

## CIRCULATION

### Vehicular Circulation

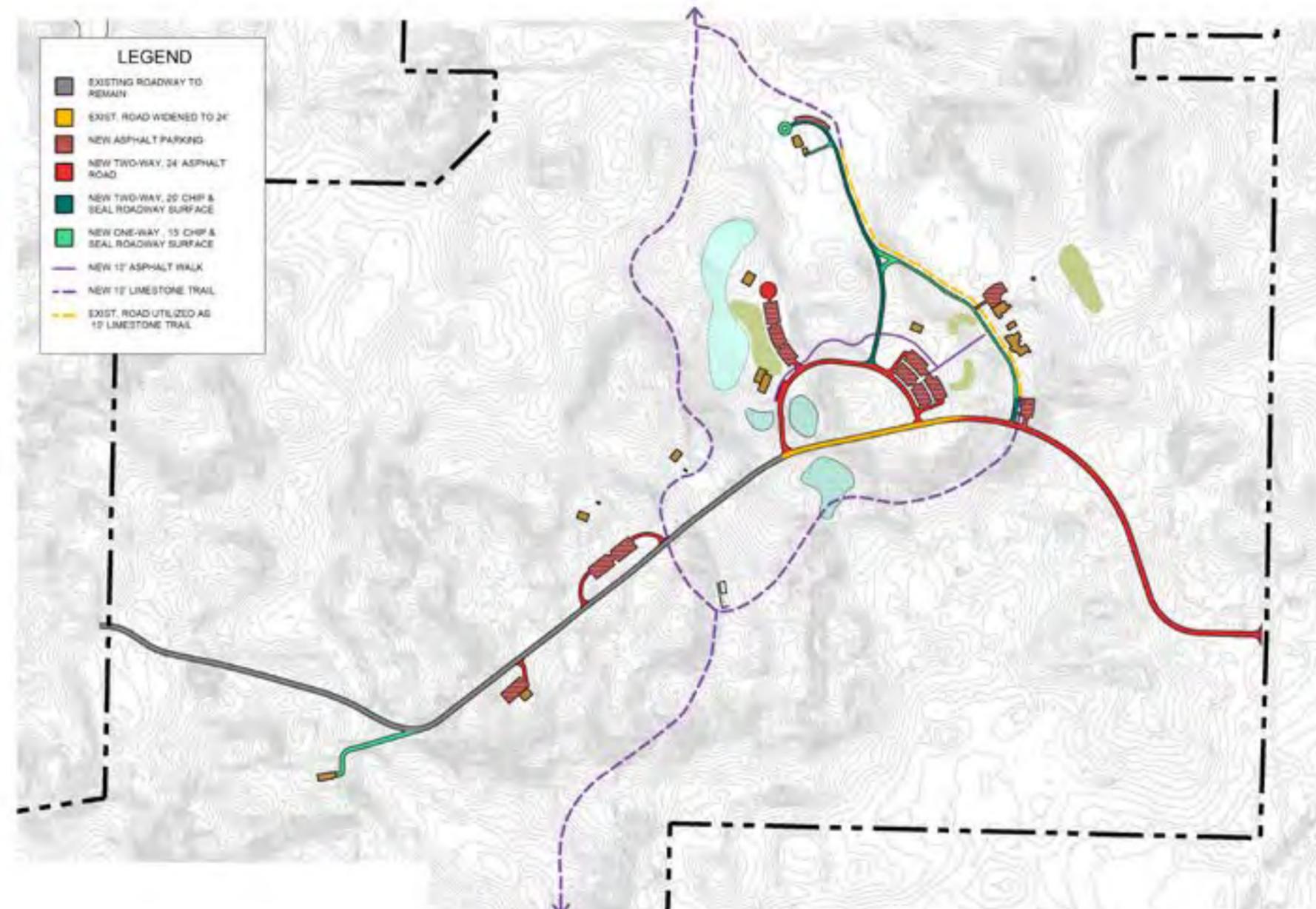
Roadways were designed as a result of the following major on-site observations during initial field investigations:

- There is only one access road in and out of the park.
- Too many vehicles are situated too closely to the Manor House
- The current roadway and parking situation is not accommodating to large events.
- The majority of the park is not accessible by vehicles. This applies to park guests, staff, and emergency vehicles.
- Current roadways are uncurbed and abutted by grass berms which create ideal traffic patterns.

### Traffic Patterns

The current entrance drive has no berm along the edge of the roadway pavement; the lawn grows right up against the edge of pavement. We would recommend that Stark Parks keep this type of arrangement. The use of the lawn up to the edge of uncurbed pavement without a berm is an effective traffic calming method. The lawn at the edge of pavement “crowds” the roadway which instinctively gives the roadway a narrower feel, though the actual width is close to, or will meet, a typical roadway width. The perception of a narrower roadway will be reflected in overall slower and safer speeds for pedestrians, bikers, horseback riders, etc.

In other aspects of the proposed Master Plan, the proposed roadways and driveways are intended to follow the contours of the land, within reason. Following the contours typically adds curves and hills and other roadway changes which helps to slow down traffic. As each of the proposed improvements of the Master Plan is implemented, the Design Team would encourage an active use of such traffic calming measures is maintained throughout the park.



Roadway Diagram

### Entrance Road

Currently, the entrance road follows the historic east-west road from Congress Lake Road and dead ends at the Carriage House. Oftentimes, vehicles utilize this roadway, get stuck at the Carriage House, and are forced to turn back and find parking. Though this roadway does continue North to the Little House, this portion of the road is a one-way private drive that should not be accessed regularly by the public.

The proposed large events and tours that Quail Hollow may host will function much more smoothly when visitors have a choice of two or more means to enter and exit the site. It is also important to have a second access in the event the primary roadway is blocked due to a fallen tree, accident, or other mishap. Additionally, large events can potentially congest roads to a point where emergency vehicles cannot pass. In order to increase the ease and efficiency of the primary vehicular access to Quail Hollow, portions of the existing entrance road will be widened and extended eastward, away from the hilltop parking lot, to intersect with Duquette Avenue NE. This intersection will be signed and utilized as a second, secured park entrance. The conceptual alignment depicted on the Master Plan was chosen to create as direct a route as possible, minimize visual impacts to the Manor House gardens, and avoid the existing stream, wetlands and prairie. Park Management may want to install gates just east of the Manor House and off Duquette to provide access control if a full-time second access is not desired.

The existing entrance from Congress Lake Avenue NE would remain asphalt at its current 23' width. However, from the existing entrance drive "Y" at the Shady Lane Pond parking lot, the 17-foot width of the existing pavement to the right toward the Manor House complex would be widened 6 feet for a new width of 23 feet. While 23 feet is just shy of the more typical 24-foot roadway width, adding just 6 feet of pavement allows for the use of common and traditional paving equipment which should be cost effective.

For the remaining extension of the entrance drive from the Manor House complex to Duquette Avenue NE, it is recommended that the width of the pavement should be 24 feet. The width of 24 feet is common construction and would be the most economical approach. In addition, a public roadway width of 24 feet is fairly typical so most drivers will be comfortable managing two-way traffic at that width of pavement.

### Loop Road

The Master Plan calls for the removal of both the hillside parking lot and Shady Lane Pond parking lot. As an alternative to these lots, two proposed parking areas, the Nature Center lot and the Great Lawn lot, will be added to both the hillside and pond area to be utilized by Manor House and Nature Center guests. A 24-foot, two-way Loop Road will connect each of these lots and will then continue back southwest, where a Nature Center and shelter drop offs will be located.

### Manor House Drive

The Manor House drive, currently being utilized as the main entrance road, is composed of approximately a 15-foot width of asphalt, barely set back from the main Manor House façade. Its location clutters the view of the Manor House with maintenance vehicles and 'no parking signs' and limits the small amount of greenspace that remains.

Park traffic simply does not belong at the Manor House. It should be preserved as a homestead, highly pedestrian and almost completely void of cars. That said, there are special circumstances when vehicles will be desired near the Manor House; service vehicles, VIP drop-off, emergencies, etc., and therefore, adequate roadways should be provided. As a result of restricting traffic to the Manor House and one-way conversion, the following changes are to take place:

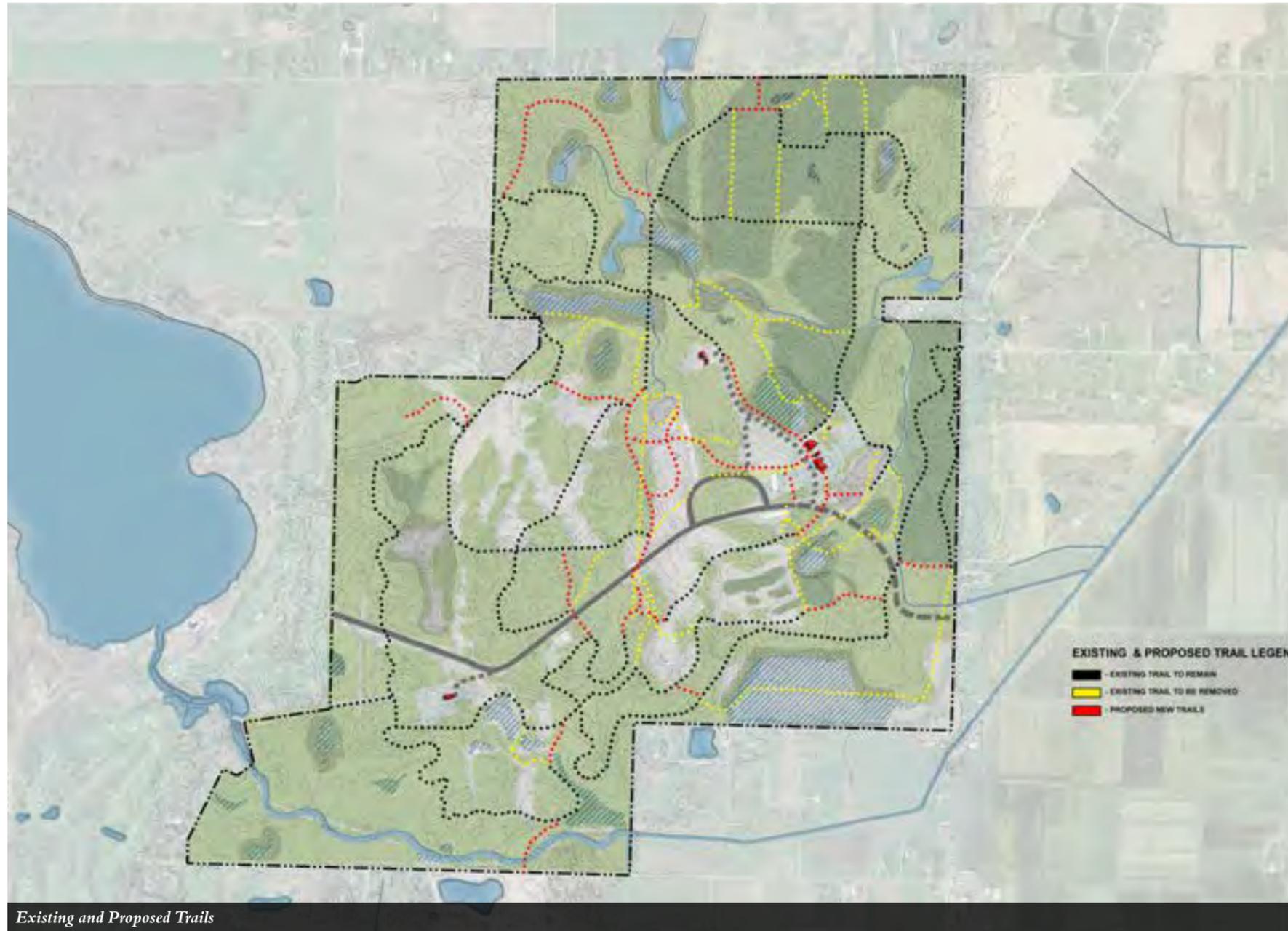
- Provide a small parking area east of the intersection of the Manor House Drive and Park Entrance Road. This allows for improved pedestrian access to the historical buildings and allows vehicles to not only park, but turn around if they pass the main parking area without traveling in front the Manor House or exiting the Park towards Duquette Ave. NE.
- Install a gate at the south end of the Manor House road to restrict access.
- Post the Manor House Road as one-way, south to north. This road should remain narrow and look like a residential driveway. Changing material to chip and seal, or other material of the period, can reinforce this theme. The one-way traffic means a new road is necessary to allow traffic to loop back to the main parking area. This occurs approximately half way to the Little House. This new road also allows access to the Little House without traveling in front of the Manor House.
- Convert the existing parking area on the north side of the Carriage House to a pedestrian-friendly gathering plaza and car court with severely limited use as a parking lot.

The existing 15 feet of pavement adjacent to the Manor House is intended to be transitioned to the "Heritage Loop Trail." A new 15-foot wide "driveway" would be installed parallel to this path, originating at the extended Park Entrance Road. By utilizing the Manor House access road as a driveway, it will limit vehicular access to only those necessary. Minimal cars and limited paved surface area will open up the area in front of the Manor House for optimal overlooking views from the hillside.

The Manor House Drive would be constructed similar to a typical full depth asphalt pavement section with the exception of the top course. In lieu of an asphalt surface course it is recommended that the final top course be chip seal, or other material of the period. Chip seal provides a more rural look and feel which better connotes visually as a "driveway" for the users and guests of the Manor House complex.

Continuing past the Manor House complex, the proposed Manor House Drive and limestone trail will extend north towards the Little House, and southwest, towards the Great Lawn parking. This portion of the Manor House Drive will be 20' wide to allow for two-way traffic and would be of similar construction to the 15-foot driveway; a traditional full depth asphalt pavement section but with a top course of chip seal, or in lieu of asphalt.

### PHOTOS THAT DESCRIBE THIS?



Existing and Proposed Trails

### Trails, Trailheads & Connections

Surrounding the primary activity areas, the trail network not only provides necessary connections between point A and point B, but develops a trail hierarchy that is reflective of the bull's-eye design concept, the historic heritage of the site and its unique natural environment. Pedestrian trails will provide opportunities to learn about the history of the site, to explore temporary or permanent community installations, to discover hidden pools and wetlands, to hike or run the trails, and much more. Specialty trails and a new trailhead for equestrians and mountain bikes provide good opportunities for new riders to explore the park.

The proposed trail system focuses on existing trails, maintaining those that provide access between points of interest and abandoning those that are redundant or traverse fragile ecosystems. New trails will only be created where no other connections exist.

**Proposed Trails**

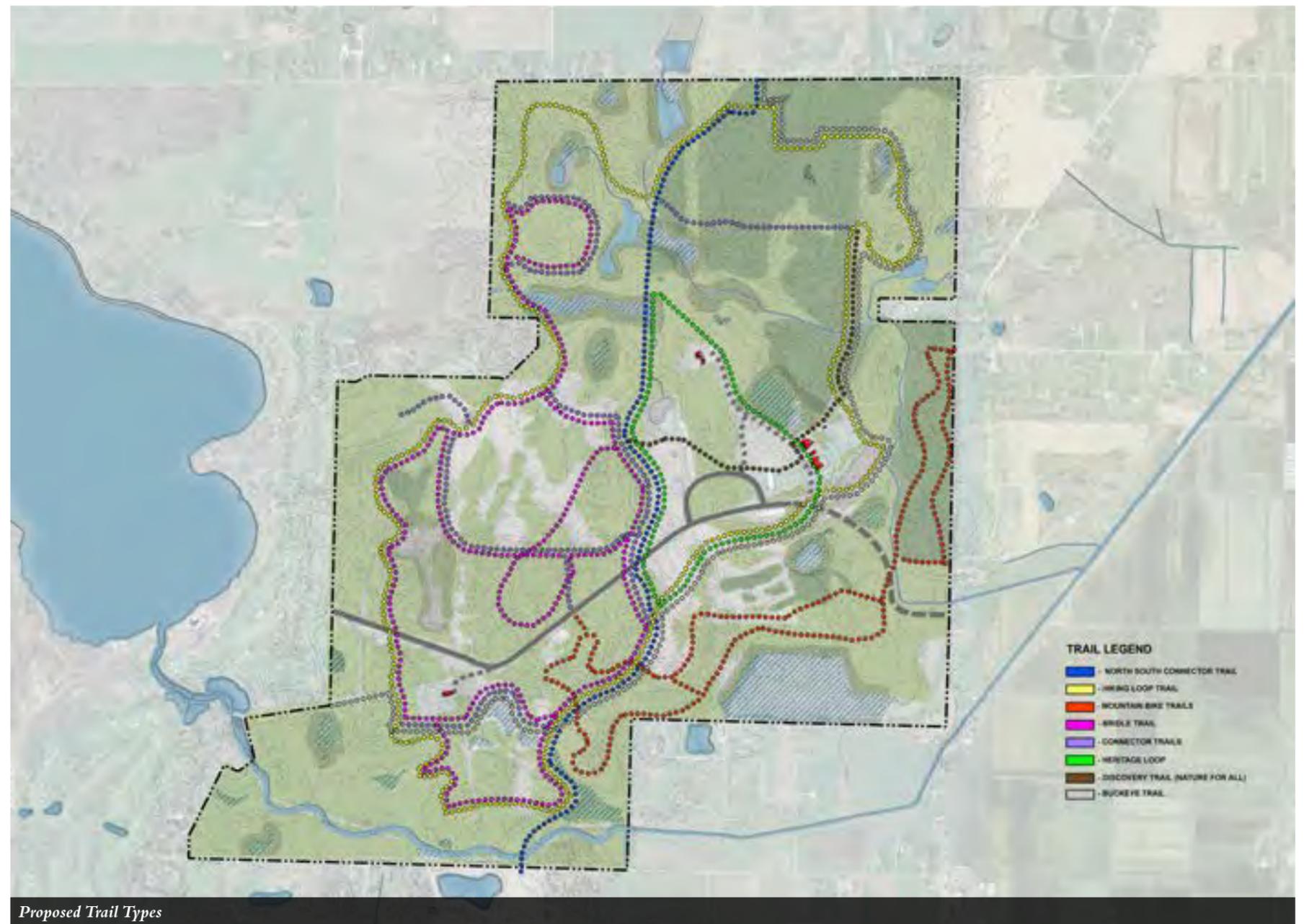
**Discovery Trail**

The Discovery Trail will connect the Manor House Area to the Pond Recreation Area. Designed for accessibility, the quarter mile long asphalt trail will formally begin at the Overlook Plaza which provides views over the Great Lawn and Manor House Area. Interpretive panels at this location provide a history of the buildings and grounds. From the Overlook Plaza, visitors may choose to follow the path down the hillside to the Welcome Plaza and eventually the Nature for All trail, or they may follow the trail to the west, past the small shelter and into the forest where it winds in and out of the tree canopy to provide unique opportunities for temporary or permanent community art installations. The trail comes to a tee at a small intersection overlooking the Pond Recreation Area. From here, visitors may choose to head north toward the Natural Playground Area and the Little House or southwest toward the Nature Center, Pond, and Boardwalk and eventually the North/South Connector trail.

**Heritage Loop Trail**

The 1.5-mile-long, ten-foot wide limestone Heritage Loop Trail connects the Environmental and Historical Core areas with a single, continuous loop that will be available for both hikers and bicyclists. Along the trail, interpretive stations will convey the history of the site and the surrounding region. Wherever possible, this trail should be designed to meet accessibility requirements.

This trail may be entered from multiple locations, but officially begins at the Manor House Drive and the South Parking Lot. From this location, the trail follows the existing roadway past the Manor House, Carriage House and Little House. A six-foot mowing strip will separate this route from the proposed Manor House drive until it reaches the parking lot at the Little House. The route then continues south along the N/S connector until it crosses the main entrance drive and reaches the intersection and node adjacent to the Brumbaugh Cemetery and barn foundations. From here, the trail continues eastward along the existing Meadowlands trail back to the Manor House.



*Proposed Trail Types*

**North South Connector Trail**

The North South Connector Trail provides access to Quail Hollow from the surrounding community and connects the north and south trailheads as proposed in the Stark Parks Trail & Greenway Plan. Similar to the Heritage Loop Trail, the ten-foot wide limestone trail will accommodate both hikers and bicyclists and strive to meet accessibility requirements. This trail will also be designed to provide access for emergency and maintenance vehicles.

From the Pontius Road Trailhead, south to the cemetery, the trail will follow an existing trail bed and old farm lane. At the cemetery, the existing trail veers off, so the North/South Trail will chart a new course weaving down the hilly slope to the flatter regions where it will eventually reach the Swamp Street Trailhead and cross the Congress Lake Outlet. Based on the current trail alignment, two bridges are anticipated. One bridge will be a dual-purpose bridge for access by bicyclists, hikers and vehicles to the Swamp Street NE Trailhead. A second bridge located just south of the Bird and Nature Sanctuary will be 10’ wide with an approximate length of 30 feet.

**Park Loop Trail and Connector Trails**

The Park Loop Trail will be a six-foot wide, natural surface hiking trail that follows existing trails around a single, large loop around the entire park. Connector Trails will be four-foot wide natural surface hiking trails that follow existing trails and provide opportunities for hikers to shortcut back to the core activity areas. These trails provide access to the outer regions of the park and provide opportunities for longer hikes. Due to their circuitous nature, there are many opportunities to access these trails. Due to high water tables, proximity to wetlands, and the numerous creeks that traverse through the park in the springtime, three pedestrian bridges may be installed to avoid these conditions along the Park Loop Trail. Each bridge will be approximately eight-foot wide and are will be constructed to only support pedestrian traffic.

**Buckeye Trail**

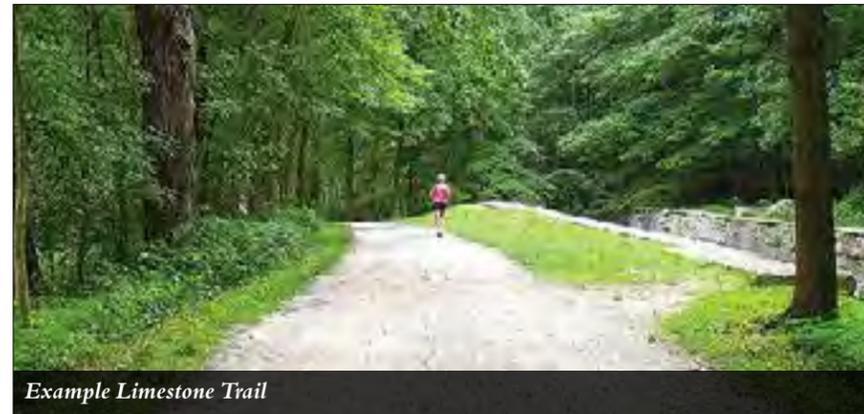
Although the Buckeye Trail can continue to take much of the same course through the park as it does today, the local chapter of the Buckeye Trail Association, the Crooked River Chapter should work with the Design Team to designate the best path for the hikers during the Implementation Phase.



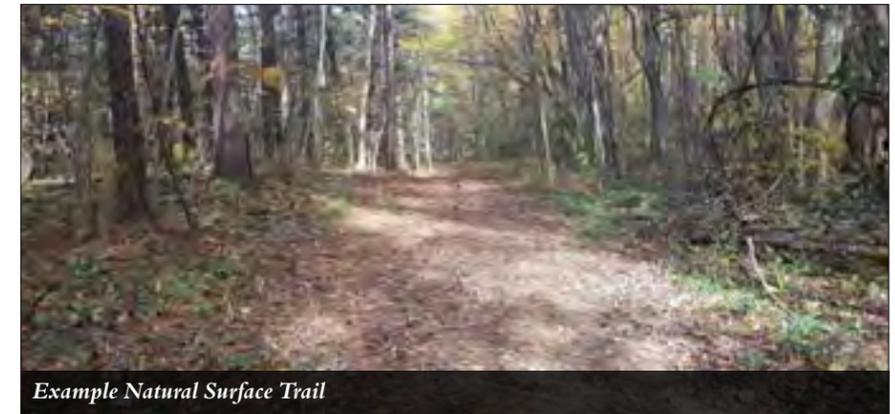
*Example Boardwalk*



*Example Bridge*



*Example Limestone Trail*



*Example Natural Surface Trail*



*Example Limestone Trail*



*Example Natural Surface Trail*



Example Equestrian Trail

**Nature for All Trail**

The Nature for All Trail will be maintained and linked to the Discovery Trail. Interpretive signs should be replaced as needed.

**Equestrian Trails**

The Equestrian Trails will feature a one large loop with three smaller loop trails that will allow riders to experience a wide variety of ecosystems within the park as well as the ability to lengthen or shorten their rides as needed. The loop trails will originate from the Mountain Bike/Equestrian trailhead, loop around the group camp, where options will split off to provide access to the southwestern corner of the park with its grassy wetlands and old-growth pines, the western ridge, the central meadow areas, and vernal pools in the northwestern corner.

While a majority of these trails are labeled as bridle trails today, in the future, they will be noted as shared use trails open to both equestrians and hikers. The shared use trail will be 10-foot wide with a natural surface. High water tables and organic soil create extremely muddy conditions in the southwestern corner of the park and where trails run adjacent to wetland areas. SCPD should armor portions of the trail that are consistent problem areas as well as consider closing trails to equestrians during severe trail conditions. Where the equestrian trails merge with the North / South Connector Trail, a trail parallel to the multi-purpose trail should be provided for equestrian use only. The parallel trails should be separated from one another with a no-mow area that could be allowed to naturalize over time. Total trail length will be approximately 4.3 miles.

As SCPD enters the Implementation Phase, they should consult with the local chapter of the Ohio Horseman’s Council (OHC).

**Mountain Bike Trails**

The existing mountain bike trail is a single-track, natural surface trail about 3.2 miles in length. The southeastern portion of the trail will be rerouted out of the wetland to preserve the habitat. Where the new entrance road extension crosses the trails, the trails will be rerouted to create two smaller loops with a single, two-way crossing over the road in order to improve safety. The crossing will be marked with pavement striping and signage. The trail also crosses the 10’-0” wide, limestone North / South Connector in two different locations. A 10’-0” wide asphalt crossing will be provided at these crossings in conjunction with signage. The remainder of the proposed mountain bike trail will follow the existing trails that are currently in good condition.

As SCPD enters the Implementation Phase, they should reference the CAMBA’s Mountain Bike Trail Improvements Study completed at Quail Hollow in 2014 and work with the local chapter to determine final trail locations and necessary improvements. Note: Clear Sight Triangles should be created at all bicycle and equestrian intersections to provide unobstructed views of oncoming traffic and improve safety.

**Shared Use Trails**

In some locations, trails will serve multiple uses and routes. The designation of “shared use trails” will only be given to portions of the trail network where multiple uses are being called out. Such occurrences take place at the North/South Connector Trail, the Heritage Loop Trail and the Equestrian Trail. Trails given this designation will be appropriately widened and signed to ensure that multiple users and types of users may all be accommodated.



Example Shared Use Trail



Example Mountain Bike Trail

**Trailheads**

**Pontius Road Trailhead**

The northernmost hiking trails currently border Pontius Road with little to no designation as to where the trails start and end. A single informal trail connection exists, but it is neither signed, nor monitored by Stark Parks. As proposed by the Master Plan, a formal trailhead will be implemented at the north of the park, directly across from Griggy Road. This trailhead will contain a single vault restroom and parking to accommodate eight vehicles. A split rail fence and gate will identify the trailhead along Pontius Road. Additional amenities will include a trash container and an information kiosk/park trail map.

**Swamp Street Trailhead**

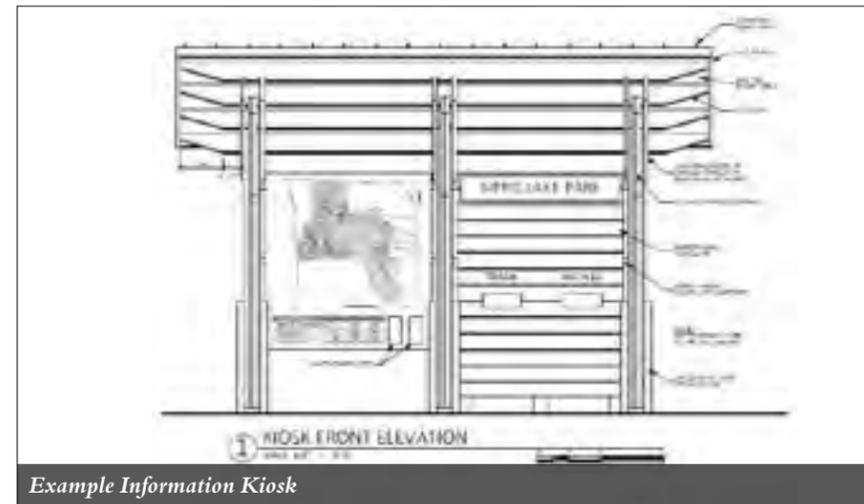
The existing, southernmost hiking trails do not connect to Swamp Street NE. (While there are rumored to be informal trail connections to Swamp Street NE through neighboring properties, it is impractical and difficult to gain direct access to Swamp Street NE from Quail Hollow due to the Congress Lake Outfall. In most locations, the outfall ditch is approximately 40 to 60 feet wide and approximately ten feet deep.)

As proposed by the Master Plan, a formal trailhead will be implemented at the south end of the park. The trailhead will be accessed directly across from Glenberry Avenue and the newly constructed residential development Danbury Glen; a connection that aligns with the trails proposed in the Stark Parks Trail & Greenway Plan. A split rail fence and gate will identify the trailhead along Swamp Street. This trailhead, when fully built out, will contain a single vault restroom, trash container, informational kiosk/park trail map, and parking to accommodate eight vehicles.

Given the close proximity of the Congress Lake Outfall to Swamp Street NE, the trailhead will be located north of the outfall ditch, approximately 75 to 100 feet from Swamp Street NE. Therefore, in order for bikers, hikers and vehicles to access the trailhead, a bridge must be constructed to move both trail users and vehicles across the Congress Lake Outlet. The bridge and roadway connection to the trailhead will also serve as a part of the North-South Connector Trail planned for Quail Hollow. Because of its dual role, the bridge is proposed to be a vehicular single lane bridge approximately 60 feet long, but at a width of 14 feet, which is wider than a typical roadway lane width. The 14 feet width is intended to allow a vehicle and pedestrian to both safely use the bridge at the same time. Given the few parking spaces proposed for the trailhead a more traditional two-way bridge was deemed unnecessary.

**Mountain Bike and Equestrian Trailhead**

A common Trailhead for the Mountain Bike and Equestrian Trails will share a parking area and amenities with the Group Campground. The parking lot will provide pull-in parking for the horse trailers, hitching posts, and mounting blocks. When fully built out, this trailhead will also contain a two-fixture restroom, trash container, bike rack, fix-it station, small shelter, information kiosk and park trail map.



Example Information Kiosk



Example Hitching Posts



Pontius Road Trailhead



Swamp Street Trailhead



Mountain Bike & Equestrian Trailhead

### Community Connections

One of the most consistent stakeholder and public comments received by the Design Team was regarding the relative isolation of Quail Hollow Park to the surrounding community. Though just outside of the village limits of Hartville, the park seems miles away. With these comments in mind, the Design Team investigated alternatives to connect local assets within the region to the park via on-street bike lanes/sharrows or through multipurpose trail connections. These community connections were designed to build off the 2014 Trails and Greenways Master Plan completed by Stark Parks for the entire County.

The first step in establishing community connections was to verify which assets were worth connecting to. The Design Team interviewed both the Village of Hartville and Lake Township staff as well as local business leaders to gain a consensus on valuable assets that needed to be connected. From those discussions, the following list of assets needing connections was established:

- Downtown Hartville
- Hartville Marketplace
- Fitchner Park
- Gentlebrook Center
- Lake High School
- Lake Athletic Fields
- Memorial Park
- Hartville Elementary
- Stan Balliett Field

With the list of local assets established, the Design Team conducted extensive field and GIS research in the local area to verify roadway right of way widths, determine the existence of utility easements, identify public property and to denote the physical, and political barriers that could limit the routes connecting these assets to the park. The Design Team also studied the 2014 Trails and Greenways Master Plan and The Portage County Park District's Trail and Greenways Plan, completed in 2016. The trail connections recommended in those plans were incorporated into the proposed alternatives. From that research, two alternatives were established.

### Alternative 1 – Minimal Right of Way

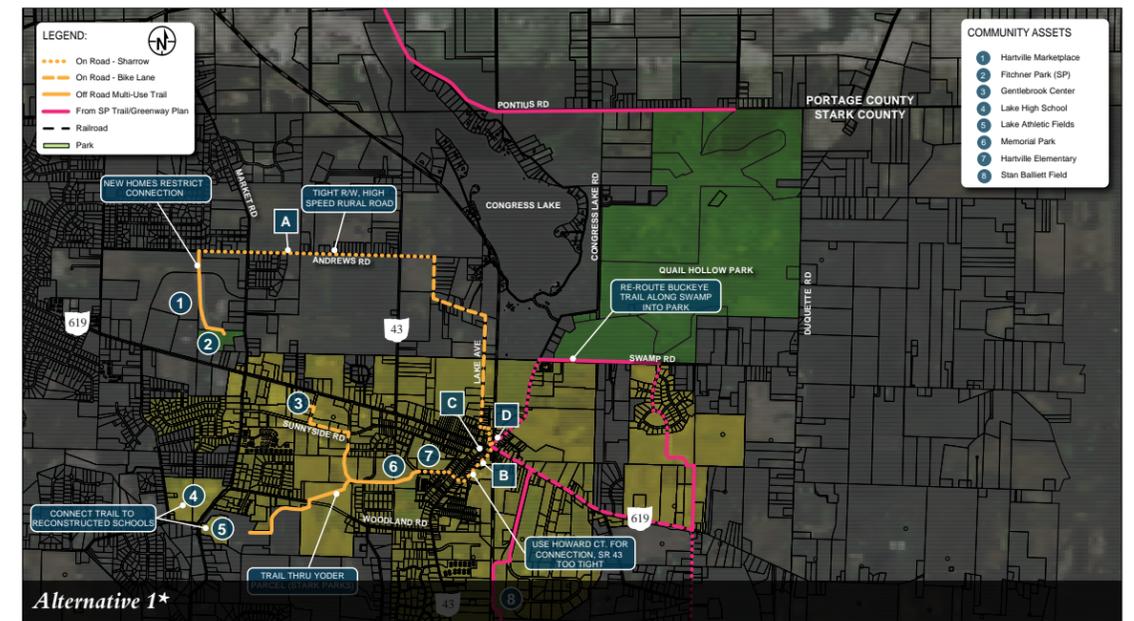
This alternative focused on an, easier to implement, lower cost solution to connecting Quail Hollow Park to the community. Connections were made mostly within or along existing right of ways or through public property (public parks, schools, etc.). The idea of this alternative was to minimize private right of way impacts and project costs. This alternative utilizes more sharrows and bike lanes as opposed to multi-purpose paths.

### Alternative 2 – Trial Connections

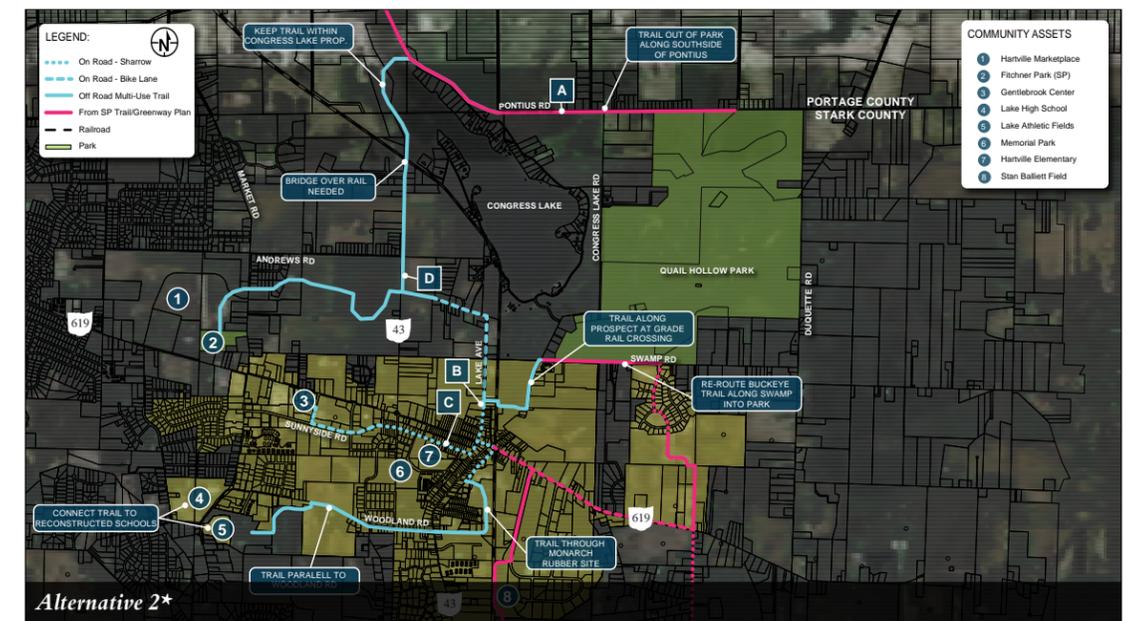
This alternative focused on a better user experience and connections to the community that all users and age groups could safely use. Though sharrows and bike lanes do provide connections, not all users feel safe driving within the roadway, especially with children. This alternative focused on utilizing multipurpose paths, where applicable as opposed to sharrow/bike lanes. Though the cost of this alternative would be considerably higher than Alternative 1, due to right of way and infrastructure costs, it would provide more suitable connections to the community.

This alternative connects all the selected assets, and navigates around Congress Lake into Portage County. Coordination with the Portage County Parks District will be needed to fully implement this alternative. A bridge over the existing rail line along SR 43 is also proposed with this alternative to connect to the Hartville Marketplace.

Further study and public outreach is needed during preliminary design to determine the exact paths to connect the local assets within the community to Quail Hollow. Not only will stakeholders need to be engaged but the potential property owners effected by these connections as well. These two alternatives are meant as a starting point to guide further discussion once funding for connections becomes available.



Alternative 1\*



Alternative 2\*

\*Refer to Appendix C for full-sized images

## UTILITIES

### On-Site Private Systems

#### ***Sanitary System***

Given that the existing five buildings are served by existing on-site wastewater treatment systems, a reasonable assumption would be to continue the use of such on-site wastewater treatment systems for improvements made at the park. Based on the proposed Master Plan it is anticipated that two additional on-site wastewater treatment systems would be required. One system to serve the new Nature Center and one to serve the area of the new Maintenance Facility along with the Group Camping restroom facility. Given the requirements for the Manor House complex, we anticipate both treatment systems would be a Mound System and the cost estimates have been priced accordingly.

We did consider connecting the Nature Center and/or the Maintenance Facility complex to the existing Manor House complex Mound System. However, for the following reasons we do not recommend transporting the sewage from the Nature Center and/or the Maintenance Facility complex to the existing Mound System:

1. The existing mound was built specific to the flows generated by the three buildings in the Manor House complex; adding flows from the Nature Center and/or the Maintenance Facility complex would likely exceed design capacity.
2. Installing a pump station and force main to transport the flows from the Nature Center or the Maintenance Facility complex to the existing Mound System and the required modifications to the Mound System to accommodate the additional flow would likely be similar in costs to a stand-alone Mound System for either the Nature Center or the Maintenance Facility complex.
3. Given the improvements found in the Master Plan, keeping the Nature Center and/or the Maintenance Facility complex separate does provide more options for dealing with the existing Mound System in the future.

#### ***Water System***

As with the Sanitary System, the current buildings are served by on-site systems, so the use of additional on-site water wells for the Nature Center and the Maintenance Facility complex are reasonable options. One existing well serves the Manor House complex and both the Levitt House and Little House have an individual water well. For both the Nature Center and the Maintenance Facility complex it was assumed for the Master Plan that each water well would include treatment such as reverse osmosis and chlorination.

As with the sanitary system, we did investigate connecting the existing water treatment facility located at the Carriage House to the Nature Center and Maintenance Facility complex. Considering the need for a booster pump station to transport the water from the Carriage House to either the Nature Center or the Maintenance Facility complex along with the length of the water service line, we found the cost to be unreasonable. Based on assumptions for the diameter size of the water service, the length from the Carriage House to either facility and the inclusion of a booster pump, we calculated the capital costs to be eight to 10 times more costly than drilling individual water wells with associated treatment systems.

## Public Systems

### ***Sanitary System***

The closest public sanitary sewer collection system is managed by the Village of Hartville and is located in the Danbury Glen subdivision off of Swamp Street NE. There is an existing pump station on the north end of the subdivision that is close to Swamp Street NE. In conversations with the Hartville Village Engineer, there is plenty of capacity within the existing pump station as well as the downstream collection system that captures the discharge from the pump station. In the discussions with the Village Engineer he noted that the existing pump station and local collection system should be able to handle the flows from Quail Hollow even with the anticipated growth in the use of the park and the addition of a Nature Center and Maintenance Facility.

For this Master Plan, we developed high level preliminary concepts and costs for serving Quail Hollow with public sanitary sewer service. For example, the existing pump station located at the Carriage House would be replaced with a new pump station. The new pump station would accept flow by gravity from the Little House and the discharge of the force main transporting sewage from the Nature Center. The force main from this main pump station would flow west following the Entrance Drive and then turn south along the North South Connector Trail to the Danbury Glen subdivision pump station.

A separate pump station would be constructed in a position to take flow by a gravity collection system from the Group Camping area, the Maintenance Facility and the Levitt House. The force main discharge from this pump station would connect into the force main from the main pump station.

Costs for both the on-site wastewater treatment systems and the public sewer option are found in the OPCC in Appendix C.

### ***Water System***

The closest public water line to serve Quail Hollow is a 12" diameter Ductile Iron Pipe (DIP) water line along SR 619 in the Village of Hartville. The potable water system serving Hartville is owned, operated and maintained by the City of Canton. In speaking to the Canton Water Department, they would anticipate extending a 12" diameter water line along Prospect Avenue NW/Congress Lake Ave NW (the road name changes at the Hartville corporate boundary) approximately 5,000 LF to the entrance of the park. From the Quail Hollow entrance, an 8" diameter water line would extend approximately 4,800 LF from Congress Lake Ave NW to the Carriage House where the current water treatment system exists.

In discussions with the Canton Water Department, they anticipate no capacity or pressure issues with the proposed scenario described above. However, it is recommended that the available volume and pressure be investigated and field testing completed before detailed design efforts are undertaken to design the new water line extensions to serve Quail Hollow.

Costs for both the individual on-site water wells along with the extension of the public potable water system to serve Quail Hollow are found in the OPCC in Appendix C.

### ***Fuel System***

It is our understanding that in the future that Stark Parks would like to replace the current propane system for heating with a natural gas system. In discussions with Dominion East Ohio Gas, there is an existing 4" diameter natural gas line on Congress Lake Road that is stubbed to just past the entrance to the Congress Lake development. There is another 4" diameter stub further north of the Quail Hollow Park entrance. These two 4" diameter lines provide service for the entire Congress Lake development. The assumption is that the slight demands placed on the natural gas system for the five existing structures plus a Nature Center and Maintenance Facility within Quail Hollow will require no system upgrades to the infrastructure that currently feeds the two 4" diameter lines on Congress Lake Road.

Costs to extend natural gas service to serve Quail Hollow are found in the OPCC in Appendix C.

### ***Electrical System***

There are no anticipated concerns or issues with providing additional electrical service to Quail Hollow for the existing facilities plus the new Nature Center and the Maintenance Facility. However, prior to the detailed design of either structure it is recommended that SCPD and/or the design consultant have detailed discussions with Ohio Edison to verify electrical capacity in relationship to the anticipated demand.

## OPINION OF PROBABLE CONSTRUCTION COST

The associated Opinion of Probable Construction Cost (OPCC) is based on an evaluation of the construction costs for each facility and site improvement based on current market rates. These estimates have been determined as general contract construction costs on a square-foot or lineal-foot basis, through the consultants' experience with construction over past years. In addition to unit construction costs, new buildings include a cost allowance for site improvements (earthwork and landscaping). A design and construction contingency of 30% is also calculated into the construction costs. The project costs include budget allowances for typical soft costs, including furnishings and equipment as well as professional fees for architects, civil, mechanical, electrical, plumbing, fire protection, and structural engineers and landscape architects, typically including phases such as Programming, Schematic Design, Design Development, Construction Documents, Bidding, Negotiation & Permitting and Construction Administration. Each project is viewed separately regarding its cost, however it may be possible to take advantage of economies of scale and produce some cost savings, based on how projects are phased and combined for bidding purposes.

In providing Opinions of Probable Construction Costs, the client understands that the Design Team has no control over the actual costs or the price of labor, equipment, or materials, or over the Contractor's method of pricing, and the Opinions of Probable Construction Costs provided herein are made on the basis of our qualifications and experience. There are many variables including quality of construction, schedule, escalation, and market value that cannot be determined at this time. Domokur Architects and our consultants make no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.