collect the natural building materials and re-stock the branches, bark and other objects necessary to ensure a quality experience for the young visitors. While ideally these materials would be gathered from on-site, a more efficient use of staff time would be to stockpile the materials from other park sites in a central location, and then occasionally bring materials to the Garden, ensuring there is ready availability of objects.

The wetland garden should seasonally be checked for invasive or undesirable species. Removal of these plants can either be by hand-weeding or appropriate application of herbicides labeled for use in a wetland situation. Regular monitoring of the boardwalk will be necessary to ensure there are no loose planks from use by pedestrians nor vandalism to the building materials from carving or etching. Annual maintenance will help reduce degradation due to UV light and water damage.

The informal lawn should be kept at a height taller than the more formal areas of the Garden, and should be mown less frequently. If bulbs are naturalized into the lawn, care should be taken to ensure that mowing does not begin for the season in the spaces until after the foliage of the bulbs begins turning yellow and senescing.



City of Raleigh staff raising environmental awareness at a park.

Source: City of Raleigh

Funding Sources and Preliminary Estimate of Probable Costs

Preliminary Concept Estimate of Cost

At this time, the City is expecting to need at least \$1 Million to build the David & Pauline Jarrell Center City Garden. Local funds, grants and other funding sources will be utilized. Depending on the final details, materials and plant material, this should be adequate to build the garden, especially if some of the construction is completed in-house. In addition, construction costs have escalated in the past few months due to material and staffing shortages but may change by the time the park is under construction. As the design is refined and detailed during permitting and construction documents, the design team will fine-tune a more detailed cost estimate. In particular, the layout, materials and extents of the boardwalk system will be refined and updated during permitting. The extents of the jurisdictional floodplain and wetlands will determine the final boardwalk design and placement.

The below cost estimate is a preliminary estimate based upon assumptions at this time (costs as of February 2023), but may change considerably as we move into detailed design. The cost estimate is using typical construction and material prices and rough order of magnitude costs based upon the preliminary design at this time. The estimated construction costs are in line with the City's expectations, but as the design progresses, the estimate will be updated and refined to ensure the project stays within the City's budget. Phasing or additional funding sources can be discussed more as the project is refined through construction documents.

Concept Estimate of Probable Cost Summary	
City Budget	\$ 1,000,000.00
Grading/Earthmoving	\$ 75,000.00
Site Clearing & Grubbing	\$ 25,000.00
Perimeter fence and brick wall estimate	\$ 200,000.00
sidewalk paving + plaza area	\$ 85,000.00
boardwalk	\$ 240,000.00
stream & wetland restoration	\$ 160,000.00
parking	\$ 75,000.00
stairs & railings	\$ 10,000.00
Site furnishings (allowance)	\$ 15,000.00
drinking fountains (3)	\$ 10,500.00
concrete retaining/seal walls (allowance)	\$ 20,000.00
irrigation - estimate	\$ 15,000.00
Plantings & soil amendments	\$ 150,000.00
erosion control & drainage (allowance)	\$ 50,000.00
educational signage (5)	\$ 15,000.00
Utilities - light, water (allowance)	\$ 15,000.00
Visitor Center/Restroom/Maintenance Bldg	TBD
subtotal	\$ 1,160,500.00
Mobilization (5%)	\$ 58,025.00
Contingency (20%)	\$ 232,100.00
Total estimated for concept plan	\$ 1,450,625.00

Potential Funding Sources

As a public park and a place to provide horticultural and native plant education, as well as a site with historically significant resources, there are various sources for funding that can be explored.

These potential funding sources include:

- North Carolina Parks and Recreation Trust Fund (PARTF)
- Federal Land and Water Conservation Fund (LWCF)
- EPA Environmental Education Grants
- The Stanley Smith Horticultural Trust
- Urban Agriculture Resilience Program (US Botanic Garden and American Public Gardens Association)
- Institute of Museum and Library Services (IMLS) - numerous grants
- American Academy of Dermatology Shade Structure Grant
- Annie's Grants for Gardens
- Garden Club of America
- Herb Society of America Grants for Educators
- National Science Foundation (NSF) Grants
- National Trust Preservation Funds
- Therapeutic Garden Grants (the National Garden Bureau)
- U.S. Bank Community Possible Grants
- National Park Service: *Save America's Treasures Grant Program*



National
Science
Foundation



INSTITUTE of
Museum and Library
SERVICES



Conclusion

The David & Pauline Jarrell Center City Garden has the opportunity to be a first-class botanical garden/arboretum/public park destination for both residents and visitors alike. Its location near downtown businesses, a residential neighborhood, a public library, the courthouse, and an elementary school provides an ideal site to provide a respite in the midst of the city. This park will provide unique garden spaces with opportunities for natives, adapted plants, wildlife habitats, pollinator species, a nature play area, and wetland plants. The garden will be a perfect place for children to learn about nature and the history of the site. Educational signage throughout the garden will provide plant and historical information for visitors. Winding paths will provide lovely places for families and friends to stroll, expansive meadows will provide places to picnic and linger, and more formal gardens and lawns will provide places for small events.



Tulsa Botanical Gardens



Cleveland Botanical Garden



Coastal Maine Botanical Gardens



Casa de Herrero, Santa Barbara

Precedent Images that resonated with the stakeholders at the public meeting show seating within a perennial garden, a smaller scale fountain with plantings, wetland plants with a small fountain, and a formal lawn with a pergola and shrubs.