



FORT DES MOINES PARK MASTER PLAN

JANUARY 2012



WE WOULD LIKE TO THANK THE MEMBERS OF THE POLK COUNTY CONSERVATION PLANNING COMMITTEE AND POLK COUNTY STAFF. WE WOULD ESPECIALLY LIKE TO THANK THE PUBLIC PARTICIPANTS THAT ATTENDED THE COMMUNITY WORKSHOPS AND PARTICIPATED IN FOCUS GROUPS.

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EXECUTIVE SUMMARY

The master plan for Fort Des Moines Park provides a clear development plan for the 117-acre park. The six-month planning process began in July 2011 and has involved the local public and Somerset Neighborhood Association, other park users, Iowa Department of Natural Resources, Polk County Conservation Advisory Board, RDG Planning & Design consultants and Polk County Conservation Board Staff through public workshops, working sessions and ongoing meetings.

Since 1972, when the Federal Government declared 103 acres as surplus property and formed the park, recreation use has experienced steady growth. In 1992, a 1.5 acre-tree arboretum was established. The original plan called for shelters, access roads, playground and fishing access – amenities which are in place and have stood the test of time.

The park has a groundbreaking military history. The Fort Des Moines Post served as the first US Army Training camp for black officers in 1917. After World War II, the park site was part of the largest Women's Army Auxiliary Corps reception and training centers in the U.S.

The Park is a combination of pre-settlement bur oak woodland, mowed parkland, shrubs and woodland, non-native grasses, successional forest and coniferous plantings. More than 222 plant species were inventoried in the park in 2007, including several rare to unusual Central Iowa plants.

Public input and park managers identified a variety of park needs in response to the aging of the park's infrastructure, increasing development pressures, and likely "outdoor classroom" opportunities due to School District interest in allowing the park to expand to the South. These needs include improved access to and within the Park, restoration of historic park facilities; improved boating/fishing access; additional trail opportunities, expanded winter access, more fully accessible facilities, and increased amenities in support of interpretation and environmental education activities.

Several significant improvements are recommended in the master plan, including:

- Enhancing and/or restoring the natural prairie areas and woodlands, and improving the pond's water quality
- Improving facilities by enhancing existing shelters, adding additional shelters and replacing existing restrooms
- Developing a trail system that improves access to the pond, provides greater access to the park and supports enhanced environmental education and interpretation opportunities
- Improving park roads and parking areas to provide safe and easy access to all areas of the park

- ① Proposed Park Entrance Enhancement
- ② Proposed Lake Drive and Parking
- ③ Proposed Fishing Pier
- ④ Proposed Shelter #1 Restoration
- ⑤ Existing Ball Field Relocation
- ⑥ Proposed Pedestrian Bridge
- ⑦ Proposed Parking Expansion
- ⑧ Proposed Playground Enhancements
- ⑨ Proposed Restroom Restoration
- ⑩ Proposed Shelter #2 Restoration
- ⑪ Proposed Parking & Kiosk
- ⑫ Proposed Peninsula Enhancements
- ⑬ Proposed Boardwalk and Pedestrian Bridge
- ⑭ Proposed Parking Expansion
- ⑮ Proposed Shelter
- ⑯ Proposed Shoreline Fishing Node
- ⑰ Proposed Parking, Kiosk & Trail Access
- ⑱ Trail (see page 20 for classification)

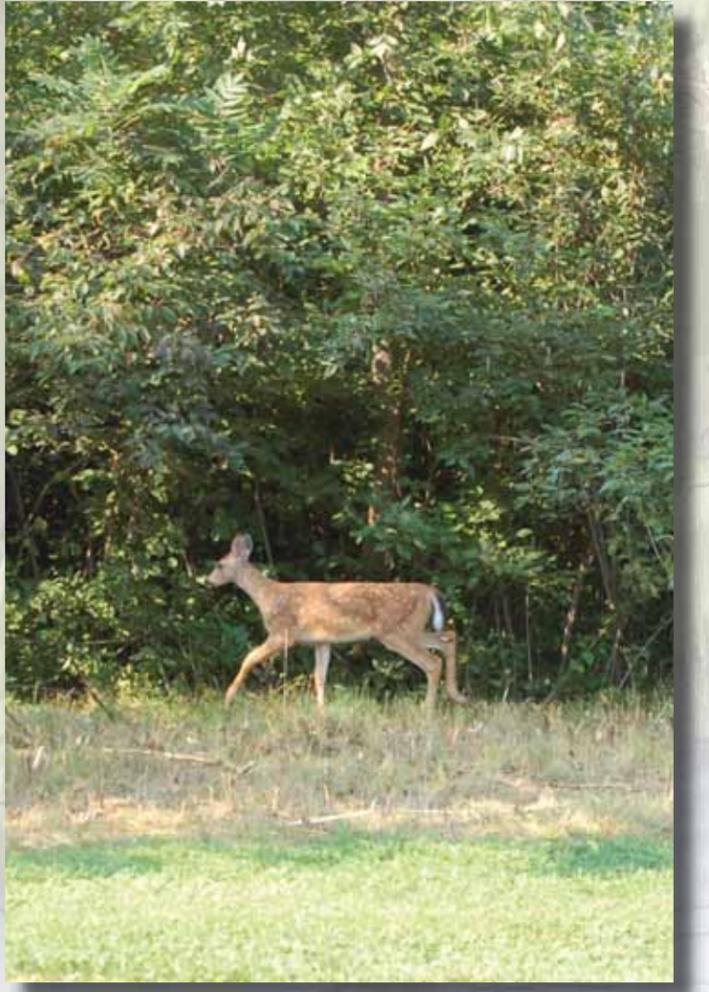


FIGURE 0.1
Location of Fort Des Moines park within Polk County

- Restoration Effort**
- Woodland Restoration
 - Prairie Restoration
 - Lawn Restoration
 - Stormwater Treatment Facilities
 - Pond Restoration



FIGURE 0.2
Fort Des Moines Park



PURPOSE

The master plan for Fort Des Moines Park is a guide for future development of the 117-acre park. Park master plans provide a means to determine the best uses for a park and to optimize management of the Park's natural and man-made resources. The Fort Des Moines master plan serves as a general guide for future appropriate park uses and their approximate location within the Park. The plan provides a long-range vision (10 to 20 year time frame) for future development and programming. The plan is conceptual in nature and is not intended to address the detailed issues related to site planning, facility designs, or ongoing park operations.

PROCESS

The Fort Des Moines Park Master Plan process began in late July 2011. An initial public meeting was conducted in August 2011 at the nearby Fort Des Moines Museum to gather input from park users, neighbors and other interested individuals. A Polk County Conservation (PCC) Planning Committee was developed to oversee the planning process. The Committee completed an assessment of the physical and natural resources of the park and surrounding areas. Members of the planning committee met with Des Moines Public School officials regarding potential plans for park expansion on current school ground to the south of the park. The Iowa Department of Natural Resources also provided guidance on improving the park's water quality and fisheries for the master planning process.

In association with the consultant, RDG Planning and Design, the committee developed a draft master plan. The plan was based on the previous public/agency input, existing conditions and anticipated future needs, particularly related to upgraded facilities, improved circulation, and the possibility of additional park land becoming available through Des Moines Public Schools.

A second public meeting was conducted in October 2011 where the planning committee presented the draft plan for additional input. Following incorporation of that feedback, the committee then developed recommendations for the final plan to present to the Polk County Conservation Board in January 2012.



FIGURE I.1

Polk County Advisory Committee field tour and inventory of Fort Des Moines Park



FIGURE I.2

Public meeting #1 for Fort Des Moines Park.

GOALS

- Connect visiting public to the higher quality woodlands
- Expand and improve the trail system
- Improve environmental education opportunities and access including wetland construction and other interpretive options for the park expansion to the south
- Improve accessibility for visitors with disabilities
- Expand fishing opportunities/access
- Renovate existing park structures
- Address existing park access and internal road system concerns
- Provide improved accessibility for visitors with disabilities
- Restore habitat, including reconstructed prairie
- Improve overall off-site way-finding and interpretive signage
- Improve water quality
- Expand the park to the south in cooperation with the Des Moines School District to enhance environmental education opportunities and additional natural areas within the park



FIGURE I.3

Polk County Advisory Committee field tour and inventory of Fort Des Moines Park



HISTORY

Activity at Fort Des Moines Park can be traced back to the early 1900's when nearly 640 acres of land housed a large scale cavalry post known at that time as the "Ritz-Carlton of the Army".

By 1917, the Fort Des Moines Post served as the first U.S. Army training camp for black officers. A U.S. General Hospital occupied space at the Fort from 1917-20, followed by the 14th Cavalry Squadron from 1920-40, and an induction center in 1941. The Fort saw an era of unprecedented construction from 1942-45 when more than 170 buildings were constructed at the Fort complex to support 5,900 women who would begin training at the "West Point for Women" after World War II. Fort Des Moines was the largest of three Women's Army Auxiliary Corps (WAAC) reception and training centers in the U.S. and the only one that prepared women to become officers. More than 65,000 women and officers were trained at the Fort from 1946-48.

After 1948, the Fort became a U.S. Army Reserve Center.

In 1972, the Federal Government declared 103 acres of the Fort lands as surplus property, transferring the property to Polk County, thus creating Fort Des Moines Park. A plan for the park called for construction of most of the facilities at the park today: lake and dam, shelters, trails, toilets and roads. Many areas of the park were reforested with native hardwoods. A 1.5 acre arboretum was established in 1992.

Due to slight adjustments in the park boundary over the years, it now consists of 117 acres including the 14-acre lake.



FIGURE 2.1

Historic view of Fort Des Moines.

NATURAL RESOURCES

Fort Des Moines Park lies within a landform that is described as a dissected till plain – meaning this area was glaciated, uplifted, and eroded into the rolling terrain that exists today. The park lies on a ridge between the Des Moines and North River valleys, but the park drains to the North River approximately 2 miles to the South. The rolling terrain has slopes that vary from 5 to 18% on primarily Ladoga and Gara silty clay loam soils. These soils are 27-40% clay and less than 20% sand.

Bur oak woodland or savanna dominated this parkland pre-settlement. 26 acres of that woodland remains in the southeastern portion of the park. The balance of the park's acres can be classified as:

- Successional forest, 41 acres;
- Lake, 14 acres;
- Mowed parkland, 13 acres;
- Shrubs and woodland, 9 acres;
- Non-native grassland, 8 acres; and
- Coniferous plantings, 0.2 acres

A 2007 plant inventory recorded 222 species in the park. The list identifies several species rare to unusual for central Iowa including quaking aspen (*Populus tremuloides*) and Bush's sedge (*Carex bushii*).

Water resources within the park include the nearly 14- acre lake and several small natural wetlands.

Ongoing management continues to actively restore woodland through the removal of exotic invasive species and weedy native species. Invasive shrubs are particularly troublesome and widespread.

The Fort Des Moines Park Arboretum was constructed in the spring of 1992 to enhance public interest in the park and aid in the recognition and appreciation of the many varieties of trees indigenous and/or adaptable to Polk County's climate.

Forty-three of the more common Iowa planted species are established. Each plant is identified with a self-guided tree marker indicating the common and botanical name.

CULTURAL RESOURCES

The former cantonment area of historic Fort Des Moines lies to the northwest of Fort Des Moines Park. The known uses of the park – as a small arms target range and storage area – are not culturally significant. The majority of the park was once disturbed by activities associated with historic Fort Des Moines.

No National Register of Historic Places sites or archaeological resources within the Fort Des Moines Park boundaries are known to exist.

PHYSICAL ENVIRONMENT

Fort Des Moines Park has achieved recognition as an "urban oasis," due to its high quality, reflective outdoor experiences among woodlands and natural settings, including hiking, mushroom hunting and fishing.

The Park further offers a mix of facilities that support a range of recreation activities. Facilities include two shelters, each with nearby restroom facilities.

The first shelter, relatively near the park's entrance, has a nearby backstop/ball field. The ball field can be reserved with the shelter rental. Similarly, the second shelter, on the western side of the park, is adjacent to a volleyball court, also reserved with a shelter rental. A general-use, traditional playground, is also near this site.

The park has a series of nature trails throughout the park, including two signed loops within the woodland area at the East side of the park.

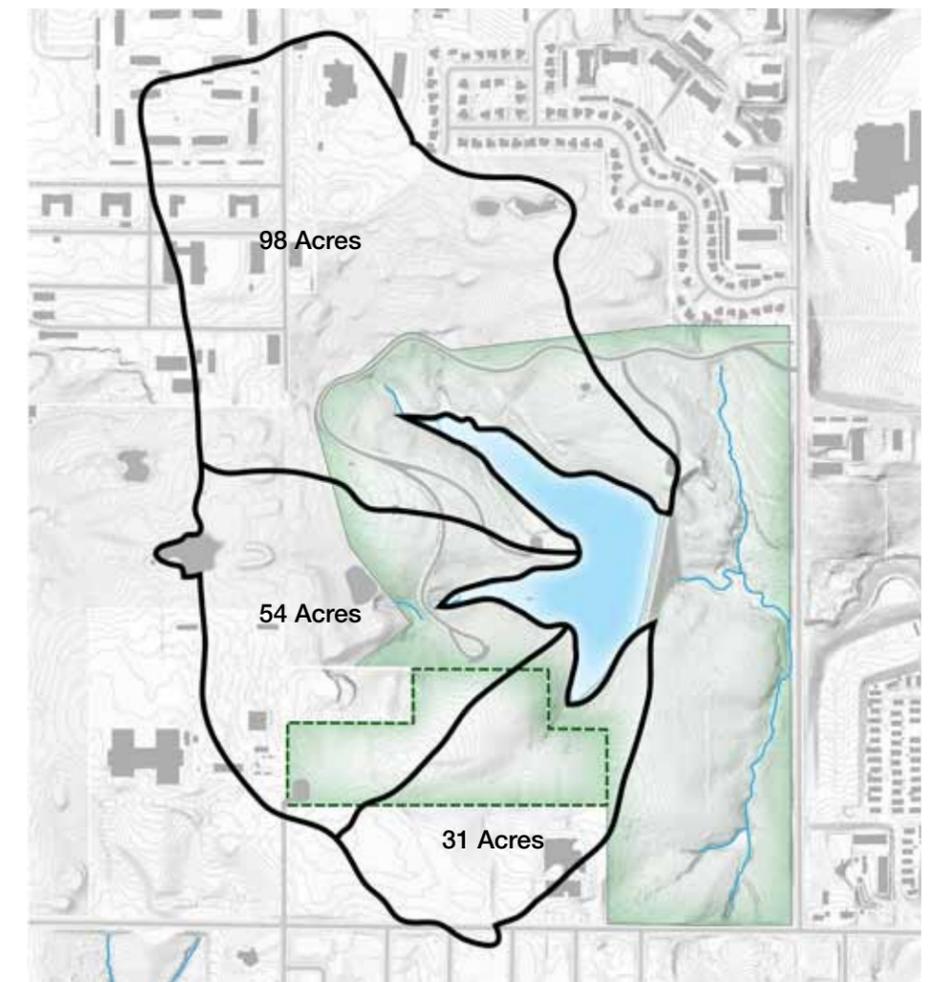


FIGURE 2.2

Fort Des Moines Park Watershed

A knoll on the western side of the lake serves as a focal point for the park and accommodates much of the park's fishing activity. A boat access/ramp is on the south side of this feature.

The entire park is fenced in – with the fencing serving as a possible deterrent to the facility's perception as an accessible, welcoming park. Some of the fencing reinforces the "military" nature of the Fort Des Moines park name.

Immediately to the north of the Park is a section of Blank Park Golf Course and the Somerset Neighborhood Association. The park is generally bordered to the south by Des Moines Public school grounds, and to the West/Southwest by additional golf holes. Further west in what has been referred to as the "superblock," is the Blank Park Zoo and Fort Des Moines Museum.

The overall site is near an increasingly active exit from the (relatively) new Highway 65 Bypass, north of County Line Road.

The entrance to the park, currently located at the NE corner of the park, facing SE Fifth Street is considered a difficult entrance to locate. Beyond the eastern border of the park, a sidewalk was recently installed.

A 1.5 acre arboretum, constructed primarily for education purposes, nestles between Shelter #2 and the fishing knoll, framed by a Y-shaped section of roadway.

MAINTENANCE

Largely the facilities at Fort Des Moines Park are "low-tech" and day-use only, minimizing some of the challenges in other park facilities, but at the same time, these factors cause their own challenges. The shelters and restrooms have received no substantial remodel or major maintenance since the park's original opening in the early 70's. This aging infrastructure does place additional demands on maintenance beyond what is experienced with more up-to-date facilities - supporting the need for remodeling or replacement.

While day-use limits the need for park infrastructure in support of camping, it also makes the park a candidate for off-hours vandalism. Malicious damage has been an ongoing maintenance issue at the park.

ENVIRONMENTAL EDUCATION

Fort Des Moines Park, while ripe for improvement, has definite strengths as a site for environmental education programming. The park has a secluded feel to it - hard to find in the Des Moines metro area. The lake is "right-sized" for introductory kayak and canoe skills-building. Due to its location, wind is rarely an issue - also ideal for beginning paddlers. The lake allows for macro-invertebrate (big bug) studies, but the shore is steep in many areas, resulting in limited water access.

The park's location adjacent to Studebaker Elementary School and McCombs Middle School further enhances the park's opportunity to provide environmental programming to youth.

Once on a woodland hiking trail, the education experience is excellent, but currently poor access to those trails from the existing shelters (gathering points for classes) hinders trail use.



FIGURE 2.5

Fort Des Moines Park pond



FIGURE 2.3

Aerial view of Fort Des Moines Park in 1930. Park boundary line in red.



FIGURE 2.4

Aerial view of Fort Des Moines Park in 1960.



FIGURE 2.6

Aerial view of Fort Des Moines Park today.

A park expansion to the South, (on the North end of the current property for Studebaker Elementary school), could be used to enhance education opportunities through additional prairie/wetland experiences and improved trail connections to the park.

SOCIAL ENVIRONMENT

Fort Des Moines Park is the fourth highest-used park in the Polk County Conservation system with 162,000 visits estimated in 2010. The main recreational activities include picnicking, fishing, mushroom hunting, hiking, and playground play. In addition, the park hosts numerous youth environmental education programs throughout the year, is well-supported by home school interests, and provides shelters for a number of family reunions and other events. The two shelter houses are used daily throughout the recreation season and were reserved 117 times in 2010.

The peak use is concentrated during the summer and into early fall, while winter uses such as ice fishing and hiking/snow-shoeing, are increasingly popular.

In 2001, and again in 2006, the Statewide Comprehensive Outdoor Recreation Plan (SCORP) was developed to provide a comprehensive approach to recreation and protection of fish, wildlife and historical resources. This plan used state demographic trends, recreational standards and trends. The culmination of this planning effort identified four primary planning goals with performance-based objectives supporting each goal. The primary goals are as follows:

- Meet local recreational needs by providing close-to-home opportunities;
- Increase availability of outdoor recreational resources to the public;
- Enhance the quality of the outdoor recreational resources;
- Encourage state, county, city and private sector planning for recreation to meet the needs of Iowans.

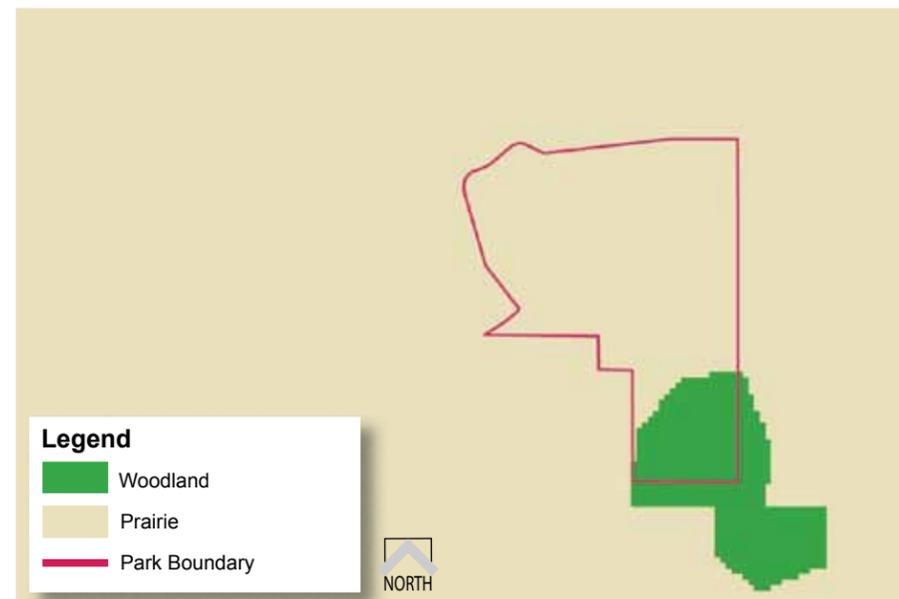


FIGURE 2.7
Historic vegetation diagram

From these planning efforts, the Fort Des Moines Park Master Plan process has been better informed with state-wide trends and considerations. Fort Des Moines Park is within the city limits of the largest population base in the State of Iowa. As the State of Iowa's population growth is stagnant, Polk, Dallas and Warren Counties are all expected to grow in the next several years. The largest portion of this population growth is those 65 years and older.

Resource availability in Polk County is aided by the existence of state, county and municipal parks. The county as a whole is well served by parks. Most state parks provide both access to natural resources and recreational facilities. County parks provide a similar offering. Most municipal parks are much more recreationally based. Fort Des Moines Park, a county-run park within city limits, provides an exception.

The downturn in the local and national economy, paired with the increasing cost of gas, has continued and strengthened a "stay local" trend for vacations. That coupled with the growing green movement, provides a great demand for access to state and county parks including short and extended stays. While this park does not offer overnight stay, its urban location makes it a particularly valued "wilderness" park opportunity.

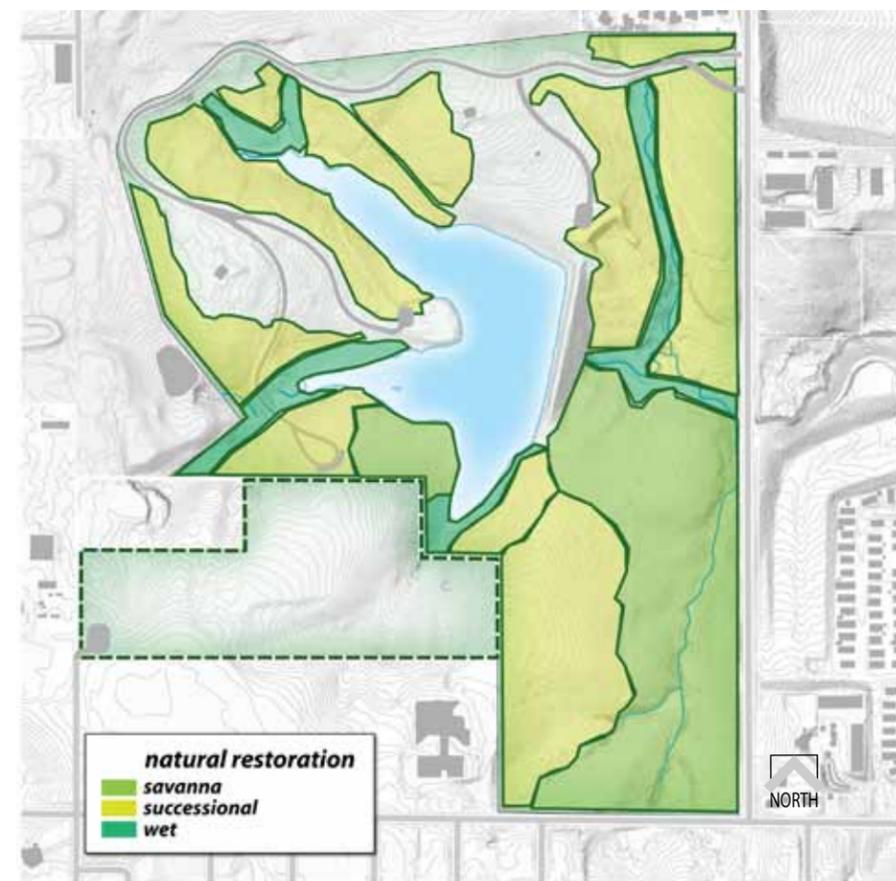


FIGURE 4.2
Existing vegetation

Both state-wide recreational trends and national trends are tracking closely. The following is a list of recreational activities that Iowans identified as top interests in a recent survey:

- Family-oriented outdoor activities
- Observing wildlife
- Using trails
- Fishing
- Hiking
- Camping

With the exception of camping, Fort Des Moines provides these amenities.

Design considerations that provide insight into the Fort Des Moines Master Plan are as follows:

- Iowa and the Des Moines metropolitan area have a significant population that is 65 years and older
- The interests most commonly noted by the public were family activities and non-structured recreation including wildlife observation and pathway use, specifically recreational trails (hard or improved) and nature trails (soft or unimproved)
- Accessibility for an aging population
- Access to natural areas for observation, hiking or fishing
- Areas that provide shade and shelter for family-oriented activities

For more information: <http://www.iowadnr.gov/grants/scorp.html>



FIGURE 2.9
Topographic diagram



PROCESS

Public input and involvement in developing the Fort Des Moines Park Master Plan was an essential and important aspect of the master plan process. The initial public meeting was held in August 2011. The first meeting involved park users, neighbors and staff. The second meeting involved the Polk County Conservation Advisory Committee. The purpose of these initial meetings included developing goals and priorities, identifying improvements to existing park facilities, and proposing facilities or services to be added to the park.

A follow-up public meeting was held in October 2011 to share the information that the staff had gathered, share a draft version of the plan, and to obtain additional input from the public. The public supported the recommendations taking shape through the master planning process.

Key elements that came from these two public meetings are listed below:

- Park entrance and access
- Protection of park natural resources
- Playground improvements
- Shelter improvements
- Internal traffic movement
- Additional trail opportunities
- Improved accessibility to facilities
- Increased interpretive opportunities

The draft master plan was presented to the Polk County Conservation Board at their December 2011 meeting. The final master plan was approved by the Board at their January 11, 2012 meeting.



FIGURE 3.1

Park entrance and access.



FIGURE 3.2

Playground at Fort Des Moines Park.



FIGURE 3.3

Shelter at Fort Des Moines Park.



EVALUATION OF CURRENT AND FUTURE PARK NEEDS

The process of identifying the current and future needs of Fort Des Moines Park involves a synthesis of the information received throughout the process. This information was gathered through public meetings, input from other governmental agencies, natural resource assessments and additional data obtained by the staff and consultants. The needs can be organized into four categories: land uses, natural resources, circulation and facilities.

LAND USES

- Improve vehicular park access at the entrance
- Improve pedestrian connectivity
- Improve water quality
- Work with adjacent partners
 - Zoo
 - School
 - Golf Course
 - Museum
 - Neighborhood
- Minimize negative impact from surrounding land uses



FIGURE 4.1

External park impacts

NATURAL RESOURCES

- Restore the urban oasis
 - Wetlands
 - Shoreline
 - Woodlands
 - Savanna
 - Grasslands/Prairie
 - Arboretum
 - Habitat opportunities
- Develop monitoring plan
 - How do you hold the plan up to a level of scrutiny?
- Manage against invasive species

CIRCULATION

Vehicular Circulation

- Realign main park entrance
- Realign intersection north of the arboretum
- Provide drive and parking to north end of pond
- Reconfigure parking at peninsula

Trail Circulation

- Provide trail access off of SE 5th Street
- Provide access to the zoo
- Provide access to McCombs Middle School and Studebaker Elementary

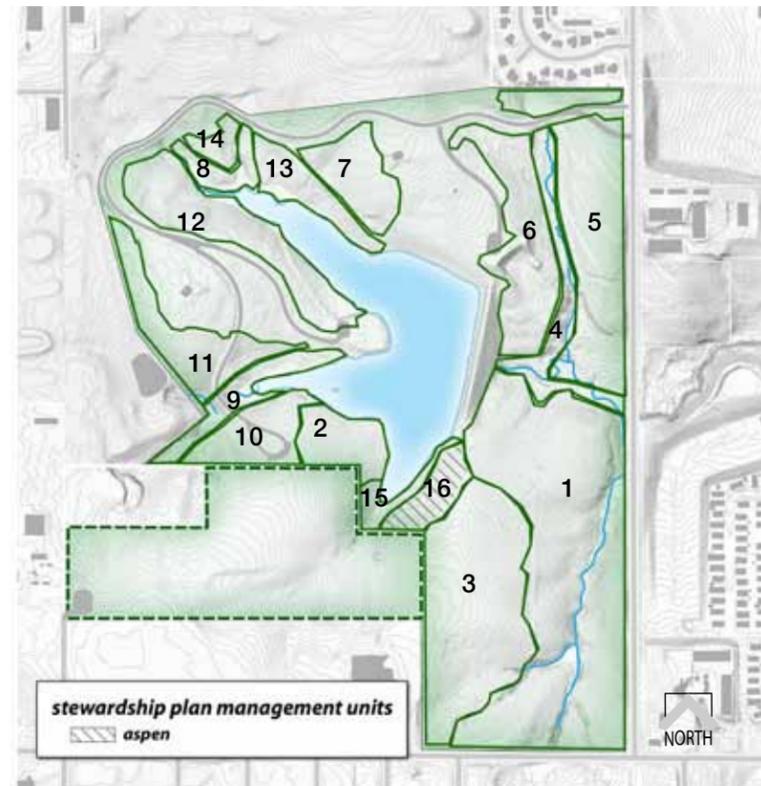


FIGURE 2.8

Woodland stewardship plan. See Fort Des Moines Woodland Stewardship Plan dated October 17, 2011.

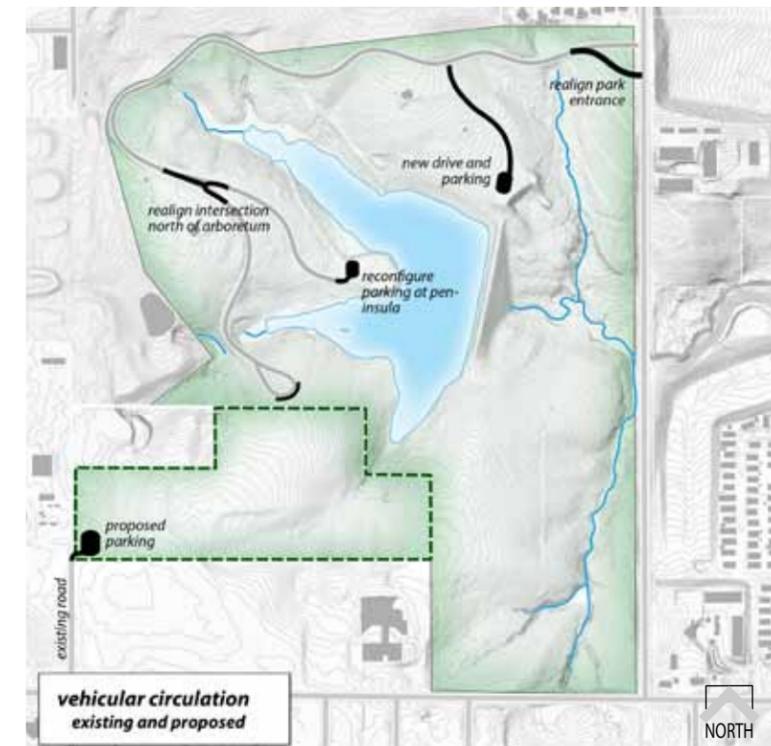


FIGURE 4.3

Recommended vehicular enhancements



FIGURE 4.4

Recommended trail enhancements

- Provide Discovery Walk
 - Potential interpretive sites
- Provide nature walks through the woodlands
- Provide loop pathways
- Provide accessible pathways and trails

FACILITIES

Recreation Facilities

- Enhance shelters #1 and #2
- Develop shade structures
- Develop bridge and lake boardwalk
- Develop wetland boardwalk
- Develop outdoor classroom
- Relocate restroom southeast of shelter #1
- Enhance restroom at play area
- Develop restroom at the peninsula
- Develop fishing pier north of the dam
- Enhance existing play areas
- Develop discovery play including wet play
- Enhance fishing at shore line

Interpretation facilities

- Provide entry kiosk
- Enhance interpretive park signage (lake, woodland, creek/watershed, prairie)
- Develop outdoor classrooms
 - One in the restored prairie (new parcel)
 - One along the shoreline on the peninsula

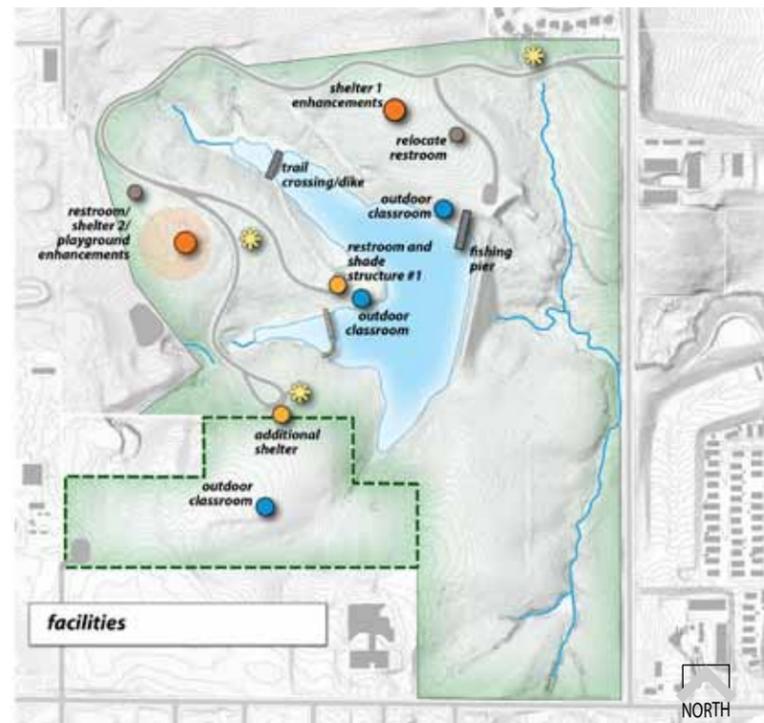


FIGURE 4.5
Recommended facility enhancements or development

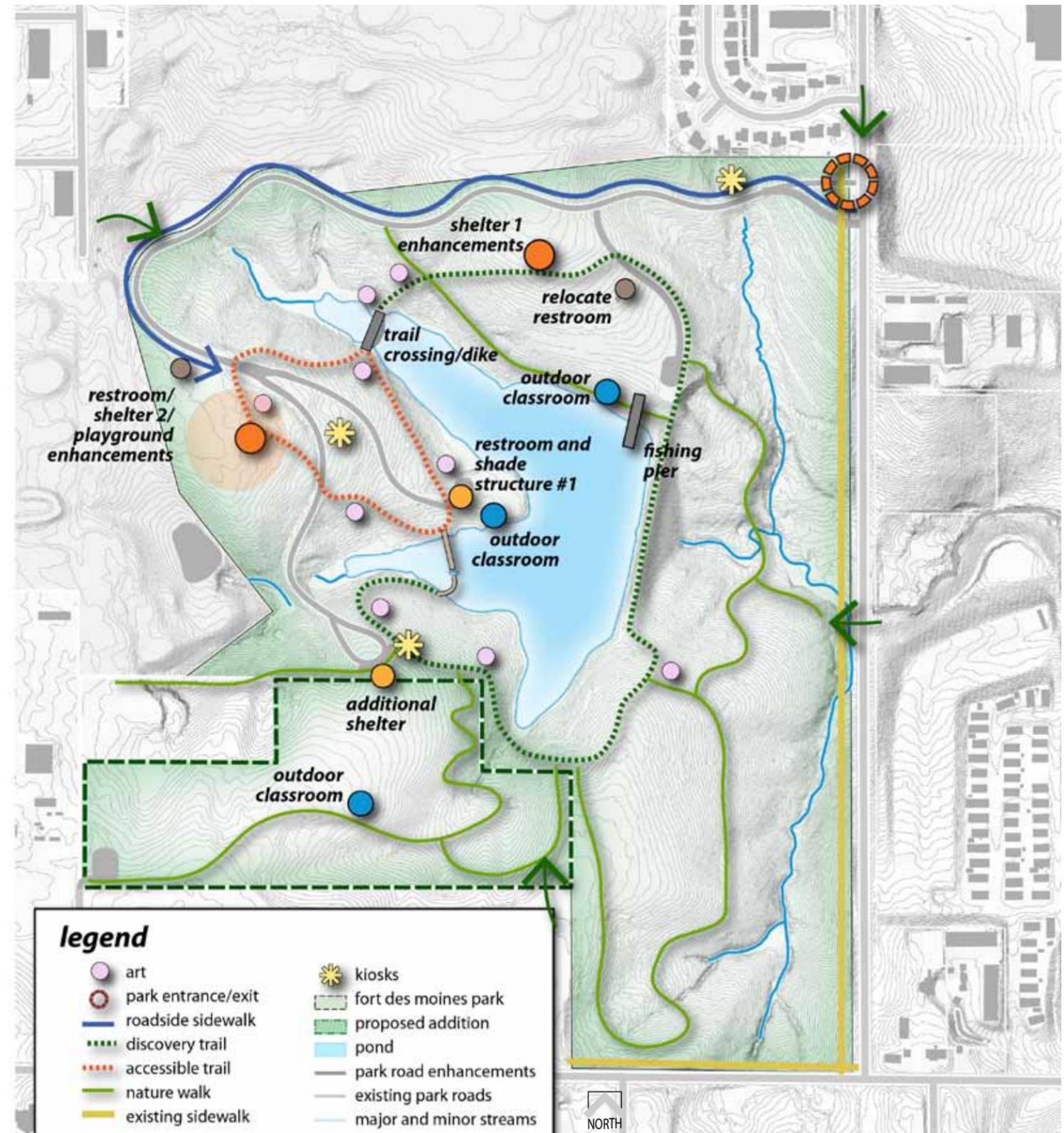


FIGURE 4.6
Recommended comprehensive park enhancements



MASTER PLAN RECOMMENDATIONS

The key outcome of a master plan is the actions that are proposed as a result of the planning process. Recommendations were determined after considering a range of options. The recommendations respond directly to the needs identified through the planning process and shape the future for how the Park will be improved. The following recommendations are grouped by category.

- Land Use
- Natural Resources
- Vehicular Circulation
- Trail Circulation
- Recreational Facilities
- Interpretive/Administrative

- ① Proposed Park Entrance Enhancement
- ② Proposed Lake Drive and Parking
- ③ Proposed Fishing Pier
- ④ Proposed Shelter #1 Restoration
- ⑤ Ball Field Relocation
- ⑥ Proposed Pedestrian Bridge
- ⑦ Proposed Parking Expansion
- ⑧ Proposed Playground Enhancements
- ⑨ Proposed Restroom Restoration
- ⑩ Proposed Shelter #2 Restoration
- ⑪ Proposed Parking & Kiosk
- ⑫ Proposed Peninsula Enhancements
- ⑬ Proposed Boardwalk and Pedestrian Bridge
- ⑭ Proposed Parking Expansion
- ⑮ Proposed Shelter
- ⑯ Proposed Shoreline Fishing Node
- ⑰ Proposed Parking, Kiosk & Trail Access
- ⑱ Trail (see page 20 for classification)

Restoration Effort

- Woodland Restoration
- Prairie Restoration
- Lawn Restoration
- Stormwater Retention Basins
- Pond Restoration



FIGURE 5.1

The illustration above is the culmination of 6 months of planning. This plan recommends these improvements to existing facilities and proposed new facilities.



LAND USES

- Improve vehicular park access at the entrance
- Improve pedestrian connectivity
- Improve water quality
- Work with adjacent partners
 - Zoo
 - School
 - Golf Course
 - Museum
 - Neighborhoods
- Minimize negative impact from surrounding land uses
- Remove the perimeter fence around the park

FIGURE 5.2
Enhanced Park Access Drive.



FIGURE 5.3
This illustration from the Iowa State Parks Design Guide depicts an accessible kiosk with an option for additional interpretive panels.



FIGURE 5.4
Polk County has established an entry portal prototype that could be used at the park entrances.



FIGURE 5.5
Location of illustrated view (Figure 5.2)

NATURAL RESOURCES

- Restore the urban oasis
- Improve exterior and interior park views
- Enhance and restore the natural environment
 - Wetlands
 - Shoreline
 - Woodlands
 - Savanna
 - Grasslands/Prairie
 - Arboretum
 - Habitat opportunities
- Implement woodland stewardship plan
- Manage against invasive species
- Develop monitoring plan

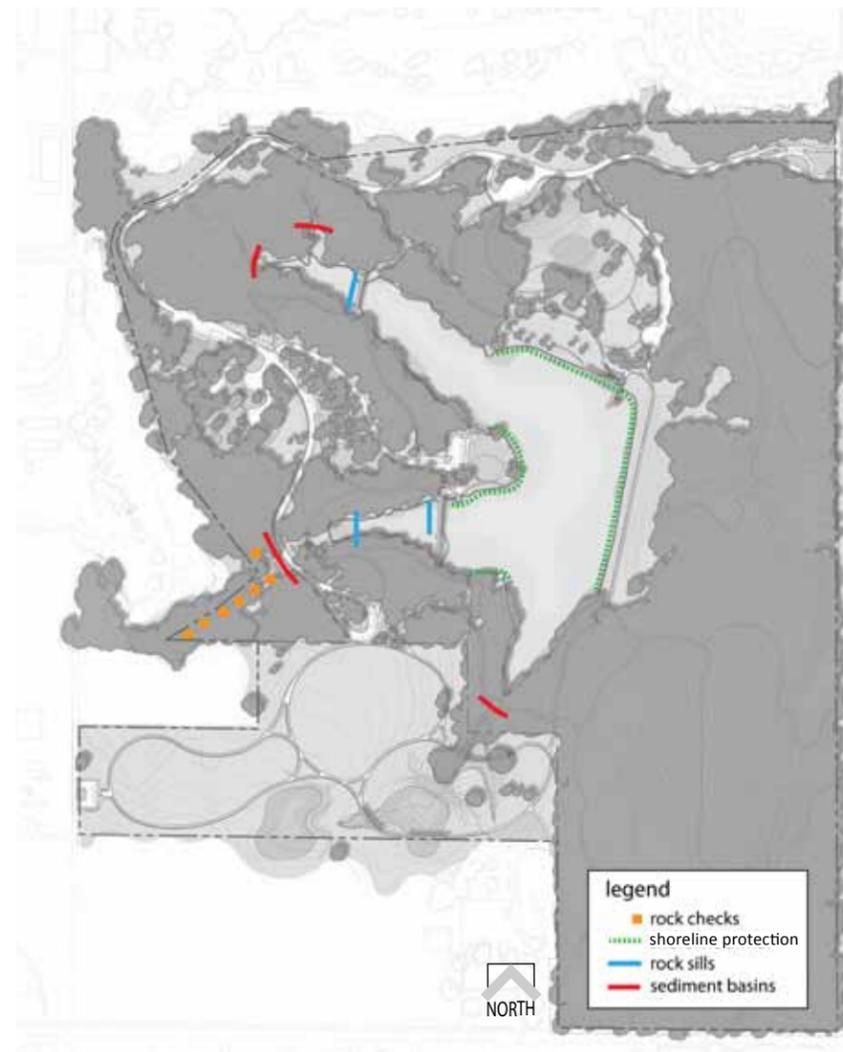


FIGURE 5.6
Water quality improvements map



FIGURE 5.7
The public often enjoys the benefits of restored and restoring prairies.



FIGURE 5.8
Fire is often an appropriate management tool.



FIGURE 5.9
Habitat restoration will enhance the sense of "urban oasis" at Fort Des Moines Park.



FIGURE 5.10
One example of grading and protecting for bank stabilization.

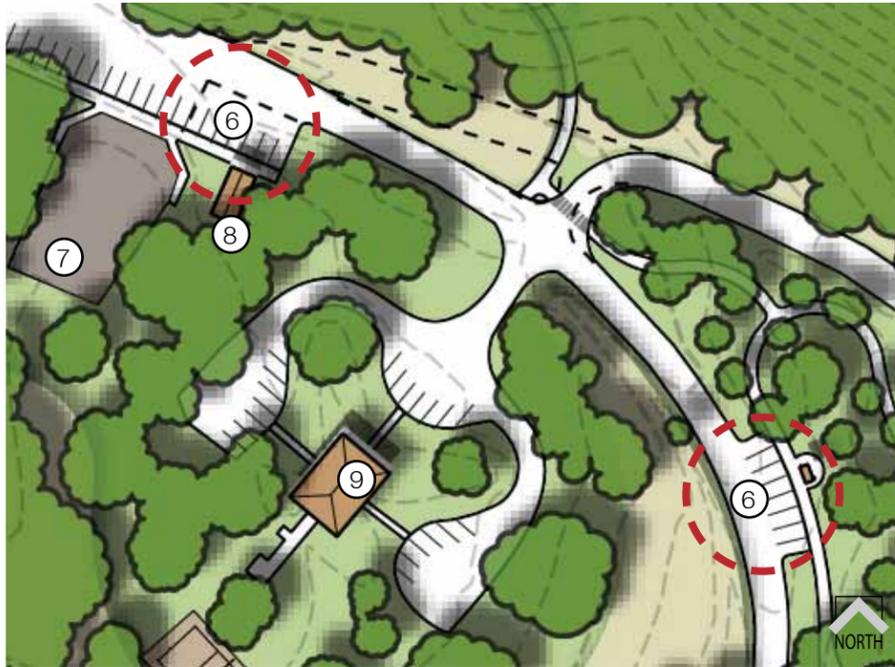


FIGURE 5.11

This plan illustrates proposed expansion of the existing parking at the playground and new parking and kiosk at the arboretum. (View 1)

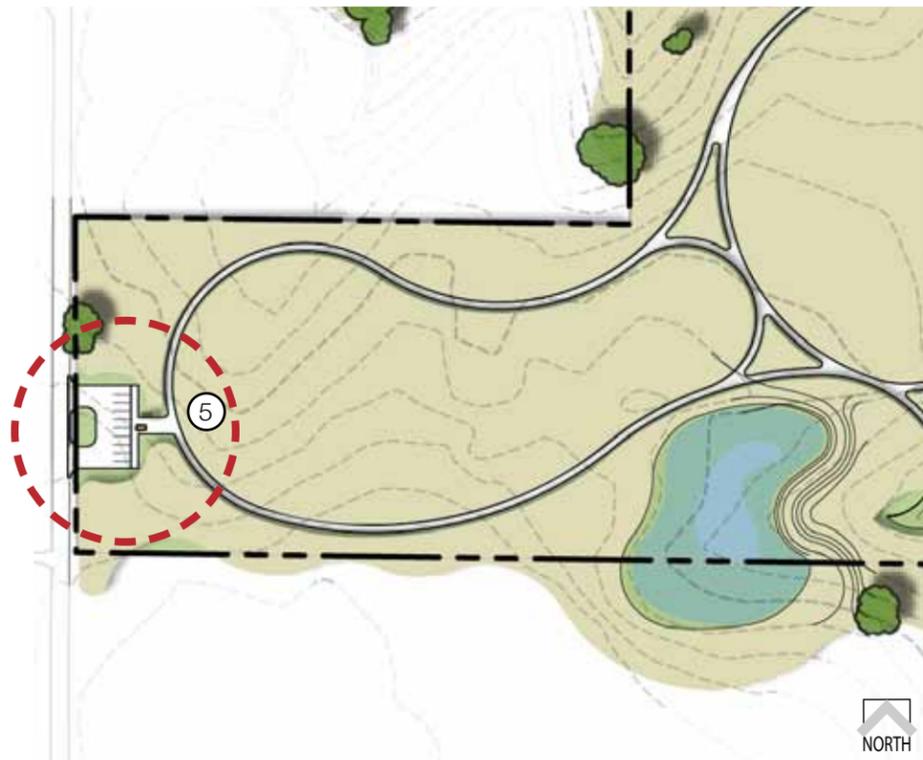


FIGURE 5.12

This plan illustrates a proposed parking and kiosk with trail access on the proposed school property expansion (View 2).

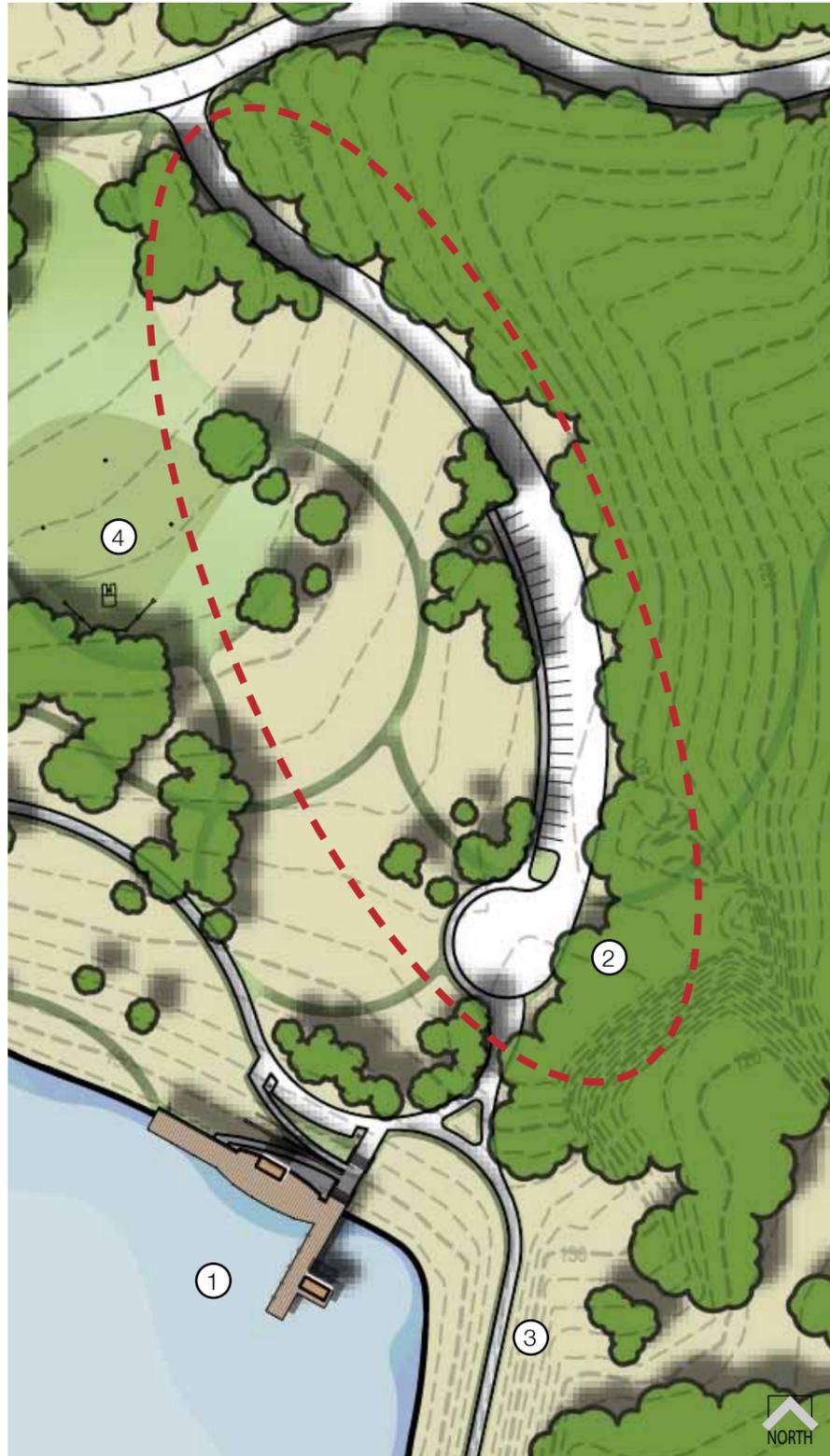


FIGURE 5.13

This plan view illustrates a proposed access drive/parking and a proposed ADA accessible fishing pier. (View 3)

VEHICULAR CIRCULATION

- Realign main park entrance
- Provide drive and parking to north end of lake
- Provide parking/park access between the schools from County Line Road
- Reconfigure parking at peninsula
- Realign intersection north of the arboretum

- ① Proposed Fishing Pier
- ② Proposed Lake Drive and Parking
- ③ Trail
- ④ Ball Field Relocation
- ⑤ Proposed Parking, Kiosk & Trail Access
- ⑥ Proposed Parking Expansion
- ⑦ Proposed Playground Enhancements
- ⑧ Proposed Restroom Restoration
- ⑨ Proposed Shelter #2 Restoration

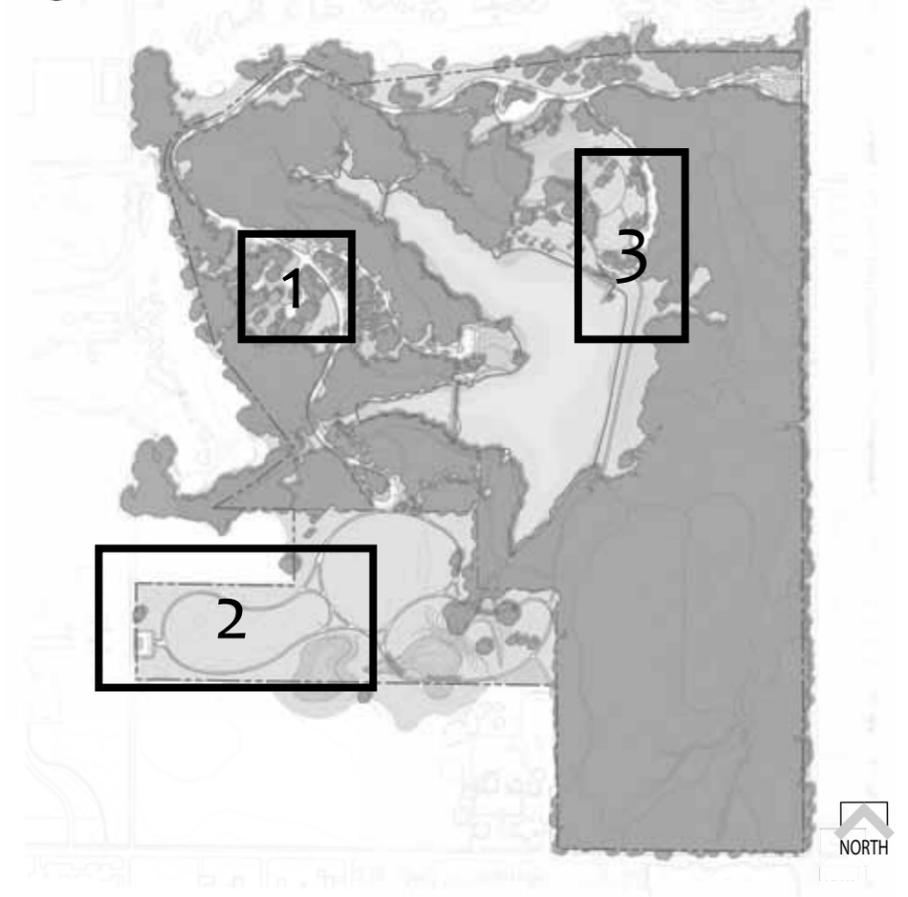


FIGURE 5.14

Location of illustrated views (Figures 5.11, 5.12 and 5.13)

TRAIL CIRCULATION

- Provide trail access off of SE 5th Street
- Provide loop pathways
- Provide accessible pathways and trails
- Enhance and expand nature trails through the woodlands
- Provide access to McCombs Middle School and Studebaker Elementary
- Provide Discovery Walk with interpretive/art sites
- Provide access to the zoo

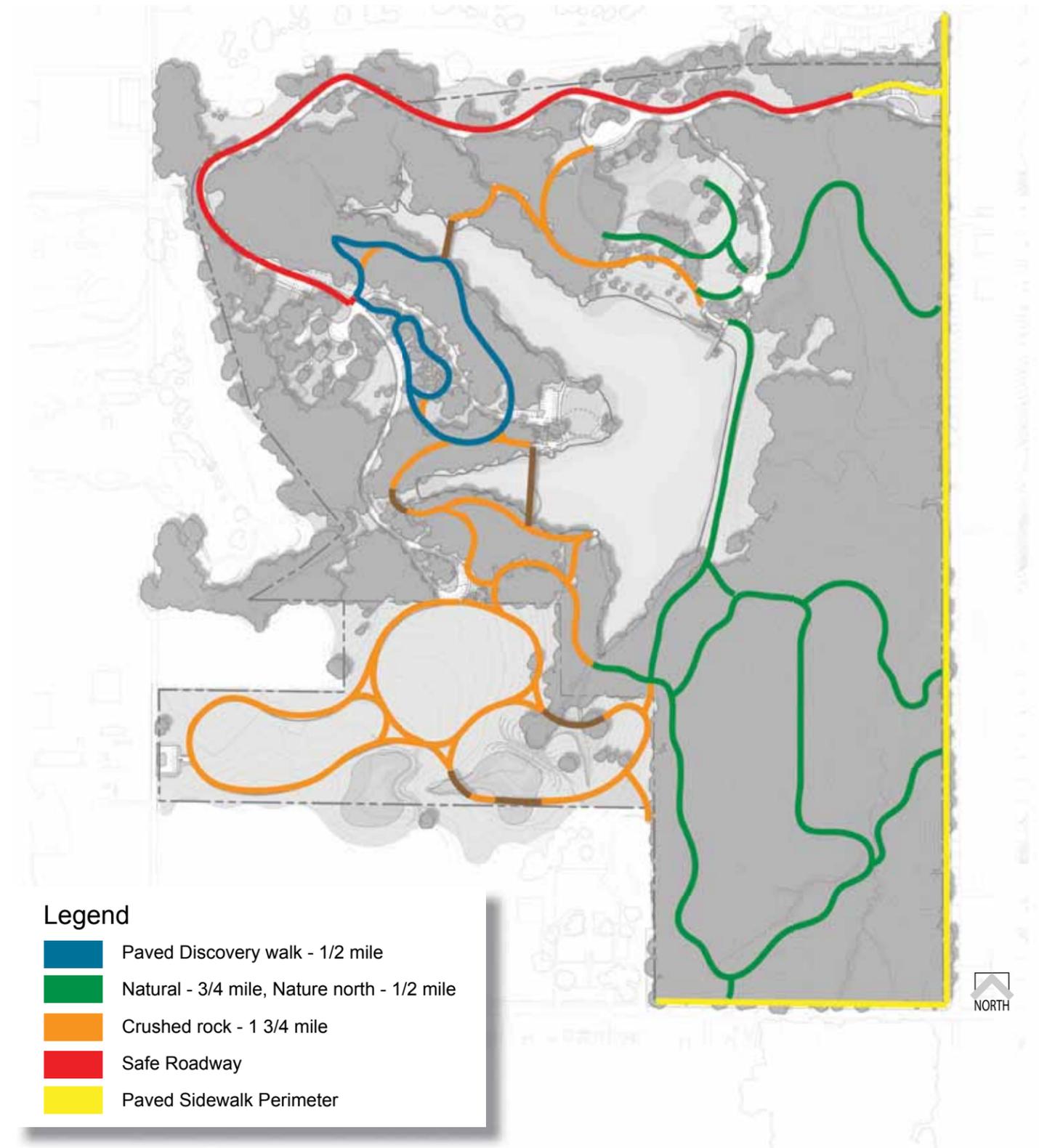


FIGURE 5.15
Comprehensive trail system



FIGURE 5.16
Proposed trail network and improvements on proposed school property expansion.

INTERPRETATION/ADMINISTRATION FACILITIES

- Provide entry kiosk, arboretum kiosk, and discovery trail kiosk
- Enhance interpretive park signage (arboretum, lake, woodland, creek/watershed, prairie)
- Develop outdoor classrooms
 - In the restored prairie (new parcel)
 - Along the shoreline on the peninsula
 - Just inside the park entrance to the south along the lake edge

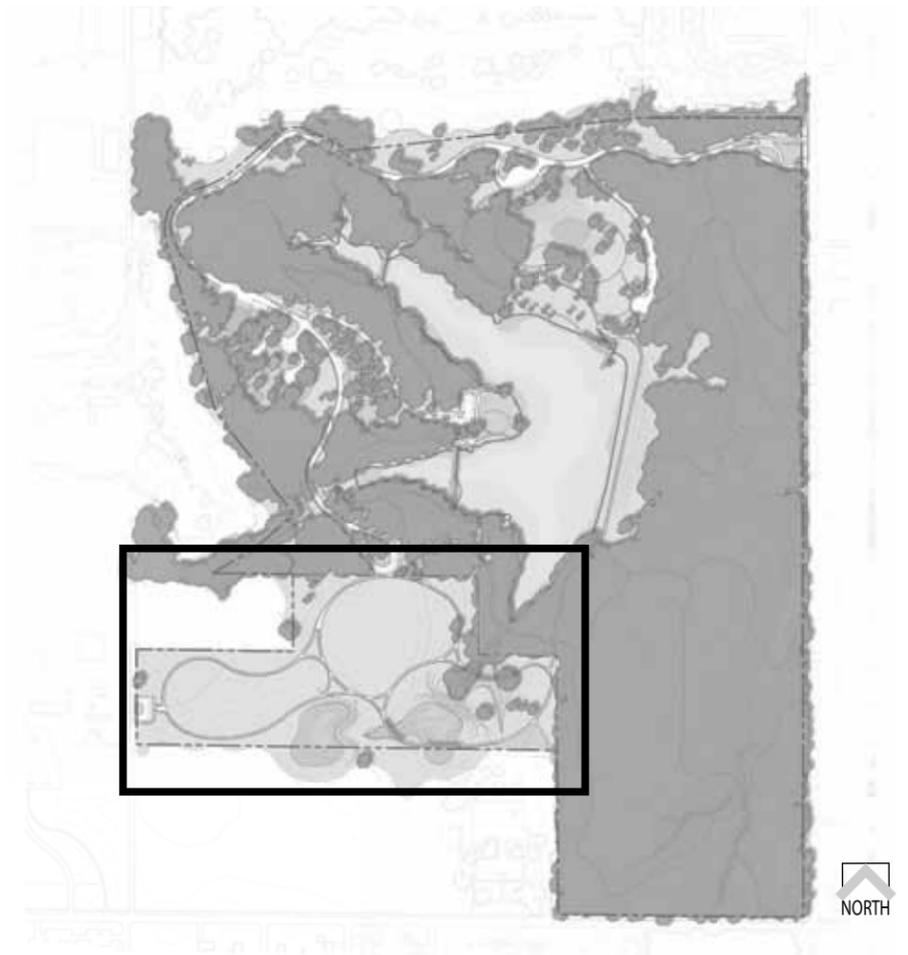


FIGURE 5.17
Location of illustrated view (Figure 5.16).

RECREATION FACILITIES

- Enhance shelters #1 and #2
- Develop lake boardwalk and trail crossing/dike
- Relocate and enhance restroom southeast of shelter #1
- Develop accessible fishing pier north of the dam
- Enhance fishing at shore line
- Develop shade structure #1 and an additional shelter
- Enhance play area and play area restroom
- Provide restroom at the peninsula
- Develop discovery play, including wet play

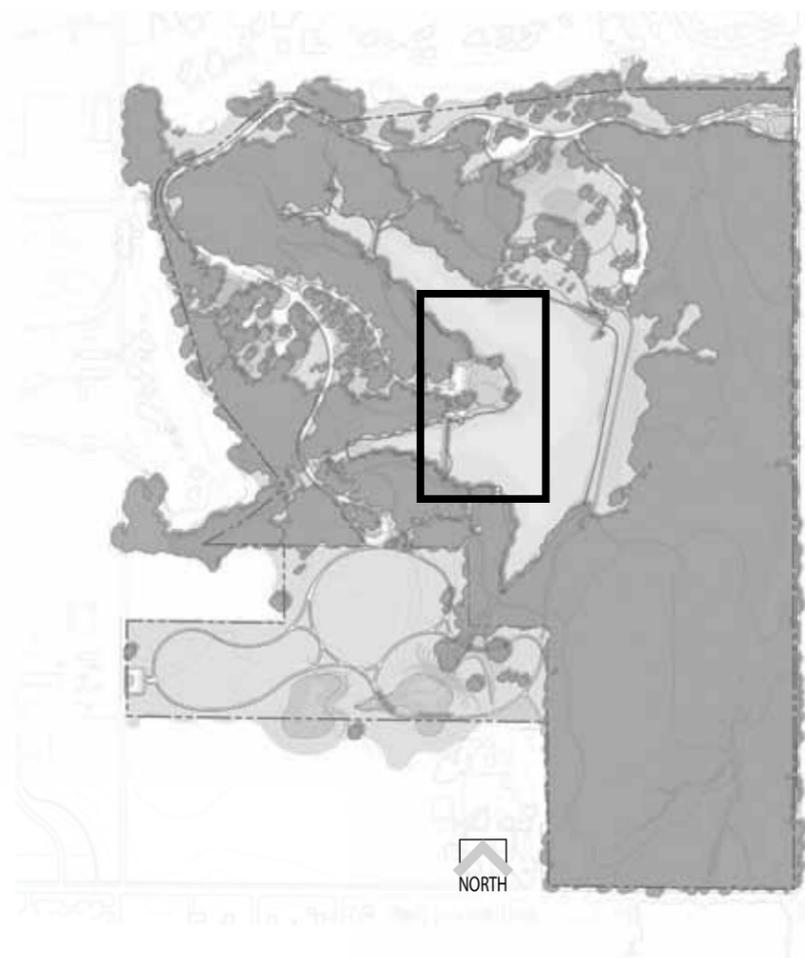


FIGURE 5.18
Location of illustrated views (Figure 5.19).



FIGURE 5.19
This plan illustrates the peninsula enhanced with reconfigured parking, better fishing accommodations, and greater access to the water for both education and passive recreation.



FIGURE 5.20
These illustrations provide a glimpse of what opportunities could exist on the peninsula



FIGURE 5.21
These illustrations provide a glimpse of what opportunities could exist on the peninsula



FIGURE 5.22
These illustrations provide a glimpse of what opportunities could exist on the peninsula



FIGURE 5.23
Illustrated view of proposed accessible fishing pier and shade structure.

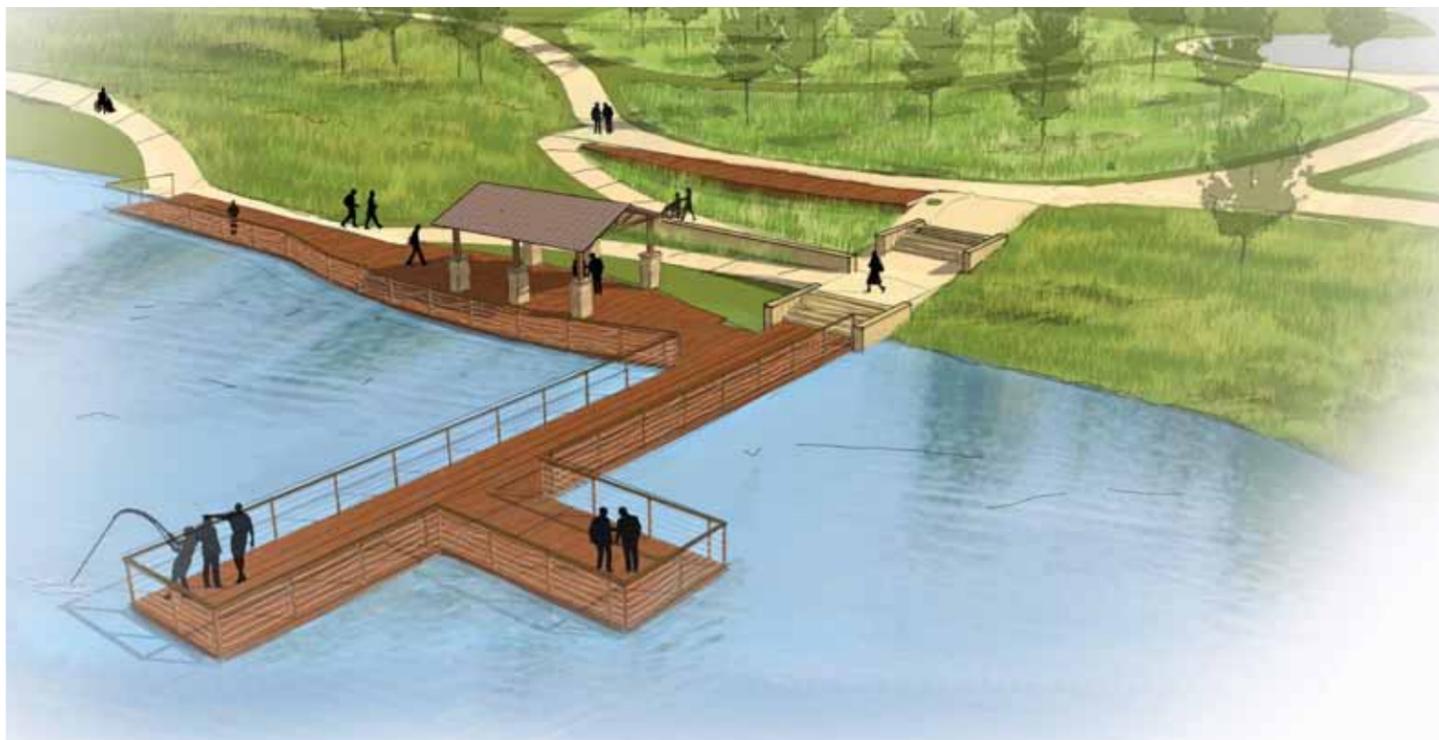


FIGURE 5.24
Illustrated view of proposed accessible fishing pier and shade structure.



FIGURE 5.25
Example of fishing pier in West Des Moines



FIGURE 5.26
Location of illustrated views (Figure 5.? and 5.?).



TIMING

The recommended improvements identified in this plan are anticipated to be implemented over time. Some recommendations require more detailed planning and design which would extend implementation of those recommendations. Projects that require less planning and design and can be done with limited funds may be completed earlier.

PRIORITIES

Higher priorities are assigned to those recommendations that are more responsive to the goals of the plan. Projects related to preserving and protecting the urban oasis, restoring the natural environment, enhancing education/interpretation, building recreation opportunities and fostering partnerships are considered priorities. Additionally, those projects that improve park access, provide greater accessibility for people with disabilities and generate increased revenues also rank higher on the priority list.

COST ESTIMATES

Cost estimates have been developed for each recommendation within this plan. These estimates are intended for budget planning efforts only and will be updated over time. The following cost estimates are summarized by category. Projected costs for implementing this plan in its entirety approach \$2 million. The estimated costs associated with each type of proposed improvement are listed below. These estimates are current year costs and do not reflect future inflation. Projects completed in-house may result in cost savings. Annual operations and maintenance costs associated with existing facilities are not included in these estimates. More detailed cost estimates will be developed when planning and design is completed on individual projects and as funding becomes available.

<u>IMPROVEMENT CATEGORY</u>	<u>ESTIMATED COST</u>
Land Use	\$ 150,000
Natural Resources	\$ 250,000
Vehicular Circulation	\$ 520,000
Trail Circulation	\$ 660,000
Recreation Facilities	\$ 420,000
Interpretation/Administrative Facilities	\$ 270,000

These estimated costs do not include survey, engineering and contingency costs.

FUNDING STRATEGY OPTIONS

The proposed improvements within this plan for Fort Des Moines Park must be integrated into the overall budget/program needs of Polk County Conservation. As master plans are completed for other parks within the Polk County Conservation Park System, the proposed improvements will be considered comprehensively across the entire system. Additionally, the needs associated with maintaining the existing facilities within the park system will be considered along with the proposed improvements.

Some recommendations may be completed through the annual program of work as part of the continuing operations and maintenance of Polk County Conservation parks.

Potential funding sources include annual appropriations, grants, partnerships and long-term public financing.



RECOMMENDED IMPROVEMENT PRIORITIES

HIGH	MEDIUM	LOW	
			LAND USES
			<ul style="list-style-type: none"> Improve vehicular park access at the entrance
			<ul style="list-style-type: none"> Improve pedestrian connectivity
			<ul style="list-style-type: none"> Improve water quality
			<ul style="list-style-type: none"> Work with adjacent partners (Zoo, School, Golf Course, Museum, Neighborhoods)
			<ul style="list-style-type: none"> Minimize negative impact from surrounding land uses
			<ul style="list-style-type: none"> Remove the perimeter fence around the park
			<ul style="list-style-type: none"> Expand the park to the south in cooperation with the Des Moines School District
			NATURAL RESOURCES
			<ul style="list-style-type: none"> Restore the urban oasis
			<ul style="list-style-type: none"> Improve exterior and interior park views
			<ul style="list-style-type: none"> Enhance and restore the natural environment (Wetlands, Shoreline, Woodlands, Savanna, Grasslands/Prairie, Arboretum, Habitats)
			<ul style="list-style-type: none"> Develop a monitoring plan (How do you hold the plan up to a level of scrutiny?)
			<ul style="list-style-type: none"> Manage against invasive species
			VEHICULAR CIRCULATION
			<ul style="list-style-type: none"> Realign main park entrance
			<ul style="list-style-type: none"> Realign intersection north of the arboretum
			<ul style="list-style-type: none"> Provide drive and parking to north end of pond
			<ul style="list-style-type: none"> Reconfigure parking at peninsula
			<ul style="list-style-type: none"> Provide parking/park access between the schools off County Line Road
			TRAIL CIRCULATION
			<ul style="list-style-type: none"> Provide trail access from SE 5th Street
			<ul style="list-style-type: none"> Provide access to the zoo (pending access availability)
			<ul style="list-style-type: none"> Provide access to McCombs Middle School and Studebaker Elementary
			<ul style="list-style-type: none"> Provide Discovery Walk with interpretive/art sites
			<ul style="list-style-type: none"> Enhance and expand nature trails through the woodlands
			<ul style="list-style-type: none"> Provide loop pathways
			<ul style="list-style-type: none"> Provide accessible pathways and trails

HIGH	MEDIUM	LOW	
			RECREATION FACILITIES
			<ul style="list-style-type: none"> Enhance shelters #1 and #2
			<ul style="list-style-type: none"> Develop shade structure #1 and an additional shelter
			<ul style="list-style-type: none"> Develop pond boardwalk and trail crossing/dike
			<ul style="list-style-type: none"> Relocated and enhance restroom southeast of shelter #1
			<ul style="list-style-type: none"> Enhance play area and play area restroom
			<ul style="list-style-type: none"> Provide restroom at the peninsula
			<ul style="list-style-type: none"> Develop accessible fishing pier north of the dam
			<ul style="list-style-type: none"> Develop discovery play including wet play
			<ul style="list-style-type: none"> Enhance fishing at shore line
			INTERPRETATION/ADMINISTRATION FACILITIES
			<ul style="list-style-type: none"> Provide entry kiosk, arboretum kiosk, and discovery trail kiosk
			<ul style="list-style-type: none"> Enhance interpretive park signage (arboretum, pond, woodland, creek/watershed, prairie)
			<ul style="list-style-type: none"> Develop outdoor classrooms (in the restored prairie - new parcel, along the shoreline on the peninsula, and just inside the park entrance to the south along the pond edge)

