



CITY OF DETROIT
RECREATION DEPARTMENT

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December 1, 2000

Dear Citizens of Detroit:

On behalf of the Detroit Recreation Department, I am proud to present for your review the Master Plan for the renovation of Belle Isle Park. This document, whose development began in 1996, is the result of study and analysis by my office and a dedicated team of park development specialists, architects, engineers, urban planners, environmentalists and economists. Our leading partner in this venture was the Detroit-based architectural firm of Hamilton Anderson and Associates.

As you examine the Plan, you will learn of Belle Isle's fascinating history, the array of recreation programs available to island patrons and the remarkable variety of natural systems contained on its 982 acres. You will be educated about the historic buildings that dot its landscape, and the management and maintenance challenges of operating the park. This document also includes a detailed analysis of the development plan for improvements to the park – the proposed renovation and construction work that will occur over the next ten to fifteen years.

The current and vintage photographs contained in this book remind us of the precious vistas that this exceptionally beautiful park has to offer. These images will, no doubt, bring back memories of the hours you have spent on Belle Isle. Maybe you were seeking a moment's respite from the frantic pace of urban life, solace in a time of sorrow or the opportunity for private introspection. Perhaps you were celebrating a family reunion by picnicking under one of the island's shelters or delighting in your children's first ride down the Giant Slide. Or is it the remembrance of a visit to the Zoo, Aquarium or Conservatory that makes you smile?

With ten million visitors annually, the demands on this 100-year old park are enormous. It is, in fact, in crisis. As park stewards, we must look for ways to assure that the public's Belle Isle experience remains a positive one. It was for that purpose that the Master Plan was developed. We must make certain that future generations will be able to enjoy this unique public place where the natural environment is respected, where it is still possible to walk leisurely along the beach. We want our citizens to be able to fish along the shoreline or indulge in a peaceful run while watching the sun set over the Detroit and Windsor skylines.

I encourage you to carefully read the Master Plan and share with me your responses to it. By becoming part of the Belle Isle Master Plan Team, you can help me assure that the island will serve not only you, but your children and grandchildren as well.

Sincerely,

Ernest W. Burkeen, Jr.
Director

DENNIS W. ARCHER, MAYOR



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March 27, 2006

Dear Citizens of Detroit:

On behalf of the Detroit Recreation Department, I am proud to present for your review an updated Master Plan for Belle Isle Park and a technical report for the Physical Needs Assessment. The masterplan, whose development began in 1996, is the result of public input and careful comprehensive analysis of the island and its amenities. Credit for this Plan falls to the many citizens of Detroit who have participated in this process and the dedicated City Employees who comprised the Team of park development specialists, architects, engineers, urban planners, environmentalists and economists. Detroit's leading partner and consultant in this venture was the Detroit Headquartered firm of Hamilton-Anderson & Associates. The physical needs assessment technical report was prepared by the Detroit Headquartered firm of Community Development Solutions, LLC (CDS).

As you examine the updated Plan, you will learn of Belle Isle's remarkable 100 year old history, the array of recreation programs currently available to the public and the remarkable variety of unique natural systems preserved on the island's 982 acres. The vintage photographs contained in this book remind us of the fascinating history of the island while the current photographs document the future direction, of the island. The older images will, no doubt, bring back memories of the hours you spent on Belle Isle seeking respite from the frantic pace of urban life. The newer images will portray the potential for a more modern riverfront recreation experience; one that confirms the signs of rebirth and regrowth of a "Next Detroit".

With ten million visitors annually, the management and maintenance demands of operating such a large regional park are both expensive and challenging. As park stewards, we must search creatively for ways to assure that the public's Belle Isle experience remains a positive one. We must ensure that future generations will be able to enjoy this unique public place, where the natural environment is respected, where it is still possible to walk leisurely along the beach in the middle of an urban city, fish along the island's shoreline or indulge in a peaceful run while watching the sun set over the Detroit skyline. To preserve this precious natural resource, the Belle Isle Master Plan should be used as a tool to help guide future development on the island. Community partnerships, citizen support and the hard work of City of Detroit municipal employees will make this possible.

I encourage you to carefully review the Belle Isle Master Plan and share your comments and reactions with the Detroit Recreation Department. Only through your support, can we assure that the island will best serve not only you, but generations to come.

Sincerely,

DETROIT RECREATION DEPARTMENT

CHARLES BECKHAM
Director

KWAME M. KILPATRICK, MAYOR

Introduction

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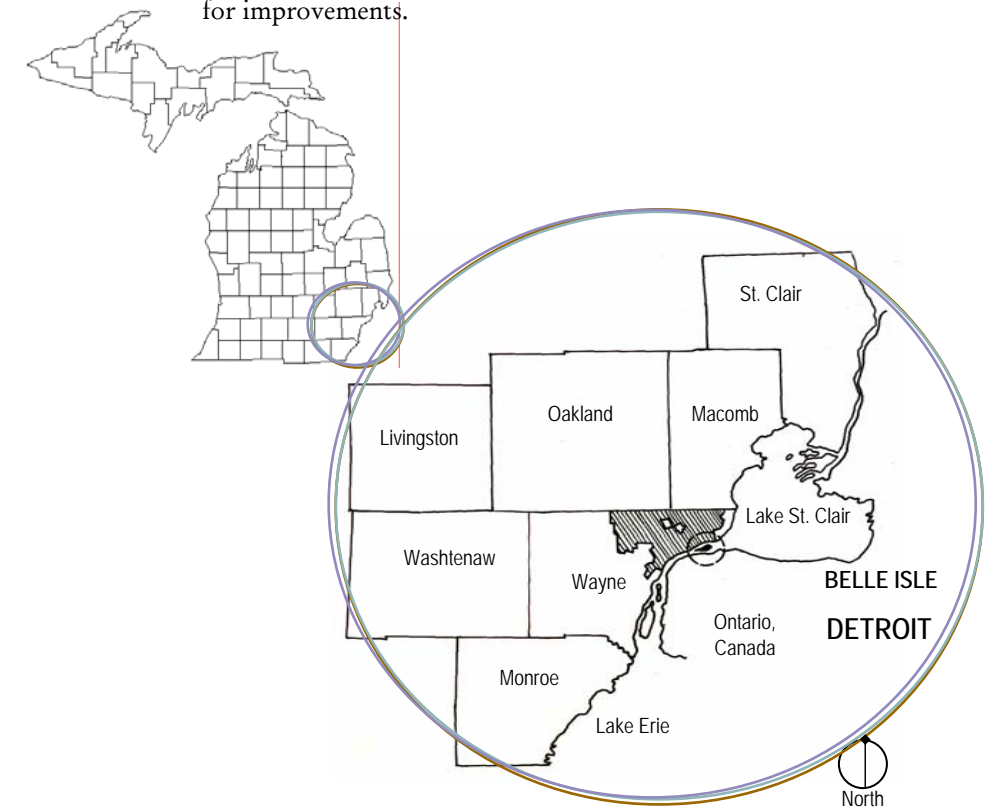
GENERAL RENOVATION PLAN

- Overview
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The Belle Isle Park Master Plan was prepared over a two-year period from 1996-1997. In 1998 the plan was reviewed and presented to the Detroit City Council. In 1999, City Council members took the plan to the community by holding public discussions at neighborhood recreation centers throughout the City to acquaint citizens with the plan and solicit more input. The final report was compiled in 2000; it is presented in two parts, the Comprehensive Renovation Plan and a Technical Assessment Report. In 2005, the Master Plan was updated to reflect ongoing improvements and an updated cost estimate.

This Comprehensive Renovation Plan contains a synopsis of the inventory and analysis process, the design strategy for renovating Belle Isle and supporting narrative and graphics. This material includes historical context, team approach, design concepts, findings and recommendations that helped shape the Master Plan.

The Technical Assessment Report, under separate cover, contains complete reports that examine specific systems on Belle Isle. These were prepared by consulting firms or agencies with expertise in specific areas relating to infrastructure, facilities, management, natural resources, traffic engineering, environmental assessment, golf course architecture, maintenance, and crime prevention. This material defines the current condition of the island and presents recommendations for improvements.



Clockwise from right: the Conservatory at dusk; a fitting inscription at the Nancy Brown Peace Carillon; boats dot the Detroit River as viewed from the island's north shore.



Photo by: Glenn Calvin Moon

Chapter **OVERVIEW** One



Photo by: Glenn Calvin Moon

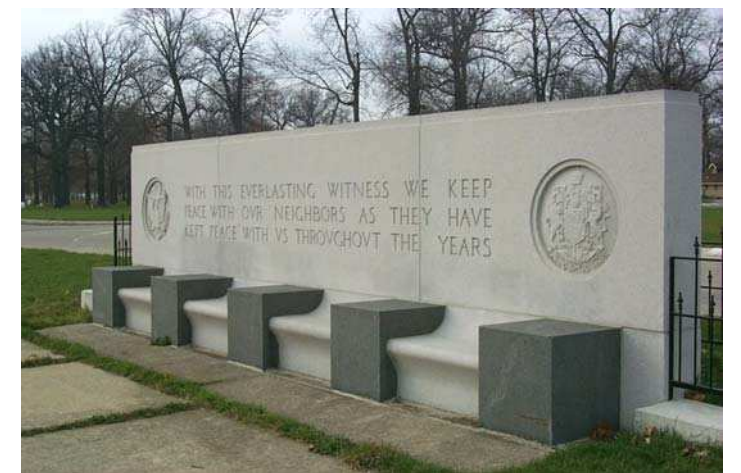
BACKGROUND

Family picnics, pictures at Scott Fountain, field trips to the Conservatory, cruising the Strand; Belle Isle is the source of memories for every Detroiter who grew up spending leisure time with family and friends in a magnificent island setting. It is a 982-acre jewel set amid the flowing waters of the Detroit River; the most dramatic setting of any urban park in the nation, just a mile from downtown Detroit yet a world all its own, with the size, location and open space diversity to relieve the stresses of urban life.

Belle Isle has numerous, diverse attractions including the Dossin Great Lakes Museum, Detroit Yacht Club, sports fields, fishing piers, beaches, a golf course and a forest full of wildlife. The Nature Zoo, large picnic facilities the Anna Scripps Whitcomb Conservatory are just a few of the places that make the island Detroit's favorite recreation destination. It is the

prime spot to watch the International Freedom Festival Fireworks and the Gold Cup hydroplane races; in a typical year over eighty special events are held at Belle Isle Park. These events take place primarily in June, July and August, the same time it is heavily used for family picnicking. An estimated ten million people visit the island annually, more than the second and third most visited regional parks combined.

Belle Isle Park is over one hundred years old, and like many other great urban parks such as New York's Central Park, Chicago's Lincoln Park and San Francisco's Golden Gate Park, it is being assessed for renewal. Frederick Law Olmsted, the architect of New York's Central Park, conceived the original concept for Belle Isle Park in 1883. Unfortunately, this design was implemented in an ad-hoc fashion, contributing to the evolution of innumerable problems that stress park



management to this day. Deteriorated facilities, deferred maintenance, inexperienced personnel and no clear management direction have added to the problems, so much so that today valuable amenities have been lost and many more are in jeopardy. Consequently, the amenities people expect to see suffer and the island's popularity has waned.

Clockwise from right:
The Detroit skyline from Belle Isle's shores; an aerial view of the MacArthur Bridge and Jefferson Avenue with Detroit in the background; a detail shot of the Johann Friedrich von Schiller sculpture; a detail of Scott Fountain.



Photo by Glenn Calin Moon

Belle Isle Proposed Development Plan Goals:

- *Strengthen assets and amenities that define the island's character and uniqueness.*
- *Enhance the range and quality of public experiences.*
- *Explore appropriate revenue generating opportunities.*
- *Create more efficient management and operations practices.*
- *Establish consensus for future direction of the island.*

PURPOSE OF THE STUDY

Belle Isle is in crisis. A major effort is needed to restore Belle Isle to its prominent place as one of America's great parks. The first step in defining a planning strategy for the future is to understand the island's problems. Infrastructure, maintenance and management systems do not function well and must be rethought. The full potential of the cultural and natural resources must be realized and safe access must be promoted. Any plan for improvement should focus on enhancing the range and quality of public experiences, while exploring opportunities for investment to help support economic viability. It is important to explore revenue-generating opportunities as an integral component of new development to restore and enhance Belle Isle's historic park environment while encouraging public use and access. The effort will require significant funding and commitment by both the public and private sectors over an extended period of time.

PLANNING PHILOSOPHY

Belle Isle is the flagship of Detroit's public park system, but it cannot and should not be all things to all people. Because of its popularity, people have come to rely heavily on Belle Isle's amenities. While Detroit has more than 5,000 acres of parkland, Belle Isle is often considered the City's only suitable park venue for new events, facilities and activities. Private interests apply pressure for consideration to build facilities for their own use, thus threatening the long-term role of Belle Isle as a public place. Without a plan in place, almost any new proposal for "fixing" Belle Isle can attract support, whether appropriate or not. Built facilities and natural systems must be managed to serve the public at full capacity, but not to the point where the quality of the experience and the environment are compromised.

The Master Plan gives the staff and administration for Belle Isle a degree of control by identifying what uses are appropriate and establishing standards for decision making. Any changes should respond to established values based on what is physically, culturally and socially appropriate. First, Belle Isle must continue to serve all residents of the City, regardless of age or economic status. Secondly, Belle Isle is a link to many things that define Detroit - it is a vital connection to learning about the natural world, the Great Lakes and the City's heritage. Visiting the cultural

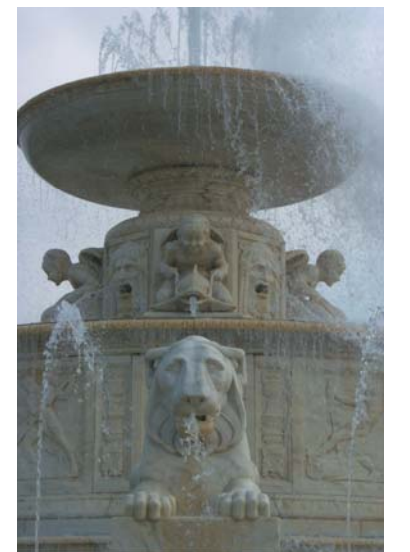




Photo by: Clayton Studios



amenities and enjoying its passive open spaces are traditions shared by generations of Detroiters. These qualities should not be compromised by ill-advised, short-term agendas or predicament-based decision-making. Therefore, all decisions for changes on the island should respond to a shared vision of what Belle Isle is and should be.

UNIQUE NATURAL ENVIRONMENT

Belle Isle has a rare and special natural location for an urban park. Set in the middle of the Detroit River, the uninterrupted miles of shoreline offer spectacular views of Detroit and Windsor, and of ships and other watercraft that cruise the River. The 200-acre forest is one of the highest quality native woodland environments in Southeastern Michigan; the canals, basins and lakes provide habitat for a diverse variety of wildlife. This unparalleled natural environment should be preserved and enhanced as part of the future planning strategy for the park.

HISTORIC CONSERVATOR

The park is listed on the National Register of Historic Places and is a National Historic District. Distinct architecture such as the Inseruhe House, Casino, Dairy Barns and whimsical picnic shelters represent various periods of Belle Isle’s history. The Conservatory is as much an attraction as the displays it houses. Scott Fountain is a monument to the City’s industrial heritage, while the vast collection of memorial statues tells of Detroiters’ sacrifices in war and their commitment to peace.

LEARNING CENTER

Few parks offer the diverse educational and recreational resources of Belle Isle. The island itself is a museum of cultural history, a rich library of nature and an entertainment center. The Detroit River is an outstanding resource to learn about the Great Lakes ecology and aquatics. While passing freighters and the Dossin Museum tell the story the Lakes commerce and

industry; the Nature Center teaches the importance of preserving natural habitat. The Conservatory demonstrates the principles of plant ecology, while the Detroit Public Schools Golightly Vocational Center, located in the island’s greenhouse complex, teaches the principles of horticulture. Wooded wetlands and canals are living laboratories for understanding environmental systems. In addition to these natural and cultural experiences, Belle Isle is the place to learn how to sail, row, swim and fish. It is where children get instruction on how to kick a soccer ball, catch a baseball and hit a golf ball. This is a rare place where opportunities for teaching and learning are almost limitless.

GATHERING PLACE

As important as these public attractions are to history, it is the personal histories and memories associated with family picnics, class reunions and field trips that make Belle Isle unforgettable

Changes to Belle Isle should:

- *Recognize and respect the unique and rare natural environment and setting.*
- *Demonstrate an understanding of the context and quality of historic elements found on the island.*
- *Further the educational capacity by building upon the existing resources.*
- *Offer recreational and social opportunities for all park users, focusing on activities that could not exist elsewhere in the City.*

Clockwise from right:
Picnicking is a favorite
island pastime; the Scott
Fountain at sunset;
the island plays host to
many events each year;
the Aquarium Building.



Photo by: Glenn Calvin Moon

to many visitors. Popular events like the Thunderfest Hydroplane Races bring large crowds from throughout the United States and Canada. The island draws regional visitors for annual events such as scouting jamborees, marathon races, rowing competitions and sailing regattas. Throughout the summer months teams compete in baseball, softball and cricket leagues. Weddings are conducted at the Conservatory Gardens; and wedding pictures taken at Scott Fountain are a tradition. Senior citizens gather for programs at the Casino and banquets are held at the Detroit Yacht Club. Belle Isle is Detroit's gathering place.

The following chapters describe Belle Isle's history, provide a context for renewal, propose a development plan and outline an action plan for implementation. The goal is to establish a long-range strategic program for investment to improve the island's image, function and viability. Belle Isle's characteristics,

both positive and negative, have been inventoried, studied and analyzed as part of this study.

It is critical to plan and invest wisely if the island is to realize its full potential. Adhering to basic principles of management and design is essential to understanding how future changes can build on existing strengths and set a framework for renewal. Belle Isle is defined by its character and role as a *Unique Natural Environment, Historic Conservator, Learning Center and Gathering Place*. These conditions can then become the basis for guiding renewal while ensuring enjoyment and use by future generations.



Clockwise from top left:
Central Ave. at the turn of
the century; beach goers
at the old bath house;
bicycling through the
woods; old Tanglewood
Lane.



Chapter Two

A BRIEF HISTORY OF BELLE ISLE



The island has been the focus of attention and controversy since the day the City purchased it for a public park. Trends in recreation change over time, but today’s visitors are attracted to the same amenities that drew visitors in the past - the opportunity to enjoy family and friends in an unparalleled natural setting. Despite disagreements that have plagued decision making in the past and present, one thing remains clear - Belle Isle is one of Detroit’s most important assets. This is not only because it is the finest park in the City, but because of its regional importance and national stature.

DETROIT BUYS AN ISLAND

Debate about what Belle Isle should be, between those who want to keep it the way it is and those who want to change it, is as intense today as it was one hundred years ago. Securing park space became a primary concern of civic leaders as Detroit grew into a thriving city. In 1879, there was a debate whether or not Belle Isle should be purchased for a park. Many

Detroiters opposed the idea believing residents would benefit more from three large parks distributed in different parts of the City. Those against a park expressed concern that the low, mosquito infested island could not be made suitable without considerable cost. Access was another concern since reaching the island required crossing the Detroit River. Despite opposition, Belle Isle became a City property on September 23, 1879 and a survey of the island was commissioned and completed in 1882.

A PARK IS CREATED

Frederick Law Olmsted, Landscape Architect and famed designer of Central Park in New York City, was commissioned to plan Belle Isle Park to nullify lingering opposition. Olmsted had an unmatched reputation for park design and is recognized as the foremost designer of America’s urban parks. Aware of the controversy surrounding the purchase of Belle Isle for a

park, Olmsted crafted a simple plan that would not require significant investment.

As debate rose over types of uses allowed on the island, Olmsted remained steadfast to his conviction that Belle Isle should focus on a theme of picturesque landscapes with a variety of passive recreation features. He designed canals that would serve as recreational and visual amenities while draining picnic and event areas. A central promenade was designed and installed, organizing circulation and access. Although his ideas were not carried beyond a preliminary stage, Olmsted’s design premise remains intact today even with significant changes over the last 120 years.

RAPID DEVELOPMENT

The turn of the century began a period of major development for Belle Isle. In 1893, when 3,000 Detroiters were out of

Clockwise from right: skaters on Lake Tacoma; traffic has always been a problem on MacArthur Bridge; Scott Fountain; crowds gather along the canals to enjoy the Detroit Symphony Orchestra summer concerts; boaters glide on the lake; one of the many beautiful historic buildings on the island; the newly built tennis courts circa 1950's; young boaters by the old Boat House.



work, the City employed workers to dig Lake Muskoday, creating roads from the excavated earth. By 1910, a bridge built in 1889 could not keep up with traffic demand. Fire destroyed this wood and steel structure in 1915 and the current MacArthur Bridge was completed in 1923. It is interesting to note that an underpass connection to Grand Boulevard, with a transit station with restrooms, was built at Jefferson Avenue as part of the new bridge construction. The underpass was intended to alleviate congestion problems. This underpass was converted to a surface intersection in the 1980's and not surprisingly traffic problems persist today.

island. Fill was placed to expand the island's perimeter and construct a golf course. Special events became common; one of the first celebrations was an annual Water Festival held in August along the shoreline facing Canada. This popular event had swimming races, canoe and rowing competitions, sail boat races and concerts.

MOST POPULAR PARK

By 1950, Belle Isle had become the repository for numerous monuments and fountains. Shelters, refectories, pony rides, concerts, power boat races, canoeing, ice skating, a children's zoo and water follies in the Scott Fountain basin were just a few of the available amenities. Annual visitation exceeded thirty million people. Roads were widened and one-way circuits were imposed to accommodate increasing automobile traffic. A large boulevard was proposed and nearly approved for Central Avenue. More comfort stations were built, and



The island was enlarged to accommodate new facilities and activities. Forty acres of fill dirt were used to create Sunset Point on which Scott Fountain stands. The fountain was unveiled in 1925. Formal gardens around the basin and a plaza on the point were designed, but never built. Blue Heron Lagoon was claimed from the River creating the east end of the

many older buildings were demolished. Canal flow was cut off from the river to control flooding, and within a few years, waterways became stagnant and unattractive. Marsh Run, a major canal in the picnic area across from the Boat Club was

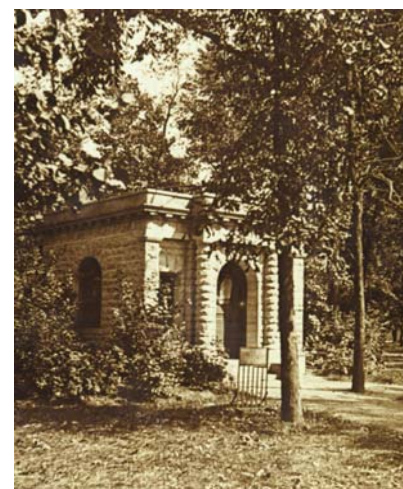
filled (see 1922 map) which created drainage problems. As early as 1960, there was evidence the park had developed serious problems. Although there was renewed interest to improve the island in the 1960's and 1970's, severe budget reductions resulted in a decline in the quality of Belle Isle. Staffing was cut back and coordination was reduced. The natural and built environment experienced degradation, several historic structures were razed, and some traditional activities were curtailed. In 1972, the Huron Clinton Metropark



Authority (HCMA) designed a plan to energize the tired park. This plan suggested a tollgate fee to generate revenue for island development. Public opposition to the City losing control of the park to the HCMA stopped the project.

ease pressure on Belle Isle’s recreational facilities by providing waterfront access and generating momentum for a greenway link to Hart Plaza and the downtown area.

Concern for the welfare of Belle Isle prompted the formation of the Friends of Belle Isle in 1973. In 1976, the firm of Kiley, Tyndall, Walker was commissioned by the Friends to propose a comprehensive revitalization plan. Dan Kiley’s proposal to remove automobiles from the island met with opposition. Only the new Kresge Plaza and the circular basin behind the Casino were implemented from the Kiley plan. Since then improvements have been undertaken on a makeshift basis. These include Safari Land Zoo, Grand Prix racecourse infrastructure, Scott Fountain rehabilitation, Casino renovation, water slide construction and canal dredging. At the same time, three riverfront parks have been built between Belle Isle and downtown Detroit. Potentially these parks will



1768	1793	1805	1817	1837	1839	1845	1850	1875	1879	1883	1886	1887	1889
Purchased from Native Americans by Lt. George McDougall	Purchased by William Macomb. Island known as "Hog Island"	Michigan Territory established. Detroit is capital	Purchased by Barnabus Campau for \$5,000	Michigan becomes 26 th State	Detroit Boat Club founded	Renamed "Belle Isle"	Detroit's Population: 21,019	White House "Inselruhe"	City purchases island for \$200,000	Fredrick Law Olmsted prepares Master Plan	Zoo established with donation of ten birds and animals	First Casino	First wooden bridge

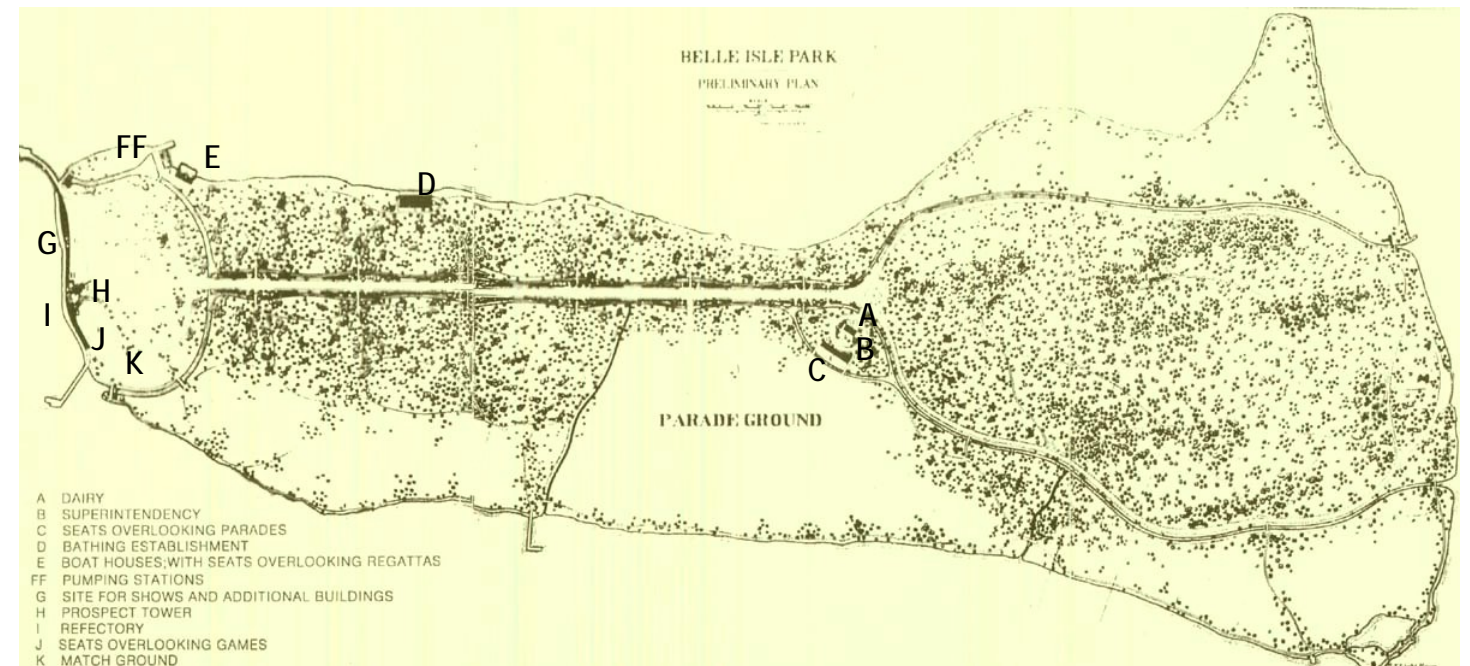
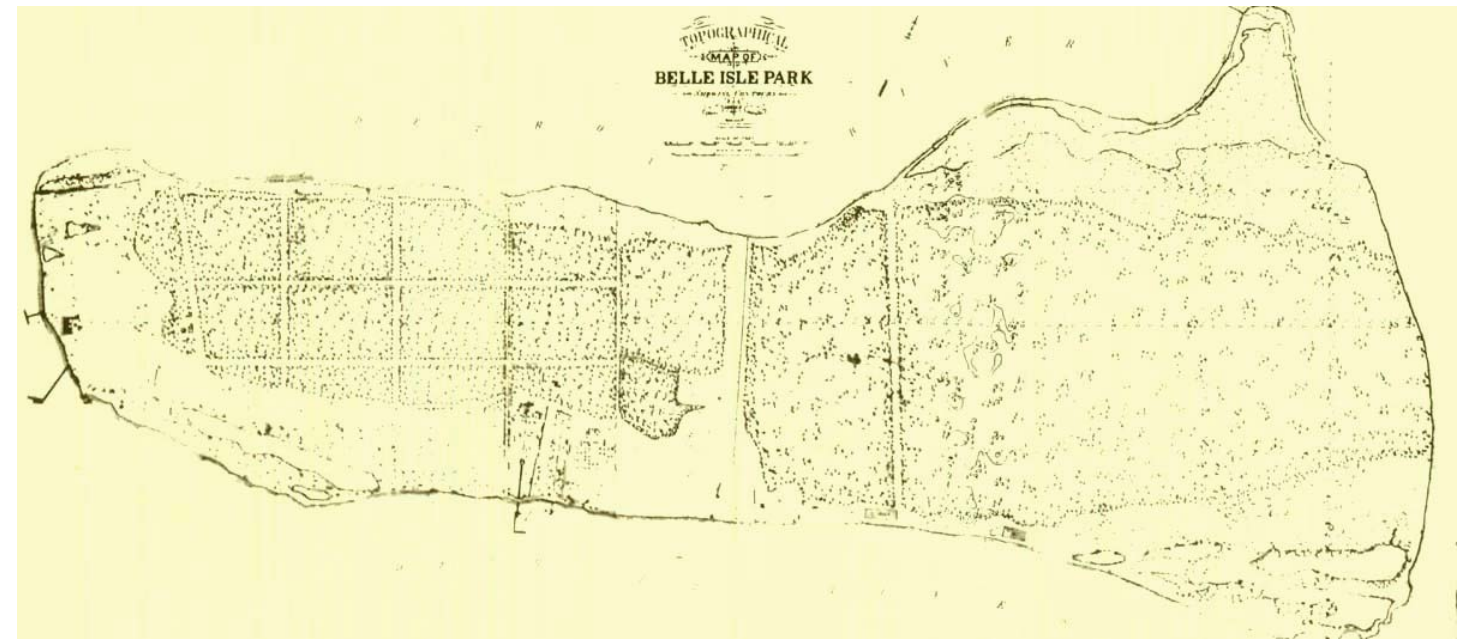
Time Line TO 1900

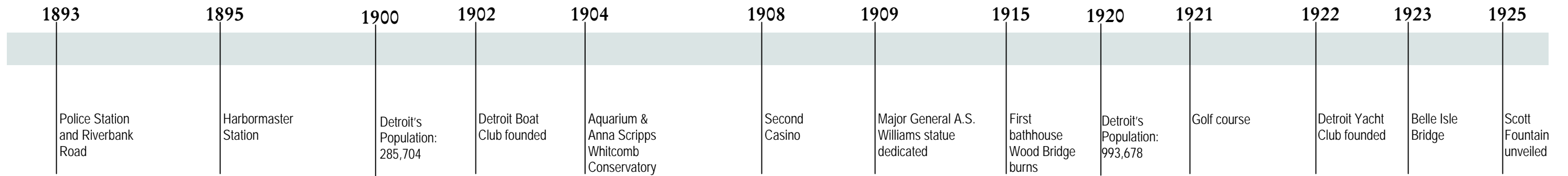


The Ottawa and Chippewa called the island Wah-na-be-zee (White Swan) Island. By the early 1700s the French were using it as a livestock grazing ground. The low swampy island, inhabited by herds of wild hogs, became known as Hog Island. It became a popular picnic spot after Barnabus Campau purchased it in 1817. It was not until 1845 that Belle Isle was renamed in honor of Isabelle Cass, daughter of Governor Lewis Cass.

The City of Detroit purchased Belle Isle for \$200,000 in 1879. Fredrick Law Olmsted, the Landscape Architect responsible for New York's Central Park, was retained four years later to create a Master Plan for Belle Isle. The survey provides a map of the island at the time of purchase and the design plan.

Clockwise from Top: boating has always been a big part of the Belle Isle experience; early Survey of the island (1882); Olmsted's Master Plan.





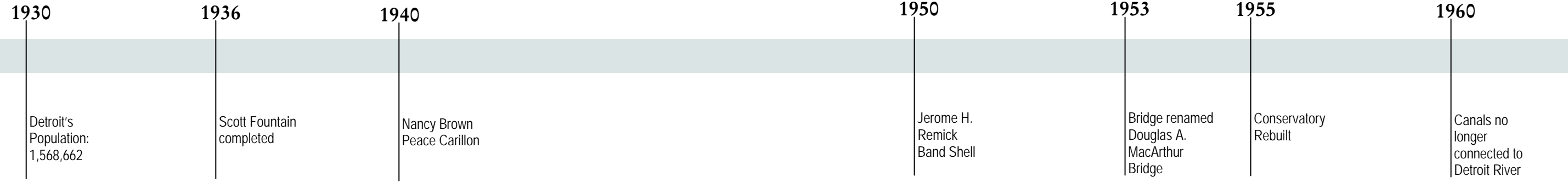
Time Line 1900 TO 1930



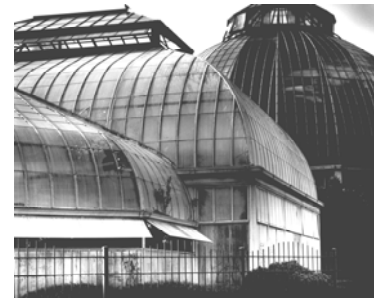
The beginning of the century was a period of rapid development for Belle Isle. Olmsted had devised a plan for digging canals to correct the drainage problems. He designed a formal central axis that is Central Avenue today. His plan created the framework for the development of new trails and roads leading to the new park attractions. The park also grew physically. When 3,000 men were out of work in 1893, the City hired the unemployed to dig Lake Muskoday, creating Riverbank Road with the excavated material. The map at right is from 1922. When the Scott Fountain was built in 1925, an additional forty acres of land was added at the island's tip. More land area was added to the eastern end to accommodate the golf course and Blue Heron Lagoon.



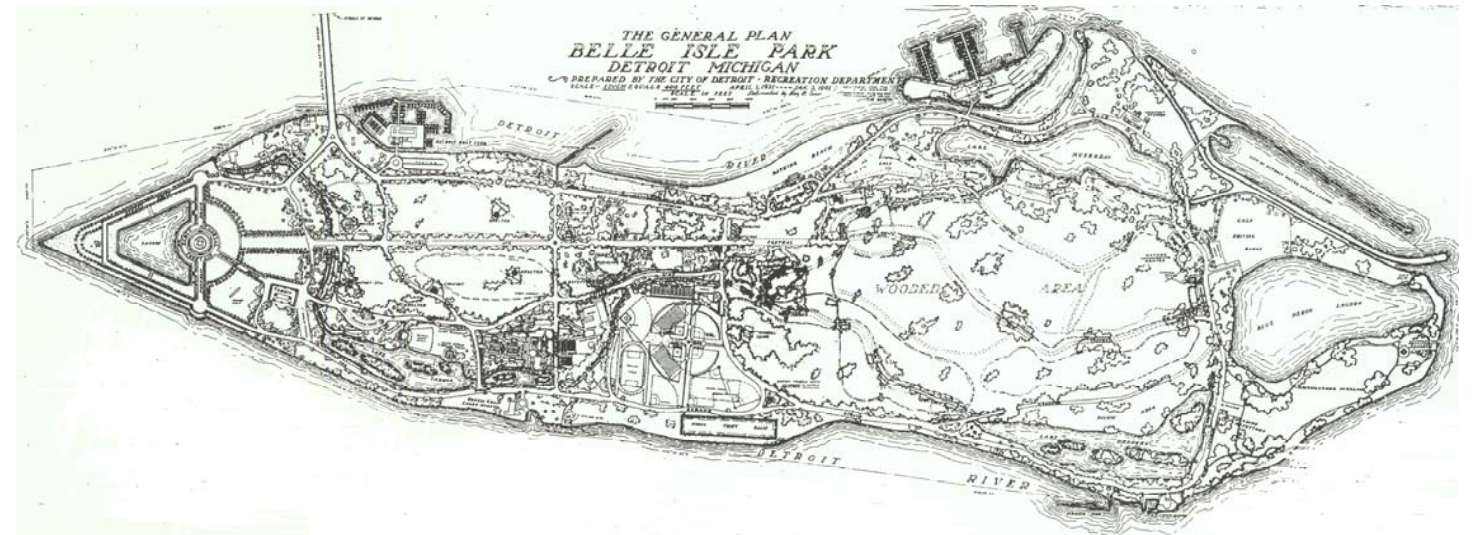
Clockwise from Top: map of Belle Isle in 1922; Athletic Pavilion; automobiles on the Strand; Dairy Barns.



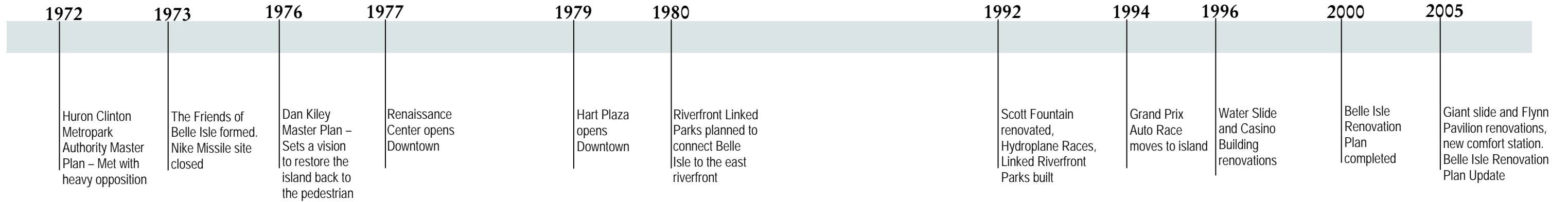
Time Line 1930 TO 1960



The Marsh Run Canal at the Boat Club and the River connection at the Casino were filled during the 1950's. Belle Isle had become the repository for numerous monuments, fountains, shelters, refectories, comfort buildings, and attractions. The island hosted sailing races, foot races, pageants, concerts, canoeing, ice-skating, and many other events. It is estimated that the park had an annual visitation rate exceeding three million people. Roads were expanded to accommodate increased traffic flow. This popularity created an overwhelming maintenance burden for the City. In time, it was evident the island was overtaxed and suffering from inadequate maintenance and simply too much traffic.



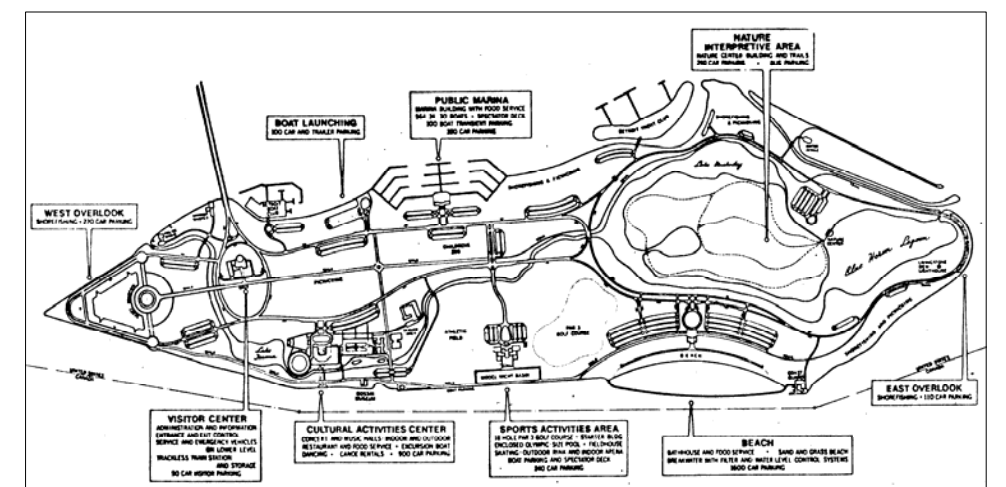
Clockwise from top: current DRD General Plan for Belle Isle; Saarinen designed Flynn Skating Pavilion; beachgoers in the 1950's; historic entrance to Belle Isle with Grand Boulevard underpass and transit shelter - removed in the 1980's; detail of the Conservatory.



Time Line 1960 TO 2000

Public concern for the welfare of Belle Isle's natural systems and its historic buildings prompted the formation of Friends of Belle Isle in 1973. City leaders became aware the island needed the guidance of a comprehensive program including a physical Master Plan, an inventory of man-made and natural features, a shoreline appraisal and an architectural survey with recommendations to halt deterioration. Dan Kiley was commissioned in 1976 to do a plan, however, only minor elements of this plan were implemented. In recent years, several important restoration projects have been undertaken including Scott Fountain, the Casino Building and grounds, the White House and canal dredging.

Clockwise from top: Turtles frolic in Scott Fountain; 1976 Dan Kiley Proposed Master Plan; 1972 HCMA Proposed Master Plan; refurbished Scott Fountain

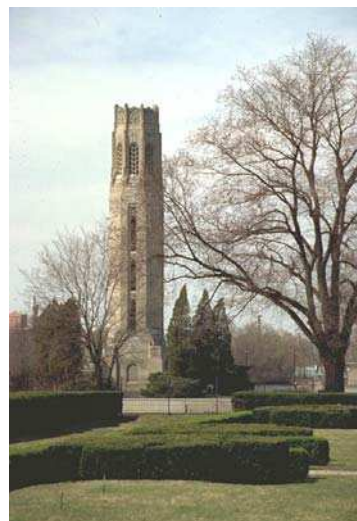


Belle Isle: a place for people, nature and historic buildings.



Chapter Three

UNDERSTANDING BELLE ISLE



INVENTORY AND ANALYSIS PROCESS

Compiling inventory and analysis findings generated an objective appraisal of what should be done to stop deterioration and enhance Belle Isle’s physical and financial well-being. Conclusions drawn from this process set the framework for refurbishment and renewal.

In addition to the history, the study includes examination of existing contracts with concessionaires, analysis of the island’s annual budget, review of the current management structure, as well as examination of the natural and built environments. Fifteen boxes of archival files dating back to the early twentieth century were reviewed and cataloged. Drawings of past, planned and ongoing projects were reviewed and documented. The twenty and thirty year old planning studies by HCMA and Dan Kiley were evaluated for relevance and scope.

Interviews were conducted to ascertain perceptions, problems, ideas and issues with DRD staff, Detroit Zoological Park Staff, History Department Staff, the Department of public works, Detroit Police Department, Detroit Water and Sewerage Department and other City agencies. Island stakeholders and organizations such as the Detroit Yacht Club, Model Boat Club, Detroit Grand Prix, Thunderfest Hydroplane Race, Coast Guard and the Friends of Belle Isle also contributed information to the process. The consultants held over fifty meetings and work sessions, including detailed discussions with Belle Isle maintenance, management and programming staff. Recreation centers throughout the City hosted public meetings over a one year period to solicit and exchange ideas and comments about what the park should be.

Information gathered from other park systems provided a resource for developing management, programming and operation strategies. Assistance was received from the Huron

Clinton Metro Park Authority (HCMA), Wayne County Parks, Chicago Park System and New York’s Central Park. This included information on management models, annual budgets, concessionaire contracting, special events, park maintenance, park fees and programming.

Many hours were spent videotaping activities, photographing conditions, observing the staging of special events, inspecting buildings, documenting site conditions and talking to visitors and park users. Park offerings were tested and the island was explored via foot, bike, boat and automobile; observations were made on 24 hour and seasonal cycles.

Reports and briefings were prepared to summarize the analysis findings. They include technical analyses of natural systems, built features, transportation systems, infrastructure, crime prevention, and detailed assessments of management, programming and operations.

Clockwise from top:
The Casino in autumn;
monuments on Belle Isle
celebrate the spirit of
Detroit in war and at
peace.



Photo by: Glenn Calvin Moon

Many of the solutions for improving the island provided for in the briefings have been integrated into this proposed Renovation Plan. However, the reports offer many other ideas that provide insight and they should continue to be evaluated for inclusion into an overall improvement program. Two significant management tools generated from the Master Plan inventory and analysis work are

Digital Map Database. Existing conditions were accurately documented using aerial photography and a global positioning system. The data base system is a useful tool for updating and documenting improvements to the park.

Engineered surveys completed for projects undertaken between 2000 and 2005 have been added to this base information.

Existing Building and Structures Database. Over 130 buildings and structures were inventoried. The information

includes evaluations of each structure, maintenance recommendations and costs to address immediate stabilization/repair needs. Each structure has a photo file and is keyed to the island's digital map. Data includes historical information, utilization, existing conditions, and general remarks about adaptive reuse potential. All the information is compiled in an expandable format that can be updated and used to monitor building conditions and prepare budgets.

In 2005, many of the buildings were reevaluated and updated renovation costs were generated.



Clockwise from right: the new golf practice facility at Blue Heron Lagoon; the Conservatory; kids love the play equipment.

PROGRAMS AND USES



Park programming is not an exact science. It requires a combination of data, local knowledge, user needs and agency capabilities to develop a reasonable strategy to fit a major facility like Belle Isle into a large urban recreation system. Belle Isle provides something for everyone from the casual stroller, jogger or parent with a child, to family reunions, or thousands of screaming fans for the Freedom Festival Fireworks. It draws people to the Detroit River to see massive freighters passing on their way to the Great Lakes or global ports, or to view the broad expanse of North America’s busiest international skyline between Detroit and Windsor.

Divestment in Detroit over the last forty years has led to reduced population, maintenance, appearances and function in the City. The same may be said for Belle Isle. A declining property tax base has reduced operating budgets for facility maintenance and programmed activities. While Detroit assigns a comparable percentage of its tax revenues to parks as its

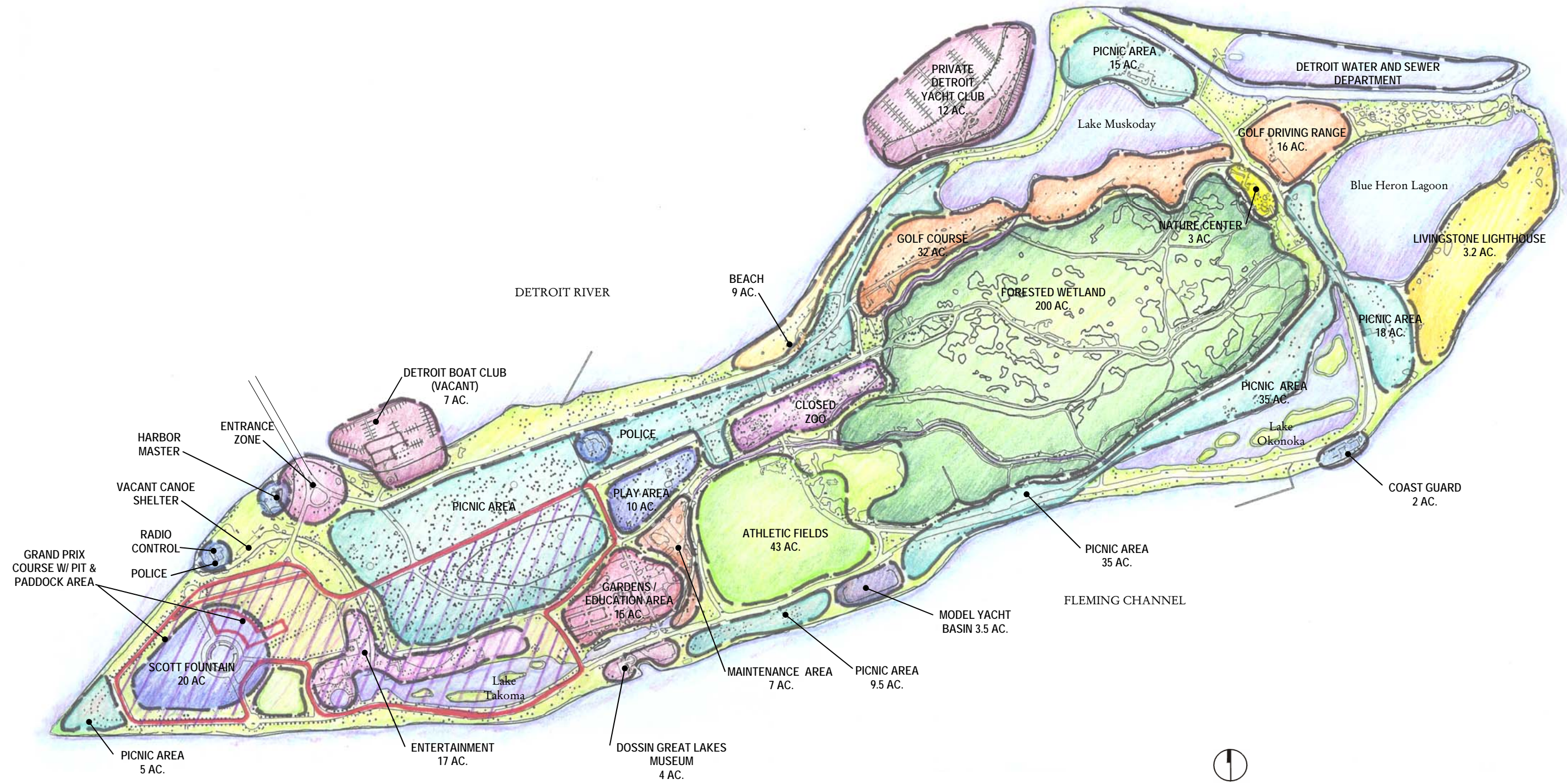


largest Midwest neighbor, Chicago, the overall parks budget is only 40% per capita of what Chicago’s tax base generates. In the last ten years, the number of year-round fulltime employees of the Detroit Recreation Department has fallen from about 1,000 to 620. According to the Urban Land Institute, Detroit is next to last in annual per resident spending on recreation facilities when compared to eight cities with similar populations and densities. Although the budget for the

Recreation Department has increased in recent years, it is only slightly more than what was spent twenty years ago (1980).

Belle Isle is Detroit’s most popular park; it compares with other large urban parks and is consistent with its historic programs and uses. Yet the park is over burdened, partly because other City parks are comparatively smaller, and offer less maintenance and security. The ability to divert user groups to local parks will allow Belle Isle to be programmed more effectively for its role as the major community park and special events location. Improving the rest of the parks in Detroit will have a positive effect on Belle Isle.

Over utilization of specific areas can create the perception of criminal activity. The user survey prepared for this study, indicates that the fear of crime lingers on the island. When a location on the island is perceived as unsafe, park goers will not frequent that location. Congestion, particularly vehicular



NTS

This plan illustrates the existing land uses and their size on the 982-acre island. The forested wetland and picnic areas are the largest land uses, followed by the athletic fields and the Livingstone Lighthouse areas.

Belle Isle Master Plan

EXISTING LAND USE PLAN



Photo by: Glenn Calvin Moon



Photo by: Glenn Calvin Moon



Clockwise from left: willows line the island's canals; picnicking and fishing are two of the island's favorite activities; unprogrammed play is important.



congestion, can give the feeling of being trapped. This discourages visitors from enjoying facilities and causes wear and tear to specific areas in the park. Examples of heavily used areas include the giant slide, Scott Fountain, the south shore along the Strand, and the beach. Overgrown conditions around many buildings, monuments, and restrooms make visitors uncomfortable and can impart a sense of danger.

PASSIVE LANDSCAPES

Informal landscapes such as meadows, lawns and shorelines provide opportunities for relaxing, passive activities. These areas should be made physically and visually accessible and inviting to all users. Gardens and other formal landscapes are important elements for Belle Isle and like nearby Windsor's Coventry Gardens can be a popular attraction. Belle Isle does not take advantage of opportunities for developing formally landscaped attractions that can enhance the island and draw regional visitors.

The Casino and Conservatory complex lack formal landscape approaches to announce and complement their historic character. The visual power of both the Scott Fountain and the Nancy Brown Peace Carillon is depreciated by weak landscape treatment; the Boat Club and Dossin Museum entrance landscapes are uninviting. The Johnson Memorial Gardens entrance at Picnic Way is almost always locked. The

garden is under-planted and uninteresting to even the most casual visitor at a time when botanical gardens are experiencing a tremendous resurgence in popularity all over the country.

ACTIVE LANDSCAPES

Active landscapes on the island include the golf course and sports fields. Although there is a new modern golf practice facility, the golf course is not spacious enough to accommodate the modern game, athletic complexes lack modern amenities and the roads force incompatible uses. All these facilities require intensive maintenance. Unfortunately, the fields can take days to drain after even a normal rain limiting use, preventing access and negatively affecting Belle Isle's image. The frequent flooding and almost constant wet conditions combined with periodic intense use, such as summer weekends, result in severe distress.

RECOMMENDATIONS

Given the complex and prominent nature of Belle Isle's role in the Detroit parks system and the need to maintain a broad appeal for the park, recommendations have been formulated in an attempt to balance leisure time offerings with protection of this valuable resource.

Highlight gardens as attractions. Appropriate landscaping will contribute to the overall quality of experience on the island. Botanical gardens can be an outstanding park amenity with revenue generating potential, and the Johnson Memorial Garden should be restored as an attraction in the Conservatory complex. Plans completed for a Japanese Garden next to the Johnson Garden should be evaluated for implementation once the original garden is restored. Space should be designated in the complex for development of other specialty gardens.



Clockwise from left: lakes and canals support wildlife and contribute to the overall serenity of the park; Belle Isle accommodates many special events annually; fishing along the north shore; the Annual Boy Scout Jamboree; little slides and giant slides populate Belle Isle; the island could be the venue for City sports championships.



Improve passive recreation - picnic use. This is one of the most popular activities on Belle Isle; demand is high and facilities are overcrowded or need repair. Action should be taken to match picnic areas to reasonable numbers of users. Parking limits based on the capacity of a use area should be implemented in order to balance natural features with goals for pleasant and attractive picnic zones. Facilities should be upgraded to provide a better quality experience for groups and families.

Develop more unprogrammed active recreation opportunities. Occasional use recreation fields and courts complement picnic facilities for groups spending a day in the park. These amenities do not need to be regulation league facilities, but they do need to be well maintained and suitable for socializing and exercising. A mix of facilities is recommended including: basketball courts with bleachers, beach volleyball, handball and shuffleboard courts, rollerblade hockey rinks, horseshoe pits, ballfields and open lawn areas, a golf course, canoe launches, trails and paths, playgrounds and fishing piers/access.

Improve active programmed recreation - field sports. Active recreation facilities at the Belle Isle athletic complex should be of the highest quality to provide a special place for playing citywide tournaments and league championships.



Expand cultural/educational facilities. The cultural and educational features of Belle Isle are among its strongest traditions. Recommendations include efforts to enhance existing facilities and programs, reprogram some facilities and add new experiences to the cultural area. Expand and enhance the area around the Conservatory complex and Great Lakes Museum to create a Cultural Campus environment where these facilities work together to create a dynamic learning environment.

Special Events Venues. The guiding principle for special, or super events is to accommodate them within the framework of the park environment. This means the staging of events and all associated permanent fixtures must respond to the park setting and not vice-versa. In some cases, these may be temporary bleachers, concessions, restrooms, fences and barricades. In other cases, it is necessary to alter infrastructure, landscape and drainage. Permanent changes should be designed and

implemented in a way that is responsive to the park environment.

There will always be the need to accommodate special events at Belle Isle; it is part of the mission of a large urban park. The City needs to make informed decisions about what is appropriate and how to accommodate events so the park continues to operate unhindered throughout the year. Set up and tear down times must be kept to an absolute minimum and event organizers must be held accountable for undertaking restoration immediately upon event completion.

PEOPLE



A two phase user survey was conducted to assess the needs, opinions and attitudes of Belle Isle visitors. In the first phase, participants filled out a one-page “short form” survey that focused on basic demographics and attitudes about the island. Participants in the second phase were selected by randomly sending users from the short form group “long form” surveys that were returned and processed for the study.

All users were surveyed to assess park usage patterns and demographics. Specific opinions relating to visitation, a possible park admission fee, and park attractions, venues and events were also gathered. The long survey focused on the park experience, reasons for visiting, evaluating specific attractions, events and venues and desirable and undesirable aspects of the park. It also provided a more detailed demographic profile of park visitors. A brief synopsis of the results follows; more detailed information is available in the *Technical Assessment Report* under separate cover.

VISITOR PROFILE

The typical visitor comes to the island approximately ten times a year; others visit quite often, sometimes every day. People



visit the park primary to tour the island, observe the wildlife and to picnic. Yet only 47% would recommend Belle Isle to all their friends and relatives. Almost a quarter of the visitors are from outside Detroit.



When asked what they do not like, two-thirds mentioned poor maintenance and run-down facilities, particularly bathrooms. Visitors also feel the park is not clean, with almost two-fifths stating there is too much litter. Congestion and safety issues were also mentioned as undesirable aspects.



Clockwise from left: improved picnic facilities would enhance visitor's experience on the island; young people find the island especially appealing; young people gathered around the S.F. Smith memorial Flagpole.



Recommendations for “new things” that would make Belle Isle better for visitors include adding more athletic facilities and water amenities. Educational attractions, activities for children and more/improved picnic areas were frequently recommended. Security and traffic control, better facility maintenance and more/better food service were often identified as needs. Many related comments suggested improving the landscaping/lawn cutting, general clean up, and improving the beach area. Expanding activities, adding amenities or convenience factors, renovating existing buildings and updating existing attractions were all suggested.



Many of these issues have been specifically addressed since this survey was completed. Regular trash pick-up and grass cutting has improved the island's image and a new play complex offer a safe, inviting place for children.

Below: erosion on the north shore.



NATURAL SYSTEMS



Natural features such as shorelines, canals, the native forest, picnic grounds and play fields are a traditional part of the Belle Isle experience. It is imperative to recognize that maintaining, enhancing and protecting the island’s landscapes are important to providing an effective educational environment that expands recreational experiences and enhances Belle Isle’s image. The island’s natural systems were evaluated and documented; however, this inventory does not preclude the fact that Belle Isle is due for a comprehensive ecological and environmental assessment of soils, plants, wildlife and water resources.

SOILS

General soil information for Belle Isle has been compiled by the United States Department of Agriculture, Soil Conservation Service (SCS). Three different soil types, or series, exist on Belle Isle: Pewamo, Blount and Metamora. All

three consist of poorly to very poorly drained, nearly level or gently sloping soils. They have moderately low permeability and very slow surface runoff. These soils become a “sticky mud” when saturated.

CLIMATE

Rainfall and snowfall directly impact activities on Belle Isle. Rainfall will postpone such maintenance tasks as mowing. When coupled with the island’s poorly drained, moisture retentive soils, the delays become longer.

SHORELINES

Belle Isle’s extensive shorelines on the Detroit River provide excellent opportunities for fishing, swimming and passive viewing. The views from the shore are among Detroit’s most picturesque postcard images. Yet for all its beauty, the current shoreline situation is unsatisfactory. Visitors can rarely experience the River’s edge without conflicting with

automobile traffic. Typical park and waterfront amenities such as boardwalks, promenades and plazas do not exist.

The world-class quality of Belle Isle’s shorelines has been greatly depreciated by the use of demolition debris and broken concrete to line the island’s edge. Exposed metal rods, miscellaneous brickbat and large voids between concrete slabs are typical. Poor installation techniques contribute to washouts and continual maintenance efforts.

Seasonal water levels can vary as much as five feet, while ice flows, currents and wave actions from large vessels rip and pull at the shore. These Detroit River dynamics make it difficult to effectively stabilize the island’s edges.

RECOMMENDATIONS

Effective planning and adequate budgeting are essential to avoid “quick fix” stabilization efforts that have failed in the past.

Clockwise from right: concrete rubble is not a suitable shoreline stabilizer; Belle Isle's waterways should be reopened for canoeing; ponds and canals thread their way through the island; an old walk that once connected the Casino to the ferry dock.



Coordination with State and Federal agencies for potential funding and permitting is necessary. All shoreline restoration work should recognize that Belle Isle is Detroit's most important recreational amenity and a national showpiece for the City. Key recommendations are:

Use quality materials and methods. Broken concrete is a common, inexpensive method of riprap stabilization and has been used extensively on the island over the years. It is less attractive than other methods, is dangerous and makes public access more difficult to accommodate than higher quality alternatives. The practice of using broken concrete and other building material should be curtailed in lieu of locally available quarried stone and other quality stabilization techniques and materials. When possible, biotechnical engineering should be used to restore shorelines to the island's natural state.

Provide a variety of shoreline experiences. The island's shoreline environment varies: the south shore that faces the shipping channel is exposed to excessive wave action requiring more intense treatment, while north shore areas provide opportunities for less aggressive edge stabilization techniques. Together, these conditions present opportunities to develop a number of water edge experiences to provide interconnected pedestrian experiences using a variety of edge treatments. Design solutions should complement the character of the immediate park surroundings, encourage access to the water, vary from formal to natural experiences and enhance the views to and from the island.

Enhance existing shoreline amenities. Existing shoreline amenities, such as the two fishing piers, should be improved to allow better access for anglers and other park users. The high elevation of the decks above the water makes fishing difficult and the piers are not over natural forage. Converting the piers



to boardwalks and/or creating habitat to attract sport fish are desirable. Enhancement techniques should always be cognizant of views and facilitating pedestrian access.

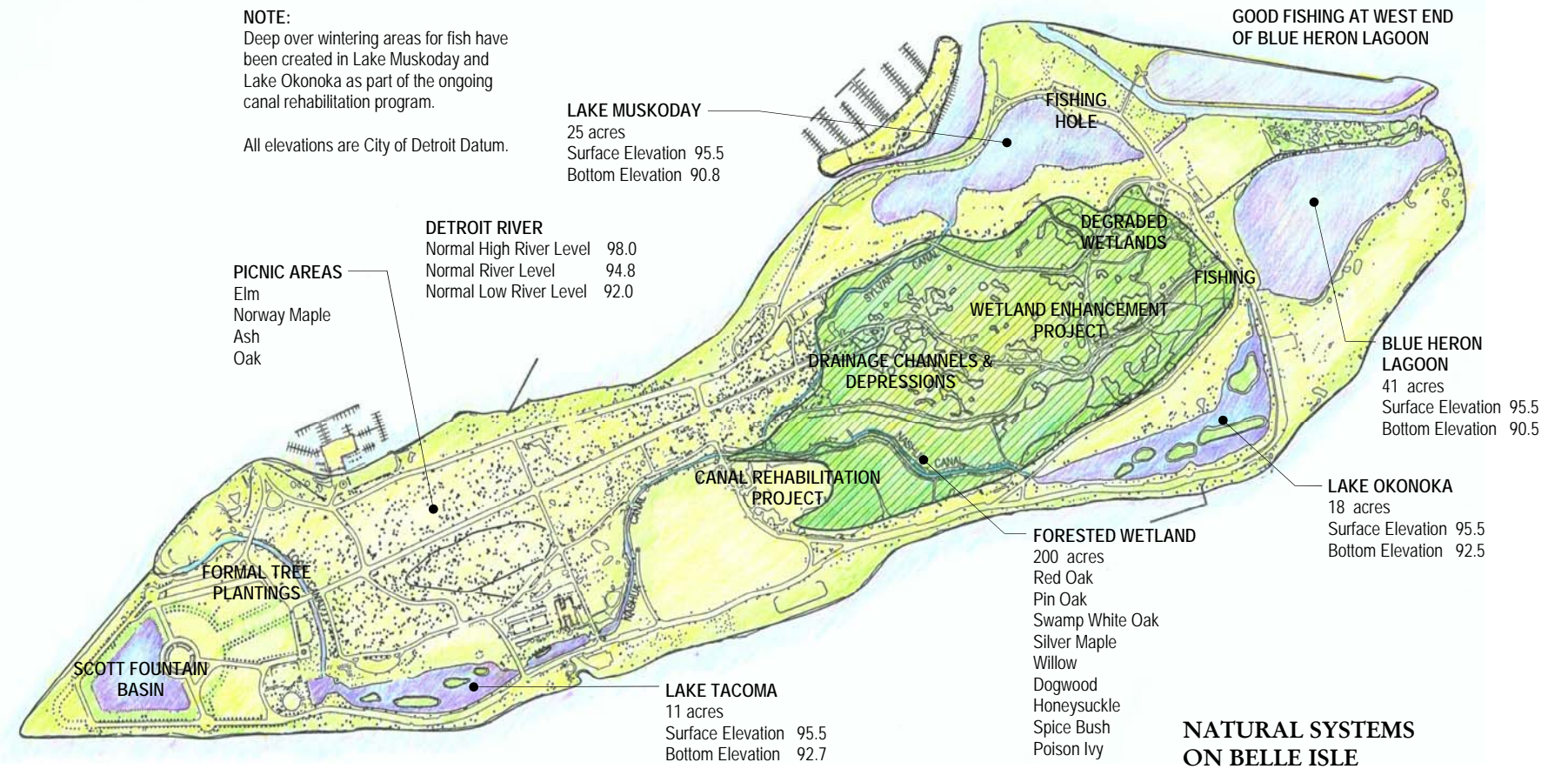


LAKES AND CANALS

The internal waterway system is composed of three lakes, a lagoon and over two miles of canals, totaling 106 acres of open surface water. Severe problems with noxious weeds and sedimentation have been common since the closing of canal connections to the Detroit River in the late 1950's. Once popular amenities such as ice-skating and canoeing are no longer featured. The canoe shelter has been vacated. Fish habitat has depreciated significantly from the past and run-off

from the defunct zoo property and the central maintenance complex compromise water quality.

The Belle Isle Canal Rehabilitation Study (1993) documented serious water quality impairment and initiated a comprehensive management plan. The program is being implemented and includes work to improve flow conditions, remove in-stream sediment, address problems with noxious weeds and create fish over-wintering habitat. Even with the successful implementation of a management program, the visual impact and value of the canal system is affected by park development. When roads were widened over the years to accommodate additional traffic lanes, landscape areas along Lake Takoma, Lake Okonoka and Lake Muskoday were sacrificed to asphalt. While the expansion of roads obviously reduced the area devoted to picnicking and fishing, it also reduced the intrinsic, natural beauty of the canal and lake system.



RECOMMENDATIONS

The recommendations for lakes and canals are based on improving the quality and quantity of recreational experiences while protecting and enhancing the natural environment.

Continue the canal and lake restoration program. The ongoing canal and lake restoration project and comprehensive management program must continue. This includes aquatic weed management, eliminating point source discharges, fish stocking, maintaining the circulation pumps and making Blue Heron Lagoon the focus of natural resources and habitat enhancement on the island. Surface water areas not functioning effectively as part of this system should be re-evaluated and redesigned.

Develop programmed recreational uses for waterways. It is important that the lakes and canals become an *active* part of the Belle Isle recreational experience. Where opportunities exist,

roads should be replaced with picnic areas, fishing, walkways and natural edges. Amenities such as canoeing and ice-skating should be reactivated. The strategy for renewal should examine the best possible location for such activities so they: complement their surroundings, are environmentally responsive and their potential for success is maximized. The recently renovated Flynn Pavilion should facilitate some of these uses.

Reduce flooding by using natural drainage design techniques. The flooding problem must receive priority status. Although not always practical, natural drainage systems such as ponds, canals and swales should be developed in lieu of engineered systems that are subject to failure and require maintenance. If engineered systems are built, annual cleaning and repair of sewers and preventative maintenance for pumps is critical to keep them operational.

Clockwise from left:
 An example of old growth forest; the superb wooded wetlands are a natural asset; the woods in autumn; Canada Geese stress the island's natural habitat; European Fallow Deer used to roam freely on the island; clearings in the woods allow shrubs and grasses to grow, but Canary Reed Grass threatens the native forbs and grasses.



WOODLANDS

Belle Isle's high quality, wetland forest, covering almost 200 acres and has been traditionally considered a nature preserve in past planning efforts. Automobiles traveling through the woods along Central and Oakway Avenues negatively impact the natural setting and experience; noise and exhaust from cars compete with the peaceful sights and smells in the wooded retreat; garbage is tossed from passing automobiles and quickly blows into the woods. Roads are used as short cuts rather than enjoyable woodland drives. This results in traffic moving too fast as demonstrated by the ruts along the edges of the narrow roadways. Nature trails, walkways and bicycle paths are almost non-existent or in poor condition, limiting forest access.

RECOMMENDATIONS

Promote the forest. The forested wetlands should be promoted as a part of the Belle Isle's renewal. This unique ecosystem with its landmark trees can be highlighted by

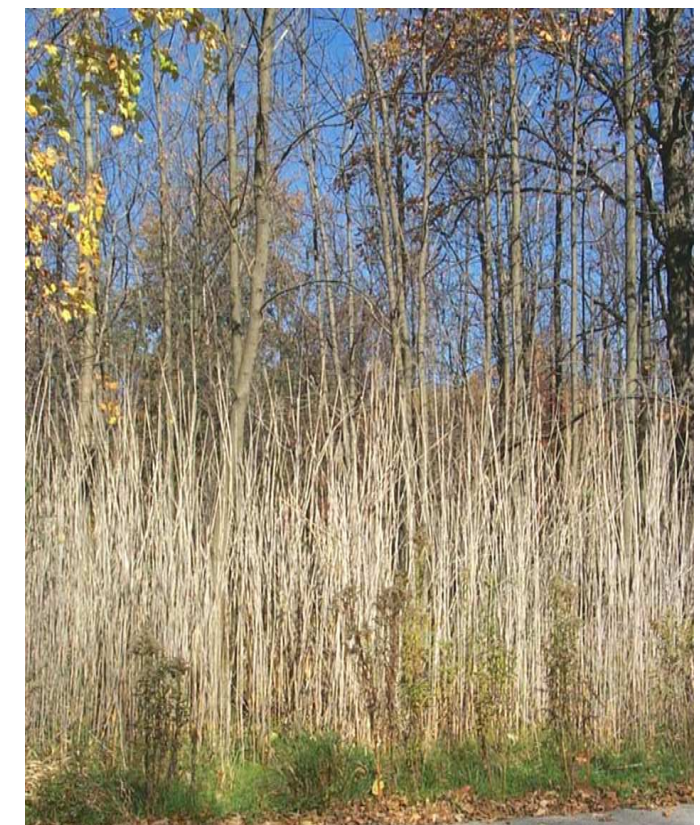
developing interpretive systems and nature trails that tell the story of the forest, stimulating educational use and visitor interest for all ages.

Implement management programs to enhance and protect the ecosystem. A woodlands management program is essential to preserving the forest environment. An eradication program for low quality, invasive plants, such as canary reed grass and buckthorn, should be implemented. Areas where canary reed grass is prevalent should be evaluated for restoration to native landscapes or redeveloped as sites for new facilities and amenities that respond to the overall development goals for improving the island (with State and Federal regulatory agency permit assistance).

Control automobile traffic and facilitate pedestrian and bicycle trails. Automobile traffic cutting through the forest should be reduced without completely eliminating the

experience. Alternative modes of access, such as bicycle and rollerblading trails, should be integrated into the woodland environment; they are likely to become a popular park attraction based upon the success of bikeways in other Michigan parks. All trails should be connected to the overall pedestrian and bicycle systems planned for the entire island.

Implement a tree management and maintenance program. It should be standard practice to maintain trees in picnic areas, this includes the removal of dead and dying trees and dangerous limbs. A canopy tree restoration plan using native tree species should be implemented. It is also recommended that informal open areas be developed in strategic locations or where problem trees have been removed. This will provide areas where picnic goers enjoy games such as frisbee, badminton, catch, horseshoes, volleyball and even softball without having to rely upon the athletic complex.





WILDLIFE

Belle Isle is home to wildlife species such as squirrels, chipmunks, raccoons, deer, muskrats, frogs, opossums, voles and shrews. Many birds also inhabit the island, such as Wood Thrushes, Green Backed Herons, Orioles, Downy Woodpeckers, Sharp-Shinned Hawks and various species of geese, gulls, pigeons and ducks. Many more use the island on their yearly migrations.

For over 60 years, the forest housed a herd of non-native European Fallow Deer. Deer watching and feeding were a popular past time and the deer had become accustomed to humans. But over-grazing and loss of native plant material suggested the population was approaching the habitat’s limit.

RECOMMENDATIONS

Expand wildlife habitat on the island. Although the island has a variety of wildlife, there is an opportunity to expand the diversity of its habitat, thus attracting more diverse wildlife species while creating a more attractive and interesting visitor experience. Many places in the park that are not heavily used are mowed as lawns that require scheduled maintenance. Converting them to natural landscapes such as meadows would enhance habitat development, improve the park experience, reduce maintenance and promote wildlife education.



Diversify environmental education opportunities using native landscapes. The comprehensive management program for the canals and lakes, as previously mentioned, is critical to developing quality fish and wildlife habitat. Native landscaping along canal banks will enhance habitat, improve views, control eroding banks and provide visual interest for canoeists. The creation of wildlife habitat in underutilized areas of the park, including native landscapes such as prairies and meadows, provide expanded educational experiences and improve the quality and variety of environmental offerings.



Photo by Glen Calvin

One recent project is the restoration of prairie habitat at the Blue Heron Lagoon.

Maintain a management program for the Fallow Deer and Canada Geese. A management program for the Fallow Deer and Canada Geese population is needed to keep populations at an appropriate level for the health of the animals, the park visitors and the park habitat. As a result of this recommendation, the Recreation Department and Michigan Department of Natural Resources recently initiated a sterilization program to control the deer population at a sustainable level for the island. This program still did not prevent the degradation of the native plants in the wooded wetland due to overgrazing by the deer. The deer have since been gathered into a controlled environment by the Nature Center where they are sheltered and safe; and where they still have the opportunity to be hand fed by the public.

Clockwise from right:
This new pavilion echoes
the design of the original
The Old Newsboy
Pavilion; the Nature
Center; the Stone
Comfort Station.



BUILT ENVIRONMENT



BUILDINGS AND MONUMENTS

Belle Isle’s assets lie in its complete environment of buildings and landscapes, not in individual structures, according to the 1973 report designating the island as a National Historic Place and National Historic District. Structures such as the Dairy Barns (maintenance building), the Casino, Inselruhe House, the Aquarium and the Conservatory are important pieces of the island’s heritage and key to developing a successful revitalization plan.

Given their prominent locations and strong historic character, most of these buildings are not used effectively. The Tudor style Dairy Barns are outmoded for use as a maintenance facility; the Conservatory is in need of significant repairs and the greenhouses are maintained poorly. The vacant Boat Club, prominently located at the island’s entrance, is of sufficient

size to accommodate a number of activities that can contribute to the success of the park; the Casino is underutilized, housing only small-scale activities.

During the 1950’s and 1970’s a few non-descript utilitarian buildings were added to the landscape without respecting the context or historic quality of the island. Unattractive buildings like the Nature Center do not contribute to the island’s character. The Beach House and the Follies Comfort Station lack character and appeal, more examples of buildings that do not complement the island. They compromise the character of Scott Fountain and north shore and block panoramic views across Sunset Point and the Detroit River.

Most buildings are in critical need of maintenance. Major repairs are required due to material failure, lack of

maintenance, heavy use, or vandalism. The analysis shows that: no comprehensive maintenance plan or preventive maintenance programs are in place; repairs are frequently “stop gap” in nature; and the number of persons assigned to building maintenance is inadequate to keep abreast of deterioration and decay. As an example, the historic horse stable building, slated for renovation in the 2000 version of this Report has since been dismantled and removed to The Henry Ford collection where it is being restored. Action must be taken to correct deterioration that could result in the loss of buildings in the near future. An immediate stabilization strategy should be planned, implemented and budgeted.

Public restroom facilities are severely limited on Belle Isle. Their locations do not respond to patterns of current and proposed uses, prompting visitor reluctance to use the facilities.

BUILDINGS

- 1 Harbor Master/Sewage Complex
- 2 Police Radio Tower
- 3 Canoe Shelter
- 4 Aqua Follies
- ★ 5 Casino
- 6 Promenade Trellis
- 7 Flynn Memorial Pavilion
- 8 Substation PLD
- 9 Remick Band Shelter
- ★ 10 Athletic Shelter/ Refectory

- 11 PLD
- 12 Giant Slide
- ★ 13 Conservatory
- 14 Dossin Museum
- ★ 15 Aquarium
- ★ 16 Greenhouses
- ★ 17 White House
- ★ 18 White House / Maintenance Complex
- ★ 19 Utility
- ★ 20 Sawmill

- 21 PLD Substation
- 22 Bath House
- 23 PLD Substation
- ★ 24 Golf Course Starter Building
- 25 Handball Courts
- ★ 26 Water Intake
- 27 Driving Range
- 28 Birdhouses
- 29 Nature Center
- ★ 30 Horse Stables
- 31 Pump Building

- 32 Lakeside Refectory
- 33 Driving Range Maintenance
- 34 Blue Heron Lagoon Canal Pumphouse
- 35 Shed
- 36 Intake
- 37 Tennis Courts
- 38 Inlet Pumphouse
- 39 Outlet Pumphouse
- 40 Pumphouse
- ★ 41 Police Headquarters

COMFORT STATIONS

- ★ 1 Graystone / Stone
- ★ 2 Bear Pit / Police
- ★ 3 Woodside / Strand
- ★ 4 Golf Course
- ★ 5 Million Dollar / Shady Nook / Muse
- 6 Comfort Station
- 7 Comfort Station

MONUMENTS

- ★ 1 Scott Memorial Fountain
- ★ 2 Newsboy Memorial Drinking Fountain
- ★ 3 Grand Army of the Republic Memorial
- ★ 4 Sailors & Soldiers Memorial
- ★ 5 Nancy Brown Peace Carillon
- ★ 6 Brady Memorial
- ★ 7 Major General A. S. Williams Memorial
- ★ 8 Dante Memorial
- ★ 9 Schiller Memorial
- ★ 10 Samuel Francis Smith Memorial Flagpole
- ★ 11 Livingstone Memorial Lighthouse
- ★ 12 General O. M. Poe Memorial
- Other Memorials

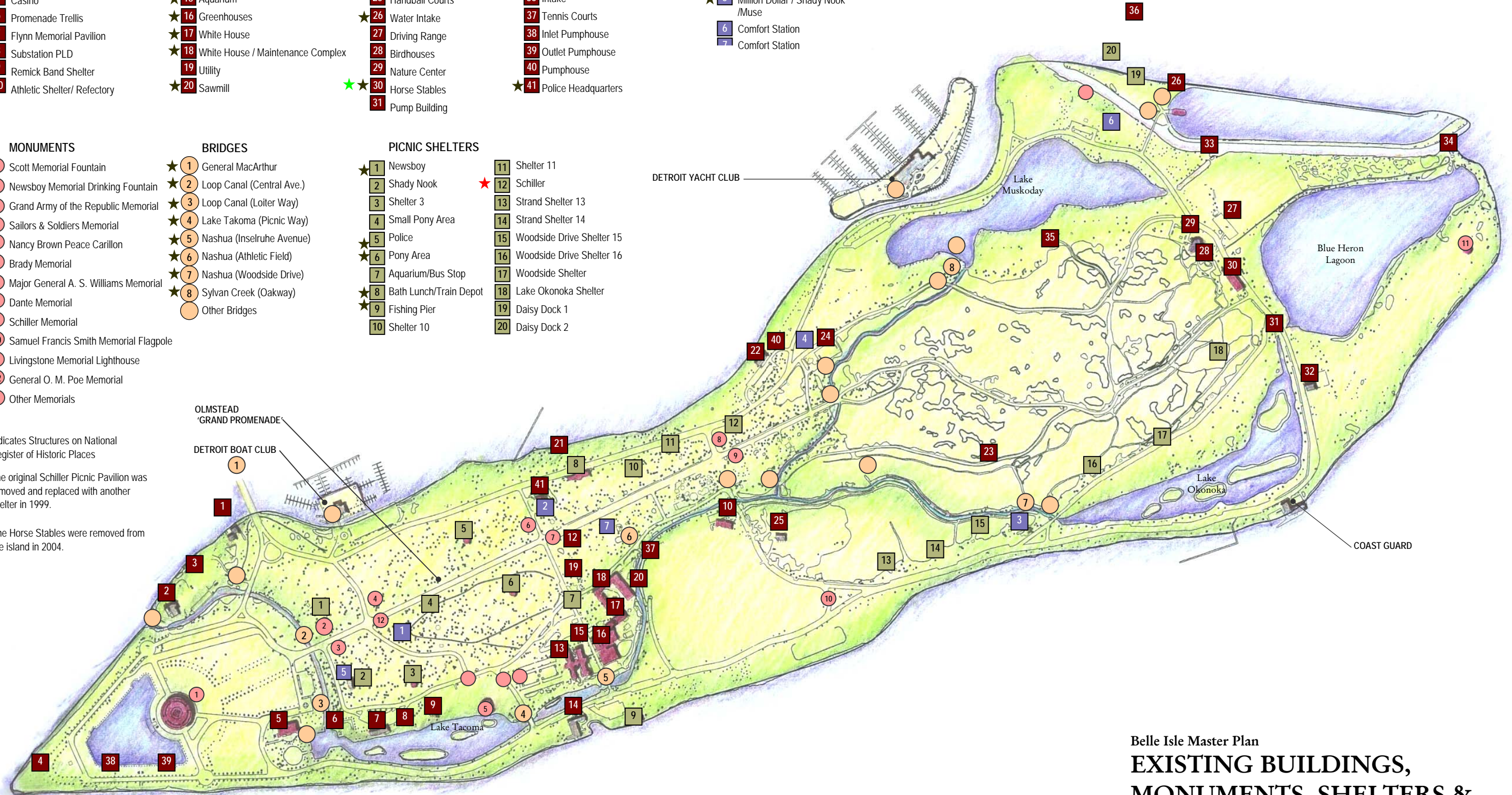
BRIDGES

- ★ 1 General MacArthur
- ★ 2 Loop Canal (Central Ave.)
- ★ 3 Loop Canal (Loiter Way)
- ★ 4 Lake Takoma (Picnic Way)
- ★ 5 Nashua (Inselruhe Avenue)
- ★ 6 Nashua (Athletic Field)
- ★ 7 Nashua (Woodside Drive)
- ★ 8 Sylvan Creek (Oakway)
- Other Bridges

PICNIC SHELTERS

- ★ 1 Newsboy
- 2 Shady Nook
- 3 Shelter 3
- 4 Small Pony Area
- ★ 5 Police
- ★ 6 Pony Area
- ★ 7 Aquarium/Bus Stop
- ★ 8 Bath Lunch/Train Depot
- ★ 9 Fishing Pier
- 10 Shelter 10
- 11 Shelter 11
- ★ 12 Schiller
- 13 Strand Shelter 13
- 14 Strand Shelter 14
- 15 Woodside Drive Shelter 15
- 16 Woodside Drive Shelter 16
- 17 Woodside Shelter
- 18 Lake Okonoka Shelter
- 19 Daisy Dock 1
- 20 Daisy Dock 2

- ★ Indicates Structures on National Register of Historic Places
- ★ The original Schiller Picnic Pavilion was removed and replaced with another shelter in 1999.
- ★ The Horse Stables were removed from the island in 2004.



Belle Isle Master Plan
**EXISTING BUILDINGS,
 MONUMENTS, SHELTERS &
 COMFORT STATIONS**

Clockwise from right: details from the Soldiers and Sailors Monument; Albert Kahn designed Dairy Barns are just one of the buildings on the National Registry of Historic Buildings; the Shady Nook Comfort Station; the floral clock display at the park entrance.



Photo by Glenn Calvin Moon



They tend to be isolated and poorly maintained; making them inviting targets for vandalism; only the lavatory building near the giant slide is illuminated by streetlight. Clean, safe, properly designed and convenient lavatories are essential to improving the park environment.

A number of problems were identified pertaining to Belle Isle's monuments. Maintenance is an issue, along with problems of inappropriate context and settings. Traditionally, monuments on Belle Isle represent an historic theme honoring Detroit or Detroiters although some of the more recent sculptures placed on the island do not respond to this idea. Curiously, there is a void of sculptures that honor Detroiters from the past fifty years, creating a gap in the island's mission as an historic and educational resource. It is important for visitors to have the opportunity to reflect upon contributions of those who built and continue to build the City.

Monument Row, where statues flank the sides of Central Avenue, is best viewed at a pedestrian scale and pace; the statues are not easily appreciated from a car. Landscape accents, such as flowers around their bases, are non-existent.



The Nancy Brown Carillon and Peace Monument lack the formal setting they deserve and their remoteness invites vandalism. Trees now encroach around the Livingstone Lighthouse, once the marker for the east point of the island, blocking its beacon and depreciating its shoreline presence.

RECOMMENDATIONS

Strengthen the arrival point onto the island from McArthur Bridge. A proper arrival sequence requires a strong, formal gateway image. The floral clock at the entrance does not effectively welcome people to the park. It is not aligned properly with the bridge approach and the steep hill built to house the clockworks is artificial looking, blocks views and is out of place on an island that has little natural topography. It should be removed and the berm leveled. The confusing roundabout traffic circle at the clock also should be removed. A new treatment should complement the architecture and materials of the MacArthur Bridge, possibly featuring a flower garden boulevard highlighted by a focal point such as a tall monolithic sculpture scaled to anchor the entrance.

Clockwise from right: everyone loves Pat but this is not an appropriate way to show it; a detail of the Marshall Fredricks's designed Levi L. Barbour Memorial Fountain in the Formal Gardens; the Conservatory seen through the neglected formal gardens; comfort stations should be programmed for several uses; two examples of inappropriate architecture at the east end of the island; a Gazelle Sculpture on the island's east end; the Dairy Barn courtyards used for maintenance parking; one of the many bridges on the island.



Recognize the importance of the historic and character-defining buildings on the island. Character-defining buildings that are underutilized, abandoned or not readily accessible to the public should be considered for alternative uses, thereby becoming functional and attractive. Explore uses that contribute to the overall well being of the park; avoid narrowly focused private interests that do not respect the

guiding principles established for the proposed renewal of the park.

Implement a planned maintenance program for all buildings and monuments. Action must be taken now to correct deterioration that could result in the loss of buildings in the near future. Interim stabilization programs to halt decay should be implemented until major renovations and restoration

work can be properly budgeted and planned. Graffiti on monuments and buildings should be removed within the week of the incident.

Establish a historically sensitive approach to repairs and modifications. The quality of repairs on Belle Isle's structures is critical to maintaining their unique character. Stop gap repairs have not always respected the historic qualities of buildings on the island. Procedures for work on historic structures should be established when modifying or repairing buildings (see Table A at right).

Encourage contextual design of all structures. The character of the island is primarily traditional and historic. Many buildings and monuments need site development programs for their surroundings to function effectively. New buildings and

monuments should be compatible with the island's historic setting, building upon the existing historic theme. Site amenities should tie buildings together into a harmonious area of shared space and use. Existing buildings that do not complement the island (i.e. Follies Comfort Station) should be removed rather than investing additional dollars for repair.

Use historically appropriate landscape settings to announce and complement historic buildings and attractions. All buildings on the island should have appropriate landscape treatment to accent their character and setting and to define their intended use. Most buildings lack relationships to their surrounding landscape; this abrupt transition depreciates their attractiveness and the quality of visitors' experiences. Parking lots should not crowd historic buildings, formal gathering



places, plazas, and gardens should be developed as amenities to enhance and diversify the Belle Isle experience.

Shift building uses to those most compatible with the type, architectural significance, location or prominence of the structure. Several underutilized buildings should be assigned new uses to take advantage of resources to strengthen the island’s historic image. Initiate further study of potential focal buildings, such as the maintenance building and the Aquarium. The central maintenance area has potential to become the focus of a popular public space in the heart of Belle Isle.

Add activities to passive buildings. Park comfort stations that once had attendants are now subject to vandalism and are difficult to maintain. Combining active uses should be part of the rehabilitation program for sites around historic comfort

stations. New comfort facilities should not be constructed as a separate use; they should be integrated into refectories or other types of park amenities that support monitoring.

PROPOSED BUILDING MAINTENANCE GUIDELINES

TABLE
A

BELLE ISLE PARK

MAINTENANCE PRACTICES RECOMMENDED FOR HISTORIC BUILDINGS	MAINTENANCE PRACTICES NOT RECOMMENDED FOR HISTORIC BUILDINGS
Attend to routine maintenance at regular intervals.	Defer routine maintenance items such as gutter and downspout cleaning.
Repair damage or deterioration as soon as it is discovered.	Delay minor repairs. Minor problems left unattended grow into major deterioration, and threaten other parts of buildings.
Repair vandalism immediately.	Allow vandalism and graffiti to remain for long periods, creating an image of neglect and thus encouraging further vandalism.
Retain original masonry and mortar, whenever possible.	Apply waterproof or water repellent coatings prior to professional examination and prescribed treatment.
Duplicate old mortar in composition, color, texture, joint size, method of application, and joint profile. Repair masonry using soft mortar when soft bricks are present. Make test mortar mixes to confirm color match prior to proceeding with repairs.	Repaint with mortar of high Portland cement content, joints of a differing size, profile, texture or color. Use off-the-shelf mortar colors, or select mortar colors without comparing to existing materials.
Replace windows with units that match originals in material, profile, muntin pattern, operating characteristics.	Use replacement windows of vinyl, or aluminum to replace wood or steel windows. Use snap-in muntins and muntins contained within insulating glass.
Make repairs comprehensive: For example: roof leak repairs should include inspection and repair/replacement of related damaged roof deck, subframing, plaster, eaves, gutters, painting.	Repair deterioration without also examining substrates for damage and, repairing if required. Repair surface damage without also repairing leaks or settling which cause the damage.
Clean masonry with the gentlest method possible.	Sandblast brick or stone surfaces.
Repair or replace deteriorated material, with new material that duplicates the old. Replace slate with slate, wood with wood, etc. Obtain samples of potential replacement materials for comparison to existing materials prior to purchasing. Examine samples with existing materials at the building site to confirm accurate match prior to proceeding.	Apply new material that is inappropriate or was unavailable when the building was constructed. Purchase materials that have not been directly compared to existing materials.
Replace missing architectural features and details.	Remove original architectural features.
Preserve the original roof shape.	Change the original roof shape or add features inappropriate to the character of the original architecture.
Replace deteriorated roof coverings with new material that matches the old in composition, size, shape, color, and texture.	Replace deteriorated roof coverings with new materials that differ from the old in composition, size, shape, color, and texture.
Retain existing window and door openings including window sash, glass, lintels, sills, shutters, and doors, pediments, hoods, architraves, steps, and all hardware.	Introduce new window and door openings into the principal elevations, or enlarge or reduce window or door openings.
Use original doors and door hardware when they can be repaired and reused in place.	Discard original doors and door hardware.
Discover original paint colors and finishes.	Repaint with colors that cannot be documented through research and investigation to be appropriate to the building and neighborhood.
Retain the basic plan of a building, the relationship and size of rooms, corridors, and other spaces.	Make unnecessary new additions.
Use contemporary designs, for new additions, compatible with the character of the building.	Imitate an earlier style or period of architecture in new additions.
Place antennae and mechanical equipment in an inconspicuous location.	Install "dropped" acoustical ceilings to hide mechanical systems.

In 1973, Belle Isle was placed on the National Register of Historic Places as a National Monument.

Belle Isle is recognized as a National Historic District. Any project proposed in the park must be reviewed.

Belle Isle's structures of National Significance

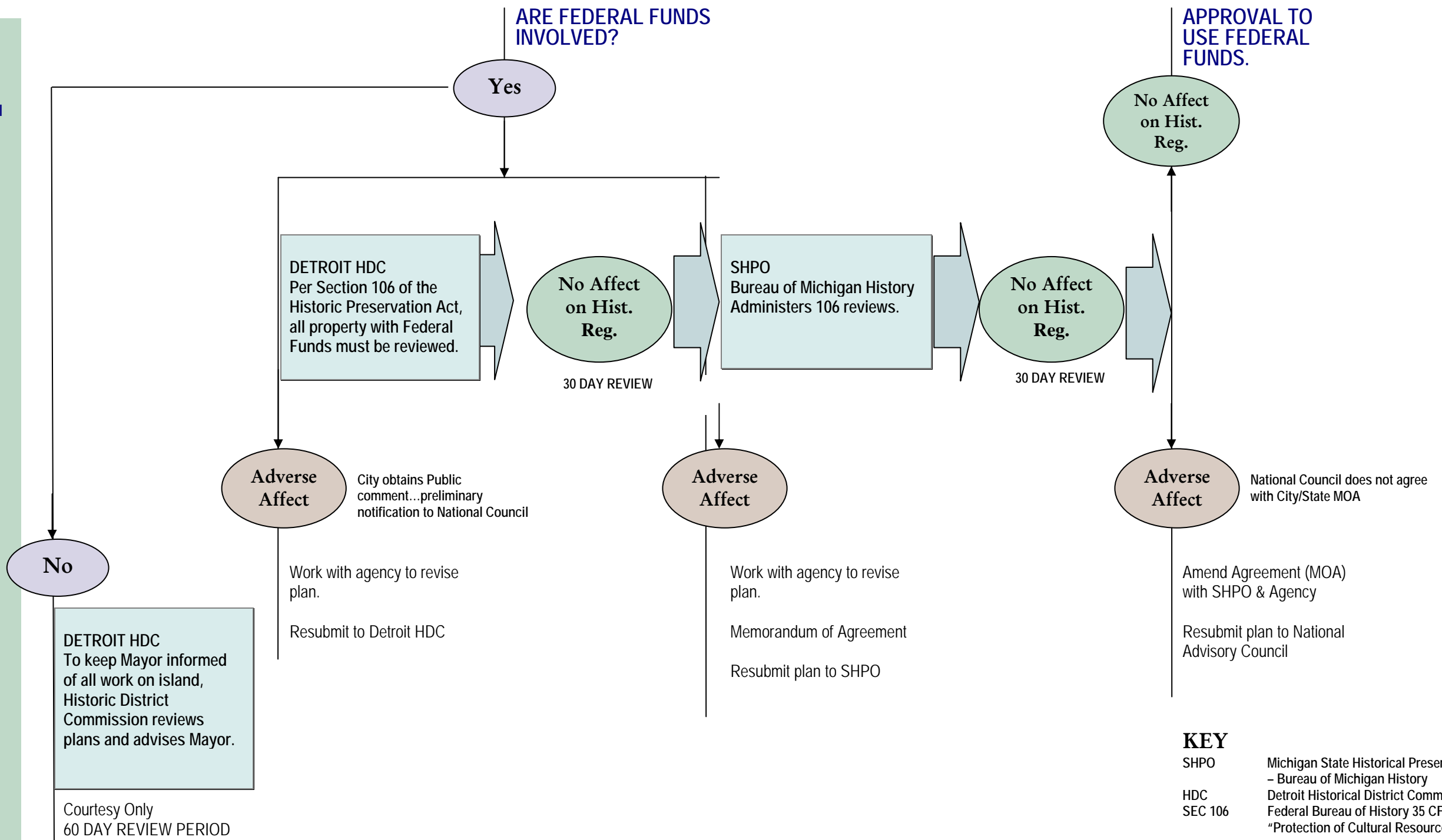
11 Buildings
 Aquarium
 Athletic Shelter/Refectory
 Casino
 Conservatory
 Golf Course Starter Building
 Greenhouses (20)
 Horse Stables
 Maintenance Yard Complex (5)
 Police Headquarters
 Water Intake
 White House

5 Comfort Stations
 Bear Pit (Police)
 Golf Course
 Graystone
 Million Dollar (Muse Road)
 Woodside (Strand)

7 Rain Shelters
 Aquarium / Train Depot
 Bath Lunch (Bus Stop)
 Fishing Pier (Inselruhe Fishing Dock)
 Newsboy
 Police
 Pony Area (Pony Field)
 Schiller (Removed in 1999)

8 Bridges
 General MacArthur
 Loop Canal
 Loop Canal (Loiter Way)
 Lake Takoma
 Nashua (Inselruhe Avenue)
 Nashua (Athletic Field)
 Nashua (Woodside Drive)
 Sylvan Creek

11 Memorials
 Scott Memorial Fountain
 Newsboy Memorial Drinking Fountain
 Grand Army of the Republic Memorial
 Sailors & Soldiers Memorial
 Nancy Brown Carillon
 Brady Memorial
 General Williams Equestrian Memorial
 Dante Memorial
 Schiller Memorial
 Samuel Francis Smith Memorial Flagpole
 Livingstone Memorial Lighthouse



KEY

SHPO Michigan State Historical Preservation Office
 – Bureau of Michigan History

HDC Detroit Historical District Commission

SEC 106 Federal Bureau of History 35 CFR,
 "Protection of Cultural Resources"

**Belle Isle Master Plan
 PROPOSED HISTORIC
 DESIGNATION APPROVAL
 PROCESS**

Clockwise from below: the "uni-road" system is inappropriate for a park setting; parking areas are inadequate.



TRANSPORTATION NETWORK

Roadways on Belle Isle do not blend into the park environment; they are wide, straight, one-way roads, four to six lanes across that encourage fast driving. Traffic along Riverbank, posted at 25 mph, typically ranges from 35 mph to over 50 mph. Speeding traffic is especially disconcerting to parents of small children and individuals who walk at a slower pace. It creates potentially unsafe conditions for both the pedestrian and the motorists.

Roads also serve as the primary parking facility on the island, currently, less than 500 spaces are provided for off-street parking. Off-street parking is unavailable for users of the large picnic shelters, the fishing pier or grassy areas next to Riverbank Drive. The Strand has only one parking lot. These conditions force users into two alternatives: park on roadways

that carry heavy, fast moving traffic or park on adjacent lawn areas.

The automobile is the most convenient mode of transportation because alternatives are not facilitated on the island. A lack of separated pedestrian walkways and bicycle paths forces non-vehicular traffic to share the pavement with cars. The all-purpose "uni-road" system is neither attractive nor functional for activities like running, bicycling or even a pleasurable drive.

The internal roadway system is more than sufficient to handle traffic demand. The majority of congestion problems on the island relate to the capacity of the MacArthur Bridge and the Jefferson Avenue intersection. Several factors contributing to the congestion are: poor traffic signal synchronization at the Jefferson intersection, an excessive road and parking network



on the island that far exceeds the capacity of the bridge and traffic overloading onto the two west bound (left) turn lanes from the bridge to Jefferson. Cruising activities where vehicle passengers frequently stop to converse also causes back-ups. During peak periods (on Saturdays and Sundays during summer months) the capacity of the bridge and intersection is breached; Jefferson Avenue becomes congested and police are



commonly called upon to direct traffic. This disrupts island access and causes extreme difficulties for Jefferson Avenue businesses and nearby residents.

Cruising is a popular evening and weekend activity but cars stopping or slowing in traffic are unacceptable. Interruptions to traffic flow by vehicles stopping in the moving lanes must be

Left to right:
Belle Isle roads function as parking areas, pathways, and circulation; paving is often placed inappropriately near water features; roads through the woods are often rutted; paving encroaches on amenities.



deterred if the park is to regain popularity for events and activities during the evening hours. Nighttime observations indicate serious cruising problems at the Fountain and along the south shore where congestion is caused by both moving vehicular traffic and parked cars.

RECOMMENDATIONS

Roadways should be designed as part of a quality park setting. Multiple traffic lanes detract from the full potential of Belle Isle’s views and historic character. Roads should be designed with parkway characteristics that clearly identify them as part of the park experience including appropriate paving materials, landscaping, signs and lighting. New road alignments should be explored to maximize the variety of natural and cultural experiences and to take advantage of skyline and riverfront vistas. For instance, Riverbank Drive

could be realigned to take advantage of important views of the Detroit skyline. Features such as the Casino, Flynn Pavilion, the Conservatory, Aquarium and athletic shelter should be part of the main circulation system. Unattractive highway guardrails detract from the park’s image and should be removed or replaced with more aesthetically appropriate safety barriers. Curbing should be installed to discourage motorists from gaining access to grassy areas.

A leisurely circle drive around the island should be part of this program. It is essential that families with picnic baskets, fisher-persons with bulky gear, the elderly and the handicapped have convenient automobile routes or alternative transit access. Reducing traffic on the Strand and Riverbank Drive is recommended. Removing roads that duplicate experiences or contribute to traffic problems, and restricting automobiles

from certain roads during specific times should be investigated. Also, alternative designs to the existing one-way loop road system should be explored to improve access and alleviate indirect exit situations.

Detroit has an opportunity to create a spectacular waterfront drive that far exceeds the beauty of the current loop system. The existing drive falls short of rounding Sunset Point and pushing out toward Livingstone Point. It is too wide, does not highlight assets such as the Casino and the Conservatory, lacks variety of visual experiences and ignores panoramic view opportunities.

Develop parking plan based on capacity of the land and facilities. Strategically located off-street landscaped parking areas are an alternative to on-street parking and can be

programmed to meet the capacity of particular attractions on Belle Isle. Transition lanes should be utilized leading from streets to parking lots. Swing arm gates installed at the parking area entrances and non-public roads allow the park staff to control access when facilities are not actively in use. Existing parking areas that cannot be justified should be removed.

Shifting emphasis to pedestrian and bicycle ways should be encouraged. Pedestrian and bicycle systems should be developed separate from roadways. They should connect attractions and provide a continuous loop around the park. Paths can be multi-use or dedicated to specific activities such as rollerblading or pedestrian only. Walkways should be designed to allow people closer access to the canals, lakes and river. Benches should be installed strategically throughout the path



Capacity of the MacArthur Bridge intersection with Jefferson Avenue requires better management to reduce congestion on the bridge. Improve this intersection by modifying traffic lanes to add one westbound left turn lane onto westbound Jefferson, modifying the traffic signals to allow for an exclusive phase for north bound traffic and extending green time on all outbound traffic at pre-determined intervals. Loop detectors installed on the bridge can be effectively used to determine the point where the island is closed to automobiles due to traffic congestion. An entrance control system could be added to island-bound lanes and information on the status of the island could be transferred to changeable message boards installed on Jefferson Avenue and Grand Boulevard to warn motorists that the island is temporarily closed to vehicular traffic. This would not preclude pedestrians, bicyclists or transit buses from crossing

system to allow places for people to pause as they travel along the paths.

Develop and maintain alternate means of transportation such as a tram or shuttle. The Detroit Department of Transportation or private operators should explore providing transit services to and from the island. An internal shuttle or tram system should be considered as a functional attraction, along with river taxis that connect Belle Isle with downtown. Buildings receiving school bus and tour bus parking and drop-offs should accommodate off-street staging and parking facilities. Also, a parking and shuttle complex for Belle Isle could be developed as part of future plans for Gabriel Richard Park, where MacArthur Bridge connects to the mainland.



the bridge. Temporary closure would be based on a programmed count for a specific number of vehicles leaving the island. Adding signs to direct vehicles leaving Belle Isle to freeways via Grand Boulevard could also decrease congestion.

Roadway systems should respond to the maximum bridge capacity and to efficiently and effectively serve the island's functions and amenities. Over the years, roads were added without thought to how they would affect the overall plan and function of the park. This extensive road network does not respond to the park's current needs nor does it respond to a reasonable maintenance budget for road systems servicing a park. These roads have a capacity greater than MacArthur Bridge can accommodate: on a typical summer Saturday or Sunday it would take nearly three hours to evacuate the island

in case of emergency. The road system should be refined based on a complete reassessment of function and level of service.

Cruising problems on the island should be addressed through better enforcement. Because the island has excess road capacity, it becomes an enforcement problem. Heavy fines should be posted for speeding and unauthorized parking and a strict enforcement program should be implemented. As a straightforward part of this program, consistent traffic lanes and clear lane markings can help facilitate traffic movement and transitions.

Left to right: many amenities are rendered unusable due to drainage problems; example of inappropriate lighting on the island that detracts from the historic character and pedestrian appeal.



EXISTING SEWER SYSTEM ON BELLE ISLE

UTILITY SYSTEMS

Water, sanitary and storm sewers and electrical power systems were studied. Natural gas service was extended from the mainland to the island in 1995 and since then buildings have been converted from oil heat.

The Detroit Water & Sewerage Department (DWSD) has made recent improvements to the water distribution system for the island, with the exception of the east end. Eight inch and twelve inch main lines provide adequate capacity for servicing existing park development and potential new uses. The older water distribution system at the east end from the forest to the Blue Heron Lagoon will need replacement to accommodate additional park development. Frequent water line breaks in this area take valuable time and money to repair and

insufficient repair work is suspected of contributing to the island's flooding problems.

The wastewater collection system consists of storm sewers, six sanitary stations, two storm water pumping stations, and a main pumping station. The storm water pumps discharge into Lake Muskoday and Nashua Canal. A new storm water system and pump is being constructed for the main picnic grounds to address drainage problems that have plagued that area for many years, since the time when Marsh Run was filled. The main pumping station is part of an obsolete and closed sanitary treatment plant. A renovation program is underway to improve the facility.

In the past, all wastewater connected to the main system was discharged through a twelve inch force main to the Detroit

River Interceptor at Jefferson Avenue. The capacity of this force main was limited, and even with the old sanitary treatment tank serving as retention, heavy summer rainstorms resulted in sewerage being discharged directly into the Detroit River.

The Detroit Public Lighting Department provides electrical service to the island. Upgrades to the primary service have been made in recent years, but a large part of the system is very old and in need of replacement. Problems include inadequate service loads, poor maintenance of fixtures, vandalized and antiquated boxes and panels and electrical code violations. The majority of site lighting on Belle Isle is provided by mercury vapor streetlights that provide illumination for roadways only. Most buildings and structures (with the exception of Scott Fountain, the Casino and buildings in use 24 hours a day) do



not have lighting that is designed for that structure or specific use. The restroom facilities do not receive direct nighttime lighting. Sculptures and statues receive little direct light, making them an attractive target for vandalism and graffiti.



EXISTING WATER SYSTEM ON BELLE ISLE



Picnic shelters currently lack lighting inside or outside. Although picnic shelters are generally not used at night darkness provides concealment for vandalism. Only the lavatory building near the giant slide is illuminated by street light spill over. The two lavatories near picnic shelters receive no light at all. The golf course has lights, but they are unattractive.

RECOMMENDATIONS

Upgrade water system improvements. The water system service to the east end of the island

should be upgraded to serve the existing park and the potential development of new park facilities. There are several areas of concern where water service can contribute to improving facilities. One example is the extension of water service to all the larger shelters to accommodate hose connections for wash down and cleaning of picnic facilities by maintenance staff. Automated irrigation systems are needed for all special landscape areas on the island; including the golf course, gardens, ballfields, building entrances and perimeters, special monuments and display areas.

Continue waste water system improvements. The limitation of the waste water system is of major concern. The existing combined sewer is not sufficient to handle large storms; adding more storm sewer structures for new development or to address flooding problems will further overload the system

because the capacity is dictated by the force main connection to the mainland. The DWSD’s, “Belle Isle Pump Station and CSO Control Improvements” project is developing specific upgrades for the combined sewer system, Main Pumping Station and CSO facilities. The Belle Isle Pump Station and CSO Control Improvements project will provide the following improvements to the system:

- Demolition of the existing 190,000-gallon retention tank and construction of a new 300,000 gallon CSO retention basin to retain the calculated peak design flow for the 10-year, 1-hour design storm for a minimum detention time of 10 minutes.
- A new main pump station wet well.
- Three (3) new storm water pumps in the main pump station, each with a capacity of 17 cfs and a rated head of 34 feet.
- Two new horizontal perforated screens with 6 mm openings.
- A new sodium hypochlorite feed system for disinfection with four chemical induction units.

- A hydraulic flushing gate in each cell of the CSO retention basin for cleaning of the basin and return of the retention basin contents to the low flow wet well.
- A new standby generator and disconnection of the emergency overflows at each of the seven packaged pump station sites, located throughout the island.
- A new standby generator for the main pump station site.

Incorporate natural drainage systems for storm water runoff when feasible. As stated above in the discussion on natural systems, the island is low with a high water table and significant standing water problems. Storm runoff should be designed as part of the park improvements by integrating natural drainage ways instead of using structures and pipes (point source discharges). Fill should be added and shaped where possible to create positive drainage. This responds to the original intent of the Olmsted Plan and his concept for

Clockwise from below: decorative lighting at Scott Fountain; many different styles of site furnishings, lighting, and signs make it hard to maintain and purchase equipment; street lighting could be improved on the island.



building canals and lakes to drain picnic and other high use areas. It is also an ecologically sound practice, relieving the dependence on pumping stations and long-term costs of maintaining and upgrading built systems.

Improve electrical and site lighting services. Major investment is necessary to bring the electrical distribution system and existing electrical service facilities up to acceptable standards and accommodate new facilities in the future. The lighting system should be developed to address general lighting needs and safety, as well as specific illumination requirements of features and special areas or facilities.

All shelters and comfort stations need direct illumination to discourage vandalism and promote safe use. Restrooms especially should have lighting installed below the rooflines and



inside recessed doorways and alcoves. Select vandal resistant fixtures and use metal halide or high-pressure sodium lamps in all fixtures to provide accurate color rendition across the visible spectrum. Special accent lighting, as recently implemented for

the Belle Isle Casino, should be considered for all historic buildings and major monuments. Remnant overhead service lines and poles should be removed. Standard ornamental light fixtures appropriate for a historic park environment should replace the existing contemporary roadway lights over time and an appropriate pedestrian lighting standard should be selected for the island.

SITE FURNISHINGS

Belle Isle has accumulated many different types of site furnishings over the years. Overall, furnishings do not service park uses effectively. They are haphazardly placed and are unattractive. The location and number of furnishings do not always correspond to visitor needs. Bicycle racks and pedestrian benches are lacking. Picnic tables, in numerous styles and states of repair, are scattered around the park.

Fences range from barricade fencing to attractive ornamental iron at the Johnson Memorial Botanical Garden. Large white plastic barrels with hand painted black lettering “BI” have been placed throughout the island; these barrels are convenient for trash haulers but contribute to visual blight.

Although Belle Isle has many signs, few of them help direct visitors to a desired location or inform them about specific areas. Areas of common use such as parking lots and restrooms require signs. Park furnishings such as benches, picnic tables, fences, walls, signs, play equipment and waste receptacles are important to the perception of a quality environment. The condition and maintenance of this “equipment” also can make a difference in how people treat the park. If the amenities are in poor shape, there is tendency for abuse by visitors. Finding



or making parts to repair a variety of furnishings contributes to inefficient maintenance.

RECOMMENDATIONS

Create Site Furnishing Design Guidelines. Create families of park furnishing products to establish a cohesive, quality park setting. The clustering of benches, waste receptacles and

bicycle racks should be planned and standardized whenever possible and the type and design of furnishings must respond to the context of their surroundings. The placement and design of benches, tables and waste receptacles must consider the park’s historic, physical and social setting. Placement should encourage passive uses such as watching ships or boats on the river, reading, watching children play or simply taking advantage of spectacular views. They should also be placed along all pedestrian pathways. Position them so clear sight lines are maintained. Select ground mounted benches made of vandal resistant materials. Whenever possible, fencing should be removed. Chain link and other functional barriers should be replaced with aesthetically pleasing, historically appropriate walls and fences.

Recently, some of the picnic shelters have had in-ground trash receptacles installed. Continue to monitor use and ease of maintenance to determine if all shelters should be outfitted.

Establish a park-wide sign system. Recently, the Recreation Department initiated a park-wide sign system for way finding, building and facility identification. This program should be designed by a way finding professional with park experience. The signs should respond to the goals and character of the park; they should be constructed of historically appropriate, durable materials. Signs can be effective in discouraging littering and other inappropriate behavior. Some of the signage systems required are: an interpretive sign program for natural features, historic resources, nature trails, fishing habitat, gardens and wildlife habitats; signs that indicate the specific use of roads and pathways; clearly visible street signs at each intersection, consistent with City ordinances and the state

vehicle code; parking lot signs that indicate hours of use and times when the lot will be gated and locked; signs at the picnic areas and other amenities indicating rules of use. “You are Here” maps can be installed throughout the park to indicate the location of major attractions, parking lot areas and restroom facilities. The tremendous clutter of signs on the island was one of the most surprising observations in the existing conditions survey. Any unnecessary and inappropriate signs that have collected on buildings, trees, fences and walls over the years should be removed.



This plan is a graphic synopsis of the inventory and analysis work outlined in the previous pages. It also illustrates opportunities for improvement detailed in Chapter Four.

Belle Isle Master Plan
SUMMARY ANALYSIS

The Inselruhe House is the island's oldest structure. It is currently used for the administrative offices and management center for the island.



MANAGEMENT

Improvements to the natural and built environment cannot be sustained without effective management and maintenance systems. The Detroit Recreation Department struggles to meet the demands of day-to-day operations on the island while attempting to field requests for information, coordinate special events and supervise programs. The following summarizes key issues impacting management and operations of the park. A detailed management analysis is provided under separate cover in Part Two of this study. For the past five years payroll expenses have averaged 78% of total annual expenditures. The average operating budget for the last five years is 3.75 million dollars. Since fiscal year 1991 the park budget declined 1 million dollars, a 20% reduction. It is anticipated that the operating budget will decrease in 2006 by perhaps 10%.

Increasing non-tax related operating revenue is essential to addressing operational needs. The aim is not to replace public funding entirely, but to reduce dependency on tax-based sources of income. Although non-tax operating revenue generation is crucial, it appears several intermediary steps must be taken prior to implementing potential revenue generation programs. The DRD has identified a list of priority capital projects for future park improvements. A solid organizational foundation must be laid before moving forward with future park improvements. Like the utilities and canal work that impact future land use, economic infrastructure is a crucial component to Belle Isle's revitalization.

PARK MANAGEMENT

The focus of the analysis is on the *operational* performance of Belle Isle. Three tasks were accomplished. The initial task was to develop an understanding of existing sources of operational revenue and expenses, current management

structure and administrative procedures including leasing and contract compliance. The second was to survey operations of comparable parks and facilities and provide benchmark comparisons when available. The third task was to review the three operating entities representing recreational, institutional and private concessionaire uses in the park.

The analysis resulted in five primary findings that impact economic performance. The first is that operating revenues do not contribute significantly to the total funds required for operations. This results in dependence on general tax dollars and State funding. The second is the current management information system does not provide adequate data to make informed decisions related to park facility use. The third finding is that facilities on the island assumed to be revenue generating are under performing when compared to standard industry benchmarks. The fourth finding is the need for improving the concessionaire contractual process, including

As shown, operating revenues consistently accounted for only a small percentage (ranging from 3.6% to 6.5%) of total revenue sources for Belle Isle. The park relies on general City tax support (roughly 40% of funding), and a combination of State cultural reimbursement and street funds (roughly 55% of funding). This means Belle Isle operations depend almost entirely on public funding. Park systems in other cities and regions saw a greater share of their operating dollars from non-tax revenue sources.

Potential revenue generating uses on the island include special events such as the Winston Gold Cup Hydroplane Races (Thunderfest). The DRD does not receive any revenue (operating or capital improvement dollars) directly from the Thunderfest operator.

OPERATING BUDGET				
BELLE ISLE PARK				
TABLE A				
Sources of Funds	Fiscal Year			
	2001	2002	2003	2004
General City Tax Support	\$	\$	\$	\$
Rental - Public Building & Space	\$42,000.00	\$42,000.00	\$42,000.00	\$42,000.00
Contract Misc. Concessions	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
Contract Driving Range	\$102,654.00	\$100,009.00	\$87,651.00	\$78,136.00
Contract Giant Slide	\$18,378.00	\$13,766.00	\$20,000.00	\$0
Contract Ice Cream	20000.00	20000.00	20000.00	\$0
Contract other please describe/ Food Concession	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
Contract other please describe	\$	\$	\$	\$
Golf Course Misc Concession	\$446,267.00	\$299,972.00	\$312,137.00	\$286,675.00
Articles Bought for Resale	\$	\$	\$	\$
State Cultural Reimbursement	\$	\$	\$	\$
Street Fund Reimbursement	\$	\$	\$	\$
Special Events please describe 2001. Special Events hosted on park	\$43,170.00	\$35,625.00	\$42,549.00	\$39,360.00
Gifts	\$	\$	\$	\$
Other: please describe	\$	\$	\$	\$
Other: please describe	\$	\$	\$	\$
TOTAL SOURCES OF FUNDING	\$	\$	\$	\$

Expenditures	Fiscal Year			
	2001	2002	2003	2004
Payroll	\$6,641,693	\$5,641,837	\$6,059,959	\$5,930,288
Professional and Contractual Services	\$13,700	\$92,300	\$70,000	\$70,000
Operating Supplies	\$111,470	\$89,670	\$73,124	\$52,000
Operating Services	\$1,484,191	\$1,143,968	\$1,242,905	\$1,292,905
Capital Outlays - Acquisitions	\$	\$	\$	\$375,000.00
Capital Outlays - Major Repairs	\$100,000	\$100,000	\$1,670,000	\$1,900,000
Other please describe	\$	\$	\$	\$
Other please describe	\$	\$	\$	\$
TOTAL EXPENDITURES	\$8,474,354	\$7,967,775	\$9,115,988	\$9,620,193

Source: Detail Appropriation Reports, Detroit Recreation Department - Accounting

For comparison purposes, budget components for the Huron Clinton Metropolitan Authority's (HCMA) Kensington Metropark were selected as a comparable park for detailed budget information. Similar to Belle Isle, total annual park expenditures average just over \$5.4 million dollars. Unlike Belle Isle, revenue from operations accounted for almost 50 percent of the park's total operating expenditures. The HCMA also utilizes a property tax levy, investment money, grants, and reserve accounts for sources of operating funding system-wide.

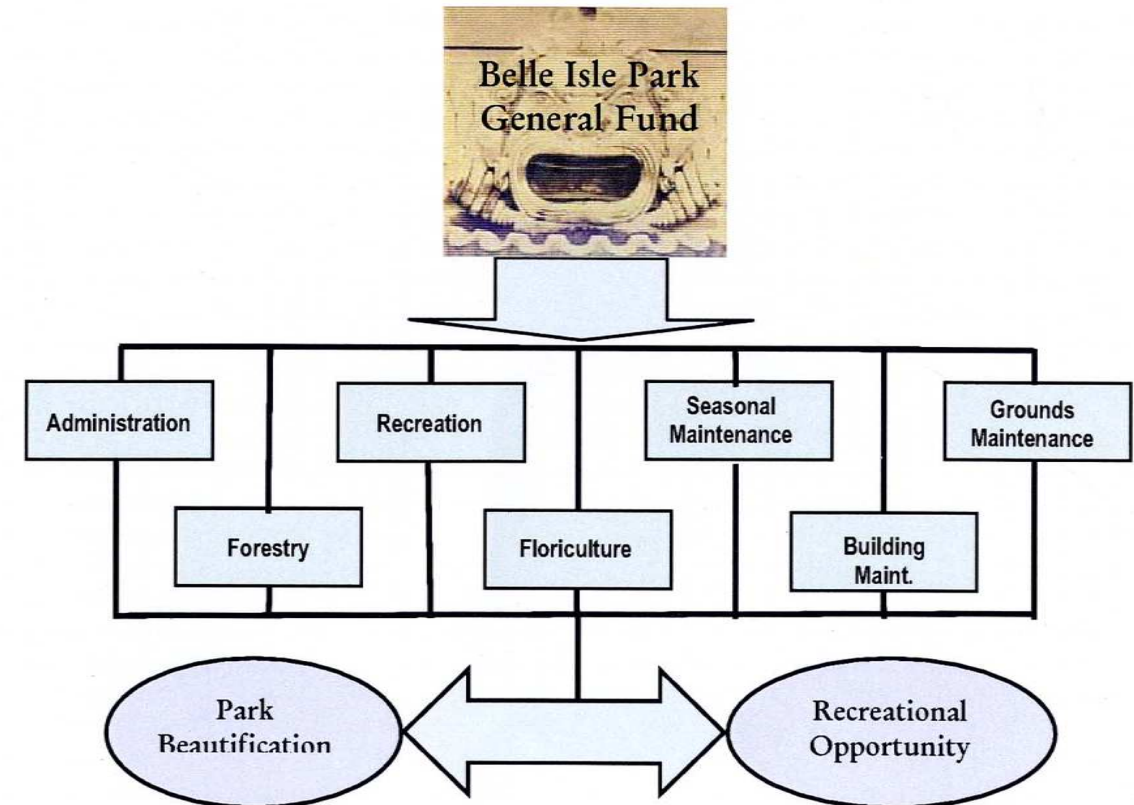
KENSINGTON METROPARK OPERATING REVENUE & EXPENSES				
BELLE ISLE PARK				
TABLE B				
	Fiscal Year			
	2002	2003	2004	
Revenue from Operations	\$2,293,500	\$2,522,000	\$2,541,300	
Operating Expenditures	\$5,360,900	\$5,305,500	\$5,539,000	

Source: Huron Clinton Metropolitan Authority, 2004 & 2005 Actual Expenditures

Table C provides a breakdown of Kensington Metropark's, primary sources of operating revenue in 2004. Toll collection and the golf course revenues consistently account for over 84 percent of total park operating revenue. Toll collection generates over a million dollars per year in operating revenue while the golf course also generates over an average of a million dollars in revenue. Vehicles entering Belle Isle are not currently charged admission and the Belle Isle Golf Course is only a nine-hole course compared to Kensington's 18 hole course.

KENSINGTON METROPARK PRIMARY REVENUE ACCOUNTS			
BELLE ISLE PARK			
TABLE C			
	2004 Budget		
	Revenue	Expenses	Net
Dockage & Boat Storage	\$33,200	\$20,800	\$12,400
Boat Rentals	\$88,100	\$55,900	\$32,200
Excursion Boat	\$26,200	\$29,600	(\$3,400)
Cross Country Skiing	\$14,600	\$9,500	\$5,100
Toll Collection	\$1,178,700	\$118,500	\$1,060,200
Sundries	\$26,600	\$12,400	\$14,200
Golf Course	\$966,600	\$611,000	\$355,600
Food Service	\$35,900	\$36,800	(\$900)
Shelter Reservations	\$59,500	\$0	\$59,500
Special Events	\$1,000	\$500	\$500
Other Major Sources of Revenue	\$110,900	\$7,000	\$103,900
Totals	\$2,541,300	\$902,000	\$1,639,300

Source: Huron Clinton Metropolitan Authority, 2004 Budget



EXISTING REPORTING STRUCTURE FOR BELLE ISLE

contract compliance, development of lease terms and rates, and establishing criteria for the selection of concessionaires by utilizing industry economic benchmarks. The final assessment is that the management structure is burdened by un-related, non-park activities and overlapping departmental interests on the island, including the Detroit Zoological Institute, History Department, Water & Sewerage Department and others.

RECOMMENDATIONS

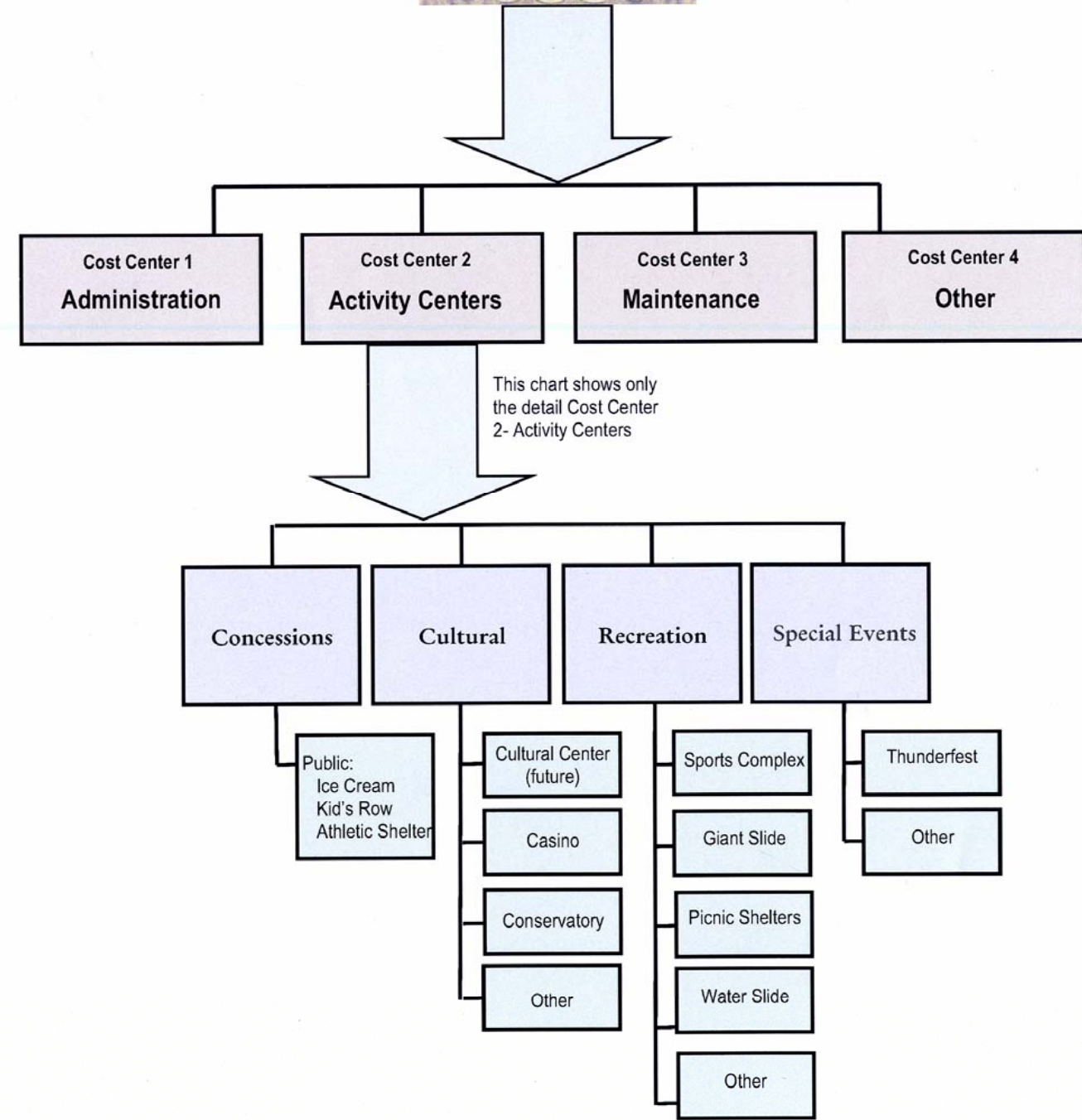
Build accountability into the administration structure. Restructure the park's organization and administration structure to make park management accountable while providing the necessary mechanisms that allow park managers to effectively manage.

Develop a system that provides a critical database for management decisions. Restructure the park's management

reporting system to provide decision-makers with crucial data to make informed decisions.

Belle Isle's position as a major community park with regional attractions warrants specific management attention. Continue to restructure the island's organization and administrative structure in a manner that makes park management accountable while providing the necessary mechanisms that allow park managers to manage. Change in the organizational structure should be made in concert with changes in the management reporting systems and the proposed zone maintenance system. While park gains the necessary tools to manage effectively, these changes must be matched by an increased accountability.

Park management would be given some degree of autonomy, and Park management should be supplied with relevant data



This chart shows only the detail Cost Center 2- Activity Centers

PROPOSED REPORTING STRUCTURE FOR BELLE ISLE

to make informed decisions regarding allocation of resources to particular activities. A new management reporting structure has been devised that takes the existing cost center approach and provides additional levels of report detail. The chart opposite illustrates the new reporting system. This system provides reporting capability at four levels:

- Overall Island Operations;
- Cost Centers (Administration, Activities, Maintenance, Other);
- Cost Center by Type (ie: Concessions, Cultural, Recreation, Special Events within the Activity Center);
- Specific Facility / Activity within each Type.

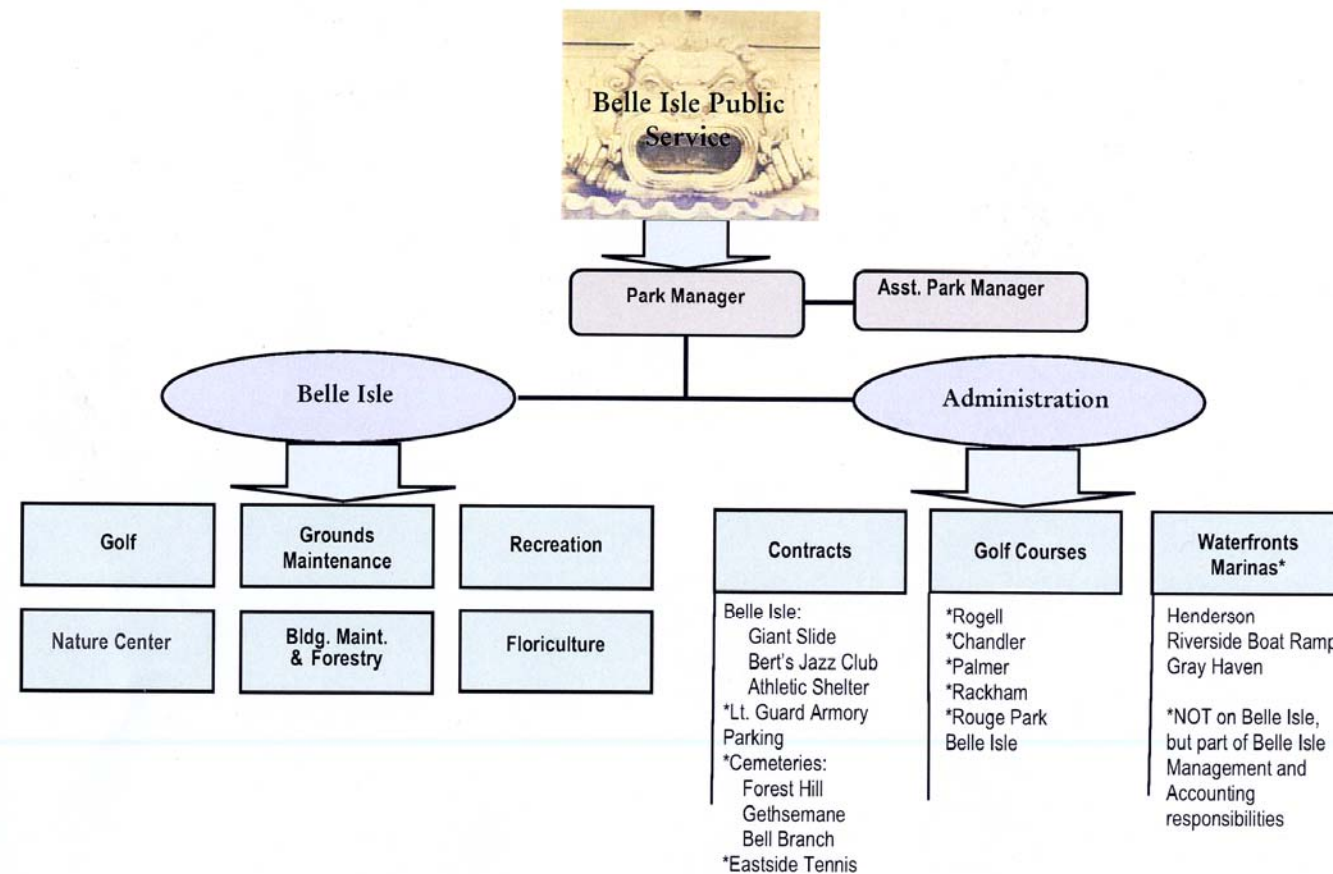
The level of detail required for decision-making will change based on specific needs. A level 3 report will tell management what percentage of resources are being allocated to special events compared to recreational activity; a level 4 report will allow management to review detailed line items on revenues

and expenses for various facilities or activities such as the golf course or Cultural Campus.

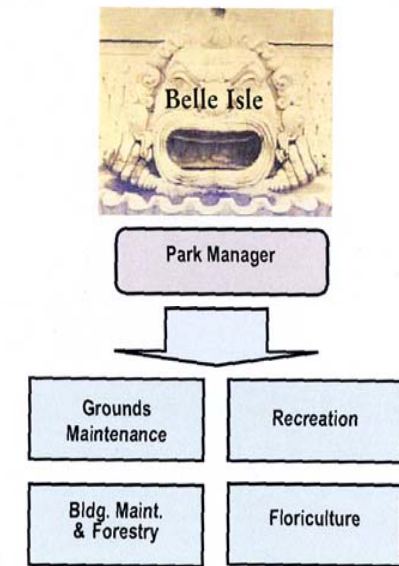
The park should be proactive in evaluating the performance of assets. Use an improved reporting system (a model is provided in the Technical Report), to evaluate the performance of existing assets and take necessary actions when resource allocation is not responding effectively to management goals. Also, relocate management of the park from the historic Inselruhe House to a new facility at the island control point near the entrance. This will allow for efficient coordination of events, ease of visitor service and create space for other departments that have interests on the island.

Performance criteria would be established prior to implementation of new activity centers or re-negotiation of existing contracts with private concessionaires. Note that

As shown in the organization charts at right, the management of Belle Isle has dramatically changed in recent years. In 2000, the Belle Isle Park Manager oversaw not only the island itself but the City of Detroit owned golf courses, waterfront marinas and cemeteries and the Light Guard Armory Parking, resulting in several overlapping jurisdictions. In the current structure, the Belle Isle Park Manager oversees only Belle Isle operations, which significantly helps focus the manager's efforts on Belle Isle.



EXISTING MANAGEMENT STRUCTURE FOR BELLE ISLE IN 2000



EXISTING MANAGEMENT STRUCTURE FOR BELLE ISLE IN 2005

criteria may not always be tied to income generation as some desirable activities on the island may require subsidy from other sources of funds. The restructured management reporting system would be used to evaluate existing “activity centers” on a periodic basis.

An area that deserves special attention is the public facility rental. It is apparent that a high level of demand exists for public picnic space. If the fee structure is modified for reserving picnic shelters to reflect size accommodations and amenity differences provided by various shelters, a revenue increase would result. For example, the proposed group picnic area by Lake Okonoka should command high rental fees because it can accommodate large groups in a semi-private setting and offer more amenities. Income generated by shelter rental fees, in concert with a refundable deposit held for clean up and damages would go towards reducing the overall costs of maintaining park shelters.

Significantly upgrade current concession contract practices.

Develop a formal process for concessionaire selection and administration that provides flexibility with the DRD and incentive to perform based on a well-defined set of market-based expectations. Two basic goals should be economic results and contribution to positive park experiences for the user. A formal process for concessionaire selection is proposed, including a detailed review of operator qualifications and track records. Three considerations should be kept in mind: how the proposal will perform financially, how does the proposed use fit with the character of the park and how will it contribute to a positive park experience for the user.

Contracts should be updated and standardized to reflect the current legal environment and reduce confusion during the approval process. Contracts should reflect standard industry practices for the respective uses and include an incentive to perform.

Recommendations for revising rental payment structures include:

- Rental payments should be based on projected figures provided by the prospective contractor in their competitive proposal; therefore, prospective contractors will no longer have the incentive to understate revenue projections during the RFP process, since this may reduce the likelihood of being selected for the contract.

- Rental rate should reflect the standard retail practices of collecting a base rent amount plus a percentage of revenue.

Enhance revenues. Seek revenue enhancement opportunities that fit the goals of the Proposed Master Plan and provide a balance between the natural and economic environments. Opportunities for revenue enhancement are detailed in the *Technical Assessment Report*.

Explore the need for an advisory council. Belle Isle Park should consider creating an advisory council to facilitate the distribution of information, provide input on planning issues, encourage cooperation between interest groups, promote partnerships/volunteering/donations and provide direction in

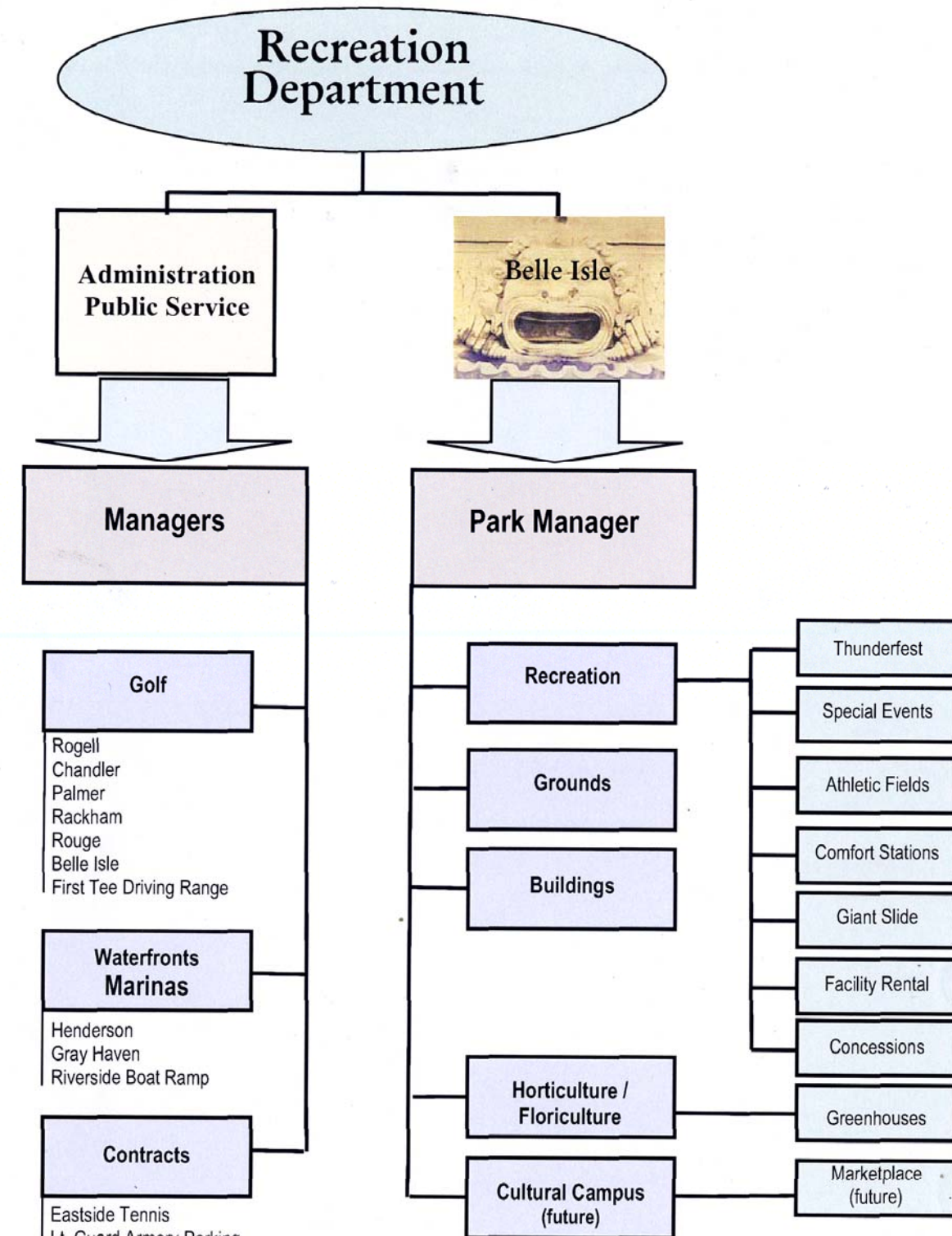
refining the policies and concepts of the Proposed Development Plan. The creation of an advisory council could result in joint efforts with other regional and county park agencies, while also strengthening partnerships of stakeholders on the island (including other city departments) to implement improvements in a unified approach. In New York City, the Central Park Conservancy makes significant contributions to restoring and managing Central Park. Although its primary mission is to find financial backing for innovative improvements and programming, The Conservancy has a strong stewardship role in ensuring that Central Park never again becomes deteriorated.

Develop a process to evaluate private and public development proposals on the island. Belle Isle receives many proposals throughout the year; they range from ideas for new uses, events and demonstrations, to changes under existing and concession agreements. Currently, a process does

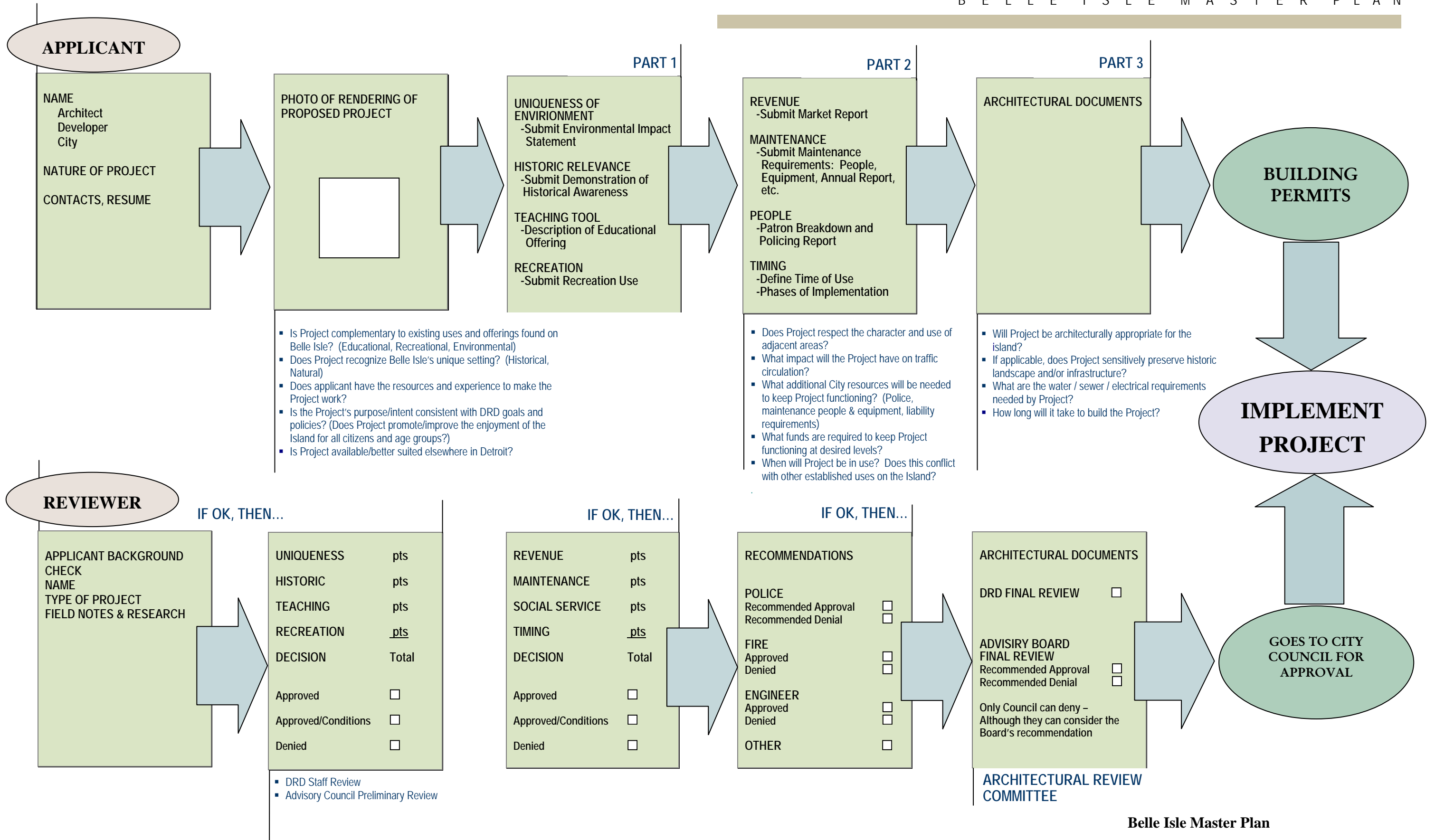
not exist for handling these proposals and evaluating their merit by the City. Questions that should be asked are:

- Is the proposal complementary to the existing uses and offerings in the park?
- Does it recognize and respect Belle Isle’s unique setting?
- Is the quality of the proposed work consistent with the quality goals of the Proposed Development Plan?
- Does the applicant have necessary resources and experience?
- Does the proposal promote enjoyment of the island by all citizens?

Belle Isle is a unique entity; it balances recreational, educational and traditional park offerings in an historic setting. A methodology has been constructed that shows how the management team for Belle Isle can set criteria on which to base any decisions for the island’s future use. How such changes place demands on maintenance and operations. considerations.



PROPOSED MANAGEMENT STRUCTURE FOR BELLE ISLE



Belle Isle Master Plan

PROPOSED PROJECT EVALUATION PROCESS

Top: the current maintenance facilities are inadequate for modern maintenance equipment and procedures;
Bottom: Trash and algae collect in the basin.



MAINTENANCE

It is a significant challenge to maintain the island. Maintenance operations on Belle Isle are impacted by natural, cultural and administrative factors. The low, flat landscape and poor drainage characteristics are exacerbated by heavy use and overcrowding during the summer months; even a brief rainfall results in standing water that can affect maintenance scheduling for up to several weeks. Belle Isle’s buildings and shelters are among the finest examples of park architecture found anywhere, but many amenities that define the character of the island are vulnerable due to an aging infrastructure compromised by budget constraints and ineffective maintenance.

Another stress on the park is the vast majority of unprogrammed and special events are concentrated in the summer months. Staffing to meet seasonal demands, maintaining equipment in working order and forecasting

budgets under the constant threat of reduced funding, are significant challenges to providing a high quality park environment. The number of different stakeholders on Belle Isle makes it difficult to institute an island-wide management program. The island is a park, but there are public and private facilities that operate independently from park management. This can result in inconsistent levels of maintenance and difficulties in controlling the image of the island.

In addition, the island has a mixture of fixtures and furnishings, making it difficult to stock and maintain them because of intense use and the policy of 24-hour access. Other maintenance issues result from vehicular circulation problems, inadequate off-street parking, the outmoded administration and service facilities, overused buildings with long deferred repairs and untrained or inadequate staff. The park cannot be maintained effectively without adequate facilities, equipment, and clearly established, realistic programming goals.

During a typical park season about fifty major events are accommodated on Belle Isle from early May through late October. Major events require significant pre- and post-event activity, placing a heavy burden on maintenance staff for timely scheduling and for completing daily tasks.

In addition to special events, extra effort is required to prepare shelters for large picnics that take place throughout the summer, including reunions, community organization get-togethers and corporate outings. On any given weekend it is not uncommon to have twenty five to thirty groups ranging in

Top: Squirrels do their part to clean up litter in the park.
 Bottom: Many picnic facilities are still substandard although progress has been made.
 Next page left: Barriers left over from the Grand Prix should be removed.
 Right and below: Dead trees and volunteer growth should be removed.



size from 100-150 people using shelters on the island. Implementing reasonable facility rental, set-up and clean-up fees would allow for adequate personnel and equipment to be allocated and scheduled.

The park is currently organized into five maintenance sub-areas that range in size from 65 acres to 175 acres. Up to eight person crews are responsible for maintenance within each zone. It is common for routine maintenance tasks to be postponed due to poor weather conditions or to accommodate special events, and absenteeism also affects task scheduling.

The grounds maintenance program is permanently staffed with approximately twenty nine employees; down from fifty five in 1999. Approximately twenty grounds positions are seasonal in nature. Three floriculturists manage the conservatory and botanical gardens. Three building attendants provide custodial care during off peak seasons and sixteen seasonal building

Grounds Maintenance Personnel on Belle Isle		
	1999	2005
▪ Supervisor	1	1
▪ Foreman	1	2
▪ Subforeman	1	0
▪ Park Maintenance Workers	18	10
▪ Extra Laborers	14	0
▪ Vehicle and Construction Equipment Operators	12	9
▪ Arborists	2	2
▪ Greens keepers	2	0
▪ Electrical/Mechanical Support	4	4
TOTAL	55	29

attendants provide custodial care during the summer months. Other than exceptions such as trash collection and building custodial care, most grounds tasks are seasonal and scheduled around four broad categories: routine grounds keeping; non-routine ground keeping; seasonal start-up and shutdown; and

FACILITIES MAINTAINED BY OTHERS		TABLE A
		BELLE ISLE
Non-Public Facilities Maintained by Others		
▪ Detroit Yacht Club	<i>Private</i>	
▪ U.S. Coast Guard	<i>Federal Government</i>	
▪ Belle Isle Police Station	<i>DPD</i>	
▪ Radio Operations Center	<i>DPD</i>	
▪ City of Detroit Water & Sewer Water Intake Facility	<i>DWSD</i>	
▪ Harbor Master/Police Diver Unit Facilities	<i>DPD</i>	
▪ DWSD Sewer Pumping Station & Holding Tank	<i>DWSD</i>	
▪ Detroit Public School Horticultural Lab	<i>Golightly Vocational Center</i>	
Public Facilities Maintained by Others		
▪ Aquarium	<i>Detroit Zoo</i>	
▪ Athletic Pavilion	<i>Concessionaire</i>	
▪ Nature Center	<i>Detroit Zoo</i>	
▪ Golf Practice Facility	<i>First Tee</i>	
▪ Flynn Pavilion	<i>Concessionaire</i>	
▪ Lakeside Refectory	<i>Concessionaire</i>	
▪ Dossin Great Lakes Museum	<i>Detroit Historical Dept.</i>	

off-season repairs/maintenance. Yet not all these tasks are performed on a regular schedule.

Existing grounds maintenance equipment is considerably varied. Although the concept of a centrally located maintenance center makes sense for many parks, Belle Isle is so large that equipment has to be transported to work areas via trailer; a labor intensive and time consuming effort.

One of the most prevalent and visible maintenance problems on the island is litter. Heavy weekend use, insufficient and ineffective trash containers, late night cruising, lakes and canals that trap and collect wind blown trash, little or no enforcement against littering and an unwillingness of users to clean up after themselves all contribute to the litter problem. Since 2002, a concerted effort has been made to collect trash quickly and efficiently. The maintenance staff spends an enormous amount of time cleaning up the island during

GROUND MAINTENANCE EQUIPMENT		TABLE B	
		BELLE ISLE	
Equipment	1996	2005	
Inventory Gains			
Half ton pickups	2		3
5 yd. dump truck	1		2
Leaf Vacuum	1		2
Inventory Losses			
John Deere trucksters	2		1
Tractors	7		5
Trailers	6		4
2-3 ton liftgate trucks	3		2
Front End Loaders	2		0
Vans	5		2
1.5 ton step vans	4		1
Inventory - No Change			
One ton stake trucks	2		2
2-3 ton dump trucks	2		2
Stake dump truck	1		1
20-25 yd. Packers	2		2
Loader / Packers	2		2
Hi Ranger	1		1
Street sweeper	1		2
Inventory Additions			
Giant Vac	0		2
¾ ton Pickup	0		2
Log Hauler	0		1
Broyhill	0		2
Water Truck	0		1

morning hours cleaning up the island from the previous day and evening.

PROPOSED MAIN TASK CATEGORIES		TABLE
BELLE ISLE		C
Routine Grounds Tasks <ul style="list-style-type: none"> ▪ Mow lawn ▪ Rake leaves ▪ Clean-up ▪ Collect trash ▪ Clean restrooms ▪ Sweep streets ▪ Clean beach ▪ Wash Casino and picnic shelters ▪ Spray canal weeds ▪ Spray sidewalk weeds ▪ Trim shrubs and hedges ▪ Operate skating rink ▪ Snow removal ▪ Remove dead trees 	Seasonal Startup and Shutdown <ul style="list-style-type: none"> ▪ Sports fields irrigation system ▪ Prep snow removal equipment ▪ Buildings and fountains ▪ Mulch hydrants ▪ Secure Scott Fountain ▪ Snow fence ▪ Picnic Tables ▪ Seasonal painting 	
Non-routine Grounds Tasks <ul style="list-style-type: none"> ▪ Small repairs ▪ Programs and events prep ▪ Maintain athletic fields ▪ Run sawmill 	Off-Season Repairs <ul style="list-style-type: none"> ▪ Service lawn mowers ▪ Repair and paint picnic tables, benches, trash receptacles ▪ Repair and point swings 	



RECOMMENDATIONS

The challenge is to achieve the highest level of maintenance possible under a conservative, but realistic budget. For the Recreation Department to effectively carry out its stewardship task, the maintenance staff must have access to the proper tools and resources to do their job. Customizing tasks to the various needs of Belle Isle is the first step in developing a responsive program.

Develop a Unified Management Approach. Create a unified management approach for maintenance and rehabilitation work. This means that a specific maintenance strategy needs to be developed for the island, with built-in accountability. Essential components are: balance between site use, anticipated quality, level of maintenance and budget; competent, motivated and mission oriented administrative staff and work force with a clear understanding of tasks and

responsibilities; and an accurate, updated record keeping and performance monitoring management system.

Tasks can be categorized into operations that are basic to meeting the park’s functional needs and others that are enhancement operations. Often maintenance operations similar to Belle Isle reveal that the staff has little understanding of what has to be done first and done well before additional tasks are undertaken.

Identify Baseline Maintenance Tasks. Baseline site maintenance operations focus on basic, routine, repetitive grounds keeping tasks that are performed to a consistent and acceptable standard. Base line tasks are what minimally need to be done to present the park in a positive, well-kept and safe image. Visitors noticeably object to park conditions when baseline tasks are not being performed well. Tasks need to be categorized and prioritized, where no other discretionary or



low use park areas. A hierarchy of standards can be developed for each task.

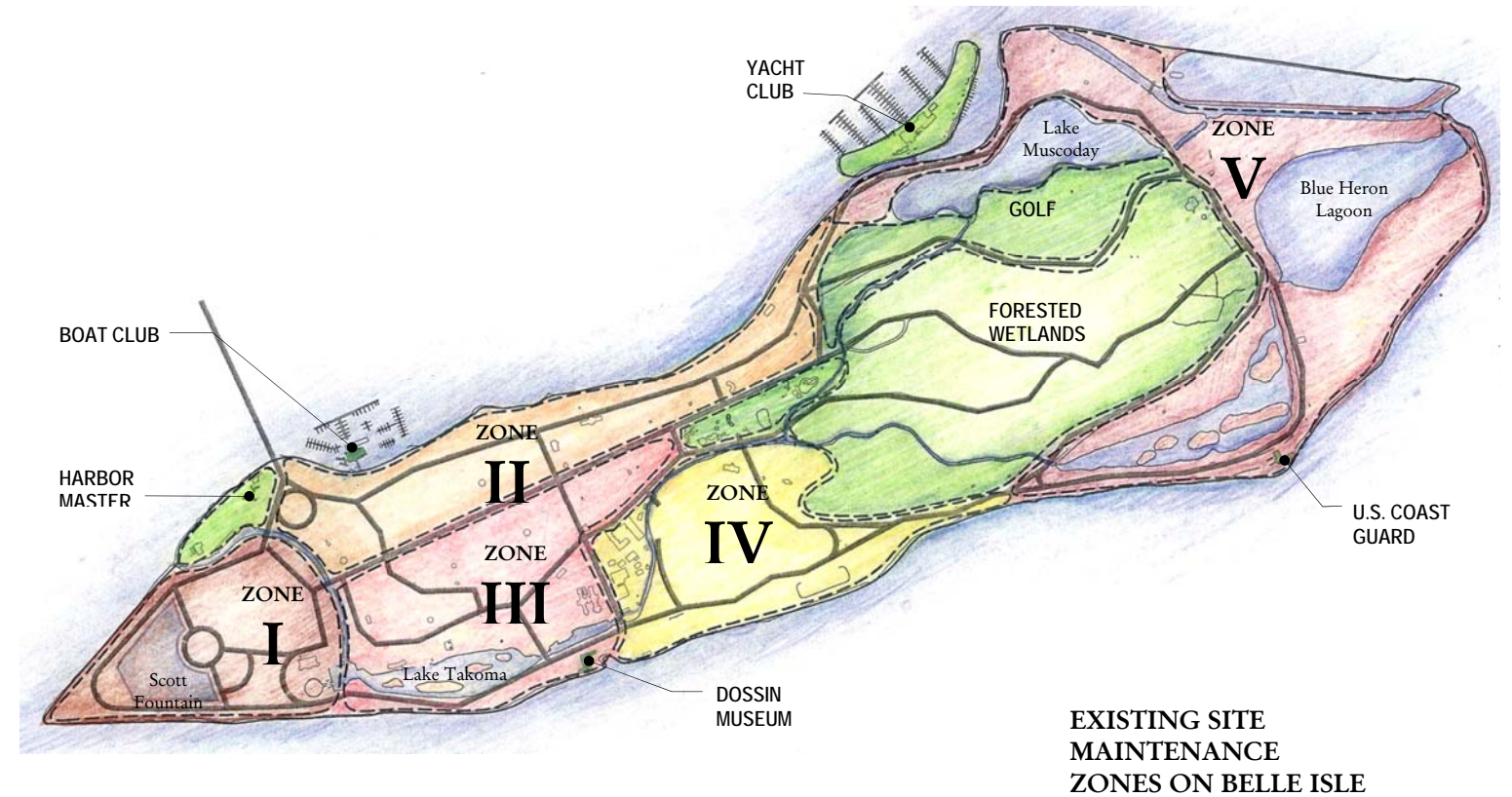
Create a Maintenance Operation Data Base. An effective plan must be established detailing quality expectation standards and the specific tasks required to achieve those standards for different use areas of the island. Site and use alterations should be explored to improve maintenance responsiveness. A

non-routine maintenance work is attempted until the base tasks have been budgeted and routinely performed at a satisfactory level. Intensively used, high image areas, would receive a proportionately higher percentage of the maintenance effort versus

detailed assessment is needed for each use area in the park to define and identify the required tasks and schedules necessary to meet those standards. Once the assessment is completed, specific maintenance tasks, schedules and priorities can be established for each use area.

Organize and train staff to meet specific needs. Upgrade minimal job and skill requirements for maintenance personnel Training should be standardized and skill levels established to address the needs and quality goals for Belle Isle. Encourage responsibility and build a stronger sense of accountability into the maintenance and management of the park. Quality of equipment and facilities should be at a level to ensure efficiency, and estimates of labor requirements should be based upon quantified site components.

Upgrade Maintenance Equipment. Inventory and evaluate equipment to determine what should be kept, replaced,



decommissioned or repaired. The use of equipment should be restructured and streamlined to accurately reflect the island’s needs and specific maintenance tasks. New equipment needs should also be identified and budgeted including any specialty equipment required to properly and efficiently maintain areas such as the athletic fields, golf course and swimming beach. Develop schedules to rotate equipment in a timely fashion to meet servicing, repair and replacement needs. Poorly utilized and unnecessary heavy equipment should be declared surplus and sold. Old equipment, such as the iron wheeled fire fighting cannons, may have historic value. Consideration should be given to downsizing or using specially designed mechanized equipment that will have less impact on fragile island soils than the large heavy machinery currently used.

Reorganize Site Maintenance Zones. The proposed master plan for Belle Isle provides the opportunity to explore ways to organize maintenance operations so they are more effective

than current practices. In keeping with a baseline site management strategy, Belle Isle Park can be divided into three distinct maintenance management zones. The three zones would consist of the following use areas:

- **Zone I**
MacArthur Bridge Park Entrance
Scott Fountain Area
Historic / Cultural Campus
Administrative / Service Complex
- **Zone II**
Athletic Campus
Picnic Area
Beach/Active Riverfront Recreation
- **Zone III**
Nine Hole Golf Course
Passive Recreation Area
Group Picnic Area

Zone I would be serviced by a main service center located near the bridge entrance. Zones II and III would be served by smaller satellite stations located near the primary facilities that

they serve. These satellite stations may operate only seasonally or as required to meet programmed needs.

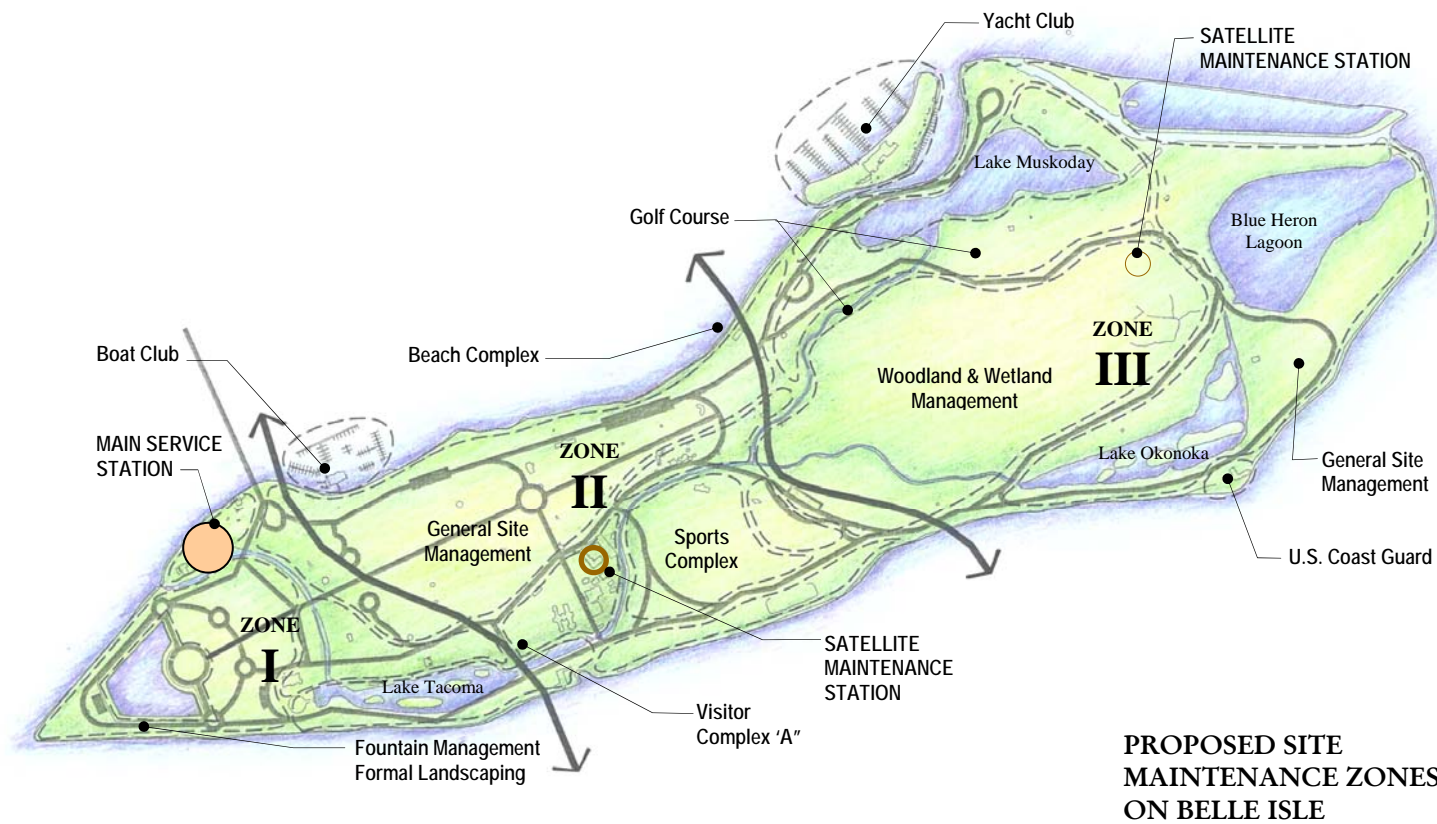
Build a new maintenance facility to replace the outdated existing facility. The Belle Isle Master Plan proposes relocating the park service area and administrative office at the entrance area of the island to improve convenience and accessibility. Park visitors seeking administrative assistance would no longer have to travel into the congested interior area, and delivery and service vehicles will find the new location easily accessible with minimal conflicts. Planned facilities for the main service area and two satellite complexes would consist of the following:

Main Service Complex: This complex is located west of MacArthur Bridge. Ingress and egress is from the primary entrance drive. The main complex serves the entire island with localized grounds emphasis in the Formal Zone.

- Site Size: Approximately five acres
- Primary all weather maintenance building.
- Secondary cold storage building.
- Fenced, secured service area.
- Staff and visitor parking.
- Staging Area
- Central trash pick-up.

Central Satellite Maintenance Complex: This complex located at the athletic campus, serves the Active Zone for grounds maintenance.

- Site Size: Approximately one acre
- Cold storage maintenance building
- Parking
- Fenced, secured service area.
- Small truck delivery area.
- Satellite trash pick-up.



Satellite Maintenance Complex: This complex shares facilities with the nine hole golf course maintenance operation that serves the east island Natural Zone for grounds maintenance.

- Site Size: Approximately one and one-quarter acre.
- Cold storage maintenance building.
- Parking
- Fenced, secured service area.
- Small truck delivery area.
- Satellite trash pick-up.
- Golf Course grounds operations.

Define roles, schedules and equipment needs. Employ sufficient staff to handle the current volume of work while initiating a strategy to attract, develop and retain a core of skilled and motivated individuals. Develop seasonal and task related maintenance guidelines or manuals that illustrate scheduling and quality standards for the proposed zones of the

park, including the equipment to be employed in the task, time frames for completion and areas of responsibility. A prototype maintenance plan for the sports fields area at the athletic complex is provided at the end of this chapter. Explore the viability of outsourcing for special site maintenance needs that exceed the capability or capacity of the staff, for instance, pest management, fertilizer application and skilled trades. Properly prepare and equip the staff to perform the tasks and then build accountability into the system and monitor performance.

Establish fee/penalties for clean up of events/park activities. Implement a fee-based permit process with a permit coordinator for set-up, monitoring and take-down of special events, large picnics and reunions, including event reservation fees and deposits for clean-up afterwards. The fee structure should represent true costs and should not be discounted.

Monitor park use and aggressively attack problems. Too often the response to a problem on the island ignores the cause. A proactive approach to problem solving has served other park systems well, including quick response graffiti removal crews and litter control teams. Determine the overall carrying capacity of various use areas and develop controls that allow for recovery in case of overuse, including temporary closure if warranted. Address security issues and vandalism by working with the Detroit Police Department and explore developing a park-watch program. Also, discourage littering by promoting awareness and announcing that heavy fines will be enforced. Maintain proper waste containment around parking areas, roadways and paths. Keep bathrooms clean and stocked.

Use maintenance responsive design. Incorporate maintenance responsive design solutions when upgrading existing facilities and building new facilities.

MAINTENANCE SCHEDULE: BELLE ISLE ATHLETIC COMPLEX BALLFIELDS

KEY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Baseline Maintenance Tasks

Routine groundskeeping tasks required to effectively manage the Belle Isle competitive baseball facilities.

Task	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MOWING												
TRIMMING												
EDGING												
WATERING												
LEAF & LITTER CLEAN-UP												

Discretionary Maintenance Tasks

Non-routine groundskeeping tasks needed to manage and improve the quality of the Belle Isle competitive baseball facilities.

Task	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FERTILIZING												
HERBICIDE APPLICATION												
AERATION												
RENOVATION - OVERSEEDING												

MAINTENANCE TASK GUIDELINES:

BASELINE TASK GUIDELINES

SYMBOL	TASK	GUIDELINES
	Mowing	Operate riding mowers at ground speeds recommended by the manufacturer and according to turf conditions. Maintain ball field turf heights at 2 1/2" during the playing season and 3" height during the off season. Maintain other general turf areas at 3" height. Remove no more than 1/3 of total leaf surface per mowing. Do not mow when lawn is wet. Alternate mowing patterns with each cutting. Discharge clippings away from hard surface walks, etc.
	Trimming	Use power line trimmers according to manufacturers recommendations. Trim according to the management plan and coordinate with mowing operations. Finished trim heights must be consistent with turf mowing heights. Trim 6" to 12" widths around buildings, fences and all vertical objects. Refrain from trimming large areas better suited for mowers. Use care line trimming around young trees with thin bark.
	Edging	Operate power edger according to manufacturer's operational requirements and safety guidelines. Edge areas designated on plan twice per year. Remove and dispose of all debris created as a result of edging and sweep/blow hardsurface areas clean.
	Watering	Ball field turf areas require approximately 1" of water per week to maintain a healthy vigorous condition. Adjust irrigation system run times to account for rainfall. Avoid light watering applications. Water sufficiently to provide moist conditions to a depth of 6"-8" penetration into the root zone. Comply with manufacturer's recommendations for spring start up and fall winterizing of irrigation system.
	Leaf & Litter Clean-up	Inspect competitive baseball diamonds on a daily basis during the playing season. Remove and dispose of any litter, broken glass, etc. Empty and dispose of trash receptacle contents daily. During the off-season inspect site, remove and dispose of litter as required to achieve quality standards. Leaf removal operations will occur primarily in the fall season. A secondary spring clean-up for the greater baseball diamonds site is also required.

DISCRETIONARY TASK GUIDELINES

SYMBOL	TASK	GUIDELINES
	Fertilizing	Fertilizing of competitive baseball diamond turf areas should be based on annual soil test results to confirm pH and nutrient levels and on established turf quality standards. Fertilizers must be applied per manufacturer's recommended application rates. Slow release granular organic fertilizers are preferred over chemical based fertilizers. Two to four applications may be required per year. Fertilizer applications must be coordinated with other turf tasks to maximize results, particularly with aeration.
	Herbicide Application	Herbicide application must comply with State of Michigan pesticide laws. Contact grounds supervisor for chemical selection, procurement and application requirements. Apply according to manufacturer's recommendations. Pre-emergent herbicides are for annual grasses weed control and post-emergent herbicides address broadleaf weeds. Granular herbicide applications are recommended over liquid applications unless specific weed problems require otherwise.
	Aeration	Aeration of competitive baseball fields addresses compaction, improves air exchange and water penetration to the root zone, and reduces the likelihood of thatch buildup. Field aeration should occur two to three times annually. Use a solid tine aerator during the playing season and hollow tine core aerator during the off season at least once. Aeration can be scheduled with fertilizer applications.
	Renovation - Overseeding	At times various areas of the ball fields may require renovation due to use, seasonal stress, insect damage or disease. Diagnose the problem accurately and either strip and remove the existing stressed lawn, work up soil, top dress and seed or dethatch, aerate, top dress and overseed. Apply adequate moisture to promote new seed germination and growth. Mow only after 3" of growth is achieved. Renovate only in the fall after the ball season is over.

ATHLETIC COMPLEX / BASEBALL DIAMONDS

Belle Isle Park Detroit, MI

This is the standard groundskeeping checklist of tasks and responsibilities for hosting competitive baseball league events at the Belle Isle Park Athletic Complex. Events other than scheduled league play may require alternate procedures. Reference the Belle Isle grounds management handbook for more detailed information.

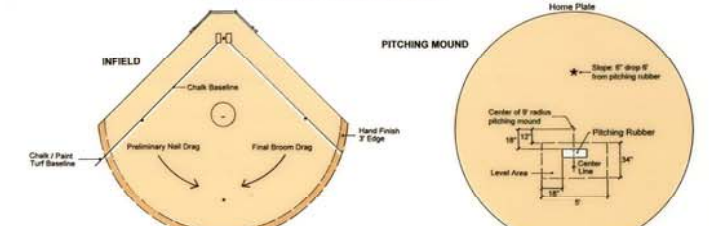
I. PRE-SEASON START-UP

- Activate and flush the water system serving the drinking fountains.
- Activate lawn irrigation system.
 - Repair any line breaks.
 - Repair or replace any irrigation couplers or heads.
- Hose down and clean ballfield bleachers and dugout seats.
- Inspect and repair any fence fabric, posts, etc.
- Test athletic complex ball field and tennis court lighting. Replace broken or burned out lights.
- Visually inspect catch basins and manholes. Identify plugged, clogged or failed structures. Identify any settling around rims which require fill to maintain positive drainage.
- Inspect and repair fitness course around ball field perimeter.

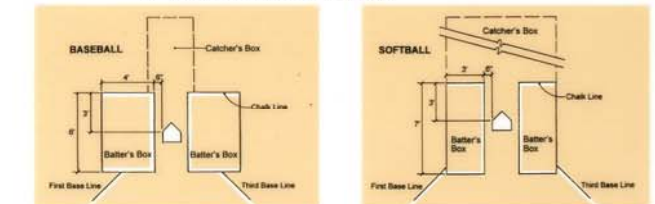
II. PRE-GAME SET-UP

■ Within 24.0 hours prior to game time

- Playing field and general baseball diamond grounds.
 - Mow (to maintain recommended playing height)
 - Trim
 - Edge (As required per maintenance schedule)
 - Trash Receptacles (18) - place before first game of the season.
- Check with athletic programmer on game day for any special instructions or schedule changes
- Playing field - infield
 - Inspect infield and identify any holes, depressions or wet spots.
 - Remove any standing water.
 - Fill holes or depressions with blended sand and clay playing surface material.
 - Tamp fill areas
 - Lightly spray water to dampen entire infield.
 - Infield - drag with "nail" drag to loosen top 2" to 3" of surface material
 - Drag in counterclockwise direction no closer than a 3' edge at infield perimeter to prevent uneven buildup of surface material at edge.
 - Hand rake 3' edge at infield perimeter to prevent uneven buildup.
 - Pitcher's mound - hand rake and broom finish to specifications indicated
 - Maintain uniform slope of 6" drop at 6' from pitching rubber toward home plate.
 - Provide uniform slopes throughout to 9' radius.



- Infield - final drag with broom "finishing" drag to provide a uniformly smooth finish.
 - Drag in clockwise direction no closer than 3' to outfield edge.
 - Provide smooth transition with pitcher's mound.
 - Hand broom 3' edge at infield perimeter to prevent uneven buildup.
- Broom off adjacent concrete areas upon completing infield preparation.
- Batter's box - hand broom finish batter's box.
 - Chalk box outline per specifications for softball or baseball.
 - Lightly spray paint home plate white. (Optional)



- "Foul / Fair" baseline marking.
 - Run infield string line from edge of home plate to first and third bases in line with outfield "foul pole."
 - Chalk first and third baselines using string line as the outside edge.
 - Run outfield string line from edge of infield chalk line to "foul pole."
 - Chalk outfield lines to poles or stripe with white paint sprayer.

■ Within 1.0 hour of game time

- Playing field and general baseball diamond grounds.
 - Lightly spray paint (optional) and set bases.
 - Final inspection of field and general grounds for readiness.
 - Turn on appropriate field lights, L-15 thru L-19 and L-21 thru L-29 depending on ball diamonds scheduled for nighttime use.

III. GAME TIME

Remain available and on immediate standby to provide grounds assistance throughout entire game.

IV. POST GAME CLOSE-UP

■ Immediately upon game completion

- Retrieve and store bases.
- Within 1.0 hour after game completion
- Trash receptacles - empty and dispose of contents.
 - Lights - shut off all field lights, L-15 thru L-19 and L-21 thru L-29 once players and spectators have dispersed.
 - Secure access gate to central storage area.

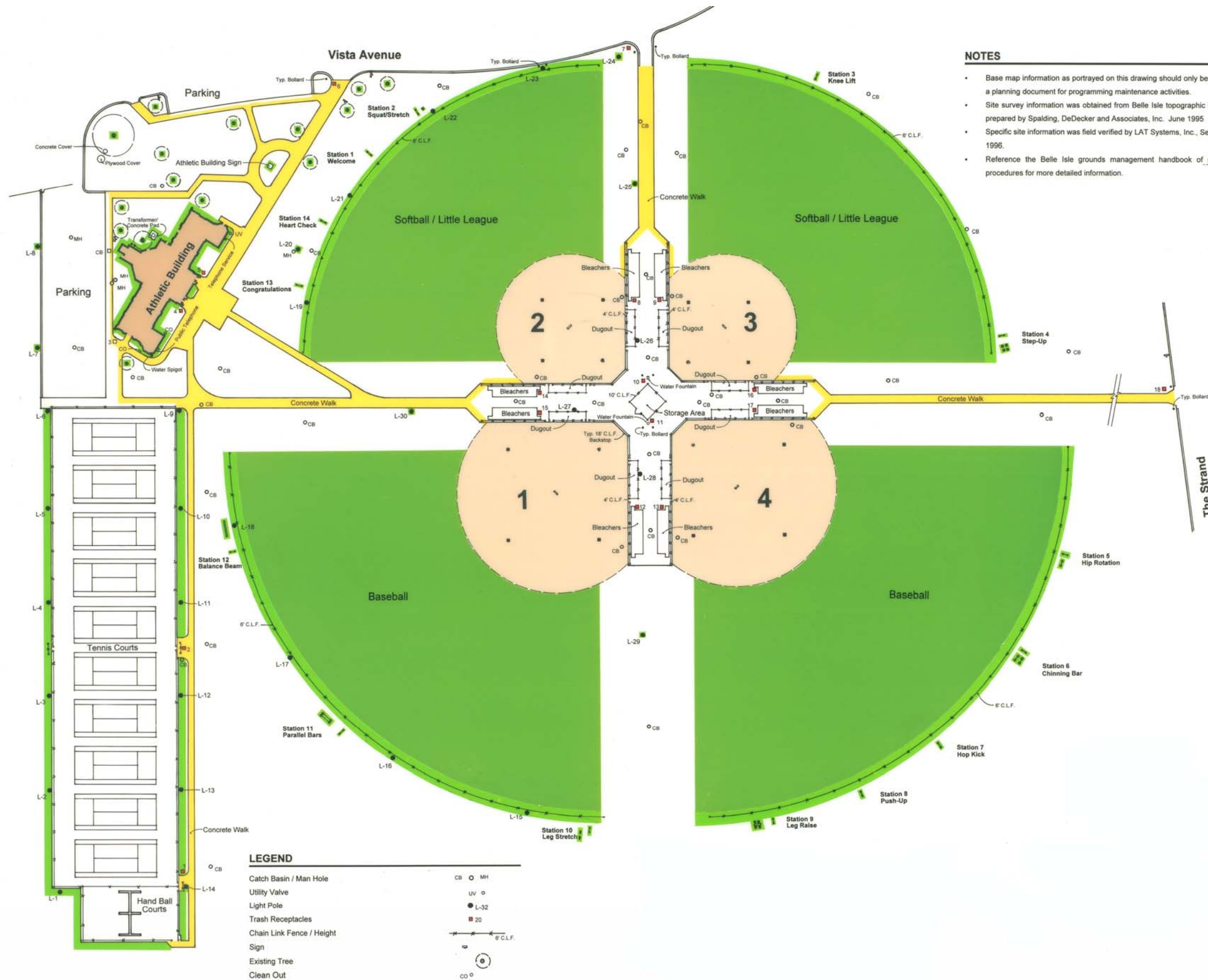
V. POST GAME CLEAN-UP

■ Within 24.0 hours after game completion or next work day

- Clean athletic complex facilities.
 - Bleachers
 - Dugouts
- Clean-up any trash and litter from playing field, general site grounds and exterior fence areas.

VI. POST SEASON CLOSE-UP

- Winterize water system serving the drinking fountains.
- Winterize lawn irrigation system prior to first frost conditions.
- Retrieve and store trash receptacles (18) after last scheduled event in the fall.



In a park as diverse as Belle Isle, there are a variety of experiences that require specific and detailed instructions to ensure a quality job is completed. A zone maintenance strategy was developed for the ballfields at the Athletic Complex to illustrate how this program would work. The Ballfield Prototype is an example of a set of detailed, site-specific maintenance tasks that can be easily communicated through graphic boards. On one side, a color-coded map of the area is presented with each ball field clearly labeled. On the other side a 12-month schedule is broken into baseline and discretionary tasks. A detailed checklist of responsibilities unique to ball fields is also included. A field staff person can use the various items of the prototype as a work list, and the manager can use it as a verification list. When fully implemented with the correct staffing levels, all persons involved with maintenance will have a clearer idea as to what needs to be accomplished.

This chart illustrates an example of a typical task area model that can be used by maintenance crews. Similar charts would be developed for all maintenance areas to clearly identify and quantify daily, monthly and annual tasks to be performed.

Belle Isle Master Plan
**PROPOSED BASKLINE TASK
 CHART FOR ATHLETIC
 COMPLEX BALLFIELDS**

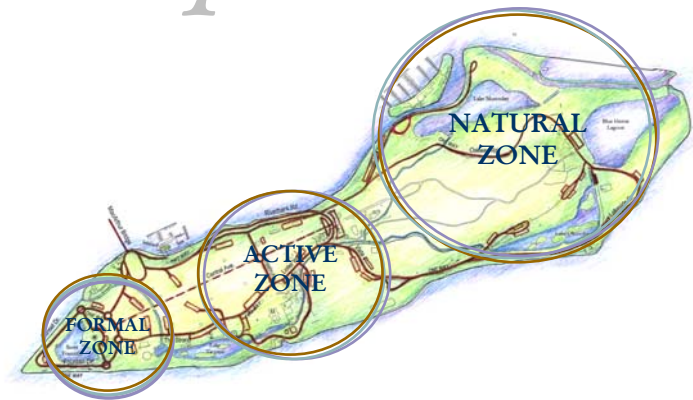
Right to left:
The MacArthur Bridge
from the Boat House; the
west end of the island
and the MacArthur
Bridge.



Photo by Clayton Studios

Chapter Four

RENOVATION PLAN



USE ZONES FOR
BELLE ISLE PARK

OVERVIEW

The plan for renovating Belle Isle proposes site-specific improvements adhering to the philosophy for the park while addressing concerns raised during the analysis process. Systemic issues were addressed first and solutions were then integrated into a comprehensive Master Plan for the future.

All parts of the island's physical setting including environmental enhancement, historic preservation, circulation and programming are addressed based on criteria of the four planning principles discussed earlier. Proposed changes recognize Belle Isle as a special natural, cultural and recreational resource. They focus on the island's natural uniqueness and its role as an historic conservator, learning center and gathering place.

The Master Plan responds to the character of existing features on the island. The park consists of three major sections: a busy Active Zone that contains the majority of park recreational activities and cultural attractions; the Formal Zone of the Scott Fountain and Casino area; and the more rustic Natural Zone on the eastern end containing the forest, wetlands, golf course and Blue Heron Lagoon.

The plan encourages nature defining use areas: wooded wetlands dominate the east side, lakes define picnic and fishing areas and a semi-circular canal differentiates the Scott Fountain area from the less formal central picnic grounds. Natural drainage ways, meadows and contained wetlands further define picnic areas and uses. Planting native plants and trees, naturalizing shorelines where appropriate and encouraging more naturalized topography in fill areas helps reinforce the natural character of the island.

The collection of architecturally noteworthy buildings and formal gardens are as fine as any found in the United States. But recognition of the park's historic assets has not led to sympathetic programming necessary to maintain their utility and appearance.

The plan proposes to consolidate cultural uses and elements in the central part of the island in order to enlarge and enhance the educational aspect of the park. This campus links the Johnson Memorial Gardens, Conservatory, Aquarium, Dairy Barns, Greenhouses and Dossin Museum areas into a comprehensive learning and cultural environment for all age groups. One of the most ambitious ideas is to feature the two hundred acre forest as a living laboratory for learning about ecology and studying nature.

The Master Plan proposes to expand the variety of experiences available to visitors on the island. Formal areas such as the



EXISTING ROAD CIRCULATION ON BELLE ISLE

Scott Fountain and Central Avenue are enhanced and strengthened while informal areas are better defined for programmed and unintended use.

CIRCULATION

The proposed road system consists of three loops loosely circumnavigating the use zones. A large two-way loop (Loiter Way and Riverbank Road) encircles the central area of the island. There are two one-way loops extending east and west of the two-way loop road. The west one-way loop travels counter clockwise around Scott Fountain extending farther onto Sunset Point to afford better views of the river skyline. The circulation system improves park access using the existing road infrastructure. Some roads continue to serve vehicular traffic while others are converted over to use as parking areas or to non-motorized trails. Sections of new roads are extended out to the perimeter of the island’s north shore, Sunset Point and Livingstone Point. These extensions allow visitors to

enjoy the panoramic views lost over the years due to landfill along the edge.

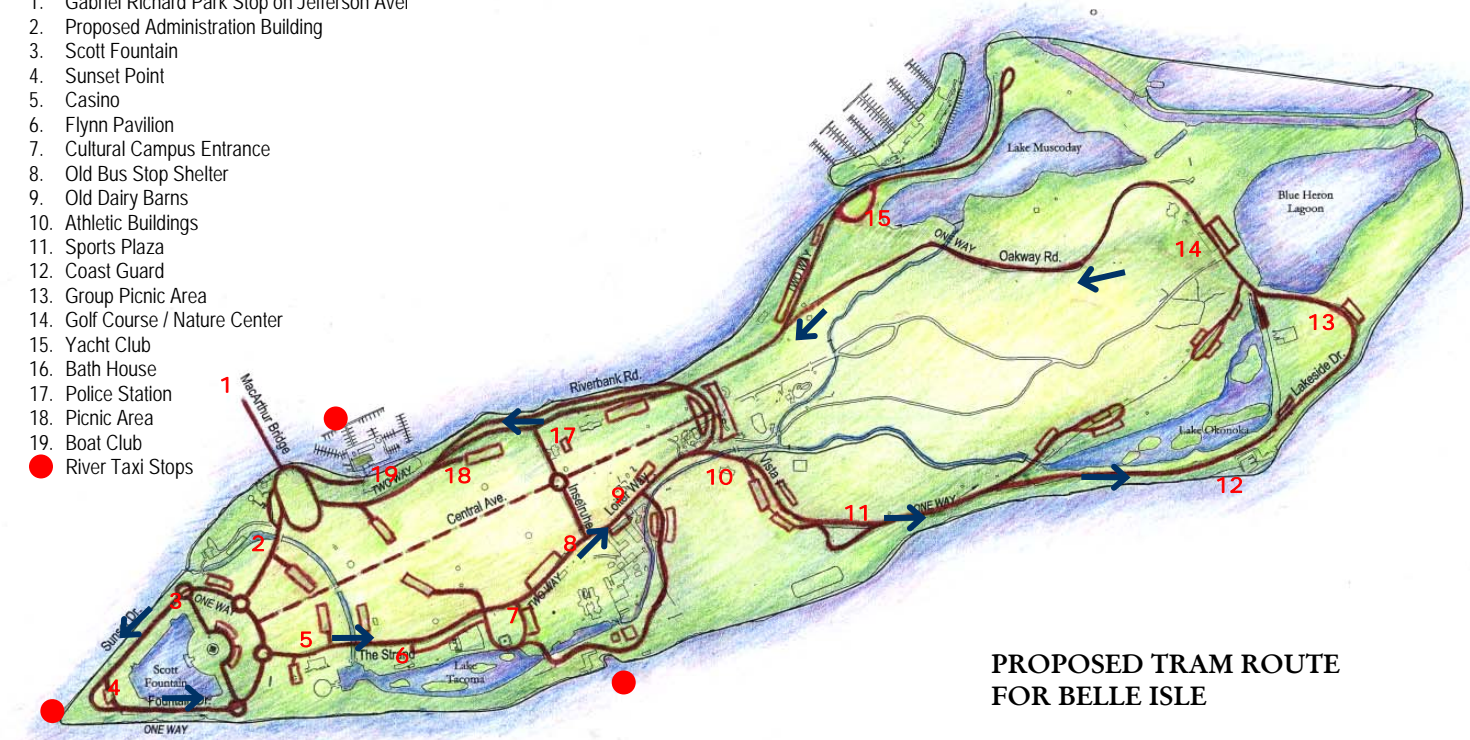
The existing road at the fountain is converted to non-motorized use and a new road located further away from the fountain provides for panoramic views. The east one-way loop begins at existing Vista Way and continues counter clockwise around the east point of the island. Lakeside Drive extends into the Livingstone Lighthouse area framing a new large group picnic area around Lake Okonoka. Woodside Drive is converted to parking to service the new picnic facilities.

The existing road in the forest becomes a non-motorized pathway providing trails for bikes, pedestrians and skaters. Removing the fill material currently blocking Loiter Way creates another non-motorized trail. The existing drive around Lake Muskoday is modified to accommodate an expanded golf course.



PROPOSED ROAD CIRCULATION FOR BELLE ISLE

1. Gabriel Richard Park Stop on Jefferson Ave
2. Proposed Administration Building
3. Scott Fountain
4. Sunset Point
5. Casino
6. Flynn Pavilion
7. Cultural Campus Entrance
8. Old Bus Stop Shelter
9. Old Dairy Barns
10. Athletic Buildings
11. Sports Plaza
12. Coast Guard
13. Group Picnic Area
14. Golf Course / Nature Center
15. Yacht Club
16. Bath House
17. Police Station
18. Picnic Area
19. Boat Club
- River Taxi Stops



PROPOSED TRAM ROUTE FOR BELLE ISLE

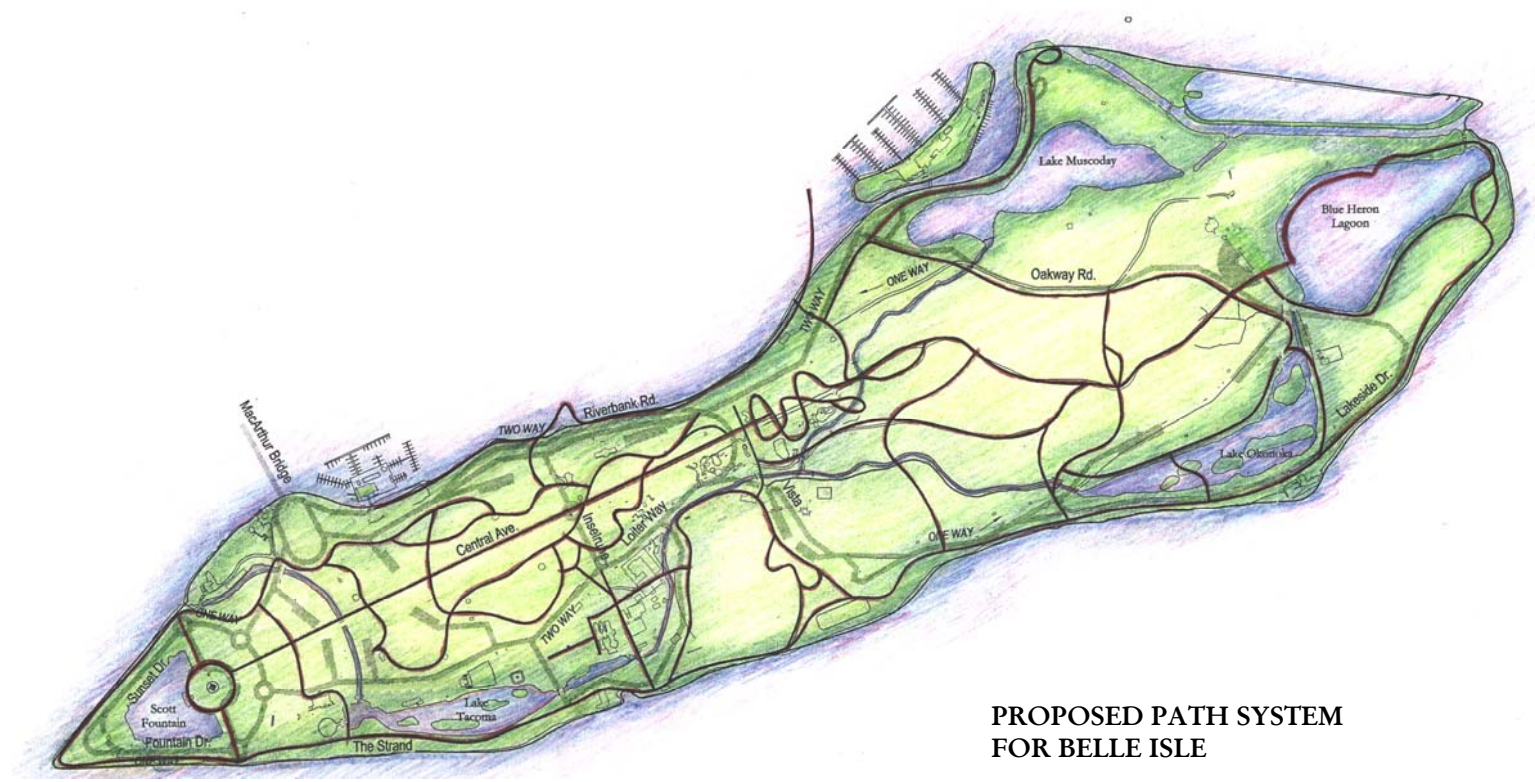
Oakway Road has been rerouted to connect to Lakeside drive southeast of Nature Center building; it then travels through the forest before connecting to Riverbank Road. A two-way spur extends Riverbank Drive/Oakway to accommodate people using the fishing areas and access to the Yacht Club. A large oval has been added to the island's entrance from the MacArthur Bridge creating a graceful arrival point for park visitors. A small loop road runs under the bridge to access the Boat Club, similar to the original concept for the bridge.

is proposed to connect various attractions on the island. The tram loop would be linked to the City transit system at Gabriel Richard Park where parking would be provided for park users. The tram would travel clockwise around the island stopping at various points of interest and at regular intervals. One could enjoy the whole park without the use of a car. A river taxi service would link the island to the downtown and other destinations. Docking areas are proposed at the Boat Club, Sunset Point, and Dossin Museum.

On the mainland entrance, the Master Plan recommends an additional westbound turn lane and modified traffic signals for exclusive phasing of northbound traffic. The outbound traffic green signal would be extended at pre-determined high volume times. Loop detectors on inbound lanes would tally traffic counts and message boards installed on Grand Boulevard and Jefferson Avenue would warn motorists about traffic conditions on the bridge and island. An internal tram system

MATRIX

The Recommendation/Improvement Matrix on the following pages illustrates how the proposed improvements in the Master Plan address the recommendations outlined during the inventory and analysis process. A box is highlighted where the proposed improvement addresses a specific recommendation.



PROPOSED PATH SYSTEM FOR BELLE ISLE

RECOMMENDATION OUTLINED IN THE INVENTORY AND ANALYSIS PROCESS

COMPONENTS OF THE PROPOSED RENOVATION PLAN

NATURAL SYSTEMS				BUILT SYSTEMS									TRANSPORTATION SYSTEMS															
Use Quality Materials & Methods for Shore Stabilization	Provide a Variety of Shore Line Experiences	Enhance Existing Shoreline Amenities	Continue Canal Restoration Program	Reduce Flooding by Using Natural Design Techniques	Implement Management Programs to Enhance and Protect the Ecosystem	Promote the Forest	Implement Tree Management and Facilitate Pedestrian and Bicycle Trails	Diversify Environment Education Opportunities Using Native Landscapes	Expand Wildlife Habitat on the Island	Implement a Management Program for the Island	Strengthen the Arrival Point onto the Island from MacArthur Bridge	Recognize the Importance of the Historic and Character Defining Buildings on the Island	Implement a Planned Maintenance Program for all Buildings and Maintenance	Use Formal Landscape Approach to Repairs and Modifications	Encourage Contextual Design of all Structures	Shift Building Uses to Those Most Compatible with the Type, Arch. Significance, Location, or Prominence of Structures	Historic Buildings and Attractions	Capacity of the MacArthur Bridge Intersection with Jefferson Ave. must be Managed to Prevent Congestion at the Bridge	Add Activities to Passive Buildings	Cruising Problems on the Island Should be Addressed through Better Enforcement	Roads Should Respond to the Island's Functions & Amenities	A Leisurely Drive around the Island Should be Addressed through Develop a Parking Plan Based on Capacity of the Island and Experience	Roadways Should be Designed as Part of a Quality Park Setting	Roadways Should be Part of the park	Develop and Maintain Alternate Means of Transportation such as a Tram, Shuttle, and Water Taxi	Shift Emphasis to Pedestrian and Bicycle Ways		
FORMAL ZONE																												
Jefferson Avenue Entrance																												
MacArthur Bridge																												
Administration Complex																												
Scott Fountain																												
Great Lawn																												
Sunset Point																												
ACTIVE ZONE																												
Lake Tacoma																												
The Strand																												
Cultural Campus																												
North Esplanade																												
Picnic Grounds																												
Beach																												
Athletic Complex																												
Boat Club																												
NATURAL ZONE																												
Forest Paths																												
Golf Course																												
Blue Heron Lagoon																												
Nature Zoo																												
Livingstone Lighthouse																												
Group Picnic Area																												
Coast Guard																												
Yacht Club																												
Fishing Access																												
Oakway Drive																												
IMPLEMENTATION																												
Resources & Revenues																												
Cultural Campus																												
Retail & Licensed Uses																												
Sports Programming																												
Private Investment																												
Public Investment																												
Toll Fee for Automobiles																												

● The Yacht Club and Coast Guard are not part of the management / maintenance plan; the Recreation Department should coordinate efforts with these groups and other City departments to ensure a consistent management structure for the island.

RECOMMENDATION OUTLINED IN THE INVENTORY AND ANALYSIS PROCESS

COMPONENTS OF THE PROPOSED RENOVATION PLAN	RECOMMENDATION OUTLINED IN THE INVENTORY AND ANALYSIS PROCESS																			
	UTILITIES	SITE FURNISHINGS	MANAGEMENT	MAINTENANCE	PROGRAMS & USES															
FORMAL ZONE																				
Jefferson Avenue Entrance																				
MacArthur Bridge																				
Administration Complex																				
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Sports Programming																				
Private Investment																				
Public Investment																				
Toll Fee																				

NARRATIVE

The following narrative is presented from the formal zone beginning at the MacArthur Bridge, through the Active Zone and the Natural Zone on the far east end of the island, circling back to the north shore of the island. Each zone is described as part of the overall vision for the future addressing specific recommendations outlined in the previous chapter.

Belle Isle Master Plan
**PROPOSED
IMPROVEMENT MATRIX**

- 1. MAIN ENTRANCE**
- Reorganize Traffic Lanes, Signaling and Signs for Improved Circulation
 - Directional Signs to Major Freeways
 - Pedestrian Promenade along River Connects Points East and West
 - Promote Gabriel Richard Park as an Entrance Feature to Belle Isle

- 2. POINT OF ARRIVAL**
- Boulevard with Sculptural Focal Point
 - Image Landscaping with Four Season Interest
 - Accent Lighting
 - Formal Theme

- 3. MAINTENANCE COMPLEX**
- New Maintenance and Service Buildings
 - New Harbor Master Facility and Dock
 - New CSO Facility
 - Controlled Access
 - Tram Service Center
 - Employee Parking

- 4. ADMINISTRATION AND VISITOR'S CENTER**
- Belle Isle Administrative Offices and Meeting Rooms
 - Visitor Information and Tram Stop
 - Police Station
 - Park Facilities Reservation Center
 - Belle Isle Library and Archives
 - Building to Complement Historic Casino Architecture

- 5. SCOTT FOUNTAIN**
- Convert Existing Roundabout to Pedestrian Plaza
 - Continue Restoration Efforts
 - Implement Annual Maintenance Program
 - Visitor Parking Area and Tram Stop
 - Formal Landscape Treatment with Flower Gardens
 - Pedestrian Connections to Central Promenade and to Basin
 - Basin Improvements to Complement Fountain, with Formal Gardens

- 6. SUNSET POINT**
- Hardscape Plaza and Edge Treatment with Panoramic Views
 - Freedom Festival Functions
 - Interpretive Sculpture with Emphasis on Detroit River
 - Programmed Lunch Time Activities
 - Extend Drive Closer to Point (Convert Existing Drive to Parking)
 - Tram Stop

- 7. ENHANCE ROAD AND PARKING AREAS**
- Infrastructure Improvements for Paving and Utilities
 - Delineate Traffic Lanes
 - Reduce Roadway Widths
 - Road Layout Appropriate to Park Setting
 - Historic Lighting
 - Coordinate Sign Program
 - Reduce On-Street Parking to Enhance River Views
 - Program New Parking Areas for Needs and Activities
 - Adjust Road Alignment to Highlight Vistas and Complement Buildings
 - Use Existing Road Alignments to Develop Off-Street Parking Areas

- 8. RENOVATED CASINO**
- Multi-Purpose Banquet Facility
 - Extend Functional Use by Creating a Terrace Lawn and Ceremony Garden
 - Open View From South Terrace to River
 - Improve Parking and Service Systems with Tram Stop

- 9. GREAT LAWN**
- Large Event / Festival Gathering Space
 - Power and Sound Systems and Portable Stage
 - Holiday Tree Display

- 10. LAKE TAKOMA STRAND**
- No Motorized Vehicles (Except Tram) on Strand
 - Enhance Pedestrian Environment and Pathway Linkage
 - Renovated Flynn Pavilion with Tavern on Terrace Deck
 - New Canoe Shelter and Paddle Boat Concession
 - Ice Skating on Lake Takoma

- 11. CENTRAL PICNIC GROUNDS**
- Pedestrian Trail System to Connect Island Assets
 - Improve Picnic Amenities and Highlight Historic Shelters
 - New Comfort Station by Shelter #5
 - Utilize Natural Drainage Techniques to Minimize Flooding
 - Implement Tree and Lawn Maintenance Program
 - Convert Picnic Way and Muse Road into Parking Areas

- 12. CENTRAL PROMENADE**
- Restrict or Close to Motorized Vehicles during Events or on the Weekends (Except Tram)
 - Public Promenade
 - Improve Monument Setting with Formal Garden Features
 - Weekend and Holiday Events Mall
 - Decorative Paving
 - Pedestrian Scale Site Furnishings and Lighting

- 13. BELLE ISLE KID'S KINGDOM**
- New Comfort Station
 - Play Equipment and Features Scaled for Tots and Children
 - Dedicated Picnic Areas
 - Special Children's Programming: Putt Putt, Skateboarding, Mini Train Rides, etc.
 - Tram Stop and Trail Connections
 - Parking Area
 - Controlled Entry and Exit

- 14. ATHLETIC FIELDS**
- Renovate Athletic Facilities
 - Promote Special Events
 - Off-Street Parking Improvements
 - New Automobile Bridge
 - Pedestrian Connector to Beach at Existing Bridge
 - Remove Strand Road to Create Open Space to the River
 - Sports Plaza (basketball, Roller Hockey, etc.)
 - Sports Pub at Athletic Pavilion with Tram Stop
- 15. SHORELINE STABILIZATION AND ENHANCEMENT**
- Continue Shoreline Stabilization Program
 - Use Natural Stabilization Methods where Applicable
 - Use High Quality Stabilization Materials Complementary to Park Setting
 - Encourage Public Use and Safe Access

- 16. CULTURAL CENTER**
- Remove Remick Band Shell
 - New Parking Area for 200 Cars and 8 Tour Buses
 - Cultural Facilities Orientation Center
 - Nancy Brown Carillon Entry Plaza
 - Gift Shop - Information and Ticket Purchase
 - Exhibit Space and Theater
 - Staff Offices
 - Stroller Rental
 - Tram Stop
 - Renovate Johnson Memorial Gardens with New Specialty Gardens
 - New Japanese Garden Attraction
 - Renovate Conservatory
 - Renovate Aquarium into Great Lakes Interpretive Center
 - Renovate Greenhouse Complex with Retail and Display Focus
 - Children's Garden
 - Convert Inselruhe (White) House to a Museum / Volunteer Organization Hdqtrs.
 - Expand and Improve Dossin Great Lakes Museum
 - Interactive Displays
 - Interpretive Plaza
 - Visiting Ship Mooring
 - Water Taxi and Tram Stop
 - Convert Existing Maintenance Facility into Cultural Court
 - Open Air Courtyard Activities and Displays
 - Horse Barn becomes Children's Activities Space or Theater
 - East Wing becomes Senior Citizens Activity Center
 - Artist's Retreat with Open Workshops / Demonstrations/ Apprenticeships
 - Restaurant
 - Interpretive Program
 - Saw Mill becomes Seasonal Events Place (sawmill, cider mill, maple syrup)
 - Maintenance (Satellite Facility)

- 17. NATIVE FOREST PRESERVE**
- Close Tanglewood and Central to Motorized Vehicles (Except Tram)
 - Convert Roads to Bicycle / Pedestrian Ways
 - Eradicate Invasive and Non-Native Plants
 - Identify, Promote and Save Landmark Trees
 - Enhance Trail System
 - Continue Woodland and Wildlife Management Program
 - Promote Forest as a Living Laboratory for Environmental Education

- 18. GROUP PICNIC AREA**
- Group Picnic Shelters and Amenities
 - Pathway Leading to Renovated Pier
 - Renovate Historic Woodside Comfort Station
 - Convert Woodside Drive for Picnic Parking with Tram Stop
 - Informal Ballfield and Children's Play Area

- 19. COAST GUARD**
- Incorporate into Educational / Interpretive Framework
 - Enhance Appearance
 - International Flag Display of Great Lakes Shipping

- 20. BROAD MEADOW**
- Create a Landscape of Native Grasses
 - Bicycle and Pedestrian Ways
 - Enhance Setting for Livingstone Lighthouse

- 21. BLUE HERON LAGOON**
- Floating Boardwalk
 - North Shore Sun Lawn
 - Reopen Connection to River
 - Fish Stocking Program
 - Model Yacht Regattas
 - Fishing Demonstrations and Derbies
 - Ice Fishing

- 22. NATURE ZOO**
- Centerpiece Building for East End of ParkR
 - Remove Existing Safari Land Zoo
 - Michigan Wildlife / Habitat Exhibit
 - Promote Great Lakes Ecology and the Detroit River
 - NewNature / Learning Center with Interactive Exhibits
 - Naturalist and Other Nature Staff Offices
 - Visiting Exhibition Hall
 - Environmental Research Laboratory (Universities)
 - Island Store (Refreshments, Fishing Supplies, Picnic Needs, Kite Kits, Model Yachts)
 - Cross Country Skiing Rental
 - Parking for 200 Cars and Tram Stop

- 23. WATER INTAKE HOUSE**
- Control Access
 - Special Accent Lighting for Historic Water House
 - Educational Tours

- 24. NEW NINE HOLE GOLF COURSE**
- Layout Accommodates Modern Game
 - Golf Pro Shop
 - Grill with Outdoor Seating Area
 - Teaching / Practice Facilities (putting green, chipping area, and driving range)
 - New Golf Maintenance Facility
 - Natural Drainage Systems
 - Preserve Public Access to Lake Muskoday and Riverbank Point

- 25. DETROIT YACHT CLUB**
- Private Use
 - Cooperation with Island Activities

- 26. CANAL IMPROVEMENTS**
- Continue Ongoing Restoration

- 27. EXPAND BEACH**
- Bath House with Tram Stop
 - Beach Refectory
 - Beach Volleyball Courts
 - Water Slide Attraction
 - Possible Parasailing / Sailboard Concession
 - Boardwalk Divides Beach from Other Uses
 - Viewing Areas for Annual Hydroplane Races

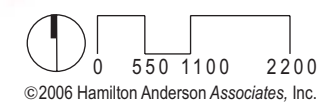
- 28. NORTH SHORE ESPLANADE AND BOULEVARD**
- Scenic Drive with Views of Detroit Skyline
 - Separate Pedestrian and Bicycle Ways
 - Lighting and Site Furnishings Consistent with character of MacArthur Bridge
 - Special Paving and Hardscape River Edge Promenade

- 29. RENOVATE HISTORIC POLICE STATION**
- Potential Bed and Breakfast Inn
 - Additional Parking
 - Front Garden with Guest Drop-Off
 - Alternate Use: Park Ranger Facility

- 30. BOAT CLUB RENOVATION**
- Renovate Existing Historic Building
 - Water Recreation Amenities
 - Destination Restaurant
 - Conference Center
 - New Boat Slips / Marina Club
 - Rowing Club to Remain
 - Water Taxi to Downtown and Tram Stop



**Belle Isle Master Plan
PROPOSED
DEVELOPMENT PLAN**



Right: Aerial photograph of Jefferson Ave Entrance to MacArthur Bridge taken before the demolition of the Uniroyal plant (1980's); Far right: plan of the Formal Zone.



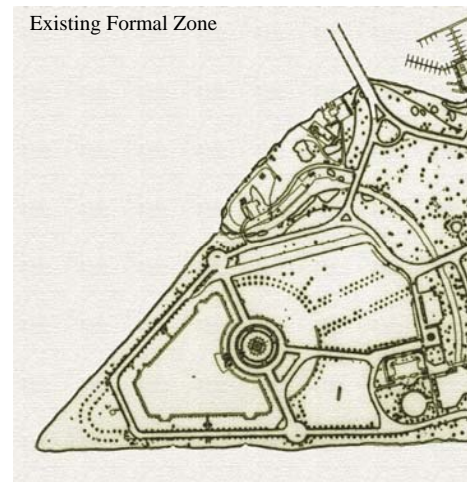
Photo by Clayton Studios

FORMAL ZONE

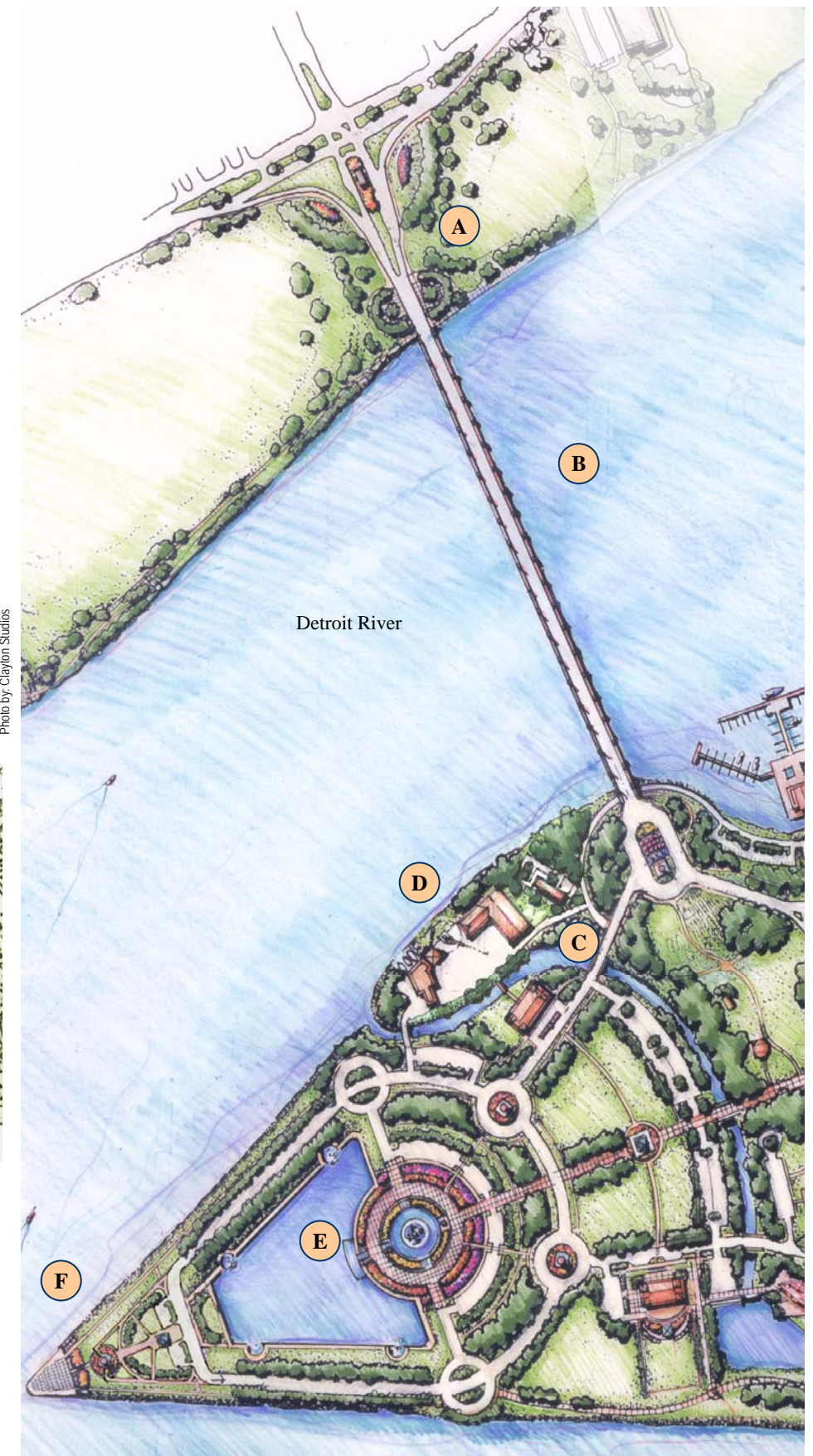


The Formal Zone, at the west end of the island contains the arrival point for the park. The MacArthur Bridge entrance signifies a change in the urban fabric whether arriving from Grand Boulevard or Jefferson. The entrance sign, tree plantings and seasonal flowers contrast against the surrounding commercial uses of Jefferson Avenue. A pedestrian promenade along the river's edge creates opportunities for public recreation and guides foot traffic from other places along the river to the bridge. The promenade could extend east to Erma Henderson Park and west to Mount Eliot Park, eventually, connecting to the Riverwalk and becoming part of a larger regional greenway system. A transfer station for the island with tram parking will be programmed for Gabriel Richard Park as transit service to the island is implemented over time.

Removing the existing clock mound and replacing it with an accent lighted sculptural element signals the arrival to the park and open vistas to the island. The broad boulevarded oval



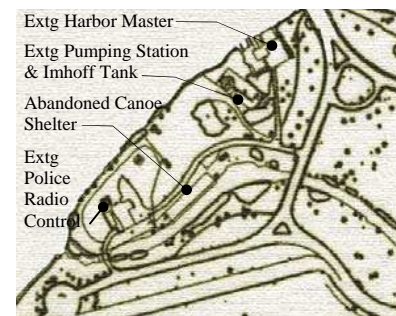
- THE FORMAL ZONE**
- A. Jefferson Avenue Entrance
 - B. MacArthur Bridge
 - C. Administrative Complex
 - D. Maintenance Complex
 - E. Scott Fountain and the Great Lawn
 - F. Sunset Point



Below: plan of Administration Center
Far Right: Scott Fountain area.



- A. Maintenance Center
- B. Administration Building & Welcome Center
- C. Existing Sewage Pumping Station
- D. Scott Fountain w/ Formal Plantings
- E. Basin
- F. Great Lawn
- G. Circle Drive
- H. Casino & Formal Gardens
- I. Cricket Field



- Extg Harbor Master
- Extg Pumping Station & Imhoff Tank
- Abandoned Canoe Shelter
- Extg Police Radio Control

replaces the image of the clock mound, providing an appropriately scaled entrance image for the park. Landscaping with four-season interest accents the arrival point.

ADMINISTRATION COMPLEX

Directly west of the bridge is a small seven-acre peninsula. Currently, the peninsula contains the Detroit Harbor Master Facility, the Detroit Water and Sewerage Departments new Controlled Sewerage Overflow facility, a police radio station and the dilapidated canoe shelter. A police communications facility is being relocated elsewhere in the City.

The Master Plan proposes a primary maintenance complex be constructed on this site because of its proximity to the bridge, its current non-public uses, the ability to use the canal to provide security and limit public access as opposed to unsightly fencing, and because it is almost completely hidden from public view. The peninsula offers many improvements over the

current location in the historic Dairy Barns; it reduces heavy equipment traffic throughout the island and it is large enough to service all the needs of the Recreation Department employees. Building a modern complex is more cost effective than continual, destructive renovations to the barns.

A new Park Administration Center is proposed across the Nashua Canal. Administrative functions are currently housed at Inselruhe House, otherwise known as the White House, the island's oldest structure. Communication between maintenance and administration staff will be more direct and convenient by placing a new administration center near the entrance of the Belle Isle.

The new multi-purpose, public building serves as a welcome center to Belle Isle visitors, distributing information about what is happening in the park. Picnic reservations, wedding events, tent rentals, etc. will be managed from the facility. The

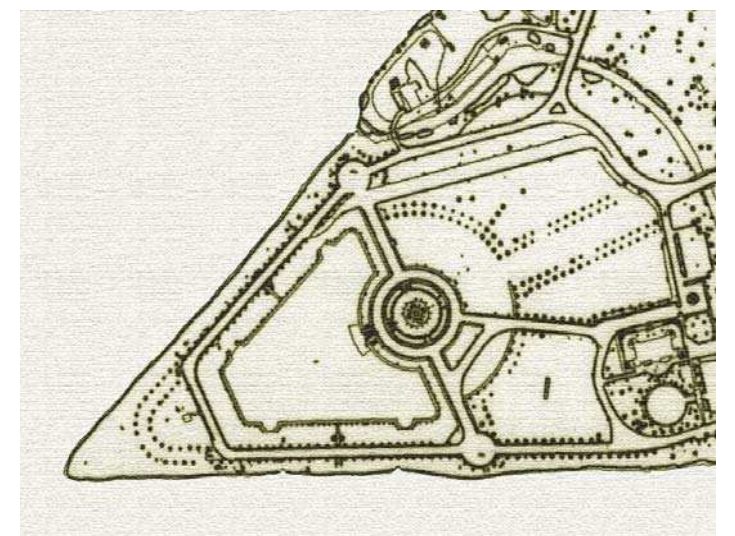


building contains space for a new police station, bathrooms and an archival library on the park's history. It provides office space for managing and organizing the large events that take place on the island. The new building respects the architecture of the Casino standing on the opposite side of a large event lawn. This lawn further defines the formal elements of this section of the park.

Existing Scott Fountain Area

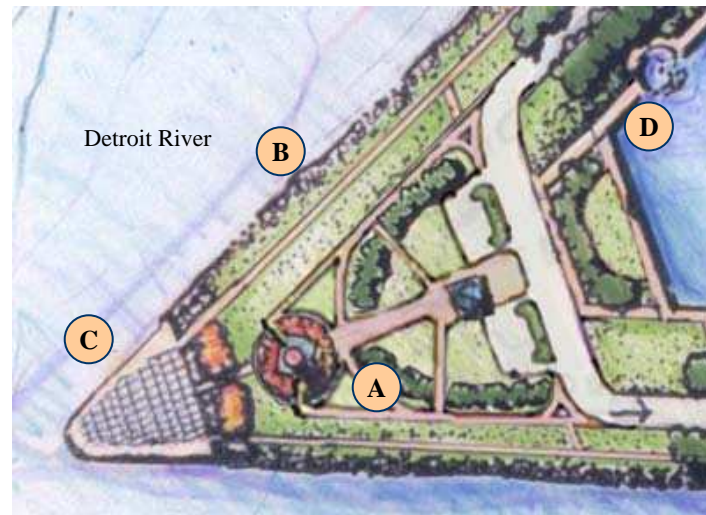
SCOTT FOUNTAIN & THE GREAT LAWN

The Scott Fountain, Belle Isle's most recognizable landmark, is located just west of the new events lawn area in the heart of the formal zone. To acknowledge the importance and value of the fountain, the plan removes automobile access directly adjacent to the fountain. A fountain plaza with brick paving enhances the site for future weddings and ceremonies. Cars can park in adjacent parking lots. Pedestrian pathways connect the fountain and basin areas to the promenade and picnic areas.

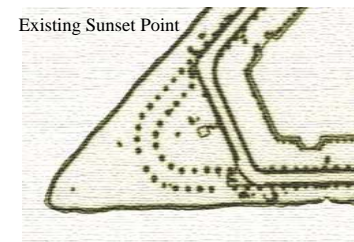


Landscaping includes seasonal flowers and shrubbery complementing the elegance of the white marble landmark. Elements inconsistent with the formal activity such as the wide pavement, chain link fencing and barricades are removed or relocated.

Below: plan of Sunset Point.
 Right: view of the Detroit skyline from Sunset Point.
 Below Right: Sunset Point as it exists today is a less than memorable setting;
 Opposite Page: rendering of proposed Sunset Point.



- A. Future Extended Drive
- B. Paths
- C. Plaza Area
- D. New Comfort Station



The large open area framed by the Administration Building, Casino Building, Scott Fountain and the canal is developed as a broad lawn area for large gatherings. The almost flat twelve acres will be a popular destination featuring events such as regional art fairs, antique auto shows, graduation ceremonies, concerts and rallies or holiday displays.

CASINO

In addition to the Scott Fountain and Basin area, the Casino building adds a distinct formality to this portion of the park. The Casino is for large banquets and formal functions, with its grandly arched entrance, terrace, distinct tile roof complete with corner towers and its open interior spaces. The Casino floor plan and size make it difficult to adapt to modern day events and gatherings. The building was once two-sided; the front had a straight-line terrace connection to greet arrivals from the ferryboats, and the back of the building faced a canal opening to the Detroit River where boats could pull up and

dock along the terrace. During the middle 1900s, the waterway was filled. In the 1970s, a circular basin was added as a symbolic gesture, but it has become a maintenance burden.

The plan removes the basin and restores the use of the terrace by programming it as part of the new garden for summertime events. This garden allows for gatherings such as weddings, fundraisers and retirement parties by providing the space necessary to allow the Casino structure to function as the service center for facilities and catering with the garden serving as an extension of the building.

SUNSET POINT

West of Scott Fountain is Sunset Point. This small part of the island offers the most dramatic views of Detroit and Windsor. Yet most visitors to the island never have the experience of being out on the point because there are no signs, paths and very few seating areas. Large quantities of concrete rubble

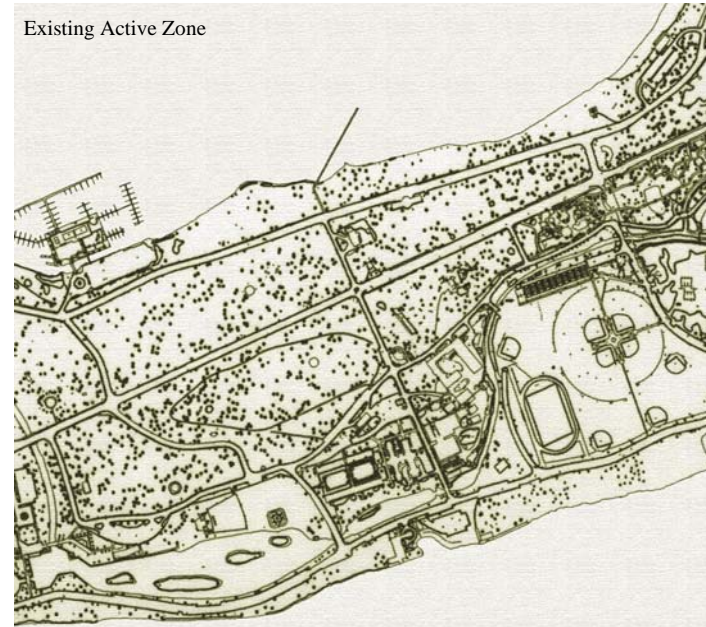


along the shoreline discourage water access. The plan recommends reconfiguring the road bringing it closer to the point to open views to the fountain basin and Sunset Point and converting the existing road to a parking area. A hardscape plaza is planned with a formal edge treatment along the water. Seating will also be provided to accommodate people coming to the island for lunch, or watching boats sail up the river throughout the day. It will continue to be the perfect spot to watch the Freedom Festival Fireworks.





Clockwise from right: plan of the Active Zone; the Conservatory in the background; the Belle Isle Greenhouses.



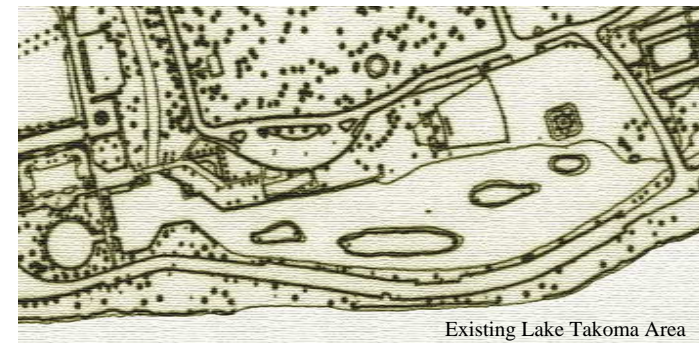
The Active Zone is located generally east of the Casino/Great Lawn area and west of the forest. It contains three major activity centers: the Cultural Campus, Athletic Complex and picnic area. The many picnic shelters, open fields, playgrounds and pathways accommodate group activities of all sizes.

ACTIVE ZONE



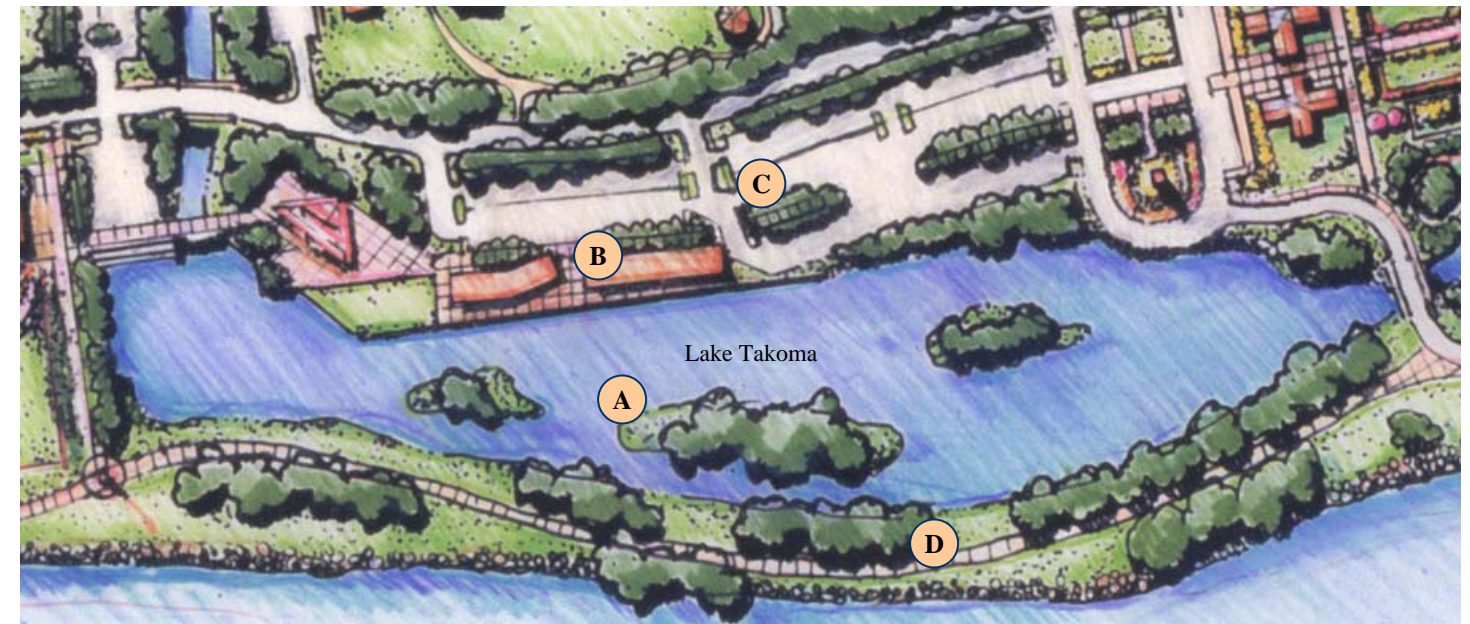
- ACTIVE ZONE**
- A. Lake Takoma Area
 - B. The Strand
 - C. Cultural Campus
 - D. North Esplanade
 - E. Picnic Grounds
 - F. Beach
 - G. Athletic Complex
 - H. Boat Club
 - I. Kid's Kingdom

Clockwise from right: plan of the Lake Tacoma area; plan of the Cultural Campus; example of open marketplace planned for the greenhouse area; parking areas at the Dairy Barns will make festive courtyard spaces; Lake Tacoma from Flynn Pavilion; Remick Bandshell is no longer a viable entertainment venue; park patrons at Boston Commons enjoy boating through a canal, similar programming could be enacted in Belle Isle.



Existing Lake Takoma Area

- A. Lake Takoma
- B. Renovated Flynn Skating Pavilion
- C. Parking
- D. The Strand



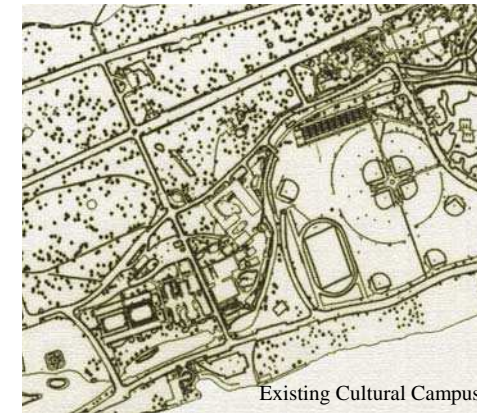
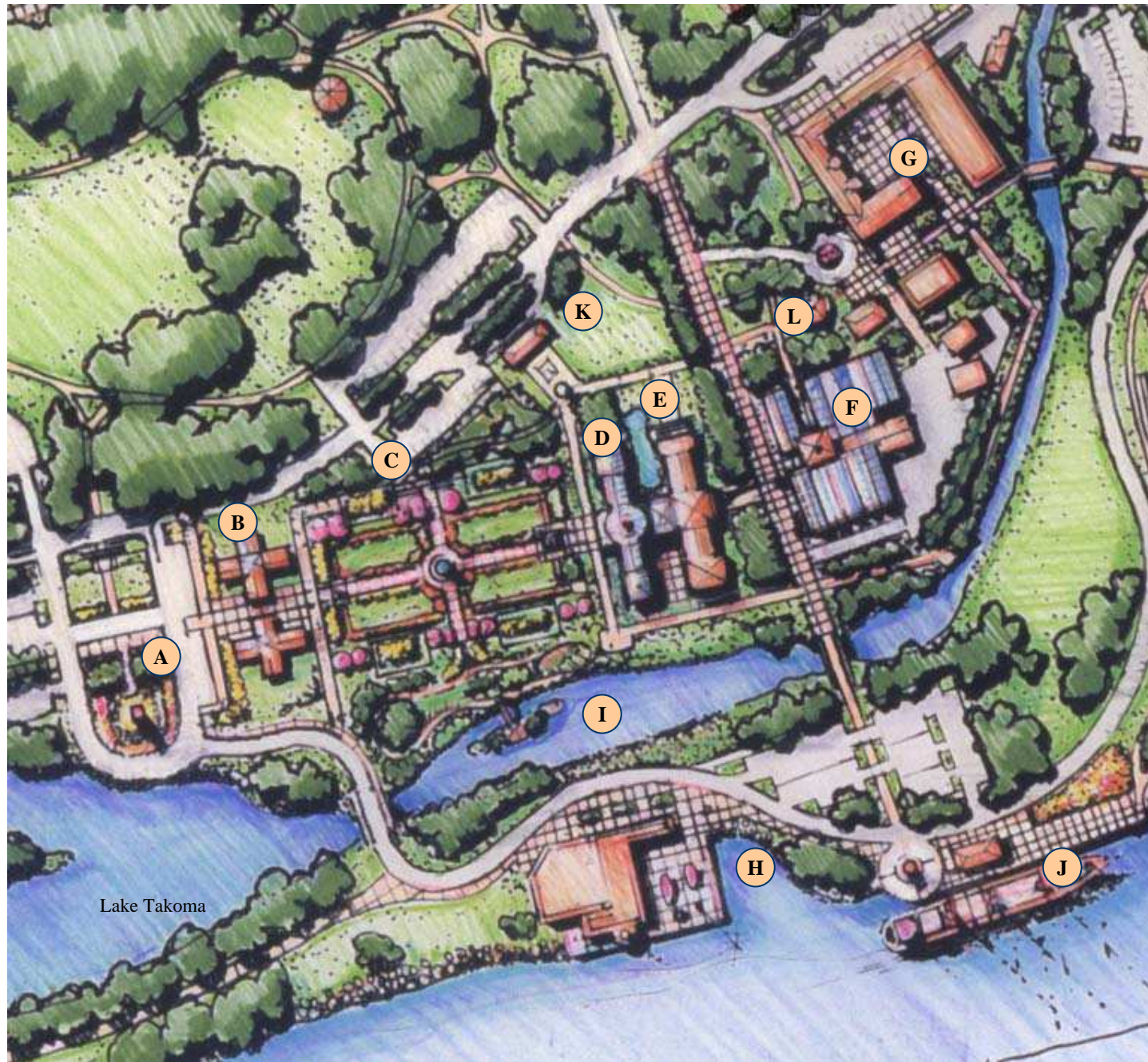
LAKE TAKOMA AREA

The Flynn Pavilion Remick Bandshell and Nancy Brown Carillon are located on the north shore of Lake Takoma. The area has been under utilized due to inconsistent programming for the bandshell and the unsightly condition of the lake. The Plan recommends restoring Lake Takoma to year round use by dredging and improving shoreline access. The lake is large enough for leisurely excursions and its location in the middle of the canal system makes it ideal for a new full service paddleboat and canoe pavilion, and reactivating ice-skating as an activity during winter. The newly renovated Flynn Pavilion could be a restaurant with a patio on the lake to support canoeing and ice skating activities.

performance venues throughout the City. It requires significant investment to address structural repairs and utility upgrades to make it a viable entertainment venue. The setting sun is in the audiences' eyes and the carillon chimes can disrupt performances. The Master Plan recommends removing the bandshell. The Master Plan recommends restoring Lake Takoma to year round use by dredging and improving shoreline access. The lake is large enough for leisurely excursions and its location in the middle of the canal system makes it ideal for a new full service paddleboat and canoe pavilion, and reactivating ice-skating as an activity during winter. The newly renovated Flynn Pavilion could be a restaurant with a patio on the lake to support canoeing and ice skating activities.

The need for Remick Bandshell is greatly diminished with the advent of nearby Chene Park Riverfront Amphitheater, the planned events lawn area next to Scott Fountain and other





- A. Carillon
- B. Orientation Center
- C. Formal Gardens
- D. Conservatory
- E. Aquarium
- F. Green Houses
- G. Dairy Barns
- H. Dossin Museum Area
- I. Japanese Garden
- J. Visiting Ship & River Taxi Mooring
- K. Aquarium/Bus Stop Shelter
- L. Inselruhe / White House



CULTURAL CAMPUS

The combination of the Conservatory, Aquarium, Johnson Gardens, Japanese Gardens, Children’s Gardens, Greenhouses and the historic Dairy Barns complex affords Belle Isle the opportunity to offer an unmatched educational and cultural attraction within the City. The advantages of creating a coordinated Cultural Campus are: the potential for related exhibits and events, shared administration and marketing costs and more efficient upkeep and maintenance.

The restored Nancy Brown Peace Carillon is the focal point of the main entrance to the new Cultural Complex. The Carillon is a tall landmark ideal for marking a point of departure for experiencing the cultural amenities of the island. Currently, the Carillon is isolated, the victim of years of neglect; formal landscape elements will anchor the Carillon within the complex. The Cultural Center needs to accommodate a large number of people in order for it to be a competitive and functional offering. The Plan proposes a parking lot holding up

to 200 cars and 8 buses, utilizing the space the Remick Bandshell now occupies. By removing the parking area at the side of the Conservatory and relocating it to the land vacated by the removal of the Bandshell, visitors can begin their experience by approaching the Conservatory’s graceful front elevation.

A pair of new buildings at the entrance to the Conservatory and Johnson Memorial Gardens function as operations offices for the cultural amenities and an orientation center for visitors. These new twin structures house a ticket area offering passes to all events, arranged in a variety of packages. The Orientation Center also contains a small theater, display area, gift shop, restrooms, stroller rental, Cultural Campus administration offices, cultural events planning office and a tram stop. The Orientation Center/Theater might feature a video detailing the history of the buildings, the Conservatory’s St. Louis World’s Fair roots, the Aquarium and the Albert Kahn designed Dairy

Barns. A plaza leads people from the parking area through the Orientation Center to the Johnson Formal Gardens beyond.

The main attraction of the Cultural Campus is the renovated Johnson Memorial Gardens and the Conservatory. Currently, the two-acre Memorial Gardens offer little more than a glimpse of formal garden planning. The renovated Gardens are planted for year round enjoyment; accent lighting, interpretative signs, refurbished pathways and ornamental fencing greatly enhance the setting and ability to draw visitors and necessary funding. The formal Gardens allow people a proper approach to the Conservatory building. Visitors will be able to use all their senses when walking through the garden. The beautifully restored beds with their sculptural elements will delight the eyes, the lush floral displays will perfume the area, and the carillon chimes will sound throughout the entire campus. The New Japanese Garden south of the complex will complement the Johnson Memorial Gardens.

Right to left from below: an old postcard of the Conservatory in full bloom; turrets on the Albert Kahn designed Dairy Barns; the Nancy Brown Peace Carillon with the Conservatory in the background illustrates how the Carillon can serve as the entry point for the Cultural Campus; the proposed Cultural Campus.

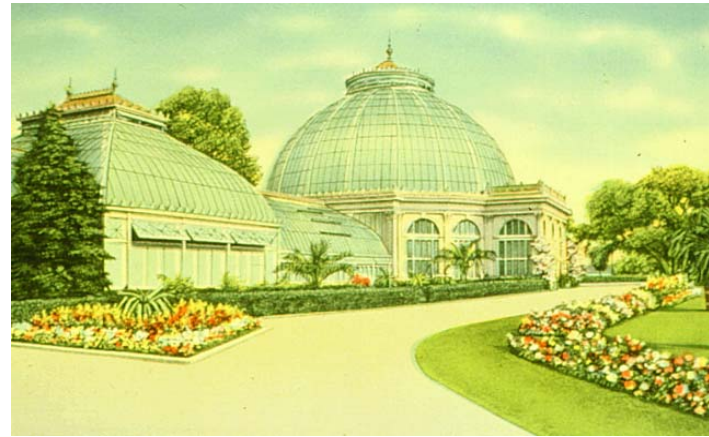


Photo by: Glen Calvin Moon



The Conservatory is as interesting as an architectural entity as it is as a Conservatory. It was built in 1904 to showcase plant life from around the world and is the most recognizable structure on the island. The great dome of the central space towers 60 feet overhead and the elegant ironwork and many glass panels evoke opulence and grandeur. The plan calls for complete restoration of the Conservatory area so it once again becomes a major attraction, with a new formal entrance to match the character and quality of the new and renovated gardens.

The Belle Isle Aquarium was built about the same time as the Conservatory and is on the National Registry of Historic places and closed to the public in 2005. Its ornate façade and tiled, vaulted ceilings and floorings reminded visitors they were entering the oldest public Aquarium in North America. The Plan suggests restoring the building and upgrading its capabilities for use as an interpretive center about the aquatic

life of the Great Lakes. One potential theme would highlight the ecological challenges caused by foreign ships traveling up the St. Lawrence Seaway, discharging ballast and introducing new aquatic species into the ecosystem of the Great Lakes. Additional outdoor space and a lawn area at the entrance accommodate the gathering of large school groups.

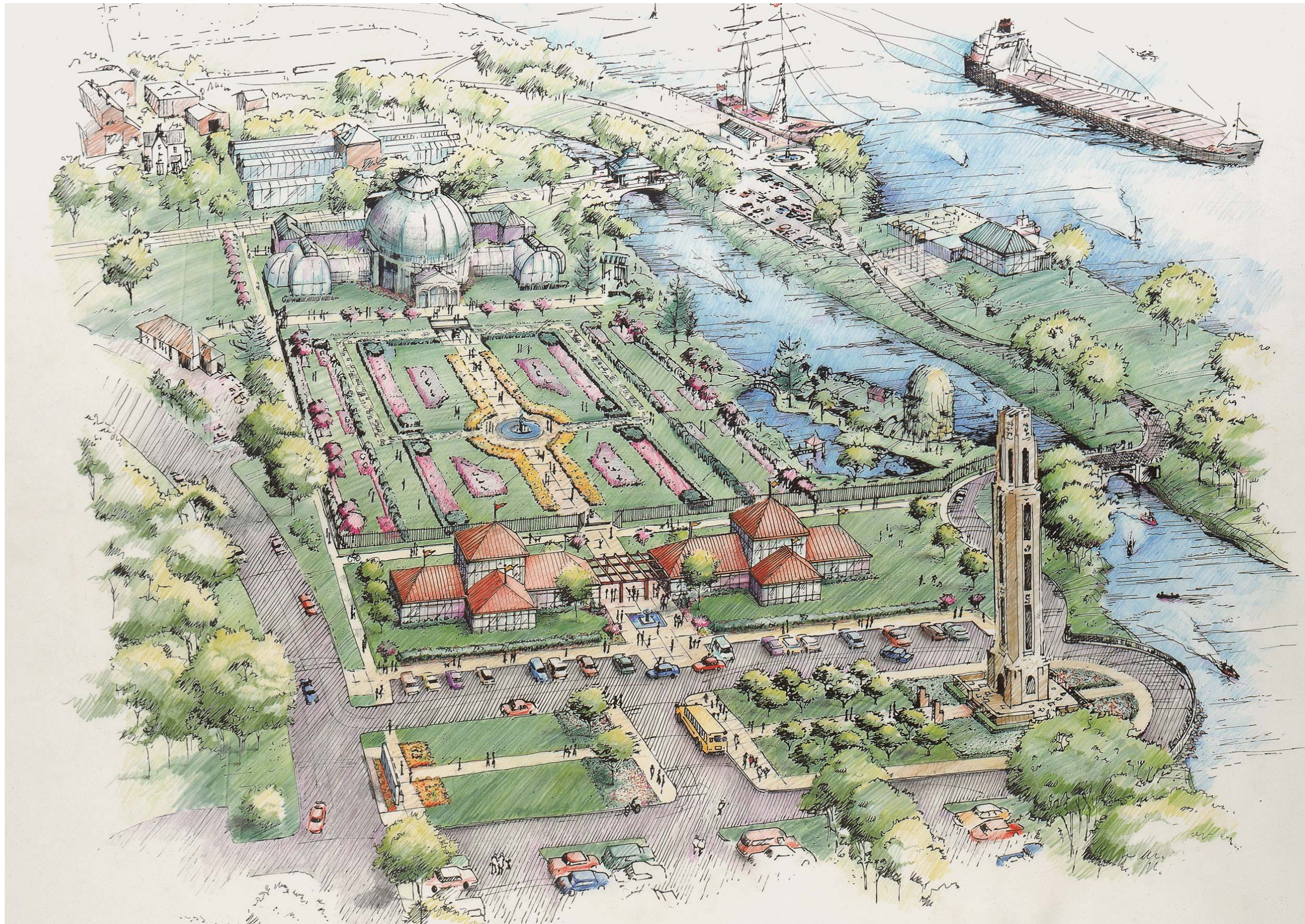
The Belle Isle Greenhouses stand east of the Aquarium. The buildings are closed to the public; deferred maintenance has rendered the building unsuitable for public viewing. They are listed on the National Registry and are inherently an attraction – restoration is necessary. The Plan recommends a concession agreement that retains a greenhouse grower to complete a commercial renovation that would ultimately offer year round plant and garden sales as well as instruction and classes.

The White House stands near the Greenhouses and currently houses the Belle Isle Park Administration facilities. The Plan

recommends converting the first floor to a small gallery on life on the island in the 1800’s, before the park existed. Photos, documents, artifacts and displays complement the architecture of the house and tell a part of island history few realize. The second floor would be available to park advocacy groups interested in restoring Belle Isle.

The Dairy Barn complex becomes the “village center” for the island. Designed by Albert Kahn, the barns are located right behind the White House and are specifically mentioned on the National Registry as historically significant buildings on Belle Isle. Although the buildings, courtyard and interiors represent high quality spaces that have outstanding public use potential, the area has long been used as a maintenance facility. The completion of a new state of the art maintenance facility at the entrance of the island will allow the Dairy Barn complex to be renovated and more sympathetically programmed.

The Plan calls for the creation of a mixed use artist retreat complete with sculpture and display areas, studios, classrooms and commercial space. The program functions as an “Urban Interlochen” where artists come in the summer to work, sell their goods and teach about their particular talent. The intent is to focus on urban artists allow them to display their wares and talent and generate visitor interest and participation. The courtyard with the restored cobble paving becomes space used for art shows, flower shows and other events; it will also contain a small refectory with outdoor dining. The Senior Activity Center is moved from the Casino to the restored part of this complex. The Police Horse Barn is programmed for conversion into a small Community Playhouse or Children’s Theater. The Dairy Barns also can provide lease agreements for small arts and crafts vendors, coffee house shops and picnic supplies.



Clockwise from right: the Barns currently hold the vehicle maintenance facility; before and after pictures of the Cultural Center Marketplace; the courtyard area is currently a maintenance yard. It offers great potential as a space for art fairs and other events. The horse barn on the left is proposed for conversion into a theater.



The old sawmill and drying buildings located next to the Dairy Barns are adaptively reused as educational display space. The sawmill is proposed for restoration as an operating mill demonstration exhibit. Special events have an educational/demonstration focus and a seasonal theme: making maple syrup in spring, creating holiday wreaths in winter, carving pumpkins in the fall and model boat display/modeling in summer, are the prime focuses of this part of the complex.

A covered market place ties together the Dairy Barn Complex, the White House and greenhouses. Originally built in the early 1930's, the existing maintenance garage building has large, double height windows on all sides. These garage doors can be opened onto the plaza in warm weather linking the Dairy Barns. Inside, a variety of Belle Isle related items will be for sale such as yard equipment and products from the Greenhouses, art supplies, antiques or maybe replicas from the White House era. Picnic tables inside and out will make this a

favorite stop for the Cultural Campus visitors enjoying the many attractions.

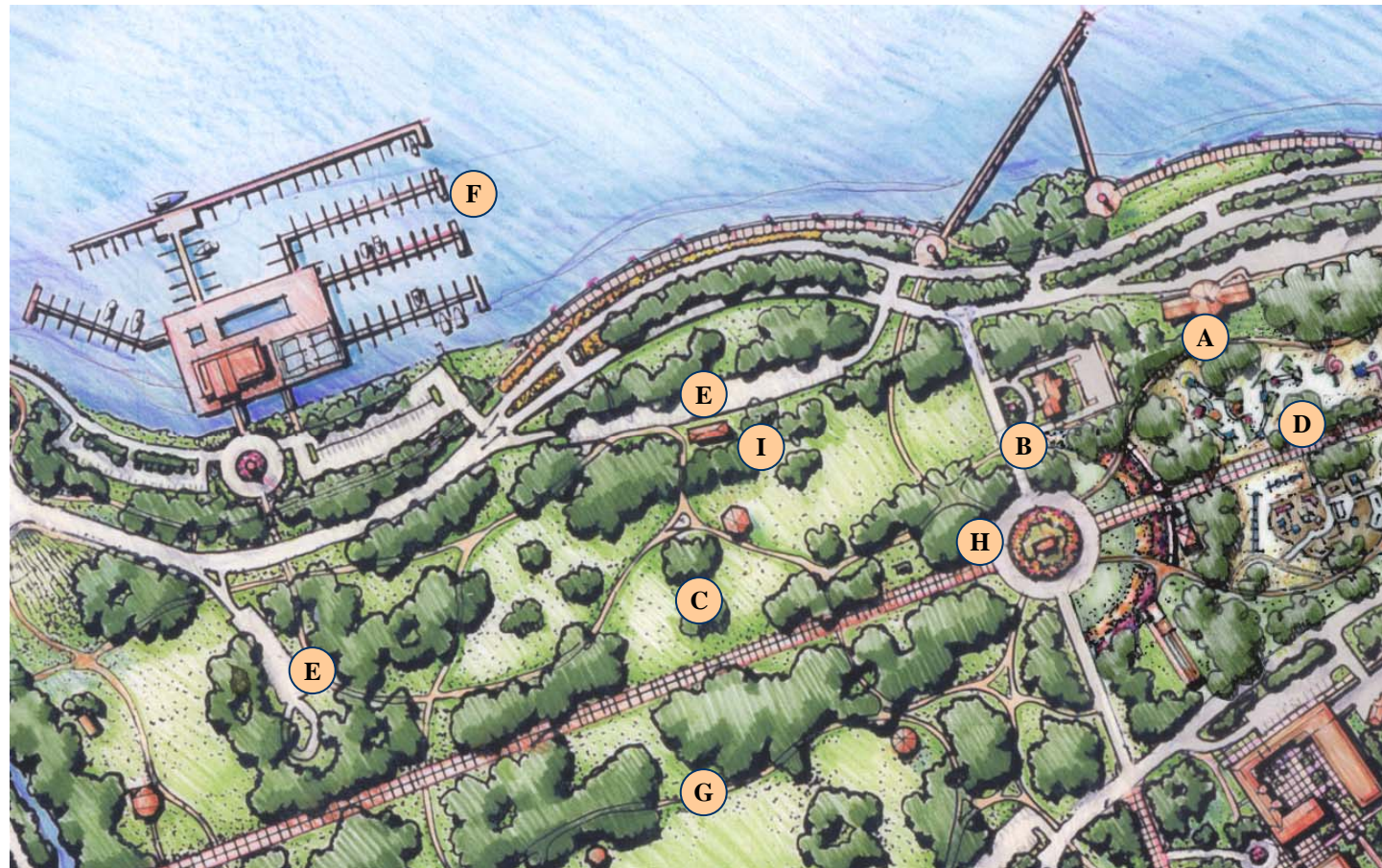
Currently, the museum is isolated from the Aquarium and Conservatory. The plan proposes that the museum be linked to the other amenities by a pedestrian system connecting uses and creating a campus. By developing the Japanese Gardens and the river walk, strong sequences of experiences are created and gaps that exist between these venues today are eliminated. New attractions infill to tie elements together and give visitors something of interest to experience as they walk from one venue to the next.

The Dossin Museum is a tremendously underutilized asset within the City of Detroit. This is an excellent venue for learning about the natural wonders of the Great Lakes. A new building addition entices visitors to view the many high quality displays housed at the Museum. At Dossin, the old seawall and



mooring facility are restored and activated for tour boats, water taxis and visiting tall ships. The shelter, built in the 1870's, is restored for use as a transit shelter (its original use) instead of its current use as a picnic shelter. Joint marketing efforts involving the entire Cultural Campus give the museum more exposure to potential visitors.





- A. Bath/Lunch Pavilion
- B. Historic Police Station
- C. Central Avenue
- D. Kid's Kingdom
- E. Converted Roads to Parking Areas
- F. Historic Boat Club Adaptive Reuse
- G. Paths
- H. General Williams Equestrian Memorial Roundabout
- I. New Comfort Station

Clockwise from left: plan of the main picnic area; the neglected Boat Club; memorials like the Major General A. S. Williams Memorial require a more dramatic setting if they are to be properly enjoyed.



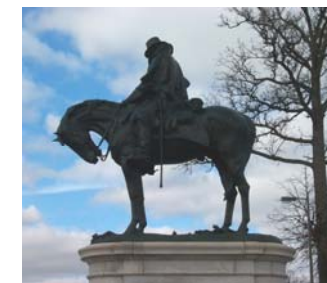
MAIN PICNIC AREA

The Plan recommends the renovation of existing picnic structures and comfort stations and adding new paths connecting the area to island amenities. The pathway system fulfills the intent of the 1883 Olmsted Plan. The new Belle Isle Kid's Kingdom is located near the giant slide. This enclosed play area features a new comfort station, updated play equipment and other special features, and is within sight of a large portion of the picnic area making it easier for parents to observe their children. Equipment appropriate for smaller children is located nearer the pavilions. Appropriate numbers of grills, picnic tables and trash receptacles are installed to serve picnickers. Signs guide the visitor through the picnic grounds and to attractions throughout the island. There is also a tram stop and dedicated parking for picnickers.



Parking is improved by converting Muse Road, Picnic Way and Old Riverbank Road into parking areas. Through traffic in the picnic grounds is limited to Inselruhe Avenue.

Additional parking lots off of Loiter Way are created to serve the southern portion of the picnic grounds. The plan recommends the number of parking spaces provided should respond to the capacity of picnic areas, reducing the potential for overuse and allowing specific areas to be temporarily closed



to allow for recovery. The Master Plan also recommends using natural methods where feasible to improve surface drainage in picnic areas. Improved drainage helps the areas dry quicker after a rain and allow necessary maintenance tasks to be accomplished on schedule, enhancing the overall park image.

The Plan proposes converting Central Avenue into a pedestrian mall when the North Shore Esplanade is completed. Automobile traffic is restricted and will have to adhere to a strict fifteen mile per hour speed limit. Central Avenue is narrowed and resurfaced with brick paving, benches and pedestrian scaled lighting that lines either side of the promenade creating a more appropriate setting for its many monuments. Landscape plantings also help create a

comfortably pedestrian scale. Ice sculpture contests, car parades, walk-a-thons and leisurely strolling are all possible in this newly created space.

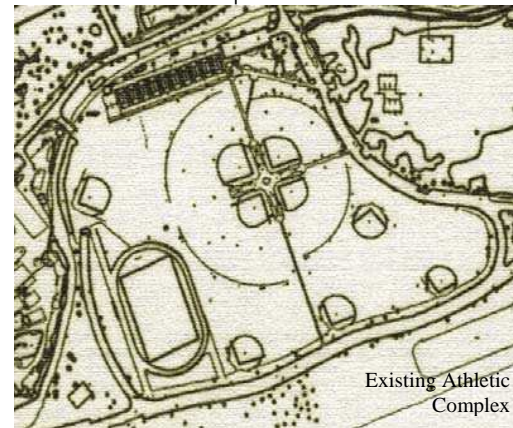
BOAT CLUB

The Boat Club is in imminent danger of being lost through neglect. The Master Plan recommends the historic building be restored and used as a multi-purpose facility featuring a restaurant and conference center. It becomes a place to rent water recreation amenities such as jet skis, kayaks, or boat shells for rowing. New transient and seasonal slips accommodate boaters and there is a stop for the river taxi service. The Boat Club continues to house the Detroit Rowing Club by providing improved facilities for training, teaching and competitive events.



Left to Right: Martial Arts Tournament in Athletic Complex; the proposed Court Plaza provides opportunities to play, watch and teach various hard court sports and activities; the Smith Memorial Flagpole as it exists today has no context or apparent purpose.

- A. Soccer / Rugby Field
- B. Tennis Courts
- C. Baseball and Softball Fields
- D. Football Field and Track
- E. Open Multi-Purpose Recreation Court Plaza
- F. New Bridge & Roadway Alignment
- G. Convert Existing Drive to Parking
- H. Convert Existing Historic Bridge to Pedestrian/Bike Use
- I. Sports Pavilion
- J. New Parking Area
- K. Open Field



ATHLETIC COMPLEX

The Athletic Complex is the third major component of the Active Zone. Used by leagues, schools, families and individuals, this portion of the park receives steady visitation throughout the warmer months. There are severe drainage problems, as on other parts of the island, and access and parking concerns need immediate attention.

The major changes espoused in the Plan involve the creation of new off street parking, and a more direct access plan. Currently, six lanes of The Strand bisect the large open space south of the ball fields that once served as the Parade Grounds. This area is the largest open space on the island without any trees, has a favorable southern exposure and over 1000 feet of shoreline. Removing The Strand from the water edge directs automobile traffic onto Loiter Way offering maximum exposure to the Cultural Campus area and allows visitors to use this large, open space for any number of recreational activities.

The Strand is now an extra wide portion of the island’s loop bike path, well removed from cars, that winds its way uninterrupted from the Casino to the Smith Memorial flagpole. The Court Plaza - a new recreational feature is situated at the flagpole at Rio Vista Drive. The existing drive is converted to off-street parking when Rio Vista is reconstructed

to a new alignment. This alleviates the dangerous practice of parking on the street and walking up to half a mile to reach the fields. A new bridge is constructed to ease the flow and eliminate the existing right angle turn. The existing historic bridge is then converted to pedestrian/bike use to connect the athletic facility to the Environmental Center and beach area. The bike path winds its way through a bright, multicolored paved surface that will have courts for roller hockey, basketball, shuffleboard, inline skating and other hard surface court sports. Informal spectator seating is incorporated into landscape mounding accented with special plantings and

lighting and is a highly visible attraction along the drive. The plan recommends drainage improvements for the soccer/rugby field and redesign of four tournament ready ballfields. New lights, irrigation, bleachers, dugouts, fencing and even a Sports Pub make Belle Isle’s fields appropriate for everyday use as well as special leagues and championship games.



Right: plan of the Natural Zone;
 Below right: the abandoned horse stable building was once the Central Market building on Cadillac Square in downtown Detroit prior to being moved to Belle Isle and converted into a stable. It has since been moved to Greenfield Village in Dearborn.

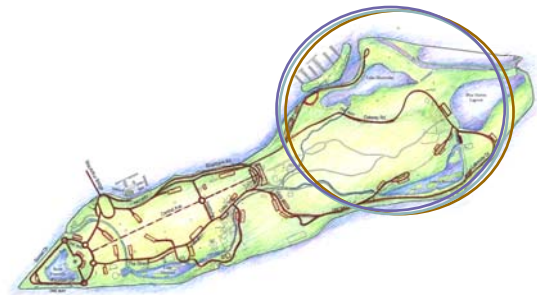


NATURAL AREA

- A. Convert Existing Roads to Paths in Wooded Area
- B. Golf Course & Golf Training Center
- C. Blue Heron Lagoon Boardwalk
- D. Nature Zoo
- E. Livingstone Lighthouse Natural Area
- F. Group Picnic Areas
- G. Coast Guard
- H. Yacht Club
- I. Fishing Access Areas
- J. Reconfigured Oakway Drive
- K. Reopen Blue Heron Lagoon to River



NATURAL ZONE



The east end of Belle Isle has the most natural setting on the island; it contains Lake Muskoday, Lake Okonoka, Blue Heron Lagoon and a 200-acre climax forest. The forest is historically as well as environmentally important; it represents one of the few remaining unaltered landscapes in Southeast Michigan since European settlement. The Plan recommends reducing the impact of automobiles on the woodland by eliminating traffic from one of the two woodland drives and turning the roadway over to non-motorized uses. Cars will still have access to the woods as part of the island 'auto tour' experience. Oakway Road remains routed around the new golf course and through the woods before connecting to Riverbank Road.



Clockwise from below: The Fallow Deer exhibit, Nature Center renovations; existing Blue Heron Lagoon; proposed boardwalk looking back to the overlook; a wetland pond featuring native Michigan amphibians and related animals.



NATURE CENTER RENOVATION

The building’s location makes it an ideal candidate for renovation as the centerpiece structure for the east end of the island that will anchor activities in the Blue Heron Lagoon area. The building will service the expanded Nature Zoo programming and the Blue Heron Lagoon. In addition to the Nature Zoo programming, the building has a grill, fishing tackle shop, model boat club meeting space, conference space and public restrooms. An outdoor seating area for the grill is located on the lagoon side of the building. Parking is located west of the clubhouse so pedestrian activity around the Lagoon and golf course is uninterrupted.

A variety of new programs can exist when the Nature Zoo complex is completed. In addition to summer activities, cross-country ski equipment can be rented in winter with hot chocolate, cider and donuts served at the grille. Expanding the winter programming will increase winter use of Belle Isle;

currently, less than 15% of all park visits occur during the winter months.

The Nature Zoo will also have a zoo of native Michigan flora and fauna including black bear and cougar. The population of European Fallow Deer will be relocated to a safe and spacious habitat at the Nature Zoo.



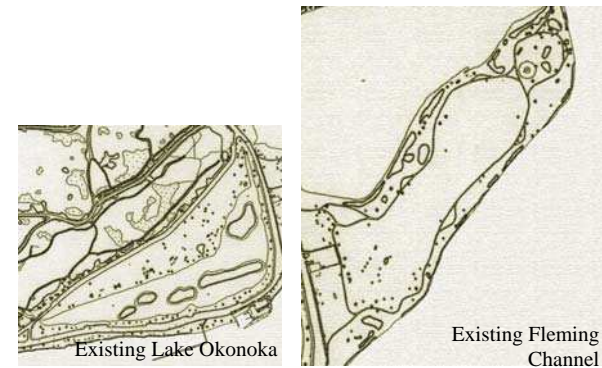


BLUE HERON LAGOON

A new circular floating boardwalk extends into the Blue Heron Lagoon expanding recreational opportunities around the water. The formal geometry of the boardwalk will contrast with the naturalized vegetation and edge treatment for the rest of the Lagoon. The boardwalk is effective in providing public access to the lagoon and newly restored prairie plantings on the north end of the lagoon while keeping people from unintentionally strolling onto the golf course. In summer, model boat regattas and fishing clinics will be popular attractions. In winter, ice-skating and ice fishing will draw visitors to the park.



Clockwise from right: plan of the group picnic area around Lake Okonoka; plan of the Livingstone Lighthouse broad meadow area; the Livingstone Lighthouse is obscured by vegetation negating its original purpose; the Livingstone Lighthouse could be the focal point for the new meadow area; the historic water intake facility in the river; an example of paths and natural areas in Ann Arbor's Gallup Park.



- A. Road converted to Parking
- B. The expanded Lakeside Drive
- C. Group Picnic Area
- D. Wildflower Meadow
- E. Livingstone Lighthouse
- F. Renovated Natural Planting Area
- G. Paths



PICNIC AREA

Lakeside Drive extends into the Livingstone Pointe creating a space around Lake Okonoka that is programmed for large groups such as the annual Boy Scout jamborees, church picnics and family reunions. A pavilion, informal ballfields, horseshoe pits and small children’s play area accommodates these group outings. Woodside Drive is converted into two loop parking areas and the Woodside Comfort Station is renovated with appropriate landscaping and lighting. The Comfort Station will be reactivated with a small concession that sells soft drinks, snacks, picnic supplies and general needs for park visitors.

A path connects this area to the forest trail system and extends to the river edge over the small islands in Lake Okonoka. The existing pier is turned into a boardwalk loop by adding a new section. Currently, the pier is not properly located or designed for fishing; by adding the section and appropriate lighting the potential for use of the pier area is increased. The City is

exploring a program with the Michigan Department of Natural Resources to create a sturgeon spawning area at the base of the pier.

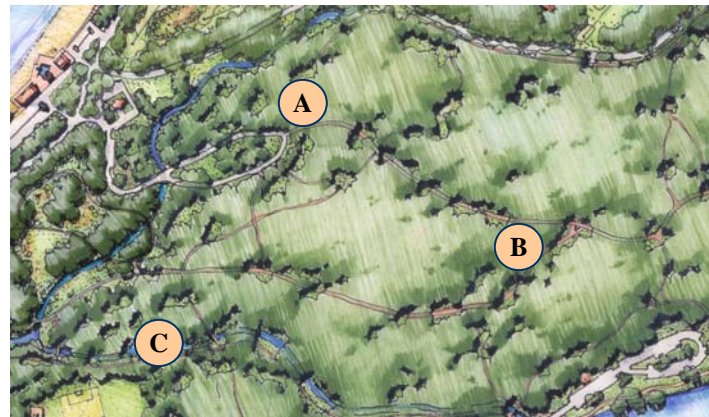
BROAD MEADOW

A native prairie landscape is expanded, creating a broad informal area for picnicking and passive recreation on Livingstone Point. The pathway system circles through the area past the lighthouse to the Blue Heron Lagoon ultimately connecting to the boardwalk. The broad meadow area is graded to create gentle slopes and open views to and from the lighthouse. The Livingstone Lighthouse has been previously renovated, but vegetation should be thinned around the building to open views of the river.





Clockwise from below: plan of the trail network in the forest; existing woodland road; proposed woodland path; examples of trail system uses.

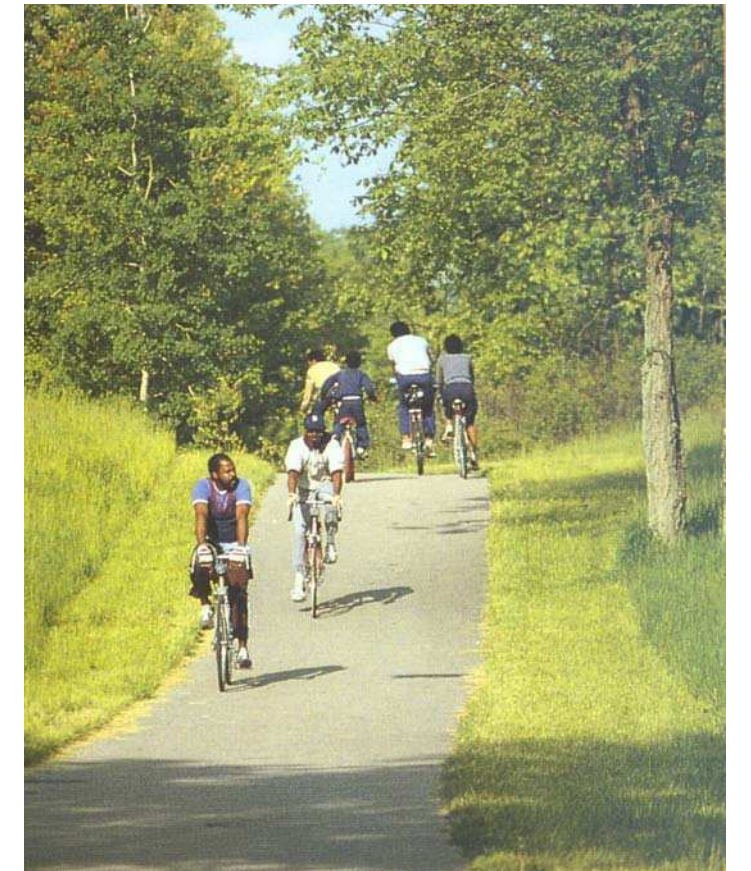
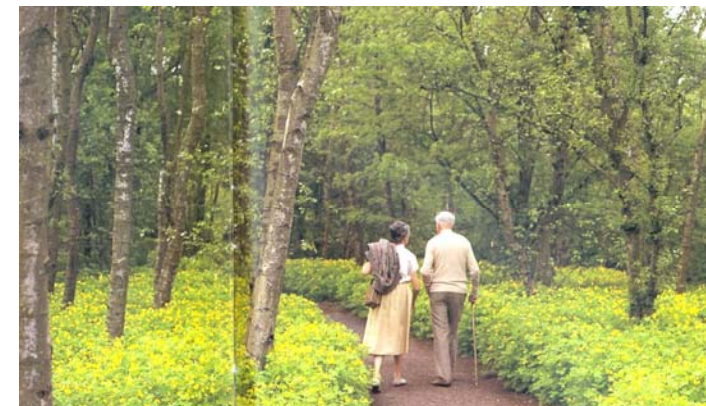


A. Realigned Oakway Drive
 B. Trails through Woods
 C. Trail Connections to Environmental Awareness Center



TRAIL NETWORK

The Master Plan recommends restoring and expanding the existing trail system through the forest. Roads are converted to trails for non-motorized use. Hard and soft surfaced trails accommodate recreational needs from roller blading and biking to leisurely strolls through the woods. Hard surfaced trails are accessible for all users. Non-native plants such as Buckthorn and Canary Reed Grass are eradicated. Interpretive signage and outdoor hiking opportunities closely link the trail network to the Nature Zoo programs. A signage system posted at all intersections indicates directions to the nearest landmark.

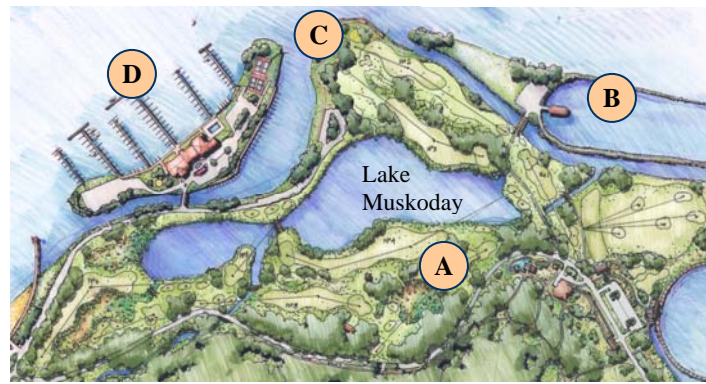




Clockwise from below: plan of the golf course area; the new golf practice facility has already been built as a result of the Master Plan and funding by Ford Motor Land; example of how using a boardwalk connects the shoreline to the pathway system while defining a maintainable edge at the swimming beach; plan of the north shore esplanade/beach area; existing views of the north shore; the putting course; the chipping bunkers; the historic pumping station.



- A. Golf Course
- B. Historic Water Intake Facility
- C. Fishing Point
- D. Detroit Yacht Club



GOLF COURSE

The existing golf course, at just over 1,800 yards, is far too short for today’s golfers and their equipment. The holes are too tight, and tees and greens are dangerously positioned for the modern game. The starter house does not offer a place to purchase items such as balls, gloves, caps or towels. The golf course loses money each year, yet in most parks, golf courses are the biggest revenue generators.

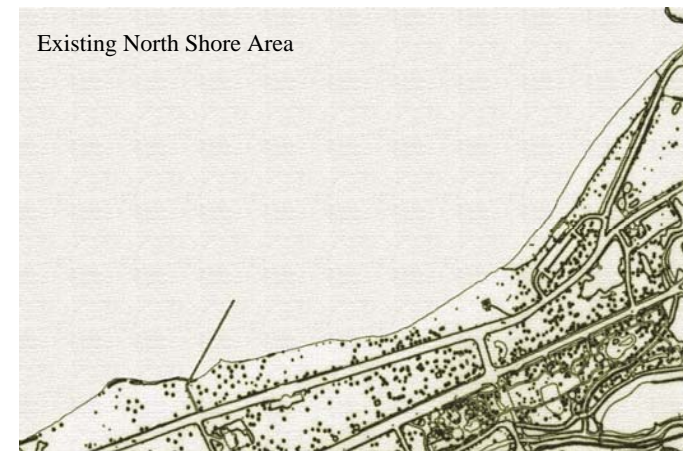
A complete golf course renovation is proposed. The first tee is next to the clubhouse by the new driving range. The nine hole, par 36 course is routed on both sides of Lake Muskoday featuring five water holes and playing just under 3,500 yards. There are four par fours over 400 yards and two par fives over 500 yards, including Hole 4 that plays 560 yards long from the back trees. The course challenges the low handicap golfer yet accommodates the higher handicapper by careful placement of tees and bunkers. High School matches, special exhibitions

and teaching clinics will be held at the newly renovated golf course.

A new practice area featuring a driving range, practice green, sand bunker and chipping areas was completed in 1998-99 per Master Plan recommendations, through support of the Ford Motor Company. The popular and highly successful facility offers programs run through First Tee, a PGA organization introducing youth to the game of golf. The facility will be blended with the new golf course development.

Access is maintained to the fishing point east of the Yacht Club by way of a loop drive using part of the existing roadway and path; and to the water intake house for City maintenance and repair workers through the Clubhouse parking lot. Accent lighting is proposed to accentuate its historic architecture.





- A. Beach
- B. Bath House, Refectory & Waterslide
- C. Group Picnic Shelter
- D. Renovated Pier
- E. Boardwalk
- F. Boulevard Drive
- G. Convert Existing Road to Parking
- H. Renovated Police Station (Adaptive reuse as support facilities for Boat Club & Casino Banquet/Conference Facilities)
- I. Pedestrian Esplanade

NORTH SHORE ESPLANADE/BEACH

If Belle Isle is to have a riverfront drive, it should be one with spectacular views of Detroit. Currently Riverbank Road is almost 200 feet from the shoreline, greatly reducing the opportunity for off shore views. The existing roadway is six lanes wide and one way, trapping land along the shoreline and segregating it from the picnic area. By activating the shore with a public walkway that connects the bridge and mainland to the beach, an entirely new experience is created. Spectacular views of the shoreline are captured and the wide promenade can be programmed for island uses. The esplanade’s amenities such as benches, lighting, etc. are inspired by the MacArthur Bridge architecture.

Several critical goals are accomplished by creating a boulevard closer to the river: it provides Detroit with views of the skyline; it allows people to easily cross the road from the picnic grounds; it creates two way access and eliminates the need to

drive around the island to get to the Yacht Club, beach and other north shore activities; it activates the existing pier as an overlook; and it allows sections of the old road to be converted to much needed parking areas for picnic uses.

The beach area is expanded and a boardwalk delineates the beach from the surrounding uses. The boardwalk curves into the water north of the beach near the Yacht Club before connecting to the esplanade. A new bathhouse located near the existing water slide has changing / restrooms. A concession facility and parking area are available for beach and boardwalk users. Programming is expanded at the beach to include volleyball, parasailing, kayaking and sailboard rentals. The renovated beach area is the prime place to observe the annual hydroplane races.







IMPLEMENTATION

COST ESTIMATE

Budget estimates were generated for work outlined in The Master Plan. The Preliminary Budget Estimate indicates quantities, units and costs for projects to be implemented over fifteen years. The park was divided into seventeen sections, as shown on the map above. Each component delineates a specific project or part of the island that would be developed at the same time. Projections for funding sources are suggestions only and do not represent inquiries or commitments.

The entire renovation of Belle Isle will cost over \$248 million dollars. This is \$68 million dollars more than reported in the 2000 version of the Master Plan book. Those numbers were based on 1997 figures. Inflation, escalation and a more detailed building inventory and cost estimate are attributed to the budget increase. The complete Preliminary Budget Estimates are included *Part Two: Technical Assessment Report*.

PROGRAM COMPONENTS

- A. Jefferson Entrance
- B. Arrival Point
- C. Maintenance Complex
- D. Scott Fountain Area
- E. Sunset Point
- F. Great Lawn and Casino Area (Events Area)
- G. Lake Takoma Strand
- H. Cultural Campus
- I. Central Picnic Area
- J. Athletic Complex
- K. Forest Area
- L. Group Picnic Area
- M. Blue Heron Lagoon
- N. Golf Course Area
- O. Beach Improvements
- P. North Shore
- Q. Boat Club

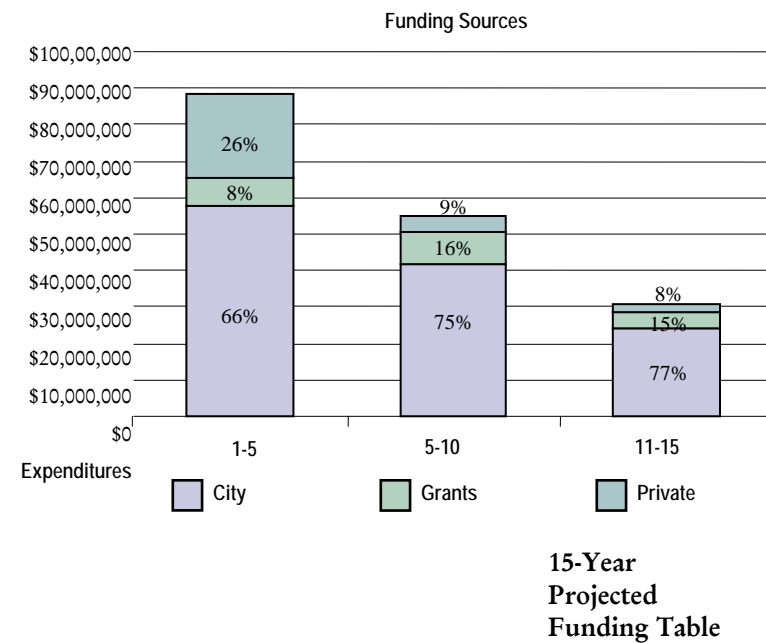
PRELIMINARY BUDGET ESTIMATE SUMMARY

Program Components	Est. Cost Total	Implementation Timeframe (Years)							Potential Source of Funds					
		1	2	3	4	5	6-10	11-15	City	MDNR/EQ	USACOE Shorelines	TEA 21 Transportation Enhancement	Patron/Private	
A Jefferson Entrance														
Boulevard Adjustments Shoreline Stabilization Pedestrian/ Bike Paths MacArthur Bridge Promenade Site Furnishings	\$ 4,236,000	\$127,080						\$4,108,920	\$ 2,977,486	\$ 1,068,925	\$ 354,200	\$ 37,950	\$ 0	
B Arrival Point														
New Roadways Shoreline Stabilization Pedestrian / Bike Paths Arrival Monument Entrance Plaza	\$ 4,934,000				\$493,400	\$1,480,200	\$2,960,400		\$ 3,644,977	\$ 221,375	\$ 36,179	\$ 18,975	\$ 1,056,275	
C Maintenance Complex														
Remove Harbor Master Building Roads / Parking/ Service Yard Shoreline Stabilization Fencing Harbor Master Boat Slips Maintenance Buildings New Harbor Master Building Radio Building Renovation	\$ 18,783,000	\$3,756,600	\$5,634,900	\$7,513,200	\$1,878,300				\$ 18,579,949	\$ 0	\$ 203,222	\$ 0	\$ 0	
D Scott Fountain Area														
Fountain Plaza Roads / Parking Walkway Promenade Shoreline Stabilization Pedestrian / Bike Paths Scott Basin	\$ 11,173,000				\$446,920	\$2,783,250	\$3,910,550	\$4,022,280	\$ 10,107,645	\$ 0	\$ 139,150	\$ 66,413	\$ 860,200	
E Sunset Point														
Roads / Parking Shoreline Stabilization Pedestrian / Bike Paths Promenade Edge Treatment Point Plaza Refectory Improvements at Basin	\$ 3,371,000	\$505,650	\$1,348,400	\$1,516,950					\$ 2,522,719	\$ 698,913	\$ 55,660	\$ 93,610	\$ 0	
F Great Lawn and Casino Area (Events Area)														
Roads / Parking Shoreline Stabilization Pedestrian / Bike Paths Central Avenue Promenade Treatment Casino Site Renovation Administration Building Casino Kitchen Renovation	\$ 14,237,000				\$427,110	\$3,843,990	\$9,965,900		\$ 10,742,703	\$ 3,324,673	\$ 55,660	\$ 113,850	\$ 0	
G Lake Takoma Strand														
Road Repairs / Parking New Bridge at Casino Pedestrian / Bike Paths Lake Tacoma / Canal Improvements Flynn Pavilion Renovation New Boat / Canoe Facility	\$ 6,610,000	\$661,000	\$859,300	\$1,123,700			\$2,644,000	\$1,322,000	\$ 4,223,412	\$ 808,708	\$ 331,177	\$ 75,900	\$ 1,171,264	
H Cultural Campus														
Inselruhe Conversion to Plaza Roads / Parking Entrance Plaza @ Carillon Courtyard Plaza Pedestrian / Bike Paths Shoreline Stabilization Visiting Ship Mooring Edge & Plaza Visiting Ship Shelter Restoration Dossin Museum Display Mall Tram System Inselruhe House Cont. Restoration Japanese Garden Botanical Gardens Conservatory Restoration Aquarium Restoration Greenhouse Restoration Service Garage Adaptive Reuse Sawmill Restoration Satellite Maintenance Building Barns Renovation Historic Bus Shelter Restoration Dossin Museum Renovation Cultural Campus Orientation Center Carillon Tower Restoration Children's Garden Sculpture/Display Garden	\$ 54,856,000	\$2,742,800	\$8,228,400	\$8,228,400	\$10,971,200	\$10,971,200	\$11,519,760	\$2,194,240	\$ 47,206,406	\$ 2,777,308	\$ 150,535	\$ 75,900	\$ 4,645,713	
I Central Picnic Area														
Informal Play Areas Kid's Kingdom Roads / Parking Pedestrian / Bike Paths Monument Restoration Picnic / Site Furnishings New Comfort Station / Shelters Picnic Shelter Renovations Bear Pit Comfort Station Renovation Police Building Adaptive Reuse	\$ 20,742,000	\$414,840	\$414,840	\$414,840	\$829,680	\$1,037,100	\$10,371,000	\$7,259,700	\$ 13,599,174	\$ 1,280,813	\$ 0	\$ 237,188	\$ 5,624,901	

BELLE ISLE PARK **TABLE A**

Program Components		Est. Cost Total	Implementation Timeframe (Years)						Potential Source of Funds					
Area			1	2	3	4	5	6-10	11-15	City	MDNR/EQ	USACOE Shorelines	TEA 21 Transportation Enhancement	Patron/Private
J Athletic Complex	Lighting Field Renovation Sports Plaza Roads / Parking Pedestrian / Bike Paths Shoreline Stabilization Plaza @ Athletic Pavilion Smith Flag Monument Restoration Athletic Building Renovation New Vista and Nashua Bridges New Pedestrian Bridge	\$ 15,810,000	\$790,500	\$2,371,500	\$1,581,000	\$2,371,500	\$158,100	\$7,905,000	\$632,400	\$ 14,580,124	\$ 379,500	\$ 452,238	\$ 113,850	\$ 1,487,560
K Forest Area	New Roadways Pedestrian Bike Paths Woodland Wildlife Management Programs Interpretive Landscapae in Forest Nature Zoo (not in Cost Estimate)	\$ 5,856,950	\$351,420	\$351,420	\$234,280	\$493,400	\$58,570	\$2,928,450	1,815,670	\$ 3,603,950	\$ 123,500	\$ 0	\$ 113,850	\$ 12,650
L Group Picnic Area	Roads / Parking Pedestrian / Bike Paths Shoreline Stabilization Fish Habitat @ Pier / Stock Canals Woodside Comfort Station Renovation Pier Improvements Pedestrian Bridges Picnic / Site Furnishings New Group Picnic Pavilion w/ Restrooms Grand Picnic Pavilion New Group Picnic Shelter	\$ 12,185,000	\$365,550	\$1,827,750	\$1,218,500	\$1,218,500	\$1,218,500	\$3,899,200	\$2,437,000	\$ 9,212,675	\$ 1,916,491	\$ 511,819	\$ 290,950	\$ 253,000
M Blue Heron Lagoon	Roads / Parking Pedestrian / Bike Paths Shoreline Stabilization Interpretive Features Reshape Lagoon / Dredge to Create Habitat New Picnic Structures Broad Meadow Landscape Wetland Enhancement Blue Heron Floating Boardwalk	\$ 5,992,000			\$59,920	\$419,440	\$419,440	\$599,200	\$4,494,000	\$ 4,280,590	\$ 1,151,150	\$ 0	\$ 94,875	\$ 464,888
N Golf Course Area	New Nine Hole Golf Course Blue Heron Plaza New Bridge Relocate Gazelle Sculpture Roads / Parking Pedestrian / Bike Paths Remove Comfort Station Shoreline Stabilization Oakway Refectory / Comfort Station Renovation Wetland Mitigation	\$ 7,612,000	\$1,141,800	\$2,664,200	\$3,425,400	\$380,600				\$ 5,287,953	\$ 0	\$ 0	\$ 0	\$ 2,323,656
O Beach Improvements	Roads / Parking Pedestrian / Bike Paths Remove Comfort Station Beach Enhancement Cont. Improvements to Beach House Beach Volleyball Beach Pier Overlook Oxbox Point Seawall Improvements Shelter @ Oxbow Point New Beach Refectory	\$ 7,988,000	\$1,198,200	\$798,800	\$399,400	\$1,597,600			\$3,994,000	\$ 6,944,708	\$ 888,916	\$ 0	\$ 91,080	\$ 63,250
P North Shore	Roads / Parking Pedestrian / Bike Paths North Shore Boulevard Pier Improvements & Additions Plazas Promenade Edge (shallow water) North Shore Pedestrian Promenade	\$ 11,741,000						\$5,870,500	\$5,870,500	\$ 9,620,620	\$ 1,233,375	\$ 526,873	\$ 234,025	\$ 284,625
Q Boat Club	Roads / Parking Pedestrian / Bike Paths Remove Existing Docks New Entrance Drive under Bridge Shoreline Stabilization New Bridges New Marina boat Slips Site Amenities and Furnishings Boat Club Renovation	\$ 41,878,000	\$4,187,800	\$10,469,500	\$10,469,500	\$12,563,400	\$4,187,800			\$ 5,427,483	\$ 126,500	\$ 189,750	\$ 0	\$ 36,089,818
MASTER PLAN TOTAL ESTIMATED COST		\$ 248,005,000	16,243,240	\$34,969,010	\$36,185,114	\$33,714,822	\$26,168,193	\$62,574,010	\$38,150,710	\$ 168,958,624	\$ 15,876,646	\$ 3,006,462	\$ 1,544,565	\$ 54,325,148

It is important to note that the following estimates were generated using 2005 dollars. Costs were developed from the Master Plan document updated in 2005, utilizing current industry information and input from Detroit Recreation Department. They were developed to indicate magnitude and must be refined through more detailed analysis, programming, design and engineering.



Funding methods used to finance the Master Plan improvements for Belle Isle should be as varied as the different activities planned for the park. Implementation of the Master Plan requires a funding strategy to raise \$248 million (based on 2005 dollars) over a fifteen-year period (Table B).

RESOURCES AND REVENUES

Belle Isle Park could be a tremendous revenue producing Park. The Park and the City of Detroit lack the necessary cash to enhance and improve the Park to the level it once was. The Park should seek qualified private businesses willing to invest in the Park as well as find sponsors to help support amenities in the Park. To accomplish this will require a revenue team of Park Professionals who understand business practices to seek out sponsors and private contractors who will provide capital and management expertise.

Also the Park requires a good Business Plan to implement the recommendations outlined in the Master Plan for staff to follow and to provide the necessary pro-forma's to truly articulate the revenue that can be gained and the expenses to be incurred. These revenues come from a variety of sources to include land leases, admission fees, reservation fees, user fees, partnerships, public/private management fees, concessions, retail operations, friends groups, sponsorships and partnerships. This will require the entire Detroit Metro area to be supportive of reinvesting in Belle Isle as an economic and re-positioning tool for the city. Many cities have over come similar situations that have plagued Belle Isle. The cities include New York City Central Park, City of Dallas Fair Park, Grant Park in Chicago and Griffith Park in Los Angeles.

The Plan provides a number of improvements that need to be made all of which will support the revenue to support the Park.

DETAILED SOURCES AND USES				TABLE B
				BELLE ISLE PARK
City of Detroit	State of Michigan	Federal Grants	Federal Enhancement Grant	Patron/Private
\$168,958,624	\$15,876,646	\$3,006,462	\$1,544,565	\$54,325,148
Sources:				
General Obligation Bonds Revenue Bonds Fees	Department of Natural Resources Grants Dept. of Environmental Quality Grants	USACOE	TEA 21 Other Federal Grants	Foundations Non-profit Organizations Corporate Sponsorships Private Investment Endowments
Uses				
Site Preparation Site Utilities Site Improvements New Roadways Bridge Improvements Parking Improvements Site Furnishings Picnic Tables, Grills, Waste Receptacles Playscape Improvements Landscape Improvements Landscaping Irrigation Systems Broad Meadow Landscapes Wetland Enhancement Building Renovations Casino Building Renovation Greenhouses Comfort Stations New Building Construction Administration Building Maintenance Buildings Harbor Master Building and Boat Slips Pier Improvements and Additions Public Plazas	Shoreline Stabilization Visiting Ship Mooring Edge Visiting Ship Plaza Special Promenade Treatment Promenade Furnishings Comfort Stations Mac Arthur Bridge Promenade Site Furnishings Pier Improvements and Additions Plazas Blue Heron Lagoon Improvements Fish Habitat at Pier and Canals Lake Takoma and Canal Improvements	Shoreline Stabilization	Pedestrian/Bicycle Pathways Pedestrian Promenade	Arrival Point Monument Pedestrian Promenade Monument Restorations Site Furnishings Athletic Building – Sports Pub Boat Club Renovations Marina Boat Slips Bridge to Boat Club Cultural Campus Site Improvements Carillion Renovation Structure Renovations Landscape Improvements Garden Renovations Ecology Exhibit Interpretive Features Flynn Tavern Renovation Golf Course Golf Course Club House Police Station Adaptive Reuse Sports Plaza Basketball Courts Picnic Structures – New and Renovated

The City should allow the Park to manage revenue in a proactive manner, not defensively. What has been in place and allowed to occur over the last forty years has not worked. It needs new energy and a major change in how the Park is managed and financed to bring it back and reposition it as a part of the grand plan for the City of Detroit.

It is anticipated that enhancing existing amenities and developing new programs where fees can be charged can raise revenue. The collected fees would be directly returned into the Belle Isle coffers. Many sources of income were investigated,

including: the Cultural Campus, the athletic facilities and programs, marine operations, rentals, contracts, permits, sales and special events. Suggestions were made for public and private revenue opportunities for all areas in the park designated and are detailed in the Implementation section of the Technical Report.

These revenue opportunities are contingent upon the park having an overall Business Plan in place that can guide staff and allow them to manage revenue productivity not defensively. A

revenue philosophy and plan must be established that will incorporate the management principles outlined in the report.

The best financing strategy is one that provides maximum benefit for leveraging, enhancement, and use of facilities on the island. Several sources of income were investigated, including: the Cultural Campus, athletic facilities and programs, rentals, contracts, permits, sales and special events. Enhancing existing amenities and developing new programs provides the opportunity to raise revenue. Collected fees would be directly returned into the Belle Isle coffers.

PRIVATE INVESTMENT

Public/Private Partnerships

Projects could be initiated by utilizing an investment strategy incorporating private funding. The City retains part ownership in the projects, leases the land to the development entity, or requires payment for licensing or usage. The

opportunity for public / private ownership is possible, especially given the historic nature of the existing Belle Isle facilities and their potential for revenue generating. By creating a structure that allows for private investment, financial mechanisms such as historic tax credits that are not available to public entities can be utilized. In most alternative ownership scenarios the ultimate public interest and control can be maintained through contractual arrangements.

Foundations

Foundations can contribute funds to pay for capital improvements and support activities directly related to cultural enhancement, recreation, and non-profit uses. These sources may include developing the Cultural Campus through the Detroit Historical Museum, Detroit Recreation Department, and the Detroit Zoo.

Patrons and Sponsors

A number of non-profit and sponsorship opportunities exist for raising funds necessary for improvement to the island. These include publicly accessible and family oriented uses – including public art, quality picnic areas, and family attractions. Sources of funds include private donations, memorials, bequeaths, fund raising campaigns and corporate sponsorships. There is a history of this type of fund raising on Belle Isle, such as funds raised by Nancy Brown to erect the Carillon and the many examples of monuments that were endowed by Detroit families and corporations.

Organizations

Non-profit organizations, such as the Friends of Belle Isle, the Belle Isle Botanical Society and the Friends of Detroit Rowing Club have a specific interest in improving the quality of Belle Isle attractions. The Friends of Belle Isle have established funds for renovating monuments and host activities such as

clean-up days on the island. The Botanical Society hosts activities in the Anna Scripps Conservatory. The Friends of Detroit Rowing Club maintains an active rowing program and education component out of the Boat Club facility.

PUBLIC INVESTMENT

Government Agencies

Many public agencies have funds available for specific projects on the island. These projects can be identified and grant proposals can be submitted to receive the funding. Examples of agencies and possible projects they may fund are: Department of Agriculture for drainage and non-point discharge projects, Environmental Protection Agency (EPA) for non-native species eradication, Department of Transportation for water taxi docking areas and bicycle paths, Department of Energy for “green” building construction, and Natural Resource Conservation Service

SUMMARY OF BELLE ISLE NET REVENUE										TABLE C	
										BELLE ISLE PARK	
Current	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	YR 11-20
CULTURAL CAMPUS Net Revenue	\$243,750	\$328,000	\$348,600	\$369,338	\$661,500	\$723,125	\$875,000	\$946,875	\$1,020,000	\$1,290,000	\$2,343,750
RETAIL & LICENSED USES Net Revenue	\$52,500	\$52,500	\$293,020	\$328,020	\$360,822	\$378,863	\$397,806	\$601,670	\$683,754	\$743,121	\$854,590
SPORTS RELATED Net Revenue	\$147,200	\$389,520	\$476,010	\$491,513	\$511,088	\$594,098	\$616,153	\$639,310	\$728,400	\$754,670	\$867,871
DRD RENTALS & Net Revenue	\$90,150	\$133,405	\$673,486	\$725,629	\$817,115	\$878,768	\$946,322	\$1,078,524	\$1,163,304	\$1,250,434	\$1,375,280
ENVIRONMENTAL Net Revenue											\$375,000
NON-PROFIT MEDIUM SPECIAL EVENTS Net Revenue					\$60,000	\$66,000	\$72,600	\$79,860	\$87,846	\$96,631	\$106,294
MAJOR SPECIAL EVENTS Net Revenue	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$90,000	\$90,000	\$90,000	\$90,000
TOTAL	\$783,600	\$1,153,425	\$2,041,116	\$2,146,500	\$2,660,525	\$2,890,854	\$3,157,881	\$3,436,239	\$3,773,304	\$4,224,856	\$6,012,784

(NRCS) for natural system restoration, Land and Water Conservator funds from the Department of Natural Resources and shoreline restoration assistance from the U.S. Army Corps of Engineers.

CULTURAL CENTER

Proposed renovation for the island envisions a year-round Cultural Center covering forty acres, incorporating buildings and activities into a campus-like setting with specialty gardens, exhibits, passive recreation, educational activities and gift shops. The cultural campus will be developed over a period of years allowing for a gradual market acceptance and maximization of fund raising opportunities. Fees for entry into the campus accelerate as more activities became available.

LICENSING, RETAIL AND RENTAL

Income generated from retail and licensed uses encompass leases for retail, restaurant, and licensed activities. Examples of

licensed fees include: docking fees for the water taxis, Orientation Center, restaurants, Greenhouses, Boat House Conference Center, First Tee Golf Practice Area and miscellaneous fees such as commercial or film shoots.

SPORTS RELATED PROGRAMMING

Facilities and activities such as the golf course, softball diamonds, soccer fields, and basketball courts provide opportunities for events that can generate revenue. New facilities proposed in the Master Plan can accommodate tournaments, league championships, and sports camps that can all be revenue producers. Numerous recreational and competitive events are hosted on Belle Isle each year that are organized by non-profit organizations and schools such as bicycle races, marathons, and inline skating races; all of which currently pay for only rental of large facilities, such as the Casino, for staging activities. These activities should be

charged fees based on number of participants to cover setup and cleanup expenses.

RECREATION/PROMOTIONAL EVENTS

Numerous recreational events are hosted on Belle Isle each year that are organized by running, hiking, biking, in-line skating, non-profit organizations and schools. Currently, these organizations pay only for rental of large facilities, such as the Casino. While there is no charge for general usage of the island, costs are incurred by the Recreation Department for clean-up, staging, and security. It is recommended that a per participant surcharge of \$1.50 should be levied on the event organizer for these types of events.

Increasing programming for these activities are envisioned by Year Three of the Development Plan implementation, assuming a quality environment can be guaranteed for event organizers. While the negative image may be initially difficult

to overcome, improvements to the island will create greater event acceptance and in turn, willingness to pay for that quality. A goal for increased events could be set at 10 percent per year.

VEHICLE TOLL

One option for raising vital capital for Belle Isle is to install an automobile toll system, requiring all auto traffic to purchase either an annual pass or pay on a daily basis for entry onto the island. This would be similar in concept to the Huron Clinton Metro Parks entrance fee that provides a substantial amount of revenue for operating their parks system. The toll would apply only to those visitors arriving by automobile, the most popular method of entering the island. The primary benefit of utilizing an automobile toll to pay for Belle Isle improvements is the ability for the City to demonstrate a readily available income source against which a revenue bond could be assessed. To count on delayed revenues generated through

BELLE ISLE PROJECTED 15 YEAR ATTENDANCE & TOLL REVENUE PROJECTIONS		BELLE ISLE PARK		
	Year 1-4	Year 5-9	Year 10-15	
Visitorship by Automobile	2,700,000	3,700,000	4,700,000	
Autos @ Annual Pass	70,440	96,520	122,610	
Autos @ Daily Pass	1,080,000	1,480,000	1,880,000	
Toll Fee				
Annual Pass \$20 yrs 1-5; \$25 yrs 6-15	\$1,408,800	\$2,413,000	3,065,250	
Daily Rate \$3.00 per car	\$3,240,000	\$4,440,000	\$5,640,000	
Annual Toll Revenues	\$4,648,000	\$6,853,000	\$8,705,250	
Additional Amount Bondable		\$20,643,000	\$17,346,000	
Revenue Bond Capacity	\$43,536,500	\$64,130,000	\$81,520,000	
Interest Rate	5.75	5.75	5.75	
Term	20	20	20	
PUBLIC FUNDS REQUIRED \$123,000,000	\$60,000,000	\$40,000,000	\$23,000,000	

TABLE D

improvements that must be made first would not create a high confidence in the bonding capacity for pay back. Future revenues vs. immediate payback would reduce the amount of bonding capacity and thus lower the amount that could be raised.

Current visitorship by number of automobile trips is estimated at 2,700,000 cars annually. For the purposes of this plan, a two-tiered fee structure is explored. Daily pass users would be those persons who utilize the park less than 5 times a year, and would pay a \$3.00 fee per car per visit. Those who visit the park more frequently might be encouraged to purchase a \$20 annual pass, thus reducing their payment to just once a year for unlimited access. Although the above mentioned plans are detailed below, additional plans can be implemented for senior citizens, disadvantaged users, and park volunteers.

In order to estimate the potential revenue that could be generated through the toll system, the number of automobile trips to the island must be distributed between those patrons paying for the annual pass and those paying for the daily pass. A survey of park users was utilized to make an assumption of visitorship by frequency. The study reported that forty percent of park users visited the island five times or less annually, making the daily pass their best option. The remaining sixty percent should purchase an annual pass. Since at least forty percent of visitors could be charged for each visit, an assumption was made that a \$3.00 fee would be charged for 1,080,000 automobile visits in the first year, for a gross earning of \$3,240,000. The remaining 1,620,000 automobiles account for an average of twenty three visits per year, resulting in the purchase of 70,440 annual passes, earning \$1,408,800 in annual gross revenues.

Table H illustrates the bonding power that can be attributed to the toll structure described over a fifteen-year period. In years one through four, total toll revenues of \$4,648,880 could be raised. Using the standard of eighty percent of the anticipated toll revenue as the revenue bond capacity, a net amount of \$3,719,104 can be applied to paying off revenue bonds each year. This amount would allow for a \$43,536,500 bond issue at a 5.75 percent rate for a twenty-year term.

During years five through nine, an increase in attendance is projected, based on the new attractions that could be introduced during the first four years of the improvement program. Assuming a thirty percent increase in visitorship, the revenue bond issue could be increased based on the new attendance and toll collection numbers. In this scenario, annual toll revenues increase to \$6,853,000 accounting for a gain of \$2.2 million against which additional revenue bonds could be generated. This additional fee could be utilized to

bond an additional \$20.6 million above the initial revenue bond issue during years one through four.

Both the attendance figures and the toll structure are anticipated to increase during years ten through fifteen due to completion of enhancements and greater attractions to the park. During this period, the annual revenue through toll collections is estimated to be at \$8,705,250; generating an additional \$1.8 million each year above the previous estimate. This surplus could be used to bond another \$17.3 million more than the previous two bonding issues. The financing required to complete the renovation of Belle Isle is estimated to be \$123,000,000 out of a total budget of \$177,314,419, with the remaining raised through State, Federal, and private sources. A total of \$81.5 million could be raised through revenue bonds over the fifteen year construction period of the proposed redevelopment plan based these projections.

The funds needed for the projects are not all required in the first year, the phasing periods of the Master Plan are spread over a fifteen-year period, with the heaviest investment by the City required in the first four years. As illustrated in Table D anticipated funding during the first four-year bond issue will generate \$43.5 million, less the amount of City responsibility by \$16.5 million. By year five, another \$40 million will be required to pay for City improvements to the park; however, the additional fees will pay for about one-half of that amount. In the last five-year period, the estimated revenue bond capacity will fall short of the total needed. These estimates are conservative and the actual amounts collected may greatly exceed the projected amounts through increased visitorship to the park and other sources of revenue. The toll concept should be further examined to determine the costs associated with establishing such a system and the appropriate marketing techniques to increase visitorship levels and the quality of Belle Isle.

The Detroit Recreation Department augmented its expertise with a consulting team of architects, engineers, landscape architects, urban planners, environmentalists and economists. Specialists provided insight and technical support in areas of urban design, use analysis, crime prevention, historic preservation, maintenance systems, marketing, economic development, park programming, golf course design, traffic planning, bridge and shoreline engineering, ecology, wildlife management, geographic information systems and cost estimating. The findings and recommendations of this work have been blended into an overall program for renewal.

The following team members contributed in the effort to create a snap shot of the present conditions on Belle Isle and a blueprint for future improvements.

DETROIT RECREATION DEPARTMENT

Charles Beckham, Director

HAMILTON ANDERSON ASSOCIATES

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DETROIT POLICE DEPARTMENT

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SUMMARY

Belle Isle consistently ranks as one of America’s top 10 urban parks despite all its funding, maintenance and development challenges. This is attributable to its unmatched setting, regional presence and its history as an urban oasis. The island’s viability and image are threatened by deterioration of facilities, inadequate maintenance budgets, under trained personnel and no clear plan for use that allows many agendas to drive park improvements. A long-term planning and implementation program must be pursued rather than quick, inexpensive fixes that prove to be limited and inefficient. The park’s full potential can only be reached through better organization and funding increases. Modest investment will not suffice. Detroit city government must commit to standing firm on policy for the island’s renewal, the creation of a significant donor base and a strategy for revenue generation. A partnership between city government and the private sector has the potential to make the most significant impact and, in fact, the lack of an effective public-private



Photo by: Glenn Calvin Moon

alliance has been an underlying factor in the park’s current condition. Effective administration, political will, and adequate funding are absolute necessities if Belle Isle is to steer away from irreversible decline.

There are no easy solutions to the park’s problems and every issue is layered with other issues, resulting in complex problems requiring aggressive solutions. The most difficult of these concerns is to improve the island without changing it; to avoid the temptation to seek new directions away from the tradition and heritage of the past. In many ways, The Belle Isle Master Plan takes what the island offers, improves upon it and supports it by complementing existing uses and facilities with new uses.

The Proposed Renovation Plan provides a long-term strategy to help guide development and refurbishment of Belle Isle Park over the next fifteen years. The Plan sets the course for

the island’s future, and clearly defines what the park can become.