

hislefarm



2009 Master Plan

hislefarm

Hisle Farm · 3601 Briar Hill Road · Lexington, KY
LFUCG Division of Parks and Recreation



LFUCG
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT

DIVISION OF PARKS & RECREATION

HISLE FARM MASTER PLAN

FEBRUARY 2009

Prepared by:



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Executive Summary

Planning Process and Final Master Plan Summary

The Hisle Farm property is approximately 280 acres of rolling pastureland located five miles northeast of downtown Lexington, Kentucky. The land was deeded to the Lexington–Fayette Urban County Government (LFUCG) by Mr. and Mrs. Robert Hisle in 1989 to be utilized as public park space. Its location among large estates, horse farms and properties that have protected development rights (PDR properties) provides the context for the type of development that should occur. Neighbors of the park and friends of the late Mr. and Mrs. Hisle are conscious of how certain park activities like ballfields and lighting will affect the perception of safety, quietness and aesthetics of the surrounding rural character. In addition, the LFUCG Division of Parks and Recreation is aware of the opportunities to provide the public with more greenspace and unique programs that are currently unavailable.

The main components of this master plan are in response to the requests of the public and the Parks Advisory Board, who gathered during the Comprehensive Master Plan Update planning process. They build on a theme of connecting people to nature and farm culture through equestrian trails, hiking trails, habitat reconstruction, gardening, archery, scout camping and interpretive areas; activities that were seen to be compatible with the surrounding context. Furthermore, their development will provide diversity within the programs that LFUCG offers through the Division of Parks and Recreation.

Perhaps the most requested yet controversial aspect of this master plan was to what extent equestrian programs would be offered. The existing horse barn and paddocks are in good condition and Division staff had requested that part of the lesson program be moved from Masterson Station to Hisle Farm. The master plan proposes the existing facilities as a place to supplement riding lessons or camps and not be their permanent or primary location. In short, *no equestrian programs will be moved out of Masterson Station*. Dedicating parkland at this location to a single use, such as equestrian activities, did not fit within the Division's overall vision. Although casual horseback riders will have an overt presence at this park, casual visitors without horses will be equally encouraged to explore the farm along the same trails.

Over 10 miles of trails are planned for this 280-acre site. The trails have been designed to introduce a variety of challenges and experiences to park visitors. Three trail types were identified in the master plan, including 1.5 miles of paved accessible trail, a four-mile main trail loop, and five miles of secondary trails. Equestrians will be allowed on the main trail loop and secondary trails and pedestrians will be permitted on all trail types.

During the planning process it was decided that the context of this park would be reserved for equestrian, pedestrian and outdoor learning experiences. Despite the desire for mountain biking trails, the expected density of visitors who will participate in passive activities, such as horseback riding and walking, may conflict with the higher speed activity of mountain biking. The Comprehensive Master Plan Update recognizes the need for mountain bike trails, and proposes instead to integrate them into several larger parks in the LFUCG park system.

Nature learning through interpretive exhibits and hands-on gardening is an element of this park that will attract visitors across many demographics. Existing barns, ponds, fencerows and mature trees provide the scenery of a working horse farm, and several areas are proposed for visitors to interact with the landscape. These include fishing piers, an ADA accessible garden, orchard, wetland, native grass and savanna habitats for wildlife observation and a Scout camping area.

A pavilion is proposed on the south side of the park near the orchard and garden. It will provide restrooms and an open air shelter in anticipation that this setting will attract company picnics, weddings, summer camps and other events that would take advantage of photo opportunities and a large, open, outdoor space.

The donation of this property is truly a gift to the entire Fayette County community and region. As such, the property will be developed with clear goals in mind that are sensitive to the cultural, environmental and social contexts that are unique to the site. The following report addresses the history, context and citizen input that guided the master plan.

Public Input

Two public meetings were held at Bryan Station High School on August 8, 2008 to note the opinions of the public. The first meeting was held for the neighbors of the park, or those living within a mile radius of the property. This meeting was held because development would likely have the most impact on their quality of life with regard to potential changes in traffic and use of the land. The second public meeting was held for the general public.

Similar comments were gathered from both meetings. They are summarized below and include desired park features, development issues and neighborhood concerns:

Desired Park Features

- Preservation of farm character
- Non-motorized trails
- Equestrian activities and programs
- Restoration of Bluegrass Savanna
- Reforestation areas
- Arboretum
- Bird sanctuary
- Educational and nature interpretation opportunities
- Expansion of Parks Divisions' day camp facilities and programs
- Archery
- Fishing
- Multi-use fields (open space, no lights)
- Space for Boy Scout and Girl Scout activities and outdoor programs
- Mountain bike trails

Development Issues and Neighborhood Concerns

- Disappearing character of the site
- Suitability for Briar Hill Road to carry increased traffic
- Railroad crossing
- Condition of the railroad bridge
- Increased noise and lights
- Vandalism to neighboring properties
- Long-term maintenance
- Funding

Two presentations of the preliminary master plan were given on a return visit on September 25, 2008. The first addressed the Parks Advisory Board and the second was given to the general public. Both audiences were generally agreeable to the proposed plan but provided some comments that would further contribute to the park's function.

Preliminary Master Plan Comments and Concerns

- Have at least 45 horse trailer parking spaces
- Add a wood rail perimeter fence to prevent runaway horses
- Add a control gate at the entrance
- Do not dedicate land exclusively to horses; do not remove lesson program from Masterson
- Charge a bridle fee for equestrian use
- Provide water and restroom facilities for the Scout camp
- Address potential traffic issues on Briar Hill Road
- Consider opening the front half of the property first, then the northern half of the property when the funding is available to replace the railroad bridge
- Why are there no mountain biking trails?
- Work in cooperation with conservationist to reestablish wildlife habitat
- Reroute trail that follows the western property line

A full list of comments from all public meetings can be found in Appendix B.

I. Goals and Objectives

The goals of the Hisle Farm master plan coincide with the goals of LFUCG's 2008 Parks and Recreation Comprehensive Master Plan Update, which are heavily focused on recreation programming. The Division of Parks and Recreation provides many opportunities for organized play in their parks, but desires more passive recreation opportunities, such as trails and nature observation, seen in parks like Raven Run and McConnell Springs. Hisle Farm presents an opportunity to provide much needed passive recreation opportunities that are unique from the existing park facilities in the Lexington-Fayette region. Furthermore, Hisle Farm offers the space and facilities to expand public horseback riding opportunities, which is lacking in the area.

Although the location of Hisle Farm does not increase passive recreation in the urban core, it does begin to balance park acreage in the northeastern quadrant of the county. Because of its short distance from downtown Lexington, it is still a viable option for camps and daytrips run by the Division staff. These issues are discussed in the 2008 Master Plan Update as elements that would diversify and thereby improve the services provided by the Division.

The Hisle Farm master plan addresses the bigger picture of the parks system by providing more passive recreation opportunities. The goals and objectives listed below are site-specific and respond to the surrounding culture and landscape, site observations, Division needs and public input.

Goal 1: Maximize the natural aspects of the site and the opportunities for park visitors to interact with or 'be in' nature.

Objectives:

- Provide trails that traverse a variety of habitats
- Provide areas where visitors can be surrounded by nature without views of structures or noise of traffic
- Provide diverse, natural areas
- Provide interpretive areas where visitors can interact with and learn from nature

Goal 2: Incorporate many activities without compromising the integrity of each experience.

Objectives:

- Create zones that are intended for different levels of use (i.e. heavy use, moderate use, light use)
- Keep louder, social activities separate from quieter activities
- Clearly design trails for their intended use and post context appropriate signs to notify people of proper use

Goal 3: Increase safety along Briar Hill Road.

Objectives:

- Close the entrance to the home along Briar Hill Road and limit access to the southwest entrance
- Perform a traffic analysis to determine if additional road signs or decreased speeds will be needed to prevent accidents

Goal 4: Protect neighbors from distractions of park activity.

Objectives:

- Limit development to activities that are relatively quiet and do not require heavy lighting
- Provide vegetative buffers and fencing along park boundaries

Goal 5: Preserve and promote the nature of the surrounding rural character.

Objectives:

- Incorporate horse trails for public riding
- Include gardening and other opportunities for hands-on, outdoor learning

II. Site Inventory and Analysis

Property Description and History

The 280-acre Hisle Farm is located in rural Fayette County, five miles northeast of downtown Lexington. The farm resembles the typical picturesque Kentucky landscape of open pasture, briar-filled fencerows, rolling hills and old barns. A railroad divides the property into a northern and southern section. The northern half of the property is approximately 100 acres and the southern half is 180 acres. The rail line has been active for the past 98 years, at least; a historic bridge that provides access for agricultural use was built by the American Bridge Company in 1910 and connects the two sides of the property.

A second historic component includes the remnants of a home site on the northern half of the property. The existing vegetation pattern is the only indication that such a place existed, but it raises opportunities to educate visitors on 'reading' the landscape. From this point on the property, one feels as if they are in the heart of the surrounding rural fabric of the Kentucky Bluegrass Region.

Large horse farms with characteristic mowed pastures, mature trees and wood rail fences are a unique experience to many people, including those who live in downtown Lexington. The PDR designation on some of the adjacent farms enables them to remain intact, preserving the rural character and lifestyle for generations to come. The PDR properties benefit Hisle Farm by providing a unique rural experience for visitors and the opportunity to establish the park as a destination point.

In addition to raising livestock, Mr. Hisle used the land to grow and harvest hardwoods, sometimes using the wood to make furniture for his home. An area of large trees on the northern half of the property that is surrounded by a fence is thought to have been planted by Mr. Hisle or protected as young forest. Several large specimen trees exist on the property, including a large ash tree on the northern half of the property.

The sensitivity and stewardship that the owners practiced with this land has been engrained in the minds of friends and neighbors. They had a great love for nature and shared those values with others. That this land be used for anything other than fostering those values would be contrary to the Hisle's desired use of the land. The deed states that the Hisle's desire was to preserve "the character of the land" and provide a place "for the general public to enjoy its scenic beauty in perpetuity."

Zoning

The Hisle Farm and those properties surrounding it are zoned A-R (Agricultural Rural). The zoning requirements state the intent of this zone is to "...preserve the rural character of the agricultural service area by promoting agriculture and related uses, and by discouraging all forms of urban development except for a limited amount of conditional uses." This zoning prevents the development of non-commercial recreational facilities, such as baseball fields, soccer fields, polo fields, swimming pools, tennis courts and the like. In addition, 10,000 square feet is the maximum size for allowable use structures.

Both neighbors and the public were outspoken in their desire to keep development of the park within the context of adjacent land uses. Obtrusive lights and loud, organized sport activities are not compatible with this area of Fayette County.

The surrounding PDR protected properties, shown in figure 2.1 required the landowner to enter into a legal agreement prohibiting further development or dividing of land in order to preserve the character of the land for future generations. Therefore, developing uses in conflict with the surrounding character would not be compatible with the goals of the PDR program.

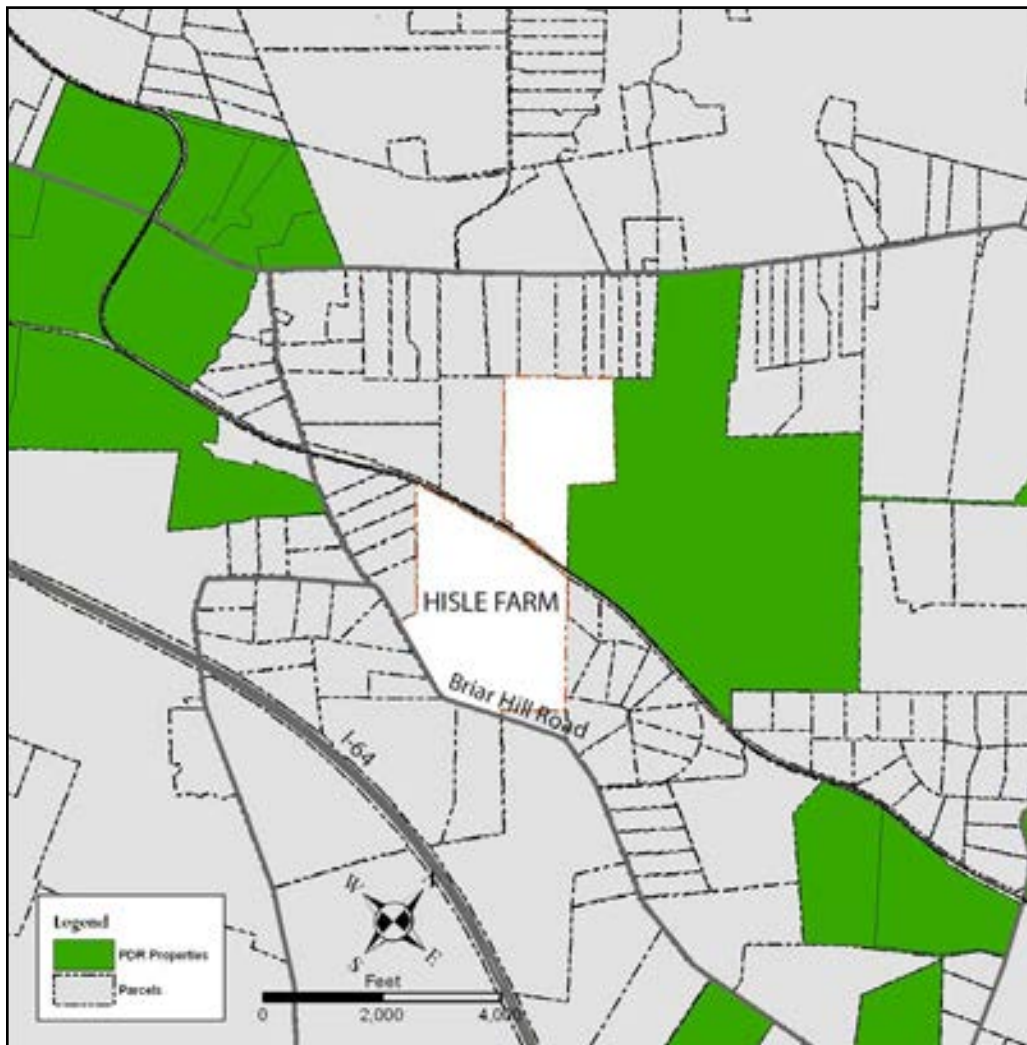


Figure 2.1: PDR (Property Development Rights) Parcels Near Hisle Farm

Access and Circulation

Vehicular

Hisle Farm is only accessible to vehicles from Briar Hill Road. The home and nearby sheds are accessible by a private drive on a blind curve, but a second access point to the farm is located at the southwest corner of the property. This gated drive provides access to barns and pastures along a gravel road. This drive is the safer of the two access points, especially for larger maintenance vehicles and horse trailers.

Concerns were raised by the public during the master planning process of potentially dangerous traffic situations on Briar Hill Road when the park is open to visitors. Increased traffic volume and horse trailer traffic, design capacity, speeding and the adequacy of existing signage were the primary concerns. To mitigate potential problems, the master plan limits vehicular access to the southwest entrance and recommends that the entrance to the home be closed because of the limited visibility. A traffic assessment of Briar Hill Road should be conducted to address the potential need for increased signs, visibility and reduced speed. Should there be issues that need to be addressed, all methods of increasing road safety should be attempted *before* widening. Road widening is not always necessary, nor is it the only option for safer roadways. Studies have shown that widening roads increases speeding while the presence of large trees along the roadside reduces speeding and aggressive driving.

Pedestrian

Although vehicular circulation is well-defined along the gravel drive and around the home, there is no clear indication of pedestrian or vehicular circulation within the farm. The nature of the farm is not one where defined interior access is provided other than interior fence lines and a single farm road. However, successful parks require clear circulation patterns in order to preserve the integrity of trails and natural habitats, separate vehicles and pedestrians, and promote safety throughout the park. Currently, the farm offers large areas of open fields that create little definition to guide pedestrians through the park. Without existing trails, there are many opportunities to develop a pedestrian and equestrian trail system with sustainable practices that create unique experiences for the park visitor, promote healthy habitats, and safe interfaces between pedestrians and vehicles.

There is potential for Hisle Farm to be accessed by neighbors along an equestrian easement that an adjacent landowner has created on his property. Nearby residents requested a locked gate, by which they could access the property without having to trailer their horses or ride along Briar Hill Road. This access point could connect seamlessly into the proposed trail system.

Accessibility applies to routes by which visitors get from point A to point B, and also to providing levels of skill for all demographics. In order to provide that range of experiences, the proposed trails will vary in their surface and slope. Trail surfaces are selected to respond to the site conditions, and proposed frequency of their use, as well as their user group. Surface type must also be chosen on an aesthetic basis; paved trails are acceptable in high-use areas but not for low-use footpaths through wooded areas, just as natural surface paths are not ideal for primary ADA access. Where ADA accessibility is needed in moderate or low use areas, a trail surface of reinforced gravel fines under 5% slope provides adequate access and sensitivity to the surrounding character. Although maintenance can be an issue for natural surface trails, there must be a balance between function and aesthetics to preserve the character that the park is intended to convey.

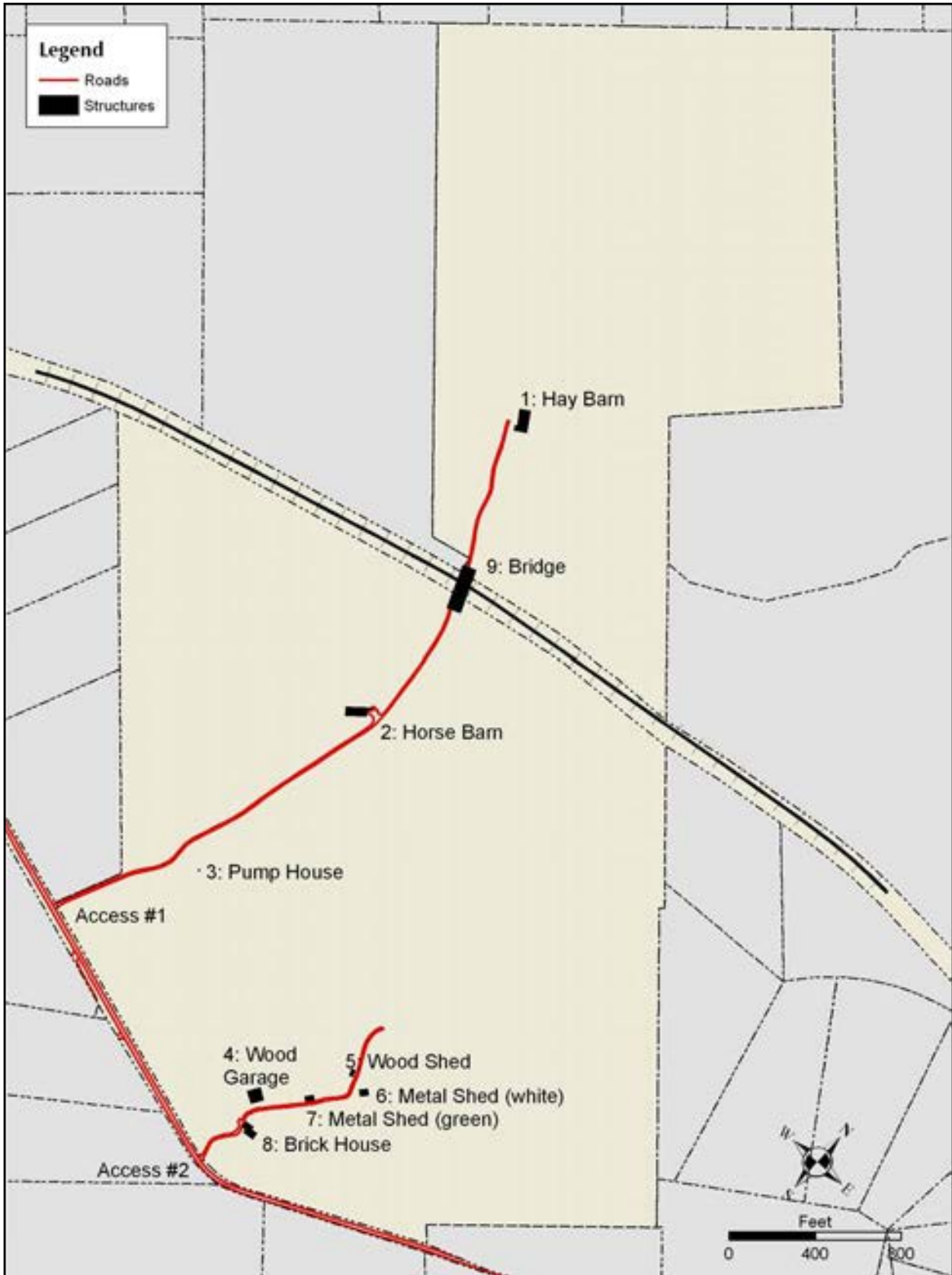


Figure 2.2: Access, Circulation and Existing Structures

Structures

Figure 2.2 serves as a reference to the nine structures found on the property. Seven of these structures are found to the south of the railroad tracks, one hay barn is located on the northern half of the property and the railroad bridge connects the two halves of the farm. Four of the structures are existing wooden barns, typical of the mid-20th century and the others include metal sheds, a brick home and very small storage huts. The condition of the structures varies.

Although the old wooden barns contribute to the nostalgic agricultural character of the site, the master plan proposes different treatments of the structures depending on their physical condition. Some of the existing structures present safety and long-term maintenance concerns judging by their outward appearance. The recommendations of this plan assume that the repair and upkeep of some barns is not feasible or cost effective. However, a detailed analysis of the significance of these structures should be completed by an architect or historian for further recommendations.

Structure 1

Although the single 60'x100' barn north of the rail line serves as storage for hay, its poor condition is evident; half of the structure has fallen down through years of use and little maintenance. In the interest of lifetime maintenance of the park and its facilities, as well as the safety of its visitors and rehabilitation costs, it is recommended that the barn be taken down. However, the materials from this structure should be preserved and reused within the park. The large size of the barn will produce a considerable amount of material that can be used to repair or construct proposed structures within the park. Figures 2.3 and 2.4 illustrate the size and condition of this barn.



Figure 2.3: North facade of hay barn (Structure #1)



Figure 2.4: Northwest corner of hay barn

Structure 2

A second large (100' x 40') barn stands just south of the railroad bridge. Historically it was used as a tobacco barn, but has been adapted to accommodate 11 horse stalls and a small office space. This structure is in good condition and sits on a small lawn among mature hickory and walnut trees. It is easily accessible by the main gravel drive that runs north from Briar Hill Road across the length of the property. It is recommended that this barn be retained as a stable and maintained in its existing condition, or improved as the park evolves in order to accommodate equestrian lessons and camps that will supplement those offered at Masterson Station. Should lessons be held here, there will be a need for additional tack space. A small outbuilding could be built nearby or the barn can be adapted to accommodate for the needs of a lesson program.

Figures 2.5 through 2.8 are images of the barn and its setting. This attractive structure contributes to the character of the farm and serves as a focal point from many places on the property. It is a major component of a successful master plan because of its aesthetic and functional qualities.



Figure 2.5: East facade of horse barn (Structure #2)



Figure 2.6: Stalls in horse barn



Figure 2.7: Detail of east facade



Figure 2.8: Mature trees and lawn on south side of horse barn

Structure 3

A small 7'x7' wood shed is located along the main drive near the front of the property and is constructed of the same material as the two barns. The structure is in fair condition, but does not currently serve a purpose except for the attachment of electric service and a meter head. If this meter is necessary after development of the park, it should be relocated, but otherwise removed if it is no longer needed. The shed itself should be removed and the materials salvaged for reuse within the park. Figures 2.9 and 2.10 show the structure and the attached utilities.



Figure 2.9: Pump house (Structure #3)



Figure 2.10: Electric meter should be removed or relocated

Structure 4

This wooden shed sits closest to the house and is currently used as a garage and storage space for maintenance equipment. Its condition is degrading and, if left standing, could become a maintenance and safety issue. This structure should be removed and the material used in future park structures. Figures 2.11 and 2.12 show this shed in its current condition.



Figure 2.11: East facade of shed (Structure #4)



Figure 2.12: Existing use and condition of shed is not acceptable for park use

Structure 5

The final wooden structure appears to be in fair condition. However, its location and character fit within the master plan of the property. Preserving the character and culture of this farm that is found in the existing wooden structures is especially difficult because the Division must be concerned with public safety and long-term maintenance. A substantial amount of renovation would be needed on most structures to justify long-term maintenance.

However, relative to the other wooden outbuildings, this one is small but large enough to accommodate small groups and equipment. It sits near a tree line on a slight slope within a proposed orchard. If it is renovated, this structure can stand as a destination point for horticulture programs and interpretive learning. It can be renovated with the materials collected from other barns on the property and easily adapted for ADA accessibility because of its location along the proposed paved trail. Figures 2.13 and 2.14 illustrate the character of this shed. Preserving this structure through renovation and adaptive reuse would guarantee that visitors experience some aspect of the farm's original character.



Figure 2.13: North facade of shed (Structure #5)



Figure 2.14: South facade of shed; salvaged materials can be used to renovate this small structure in order to preserve an element of the original farm character

Structure 6 and 7

While the hay barn and the horse barn are used for equestrian needs, other structures provide space for equipment and tools for the maintenance of the farm, home site and garden. Two metal sheds, thought to be constructed in the 1980's, are located by the old orchard and garden at the front of the property. One measures 41'x31' (Figure 2.15), the other, 33'x28' (Figure 2.16). They are in good condition and can be utilized for many park programming activities and storage needs. The master plan proposes these sheds to be utilized for the proposed archery and gardening programs. They are large enough for storage of the equipment required to program these two activities, and also to run programs within them during inclement weather. With modest modifications they can also function as spaces to organize camps before entering the field.

While these sheds are newer than the wooden structures on the property, they reflect the evolution of the farm through changes in building practices and thus, the farm's history. They are extremely valuable to the park master plan from a functional standpoint, but could be improved aesthetically through matching the facades' color to fit the theme of the park. Coordinating the color of their exterior is a simple treatment that can have a dramatic effect on the overall coherence of the park. Their location and high visibility at the front of the property necessitate some kind of aesthetic treatment.



Figure 2.15: Southwest facade of the 41'x31', white, metal shed (Structure #6); this building is in good condition and proposed to become the gathering place for gardening, orchard activities and other potential indoor/outdoor programs



Figure 2.16: South facade of 33'x28', green, metal shed (Structure #7); this building is in good condition and proposed to become the "Bow Hut"--the gathering place and storage area for the archery program

Structure 8

The brick home at the entrance to the property (Figure 2.17 and 2.18) is the home that Mr. and Mrs. Hisle occupied during their time on the farm. This structure is typical of 1950's construction and although its architecture is not historically significant, its simplicity contributes to the character of the farm. The home is in great condition and is currently being occupied by a maintenance employee who provides some oversight of the property. It should be preserved and used as the Division sees fit, either as a residence for a full-time staff person, or as a headquarters for the park. Currently, this is the only structure on the property with a restroom and should be accessible for staff to use while alternate facilities are built. If the home remains a park residence it may be possible to add on a small restroom with public access and take advantage of the existing septic field. This location would be a particular benefit to the archery program, which is proposed to be located in the area behind the home.



Figure 2.17: South facade of the brick house (Structure #8)



Figure 2.18: North side of the brick house

Structure 9

The bridge, shown in Figures 2.19-2.22, crosses the railroad to connect the two halves of the property and is significant to the function of the farm, as well as its history. Built of steel and railroad ties, the bridge has provided machinery and vehicle access to the northern half of the property for 99 years. Despite its historic character and necessity, it was assessed by a structural engineer as unsafe for further use. The technical report is included in Appendix A.

Whereas not all of the buildings on the farm need to be replaced for the park to function, this bridge is a necessary component of the park. A bridge is the most feasible way to access the 100 acres of parkland located north of the railroad tracks. In addition, emergency vehicles must have access in case of a fire or if a medical emergency occurs on this side of the property. A precast truss bridge was discussed by the Division staff and the public as being a good option for crossing horses over the tracks. The location of the crossing cannot change because of the clearance needed for trains to pass beneath it.



Figure 2.19: Water line tied to bridge railing



Figure 2.20: Vehicle driving over the bridge before structural inspection; the design is simple and utilitarian



Figure 2.21: Under side of bridge



Figure 2.22: Bridge plaque revealing 1910 construction date.

Other Structures

One small garden shed, seen in Figures 2.23 and 2.24, is located behind the house and existing garden. This structure can be easily incorporated into the proposed garden layout to serve as a focal point and as storage for small gardening tools for program use.



Figure 2.23: Small, portable storage building behind the existing garden can be used specifically for the proposed garden program



Figure 2.24: Wood construction and weathered roof give this shed character; it can be repaired with reclaimed materials from other buildings on site

Utilities

Like most counties with sparsely populated rural areas, utility service is limited past the city or town boundaries. In the Lexington-Fayette area, no sanitary sewer service is offered east of Interstate 75. Homes outside of this boundary have septic systems, but water and electric are provided to the rural areas of Fayette County.

LFUCG's sanitary sewer ends over three miles outside of the Hisle Farm property line. Service through this line is unlikely in the foreseeable future. Even on site, utility service is limited. Briar Hill Road is the primary utility corridor providing water and electric service to the farm. The home has access to water and electricity from this corridor, but has a septic system for waste water. Water and overhead electric are also supplied to the horse barn and to the small structure (#3) that likely served as a pump house. Two overhead power lines cross the property, one follows Briar Hill Road and the other divides the northern half on an east/west axis (see Figure 2.26). A small water line has been run across the railroad tracks, underneath the bridge to supply water to the northern half of the property. Although there are no other utilities on the northern half of the property, it has been reported that at least one well is present. This should be investigated further, and if any wells do exist, they should be closed for safety reasons.

In order to provide an organized Scout camp area, water and toilet facilities must be provided on the north side of the property. A new truss bridge that is proposed to replace the existing bridge will provide an opportunity to route the water line across the tracks more discretely and efficiently. Because utilities will be kept to a minimum throughout the park, a composting toilet is suggested for the Scout camp area to reduce the need for water and the installation and maintenance of a septic system.



Figure 2.25: Overhead electric line located on the north side of the farm.

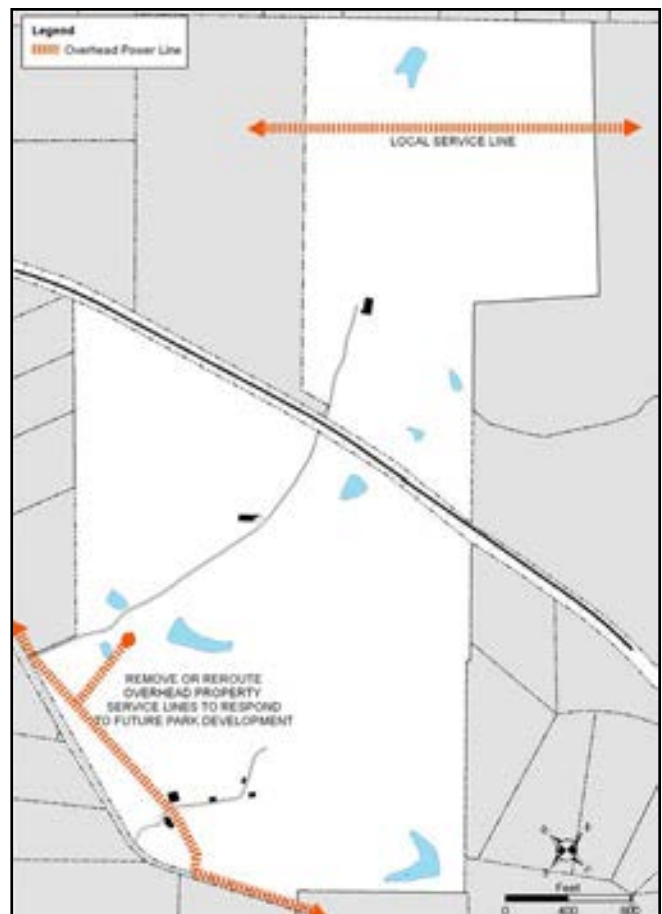


Figure 2.26: Overhead Power Lines

Hydrology

There are eight farm ponds on the property, three of which are located to the north of the railroad tracks. The remaining five are located on the southern half of the property. Most are in need of renovation as evidenced by excessive algae growth, cattails and other wetland plants that nearly cover the water surfaces. Some have been stocked with fish, and with proper renovations could provide opportunities for fishing and educational programs. It is recommended that three of the large ponds south of the railroad be renovated to provide better opportunities for fishing and one is recommended to be developed into a wetland to offer learning opportunities and improve aesthetics. The ponds currently provide water for horses and other wildlife and enhance the natural beauty of the area.

Several of these ponds were created along stream channels. Three tributaries originate on the Hisle Farm and flow into North Elkhorn Creek. They include, Johnson Road Tributary, David Fork and Howard Grove Tributary. The site can be divided into several mini watersheds, shown in Figure 2.28, which illustrates the topographic complexity of the site.

State regulations for altering streams, waters of the State and Federal Clean Water regulation regarding work within wetlands, should be reviewed and followed during the implementation phase of the project. This will include formally delineating wetlands and waters of the state to determine the extent of regulated waters on the property.

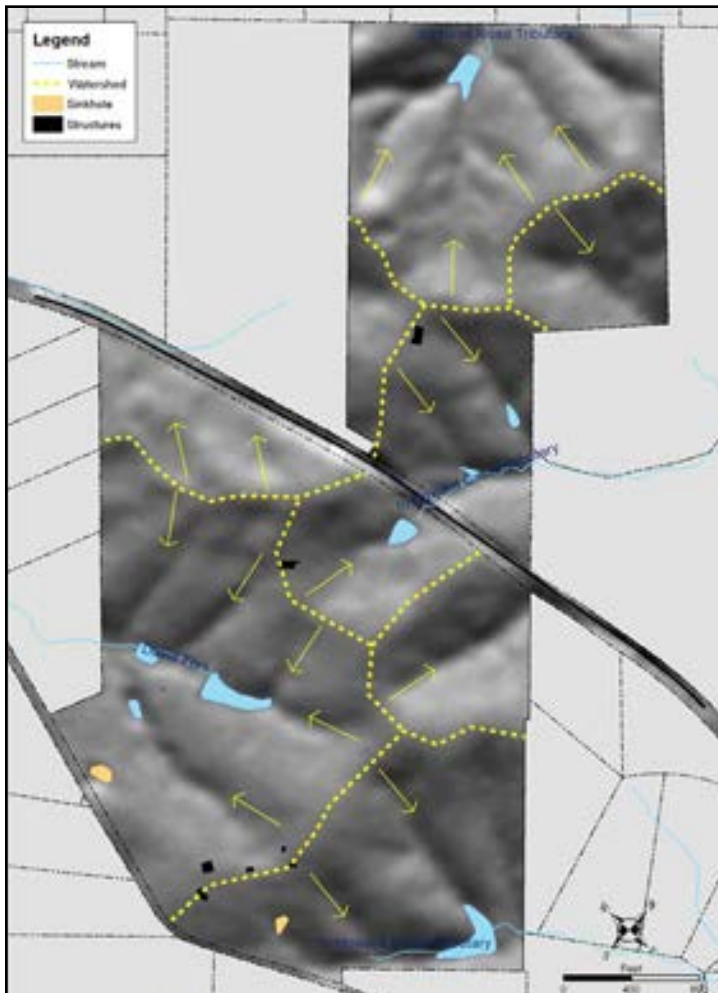


Figure 2.27: Most ponds on the farm have problems with algae and cattails

Figure 2.28: Hydrology

Vegetation

Figure 2.32 is a map of the property's existing vegetation patterns. In terms of vegetation, the majority of Hisle Farm is maintained as pasture for grazing horses and has very little species diversity. Although some forest fragments do exist there, like one in a northeastern corner of the property that is fenced off from the surrounding pasture, many of the mature trees, shrubs and briars found on this property are located along fence lines, steep slopes and swales. Some large trees are widely spaced in open pastures and fields, which is a characteristic of the Bluegrass Savanna.

Ash, walnut, oak and hickory tree species are common throughout the property, especially north of the railroad, and are found growing within the pasture, as well as in forested areas. One very large white ash, which stands alone by a farm pond on the northern half of the property, is thought to be one of the largest in Fayette County. Several large, old trees within the pastures exhibit signs of damage and decay. Safety of the public should be a primary concern throughout development of the park, so some of these trees should be removed.

Although the character of the farm is fairly uniform, there are differences in tree species and vegetation maintenance that is evident between the northern half of the property and the home site. Large magnolias and uniform spacing of trees near the home are reflective of horticultural practices that create a more formal character at the front of the property. A vegetable garden can be found behind the home in an open space where an orchard once stood. These mowed open spaces at the front of the property are defined by fencerows and large trees and their character differs from the open space of the pasture in their smaller scale and smooth, mowed lawn.



Figure 2.29: Main road through pastures, looking south; mowed pasture is typical of the character found on this and other surrounding farms



Figure 2.30: Characteristic briars and scrub growth along fence rows

Due to the size of the property, it would not be feasible to maintain vegetation to the degree of parks within the urban and suburban areas of the County. Instead, there are opportunities to build on the existing tree cover to develop diverse, yet distinct, areas of vegetation that contribute to healthy wildlife and an enjoyable park experience. The existing mature trees establish a foundation that will provide shade and some visual diversity during the first few years as the park matures and requires less maintenance. Once habitats establish a smaller area of the park will need to be mowed on a regular basis.

Native warm season grass habitats are essential for bird and insect wildlife, so the potential for drawing in visitors with bird watching programs will improve if quality habitat is in place. Bluegrass Savanna also presents a unique habitat for wildlife observation. Both habitats will require little maintenance once established, greatly reducing the manpower and money spent on maintaining the park. However, educating maintenance staff on how to care for these habitats compared to pasture land and turfgrass is extremely important in guaranteeing their success.



Figure 2.31: Large ash tree located on the north side of the property is a unique specimen

Figure 2.32: Vegetation Patterns

Topography and Slope

Gentle rolling hills and pastures are characteristic of eastern Kentucky and the horse farms portrayed in picture books and magazines. Hisle Farm is no exception to this typified landscape. Topography plays an important role in the character of the farm and provides many opportunities to experience distant views from ridge tops and enclosed spaces in the shallow valleys.

Elevation change on the property is approximately 75 feet; 1007' at the highest point near shed #6, to 932' at its lowest point on the northern half of the property. Topographically, the landscape limits development of activities such as sport fields that require large, flat surfaces without major earthwork; however, the existing topo is ideal for providing a variety of low impact development such as trails, open meadows and revegetation. Figure 2.33 illustrates percentage slope on Hisle Farm. The gentlest slopes are found on the southern half of the property, along Briar Hill Road where the home, garden and storage sheds are located. The steepest slopes are located north of the railroad tracks in the large drainage area of Johnson Road Tributary.

The master plan proposes to work with the existing topography when creating trails and establishing views, turning one of the site's biggest challenges into its greatest asset. Such variations in topography create opportunities for stunning views and trails that provide a variety of challenges and experiences. Providing trails with less challenging slopes would allow the development of the most miles of trail in the park since they must follow contours more closely. In addition, vegetation can be used in conjunction with slope to create areas on the property where a visitor can experience views completely free of structures, utilities and roads.

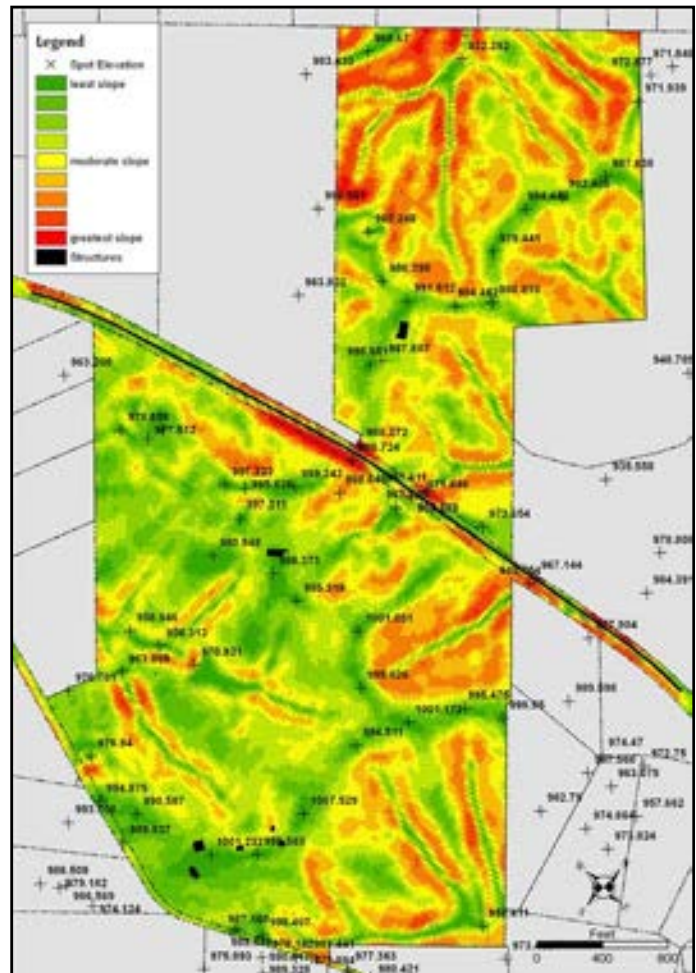


Figure 2.33: Percent Slope and Spot Elevations

III. Preliminary Master Plan

Throughout public meetings and interviews with staff, two specific themes were consistently expressed and have driven the master plan design. The two themes were for the park to remain in context with its surroundings and reflect its historic farm heritage and to become a horse-friendly park where the public can ride. Suggested programming elements included those that offered park visitors close contact with both the natural environment and farm life. Clearly, opinions about the future of the park revolved around preserving and enhancing the existing farm character through sensitive and well planned site development.

To achieve the public's vision for the park, passive programming and other elements that are compatible with nature and outdoor activities have been proposed. It was also understood that there are basic site infrastructure needs that allows the park to serve a wide public interest, including accessible trails, restrooms and parking areas for cars and horse trailers. This planning is consistent with the goals stated at the beginning of the document, which establish the park as a feature to be made available and safe to the public and must be maintained for the long-term.

The preliminary master plan is shown in figure 3.1. Its features and recommendations include:

- Zones of high, medium and low-use
- Three general trail types
- Reestablishing habitat for wildlife and for increased enjoyment along trails
- Archery, gardening, interpretive areas
- Pasture for horses that will complement lesson programs at Masterson Station
- Pavilion with restrooms for special events, rentals and programmed activities
- Creation of perimeter buffer zones
- Removal of unsafe structures and renovation of those to remain
- A remote group/Scout camping area with support facilities
- New bridge over the railroad to link both sides of the park
- Restoration and restocking of several ponds and improving fishing access
- New park drives and parking facilities
- ADA accessible trail

The preliminary master plan was presented to the public on September 25, 2008. Public meeting comments can be found in Appendix B. Some minor changes were made to the preliminary master plan and are reflected in the Final Master Plan section, which also provides a more complete description of the proposed park, including the features listed above and the suggested phasing.



Figure 3.1: Preliminary Master Plan

IV. Final Master Plan

This section provides a detailed description of the proposed master plan, its physical features, programming recommendations and suggested phasing to achieve a product in which cost and maintenance requirements will not hinder the level of service the park provides. In general, Hisle Farm will continue to evolve as a park for the next 20 years just as it evolved as a farm. Care should be taken throughout the park's implementation phases to minimize impacts on the existing character and aesthetic of the farm and the surrounding properties.

Following the final public meeting, changes were made to the preliminary master plan to reflect the public's comments. The revisions were minor in the scope to the overall plan and programming suggestions, and only a few changes were needed to finalize the master plan, including:

- Increasing the number of horse trailer parking spaces to 45, minimum
- Installing a control gate at the entrance
- Installing a perimeter fence along Briar Hill Road to prevent runaway horses
- Increasing the distance between the trail and the properties along the western edge of the farm



Figure 4.1: Final Master Plan

Park Zones

Hisle Farm can be looked at from a broad perspective as being divided into three zones of use: high, medium and low. Programming, trail type and maintenance levels were determined based on these zones.

High-use zones are characterized as having a greater variety of programmed activities, more development in smaller areas and serve the largest number of users at any one time. This zone will have full ADA access to facilities. Maintenance requirements are high and performed regularly.

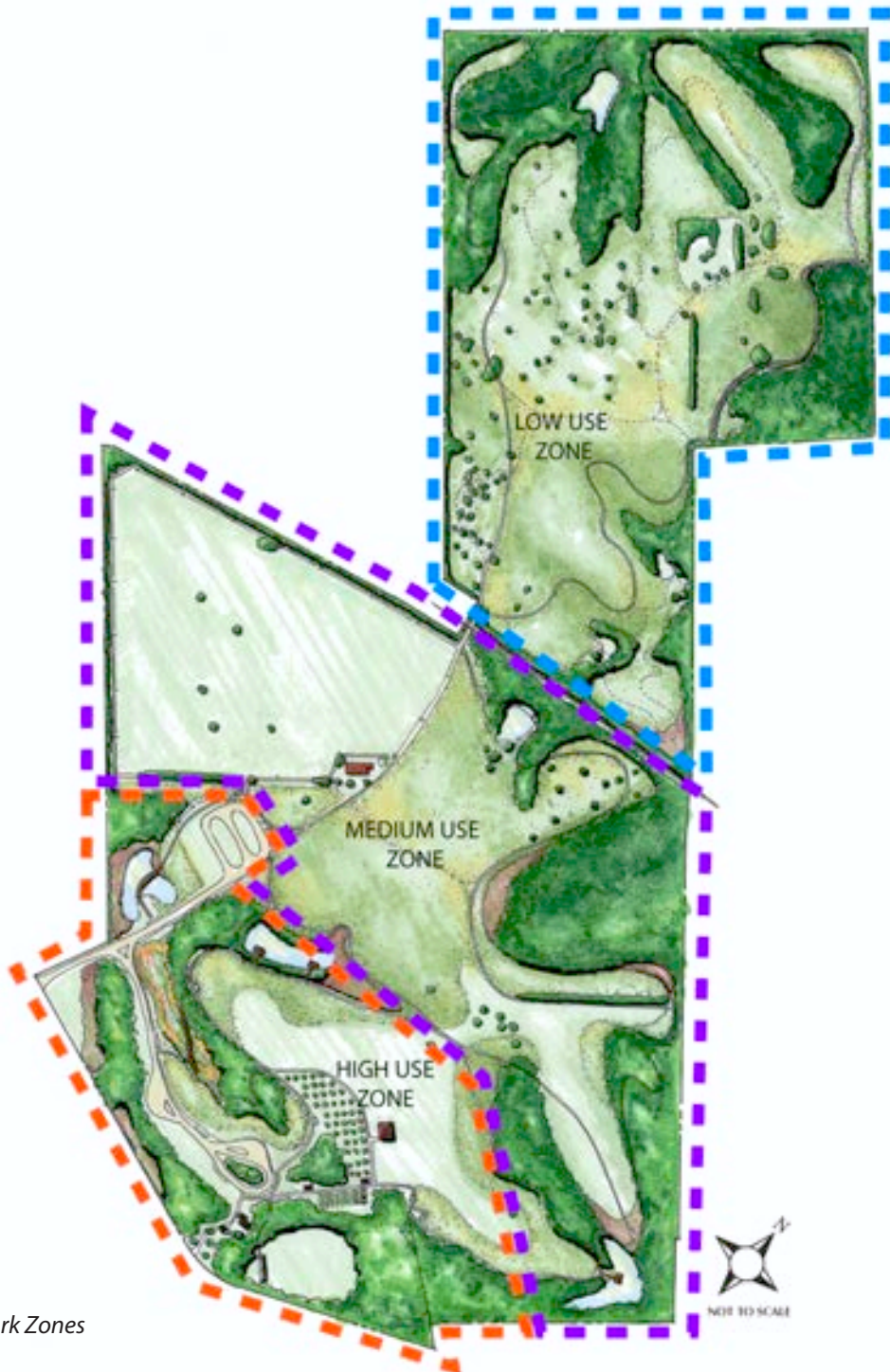


Figure 4.2: Park Zones

Medium-use zones are characterized as having a mixture of programmed activities and self-directed activities. This zone will have ADA access to all programmed activities. Maintenance requirements are moderate to low.

Low-use zones will have limited or no programmed activities that originate within the zone. Limited ADA access will be available and maintenance requirements are low.

The high-use zone was determined to be the southern most part of the property, nearest to Briar Hill Road. Every visitor to the park will enter at the same point and park in the same lots, meaning that the highest concentration of people are likely to occupy this area at any given time. Its proximity to Briar Hill Road will allow passive policing of the site by passing motorists. As a result, it will receive the highest level of maintenance. This high use area includes most of the existing structures and the proposed pavilion. It will serve as a gathering point for programmed activities such as camps, archery and gardening.

The medium-use zone is just north of the high-use zone in the center of the park. The horse barn and pasture are located here, as well as trails, open lawn, native grasses, savanna and reforested areas. All three trail types circulate through this area, so maintenance levels will vary depending on the suggested use. The quantity of people will be dispersed throughout this zone, which contains several spots to rest on benches, fish, hike, horseback ride, observe nature or enjoy activities on the open lawn.

The northern half of the property is proposed as the lowest use area. This is the quietest area and will be used for purely passive recreation. There will be no paved trails, only the reinforced main trail loop and secondary trails. The size of this zone lends itself to large areas of savanna, native grasses and forest: quality wildlife habitat. Facilities must be available for the Scout camp area located at the northern most edge of the property, including running water and a composting toilet. The fewest people are expected in this zone at any given time. Maintenance should consist of regular trail management and conservation practices to retain healthy native grass habitat and Bluegrass Savanna.

Circulation

Vehicular

A park the size of Hisle Farm needs to have a well defined main entry that welcomes park visitors. It needs to be located in an area that provides safe access for the various types of vehicles that will enter and exit the park from Briar Hill Road. Access to the park should be limited to one point at the existing southwest entrance along Briar Hill Road. The current entrance to the home on a blind curve should be closed to the public. This entrance should be left for emergency and service vehicles but should be gated to prevent visitors from using it. Further transportation studies by the County are recommended to determine if upgrades to Briar Hill Road are needed to ensure the safety of park visitors and all citizens traveling on this road.

Access drives and parking areas are purposely located on the edge of the park. Doing so reduces the development footprint and the potential for conflict between pedestrians and vehicles. Although the existing road that crosses the property will become part of the trail system, service and emergency vehicles will still be capable of reaching the farthest edge of the northern property. Public vehicular access in the park is limited to the high-use zone. The main entrance splits into two drives, one which ends at the horse barn and provides parking for 36 trailers and 10 standard vehicles. The other drive ends near the existing home and provides parking for 9 horse trailers and 45 standard vehicles. While drive lanes should be paved, parking spaces should be constructed of permeable pavers or reinforced geo-textile fabric or grid filled with gravel or grass surface. Overflow parking for an additional 55 vehicles can be established using a reinforced geo-textile grid or fabric that supports the growth of turfgrass. This system will essentially create a non-visible parking lot. All standard parking spaces other than overflow parking should be constructed of permeable, non-slip surfaces, especially parking spaces where horses must step onto and out of trailers.

Pedestrian

Over 10 miles of trail are planned for this 280-acre site. They have been designed to introduce a variety of challenges and experiences to park visitors. A variety of trail surfaces and slopes will allow for ADA accessibility to destination points, but also a challenge to those seeking it. Three trail types were identified in the master plan that correspond to the area of the park where each is found and the amount of use each is expected to receive. They include 1.5 miles of accessible trail, a four-mile main trail loop, and five miles of secondary trails. Equestrians will be allowed on the main trail loop and secondary trails. Where the main loop trail intersects the accessible trail, a narrow mulched path will run parallel to the pavement. Pedestrians will be permitted on all trail types.

Accessible Trail

A 1.5 mile-long, 12-foot wide, paved loop trail will be located at the front of the property. Access to the trail begins at both parking lots. Its slope will be within ADA accessibility guidelines and the trail surface can be a permeable asphalt or geo-textile grid filled with crusher-run and fines. This trail connects the developed facilities within the high-use zone and medium-use zone.

Primary Loop Trail

The primary loop trail around the property should be constructed of a surface compatible with soil type and use, including equestrian and pedestrian foot traffic. It is important to the integrity of the park and to the public that the trail be developed in a sustainable way, with materials that are

appropriate to the context of the park. This trail should not be paved with asphalt or concrete, but with a stable natural surface, such as wood mulch or polymer soil stabilizer, and reinforced with geotextile fabric in appropriate areas. Slopes along this route can be challenging but should be designed with proper surfacing to sustain long-term use. Where slopes are not a concern, mowed grass trails should be considered. These trails should be watched carefully and reinforced if their level of demand begins to degrade the surface.

Secondary Trails

Secondary trails branch off of the primary trail loop and may be grass, mulch or dirt paths. Where appropriate, they should be reinforced with large rocks, logs, check dams or steps to prevent erosion and provide additional challenge and interest along the route. Secondary trails are typically known as primitive trails, are more physically challenging, and provide the park visitor with a quieter, closer experience with nature.

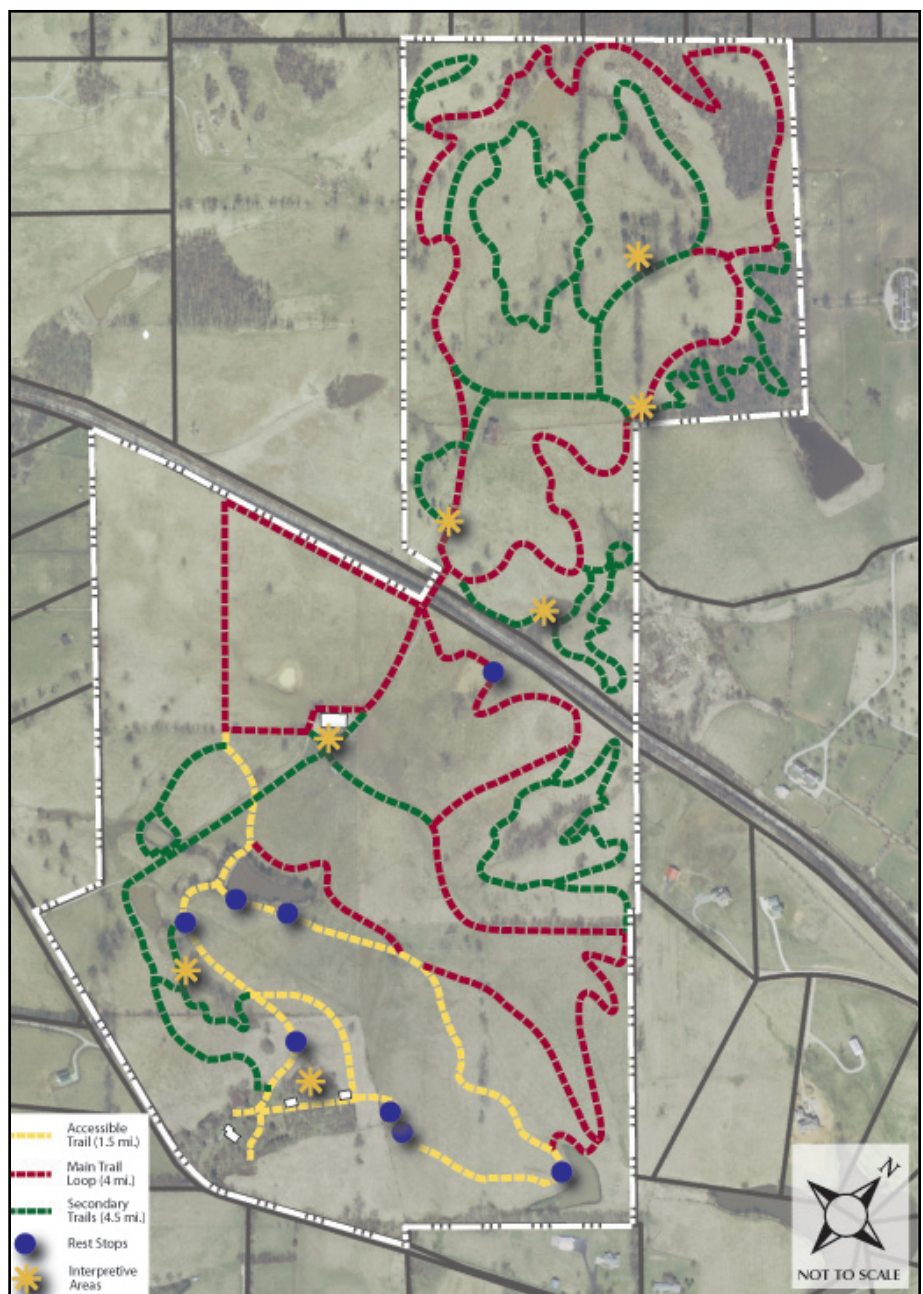
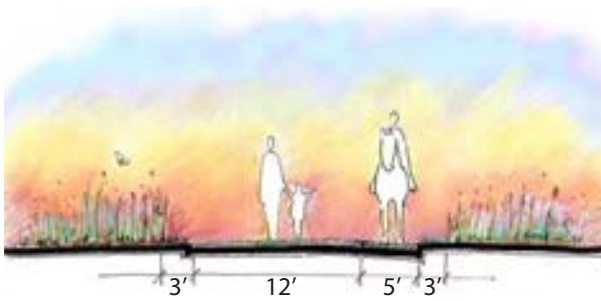
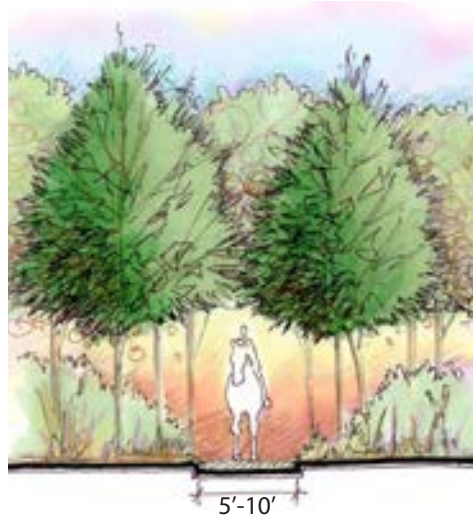


Figure 4.3: Trails

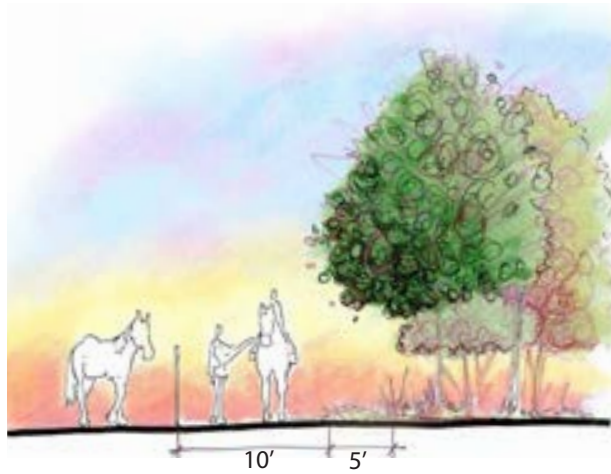
Figure 4.4: Trail Types



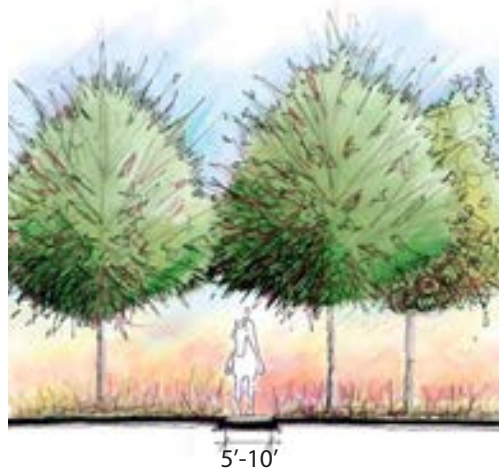
Accessible Trail and Equestrian Trail



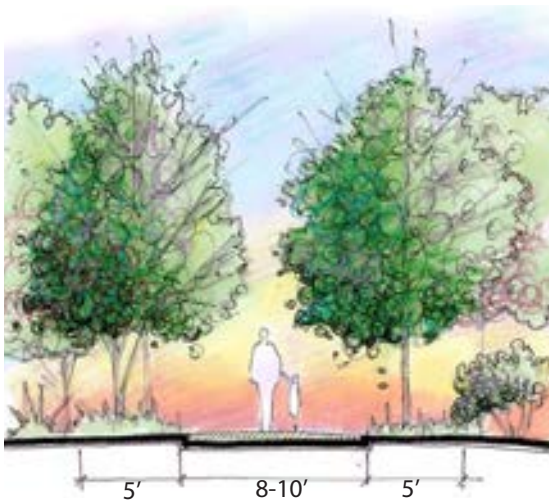
Equestrian Trail through Wooded Area



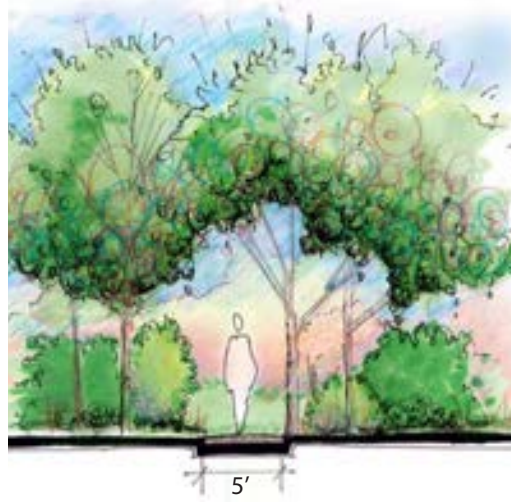
Equestrian Trail between Pasture and Vegetative Buffer



Equestrian Trail through Savanna



Primary Trail through Wooded Area



Secondary Trail through Wooded Area

Vegetation Zones

One of the master plan goals for Hisle Farm is to introduce visitors to various environments and plant communities not commonly seen in the LFUCG park system. Diversifying the existing pastures to a mix of native grasses and forest will be required to achieve this goal. Reestablishing vegetation is essential to the success of the proposed trail routes. Several vegetation zones, or habitats, are proposed to enhance the natural beauty of the farm, encourage wildlife diversity and increase the visitors' enjoyment of the trails through change of scenery. Generally, three habitat types are suggested to be developed throughout the park, including reforestation areas, Bluegrass Savanna, and native warm season grasses. Other habitats of wetland and edge species, mowed lawn, orchards and gardens will be located in strategic areas of the park to create focal points or destinations along the trail that encourage visitors to explore.

Most parks in the LFUCG system have been designed to require a high level of maintenance, so "natural" areas are typically very small in size or disconnected from larger ecosystems. These habitats are too small to attract a wide diversity of wildlife but will attract wildlife nonetheless. The larger habitats of Hisle Farm will likely provide viewing opportunities that are unseen in downtown parks.

The vegetation zones present a method of reducing maintenance while maximizing aesthetics by focusing maintenance efforts on areas where the most people will gather. Bluegrass Savanna and native warm season grasses will require little maintenance once established, greatly reducing the manpower and money spent on maintaining the park. In general, maintenance needs decrease and change as a person moves from the front of the property (near Briar Hill Road) to the back. Mowing, weed-eating and horticulture practices will be used to maintain the front half of the property, garden and orchard, whereas annual mowing, burning and arboriculture techniques should be practiced on the north side of the property. Educating maintenance staff on how to care for each unique habitat in comparison to pasture land and turfgrass must be a major component of the implementation and long-term plan for the park.

It is recommended that an integrated vegetation management (IVM) plan be in place to support the healthy growth of new habitats. This includes having methods to prevent the growth of invasive species while native habitats are establishing, and also throughout the lifetime of the park. The best way to prevent invasive species from becoming an issue is to treat the problem at its first signs and facilitate competition through the growth of native species. It is imperative that the Division have resources in place to mitigate the vegetation issues that have become serious problems in other parks and along their roadways.

Figure 4.5 illustrates the proposed vegetation zones.

Reforestation

Reforestation is the act of promoting the growth of large trees, understory vegetation and forest groundcovers. Establishing forest on the steepest slopes would provide soil stabilization and more visual variety in the park. Once established, this habitat will not require maintenance except to keep limbs at the proper height and shrubs from crowding the trails. Promoting reforestation through programs such as LFUCG's "Reforest the Bluegrass" would benefit the Division by saving on costs, promoting community ownership, and using local knowledge of plants and landscape. Although the pastoral landscape is a desirable feature of this property, long trail rides in open fields are not ideal, especially during hotter times of the year.

Edge habitats include transitional vegetation between forest and grassland. They are essential to healthy habitats as they provide food and shelter for birds and small mammals. Small and medium

sized trees and shrubs such as sumac, viburnum, redbud and dogwood are common in this region. When planted or cultivated naturally in mass and in strategic areas along tree lines, these species will enhance the seasonal qualities of the landscape. In this park, transition vegetation (edge species) should be chosen based on their aesthetic qualities as well as their suitability to the site (as listed in Figure 4.5).

Bluegrass Savanna

Bluegrass Savanna would provide a new experience to park users. Savannas are characterized by large trees that establish their full canopy because of the distance they are spaced. In Kentucky, the Bluegrass Savanna consists of bur and chinkapin oaks, blue ash, black maple, black walnut and hickories. The understory consists of a mixture of cool and warm season grasses such as sideoats grama, tall dropseed, broomsedge, Virginia wild rye and a mixture of showy forbs (Barnes 2008).

Native Warm Season Grasses

Native warm season grass habitats are essential for bird and insect wildlife, so the potential for drawing in visitors with bird watching programs will improve if quality habitat is in place. Suitable native warm season grass species for this area of Kentucky include Indian grass, Eastern gamagrass, big bluestem and switchgrass, tall dropseed, sideoats grama, broomsedge and split-beard.

Wetland

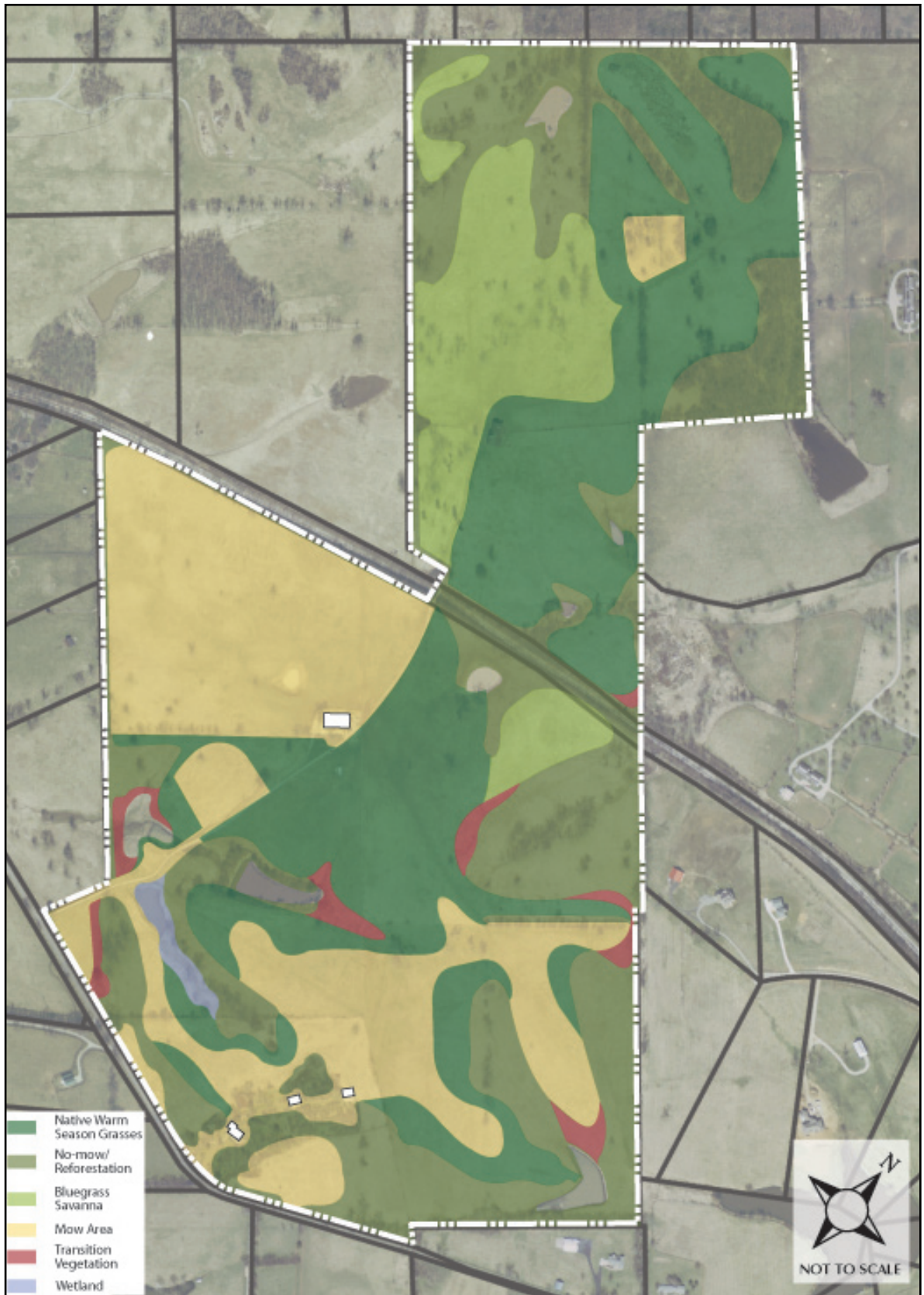
Wetlands provide an exceptional resource to a variety of wildlife by providing food and water. They attract many species of birds and amphibians, which children and adults alike find fun to observe. All existing ponds should be assessed for their viability for fishing or for wetland habitat. It is believed that most existing ponds can be renovated to create opportunities for fishing, but some ponds exhibit signs that they have lost water over the years. If the proper site conditions exist, it may be possible to convert, expand or improve these old farm ponds into quality wetland habitat.

Mowed Lawn

Only a small portion of the Hisle Farm landscape is to be maintained to the level of most parks in the LFUCG system. Approximately 10 acres of turf on the southern half of the property surrounding the proposed pavilion, orchard, garden, archery range, parking lot and entrance drives will be mowed regularly. These program spaces are located at the front of the property and will sustain the heaviest use. Also, a 10-foot-wide mowed strip of grass should be maintained along the edge of drives and parking lots to provide visibility between pedestrians and vehicles but limit encroachment on natural areas.

Regularly mowed areas are limited to the high use development zone. These mowed lawns will provide multiple use programming space for groups that come to the park or for pick-up play opportunities, as well as visual contrast to forest, pasture and native grass areas proposed in the park. The turf areas are limited in size to reduce maintenance demands and encourage healthy habitat.

Figure 4.5: Vegetation Zones



Programming Elements

Reconnecting people with nature through interpretive exhibits, guided walks and hands-on gardening is a goal that this park is intended to achieve. These activities are anticipated to attract visitors across many demographics. Existing barns, ponds, fencerows and mature trees exemplify the landscape of a working farm, but also offer places for visitors to interact with a landscape that is not currently found in LFUCG's park system. Several stations for learning skills and discovering nature are highlighted along the trails to encourage exploration, including three fishing piers, an ADA accessible garden, an orchard and wetlands on the south side of the property. Forest, native grass and savanna habitats for wildlife observation exist throughout the park. Other programming elements were proposed because of their outdoor nature and opportunities to gather for both formal and informal group activities. These include a Scout camping area, archery range, ropes course, interpretive areas, riding stable and pavilion. The network of trails is the link that ties all of these elements together.

Fishing

Fishing piers are proposed in two ponds at the transition point between the high and medium-use zones. Each pier should comfortably fit two to three people. A boardwalk is proposed over a third pond that is located west of the main entrance drive and could also provide fishing opportunities.

Wildlife Observation

The network of trails will provide many opportunities to encounter wildlife. As habitats begin to establish, trail markers or interpretive signs can be added that point to common animals or plants that are found within viewing distance.

Gardening

Gardening is a very common practice on farms. The proposed garden and orchard are located at the site of the existing garden near the existing metal sheds and proposed pavilion. Planter boxes that are designed for ADA accessibility will promote participation of a wider demographic in gardening programs and should be constructed in an area of the proposed garden. These planter boxes should be surrounded by an accessible natural surface.

The orchard location takes advantage of a south facing slope and will contribute to the picturesque setting of the pavilion. It will provide opportunities to teach skills in fruit production. Blooming fruit trees will also provide a spectacular backdrop to events held at the pavilion.

Scout Camping Area

Division staff suggested that the north section of the property is a good location for a Scout camping area because of its remoteness. A vehicle may be allowed to the site to deliver equipment, otherwise the site will be accessible by a mowed or mulched trail. The area should be marked to prevent equestrian use so that animal waste is kept away from where children will be hiking and preparing food. A fire ring should be constructed so that campfires can be contained. A composting toilet and access to water must also be provided.

Archery Range

Archery is a growing sport and especially suited to the setting that Hisle Farm provides. A large, relatively flat open space exists just east of the home along Briar Hill Road that offers an ideal site for 10 targets. A safety berm must be built on the northeastern side of the range, where vegetation can be promoted to provide full enclosure of the area. There is room available to expand the archery range to include a skills course if the program demands it. An archery pavilion is proposed to increase the appeal for holding tournaments at the park.

Ropes Course

Mature trees provide the setting for a small ropes course that is proposed near the garden and orchard areas. The course can be integrated into the existing stand of trees so that it is enclosed in a defined space. This activity could attract companies and other groups interested in team building exercises.

Interpretive Areas

The farm's rich character offers many opportunities to learn from the existing landscape through interpretation. Several significant areas of the farm, both existing and proposed, will provide destination points along the trails. These include the large ash tree and original home site on the north half of the property and the wetland, horse barn and renovated wooden shed on the south side of the property. It is likely that many more opportunities for interpretive areas will develop as the park matures.

Plaques or signs are commonly used to draw attention to significant features. A self-guided tour, where the visitor references a simple numbered marker at the site to a brochure is another option for providing interpretive areas. Mounted binoculars, boardwalks and construction that allows for closer looks are also common in more developed interpretive areas.

Riding Stable

The existing horse barn and pastures contribute significantly to the nature of the farm and to the broader context of surrounding properties. The horse barn and the paddock behind it is proposed to be left intact to provide a designated area to hold small group riding lessons that will complement those at Masterson Station. Few changes will have to be made for this program to function. The barn and fence are in good condition and may hold up to 10 horses. A small shed for tack may be needed to facilitate the programs. If needed, this shed can be built adjacent to the existing barn.

The preliminary master plan called for the trail system to follow the fence line of the pasture along the western property line. Adjacent landowners requested that the trail be moved because it was too close to their property. The master plan shows a double-row fence along the trail that splits the existing paddock in two. The trail around this pasture is intended mostly for use in lesson programs.

Pavilion

The proposed pavilion will provide space, shelter and restroom facilities for Division programs and private events. Summer camps, picnics, weddings and other large gatherings are expected there. The Division should plan to charge rental fees for the use of this facility.

Structures

Hisle Farm is rich with old structures. This master plan calls for further evaluation of the existing barns and sheds, where safety and long-term maintenance must be the primary concern to determine if renovation or removal should take place. It is anticipated that three of the structures will have to be removed, but their materials can be salvaged for renovations and new construction within the park. Also, two new structures are proposed: a pavilion with restrooms and a replacement truss bridge that connects the northern and southern halves of the property.

The large horse barn, found just south of the railroad bridge, is seen as an iconic structure of the farm. It should be preserved in its current state and used for park programming. There is room adjacent to the barn to provide a new tack shed and riding ring. Three additional mid-20th century wooden barns and sheds appear to be in fair to poor condition. Although it would be ideal to preserve all existing structures and the full character of the farm, the expected renovation and long-term maintenance costs motivated the suggestion for removing three of the structures. Instead of

maintaining all structures at a high degree, it is suggested that using reclaimed materials from those that are removed, in order to save one, would be a reasonable and financially responsible endeavor to contribute to the farm's character. The one shed that is recommended for renovation is Structure #5, which was constructed for storage of small farm equipment. Its location along the paved trail and within the proposed working orchard is ideal for inviting people to rest, for camps to be organized and to interpret the history of the farm.

The two metal buildings will remain to provide indoor programming and storage space for the archery and gardening programs. The exteriors of these buildings should be refinished with similar materials and colors to contribute to the overall theme of the park.

A pavilion is proposed on the south side of the park near the orchard and garden. Its location on the highest point of the property is intended to facilitate views throughout the farm. From this pavilion, the horse barn will serve as a focal point across a field of native grasses. The standard #3 pavilion from LFUCG's Design Standard Manual is proposed, which will provide four men's and four women's restrooms and approximately 5,300 square feet of open air shelter. It is anticipated that this setting will attract company picnics, weddings and other events that would take advantage of photo opportunities and a large open outdoor space. The pavilion should be constructed of materials that repeat the same colors and textures found in the existing barns and landscape. This would include making slight changes to the standard design to use the reclaimed materials from structures that will be taken down.

During the course of this master plan, the historic bridge that connects the north and south sides of the property was studied by a structural engineer and determined to be unsuitable for use. The deteriorated condition of the existing historic bridge was unexpected, and because the rail line is still active, a replacement bridge will be necessary. Although it is physically possible, an at-grade crossing at the railroad tracks is not recommended due to safety concerns. Public meetings and conversations with equestrians revealed that a box truss bridge would be most appropriate for crossing horses over this rail line.

Phasing

The desire of the Division of Parks and Recreation was for the LFUCG parks system to offer something new and exciting to the public, far removed from the typical ballfield and playground facilities found in most of their parks. Providing these new opportunities on a reasonable schedule, with quality, sustainable construction and within financial capabilities is feasible when park elements are built in phases. The park setting and experiences will evolve as vegetation matures and new facilities are constructed each year. The Division wishes to make the park available to visitors as soon as possible while preserving the integrity of the farm's landscape.

To achieve these goals and promote development of the park, the execution of this plan is proposed in four phases:

Phase 1:

- Remove internal fences except those shown to remain
- Perform environmental assessments
- Remove hazard trees and unsafe structures
- Provide a safe vehicular entrance, parking and main drives
- Develop a vegetation management plan
- Mow trails through pastures
- Determine the boundaries of vegetation zones and cease mowing in areas for natural reforestation
- Grade-in archery range and earth berm
- Renovate ponds and wetland along main drives
- Begin riding programs
- Install wood rail perimeter fence along Briar Hill Road and repair existing fence along the perimeter of the property
- Construct park identification sign and entry gate
- Remove unsafe structures and store reclaimed materials onsite
- *Install new bridge to cross railroad (Phase I or II)

Phase II:

- Begin to establish native warm season grasses and savanna
- Pave ADA accessible trail and install seat wall rest areas
- Build pavilion/restroom structure
- *Install new bridge to cross railroad
- Reinforce main loop trail
- Begin gardening program and build accessible planters
- Renovate existing shed in orchard
- Divide paddock with trail and double fence

Phase III:

- Build archery pavilion
- Renovate additional ponds and add fishing piers
- Begin orchard
- Evaluate trails and continue to develop and reinforce trails with sustainable practices
- Install facilities for Scout camp area, including a fire ring and composting restroom
- Add tack shed or retrofit existing horse barn to accommodate tack for riding program

Phase IV:

- Install boardwalks across wetland and pond
- Install interpretive signage along trails
- Evaluate vegetation management: continue planting and selective thinning
- Install ropes course
- Improve the archery hut and garden shed (metal shed facades)

A detailed opinion of probable construction cost is provided in Appendix C. The costs are organized by program or park element (e.g. archery, trails, structures, drives and parking areas) and reflect staff and volunteer labor where appropriate. Costs per phase are as follows:

Phase I =	\$3,084,000
Phase II =	\$1,794,000
Phase III=	\$804,000
Phase IV=	\$729,000

Figure 4.6: First Year Plan
This plan illustrates the progress to expect in the first two phases of development. Mowed paths and parking areas can make the park immediately available to the public.



V. Resources and Works Referenced

Barnes, Thomas G. "How to establish NWSG." University of Kentucky. 30 Dec. 2008

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APPENDICES

Appendix A



R. E. JACKSON ENGINEERS, PLLC
STRUCTURAL CONSULTING ENGINEERS

Structural Report for Bridge at Hisle Park Lexington, KY

August 25, 2008

Mr. Chris Camp, ASLA (Lose & Associates, Inc.) asked Mr. Ron Jackson, P.E. (R.E. Jackson Engineers, PLLC) to review the bridge located on a farm (future Hisle Park) at 3601 Briar Hill Road, Lexington, Kentucky. On Tuesday, August 5, 2008 Mr. Jackson met Ms. Emily Houston, ASLA at the property to review the structural integrity of the bridge.

This evaluation was limited to a visual inspection of those structural components that were exposed to view and accessible. The following observations were made:

General discussion:

This 98 years old structure (an American Bridge Company of New York sign attached to structure is dated 1910) is a single lane (12' wide) three span (22'-9" x 21'-8" x 22'-0") steel and timber bridge spanning over a railroad track. The bridge is constructed of timber floor planks (2 1/2" x 7 1/2") spanning over steel beams at the two end spans (22'-9" and 22') and over timber beams at the center span (21'-8 1/2"). Timber wheel guards (approx. 8"x 8"), are located along each side of the bridge. The handrails are constructed of two 1 1/4" diameter pipe continuous top and middle rails (20" apart) supported by steel angle (3 1/2"x2 1/2") posts 7'-6" apart that are bolted to the sides of 10" deep channels along each side of the bridge.

The end spans are constructed of three 10" x 4 5/8" wide steel beams ("I" beams) with two 10" x 2 1/2" wide steel channels along each side of the bridge, spaced at 3'-0" on centers. The center steel beams, at both end spans have timber members (2 1/2" x 7 1/2") bolted to the webs for fastening (nails) of the floor planks. The end span beams and channels are supported (bolted) by a steel frame or bent at one end and at the other end bears directly on a continuous steel channel (6" x 2", legs down) which is sitting on five treated timber blocks (8" deep x 16" x 10") equally spaced that are on top of a continuous timber spacer (6 3/4" deep x 16" wide x 14' long) that bears on a concrete abutment (2' x 14' long).

The center span is constructed of eleven timber beams (five 4 5/8"x12"s, two 6 1/2"x12", four 8 1/4" x 10 1/4") and steel channels (10" x 2 1/2" wide) along each side of the bridge. Each end of the timber beams are supported by the two steel bents.

Each of the two steel bents are constructed of a 12" x 4 7/8" steel beam ("I" beam) at the top which is supported at each end by a 8" x 4" steel column ("I" beam) that bears on two treated timber blocks or spacers (7 3/4" deep x 13"x16" and 8"x16" square) which are sitting on top of a 7"x15 5/8" wide continuous timber spacer that bears on a concrete foundation (24" x 14' long). The steel bents are x-braced with 2 1/2"x2 1/2" angles and braced horizontally at mid span and near the base with 3 1/2"x2 1/2" double angles. There are also diagonal knee braces (3"x2" steel angles) connecting (bolted) the channels to each of the columns. The treated wood spacers or blocks at the abutment and steel bents were installed recently by the railroad (according to Emily Houston) to raise the height of the bridge.

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Hand rails:

The handrails (approx. 4' high) are completely covered with rust and feel very unstable (unsafe) when pushed. The handrails are supported by steel channel along each side of the bridge that is also covered with rust. One of the channels (east side) appears to have completely failed no longer providing resistance and displaces with the handrail when pushed. The channel connections to the steel frames are either missing or have damaged bolts or rivets.

Wheel Guards:

The timber wheel guards are completely deteriorated (rotted), hollow, and split. Some of the wheel guards are no longer attached (nailed) to the floor deck and will not function as required.

Floor Planks:

The timber floor planks (top) show extensive wear surface. The planks are spaced 1/4" apart except for a couple of gaps that are greater than 1 1/2". Many of the planks show cracking with some holes and loss of section (depth). Dirt and vegetation have filled some of the holes in the planks. Many of the floor planks are no longer attached (nailed) to their support at the end spans and a few of the planks are completely loose. The bottom surface of the planks appears stained and show some moss, but feel solid when touched and probed.

Steel Beams (End Spans):

The floor planks are supported by steel beams at the two end spans. These beams are almost completely covered with rust with some loss of section (thickness) visible. The connections at both ends of the beams show extensive rust with some of the bolts or rivets missing. It appears two of the beams (with missing bolts) have moved out of position and have very little bearing surface (approximately 3/4" wide) on the support beams. The side channels, located on the east side of the bridge supporting the handrails and knee braces, are no longer attached at the steel beams because of missing bolts.

Timber Beams (Center Span):

Timber beams located at the center span show some large splits and cracks. The majority of the timber beams felt solid when tapped and probed although there are some spots in the bottom surface that are beginning to rot or become soft in front of the timber beams. There is also moss growing on the bottom surface of the beams.

Steel Bents:

The two steel frames composed of steel beams and angles are almost completely covered with rust. The two horizontal double angle braces are almost completely (80% loss of section) rusted through. Also almost all the other members, including the knee braces of both frames show some section loss due to rusting. Two of the knee braces are attached to the side channels that are no longer attached to the structure.

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Abutments and Bent Footings:

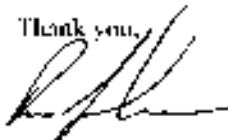
Both concrete abutments and footings show some minor concrete spall. The south abutment has one large crack (1/2" wide) with some displaced concrete visible on the west side corner. The concrete surface feels solid and shows compressive strength in excess of 3,000 psi when tested with a Schmidt hammer. The continuous steel channel is almost completely rusted with some minor section loss. The recently install treated timber spacers are in good shape.

Conclusion:

In general, this bridge is in serious condition. Local failure of any of the bridge members mentioned above is possible. Unless there is some historic or sentimental value in keeping this bridge we recommend replacing the entire bridge.

I want to thank you for the opportunity to be of service to you. If you have any questions and/or comments that pertain to this work, please do not hesitate to call me.

Thank you,



Ryan Jackson, PE
R. E. Jackson Engineers, PLLC
811 Corporate Drive, Suite 106
Lexington, KY 40503



Appendix B

Comments from the Hisle Farm public meeting: 8-6-08

Dog parks; Funding for equestrian facilities?

Lexington is the horse capital of the world and the least horse friendly place

Equestrian trails can be compatible with other uses

Some states like Virginia charge a bridle tax of \$10/year per park

Primitive trails and facilities are fine; gravel and mulch trails should be used in some areas

Mountain bike trails can be built with matching funds; will provide economic benefit

Hikers/ Bikers/ Horses- 3 separate user groups must be shared

Equestrian facilities needed for tourism/economics

Cooperation between horse groups and parks, multi-use supported

Expand equestrian trails to urban areas; get children in contact with horses

Public equestrian trails needed in a non threatening environment

Mrs. Hisle wanted people to experience nature; honor the Hisles' vision

Preserve natural beauty; incorporate green space and environmental responsibility; do not allow motorized vehicles

No lights and loud speakers

Shut down park at night

Briar Hill Road is inadequate for large trailers; currently no parking to accommodate trailers on the farm

50 acres wanted for archery; is the #1 growing sport in the nation

Property must be used for parks

Equestrian educational center: would need a covered, lighted arena, trailer parking

Reach out to children, adolescents

Change name from Hisle Park to Hisle Farm

Open up the Horse Park to educational activities (booked until 2009 and not open to the public)

Do not move ball fields to Hisle

Want unprogrammed open space: no lights, minimal facility

Be as least invasive as possible; develop uses suitable to topography

Construct sustainable trails

Incorporate public schools to help plant trees to watch the park grow; fields and wildflowers for education

Patrolling can be done by riders

Evening activities for scouts, primitive camping for scouts

Consider moving equestrian lessons to Hisle -- Masterson is dangerous

Why aren't there mountain bike trails at other parks?

Keep mountain bike trails closer to the urban areas; keep Hisle as special use/equestrian park; close it in the evenings

Don't turn it into another Masterson

No soccer fields; need a place to enjoy nature

Where is the money going to come from for long term maintenance?

Police presence; people in the general public do not respect property

Additional fencing to protect adjacent properties would have to be high enough that people couldn't climb

City's responsibility to provide fence

Railroad bridge: consider as historic landmark; repaired by RJ Young under historic specifications

Fire truck cannot cross bridge

Essex Co. Trail in Boston as a model; putting up high fences is not working together as a community
Forest preserves in urban areas; achieve a balance to achieve public vision at Hisle
Rework traffic pattern at Masterson
Do not lose activities at Masterson
Recreation easements increase property value
Lease property as a working farm for parks profit
Provide a mounting block on either side of bridge to walk scared horses across the bridge
Concern for the 80 horses currently on the property; what will happen to them? Why can't you use the
property to make profit and keep it as is?
Parcel was donated to be used as a park
Develop a long-term plan; increased people, barns, etc. will result in more maintenance
No water in the back
1 well in the back
Wildlife will love the gardens

Susan Sharp

Sisteruby@hotmail.com

There was quite a bit of talk about the "conflicts" between horse activities and speeding cars, 10 year old boys throwing fist sized rocks, horses being spooked by soccer, sheep trails, etc. Since Masterson is a multi use park, I feel that it is important for the multi uses to accept responsibility for their activities. Speeding cars should never be allowed in or on park roads. Young boys should be held accountable for rock throwing and for vandalism. Horseback riders also have a responsibility to ride safely and be good ambassadors of their sport. Obviously archery and horses don't mix well but there are many other activities that are compatible and that horses/riders can tolerate.

Sauders Lawson

I favor trails/parks for horseback riding, continued equestrian use at Masterson Station Park and expanded "green" space for riding. Horses are all the signature of the Bluegrass Horse Capital of the World.

Jennifer Coyle

Please leave this property at Hisle as natural as possible. Horses, mountain biking, hiking, archery, camping, fishing, nature walks.

Mark McKinley

marksmusicsource@aol.com

Is this property deeded in such a way that it has to be developed? Keep the property as low-key as possible.

Janella Price

Jtprice55@aol.com

879-3106

We (Central KY) treat the area/state as the Horse Capital of the World, yet development keeps encroaching on the horse industry – especially the individual horse owners who have small acreage. Masterson – Drive-thru: Can't it be made so that it is not a drive thru? I've helped with special needs riding and witnessed scary close calls with people driving too fast.

Parks Advisory Board suggestions for Hisle Farm

Archery range; archery is a big sport in the south; work with Olympics
Have access to alternative funding sources such as Dicks Sporting Goods and construction labor
Children interacting with parents (hunting lessons)
Archery is taught at Lafayette School
Doesn't take a lot of \$, movable targets, growing program, doesn't take big space, multi-generational activity
Can use existing barn for indoor range

Comments from the public presentation of master plan: 9-25-08

Why are there no mountain biking trails?
Railroad company repaired the bridge; no one notified the leaser or is helping her to repair it since it has been condemned
Close the wells
What will happen to the horses?
Need to have a complementary transportation plan for the road (SR57): inviting disaster with 20 horse trailers on Briar Hill
Find out the accident rate is on Briar Hill Road
There are several hidden driveways along the road; evaluate the speed limit, existing signs, etc.; should be done by LFUCG; speed limit should be reduced
Work with conservationist to establish wildlife habitat
Make the neighbors happy first; reestablish vegetation
Consider leaving rescue horses on the north side during development of the park if the bridge cannot be replaced right away
Mike thinks they can get grants for reforestation
Cut hay on Hisle Farm for Masterson so Masterson can be improved for safety

Comments from the Parks Advisory Board from the presentation of the Hisle Farm master plan: 9-25-08

Parking needed for at least 45 trailers
Perimeter fence needed along the front of the property in first phase to prevent runaway horses
Control gate at entrance
New use for the house?
Separate bike lanes on the road
Fundamental problem with the plan: dedicated horse land is the 1st step to removing the lessons from Masterson; Put in report: **it is not the intent of this plan to remove the lesson program from Masterson.**
Provide an estimate for 10 horses to keep at Hisle in the opinion of cost
Bridle fee and health certificates required for riders to use park
100' buffer standard for parks – double check Division of Parks and Recreation standards
Box truss preferred for bridge
Provide a composting restroom facility on the north side at the scout camp
Provide a compilation of fundraising opportunities (like greenways fundraiser in Nashville)

Appendix C

Hisle Farm				
Opinion of Probable Cost- 11-5-08				
Master Plan				
Archery				
	Amount	Unit	Cost/Unit	Total
Archery Hut improvements	1	ls	\$ 25,000.00	\$ 25,000
Earth work	1	ls	\$ 35,000.00	\$ 35,000
Pavilion	1	ls	\$ 75,000.00	\$ 75,000
Equipment and site furnishings	1	ls	\$ 25,000.00	\$ 25,000
Ropes course	1	ls	\$ 50,000.00	\$ 50,000
			subtotal	\$ 160,000
Fencing				
Wooden fence at front of park (3 rail, 4' high)	2525	lf	\$ 18.00	\$ 45,450
Wooden fence around archery range (3 rail, 4' high)	970	lf	\$ 18.00	\$ 17,460
Fence around pasture (3 rail, 4' high)	3050	lf	\$ 18.00	\$ 54,900
Double row fence to split paddock (3 rail, 4' high)	2200	lf	\$ 18.00	\$ 39,600
Double row fence to split paddock around entire perimeter (3 rail, 4' high)	18872	lf	\$ 18.00	\$ 339,696
			subtotal	\$ 497,106
Entrance Drives and Parking				
Drive lanes (HD asphalt)	104700	sf	\$ 5.65	\$ 591,555
Drive lanes (6" stone base)	1938	ton	\$ 17.00	\$ 32,946
Drive lanes for trailer parking at entrance	13800	sf	\$ 5.65	\$ 77,970
Drive lanes for trailer parking (6" stone base)	255	ton	\$ 17.00	\$ 4,335
Overflow parking HD lanes	11100	sf	\$ 5.65	\$ 62,715
GrassPave parking spaces	8100	sf	\$ 9.00	\$ 72,900
Hoofgrid parking for trailers	92500	sf	\$ 10.00	\$ 925,000
Hitching posts	15	ea	\$ 300.00	\$ 4,500
			subtotal	\$ 1,771,921

Reestablish Vegetation				
Forest (over a 10 year period)	70	ac	\$ 2,600.00	\$ 182,000
Grassland and savanna (over a 10 year period)	180	ac	\$ 200.00	\$ 36,000
			subtotal	\$ 218,000
Pond Reconstruction				
Pond renovations	2	ea	\$ 80,000.00	\$ 160,000
Wetland	1.5	ac	\$ 30,000.00	\$ 45,000
Boardwalks	170	lf	\$ 225.00	\$ 38,250
Fishing piers	3	ea	\$ 30,000.00	\$ 90,000
			subtotal	\$ 333,250
Structures				
Contech bridge (100' span with abutments)	1	ls	\$ 100,000.00	\$ 100,000
Corporate pavilion w/restroom and caterer's kitchen	1	ls	\$ 545,000.00	\$ 545,000
Renovate existing wooden shed	1	ls	\$ 100,000.00	\$ 100,000
Composting toilet for Scout camp	1	ls	\$ 50,000.00	\$ 50,000
			subtotal	\$ 795,000
Demolition and Engineering				
Storm drainage budget	1	ls	\$ 50,000.00	\$ 50,000
Demo 2 barns, 2 small structures	1	ls	\$ 15,000.00	\$ 15,000
			subtotal	\$ 65,000
Working Garden				
Garden Hut improvements	1	ls	\$ 25,000.00	\$ 25,000
ADA accessible planter boxes	1	ls	\$ 12,000.00	\$ 12,000
Accessible surface around planters	2000	sf	\$ 4.00	\$ 8,000
Irrigation system	1	ls	\$ 5,000.00	\$ 5,000
Site furnishings	1	ls	\$ 25,000.00	\$ 25,000
Arbor	1	ls	\$ 50,000.00	\$ 50,000
			subtotal	\$ 125,000

Trails				
12' accessible trail	7920	lf	\$ 30.00	\$ 237,600
4 miles mowed trail (staking, mowing, preventative bank stabilization)	1	ls	\$ 200,000.00	\$ 200,000
Seat walls for rest stops	6	ea	\$ 3,000.00	\$ 18,000
			subtotal	\$ 455,600
Interpretive Displays and Signage				
Interpretive displays and signage	1	ls	\$ 50,000.00	\$ 50,000
			subtotal	\$ 50,000
Overall Site Development Costs				
Site electrical budget (lighting)	1	ls	\$ 65,000.00	\$ 65,000
Site grading budget	1	ls	\$ 100,000.00	\$ 100,000
Septic system	1	ls	\$ 70,000.00	\$ 70,000
Expanded water service	1	ls	\$ 50,000.00	\$ 50,000
Miscellaneous park improvements	1	ls	\$ 100,000.00	\$ 100,000
			subtotal	\$ 385,000
			GRAND SUBTOTAL	\$ 4,855,877
Mobilization, Bonds, overhead and profit, (10% total)	1	ls	\$ 485,587.70	\$ 485,588
			TOTAL -This Phase	\$ 5,341,465
			w/ 20% contingency	\$ 6,409,758

Opinions of Probable Cost and Materials Estimate

Estimates of construction quantities and opinion of probable costs provided by us are made on the basis of our experience and the level of design. They represent our best judgment as design professionals. We cannot and do not, however, guarantee that the actual construction quantities or costs will not vary from our quantities and cost estimates. Lose & Associates makes no warranty, expressed or implied, for the accuracy of such opinions as compared to bid or actual costs.

ADMIN:\08000's\08076\Hisle Park\costs\Cost Hisle Opinion of Cost 11_5_08.xls