



Holder-Wright Farm and Earthworks

Site Master Plan, November 2011



Prepared By:



Acknowledgements



City of Dublin

Fred Hahn
Laura Karagory
Matt Besecker
Sara Ott

Holder-Wright Park Visioning Committee

Joan Harless
Stephanie Harless
Janell Thomas
Randy Roth
Paul Gardner
Jules Angel
Jarrod Burks



Consultant Team

Floyd Browne Group

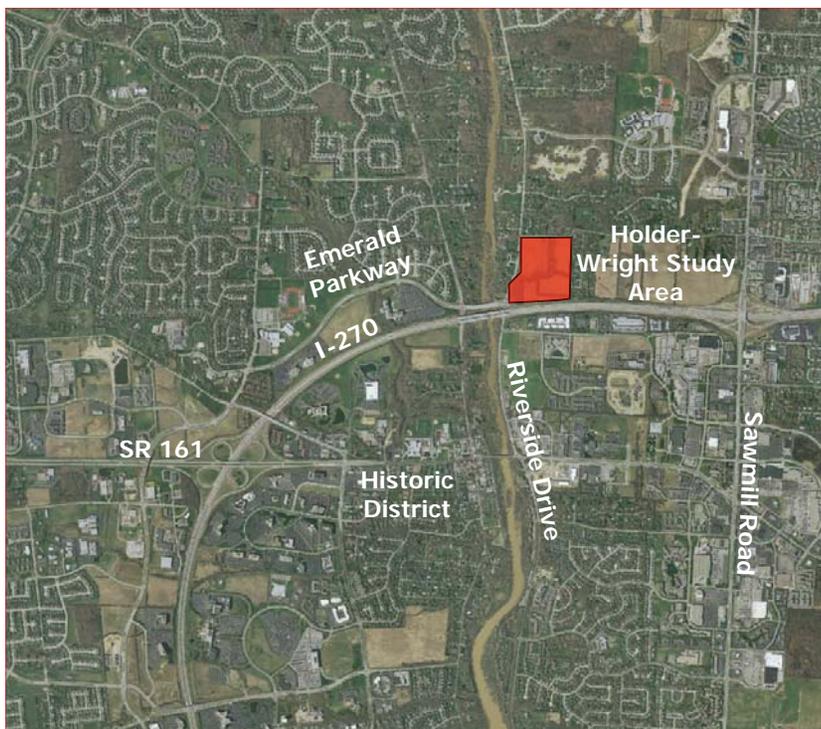
Matt Simpson, RLA, LEED AP
Andrea Smith, ASLA
Gary Schmidt, ASLA, AICP

3769 Columbus Pike
Delaware, Ohio 43015
(740) 363-6792



Architectural Renderings

The Arter Company



Vicinity Map

Introduction

The plan for Holder-Wright Park will preserve and showcase the ancient earthworks, farm house and natural features that are a significant part of Dublin's history. As park visitors walk the trails that meander through the site's restored meadows, they will view the ancient ceremonial mounds and learn about the archaeological, natural and historic features from the park's informational signage. The Holder-Wright home will be renovated to its historic stature, and will serve as an interpretive center for the entire park. In addition, an interactive demonstration earthwork, children's natural play area and observation deck overlooking the rugged terrain of Wright Run will be constructed to enhance the educational and recreational focus of the park. Visitors travelling by car/bus will access the park off of (future) Emerald Parkway, which will provide a parking area, restrooms and an orientation space for park users before they cross the creek through the woods that form the gateway to Holder-Wright Park.

History

The Holder-Wright Farm and Earthworks has been a site of interest for the City of Dublin, Ohioans and Midwesterners for many years. Some of the oldest references about the site date back to the 1880s. This is due to several significant features of the site. The first is the existence of the "ancient works near Dublin" or the Holder-Wright Works. These prehistoric mounds consist of three geometric earthworks and five burial mounds and are considered to belong to the Middle Woodland period dating to 200 B.C.-A.D. 400. Since first mapped in the 1880s, numerous archaeological investigations have occurred. Professional excavations were conducted in 1922 and 1961 and revealed abundant chipped stone flakes, fireplace, human bone piles and several post molds for presumably a structure. Due to disturbance by farming activities, several of the mounds are difficult to see with the untrained eye. However, because of their excellent condition below plow depth and significance as one of the few remaining prehistoric community centers in the state, this site has great interpretive and archaeological opportunities.*

*A report on the Holder-Wright Earthwork Complex, Perry Township, Franklin County, Ohio By William S. Dancy, Ph.D. June 5, 1997

In addition to the earthworks is the Holder-Wright Farmhouse. The site was originally settled by Joseph Ferris in 1818. It is believed that in 1820 he built the first framed house in the area, with all others being cabins. Through the years, there have been numerous additions to the house, however the original footprint remains evident by the stone foundation, original wood flooring, horse hair plaster walls and hand-sawn beams and joists in the attic. Because the farmhouse is one of the few remaining examples of architecture from the early 1800s, it offers terrific opportunities to interpret Ohio's early farming history.

And lastly, Wright's Run, the creek located south of the earthworks and farm house offers the opportunity to look back into geological time. There are several significant features to the creek including several waterfalls, a stone arch and sheer cliffs that fall approximately thirty feet to the stream below.

Site Location

Holder-Wright site is located approximately one mile northeast of the historic district Center. The site is accessible by Riverside Drive to the west, Bright Road to the north and Grandee Cliffs Drive to the east. The Scioto River is located just west of the site and scenic Wright's Run (Billingsly Creek) runs through the site. As Emerald Parkway is extended, a pedestrian trail is planned along with the parkway that will provide connection to Dublin's numerous other parks and trails.

Target Audience and Facility Development

Problem Statement

Floyd Browne Group was commissioned by the City of Dublin Parks and Open Space Division to provide site design services for the Holder-Wright Farm and adjacent parcels. The team was charged to develop programming, master plans, implementation plans and construction cost opinions for the park complex. Additionally Floyd Browne was tasked to provide concept plans for the planned office space located between I270 and Wright's Run.

Prior to the selection of Floyd Browne, a visioning committee had developed a preliminary set of goals and objectives for the study area. A list of desired elements, Bright Road Area Plan and historic and archaeological background information was provided as the basis for refinement during this design process. An initial list of potential activities was developed including peaceful walkways, mound restoration and archaeology areas, habitat preservation and restoration, native American and pioneer interpretation, outdoor learning labs, and picnic areas.

Target Audience

The visioning committee made it clear in the work sessions that the proposed facilities should communicate to a broad and diverse target audience. This park is part of a large park system that will draw visitors who explore Dublin's recreational amenities. In addition, it will also appeal to specific user groups who choose it for its unique natural and cultural resources and for its educational opportunities. Such a diverse and broad audience requires an equally diverse range of activities.

Facility Development

The site's natural and cultural resources have played a very significant role in determining facilities for the site and their site selection. Upon meeting with the Visioning Committee to discuss opportunities, constraints, vision and thematic development, several goals for the park were identified. The specific goals to incorporate into the activity program, interpretive design, and site features include:

- Demonstrate the value of the land and illustrate the strong connection that the native Americans, early Americans and Holder-Wright Family had on this site.
- Help visitors understand, enjoy, appreciate the historic significance of the site and develop respect for their environment.
- Implement environmental improvements that mirror the sustainable culture of Native Americans and early pioneers.
- Provide an interpretive trail that highlights the numerous natural and cultural features of the site.



Interpretive Sign



Junior Archeologist Programs



Seasonal Guided Hikes

Site Description



KEY

1. Holder-Wright Farm House
2. Garage
3. Silo
4. Northeast Circular Earthwork
5. Central Square Earthwork
6. Southwestern Circular Earthwork
7. Krumm Mound (approximate location)
8. Ferris Cemetery
9. Wright's Run

Site Description

The project study area is northeast of Historic Downtown Dublin and is bound by Riverside Drive to the west, Grandee Cliff's Drive to the East, Bright Road to the north and I-270 to the south. The total acreage of the project study area is 47.1 acres with the eastern 21.4 acres being owned by the City of Dublin and the western 25.6 acres privately owned. For the purpose of this project, all three parcels will be included in the master planning of the site.

The Wright-Holder house is centrally located at the highpoint of the site overlooking Wright's Run to the south and farm fields to the east and west. In addition to the home, there is a block garage and small metal silo. Located to the north and west of the farmhouse are the prehistoric earthworks. There are four known earthworks on the site. They are the central square earthwork, northeastern circular earthwork, southwestern circular earthwork and Krumm mound.

Approaching the site from Riverside Drive, the farmhouse, earthworks and Wright's Run are hidden from view due to the rising topography. However, once at the farmhouse the site offers 360 degree views. The relatively dense vegetation along Wright's Run buffers views and noise between the primary park area and I-270, future Emerald Parkway and future office development to the south. Generally the site has rolling topography with gentle swales draining toward the Wright's Run or the Scioto River.

The site falls within the City of Dublin's Bright Road Area Plan, which calls for a mix of land uses in the vicinity including; parkland, standard office and medium density residential. Recommendations in the Area Plan that impact the project study area are:

- The preservation of the Holder-Wright Works
- A bike path connection through the park to Grandee Cliffs and Emerald parkway
- Restricted access to Riverside Drive by creating a cul-de-sac at Bright Road
- The extension of Emerald Parkway through the southern portion of the site
- Development of planned office outlots along Emerald Parkway
- Preservation of Ferris Cemetery area
- Protection of Wright's Run stream corridor and ravine and providing a 200' scenic setback along Riverside Drive

Existing Buildings



Silo

- The existing silo is an interesting architectural element to the site and should be preserved as part of the visitor experience and possible interpretive opportunity.

For additional information see: A Feasibility Study for The Holder-Wright House, Prepared by Schooley Caldwell Associates
July 2011

Farm House and Yard Area

- The Holder-Wright House represents one of the oldest surviving residential structures in the area. It is believed that this house has the significance of being the first frame built home in the area (others being log cabins).
- Several significant features of the original home include; walls built with one inch lath and plaster with horse hair, dry laid limestone foundation walls, timber framing in the basement, and hand-sawn beams and framing in the attic.
- The original structure has great potential to be restored and used as an interpretive center that highlights this important piece

of Dublin's History and early settlement in the area.

- Over the years, additions have significantly increased the size of the house. Due to the lack of historical significance of the additions, it is recommended that they be removed and the home be restored to its early 20th century configuration.
- Restorations may include space for Native American and early American heritage displays, kitchenette and small office space.
- The overhead electric line should be removed and buried.

- Healthy shade trees should be preserved and protected.
- The lawn area adjacent to the house likely contains archaeological remains from the farm. Where possible, site disturbance should be limited to previously disturbed areas.

Block Garage

- This is a modern block garage building with a second story loft.
- The garage is recommended to be removed due to its lack of historical significance, long-term maintenance cost and no defined purpose in the park.

Holder-Wright Earthworks



Southwest Circular Earthwork

- This is the most easily recognizable earthwork and is located directly north of the farm house.
- The earthwork measures approximately 160' in diameter and consists of an enclosure, interior ditch and burial mound.
- The western section has been leveled by farming, but much of the eastern portion is relatively intact and offers great interpretive and archaeological opportunities.

Central Square Earthwork

- This is the largest earthwork on the site and is approximately 1.4 acres in size. It includes a square enclosure and burial mound.
- Due to leveling caused by farming and the overall large scale of the space this earthwork is difficult to visually identify
- To increase interpretive opportunities and to help visitors identify the earthwork, the use of non-invasive grasses is recommended to help define the grand scale of the space and call attention to the earthwork. Grasses will be selected that have contrasting color, texture and height from surrounding lawn areas.

Northeast Circular Earthwork

- This earthwork is located in the far northeast corner of the site. Approximately half of the enclosure is located in the park with the other half being on private property.
- The earthwork measures approximately 120' in diameter and consists of an enclosure and interior ditch.
- Similarly to the central square earthwork, this site is also difficult to identify due to leveling caused by farming.
- To help visitors identify the earthwork, the use of non-invasive grasses is recommended to call attention to the space. Grasses will be selected that have contrasting color, texture and height from surrounding lawn areas.

For additional information see: A report on the Holder-Wright Earthwork Complex, Perry Township, Franklin County, Ohio By William S. Dancy, Ph.D. June 5, 1997

Wright's Run



Wright's Run

- Wright's Run (also known as Billingsly Creek) flows east to west toward the Scioto River and divides the site into two distinct areas. It also serves as a logical dividing line between the proposed parkland to the north and future office development to the south.
- This scenic portion of the creek has several waterfalls, a stone arch, high cliff walls and caves.
- Site development should ensure that the stream corridor and woodland vegetation is protected and preserved as much as possible.
- There is an opportunity to tell the story of Dublin's geological history, the stream's morphology and importance of waterways.
- Due to the high vertical cliffs on the western portion of the creek, visitor controls such as timber fencing is recommend to reduce the potential of visitors falling off the cliffs.
- Invasive shrubs have taken over much of the stream corridor. Removal of the invasives should be completed to open views to the scenic stream and to increase the opportunity for native vegetation to reestablish.

Site and Activity Programming

The Floyd Browne Group team used input and recommendations from the City and Visioning Committee during the concept development process to identify interpretive and site program elements. Key messages that the team expressed were to preserve the existing Hopewellian Earthworks, utilize the farm house as an interpretive center and develop the site in an environmentally friendly manner. Below are the primary design recommendations:

- Retain the existing farm house as a focal point of the site. Recondition it so that it allows public access but doesn't detract from the historical significance of the structure. Provide an adjacent outdoor classroom space for informal gatherings and special events. Remove the existing detached garage due to its lack of historical significance, no defined purpose in the park and long-term maintenance cost. Maintain the existing silo for its charm and potential interpretive opportunities.
- Preserve the existing earthworks. Work with local archaeological groups to further investigate the site and provide a real world archaeological outdoor classroom for OSU and City of Dublin students. Utilize noninvasive plantings, stone edging and other means to highlight the earthworks that are difficult to detect with the untrained eye.
- Provide an interpretive trail system that can be self-guided or used during guided tours. Provide trailside displays at points of interest such as the farm house, earthworks, Wright's Run, Ferris Cemetery and at the demonstration earthwork. Provide Quick Response Codes or web links coordinated with trail markers to highlight these features of the site. The trail system should follow the contour of the land and be as inconspicuous as possible to minimize the affect to the natural surroundings and to reduce archaeological impacts. Along the trail, provide wildlife habitat enhancements such as meadow areas, restored wetlands, woodlands and shrub plantings.
- Partner with Historic Society and/or OSU to provide periodic child and adult educational opportunities and programs that focus on reconnecting the public back to the land. Demonstrate how Native Americans, Early Americans and the Holder-Wright family had a strong connection to the site. This could include programs such as: Hopewell Discovery Day, Junior Archaeologist Programs, Ohio's Farming Heritage Display, and Pottery Demonstrations to name a few.

- Provide passive recreational opportunities for visitors who are visiting the site for its recreational aspects. Ensure park improvements such as shelters, overlooks and pedestrian bridge are in keeping with the architectural style and simplicity of the farm house.
- In planning the office development on the southern portion of the site, ensure that design standards are established that encourage sustainable design principles that reduce potential negative environmental impacts to the park development such as: energy efficient buildings, minimal disturbance to the riparian corridor, use of bioswales, dark sky lighting and pervious paving.

Visitor Experience

The following is a graphic tour of the proposed improvements to the site using plans, sketches and images that demonstrate the design intent. The tour begins at the visitor orientation space and proceeds through the park. Descriptions of specific activities, exhibits and program items are provided. A plan view with descriptive legend is included to give an overview of the entire development area.



OSU Field Research Site

Holder-Wright Park Master Plan

LEGEND

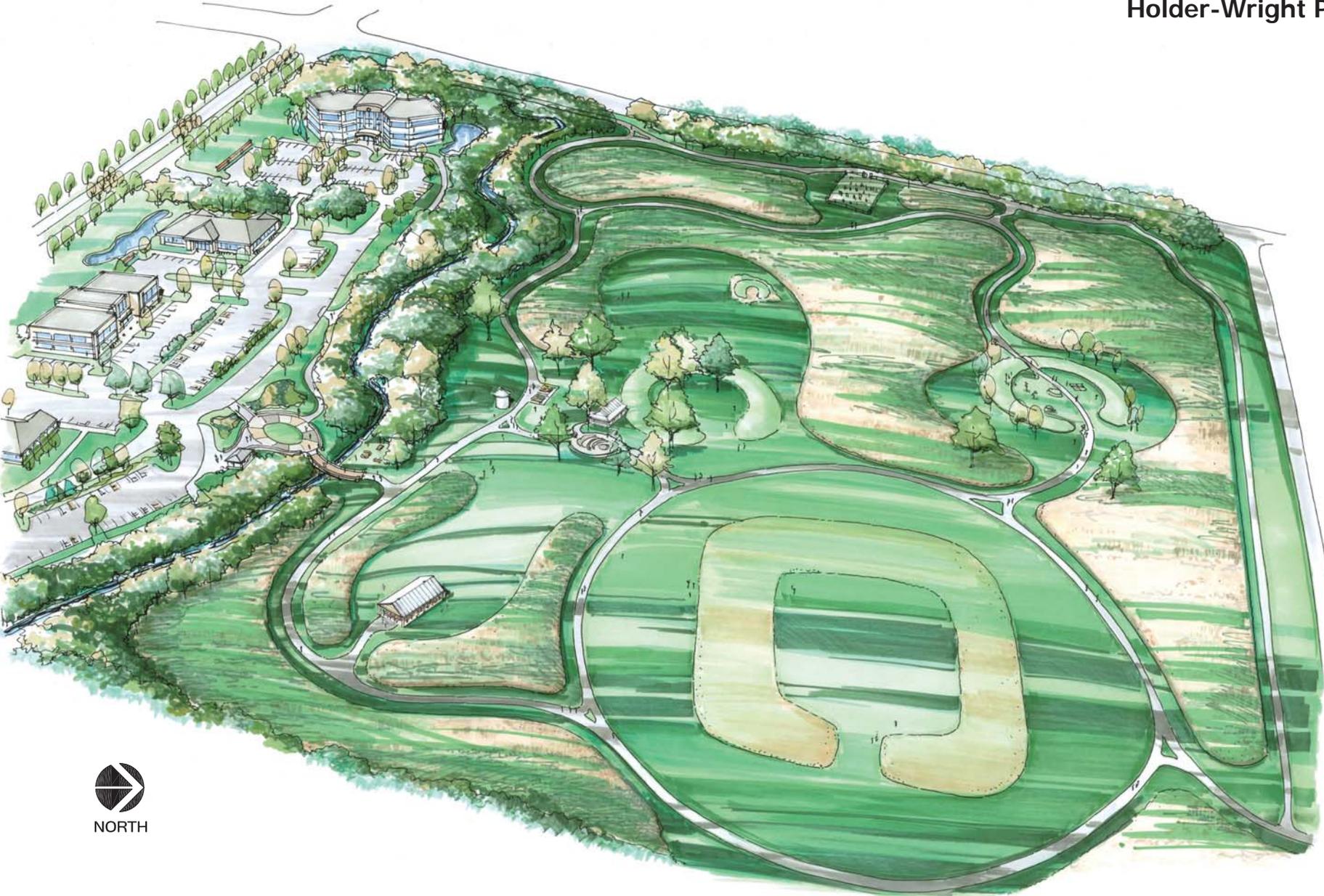
1. Entrance Drive
2. Visitor Orientation Space
3. **Planned Office Development**
4. Natural Play Area and Pedestrian Bridge
5. Interpretive Trail
6. Multi-Use Trail
7. Interpretive Center and Outdoor Classroom Space
8. Picnic Area/Open Lawn
9. Existing Earthwork
10. Habitat Restoration Area
11. **Demonstration Earthwork**
12. **Restored Ferris Cemetery**
13. Creek Overlook
14. **Demonstration Garden**



The goal of the master plan is to guide development of the park in a way that provides amenities and attractions to visitors interested in both the natural and cultural resources of the site as well as the recreational aspects. Included in the plan are areas that focus on the archaeological features of the site such as; the interpretive center and outdoor classroom, existing earthworks, Ferris Cemetery, and demonstration earthwork. For the casual visitor, there are picnic areas, shelter, creek overlook and habitat restoration areas.

Linking the numerous proposed amenities is an interpretive trail system that meanders through the park closely following the hillside contours. The rustic gravel trail offers an up close view of Wright's Run, meadows, reconstructed Ferris Cemetery, farm house and earthworks. In addition to the interpretive trail, there is a multi-use asphalt trail around the perimeter of the site that allows visitors an alternative way to access and view the site. At Wright's Run, there are plans to remove invasive shrubs and weeds and replant with hardy natives to open views to this scenic creek and provide additional wildlife habitat. Just to the north of Wright's Run are two unprogrammed picnic/open lawn areas that will provide the casual visitors an opportunity to enjoy the site, sun bathe, play catch or have a picnic. Within the picnic area will be a rustic shelter that provides an informal place for family gatherings or a quick lunch. And adjacent to Wright's Run is a dramatic overlook that will give visitors a chance to see the waterfalls and view the geology of the area. On the southern portion of the site is a proposed office development. It contains approximately 70,000 square feet of office space. Highlights of this development include preservation of existing vegetation, pedestrian path system, stormwater bioswales and rain gardens.

Holder-Wright Park



NORTH

Visitor Orientation Space



As visitors come to the site, their tour will begin at the Visitor Orientation Space. This space is located on the south side of Wright's Run and will be incorporated with the office development. The parking area will accommodate approximately 30 cars and will be designed with bio-swales, rain gardens and native plantings to set the tone for this environmentally sensitive park.

The orientation space gets its inspiration from the Hopewell Culture's fascination with geometry and sculpting the land. The oval shaped central gathering spaces with raised grass mound and curvilinear walkways is an area for visitors to be introduced to the park's archaeological, natural and cultural resources. Interpretive, informational and directional signs will be used to highlight the sites many attractions, direct visitors to the various destinations, advertise a seasonal hike series and post upcoming special events.

To unify the space with the rest of the park, construction materials will be repeated such as; the use of field stone foundations on the restroom facility and seat walls, restroom roof materials will match the farm house and colored, textured concrete paving surface will be used to reinforce the space and add interest to the ground plain. In addition, sustainable site elements such as rain gardens and native plantings are planned to reduced the negative impacts that parking lots and development have on the site and Wright's Run.

Interpretive Center and Outdoor Classroom



The tour continues as visitors walk across the pedestrian bridge over Wright's Run and enter the main park area. Along the path visitors pass by a natural play area at Wright's Run, the existing silo and demonstration gardens. The natural play area offers visitors a chance to splash in Wright's Run, search out aquatic life and learn about the importance of our waterways. And the demonstration gardens offer visitors insight into native and early American agriculture. Once at the top of the hill, visitors are introduced to the Holder-Wright Farm House and adjacent Hopewellian earthworks.

The focal point of the interpretive center is the Holder-Wright Farm House. Because of the original structure's historical significance, the house is planned to be restored to its approximate early 1900s configuration. It will contain lecture rooms for small events and will display early American and Native American artifacts and interpretive elements.

Outside of the home is an outdoor classroom space with interpretive signs that help visitors better understand and appreciate the home and earthworks. The classroom space is located on the former gravel farm lane and is oriented toward the west so visitors can easily view the historical elements. To add interest to the outdoor classroom space, specialty paving (colored concrete in the shape of a bird's claw) is used to provide an opportunity to interpret the Hopewell peoples interest in art and decorations. The classroom's circular design with low seat wall provides a gathering space for seasonal guided tours, place for visitors to listen as archaeologists or historians tell the story of this site or a place for children to search for replica artifacts at a junior archeologist program.

Demonstration Earthwork



Northwest of the farm house is the demonstration earthwork. This space will be constructed to illustrate to visitors what a typical Hopewell earthwork may have looked like in its original condition. The site was chosen due to its similar characteristics of the existing southwestern circular earthwork located next to the farm house. It is positioned on relatively level topography, offers views to the Scioto River valley and is far enough from existing earthworks that it doesn't compete with their interpretive potential.

Features of the demonstration earthwork include: its earthen enclosure, interior ditch, central mound and fire pit. There is also a cut-away at the south entrance so visitors can see, in cross section, how the mound was constructed and what was often buried inside. To further illustrate the site's archaeological significance, a demonstration archaeological dig area with interpretive signs will be constructed so visitors can better understand the archaeological process, techniques and what artifacts have been found at the site. As an added three dimensional teaching element, sculptural elements are placed in the enclosure helping visitors to recognize this park as an important ceremonial space.

Phasing Plan



Phasing Legend

- - - Visitor Orientation Space
- - - Interpretive Center
- - - Eastern Trail System
- - - Western Trail System (Subject to land acquisition)
- - - Perimeter Multi-Use Trail (Subject to land acquisition)

The Design Team and City of Dublin identified the following phasing plan and list of priority projects:

- Park Entrance Drive, Vehicular Parking, Visitor Orientation Space, Wright's Run Pedestrian Bridge.
- Farm House Renovation, Outdoor Classroom and Demonstration Garden.
- Eastern Trail System, Meadow Planting, Picnic Shelter and Lawn Picnic Area Seeding.
- West Side Trail System, Demonstration Mound, Wright's Run Overlook, Meadow and Lawn Picnic Area Seeding. (Subject to land acquisition)
- Perimeter Multi-Use Trails, Ferris Cemetery Restoration. (Subject to land acquisition)

Opinion of Probable Cost

| CITY OF DUBLIN HOLDER-WRIGHT PARK MASTER PLAN OPINION OF PROBABLE COST NOVEMBER 2011 | | | | |
|---|-------|-------|--------------|---------------------|
|  | | | | |
| DESCRIPTION | QTY. | UNIT | UNIT COST | TOTAL COST |
| Visitor Orientation Space | | | | |
| A. Misc. Clearing & Grubbing | 1 | ALLOW | \$5,000.00 | \$5,000.00 |
| B. Erosion Control | 1 | ALLOW | \$2,500.00 | \$2,500.00 |
| C. Entrance Drive | 500 | LF | \$300.00 | \$150,000.00 |
| D. Parking Lot | 1 | ALLOW | \$62,000.00 | \$62,000.00 |
| E. Stormwater Structures | 1 | ALLOW | \$14,000.00 | \$14,000.00 |
| F. Pedestrian Trail | 600 | LF | \$65.00 | \$39,000.00 |
| G. Pedestrian Bridge/Boardwalk | 95 | LF | \$850.00 | \$80,750.00 |
| H. Bridge Abutments | 2 | EA | \$10,000.00 | \$20,000.00 |
| I. Architectural Paving | 4,500 | SF | \$10.00 | \$45,000.00 |
| J. Seat wall | 500 | FF | \$80.00 | \$40,000.00 |
| K. Restroom Facility | 1 | ALLOW | \$92,000.00 | \$92,000.00 |
| L. Sanitary Sewer Service | 550 | LF | \$75.00 | \$41,250.00 |
| M. Water Service | 550 | LF | \$20.00 | \$11,000.00 |
| N. Bike Rack | 1 | EA | \$750.00 | \$750.00 |
| O. Interpretive and Directional Signs | 4 | EA | \$500.00 | \$2,000.00 |
| P. Stormwater Rain Garden | 1 | ALLOW | \$5,000.00 | \$5,000.00 |
| Q. Misc. Landscaping | 1 | ALLOW | \$10,000.00 | \$10,000.00 |
| Total | | | | \$620,250.00 |
| Contingency (15%) | | | | \$93,037.50 |
| CONSTRUCTION TOTAL | | | | \$713,287.50 |
| Interpretive Center | | | | |
| A. Misc. Clearing & Grubbing | 1 | ALLOW | \$5,000.00 | \$5,000.00 |
| B. Garage Demolition | 1 | ALLOW | \$4,000.00 | \$4,000.00 |
| C. Electric Line Relocation | 620 | LF | \$6.00 | \$3,720.00 |
| D. Erosion Control | 1 | ALLOW | \$1,000.00 | \$1,000.00 |
| E. Pedestrian Trail | 260 | LF | \$65.00 | \$16,900.00 |
| F. Architectural Paving | 1,200 | SF | \$10.00 | \$12,000.00 |
| G. Seat wall | 130 | FF | \$80.00 | \$10,400.00 |
| H. Demonstration Archaeological Dig Display | 1 | ALLOW | \$2,500.00 | \$2,500.00 |
| I. Interpretive and Directional Signs | 4 | EA | \$500.00 | \$2,000.00 |
| J. Picnic Tables | 3 | EA | \$1,000.00 | \$3,000.00 |
| K. Demonstration Garden | 1 | ALLOW | \$3,500.00 | \$3,500.00 |
| L. Misc. Landscaping | 1 | ALLOW | \$10,000.00 | \$10,000.00 |
| M. House Renovation (Per SCA Feasibility Study) | 1 | ALLOW | \$300,000.00 | \$300,000.00 |
| Total | | | | \$374,020.00 |
| Contingency (15%) | | | | \$56,103.00 |
| CONSTRUCTION TOTAL | | | | \$430,123.00 |

| CITY OF DUBLIN HOLDER-WRIGHT PARK MASTER PLAN OPINION OF PROBABLE COST NOVEMBER 2011 | | | | |
|---|--------|-------|-------------|---------------------|
|  | | | | |
| DESCRIPTION | QTY. | UNIT | UNIT COST | TOTAL COST |
| Eastern Trail System | | | | |
| A. Erosion Control | 1 | ALLOW | \$8,000.00 | \$8,000.00 |
| B. Pedestrian Trail | 2,300 | LF | \$65.00 | \$149,500.00 |
| C. Shelter (24'x44') | 1 | ALLOW | \$52,000.00 | \$52,000.00 |
| D. Picnic Table | 4 | EA | \$1,000.00 | \$4,000.00 |
| E. Interpretive and Directional Signs | 4 | EA | \$500.00 | \$2,000.00 |
| F. Bird Boxes | 3 | EA | \$100.00 | \$300.00 |
| G. Lawn Seeding | 3,300 | SY | \$1.00 | \$3,300.00 |
| H. Meadow Seeding | 13,000 | SY | \$1.50 | \$19,500.00 |
| I. Misc. Landscaping | 1 | ALLOW | \$10,000.00 | \$10,000.00 |
| Total | | | | \$248,600.00 |
| Contingency (15%) | | | | \$37,290.00 |
| CONSTRUCTION TOTAL | | | | \$285,890.00 |
| Western Trail System | | | | |
| A. Erosion Control | 1 | ALLOW | \$3,000.00 | \$3,000.00 |
| B. Pedestrian Nature Trail | 2,040 | LF | \$45.00 | \$91,800.00 |
| C. Hopewell Demonstration Earthwork | 1 | ALLOW | \$90,000.00 | \$90,000.00 |
| D. Observation Deck (15'x15') | 225 | SF | \$35.00 | \$7,875.00 |
| E. Timber Fence | 200 | LF | \$20.00 | \$4,000.00 |
| F. Interpretive and Directional Signs | 6 | EA | \$500.00 | \$3,000.00 |
| G. Bird Boxes | 3 | EA | \$100.00 | \$300.00 |
| H. Trailside Bench | 2 | EA | \$800.00 | \$1,600.00 |
| I. Picnic Table | 4 | EA | \$1,000.00 | \$4,000.00 |
| J. Lawn Seeding | 15,000 | SY | \$1.00 | \$15,000.00 |
| K. Meadow Seeding | 35,400 | SY | \$1.50 | \$53,100.00 |
| Total | | | | \$273,675.00 |
| Contingency (15%) | | | | \$41,051.25 |
| CONSTRUCTION TOTAL | | | | \$314,726.25 |
| Perimeter Multi-Use Trails | | | | |
| A. Riverside Drive Trail | 1,625 | LF | \$90.00 | \$146,250.00 |
| B. Bright Road Trail | 1,035 | LF | \$90.00 | \$93,150.00 |
| Total | | | | \$239,400.00 |
| Contingency (15%) | | | | \$35,910.00 |
| CONSTRUCTION TOTAL | | | | \$275,310.00 |