STATE ENVIRONMENTAL QUALITY REVIEW
(SEQR)

DRAFT
SITE-SPECIFIC/GENERIC ENVIRONMENTAL IMPACT STATEMENT

PROPOSED ACTION:
CITY OF ROCHESTER PORT PUBLIC MARINA & MIXED USE DEVELOPMENT PROJECT

SEQR Environmental Impact Statement
NEPA Environmental Assessment

LOCATION:
Port of Rochester, City of Rochester, Monroe County, NY

LEAD AGENCY:
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DATE OF ACCEPTANCE:
October 7, 2011

WRITTEN COMMENTS MUST BE SUBMITTED ON OR BEFORE: NOVEMBER 18, 2011
TO MARK GREGOR AT THE ADDRESS LISTED ABOVE

OR ON THE WEBSITE:
HTTP://WWW.CITYOFROCHESTER.GOV/MARINA/

PUBLIC HEARING DATE: NOVEMBER 1, 2011

CITY OF ROCHESTER PORT PUBLIC MARINA & MIXED USE DEVELOPMENT PROJECT

Site-Specific/Generic SEQR Environmental Impact Statement & NEPA Environmental Assessment

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City of Rochester Port Public Marina & Mixed Use Development Project

Site-Specific/Generic SEQR Environmental Impact Statement
NEPA Environmental Assessment

Executive Summary

The Proposed Action is entitled the City of Rochester Port Public Marina & Mixed Use Development Project. The City of Rochester, as the project sponsor, is proposing this project to redevelop the Port of Rochester area in order to enhance public waterfront recreational facilities and to encourage and support economic development consistent with the goals of the City's Local Waterfront Revitalization Program (LWRP) and the City's Comprehensive Plan. In broad terms, the project includes:

- Comprehensive redevelopment of the Port of Rochester site, featuring the creation of a public marina basin and promenade;
- Private development of adjacent public lands for residential units and/or mixed-use commercial development;
- Relocation of existing public parkland facilities at the Port site to accommodate the redevelopment; and,
- Redevelopment at the transportation terminal formerly used for operation of a fast ferry service.

This document serves as the Site-Specific/Generic SEQR Environmental Impact Statement for the project, required by the New York State Environmental Quality Review Act (SEQR). Following coordination with the Involved Agencies, the Mayor of the City of Rochester was designated as the Lead Agency and issued a determination in May 2010 that the proposed project would be the subject of an Environmental Impact Statement (EIS). A final scope for the EIS was issued on June 10, 2010. In addition, this document will assist those Federal agencies which have jurisdiction by law with respect to any component or environmental impact involved in the proposal, and can serve as the federal Environmental Assessment (EA) for the project.

Project Location

The project site is located at the Port of Rochester where the Genesee River meets Lake Ontario in the community of Charlotte within the City of Rochester. This area, located adjacent to Ontario Beach Park, is currently the site of the former fast ferry terminal, parking lots, the Public Boat Launch, the Ontario Beach Labor Operations Center, and the Charlotte Genesee Lighthouse. The parcels and address locations within the project area are:

- The approximately 22-acre City-owned site known as the Port of Rochester (Port site) is generally bound by the Genesee River to the east, the Hojack railroad to the south, Lake Avenue to the west, and Ontario Beach Park to the north. The Port site encompasses the properties at 4590, 4600, 4630, 4650 and 4752 Lake Avenue, and 1000 North River Street; and

- South of the Port site, the Right-of-Way Improvements extend across parcels at 503, 527, and 565 River Street; and
- Also south of the Port site, the Lighthouse Trail project area includes two City-owned parcels at 4576 and 4580 Lake Avenue, and portions of the County-owned Charlotte Genesee Lighthouse property at 70 Lighthouse Street, and the privately owned parcel at 4554 Lake Avenue.

Project Description

The project will transform an under-developed public waterfront area into a year round recreationally-oriented resource that will complement other significant public resources in the area (e.g., Ontario Beach Park, Terminal Building, Charlotte Pier, the Charlotte Genesee Lighthouse, etc). In general, the action includes development of a marina basin, public promenade and new streets to replace both the existing surface parking area and access drives associated with the former ferry terminal. Pedestrian and bicycle access will be enhanced with new trails and sidewalks. The Ontario Beach Park Labor Operations Center and Public Boat Launch will be relocated, and public lands will be sold for conversion to private mixed use development.

As indicated above, the Proposed Action includes a combination of public improvements (marina, road re-alignments and extensions, trail construction, utilities/facility relocations, parkland alienation, etc.) and private development (mixed use commercial and residential structures). The action also includes creation of a new zoning district within the existing Harbor Village District to support the development of the proposed uses.

It is important to note that the first phase of the public improvements includes activities that can be undertaken by the City immediately upon project approval, as they occur on vacant lands owned by the City which are not designated parkland. The second phase of the improvements will require more lead time as they will require parkland alienation through a Home Rule message from City Council and the approval of the NYS Legislature. As is required when parkland is proposed to be alienated, the City will provide lands of equal usefulness, environmental value, and fair market value to replace the parkland.

The Proposed Action provides for the following:

- **Marina Zoning District**
  A new zoning district, to be called the *Marina District*, will encompass the project site. The *Marina District,* a Form-Based Code, will ensure that future projects are developed in a manner that is consistent with the vision of the Proposed Action and that avoids significant adverse impacts on the surrounding neighborhood and larger community.

- **Phase 1 Public Improvements**
  The Phase 1 Public Improvements include the Phase 1 Marina, Right-of-Way (ROW) Improvements, the Lighthouse Trail, and Lake Ontario Resource Center (LORC), as described below. With the exception of the LORC and the Lighthouse Trail, it is anticipated that these components will be coordinated as a single public improvement project.

Phase 1 Marina
A 4.7 acre marina basin with access to the Genesee River will be developed and will share the current river opening with the existing Public Boat Launch. The marina will feature approximately 85 boat slips (transient and seasonal), a public promenade around the perimeter of the basin, and a boater facility building and amenities.

Right-of-Way (ROW) Improvements
Streets in the site vicinity, primarily River Street, North River Street, and Corrigan Street, will be re-aligned and extended to accommodate creation of the marina basin, to smooth traffic flow, and to facilitate access. Street utilities and infrastructure will be relocated as needed, and access and parking serving the existing Public Boat Launch will be reconfigured. The Genesee Riverway Trail will be extended along the River Street Extension to connect to the proposed marina promenade.

Lighthouse Trail
A 700-foot trail between Lake Avenue and the Charlotte Genesee Lighthouse property will be constructed to improve public access to the Lighthouse site and its superior view corridor of the waterfront.

Lake Ontario Resource Center (LORC)
SUNY College at Brockport has expressed interest in developing the Lake Ontario Resource Center at the Port site, as a facility which will focus on water quality research and accumulation of data regarding Lake Ontario. The LORC may be constructed within the "link building" which is part of the former fast ferry terminal or in a permanent facility near the Terminal Building at 1000 North River Street.

- **Phase 2 Public Improvements**

The Phase 2 Public Improvements include Expansion of the Marina, Relocation of the Public Boat Launch, and Relocation of the Ontario Beach Park Labor Operations Center. The City's investment in the Phase 2 Public Improvement is predicated upon private investment in the parcels available for development and demonstrated interest within the development community.

Phase 2 Marina Expansion
The Phase 2 Marina Expansion will involve expansion of the basin to the south, including the current location of the public boat launch. The acreage of the marina basin will increase from about 5 acres to 7 acres, and the capacity will increase from about 85 to about 157 slips, including broadside dockage.

Relocation of the Public Boat Launch
The Public Boat Launch, currently located at 4630 Lake Avenue and 1000 North River Street, will be relocated to elsewhere within the Rochester Harbor area (several alternative sites have been preliminarily identified), in order to accommodate expansion of the marina basin, as well as anticipated private development. Before the existing Boat Launch property can be redeveloped, parkland alienation and replacement legislation will be required.

Relocation of the Ontario Beach Park Labor Operations Center

The Ontario Beach Park Labor Operations Center will be relocated from its existing location on Lake Avenue to another location in or adjacent to Ontario Beach Park (several alternative sites have been preliminarily identified). The area occupied by the existing Labor Operations Center is proposed as part of the private development. Before these properties can be used for private development, parkland alienation and replacement legislation will be required.

- **Incremental Private Development**

  The Proposed Action includes mixed-use private development on three parcels of publicly owned land: Parcel I (4752 Lake Avenue), Parcel II (4600, 4650, and part of 4630 Lake Avenue) and Parcel III (part of 4590 and 4630 Lake Avenue). The mixed use development is preliminarily identified as 280 to 430 residential units (apartments and condominiums) and 44,000 square feet of commercial/retail development, and will be undertaken incrementally subject to market conditions. The incorporation of mixed-use development at the Port is designed to increase the number of people living and staying in the area and to enhance economic development and business activity year round.

  It should be noted that, based upon the analysis of impacts undertaken as part of the EIS preparation, the City modified the Proposed Action by eliminating a fourth private development parcel proposed in the Ontario Beach Park parking lot at the northern end of the project site. Parcel IV has been removed from the Proposed Action due to loss of parking, view-shed impacts and requirements for parkland alienation that became impossible to adequately mitigate. The density of development, however, has not changed and has been redistributed over the other development parcels on the site.

Project Timetable

The full build-out of all of the components proposed as part of the Port project will be realized over many years. The phasing and timing of this multi-year project has been designed so that the Port area and the surrounding Charlotte community has the necessary time to adjust to and accommodate the changes in development, traffic patterns, housing demand, commercial opportunities, population dynamics, views and other characteristics of the area. Many aspects of the proposed development, in particular, the private development and Phase 2 Public Improvements, are dependent upon market conditions and other factors, such that these components may not come to fruition for a decade or more.

The Phase 1 Public Improvements, including the Phase 1 Marina, the ROW Improvements and the Boat Launch Reconfiguration (parking), will be advanced in a single coordinated effort, anticipated to occur between September 2012 and May 2014. Special attention will be paid to maintaining access to the Public Boat Launch, the Terminal Building and other recreational resources of the area, particularly during the summer months. The Lighthouse Trail is expected to be constructed in the spring and summer of 2013. The construction of the LORC is dependent upon the negotiation of a lease-purchase option between the City of Rochester and SUNY College at Brockport.

Private development will likely begin with the development of Parcel I, or a portion thereof, in 2014. Development on Parcels II and III will follow based on the timing of the necessary parkland alienation, relocation of the Public Boat Launch and/or Ontario Beach Park Labor Operations Center, and developer interest.

Public Need and Benefits

The Port site is currently an underutilized area, consisting predominantly of parking lots and commercial land, located at the most significant waterfront space in the Greater Rochester area--the confluence of the Genesee River and Lake Ontario--and one of only two access points into Monroe County from Lake Ontario. While this waterfront site is open to the public, there are minimal amenities that provide for public enjoyment. Public green space is limited; bicycle and pedestrian access is informal from the south to Portside Drive; and there are no retail establishments and only a few eateries.

Rochester Harbor is one of only three deep draft harbors on the south shore of Lake Ontario. A boater market analysis performed in 2008 identified a potential demand for 200 to 500 additional boat slips in the Rochester/Monroe County area for boats 26 feet and larger, a need which is un-met by existing marinas. The report also documented the need for additional modern, quality boater services. Moreover, the Rochester Harbor does not provide accommodations to support regional boater-oriented events.

Significant public benefits are anticipated from implementation of the Proposed Action. The proposed marina, in combination with the natural and historic features of this area, would stimulate local and regional tourism opportunities and promote boat travel between Rochester and other Great Lakes ports. Residential and commercial development is expected to spur long term economic and financial growth in the area and to expand enjoyment of the waterfront, creating a more vibrant and active waterfront.

The marina would provide a safe public harbor serving local boaters and Great Lake travelers and make Rochester a first class venue for regional sailing regattas, modern in-water boat shows, and regional or national classic and antique boat shows. Public access and enjoyment of the area will be enhanced by the creation of additional waterfront area, increased green space, and public trails and pathways. The Terminal Building would continue to function as an important Port building, and development of the marina would not preclude the future operation of a small ferry service if parking options are identified.

The River Street Extension will serve as a secondary north-south public access from Latta Road to the Port site to facilitate traffic flow as well as emergency access. The Genesee Riverway Trail will extend to Ontario Beach Park, affording pedestrian and bicyclists with scenic off road access to the waterfront. Development of the Lighthouse Trail will provide public access to scenic views of Lake Ontario, the Genesee River, Ontario Beach Park, the Ontario Beach Carousel, and the newly created waterfront area within the Port site. The Lake Ontario Resource Center would facilitate research associated with the Great Lakes, promote community and business partnerships, and provide unique opportunities for students at all levels.

The operation of the marina alone is anticipated to contribute to an estimated $1.85 million in annual direct economic benefits, and over $2 million in annual economic benefits when indirect (secondary) effects are included, based upon anticipated revenues generated by boater purchases and other associated economic activity. For all phases of private development, the present value of increased property tax revenues over a period of twenty years was computed and found to range from $6.1 million to $18.5 million. The construction and operation of the marina along with the private development upon Parcels I, II and III is expected to contribute to the creation of approximately 2,500 construction jobs and 300 permanent jobs.

Impacts and Mitigation

Section IV of this EIS presents an analysis of the environmental impacts associated with the City of Rochester Port Public Marina & Mixed Use Development Project (Proposed Action). Section IV is organized into Sub-sections based upon the Final Scope, as indicated in the listing below. Each Sub-section provides a description of the Existing Setting, Impacts and Mitigation Measures for the affected issue or resource, and Section F Aesthetic and Visual Resources contains a Visual Preference Survey for readers to complete:

- **A.** Geology, Soils and Topography
- **B.** Water Resources
- **C.** Hydrologic Conditions and Coastal Management
- **D.** Vegetation and Wildlife
- **E.** Air and Odors
- **F.** Aesthetic/Visual Resources
- **G.** Historic, Cultural and Archeological Resources
- **H.** Parks, Recreation and Open Space
- **I.** Land Use, Zoning, and Conformance with Officially Adopted Plans
- **J.** Community Character/Quality of Life
- **K.** Transportation
- **L.** Utilities
- **M.** Growth-inducing Impacts
- **N.** Use and Conservation of Energy Resources
- **O.** Solid Waste Management
- **P.** Public Health and Safety
- **Q.** Economic/Fiscal
- **R.** Environmental Justice
- **S.** Temporary Impacts Related to Construction Activities
- **T.** Unavoidable Adverse Impacts
- **U.** Irreversible and Irretrievable Commitment of Resources

Most of the Sub-sections within Section IV follow a similar format: an Introduction in Sub-section 1; a description of the Existing Setting in Sub-section 2; and an evaluation of Impacts and Mitigation Measures in Sub-section 3. The evaluation of impacts and mitigation measures within Sub-section 3 is further broken down by project component, typically following the outline below:

3.1 Marina
3.2 Right-of-Way (ROW) Improvements
3.3 Lighthouse Trail
3.4 Lake Ontario Resource Center (LORC)
3.5 Relocation of the Public Boat Launch
3.6 Relocation of the Ontario Beach Park Labor Operations Center
3.7 Incremental Private Development

For certain Sub-sections it is not feasible to follow the outline above, in particular for issues where impacts occur on a wider scale or are relevant to the overall Port area, such as Transportation or Aesthetic/Visual impacts.

Section IV makes up the bulk of the EIS document. Given the complexity of the Proposed Action and the number of issues and resources analyzed, it is not practicable to summarize the impacts and mitigation measures in a concise form in this Executive Summary. Rather, the reader is referred to the individual Sub-sections relevant to the specific area of interest. Page numbers are provided in the Table of Contents.

Alternatives to the Proposed Action

An analysis of alternatives to the Proposed Action is provided in Section V of the EIS document and summarized by Sub-section below:

A. No Action Alternative

The No Action Alternative explores the implications of the City doing nothing in the project area (i.e. not undertaking the Proposed Action). The loss of the benefits associated with the project as well as the avoidance of environmental impacts are reviewed. This alternative is not considered preferable to the Proposed Action.

B. Marina Location and Design Alternatives

Six options for marina design and location were identified in the 2009 Marina Engineering Report and Feasibility Study and a seventh “preferred alternative” was identified in early 2010 at the end of the public focus group sessions. These alternatives illustrate the evolution of the project design, which culminates in the Proposed Action presented in the EIS.

C. Marina Operation Alternatives

This section discusses the alternatives for operating the marina and funding the ongoing marina operations including: Municipal Operation, Contractor under agreement to the City, Third Party Operator, or Licensee/Leasehold Operator. Assuming the City of Rochester maintains meaningful oversight of the marina operation, there are no significant differences in the potential environmental impacts of the various operational approaches, with the exception of economic and fiscal impacts to the City of Rochester. The "Municipal Operation" alternative is well within reasonable expectations of competent municipal employees and should be the most financially beneficial approach for the City.

D. Relocation of the Ontario Beach Park Labor Operations Center

The Proposed Action will require the eventual relocation of the Ontario Beach Park Labor Operations Center to another location in or adjacent to Ontario Beach Park. Certain locations may make it possible for the center to be combined with a facility for the Charlotte Youth Athletic Association (CYAA). Four preliminary alternative sites are being reviewed. Once selected, the preferred site will be the subject of a site specific environmental review.

E. Right-of-Way (ROW) Alternatives

Alternatives affecting the location of River Street, North River Street, and intersections along these roads were considered and described in the 2009 Marina Engineering Report and Feasibility Study. Important site considerations include the CSX rail line which limits the potential alignments to the west, and existing structures along the Genesee River, which limit the potential alignments to the east. The preferred alternative was selected based on sound engineering practice and roadway design standards, impacts to properties crossed, efficiency of resulting parcel dimensions, pedestrian safety, and impacts on the alignment of Genesee Riverway Trail.

F. Public Boat Launch Relocation and Design/Operation Alternatives

The Proposed Action will require the eventual relocation of the existing Public Boat Launch (prior to the Phase 2 Marina Expansion). Three preliminary alternative sites are currently under consideration by the City, and no decision has been made. Once selected, the preferred site will be the subject of a site specific environmental review.

G. Development Density Alternatives

Over the course of the planning process, a series of potential development densities for the Port site were reviewed, ranging from a very high urban density of over 133 units per acre to a less intensive resort community density of under five units per acre. Based on input from the Charlotte community, projections of market demand, and urban design strategies intended to maximize the value of each unit while expanding public access, the 2009 Marina Engineering Report and Feasibility Study proposed the development of

between 280 and 430 residential units on Parcels I, II, III, and IV for a density range of 11.3 to 17.3 units per acre. As a consequence of the elimination of the Parcel IV site, the density now being proposed ranges from 12.0 to 18.4 units per acre.

H. Private Development Site Alternatives – Parcel IV

At the onset of DEIS preparation, the preferred alternative called for private development upon four sites identified as Parcels I, II, III, and IV. As the evaluation of impacts progressed, the prospect for private development upon Parcel IV raised particular concerns with regard to parking, visual/aesthetic resources and parkland alienation. An evaluation of the Form-Based Code indicated that Parcels I, II and III could accommodate the entire private development program originally proposed upon all four parcels. As the elimination of Parcel IV did not compromise the project in any meaningful way and did not diminish the project's capacity to achieve the intended benefits, development upon Parcel IV was eliminated from the preferred alternative.

I. Slip Density Alternatives

The preferred alternative originally called for development of 75 to 80 boat slips in the Phase 1 Marina and an additional 38 to 43 slips in the Phase 2 Marina Expansion for a total of 118 slips. As preliminary plans for the marina basin evolved, the preferred alternative was modified to include the development of 85 slips in Phase 1 and a combined final total of 157 slips in Phase 2 (Full Build). The currently proposed total is well below the estimated market demand and the additional slips can be accommodated within the basin without any increase in the basin's extent and without compromising navigation. The number of slips is recognized as a key project component and an important catalyst for the anticipated private development and related economic benefits.

J. Phasing Alternatives

The proposed phasing of the project is based on establishment of the proposed marina and associated infrastructure as a catalyst to private mixed-use developments on adjacent Parcels I through III. It was determined that a significant portion of the project could be completed in a first phase, which would facilitate a measured approach to the entire project (Full Build). The Incremental Private Development would proceed in segments appropriately scaled to the anticipated rate of absorption by the market.

I. INTRODUCTION

A. Project Intent

The Proposed Action is entitled the City of Rochester Port Public Marina & Mixed Use Development Project. The City of Rochester is proposing this project to redevelop the Port of Rochester area in order to enhance public waterfront recreational facilities and to encourage and support economic development consistent with the goals of the City's Local Waterfront Revitalization Program (LWRP) and the City's Comprehensive Plan. In broad terms, the project includes:

- Comprehensive redevelopment of the Port of Rochester site, featuring the creation of a public Marina basin and promenade;
- Private development of adjacent public lands for residential units and/or mixed-use commercial development;
- Relocation of existing public parkland facilities at the Port site to accommodate the redevelopment; and,
- Redevelopment at the transportation terminal formerly used for operation of a fast ferry service.

A detailed project description is included in *Section II* of this document.

B. Project/Site Evolution

1. LWRP

An amendment to the City's LWRP (see Appendix A) that addresses the Port Site was prepared by the City, reviewed by the NYS Department of State (NYSDOS), subsequently adopted by City Council in May 2010. The amendment outlines a new concept plan for the redevelopment of the Port site that includes the phased construction of a large marina basin and public promenade, creation of several land-side development parcels, reuse of the Terminal Building, extension of River Street north into the site, relocation of the Public Boat Launch and other facilities, and the development of new open space and public parking areas.

The City will begin work on a formal Harbor Management Plan for the Port and Harbor area in the fall of 2011. When completed, the Harbor Management Plan will be submitted to Rochester City Council and the NYS Department of State for approval. This plan may have additional implications for development, management and use of the Port site and the surrounding neighborhood.

2. Ferry and Terminal Building

More than a decade ago, former Mayor Johnson and the City Council of the City of Rochester began the process of bringing a fast ferry service between Rochester and Toronto, Canada. The City of Rochester selected the location of the former North and South Warehouses at the Port of Rochester as the site for a transportation

terminal to support the fast ferry. A *Port of Rochester Draft/Final Design Report/NEPA Environmental Assessment/SEQR Environmental Impact Statement* was prepared for the ferry project in 2001.

The operation of the ferry encountered many problems including higher than planned operational costs, less than expected ridership, and mechanical breakdowns. In early January 2006, newly elected Mayor Robert Duffy proposed and the City Council adopted policies that permanently suspended the ferry operations.

The City of Rochester remains committed to the re-positioning of the existing Port of Rochester Terminal Building to a viable office/retail complex. The City is also proposing further redevelopment of the Port of Rochester site through installation of a public marina, outparcel private development offerings and other components of the project being reviewed in this document.

3. 2006 Port of Rochester Master Plan (2006 Sasaki Plan)

In 2005, the Sasaki Planning and Design Team was retained by the City of Rochester to study the Port site and to prepare a comprehensive Master Plan. The intent was for the plan to address current and future market demands for the greater Rochester area, be compatible with the existing Charlotte community, and complement the adjacent uses on the Genesee River in the Town of Irondequoit. Accordingly, a detailed market study was conducted, key stakeholders were interviewed, and numerous public workshops were held with the community to solicit input.

The planning team studied a variety of potential uses. These ranged from hotel and recreational developments, to active port uses, and finally to residential mixed-use development based on the design principles of New Urbanism. The planning effort attempted to synthesize all of the community and stakeholder input and to reconcile or align it with the market analysis. The result was a master plan (*Port of Rochester Master Plan*, see Appendix B) for a mixed use waterfront community which is an extension of the existing Charlotte community. It called for a variety of housing types, associated commercial/retail use, marine use, institutional use and limited professional office space. Active recreation would continue to be one of the strong attractions of the area as it offers a large variety of amenities to the local community and the City of Rochester at large. Activities range from passive and active recreation uses such as walking, jogging, beach-going, boating and picnicking in Ontario Beach Park, to potential future new ferry operations associated with the existing terminal facility on the Genesee River.

Similar to the subject proposal, the proposed Sasaki Plan envisioned a diverse mix of uses. The key highlights of the uses proposed in the Sasaki Plan were:

- Residential housing, mixed variety: 395-700 units;
- Commercial/Retail: up to 80,000 square feet;
- Educational/ Institutional: 24,000 – 27,000 square feet;
- Port/Marine: future passenger ferry and 100 boat marina;
- Office: 6,000 square feet;
- Recreation; and,
- Public parking.

The Sasaki Plan was the subject of multiple public meetings held in 2005 and 2006. Minutes of these meetings can be found on pages A60 through A70 of the 2006 Sasaki Plan (Appendix B).

While the Sasaki Plan included many of the same elements prescribed in the LWRP and in the subject proposal, upon evaluation of the plan it became clear that further work was still necessary to move forward. The construction of the marina was the critical component of the port redevelopment and its feasibility was yet unknown. With the assistance of Edgewater/Abonmarche Consultants, the City undertook a Marina Engineering and Feasibility Study which was completed in 2009 (Appendix C). Based on that study, the size, number of slips and location of the marina were evaluated and the current plan was created. The research and findings of the 2006 Sasaki Plan contributed to the current plan for the redevelopment of the Port.

C. SEQR Process

1. Agency Coordination

As required by the New York State Environmental Quality Review Act (SEQR), any State or local governmental agency undertaking, funding, or approving an action must first review the environmental impacts and mitigation alternatives. The SEQR regulations (6NYCRR Part 617) define those agencies as "Involved Agencies." For projects involving more than one agency, the multiple Involved Agencies must coordinate the review and designate a "Lead Agency." For the subject proposal, the Mayor of the City of Rochester coordinated with all the Involved Agencies in March of 2010 and was designated as the Lead Agency. On May 3, 2010, the Mayor, as Lead Agency, issued a determination that the proposed City of Rochester Port Public Marina & Mixed Used Development Project would be the subject of an Environmental Impact Statement (EIS).

2. Environmental Impact Statement

According to the SEQR regulations, an EIS is intended to provide a means for agencies, project sponsors and the public to systematically consider significant adverse environmental impacts, mitigation measures and alternatives of a proposal.

The regulations also provide that an EIS should facilitate the weighing of social, economic and environmental factors early in the planning and decision-making process. When an EIS is required, the process begins with preparation of a draft EIS by the lead agency or project sponsor. The draft EIS is then made available to the public and circulated to Involved Agencies for their review and comment. After public and agency review, a final EIS addressing all substantive comments and disclosing any project changes is released by the lead agency.

This draft EIS assesses the benefits and impacts of the proposed City of Rochester Port Public Marina & Mixed Use Development Project as it is described in *Section II Proposed Action*. If future development proposals related to this project are found to exceed the thresholds described in *Section II*, then additional environmental review will be required.

This draft EIS will reference relevant sections of the 2001 *Port of Rochester Draft/Final Design Report/NEPA Environmental Assessment/SEQR Environmental Impact Statement*. Many characteristics and conditions of the existing setting have not changed significantly since 2001 and this document will repeat or refer to sections where important information is reported in that 2001 document.

This Draft EIS will be the subject of a public hearing before the Rochester Environmental Commission. The date of the hearing will be included in the required public notice. All substantive comments are addressed in the Final EIS. When the Final EIS is released to the agencies and the public, a 10-day waiting period ensues before any decisions can be rendered on the project. After the waiting period, each Involved Agency will adopt a Findings Statement which concludes the SEQR process.

3. Scoping

Prior to beginning preparation of this draft EIS, the lead agency elected to conduct an optional “scoping” process to gather information on potentially significant adverse impacts and eliminate consideration of impacts that would be irrelevant or not significant. In this instance, a draft scope was issued on May 3, 2010, to all Involved and Interested Agencies. A notice was also mailed to all of the people who attended the public meetings on the proposal. A scoping meeting was conducted on May 17, 2010 to which the above-listed Interested and Involved Agencies were invited. Taking in all the information gathered during the scoping process, a final scope was issued on June 10, 2010 and is included in Appendix D. The final scope served as an expanded outline for this draft EIS.

Since the scope was finalized, the project evolved causing the scope of the EIS to change. One of the major changes to the project was the removal of the private development parcel (referenced in this document as Parcel IV) that was proposed in the Ontario Beach Park parking lot at the northern end of the project site. References to Parcel IV appear in this document, particularly in some figures and in some supporting documents included in the appendices. However, private development on Parcel IV is no longer a component of the proposed project. Loss of parking, view-shed impacts and requirements for parkland alienation were impacts that became impossible to adequately mitigate so the proposal was modified to eliminate the development of Parcel IV. The density of development, however, has not changed and has been redistributed over the other development parcels on the site.

Another change in the project scope is the expansion of the size of the marina from 118 slips to 157 slips at full build out. The marina is proposed for the same general location; only the size has been expanded. More information about the marina size and number of slips is included in *Section II Proposed Action*.

Lastly, early in 2011, the City acquired the Boat Launch from the County and assumed ownership. Acquisition of the Boat Launch property was included as part of the Proposed Action in the original project scope, however, the City was able to acquire the property earlier as its acquisition was also reviewed in previous environmental documents associated with the fast ferry project.

4. Generic vs. Site-Specific Assessment

The review presented in this EIS is generic with respect to some project components and site-specific with respect to others. According to the SEQR regulations, a generic EIS may be used to assess the environmental impacts of:

- A number of separate actions in a given geographic area which, if considered singly, may have minor impacts, but if considered together may have significant impacts; or,
- A sequence of actions, contemplated by a single agency or individual; or,
- Separate actions having generic or common impacts; or,
- An entire program or plan having wide application or restricting the range of future alternative policies or projects, including new or significant changes to existing land use plans, development plans, zoning regulations or agency comprehensive resource management plans.

Section II of this document describes the components of the Proposed Action and whether they will be reviewed generically or site-specifically. For those project components being reviewed generically, any subsequent site-specific development proposals will be required to undergo a supplementary review process. Any such supplementary review would focus upon those aspects of the site-specific development proposal that were not considered in this EIS. Should it be found that there are no aspects that could result in significant environmental impacts, a declaration would be issued that would allow other approvals to then proceed.

Alternatively, should it be found that some aspects of these site-specific proposals could result in significant environmental impacts, a supplemental EIS would then be prepared and subjected to an additional public review process.

5. List of Involved/Interested Agencies

The City of Rochester has identified the Involved Agencies under SEQR as well as agencies that may potentially be Involved Agencies for the project. These agencies and their corresponding jurisdictions are outlined in Table I-1 below.

Table I-1 Involved and Potentially Involved Agencies Under SEQR

INVOLVED / POTENTIALLY INVOLVED AGENCIES	ACTION(S)
City of Rochester	
Mayor/City Council	Funding Comprehensive Plan Amendment Zoning Map and Text Amendment Land Disposition/Acquisition Amendment to City County Parks Agreement Parkland Alienation/Dedication Official Map Amendment
Commissioner of Neighborhood and Business Development	Site Preparation Permit Flood Development Permit Demolition Permit
Manager of Zoning	Site Plan Review
City Planning Commission	Special Permit Subdivision
Traffic Control Board	Right-of-way parking/signalization approvals
New York State	
Dept. of Environmental Conservation	Article 15 Excavation and Fill Article 15 Docks, Moorings and Platforms 401 Water Quality Certification Mined Land Reclamation permit SPDES
Department of State	Funding
Dormitory Authority	Funding *(CYAA Concessions Facility)*
Department of Transportation	Funding
SUNY College at Brockport	Lease Execution
Office of Parks, Recreation & Historic Preservation	Parkland Alienation Funding (US Fish and Wildlife BIG grant)
Monroe County	
Executive/Legislature	Amendment to the City/County Parks Agreement Land Acquisition/Disposition/Lease Agreements Parkland Alienation
Pure Waters	Utility modification approvals
Town of Irondequoit	
Town Board	Potential New Boat Launch Development
Town Planning Board	Potential New Boat Launch Development
Town of Greece	
Town Planning Board	Potential Parking Facility

Interested agencies are defined in SEQR as an agency that lacks State or local governmental jurisdiction over the project, but that wishes to participate in the review process because of its specific expertise or concerns about the Proposed Action. Federal agencies are not subject to the requirements of SEQR. However, a federal agency with jurisdiction over or an interest in a project can be included in the SEQR process as an Interested Agency. The following is a list of all identified Interested Agencies:

US Army Corps of Engineers
US Coast Guard
US Department of Homeland Security
US Fish and Wildlife
US FHWA
New York State Legislature
Monroe County Sheriff
Monroe County Planning and Development
Monroe County Department of Transportation
Monroe County Department of Health
Monroe County Parks Department
Rochester Police Department
Rochester Fire Department
Rochester Environmental Commission
Rochester Preservation Board
Rochester-Genesee Regional Transportation Authority
Rochester City School District
Landmark Society of Western New York
Charlotte Community Association
Team Charlotte
Charlotte Genesee Historical Society
Harbortown Merchant's Association
Fishery Advisory Board
Ontario Beach Park Program Committee
Time Warner Cable
RG&E
Frontier

D. NEPA Process

The National Environmental Policy Act (NEPA) is a United States environmental law that establishes a national policy promoting the enhancement of the environment. NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their Proposed Actions and reasonable alternatives to those actions. NEPA regulations (40 CFR §§ 1500-1508) establish procedural requirements for all federal government agencies ("Cooperating agencies") regarding the preparation of Environmental Assessments (EAs) and Environmental Impact Statements (EISs). EAs and EISs describe the potential environmental effects of proposed federal agency actions.

Like SEQR, the principles or essential elements of NEPA include:

- Assessment of the social, economic, and environmental impacts of a Proposed Action or project;
- Analysis of a range of reasonable alternatives to the proposed project, based on the applicants defined purpose and need for the project;
- Consideration of appropriate impact mitigation including avoidance, minimization and compensation;
- Interagency participation: coordination and consultation;
- Public involvement including opportunities to participate and comment; and,
- Documentation and disclosure.

This document will assist those Federal agencies which have jurisdiction by law with respect to any component or environmental impact involved in the proposal (or a reasonable alternative). The subject proposal involves the Federal agencies which are listed on the "Interested Agency" list above in *Section B*. This document serves as the EA for use by those agencies in their decision-making regarding the proposed project

II. PROPOSED ACTION

The City of Rochester is the project sponsor. The Proposed Action includes a combination of public improvements (marina, road re-alignments and extensions, trail construction, utilities/facility relocations, parkland alienation, etc.) and private development (mixed use commercial and residential structures). The action also includes creation of a new zoning district to support the development of the proposed uses. While the public improvements and the general phasing of construction can be defined, the exact type and timing of the private development is largely dependent on market conditions and other factors.

The first phase of the public improvements include activities that can be undertaken by the City immediately upon project approval as they occur on lands owned by the City which are not designated parkland. The second phase of the public improvements will require more lead time as they will require parkland alienation through a Home Rule message from City Council and the approval of the NYS Legislature. As is required when parkland is proposed to be alienated, the City will provide lands of equal usefulness, environmental value, and fair market value to replace the parkland lost (see *Section IV H*).

This section of the DEIS describes both phases of the proposed public improvements and the associated private development. As previously described in the Introduction, components of the project are described site-specifically, where possible, or generically, where site specific details are unknown. For each component, it is indicated whether the review is being handled site specifically or generically. Full-page "Exhibits" are included at the end of this section which illustrate aspects of the project site or proposed development.

A. Project Location

The project site is located at the Port area where the Genesee River meets Lake Ontario in the community of Charlotte within the City of Rochester (see Exhibit 1). This area, located adjacent to Ontario Beach Park, is currently the site of the former fast ferry terminal, parking lots, the Public Boat Launch, the Ontario Beach Labor Operations Center, and the Charlotte Genesee Lighthouse. Exhibit 2 shows the existing conditions and key landmarks/buildings at the project site, and Exhibit 3 shows designated parkland which is an important component of the project area.

The parcels and address locations within the project area are described below and shown on Exhibit 4 Address/Parcel Location map:

- The approximately 22-acre City-owned site known as the Port of Rochester (Port site) is generally bound by the Genesee River to the east, the Hojack railroad to the south, Lake Avenue to the west, and Ontario Beach Park to the north. The Port site encompasses the properties at 4590, 4600, 4630, 4650 and 4752 Lake Avenue, and 1000 North River Street; and
- South of the Port site, the Right-of-Way Improvements extend across parcels at 503, 527, and 565 River Street; and

- Also south of the Port site, the Lighthouse Trail project area includes two City-owned parcels at 4576 and 4580 Lake Avenue which total about one acre, and portions of the County-owned Charlotte Genesee Lighthouse property at 70 Lighthouse Street, and the privately owned parcel at 4554 Lake Avenue.

With regard to reviewing agencies, the project site is located within NYS Department of Environmental Conservation (NYSDEC) Region 8, and the Ninth U. S. Coast Guard District, Eastern Region; and the U.S. Army Corps of Engineers/Buffalo District.

B. Project Timetable

The full build-out of all of the components proposed as part of the Port project will be realized over many years. The phasing and timing of this multi-year project has been designed so that the Port area and the surrounding Charlotte community has the necessary time to adjust to and accommodate the changes in development, traffic patterns, housing demand, commercial opportunities, population dynamics, views and other characteristics of the area. Many aspects of the proposed development, in particular, the private development and Phase 2 Public Improvements, are dependent upon market conditions and other factors, such that these components may not come to fruition for a decade or more.

The Phase 1 Public Improvements, including the Phase 1 Marina, the ROW Improvements and the Boat Launch Reconfiguration (parking), will be advanced in a single coordinated effort, anticipated to occur between September 2012 and May 2014 (see *Sections IV S and V J*). Construction during this time will involve marina excavation, slag processing, relocation of utilities, reconfiguration of the Public Boat Launch parking lot, and roadway relocation and re-paving. Special attention will be paid to maintaining access to the Public Boat Launch, the Terminal Building and other recreational resources of the area, particularly during the summer months. The Marina is expected to be open to the public in May 2014 in time for the summer boating season.

The anticipated construction schedule for the Lighthouse Trail is spring and summer of 2013. The construction of the LORC is dependent upon the negotiation of a lease-purchase option between the City of Rochester and SUNY College at Brockport.

Private development will likely begin with the development of Parcel I or a portion thereof. It is not expected that construction on Parcel I will begin until 2014. Development on Parcels II and III will follow based on the timing of the necessary parkland alienation, relocation of the Public Boat Launch and/or Ontario Beach Park Labor Operations Center, and developer interest.

C. Project Description

The proposed project is designed to enhance public waterfront recreational facilities and to encourage and support economic development consistent with the goals of the City's Local Waterfront Revitalization Program (LWRP) and the 2010 Renaissance Plan. The project will transform an under-developed public waterfront area into a year round recreationally-oriented resource that will complement other significant public resources in the area (e.g.,

Ontario Beach Park, Terminal Building, Charlotte Pier, the Charlotte Genesee Lighthouse, etc).

In general, the Proposed Action includes development of a marina basin, public promenade and new streets to replace both the existing surface parking area and access drives associated with the former ferry terminal. Pedestrian and bicycle access will be enhanced with new trails and sidewalks. The Ontario Beach Park Labor Operations Center and Public Boat Launch will be relocated, and public vacant lands will be sold for conversion to private mixed use development. Parkland will be alienated following a Home Rule message from City Council and approval by the NYS Legislature. Exhibits 5 and 6 illustrate the overall locations and components of the Proposed Action.

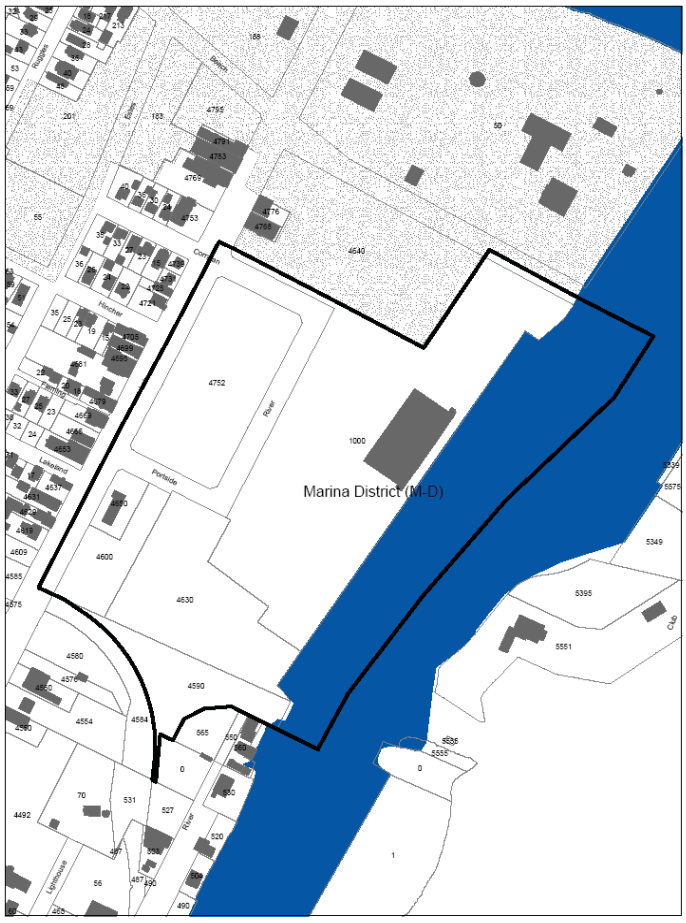
As specified in the sections which follow, and as was generally described in the Introduction, the following are the subject of a site-specific review: establishment of a new zoning district, the actions described as Phase 1 Public Improvements, and some of the actions proposed as Phase 2 Public Improvements. Other actions are being reviewed generically, including: some actions proposed as Phase 2 Public Improvement and the Incremental Private Development upon Parcels I, II, and III.

The Proposed Action provides for the following:

1. Marina Zoning District

A new zoning district, to be called the *Marina District,* is proposed for the area shown in Figure II-1 below. The *Marina District* will ensure that future projects are developed in a manner that is consistent with the vision of the Proposed Action and that avoids significant adverse impacts on the surrounding neighborhood and larger community. This new zoning district requires a Zoning Map Amendment and Zoning Text Amendment through City Council. The area outside the new *Marina District* will remain in the Harbortown Village (HV) District or in the Open Space (OS) District. The *Marina District* is described more fully in *Section IV I.*

Figure II-1 Marina District



2. Phase 1 Public Improvements

All of the Phase 1 Public Improvements are being reviewed site specifically in the EIS. These include the Phase 1 Marina, Right-of-Way (ROW) Improvements, the Lighthouse Trail, and Lake Ontario Resource Center (LORC), as described below. With the exception of the LORC and the Lighthouse Trail, it is anticipated that these components will be coordinated as a single public improvement project. Based on the current financing plan, the Phase 1 Public Improvements will be financed from a combination of sources, including:

- a Boating Infrastructure Grant (BIG) from US Fish and Wildlife Service administered through the NYS Office of Parks, Recreation, and Historic Preservation;
- a Multi Modal grant from the NYS Department of Transportation;
- LWRP Environmental Protection Fund grants from the NYS Department of State;
- proceeds from City sale of the watershed authorized by City Council in April 2010;
- City Cash capital; and
- proceeds from sale of bonds as provided for in Fiscal Years 2009-2010 and 2012-2013 City Capital Improvement Programs.

2.1 Phase 1 Marina

The Proposed Action includes development of an approximately 4.7-acre public marina with access to the Genesee River. The location proposed for the marina basin is adjacent to and west of the former fast ferry terminal and north of the existing public boat launch, primarily within the property at 1000 North River Street. The marina will replace paved parking and inspection areas associated with the defunct fast ferry service. Subdivision of 1000 North River Street will be required to accommodate creation of the marina.

The marina will feature a public promenade around the perimeter of the basin (approximately 20 feet in width), as well as adjacent public open space. Boater amenities will be available, including a boater facility building (rest rooms, showers, laundry, etc), a pump-out station, and appropriate utility connections including Wi-Fi, electricity and water.

The marina basin developed in this phase will provide transient and seasonal boat docking for a variety of vessel types. It will accommodate boats ranging in size from 30 to 75 feet in length and will include opportunities for broadside dockage. The basin is designed to function also as a venue for local, regional and national in-water boat shows and regattas.

The Phase 1 Marina basin will provide significant flexibility regarding the number of slips that may be accommodated. The anticipated configuration is depicted in Exhibit 7. The configuration depicted in Exhibit 7 would provide a total of 85 slips of the types and sizes summarized in Table II-1. This number includes opportunities for broadside docking along the perimeter of the basin.

It is conceivable that the configuration summarized in Table II-1 and depicted in Exhibit 7 could be modified to some degree to reflect the market conditions prevailing at the time the basin is completed. It is also true that the number of boats actually accommodated by this or any other particular configuration will vary somewhat, as it would, for example, should a single boat 65 to 70 feet in length occupy two successive slips designated for boats half that length.

Table II-1 Phase 1 Marina Slip Summary

SLIP TYPE/LOCATION	SLIP LENGTH	QUANTITY
Seasonal	35’	18
Seasonal	40’	19
Seasonal	45’	8
Seasonal	50’	6
Seasonal	80’	4
	SEASONAL TOTAL:	55
Transient South	26’	14
Transient North	26’	13
Transient Special Events	26’	3
Transient/Seasonal	26’	-
	TRANSIENT TOTAL:	30
	PHASE 1TOTAL:	**85**

The Marina Engineering Report and Feasibility Study regarding this project that was completed in May, 2009 (see Appendix C) anticipates licensing some of the provided slips, thereby committing those slips to a particular tenant or user and removing them from the pool of slips available for seasonal rent or transient use. Although the study indicates that there could be many different strategies, it assumes that a maximum of 50 percent of the seasonal slips could be available for licensing. With respect to the Phase 1 Marina, the study specifically assumes the licensing of 24 slips. The strategy would likely also impose a maximum upon the number of slips that might be licensed as a single block.

Construction of the marina will include:

- Site excavation and the management of iron slag, non-slag fills and native soils, as required;
- Opening the basin into the river. The opening is proposed north of and immediately adjacent to the boat launch. Permits will be required from the U.S. Army Corps of Engineers and NYS Department of Environmental Conservation as detailed in *Section IV B* of the EIS;
- Relocation of existing public utilities and infrastructure;
- Installations of 6,000 square feet of rock scour protection in the riverbed;
- Installation of sheet piling and stone revetment around the basin perimeter and at the entrance (Genesee River access point). These measures and others such as baffle walls, wave attenuators, and scour protection will reduce wave energies, limit wave surge, and provide a basin that meets Safe Harbor standards (see *Section IV C);*
- Installation of water circulation features, including a system of bubblers to prevent ice formation and winter damage to marina facilities;
- Installation of marina water quality improvements and measures to improve wildlife habitat;
- Installation of docks, gangways, slip utilities and associated amenities;

- Construction of Boater Facilities Building; and,
- Construction of the public promenade, open space and appropriate landscape amenities.

An aerial rendering of how the area would appear following completion of the Phase 1 Marina (and the ROW Improvements as described below) is presented in Exhibit 8. The cost for construction of the Phase 1 Marina and perimeter promenade is estimated to be $14.64 million.

2.2 Right-of-Way (ROW) Improvements

As shown in Exhibit 8, streets in the site vicinity will be re-aligned and extended to accommodate creation of the marina basin. The proposed ROW improvements, primarily affecting River Street, North River Street, and Corrigan Street, are designed to smooth traffic flow and facilitate access. The improvements will provide for a new secondary north-south access into the Port site and for changed access to the Terminal at 1000 North River Street.

Construction of the ROW Improvements will require City acquisition of property rights. Acquisition is necessary at 503, 565, and 527 River Street. The City will retain a utility access easement along former right of way which will become part of 520 River Street.

The ROW Improvements include:

- Realignment of North River Street. The segment of the existing North River Street ROW from Ontario Beach Park to Portside Drive will be realigned to the west;
- River Street Extension. A new ROW will be created to realign and extend River Street northerly from just north of Latta Road into the Port site to connect with the realigned North River Street. Once River Street is extended and connects with North River Street, the roadway from Stutson Street to Ontario Beach Park will be renamed, and a portion may be designated as park road;
- Corrigan Street Extension. The existing Corrigan Street ROW, which now terminates at the intersection with the existing North River Street will be extended eastward towards the Terminal Building;
- Installation of new and relocation of existing public utilities and infrastructure. Utilities and infrastructure associated with the foregoing ROW realignments and extensions will be relocated and/or extended as needed;
- Street Facility Improvements. On-street parking improvements, installation of sanitary and storm sewer improvements, new sidewalks, decorative street lighting, and granite curbs will be constructed on North River Street, River Street Extension and the extension of Corrigan Street;

- Reconfigured Public Boat Launch Access and Parking. Access and parking now serving the Public Boat Launch in its present location will be reconfigured to accommodate construction of the new ROW.
- Extension of the Genesee Riverway Trail. The Genesee Riverway Trail will be extended along River Street from its current terminus to the proposed marina promenade and beyond to Ontario Beach Park, the existing river walk and the Charlotte Pier;
- Possible incorporation of "Green" features such as bio-retention areas for stormwater management and permeable paving materials for side walk/trail and parking areas

The 2011 cost estimate for construction of the ROW improvements is estimated to be $5.1 million

2.3 Lighthouse Trail

A trail will be constructed to connect Lake Avenue with the site of the Charlotte Genesee Lighthouse property at 70 Lighthouse Street. The trail will be designed to improve public access to the Lighthouse site and to create public access to a superior view corridor of the waterfront which is recognized as among the most significant in the region. The trail will begin on properties owned by the City at 4576 and 4580 Lake Avenue. Once off the City-owned land, the trail will extend along the perimeter of adjacent property owned by Rochester Gas & Electric Corporation (RG&E) at 4554 Lake Avenue, and continue along the perimeter of the Charlotte Genesee Lighthouse property to connect with the sidewalk on Lighthouse Street.

The proposed trail will be approximately 700 linear feet in length with a minimum width of 10 feet. The trail will be handicapped accessible with a stable asphalt or stone dust surface (that will meet or exceed AASHTO guidelines for surface stability). The trail will include a scenic overlook to provide public access to a superior view corridor of the waterfront. In order to increase use and visibility of the trail, signage consistent with the City's Genesee Riverway Trail signage standards will be installed.

Construction of this project component will include the removal of scrub vegetation along the slope adjacent to the trail which may require easements from adjacent property owners for construction and future maintenance access. The project will also require acquisition of a permanent easement or fee title from RG&E to provide for the trail, and a temporary access agreement from Monroe County for construction of the project at 70 Lighthouse Street.

The preliminary estimate for construction of the trail is $353,000 (not including the connection to the sidewalk at Lighthouse Street).

2.4 Lake Ontario Resource Center (LORC)

The City-owned former fast ferry terminal at 1000 North River Street will continue to be adapted for both commercial and public use, including potential interim and permanent development of a Lake Ontario Resource Center (LORC). SUNY College at Brockport has expressed interest in developing the Lake Ontario Resource Center at the Port site, as a facility which will focus on water quality research and accumulation of data regarding Lake Ontario.

The Proposed Action includes the potential development of the LORC, primarily within the "link building" portion of the Terminal Building. The link building was constructed in 2004 to connect the Terminal Building, as it existed at that time, to the fast ferry. The development of the LORC within the link building, rather than in a separate, newly constructed building, is referred to as the Interim LORC. The Interim LORC is reviewed site specifically as part of this EIS.

SUNY College at Brockport plans to potentially undertake development of a Permanent Resource Center facility at such time as the College has secured the necessary funding and the City has transferred property rights and approved development plans. Development of a Permanent LORC may require sale of a portion of 1000 North River Street to SUNY and additional subdivision of the parcel. The development of the permanent facility is reviewed generically within this EIS document.

3. Phase 2 Public Improvements

The City's investment in the Phase 2 Public Improvement is predicated upon private investment in the parcels available for development and demonstrated interest within the development community. The Phase 2 Public Improvements include Expansion of the Marina, Relocation of the Public Boat Launch, and Relocation of the Ontario Beach Park Labor Operations Center. Although the marina expansion will require the prior relocation of the Public Boat Launch facility, the timing of these three components is uncertain, and it is unknown whether they would be undertaken together as a single project or as multiple projects over time. It is anticipated that some or all of the Phase 2 Public Improvements will be financed with funding from the City of Rochester's capital improvement program. State and federal grant funding opportunities will be pursued as has been the case with the Phase 1 Public improvements.

3.1 Expansion of the Marina

The City has incorporated a plan for expansion of the Marina basin into the Proposed Action. The Phase 2 Marina Expansion will involve expansion of the basin to the south, including the current location of the public boat launch. The acreage of the marina basin will increase from about 4.7 acres to about 7 acres, and the capacity will increase from about 85 to about 157 slips, including broadside dockage. The public promenade will extend around the perimeter of the expanded marina. The expansion of the marina is reviewed site-specifically in this environmental review.

Although the project now calls for a total of 157 slips, an earlier alternative that was considered the preferred alternative for some time called for a total of only 118 slips. Additional analysis revealed that the basin could accommodate additional slips, that there was sufficient market demand for an increased number of slips and that the return on the public investment could be improved by including additional slips. Although applications now pending before permitting agencies request approval of only 118 slips, the preferred alternative being proposed at this time does call for a total of 157. It is anticipated that the pending applications will be amended or that subsequent applications will be submitted to account for the additional 39 slips.

Expansion of the marina basin will require the prior relocation of the Public Boat Launch facility, as described in *Section 3.2* below. As stated above, initiation of the Phase 2 Marina Expansion will also depend upon the demand for more slips, and financing opportunities.

The expanded marina will be designed to include all of the features of the original marina basin, including sheet piling and stone revetment, wave attenuation measures, water circulation features, water quality measures, and features to protect and promote wildlife habitat. Construction will involve site excavation and the management of iron slag, non- slag fills and native soils, along with the installation of docks, gangways, slip utilities and associated amenities.

The expanded marina basin will provide significant flexibility regarding the number of slips that may be accommodated. An engineering analysis indicates that the expanded basin could accommodate as many as 165 slips. One likely configuration is depicted in Exhibit 9. The depicted configuration would provide a total of 157 slips as summarized in Table II-2. Broadside dockage within the basin is included within this total. (For an aerial rendering of how the area would appear following completion of the Phase 2 Marina Expansion, see Exhibit 13 which is referenced later in *Section 4* regarding Incremental Private Development).

Table II-2 Phase 2 Marina Slip Summary

SLIP TYPE/LOCATION	SLIP LENGTH	QUANTITY
Seasonal	35’	20
Seasonal	40’	23
Seasonal	45’	8
Seasonal	50’	6
Seasonal	80’	4
	SEASONAL TOTAL:	61
Transient South	26’	-
Transient North	26’	13
Transient Special Events	26’	3
Transient/Seasonal	26’	80
	TRANSIENT TOTAL:	96
	PHASE 2 TOTAL:	**157**

It is conceivable for a different slip configuration to be proposed at the time the expanded basin is excavated. The precise configuration will depend upon market conditions prevailing at the time and, most importantly, the demand for slips of different types, sizes and configurations. The number of boats actually accommodated by any particular configuration may also vary; as it would should a single boat occupy two successive slips otherwise designated for boats half as long.

As was already described above in the Phase 1 Marina narrative following Table II-1, The Marina Engineering Report and Feasibility Study (see Appendix C) anticipates licensing of some of the provided slips, thereby committing those to a particular tenant or user. The study indicates that a maximum of 50 percent of the seasonal slips could be available for licensing. With respect to the expanded basin developed in Phase 2, the study has specifically assumed the licensing of a total of 50 slips. As the study was focused upon a scenario in which only 118 slips were anticipated and as the number of proposed slips has since increased to 157, it should be anticipated that the actual number slips subject to licensing could be greater than 50.

The estimated cost for construction of the Phase 2 Marina Expansion is $5.3 million (Appendix C, 2009 Feasibility Study).

3.2 Relocation of the Public Boat Launch

The four-lane Public Boat Launch, currently located at 4630 Lake Avenue and 1000 North River Street, will be relocated to elsewhere within the Rochester Harbor area. This is necessary to accommodate expansion of the marina basin, as well as anticipated private development.

The property containing the existing Public Boat Launch is designated parkland. Before the existing Boat Launch property can be redeveloped, parkland alienation and replacement legislation will be required.

Several alternative sites for the Public Boat Launch have been identified, but so many factors could affect the eventual relocation site that these alternative sites are all considered preliminary (see *Section V F* for a description of the alternative sites). Displacement of the current Public Boat Launch and development of the need for a relocated facility are definite components of the site specific review; the development of a relocated facility upon another uncertain site within the area is only being subjected to a generic environmental review.

The preliminary estimate for relocation of the Public Boat Launch, including land assembly, is $2.5 million.

3.3 Relocation of the Ontario Beach Park Labor Operations Center

The Ontario Beach Park Labor Operations Center includes staff facilities, offices, and maintenance facilities associated with the operation of Ontario Beach Park. This City-owned, County-operated facility is located at 4600 and 4650 Lake Avenue. These properties are designated parkland.

The area occupied by the existing Ontario Beach Park Labor Operations Center is proposed as part of private development Parcel II. Before these properties can be used for private development, parkland alienation and replacement legislation will be required. In addition, City legislation authorizing sale of the property and an amendment to the City-County Parks Operation and Maintenance Agreement will be required.

The Labor Operations Center will be relocated from its existing location on Lake Avenue to another location in or adjacent to the park. The Labor Operations Center will be replaced in kind and may include additional amenities to serve the Charlotte Youth Athletic Association. Several alternative sites for the Labor Operations Center have been identified, but so many factors could affect the eventual relocation site that these alternative sites are all considered preliminary (see *Section V D* for a description of the alternative sites). As with the Public Boat Launch, displacement of the current Labor Operations Center and development of the need for a relocated facility are definite components of the site specific review; the development of a relocated facility upon another uncertain site within the area is only being subjected to a generic environmental review.

The cost of a new facility is estimated at $1.2 – $1.4 million.

4. Incremental Private Development

The Proposed Action includes mixed-use private development on three parcels designated for that purpose: Parcels I, II and III. Private development of these three parcels will require the sale of publicly-owned lands for private use. Public land will be sold at a fair market value. A 30-foot public access easement along waterfront parcels will be retained by the City. The properties to be sold include:

- Parcel I: 4752 Lake Avenue
- Parcel II: 4600 and 4650 Lake Avenue, portion of 4630 Lake Avenue
- Parcel III: Portions of 4590 Lake Avenue and 4630 Lake Avenue

As described in the foregoing sections, Parcel II includes designated parkland and is the site of the Ontario Beach Park Labor Operations Center. Parcel III, which includes the site of the Public Boat Launch, also includes designated parkland.

Residential and commercial development is primarily envisioned on Parcels I, II, and III. The incorporation of private, mixed-use development at the Port site is designed to increase the number of people living and staying in the area and to enhance economic development and business activity year round.

For the purposes of this generic environmental review, the mixed use development is preliminarily identified as a combination of private residential (apartments and condominiums) development containing 280 to 430 units and commercial/retail development containing up to about 44,000 square feet. A pedestrian mall or "Civic Square" has been incorporated in the site design of Parcel I to provide visitors with both physical and visual access to the new Marina and Port development from Lake Avenue (see Exhibit 10). This pedestrian linkage has been designed to function as an active outdoor "mall" with landscaping, benches, retail shops and other features.

A future proposal for a hotel will be reviewed within the context of the impacts evaluated for the build out of commercial and residential uses. Proposals will be subjected to site-specific environmental review as described in *Section I*.

The mixed-use private development is proposed to be undertaken incrementally, in multiple phases subject to completing site specific environmental reviews. Preparation for private development on Parcel I could commence concurrent with the Phase 1 Public Improvements, subject to City Council approval of the sale of the land. However, as Parcel I will be utilized for staging and related construction activities during the Phase 1 Public Improvements, actual construction upon Parcel I could only commence after completion of the Phase 1 Public Improvements. Private development on Parcel II will require relocation of the Labor Operations Center, alienation of associated parkland, and the sale of public land. Private development on Parcel III will require the relocation of the Public Boat Launch, alienation of parkland, and the sale of public land.

The precise sequence in which development upon these parcels would proceed is uncertain and will depend upon market demands and developer interest as well as upon the construction, relocation and alienation prerequisites described above in this section.

A series of four aerial renderings is presented in Exhibits 10 through 13. The first, Exhibit 10 illustrates how the area might appear were the Phase 1 Marina development to be followed by development on Parcel I in advance of development on any other parcels. Exhibit 11 illustrates development on Parcel I, relocation of the Labor Operations Center and development on Parcel II, all in advance of further marina excavation or development on the remaining parcels. In Exhibit 12, the Public Boat Launch has also been relocated, and development on Parcel III has proceeded in advance of the Phase 2 Marina Expansion. The boundary of the area to be occupied by the expanded marina is shown in this exhibit. Exhibit 13 illustrates the Full Build scenario in which the marina has been expanded (Phase 2 Marina Expansion) and private development has taken place on Parcels I, II and III.

Due to the uncertainties of the type and timing of development on each parcel, the private mixed-use development is only being subjected to a generic environmental review. The feasibility study indicates that the involved sites could accommodate development more extensive than that being proposed. However, the project being proposed as the subject of this EIS also takes market conditions into account and therefore assumes that the project will lead to no more than 430 dwelling units and to no more than 44,000 additional square feet of commercial space in the aggregate. The maximum of 44,000 square feet of commercial space is in addition to space now existing within the Terminal Building and the adjoining Link building. As was already described above in the Phase 1 Marina narrative following Table II-1, the Marina Engineering Report and Feasibility Study (see Appendix C) anticipates licensing of some of the slips**.**

Specific proposals for private development on Parcels I, II or III will require a subsequent site specific environmental review to augment the current generic review. Given the thresholds relied upon in this review, any development proposal that would cause the total number of dwelling units developed as part of this project to exceed 430 and/or cause the total amount of commercial space developed as part of this project to exceed 44,000 square feet (outside the confines of the Terminal Building) will require preparation of an Environmental Assessment Form, pursuant to the requirements of the State Environmental Quality Review Act and Chapter 48 of the City Code. Likewise, any proposal that would generate parking demands significantly greater that those that have been estimated or that would not develop a sufficient number of new spaces to satisfy the new demand would also require an Environmental Assessment Form.

Development upon Parcels I, II and III will be financed privately.

Exhibit 1
Project Location Within the City of Rochester

LABELLA Associates, P.C. Engineering Architecture Environmental Planning

LABELLA Associates, P.C. | Engineering Architecture Environmental Planning

Exhibit 2
Site Location Map

LABELLA Associates, P.C. | Engineering Architecture Environmental Planning

Exhibit 3

Parkland In and Around Site

LABELLA Associates, P.C.
Engineering Architecture Environmental Planning

0 100 200 400 Feet

1 inch = 200 feet

ADDRESS / PARCEL LOCATION MAP

MARCH 2011

LEGEND

Included Within or Affected by Proposed Action

2009 Aerial Photo

PROJECT/CLIENT

PROJECT NUMBER / FILEPATH

210660

Y:\Edgewater Resources LLP\210660 - Port Marina\Planning \SEQR\Figures\From Wes\vl_ParcelMap.mxd

DRAWING TITLE

Exhibit 4

Address / Parcel Location Map

Exhibit 5
Port Marina Project
Overview of Development Areas (Full Build-Out)

Exhibit 6
Port Marina Project
Overlay of Full Build Development on Aerial Photo of Existing Conditions

Exhibit 7
Port Marina Project
Phase 1 Marina
Potential Slip Configuration

Exhibit 8
Port Marina Project
Phase 1 Marina
and Public Improvements

Exhibit 9
Port Marina Project
Phase 2 Marina
Potential Slip Configuration

Exhibit 10
Port Marina Project
Phase 1 Marina and Public Improvements and Private Development on Parcel I

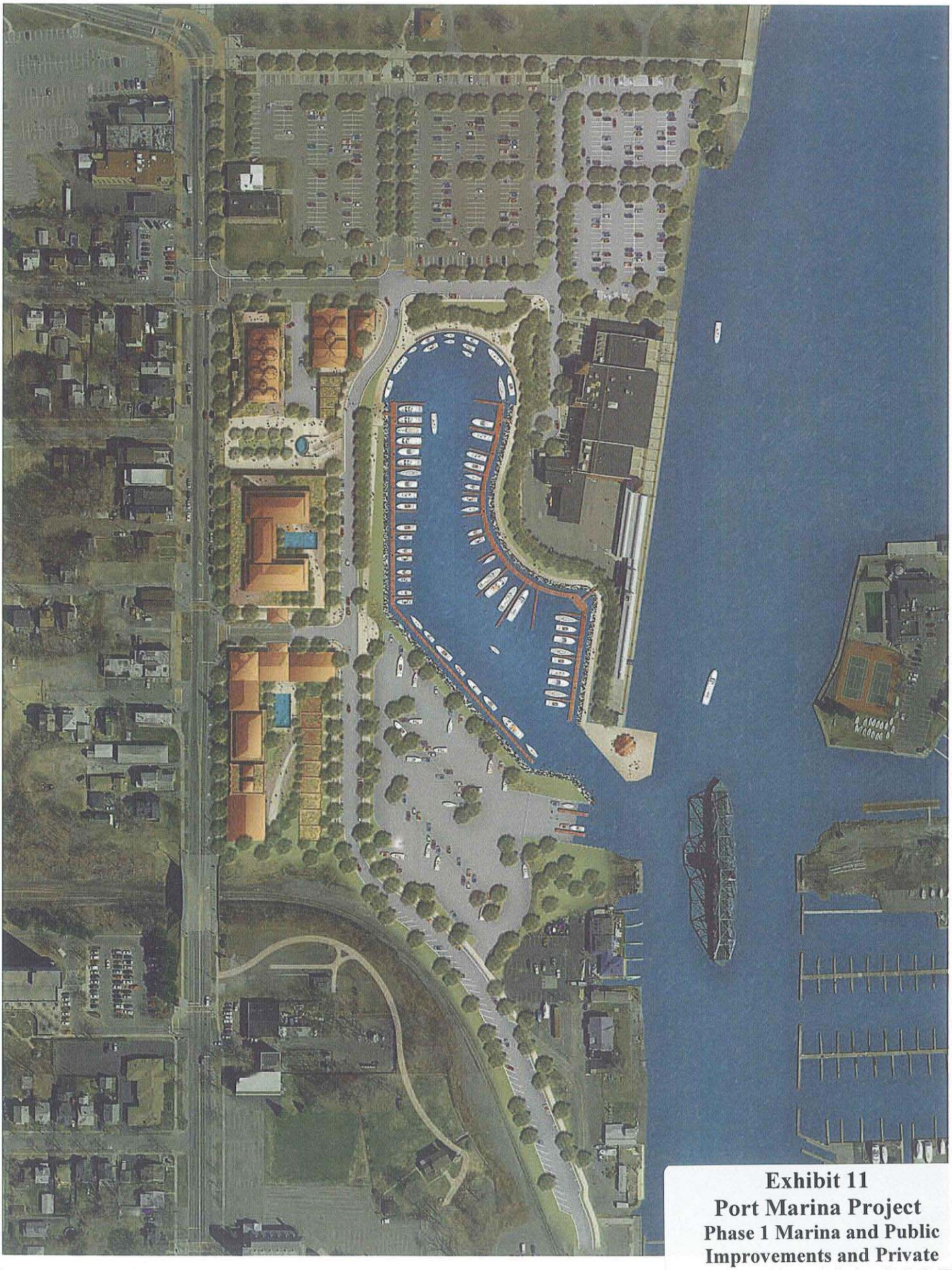


Exhibit 11
Port Marina Project
Phase 1 Marina and Public Improvements and Private Development on Parcels I & II

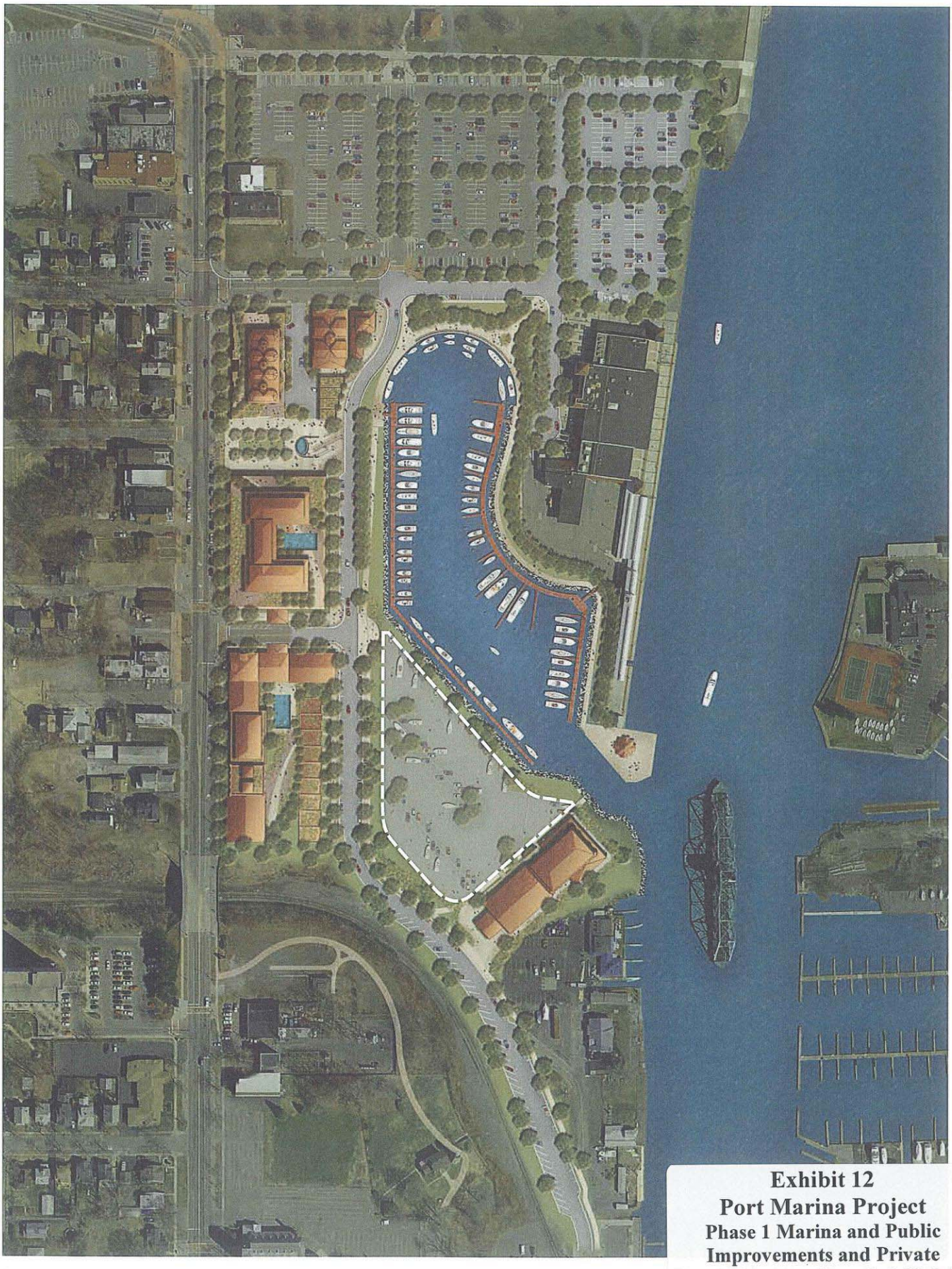


Exhibit 12
Port Marina Project
Phase 1 Marina and Public Improvements and Private Development on Parcels I, II & III

Exhibit 13
Port Marina Project
Full Build Development
(Phase 2 Marina and Private Development on Parcels I, II, & III)

III. PURPOSE, PUBLIC NEEDS AND BENEFITS

A. Overview

This section of the EIS describes the purpose, public need for and anticipated benefits of the proposed action. The purpose of the project is to transform an under-developed public waterfront area into a year round recreation-oriented resource that complements other significant public resources in the area (e.g. Ontario Beach Park, Terminal Building, Pier into Lake Ontario, the Charlotte Genesee Lighthouse, etc).

B. Project Goals and Objectives

The project is designed to enhance public waterfront recreational facilities and to support economic development consistent with the City's Local Waterfront Revitalization Program (LWRP), prepared in 1990 and amended in 2011. The LWRP (see Appendix A) includes both policies and goals that have played a role in the planning of the proposed action.

LWRP policies that have guided project design include:

1. Redevelop vacant and underutilized land and structures at the Port in a manner which addresses boating demand, leverages private investment and includes a mix of water oriented and/or water enhanced commercial, residential and recreational uses;
2. Provide and maintain public access to the waterfront as part of the development;
3. Redevelop, reconfigure or relocate the public boat launch facility in a manner which creates the highest and best use of land, maximizes development potential of landside parcels, continues to meet boat launch demand and minimizes environmental and traffic impacts;
4. Facilitate development of marinas, boat docks and launching ramps, fishing access and other water dependent and water enhanced recreational uses; and,
5. Redevelop the Port site and River Street area in a manner which is compatible with and complements the character and integrity of significant architectural and/or historic structures in the area and which specifically protects and enhances the Charlotte Genesee Lighthouse.

Specific goals set forth in the Local Waterfront Revitalization Program for the Port Site also played a role in project planning:

- Preserve and enhance the village character of Charlotte;
- Create a family-oriented, four-season development;
- Maintain and enhance visual and physical access to the water;
- Improve access into and out of the port area;
- Enhance economic development and business activity within Charlotte;
- Improve pedestrian circulation and safety in the area;

- Protect/enhance the environmental, historic and cultural resources of the area; and,
- Develop a mixed-use project that balances public uses and needs with appropriate private development that expands the tax base.

In accordance with the goals described above, several targeted and specific objectives for this project were identified in the planning process:

1. Establish a clearly defined marina location in the Rochester Harbor that caters to transient boaters offering: state of the art dockside utilities including Wi-Fi, electricity, water, and pump-out service; easy access to nearby restaurants, public bicycle/walking trails, and public transportation; layout space for activities such as sail maintenance and gathering spaces for landside recreation; and a boater services facility with comfort facilities and information sources, including check-in, showers, restrooms, laundry, and lounge space;
2. Create a safe harbor that incorporates the use of scour protection, wave attenuators, baffles, seawalls, and armor stone to create a calm internal basin with an average wave climate below 1.5 feet in height;
3. Create an access point for both seasonal and transient boaters who want to take advantage of the City of Rochester and it's nationally, regionally, and locally significant attractions;
4. Create deep draft facilities that support regional transient sailing regattas and in-water boat shows;
5. Support educational activities for transient boaters aimed towards improving the quality of Lake Ontario and provide mooring space for transient research vessels;
6. Transform the Port of Rochester site from its current condition as an under-utilized public waterfront with few amenities to a vibrant boater-oriented waterfront destination;
7. Stimulate the economy of the City of Rochester and serve as a catalyst for the redevelopment of underutilized public lands in the Charlotte neighborhood, creating a more attractive boater destination with greater services, recreation, shopping, dining, and entertainment amenities for transient boaters; and,
8. Increase the number of people living and working in the area by making defined portions within the Port site available for private investment and redevelopment, including market rate housing options, additional retail development at street-level, and potential hotel development.

C. Public Need

The Port site is currently an underutilized area consisting predominantly of parking lots and commercial land located at the most significant waterfront space in the Greater Rochester area – the confluence of the Genesee River and Lake Ontario – and one of only two access points into Monroe County from Lake Ontario.

Rochester Harbor is one of only three deep draft harbors on the south shore of Lake Ontario. Boater traffic on Lake Ontario is seasonally high, and boaters must often take shelter in Rochester Harbor during storms. Storms generating high northeast winds can create twelve to sixteen foot high waves on Lake Ontario and a wave surge into the Rochester Harbor that precludes docking along the river wall.

The 22 acre port site is prime real estate and has provided some public benefit for the last several decades, serving primarily as a seasonal parking lot for special events at the park, for boat trailers, and most recently for patrons of the Terminal Building. While this waterfront site is open to the public, there are minimal amenities that provide for public enjoyment. Public green space is limited; bicycle and pedestrian access is informal from the south to Portside Drive; and there are no retail establishments and only a few eateries.

Moreover, the Rochester Harbor does not currently provide the accommodations that would support regional boater-oriented events. There is no protected in-water staging area, and there are insufficient transient facilities in close proximity to the Port site. Local residents involved in boating and the boater recreational industry support the creation of such facilities to accommodate local, regional and national in-water boat shows, regattas, as well as classic and antique boat shows.

The creation of a marina basin within the Port site has been an element of various planning documents and studies for more than 20 years. The Monroe County Waterfront Recreation Opportunities Study, January 1990 (MCWRO), identified opportunities to enhance Ontario Beach Park to serve the community and to attract tourists. The study recommended improvements to pedestrian circulation, parking access, and public transit linkages. It called for the creation of 75 boat slips with provisions for transient boaters, for the creation of docking for display ships, and for additional entertainment facilities. Recommendations for expansion of the City's public marina facilities at the Port site were also contained in the 1990 Local Waterfront Revitalization Program adopted by the City and the State, in the City's 2010 Amendment to the LWRP, in a Market Analysis performed in 2006 by ZHA, Inc., and in the Marina Engineering Report and Feasibility Study completed in 2009 by Edgewater/Abonmarche Consultants and Passero Associates. The GEIS prepared by the City in 2001 for the Port of Rochester Harbor and Public Improvement Project included a generic review of the marina and adjacent private development within the Port site.

The Rochester Harbor is home to several marinas and hundreds of boaters and serves as a key stopover for boaters transiting Lake Ontario on regional and national routes. A boater market analysis performed in 2008 by Edgewater/Abonmarche Consultants identified a potential demand for 200 to 500 additional boat slips in the Rochester/Monroe County area for boats 26 feet and larger. Boats larger than 26 feet are generally kept in marinas, rather than being hauled to boat launches for each use. Generally, existing marinas in the Rochester area do not contain sufficient slips larger than 30 feet to meet the estimated demand. The proposed first phase of the public marina would offer approximately 85 slips for boats larger than 26 feet. The second phase of the marina project would expand this capacity to approximately 157 slips, well within the estimated potential demand.

This significant potential demand for larger slips was identified in the *Economic Impact Analysis and Marina Engineering & Feasibility Report*, completed in May 2009 by Edgewater/Abonmarche Consultants with Passero Associates. The report also documented the need for additional modern, quality boater services, including restrooms, showers, shore power, water, internet, trash collection, pump out, laundry facilities, layout space for activities such as sail maintenance, gathering spaces for landside recreation, and connections to nearby restaurants, trails, and public transportation.

Access to the Port site is via Lake Avenue, an arterial on the west side of the Port area, and the only north-south right-of-way serving the Port site. In addition to the normal day to day activities, special events at the Port are increasing in number and can attract gatherings of 5,000 persons to the waterfront and the immediate Port area, and up to 50,000 persons once or twice per year. Safety and quick access at these events is a number one priority for security and emergency responders. The closest firehouse to this area is located one mile to the south on Lake Avenue. Incidents on Lake Avenue could restrict critical security and emergency vehicle access. The LWRP and other planning documents identify the need for a secondary north-south ROW through the extension of River Street into the Port site.

The Charlotte Genesee Historic Lighthouse, built in 1822 and the second oldest lighthouse on the Great Lakes, is located near the Port. The lighthouse is open to the public year round and has served as a marine museum. While the lighthouse is adjacent to and visible from Lake Avenue, the only public access is via Lighthouse Street off Latta Road and is not well-marked. Visitors coming from Lake Avenue cross private property to access the lighthouse. There is a need to facilitate access to the historic lighthouse from Lake Avenue via the creation of an accessible scenic walkway. The Lighthouse Trail project additionally provides opportunity to improve views of the waterfront from this area, create additional public accessibility to these views and to mitigate the loss of significant vistas of the harbor from Lake Avenue, an impact of the proposed private development.

D. Anticipated Public Benefits:

1. Phase 1 Public Improvement Project

1.1 Phase 1 Marina

A new, state-of-the-art marina basin and docking facility, approximately 4.7 acres in size and accommodating 55 seasonal and 30 transient boat slips, which features a perimeter promenade and a boater services building, would provide numerous benefits:

- The proposed marina, in combination with the natural and historic features of this area, would garner Rochester a reputation as a first class destination on the Great Lakes, thereby stimulating local and regional tourism opportunities and promoting boat travel between Rochester and other Great Lakes ports in the United States and Canada;

- The proposed marina would transform an underutilized site with subsurface issues that present challenges for redevelopment into a more valuable public resource;

- The proposed marina would make Rochester a first class venue for regional sailing regattas, modern in-water boat shows, and regional or national classic and antique boat shows;

- The deep water marina and surrounding rock revetment would provide new habitat for native fish populations;

- The marina would provide a safe public harbor serving local boaters and Great Lake travelers;

- The development of the marina would not preclude the future operation of a small ferry service, given the continued presence of the Terminal Building, assuming parking needs can be met;

- The marina would satisfy an increased demand for marine sales and boater services;

- In addition to revenue from the sales of land for development and from the licensing of marina slips, the project is anticipated to contribute to an estimated $1.85 million in annual direct economic benefits from increased property taxes at the site and from marina operations;

- Additional economic benefits are anticipated from increased property values and taxes within the surrounding neighborhood, from increased business activity and sales taxes associated with boater purchases and related economic activity, and from job creation; and,

- Public access and enjoyment of the area will be enhanced by increased green space, creation of additional waterfront area, and public trails and pathways.

1.2 Right-of-Way (ROW) Improvements

The proposed Right-of-Way, public access, and trail improvements will provide multiple benefits:

- North River Street will serve as a secondary north-south public access from Latta Road to the Port site, as well as to Ontario Beach Park, the Genesee River and the Terminal Building at 1000 North River Street;

- North River Street will serve as a vital ROW providing an alternate access for Fire, Police and Homeland Security agencies to service and quickly respond to investigations and emergency events in this area; and,

- The Genesee Riverway Trail will extend to Ontario Beach Park, affording pedestrian and bicyclists with scenic off road access beginning at Lower Falls Park, approximately 5 miles south of the Lake, and continuing through Maplewood Park and Turning Point Park to Ontario Beach Park. This improvement will provide local residents and visitors with improved access to natural and cultural attractions, including the beaches of Lake Ontario, the Pier into Lake Ontario, and the Ontario Beach Carousel. As the Genesee Riverway Trail enhances the quality of life for local residents and promotes city living, improvements to the trail should contribute to Rochester gaining a reputation as a first class destination on the Great Lakes.

1.3 Lighthouse Trail

The development of an approximately 700 linear foot trail connecting the existing Lake Avenue public sidewalk to the Charlotte Genesee Lighthouse and the sidewalk at Lighthouse Street will provide the following benefits:

- A dedicated public access will be developed from the Lake Avenue ROW to the Lighthouse and to Lighthouse Street. This public access will be well-marked and is expected to increase the number of visitors to the historic Charlotte Genesee Lighthouse;

- Development of the Lighthouse Trail will provide public access to scenic views of the new marina and other existing scenic views within the area. Residents and visitors will be able to enjoy significant vistas of Lake Ontario, the Genesee River, Ontario Beach Park, the Ontario Beach Carousel, and the newly created vibrant waterfront area within the Port site featuring open water, boats, recreational trails, and new open space; and,

- The new trail will be integrated with existing public resources which is expected to significantly reinforce the Port of Rochester as a regional destination and highly desirable place to live.

1.4 Lake Ontario Resource Center (LORC)

The potential development of an Interim Lake Ontario Resource Center (LORC) by SUNY College at Brockport within the Terminal Building and the eventual development of a Permanent LORC is expected to result in the following benefits:

- The Lake Ontario Resource Center would facilitate research associated with the Great Lakes, promote community and business partnerships, and provide unique opportunities for students at all levels in the Greater Rochester area;

- Public education would be provided by the LORC that will lead to tangible improvements in local storm water practices, waste management, tributary management, and upland agricultural practices that impact the water quality of Lake Ontario and will help to enhance the quality of the transient boating experience on this lake and throughout the Great Lakes. (The quality of the boating experience is dependent upon the health and cleanliness of the surrounding waters, and these attributes are directly impacted by the activities of boaters and the surrounding community.);

- Transient boaters would be afforded the opportunity to support the research activities of LORC by performing observation and reporting of lake conditions as they transit Lake Ontario; and,

- The utilization and financial viability of the Terminal Building at 1000 North River Street would improve.

2. Phase 2 Public Improvements and Incremental Private Development

Private development on Parcel I is expected to commence concurrent with completion of the Phase 1 Public Improvements, as they are described in Section II. Full build out of the project, involving incremental private development on Parcels II and III, will be dependent upon the success of the Phase I Marina, market demands, developer interest, and funding availability to complete the associated public improvements and Council approval of the sale of public lands. Incremental Private Development on Parcels II and III also requires the following:

1) Relocation of the Ontario Beach Park Labor Operations Center to accommodate private acquisition and mixed use development at Parcel II. This will require enactment of associated parkland alienation and replacement legislation and the disposition of public lands; and,

2) Relocation of the Public Boat Launch to accommodate private acquisition and mixed use development at Parcel III. The relocated launch will be operation and provide an equivalent level of service prior to discontinuing operation of the existing launch. Development at Parcel III will also require enactment of associated parkland alienation and replacement legislation and disposition of public lands.

Anticipated benefits associated with the Incremental Private Development on Parcels I, II, and III and the associated Phase 2 Public Improvements include:

- Residential and commercial development is expected to spur long term economic and financial growth in the area and to expand enjoyment of the waterfront, both seasonally and year round, creating a more vibrant and active waterfront for visitors and the Charlotte community;

- For all phases of private development the present value of increased property tax revenues over a period of twenty years was computed and found to range from $6.1 million to $18.5 million;

- For development area I alone, assuming 214 residential units and 20,000 square feet of commercial/retail space including office, private residential and commercial development is expected to generate new City property tax revenues in the range of $1.53 million to $1.67 million annually *(Note: The higher revenue figure assumes that the Terminal Building is sold at some point for an approximate cost of $2.915 million per the updated estimates provided by Edgewater in April 2011, see Appendix E)*;

- Private development upon Parcels I, II and III together with the construction and operation of the marina is expected to contribute to the creation of approximately 2,500 construction jobs and 300 permanent jobs upon completion;

- Economic benefit of approximately $2.17 million to $4.34 million will be derived from sale of public lands *(updated values provided by Edgewater April 2011, see Appendix E)*;

- A stronger economy is expected to result in the Charlotte community, the City and the region. Property values in the vicinity are expected to increase. The operation of the marina is expected to provide an estimated $1.85 million in annual direct economic benefits, and over $2 million in annual economic benefits when indirect (secondary) effects are included (based upon anticipated revenues generated by boater purchases and other associated economic activity.);

- On-site mixed-use residential development will improve the activity and viability of the Port site in the off-season;

- Increased and improved boating industry business and employment is expected to result, including marine supply and boater services;

- The new structures will be constructed in conformance with a form based code that controls structure height and location, form, materials, scale, and massing, in order to maintain an attractive visual environment and protect public enjoyment and access to the waterfront; and,

- The new structures will, to the greatest extent possible, incorporate energy efficient and sustainable design strategies, including dark sky lighting with LED fixtures, LEED Certified structures, passive solar and day-lighting strategies, and the use of existing materials and innovative new materials that reduce rainforest deforestation and minimize use of chemical preservatives.

IV. SETTING, IMPACTS AND MITIGATION

A. Geology, Soils and Topography

1. Introduction

This section reviews existing surface and subsurface soils and bedrock conditions and discusses impacts of the project.

All elevations in this section refer to the City of Rochester Datum. Some of the technical reports/appendices referenced in the DEIS use the North American Vertical Datum (NAVD) which is 1.75 feet below the City Datum.

2. Existing Setting

2.1 Soils and Subsurface Conditions

The Port of Rochester Site (approximately 22 acres) is located on land that is partially fill materials and native soil. The exact soil composition, groundwater, and topography are all important aspects that are considered in the design of any project, as they can impact foundation design, utility design and roadway design.

Currently the Port site consists of large areas of pavement, sections of lawn and landscape features, and a boat launch. The pavement is mainly used for vehicular parking for visitors to Ontario Beach Park and the Terminal Building, as well as for special events. These areas are constructed on soils consisting in part of manmade fill materials including slag, cinders, coals, foundry sand, etc., collectively referred to as "Regulated Solid Waste". Native soil types at the site include glacial till, alluvial deposits and native lacustrine soils.

The Soils Survey of Monroe County designates soils on the site as being within the Collamer series and as Made Land. The Collamer series soils are described in the Soil Survey as well drained, medium textured soils that are mainly made up from Lacustrine deposits of sand, silt, and clay. The Collamer soils are highly erodible when exposed and have a low bearing capacity. The Made Land series of soils are soils and fill materials that have been transported to the site and placed there. Soils consist of fill materials that are not necessarily clean select fills and include construction debris and Regulated Solid Waste. The erodibility and bearing capacity of Made Land soils are difficult to estimate due to the wide variability in the soil material.

A Geotechnical Site Characterization was completed as part of the Port of Rochester Harbor Improvement and Harbor Ferry Terminal project by Haley & Aldrich, Inc. in September 2000 (see Appendix W). As part of the geotechnical assessment, 25 test borings, 27 test pits, and 3 groundwater observations wells were installed throughout the site, with the exception of the proposed Lighthouse Trail area.

According to the Geotechnical Site Characterization, three soil units including fill, alluvial sediments, and glacial till, are present at the site.

The fill materials on the site include slag, cinders, generic fill materials, and construction debris. The iron slag on the site is a result of a former manufacturing operation that was located along the east side of Lake Avenue. The waste materials generated from the manufacturing operation were used to fill much of the site. Slag thicknesses average 6 feet, with thicker layers of slag (approximately 16 feet) on the southern portion of the site. Standard Penetration Test values of site fill ranged from 4 blows to refusal on impenetrable objects.

Alluvium is present across the site and consists of silty medium to fine sand with varying amounts of gravel and occasional zones of plastic, slightly organic, clayey silt with some fine sand. Standard Penetration Test values ranged from 0 to more than 50 blows per foot, indicating a loose to very loose condition.

Glacio-lacustrine deposits exist in the higher ground towards Lake Avenue. These are up to 10 feet thick and consist of stratified fine sands with occasional clay and coarser sand.

Glacial till was present between the alluvium or lacustrine deposits in most areas of the site. Till was absent in the vicinity of Borings HA-101, HA-109, HA-110, and HA-123, which are located at considerable distances from each other in a north-south direction (the furthest south and furthest north are 2,600 feet apart), but are all in close proximity to the river. The till consists of soft to hard sandy silty clay with trace gravel, or clayey silt with sand and fine gravel, and was generally very compact.

Generally, the soil strata are somewhat consistent across the site in both an east-west and north-south direction. The top twelve to eighteen inches of material consists of an asphalt pavement section or topsoil and other organic material. Regulated waste exists at an elevation that varies slightly across the site, but is generally located between 2 and 10 feet below ground surface. Slag fill and construction/demolition
debris (fill) exists in another varying layer ranging from 10 to 15 feet below the surface. This fill layer is bounded underneath by a layer of organic peat approximately 15 to 20 feet below the ground surface.

Soils and groundwater testing have been completed in multiple subsurface investigations in the past, with the most recent subsurface investigations performed in 2007, 2008 and 2009. Samples were tested for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals and pesticides.

The soil testing results, as reported by the certified analytical laboratory that performed the subsurface investigation noted that two VOCs were present in the samples that exceeded the NYSDEC allowable limits of naphthalene and

methylene chloride. None of the samples tested contained SVOCs in levels above detection limits. Metals present in the samples included arsenic, barium, beryllium, cadmium, calcium, copper, magnesium, manganese, and zinc. Most of these contaminants were found to be slightly above the established limits set forth by the NYSDEC and U.S. Environmental Protection Agency (USEPA). No pesticides were found in any of the samples collected from the site investigation.

2.2 Bedrock

Bedrock at the site consists of sandstone of the Queenston formation and ranges from depths of 37 feet below ground surface (elevation 254) near Lake Avenue to 111 feet below ground surface (elevation 143) near the Genesee River.

The existing bedrock elevation of the proposed Lighthouse Trail is approximately 280 feet. This trail is close to Lake Avenue where bedrock has been found at elevation 254 and lower (at least 26 feet below the trail elevation).

2.3 Depth to Groundwater

Regional groundwater tends to flow to the north towards Lake Ontario. However, based on geotechnical investigations, groundwater flows generally toward the south-southwest, away from the river at the proposed marina site. The existing static groundwater elevation in the area of the proposed marina is 248.75-feet, according to the "Data Summary Package Port Marina Predevelopment Site Conditions Gap Investigation" (Gap Investigation), prepared by LaBella Associates, PC, and dated September, 2009 (see Appendix F).

The existing elevation of the proposed Lighthouse trail is approximately 280 feet and the highest elevation of the groundwater in the area is approximately 249 feet, or approximately 31 feet below the surface.

2.4 Topography

Within the Port site, the highest point of grade is on Lake Avenue and the lowest point is the Genesee River. From west to east, the drop in elevation between these two points is approximately 37 feet. The approximate elevation at Lake Avenue is 291 feet while the Genesee River wall is at elevation 254 feet. Most of the significant drop in elevation takes place closest to Lake Avenue.

Little elevation change occurs in the area of the proposed Lighthouse trail. The grade between Lake Avenue and the lighthouse is fairly constant, with the overall elevation change being about 10 feet over a run of approximately 500 feet.

3. Impacts and Mitigation

3.1 Marina

3.1.1 Soil and Subsurface Conditions

Soil and subsurface conditions at the marina site include widely-varying depths to bedrock; deep, loose and potentially compressible natural soil deposits; foundations of former structures; fill with slag, ash, construction and demolition debris, and other wastes; and shallow groundwater. Each of these conditions complicates redevelopment of the site.

The marina will require the excavation of approximately 225,000 cubic yards of material upon full build-out. The Phase 1 Marina will require the excavation of approximately 178,000 cubic yards of material. The quantities of material to be excavated were determined using a three dimensional model of the marina in conjunction with the soil boring information (see *subsurface investigation reports* in Appendix G).

When the excavation of the marina is complete and the body of water is created, there will be no major alteration to the soils around the marina's footprint. Erosion of newly exposed soils on the banks of the marina will not be a concern as the project will install rip rap and stone revetment around the marina's perimeter. This will protect the soils from washing away.

3.1.2 Bedrock

No constraints for marina development are anticipated due to bedrock on the site. Subsurface investigations determined that the Queenston bedrock varies from 37 feet below ground surface (elevation 254) along Lake Avenue to approximately 111 feet (elevation 143) along the Genesee River where the marina will be built. The existing bedrock will not affect the excavation of the marina basin as it is at a lower elevation than the bottom of the proposed marina (elevation 232).

3.1.3 Depth to Groundwater

The hydraulic gradient across the proposed marina study area is relatively flat, which indicates that horizontal groundwater migration will likely occur at a relatively slow rate. The hydraulic conductivity of the subsurface soils and fill materials is also high, indicating that vertical recovery (or filling in) of groundwater, once these soils and fills are excavated, will likely occur at relatively high rates. The gradient and conductivities were determined by conducting borings, test pits, rising head tests, measurements, observations, and laboratory analysis.

Since groundwater depths at the site are relatively shallow, the hydraulic gradient is relatively flat, and the hydraulic conductivity is relatively high, it is anticipated that impacts from the proposed marina to the groundwater table levels will be minimal. The excavation and the eventually filling in of the marina basin to match surface water levels with those of the river will likely replenish and maintain the existing groundwater levels in the area. Also, the introduction of the marina and the associated volume of water will likely result in a further reduction of the already slow horizontal migration of groundwater across the site.

During excavation of the marina, groundwater will become a concern as the excavation will proceed to a depth well below the elevation of existing groundwater. This will require use of dewatering measures. These measures may include creating a sump pit in one location of the marina and allowing groundwater to collect there, where it can then be pumped out, treated in accordance with a Stormwater Pollution Prevention Plan (SWPPP) and discharged into the Genesee River.

After the marina is excavated, the final step in its construction will be to break through the river wall to allow the marina to fill with water from the Genesee River. Groundwater elevation on the site and around the marina footprint will remain the same once the marina basin is filled with water. The low and high water elevations of the Lake Ontario (and consequently, the mouth of the Genesee River) are 244 feet and 250 feet, respectively. The groundwater is found at elevation 248.75 feet, which falls between the river elevations for the area.

3.1.4 Topography

Due to the significant drop in overall elevation across the site from west to east, elements of the project will be designed to minimize the need for retaining walls. The relocated North River Street profile will be designed to maintain drivable intersections with Corrigan Street and Portside Drive, while reducing the elevation drop to the basin edge and promenade.

At the north end of the basin, adjacent to Corrigan Street, the grading design will include a gentle slope to allow open space for the public and boaters. In the area just east of the intersection of North River Street and Portside Drive an overlook is planned. A grade difference will exist here, between North River Street, the reconfigured boat launch, and the top of marina revetment that will facilitate the overlook and incorporate a retention structure. The areas east of the basin, surrounding the terminal and link buildings will remain mostly unchanged from their current elevations. Transitions from the terminal building and drop off loop will be designed to minimize slopes and provide open space where possible.

3.2 Right-of-Way (ROW) Improvements

3.2.1 Soil and Subsurface Conditions

The soils and subsurface conditions within the site of the proposed Right-of-Way Improvements are comprised of organic materials, slag deposits, demolition debris, glacial till, alluvial deposits and lacustrine soils.

The existing soil and subsurface conditions (widely-varying depths to bedrock; deep, loose and potentially compressible natural soil deposits; foundations of former structures; fill with slag, ash, construction and demolition debris; and shallow groundwater) are considered in design of the street.

Material that is excavated may contain slag or other contaminated materials. Soil testing, classification, handling and disposal will be completed in accordance with the project's Environmental Management Plan (EMP), NYSDEC regulations, and requirements of permitting agencies. Further discussion can be found in *Section IV O*.

3.2.2 Bedrock

Bedrock in the vicinity of the proposed roadway alignment is similar to that of the proposed marina. Bedrock near Lake Avenue has been found to be about 37 feet deep (elevation 254) and will not affect construction of the Right-of-Way improvements.

Likewise, bedrock conditions will not impact the relocation of utilities associated with the Right-of-Way Improvements, as the utilities will be installed at shallower depths above the bedrock. The deepest utility projected to be installed is the relocated sanitary sewer, which will be approximately 20 to 25 feet deep, dependent upon location along the sewer's alignment. As stated above, bedrock in this area is at least 37 feet below the ground surface. Further discussion on utility installations can be found in *Section IV I.*

3.2.3 Depth to Groundwater

Groundwater within the vicinity of the proposed ROW Improvements is similar to that of the groundwater elevation in the marina footprint, approximately 248.75 feet. The northern portions of the roadway (North River Street between Portside Drive and Corrigan Street) are around elevation of 260 feet and will not be affected by groundwater elevations. However the southerly sections of the roadway are at elevations in the 253 to 258 feet range. Due to relatively high groundwater elevations, the design of the pavement section for the roadway may incorporate geotextile fabric that will serve to strengthen the pavement section by preventing the migration of fine stone that causes pumping and potholes to develop. Under-drains will be installed along the roadway edge to remove groundwater from the pavement section if it filters up through the soil or is absorbed into the ground and pavement section. The removal of water will serve to prevent pavement distress and extend the life of the pavement.

3.2.4 Topography

From the end of River Street (at the CSX railroad tracks) to its terminus at Portside Drive, the change in elevation is approximately 10 feet over a length of about 1,300 feet. The design profile for this roadway maintains the existing grade as much as possible. This approach avoids a large change in elevation from the edge of the roadway section to existing grades along its alignment. It also avoids a large amount of cutting and filling of material to bring the road to its finished design elevation.

The proposed alignment of North River Street changes in elevation from 265 feet at Portside Drive to 255 feet at Corrigan Street. North River Street will generally maintain the elevations of existing roads with which it intersects. For example, Portside Drive currently has a slope of approximately 6 percent west to east and will ultimately terminate at the relocated North River Street located along the marina's edge. The profile of North River Street will be designed to approximately match existing elevations on Portside Drive (265 feet), to minimize changes to its slope. A retaining wall will be constructed at the terminus of Portside Drive and the marina edge to accommodate differences in elevation between the Portside Drive-North River Street intersection and the elevation of the marina.

Likewise, North River Street will be designed to meet the existing grade at the Corrigan Street intersection. Corrigan Street has a fairly constant slope from Lake Avenue to the Terminal, and is not proposed to change in profile. The difference in elevation from Corrigan Street to Portside Drive will create views of the waterfront of the marina.

3.3 Lighthouse Trail

3.3.1 Soil and Subsurface Conditions

According to the USDA Soil Survey for Monroe County, the soils in the area of the proposed trail are comprised of Collamer silt loam and Made Land. Silt loam soil is highly erodible, difficult to work when wet and subject to differential frost heaving. Soil and subsurface conditions in the trail area will be analyzed in more detail during design to confirm the types of soils present and their suitability to construct a trail.

The Lighthouse Trail will not be adversely affected by the mass excavation of the marina. With the approval of NYSDEC, processed slag material from the marina excavation could be used as sub-base for the trail during its construction. This use would be beneficial in providing a suitable base and in reducing the cost of slag disposal.

Excess soils that may need to be disposed of upon completion of the trail would be removed from the site. Soil testing, classification, handling and disposal will be completed in accordance with the project's EMP, NYSDEC regulations, and requirements of permitting agencies. See *Section IV O* for further discussion.

3.3.2 Bedrock

Bedrock will not be a factor in trail construction. Bedrock in this area is believed to be approximately 26 feet below the ground surface.

3.3.3 Depth to Groundwater

The depth to groundwater will not be a factor in trail construction. Groundwater in this area is believed to be 31 feet below the ground surface.

3.3.4 Topography

The slope between Lake Avenue and the lighthouse is fairly constant, with the overall elevation change being about 10 feet over a run of approximately 500 feet. The construction of the trail will likely take advantage of this consistent elevation change to minimize the import and export of materials when establishing a finished grade elevation.

3.4 Lake Ontario Resource Center (LORC)

3.4.1 Soil and Subsurface Conditions

The construction of SUNY College at Brockport's permanent Lake Ontario Resource Center (LORC) adjacent to the Terminal Building will require consideration of the existing soils and subsurface conditions on-site, including the slag, solid waste, and native materials. Soil testing, classification, handling and disposal will be completed in accordance with the project's EMP, NYSDEC regulations, and requirements of permitting agencies. The soil and subsurface conditions investigation will assist in determining appropriate foundation systems.

The mass excavation of the marina may occur during the timeframe when SUNY College at Brockport will be using the former "link building" attached to the Terminal Building for the interim LORC. Access to the Link Building will be maintained throughout construction of the public improvement project.

3.4.2 3.4.2 Bedrock

Bedrock in the general area proposed for the LORC is found at depths of 111 feet, and is not expected to be a factor when designing the foundation for the permanent building. The foundations and footings will be designed to avoid conflict with the existing the riverwall tiebacks.

3.4.3 Depth to Groundwater

Groundwater elevations in the general area proposed for the LORC will need to be considered during design of a permanent facility. Groundwater at the site will likely be at a similar elevation as the river and proposed marina (approximately at elevation 248).

3.4.4 Topography

The topography of the permanent LORC site is relatively flat and at an elevation of approximately 254 feet. This elevation is 2.25 feet higher than the 100 year floodplain as designated by FEMA. Site grading and the exact location of the building will be considered during the design process.

3.5 Relocation of the Public Boat Launch

3.5.1 Soil and Subsurface Conditions

Relocation of the Public Boat Launch to potential sites along the Genesee River will be preceded by sub surface investigations and soils testing to identify the types of soils that exist at the potential sites and to ascertain if there is contamination.

3.5.2 Bedrock

As part of a subsurface investigation, the depth to bedrock for the proposed Public Boat Launch site will be determined.

3.5.3 Depth to Groundwater

Sites considered for the Public Boat Launch will likely have a high water table, as they will be on the bank of the Genesee River. The design of the launch and associated parking areas will address the high groundwater conditions.

3.5.4 Topography

Topography will be considered in the design of the Public Boat Launch ramp and the parking lot area to address drainage of stormwater and snow melt, soil removal or required to build the launch. River sounding and bathymetry readings will be used determine the dredging requirements and drafts limits in the federal navigation channel in the river.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

3.6.1 Soil and Subsurface Conditions

The existing Labor Operations Center is situated relatively close to the marina footprint and is believed to have soils with the same properties and composition. Upon demolition of the building, the parcel will be backfilled with approved materials.

Soils and subsurface conditions at the new Labor Operations Center relocation site will be investigated during the feasibility stages of this project component.

3.6.2 Bedrock

Bedrock depths will be investigated at the proposed relocation site of the Labor Operations Center.

3.6.3 Depth to Groundwater

Groundwater at the site of the existing Labor Operations Center is not an issue, as the building's elevation is approximately 280 feet, which is above the groundwater level (elevation 254).

Groundwater conditions at the site of the proposed new facility will be investigated during the feasibility stage of this project component.

3.6.4 Topography

Topography at proposed Labor Operations Center will be investigated during the feasibility stage of this project component.

3.7 Incremental Private Development

3.7.1 Soils and Subsurface Conditions

Soil and subsurface conditions at the site include widely-varying depths to bedrock; deep, loose and potentially compressible natural soil deposits; foundations of former structures; fill with slag, ash, construction and demolition debris and other wastes; and shallow groundwater. Careful consideration of these factors should be undertaken as foundation systems for structures are evaluated and selected.

During the design of buildings proposed for construction on the development parcels, the foundation design will take into account the types of soils, given the size of the buildings being proposed. In previous subsurface investigations, including a predevelopment report created for Parcel I between Portside Drive and Corrigan Street, it was noted that buildings will likely be required to be built on spread footings on a portion of this parcel and deep foundations on other portions.

The Predevelopment Subsurface Conditions Analysis Investigation Report prepared by Labella in March of 2009 (Appendix G) recommends that sub slab vapor intrusion systems be installed in the proposed private development structures. These systems will assist with the removal of gases that build up under slabs of structures and could then potentially seep into those structures. It was also noted that the Monroe County Health Department and NYSDEC could require that these systems be installed as part of all proposed structures on-site, specifically where slag will remain within the soils on-site and under the potential buildings on-site. The Monroe County Health Department and NYSDEC will be incorporated into the review process for development proposals.

There will likely be excavated materials from each development parcel when the foundations and basements are constructed. This excavated material, including all solid waste and slag, will need to be monitored and disposed. Soil testing, classification, handling and disposal will be completed in accordance with the project's EMP, NYSDEC regulations, and requirements of permitting agencies.

The foundations and remnants of structures that once existed on the site will need to be disposed of offsite. Depending upon building placement on the parcel and foundation design, the organic and top soils will need to be undercut.

An evaluation of subsurface conditions will be completed prior to development of Parcels I, II, and III. The subsequent reports will include discussion and recommendations on foundation systems, drainage systems, and pavement sections design.

3.7.2 Bedrock

Bedrock is not a development constraint on Parcels I or II as they will be situated closer to Lake Avenue and near an elevation of 270 feet. Bedrock in this area was found to be approximately at elevation 254. Parcel III is closer to the river at surface elevation 253 where the depth to bedrock is more than 100 feet below the ground surface. Depth to bedrock will be a consideration as foundation systems are evaluated and selected for structures to be built on this parcel.

3.7.3 Depth to Groundwater

Groundwater in the vicinity of Parcels I and II should not be a concern as the elevation of these parcels is about 20 feet higher than that of the groundwater found on-site (elevation 248.75). Groundwater in the vicinity of Parcel III may be a concern as it is at a lower elevation and closer to the river. Parcel III is at an elevation of about 253 feet, about 4

feet above groundwater depth. The design of foundations for all buildings will take into account groundwater elevation and the migration of water up through and across soil strata.

3.7.4 Topography

Upon completion of the marina and the realignment of North River Street, there will be approximately 10 to 20 feet of elevation difference between Lake Avenue and the new River Street. Developers could create a building that has an elevation drop equivalent to one building "story" (or 10 to-15 feet) from the Lake Avenue side of the building to the North River Street side of the building. This elevation drop is more drastic near Portside Drive and less near Corrigan Street. Entrances to these building and their parking areas will need to accommodate topographic condiditons

B. Water Resources

1. Introduction

This section describes the surface and groundwater resources within the project area. The discussion addresses water quality, including known instances of groundwater contamination, site drainage conditions, and stormwater management. This section also includes a discussion of how the proposed marina will affect and be affected by the Genesee River and the marina design principles that can be implemented to address water quality.

All elevations in this section refer to the City of Rochester Datum, unless otherwise noted. Some of the technical reports and appendices referenced in this DEIS use the North American Vertical Datum (NAVD) which is 1.75 feet below the City Datum.

2. Existing Setting

2.1 Surface Water Quality

2.1.1 Lake Ontario

Lake Ontario is a 7,500 square mile lake that is part of the Great Lakes of North America. Lake Ontario accepts drainage runoff from a large drainage area from both the United States and Canada. Generally, it takes about six years for water to pass through Lake Ontario to the St. Lawrence Seaway.

As a result of human activities, the Lake has a number of impairments, including water quality and invasive species. Near the proposed project site, along the beach and the Charlotte Pier, organic materials, such as algae, becomes trapped. The material becomes stagnant and creates unpleasant odors and public health concerns which contribute to beach closures.

2.1.2 Genesee River

The Genesee River forms the eastern border of the site. The Genesee is a major drainage-way which flows north from its headwaters in Pennsylvania, bisects the City of Rochester, NY, and discharges into Lake Ontario. The river covers a distance of 157 miles, receives runoff from 2,500 square miles, and discharges approximately 4,430 cubic feet per second of water into the Lake. Other than Lake Ontario, the Genesee River is the only surface waterbody within or adjacent to the project site.

The NYSDEC has classified the Genesee River as a Class B stream meaning that its best use is recreation and fishing. NYSDEC also indicates that the Genesee River supports a warm water fishery. The Genesee River is classified as a Federal Wetland (designated as R2OWH), according to the U.S Department of the Interior National Wetland Inventory Map included in Appendix H.

The Genesee River is classified by NYSDEC as an impaired water body and is contaminated with PCBs, minex, dioxin, and impaired sediments. These pollutants impact the use of the river for swimming and fishing and adversely affect aquatic life. Pursuant to Section 303 of the Clean Water Act, NYSDEC implemented a strategy that includes regulations and monitoring to reduce the input of certain pollutants and protect the waters from continually being polluted in an attempt to restore the water body to a usable function.

In the vicinity of the project site, the Genesee River has high sedimentation loading as well as high levels of phosphorus, cadmium, pathogens and silt, which can be attributed to storm runoff from large agricultural areas upstream, discharges from the industrial facilities including Eastman Kodak's sewage treatment system, and infrequent overflows from the Monroe County Pure Waters (MCPW) combined sewer system. Recent, more stringent stormwater quality measures are in place to reduce the amount of pollutants entering the Genesee River and ultimately Lake Ontario.

2.1.3 Stormwater Management

Stormwater from the Port site and offsite generally flows from west to east and is captured through a series of catch basins and swales located throughout the site. Captured stormwater flows to underground water treatment structures in two locations on-site where sediment and contaminants are removed prior to the water entering the Genesee River. See *Section IV L* for additional discussion on stormwater management.

2.2 Groundwater Quality

As previously described, groundwater exists onsite at an elevation of approximately 249 feet. This elevation corresponds with the average elevation of the Genesee River of approximately 247 to 249 feet. According to groundwater contour maps and subsurface investigations performed over the years for various projects, the general flow of groundwater is north towards the Lake. However, on the project site itself, groundwater appears to flow generally toward the south-southwest, away from the river, based on groundwater sampling data, indicating that the river maybe locally influencing groundwater. Groundwater flow rates have been determined to be relatively slow in the project vicinity.

Throughout 10 years of subsurface investigation at the site, approximately 10 monitoring wells have been installed throughout the site. Well locations have been concentrated at the south end of the site, with others placed at locations of key structural components of proposed plans, for example where large multi-story or underground structures may be constructed.

Groundwater sampling investigations have identified volatile organic compounds (VOCs) and metals in some locations. No semi-volatile organic (SVOCs) compounds or pesticides were found in the groundwater samples. Generally, contaminants were detected at levels under the groundwater quality standards set forth by the NYSDEC and U.S. Environmental Protection Agency (USEPA).

More details can be found in three reports prepared by LaBella Associates: the Remedial Investigation Report (March 2007), the Predevelopment Subsurface Conditions Analysis Investigation Report (March 2009), and the Data Summary Package Port Marina Predevelopment Site Conditions Gap Investigation (September 2009), found in Appendices I, G and F, respectively. Based on these three investigation reports, the following conclusions have been made regarding groundwater quality at the Port of Rochester.

Laboratory Analytical Data:

Groundwater samples have been collected and submitted for laboratory analysis from the groundwater monitoring wells at the Port of Rochester. The laboratory analytical results have indicated that VOCs and metals in questions (such as cadmium, chromium, lead, and mercury) are generally not present in the samples submitted for laboratory analysis. The exceedances to the NYSDEC TOGS 1.1.1 Groundwater Quality Standards from samples MW09-1, MW09-2, and MW09-3 may be due to excessive sediments in the groundwater samples and not representative of actual groundwater conditions.

Overall, the laboratory analytical results from the eight groundwater samples suggest that metals potentially associated with slag materials at the Port of Rochester are not leaching to and impacting the groundwater.

Hydraulic Conductivity Testing:

Hydraulic conductivity testing was completed on three monitoring wells at the Port of Rochester in July 2009. Hydraulic conductivity testing is performed in order to measure rate at which groundwater is able to move through the ground. The results of this testing indicated that the subsurface at the Port of Rochester is highly permeable and that the results are consistent with the mid-range of fine to coarse-grained gravel deposits or the upper ranges of a fine to coarse-grained sand deposit.

Additional information regarding existing groundwater conditions may be found in the preceding section on Geology, Soils and Topography (*Section IV A*).

3. Impacts and Mitigation

3.1 Marina

3.1.1 Surface Water Quality

3.1.1.1 Lake Ontario

There will be no direct connection between the proposed Marina and Lake Ontario. Impacts of construction of the marina on Lake Ontario, if any, would result from transmission by the Genesee River to the lake. Possible impacts would primarily be related to dewatering of excavations and storm water runoff from construction activities, if proper mitigation measures are not employed

Impacts from the future operation of the marina would also initially affect the Genesee River and then flow north to the lake. It is expected that upon the completion of the Phase 1 Marina and upon full build out as many as 85 and 157 additional boats, respectively, may be docked at the marina and entering or exiting from the river. The Lake may be indirectly impacted due to a potential increase in the numbers of boats present on the Genesee River at the Port of Rochester.

3.1.1.2 Genesee River

As previously discussed, the Genesee River is classified as a Class B stream. Therefore, an NYSDEC Article 15 permit will be required when disturbing the banks of the River. Section 401 Water Quality Certification, also issued by NYSDEC, will be required to operate the marina.

A Section 404 permit will be obtained from the US Army Corps of Engineers (USACE) to allow for the dredging of the marina entrance and the placement of material into the marina. These materials include the stone armoring of the marina perimeter with rip rap and stone revetment for marina wall protection. The City of Rochester already has a permit from USACE and NYSDEC allowing for maintenance dredging and disposal of material from the navigational channel within the Rochester Harbor. The most significant permit issue associated with the proposed project will be to allow dredging

along the western bank of the Genesee River in order to bring the marina entrance to the required elevation. A Joint Application for the marina project has been submitted by the City to the USACE, the NYSDEC and other state agencies, to obtain dredging approvals.

A Section 10 permit of the Rivers and Harbors Act of 1899 will be obtained from USACE to allow the "breaking through" of the river wall to allow water to fill the marina basin. Review is required under this permit of how the alteration of the existing Genesee River wall may affect the Federal Navigation Channel.

The construction of the marina basin in an area of known significant filling with identified waste materials will create new areas for the communication between groundwater and water in the marina basin and therefore the Genesee River. The excavation for the marina will result in the removal of significant quantities of fill and waste materials that could be acting as sources of low level contaminants in groundwater. However, at the perimeter of the excavation these fill materials will remain in place. The Environmental Management Plan for the project will include procedures for removal of suspect or contaminated fill or waste materials at the perimeter of the marina excavation. The construction phase environmental project monitor will be responsible for identifying these conditions.

Another water quality issue with the proposed marina is the potential for water to become stagnant within the basin. To mitigate this potential impact, a water circulation element is included in the marina design. The proposed circulation system for the new marina includes a 24-inch diameter passive circulation pipe which will be designed to allow for the marina, under its own natural current, to turn over its water in approximately one week's time (see *Section IV C 3.1.1.3*).

Potential water quality impacts associated with the marina once operational include the operational spills or releases of cleaners, paints and other potentially hazardous materials associated with marina maintenance activities and boat use. While boat maintenance services will not be offered at the new marina some materials inherent to boating and marina infrastructure can impact water quality. Anti-fouling paints are used to prevent the buildup of barnacles, algae and other aquatic species on stationary structures, such as the marina infrastructure (docks, cables, etc.) and boats docked for long

periods of time. Some of these paint products contain chemicals such as tributylin (TBT) which may affect water quality and aquatic life. These types of anti-fouling products may also be applied to marina components.

A Marina Management Plan will be prepared by the City of Rochester during marina construction. The plan will include operational restrictions, including use of these paints on boats. The City's marina operator will be responsible for observing the conditions of boats and general operations that may impact water quality, such as leaking fluids in the water. Compliance with the Marina Management Plan will be continuously monitored by the marina operator.

The marina will include either a permanent pump out facility, a portable boat pump out facility, or both. If a portable system is used, the facility would be wheeled out to boaters for their use. The contents of the pump out tank will be discharged into a sanitary manhole. The operation and equipment associated with the boat pump out facility will be in compliance with NYSDEC and Monroe County Pure Waters regulations and permits. As will be required by these regulatory agencies, the pump out facility will be monitored by the City's marina operator and data will kept on the volume of sewage that is being discharged into the sewer system.

Marina dock slips will be provided with a water service, therefore, boaters may impact the water quality within the basin by spraying and rinsing off their boats and motors in the basin. The effects of routine spraying of boats would be reduced as marina water mixes with the large flow volume in the river.

Furthermore, no fuel services or off-season boat storage are to be provided which will limit the possibility of fuel spilling or leaking into the basin and maintenance related solvent, paint, or chemical releases to the river. Multiple marina operators in the area provide winter boat storage. Fuel services are provided nearby at other faculties in the Port. The modest increase in boat use on the river expected from the new marina would lead to a corresponding increase in fueling, and as a result, a similar increase in the potential for spills.

Scheduled marina maintenance procedures will be established by the City and marina operator to help protect the water quality of the marina and the Genesee River. Procedures will be implemented to remove debris and any waste material that accumulates within the marina basin as part of the Marina Management Plan. Marina management best practices will be followed, as outlined for New York State on the *NY Marina Environmental Best Practices Web Site* or in industry standards such as the *Connecticut Clean Marina Guidebook*. As previously described, sediment will need to be removed on a periodic basis. Based on the estimated sediment loading of approximately 1 foot per year or less, it is anticipated that the marina will need to be dredged every three to four years (see *Section IV C 3.1.2.3* for more detail). Sediment dredging will be performed under state and federal permit conditions established to protect water quality and marine life.

3.1.1.3 Stormwater

Construction of the Marina

Ground disturbance associated with construction generally increases the amount of sediment in stormwater run-off generated from a site. As such, a State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction will be required by the NYSDEC, pursuant to Section 402 of the Clean Water Act. As part of the granting of the permit, the project will require a Stormwater Pollution Prevention Plan (SWPPP), which includes the design of erosion and sediment controls to be used during all phases of construction as well as permanent site stormwater management practices.

Erosion control measures, such as silt fence, stabilized construction entrances, and dust control measures, will be installed during construction. Silt fence collects sediment that would otherwise run off the site and discharge into lower lying areas and the Genesee River. Fences are generally placed on the downhill side of disturbed areas and assists with the prevention of wind erosion from the site as well. A stabilized construction entrance allows for sediment and soil to dislodge from vehicles that are exiting the site.

Drop inlet protection will be provided around all catch basins that are within and will remain in the disturbed areas. This measure will prevent sediment from entering the storm sewer system and being discharged into the river.

While the marina is being excavated and utilities are being relocated, dewatering may need to take place to allow contractors to work in dry conditions. The water that is pumped from the excavation will be treated prior to its final discharge. Methods used to treat this dewatered material will include a silt sock or dirt bag, and/or sump pits within the excavation to filter out some silt and sediment prior to pumping. Alternatively, water can be pumped to a temporary sediment pond at a higher elevation, allowing silt to settle out prior to the water being discharged to the river through a pipe laid on the site surface.

The SWPPP and Notice of Intent (NOI) will be completed and filed with NYSDEC and other regulating agencies for Phase 1 Marina development. The permanent stormwater control measures to be constructed in Phase 1 will be designed to accommodate the Full Build condition. Construction areas associated with the Phase 2 Marina Expansion would be covered under a separate SWPPP and NOI developed at the time due to time limits set by NYSDEC.

In addition to the SPDES General Permit for Stormwater Discharges from Construction, other water quality permits will be obtained from NYSDEC for the proposed action.

Operation of the Marina

Currently, the project site is mostly paved with some grass medians and landscaped islands. Parking surfaces and interior vegetation will be removed due to the proposed development and replaced with the marina, the road improvements, and the private development.

As can be seen from Table B-1 below, approximately 75 percent of the project site is now impervious surfaces contributing directly to runoff. It is anticipated that the project will reduce these areas to about 54 percent of the site. Regarding the development parcels themselves, it is estimated that these will become approximately 85 percent impervious surfaces and 15 percent pervious. Existing pervious areas, which now represent approximately 25 percent of the site will also be reduced, to about 21 percent. The decrease in both impervious and pervious areas is accounted for by the development of the marina basin which is technically classified as an additional impervious area. Whereas none of the site is now occupied by open water, approximately 25 percent of the site will be open water.*

Table B-1 Change in Pervious and Impervious Surfaces

	Existing		Developed	
Surface	Acres	Percent	Acres	Percent
Pervious	6.48	25	5.37	21
Impervious	19.89	75	14.00	54
Water	0.00	0	7.00	25
	26.37*	100	26.37*	100

**Note: the total acreage of 26.37 includes the 22-acre City-owned Port site as well as some additional acreage to the north and south of the Port site (including the former Parcel IV).*

Prior to discharge into the marina, stormwater will be passed through treatment structures or facilities to remove pollutants, sediment, etc. These stormwater treatment facilities could include underground chambers, infiltration areas and bio-retention areas to remove pollutants from runoff.

Permanent storm water quality measures will need to be maintained and inspected by the City's marina operator and Monroe County Pure Waters periodically to ensure that they perform correctly in pollutant and sediment removal. Sediment control devices will need to be inspected yearly and cleaned out as they fill up with sediment and debris. Other storm water management features, such as the vegetated filter strips, will need to be mowed to specified lengths as outlined in the operations maintenance plan included in the SWPPP.

In order to prevent erosion from the walls of the basin as a result of water currents, agitation, and waves from boats and storms, the basin design will incorporate stone revetment and steel sheet piling along its walls. The stone revetment will essentially serve to provide an armoring to the marina walls, much like armoring is installed along steep highway slopes to prevent soil erosion.

3.1.2 Groundwater Quality

Groundwater quality and management is expected to be a concern during excavation of the marina basin. To remove groundwater, sump pits will be placed at low points within the excavation and water will be pumped to the ground surface. The groundwater will then be passed through a sediment control device such as a dirt bag, sediment sack or other method prior to discharge.

The site Environmental Management Plan (see *Section O Solid Waste Management* for more information regarding the EMP), which will include provisions for monitoring and disposing of both groundwater and contaminated soils, will require water quality testing before discharge to either the existing stormwater system or to the sanitary sewer system. Prior to any discharge of groundwater to the sanitary sewer system, a permit from Monroe County Pure Waters will be obtained. Some groundwater may be stored in settling tanks for treatment or transported for disposal at a permitted NYSDEC landfill facility. All fill material within the footprint of the marina will be removed, including any contaminated fill or waste material. This will eliminate any existing sources of groundwater contamination within the marina footprint and result in a reduction in overall contaminant loading to groundwater at the Port site.

3.2 Right-of-Way (ROW) Improvements

3.2.1 Surface Water Quality

3.2.1.1 Lake Ontario

The surface water of Lake Ontario is not expected to be impacted by the construction of Right-of-Way Improvements. Stormwater that discharges from these roadways will be passed through existing or new stormwater quality units once utility relocations are made. One such stormwater quality unit is currently in place near the northwest corner of the Terminal Building. The creation of the marina will reduce the drainage area being directed to this stormwater quality unit. These units will treat runoff to remove sediment and chemicals, such as phosphorus.

3.2.1.2 Genesee River

The Right-of-Way Improvements is not expected to impact the water quality of the Genesee River, as permanent stormwater quality units will be incorporated to treat water prior to its discharge in to the river. These units will serve to remove sediments that may be washed from the pavement and to remove harmful chemicals that may have accumulated in the runoff water.

3.2.1.3 Stormwater

During the construction of the Right-of-Way Improvements, soil and erosion control measures will be implemented to prevent and limit the transport of sediment and soils from the site. Measures that will be implemented during construction include silt fence, concrete wash stations, stabilized construction entrances and drop inlet protection. These measures will be installed in conformance with the overall project SWPPP.

Upon completion of the project, stormwater will be collected and conveyed to an existing stormwater quality unit. Water will be treated prior to discharge into the river. Other permanent stormwater management measures under consideration include bio-retention areas and porous pavement on sidewalks/trails and parking areas. These permanent stormwater measures will require periodic maintenance to keep them operating at maximum efficiency.

3.2.2 Groundwater Quality

The road surfaces will be will be approximately 4 to 16 feet above the groundwater table. As a result, the construction of the Right-of-Way Improvements will not affect groundwater quality.

3.3 Lighthouse Trail

3.3.1 Surface Water Quality

3.3.1.1 Lake Ontario

Construction of the Lighthouse Trail is not expected to affect the water quality of Lake Ontario. Runoff created by the trail will sheet flow across a large area prior to being collected in a storm sewer system and conveyed to the Genesee River. As the water flows across surfaces such as grass, it will be filtered and sediment and nutrients will be absorbed into the ground.

3.3.1.2 Genesee River

The Lighthouse Trail is not expected to affect the water quality within the Genesee River. As previously mentioned, stormwater runoff will sheet flow from the area around the trail. The runoff will be collected in the storm sewer system and treated prior to its discharge into the river.

3.3.1.3 Stormwater

The construction of the Lighthouse Trail will be undertaken in accord with various "green" construction initiatives and materials. These practices may include using a pervious pavement section that allows runoff to percolate into the soil. The design goal will be to not increase runoff from the site.

3.3.2 Groundwater Quality

The Lighthouse Trail is not expected to affect groundwater quality, as the project involves minimal amounts of materials with the potential to migrate and impact groundwater. In addition, the groundwater table is is approximately 30 feet below ground surface in the vicinity of the trail.

3.4 Lake Ontario Resource Center (LORC)

3.4.1 Surface Water Quality

3.4.1.1 Lake Ontario

No impacts to the water quality of Lake Ontario have been identified as a result of the Lake Ontario Resource Center, whether it is constructed in a new building or placed in the former "link building" at the south end of the Terminal Building. Stormwater from the site will be collected and treated before discharge into the Genesee River, as described further in Section 4.4.1.3 below.

The research that is performed by the LORC may lead to progress and methods to improve the water quality of the lake.

3.4.1.2 Genesee River

No impacts to the water quality of the Genesee River have been identified as a result of the Lake Ontario Resource Center, whether it is constructed in a new building or placed in the former link building. Stormwater from the site will be collected and treated before being discharged into the Genesee River, as described further in Section 4.4.1.3 below.

The research that is performed by the LORC may lead to progress and methods to improve the water quality of the river.

3.4.1.3 Stormwater

The use of the link building for the interim LORC will not result in changes to stormwater quality or quantity, as this structure is already in place. The stormwater runoff that is currently generated from the link building and paved area is collected and conveyed through a stormwater quality unit located south of the link building and a bio-retention area on the west side of the building.

If a new building is constructed for the permanent Lake Ontario Resource Center, stormwater runoff will be collected and treated prior to discharge to the Genesee River. Silt fence, drop inlet protection, and other erosion control measures will be implemented during construction.

Permanent storm water management features and green building design (e.g. green roof, cisterns, rain gardens, bioswale planters, underground stormwater chambers) may be incorporated in the design of the project to meet stormwater runoff requirements for water quality. These measures would assist in decreasing the runoff from the site and will improve the quality of runoff entering the Genesee River.

3.4.2 Groundwater Quality

Groundwater quality in this area is similar to the groundwater conditions on the remainder of the site and fairly consistent with average river and lake levels, as previously discussed. Groundwater quality is not expected to be affected by the use of the terminal for the interim LORC. If a permanent LORC building is constructed, the design will take into account the groundwater level. Monitoring wells will be constructed to establish the groundwater levels prior to their final design and the design of the building's foundations.

3.5 Relocation of the Public Boat Launch

3.5.1. Surface Water Quality

3.5.1.1 Lake Ontario

The relocation of the Public Boat Launch to a new location along the Genesee River will not have a negative impact on the water quality of Lake Ontario, as there will be no direct connection between these two waterbodies. Any effect upon Lake Ontario would be as a consequence of intermediate

effects upon the quality of surface water within the Genesee River, as discussed in the next sub-section.

3.5.1.2 Genesee River

During removal of the Public Boat Launch, stormwater management practices will be installed to treat runoff prior to discharge into the Genesee River (see sub-section below).

The Public Boat Launch will be re-located to a site along the Genesee River. As the water at the Public Boat Launch will mix freely with the waters of the Genesee River, the water quality of each will affect the other.

It will be necessary to obtain permits to construct the new Public Boat Launch, including a Section 401 Water Quality permit from NYS DEC, a Section 404 permit for the dredging and filling of material for the installation of the boat ramp into the river, and an Article 15 permit from NYSDEC for work related to the river banks.

3.5.1.3 Stormwater

The relocation of the Public Boat Launch is not expected to result in a net change in the amount of impervious surfaces in the project area, as the new facility is expected to be similar in size to the current facility. Moreover, the Public Boat Launch would continue to be located on a portion of the Genesee River, which will receive all drainage from the area. As a result, no significant changes in quantity and quality stormwater are anticipated.

During removal of the relocated public boat launch, stormwater management and erosion control measures will be implemented, such as silt fencing, sediment traps, and a turbidity curtain. Upon completion of the project it may be necessary to have permanent stormwater quality control measures installed. The need for such measures will be assessed in the site-specific review for the new site.

3.5.2 Groundwater Quality

It is not expected that removal of the Public Boat Launch will adversely affect groundwater quality. Subsurface investigations may be undertaken to characterize groundwater at the relocation site for the Public Boat Launch, once selected. This information will be used in the

design of the ramps and parking areas to be installed at the relocation site.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

3.6.1 Surface Water Quality

3.6.1.1 Lake Ontario

No significant impacts are anticipated to the surface water quality of Lake Ontario as a result of the demolition of the Ontario Beach Park Labor Operations Center. Both the demolition and the construction stages of this project will incorporate stormwater and erosion control practices. Construction items such as silt fence, drop inlet protection and stabilized construction entrances will be included in the design to ensure that soils, sediment and pollutants do not enter the stormwater systems.

3.6.1.2 Genesee River

No significant impacts are anticipated to the surface water quality of the Genesee River as a result of the demolition of the Labor Operations Center. As mentioned above, the demolition of the existing structure and construction of the new structure will incorporate erosion control and stormwater management practices. No impacts to the surface water quality of the river have been identified as runoff will be collected and conveyed through stormwater quality units prior to discharge.

3.6.1.3 Stormwater

The demolition of the existing Labor Operations Center building will incorporate erosion control and stormwater management practices. A SWPPP will be prepared for the construction of the new Labor Operations Center building, and all appropriate permits will be obtained. Stormwater management practices implemented during construction may include a silt fence, a stabilized construction entrance, level spreader, sediment trap and drop inlet protection.

3.6.2 Groundwater Quality

Neither the removal of the existing Labor Operations Center nor the construction of a new facility is expected to impact groundwater quality. Stormwater will be collected and treated prior to any infiltration into the

ground. Operations of the new center will include any necessary facilities to contain oil and gasoline.

3.7 Incremental Private Development

3.7.1 Surface Water Quality

3.7.1.1 Lake Ontario

Any effects upon water quality within Lake Ontario would be as a consequence of effects upon water within the Genesee River.

3.7.1.2 Genesee River

Commercial and residential uses will have no direct point source connections to the Genesee River. All discharges of water will be to the public sewer system. Stormwater runoff is addressed below.

3.7.1.3 Stormwater

Mixed use development on the private parcels created as part of the Port project will primarily occur on land that is already covered with impervious surfaces (parking lot, access roads etc.) On those parcels, the private mixed use development will result in an increase in the amount of impervious surface from which stormwater runoff is generated, as described in the paragraphs below.

Overall, it is expected that the entire project will result in a net decrease in impervious area, including approximately 13 acres of impervious surfaces that will be converted to pervious areas and the marina basin. Storm sewer improvements that would be required by subsequent development on Parcels I, II and III will be installed as part of the preceding public infrastructure development.

The private development is anticipated to increase impervious surfaces within the parcels on which they are developed. Upon completion, the development sites are anticipated to become approximately 85percent impervious and 15percent pervious. This increase in impervious surfaces will result in a corresponding increase in stormwater runoff.

Parcel I will discharge stormwater runoff into the storm system on the relocated North River Street which will tie into the system on Corrigan Street where water is passed through an existing stormwater quality unit, treated, and released into the river. Parcel II will have its onsite storm system tie into the storm system on adjacent public ROW. Parcel III will have its storm systems tied into the River Street ROW.

Increases in stormwater runoff volume anticipated as a consequence of more extensive impervious surfaces will be limited through incorporation of Better Site Design (BSD) practices during the design phase. These will assist in meeting the NYSDEC requirements for water quality discharges into the river and ultimately the lake. Site design practices under consideration include green roof installation or installation of vegetated buffers. A detailed listing of these measures will be included in the final site design plans.

3.7.2 Groundwater

If, during the construction of foundations systems on Parcel III, dewatering measures are required, State and County requirements will have to be followed. As previously described (see *Section 3.1.2*), dewatering and erosion control measures such as silt fence installation and the use of dirt bags and sump pits will be used to treat water that is removed from earth moving and dewatering activities.

C. Hydrologic Conditions and Coastal Management

1. Introduction

1.1 Hydrologic Conditions

This section describes the hydrologic conditions and flood control facilities at the Port and how construction of the marina and in the surrounding areas may impact these flood control facilities. The marina has been analyzed in terms of hydrologic characteristics, (including the occurrence, circulation, distribution and attributes of the Genesee River and marina) to ensure that water flow characteristics, wave surge control, flood control and the marina design will be adequate to allow for a well functioning, safe and viable public marina.

1.2 Coastal Management

This section addresses coastal management (including review of jurisdictional requirements, dredging operations and potential impacts, water level fluctuations, and preparation of a Harbor Management Plan) as a means to mitigate potential impacts related to overall management and coordination of coastal and harbor operations. The City of Rochester Port Public Marina and Mixed Use Development Project is subject to a NYS Department of State (NYSDOS) Division of Coastal Resources Consistency Review. This review will ensure that the proposed activity is in compliance with the City of Rochester's Local Waterfront Revitalization Program (LWRP), as amended in 2011. It will be conducted in a matter consistent with the program, as expressed in the LWRP (Appendix A of this document). Discussion of the City's LWRP can be found in *Section I A* and in *Section IV I* of this document.

2. Existing Setting

2.1 Hydrologic Conditions

2.1.1 Genesee River

The Port project site is located along the western edge of the Genesee River near its confluence with Lake Ontario (see Exhibits 1 and 2).

The proposed entrance to the marina is located adjacent to the north side of the existing public boat launch, approximately 2,100 feet south of the edge of Lake Ontario at the Charlotte Pier. The Genesee River has a NYSDEC stream classification of "B" and best usage entails primary and secondary contact recreation and fishing. These waters must be suitable for fish, shellfish, and wildlife propagation and survival.

There is a portion of the site that is located within the Federal Emergency Management Agency's (FEMA) designated 100-year floodplain. The floodplain elevation, according to FEMA Flood Insurance Rate Map (FIRM) #36055C0088G (located in Appendix J of this document), is 250 feet. This FIRM map uses North American Vertical Datum of 1988 (NAVD). The City of Rochester datum is 1.75 feet higher than NAVD, so the floodplain elevation using City datum is 251.75 feet.

During some storms, specifically the rare northeasterly storms with prevailing winds out of the northeast, marina operators have observed that the apex of waves will crest the top of the Genesee River wall. Many of these storms, and the period of time when water crests the wall, are short in duration. Typically, the result is minor ponding and puddles rather than large flooded areas.

2.1.2 Lake Ontario

The level of Lake Ontario (and consequently, the mouth of the Genesee River) has been monitored for approximately 120 years. Over that period of time, the extreme values of monthly mean lake elevations ranged from approximately 241.9 feet to 248.6 feet, according to the 1985 International Great Lakes Datum (IGLD). Note that City of Rochester datum is 1.81ft higher than IGLD datum, so the extreme recorded monthly mean lake elevations would be 243.7 feet and 250.4 feet, respectively, using City datum.

Based on research into several sources, the "average" surface elevation of the lake varies, and it is difficult to assign an overall average level. One of the main sources of information is the US Army Corps of Engineers (USACE) which provides monthly updates on water levels for the Great Lakes including historic high, low and mean lake levels. A review of this information indicates average levels for Lake Ontario between 246 feet and 248 feet when converted to City datum, with most sources indicating closer to 248 feet. To maintain consistency, all elevations in the rest of this section and elevations shown on the civil site design plans are based on City datum unless otherwise noted.

The International Joint Commission (IJC) is studying the St. Lawrence River and the release of water from Lake Ontario into the St. Lawrence River (and ultimately into the Atlantic Ocean), as well as upstream sources of water that enter Lake Ontario. The purpose of this study is to determine the optimum long-term lake level management strategy in order to satisfy a number of varying interests, including commercial shipping, hydroelectric power, fisheries, waterfront property owners and environmental groups. The results of this study could have an impact on

the water level, and therefore, the marina will have to be designed with flexibility to accommodate varying water levels.

The IJC is proposing an "Adaptive Management" concept in its plan for regulating future water levels and flows in Lake Ontario. Although the specific regulation plan is unknown at this time, the IJC has received strong recommendations from several groups and organizations for use of an adaptive management process. The adaptive management process continually improves policy and practices to help ensure that objectives are reached, even while conditions change over time. Environmental factors, such as climate change, and socioeconomic factors, such as recreational boating, commercial shipping, urbanization and population growth, evolve continually over time. The IJC will monitor the physical and ecological integrity of the Lake Ontario-St. Lawrence River system to identify both the ongoing impacts of flow regulation, and the changes or corrections, if any, that are needed. The goal is to provide monitoring data, scientific information, and analysis that will help improve water level regulation and flow.

2.1.3 Wave Dynamics and Surge Conditions

Through analysis of data obtained from the U.S. Army Corps of Engineers, the National Oceanic and Atmospheric Administration (NOAA), video, photographs, and actual observations, it was determined that wave surge occurs at the mouth of the Genesee River and at the location of the proposed marina entrance during strong, northeasterly storms. There is a probable annual occurrence of 1 to 3 foot waves reaching the proposed entrance. This surge could occur with an average duration of 12 to 36 hours during a strong, northeasterly storm. However, it is expected that during the boating season (defined as May 1st-September 30th), this surge would occur less than once, with the other surge conditions occurring during the winter.

More extreme wave conditions could be anticipated to occur once every 50 to 100 years during an extreme storm, but this would likely occur in the middle of winter rather than during the boating season.

2.2 Coastal Management

2.2.1 Harbor/Coastal Management Plans, Structures and Practices

The Port project site exists within an area designated by the NYSDOS as a part of the City's LWRP. As such, activities at the site are required to abide by the LWRP. The LWRP is a process by which the City evaluates its waterfront and community wide resources, decides on a vision and future goals, develops a comprehensive strategy for the best

use of those resources, and puts in place a program and policies to carry out that strategy.

The City is currently preparing a Harbor Management Plan pursuant to the LWRP and a grant from the NYSDOS.

2.2.2 Sediment Deposition, Dredging, and Navigation

Portions of the Genesee River, including a portion located adjacent to the proposed marina site, require periodic dredging and removal of built up sediment, including silts, clays, and some sands. Sediments are removed from the channel bottom by using a mechanical or hydraulic dredge and placed into hoppers aboard ship or scow for transport to the discharge site.

Prior to removal, sediment data is analyzed in accordance with joint USEPA/USACE protocols contained in the Great Lakes Dredged Material Testing and Evaluation Manual (1988). If the sediment is found to be toxicologically comparable to that found in the open-lake placement area in Lake Ontario, it is discharged there. This open-lake placement area is located approximately 1.5 miles from the Charlotte Pier head light.

The Genesee River navigation channel is dredged about once every three years. The river was last dredged in 2009 when approximately 160,000 cubic yards (CY) of material was removed. The river is dredged to approximately 21 feet below low water datum, or elevation 224 feet (City datum), which is about 10 feet below the elevation of the bottom of the proposed marina. Bathymetric readings (soundings) taken before and after the last dredging can be found in Appendix K of this document.

3. Impacts and Mitigation

3.1 Marina

3.1.1 Hydrologic Conditions

3.1.1.1 Genesee River and Lake Ontario

It is recognized that the 100-year flood elevation is 251.75 feet. However, the site is located in close proximity to the confluence of the Genesee River and Lake Ontario. As a consequence, the water level within the marina will not reach levels higher than that of Lake Ontario. The highest recorded monthly mean water level for Lake Ontario for any significant amount of time is 250.4 feet (1952). The boater promenade

adjacent to the marina will range from elevation 250.6 to 252.0 to keep freeboard heights on broadside dock areas at reasonable levels during low water conditions. At the north end of the marina, where broadside dockage is planned, rub posts will also be installed to properly moor and protect boats during high water conditions. The public promenade and other features will be higher than elevation 252, keeping them safely outside of the high water mark, 100-year flood elevation.

The typically accepted minimum for first floor building elevations (FFE) and stormwater management facilities is 1 to 2 feet above the designated 100-year floodplain elevation. The FFE of the existing Terminal Building is at 254.2 feet, which is 2.5 feet above the designated floodplain elevation of 251.7 feet. Continued use, expansion of, and/or reuse of this building would be safe due to its height above flood levels. Site Development Plans, showing these elevations, can be found in Appendix L of this document.

To accommodate these potential water level fluctuations, the proposed marina will be designed to accommodate mean low (245.11 feet) and mean high (249.11 feet) water levels in the Genesee River and Lake Ontario. These elevations are shown on the site development plans. Also, as requested by NYSDEC, the corresponding IGLD 1985 elevations (243.30 feet mean low and 247.30 feet mean high) will also be shown. The marina will be excavated to -13 to -15 feet Low Water Datum (LWD), or 232 to 230 feet at the marina entrance. This will allow for approximately 5 feet of siltation to occur before the marina entrance would be unable to accommodate deep-draft sailboats and 8 feet of siltation before the entrance would be unable to accommodate large power boats. Marina basin depths will range from -11 feet LWD to -8 feet LWD.

Once the river wall is removed for the marina entrance, the marina will be filled with water from the Genesee River. Hydraulically, the marina will take on some of the same characteristics as the Genesee River and Lake Ontario, as these three water components will be connected. As such, the water elevation of the marina will be the same as that of the river and the lake and will rise and fall in the same manner as lake levels vary on Lake Ontario.

3.1.1.2 Wave Dynamics and Surge

It became apparent during the development of the various marina layout options that the marina basin entrance needed to be located as far south as possible, in order to minimize the effects of the existing wave surge during the northeast storms on the Genesee River (see *Section V B Marina Location and Design Alternatives*). In the mid-1990s, the Army Corps of Engineers constructed a wave-dampening stone revetment on the inner seawall area of the westerly breakwater of the pier structure extending into Lake Ontario. Although this structure has reduced wave energies in the harbor, it has not effectively eliminated them. During strong northeasterly winds, there is a 3 to 6 feet surge at the northern end of the Port site, which is reduced to 1 to 3 feet at the southern end of the site.

A computer numeric wave study was completed in July 2009 by Edgewater Group in association with James Muschell, P.E., a known leader in coastal engineering with over 60 years of experience in coastal structures and marine and ice engineering (see Appendix M). Based upon this study and other analyses, the currently proposed location and angle of the marina entrance was designed to minimize impacts to the marina from waves created in the Genesee River. Appropriate marine and coastal engineering wave attenuation measures will be incorporated into the proposed marina design to reduce these wave energies to an acceptable condition (6 to 12 inch wave heights), as described below.

The marina will be designed to limit wave surge that could potentially damage boats as well as dock facilities and structures. A combination of stone revetment materials and an angular entrance with wave attenuation breakwaters will be used. The stone revetment serves as a wave dampening structure that will absorb wave energy and reduce the height of waves in the marina. Revetment stone will be approximately 1 to 2 feet in diameter and will be angular to allow for interlocking with material along the bank. The toe of the marina slope will have larger stone dug into the bottom of the marina. This will assist in holding up the stone revetment at the marina's side slopes.

The steel sheet piling proposed within the marina boundaries is limited to the north end of the basin where waves will already have been dampened and are expected to be minimal. Steel sheeting was not chosen to be used along all of the marina edge because the essentially flat surface of the steel corrugations

may amplify waves as they make their way throughout the marina.

Steel sheeting is also proposed along the entrance to the marina; however, the sheeting will be lined with stone revetment on the westerly side to assist in the wave dampening.

Within the marina, waves will be dampened and attenuated by the stone revetment and also by the dock construction. The "fingers" where boats will tie up will be allowed to float, with a portion of the structure under water. This underwater component is essentially a floating baffle wall composed of planks, with the wider portion of the plank facing oncoming waves and spaces between the planks to allow water to flow through. The main purpose of this design is to both dissipate waves and prevent them from gaining additional amplitude and speed within the marina basin.

At the marina entrance, the existing debris fence (wall), along the southern face of the existing concrete platform is proposed to remain. A new baffle wall is proposed adjacent to and along this wall, with alternating horizontal I-beam baffles, to assist in wave energy dissipation. The intent of having the openings in the walls offset from one another is to provide a secondary depletion of wave energy after water has passed through the openings of the front wall. Like the protruding steel sheeting and revetment proposed along the southern edge of the marina entrance, these new baffle walls will serve to "knock down" waves and reduce wave energies near the marina opening to the river.

3.1.1.3 Marina Basin Circulation

Permanent water quality within the marina basin will be maintained by installing a 24-inch diameter passive circulation pipe. Due to the potential concern for stagnation within the marina basin, this pipe will be sized to allow for an anticipated flow of approximately 18 cubic feet per second (cfs). This will allow for the marina, under its own natural current, to turn over its water in approximately one week's time. It is anticipated that the natural south to north flow of the adjacent river will be mimicked in the new marina with the installation of this pipe, thereby minimizing potential water stagnation and the corresponding build-up of algae's and organisms.

Within the marina basin, water turnover rates can be calculated and circulation measures can be designed to meet designated water turnover times. If additional flow during summertime is needed, a simple marina circulation pump, commonly known as an "ice eater," can be placed in the tube to increase circulation. The design of the marina will accommodate the additional pump, if needed.

3.1.2 Coastal Management

3.1.2.1 Harbor/Coastal Management Plans, Structures, and Practices

The Port project is located within a The City of Rochester's Local Waterfront Revitalization Program as amended, 2011 and must meet requirements set forth in the State's Coastal Management Plan. The LWRP emphasizes the revitalization and redevelopment of deteriorated or underutilized waterfront sites. Much of the Port area is considered underutilized as it currently serves as a large parking area, much of which is not used except during large events at Ontario Beach Park. A sizable portion of this parking area (the portion formerly used for the fast ferry vehicle queuing) is closed off to any use.

The LWRP also addresses the development of waterfront areas near public park land. This project is designed to have a positive impact on the use of and access to Ontario Beach Park, which is owned by the City of Rochester and operated by Monroe County. In addition, the project includes the creation of approximately seven acres of open space in the form of the Phase 1 Marina, the promenade, the Lighthouse Trail, and the Pedestrian Mall (Civic Square) [described further in *Sections IV H Recreation and IV I Land Use*]. Full build-out of the project will require the removal of park land, referred to as "alienation of parkland," however; there will be a net gain in designated park land at project completion (see *Section IV H*). Full build-out will also require relocation of the public boat launch and the Ontario Beach Park Labor Operations Center, but these will be replaced within the City's LWRP area.

The remainder of this section indicates the project's conformance with specific policies in the LWRP.

<u>Policy 1</u>
In accordance with Policy 1 of the LWRP, the project began with a marina feasibility and market study, as well as an engineering report, which showed that the creation of a public marina basin and developable areas surrounding the marina

will leverage additional private development on the site. The marina, pedestrian features, and private development of retail stores, restaurants and residential space will enhance the waterfront neighborhood, provide greater public access, and broaden the community by making better use of valuable waterfront land. Current underutilized and deteriorating parking areas will be renovated and redeveloped to make room for the construction of the public marina.

Policy 2

Policy 2 of the LWRP concerns the promotion of water dependent uses. The proposed project will provide for the ability to fish and boat by expanding the capacity at the Rochester harbor for mooring and overnight stays at the new marina. The proposed marina will feature public amenities for boaters including bathrooms, showers, laundry, and pump-out facilities.

The marina design will also incorporate an area near its north end that will be designated as an area for broadside docking and rafting of boats. This area could be used for additional waterfront activities including boat shows and access to concerts on the nearby beach. This creates a potentially new access for users for the summertime activities at the beach.

Policy 7

In accordance with Policy 7 of the LWRP, existing fish and wildlife habitats will be protected and preserved so as to maintain their viability as habitats. The LWRP recognizes areas that are State designated as "Significant Coastal Fish and Wildlife Habitats." The project site is located adjacent to a section of the Genesee River which is designated as a Significant Coastal Fish and Wildlife Habitat.

The majority of construction and excavation of soil will be taking place on land adjacent to the Genesee River. Strict erosion and sediment control measures will be put in place to prevent siltation of the river and its habitat areas. In addition, excavated slag and other potentially contaminated materials will be carefully staged to avoid such material from entering the Genesee River. *Refer to Section IV O*.

The construction sequence for the excavation of the marina basin and river wall breakthrough will be designed and planned to minimize impacts to the river. Requirements for these actions will be clearly included in plans and specifications, as well as general notes, construction sequencing, and instructions

to contractors. The breakthrough of the river wall will be completed last in order minimize disturbance to fish species. Should any dredging be needed, specifically around the marina entrance to the Genesee River, the timing of this operation will be coordinated to avoid the spawning and most active periods of the fish that have been identified in accordance with the NYSDEC permitting requirements.

No significant impacts to waterfowl and birds in the vicinity of the project site and the Genesee River are anticipated. Most of the construction will take place during colder and off season months. If birds are affected by temporary disturbances associated with excavation and installation of the marina, they will likely migrate to another location within the coastal area and return once construction is complete.

Policy 12

In accordance with Policy 12 of the LWRP, the project will not jeopardize the natural resources near the site, including the beach at Lake Ontario Beach Park. The Genesee River will experience a minor impact during construction, but this would be limited to the breakthrough of the river wall, allowing for the filling of the marina basin. This impact will be mitigated with proper erosion control measures, and it is not anticipated that any damage to natural resources will occur as a result of this breakthrough.

Policies 15 and 35

Any regulated solid waste that is excavated as a result of the construction of the marina portion of the project site will be handled appropriately and with appropriate permits in place, as is discussed in LWRP policies 15 and 35.

Policy 22

Policy 22 concerns the promotion of waterfront activities. In accordance with Policy 22 of the LWRP, the proposed marina promotes waterfront activities and leverages new on-shore economic development by providing approximately 157 new boat slips (at full build) for both transient and seasonal use at the Port of Rochester. This will promote tourism by providing berthing for Great Lake boaters who come to Rochester to enjoy the beach, waterfront amenities, and other local and regional attractions. The seasonal docking will encourage visitors to vacation, take up residence at the Charlotte waterfront, and spend money in the restaurants and shops in the area.

Policy 25
In accordance with Policy 25 of the LWRP, the project will enhance scenic qualities of the site by eliminating a large paved parking area and replacing it with a public marina. Project development is planned to create major scenic views and vistas and further enhance the City's waterfront.

Policy 32
Policy 32 of the LWRP describes using inexpensive sanitary infrastructure in the development of waterside communities. A section of existing sanitary sewer will need to be relocated around the proposed marina basin. The proposed sewer alignment will be designed to provide easily accessible connections for private development that will take place nearby.

Policy 37
In accordance with Policy 37 of the LWRP, the project will incorporate both temporary and permanent erosion control measures and best management practices. Temporary measures will likely include silt fences, stone check dams, diversion swales, sedimentation basins, and/or drop inlet protection. Permanent measures will likely include hydrodynamic chambers, swirl concentrators, sand filters and/or rain gardens. More information is included in *Sections IV B and IV S.*

Policy 41
In accordance with LWRP policy 41, it is anticipated that all development associated with the project site, including the public marina and private development, will not violate national or state air quality standards.

Policy 43
In accordance with LWRP policy 43, it is not anticipated that the project will contribute to generation of acid rain.

3.1.2.2 Shoreline and Marina Protection

The construction of the marina will result in a gap in the existing Genesee River wall. An opening in the existing river wall exists now at the public boat launch. The existing boat launch gap will be improved to provide access to the marina. This gap will provide an entrance to the new marina and will be stabilized and shaped by the installation of tie backs, steel sheet piling, and stone revetments. These materials will provide protection to the shoreline and essentially reshape the existing

Genesee River wall to accommodate a new marina entrance. The installation of stone revetment will also provide for wave attenuation and protection of the marina.

Upon completion of Phase 2 Marina Expansion (full build), the boat launch will be removed and a new river wall will be installed in its place with additional wave attenuation stone revetments. This will be an extension of the river wall that will have been installed as a result of the completion of the Phase 1 Marina and will close off and fill in the existing boat launch, which will be moved to a new location.

The fluctuation of the new marina water surface will be the same as the fluctuation of the Genesee River and essentially Lake Ontario. The new marina will be filled with water from the Genesee River, and therefore will have the same properties as the river in terms of water quality and water surface elevation.

3.1.2.3 River and Marina Basin Sedimentation, Dredging, and Navigation

The Genesee River navigation channel is generally dredged to an elevation of 21 feet below low water datum, which is elevation 224 feet (City datum).

The proposed marina entrance is anticipated to be excavated to an elevation of 232 to 230 feet. As such, the marina entrance will provide 13 to 15 feet of draft when water levels are at low water datum. This will accommodate the scour protection that is proposed in the marina entrance channel, as well as provide for enough draft (including a safety factor) for anticipated vessels that will be using the marina.

The anticipated siltation rate within the marina basin is approximately one foot per year or less and depths will need to be at a minimum of 6 to 8 feet for the marina to operate effectively. At the anticipated siltation rate, therefore, the marina will need to be dredged approximately every three to four years in accordance with the Marina Management Plan.

The marina basin construction will require some dredging and excavation near the marina entrance to provide adequate depth for boats entering and exiting the marina. The main portion of the marina excavation will likely be performed by large excavators from land. Dredging will also be utilized to match the proposed marina grades to the existing river bottom, in

order to eliminate any abrupt change in elevation. The excavation to match grades at the location where the marina bottom meets the river bottom will be performed in accordance with the necessary state and federal permits required for such excavation. These permits include a NYSDEC Article 15, Title 5 permit and a NYSDEC Water Quality Certification.

Overall, approximately 178,000 cubic yards of material will be excavated to create the Phase 1 Marina basin. A total of 225,000 cubic yards of material will have been excavated once the Phase 2 Marina Expansion takes place. No wetlands, agricultural lands or other natural resources will be disturbed. Due to the relatively small area of river shoreline to be disturbed, which is actually a river wall and not currently subject to erosion, it is not anticipated that there will be any significant interference with natural coastal processes.

Navigation of recreational boats within the marina basin will be accomplished by proper marine engineering design using standards adopted by the American Society of Civil Engineers and the experience of Edgewater design professionals and James Muschell, P.E. (60 years marine experience).

3.2 Right-of-Way (ROW) Improvements

3.2.1 Hydrologic Conditions

The hydrologic conditions, wave dynamics and surge conditions associated with the Genesee River and Lake Ontario will not significantly impact the Right-of-Way Improvements component of the project.

Right-of-Way Improvements within the project area are not within the FEMA designated 100-year floodplain.

3.2.2 Coastal Management

3.2.2.1 Harbor/Coastal Management Plans, Structures, and Practices

The Right-of-Way Improvements will be included in the LWRP Consistency Review, as part of the overall project. The purpose of the review will be to determine if this component meets the requirements of the State's Coastal Management Plan. The discussion below indicates which policies of the LWRP are advanced by the Right-of-Way Improvements.

Policy 12
Policy 12 of the LWRP discusses the effects of projects on natural resources at the site. No impacts on natural resources have been identified for the Right-of-Way Improvements. Currently River Street ends at the CSX railroad tracks at the southerly limit of the project site and North River Street begins at Portside Drive. There is no formal connection between the two locations; however, there is an informal roadway that makes the connection through the existing public boat launch. The creation of a formal right of way will not disturb any natural resources as it will essentially use the alignment of the paved access drive currently in place.

Policy 20
In accordance with Policy 20 of the LWRP, the Right-of-Way Improvements will improve public access to the beach at Ontario Beach Park by providing a second north-south route for motorists from southern portions of the Charlotte area to the beach. The extension of the Genesee River Trail along the new River Street will enhance public access for bicyclists and pedestrians in this area.

Policy 33
As discussed in Policy 33 of the LWRP, stormwater pollution prevention measures and best management practices will be used in the design and construction of this portion of the project. A stormwater pollution prevention plan (SWPPP) will be created for the overall project, which will ensure that contractors will control water runoff from the site.

Policies 15 and 35
Any regulated solid waste that is excavated as a result of the construction of the Right-of-Way Improvements portion of the project site will be handled appropriately and with appropriate permits in place, as is discussed in LWRP policies 15 and 35.

3.3 Lighthouse Trail

3.3.1 Hydrologic Conditions

The Lighthouse Trail component of the project will not impact the hydrologic conditions, wave dynamics and surge conditions associated with the Genesee River and Lake Ontario. The Lighthouse Trail will not be constructed within the limits of the FEMA designated 100-year floodplain. The trail elevation is anticipated to be at approximately 280 feet, well above the floodplain elevation of the area of approximately 252 feet.

3.3.2 Coastal Management

3.3.2.1 Harbor/Coastal Management Plans, Structures, and Practices

The Lighthouse Trail will be included in the LWRP Consistency Review, as part of the overall project. The purpose of the review will be to determine if this component meets the requirements of the LWRP. The discussion below indicates how the Lighthouse Trail advances the goals and policies of the LWRP.

The Lighthouse Trail will facilitate access to the historic Genesee Charlotte Lighthouse and excellent views of the marina and waterfront. Currently, no trail is present at the lighthouse, and the area is overgrown and not accessible to visitors. The improvements are particularly consistent with LWRP policy 22 regarding promotion of waterfront activities and policy 25 regarding enhancement of scenic resources.

3.4 Lake Ontario Resource Center (LORC)

3.4.1 Hydrologic Conditions

The hydrologic conditions, wave dynamics and surge conditions of the Genesee River and Lake Ontario could impact the Lake Ontario Resource Center in that the water level of the river may affect some of its research projects. It is not expected that dredging of the river will impact the LORC, except that the dredging barge may tie up along the river wall in its vicinity.

With regard to the interim LORC, the first floor elevation of the "link building" is approximately 254 feet, which is above the 100-year flood elevation of 251.75 feet. No flood-related impacts would be expected to affect the LORC component of the project.

Concerns regarding the groundwater table level and groundwater migration underneath the relatively narrow strip of land between the proposed marina and the Genesee River, where the LORC could be located, have been raised by the SUNY College of Brockport. These impacts are discussed in *Section IV B*.

3.4.2 Coastal Management

3.4.2.1 Harbor/Coastal Management Plans, Structures, and Practices

The LORC will be included in the LWRP Consistency Review as part of the overall project. The purpose of the review will be to determine if this component meets the requirements of the LWRP.

The LWRP emphasizes the revitalization and redevelopment of underutilized or deteriorated waterfront sites (Policy 1, 2, 22 etc.) Revitalization of the existing Terminal Building has been ongoing for the last few years with the introduction of new restaurants and other uses in the vacant spaces of the building. However, the former link building that was once used to shuttle passengers from the former fast ferry to the Terminal Building remains unused. The re-use of the link building or development of a site adjacent to the Terminal Building by SUNY College at Brockport for the LORC will further these revitalization efforts.

3.4.2.2 River and Marina Basin Sedimentation, Dredging, and Navigation

As siltation occurs in the marina and the adjacent portion of the river, dredging will need to be performed to maintain proper water depths for a possible boat used in the operations of the LORC.

3.5 Relocation of the Public Boat Launch

3.5.1 Hydrologic Conditions

3.5.1.1 Genesee River and Lake Ontario

Review of the FEMA floodplain mapping and flood levels in the new boat launch location will be required and necessary flood control measures will be implemented. Depending on the location of the new boat launch, and its proximity to Lake Ontario, wave surge may be a concern. In this case, wave attenuation measures will be considered to provide the safest possible boating conditions during strong storms.

Once established, the new boat launch site should be reviewed in accordance with the latest position, strategy, and regulations of the International Joint Commission regarding the future water level management strategy for Lake Ontario. The launch

will be designed in accordance with mean low and high water levels in the area, and will take into account the potential fluctuations due to IJC strategies and regulations.

3.5.1.2 Wave Dynamics and Surge

Consideration of public boat launch sites must take into account the wave dynamics within the Genesee River. It is generally true that the waves in the river dissipate as they move southward. The farther upriver the boat launch is proposed to be, the less of an impact waves will have on its operation. If the proposed launch is south of CSX swing bridge and the O'Rorke bridge, wave dynamics will be of minimal concern as the structures and shoreline features north of the bridge will have mitigated most of the wave energies.

3.5.2 Coastal Management

3.5.2.1 Harbor/Coastal Management Plans, Structures, and Practices

Once it is determined, the new location of the public boat launch will be reviewed for LWRP Consistency. The purpose of the review will be to determine if this component meets the requirements of the LWRP. Overall, relocating the existing boat launch allows for the implementation of the Port project and the creation of the new marina, mixed use development, trails, and improved public access. These components will ultimately result in the revitalization of underutilized waterfront resources and will promote waterfront activities.

The new boat launch facility will likely require disturbance of the bank of the Genesee River. This would require review, approvals, and/or permits by the USACE, NYSDEC, NYSOPRHP, and City of Rochester.

3.5.2.2 River and Marina Basin Sedimentation, Dredging and Navigation

Bathymetric readings and soundings of the river area adjacent to the site selected for the new Public Boat Launch should be taken frequently to determine the magnitude of dredging and sediment removal required to accommodate boats that will use the launch. The build-up of sediment varies throughout different portions of the Genesee River, so some areas require more dredging than others.

Previous USACE dredging studies and results will be reviewed to determine the best management strategy for maintaining a safe and viable Public Boat Launch on the Genesee River. Hauling and disposal of any dredged material will be done in accordance with USACE and NYSDEC regulations, and a dredging maintenance plan/schedule will be developed for the new site.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

3.6.1 Hydrologic Conditions

The hydrologic conditions, wave dynamics and surge conditions associated with the Genesee River and Lake Ontario will not significantly impact the Relocation of the Ontario Beach Labor Operations Center.

Currently, the Labor Operations Center is situated at elevation 280 feet which is outside the 100-year floodplain designated by FEMA. The relocation site for the Labor Operations Center will also be outside of the 100-year floodplain, as a building that is constructed within the floodplain will require specific flood insurance

3.6.2 Coastal Management

Once the site of the Labor Operations Center is identified, it should be determined if the site is within a coastal management zone. If so, a NYSDOS LWRP Consistency Review of the project site will need to be completed to ensure that construction conforms to their requirements. Overall, relocating the Labor Operations Center allows for the implementation of the Port project and the creation of the new marina, mixed use development, trails, and improved public access. These components will ultimately result in the revitalization of underutilized waterfront resources and will promote waterfront activities.

3.7 Incremental Private Development

3.7.1 Hydrologic Conditions

Development Parcels I, II, and III are above the 100-year floodplain elevation. Given the proximity of Parcel III to the 100-year floodplain, the first floor elevation of this building must be set above the floodplain elevation. If underground parking areas are proposed below the elevation of the 100-year floodplain, then emergency stormwater pumping systems will need to be installed to handle possible flooding from a 100-year storm event.

The proposed drainage analysis and water quality design features assume that the mixed use development areas will entail primarily impervious surfaces, so proper drainage infrastructure and water quality impact mitigation will be in place once the mixed use building areas are developed.

3.7.2 Coastal Management

3.7.2.1 Harbor/Coastal Management Plans, Structures and Practices

The mixed use development will be included in the LWRP Consistency Review, as part of the overall project. The purpose of the review will be to determine if this component meets the requirements of the LWRP. The discussion below indicates how the mixed use development generally advances the goals and policies of the LWRP.

The development parcels will serve to revitalize the existing Port area, which currently consists largely of asphalt parking. The proposed mixed use development will bring business to the area, as it is expected that Parcel I will provide commercial space on the first floor and housing units above. It is anticipated that some of the residents of the new residential development will house their boats at the marina. This will encourage greater recreational use of the river and the lake.

The development of Parcels II and III will encroach on designated parkland. This will require a park alienation process following NYSDOS policies which include a plan to mitigate the loss by providing compensatory park land elsewhere (see *Section IV H.*).

The construction of the mixed use development will require a plan to transport, treat and dispose of the potentially hazardous waste materials generated as a result of excavation. Discussion of proposed solid waste disposal plans is provided in *Section IV O*. These plans will not only need to conform to the NYSDOS LWRP, but also to NYSDEC policies and permits.

D. Vegetation and Wildlife

1. Introduction

This section discusses potential impacts of the project on vegetation and wildlife, including fisheries. The potential presence of threatened and endangered species, as listed by U.S. Fish and Wildlife Service (USFWS) and NYSDEC is reviewed. The range of mitigation measures to address any negative impacts is identified.

2. Existing Setting

2.1 Vegetation and Wildlife

No significant land-based wildlife habitats or vegetation are found on the Port site. Typical urban wildlife inhabits this area.

Ontario Beach Park and the Charlotte Genesee Lighthouse consist of lawn areas set amongst trees and paved walkways.

Federal wetlands maps indicate that no designated Federal wetlands are located within the landward boundaries of the project site. However, the Genesee River is a designated riverine Federal wetland. The area is also included in a designated coastal zone and is part of the City's LWRP area.

The Genesee River supports an active warm water fishery. Resident species such as small mouth bass, brown bullhead and northern pike, and lake run species such as white bass and yellow perch are supplemented by seasonal influxes of large numbers of trout and salmon. In general, wildlife use of the river area appears to be limited to those species that can inhabit a relatively narrow riparian corridor and are tolerant of human activity in adjacent areas.

2.2 Threatened and Endangered Species

In order to determine if impacts to State-listed threatened or endangered species are possible within the project vicinity, a letter was sent to the NYSDEC Natural Heritage Program Information Services. The NYSDEC Natural Heritage Program responded in a letter dated December 29, 2010 (see correspondence in Appendix N):

> We have no records of <u>known</u> occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site.

The lake sturgeon, a State-listed threatened species, historically inhabited the waters of Lake Ontario, but this species has been thought to be absent since the 1930's due to poor water quality, habitat fragmentation and degradation, and intensive commercial exploitation. In June of 2003, the NYSDEC, USFWS, the U.S. Geological Survey (USGS), and the Seneca Park Zoo began a lake sturgeon reintroduction program which includes juvenile stocking and public education. The goal of the program is to restore a self-sustaining lake sturgeon population to the area. The stocking program involved the reintroduction of about 1,000 juvenile sturgeon annually into the Genesee River in 2003 and 2004.

Subsequent gill net surveys indicate that the sturgeon is most likely moving from the Genesee River to Lake Ontario until they reach maturity. Lake sturgeon return to rivers to spawn where they prefer waters of at least 6 meters in depth with a gravel and mollusk shell substrate. Research has supported the hypothesis that the Genesee River contains habitat suitable for growth and survival of stocked juvenile sturgeon. Based on the typical lake sturgeon life cycle, sturgeon stocked in 2003 are not expected to return to the Genesee River to spawn until the spring of 2020, when they are expected to reach sexual maturity.

Information regarding potential impacts to Federally listed endangered and threatened species was submitted to the U.S. Fish and Wildlife Service, pursuant to the Endangered Species Act of 1973 (ESA). The City identified "no effect"
to Federally listed endangered and threatened species, based upon USFWS website information for species in Monroe County, as presented below:

- Bog Turtle (Riga and Sweden Townships)
  No impacts. The project area is located in the City of Rochester and not in the Town of Riga nor the Town of Sweden.

USFWS responded via a fax dated December 20, 2010 (see correspondence in Appendix O). USFWS acknowledged the receipt of the City's no effect determination and indicated that "No further ESA coordination or consultation is required." The USFWS also indicated that a copy of the City's no effect determination should be provided to Federal agencies involved with the proposed project. The distribution of this DGEIS to involved/interested Federal agencies, which provides the no effect determination above, fulfills this USFWS requirement.

2.3 Habitat Designations

NYSDEC has designated approximately 6½ miles of the Genesee River as a Significant Coastal Fish and Wildlife Habitat, meaning that the designated area is critical to the maintenance of a given fish and/or wildlife population. The designated 6½-mile stretch of the Genesee River extends from the mouth of the river at Lake Ontario to the Lower Falls, just south of the Driving Park Bridge. As such, the stretch of river that flows adjacent to the project site is located within the designated Significant Coastal Fish and Wildlife Habitat area.

Significant Coastal Fish and Wildlife Habitat areas exhibit one or more of the following characteristics: (1) are essential to the survival of a large portion of a particular fish or wildlife population (e.g. feeding grounds, nursery areas); (2) support populations of rare and endangered species; (3) are found at a very low frequency within a coastal region; (4) support fish and wildlife populations having significant commercial and/or recreational value; and (5) would be difficult or impossible to replace.

For each designated Significant Coastal Fish and Wildlife Habitat, the State prepares a "Habitat Rating Form" to describe the fish and wildlife values, ecosystem rarity, human encroachments, potential impacts, etc. The Habitat Rating Form regarding the Genesee River Significant Coastal Fish and Wildlife Habitat indicates that the large size of the Genesee River and the fact that much of the river corridor is essentially undisturbed makes this area one of the most important potential fish and wildlife habitats in the Great Lakes Plain ecological region of New York State. The Habitat Rating Form goes on to state that water pollution and the extensive alteration of the lower Genesee River channel have reduced the environmental quality of this area.

NYSDEC has classified the section of the Genesee River within Letchworth State Park upstream of the Mt. Morris Dam as a wild, scenic and recreational river. This portion of the Genesee River does not extend through the project area.

3. Impacts and Mitigation

3.1 Marina

Construction of Phase 1 of the Marina basin will create approximately 4.7 additional acres of open water along the Genesee River. This will be increased to approximately 7 acres of open water habitat when Phase 2 Marina Expansion is implemented. This open water area (deep water wetland) will provide additional habitat for fish and wildlife. New fisheries habitat and spawning areas will also be created in the additional shoreline consisting of stone revetment along the perimeter of the marina basin.

It is not expected that the proposed marina will substantially degrade water quality, increase temperature or turbidity, reduce flows, or increase water level fluctuations on the Genesee River and, therefore, will not significantly affect the biological productivity or ecological characteristics of this area. The marina operations plan will include guidelines for marina usage designed to protect the water quality of the marina and of the Genesee River Significant Coastal Fish and Wildlife Habitat to the maximum extent possible. Marina management best practices will be followed, as outlined for New York State on the *NY Marina Environmental Best Practices Web Site* or in industry standards such as the *Connecticut Clean Marina Guidebook* or the *NOAA Clean Marina Program*.

As NYSDEC and USFWS did not identify any concerns with threatened or endangered species in the project area, no adverse impacts to species will occur. Moreover, no adverse impacts on the lake sturgeon have been identified. It is unlikely that the sturgeon will use the marina basin for spawning as its depth and bottom substrate do not meet its habitat requirements. The creation of the marina will not impede movement of sturgeon throughout the Genesee River nor hinder access to spawning habitat further upstream. As the project area is already heavily developed, marina development will not significantly degrade or alter habitat that is currently available to sustain juvenile and/or mature lake sturgeon. Finally, the general timeframe for the opening of the Phase 1 of the Marina is 2014 or 2015, well before 2020 when the 2003 class of stocked lake sturgeon are expected to return to the Genesee River to spawn.

Impacts to the existing bottomland of the Genesee River will result from the construction of an opening in the existing river wall approximately 60 feet wide. In addition, an area of rock scour protection, approximately 6,000 square feet in size, will be constructed on the riverbed, which is a Federally designated wetland. The City will obtain a Marine Structures permit from the USACE which will encompass the construction of the river wall opening and the rock scour protection area.

Likewise, no land based habitat areas will be adversely impacted by the marina. As previously described, most of the land affected by the project is currently paved parking area with sparse vegetation and no significant habitat value. Marina construction will convert a portion of a paved parking area into an open water habitat area, and will increase green space on site with the addition of the landscaping/open space to be created around the marina basin. Proper erosion, sedimentation, and pollution prevention measures will be implemented during construction and during operation of the proposed action to prevent degradation of water quality in the Genesee River from surface run-off (see *Section IV B Water Resources*).

Potential impacts to Significant Coastal Fish and Wildlife Habitat areas are addressed as part of the NYS Department of State (NYSDOS) coastal consistency review, specifically under Policy 7 of the State's coastal policies. NYSDOS guidelines on protecting and preserving significant habitat areas indicate that land and water uses or development shall not be undertaken if such actions would destroy a habitat or significantly impair the viability of a habitat.

Habitat destruction is defined as the loss of fish or wildlife use through direct alteration, disturbance, or pollution of a designated area, or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include, but are not limited to, reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity, and/or increased incidence of disease and mortality.

Construction activities will be temporary, and therefore, associated impacts to the lower Genesee River and existing wildlife habitat are expected to be minor and temporary. No permanent adverse impacts to vegetation and wildlife have been identified. Overall, operation and use of the project area will be consistent with the past use of the area as an active, commercial harbor. The operation of the marina and associated facilities will not result in any new or unknown disturbance to fish and wildlife species in the surrounding area.

Operation of the marina and all facilities included in the project will comply with applicable State and Federal environmental regulations and laws. The primary impact on wildlife and vegetation is habitat creation – including the construction of the deepwater wetland habitat in the marina and the creation of additional green space surrounding it, both of which replace pavement and existing asphalt parking lots.

3.2 Right-of-Way (ROW) Improvements

It is expected that any urban wildlife species currently using the area will have the same use of the area once the ROW improvements are constructed. The River Street Extension, as proposed, may include green infrastructure elements such as bioswales or rain gardens that will create small areas of new habitat.

3.3 Lighthouse Trail

The area where the trail will be developed is primarily an open grassed area which does not contain significant habitat value. No mature trees will be removed to create the trail, however, some low brush and scrub along the embankment will likely be cut back to open up views. It is expected that any urban wildlife species currently using the area will have the same use of the area once the trail is constructed.

3.4 Lake Ontario Research Center (LORC)

If the LORC is built within the link building adjacent to the Terminal Building, no new construction or ground disturbance will occur, and no impacts on vegetation or wildlife would occur.

If the LORC is built in a new structure adjacent to the Terminal Building, some ground disturbance would occur. However, most of the area is already paved. The construction of a new building to house the LORC would not result in the loss of any significant wildlife habitat or vegetation.
Positive impacts to the habitat and wildlife species within the Genesee River and Lake Ontario could occur as a result of research conducted at the LORC and new measures implemented to improve water quality of these waterbodies.

3.5 Relocation of the Public Boat Launch

The removal of the boat launch from its current location will have no significant impacts on vegetation and wildlife. Most of the current boat launch area is comprised of the parking lot which does not contain significant wildlife habitat.

Once the site for the new boat launch is selected, the vegetation and habitat characteristics will be evaluated and potential significant impacts identified. Construction will be undertaken in accordance with all necessary permits and oversight by regulating agencies, including NYSDEC and the Army Corps of Engineers. Sediment and erosion control measures will be implemented to prevent sedimentation into the river.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

The relocated Labor Operations Center and associated parking will occupy a similar amount of space as the current site, independent of its final location. None of the sites currently under consideration are located along the Genesee River, Lake Ontario. Moreover, the alternate locations under consideration are in the same general vicinity as the current site and have a similar level of development. Once the site for the new Operations Center is selected, the vegetation and habitat characteristics will be evaluated and potential significant impacts identified.

3.7 Incremental Private Development

The private mixed use development parcels will be created primarily on existing parking areas. Some lawn areas adjacent to or around these parking areas will be included in the development parcels. Very few trees are located in the area identified for the development parcels.

It is anticipated that the private mixed use development will include some landscaped areas including lawns, trees and shrubs. It is likely that more trees will be present on-site in landscaped areas following development than are currently present on-site before development.

As no significant habitat or vegetation will be removed by the development of Parcels I through III, no impacts are identified.

E. Air, Odors, and Noise

1. Introduction

This section of the DEIS reviews air quality, odor, and noise issues relative to the existing site and uses. Potential impacts to air quality (e.g. vehicular and boat emissions, new building emissions) are presented. Potential odors that may result from the proposed action (e.g. stagnant water, algae accumulation, or new uses including restaurants) and/or the impact of existing odors on new occupants are analyzed. Potential noise impacts associated with construction activities, boats, and new uses in the project area are evaluated. A range of reasonable mitigation measures are presented.

2. Existing Setting

2.1 Ambient Air Quality

Air quality in the Port area and the surrounding Rochester region is generally good. The NYS Department of Environmental Conservation (NYSDEC) air quality monitoring stations in the region monitor levels of sulfur dioxide, inhalable particulates, carbon monoxide, nitric oxide and nitrogen dioxide, and ozone. The closest monitoring station is located south of the Port site in the City of Rochester.

The most recent New York State Ambient Air Quality Report (2009) includes air quality data for the previous ten years. The report indicates no contraventions of State or Federal air quality standards for sulfur dioxide, inhalable particulates, carbon monoxide and nitric oxide and nitrogen dioxide during this time period. NYSDEC provides more recent data for ozone. In 2010 and 2011 (through July), no exceedances were recorded of either the one-hour ozone standard or the eight-hour ozone standard at the monitoring station in Rochester, nor at the monitoring station in Williamson, Wayne County.

In addition, air quality assessments and reports have been prepared as part of the planning process for earlier projects in the Port area. For the Lake Avenue Improvement project between Stutson Street and Beach Avenue, Bergmann Associates prepared a report for the City of Rochester entitled, “Planning and Preliminary Engineering Report for Lake Avenue Improvement Project (Stutson Street to Beach Avenue), dated August 1999. This report showed that the predicted traffic levels at all existing and proposed roadways at the estimated time of completion and for 20 years thereafter had Levels of Service of “C” or better. Since no significant traffic delays were indicated at area intersections, the likelihood for negative impacts to air quality was very low.

A site specific air quality study was not undertaken for the proposed action based on the following determinations:

- The greater Rochester area is in attainment with NYSDEC Ambient Air Quality Standards,
- The current traffic study (*Section IV K*) indicates that traffic and area intersections continue to operate well (Levels of Service C or better), and
- The project does not include any other uses that would significantly contribute new air emissions, such as manufacturing facilities, industrial plants with stacks, or energy facilities that burn oil, gas or coal.

2.2 Odors

Odors common in waterfront areas are found in the Port area, including vehicular exhaust, boat exhaust, odors generated by restaurant food preparation, and "fishy" odors caused by decomposing fish along the shoreline (and to a lesser extent along the banks of the Genesee River).

More significantly, foul odors are sometimes generated during the warmest parts of the summer months along the shoreline of Ontario Beach and slightly west of the Charlotte Pier. These odors are created primarily by the decomposition of accumulated algae in that area. The Charlotte Pier restricts easterly water flow along the natural shoreline of Lake Ontario and acts as a trap, collecting decomposing algae biomass and other debris that are pushed into the shallows along the shore by lake breezes and wave action. Winds from the north can cause a significant drift of this odor near and onto the proposed project site.

Currently algae and debris are removed from the shore and transported to the Labor Operations Center at 4600-4650 Lake Avenue where it is spread out, dewatered and hauled away for disposal.

2.3 Noise

Noise can be described as an irritating or unwanted sound. It is measured in terms of sound pressure level and expressed in decibels (dB). Noise can be affected by environmental factors, which can include distance from the source, topography, temperature, wind direction and time of day.

The Port area is bordered on the west by Lake Avenue, which is lined with restaurants and businesses along the west frontage. Residential homes and apartments are located one block west of Lake Avenue, approximately 520 feet west of the proposed marina and 30 to 35 feet higher in elevation. This residential area would be one of the key receptors to noise generated at the Port, and it includes homes along the shoreline of Lake Ontario fronting on Beach Avenue.

Primary sources of existing noise in the area of the proposed project site include noise from vehicles, boats, music, people, and birds. With the exception of high-powered speedboats, all of these noises are considered minor background noises which are common to developed harbor areas. There are public events which occur at Ontario Beach Park and in the vicinity which can generate higher levels of noise. These include Harbor Fest, an occasional air show, concerts, picnics, firework displays, and other celebrations. Most of these events occur between May and October.

A land use survey of existing conditions was previously performed in the Port area in conjunction with the 2001Port of Rochester EIS. The lands surrounding the project site were classified in accordance with the Federal Highway Administration (FHWA) activity categories based upon visual observation. The categories were then used to define sensitivity to noise based upon land use.

Existing noise levels were measured at seven locations in the project area that were determined to be representative of the majority of receptors within the project area. This was done to best characterize the existing noise environment. Resulting noise levels ranged from equivalent sound level (L_{eq}) values of 51 to 66 dBA, with six of the seven sites measuring at or below 59 dBA. These values indicate the lack of a dominant noise source, such as a highway or factory, near these sites. Since the fast ferry is no longer in operation, and little has changed in the area since the noise study was conducted, these existing noise levels and findings are believed to be consistent with current conditions at the site.

3. Impacts and Mitigation

During construction of the proposed improvements, construction vehicles will generate vehicle emissions, dust, and noise. A complete discussion of construction-related impacts is provided in *Section IV S*, including impacts related to air quality, odors and noise, and summarized briefly below.

Construction work hours will be limited from 7:00 am to 10:00 pm as allowed by City Code. Trucks and other vehicles will enter and exit the site at a controlled gate(s) and a preferred construction route will be identified. At this time, it is likely that most trucks will travel to and from the site via I-390, Latta Road and Lake Avenue. It is not envisioned that construction vehicles will routinely use Beach Avenue or any of the residential roads adjacent to Lake Avenue and Beach Avenue.

The contractor will provide standard dust control practices, such as stabilized construction entrances and use of calcium chloride, water, and power sweepers. Trucks carrying loads of loose material or debris will generally use tarps to cover the load.

3.1 Marina

3.1.1 Air Quality

The proposed action does not include uses that would significantly contribute new air emissions to the vicinity, such as manufacturing facilities, industrial plants with stacks, or energy facilities that burn oil, gas or coal. Once operational, only the additional vehicular and boat traffic generated by the proposed marina could affect changes in air quality.

The traffic impact study prepared for the project shows that there is generally enough reserve capacity on the existing road system to accommodate new Port traffic (see *Section IV K Transportation)*. In fact, traffic operations during the peak traffic hours, with the proposed project in place, are projected to range from very good to acceptable. One exception is the intersection of Lake Avenue with the Lake Ontario State Parkway where some congestion is expected. The County monitors this intersection regularly with cameras and has implemented a special timing plan lifting the bridge to help alleviate gridlock. As a result of the relatively minor increases in traffic volumes and traffic delays, no significant air quality impacts are expected.

The marina itself will provide docking for several types of boats, however, the motor or power boat is anticipated to be the most popular type docked at the marina, based on the market analysis performed during the early stages of the project. Motorboats typically run on gasoline or diesel and produce exhaust just as a car does.

There are currently approximately 838 boat slips at marinas and other public/private docking facilities in the Rochester Harbor. The proposed action will increase the number of boat slips by 85 (or 10 percent) for the Phase 1 Marina and by an additional 72 (or additional 8.5 percent) for the Phase 2 Marina Expansion. Some proportion of the additional boats drawn to the area by the availability of new slips will be sailboats. Moreover, transient slips, estimated to make-up at least a third of the Phase 1 Marina and more than one-half of the Phase 2 Marina Expansion, will be used by boaters coming and going from the area and do not represent a consistent number of new boats in the Port waters. As such, it is estimated that air emissions from new boats using the Port area will increase by about 5 percent above existing levels due to the development of Marina Phase 1 and by an additional 5 percent due to the development of Marina Phase 2 Expansion.

Vehicular and boat emissions are naturally dispersed by winds and air currents, particularly in the vicinity of the Port where the area is a flat, open, lakefront setting with no geographic features that trap or re-circulate air in place. As previously described, the greater Rochester region, including the Port site, has met ambient air quality standards for sulfur dioxide, inhalable particulates, carbon monoxide and nitric oxide and nitrogen dioxide for the last decade and has had no exceedances of ozone standards in 2010 and 2011 (through July).

3.1.2 Odors

The Port site is currently subjected to odor issues from the build-up of decomposing algae biomass and other debris along the shoreline of Ontario Beach north of the project site. Accumulated algae and debris is brought to the grounds of the Labor Operations Center for dewatering and eventual disposal.

The County's current practice for managing the algae/debris will conflict with the proposed development of the Port site for the marina, residential and commercial buildings, and other recreational attractions and amenities designed to bring more people to the waterfront. Algae dewatering is generally associated with unpleasant odors and is unsightly.

The City is considering ways to avoid having these conflicting uses in close proximity to each other. The options are limited by the results of several recent studies. In 2007, the U.S. Army Corps of Engineers conducted a feasibility study of alternative measures to control algae accumulating at Ontario Beach. Most of the measures proved impractical due to high initial construction costs, high operational costs, or their relative ineffectiveness in solving the problem. As a result, in 2011, the USACE, Monroe County, and the City are undertaking a field demonstration project which involves removal of the algae/debris from the beach area.

As this study comes to a close, the City is continuing to work with the County to devise a strategy which would allow for management of algae/debris at an off-site location rather than at the Labor Operations Center. Once a plan is in place, a site specific evaluation of the environmental effects, including impacts of odor, will be prepared.

Marina development will not create significant sources of odor. Stagnant water within the marina will be minimal due to the proposed installation of a circulation pipe to assist with moving water from the south entrance of the marina, through the north end, and back into the River. As mentioned previously in *Section IV C 3.1.1.3* of this document, the circulation pipe system will also incorporate a large

diameter manhole which could accommodate a pump should one be needed to assist with moving water from the marina basin into the Genesee River.

During normal operations, any debris that builds up in the marina, including organic matter or seaweed, will be periodically removed as part of regular marina maintenance consistent with the marina management plan. Removal of this material will mitigate odors, as well as potential damage to boats in the marina.

As boaters return from the lake or river, they may have their catch on board. As the boats using the marina will not be commercial fishing vessels, no significant "fishy" odor will be created by the relatively small catches brought into the marina by private boats or individual fishing charter operators.

3.1.3 Noise

Once operational, the primary source of noise at the marina site will be boats idling, boats entering/exiting the marina at low speeds, and boats operating at up to full speeds in the adjacent Genesee River and Lake Ontario. During the fast ferry project, a noise study was conducted and included in the 2001 EIS to assess potential impacts of the fast ferry project on the ambient noise levels at the Port area. The study assessed noise associated with the ferry operation, traffic, and construction activities. The study concluded that there would be no significant noise impact due to the implementation of the fast ferry project. The noise associated with the boats entering and leaving the proposed marina is expected to be significantly lower than the noise associated with the docking of former fast ferry vessel. Moreover, the fast ferry is no longer operational.

The Port of Rochester currently has a number of operating marinas and broadside docks along the Genesee River, and noise from boating is common to the area. As previously described, there are currently about 838 boat slips at marinas and other public/private docking facilities in the Rochester Harbor. The proposed action will increase the number of boat slips by 85 (or 10 percent) for the Phase 1 Marina and by an additional 72 (or additional 8.5 percent) for the Phase 2 Marina Expansion. As the marina is designed to accommodate larger boats, a proportion of the additional boats drawn to the area by the availability of new slips will be sailboats or relatively quiet yachts. Moreover, transient slips, estimated to make-up at least a third of the Phase 1 Marina and more than one-half of the Phase 2 Marina Expansion, will be used by boaters coming and going from the area and do not represent a consistent number of new boats in the Harbor.

It is estimated that noise from louder motor-type boats using the Port area will increase by about 5 percent above existing levels due to the development of Marina Phase 1 and by an additional 2 to 3 percent due to the development of Marina Phase 2 Expansion.

Noise regulations will be included in the Marina Management Plan. Typically, these plans give marina operators the authority to evict a transient boater from the marina or to evict a seasonal slip owner to due to repeated or flagrant noise violations.

Noise at the marina or in the vicinity is subject to the City of Rochester Noise Ordinance, Chapter 75 of the City Code, as indicated below:

§ 75-4. Excessive noise prohibited.

A. No person shall make, continue, cause, or suffer or permit to be made or continued, and the owner and the person in control of a motor vehicle and the person in control of premises shall not suffer nor permit to be made or continued, any excessive noise. It shall be prima facie evidence of a violation of this section if noise emanating from any source, including, but not limited to, voices or other sounds caused or emitted by humans, is:

(1) Audible beyond the property line of the premises from which it emanates between the hours of 10:00 p.m. - 8:00 a.m.

(2) Audible at a distance of 50 feet beyond the property line of the premises from which it emanates between the hours of 8:00 a.m. - 10:00 p.m.

(3) Audible at a distance of 50 feet from the source if emanating from a public street, public park or other public place.

The Rochester Police Department enforces the City Noise Ordinance.

3.2 Right-of-Way (ROW) Improvements

3.2.1 Air Quality

Once the ROW Improvements are in place and operational, no adverse air emissions impacts will occur.

3.2.2 Odors

There are no significant odor impacts associated with the ROW Improvements.

3.2.3 Noise

No significant changes to ambient noise levels or noise impacts associated with the ROW Improvements.

3.3 Lighthouse Trail

3.3.1 Air Quality

No air quality impacts are associated with the operation of the Lighthouse Trail.

3.3.2 Odors

No odors are associated with the operation of the Lighthouse Trail.

3.3.3 Noise

No noise impacts are associated with the Lighthouse Trail.

3.4 Lake Ontario Resource Center (LORC)

3.4.1 Air Quality

Development of the interim LORC inside the Link building will have no impact on air quality.

The operation of a permanent LORC building is not expected to impact air quality. The building will be constructed according to New York State and City building codes, which do not allow for harmful air emissions, foul odor emissions, or irritating noise. The only contributors to air emissions would be visiting vehicles and an occasional delivery vehicle, or exterior air conditioning units near the building. These contributors would be considered minor and would have no potential adverse effects to ambient air quality.

3.4.2 Odors

Vehicles accessing the LORC will consist mainly of staff, students, and occasional delivery trucks. Emissions from newly-constructed buildings are strictly regulated by New York State. Ventilation systems for laboratories, fire pump rooms, boiler rooms and kitchens, are required to be designed to minimize the release of potential contaminants and odors.

3.4.3 Noise

Any noise generated by the LORC is expected to be relatively minor. The primary generators of noise would be vehicles and occasional delivery trucks entering and exiting the site. Noise typically generated by exterior air-conditioning units, condensers, and rooftop units can be considered background noise for these types of buildings. It is not anticipated that any mitigation measures will be necessary for noise impacts associated with the operation of the LORC facility.

3.5 Relocation of the Public Boat Launch

3.5.1 Air Quality

Removal of the Public Boat Launch from the Port site is not expected to significantly impact air quality. Emissions and dust generated by construction vehicles will be at relatively low levels and limited to construction work hours from 7:00 am to 10:00 pm as allowed by City Code. Further discussion of construction-related impacts and mitigation measures is provided in *Section IV S*.

As the new boat launch will be designed to replace the existing facility in kind, there will be no significant increase in overall air emissions at the Rochester Harbor. Air impacts in the immediate vicinity of the new boat launch, however, will have to be assessed as part of the subsequent site-specific review.

3.5.2 Odors

The removal the Public Boat Launch from the Port site will not impact odors in the Rochester Harbor. The design and location of the new boat launch will consider direction of currents, water depth, and shoreline habitat to alleviate odors caused by accumulation of seaweed and stagnant water. The relocation site will be evaluated for potential impact to key receptors, including residential areas, schools and day care facilities.

3.5.3 Noise

Noise will be generated by the demolition of the existing Public Boat Launch. Further discussion of construction-related impacts and mitigation measures is provided in *Section IV S*.

As the new boat launch is a replacement of the existing boat launch, in the vicinity of the port site, no significant changes in the overall noise environment is expected. Possible sites for relocation of the boat launch will be evaluated for potential impact to key noise receptors, such as residential areas, schools and day care facilities, during the site-specific environmental review.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

3.6.1 Air Quality

During demolition of the existing Labor Operations Center building and construction of the new facility, construction vehicles will generate vehicle emissions and dust. Further discussion of construction-related impacts and mitigation measures is provided in *Section IV S*. Once operational, the new Labor Operations Center will not generate significant air emissions.

3.6.2 Odors

As previously described, plans are being considered to modify the practice of dewatering of algae and debris removed from the lakeshore at the current Labor Operations Center site. If the planning process results in the identification of a permanent off-site location that is removed from sensitive odor receptors, algae dewatering may continue at the off-site location even once the Labor Operations Center is relocated. If, on the other hand, algae/debris management is proposed to be located within the Labor Operations Center, once relocated, odors and other issues associated with the operation will be evaluated as part of the site-specific environmental review for the new Labor Operations Center.

3.6.3 Noise

Noise associated with demolition of the existing Labor Operations Center building will be caused by truck traffic and operating heavy equipment (Further discussion of construction-related impacts and mitigation measures is provided in *Section IV S*.) The noise will be intermittent and be limited to work hours from 7:00 am to 10:00 pm as allowed by City Code.

Once operational, noise associated with the Labor Operations Center will include traffic entering and leaving the site and machinery used for maintenance operations. Depending upon its location, the noise created by these operations could impact surrounding uses. Possible sites for relocation of the Labor Operations Center will be evaluated for potential noise impacts, during the site-specific environmental review.

3.7 Incremental Private Development

3.7.1 Air Quality

Once operational, the proposed private mixed use development buildings are not expected to create significant air quality concerns. The proposed buildings will contain residential and commercial uses including restaurants. Such uses do not generate emissions containing chemical components or particulates. The private development will not include manufacturing facilities, industrial plants with stacks, or energy facilities that burn oil, gas or coal. Parking for each building is proposed to be contained on its own lot, and in some cases may include underground parking garages.

Emissions from newly-constructed buildings are strictly regulated by New York State. Ventilation systems for underground parking facilities, fire pump rooms, boiler rooms and restaurant kitchens, are required to be designed to minimize the release of potential contaminants and odors.

Potential impacts of air emissions associated with the development of these facilities will be evaluated as part of the site-specific environmental review and will be based upon the exact mix of uses and facilities proposed for each parcel.

3.7.2 Odors

The development of the private parcels is not expected to generate significant odors. Vehicles accessing the new buildings should consist mainly of residents, shoppers, and occasional loading trucks.

Emissions from newly-constructed buildings are strictly regulated by New York State. Ventilation systems for underground parking facilities, fire pump rooms, boiler rooms and restaurant kitchens, are required to be designed to minimize the release of potential contaminants and odors.

3.7.3 Noise

Any noise generated by the operation of residential and commercial uses on the development parcels will be relatively low and consistent with that found at any developed mixed-use site. The primary generators of noise would be vehicles and occasional loading trucks entering and exiting the site. Noise typically generated by exterior air-conditioning units, condensers, and roof-top units is relatively low and can be considered background noise for these types of developments.

Noise generated by outdoor entertainment associated with development on the private parcels will be controlled through requirements in the zoning code and monitored by the Rochester Police Department.

Site specific environmental review will be undertaken at the time each parcel is proposed for development and will be based upon the final design and mix of uses and facilities. Noise impacts will be included in this review process.

Noise at the Port area will be subject to the City of Rochester Noise Ordinance which prevents excessive noise in Chapter 75 of the City Code (*see subsection of Code included in Section IV E 3.1.3*). Other mitigation measures will be determined during site-specific review and may include:

- Buffer rooftop mechanical equipment with parapet walls or sound dampening enclosures.
- Restricting hours of operation and/or scheduling of deliveries and garbage pickup.
- Selecting locations of mechanical equipment, vehicle access points and service entrances to reduce noise impacts

F. Aesthetic and Visual Resources

1. Introduction

The proposed project will impact the visual environment of the Port area. An assessment of those impacts, positive and negative, is presented in the following section.

Key vantage points, shown in Figure F-1, were selected for analysis as part of the visual impact assessment. These vantage points were determined to be either representative of the views seen by the most people within or around the project area, or related to an important visual resource or overall view of the project. Below is a list of those vantage points:

Key Vantage Points

1 – View from adjacent high-rise apartment building
2 – Views from the Charlotte-Genesee Lighthouse
3 – Views from proposed Lighthouse Trail Scenic Overlook
4 – View from the railroad bridge on Lake Avenue looking east
5 – View from just north of the railroad bridge on Lake Avenue looking northeast
6 – View north on Lake Avenue approaching Portside Drive
7 – View south on Lake Avenue at Portside Drive
8 – View east along Portside Drive from Lake Avenue
9 – View through project site in the area of proposed public easement (Civic Square)
10– View of Genesee River and Lake Ontario from Lake Avenue
11 – View south on Lake Avenue in front of proposed Parcel I
12 – View from Lake Avenue looking east on Corrigan Street
13 – View from Lake Avenue toward lake/park (northeast)
14 – View from Pavilions in Ontario Beach Park
15 – View from Ontario Beach Park
16 – View of project site from Carousel
17 – View of the project site from the front of the Terminal Building
18 – View of the project site from the south end of the Terminal Building
19 – View south along River Street in area of Parcel II
20 – View north along existing River Street at Portside Drive
21 – View of the project site from the east side of the Genesee River

Figure F-1
Port Marina Project
Key Vantage Points

2. Existing Setting

The project area is currently dominated by asphalt parking. The site is characterized as open and underutilized for most of the year. The primary visual components include the waterfront area, the Charlotte Genesee Lighthouse, and Ontario Beach Park.

Waterfront Area: The Genesee River and Lake Ontario both offer high quality vistas and are among the most significant visual resources in the City of Rochester. Views of the water are best from within Ontario Beach Park and along the water's edge, e.g. the Charlotte Pier. The Terminal Building currently blocks views of the Genesee River from much of the project site. Public access around the Terminal Building, however, offers noteworthy views of the River and the Lake. Views of the water are also available along Lake Avenue.

Charlotte Genesee Lighthouse: Views of the Port area from the Charlotte Genesee Lighthouse are largely blocked by brush and small trees. Through the brush, glimpses of the project site are available. During the winter months, views are easier to access, but the weather inhibits the ability to take advantage of the views. Currently, the lighthouse can be seen from parts of the project site, and preserving and enhancing those views is a goal of the plan.

Ontario Beach Park: Ontario Beach Park, with its green spaces, trees, carousel, beach, boardwalk, and bath house, is a highly valued visual resource. Views of the park and from the park are important community assets.

3. Visual Impact Analysis

The following analysis is a collection of photographs of the existing environment in and around the project site. Each of the existing photographs is followed by a corresponding view taken from the 3-dimensional model that has been created to demonstrate the project. The model presents the "Full Build-Out" scenario, including the Phase 2 Marina Expansion, and development of Parcels I, II, and III including 430 dwelling units, 44,000 square feet of new commercial space, and accessory parking (see Figure F-2).

Following the pictures is a **Visual Preference Survey** for readers to complete, either through the website or by printing a copy and mailing it to the City contact listed on the front of this EIS document. Part 1 of the survey provides an opportunity to rate each existing and proposed snapshot and then provide any follow-up comments. It is important to note that, while the proposed snapshots are intended to illustrate the general siting, height, massing, and orientation of the proposed site and buildings, they do not include the actual architectural amenities, landscaping, and other potentially positive aesthetic features of actual development. In Part 2 of the survey, photos are presented of development elsewhere that can be rated and assessed. This survey is an opportunity for the City and citizens to work collaboratively to achieve an understanding of valuable views and appropriate mitigation for lost views.

Figure F-2 Model of Full Build Scenario for Port Project

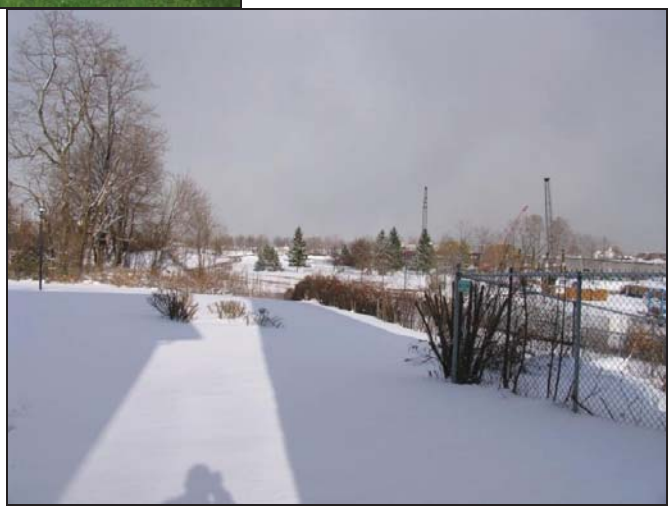
View from adjacent high-rise apartment building (#1)

Existing:

Proposed:

Views from the Charlotte-Genesee Lighthouse (#2)

Existing:



Proposed:

Views from proposed Lighthouse Trail Scenic Overlook (#3)

Existing:

Proposed:

View from the railroad bridge on Lake Avenue looking east (#4)

Existing:

Proposed:

View from just north of the railroad bridge on Lake Avenue looking northeast including the Ontario Beach Park Labor Operations Center in the foreground (#5)

Existing**:**

Proposed:

View north on Lake Avenue approaching Portside Drive (#6)

Existing:

Proposed:

View south on Lake Avenue at Portside Drive (#7)

Existing:

Proposed:

View east along Portside Drive from Lake Avenue facing the "link building" of the Terminal (#8)

Existing:

Proposed:

View through project site in the area of proposed public easement (Civic Square) (#9)

Existing**:**

Proposed:

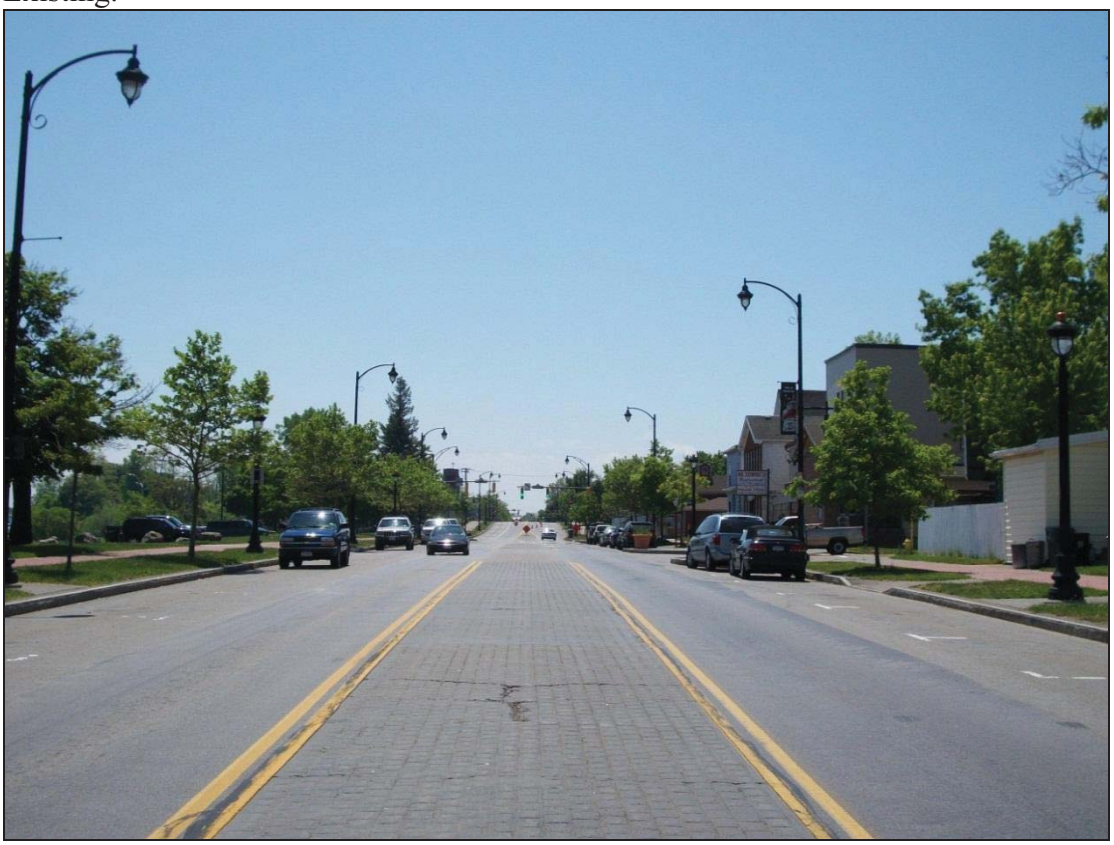
View of Genesee River and Lake Ontario from Lake Avenue (#10)

Existing:

Proposed:

View south on Lake Avenue in front of proposed Parcel I (#11)

Existing:



Proposed:

View from Lake Avenue looking east on Corrigan Street (#12)

Existing:

Proposed:

View from Lake Avenue toward lake/park (northeast) (#13)

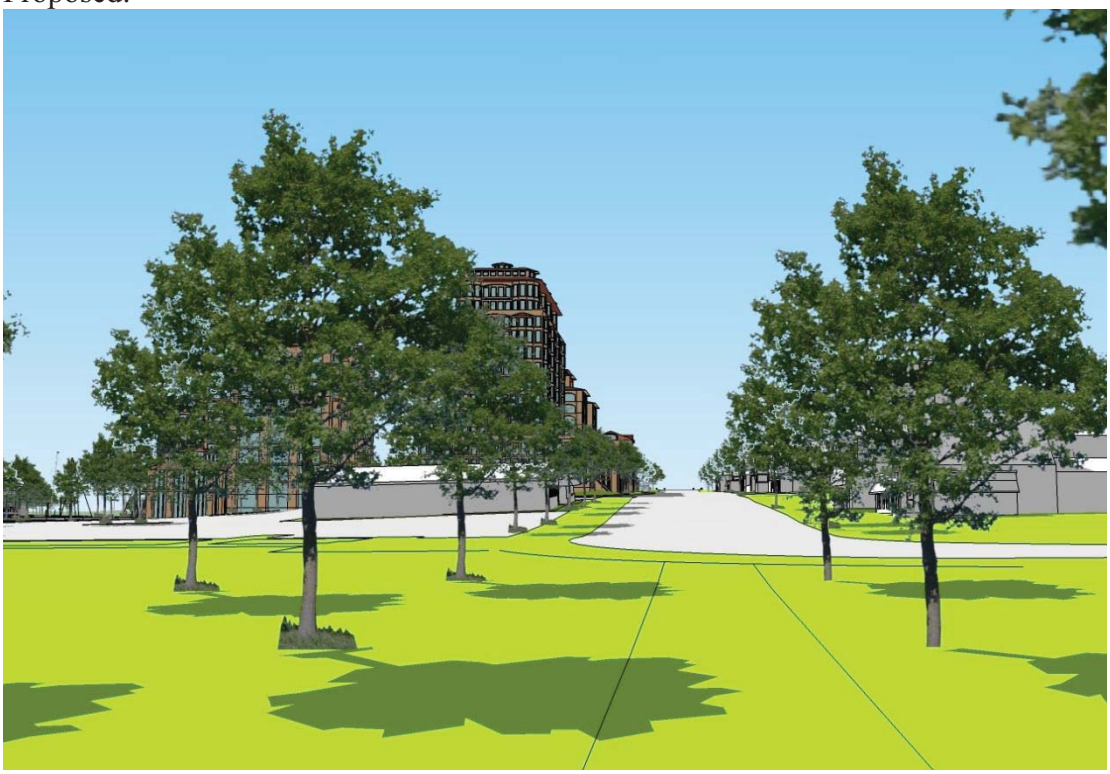
Existing:

Proposed:

View from Pavilions in Ontario Beach Park (#14)

Existing:

Proposed:



View from Ontario Beach Park (#15)

Existing:

Proposed:

View of project site from Carousel (#16)

Existing:

Proposed:

View of the project site from the front of the Terminal Building (#17)

Existing:

Proposed:

View of the project site from the south end of the Terminal Building (#18)

Existing:

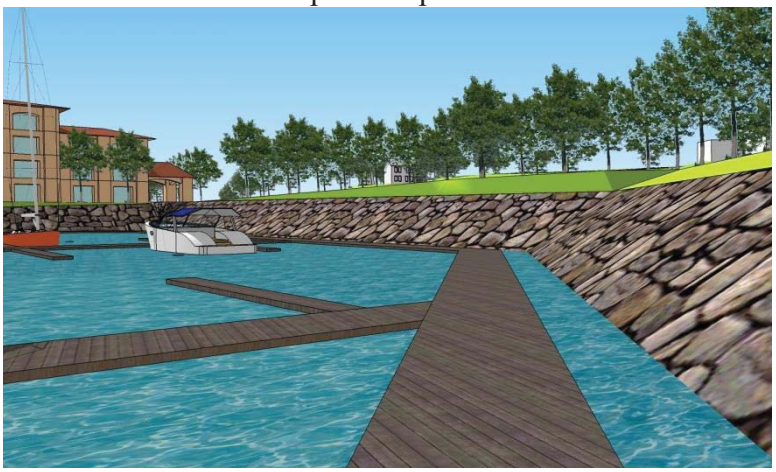
Proposed:

View south along River Street in area of Parcel II (#19)

Existing:

Proposed:

Actual view from same point as picture above



View south along proposed River Street

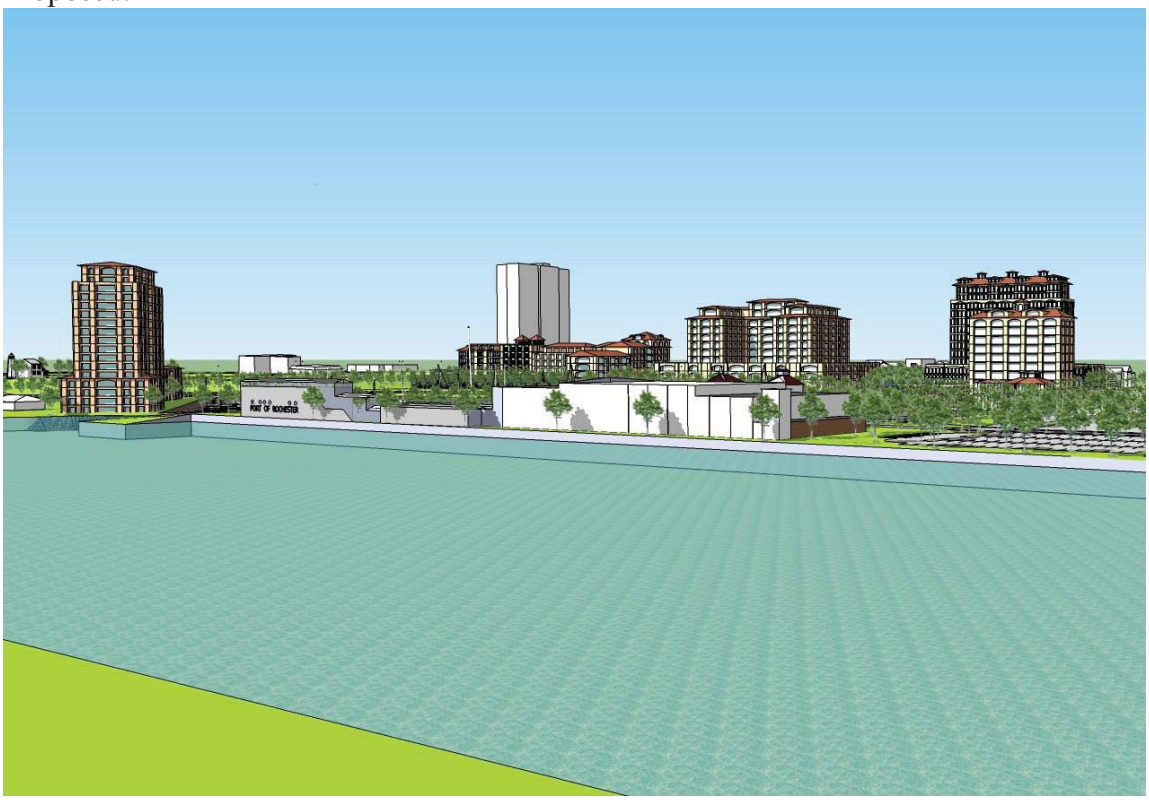
View north along existing River Street at Portside Drive (#20)

View north along proposed River Street at Portside Drive

View of the project site from the east side of the Genesee River (#21)

Existing:

Proposed:



4. Impacts and Mitigation

A. Waterfront Area

As is illustrated in the visual impact analysis above, views from Lake Avenue of the waterfront will be blocked by the proposed development. Mitigation for that impact include:

1. Adoption of the proposed Form-Based code for the project site (see *Section IV I*). The proposed zoning code places limits on the proposed new development to preserve viewsheds and create significant new views at the waterfront. In addition to high-quality design requirements for development, the proposed code provisions require active building frontages to create a sense of vitality in the public realm. This sense of vitality will work with the physical environment to create a positive visual experience at the waterfront.

2. The required public easement or "Civic Square" proposed on Parcel I will provide an area for visual access of the proposed waterfront along the Marina.

3. Attractive new views of the Marina, Lake Ontario, and the Genesee River are being opened up to the public along the proposed Lighthouse Trail and from the Lighthouse property.

4. Views of the Marina will be available along the proposed public promenade as well as from Corrigan Street, Portside Drive and River Street. The additional vantage points and the additional aesthetic resources are intended to mitigate the lost viewsheds from Lake Avenue.

B. Charlotte Genesee Lighthouse

Current views of the project site and the waterfront from the Charlotte Genesee Lighthouse are largely blocked by brush and small trees. Through the brush, glimpses of the site are available. During the winter months, views are easier to access, but the weather inhibits the ability to take advantage of the views. Likewise, while views of the Lighthouse are available from the project site, they are obscured. Preserving and enhancing those views is a goal of the plan.

To maintain newly created views at the higher elevation of the Lighthouse and the proposed overlook points, vegetation along the embankment must be kept clear of scrub-growth. Low-growing ground cover or tall deciduous trees will preserve views at key vantage points and plantings along the embankment should be limited to such.

C. Ontario Beach Park

When private development of Parcel IV was included in the preferred alternative, views of Ontario Beach Park from within the project site and along Lake Avenue would have been largely blocked by new structures. Likewise, the development of Parcel IV would have blocked views of the Marina from the Park. As the currently Proposed Action no longer includes private development on Parcel IV, these impacts have been avoided.

Visual Preference Survey

Please complete the attached Visual Preference Survey. You can submit your survey answers, either through the website www.cityofrochester.gov/visualsurvey, or by printing a copy and mailing it to the City contact listed on the front of this EIS document.

Part 1 of the survey provides an opportunity to rate each existing and proposed snapshot and then provide any follow-up comments. It is important to note that, while the proposed snapshots are intended to illustrate the general siting, height, massing, and orientation of the proposed site and buildings, they do not include the actual architectural amenities, landscaping, and other potentially positive aesthetic features of actual development.

In Part 2 of the survey, photos are presented of development elsewhere that can be rated and assessed. This survey is an opportunity for the City and citizens to work collaboratively to achieve an understanding of valuable views and appropriate mitigation for lost views.

City of Rochester

Port Public Marina & Mixed Use Development Project

Visual Preference Survey – Part 1

Views (Refer to pages 127-147)	**Rating** 1 Poor 2 Fair 3 Good 4 Great		**What do you like about it?**		**How would you improve it?**	
	Existing	Proposed	Existing Image	Proposed Image	Existing Image	Proposed Image
#1 View from adjacent high-rise apartment building						
#2 Views from the Charlotte-Genesee Lighthouse						
#3 Views from proposed Lake to Lighthouse Trail Overlook						
#4 View from the railroad bridge on Lake Avenue looking east						

Views (Refer to pages 127-147)	Rating 1 Poor 2 Fair 3 Good 4 Great		What do you like about it?		How would you improve it?	
	Existing	Proposed	Existing Image	Proposed Image	Existing Image	Proposed Image
#5 View from just north of the railroad bridge on Lake Avenue looking northeast						
#6 View north on Lake Avenue approaching Portside Drive						
#7 View south on Lake Avenue at Portside Drive						
#8 View east along Portside Drive from Lake Avenue						

Views (Refer to pages 127-147)	Rating 1 Poor 2 Fair 3 Good 4 Great		What do you like about it?		How would you improve it?	
	Existing	Proposed	Existing Image	Proposed Image	Existing Image	Proposed Image
#9 View through the project site in the area of the proposed public easement						
#10 View of River and Lake from Lake Avenue						
#11 View south on Lake Avenue in front of proposed parcel I						
#12 View from Lake Avenue looking east on Corrigan Street						

Views (Refer to pages 127-147)	Rating 1 Poor 2 Fair 3 Good 4 Great		What do you like about it?		How would you improve it?	
	Existing	Proposed	Existing Image	Proposed Image	Existing Image	Proposed Image
#13 View from Lake Avenue toward lake/park (northeast)						
#14 View from Pavilions in Ontario Beach Park						
#15View from Ontario Beach Park						
#16 View of project site from Carousel						
#17 View of the project site from the front of the terminal building						

Views (Refer to pages 127-147)	Rating 1 Poor 2 Fair 3 Good 4 Great		What do you like about it?		How would you improve it?	
	Existing	Proposed	Existing Image	Proposed Image	Existing Image	Proposed Image
#18 View of the project site from the south end of the terminal building						
#19 View south along River Street in area of parcel II						
#20 View north along existing River Street at Portside Drive						
#21 View of the project site from the east side of the River						

City of Rochester

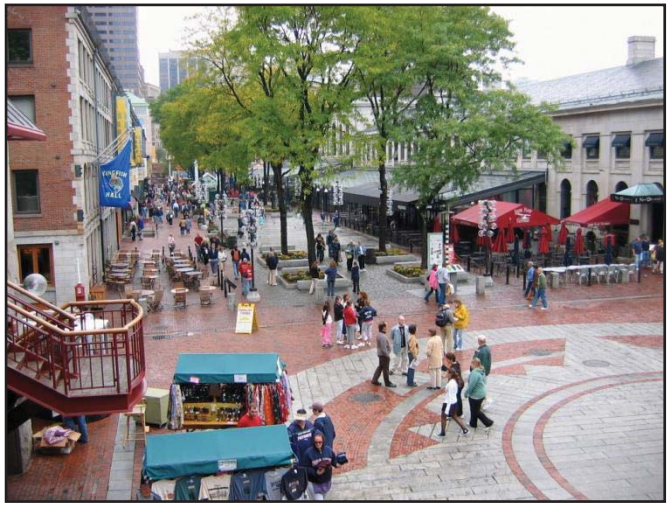
Port Public Marina & Mixed Use Development Project

Visual Preference Survey – Part 2

Development Example	Rating 1 Poor, 2 Fair 3 Good, 4 Great	What do you like about it?	How would you improve it?
			
			

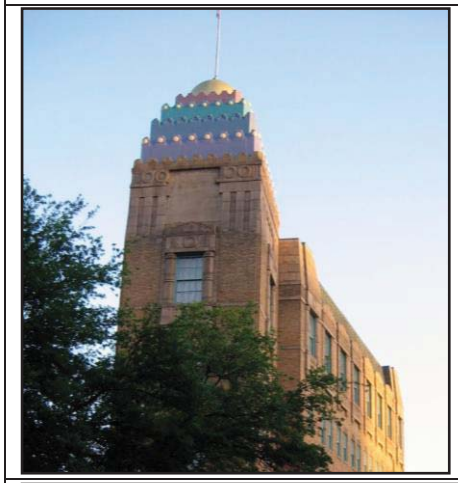
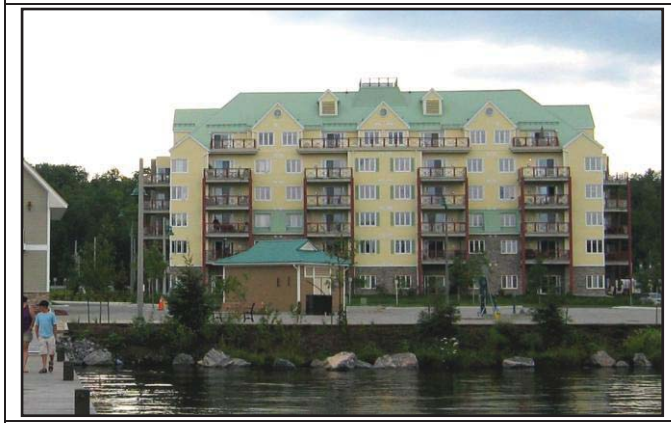
Development Example	Rating 1 Poor, 2 Fair 3 Good, 4 Great	What do you like about it?	How would you improve it?
			
			

Development Example	Rating 1 Poor, 2 Fair 3 Good, 4 Great	What do you like about it?	How would you improve it?
			
			

Development Example	Rating 1 Poor, 2 Fair 3 Good, 4 Great	What do you like about it?	How would you improve it?
			
			

Development Example	Rating 1 Poor, 2 Fair 3 Good, 4 Great	What do you like about it?	How would you improve it?
			
			

Development Example	Rating 1 Poor, 2 Fair 3 Good, 4 Great	What do you like about it?	How would you improve it?
			
			

Development Example	Rating 1 Poor, 2 Fair 3 Good, 4 Great	What do you like about it?	How would you improve it?
			
			
			

G. Historic and Cultural Resources

1. Introduction

The project requires funding and approvals from State and Federal agencies, and is therefore subject to review pursuant to Section 14.09 of the New York State Historic Preservation Act ("Section 14.09") and Section 106 of the National Historic Preservation Act ("Section 106"). Section 14.09 and Section 106 require consultation with the New York State Office of Parks, Recreation, & Historic Preservation (OPRHP) on potential effects on resources which are on or eligible for inclusion on the State and National Registers of Historic Places (S/NRHP).

In 2000, a Phase I Cultural Resource Investigation was conducted in the general project area by the Rochester Museum and Science Center (RMSC). This investigation, including both Phase IA and Phase IB investigations, was in support of the Port of Rochester Harbor Improvements and Harbor Terminal project. The results of that investigation were discussed in detail in the 2001 Port of Rochester Draft/Final Design Report/NEPA Environmental Assessment/SEQR Environmental Impact Statement. The 2000 Cultural Resource Survey, as well as additional updated information, is summarized below and included in Appendix P.

2. Existing Setting

The project limits lay mostly within the area addressed in the 2000 Cultural Resource Survey that was conducted for the earlier Port of Rochester Harbor Improvements project, portions of which were implemented. The limits of the current project fall within those of the previous project, which extended farther south along the river to Petten Street. The sole exception is that the current project includes the site of the Genesee Lighthouse and Keeper's House.

The implemented portions of the earlier plan that lay within or adjacent to the current project limits include:

1. Modification of the North Warehouse into a ferry terminal building, with the addition of an embarkation building, customs stations and related site work.
2. Demolition of the South Warehouse.
3. Installation of streets, sidewalks, parking lots and utilities.
4. Reconstruction of the river wall.
5. Improvement to the Lake Avenue public right-of-way.

Due to the correlation between project limits, the accuracy and completeness of the earlier Cultural Resource Survey, and the findings of the current project sponsor that the resources identified in the survey remain largely unchanged, the City is hereby resubmitting the 2000 Cultural Resource Survey to describe the existing setting, with the following updates and additions.

Phase 1A and B Cultural Resource Investigations for the earlier project were conducted in 2000 by the Regional Heritage Preservation Program of the Department of Collections and Research of the Rochester Museum & Science Center. The Phase 1A investigations examined the environmental, archaeological and historical literature prepared in the 15 years since the RMSC had conducted a Cultural Resources Inventory for the City's Local Waterfront Revitalization Program in 1986. The Phase 1B field investigations included an architectural survey of any buildings or structures not inventoried earlier, and subsurface shovel testing in suitable areas.

Within the limits of the current project, the report of the 2000 Cultural Resources Investigations stated the following:

> Despite the number of prehistoric and historic archaeological sites documented within and surrounding the project area, substantial previous disturbance associated with filling throughout much of the project area as well as building demolition and road construction, has left little of the project area suitable for subsurface testing. A map of the harbor conditions at Charlotte in 1829 shows much of the project area as "reed-filled waterways". Most of the area north of the lighthouse and east of Lake Avenue [*the current project site (notation added)*] and along the western bank of the river to below Latta Road had to be filled before any construction or development could occur.

Within the limits of the current project site, the investigations found only six existing buildings, as follows. Recent photographs are included in Appendix P.

1. 70 Lighthouse Street (Genesee Lighthouse and Keeper's House)
   The Genesee Lighthouse and Keeper's House were built in 1822. The original house was later removed, and a new house was constructed in 1863. The current structure is listed in the S/NRHP (90NR1478) and was designated a Rochester City landmark in 1974. The report of the 2000 Cultural Resources Investigations includes the S/NRHP nomination form.

2. 4650 Lake Avenue
   County Labor Operations Center building less than 50 years old and determined not to be eligible for S/NRHP listing.

3. 4768 Lake Avenue
   The Cultural Resource Investigations report states "This one-story frame commercial structure was built prior to 1918. Its present exterior – a combination of stucco, brick, and mock-mansard roof—masks any original exterior elements. This building does not possess the distinctive characteristics of a particular style or period nor is it the work of a master, and it does not possess high artistic value." The building was determined not to be eligible for S/NRHP listing.

4. 4776 Lake Avenue
   This is a commercial structure less than 50 years old and determined not to be eligible for S/NRHP listing.

5. North Warehouse
   This building was determined individually eligible for S/NRHP listing, and the inventory form is included in the report of the 2000 Cultural Resource Investigations. As part of the earlier project, the building was altered into a ferry terminal, with the addition of an embarkation building, customs stations and related site work.

6. South Warehouse
   Demolished during the earlier project, this building was determined not to be eligible for S/NRHP listing.

Immediately north of the project site is Ontario Beach Park. The Park and eleven park buildings have been determined to be eligible for S/NRHP listing as a group. One of the eleven, the Ontario Beach Carousel, was designated a City of Rochester landmark in 1980. The Ontario Beach Carousel is open weekends from Memorial Day through Columbus Day from noon until 9:00 pm.

One structure adjacent to the project limits but outside the jurisdiction of the City of Rochester was found to be individually eligible for inclusion in the S/NRHP. The Hojack Swing Bridge stands in the middle of the Genesee River, about 4,500 feet upstream from where the river meets Lake Ontario. It is a rotating bridge that rests on a central pier at midstream, and is now stalled in an "open" position parallel to and about 120 feet from both shorelines. Although both shorelines are within the City of Rochester, the navigational channel is under federal jurisdiction. An effort in 2003 to nominate the bridge as a City landmark failed when it was ruled that the bridge is outside municipal jurisdiction, even though the bridge abutments (where the bridge would rest when "closed") are within municipal boundaries. The inventory form is included in the 2000 Cultural Resource Investigations report.

The conclusion of the report of the Cultural Resource Investigations stated the following:

> Based on the extent of previous disturbance documented through geological and geotechnical investigations of the proposed project, especially that portion of the project area located north of the CXT track and east of Lake Avenue [*the current project site (notation added)*], historic map evidence and the on-site inspection, the project area was assigned an overall sensitivity estimate of low with regard to historic and prehistoric archaeological resources. However, in areas exhibiting less disturbance (the Genesee Lighthouse Site), this sensitivity estimate was modified to high for historic and prehistoric archaeological sites.

As part of the previous project, no Phase 1B subsurface testing was recommended for the Lighthouse site because no ground-disturbing activities were proposed. The report recommended that if any such activities are proposed, the NY State Historic Preservation Office (SHPO) should be consulted and a qualified archeologist should conduct archeological investigations.

3. Impacts and Mitigation

As concluded in the 2000 Cultural Resource Investigation report (see Appendix P), the majority of the site has a low sensitivity estimate for historic or archeological resources. As a result, significant adverse impacts are not anticipated for the proposed Port project.

The New York State Historic Preservation Office has recently prepared a preliminary review of the project. As stated in a memorandum dated August 25, 2011, SHPO "recommends that a Phase 1 archeological survey be completed for all portions of the project to involve ground disturbance, unless substantial prior ground disturbance can be documented" (see letter in Appendix Q). The City will continue to coordinate with SHPO to provide sufficient evidence of prior ground disturbance and to prepare any additional information required by this agency.

In addition, an Archeological Protocol has been established and will be in place for all project construction. This Archeological Protocol, along with OPRHP's standard Human Remains Protocol, is provided in *Section IV G 3.3,* where it is most relevant to the discussion of impacts and mitigation associated with construction of the Lighthouse Trail.

3.1 Marina

No significant adverse impacts to historic or archeological resources have been identified as a result of the construction and operation of the proposed Marina. The marina basin will be visible from both City landmark buildings -- the Ontario Beach Carousel and the Charlotte Genesee Lighthouse -- and will provide visitors with additional waterfront views from these historic vantage points. The Lighthouse is intended to become a focal point of the view from the proposed public promenade/open space and from the new marina southward, visually connecting the Lighthouse to the marina site thereby reinforcing the historic use of the Lighthouse as a waterfront feature. A complete discussion of potential impacts on visual and aesthetic resources is found in *Section IV F*.

Pedestrian amenities, such as wide walkways and benches, are proposed to connect the marina promenade to Ontario Beach Park. The additional recreational amenity provided by the Marina complements the Ontario Beach Carousel by continuing the historic use of the site as an area of amusement and will provide marina visitors with immediate visual and physical access to the historic carousel.

The area where the basin will be created was identified as an area of low sensitivity for historic and archeological resources, however an Archeological Protocol is in place should archaeological resources be encountered during the excavation of the marina basin.

Operation of the Carousel will not be impacted by the project. Access to the park will be maintained throughout the project duration.

3.2 Right-of-Way (ROW) Improvements

The proposed extension of River Street and the Genesee Riverway Trail will not be contiguous to any historic sites or buildings but will be visible from the Lighthouse grounds. The new extended roadway will help to create a visual corridor to the Lighthouse and will improve access from the south to Ontario Beach Park. During construction, no significant impacts will occur to the primary historic resources in the area (Charlotte Genesee Lighthouse and the Ontario Beach Carousel).

Based on the extent of previous disturbance (filling, building demolition and road construction) documented through geological and geotechnical investigations, historic map evidence and on-site inspection, this portion of the project area was assigned an overall sensitivity estimate of low with regard to historic and prehistoric archeological resources. As a result, it is not anticipated that archaeological resources will be disturbed as part of this project. However, since it is anticipated that the sewer utility work will involve excavation of up to 22 feet in depth, and the water main utility work will involve excavation of up to 5 feet in depth, the Archeological Protocol has been established in the event that resources are identified (see *Section IV G 3.3*).

3.3 Lighthouse Trail

The Lighthouse Trail component involves the construction of a pedestrian trail along the perimeter of the Lighthouse property that will connect Lake Avenue to the Charlotte Genesee Lighthouse and to the sidewalk at Lighthouse Street. The construction of the Lighthouse Trail will include the removal of scrub and brush vegetation along the crest of the slope, thereby providing less obstructed views between the Lighthouse and the proposed marina/waterfront area. The trail will include a designated overlooks in order to provide public access to a superior view corridor of the waterfront, including expanded views of the Hojack Swing Bridge (determined eligible on the National Register of Historic Places).

Construction of the Lighthouse Trail will pose minimal if any adverse impacts to special events at the Lighthouse, which include concerts, National Lighthouse Day, arts and crafts exhibits, and ghost stories readings, as most of these activities take place on weekends. Rather, it will increase public access and appreciation of this historic resource and its programs.

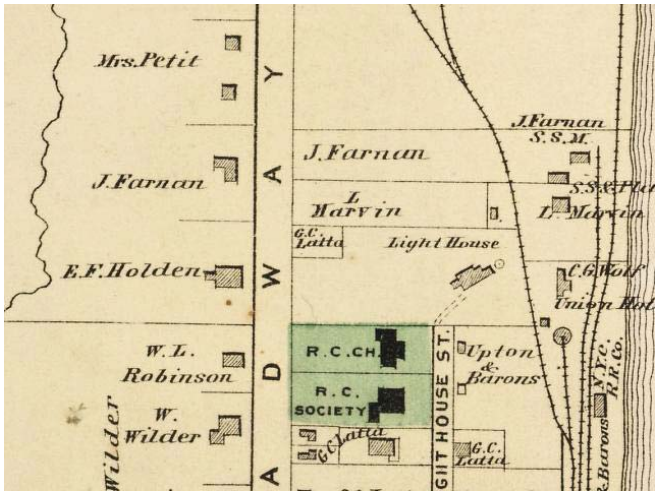
Built in 1822, the original Charlotte Genesee lighthouse remains intact, but at some point the house was removed and replaced in 1863. Due to its long history, the site was assigned a sensitivity estimate of 'high' in the Phase 1A and 1B Cultural Resource Survey of 2000. But since the project proposed at that time did not include ground-disturbing activities at the site, no Phase 1B testing was called for or conducted.

Evidently, no comprehensive Phase 1B testing has been done at the Lighthouse site for any other purpose. In the summers of 1983 and 1984, fieldwork was conducted by Fr. Jack Lee and students of the Department of Anthropology at St. John Fisher College, with a goal of identifying the location of the first keeper's house. The location was determined and artifacts discovered, but the investigation did not address the entire site or any other sites.

The Lighthouse Trail would cross three parcels in addition to the Lighthouse site. Two of these parcels are owned by the City and contain a small structure. The third parcel is owned by Rochester Gas & Electric Corporation and contains an electrical substation. There is evidence of significant disturbance to each site over time, but also evidence that structures formerly existed on each site. Maps included in the 2000 Cultural Resource Survey and reproduced below show the presumed locations of these structures.

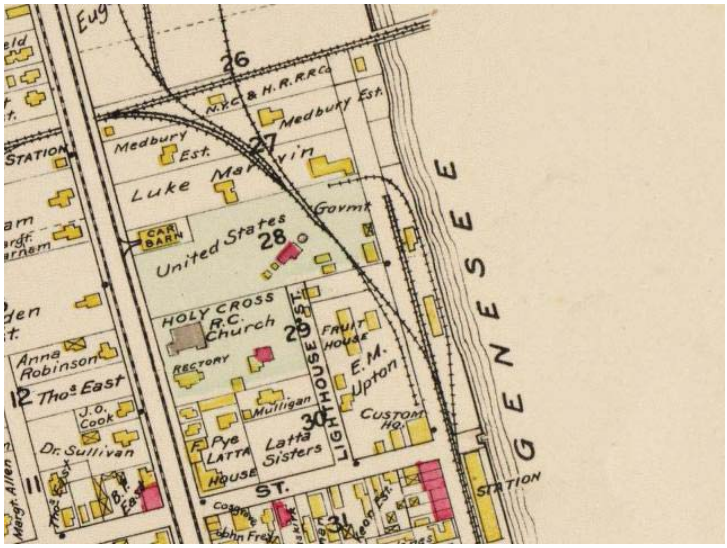
Beers' 1872 atlas (Figure G-1) shows a small structure north of the Lighthouse on an adjacent property, but no other structures on the parcels crossed by the proposed trail. A railroad track leading to the iron works to the north is shown located where tracks presently exist.

Figure G-1 Beers' 1872 Atlas



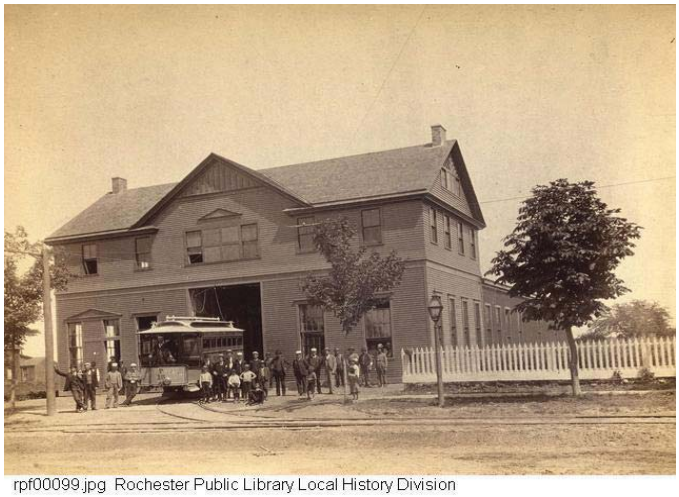
Lathrop's 1902 map (Figure G-2 below) shows the north-south railroad tracks joined by a track leading north to Ontario Beach Park. Also appearing are east-west tracks of the New York Central and Hudson River Railroad. The tracks crossed the river on a cast iron drawbridge, which was replaced in 1905 by the present swing bridge. Trolley tracks appear on Broadway (now Lake Avenue), with a car barn on the western edge of the Lighthouse property. The map also shows a structure on each of the two parcels north of the Lighthouse. Both are drawn similar in size to houses nearby, but are set back from the street farther than most others.

Figure G-2 Lathrop's 1902 Map



The caption of the photo below (Figure G-3), dated 1889, reads: "The car barn of the Rochester Electric Railway Company on the boulevard in Charlotte. There is a streetcar leaving the building and about 25 people are gathered on either side. The tracks are visible in the street. The Charlotte lighthouse (not seen) is on the southeast part of the same lot." The rear of the structure, seen behind the tree, appears to match the building that became a Masonic Temple and now houses an Islamic center. The front portion of the building shown here no longer exists.

Figure G-3 Photo of Car Barn



rpf00099.jpg Rochester Public Library Local History Division

Hopkins' 1918 plat map (Figure G-4) below shows the two parcels north of the Lighthouse combined into lot #27 under the ownership of the New York Central Railroad. The parcel is now vacant except for railroad tracks and a small structure near Lake Avenue (former Broadway) and noted 'W.T.'.

Figure G-4 Hopkins' 1918 Plat Map

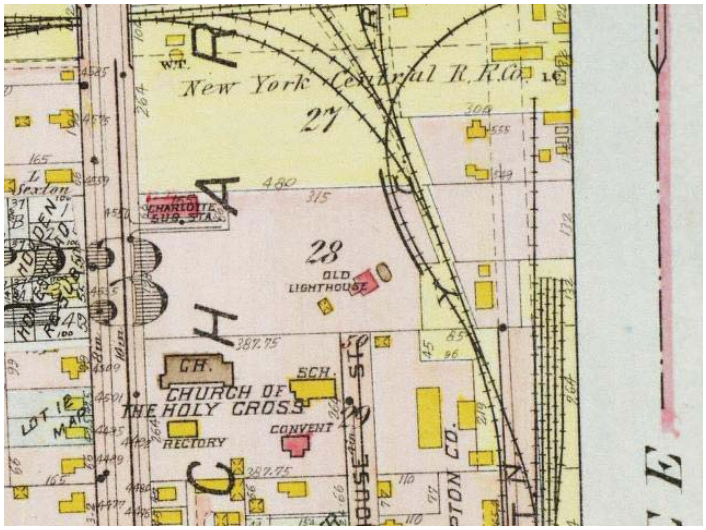
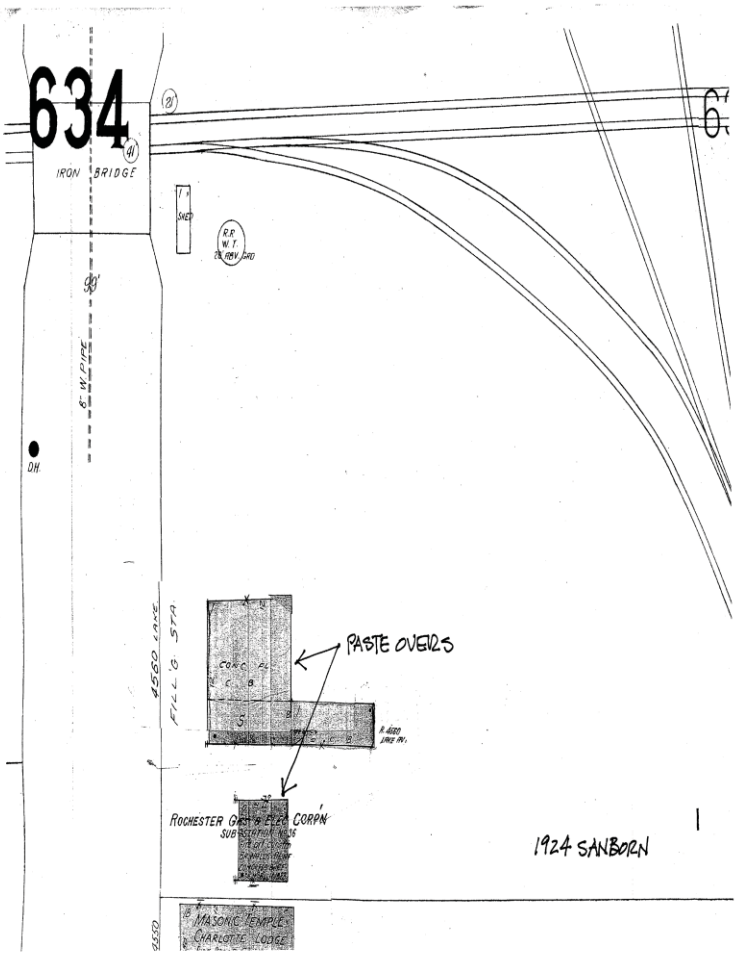


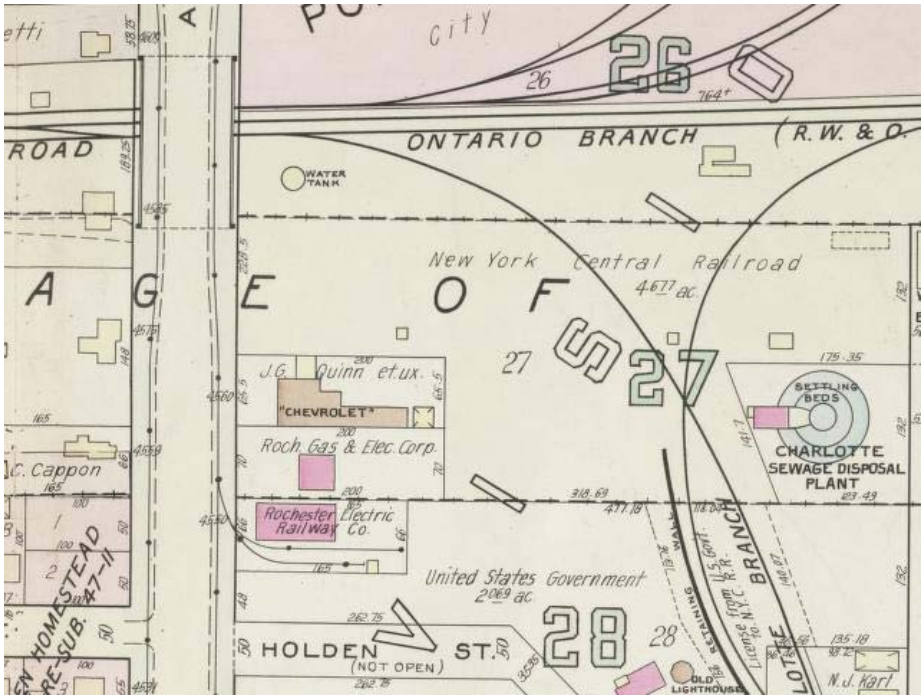
Figure G-5 1924 Sanborn Map



The 1924 Sanborn map (Figure G-5) above shows a small single-story shed in this location, with a circular structure nearby labeled 'R.R. W.T. 20' ABV. GRD.' The map is altered with "paste overs" from an unknown date, which show that the site formerly containing a car barn became the Masonic Temple Charlotte Lodge.

Hopkins' 1936 map below (Figure G-6) includes the words 'water tank' alongside the circular structure near the railroad tracks. The map also shows the western portion of lot #27, just north of the car barn, now subdivided into two parcels. One contains a building for the Rochester Gas & Electric Company; the other a building marked 'Chevrolet'. The remainder of the lot, except for the aforementioned water tank, remained vacant.

Figure G-6 Hopkins' 1936 Map



As previously stated, the sensitivity estimate for historic and prehistoric archaeological sites for the Lighthouse site was modified to high, as this area exhibited fewer disturbances than the rest of the Port project site. In the report of the 2000 Cultural Resource Investigations, RMSC recommended consultation with the NY State Historic Preservation Office and for a qualified archeologist to develop an appropriate scope of work for conducting archaeological investigations prior to any construction/site preparation activities. However, since the project proposed at that time did not include ground-disturbing activities for the site, no Phase 1B testing was conducted in 2000.

Due to the sensitivity of the Lighthouse site and evidence of earlier structures on the sites to the north, it is possible that items of archeological and historic significance could be present at the proposed trail site. In order to mitigate potential impacts, an Archeological Protocol has been developed and will be in place during construction of the Lighthouse Trail project. In addition, the Human Remains Discovery Protocol, prepared by SHPO and issued in November 2008, will also be in place during construction. These protocols are provided below.

ARCHEOLOGICAL PROTOCOL

PROCEDURES WHEN ARCHAEOLOGICAL REMAINS ARE FOUND IN THE LIGHTHOUSE TRAIL PROJECT

Given the nature of the Lighthouse site and the sites to the north bounded by the railroad tracks, it is anticipated that excavation may unearth items of historic significance or interest. The items may include the remains of buildings, such as walls, piers, footings and beams, evidence from human habitation such as pottery, flatware and clothing, or human or animal remains.

If in the course of excavation any such items are seen, the following steps are to be taken:

1. Stop work immediately.
2. The on-site supervisor will call the City of Rochester Manager of Environmental quality at 428-5978.
3. The Manager will contact an on-call archaeologist.
4. The on-site supervisor shall photograph the evidence immediately upon discovery.
5. The site is not to be further disturbed, nor is the dirt to be replaced.
6. The on-site supervisor shall cover the area with a tarp to protect it from sunlight and weather.
7. Move to a different portion of the project and commence construction.

State Historic Preservation Office/ New York State Office of Parks, Recreation and Historic Preservation

Human Remains Discovery Protocol (November 28, 2008)

In the event that human remains are encountered during construction or archaeological investigations, the New York State Historic Preservation Office (SHPO) recommends that the following protocol is implemented:

- At all times human remains must be treated with the utmost dignity and respect. Should human remains be encountered work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance.

- Human remains or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.

- The county coroner/medical examiner, local law enforcement, the SHPO, the appropriate Indian Nations, and the involved agency will be notified immediately. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archaeological.

- If human remains are determined to be Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred choice of the SHPO and the Indian Nations. The involved agency will consult SHPO and appropriate Indian Nations to develop a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance.

- If human remains are determined to be non-Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred choice of the SHPO. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action.

3.4 Lake Ontario Resource Center (LORC)

If an interim Lake Ontario Resource Center (LORC) utilizes existing space in the "link building" of the Terminal Building, no impacts to historic or cultural resources will occur. The 2001 EIS determined no adverse impacts will occur to historic or cultural resources as a result of the construction of the Terminal Building, and no changes to the exterior of this building or its operation are proposed as a result of the LORC.

If a permanent LORC is proposed in a separate, newly-constructed building near the Terminal Building, the new LORC building will be visible from the improved viewshed at the Lighthouse after construction of the trail. No significant adverse impacts are anticipated. It is not expected that the new LORC building will be visible from the Ontario Beach Carousel in Ontario Beach Park.

The proposed location for a permanent LORC building is located on a portion of the site which has a low sensitivity for cultural resources based on the extent of previous disturbance documented in the area. As a result, no adverse impacts have been identified.

3.5 Relocation of the Public Boat Launch

The Public Boat Launch will be relocated from its existing location once the Phase 2 Marina Expansion is approved. The launch facility is not considered a historic feature, and no impacts to historic or archeological resources will result from its removal. As the current location of the Public Boat Launch is designated parkland, parkland alienation will also be necessary before relocation can occur (see *Section IV I* for a complete discussion of parkland alienation).

Depending upon the new location of the Public Boat Launch, and known historic or archeological resources in the vicinity of the proposed site, the City will consult with OPRHP regarding potential historic and cultural resource impacts. If necessary, a Phase I Cultural Resources Survey will be undertaken as part of the environmental review of the proposed relocation site.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

The City-owned, County-operated Labor Operations Center will be relocated from its existing location at 4650 Lake Avenue to another location in or adjacent to Ontario Beach Park. As previously described, this building was determined not to be eligible for listing on the S/NRHP, therefore its demolition will not adversely affect historic or archeological resources. As the current location of the Labor Operations Center is designated parkland, parkland alienation will also be necessary before relocation can occur (see *Section IV I* for a complete discussion of parkland alienation).

Depending upon the new location for the Labor Operations Center, and known historic or archeological resources in the vicinity of the proposed site, the City will consult with OPRHP regarding potential historic and cultural resource impacts. If necessary, a Phase I Cultural Resources Survey will be undertaken as part of the environmental review of the proposed relocation site.

3.7 Incremental Private Development

Parcels I, II, and III will be made available for private development most likely consisting of residential and commercial/retail uses. These parcels are located on portions of the site which have been deemed to have a low sensitivity estimate with regard to historic and prehistoric archeological resources. This low sensitivity estimate is based upon the extent of previous disturbance (filling, building demolition and road construction) documented through geological and geotechnical investigations, historic map evidence and on-site inspection.

As a result, no significant adverse impacts to historic or archaeological resources have been identified for this part of this project. While the possibility exists that some deep excavation may be needed for building footers or parking facilities, an Archeological Protocol has been established to help mitigate potential impacts (see *Section IV G 3.3*). Moreover, the City will continue to consult with OPRHP regarding potential historic and cultural resource impacts and undertake a Phase I Cultural Resources Investigation if deemed necessary by OPRHP, as part of the site-specific environmental review for each parcel.

The development of residential and commercial buildings on the private development parcels will impact views to and from the project site and the primary historic resources in the area (Charlotte Genesee Lighthouse and Ontario Beach Carousel). These impacts are described in *Section IV F*. Private development will also require alienation of parkland and sale of public lands, as discussed in *Section IV H Parks, Recreation and Open Space*.

H. Parks, Recreation and Open Space

1. Introduction

Parks have long been recognized as major contributors to the physical and aesthetic quality of all neighborhoods, thus impacting the quality of people's lives. Recognizing these facts, this section documents and describes the existing public parks and recreation facilities within and adjacent to the proposed project area. Impacts on parkland, open space and recreational areas caused by the proposed action and a range of reasonable mitigation measures are discussed.

According to the *"Handbook on the Alienation and Conversion of Municipal Parkland*," April 2005, from the NYS Office of Parks, Recreation and Historic Preservation (NYS OPRHP), the courts have consistently held that once land has been dedicated to use as a park, it cannot be diverted for uses other than recreation without legislative approval. The proposed action proposes to offer land that is currently used for park purposes for private, non-park development. In seeking approval for that proposal from the NYS Legislature, it is the intent of the City and the preference of NYS OPRHP that parkland alienation legislation includes a provision for substitute lands for the lands being alienated. It is generally expected that the substitute (or replacement) lands be equal in size and recreational value as the lands being alienated. The following discussion identifies all parkland to be alienated and the replacement parkland being created.

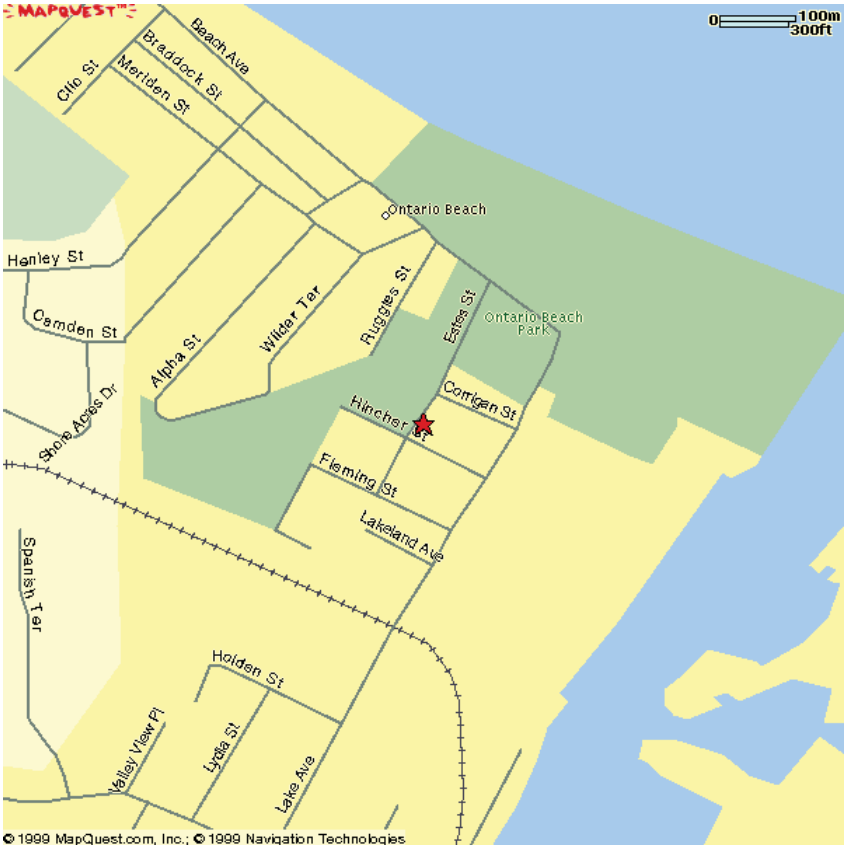
No property acquired or developed under Section 6(f) of the Land and Water Conservation Fund Act exists within the project limits. No parks in the Port area have designation as a federal park, so there is no requirement for the federal park conversion process.

2. Existing Setting

2.1 Ontario Beach Park

Ontario Beach Park fronts on the Genesee River and Lake Ontario (see Figure H-1). The park is owned by the City of Rochester, operated and maintained by the County of Monroe. The facilities at the park include the beach, a boardwalk, a large former "bathhouse" facility now functioning as the Robach Community Center, the Ontario Beach Carousel, picnic facilities, a performance bandstand/pavilion, playground equipment, basketball courts, sand volleyball courts, etc. A long concrete federal navigation pier, referred to as the Charlotte Pier, borders the Ontario Beach Park on the east side. People from across the region come to enjoy the beach, stroll the Pier, catch one of the weekly performances at the bandstand, visit the Ontario Beach Carousel, play on the playground, picnic in the shade, play basketball and beach volleyball, or simply watch the waves roll in from the steps of the bath house.

Figure H-1 Map of Ontario Beach Park



Dedicated parkland was identified using the City County Parks Agreement, along with government records and documents. Figure H-2 on the following page illustrates the existing parkland both within the project area boundary and within the project vicinity.

Within the project area, the following parcels are parkland (see also Exhibit 4 in *Section II*):

- Public Boat Launch parcel at 4630 Lake Avenue (4± acres)
- Ontario Beach Park Labor Operations Center at 4600-4650 Lake Avenue (1.5± acres)

Within the surrounding area, parkland includes:

- Ontario Beach Park along the shoreline of Lake Ontario (28± acres)
- Between Estes Street and Lake Avenue: 4795 Lake Ave & 183 Beach Avenue (2± acres)
- Remainder of Ontario Beach Park south of Beach Ave and west of Estes: (12± acres)
- Ontario Beach Park parking lot at 4640 Lake Avenue (4.5± acres)

Each parcel of parkland provides a unique service or function to the public. The Public Boat Launch parcel provides both boat launching facilities and parking for vehicles and trailers. The Ontario Beach Park Labor Operations Center parcel provides sheltered and open areas for storage of equipment for the operation and maintenance of Ontario Beach Park. The 4.5 acre parcel of Ontario Beach Park east and south of Lake Avenue accommodates the majority of the parking available for users of the park.

In addition to the main area of the park along the shoreline of Lake Ontario, Ontario Beach Park also extends south to the railroad tracks, west of Lake Avenue and south of Beach Avenue. The area between Estes Street and Lake Avenue accommodates parking for the park. The remainder of this area of the park provides overflow parking for the park and active recreation fields for sports such as baseball and soccer.

Figure H-2 Map of All Parkland in the Project Area

The Ontario Beach Park Program Committee, Inc. (OBPPC) was established 1984 and, according to their website, is "dedicated to providing and expanding family entertainment/events at Ontario Beach Park, the Rochester harbor and the lower Genesee river area." OBPPC is comprised of representatives from the local Charlotte area, City of Rochester and County of Monroe. The Program Committee was initially formed to support the re-development of the beach, harbor and lower Genesee River areas. Later the committee expanded to include the Charlotte-Lake Ontario Kiwanis Club, Lighthouse Society, Marine Volunteer Fire Department and the Friends of the Rochester Carousel. These non-profit organizations formed the Ontario Beach Park Program Committee in cooperation with the City of Rochester and the County of Monroe, who assigned representatives to the Committee.

The OBPPC recognizes the need for year-round entertainment and activities for families and has worked to achieve results in meeting that need. Some of the 2011 activities include:

The Lake Ontario Lakeside Winter Celebration
Ontario Beach Kite Flight
Wednesday Evening "Concert By The Shore" Series
Spirit of America Day
Flower City Kids Planting & Picnic
Rochester Harbor and Carousel Festival &Fireworks
Wednesday evening Spring and Fall Big Band Dance Series
The Fall Foliage Festival - Romancing the River
National Night Out Against Crime Community Event

The OBPPC finances these events by fundraisers, individual and private contributions, corporate sponsors and grants. As a result of its efforts many of the above activities are free to the public. The committee's programs continue provide the majority of the year-round family entertainment at the beach and in the Harbor area.

2.2 Public Boat Launch

The Public Boat Launch, which is located on City-owned riverfront property at 4630 Lake Avenue, provides boat access to the Genesee River and Lake Ontario. The approximately four-acre facility provides four launch lanes, 106 trailer parking spaces, and 14 car parking spaces for public use at a nominal fee. The boat launch has historically been operated by the Monroe County Parks Department, but was recently transferred to the City. The usage of the launch varies due to weather, events, and other factors. The recorded annual usage is listed below in Table H-1. These numbers include paid launches from Memorial Day to Labor Day. During the off season, the launch is available at no charge. To estimate additional usage during the off season, one can calculate an additional 25 percent of the numbers in Table H-1.

Table H-1 Annual Number of Paid Launches

YEAR	# OF PAID LAUNCHES IN SEASON
2000	3500
2001	1730
2002	2268
2003	2060
2004	2119
2005	1338
2006	2371
2007	2426
2008	1889
2009	1757
2010	2355

2.3. Ontario Beach Park Labor Operations Center

The Ontario Beach Park Labor Operations Center, located on two City-owned parcels (4600 and 4650 Lake Avenue) totaling about 1.5 acres, contains a building, parking lot and outdoor space for the storage of maintenance vehicles and materials. The Labor Operations Center is used by Monroe County Parks Department for the ongoing maintenance of Ontario Beach Park. It serves as the center for all park maintenance activities, including staff accommodations (offices, lockers, lunchroom, phone and computers, restrooms), equipment storage (mowers, loaders, trucks, and utility vehicles) and maintenance, tool storage, staff and visitor parking, equipment fueling station (unleaded gas and diesel), trash and refuse transfer (roll-offs and dumpsters), and miscellaneous indoor and outdoor storage of park furnishings and supplies.

Staffers reporting to the site are directed by supervisors to conduct park maintenance, operation and improvements, including grass mowing and trimming, restroom cleaning, trash removal, boat launch and carousel operation, beach cleaning and grooming, building cleaning, painting, ball field maintenance, and equipment maintenance. At Ontario Beach Park, these are accomplished in two staff shifts (morning and evening), plus an overnight security shift. The location of the center is situated for easy visual, vehicular and pedestrian access to the beach facilities and the boat launch facility.

2.4. 4600 Lake Avenue, 4752 Lake Avenue, and 1000 North River Street

Prior to 2002, the three parcels located at 4600 Lake Avenue, 4752 Lake Avenue, and 1000 North River Street within the Port area were one parcel, most of which was associated with port/water transportation use. The single parcel was associated with two large warehouses located on the site in the area where the Terminal Building now sits. Starting in 2002, the City redeveloped this parcel to prepare for the operation of a ferry service with accessory commercial operations (i.e., restaurants). North River Street, Corrigan Street (extension) and Portside Drive were developed which divided what was 4752 Lake Avenue into three new parcels: 1000 North River Street, 4752 Lake Avenue and 4600 Lake Avenue. All three of these parcels, except for a small portion of 4600 Lake Avenue, do not have any parkland status.

3. Impacts and Mitigation

3.1. Marina

A marina basin is proposed to be constructed within the Port site and will provide transient and seasonal boat docking. Phase 1 of the Marina, which is anticipated to open in the spring of 2014 or 2015, will be constructed nearly entirely within the parcel that is currently known at 1000 North River Street. This parcel is not currently designated parkland; it is a parcel that is historically associated with port/water transportation use. A small portion of the Phase 1 Marina will, however, encroach on parkland. The boat entrance to the marina from the Genesee River will encroach on parkland associated with the Public Boat Launch.

A public marina is considered an appropriate park amenity as long as the boat docks are available to the general public. Any boat slips that are open for seasonal public rental or made available for transient docking, along with all the open water areas, can be designated as Public Park. Any slips that are reserved for long-term rental for nearby housing cannot be included in the area designated as park. The proposed marina will be nearly entirely public surrounded by public amenities, including an open space at the north end of the marina and a promenade around the marina perimeter. Most of the area of the marina and the surrounding amenities will be new public parkland in an area of the Port that was not previously parkland. In terms of specific numbers, Phase 1 of the Marina basin is proposed to total approximately 5 acres measured to the top of the bank. Subtracting out the area of the marina dedicated to long-term privately leased docks (approximately 20 slips), which accounts for approximately 15 percent of the Marina, or 0.75 acre, approximately 4.25 acres remain as public space that the City intends to dedicate as park. The proposed promenade and public open spaces around the marina total approximately 1.5 acres of new parkland. The two areas of new parkland have a combined total of approximately 5.75 acres of new parkland.

Phase 1 of the Marina is designed with the expectation that it and all future phases of the overall Port development are interdependent, yet phased over several years in realistic recognition that private development will depend on market conditions. The development of the Port involves creation of parkland, as well as alienation of parkland. Whenever parkland is created, in the natural progression of this comprehensive project, it is the City's assumption that it may be used as mitigation for parkland alienation elsewhere in the project, even if that alienation occurs in a later phase than the parkland creation.

Parking demand created by use of the Marina will impact the adjacent Ontario Beach Park parking lots. The only docks that will create a regular demand for parking are the proposed seasonally leased public docks. (The private docks will serve adjacent residents who will have parking for their residence.) Transient boaters' cars will be at the location where their boat originated. It is anticipated that there will be about 32 non-private seasonally leased docks. According to the study entitled, "*Statistical Analyses of Parking by Land Use*," by the Monroe County Department of Planning and Development, dated August 2007:

> *Marinas and yacht clubs tend to generate parking demands of less than 0.7 occupied parking spaces per boat slip (1 space per 1.4 boat slips). For most of the facilities, a rate of 1 space per 2 or even 3 boat slips is sufficient, and compared to these rates a common standard of 1 parking space per 1 boat slip could be viewed as an excessive requirement.*

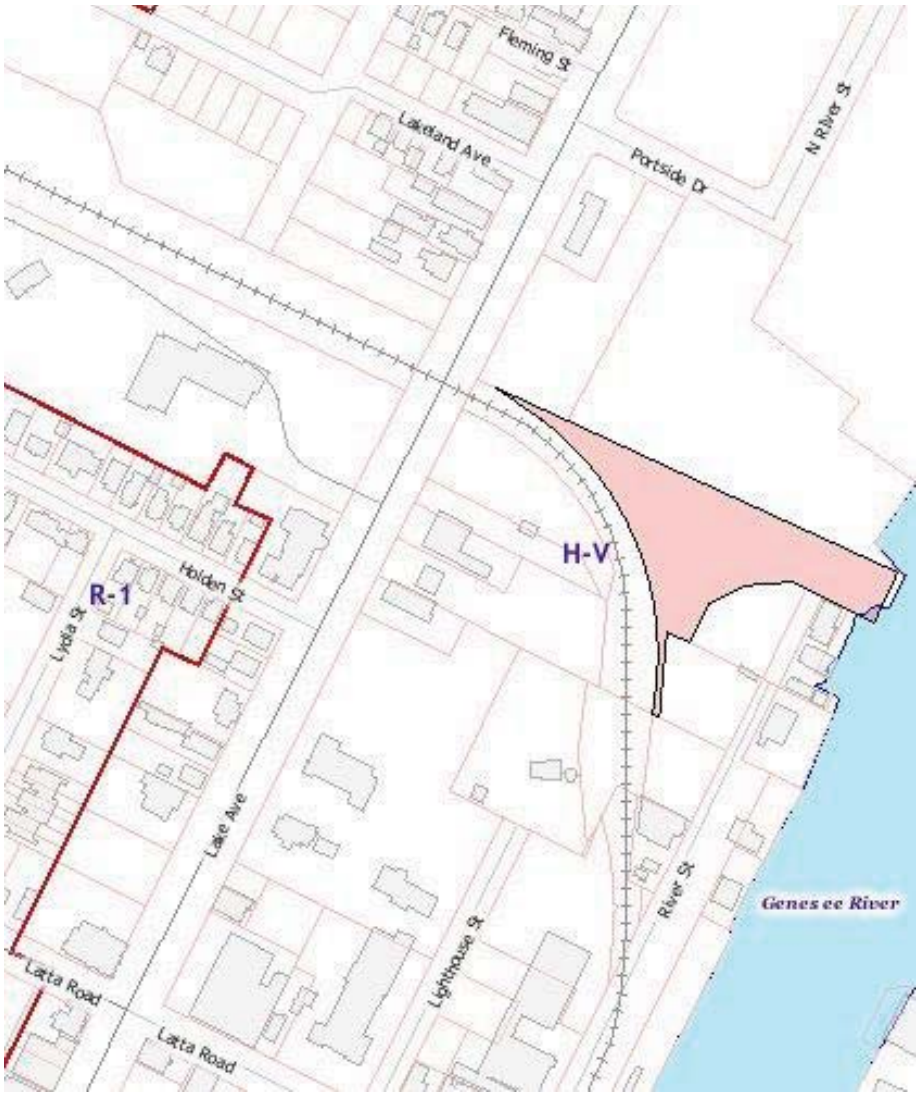
Based on this study, parking demand for Phase 1 of the proposed Marina can be calculated to be approximately 22 spaces (32 x 0.7 = 22). This is the maximum demand which will probably rarely be achieved. It is more likely that 10 spaces will be used at any one time. Therefore, ten parking spaces at the south end of the Ontario Beach Park parking lot closest to the Marina are proposed to be reserved as designated marina parking. These spaces are the least convenient spaces for users of Ontario Beach Park, as they are located the farthest distance from the beach.

The North River Street right-of-way (between Corrigan Street and Portside Drive) will define the boundary of the newly-created parkland. Although the right-of-way will not be designated parkland, it will serve to connect the new River Street Extension to Ontario Beach Park and will have on-street parking to serve park users as well as the anticipated commercial/residential development on its west side.

Phase 1 of the Marina will displace a portion of the existing boat launch and force the boat launch to be reconfigured. This reconfiguration of the boat launch will include an expansion to the south to accommodate parking for the operation of the launch. This parking lot expansion encroaches on a parcel (4590 Lake Avenue, see Figure H-3 below) that is currently zoned H-V,

Harbortown Village District, and is indicated in City records as vacant commercial land. This parcel has no parkland status. The encroachment of the new parking will, therefore, have no impact on existing parkland. The intent of the Port project is to eventually permanently relocate the boat launch. Thus, the encroachment onto 4590 Lake Avenue is an interim situation until the boat launch is relocated. This parcel is a future development parcel as shown in Figure H-3.

Figure H-3 4590 Lake Avenue



Phase 2 of the Marina involves the expansion of the marina basin into the existing boat launch parcel which is currently designated parkland. Prior to the Phase 2 expansion, the boat launch facility will be relocated, the new launch(es) operational, and the land alienated from parkland status.

For the purposes of this assessment of parkland alienation, the maximum impact will be assumed which would require alienation of the entire 4-acre parcel which currently houses the Public Boat Launch. The maximum loss of parkland associated with Phase 2 of the Marina is therefore four acres. There will be, however, parkland created with the promenade and open spaces associated with marina expansion. This will be assessed in detail at the time of alienation. Alienation of parkland requires an action by the New York State Legislature. For details on this process, refer to the *"Handbook on the Alienation and Conversion of Municipal Parkland*," April 2005, from the NYS Office of Parks, Recreation and Historic Preservation. Refer to Table H-2 in *Section 4* below for details on alienated and replacement parkland.

3.2. Right-of-Way (ROW) Improvements

River Street will be extended north from its terminus (just north of Latta Road) to Portside Drive where it will connect to the relocated North River Street. Once River Street is extended and connects with the relocated North River Street, this road will connect Stutson Street, Latta Road, and the public Marina on River Street with the Port development site. The portion of River Street that cuts across the boat launch parcel will be a park road as there will be parkland on both sides of the street. The Genesee Riverway Trail will be extended along the River Street Extension to link with the proposed promenade, ultimately connecting the trail to Ontario Beach Park, the existing river walk and the Charlotte Pier. The River Street Extension will feature on-street parking, installation of sanitary and storm sewer improvements, sidewalks, street lighting, curbs, and "green" elements such as storm water management facilities, which are all consistent with a pedestrian-oriented street adding an amenity to the parks and recreation component of the Port.

Construction of the street will require City acquisition of parcels owned by the U.S. Coast Guard and potentially some privately-owned parcels. The new street will affect the design, layout and access to the temporary boat launch created with Phase 1 of the Marina. At the time that the boat launch is relocated and the parcel is alienated from parkland status, River Street will be alienated as well from its designation as a park road. Again, the alienation of the parkland will be processed as prescribed in the *"Handbook on the Alienation and Conversion of Municipal Parkland*," referenced above. The newly created parkland associated with the Marina basin and associated public amenities may be used as the replacement parkland or the new boat launch(es) may serve as the replacement parkland. There will be at least an equal exchange of new parkland for alienated parkland.

3.3. Lighthouse Trail

An approximately 700 linear foot multi-use trail will be constructed to connect the Lake Avenue public sidewalk to the County-owned Charlotte Genesee Lighthouse at 70 Lighthouse Street. The trail is proposed to be constructed along the perimeter of 4576 and 4580 Lake Avenue, which are owned by the City, and will further extend along the perimeter of adjacent property owned by Rochester Gas & Electric Corporation (RG&E). The City plans to acquire an easement or title from RG&E to provide for the connection. Construction of the trail connection is funded from a combination of City capital and a NYS Environmental Protection Fund grant from the NYS Department of State.

The new trail and overlook are proposed on lands that are currently vacant commercial land, zoned H-V Harbortown Village District. The conversion of this land to a trail and scenic overlook could create new parkland of up to 1.1 acres in area. This newly-created parkland can be used to replace parkland proposed to be alienated in the Port area. It will create new and convenient opportunities for looking over the views of the new marina basin, the Genesee River, and Lake Ontario, while providing new pedestrian and visual connections between the Port and the lighthouse. When looking at the functional value of some of the parkland proposed to be alienated (i.e., the 1.5 acres of land on which the Labor Operations Center is located), the proposed parkland associated with the Lighthouse Trail will provide higher quality parkland for public use and enjoyment at the Port.

3.4 Lake Ontario Resource Center (LORC)

Both the interim and the permanent Lake Ontario Resource Center (LORC) building is proposed within or in the immediate vicinity of the Terminal Building, which is on the parcel known as 1000 North River Street. As discussed above, this parcel is not public parkland and will require no parkland alienation. It is the intent of the LORC to have a public component that will allow public access to educational information and displays relating to Lake Ontario. This will be an added amenity for visitors to Ontario Beach Park and, therefore, has a positive impact on parkland in the Port area.

3.5 Relocation of the Public Boat Launch

The existing Public Boat Launch is approximately four acres at 4630 Lake Avenue. It is anticipated that the area of the new relocated boat launch will require approximately the same amount of land area. The area of the new launch will be dedicated as new parkland, if not currently parkland, and will be replacement for the alienated parkland of the displaced boat launch. If the new site(s) is already parkland, then the newly created parkland associated with the Port project will be used as the replacement parkland. There will be an equal exchange of new parkland for alienated parkland (see Table H-2 in sub-section 4 below for details). For a discussion of the potential sites for the boat launch

operation, see *Section V F Boat Launch Relocation and Design/Operation Alternatives*.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

The County-operated Ontario Beach Park Labor Operations Center is located on City-owned land and will be relocated from its existing location at 4600-4650 Lake Avenue to another location in or adjacent to Ontario Beach Park. 4600 Lake Avenue is 1.1 acres and 4650 Lake Avenue is 0.43 acres, totaling approximately 1.5 acres, all of which is designated parkland.

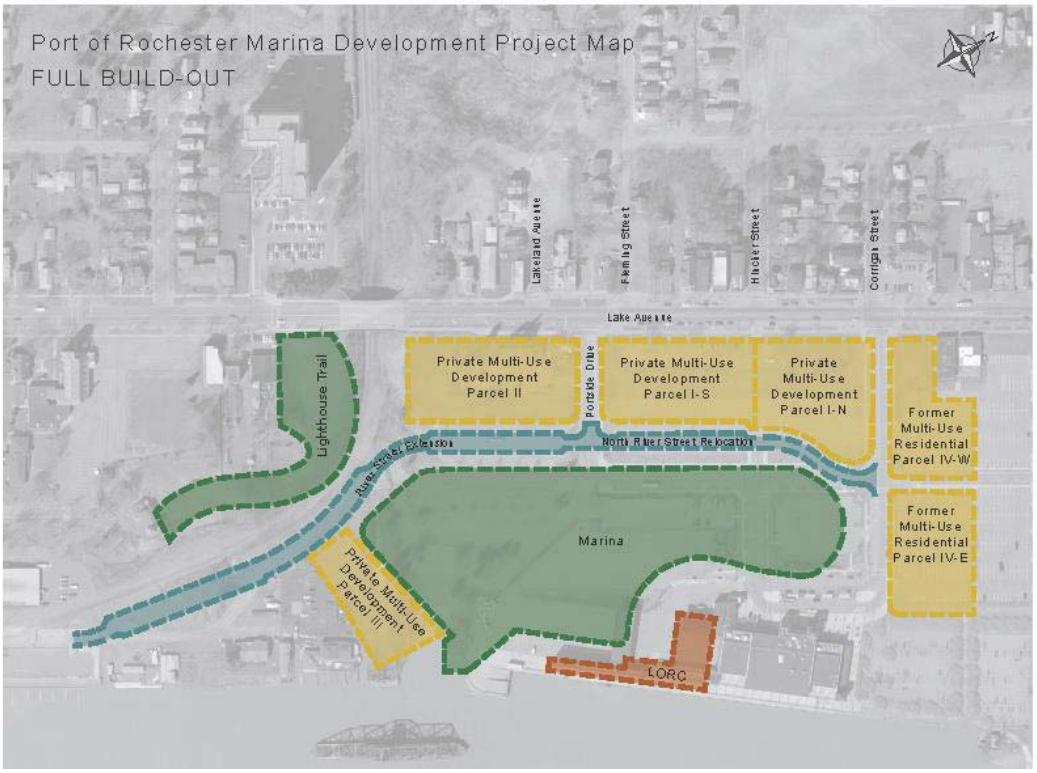
Execution of an amendment to the City-County Parks Operation and Maintenance Agreement will be required for relocation and maintenance of the new facility. The cost of a new facility will be financed with City sources and will be maintained by the County. Once the Labor Operations Center is relocated, the existing location at 4650 Lake Avenue will remain parkland until a private development proposal, consistent with the goals of the Port development plan, makes alienation necessary.

The alienation of the parkland will be processed as prescribed in the "*Handbook on the Alienation and Conversion of Municipal Parkland*," referenced above. The newly created parkland associated with the Port development plan will be used as the replacement parkland for the alienation of this parcel. There will be at least an equal exchange of new parkland for alienated parkland.

3.7. Incremental Private Development

Construction on Parcels I through III are planned for eventual commercial and residential development (See Figure H-4). The intention for Parcels I-N and I-S are for development in the first phase and simultaneously with the development of Phase 1 of the Marina. Parcels I-N and I-S located at 4752 Lake Avenue, are not on public parkland, as discussed above. No parkland, therefore, will be alienated as a result of the development of Parcels I-N and I-S. The plan calls for a civic space between the two development parcels for the purpose of allowing public access, both pedestrian and visual, into the Marina area. This public access area, which will be referred to as a "Pedestrian Mall" or "Civic Square" will be protected through an easement and possibly through the dedication as public parkland. This area may be added to the overall inventory of parkland in the Port area, if needed.

Figure H-4 Map of Development Parcels



Development Parcel II, as proposed, will impact three parcels, primarily 4600-4650 Lake Avenue and, secondarily, the Boat Launch parcel (4630 Lake Avenue), requiring the alienation of approximately two acres of parkland. The alienation of parkland will be processed as prescribed in the *"Handbook on the Alienation and Conversion of Municipal Parkland*," referenced above. The newly created parkland associated with the Port project will be used as the replacement parkland. There will be at least an equal exchange of new parkland for alienated parkland. See Table H-2 in *Section 4* below for details.

Development Parcel III, as proposed, will impact two parcels, primarily 4590 Lake Avenue which is currently vacant and unused, and secondarily the Boat Launch parcel at 4630 Lake Avenue parcel (see Figure H-4 above). As previously discussed, 4590 Lake Avenue is not parkland and therefore, no alienation of parkland process will be necessary. The alienation of the Boat Launch parcel, is discussed in *Section 3.5* above.

4. Conclusion/Summary

Table H-2 below summarizes the impacts to the quantity of parkland in the Port area:

Table H-2 Summary of Parkland Alienation and Replacement

Project Component Removing Parkland	Approximate Acreage
Removal of Boat Launch and site redevelopment (Parcels II & III and Phase 2 Marina Expansion)	4.0
Labor Operation Center Relocation and site redevelopment (Parcel II)	1.5
Total	5.5±
Project Component Creating New Parkland	**Approximate Acreage**
Phase 1 Marina w/ open space and promenade	5.75
Construction of New Boat Launch	4.0
Lighthouse Trail and Overlook	0.0 to 1.1*
Public Access Easement at 4752 Lake Ave (if needed)	0.0 to 0.20*
Total	9.75 to 11.0±

*Status to be determined.

The construction of Full Build-Out of the Port development will result in a net increase of parkland of up to 5.5 acres. In terms of a recreational value, all of the acreage, on either side of the equation, has waterfront or park frontage with no active recreational amenities (i.e., sports facilities), and therefore, the functional comparison is at least equal in value. In fact, the new parkland (i.e., Marina, promenade, trails, overlook) will have a higher recreational value than the existing parkland (e.g., parking lots, Labor Operations Center parcel) that is proposed to be alienated. The higher value results from increased visual and physical access to water and waterfront activities.

I. Land Use, Zoning, and Conformance with Officially Adopted Plans

1. Introduction

This section describes the historic and existing land uses for the project site and the Charlotte area, current property usage and occupancy, and the current parcel configuration. Also described are current land use regulations and recommended zoning map and code changes. In addition, City plans, policies, and regulations for the Port area, such as the City of Rochester Local Waterfront Revitalization Program (LWRP), and 2010 Renaissance Plan are presented and the conformance of the proposal with such is assessed.

2. Existing Setting

2.1 Land Use

2.1.1 Existing Parcels

The total land area of the proposed project is approximately 22 acres comprised of 11 parcels (see Exhibit 4 in *Section II*). An approximately 0.4 acre parcel, the site of a local Coast Guard auxiliary unit, is owned by the United States, and the remaining 11 parcels are owned by the City of Rochester, including two non-contiguous parcels at 4576 and 4580 Lake Avenue.

2.1.2 Existing Land Uses

The project site is located in Charlotte, a portside community since 1792 which was annexed by the City of Rochester in 1916. Within the project site, the existing land uses consist of:

- Terminal Building with accessory commercial uses (1000 North River Street)
- The Ontario Beach Park Labor Operations Center (4650 and 4600 Lake Avenue)
- Public boat launch (4630 Lake Avenue)
- Parcels at 4576 and 4580 Lake Avenue which are vacant lots with a small vacant accessory structure.

The Charlotte Genesee Lighthouse is not part of the contiguous site but is located a short distance to the south at 70 Lighthouse Street.

Immediately surrounding the project area, the existing land uses consist of:

- To the north: the main portion of Ontario Beach Park, including the beach, boardwalk, Robach Community Center, ball courts, picnic and playground areas, parking lots, etc.
- To the east: Genesee River and the Town of Irondequoit.
- To the south: a commercial area that includes restaurants, offices, manufacturing, a public marina, and a private marina. The Monroe County River Street pump station and the Coast Guard auxiliary station are located south and east of the project site.
- To the west: a range of commercial uses along Lake Avenue, predominantly bar and restaurant uses, and additional Ontario Beach Park land and facilities. A single-family residential district lies west of the commercial uses on Lake Avenue.

Two buildings currently exist within the contiguous project site: the Terminal Building and the Ontario Beach Park Labor Operations Center. The Terminal Building, at 1000 North River Street, is an approximately 70,000 square foot structure that provides a unique opportunity for further waterfront development due to its proximity to the river and lake. Presently, the first floor features an atrium main concourse area which accommodates several local and national restaurants. The former departure and arrival halls associated with the fast ferry, situated on the river side of the building, are available to the public for special events and community meetings. This area also includes space for the U.S. Customs and Border Protection (Division of Homeland Security) operations. The second floor contains two main areas that include the *Pier 45* restaurant and catering (operated by the Rochester Riverside Convention Center) and City administrative offices / commercial office space available for lease.

Extensive efforts are currently being considered to reposition the Terminal Building to offer a unique, mixed-use, multi-tenanted retail and office complex catering to eclectic and specialty shops and general office use requirements. A wide array of leasable space can be configured to accommodate a variety of uses.

The second building, the Ontario Beach Park Labor Operations Center, is located at 4650 Lake Avenue and provides sheltered and open areas for storage of equipment for the operation and maintenance of Ontario Beach Park. This building is operated by Monroe County, and the parcel is owned by the City of Rochester. This building will continue to function as the Labor Operations Center until it is relocated to a new facility. The new facility will be equivalent in size to the existing building and located such that it will provide easy access by maintenance vehicles to Ontario Beach Park. The new site will have

parking, outdoor storage space, and a new building sufficient to maintain the current operations. Site Alternatives being considered at this time for relocation of the Operations Center are presented in *Section V D*.

Lastly, the Genesee Charlotte Lighthouse is located on the site where the proposed Lighthouse Trail will be constructed. The use of this building will not change as a result of the proposal.

2.2 Historical Land Uses

After the end of the War of 1812, trade began to rapidly increase in the Great Lakes. Trade of commodities with other Lake Ontario ports encouraged the development of the waterfront community commonly known as Charlotte. The Village of Charlotte, occupying 800 acres on the west side of the Genesee River, served as Rochester's port.

On August 25, 1852 ground was broken on the Rochester and Lake Ontario Railroad (later part of the New York Central Railroad) which provided a convenient route for Canadian passengers to reach New York City. Later, the New York Central railroad, which connected New York City to Chicago, extended a loop from Rochester to the Lake Ontario waterfront in 1876. Passenger trains brought thousands of people to the Charlotte beach and boardwalk. In 1884, the Ontario Beach Improvement Company was formed to establish a lakefront resort area, and by 1889, electric trolleys were in place to connect vacationers to the City of Rochester. A grand hotel was constructed on the site, along with pavilions and a band shell. Thousands of tourists visited Charlotte each year.

Lake trade from Charlotte began to decline from increased competition from the Erie Canal and the railroad lines in Rochester. At the same time as the rebound in tourism, the mid to late 1800's saw the Port area become the site of steel mills. The mill operations involved large blast furnaces and coal storage with rail lines integral to the operations. The steel mill operations were terminated in the mid 1920's, and the buildings were subsequently demolished.

The Ontario Car Ferry company began operating a ferry service for passengers and cargo from the Port area in November 1907, with the launch of the "Ontario I" later joined by the "Ontario II" as well as the "Toronto" and the "Kingston". These large ferries prompted a need to deepen the channel and make harbor improvements.

Charlotte was annexed by the city of Rochester in the early 1900's in an effort by the City to gain control over the Port and increase its population, thereby raising its political importance and funding. When the City of Rochester annexed Charlotte, many resort structures were in decay and were cleared for parking. The Port's activity again declined during the Great Depression. Ferry traffic eventually came to an end around 1949. Freight and passenger rail

service continued to the Port area until the 1950s. Today, rail activity is limited to a connection to the nearby Russell Station in the Town of Greece.

In the latter part of the 20th century, the Port became largely underutilized with Ontario Beach Park being the primary attraction. Another attempt to establish ferry traffic between Rochester and Toronto was made with the launch of a fast ferry in 2004, but it was permanently suspended in 2006.

2.3 Zoning

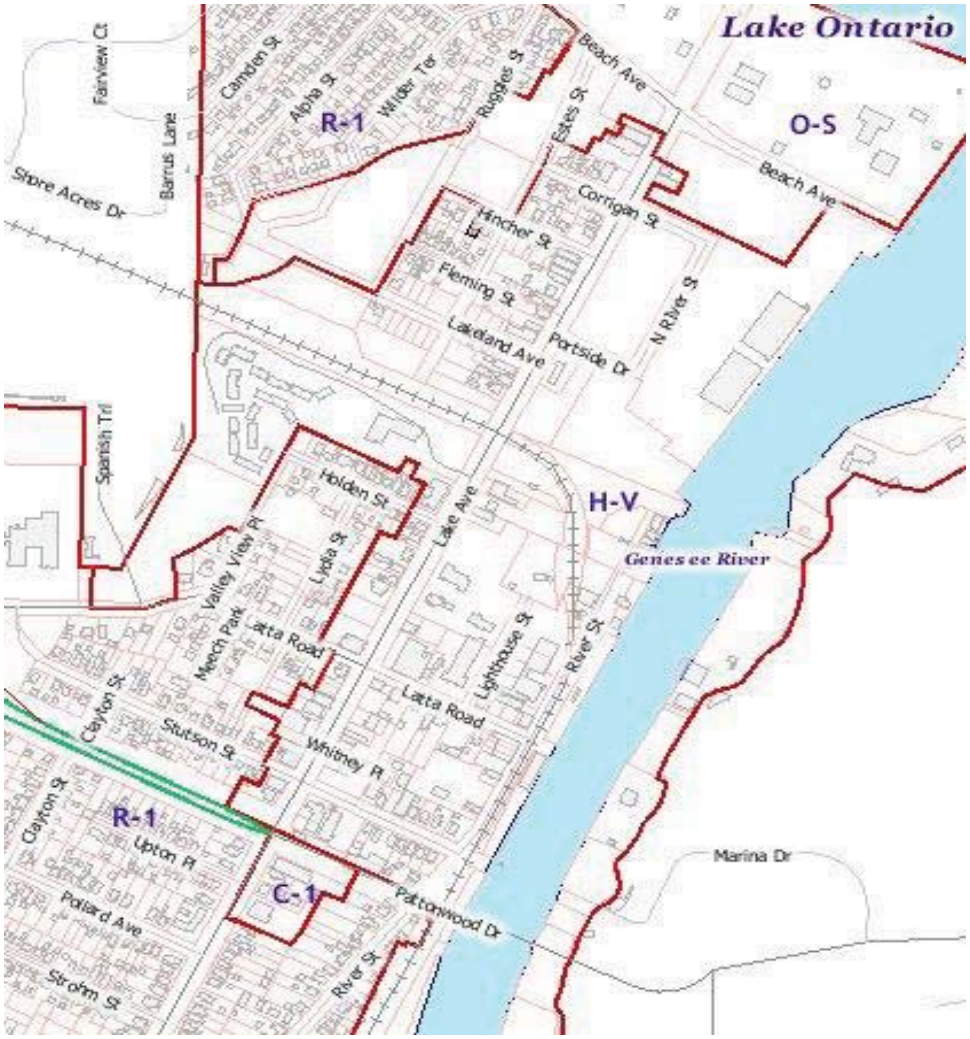
2.3.1 Existing Zoning

Several years ago, the City of Rochester undertook a City-wide comprehensive evaluation of the City Zoning Code and adopted a new zoning code and map in 2003. The 2003 Zoning Code created the *Harbortown Village District (HV)*, the intent of which is as follows:

> *The HV Harbortown Village is a distinct neighborhood developing around the mouth of the Genesee River and the shore of Lake Ontario as a unique and lively water- and pedestrian-oriented area. The district regulations improve the harbor environment, promote public access, encourage tourism and preserve the waterfront environment. The development of facilities for fishing, boating, swimming, dining, picnicking, strolling and sightseeing is encouraged, while the Lake Avenue commercial corridor offers diverse activities that are tourist-related and serve the neighborhood. Dense residential development promotes diversity in housing types and a year-round population that will ensure the vitality of the village.*

Most of the proposed project area is located within the HV district (see Figure I-1).

Figure I-1 – Zoning Map



The HV district regulations are located in §120-77 of the City of Rochester Zoning Code. Design requirements unique to the district, combined with the City-wide design standards, attempt to direct development in a way that respects the waterfront location and contributes to a village-like atmosphere.

Currently, permitted uses in the HV District include:

a. Public boardwalks, paths, biking trails and outdoor seating/assembly areas.
b. Boating and fishing docks.
c. Marinas.
d. Water passenger transportation terminals.
e. Boating and sailing instruction schools.
f. Boat sales, rental and charter facilities.

g. The following uses are permitted as of right in the HV Harbortown Village District if located 30 feet or more from the edge of the Genesee River, subject to site plan approval:
   (a) Single-family attached dwellings.
   (b) Live-work spaces.
   (c) Restaurants not exceeding 2,500 square feet and excluding drive-through facilities.
   (d) Bars, taverns and cocktail lounges not exceeding 2,500 square feet.
   (e) Private clubs not exceeding 2,500 square feet.
   (f) Office space not exceeding 2,500 square feet.
   (g) Retail sales and services not exceeding 2,500 square feet.
   (h) Tourist information centers.
   (i) Museums and aquariums.
   (j) Hotels and motels.
   (k) Bed-and-breakfast establishments, subject to the additional requirements for specified uses in § 120-132.
   (l) Mixed uses when limited to residential and commercial uses as permitted under this section.
   (m) Other establishments relating to and supporting water-dependent activities.

Some uses, when proposed in the HV District, require a special permit from the City Planning Commission. The special permit procedure is intended to provide a means to establish uses having some special impact or uniqueness which requires a careful review of their location, design, configuration and special impact to determine, against fixed standards, the desirability of permitting their establishment on any given site. They are uses that may or may not be appropriate in a particular location depending on a weighing of the public need and benefit against the local impact and effect.

The uses that are currently listed in the City Zoning Code as requiring a special permit in the H-V District include:

(1) The following uses when located within 30 feet of the edge of the Genesee River:
   (a) Bars, taverns and cocktail lounges.
   (b) Museums and aquariums.
   (c) Private clubs.
   (d) Restaurants, excluding drive-through facilities.
   (e) Retail sales and services.
   (f) Tourist information centers.
   (g) Other establishments relating to and supporting water-dependent activities.

(2) Single-family detached located no closer than 100 feet of the edge of the Genesee River.
(3) Boat launches.
(4) Community garages and parking lots.
(5) Multifamily dwellings.
(6) Outdoor entertainment.
(7) Outdoor markets.
(8) Parking areas, lots and garages.
(9) Private and commercial recreation and amusement facilities.
(10) Public and semipublic uses.
(11) Entertainment, subject to the additional requirements for specified uses in § 120-137.
(12) Vehicle service stations, subject to the additional requirements for specified uses in § 120-154.

In addition to the use lists, the district regulations include provisions for yards, lot, area and bulk requirements. These are generally the same as that for the R-1, Low-Density Residential district in the Zoning Code. However, while commercial development is restricted to 2,500 square feet, there are no height or size limits to residential development in the HV District.

Existing front yard setback requirements are based on the context of a built up street or a minimum of 20 feet. This is irrelevant to the proposed development which currently has no interior street context and 20 feet would not be conducive to the character that is envisioned. Side and rear yard setback provisions are only indicated for single-family detached dwellings of which there are none proposed in the project area. Lot coverage limitations require that at least 50 percent of the lot remain greenspace. It is envisioned that greenspace in the project area will be provided in public parks and gathering areas rather than on individual lots. Frontage provisions, again, are only indicated for single-family detached dwellings of which there are none proposed in the project area. The future development will likely not be in conformance with these provisions. Parking is not required in the HV district and therefore the proposed development will conform to this provision.

3. Impacts and Mitigation

3.1 Proposed Land Use

Because of the site's location at the confluence of the Genesee River and Lake Ontario, it will always remain a regional destination and an important asset to the City of Rochester and the entire Greater Rochester community. The existing Terminal Building will remain an important building at the Port featuring retail and other commercial uses. It will also continue to serve as a port building,

available to accommodate marine transportation facilities such as servicing visiting cruise ships or private ferry operations.

The proposed project offers a vision for the Port that includes a new marina surrounded by public spaces and private development projects. Private development, as envisioned, is predominately a mix of housing types with space for new commercial uses, including new retail, restaurant or hotel establishments. The area is intended to be a lively, waterfront community that contributes to the existing mixed-use community of Charlotte and offers new opportunities for living, working and playing.

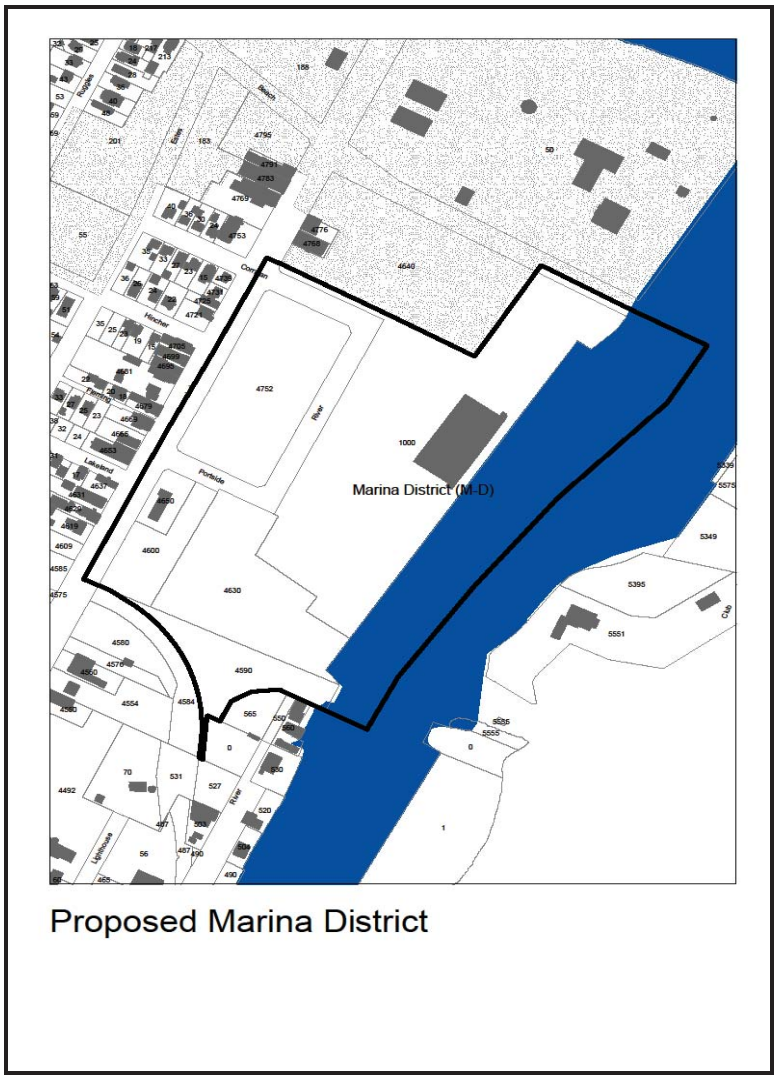
3.2 Proposed Zoning

Zoning regulations are a means for not only directing a certain vision for an area, but also limiting development in such a way that it does not negatively impact adjacent areas. The proposed zoning, as described below, is a form of zoning that is relatively new to Rochester. It will be most efficient in getting high-quality development that will positively impact the surrounding area without imposing unnecessary regulatory processes and restrictions.

3.2.1 Form-Based Code

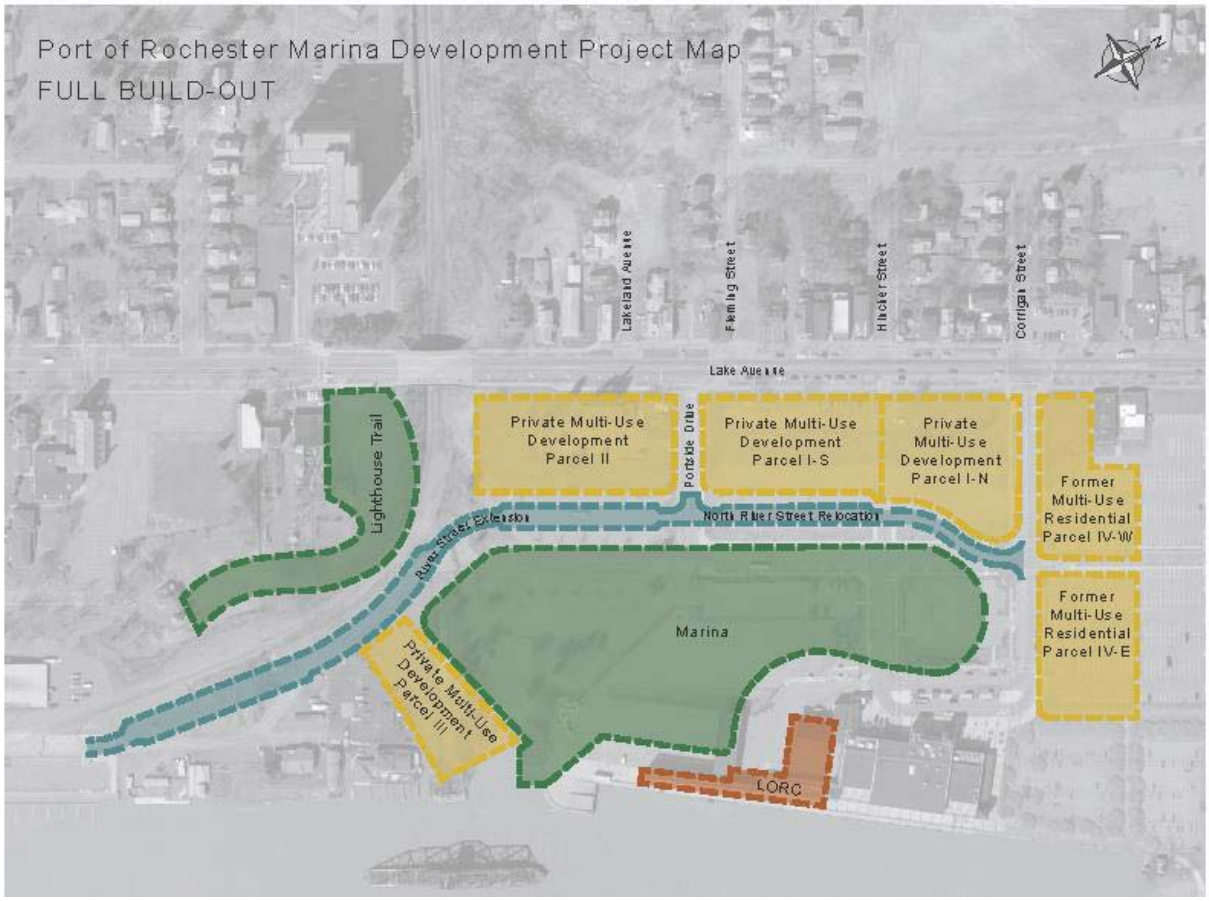
Within the HV District, a new zoning district, to be called the *Marina District,* is proposed for the area shown in Figure I-2 in order to ensure that future projects are developed in a manner that is consistent with the vision of the proposal and do not create significant adverse impacts on the surrounding neighborhood and larger community.

Figure I-2 Marina District



The proposed *Marina District* includes an area that is smaller than the entire project area and is intended to include only the first three private-development parcels, Parcels I, II, III (see Figure I-3). Former development Parcel IV is not included in the new district and will remain in an Open-Space (OS) District. Other area outside the new *Marina District* will remain in the HV District or in the OS District.

Figure I-3 Full Build Scenario showing Private Development Parcels



It is proposed that the *Marina District* utilize a **Form-Based code** rather than a conventional zoning code. The Form-Based Codes Institute, a national organization that promotes the study, development and adoption of Form-Based codes, provides the following draft definition of Form-Based codes:

> ***Definition of a Form-Based Code***
> *Form-Based codes foster predictable built results and a high-quality public realm by using physical form (rather than separation of uses) as the organizing principle for the code. These codes are adopted into city or county law as regulations, not mere guidelines. Form-Based codes are an alternative to conventional zoning.*
>
> *Form-Based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The regulations and standards in Form-Based codes, presented in both diagrams and words, are keyed to a regulating plan that designates the appropriate form and scale (and therefore, character) of development rather than only distinctions in land-use types. This is in contrast to conventional zoning's focus on the micromanagement and segregation of land uses, and the control of development intensity through abstract and uncoordinated parameters (e.g., FAR, dwellings per acre, setbacks, parking ratios, traffic LOS) to the neglect of an integrated built form. Not to be confused with design guidelines or general statements of policy, Form-Based codes are regulatory, not advisory.*
>
> *Form-Based codes are drafted to achieve a community vision based on time-tested forms of urbanism. Ultimately, a Form-Based code is a tool; the quality of development outcomes is dependent on the quality and objectives of the community plan that a code implements.*

Appendix R includes the proposed *Marina District* Form-Based code which is proposed for adoption. The proposed regulations will ensure that future development is consistent with and meets the goals of the proposed project while establishing development parameters that protect the existing community character.

Following is a list of the sections included in the proposed *Marina District.*

Purpose Statement –It is intended that the *Marina District* will become a compact, walkable, mixed-use district that will function as the symbolic town center for the Charlotte community. It is intended that the *Marina District* be a memorable and distinctive place for residents and visitors alike. In the *Marina District*, the primary emphasis is placed upon the physical form of buildings, civic spaces and place making. While land uses are regulated, they are a secondary focus within this district. The regulations encourage a pedestrian-oriented and human-scaled right-of-way, public realm and streetscape and promote safe pedestrian movements, access and circulation.

Regulating Plan – This is a map that graphically designates the permitted locations of building and/or frontage types; required build-to lines; parking setback lines; permitted locations for parking, loading & service vehicle ingress/egress; the permitted location and minimum/maximum sizes for a required public open space, such as the Pedestrian Mall (Civic Square) proposed on Parcel I.

Building Envelope Standards – This section establishes the basic parameters governing building form including the three dimensional building envelopes and certain permitted and/or required elements such as the boundaries within which things may be done and specific things that must be done. The primary intent of the Building Envelope Standards is to define and shape street and civic spaces in order to create a vital and coherent public realm. The interface of private building frontages with public thoroughfares and civic spaces shapes the public realm and is the principle focus of these standards.

Building Function (Uses) – This section will set forth the permitted, specially permitted and prohibited uses in the district. The proposed regulations include the following provisions relating to use:

Permitted Uses:
All uses are permitted in fully enclosed buildings in the *Marina District* unless listed as specially permitted or prohibited uses in this article. In addition to any specific requirements listed below, uses shall be subject to the additional requirements for the specified uses set forth in Article XVIII of the City Zoning Code.

Permitted Outdoor Uses:
(a) Accessory outdoor seating/assembly areas operating between the hours of 6:00 a.m. and 11:00 p.m.;
(b) Accessory display of merchandise during business hours;
(c) Food vending carts and trucks may be located in interim parking facilities constructed in accordance with §120-77.2F(3), in the required Pedestrian Mall (Civic Square) and on the grounds of the Terminal Building.

Specially Permitted Uses:
The following uses are allowed as special permit uses in the *Marina District*:
(a) Any uses open to the public or requiring loading/unloading between the hours of 2:00 a.m. and 6:00 a.m.;
(b) Accessory outdoor seating/assembly areas operating between the hours of 11:00 p.m. and 6:00 a.m.;
(c) Interim Parking Facilities, subject to specified additional requirements, including a requirement that the parking facilities being available for public use.

Prohibited Uses:
The following uses are prohibited in the *Marina District*:
(a) Homeless shelters;
(b) Sexually oriented businesses;
(c) Uses not in a fully enclosed building, excluding building parking, outdoor seating/assembly areas, walk-up windows and interim public parking lots constructed on undeveloped portions of Parcels I, II or III in compliance with §120-77.2(F)(3);
(d) Any use that would meet the definition of a manufacturing use as per §120-208 of the Zoning Code;
(e) Drive-throughs;

(f) Vehicle - related uses, including car washes, vehicle service stations, vehicle sales, vehicle repair including commercial vehicle repair and vehicle rental services, except vehicle rental or sharing services in which vehicles are stored in permanent parking facilities constructed in accordance with §120-77.2F(1), vehicle service takes place outside the Marina District and offices are located in a fully enclosed building;
(g) Warehouses;
(h) Recycling centers.

Civic Square Standards – These standards establish the basic parameters governing the required Pedestrian Mall on Parcel I, which is referred to in the zoning code as a "Civic Square." The Civic Square is intended to be the principle pedestrian connection between Lake Avenue and North River Street and the Marina. It will be an active pedestrian center and a major focal point within the *Marina District*. In order to facilitate pedestrian activity, most of the square will have paved surfaces. The use of pervious paving materials to allow oxygen for tree roots and to absorb storm water run-off is encouraged.

Parking and Loading Standards – There will be no minimum or maximum parking requirements within the *Marina District*, however there will be requirements governing the placement of and access to parking. These are largely covered in the Regulating Plan and the Building Envelope Standards. There may be additional requirements, such as for bicycle parking that would be included in this section.

Architectural Standards –This Section establishes standards for new construction within the *Marina District* to ensure that building frontages are designed in such a way as to ensure a minimum level of quality and positively contribute to the public realm. These standards do not mandate or prohibit any particular architectural style, but are intended to promote harmony within the district by enabling variety within a defined set of constraints. The Architectural Standards are applicable to building elements that are clearly visible from the street or any civic space. This includes all public streets and civic spaces within the *Marina District* and adjoining the *Marina District*. These standards concentrate on those building elements that can be seen from public spaces and minimize the regulation of those elements that are within the private realm.

Review and Approval Process – This section sets forth the process through which projects may be approved including processes for the granting of waivers to provisions of the *Marina District*.

Definitions – This section will provide definitions for terms used in the *Marina District* that are not defined in other portions of the City of Rochester Zoning Code.

The *Marina District* requirements will, if adhered to, produce a predictable end product and facilitate the proposed plan, as envisioned, for the Port area. The maximum build-out that could be achieved, absent market constraints, is illustrated in Figure I-4 below.

It is important to note that Figure I-4, as well as Figures I-5, I-6 and I-7, which follow, are illustrative of maximum build-out under the proposed code and only show general building form. The architectural detailing that is required by the code is not included in these diagrams. The intent of these diagrams is to demonstrate maximum height, massing and required building siting only.

While it is unlikely that maximum build-out would occur, for purposes of the analysis in this section, it is prudent to see what the proposed code would, in fact, allow. For illustrations that provide a perspective that is more in keeping with the market conditions, see *Section IV F*.

The regulations pertaining to building type and building height keep the building frontages along Lake Avenue to a height that is in keeping with the existing building heights along Lake Avenue (see Figure I-5). Higher building forms are required to be stepped back from Lake Avenue and other streets to preserve the smaller-scale character of the existing community.

In addition, building heights are limited to three stories along the southern end of Parcel III and to two stories along the southeastern portion of Parcel II to preserve views to and from the Charlotte Genesee Lighthouse and the proposed Lighthouse Trail (see Figures I-6 and I-7).

Figure I-4 Maximum Build-Out under Marina District Code

Figure I-5 View of Lake Avenue from Beach Avenue Intersection Looking South

Figure I-6 View from Lighthouse Property

Figure I-7 View toward Lighthouse property from North End of the Marina

The proposed Architectural Standards are intended to create buildings as illustrated in the Form Based code (see Appendix R).

3.2.2 Land Use Approval Process

The proposed *Marina District* regulations describe the review process for projects within the boundaries of the *Marina District.* It is the intent of the regulations to provide an accelerated process for proposals that are within the parameters established by the City of Rochester Port Public Marina and Mixed Use Development Project and of the *Marina District* Code. This accelerated process would allow a developer to receive a Certificate of Zoning Compliance immediately upon submitting a plan that is in complete compliance with the *Marina District* code. Projects that are not in compliance with the regulations would require waivers. Minor waivers are issued by the Director of Planning and Zoning. Waivers for non-compliance for major factors, such as building height, building/parking placement, transparency, etc, are under the jurisdiction of the Zoning Board of Appeals. Variance decisions rely on an analysis of impacts on the community. A public hearing is conducted for all variance applications.

3.3 Conformance with Officially Adopted Plans and Policies

The City's Comprehensive Plan consists of the City's future land use development goals, policies and/or programs as they are contained in the adopted portions of the following:

Renaissance 2010 Plan;
Zoning Code and Zoning Map;
Subdivision Ordinance;
Official Street Map;
Capital Improvement Program;
Functional Street Classification Map; and
Adopted Urban Renewal Plans (Not Applicable)

In addition to the above Comprehensive Plan components, the City LWRP is identified as one of several implementing strategies for the Comprehensive Plan. The consistency of the proposal with the LWRP is assessed below.

Lastly, the City recently adopted a Housing Policy as a component of the Comprehensive Plan. The conformance with that policy is assessed below.

The following analysis indicates whether or not the proposal is in conformance with each relevant component of the Comprehensive Plan.

3.3.1 2010 Renaissance Plan

The Renaissance Plan is comprised of eleven "Campaigns" that are adopted into the City's Comprehensive Plan. While several of the campaigns are somewhat relevant to the proposed project, three campaigns are specifically relevant to the proposed project and are discussed below. The campaigns include policy statements and a list of goals. Following the description of each goal below is a brief assessment of the project's conformance with that goal.

Campaign Six: Economic Vitality.

Policy: *It is the policy of our City to promote an environment in which businesses can develop and flourish; to develop a diverse local economy that supports quality jobs, produces new product, service and technology innovations and high-quality business and personal services; and to create a highly skilled workforce that embraces creativity and our rich entrepreneurial spirit. We will also promote and pursue the management of our community identity as a world-class City in which to do business, as well as a highly desirable place to live, work and visit.*

Goal 6-1: *Develop strong, economically viable and diverse neighborhood commercial areas that help to provide entry-level jobs, high-quality goods and personal services to our citizens, offer entrepreneurial opportunities and help increase our City's economic development and growth.*

Conformance Analysis: A total of 44,000 square feet of commercial space is proposed on the private development parcels. In addition, the Terminal Building contains commercial space.

Goal 6-2: *Support and promote opportunities for shopping for residents and visitors at stores, businesses and personal service shops within our City.*

Conformance Analysis: See comment above. In addition, the pedestrian-scale and orientation of retail will offer a desirable retail/restaurant experience for visitors and residents.

Campaign Eight: Tourism Destination.

Policy: *It is the policy of our City to promote recognition of our City and region as a tourism destination that embraces a broad range of four-season tourist attractions centered on our unique waterfront resources, recognizing especially the centrality of the Genesee River to the life of our community, along with arts, cultural, sports and entertainment facilities as well as our reputation as a supportive and innovative community, in a way that contributes to our community's local and national image as well as its economic vitality and growth.*

Goal 8-1: *Transform our extensive and unique waterfront resources and historic and cultural assets into a regional tourism destination attraction that maximizes economic, environmental and recreational benefits in a way that enhances the quality of life for City residents.*

Conformance Analysis: The proposed Port project increases the linear feet of waterfront and enhances the recreational benefits of the Port by providing a public promenade, creating new open spaces, and providing more public boat slips. The proposed Lighthouse Trail will improve public connection to the Charlotte Genesee Lighthouse. Extending River Street improves vehicular and pedestrian access to the waterfront. Refer to *Section III* for a discussion of public benefits of the proposal.

Goal 8-2: *Develop, protect and promote our parks, recreation and open space system as a prime four-season regional tourism attraction and asset that is complementary to our diverse waterfront resources.*

Conformance Analysis: It is the intent of the proposed project to create opportunities for up to 430 units of residential development, thereby adding to the year-round population supporting existing and additional commercial venues at the port. This will increase the opportunity for the Port to support year-round tourism. See *Section IV H* for a discussion on the parks and recreation system.

Goal 8-3: *Develop diverse, unique tourism attractions that balance economic issues and impacts with neighborhood preservation, enhancement and protection.*

Conformance Analysis: The proposal is intended to develop a unique tourist attraction. Refer to *Section III* for a discussion of the public benefits of the project.

Goal 8-4: *Capitalize on our many recreational, historic, civic and business assets as well as our high quality of life to expand recognition of Rochester as a highly desirable tourism destination and attractive place to live.*

Conformance Analysis: The proposal will capitalize on the waterfront, as well as the existing assets of the area, including Ontario Beach Park, the Terminal Building, the Pier into Lake Ontario, the Charlotte Genesee Lighthouse, and the existing businesses.

Campaign Nine: Healthy Urban Neighborhoods.

Policy: *It is the policy of our City to support unique, vital, interconnected urban neighborhoods which provide a variety of housing choices, accessible goods and services in a village-like setting, pedestrian-friendly environments, appropriate transit and parking facilities and access to park, recreation, environmental and cultural amenities.*

Goal 9-1: *Create appropriate and affordable housing choices/opportunities for all citizens through a housing system that promotes and supports new construction and rehabilitation, is responsive to market opportunities and encourages owner occupancy and affordable units for all incomes.*

Conformance Analysis: The housing types that are proposed are intended to be market driven. There will be opportunities for both home ownership and apartment rental. It is not the intent of the project to create subsidized units; instead, the market will determine the housing choices. The neighborhood is currently dominated with single-family detached houses. The proposal includes no detached single-family homes and will therefore, offer additional housing choices for the neighborhood.

Goal 9-2: *Encourage strong, stable, vital and healthy neighborhoods that retain their unique characteristics, are supported by appropriate community resources, services and amenities in village-like settings, with neighborhood commercial centers serving nearby residential neighborhoods to provide essential goods and services and help create a high quality of life for every citizen.*

Conformance Analysis: The Port site is within the village-like setting of the Charlotte neighborhood. The challenge of the Port site is the large number of residential units that are required to gain year-round support of goods and services that are needed to support a "village." This number of units requires dense development and large multi-unit buildings. The scale of the proposed buildings will be larger than the traditional scale of this neighborhood. The proposed *Marina District* Form-Based code will reduce the negative impacts of the large scale as discussed above. The key to creating a village is a mix of uses that creates symbiotic relationships for long-term sustainability. That is a goal of the proposed development.

Goal 9-3: *Ensure adequate parking resources or facilities that balance the protection of neighborhoods and residences with the need to sustain the economic viability and vitality of commercial areas.*

Conformance Analysis: Refer to *Section IV K* for a discussion of parking. Existing parking resources will be displaced as a result of the proposal. The proposed development parcels will contain all required parking on site. New on-street parking opportunities will be created. There will, however, be a net decrease in the amount of parking in the Port area.

Goal 9-4: *Develop a pedestrian circulation system that provides maximum accessibility to nearby goods and services, our parks, recreation and open space areas and other community amenities.*

Conformance Analysis: The proposed project will improve the existing pedestrian circulation system in the following ways:

* Sidewalk/Genesee Riverway Trail proposed along the River Street Extension.
* Promenade proposed around the perimeter of the proposed marina.
* Lighthouse Trail will connect the Lake Avenue sidewalk to the historic Charlotte-Genesee Lighthouse.

Goal 9-5: *Promote the creation of a safe, reliable and aesthetically pleasing transportation system that facilitates the movement of people and goods throughout our community and connects neighborhoods while encouraging alternatives to automobile transportation.*

Conformance Analysis: The extension of River Street into the Port site creates a safe, reliable and aesthetically pleasing vehicular, bicycle and pedestrian transportation system. The public marina will contain several transient boat docks, along with leased docks which encourage boat use as a means to travel to and from this site. It is not anticipated that the RGRTA bus schedule will be negatively impacted. There is a potential to increase ridership of buses that connect the port to downtown and other areas of the region.

Goal 9-6: *Support a land use development pattern in our City that balances reasonable property use rights with our community's expectation of protection from negative impacts generated by nearby uses or activities.*

Conformance Analysis: Proposed mitigation for potential impacts (e.g., construction impacts, visual impacts, traffic impacts) to the existing neighborhood is discussed in individual subsections of *Section IV*.

3.3.2 Zoning Code and Official Zoning Map

The existing zoning map and regulations are discussed above.

3.3.3 Subdivision Ordinance

The purpose of the Land Subdivision Regulations (Chapter 128) of the City Code is:

> *...to provide rules, regulations and standards to guide land subdivision within the City of Rochester in order to promote the public health, safety, convenience and general welfare of the City. They shall be administered to ensure the orderly growth and development, conservation, protection and proper use of land and adequate provision for circulation, utilities and services and to ensure that land utilized for building purposes shall be without danger to health or peril from fire, flood or other menace and that provision is made for adequate light and air, fire protection, recreation areas and other amenities.*

The proposal includes the creation of new parcels, as well as new vehicle and pedestrian rights-of-way. The proposed subdivision plat must be reviewed and approved by the City Planning Commission. In acting upon the subdivision applications, the City Planning Commission considers the standards listed in §128 of the City Code. The following is a list of the relevant standards and a short assessment of compliance:

1. *The arrangements of streets in the proposed subdivision shall, in general, provide for the continuation of the principal existing or planned streets in adjoining property or for their proper projections when adjoining property is not subdivided and shall be of a width at least as great as that of the existing streets to be continued.*

Conformance Analysis: Proposed changes to the street network include extending River Street and Corrigan Street and modifying the intersection of Portside Drive and River Street. These changes are consistent with this standard.

2. *Where a proposed subdivision abuts or contains an existing or proposed major arterial; the Commission may require local streets, rear service alleys or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.*

Conformance Analysis: The Lake Ontario State Parkway is the only principal arterial in the area of the project site and the subdivision does not "abut" or "contain" it.

3. *Street right-of-way widths and component widths shall be those shown on the Official Street Map or, where not shown, shall be not less than indicated by the chart of minimum street design standards.*

Conformance Analysis: All new streets will meet minimum width requirements.

4. *Street grades, wherever feasible, shall not exceed [specified grades], with due allowance for vertical curves.*

Conformance Analysis: All new streets will meet grade requirements.

5. *In general, right-of-way lines within a block deflecting from each other at any one point more than 10° shall be connected with a curve, the radius of which, for the inner right-of-way lines, shall be not less than 500 feet on major arterials and not less than 250 feet on minor arterials and on local streets.*

Conformance Analysis: All new streets will meet requirements.

6. *All changes in street grade shall be connected by vertical curves of a minimum length equivalent to 20 times the algebraic difference in the rate of grade for major and minor arterials and collectors and 1/2 of this minimum for all local streets. In no case shall vertical curves be less than 50 feet in length.*

Conformance Analysis: All new streets will meet requirements.

7. *Streets shall be laid out so as to intersect as nearly as possible at right angles, and no street shall intersect any other street at less than 60°.*

Conformance Analysis: All new streets will meet requirements.

8. *Dead-end or cul-de-sac streets shall not exceed 700 feet in length and shall be terminated with a paved turnaround roadway with a minimum radius of 40 feet and a minimum right-of-way radius of 50 feet at the closed end.*

Conformance Analysis: Where dead-end or cul-de-sac streets are proposed, mitigation measures will be proposed.

9. *In general, block lengths shall not exceed 1,200 feet or be less than 500 feet.*

Conformance Analysis: The unique layout of the Port site may require mitigation for noncompliance.

10. *Pedestrian walkways not less than five feet wide shall be required where deemed essential by the Commission to provide circulation or access to schools, playgrounds, shopping centers, transportation and other community facilities.*

Conformance Analysis: All proposed streets include walkways.

11. *Property lines at street intersections shall be rounded with a radius of 20 feet or of a greater radius where the City Engineer may deem it necessary. The City Engineer may permit comparable cutoffs or chords in place of rounded corners.*

Conformance Analysis: All new intersections will meet pertinent requirements.

12. *Easements for the installation of utilities shall be provided where necessary along the rear or side lot lines and shall be of a width deemed necessary by the City Engineer.*

Conformance Analysis: All new streets will meet requirements.

13. *Reserved strips controlling access to streets or controlling access to land dedicated to public use shall not be permitted.*

Conformance Analysis: No reserved strips are proposed.

14. *No proposed street name shall duplicate or closely approximate phonetically the name of any street within the City.*

Conformance Analysis: This will be taken into consideration at such time that any of the streets are renamed.

15. *Every subdivision to be located in a special flood hazard area shall have public utilities and facilities constructed to minimize flood damage and shall have adequate drainage provided to reduce exposure to flood damage.*

Conformance Analysis: In accordance with the Federal Emergency Management Agency's Flood Insurance Rate Map # 36055C0211G, dated August 28, 2008, the area of the subdivision is outside a Special Flood Hazard Area.

16. *Subdivisions shall be protected from flood hazard and inundation by stormwater, springs and other surface waters. The design and construction of drainage systems shall be such that watercourses traversing the subdivision and natural water emanating from within the subdivision will be carried through and off the subdivision without injury to improvements, building sites or buildings existing or to be installed within, adjacent to or downstream from the tract. Drainage water entering the subdivision shall be received and discharged at locations as nearly as possible in the manner that existed prior to construction of the drainage facilities. The design of drainage facilities shall be such that they will conform to the ultimate drainage requirements of the land uses within the subdivision's watershed. The discharged flow at the downstream area of the subdivision shall be conducted in drainage facilities such that the flow effects shall be restored as near to predevelopment conditions as possible prior to leaving the subdivision or reasonably distant therefrom.*

Conformance Analysis: Stormwater management facilities for the proposed public infrastructure are discussed in *Section IV B* of this document.

17. *Minimum Street design standards.*

Conformance Analysis: All proposed streets are required to meet the minimum street design standards.

3.3.4 Official Map

The Official Map shows the layout of streets and parks as adopted and established in the City with respect to the location and width of streets and highways and the location of parks. The proposed project includes new streets and new open spaces/parkland. Upon approval of the subdivision plat and construction of the proposed infrastructure, the Official Map will be amended to reflect the newly constructed rights-of-way and parks.

3.3.5 Capital Improvement Program

Capital Improvement Program, or CIP, is a short-range plan, which identifies capital projects and equipment purchases, provides a planning schedule and identifies options for financing the plan. Essentially, the plan provides a link between the City of Rochester's strategic plans and the annual budget. The CIP assists City government with forecasting where it believes it will face future demands and growth which requires a clear understanding of existing facilities, infrastructure and equipment. Once the CIP is finalized, a public hearing is required before the plan is adopted by City Council. The proposed project is currently included in the City's CIP which is a document that is available on the City website.

3.3.6 Functional Street Classification Map

Functional classification is the process by which roads, streets, and highways are grouped into classes according to the character of service they provide. Functional classification is also used to determine which roads are eligible for project funding under the Federal Highway Administration's Surface Transportation Program. In accordance with the New York State Functional Classification Map, the roads in the project area are classified as follows:

Lake Avenue - Minor Arterial
Beach Avenue - Collector
Corrigan Street - Collector
Portside Drive - Collector
North River Street - Collector

The minor arterial street (Lake Avenue) is defined as a street that interconnects with and augments the urban principal arterial system and provides service to trips of moderate length at a lower level of speed than principal arterials. Minor arterials may carry local bus routes and provide intra-community continuity, but ideally should not penetrate neighborhoods.

The collector street is defined as a street that provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that the collector system may penetrate residential neighborhoods. The collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system.

The proposed project does not change the functional classification of any of the streets in the project area. For a full analysis of traffic impacts and mitigation, refer to *Section IV K* of this document.

3.3.7 LWRP

An amendment to the City's LWRP (see Appendix A) was prepared in 2010. This document amends the existing LWRP, integrates recent design and engineering studies, and lists recommendations for the Port site. It also proposes new LWRP goals, policies and implementing techniques, development objectives, recommended land uses and a conceptual development plan for that site based on those studies. The amendment establishes a broad and flexible development and design framework to guide future land use, zoning and funding decisions at the Port Site in a way that addresses LWRP goals and policies, preserves and protects significant environment features and adequately responds to future market conditions. The amendment applies to the Port site only and replaces certain sections of the City's 1990 LWRP. All remaining sections of the 1990 LWRP continue in effect as adopted.

The amendment reflects the concept of the proposed plan, including phased construction of a large marina basin and public promenade, creation of land-side development parcels, reuse of the Terminal Building, extension of River Street north into the site, relocation of the public boat launch and the development of new open space, gateway features and public parking areas. The amendment also includes the following list of 19 recommended land uses for the project site:

Marina and marina support facilities
Public walkway and trails
Boat docks
Boat launch / ramp
Fishing areas
Museum / aquarium
Waterfront education / research facilities
Water-related retail support facilities
Picnicking areas
Parking areas and parking structures
Outdoor entertainment
Festival site
Hotel, boatel, conference center
General retail facilities, including restaurants
Housing
Mixed-use buildings and development
Parks, open space
Visitor information center
Transportation terminal

Conformance Analysis: The proposed land uses associated with the subject proposal are all included in the above list.

The amendment also includes 27 development objectives that provide a planning framework for proposing, reviewing and approving future development projects. The objectives address major LWRP goal and policy statements and create a development framework within which all projects, actions and activities proposed on the site will be reviewed and evaluated through the City's LWRP consistency review legislation and procedures. The objectives are listed below, each followed by a conformance analysis:

(1) Maintain and enhance local use and enjoyment of the site, Ontario Beach Park, the Genesee River and Lake Ontario:
   (a) relate and connect new development to existing neighborhood land uses, features and amenities.
   (b) connect streets, neighborhoods, districts and amenities to each other and to the river and lake.
   (c) establish and/or maintain public access to and along the waterfront.
   (d) preserve local open space, recreational facilities and other public amenities.
   (e) maintain significant views and vistas to and from the lake and the river and to and from the Genesee Lighthouse along streets, sidewalks and parks/trails.

Conformance Analysis: The proposed pedestrian promenade, the Lighthouse Trail and River Street pedestrian enhancements, including the extension of the Genesee Riverway Trail, will all contribute to a system of connections to, from and through the site as well as promote accessibility to the waterfront itself and waterfront amenities.

(2) Develop the site in a way that maximizes city tax revenues and other important revenue streams:
   (a) create development parcels and a phased development approach that satisfies reasonable market demand and maximizes investment return potential while preserving a village character and scale.
   (b) encourage the development of a small-scale, private ferry service using existing infrastructure when feasible.
   (c) utilize existing public infrastructure where feasible.
   (d) utilize existing public infrastructure and facilities to create revenue streams where appropriate and feasible.

Conformance Analysis: The marina and development parcels were designed to maximize the use of existing infrastructure such as Corrigan Street, Portside Drive and the Terminal Building. The recently constructed Beach Avenue pedestrian right-of-way will remain intact. The recently constructed North River Street, however, will be relocated west of its existing location to make room for the proposed marina.

A key component of the proposal is the creation of development parcels that take advantage of the waterfront location and amenities. Development on the newly created parcels will increase tax revenues.

Construction of the marina and promenade in the location proposed limits terminal use parking and therefore the project does not preclude the future operation of a small ferry service if off-site parking options can be identified.

(3) Encourage the use and development of the site as a waterfront tourist destination through appropriate water-dependent and/or water-enhanced uses and public amenities:
   (a) develop a public marina with transient slips and amenities.
   (b) develop specialty retail or unique retail experiences in appropriate locations.
   (c) establish a village design character on the site.
   (d) create a visitors / information center and link it to the Seaway Trail.
   (e) establish a critical mass of uses, attractions and amenities to attract visitors.
   (f) develop site as an entrance or gateway into the city / region.
   (g) create public spaces to accommodate festivals and events that compliment the beach, park and marina.
   (h) encourage the development of a small-scale, private ferry service using existing infrastructure when feasible .
   (i) create at least one destination attraction (recreational or entertainment oriented).
   (j) establish a directional signage system to guide visitors and tourists.
   (k) develop a hotel, boatel and/or bed and breakfast facility on or near the site.

Conformance Analysis: A public marina is a component of the proposed project, along with street-level retail/restaurants, housing and a hotel. This mix of uses will create a destination to attract residents and visitors to the site. It is envisioned that the proposed Lake Ontario Resource Center will contain a small public information center, the program for which has not yet been determined. It will likely provide educational information on Lake Ontario. New public spaces created by the proposed public promenade and open space at the north end of the proposed marina will be available for events that will complement beach and park uses. In addition, public plazas are incorporated into the design of the site for additional spaces for gatherings, festivals and events.

The City of Rochester received funding through the United States Department of Transportation for the Port of Rochester Security/Intelligent Transportation Systems Project (Port ITS). The Port ITS project is a program of interrelated ITS elements which together will ease traffic congestion, improve safety, and enhance visitor experience at the Port of Rochester for bicyclists, pedestrians, motorists, transit riders, and domestic and international boaters alike.

The project will deploy ITS as a complement to infrastructure investments to improve mobility and accessibility at the Port and to ensure that Port visitors have a positive experience. Potential ITS elements that could be advanced through this project include, but are not limited to, closed-caption television traffic cameras, roadside dynamic message signs, and an Advanced Parking Management System. Actual deployments will be determined through the Design phase of the project.

(4) Improve pedestrian circulation, safety and enjoyment on the site:
   (a) complete a river front promenade with connections to the existing Genesee River trail.
   (b) establish a comprehensive pedestrian / visitor signage system.
   (c) connect streets, neighborhoods, districts, trails and amenities to each other and to the river and lake.
   (d) create a significant pedestrian experience at the north end of Lake Avenue at the park.
   (e) develop Lake Avenue and River Street as the major pedestrian spines of the area.
   (f) connect the site to River Street, the Turning Basin and the parks and river gorge to the south.

Conformance Analysis: In addition to what is stated above with regard to connectivity, the extension of River Street will include an extension of the Genesee Riverway Trail to connect Turning Point Park to the waterfront. Presently, the connection is informal and undeveloped. The proposed development along Lake Avenue, with its street-level retail/restaurants and design character will enhance the pedestrian experience along Lake Avenue.

(5) Create a 4-season character and functionality on the site:
   (a) develop a significant public space or venue that can be programmed for 4-season uses.
   (b) create public spaces to accommodate festivals and events that compliment the beach, park and marina.
   (c) establish a year-round residential population base.
   (d) develop an appropriate mix of recreational, entertainment and retail uses.
   (e) create at least one destination attraction (recreational or entertainment oriented).
   (f) create a visitors / information center and link it to the Seaway Trail.

Conformance Analysis: Use of the marina and surrounding public amenities for four seasons is a programming concept that will be explored in the proposed Harbor Management Plan. With the addition of new year-round residential units, the need for 4-season amenities and events is more compelling.

(6) Encourage an appropriate mix of land uses, public amenities and development that facilitate the creation of a village scale and character on the site:
   (a) develop an appropriate mix of land and building uses (in horizontal and vertical relationships) that takes advantage of proximity to the lake, river, park and other amenities
   (b) establish an appropriate village scale, massing, density and aesthetic for buildings (heights, facades, dormers, roof lines and construction materials)
   (c) create buildings with street level window storefronts, awnings and pedestrian- scale signs and lighting
   (d) establish a consistent public streetscape design theme with pedestrian-scale details
   (e) develop a comprehensive signage system (directional and historic/interpretive)
   (f) create a unique pedestrian experience along Lake Avenue and River Street
   (g) establish a year-round, residential population base on the site

Conformance Analysis: See analyses above.

(7) Develop alternative means of transportation to, from and through the site and the Charlotte neighborhood:
   (a) encourage the establishment of a multi-modal terminal (ferry, bus, car rental, taxi, bike, shuttle).
   (b) develop a system of off-site, remote parking lots for major events.
   (c) develop a shuttle system to move visitors from remote lots to the site.
   (d) establish a village people mover (i.e., jitney, carriage rides, water taxi) to move people to/from attractions and parking.
   (e) investigate acquisition of the CSX right-of-way (if feasible) for use as access to remote lots, additional parking and/or other means of internal circulation and movement.
   (f) develop walking trails and bike paths to and through the site.

Conformance Analysis: Refer to *Section IV K* for a discussion on potential parking and transportation alternatives. Currently RGRTA serves the site and will continue to do so. The proposed extension of the Genesee Riverway Trail is discussed above.

(8) Protect/enhance waterfront recreational, historic and cultural resources on or near the site:
   (a) preserve and enhance the Genesee Charlotte Lighthouse and connect it, physically and visually, with surrounding development and amenities.
   (b) preserve and enhance the Robach Community Center, Ontario Beach Carousel, and Genesee River Pier and riverwalk.
   (c) establish additional attractions / amenities within Ontario Beach Park and the beach itself to encourage and promote public use and enjoyment in accordance with appropriate plans and studies.

Conformance Analysis: The proposed project includes a new connection of the Charlotte Genesee Lighthouse to Lake Avenue in the area of the project site. This will effectively connect the historic lighthouse to the Port. An analysis of impacts on views from the site of the lighthouse to the waterfront is presented in *Section IV F*. The subject project does not include any actions relating to the Pier into Lake Ontario, Robach Community Center or the Ontario Beach Carousel.

(9) Preserve and enhance business activity on the site and in the Charlotte neighborhood:
   (a) preserve and enhance the existing commercial corridor along Lake Avenue as the Charlotte Harbortown Village Main Street.
   (b) create new infill mixed-use development along the east side of Lake Avenue, on the site.
   (c) develop new commercial/retail opportunities on the site that complement existing commercial development along Lake Avenue.
   (d) develop new mixed use development along River Street that creates an exciting new waterfront ambience.
   (e) develop street intersections within the site for ground floor retail/commercial uses.
   (f) develop specialty retail or unique retail experiences in appropriate locations.

Conformance Analysis: Refer to the analyses above.

(10) Utilize the waterfront portion of the site for water-dependent and/or water-enhanced uses:
   (a) develop a river front trail system connecting the site with River Street, the Turning Basin and the parks and river gorge to the south.
   (b) complete a river front promenade and connect it to other waterfront trail systems.
   (c) encourage the development of a SUNY/Brockport Lake Ontario Resource Center or similar facility along the river.
   (d) develop a public marina(s) with transient slips and appropriate amenities that can also service new residential development.
   (e) develop public boat launches at appropriate locations along the river that allow access for trailered and car-top boats.

Conformance Analysis: Refer to the analyses above. The proposed relocation of the existing boat launch is discussed in *Section V F*.

(11) Develop the site as a water gateway into Rochester, Monroe County and the Genesee/Finger Lakes Region:
   (a) establish a multi-modal terminal (ferry, bus, car rental, taxi, bike, shuttle).
   (b) establish a directional signage system to guide visitors and tourists.

(c) establish a village people mover (i.e., jitney, carriage rides, water taxi) to move people to/from attractions and parking.
(d) develop a public marina with transient slips and amenities.
(e) encourage the development of a small-scale, private ferry service using existing infrastructure when feasible.
(f) develop public boat launches at appropriate locations along the river that allow access for trailered and car-top boats.
(g) develop a hotel, boatel and/or bed and breakfast facility on or near the site.

Conformance Analysis: Refer to the analyses above.

(12) Develop the site in a way that minimizes negative environmental and neighborhood impacts, adequately addresses housing, commercial and boating market demand issues and does not create additional significant parking, access or circulation problems:
(a) locate site development in areas that can accommodate that development to minimize environmental impacts, preserve open space, public access and amenities and maintain significant views to and from the lake and river.
(b) develop an appropriate mix of transportation options to, within and through the site.
(c) maintain public access to and along the waterfront and connect new development and the surrounding neighborhood to the water as much as possible.
(d) create development parcels and a phased development approach that satisfies market demand and maximizes investment return potential.
(e) balance parking demand needs with protection of environmentally sensitive areas and concerns for site walkability.
(f) preserve local open space, recreational facilities and other public amenities.

Conformance Analysis: The intent of the Environmental Impact Statement is to ensure that the environmental and neighborhood impacts are analyzed and mitigation measures identified.

(13) Improve water quality at Ontario Beach Park:
   (a) research and document the specific causes of and factors influencing the water quality problems at Ontario Beach.
   (b) develop and implement an appropriate mitigation system to improve beach water quality and enhance public access to the water for swimming based on Army Corps of Engineers recommendations.

Conformance Analysis: See *Sections IV B and IV E*

(14) Preserve and enhance significant views and vistas within and through the site:
   (a) place buildings and structures on the site in a manner that preserves, protects and enhances existing significant views, vistas or panoramas of the Genesee River, Ontario Beach Park and the Genesee Lighthouse.
   (b) create view sheds from Lake Avenue to the river along streets, trails or public open spaces.

Conformance Analysis: See *Section IVF*.

(15) Maintain and enhance public safety throughout the site by providing adequate security amenities or features and by designing trails, open spaces, public and private development, parking areas and marina dock spaces to include adequate lighting and identifiable defensible space elements.

Conformance Analysis: See *Section IV P.*

(16) Create a public marina on the site that addresses market demand for new public and private boat slips (including transient slips), protects Genesee River water quality, interfaces with the Genesee River in a manner that does not substantially increase the wave surge problem within the river or within the basin, addresses other environmental concerns, creates appropriate development parcels surrounding the basin and leverages private development interest in the site:
   (a) create a basin and marina entrance design that reduces siltation within the basin.
   (b) create a basin entrance that reduces or minimizes wave surge problems within the basin.
   (c) enhance water quality in the basin and provide for adequate flushing of basin water.
   (d) enhance landside development opportunities with an appropriate basin size, shape and location on the site.

(e) include a public walkway and public access around the basin as well as open spaces or public space features and amenities.
(f) develop a marina focal point or icon to draw attention to the site and serve as a public marker for the marina, and as a gateway for the Charlotte community and the City of Rochester itself.
(g) develop a marina basin and river front docking area that encourages and promotes cruise ship and charter fishing activity.
(h) provide appropriate marina amenities and services adjacent to the basin.
(i) encourage the development of a small scale private ferry service (without vehicular ferry service) if market demand exists and utilize the existing terminal and dock space along the pier or within the new basin to accommodate this activity.

Conformance Analysis: See analyses above and refer to *Sections III* and *IV C*.

(17) Redevelop and extend River Street north through and into the site, on an alignment that closely follows the existing access road along the east side of the CSX right-of-way and that connects to Portside Drive to provide an alternate means of getting into and out of the main portion of the site. Continue the extension of River Street north to Ontario Beach Park and associated parking areas following a traffic analysis and an evaluation of alignment options and traffic circulation patterns that considers overall implications for land side development parcels and the marina basin configuration.

Conformance Analysis: See *Section IV K* for an assessment of traffic impacts and design rationale for River Street. Also, refer to *Section V E*. for a discussion of River Street design alternatives considered.

(18) Encourage the development of a small-scale, private ferry service on the site (without vehicular service), utilizing a portion of the existing Terminal Building, parking and queuing areas and other public infrastructure. If a ferry service is not developed, encourage appropriate alternatives for the re-use of the ferry Terminal Building such as an inter-modal terminal or visitors' center.

Conformance Analysis: The project does not preclude the future operation of a small ferry service if off-site parking options can be identified. Reuse of the terminal is discussed in above.

(19) Encourage a higher and better use of land side development parcels and opportunities on the site by pursuing the relocation of the Ontario Beach Park Labor Operations Center off the site, to a building and parcel of land appropriate for such use, that minimizes adverse impacts and is located in an area conducive to the efficient conduct of the activities and functions associated with that facility.

Conformance Analysis: See *Section V D*.

(20) Encourage a higher and better use of land side development parcels and opportunities on the site by pursuing the reconfiguration of all or a portion of the Public Boat Launch Facility (4 ramps) in its approximate existing location or by relocating the facility off the site in a manner and location consistent with launch ramp demand, appropriate design and engineering considerations and minimal adverse environmental and traffic impacts.

Conformance Analysis: See *Section V F*.

(21) Pursue development of a SUNY/Brockport Lake Ontario Resource Center and/or permanent Great Lakes Research Facility on the site, either within a portion of the existing Terminal Building or in a stand-alone facility, adjacent to the Genesee River and/or public marina.

Conformance Analysis: SUNY Brockport's Lake Ontario Resource Center is a component of the proposed project.

(22) Investigate the acquisition and development of the CSX right-of-way for potential parking, circulation and access if that land becomes available and that option is determined to be feasible.

Conformance Analysis: The CSX right-of-way has not become available at the time of the writing of this document.

(23) Develop remote parking areas and shuttle systems to satisfy long-term peak demand during major events, festivals or other activities on the site.

Conformance Analysis: Remote parking lots and a shuttle service are discussed in *Section IV K*.

(24) Preserve and protect Ontario Beach Park and all existing designated parkland areas (including associated parking) and replace parkland lost to development through required New York State parkland alienation procedures.

Conformance Analysis: Refer to *Section IV H*.

(25) Develop the site as a mixed-use, waterfront village community that includes appropriate public amenities and attractions and a strong residential or housing component built around a major public marina facility.

Conformance Analysis: In addition to the analyses above, refer to *Section II*.

(26) Preserve and enhance existing viable businesses and development in the area immediately to the west of the site, fronting along Lake Avenue, in a way that leverages further private development of the site and enhances the overall commercial corridor or Main Street character of Lake Avenue.

Conformance Analysis: Refer to *Section IV M.*

(27) Create an urban design environment within the site that:
- (a) relates building first floors to streets with high levels of transparency, prominent and clearly identifiable entrances and appropriate design details.
- (b) establishes a regular rhythm of windows and bays over building facades.
- (c) terminates the tops of buildings with a combination of recessed wall planes, cornices, roof forms and other architectural details.
- (d) locates parking to the rear of buildings and at the center of blocks.
- (e) maintains waterfront views and vistas down side streets to the river and north on Lake Avenue to the lake.
- (f) incorporates building architectural styles or details that reflect the areas waterfront history and that complement the lighthouse, bath house, carousel and other historic design details from Ontario Beach Park.

(g) incorporates appropriate design elements that reflect an historic amusement park / Ontario Beach Park / maritime theme and identifies a specific waterfront design icon that can be used and repeated in public spaces and featured in building architectural details and styles.

(h) enhances pedestrian movement to and from the lake and the river through wide sidewalks, pedestrian scale street furniture, lighting and signage, prominent landscaping and street trees and other design elements.

(i) develops public pocket parks, open spaces and landscaped areas throughout the site to maintain a park like ambience and provide for public functions/activities within development.

(j) utilizes specific design elements such as landscaping, paving materials, signage and lighting to create gateway experiences for pedestrians, motorists and boaters at major water and land-side entryways into the site.

Conformance Analysis: Proposed zoning regulations are a component of the proposed project. Refer to zoning discussion above for a detailed discussion on design regulations.

3.3.8 Housing Policy

The City's housing policy is currently the only adopted policy that is listed as an implementing policy of the Comprehensive Plan. It was adopted on March 18, 2008. An analysis of the conformance of the proposal with the general objectives of the policy follows.

Policy: The City of Rochester will engage stakeholders and foster public/private partnerships to improve neighborhoods, create healthy real estate markets, stabilize and enhance the tax base, and provide a broad array of housing options to address the needs of diverse households. To accomplish the goals of this Housing Policy, the City shall:

1) Promote rehabilitation, redevelopment and new construction of housing

Conformance Analysis: The construction of market-rate waterfront housing for both owner and tenant occupancy is a component of the proposal. The exact mix of housing type will be determined by the market at the time of construction.

2) Promote home ownership

Conformance Analysis: The construction of market-rate waterfront housing for owner occupancy is a component of the proposal.

3) Support efforts to strengthen the rental market

Conformance Analysis: The construction of market-rate waterfront housing that includes owner-occupied condos and rental apartments is a component of the proposal.

4) Promote housing choice

Conformance Analysis: The construction of market-rate waterfront housing that includes owner-occupied condos and rental apartments is a component of the proposal.

5) *Support the implementation of neighborhood and asset-based planning through interdepartmental collaboration*

Conformance Analysis: The proposed project is the result of years of collaboration interdepartmentally within City Hall and jointly with the public. The project focuses on creating a development plan utilizing the waterfront assets, including Ontario Beach Park, the Genesee River and Lake Ontario.

J. Community Character/Quality of Life

1. Introduction

This section describes existing socioeconomic conditions, general characteristics of existing residential, institutional, commercial and mixed-use buildings, and the historic and recent patterns and trends in land uses at the Port project site and within the surrounding community. The impacts presented in this section are a compilation of impacts cited elsewhere in the DEIS to provide immediate reference to those items that could have impacts on community character and quality of life.

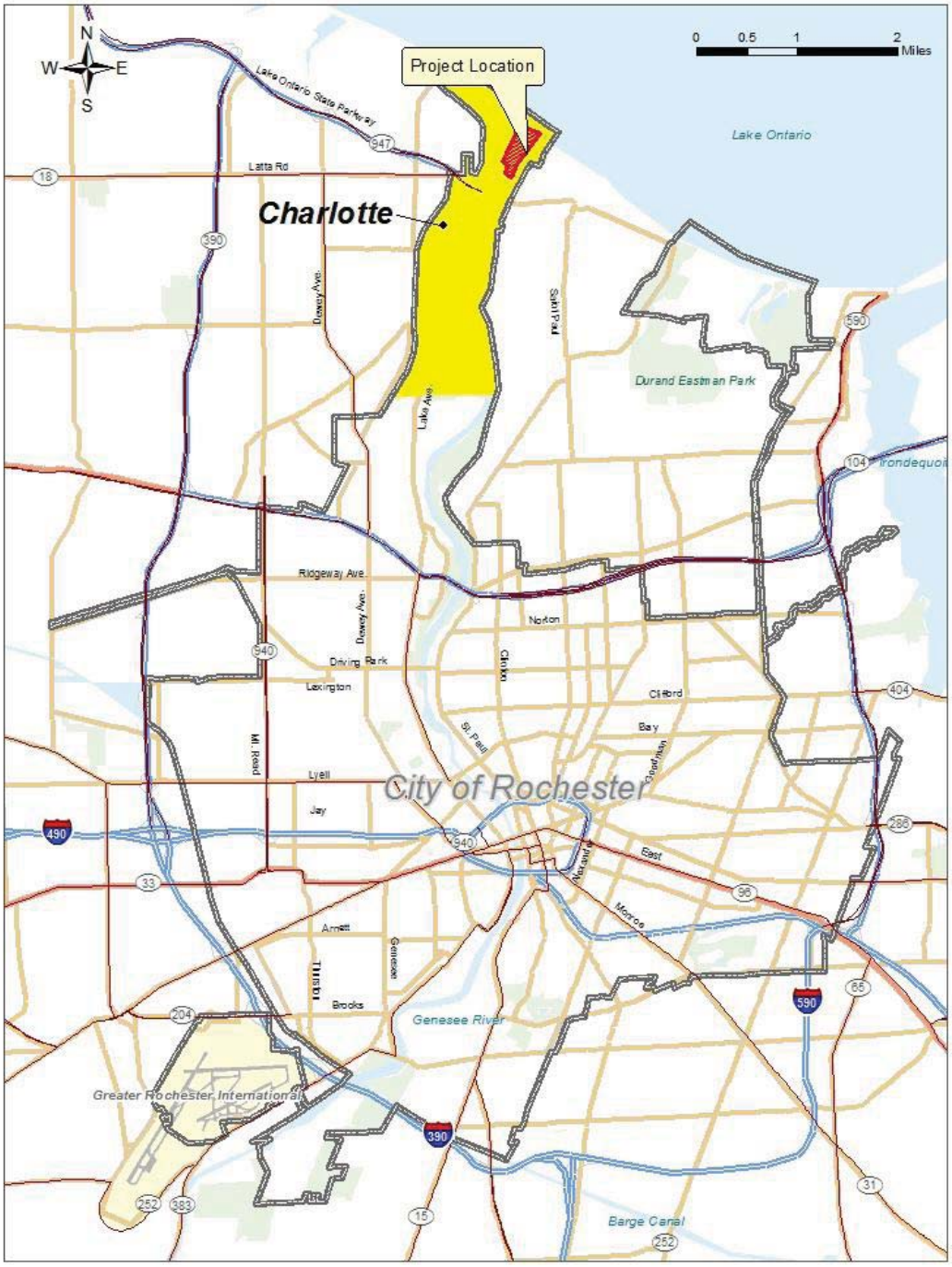
2. Existing Setting

2.1 Location

For the purpose of this section, the study area is defined as being within a one (1) mile radius of the Port project site, extending approximately to Greenleaf Road on the west, and Pattonwood Drive on the south, and bordered by Lake Ontario to the north and the Town of Irondequoit to the east.

The study area is located within what is commonly known as "Charlotte", a portside community since 1792, which was annexed by the City of Rochester in 1916 (see Figure J-1 below).

Figure J-1 Location of Charlotte within the City of Rochester



2.2 Physical Setting/Existing Features

2.2.1 Land Use

The contiguous project site is owned by the City of Rochester and located within the Harbor Village Zoning District (HV). Within the contiguous project site, the existing land uses consist of:

- Parkland used for Ontario Beach Park parking (4640 Lake Avenue).
- Terminal Building with accessory commercial uses (1000 North River Street), including the former fast ferry terminal and link building with accessory commercial uses; a public plaza area including public art, associated public and employee parking lots, and an internal roadway system.
- The Ontario Beach Park Labor Operations Center (4650 and 4600 Lake Avenue), improved with a maintenance barn and chain link fencing, parking, and heavy equipment and outdoor furniture storage areas.
- Public Boat Launch (4630 Lake Avenue) including a four lane boat launch, operator kiosk, boat trailer parking and lighting. The launch also facilitates police, fire rescue, and U.S. Customs and Homeland Security services access to the river and Lake Ontario.
- Public Rights-of-Way (ROW) including Portside Drive, North River and Corrigan Streets, and the Beach Avenue ROW which now provides for pedestrian and bicycle traffic only. The streets feature specialty pavements, sidewalks, decorative pedestrian lighting, benches, and trash receptacles.
- A municipal drive that bisects the Boat Launch parcel and the former railroad property, which connects River Street to North River Street. (Scheduled for replacement as part of the River Street Extension project component.)

The Charlotte Genesee Lighthouse is not part of the contiguous site but is located a short distance to the south and at a higher elevation, at 70 Lighthouse Street. The Lighthouse property is owned by the County of Monroe and has served as a maritime museum and tourist destination. Besides the Light Tower and Light Keeper's Cottage, the parcel is improved with a two-car garage, site lighting and landscape features.

City-owned vacant lots at 4576 and 4580 Lake Avenue will be used for development of the Lighthouse Trail. These lots are currently improved with paved and unpaved parking areas and enhanced with decorative lighting, and a small structure formerly used in correlation with private operation of a miniature golf course.

Immediately surrounding the project area, the existing land uses consist of:

- To the north: the main portion of Ontario Beach Park, including the beach, boardwalk, the Robach Community Center, ball courts, picnic and playground areas, etc.
- To the east: Genesee River and the Town of Irondequoit.
- To the south: a commercial area that includes restaurants, offices, manufacturing, a public city owned and operated marina, and a private marina. The Monroe County River Street pump station and the Coast Guard auxiliary station are located south and east of the project site.
- To the west: a range of commercial uses along Lake Avenue, predominantly bar and restaurant uses, and additional Ontario Beach Park land and facilities. A single-family residential district lies west of the commercial uses on Lake Avenue.

A former railroad line (the Hojack Rail, now owned by CSXT) physically divides this area of the Charlotte community and restricts access opportunities within the study area.

The following subsections provide more information on the above-described land uses.

Residential Use

Within the study area, the primary residential area lies west of Lake Avenue. The area is a predominantly single-family residential neighborhood with some condominium dwellings. A portion of the neighborhood is located within the Beach Avenue Local Preservation District. This residential area is within an R-1 zoning district outside the boundary of the Harbor Village Zoning District.

Primary access to this neighborhood area is via Beach Avenue. In addition to residential homes, this area includes an active rail line, a portion of Ontario Beach Park, the Shore Winds Nursing Home, the Lakeshore Golf Course, and a Town of Greece residential subdivision. Homes range from one to three stories, and from 500 to 7,000 square feet.

Along Beach Avenue, the largest and most expensive homes are found along the lakeshore. Home values range from approximately $200,000 to $2 million South of Beach Avenue, property values generally range from $50,000 to $300,000. Further south in this neighborhood (i.e. south of the railroad and extending to the City limit), property values range from $45,000 to $120,000 and include single family residential, condominium, and low income housing.

Commercial/Retail

The commercial corridor of Lake Avenue, a City arterial, extends south from Ontario Beach to downtown Rochester. This commercial corridor lies west of the project site and within the Harbor Village Zoning District. Within the study area, Lake Avenue is lined with a mix of commercial, professional, retail, restaurant, religious, residential, utility, and manufacturing uses. Those businesses located in closest proximity to the project site along Lake Avenue are primarily restaurants and taverns, but also include Holy Cross Church, the Lake United Methodist Church, a convenience store, funeral home, auto repair and collision shops, tattoo parlors, fish & tackle shop, beauty salons, etc. At the present time, there is no unifying character of architecture, landscape or use that defines the commercial corridor.

Mixed uses are also found directly south of the project site and east of Lake Avenue (within the Harbor Village Zoning District), including restaurants, retail, marine and bait stores, offices, manufacturing, public and private marinas, personal and commercial boat dock facilities, a Monroe County Pure Waters pump station, the U.S. Coast Guard Auxiliary station, boat storage, public parking lots, and single family homes and apartment buildings.

Genesee River and Riverway Trail

East of the project site lies the Genesee River, known by the U.S. Army Corps of Engineers as the Rochester Harbor. The Harbor has one commercial cargo user, Essroc Materials, Inc. (a cement company with offices in Pennsylvania and Canada). Over the last three decades, recreational fishing, primarily for trout and salmon stocked in the Lake, has become an important economic activity on Lake Ontario and the Genesee River. Besides fishing, the Rochester Harbor is also well used by recreational boaters, and boasts a total of four marinas, two yacht clubs, two fuel stations and public and privately owned pump-out stations. The Charlotte Pier, which extends about one-half mile into the lake, is part of the federal navigation channel as designated by the U.S. Army Corps.

The Genesee RiverwayTrail is a trail along the Genesee River used by pedestrians and bikers that extends northerly from Turning Point Park to the Port area. North of Latta Road, near River Street, the trail ceases to follow the Genesee River. Trail design and construction was financed with federal, state transportation and local funds.

Genesee River Eastern Shore/Town of Irondequoit

The City's boundary with the Town of Irondequoit lies approximately 50 feet from the Genesee River's eastern shoreline. Properties immediately adjacent to the river on the east side are primarily located within the Town of Irondequoit. These properties include a US Coast Guard Station, New York State property, Monroe County and City of Rochester municipal facilities, marinas and marina businesses, yacht clubs and restaurants. Beyond the shoreline to the east, single family and multifamily residences are found within the community commonly known as Summerville.

NYS Route 18, the Seaway Trail, located immediately adjacent and parallel to Stutson Street, crosses the Genesee River from the Town of Irondequoit into Charlotte via the Colonel Patrick O'Rorke Bridge. The O'Rorke Bridge is a four-lane lift bridge recently constructed by New York State and Monroe County that meets with the Lake Ontario State Parkway at Lake Avenue.

2.2.2 Historic Land Use

The community of Charlotte, which traces its history back to 1792, has long served as Rochester's port. Charlotte was annexed by the City of Rochester in the early 1900's. Aside from its function as Rochester's harbor, through the years this waterfront area has served as the site of rail lines, seaside resort attractions and trolley facilities, steel mills, ferry services, and waterfront park and recreational amenities. A complete description of the relevant history of the area is provided in *Sections IV H and IV I.*

2.2.3 Physical Features

The Port project site lies east of the Genesee River and south of Lake Ontario. It is bordered on the west by Lake Avenue and on the south by Latta Road. The former Hojack Rail line, now owned by CSXT, physically divides this area of the community.

The topography in the vicinity of the project site is relatively flat, as geologically it was former lake bed. Within the project site, topography varies approximately 30 feet sloping from Lake Avenue easterly to the Genesee River.

The Genesee River is one of two primary access points to Lake Ontario from Monroe County, the other being Irondequoit Bay. Ontario Beach Park, one of two lakefront parks located within the City, is primarily located along the lake shore at the north end of the project site. A beachside boardwalk through Ontario Beach Park connects to a federal

navigation pier (Charlotte Pier) located along the western river edge. The Charlotte Pier extends north into the lake, a distance of approximately one-half mile.

2.2 Population

Rochester's city population according to the 2010 census is approximately 210,565, making it New York's third most populous city. In the 2000 census, the population was 219,773. This is a decrease of 9,208 people or 4.2 percent.

2.3 Community Services/Facilities

Emergency services are provided to the Charlotte community by the Rochester Fire Department, Quinton/Medi 1 Fire Station located at 4090 Lake Avenue, the Rochester Police Department and the Rural/Metro Ambulance Service, an agency on contract with the City. The Monroe County Sheriff shares enforcement authority with the City for Ontario Beach Park. The U.S. Coast Guard, NYS Department of Conservation, and the Monroe County Sheriff have enforcement authority on the water areas.

The Charlotte community is served by the Rochester City School District. Two public schools are located within the community south of the project site and outside the study area: Charlotte Middle School at 4115 Lake Avenue, and School #42 (elementary) at 3330 Lake Avenue. Within the study area, Holy Cross Catholic School is located on Lighthouse Street in close proximity to the project site. Closed by the Diocese of Rochester in 2009, the school will reopen in 2011, providing for up to 460 elementary students.

Several churches are located within the community, four of which are located within the study area, south of the project area:

- Holy Cross Catholic Church at 4492 Lake Avenue;
- Lake United Methodist Church at 4409 Lake Avenue;
- Christian Community Church at 4352 Lake Avenue ; and,
- Lakeside Presbyterian Church at 75 Stutson Street.

Public transportation to the Charlotte community is serviced by Genesee Transportation Services, Route #1. Detailed information on public transportation is provided in *Section IV K*.

There are several subsidized senior housing communities within or near the study area. The complex at 4575 Lake Avenue offers federally subsidized housing for seniors and low income families. The complex at 60 River Street is a publicly assisted senior housing community which has views of the Port site and the Rochester Harbor. The Shore Winds Nursing Home at 425 Beach Avenue provides 229 nursing beds.

Museums in the Charlotte area include the Charlotte Genesee Lighthouse and Maritime Museum at 70 Lighthouse Street and the Charlotte Transportation Museum which has established its interim location at 193 River Street. The Bill Davis Overlook, an outdoor museum celebrating the history of the Genesee River, is located at the northwest corner of the Patrick O'Rorke Memorial Bridge.

Several volunteer organizations operate in the community, including the Charlotte Community Association, Charlotte Youth Athletic Association, the Harbor Merchant's Association, the Ontario Beach Park Program Committee, the Genesee-Charlotte Lighthouse Historical Society, the Charlotte Community Development Corporation, Team Charlotte, and Charlotte Neighborhood PAC Team.

2.4 Community Characteristics

Charlotte's location at the northernmost boundary of the City or Rochester, stretching approximately 3 miles north to south and up to 2/3 miles east to west, has contributed to the character and use of the Charlotte community. Given its strategic location at the mouth of the Genesee River at Lake Ontario and its relatively remote location from the center city, waterfront activity has always been and continues to be integral to development in Charlotte, particularly in those areas north of Stutson Street and the Lake Ontario Parkway.

As the Genesee River is one of only two access points into Lake Ontario within Monroe County, the Port area attracts visitors from near and far. From May through September, hundreds of people descend on the Port area daily to swim, sunbathe, fish, sail, canoe, walk the trails, meander through the park and along the river promenade, visit the Charlotte Genesee Lighthouse and the Ontario Beach Carousel, picnic, dine and take in the cool breeze and scenic vistas. They come by boat, car, bus, bicycle and on foot. Dozens of special events held annually bring thousands more people to the Port for concerts, festivals, jet ski races, regattas, volleyball tournaments, and charity walks. All of this activity contributes to the typical waterfront community characteristics found in the area: highly trafficked roads and walkways, local streets loaded with parked cars, active commerce, noise and bustle all around, and music in the air. The area essentially has a festival-like character from Memorial Day through Labor Day.

Off season, the Port area is much quieter. Visitors come on a daily basis by the dozens not the hundreds….they come to walk, snowshoe, cross country ski, dine, feed the ducks and gulls, and to enjoy the scenic vistas. Locals enjoy the quiet and frequent the local restaurants and taverns that they tend to avoid during the crowded summer season. The busiest time during the off-season typically occurs in February, when the annual Ontario Beach Park Winterfest and Polar Plunge is held (a one day event).

As previously noted, there are several volunteer organizations that serve the Charlotte community. During the 1990's, a consortium of these organizations, working through the City of Rochester Sector Planning initiative, developed a vision statement and Design Guidelines for the Port area to help guide redevelopment of the Charlotte waterfront. The Design Guidelines can be referenced in Appendix S. The vision statement taken from these guidelines reads as follows:

> *Charlotte is a unique blend of neighborhoods in a historic waterfront area forming a partnership among residents, businesses and recreational services into a 'Community That Cares'; thoughtfully developing the natural resources that lie along our riverfront and lakeshore borders with sensitivity to our history and contributions; striving to provide and maintain a safe, clean, family oriented environment for all who live, work and visit.*

For the past several years, the local community groups have organized, sponsored and implemented an annual daylong seminar primarily focused on waterfront revitalization and community safety strategies. Recent accomplishments are recapped at this event.

As illustrated throughout this section, Charlotte is a typical waterfront community, having evolved based on access to the waterfront, changes in technology, and changes in the economy. The City and State adopted Local Waterfront Revitalization Program (LWRP) calls for the Port to be a center for public recreation, tourism and commercial opportunities and is strongly supported by the local community organizations. The primary use of the publicly owned Port site over the last thirty years has centered on serving waterfront recreation.

3. Impacts and Mitigation

The impacts presented below are excerpts from and references to other sections within the EIS document selected based on potential to affect existing community character and quality of life.

3.1 Hydrologic Conditions and Coastal Management

No impacts on community character or quality of life were identified (see *Section IV C*).

3.2 Vegetation and Wildlife

Construction of the Phase 1 Marina basin will create approximately 4.7 additional acres of open water along the Genesee River. This open water area (deep water wetland) will provide additional habitat for waterfowl, fish and wildlife. New fisheries habitat and spawning areas will also be created in the

additional shoreline consisting of stone revetment along the perimeter of the marina basin. No significant habitat or vegetation will be removed by the development of the project, and no impacts have been identified.

Modifications to paved areas will incorporate biological and mechanical storm water quality measures to prevent degradation of water quality in the Genesee River from surface run-off.

Positive impacts to the habitat and wildlife species within the Genesee River and Lake Ontario may occur as a result of research conducted at the proposed Lake Ontario Resource Center and new measures implemented to improve water quality of these waterbodies.

3.3 Air and Noise

3.3.1 Air Quality

During construction of the marina basin, construction vehicles will generate vehicle emissions and dust. The emissions and dust will be at relatively low levels and limited to off-peak period from September to May. Construction work hours will be limited from 7:00 am to 10:00 pm, as allowed by City Code. Construction vehicles will follow a designated construction route and enter and exit the site at a controlled gate. A construction route will be selected to minimize disruption to residential areas. The contractor will have to provide standard dust control practices, such as stabilized construction entrances and use of calcium chloride, water, and power sweepers. Trucks will be required to use a tarp to cover loads of loose material or debris.

No significant changes in ambient air quality have been identified based on the following determinations (see *Section IV E*):

- The greater Rochester area is in attainment with NYSDEC Ambient Air Quality Standards,
- The project does not include any other uses that would significantly contribute new air emissions, such as manufacturing facilities, industrial plants with stacks, or energy facilities that burn oil, gas or coal,
- The current traffic study (*Section IV K*) indicates that traffic and area intersections continue to operate well (Levels of Service C or better), and once the proposed project is in place, traffic operations during the peak traffic hours will generally range from very good to acceptable, and

- It is estimated that air emissions from new boats using the Port area will increase by only about 5 percent above existing levels due to the development of Marina Phase 1 and by an additional 5 percent due to the development of Marina Phase 2 Expansion. This is based on the proportional increase of boat slips available in the Rochester Harbor with the new marina compared to existing conditions.

3.3.2 Odors

The Port site is currently subjected to odor issues from the build-up of decomposing algae biomass and other debris along the shoreline of Ontario Beach north of the project site. Accumulated algae and debris is brought to the grounds of the Labor Operations Center for dewatering and eventual disposal.

The County's current practice for managing the algae/debris will conflict with the proposed development of the Port site for the marina, residential and commercial buildings, and other recreational attractions and amenities designed to bring more people to the waterfront. Algae dewatering is generally associated with unpleasant odors and is unsightly.

The City is continuing to work with the County to devise a strategy which would allow for management of algae/debris at an off-site location rather than at the Labor Operations Center. Once a plan is in place, a site specific evaluation of the environmental effects, including impacts of odor, will be prepared (see *Section IV E*).

No significant impacts have been identified as a result of marina and associated development, including stagnant water, build-up of organic matter/seaweed, restaurants, etc. (see *Section IV E*).

3.3.3 Noise

Once operational, the primary source of noise at the marina site will be boats idling, boats entering/exiting the marina at low speeds, and boats operating at up to full speeds in the adjacent Genesee River and Lake Ontario. No significant noise impacts were determined to be associated with the fast ferry project according to a noise study conducted and included in the 2001 EIS. The noise associated with the boats entering and leaving the proposed marina is expected to be significantly lower than the noise associated with the docking of former fast ferry vessel.

The Port of Rochester currently has a number of operating marinas and broadside docks along the Genesee River, and noise from boating is common to the area. There are currently 838 boat slips at marinas and other public/private docking facilities in the Rochester Harbor. The proposed action will increase the number of boat slips by 85 (or 10 percent) for the Phase 1 Marina and by an additional 72 (or additional 8.5 percent) for the Phase 2 Marina Expansion. As the marina is designed to accommodate larger boats, a proportion of the additional boats drawn to the area by the availability of new slips will be sailboats or relatively quiet yachts. It is estimated that noise from louder motor-type boats using the Port area will increase by about 5 percent above existing levels due to the development of Marina Phase 1 and by an additional 2 to 3 percent due to the development of Marina Phase 2 Expansion.

Loud noise at the marina itself will be mitigated by noise regulations in the marina operations plan which will allow the marina operator to eject noise violators from their slip (either temporarily or permanently). Noise at the marina or in the vicinity will also be subject to the City of Rochester Noise Ordinance which prevents excessive noise in Chapter 75 of the City Code (see *Section IV E*). Noise from boats on the lake is under the jurisdiction of the U.S. Coast Guard and the Monroe County Sheriff and any impacts related to the marina development will be mitigated by the actions of these enforcement entities.

3.4 Aesthetic/Visual Resources

Refer to *Section IV F* for visual assessment demonstrations, impacts and mitigation.

3.5 Historic, Cultural and Archeological Resources

Except for the improvements proposed as part of the Lighthouse Trail project component, historic, cultural and archeological resources will not be impacted by the project. The Lighthouse Trail improvements will add value to the Lighthouse property by improving pedestrian access and creating and enhancing vistas between the waterfront and historic Ontario Beach Carousel (see *Section IV G*).

3.6 Parks, Recreation and Open Space

A summary of proposed changes in parkland is provided below. *Section IV H Parks, Recreation and Open Space* provides a more detailed description of all changes in designated parkland.

- The existing parcel at 1000 North River Street will be subdivided to accommodate construction of the Phase 1 Marina and perimeter amenities, to remove parking associated with the former fast ferry service, and create 5.75 acres of parkland.
- The public boat launch at 4630 Lake Avenue will be relocated off site to provide for construction of the Phase 2 Marina expansion and perimeter amenities. Removal of the launch facility will require alienation of approximately 4 acres of parkland. Mitigation will be achieved through the relocation of the facility elsewhere on the river within the study area. There will be an equal exchange of new parkland for alienated parkland.
- Parking demand created by the marina use will impact the adjacent park parking. Parking spaces at the south end of the parking lot closest to the marina are proposed to be reserved as designated marina parking. These spaces are the least convenient spaces for users of Ontario Beach Park as they are located the farthest distance from the beach and park green space.
- Creation of the Lighthouse Trail is proposed on lands that are currently vacant, commercial land in the HV Harbortown Village District. The conversion of this land to a trail and scenic overlook will create approximately 1.1 acres of new parkland. This parkland will be used in exchange for parkland alienated in the Port area as a result of incremental private development. The trail will offer new and easy-to-access opportunities for looking out to views of the proposed marina basin, the Genesee River, and Lake Ontario. It will provide a new pedestrian connection between the parkland at the Port and the lighthouse.
- As part of the ROW improvements, the Genesee Riverway Trail will be extended along the River Street Extension to link with the proposed marina promenade, and ultimately connect to Ontario Beach Park, the existing river walk and the Charlotte Pier. This improvement will create additional open space as part of the River Street Extension right-of-way.
- Private development on Parcels II and III will require alienation of parkland as a result of the relocation of the Public Boat Launch and the Ontario Beach Park Labor Center. The newly created parkland associated with the marina basin and its associated public amenities, as well as the Lighthouse Trail may be used as the replacement parkland. There will be at least an equal exchange of new parkland for alienated parkland.

3.7 Land Use, Zoning, and Conformance with Officially Adopted Plans

Land use at the Port site will include mixed use commercial, residential and office space in conformance with adopted Plans including the City's Comprehensive Plan, the Renaissance 2010 Plan, the Harbor Village Zoning District (HV), and the Local Waterfront Revitalization Plan. SEQR review of the proposed project must provide analysis of the specific project components. *Section IV I Land Use, Zoning, and Conformance with Officially Adopted Plans* provides an analysis of conformance with these plans and sets forth the basis for local government oversight for all proposed development through the existing Harbor Village Zoning District (HV) requirements and the proposed new *Marina District* Zoning requirements within the HV. The proposed project is in conformance with these plans and in conformance with current zoning.

The proposed changes in land use presented below are permissible changes based within the HV district. Impacts associated with these changes are the subject of this EIS.

- Conversion of approximately 5.5 acres of publicly owned land to private use, including construction of up to 430 residential units housed in multiple story structures not typical within the study area.
- Removal of public parking areas to accommodate the marina, private development, and reuse of the Terminal Building.
- Realignment of public ROW and access to the Terminal Building to accommodate creation of the marina basin.
- Relocation of the Ontario Beach Park Labor Operations Center off site. Proposed alternative sites have been preliminarily identified (see *Section V D*).
- Removal of the Public Boat Launch off site and relocation elsewhere within the study area. Proposed alternative sites have been preliminarily identified (see *Section V F*).

3.8 Transportation and Parking

Traffic volumes and traffic flow patterns will change as a result of the project and public parking capacity will be reduced. *Section IV K Transportation* provides a full assessment of impacts and mitigation.

3.9 Community Services/Facilities

There are no anticipated adverse impacts to Community Services/Facilities as a result of this project. Public services to the existing neighborhoods including street maintenance, trash and leaf removal, street lighting, etc will continue at the same level. The project will create additional need for such public services/facilities within the Port site to accommodate maintenance and operation of the marina, the promenade, the Lighthouse Trail, and to serve the

private mixed use development. The cost for the increase in services will be offset by revenues produced by the marina, property taxes imposed on the private use properties, and from sales tax associated with the increase in commerce.

Vehicular, bicycle and pedestrian access to public facilities within the project boundaries and to the waterfront will be improved through: realignment of existing streets; creation of new streets; creation of the marina promenade; creation of trails and sidewalks that will link the Genesee Riverway Trail, marina promenade, the public sidewalk system, the Beach Avenue promenade, the Charlotte Pier, the Terminal Building, the Charlotte Genesee Lighthouse, Ontario Beach Park and the Ontario Beach Carousel.

Access to the existing Public Boat Launch will be improved as part of the ROW Improvements, in particular, by the River Street Extension, construction of the Genesee Riverway Trail extension, and reconfiguration of the boat launch site.

3.10 Growth Inducing Impacts

If property values on the west side of Lake Avenue increase, the associated increase in equity would provide potential funding for improvement and/or expansion of existing structures. Alternatively, existing homeowners may take advantage of improved property values to relocate to other areas, and existing properties may, in time, be converted to uses of higher value commensurate with the increased property values. Over time, market pressures will contribute to secondary (improvement) projects and a general improvement in the local economic conditions. These effects will be enhanced by the fact that the neighborhood west of Lake Avenue is clearly defined by its borders with Ontario Beach Park and with the existing CSX rail lines, which contributes to a sense of place and identity.

The potential growth described above could impact traffic, utilities, and the character of surrounding neighborhoods. However, it is important to emphasize that any growth-inducing impacts will occur over a relatively long timeframe. As a result, no unexpected or immediate changes to the Charlotte area will occur that would cause conflicts in terms of utilities, traffic, community character, etc. Rather, it is expected that changes to the community will be measured over time, at a relatively slow pace, and will be absorbed without the creation of short-term insufficiencies.

Existing zoning regulations, including the Harbortown Village (HV) District regulations, will provide the proper oversight of the secondary development described above. The HV District promotes limited growth by allowing small-scale (i.e., up to 2,500 square feet) commercial uses by right. Commercial uses greater than 2,500 square feet would require a Variance from the Zoning Board of Appeals with a public hearing.

3.11 Solid Waste

Disturbance of previously buried wastes at the site during construction of the project poses a potential threat to public health as excavation will occur within the delineated area of regulated and slag bearing fills, in addition to several areas of known petroleum contamination. It is unlikely that there would be impact to community character as this threat would be temporary and the site will be inaccessible to the general public.

The Environmental Management Plan (EMP) for the project contains a Community Air Monitoring Plan (CAMP) for earthwork portions of site development. The CAMP includes monitoring for volatile organic compounds (VOCs) as well as for particulate matter generated during excavation. The CAMP details mitigation measures to be implemented in the event that action levels are exceeded. More information is provided in *Section IV O*.

3.12 Public Health and Safety

Section IV P includes a complete discussion of impacts and mitigation related to public health and safety. A summary is provided below.

The basic function of a marina is to provide safe and functional infrastructure for the mooring of recreational vessels. Inherent in the design of marinas is the necessity to provide pedestrian access between fixed landside amenities and floating dock infrastructure that accommodates dynamic water levels, and direct access between fixed landside amenities and boats themselves. In order for the facilities to function properly, typical railing and edge protection solutions are not always possible. Furthermore, access to the water's edge and views of the boats by the non-boating public is a primary goal of the design.

In order to accommodate both the functional requirements of the marina facilities and the safety of pedestrians on the adjacent public promenade, the design will incorporate and comply with the requirements of Americans with Disabilities Act (ADA) 2010 requirements for recreational boating facilities, American Society of Civil Engineers (ASCE) Manual 50, Planning and Design Guidelines for Small Craft Harbors, and the Harbor Development Standards Guidance Manual by the Michigan Department of Natural Resources (MDNR), Parks & Recreation Bureau. Specific strategies that will be incorporated in the design include the following:

- All promenade areas adjacent to exposed edge conditions are level with a maximum cross slope of 2 percent to provide proper drainage, and the width of the promenade is increased to approximately 16 feet in these areas.

- Where possible, the main path of travel of the pedestrian promenade is separated from the edge of the marina basin by a seatwall barrier.
- Pedestrian paths leading to the marina edge promenade are aligned to route cyclists and pedestrians parallel with the basin wall. Where paths lead directly toward the marina edge, landscape treatments and the seatwall provide a visual and physical barrier to direct cyclists and pedestrians away from the marina edge.
- Marina pedestal light bollards visually define the marina edge, and edge protection on exposed vertical areas will comply with ADA requirements.
- Ladders will be provided at regular intervals along vertical walls and on floating docks to provide a means of egress from the water. The bottom rung of each ladder shall extend to two feet below low water datum.
- USCG approved life rings will be provided at regular intervals along vertical walls to provide emergency floatation.

There is a significant positive impact to public safety resulting from the project. Pedestrian and bicycle access in to the Port side will be formalized within the public ROW's, and new off road Genesee Riverway Trail will be constructed to link with Ontario Beach Park.

3.13 Environmental Justice

The Charlotte neighborhood is not an environmental justice area as defined by Commissioner Policy 29. Moreover, the uses proposed will not generate negative environmental impacts that disproportionately impact the Charlotte community. Two potential negative impacts identified by the community (traffic congestion and property value increases) have been addressed by the project and are discussed in detail in *Section IV*.

K. Transportation

Transportation issues for the City of Rochester Port Marina Development Project are addressed in this section. The issues considered include Vehicular Traffic, Parking, Public Transit and Pedestrian and Bicycle Traffic.

As issues of transportation are relevant to the entire project vicinity, it is impractical to perform separate evaluations of the impacts of individual project components, such as the Marina or the Lighthouse Trail. For this reason, this section will be broken down into four sub-sections based on the issues listed above (Vehicular Traffic, Parking, Public Transit and Pedestrian and Bicycle Traffic).

A full Traffic Study ("the Study") completed by Bergmann Associates (*Port of Rochester Traffic and Parking Analysis*, December 2010) is included in Appendix T. As the analysis and evaluation of alternatives progressed following completion of the 2010 Study, the Port project was modified to maximize project benefits and reduce potential impacts. Specifically, Parcel IV was eliminated as a private development parcel, and the proposed development plan (430 residential units and 44,000 square feet of commercial space) was re-designed to take place on Parcels I, II, and III only. The result was that 219 public parking spaces which would have been eliminated by private development on Parcel IV were retained in the area (see *Section IV K 2* for detailed parking information).

An additional project change involved an increase in the number of boat slips proposed in the marina. A complete description of the changes that have occurred since the December 2010 Traffic Study and how they affect transportation issues is provided in the June 2011 supplementary memo from Bergmann Associates included in Appendix U. These updates and changes are reflected in the following narrative wherever they come into play and summarized in Table K-8 in *Section IV K 2*.

1. Vehicular Traffic

1.1 Introduction

The purpose of the vehicular traffic analysis is to document the existing traffic conditions, the estimated future traffic conditions and the expected impacts of the proposed development. The analysis was completed for the worst case scenario – traffic during the peak summer season Friday and Saturday periods. The report also addresses special events at the Port and the Beach.

The analysis of traffic impacts is based on:

1) Data collection including July 2007 intersection counts and July 2010 machine counts;
2) Redevelopment site plan for the Port of Rochester (Appendix L);
3) Meetings with the City of Rochester, Rochester Genesee Regional Transportation Authority (RGRTA) and Ferry Terminal Managers; and,

4) Review of the Port of Rochester SEIS Traffic and Parking Analysis – Traffic Study – Traffic Generation and Distribution dated August 17, 2009 by the City of Rochester and Monroe County Department of Transportation.

1.2 Existing Setting

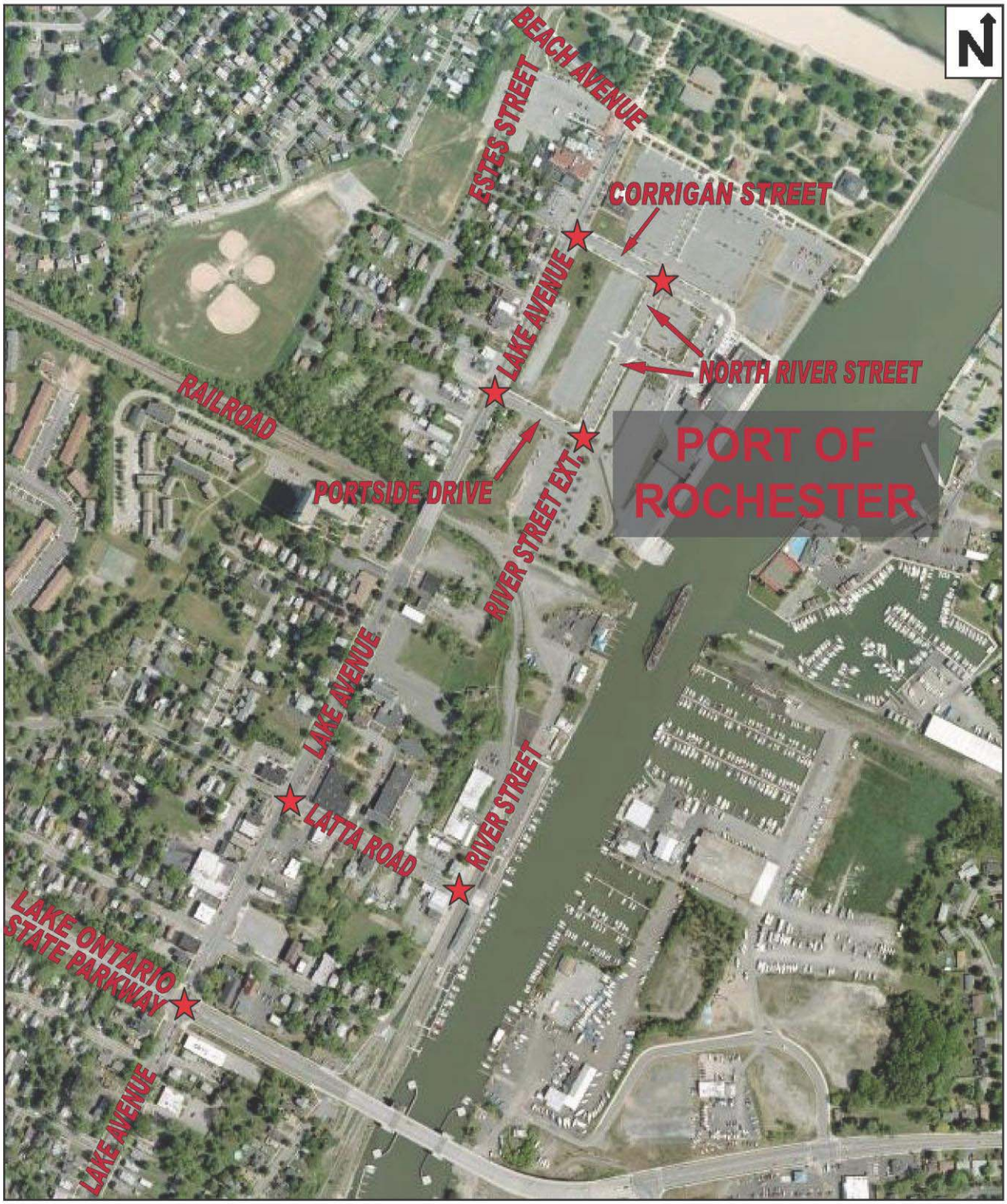
The vehicular traffic study area includes Lake Avenue between Beach Avenue and the Lake Ontario State Parkway (LOSP), Corrigan Street, Portside Drive, North River Street (north of Portside Drive), River Street Extension from south of Portside Drive to River Street, River Street from River Street Extension to Latta Road, Latta Road between Lake Avenue and River Street, and LOSP at Lake Avenue. The traffic study area map is shown on the following page in Figure K-1.

Seven intersections were identified as being affected by the proposed project (see Figure K-1). Four of these have been identified as key study area intersections, and additional detail regarding the key study area intersections is provided in the listing below:

1. *Lake Avenue at Corrigan Street (key study area intersection)*
   Lake Avenue provides one travel lane for northbound traffic and one for southbound traffic. A southbound left turn lane on Lake Avenue is also provided. Corrigan Street provides one lane for eastbound and one lane for westbound traffic. An 80 foot long westbound right turn lane is also provided. Street parking is provided from the end of the turn lane to North River Street. This intersection is controlled by a two phase traffic signal, coordinated along Lake Avenue.

2. *Corrigan Street at North River Street (key study area intersection)*
   Corrigan Street provides two-way traffic flow west of North River Street with one travel lane for eastbound traffic and one for westbound traffic. The formal Corrigan Street right of way does not actually extend to the east beyond North River Street. The segment east of North River Street that might appear to be a part of Corrigan Street is actually part of the private vehicular circulation providing access to the adjoining site and parking areas. This segment has been included in the study nonetheless (it should be noted that the project proposes to extend the existing Corrigan Street right of way into this area east of North River Street). This private segment accommodates one-way westbound traffic originating east of North River Street with one shared thru/right lane and one left turn lane. North River Street provides one lane for northbound and one lane for southbound traffic. Street parking is provided on both sides of the street from the end of the right turn lane at Lake Avenue to the Terminal Building Access Road. The intersection of Corrigan Street with North River Street is a four-way stop.

Figure K-1 Traffic Study Area and Intersections



3. *Lake Avenue at Portside Drive (key study area intersection)*
   Lake Avenue provides one travel lane for northbound traffic and one for southbound traffic. A 175 foot long southbound left turn lane and an approximately 600 foot long northbound right turn lane are also provided on Lake Avenue. Portside Drive intersects Lake Avenue from the east. Portside Drive provides one lane for eastbound and one lane for westbound traffic with some parking provided on the north side of the street. This intersection is controlled by a three phase traffic signal that is part of the coordinated signal system on Lake Avenue.

4. *Portside Drive at North River Street / River Street Extension (key study area intersection)*
   Portside Drive provides two-way traffic flow west of North River Street, with one travel lane for eastbound traffic and one for westbound traffic. North River Street provides one lane for northbound and one lane for southbound traffic. This intersection is an all-way stop controlled intersection.

5. *Lake Avenue at Latta Road*

6. *Latta Road at River Street*

7. *Lake Avenue at the Lake Ontario State Parkway (LOSP)*

Traffic Counts

The July 2007 traffic counts indicate that the overall peak traffic hours occurred in the study area between 6:30 and 7:30 p.m. on Friday and between 3:30 and 4:30 p.m. on Saturday. The key study area intersections (the four intersections on Corrigan Street and Portside Drive) peaked later on Friday night, between 8:30 and 9:30 p.m. Therefore, these four intersections were evaluated during the later Friday peak hour as well as during the 6:30 to 7:30 p.m. peak hour.

In order to update the July 2007 traffic counts, additional counts were conducted in July 2010 by the Monroe County Department of Transportation for the City of Rochester. The 2010 counts were 24-hour machine counts performed at six locations from Friday, July 16th to Sunday, July 25th. The locations of the 2010 traffic counts, are as follows:

1. Beach Avenue, west of Lake Avenue
2. Estes Street, south of Beach Avenue
3. Corrigan Street, east of Lake Avenue
4. North River Street, north of Portside Drive
5. Lake Avenue, south of Lakeland Avenue
6. River Street Extension, north of Latta Road

The 2010 counts were used to adjust the turning volumes at intersections, either up or down based on the difference, and the traffic analysis was updated accordingly.

2010 Existing Traffic Operations

The existing flow of traffic in the study area can be characterized using Level of Service methodology. Level of Service (LOS) is a means of determining the ability of an intersection to accommodate traffic volumes, based on intersection street geometrics, traffic controls and traffic maneuvers. The analysis produces an indication of the Level of Service at which an intersection is functioning or is expected to function for future conditions.

Level of Service is defined by letter characters that range from A to F, with A representing the best traffic operating conditions that have little or no delay and F characterizing the worst conditions that have significant delay. LOS A through D are usually considered acceptable. LOS E is usually considered representative of conditions where improvements are needed. LOS F represents operating conditions that are typically unacceptable, and improvements are needed in the form of traffic control, geometric changes or a combination of both. Version 7.0 of the software program Synchro was utilized to determine the LOS for the subject intersections.

The overall 2010 traffic operations during the peak hours at the signalized intersections are shown in the Table K-1 below. The overall LOS ranges from LOS A to B except at the intersection of Lake Avenue with the Lake Ontario State Parkway (LOSP) where it is D and C during the Friday and Saturday peak hours respectively. Traffic operations at the unsignalized intersections are LOS B or better, as shown in Table K-2 below.

Table K-1 Overall Level of Service at Signalized Intersections (2010 Existing)

SIGNALIZED INTERSECTION	Overall Signalized Intersection LOS - 2010 Existing		
	Fri 6:30-7:30 PM	Fri 8:30-9:30 PM	Sat 3:30-4:30 PM
Lake Avenue at Corrigan Street	A	B	B
Lake Avenue at Portside Drive	A	A	A
Lake Avenue at Latta Road	A	Off Peak	A
Lake Avenue at LOSP	D	Off Peak	C

Table K-2 Overall Level of Service at Un-Signalized Intersections (2010 Existing)

UNSIGNALIZED INTERSECTION	INTERSECTION APPROACH	Unsignalized Intersection Approach LOS - 2010 Existing		
		Fri 6:30-7:30 PM	Fri 8:30-9:30 PM	Sat 3:30-4:30 PM
North River Street at Corrigan Street	Eastbound	A	A	A
	Westbound	A	A	A
	Northbound	B	B	A
	Southbound	A	A	A
River Street Ext. at Portside Drive	Eastbound	A	A	A
	Northbound	A	A	A
	Southbound	A	A	A
River Street at Latta Road	Eastbound	A	Off Peak	A
	Northbound	A		A
	Southbound	A		A

Estimate of 2020 No Build Traffic Operations

Before the impacts of the proposed project can be evaluated, it is important to establish the baseline traffic for the study area in the future, based on normal growth and development continuing at the existing pace. As such, traffic conditions in the year 2020 were projected under the assumption that the proposed project was not developed (No Build).

The 2020 No Build condition is shown in Tables K-3 and K-4 below. The impact of background traffic from 2010 to 2020 is minor, and traffic conditions are anticipated to be very similar to existing conditions. The tables below indicate that one intersection is expected to experience a change in LOS: at the Lake/Corrigan intersection the overall traffic operations are expected to degrade from LOS A to LOS B.

Table K-3 Overall Level of Service at Signalized Intersections (2020 No Build)

SIGNALIZED INTERSECTION	Overall Signalized Intersection LOS - 2020 No Build		
	Fri 6:30-7:30 PM	Fri 8:30-9:30 PM	Sat 3:30-4:30 PM
Lake Avenue at Corrigan Street	B	B	B
Lake Avenue at Portside Drive	A	A	A
Lake Avenue at Latta Road	A	Off Peak	A
Lake Avenue at LOSP	D	Off Peak	C

Table K-4 Overall Level of Service at Un-Signalized Intersections (2020 No Build)

UNSIGNALIZED INTERSECTION	INTERSECTION APPROACH	Unsignalized Intersection Approach LOS - 2020 No Build		
		Fri 6:30-7:30 PM	Fri 8:30-9:30 PM	Sat 3:30-4:30 PM
North River Street at Corrigan Street	Eastbound	A	A	A
	Westbound	A	A	A
	Northbound	B	B	A
	Southbound	A	A	A
River Street Ext. at Portside Drive	Eastbound	A	A	A
	Northbound	A	A	A
	Southbound	A	A	A
River Street at Latta Road	Eastbound	A	Off Peak	A
	Northbound	A		A
	Southbound	A		A

The effect on traffic operations for the Build scenario (i.e. with the proposed project improvements) is presented below in the Impacts and Mitigation section.

1.3 Impacts and Mitigation

New Vehicle Trips

In order to characterize traffic flow and the Level of Service of the various key intersections in the study area once the project is developed, the first step is to estimate the number of new "vehicle trips" that will be added to area roadways. The number of new trips expected within the area is calculated based on the type of new development proposed. In this case, the proposed development includes the Marina, the Lighthouse Trail, the Right-of-Way Improvements, the relocation of the Public Boat Launch, the relocation of the Ontario Beach Park Labor Operations Center, the addition of a Lake Ontario Resource Center, and the Mixed Use Development expected on Parcels I through III.

With regard to the mixed used development, an estimate of 430 residential units (total) was used in the trip generation calculations. The ITE Trip Generation, 8th edition, equation trip rates were used for estimating residential trips, as the equation rates are slightly more conservative than the average ITE rates. The total commercial space expected on the site in Parcels I through III was estimated to be 44,000 square feet, split between 8,000 square feet of restaurants and 36,000 square feet of specialty retail catering to boaters and beach goers. The ITE Trip Generation, 8th edition, average trip rates were used for estimating restaurant and retail trips. A vehicle occupancy rate of 2.5 persons per vehicle (based on a local rate from previous parking survey data) was used to estimate the trips for the reception/banquet halls.

As a result of this modeling, the number of new trips on the roadway system during peak hours which would be generated by proposed development at the Port is shown in Table K-5 below.

Table K-5 New Vehicle Trips

Peak Traffic Hour	Number of New Trips
Friday 6:30 to 7:30 pm *(overall study area)*	552
Friday 8:30 to 9:30 pm *(four Port intersections)*	218
Saturday 3:30 to 4:30 pm *(overall study area)*	562

Although there has been some discussion of the potential for development of a 100 room hotel in the vicinity, no such hotel has been included in this project or in the above estimates of new vehicle trips. As was described in *Section II Project Description*, proposals for the development of such a hotel would require a subsequent supplementary environmental review. However, it may be of interest to note that such a hotel would be anticipated to contribute an additional 60 trips to the number of new trips shown above in the Friday PM peak traffic hour. Presumably, development of such a hotel would also displace a comparable area of anticipated residential or commercial development so that the net increase in the number of new trips in that peak traffic hour would be much smaller than 60.

Trip Distribution

This phase of the traffic analysis involves distributing the projected peak hour traffic generated by the development to the surrounding roadway system. The new traffic was assigned to the roadway system based on existing traffic patterns and population in the area.

The percentage of new traffic traveling on Lake Avenue south of the Port was determined to be 90 percent. The other 10 percent is expected to mainly use Beach Avenue with very minor volume on Corrigan Street west of Lake Avenue.

To access the Port area, it was determined that 5 percent of the new traffic will use Latta Road west of Lake Avenue, 20 percent will use the Lake Ontario State Parkway west of Lake Avenue, 30 percent will use the Lake Ontario State Parkway east of Lake Avenue, and the remaining 35 percent will use Lake Avenue south of the Lake Ontario State Parkway.

The potential for development of a 100-room hotel was referenced above in the discussion of "New Vehicle Trips". Although development of such a facility is not a formal part of this project, gauging the potential effect upon traffic may be useful nonetheless. Ignoring any related, offsetting reduction in the number of new trips estimated above as being generated by commercial and residential development, 60 additional new trips associated with a 100-room hotel would lead to an additional 20 to 30 vehicles per hour when distributed through the road network. This would not have a significant impact upon the results reported below regarding impacts to LOS.

Impacts

The traffic operations under the Build scenario (with the proposed project) during the peak hours are projected to range from very good to acceptable. One exception is the intersection of Lake Avenue with the LOSP where congestion is expected. The County already monitors this intersection regularly with cameras and has implemented a special timing plan for times when the O'Rorke Bridge is up to help prevent gridlock at the Lake/LOSP intersection. A system is in place to detect queuing of eastbound traffic due to the bridge and stop the following movements at the Lake/LOSP intersection: eastbound through and southbound left turn. It will be important for the City to work with Monroe County to implement the optimum timing plan for signal changes in this area, as discussed in the following section on Mitigation.

Tables K-6 and K-7 below summarize the intersection LOS for the 2020 Build condition and with the River Street Extension in place. While some impact is expected, Tables K-6 and K-7 below show there is enough reserve capacity to accommodate new Port development traffic and maintain good to acceptable traffic operation.

Table K-6 Overall Level of Service at Signalized Intersections (2020 Build)

SIGNALIZED INTERSECTION	Overall Intersection LOS - 2020 Build with North River Street		
	Fri 6:30-7:30 PM	Fri 8:30-9:30 PM	Sat 3:30-4:30 PM
Lake Avenue at Corrigan Street	B	B	C
Lake Avenue at Portside Drive	B	A	B
Lake Avenue at Latta Road	A	Off Peak	A
Lake Avenue at LOSP	D	Off Peak	C

Table K-7 Overall Level of Service at Un-Signalized Intersections (2020 Build)

UNSIGNALIZED INTERSECTION	INTERSECTION APPROACH	Intersection Approach LOS - 2020 Build w/ North River Street		
		Fri 6:30-7:30 PM	Fri 8:30-9:30 PM	Sat 3:30-4:30 PM
North River Street at Corrigan Street	Eastbound	B	B	B
	Westbound	B	B	B
	Northbound	C	B	C
	Southbound	B	B	B
River Street Ext. at Portside Drive	Eastbound	D	A	C
	Northbound	B	A	B
	Southbound	A	A	A
River Street at Latta Road	Eastbound	A	Off Peak	A
	Northbound	A		A
	Southbound	A		A

The intersection of Corrigan Street with North River Street is expected to operate well as designed in the Port plan, with one lane in each direction, stop signs on all four approaches and the River Street Extension in place.

Mitigation Measures

Corrigan Street and Portside Drive provide access between Lake Avenue and the new Port development. River Street Extension is an important connector for circulation of traffic and as an emergency access. The proposed River Street Extension will connect North River Street to River Street providing a third signalized exit from the area with the signalized access to Lake Avenue at Latta Road.

In order to mitigate impacts in this area, the North River Street connection between Corrigan Street and Portside Drive will be retained and realigned to accommodate: 1) new development including the marina basin; and, 2) full build vehicle queues on Corrigan Street and Portside Drive.

This circulation plan provides an alternative access route for emergency vehicles as well as additional capacity and circulation for the overall plan. It has been determined that North River Street can be no closer than 250 feet from the east curb line of Lake Avenue along Corrigan Street and no closer than 150 feet along Portside Drive. When traffic is congested on the Corrigan Street exit from the Port area, the River Street Extension will be utilized to access the Portside Drive and Latta Road signals to Lake Avenue.

Timing adjustments for the traffic signals at the intersection of Lake Avenue and the LOSP will be required. The intersection of Lake Avenue with the LOSP is projected to operate the same with or without the North River Street connection. Traffic operations at this intersection will require improvement by implementation of the following signal timing adjustments:

Friday 6:30-7:30 p.m. peak hour

- Take 1 second away from the northbound through phase and give this time to the westbound left turn phase.
- Take 1 second away from the southbound through phase; take 2 seconds away from the westbound through phase; and give 3 seconds of time to the eastbound left turn phase.

Saturday 3:30-4:30 p.m. peak hour

- Take 3 seconds away from the northbound through phase and give this time to the eastbound through phase.
- Take 3 seconds away from the southbound through phase; take 2 seconds away from the westbound through phase; and give 5 seconds of time to the eastbound left turn phase.

Mitigation during Port and Beach Special Events

Special events in the Port and Beach area can be broken into two categories: Level 1 and Level 2. Level 1 events draw up to 4,000 people and 1,700 vehicles, and Level 2 events would draw in excess of 4,000 people. It is anticipated that Level 1 events can be managed using the existing street system patterns. In addition, the City is currently implementing an ITS program for the Port area, as described below. Level 2 events will require close traffic management with possible street closings and the use of frequent bus transit to move visitors in to and out of the Port and beach area.

Level 1 Events – Up to 4,000 People or 1,700 Vehicles

An example of a Level 1 Event is the Wednesday Night concert series during the summer. When parking in the area reaches capacity, traffic congestion occurs and visitors are diverted to remote parking areas. As development in the Port area continues, the need will increase for more remote parking and more frequent transit buses operating on established routes with direct service to the Port.

In order to facilitate the flow of traffic and give notice to approaching visitors that the Port area may be congested, the City is currently developing traffic management plans incorporating the use of additional Intelligent Transportation System (ITS) Tools and Technologies. The City has received funding for and is beginning to implement an ITS program in the Port area, including tools such as fixed and portable Dynamic Message Signs (DMS), Highway Advisory Radio (HAR), and additional closed circuit television (CCTV) systems. These ITS tools will help to manage parking and traffic flow and to provide the advance notice to make the trip easier for visitors. When the parking lots in the immediate Port area become 85 percent occupied, the messages displayed on the DMS will direct motorists to Parking Lot 5 (Estes Street), as well as to remote lots on Dewey Avenue and perhaps Ling Road (see further discussion of Parking in the next subsection).

Fixed or portable DMS will also be utilized as necessary to improve the flow of traffic exiting the Port after summer beach events.

The CCTV systems can be easily installed in the Port area. Advance DMS signs on Lake Ontario State Parkway, Lake Avenue and Pattonwood Drive will be installed to provide the information necessary to guide visitors to the remote parking areas and to manage the Port area traffic flow.

Currently, the Monroe County Department of Transportation operates and maintains a coordinated signal system on Lake Avenue in the Charlotte area. Also, the County operates and maintains CCTV cameras at the intersections of 1) Lake Avenue and the Lake Ontario State Parkway/ Pattonwood Drive and 2) Pattonwood Drive and Thomas Avenue. These cameras are used to monitor traffic flow in the corridor and the O'Rorke lift bridge. The cameras are monitored both at the Regional Traffic Operations Center (RTOC) located on Scottsville Road and at the O'Rorke bridge (during times that the bridge is staffed).

A key operational component of this plan will be to coordinate forces from police agencies, City Port staff and Special events staff, Monroe County DOT and Parks Departments, and NYSDOT, to plan for and manage traffic and parking during events. This coordination can be implemented with the issuance of event permits and monitored as events occur, with debriefs to improve this operation.

Level 2 Events – More than 4,000 People

Events such as HarborFest are categorized as Level 2 events and will require special traffic and parking management plans. All Level 2 events begin with a permitting process initiated through the Monroe County Parks Department. Upon receipt of the request, the Parks Department coordinates with the involved agencies through the City of Rochester Special Events office. Coordination involves establishment of traffic and parking needs and traffic and parking management plans. Police presence will be required to help direct traffic.

The use of Intelligent Transportation System Tools and Technologies will also be implemented during Level 2 events. Tools such as fixed and portable Dynamic Message Signs, Highway Advisory Radio, and additional CCTV systems will help to manage parking and traffic flow and to provide the advance notice to motorists and transit users of traffic restrictions, parking availability and real time transit schedules.

2. Parking Management

2.1 Introduction

This section provides a summary of the full parking study (see 2010 Port of Rochester Traffic and Parking Analysis in Appendix T). The purpose of the parking analysis is to document the existing conditions, the estimated future conditions and the expected impacts of the proposed development on parking conditions at the Port. The analysis was completed for peak parking periods on Friday and Saturday during the summer season, and also addresses Port area and Beach special events. Potential mitigation measures are identified.

Parking at the Port is discussed in terms of "public parking" and "private parking." At the current time, nearly all of the parking in the Port area (as described in this DEIS) is deemed public parking. However, once private development occurs on Parcels I, II and III, there will be new "private" parking areas at the Port that are reserved for residents or patrons of commercial areas. In addition, some parking spaces may be restricted for users of the Terminal Building. A detailed description of the changes to parking including changes in public and private parking availability is provided below in sub-section 2.3.

For ease of reading, the most significant aspects of the parking changes associated with the Port project are summarized below. Details as to how these parking amounts were arrived at are provided in the sub-sections which follow.

- A total of 1,187 public parking spaces are currently available in the Port area (not including parking at the Public Boat Launch or extra parking at the soccer fields on Estes Street)
- A total of 741 public parking spaces will remain after Full Build Out of the Port project.
- An additional 1,085 private parking spaces will be available after Full Build Out of the Port project.
- The total public and private parking spaces available after Full Build Out of the Port project will be 1,826.
- The elimination of Parcel IV from the Port project retained 219 public parking spaces adjacent to Ontario Beach Park that otherwise would have been lost.
- Analysis of parking demand versus availability indicates that parking deficits will occur in the summer during special events, with relatively small deficits indicated for the Saturday afternoon peak hour and no parking deficit for the Friday evening peak hour. Conditions and assumptions behind this analysis are provided in sub-section 2.3 and in Appendices T and U. Mitigation measures are described in sub-section 2.4.

These above parking numbers are also shown in Table K-8 which summarizes all of the changes since the December 2010 Traffic Study was completed.

Table K-8
Project Changes Which Followed the 2010 Traffic & Parking Analysis

Project Parameter	As earlier proposed and contemplated in the December 2010 Traffic Study	As modified after the 2010 Study to maximize benefits and reduce impacts	Comment
Number of slips			Additional slips will generate additional traffic and additional demand for parking.
Phase I	75 to 80	85	
Phase II (or Full Build Out)	118	157	
Development Parcels	Parcels I - IV	Parcels I - III	Parcel IV is no longer being proposed as a development site. Impacts associated with development of Parcel IV included visual, parkland alienation and loss of existing parking spaces.
Development Program			The development program remains unchanged, despite the exclusion of Parcel IV. The level of development that had been proposed to take place upon Parcels I – IV, is now being proposed to take place on Parcels I – III only.
Residential	430 units	430 units	
Commercial	44,000 SF	44,000 SF	
Existing public parking spaces currently	1,187	1,187	A total of 16 parking areas provide 1,187 spaces (see Figure K-2)
Existing public parking spaces lost	746	527	Development on Parcel IV was anticipated to involve the loss of 219 existing spaces. That will now be avoided
Street-side parking gained	75	81	75 spaces will be constructed on River Street. An additional 6 spaces will now be constructed on Corrigan as well.
Total public parking capacity	516	741	Fewer public parking spaces are eliminated, and more side street parking is gained.
Parcel parking configuration	IV included	IV excluded	Parking that would have been provided on Parcels I – IV will now be provided on Parcels I – III.
New private development parcel parking capacity	1,060	1,085	Parking to be provided on Parcels I – III has been increased to correspond to the demand associated with development on those parcels.

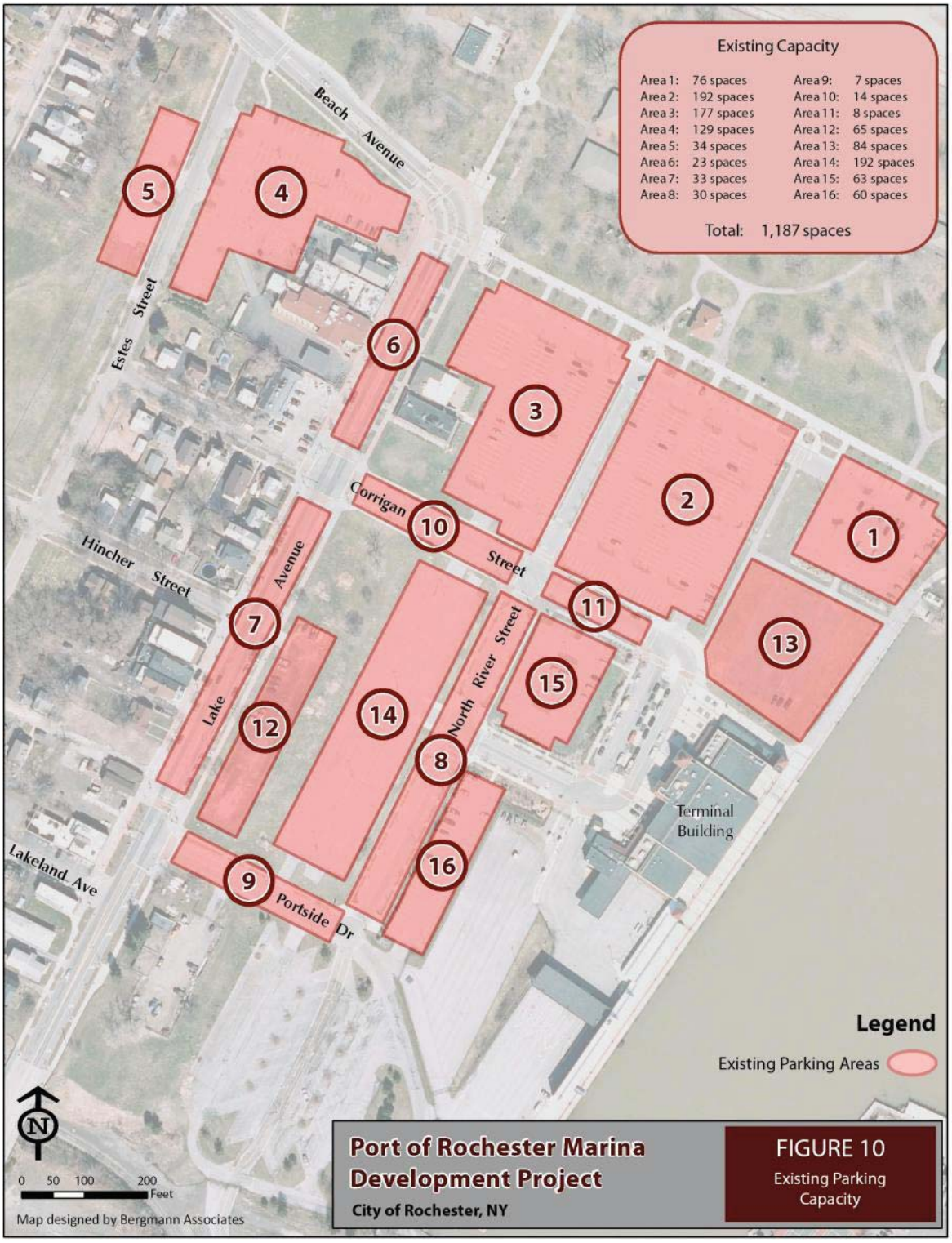
2.2 Existing Setting – Public Parking Supply and Demand

A total of 16 public parking areas, providing 1,187 spaces, have been identified in the Port of Rochester/Lake Ontario Beach Park area. Each area has been assigned a number for data recording purposes. These can be seen in the Figure K-2 Existing Parking Capacity (a full format version has also been included in the Study in Appendix T).

The numbers of parking spaces found to exist within each of the 16 areas shown on Figure K-2 are as follows:

Area 1:	76	Area 5:	34	Area 9:	7	Area 13:	84
Area 2:	192	Area 6:	23	Area 10:	14	Area 14:	192
Area 3:	177	Area 7:	33	Area 11:	8	Area 15:	63
Area 4:	129	Area 8:	30	Area 12:	65	Area 16:	60

Figure K-2 Existing Parking Capacity



The occupancy level of these public parking areas was documented on Friday July 20, 2007, between the hours of 6:30 and 9:30 pm, and on Saturday July 21, 2007, between the hours of 2:00 and 5:00 pm. The number of parked vehicles was documented in each parking area once every half hour for each three hour study period. The capacity (marked or striped parking spaces) of each parking area was also documented. Table K-9, Existing Parking Occupancy Summary, summarizes the documented parking demands and calculated occupancy percentages.

Table K-9
Existing Parking Occupancy Summary

Parking Area #	Parking Area Capacity	Friday Night Average		Saturday Average		Friday Night Maximum		Saturday Maximum	
		Vehicles Parked	% Occupancy	Vehicles Parked	% Occupancy	Vehicles Parked	% Occupancy	Vehicles Parked	% Occupancy
1	76	52	68%	64	84%	66	87%	74	97%
2	192	95	49%	191	99%	115	60%	211	110%
3	177	66	37%	153	86%	81	46%	175	99%
4	129	112	87%	127	98%	129	100%	129	100%
5	34	24	7%	39	11%	37	10%	43	12%
6	23	15	65%	15	65%	17	74%	20	87%
7	33	29	88%	18	55%	33	100%	19	58%
8	30	0	0%	1	3%	1	3%	2	7%
9	7	0	0%	0	0%	0	0%	0	0%
10	14	5	36%	0	0%	6	43%	0	0%
11	8	3	38%	2	25%	6	75%	3	38%
12	65	63	97%	4	6%	88	135%	10	15%
13	84	14	17%	10	12%	16	19%	13	15%
14	192	14	7%	12	6%	26	14%	16	8%
15	63	12	19%	6	10%	21	33%	9	14%
16	60	15	25%	10	17%	18	30%	12	20%
All Parking Areas	1,187	519	34%	652	43%	660	41%	736	47%

Table Key:
- Less than 85% occupancy
- Greater than 85%, Less than 100% occupancy
- Greater than 100% occupancy

The results summarized in the foregoing table were used to assess the existing demand for parking in the study area. The results indicate that the highest public parking demand on Friday nights occurs in Parking Areas 4, 7 and 12. Parking Area 4 is a lot located immediately south of Beach Avenue with access to Estes Street. Parking Area 7 is designated as the on-street parking on Lake Avenue between Corrigan Street and Portside Drive. Parking Area 12 is the unpaved lot immediately east of Lake Avenue, north of Portside Drive. Parking Areas 4, 7 and 12 are utilized on Friday nights mainly due to the restaurants along the west side of Lake Avenue. Among the areas experiencing relatively low occupancy was the Estes Street parking lot (Area 5) which contributes 34 parking spaces (within the paved area) and spaces on Portside Drive (Area 9), spaces on Corrigan Street (Area 10) and spaces in the vicinity of North River Street (Area 8) .

The greatest demand for public parking on Saturday occurs in Parking Areas 1, 2, 3, 4, and 6, as these areas provide the closest beach-front parking. Parking Areas 1, 2 and 3 are the lots nearest the beach, located east of Lake Avenue. Parking Area 4 is a lot located immediately south of Beach Avenue and west of Lake Avenue with access to Estes Street. Parking Area 6 is the on-street parking on Lake Avenue, north of Corrigan Street.

As indicated in Table K-9, the maximum aggregate demand for parking was found to be 660 spaces on Friday nights and 736 spaces on Saturday nights. To this documented existing demand, the Study adds anticipated demand associated with the Roger Robach Community Center located at 180 Beach Avenue. The Robach Center has been renovated and is available to rent for events such as local meetings, picnics, parties and weddings. The Study assumes a maximum of 150 spaces required to support Robach Center use during peak summer time periods.

To the sum of the documented demand and that anticipated in association with use of the Robach Center, the Study has applied a 100 space credit to account for variables associated with use of the Robach Center, to account for use of public transportation and to account for average summer time multi-use peaking and multi-use sharing (see Table K-10). As a consequence, the resulting estimate of existing demand, including that associated with the Robach Center, that has been relied upon in the Study to identify and evaluate impacts is: a maximum of 710 spaces on Friday nights (660 + 150 – 100) and a maximum of 786 spaces on Saturday nights (736 + 150 – 100).

Table K-10 Existing Public Parking Needs

Port Area, Public Parking	*Friday Peak*	*Saturday Peak*
Occupancy - Parking Areas	660	736
Robach Center Maximum	150	150
Overall Peaking/Sharing Credit	(100)	(100)
Parking Needs	**710**	**786**

2.3 Impacts

Net Change in Available Public Parking Spaces

Parking demand and impacts have been analyzed for two development stages: all project components, identified herein as "Full Build Development," and an intermediate stage of development identified below as "Marina Phase One." The scope of Marina Phase One is similar, but not identical, to the Phase 1 scope defined in the Project Description found in *Section II* of this document. In the discussion of potential parking impacts which follows, "Marina Phase One" includes all those components and activities identified in the Project Description as Phase 1 Public Improvements as well as the succeeding private development that could take place upon Parcel I. Development of Parcels II and III have not been included in this intermediate stage as neither could proceed in advance of the completion of the activities identified in the Project Description as being within Phase 2. "Full Build Development" includes all development and activities included in "Marina Phase One" together will all those identified in the Project Description as Phase 2 Public Improvements, as well as all succeeding private development that could take place on Parcels II and III.

In summary, the Marina Phase One stage of development includes:

- Phase 1 Public Improvements:
  - Phase 1 Marina (85 slips);
  - Right-of-Way Improvements;
  - Lighthouse Trail;
  - Lake Ontario Resource Center (LORC); and,

- Private Development on Parcel I
  - For purposes of this parking analysis, the development assumed on Parcel I was of 60 condominiums, 86 apartments, a 4,000 square foot restaurant and 16,000 square feet of specialty retail.

The Full Build Development stage includes:

- Phase 1 Public Improvements:
  - Phase 1 Marina (85 slips);
  - Right-of-Way Improvements;
  - Lighthouse Trail;
  - Lake Ontario Resource Center (LORC);

- Phase 2 Public Improvements:
  - Phase 2 Marina Expansion (to a total of 157 slips);
  - Relocation of the Public Boat Launch;
  - Relocation of the Ontario Beach Park Labor Operations Center; and,

- Private Development on Parcels I, II and III.
  - For purposes of this parking analysis, the aggregate development of 260 condominiums, 170 apartments, restaurants occupying 8,000 square feet, and specialty retail occupying 36,000 square feet on Parcels I, II and III has been assumed.

Regarding changes since completion of the 2010 Traffic and Parking Analysis found in Appendix T, development upon Parcel IV has not been included above in either Marina Phase One or Full Build Development as it is no longer a part of the preferred alternative being evaluated. However, as the 2010 Study preceded the exclusion of development upon Parcel IV, that analysis does include Parcel IV development in its analysis of Full Build Development. With respect to parking, as the anticipated level of private development remains unchanged and would now take place upon three parcels rather than four, and as the commitment for that private development to construct sufficient parking to meet its needs remains in place, the principal effect of Parcel IV's exclusion is avoidance of the loss of existing parking now located on that Parcel (Parking Areas 2 and 3).

In addition, the number of anticipated boat slips has changed since completion of the 2010 Traffic and Parking Analysis. The 2010 Study reflected earlier plans which called for the Phase 1 development of 75 to 80 slips and for a Phase 2 Marina Expansion increasing the number of slips to 118. In fact, it should be recognized that some flexibility always exists with respect to how many slips might be accommodated within a given marina basin. Some uncertainty regarding the precise number being provided is also rooted in the distribution of slip sizes, as when one large slip also functions as two smaller slips. This flexibility and these uncertainties aside, in order to maximize the project's economic feasibility, it is now proposed to provide 85 slips (rather than 75 to 80) in the Phase 1 Marina and to provide a total of 157 slips (rather than 118) in the expanded basin to be completed in Phase 2. From a parking perspective, the development of 85 slips rather than 75-80 in the Phase 1 Marina would lead to the need for an additional parking space or two. Development of 157 slips

rather than 118 in the Full Build Development would lead to a need for an additional 10 parking spaces.

The Port area development plan was reviewed and overlaid onto existing conditions to determine which of the existing parking areas will be impacted or eliminated by each stage of the plan. As was shown in Table K-9, there are currently a total of 1,187 parking spaces in the Port area. As illustrated below in Table K-11, the project will result in the loss of 527 existing public spaces as a result of the development associated with "Marina Phase One." An additional 81 spaces will be added to offset some of these lost spaces: 75 on River Street Extension and 6 on Corrigan Street. Taking these into account, the net loss is 446 spaces, which leaves 741 spaces available (1,187 – 446 = 741).

Table K-11 Availability of Public Parking Spaces

	Development Stage		
Parking Area	**Existing**	**Marina Phase One**	**Full Build Development**
Area 1/C	76	50	50
Area 2	192	192	192
Area 3	177	177	177
Area 4	129	129	129
Area 5	34	34	34
Area 6	23	23	23
Area 7	33	33	33
Area 8	30	15	15
Area 9	7	7	7
Area 10	14	0	0
Area 11	8	0	0
Area 12	65	0	0
Area 13	84	0	0
Area 14	192	0	0
Area 15	63	0	0
Area 16	60	0	0
Subtotal	**1,187**	**660**	**660**
Loss	***NA***	***-527***	***-527***
New Parking Area 17 – River Street	0	75	75
New Parking Area 18 – Corrigan Street	0	6	6
Combined Total	**1,187**	**741**	**741**
Net Loss	***NA***	***-446***	***-446***

In Marina Phase One, Parking Areas 10 through 16 will lose a total of 486 parking spaces, while portions of Parking Areas 1 and 8 will lose 41 parking spaces. The loss in parking spaces is a result of the removal of Parking Areas 10, 11, 12, 14, 15, and 16, as well as changes to Parking Areas 1, 8, and 13. Parking Area 1, now referred to as Parking Area C, will be reconstructed and reduced in size from 76 spaces to 50 spaces. The redeveloped Parking Area C will remain public parking. Parking Area 13, now referred to as Parcel T, will be reconstructed, and it is assumed that this lot will be restricted for Terminal Building parking. This restricted parking has not been included in Table K-12. Parking Area 8, along North River Street, will be reduced from 30 to 15 spaces when reconstructed in its proposed new alignment.

As Table K-11 also shows, no additional loss of parking is anticipated in the Full Build Development. However, the 2010 Traffic and Parking Analysis was completed when development on Parcel IV was still being proposed, estimating the loss of an additional 219 spaces in the Full Build Development (the loss of 112 existing spaces in Parking Area 2 and the loss of an additional 107 spaces in Parking Area 3). This additional loss of 219 spaces was the direct result of development on Parcel IV. This additional loss is among the reasons that the alternative calling for private development on Parcel IV was abandoned and that a modified alternative focusing all private development upon Parcels I, II and III is now the preferred alternative.

Private & Public Parking Demand and Availability – Friday and Saturday Peak Periods

The development of the marina, the new private development, and new and existing uses within the Terminal Building will create a demand for parking spaces in the area. Table K-12 summarizes the new parking demand anticipated at the completion of the Marina Phase One stage of development, and Table K-13 summarizes new parking demand anticipated at the completion of Full Build Development.

The following assumptions have been made for this analysis:

- Each private development parcel will construct new on-site parking sufficient to meet its needs.
- All of the new parking created for the private development parcels will be fully utilized and will not be available to the public.
- Parking spaces associated with the Public Boat Launch and the Ontario Beach Park Labor Operations Center will be lost and redeveloped elsewhere off-site when the facilities themselves are successfully relocated.

Table K-12
New Parking Generation – Marina Phase One

DEVELOPMENT ACTIVITY	SIZE	RATE	PARKING SPACES	AREA
Terminal Building				
Pier 45 Restaurant	8,500 SF (approx)		113	
Waterside Room/Dock/Ship Service	150 Patrons		70	
Potential Future Uses – 1st Floor	5 – 7,200 SF		20	
Potential Future Uses – 2nd Floor	5 – 6,000 SF		18	
US Customs City	12 Employees (approx)		25	
SUNY Brockport	Link Building		20	
		Gross Subtotal	266	
		Credit	(66) [1]	
		Net Subtotal	**200**	**200**
Marina Phase I				
Slips	85		**10**	**10**
Development Parcel I [2]				
Apartments	86 Units	1.4 per Unit	121	
Condominiums	60 Units	1.8 per Unit	108	
High Turnover (Sit Down) Restaurant	4,000 SF	13.3 per KSF	53	
Specialty Retail	16,000 SF	2.0 per KSF	32	
		Subtotal	**314**	**314**
			Combined Total	**524**

Note 1: Not all 266 spaces are likely to be required for the Terminal because this would be a "perfect storm" with all banquet halls, restaurants and other businesses operating at peak conditions at the same time. Therefore, a reasonable estimate of 200 is used.

Note 2: The development shown for Parcel I is one of many different possible scenarios. While the precise configuration may vary, the analysis assumes that all parking demand generated upon Parcel I will be satisfied by the simultaneous development of a sufficient number of new spaces.

Table K-13
New Parking Generation – Full Build Development

DEVELOPMENT ACTIVITY	SIZE	RATE	PARKING SPACES	AREA
Terminal Building				
Pier 45 Restaurant	8,500 SF (approx)		113	
Waterside Room/Dock/Ship Service	150 Patrons		70	
Potential Future Uses – 1st Floor	5 – 7,200 SF		20	
Potential Future Uses – 2nd Floor	5 – 6,000 SF		18	
US Customs City	12 Employees (approx)		25	
SUNY Brockport	Link Building		20	
		Gross Subtotal	266	
		Credit	(66) [1]	
		Net Subtotal	**200**	**200**
Marina Phase I and Phase II Expansion				
Slips	157		**20**	**20**
Development on Parcels I, II and III				
Apartments	170 Units	1.4 per Unit	239	
Condominiums	260 Units	1.8 per Unit	468	
High Turnover (Sit Down) Restaurant	8,000 SF	13.3 per KSF	106	
Specialty Retail	36,000 SF	2.0 per KSF	72	
		Subtotal	**885**	**885**
			Combined Total	**1,105**

Note 1: Not all 266 spaces are likely to be required for the Terminal because this would be a "perfect storm" with all banquet halls, restaurants and other businesses operating at peak conditions at the same time. Therefore, a reasonable estimate of 200 is used.

In summary, the Marina Phase One development will generate the need for a total of 524 parking spaces and the Full Build Development will generate the need for a total of 1,105 parking spaces.

Tables K-14 and K-15 below present an overall picture of how the available parking supply in the Port area will compare to the parking demand upon completion of both the Phase One development and the Full Build Development. Both existing public parking needs and new parking needs generated by the development are taken into account. The parking supply takes into account the public parking spaces that will remain after the proposed improvements are constructed, as well as new parking spaces to be developed on private development parcels and other restricted spaces to be made available to satisfy the demands associated with the Terminal Building.

Table K-14
Overall Parking Impacts – Marina Phase One

Port Area Parking	***Friday Peak***	***Saturday Peak***
Existing Public Parking Needs	710	786
Remaining Public Parking Capacity	741	741
Public Parking Surplus/Deficit	**+31**	**(45)**
New Private Parking Needs [1]	524	524
Restricted Parking Capacity	200	200
New Private Parking Capacity on Parcel I	314	314
Private Parking Surplus/Deficit	**(10)**	**(10)**
Cumulative Surplus/Deficit [2]	**+21**	**(55)**

Note 1: The peak for the new demand shown has not been characterized. The demand that is shown is not necessarily the demand that would be experienced on a Friday or Saturday evening.
Note 2: Assuming the peak public demand and peak for new demands coincide.

Table K-15
Overall Parking Impacts – Full Build Development

Port Area Parking	*Friday Peak*	*Saturday Peak*
Existing Public Parking Needs	710	786
Remaining Public Parking Capacity	741	741
Public Parking Surplus/Deficit	**+31**	**(45)**
New Private Parking Needs [1]	1105	1105
Restricted Parking Capacity	200	200
New Private Parking Capacity on Parcels I - III	885	885
Private Parking Surplus/Deficit	**(20)**	**(20)**
Cumulative Surplus/Deficit [2]	**+11**	**(65)**

Note 1: The peak for the new demand shown has not been characterized. The demand that is shown is not necessarily the demand that would be experienced on a Friday or Saturday evening.
Note 2: Assuming the peak public demand and peak for new demands coincide.

As the foregoing tables show, when compared to the existing conditions, it is expected that the completion of Marina Phase One and the Full Build Development will result in a parking deficit of 65 spaces during the summer Saturday peak time period. No parking deficit is expected to occur during the summer Friday peak time period. Further details regarding the parking needs, availability and potential restrictions are provided in the 2010 Port of Rochester Traffic and Parking Analysis included in Appendix T.

Public Parking Demand and Availability – Port and Beach Special Events

Special events in the Port and beach area can be broken into two categories: Level 1 and Level 2. Compared to the normal summertime Friday and Saturday peak parking demand for about 700 to 800 vehicles, Level 1 events draw up to 4,000 people and 1,700 vehicles, and Level 2 events are larger events that draw in excess of 4,000 people. It is anticipated that Level 1 events can be managed using the existing street system patterns, while Level 2 events will require special traffic and parking management plans.

Level 1 Events

Peak parking demand during Level 1 events, such as the Wednesday Night Concert Series, was determined to be approximately 1,700 spaces based upon on-site observations. In the past, arrangements have been made to use the soccer fields located to the west of Estes Street for overflow parking on Wednesday nights. If this practice continues, it will reduce the Wednesday night deficits by approximately 330 spaces as shown below. Also, if space is available, some overflow is absorbed by the boat launch. Expected parking utilization is as shown in Table K-16 below.

Table K-16 Wednesday Night Concert Series
Marina Phase One and Full Build Development

Public Capacity	741 spaces
Estes Street Soccer Fields	330 spaces
Concert Night Need	-1,700 spaces
Surplus/Deficit	**-635 spaces**

Even with the Estes Street soccer fields, a significant deficit in available parking during the Wednesday Night Concert Series is indicated for the proposed development. As development occurs in the Port area, the need will increase for more remote parking and more frequent transit buses operating on established routes with direct service to the Port.

Potential off-site parking locations have been initially identified. There were two important factors in the consideration of off-site parking locations. The first was that the off-site location be along a current a public transportation (bus) route. The second was that the location be within close proximity to the railroad corridor which runs between the Port site and the Dewey Avenue area west of the Port site (this railroad is the CSX line that is crosses River Street in the Port area.) This rail line, which is no longer in active use, is considered significant due to the future possibility that the City could obtain a right-of-way along it and use it as a direct corridor into the Port area. More information on potential off-site parking locations is provided in the Mitigation section below.

Level 2 Events

Events such as HarborFest are categorized as Level 2 events and will require special traffic and parking management plans. A description of this planning process and parking measures is provided in the Mitigation section below.

2.4 Mitigation

As described in the preceding sections, the proposed development of the Port area is expected to result in some parking deficits. It is important to note that these parking deficits will be largely confined to the summer months and will only occur at specific times (smaller deficits on Saturdays and larger deficits during special events). Mitigation measures are under consideration by the City, and include offsite parking with bus service to the Port area, use of ITS devices and Parking Management. The offsite parking areas under consideration are located on existing Rochester Genesee Regional Transportation Authority Regional Transit Service (RTS) transit routes.

Private Development on Parcel IV

As previously described, an alternative that was given serious consideration during the planning process included private development on Parcel IV at 4640 Lake Avenue, as well as Parcels I, II and III (see *Section V H* for more information on this alternative).

Private development upon Parcel IV would affect existing public parking now provided in Parking Areas 2 and 3, resulting in the loss of an additional 219 spaces (112 in Parking Area 2 and 107 in Parking Area 3). As private development on Parcel IV was still being considered in 2010, the 2010 Port of Rochester Traffic and Parking Analysis (Appendix T) characterizes losses and their impact upon parking in the area. In order to mitigate or avoid these and other impacts, private development on Parcel IV has since been eliminated from the project.

ITS Devices and Parking Management

In order to facilitate the flow of traffic and give notice to approaching visitors that the Port area may be congested, the City is currently developing traffic management plans incorporating the use of additional Intelligent Transportation System (ITS) Tools and Technologies. The City has received funding for and is beginning to implement an ITS program in the Port area, including tools such as fixed and portable Dynamic Message Signs (DMS), Highway Advisory Radio (HAR), and additional closed circuit television (CCTV) systems. These ITS tools will help to manage parking and traffic flow and to provide the advance notice to make the trip easier for visitors. When the parking lots in the immediate Port area become 85 percent occupied, the messages displayed on the DMS will direct motorists to remote parking lots (see further discussion in the next subsection).

A key operational component of this plan will be to coordinate forces from the police agencies, City Port staff and Special events staff, County DOT and Parks Departments, and NYSDOT, to plan for and manage traffic and parking during events. This coordination can be implemented with the issuance of event permits and monitored as events occur, with debriefs to improve this operation.

All Level 2 Events begin with a Permitting process initiated through the Monroe County Parks Department. Upon receipt of the request, the Parks Department coordinates with the involved agencies through the City of Rochester Special Events office. Coordination involves establishment of traffic and parking needs and traffic and parking management plans.

Important to the successful operation of each event is the early identification of the event commander. The commander is then responsible for bringing together the involved agencies and developing management plans. During the days that the events are running, it is important that the event commander and respective staff be on site to monitor operations and to institute changes to the management plans as necessary.

Off-Site Parking Area Alternatives

In order to mitigate parking impacts during special events, the Port project will require the use of remote parking areas with bus service to the immediate Port and Beach areas. An analysis of possible locations for off-site parking is presented below. Two locations were identified as potential off-site parking sites, described below as Site A and Site B. Aspects of each site are described, including the estimated number of spaces provided, distance to the Port area, estimated costs, and the pro's and con's associated with each site (see Table K-17). The cost of providing each alternative parking area is estimated based on generic unit costs for the Rochester area and an assumed level of construction for each site.

Site A is the remote off-site parking area located on Dewey Avenue opposite Ling Road. Grass areas north and south of the existing driveway provide parking area. A total of approximately 350 spaces could be accommodated. The distance between this site and the Port area is approximately 3.0 miles. The distance is based on travel via Dewey Avenue, Lake Ontario State Parkway, and Lake Avenue.

Site B is adjacent to Ling Road near Greenleaf Road. The site was a former drive-in theater which is presently abandoned. A driveway from the site to Ling Road provides access to the highway system. Approximately 1,200 spaces could be provided at this site. The distance between this site and the Port is approximately 1.8 miles travelling via Ling Road, Greenleaf Road, Beach and Lake Avenues. The distance is 2.5 miles travelling via Ling Road, Greenleaf Road, Lake Ontario State Parkway, and Lake Avenue.

Table K-17
Off-Site Parking Location Pros & Cons Summary

SITE	PROS	CONS
A **Dewey Ave.**	**1)** Good connectivity and access to existing roads. **2)** Minimal cost to implement: approximately $20,000.	**1)** Greatest distance to Port of all sites: approximately 3.0 miles **2)** Does not provide all Level 1 Wednesday night parking needs – 285 additional spaces are required for Marina Phase I and Full Build Development.
B **Ling Road**	**1)** Good connectivity and access to existing roads **2)** Provides all Level 1 parking needs. 3) Distance between site and Port is less than for Site A, approximately 1.8 miles. 4) The location has potential access to the railroad corridor.	**1)** Cost without asphalt concrete parking surface and security fencing is estimated to be $600,000 **2)** Cost with asphalt concrete parking surface and without security fencing is estimated to be $2,000,000. 3) Cost with asphalt concrete parking surface and security fencing is estimated to be $2,160,000.

Recommendations

A summary of the measures proposed to mitigate potential parking impacts include:

- Implement traffic and parking management plans which utilize Intelligent Transportation Systems (ITS) to manage parking and traffic, alerting incoming traffic to parking availability with changeable message (digital) signs.

- Supplement parking needs by continuing to pursue seasonal agreements to utilize the off-site parking area on Dewey Avenue (Site A) and investigate the feasibility of utilizing the Ling Road parking area (Site B).

- Coordinate with RGRTA to increase service to the Port area including to/from remote lots by increasing the frequency of buses during peak summer times: Friday evenings, weekend days, Wednesday night Beach Concerts and other special events.

3. Public Transit

3.1 Introduction

Public transit service in the City of Rochester and the six surrounding counties is provided by the Rochester Genesee Regional Transportation Authority Regional Transit Service (RTS). One of the markets served by the RTS is customers traveling to the Ontario Beach County Park to access the beach and, to a lesser extent, attend one of the many events held at the park. Additionally, the RTS has provided services for many of these events, including the Wednesday night *Concerts by the Shore* series held during the summer months and other large events where remote parking is used on the established RTS routes.

Given the large role that transit plays in the Port area transportation system, it is important to understand how the Port project will impact the existing routes and how the proposed changes in event parking will impact the ability of RTS to provide services.

3.2 Existing Setting

The RTS operates the 1/1X (Lake) Route, which provides service between downtown Rochester and the Port area/Ontario Beach Park (see Figure K-3).

As is depicted in Figure K-3, there are currently eight bus stops that directly service the Port of Rochester and Ontario Beach County Park:

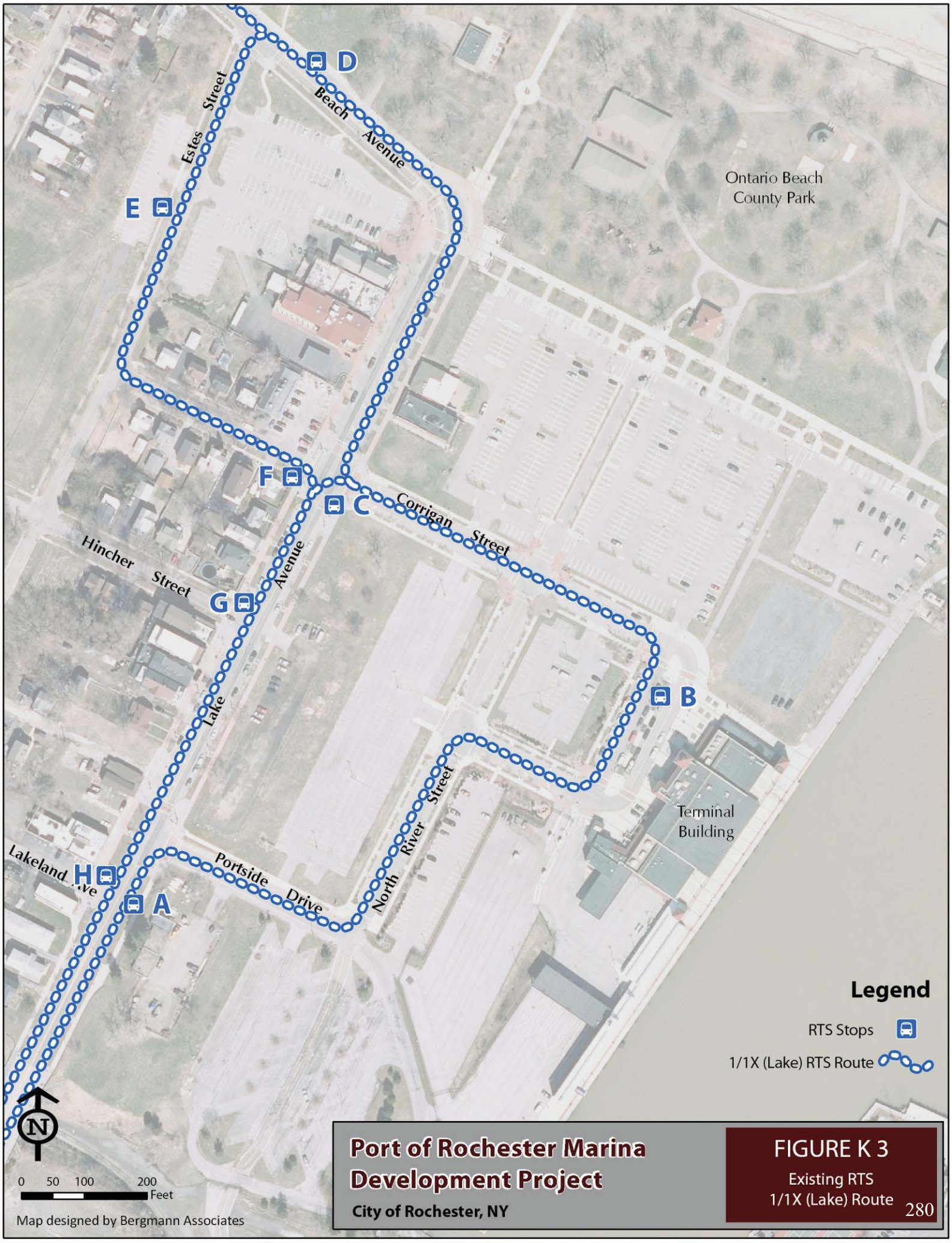
A. *Lake & Ontario Beach Launch* – this stop is located on Lake Avenue just south of Portside Drive on the northbound portion of the 1/1X (Lake) Route.

B. *Port of Rochester* – this stop is located directly in front of the Terminal Building on the northbound portion of the 1/1X (Lake) Route. This stop is currently used by RTA drivers.

C. *Lake & Corrigan* – this stop is located at the intersection of Lake Avenue and Corrigan Street on the northbound portion of the 1/1X (Lake) Route.

D. *Beach & Estes* – this stop is located along the north side of Beach Avenue in front of the Roger Robach Community Center (i.e., Bathhouse). This stop in on the northbound portion of the 1/1X (Lake) Route.

E. *Estes & Corrigan* – this stop is located along the western side of Estes Street adjacent to the paved parking lot serving the soccer fields. This stop in on the southbound portion of the 1/1X (Lake) Route.



Port of Rochester Marina Development Project

City of Rochester, NY

FIGURE K 3

Existing RTS
1/1X (Lake) Route

F. *Corrigan & Lake* – this stop is located at the intersection of Corrigan Street and Lake Avenue on the southbound portion of the 1/1X (Lake) Route.

G. *Lake & Hincher* – this stop is located at the intersection of Lake Avenue and Hincher Street on the southbound portion of the 1/1X (Lake) Route.

H. *Lake & Lakeland* – this stop is located at the intersection of Lake Avenue and Lakeland Avenue on the southbound portion of the 1/1X (Lake) Route.

With the exception of the Port of Rochester Stop (Stop B), none of the stops noted above provide shelter from the weather.

In terms of routing, the 1/1X (Lake) Route travels north along Lake Avenue from downtown Rochester until reaching the first stop in the project vicinity – Stop A (from above). From Stop A, the Lake Route turns right onto Portside Drive and makes its way to the Terminal Building and Stop B. The Lake Route then travels west on Corrigan Street until reaching Lake Avenue and Stop C. At this point the Lake Route either turns south onto Lake Avenue and returns downtown, or it turns north onto Lake Avenue and continues along Lake Avenue/Beach Avenue until reaching Stop D in front of the Bathhouse. From Stop D, the Lake Route makes an immediate left turn onto Estes Street and makes its way to Stop E. From Stop E, the Lake Route continues south on Estes Street until turning left onto Corrigan Street and making its way to Lake Avenue and Stop F. At this point, the Lake Route turns right onto Lake Avenue and continues towards downtown Rochester. The next two stops located on this route in the project vicinity are Stops G and H, respectively.

The RTS currently offers regular transit service to the Port on weekdays, weekends, and on holidays from approximately 6:00 AM until 1:00 AM (see Table K-18; note that the Port of Rochester Stop was used to represent all of the stops in the project vicinity). Depending on whether it is a weekday or weekend, the frequency with which buses stop at the locations described above ranges from 14 minutes during the morning rush on weekdays, to more than one hour during non-peak hours. Additionally, service frequency during daylight hours on weekends and holidays is fairly consistent, with buses running approximately every 45 minutes.

Table K-18
Current Arrivals and Departures at the Port of Rochester Stop

Service Type	Arrivals			Departures		
	Earliest	Latest	Intervals	Earliest	Latest	Intervals
Weekday	6:45 AM	1:04 AM	Every 14 minutes in the morning; Every hour in the evening	6:23 AM	1:10 AM	Every 15 minutes in the morning; Every hour in the evening
Saturday	6:14 AM	1:04 AM	Every 45 minutes until the evening hours, where intervals increase to 1 hour	6:27 AM	1:10 AM	Every 45 minutes until the evening hours, where intervals increase to 1 hour
Sunday & Holidays	5:46 AM	1:04 AM	Every 45 minutes until the evening hours, where intervals increase to 1 hour	5:46 AM	1:04 AM	Every 45 minutes until the evening hours, where intervals increase to 1 hour

3.3 Impacts and Mitigation

Impacts

Based on the proposed site plan for the Port project, there will be considerable changes to the street and parking layout currently used by RTS buses to access the Port of Rochester Stop (Stop B). While Portside Drive and North River Street will still be accessible, there will be no through-traffic access to the Terminal Building once the marina is developed. To continue service directly to the Terminal Building following site development, the RTS buses would have to continue along North River Street until reaching Corrigan Street. At this intersection, buses would turn right onto Corrigan Street and then continue along Corrigan Street for approximately 150 feet until turning left onto the Terminal Road Extension. After stopping on the left, the buses would then loop through the northernmost parking lots using Beach Avenue and North River Street, and turn right onto Corrigan Street to continue on with the regular I/IX route.

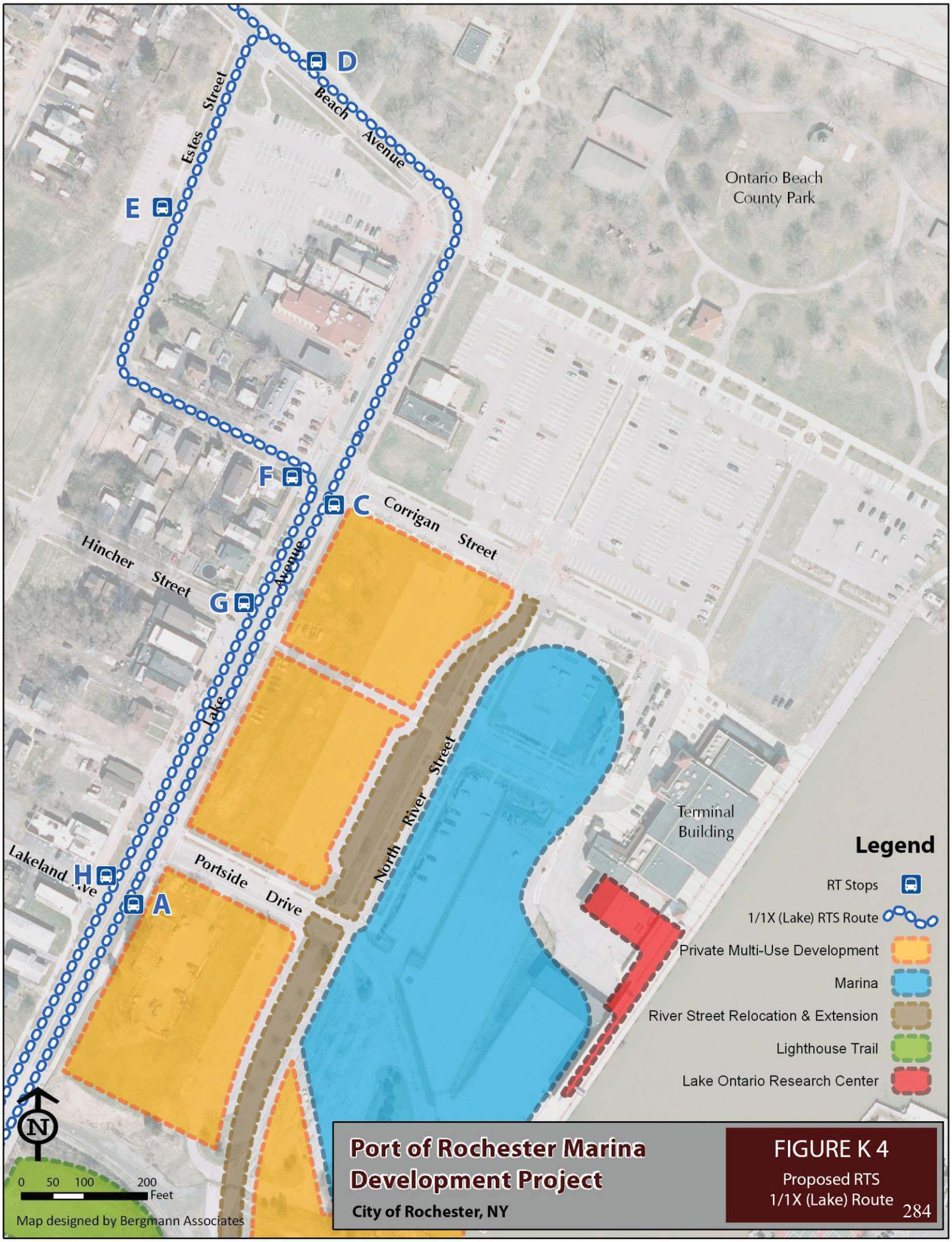
Simultaneous with the change in bus routing, there will be increase in the number of pedestrians moving through the same general area that RTS buses are using to get to and from Stop B. The project proposes to add approximately 44,000 square feet of commercial and retail space, 430 residential units, and 157 boat slips. This new development will significantly increase the number of pedestrians using the Port area on a daily basis. As a result of the increased pedestrian traffic and the new routing of the buses to and from Stop B (particularly through the northernmost parking lots), the number of bus/pedestrian interactions will increase and pedestrian safety is a concern.

Finally, the proposed Port of Rochester Marina Development Project will likely increase ridership on the 1/1X (Lake) Route due, in part, to a decrease in the number of parking spaces in the Port area that are available to the general public.

Mitigation Measures

To mitigate impacts on public transit, the City of Rochester is working with the RTS to remove the Port of Rochester Stop (Stop B). In effect, the 1/1X (Lake) Route would bypass the Terminal building and continue along Lake Avenue north towards Stops C and D (see Figure K-4). As the bus route would no longer travel through the north parking lots, this measure would minimize potential bus/pedestrian interactions and maintain pedestrian safety.

Given that Stops C and D will replace the Port of Rochester Stop (Stop B) as the primary stop for Port area attractions, it will be necessary to upgrade the existing Beach & Estes Stop (Stop D) to accommodate an increased number of transit riders. This stop was selected as it provides the closest access point to the beach which is where the majority of riders using the 1/1X (Lake) Route are heading. The upgrade of this stop will include an extension of the existing pull-out area, as well as the addition of pedestrian signage and a cement pad for rider queuing (a bus shelter may also be located on this cement pad). The signage should provide a "You Are Here" map indicating the location of area bus stops and a schedule of dates and times for the 1/1X (Lake) Route's scheduled stops. The signage should be branded appropriately so as to complement both the Port of Rochester and Ontario Beach County Park and should be placed at multiple locations within the general Port of Rochester and Ontario Beach Park area.



Port of Rochester Marina Development Project

City of Rochester, NY

FIGURE K 4

Proposed RTS 1/1X (Lake) Route

4. Pedestrian & Bicycle

4.1 Introduction

The Port of Rochester and Ontario Beach Park offer a variety of attractions and activities, many of which are pedestrian and/ or bicycle-oriented. An example of these activities includes:

- Walking the Charlotte Pier;
- Enjoying a meal at a restaurant along Lake Avenue or in the Terminal Building;
- Hiking/biking the Genesee River Trail System;
- Attending festivals, concerts, and outdoor movie screenings; or
- Visiting the historic Charlotte Lighthouse.

While the Port area currently provides an adequate level of pedestrian and bicycle infrastructure, the proposed Port project will improve the walkability and pedestrian safety of the area, maintain and enhance physical access to Lake Ontario and the Genesee River, improve the connectivity of the Port and Ontario Beach Park to the regional trail network, and preserve and enhance the village character of Charlotte. As a result, pedestrian and bicycle circulation and access to all areas of the Port of Rochester and Ontario Beach Park will be improved.

4.2 Existing Setting

Currently, all streets located in the Port project area have sidewalks on both sides, with the exception of the section of River Street to be relocated in the southern portion of the site. Additionally, the village-like environment along Lake Avenue is home to a friendly and stable community of year-round residents and provides the infrastructure necessary to make this a very walkable community.

The project area is also the northern-most terminus of the Genesee River Trail, which was designated as a national recreation trail in 2006. This scenic trail network extends through the historic and cultural heart of Rochester, from the Erie Canal to downtown and north to Lake Ontario. Along its route, the trail provides access to the Genesee River, its scenic gorge, three waterfalls, eight pedestrian bridges, and eleven parks, including four historic parks designed by Frederick Law Olmsted.

Within the Port area, the trail travels north along River Street from Latta Road until reaching the existing CSX railroad grade. At this point, the trail veers north and travels along the western side of the existing railroad grade for approximately 700 feet, where it crosses the railroad grade and turns north towards River Street. The trail continues along River Street until it reaches its terminus at Portside Drive.

4.3 Impacts and Mitigation

The proposed project calls for the portion of River Street north of the existing railroad grade to be relocated slightly to the west and fully extended to Portside Drive. As part of this realignment, it is proposed that the Genesee River Trail also be relocated from its current location west of the existing railroad grade to the eastern side of River Street (see Figure K-5).

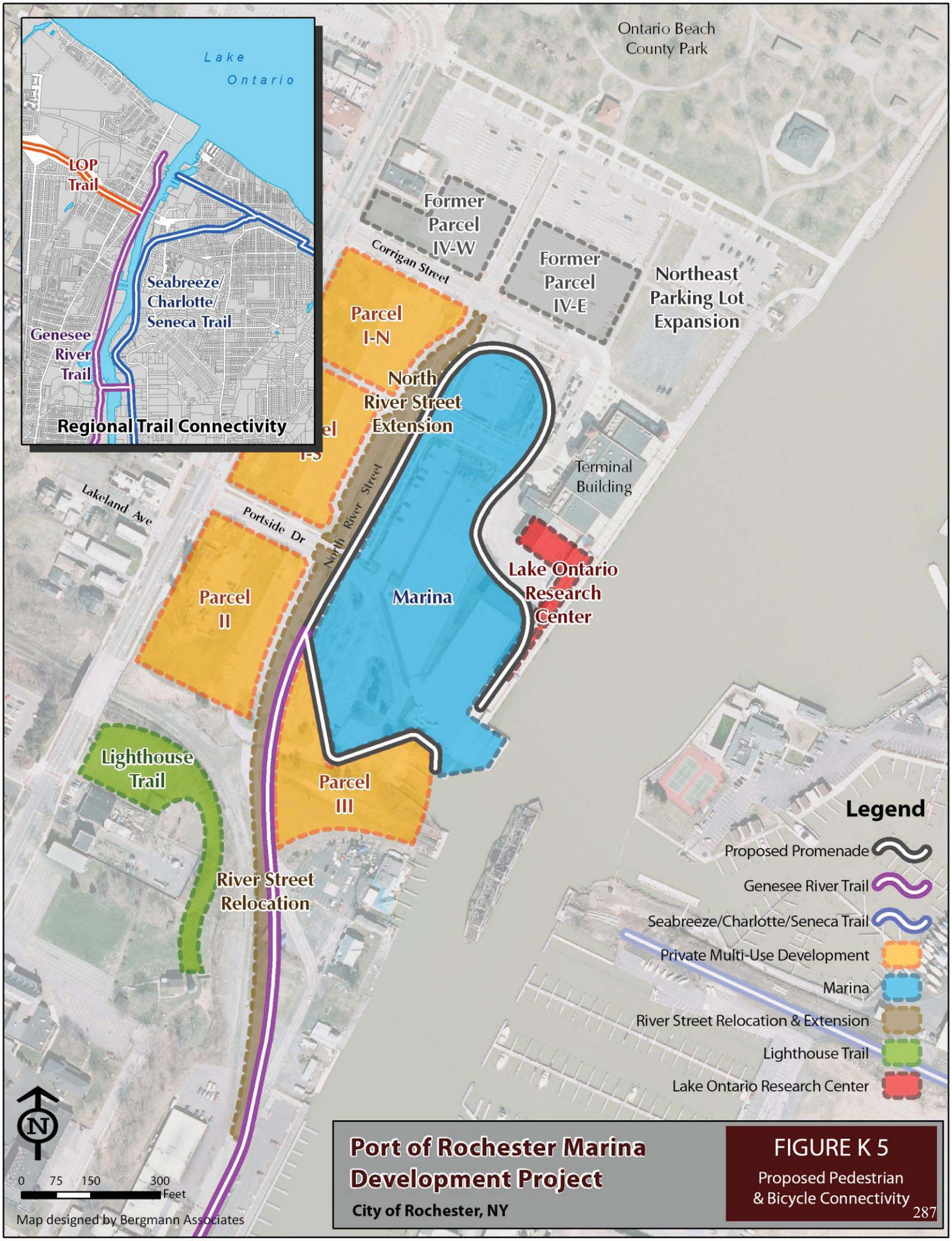
From its new location along the eastern side of River Street, the Genesee River Trail will connect with the landscaped promenade around the public marina facility proposed for the Port area. This link will complete previous efforts to fully connect the Genesee River Trail system to Ontario Beach County Park.

Specific to the project area, the new trail alignment will allow trail users to more easily cross the railroad tracks near River Street.

Also included as part of this proposed project are significant improvements to the Lighthouse Trail. The improved trail will be well marked and graded and will connect the Charlotte-Genesee Lighthouse Museum to Lake Avenue.

In addition to the enhanced connectivity associated with the extension of the Genesee River Trail and the improvements to the Lighthouse Trail, the proposed project will add approximately 44,000 square feet of commercial and retail space, 430 residential units, and 157 boat slips to the Port area. The addition of these retail amenities will significantly improve the current pedestrian experience by providing additional shopping opportunities for visitors.

Based upon the information above, no negative impacts on Pedestrian and Bicycle facilities have been identified for the proposed project. Rather, the project will result in positive impacts including improved pedestrian and bicycle circulation and access to all areas of the Port of Rochester and Ontario Beach Park. No mitigation measures are necessary for this portion of the project.


Ontario Beach
County Park
Former
Parcel
IV-W
Former
Parcel
IV-E
Northeast
Parking Lot
Expansion
Corrigan Street
Parcel
I-N
North
River Street
Extension
Terminal
Building
Lakeland Ave
Portside Dr
North River Street
Parcel
II
Marina
Lake Ontario
Research
Center
Parcel
III
Lighthouse
Trail
River Street
Relocation
Lake
Ontario
LOP
Trail
Seabreeze/
Charlotte/
Seneca Trail
Genesee
River
Trail
Regional Trail Connectivity
Legend
Proposed Promenade
Genesee River Trail
Seabreeze/Charlotte/Seneca Trail
Private Multi-Use Development
Marina
River Street Relocation & Extension
Lighthouse Trail
Lake Ontario Research Center
N
0 75 150 300
Feet
Map designed by Bergmann Associates
Port of Rochester Marina
Development Project
City of Rochester, NY
FIGURE K 5
Proposed Pedestrian
& Bicycle Connectivity

L. Utilities

1. Introduction

This section reviews the function and condition of existing utilities in the project area. Impacts of the project on existing utilities are described and capacity issues are analyzed. The discussion includes input from utility agencies related to existing and proposed utility capacities and alignments.

2. Existing Setting

The site is served by storm sewer, sanitary sewer, public water, natural gas, electric, street and site lighting, fiber optics and telecommunications utilities. The river wall in front of the Terminal Building is served by two existing vessel utility stations. The "southern vessel utility station" served the fast ferry operation and is located near the berthing pier. The "northern vessel utility station" is located just north of the southeast corner of the Terminal Building and was installed for Great Lakes cruise ships. Both stations provide sanitary sewer, domestic water and electrical services for vessels on the water. The site also contains air tubing and underground fueling lines.

2.1 Storm Water Sewer

Storm water sewers on site are mainly located within the public right-of-way. Some drainage structures, such as catch basins, are located within parking lots and within vehicle staging areas associated with the former ferry service. The site currently drains to the east toward the Genesee River both by sheet flow and by collection of runoff by the storm sewer system.

Storm water sewers along Corrigan Street, Portside Drive and North River Street range from depths of approximately 5 to 15 feet below ground surface and were installed as part of the Port of Rochester Harbor and Ferry Terminal Improvements and Access Road Improvements projects.

There is a 72-inch diameter storm sewer trunk main on the north end of the site that assists in collecting and transferring storm water from the upstream areas of Beach Avenue and the adjacent surrounding neighborhoods. The trunk main discharges storm water flows into the Genesee River within the Beach Avenue right-of-way.

There are other locations where storm water is discharged into the river. Along the north side of the Terminal Building, a 36-inch diameter storm line discharges water into the river after being passed through an underground storm water quality unit just upstream. This drainage structure accepts and treats runoff from the site.

2.2 Sanitary Sewer

Sanitary sewers on site include a 21-inch diameter sewer that flows from the Ontario Beach Park facilities (such as the public restrooms) and from areas along Beach Avenue to the Greece town line at Greenleaf Road. The area served by this sewer main includes approximately 554 parcels, primarily consisting of residential and commercial properties.

The 21-inch sanitary sewer flows from the Beach Avenue ROW south to the Monroe County Pure Waters (MCPW) Charlotte Pump Station on River Street. This pipe reduces down from 21-inch to 18-inch prior to discharging to the pump station. At its deepest point, the 21-inch sanitary sewer is approximately 10 to 15 feet below ground surface along the current North River Street corridor. Along the west face of the Terminal Building, the sewer is 8 to 10 feet deep, and near the former loading platform, the sewer is 7 to 8 feet deep.

Much of this sewer was installed as part the Port of Rochester Harbor and Ferry Terminal Improvements project completed in the 2004, and is known to be in good condition. However, MCPW has televised the 18-inch sewer pipe and observed that a 200 foot section is deteriorated and is recommending that it be replaced as part of the proposed project.

Sanitary sewers also exist along Portside Drive and Corrigan Street, with multiple laterals that extend north-south. These laterals were stubbed for future connections and do not convey any flow at the present time.

2.3 Water

2.3.1 Water

Watermains within the site follow the path of the street alignments, creating a loop on Corrigan Street, Portside Drive and North River Street. Another loop is made within the drop off loop to the west of the Terminal Building. This loop is supplied by a 12-inch main on Lake Avenue. All mains within the project site are 8 inches in diameter and serve the Terminal Building's domestic water and fire protection systems.

A watermain located within the main access aisle of the Ontario Beach Park surface parking areas just north of the project site boundary connects the watermain in the Beach Avenue right-of-way with the North River-Corrigan-Portside loop.

2.3.2 Fire Suppression

As mentioned above, the 8-inch watermain to the west of the Terminal Building provides adequate fire flow service for the building's fire suppression systems.

2.4 Electric

Rochester Gas & Electric (RG&E) provides electric service to the site from electric conduits buried under Lake Avenue.

At a utility agency meeting in May 2009, RG&E electrical engineers noted that a large capacity transformer at the Terminal Building can accommodate some of the proposed improvements. RG&E has also noted that electric supply in the area is not a concern for the proposed project.

2.5 Telephone/Communications/Fiber Optics/Cable

Underground telephone and fiber optics serve the site from conduits on Lake Avenue. The fiber optic cable in the area is owned and operated by the City of Rochester and Monroe County, and telephone lines in the area are owned by Frontier Communications.

2.6 Natural Gas/Diesel Fueling System

Natural gas on site is supplied by RG&E with gas mains that serve the site from multiple locations. Existing capacity for the existing Terminal Building is sufficient. However, at the utility agency meeting in May 2009, RG&E expressed concern with the capacity of the existing gas mains to service new development, as proposed. Based upon that meeting and subsequent discussions, little or no capacity for new natural gas customers is available in the Charlotte area.

An underground diesel storage and dispensing system was constructed in 2003 specifically for the fast ferry service and lies within the 'footprint' of the marina basin. It consists of two tanks, concrete buoyancy restraint system, tank-top appurtenances, submersible pumps, fuel supply and vent piping, signal and power conduit, fuel management system, hose reel, meters, and valves.

2.7 Street and Site Lighting

The Port site is improved with street lighting consisting of black metal decorative poles and fixtures. Site lighting is a mix of black decorative and black davits installed as part of the Port of Rochester Harbor and Ferry Terminal project. Besides poles and fixtures, the lighting system includes underground conduits and cabling, and is maintained by the City of Rochester Bureau of Architecture & Engineering/Lighting Division.

There is limited davit lighting in the Public Boat Launch area, mainly to the west side of the parking lot. This lighting is maintained by the City.

Lighting exists along the river wall north of the Terminal Building, and consists of decorative fixtures. Power is supplied from the Beach Avenue right-of-way.

Within the proposed Lighthouse Trail Site, limited lighting exists in the form of two to three light poles. It is not known from where the light poles are receiving power.

3. Impacts and Mitigation

Utility permits and approvals required for this project include approvals from local and state regulatory agencies including Monroe County Pure Waters, New York State Department of Environmental Conservation (NYSDEC), and Monroe County Health Department (MCHD). The City will continue to coordinate with all utility agencies during final design of the project.

3.1 Phase 1 Marina and Right-Of-Way Improvements

The project includes construction of new utilities and relocation of some existing utilities. Utility alignments are being designed within the public right-of-way or within properties that will remain in the public domain. All utility and public infrastructure improvements required for Full Build-Out, as proposed, will be constructed as part of the Phase 1 Marina and Public Improvement Project.

3.1.1 Storm Water Sewer

Storm sewers will be designed in general conformance with the standards of Monroe County Pure Waters (MCPW). Storm water management practices will be designed in general conformance with the NYS Storm Water Management Design Manual, specifically, Chapter 9 – Redevelopment Projects.

MCPW operates and maintains the existing mainline storm sewer, located in existing right-of-way and easements, and will continue to operate and maintain the relocated storm sewer. Storm laterals outside the right-of-way will be the responsibility of the individual property owners to construct and maintain.

Proposed modifications and installation of new storm water facilities are described below:

1000 North River Street: The excavation of the Phase 1 Marina basin will disrupt storm sewers and eliminate catch basins. The project will relocate storm water facilities outside of the marina footprint. All or portions of the storm sewers within 1000 North River Street will be removed during excavation of the marina including portions of the existing storm sewer on the north-south roadway adjacent to the Terminal Building. This storm sewer will be relocated to serve catch basins along the proposed drop off loop and cul-de-sac. Storm flows from this sewer will be directed to the existing storm water treatment device noted above.

The east-west roadway within the parcel located south of Corrigan Street will be completely removed during marina excavation and a replacement storm sewer is not required. A cross-lot storm sewer that currently serves Portside Drive will be removed.

River Street Extension: Currently there are no storm sewers located within the limits of the proposed River Street Extension. A new storm sewer and associated catch basins will be installed and will discharge to an existing MCPW storm sewer located in the vicinity of MCPW's Charlotte Pump Station that discharges into the Genesee River on the south side of the pump station. Storm water management practices, including off-line and roadside bio-retention cells are being evaluated for applicability to address treatment of storm water along the River Street Extension.

Portside Drive: The existing cross-lot storm sewer and associated storm water management device that serves the storm sewer on Portside Drive will be removed during marina excavation. The existing Portside Drive storm sewer is proposed to be intercepted by a new storm sewer along the North River Street Realignment.

North River Street Realignment: The existing storm sewer on North River Street, between Portside and Corrigan, will be removed during marina excavation. A new northerly flowing storm sewer will be installed within the realigned North River Street. This sewer will collect storm flows from Portside Drive at the upstream end and discharge to an existing storm sewer on Corrigan Street.

New storm laterals will be installed within the right-of-way to accommodate future private development proposed by the project (see *Section 3.6* below for location descriptions).

Corrigan Street: The existing storm sewer on Corrigan Street will be largely unaffected by the proposed marina development with the exception of the reconfigured North River Street sewer connection. The Corrigan Street storm sewer is currently served by an existing storm water management device located within the 1000 River Street parcel at the southwest corner of the intersection of the projection of Corrigan Street (private) and the western lanes of the drop-off loop. This device is proposed to remain in service and will treat storm flows from the proposed drop off loop, Corrigan Street, North River Street Realignment, and Portside Drive before being discharged to the Genesee River through an existing 36-inch outfall.

3.1.2 Sanitary Sewer

Sanitary sewer improvements are being designed in general conformance with the *Recommended Standards for Wastewater Facilities (10-State Standards)* and the standards of Monroe County Pure Waters. Private sanitary sewers will meet the requirements of the City of Rochester Plumbing Department. Sanitary sewer facilities will be constructed using standard construction practices conforming to local (MCPW), state, and federal regulations. MCPW operates and maintains the existing mainline sanitary sewer, located in existing rights-of-way and easements. MCPW will continue to operate and maintain the relocated sanitary sewer. Sanitary laterals outside the right-of-way will be the responsibility of the individual property owners to construct and maintain. The proposed improvements are described in the paragraphs below:

The existing 21-inch sanitary sewer that transports sewage flow from the project site to the MCPW Charlotte Pump station crosses through the footprint for the proposed marina basin and will be relocated by the project. The upstream end of the proposed sewer alignment will begin at the former Terminal Building and flow west within the proposed extension of Corrigan Street to the realigned North River Street, and then south and southeast within the realigned North River Street/River Street Extension. Once adjacent to MCPW's Charlotte Pump Station, the proposed sewer will flow east to the pump station. From here, sewage is pumped under the Genesee River and eventually to the Frank E. Van Lare Waste Water Treatment Facility (WWTF).

The proposed relocation, rather than relocation beneath the marina, along its current alignment, avoids exposure of the gravity sewer invert above the bottom elevation of the marina, and the potential for odor, and will result in lower costs for operation and maintenance.

Sanitary service to the individual dock slips in the marina basin is not proposed. Sanitary pump out service is proposed to be located near the marina entrance on its east side, or a portable system will be utilized to service the boats.

Sanitary sewer infrastructure, consisting of piping and manholes that presently extend to the southern vessel utility station located immediately west of the former ferry berthing pier, will be displaced by the marina basin. New sanitary infrastructure will be constructed in order to reconnect the southern vessel utility station, and will receive flows from the boater pump-out service proposed to be located near the marina entrance.

The depth of the proposed sewer varies from approximately 8 feet deep to 22 feet deep. The depth of the proposed sewer becomes shallower near the downstream end as it nears the river; it is approximately 10 feet deep at the pump station discharge point.

3.1.3 Water

Water improvements will be designed in general conformance with *Recommended Standards for Water Works (10-State Standards,* and the standards of the City of Rochester Water Bureau. All watermain improvement designs must be approved by the Monroe County Department of Health.

The proposed marina construction will impact an existing 8-inch watermain. Portions of the existing watermain will be removed during marina excavation, and rerouted around the proposed marina within the proposed rights-of-way. Upon completion of the installation, the mains will be disinfected and pressure tested to ensure that no leaks will occur and no contaminants will enter the public water system. The watermain design is being coordinated with storm and sanitary sewer designs to avoid conflicts and to maintain minimum separations between facilities at points of crossing and along parallel installations.

In accordance with the *10-State Standards*, watermain improvements must be "designed to maintain a minimum pressure of 20 psi at ground level at all points in the distribution system under all conditions of flow." Additionally, "the working pressure in the distribution system should be approximately 60 to 80 psi and not less than 35 psi." Local pressure and flow tests indicate static pressures of 88 psi, with flow rates of approximately 3,700 gallons per minute or more, at 20 psi. Presently, the water distribution system is capable of providing water to meet fire flow and pressure requirements at levels suitable for the proposed development. Further analysis and refinement of improvements to the water system will be completed during final design.

Water service will be provided at the individual dock slips to accommodate the washing down or cleaning out of boats and other equipment. Metering of these individual dock spaces will be coordinated with the City of Rochester Bureau of Water and made part of the Marina Management Plan. Cost reimbursement options include charging a flat fee as part of the rental of the slip and turning the water on to that particular dock via a secured valve location, or monitoring usage through the installation of meters at the individual dock space. Individual water service metering will require the installation of meters at each service and more detailed billing procedures, but will likely reduce water usage and result in more accurate billing.

Existing domestic water infrastructure piping extending southward from the Terminal Building will be displaced by the marina. This piping provides domestic water to the southern vessel utility station, the link building, and the northern vessel utility station. New domestic water infrastructure will be constructed in order to reconnect water service to these locations, and to the proposed boater pump-out facility.

The service to the Terminal Building and the existing watermains along the existing drop-off loop in front of the Terminal Building and Corrigan Street will remain intact. New watermain will be installed within the realigned North River Street and River Street Extension. A connection from the section of main will be made to the existing main at Portside Drive.

With the exception of the Terminal Building, no existing water services will be affected by the proposed water system improvements. The project will reestablish service to the Terminal Building with a minimum period of interruption of service as piping connections switched over. It is not the policy of the City of Rochester Water Bureau to install water services to undeveloped parcels; therefore, the extension of water services will need to be addressed as part of the private development.

3.1.4 Electric

Below-grade electric facilities will be installed within the new and realigned rights-of-way to provide for proposed public and private development including service connections to the boat slips that will be constructed as part of the Phase 1 Marina. Sizing and location of the underground infrastructure improvements within the rights-of-way will be determined by RG&E.

The existing electric service to 1000 North River Street is fed by a cabling and conduit system that will be displaced by the marina excavation. A new conduit and cabling system will be constructed extending southward from the Beach Avenue right-of-way into the 1000 North River Street parcel. The new system will connect to existing conduits that enter the Terminal Building.

Existing electric infrastructure extending southward from the Terminal Building will also be displaced by the marina. This infrastructure provides electrical service to the southern vessel utility station located immediately west of the former ferry berthing pier. New electrical infrastructure will be constructed in order to reconnect service to the southern vessel utility station.

Existing electric infrastructure extending southward from the Phase 1 Marina will be displaced by the Phase 2 Marina Expansion. This infrastructure provides electrical service to the Public Boat Launch facility and will no longer be necessary once the boat launch is replaced by the Phase 2 Marina. Below-grade electric facilities will be installed to provide for service connections to the boat slips that will be constructed as part of the Phase 2 Marina Expansion.

3.1.5 Telephone/Communications/Fiber Optic/Cable

Below-grade Telephone/Communications/Fiber Optics/Cable infrastructure will be installed within rights-of-way to provide for proposed public and private development, including service to the boat slips constructed as part of the Marina project.

Construction of the marina will require relocation of existing below-grade Telephone/Communications/Fiber Optics/Cable from which the Terminal Building is serviced. New conduit and cabling systems are proposed to be constructed within the new and realigned rights-of-way to provide service to 1000 North River Street and the Terminal Building.

Joint trench opportunities will be explored between the various private enterprises including ‘datacom’ companies and RG&E. Opportunities to install facilities to accommodate emerging technologies and/or trends in the telecom industry are being explored. Sizing and location of the underground infrastructure improvements will be determined by engineers employed by the various enterprises.

Stubs will be installed in the vicinity of the proposed private multi-use development parcels to accommodate future development and minimize the need re-excavate the rights-of-way.

3.1.6 Natural Gas/Diesel Fueling System

Gas facilities located within existing rights-of-way will remain in place or be relocated to realign with new rights-of-way. Additionally, new facilities will be required to provide reinforced or increased capacity to support the private development. The sizing and location of new gas mains would be determined by RG&E engineers.

Construction of the marina will require relocation of existing gas mains from which the Terminal Building at 1000 North River Street are serviced. It is anticipated that RG&E will construct a new gas main extending southward from the Beach Avenue right-of-way to provide service to the Terminal Building. Construction of the new gas main is planned prior to the start of the marina project construction to minimize impacts to Terminal Building service.

Existing natural gas piping within 1000 North River Street extending southward from the Terminal Building will be displaced by the marina basin. This piping provides natural gas to the link building. New gas piping will be constructed in order to reestablish gas service to the link building.

The existing underground diesel storage tanks and associated dispensing system constructed in 2003 specifically for the fast ferry service will be displaced by the marina basin. This system will be removed in its entirety.

3.1.7 Site and Street Lighting

The lighting system will be designed in accordance with the requirements of the Street Lighting Division of the City of Rochester Architecture and Engineering Bureau. Locations of power points for the lighting system will be coordinated with RG&E.

Construction of the marina will impact the existing site and street lighting system. Where possible and practical, affected poles and lamps, conduits, cables, pull boxes, etc will be salvaged and stored for eventual reuse on or off site within the City system. Existing underground infrastructure consisting of conduits, cables, pull boxes, etc will be removed, or abandoned in place if removal is impractical.

Pedestrian level lighting is proposed in the vicinity of the marina. Fixtures will be selected that illuminate the ground without creating glare for boaters on the water. Bollard-type fixtures will be installed along the Genesee Riverway Trail and the public promenade around the marina to provide lighting for pedestrians and bicyclists. Utility

pedestals located along the Marina perimeter will also provide a moderate level of light for local visibility.

The development of the Phase 2 Marina Expansion will have little to no impact on street lighting. Lighting issues related to the Phase 2 Marina site will have been addressed during the construction of the Phase 1 Marina and the Right-of-Way Improvements. Phase 2 Marina lighting will be extended south from the Phase 1 lighting and will utilize the same design.

3.2. Lighthouse Trail

3.2.1 Stormwater Sewer

It is not anticipated that storm sewers will be required as part of the project. There will be a slight increase in the impervious area and minor alterations to the existing drainage patterns as a result of trail construction. No significant adverse impacts as a result in the changes to impervious surfaces and drainage have been identified.

3.2.2 Sanitary Sewer

The Lighthouse Trail will not require the installation or relocation of sanitary sewers. It is not anticipated that the design of the trail will incorporate restroom facilities.

3.2.3 Water

The Lighthouse Trail will not require the installation or relocation of watermains.

3.2.4 Electric

Installation or relocation of electric services is not anticipated as part of the Lighthouse Trail project, unless lighting improvements are installed. In this case, electric service to power the lights will be necessary. Refer to *Section 3.2.7* regarding Lighting below.

3.2.5 Telephone/Communications/Fiber Optics/Cable

Installation or relocation of telecommunication, cable or fiber optics is not anticipated as part of the Lighthouse Trail project.

3.2.6 Natural Gas/Diesel Fueling System

No installation or relocation of natural gas or fuel piping will be required as part of the Lighthouse Trail.

3.2.7 Lighting

At this time it is not known whether the trail will be improved with lighting. An electric service will likely need to be brought to the area should it be desired to provide lighting along the trail.

3.3 Lake Ontario Resource Center (LORC)

The interim LORC facility is proposed to be located within the "link building" which is part of the Terminal Building. Existing utilities serving the Terminal Building will supply the interim LORC. Moreover, it is anticipated that the existing utilities have adequate capacity to serve the LORC without expansion or addition of new services.

Construction of a permanent LORC building may require relocation of existing site utilities around the new building, or to extend new services to the new building.

3.3.1 Stormwater Sewer

Use of the "link building" as an interim facility does not require installation of new or increased capacity stormwater improvements. There will be no increase in impervious area, and surface drainage patterns will remain the same.

If a permanent LORC building is constructed, storm sewers near the proposed site relocated as part of the marina construction will provide for the LORC and will be incorporated into the design of a new LORC building, including the inverts of storm sewers and manholes in the area. It is not expected that capacity will be an issue as the new LORC building will not significantly increase impervious area or runoff to the system. Moreover, green building design (e.g. green roof, cisterns, rain gardens, bioswale planters, underground stormwater chambers) may be incorporated in the design of a permanent LORC to decrease volumes of storm water runoff and increase its water quality.

3.3.2 Sanitary Sewer

Currently, an 8-inch sanitary sewer line services the link building and flows into the 21-inch main that carries waste to the MCPW pump station. The 8-inch sanitary sewer running north and south along the face of the Terminal Building will be relocated as part of the marina construction, and the inverts of the pipe altered so that the flow runs north instead of south.

If a permanent LORC building is constructed, sanitary sewer facilities relocated as part of the marina construction will be incorporated into design of the new building. It is not expected that capacity will be an issue as the new LORC building will not significantly increase sanitary flows to the system.

3.3.3 Water

Existing water services to the Terminal Building will be used to supply the interim LORC. No impacts to domestic water and fire water service were identified related to the interim facility. It is not anticipated that additional water pressure or volume will be needed to operate the LORC.

If a permanent LORC building is constructed, water for domestic and fire use will be provided through available water piping within the site. The necessity for a fire or domestic water pump based on existing pressures will be determined during Permanent LORC design.

3.3.4 Electric

Electric service will be run internally through the Terminal Building to service the interim facility and capacity is not an issue.

If a permanent LORC is constructed, electric service may be fed by a separate service, or continue to be fed through the existing Terminal Building. Anticipated electricity demands for the LORC will be coordinated with and RG&E electrical engineers during final design.

3.3.5 Telephone/Communications/Fiber Optics/Cable

The interim LORC will be serviced through telecommunications and cable from the Terminal Building.

If a permanent LORC is constructed, new telecommunications and fiber optics services may be fed by separate services, or continue to be fed through the existing Terminal Building.

3.3.6 Natural Gas/Diesel Fueling System

The interim LORC will be serviced from the piping extending southward through the site from the Terminal Building. Existing piping in this area will be relocated due to the marina construction as described in *Section IV L 3.1.6* above.

If a permanent LORC is constructed, natural gas may be fed by a separate service, or continue to be fed through the existing Terminal Building.

3.3.7 Lighting

The interim LORC will not require installation of new lighting.

If a permanent LORC is constructed it will likely include new site lighting. Design of the LORC will consider lighting levels provided by the lighting installed as part of adjacent promenade and marina.

3.4 Relocation of the Public Boat Launch

3.4.1 Stormwater Sewer

Planning for the relocation for the Public Boat Launch will take into account the existing stormwater utilities on each alternative site and catch basins, sewers and stormwater management facilities will be installed as required to comply with local, state or federal regulations within the new facility.

3.4.2 Sanitary Sewer

It is not anticipated that a sanitary sewer will be required for the relocated boat launch. However, if the design of the relocated boat launch does include restrooms and no existing sanitary sewer facilities are available, installation of new sanitary lines will be necessary.

3.4.3 Water

Water service to the proposed relocation site may be desired. NYSDEC recommends the installation of wash down areas, along with collection and treatment facilities for wash down water, in order to prevent the migration of invasive species into new habitats. In addition, water may be required by the local Fire Marshall.

3.4.4 Electric

Electric service will be needed at the proposed boat launch. Design will be coordinated with RG&E and the City Water and Lighting Bureau.

3.4.5 Telephone/Communications/Fiber Optics/Cable

At this time, telephone and other communication/fiber optic facilities are not anticipated.

3.4.6 Natural Gas/Diesel Fueling System

It is not anticipated that natural gas lines or fuel piping will be required at the site of a proposed boat launch. All onsite existing facilities will be examined during design and relocated or removed, as necessary.

3.4.7 Lighting

Lighting will be installed at the relocated boat launch facility. The necessary electric feed and illumination levels will be determined during design.

3.5 Relocation of the Ontario Beach Park Labor Operations Center

3.5.1. Stormwater Sewer

Storm sewers and laterals to the existing Labor Operations Center will be capped or removed upon its demolition. The site design of the new Labor Operations Center will include extensions to storm sewers if necessary to serve the new location. Abandonment of storm sewers will be coordinated with MCPW.

3.5.2 Sanitary Sewer

Sanitary sewers and laterals to the existing Labor Operations Center will be capped or removed upon its demolition. The site design of the new Labor Operations Center will include extensions to sanitary sewers if necessary to serve the new location. Abandonment of sanitary sewers will be coordinated with MCPW.

3.5.3 Water

Watermains and services to the existing Labor Operations Center will be capped or removed upon its demolition. The new Labor Operations Center will include extensions to watermains or services if necessary to serve the new location. Abandonment of watermains will be coordinated with City of Rochester Water and Lighting Bureau.

3.5.4 Electric

Electric services to the existing Labor Operations Center building will be removed upon demolition. Coordination will take place with RG&E electrical engineers to affect the removal of services to the existing site and the provision of services to the new location.

3.5.5 Telephone/Communications/Fiber Optics/Cable

Communications services to the existing Labor Operations Center will be removed upon its demolition. Coordination will take place with utility agencies to affect the removal of services to the existing site and the provision of services to the new location.

3.5.6 Natural Gas/Diesel Fueling System

Gas services to the existing Labor Operations Center will be removed upon its demolition. Coordination will take place with RG&E engineers to affect the removal of services to the existing site and the provision of services to the new site. No fuel piping is planned to the new Labor Operations Center site.

3.5.7 Site Lighting

Site lighting at the existing Labor Operations Center will be removed prior to private development. Lighting will be installed by the private developers in compliance with the new Marina District Zoning requirements.

3.6 Incremental Private Development

All utility improvements to be constructed within rights-of-way in the project area will be sized to accommodate the maximum build-out of the proposed future mixed-use development. This approach will be taken to prevent or minimize potential costly disturbances subsequent to completion of the proposed public improvement projects.

3.6.1 Stormwater Management

New storm sewers will be designed in general conformance with the standards of Monroe County Pure Waters (MCPW). Stormwater management practices will be designed in general conformance with the NYS Stormwater Management Design Manual, specifically, Chapter 9 – Redevelopment Projects. Laterals will be extended from storm sewers within rights-of-way to parcel boundaries to receive stormwater discharge from development parcels. It is likely that Development Parcels I, II and III will contain on-site stormwater management facilities that will discharge flows from the parcels to these laterals.

Development Parcel I will discharge to storm sewers along the realigned North River Street. These flows will pass through the stormwater management device at the east end of Corrigan Street, before being discharged to the river.

Depending on the site design and sequencing of construction, portions of Development Parcel II will discharge to storm sewers along Portside Drive or along the realigned North River Street, or along River Street Extension. Discharges to Portside Drive or the realigned North River Street will be conveyed northward and pass through the stormwater management device at the east end of Corrigan Street, before being discharged to the river. Discharges to River Street Extension will be conveyed southward and into the sewer that discharges to the river near the MCPW pump station.

Development Parcel III will likely discharge to the marina basin.

For more information regarding stormwater management refer to *Section IV B Water Resources.*

3.6.2 Sanitary Sewer

The sanitary sewer to be installed within rights-of-way under the Phase I Public Improvements will be sized considering full build-out of the development parcels. Laterals to the individual parcels will be strategically placed to accommodate estimated flows from the parcels. The installation of these improvements simultaneously with the construction of the River Street Extension and the North River Street re-alignment will prevent the re-excavation of the finished streets at the time of development of the private parcels.

3.6.3 Water

The proposed watermain to be installed within the rights-of-way will be sized to accommodate full build-out of the development parcels.

A fire or domestic water pump may be required by the City of Rochester and/or New York State Building Code for individual buildings in the proposed mixed-use development, depending upon the height of each building and requirements set forth by the Insurance Services Office (ISO).

3.6.4 Electric

Electric services to the structures built on the development parcels will be coordinated with RG&E electrical engineers.

RG&E suggested at a utility coordination meeting in May 2009 that underground transformers be installed in manholes for the proposed development parcels. This would require a second manhole structure at the edge of the right-of-way for conduits to be distributed to each building. Above-ground transformers could be used and likely placed between buildings to feed multiple buildings. RG&E suggested that during design of the structures, consideration be given to the location of the mechanical rooms.

3.6.5 Telephone/Communications/Fiber Optics/Cable

Fiber optic, telecommunications and cable services to the development pads will need to be coordinated between the private developers and the respective utility agencies.

3.6.6 Natural Gas/Diesel Fueling System

As stated previously, gas capacity is not believed to be sufficient to provide for the new residential and commercial mixed use development.

According to RG&E, gas services will likely be extended to the development parcels from the gas mains within Lake Avenue and the gas mains near the CSX tracks at the south end of the site. The closest distribution hub is located in the area of Latta Road and Dewey Avenue. Upgrades to the system may need to be traced back to this location, a distance of approximately 2 miles. It is not known how the cost of the upgrades will be financed. The City has not allocated funding for these upgrades.

The City has had several communications with RG&E in 2011 regarding this issue and has provided RG&E with additional information on the estimated demand in terms of BTU's per unit and number of units per development parcel. With the submission of this information, the City is attempting to clarify at what stage of the project would a new gas main be needed. Little or no capacity for new natural gas customers is available in the Charlotte area.

3.6.7 Lighting

The development parcels will have appropriate lighting installed around entrances, pedestrian ways, and parking areas in order to provide visibility and security for residents and visitors to these areas. Lighting will be installed in compliance with the new Marina District Zoning and in accordance with City of Rochester Water And Lighting Bureau standards. Lighting improvements will match or complement the public street and site lighting.

M. Growth-Inducing Impacts

1. Introduction

This section describes potentially significant growth-inducing aspects of the proposal, particularly the potential for additional development/redevelopment projects in the vicinity of the project area. The project will enhance potential for additional development/redevelopment in the immediate project area and within the adjacent neighborhood and the commercial area along Lake Avenue and River Street.

2. Existing Setting

Refer to *Section IV I Land Use, Zoning, and Conformance with Officially Adopted Plans* for a description of the existing setting.

3. Impacts and Mitigation

3.1 Marina

As outlined in *Section IV Q Economic/Fiscal*, the construction of the marina will generate both long and short term growth-inducing impacts created by construction activities and permanent job opportunities. In addition to the direct and indirect jobs and income generated by the construction and operation of the marina, the presence of the marina is a desirable use that increases the potential value of adjacent properties. The presence and availability of high quality boat slips in very close proximity to Lake Ontario is a significant amenity. When this amenity is present within walking distance of a potential residential property, the potential value of that residential property is increased. This increase in property values may encourage infill development within the surrounding neighborhood. In addition, visitors will be drawn to this amenity which will bring more people to the existing businesses creating more value and inducing more investment.

3.2 Right-of-Way (ROW) Improvements

The extension of River Street, realignment of North River Street and extension of Corrigan Street will not generate growth inducing impacts beyond potential short term local impacts created by construction activities. However, the improvement of these streets and the increased connectivity to and within the project site will facilitate growth that does occur as a result of the marina and adjacent developments.

3.3 Lighthouse Trail

The improvement of the Lighthouse Trail will not create any significant growth inducing impacts beyond potential short-term local impacts created by construction activities, and perhaps a modest increase in tourism at the Lighthouse facility as a result of the improved access created by the project.

3.4 Lake Ontario Resource Center (LORC)

Whether it is housed in an interim or permanent structure, the LORC may generate modest local growth-inducing impacts in addition to potential short term local impacts created by construction activities. Specifically, it is anticipated that the LORC will promote community and business partnerships, facilitate Great Lakes research, and provide both public education and private education for students throughout the Greater Rochester area. As a result, new business or institutional facilities may be attracted to the area.

The extent of potential new growth will depend on several factors, including the number of staff, visitors, faculty, and students using the facility. Growth inducing impacts associated with construction will depend on whether the LORC is located in an existing structure (interim LORC) or within a new structure near the Terminal Building (permanent LORC), as well as the size and complexity of that new structure.

3.5 Relocation of the Public Boat Launch

The relocation of the Public Boat Launch will not create any significant growth inducing impacts beyond any potential short term local impacts created by construction activities. The public boat launch is already present in the area and will simply be relocated to a different site in the same vicinity.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

The relocation of the Ontario Beach Park Labor Operations Center will not create any significant growth inducing impacts beyond any potential short term local impacts created by construction activities. The Labor Operations Center is already present in the area and will simply be relocated to a different site in the same vicinity.

3.7 Incremental Private Development

The mixed use development parcels established as a part of this project will create the opportunity for new structures supporting a mix of retail, commercial, office, and residential uses. The development will increase the population of the Charlotte neighborhood by 750 to 1,000 people in a concentrated area, which will increase the demand for a range of support services including restaurants, shops, newsstands, and other similar businesses. Further, these new residents are expected to increase year-round clientele for existing businesses in the area.

All of the structures developed on these parcels will be constructed in accordance with the newly developed form-based code which is intended to result in high quality architecture that supports and enhances the Lake Avenue commercial corridor. The required architectural character and increased density of residential units is expected to increase property values on both sides of Lake Avenue over time. It is anticipated that the project may spur secondary redevelopment projects on the west side of Lake Avenue, as property owners respond to the changing demographics and the increase in population.

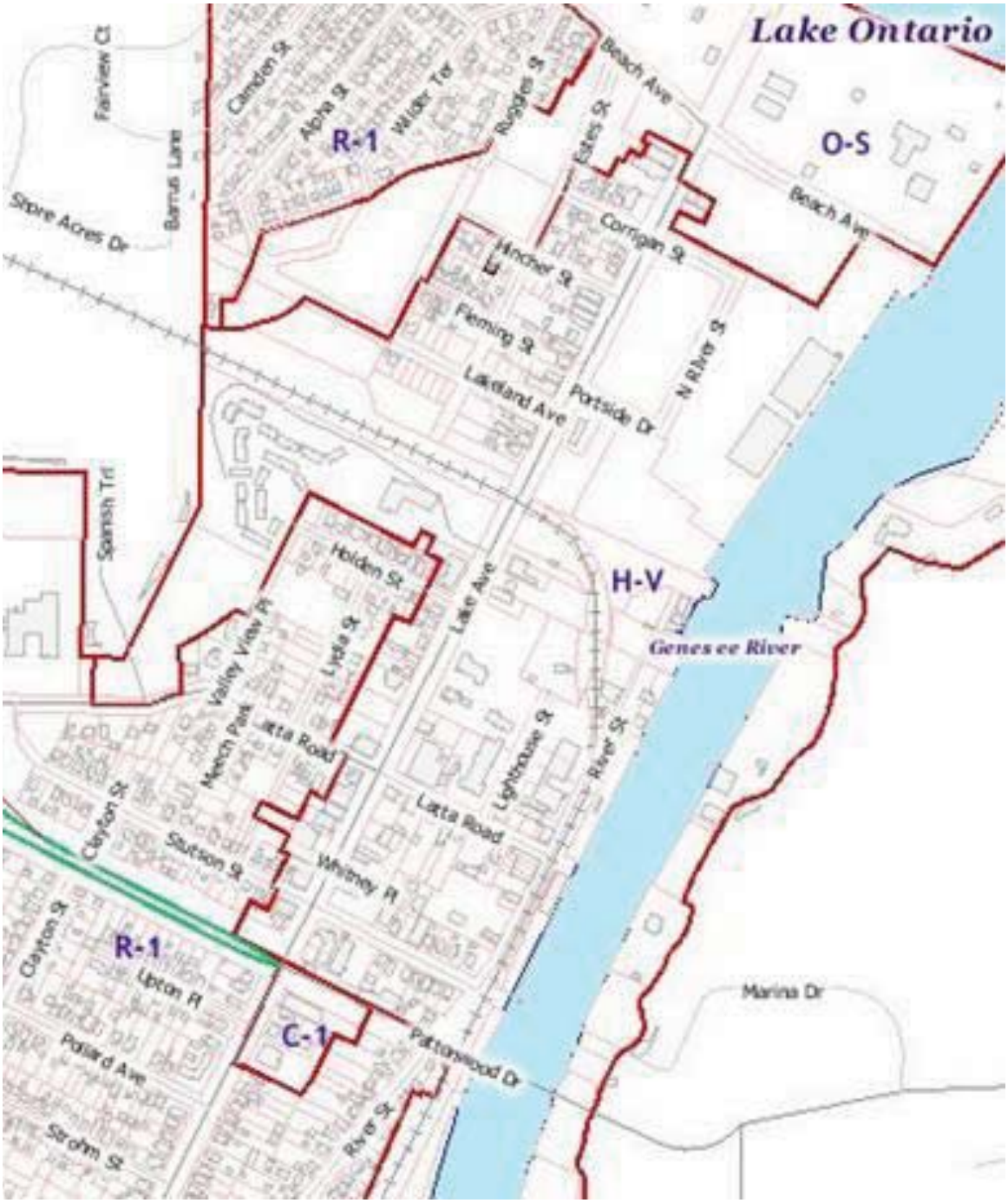
If property values on the west side of Lake Avenue increase, the associated increase in equity would provide potential funding for improvement and/or expansion of existing structures. Alternatively, existing homeowners may take advantage of improved property values to relocate to other areas, and existing properties may, in time, be converted to uses of higher value commensurate with the increased property values. Over time, market pressures will contribute to secondary (improvement) projects and a general improvement in the local economic conditions. These effects will be enhanced by the fact that the neighborhood west of Lake Avenue is clearly defined by its borders with Ontario Beach Park and with the existing CSX rail lines, which contributes to a sense of place and identity.

The potential growth described above may impact traffic, utilities, and the character of surrounding neighborhoods. However, it is important to emphasize that any growth-inducing impacts will occur over a relatively long timeframe. The Phase 1 Marina is not expected to be in place until the start of the summer season in 2014 or 2015. Residential and commercial development is expected to begin after that time. Such private incremental development, as well as the Phase 2 Marina Expansion and other Phase 2 public improvements, will be dependent upon market conditions and other factors in place and will occur over the long-term. As a result, no unexpectedly large or immediate changes to the Charlotte area will occur that would cause conflicts in terms of utilities, traffic, community character, etc. Rather, it is expected that changes to the community will be measured over time, at a relatively slow pace, and will be absorbed without the creation of short-term insufficiencies.

Existing zoning regulations, including the Harbortown Village (HV) District regulations, will provide the proper oversight of the secondary development described above. The HV District promotes limited growth by allowing small-scale (i.e., up to 2,500 square feet) commercial uses by right. Commercial uses greater than 2,500 square feet would require a Variance from the Zoning Board of Appeals with a public hearing.

The regulations of the adjoining R-1 District to the west require the retention of a low-density residential district. The Zoning Code prohibits (and does not allow variances for) the conversion of single-family homes to any other use or the establishment of new commercial uses in the R-1 District. Secondary growth in the R-1 area west of the zoning district boundary line along Ontario Beach Park (the southwest portion) is restricted (see Figure M-1 below).

Figure M-1
Existing Zoning in the Project Vicinity
that Affects Potential Growth-Inducing Impacts



N. Use and Conservation of Energy Resources

1. Introduction

This section describes potentially significant adverse impacts of the proposed project development on the use and conservation of energy resources and provides an estimate of the quantity of energy currently used by the site. This includes electricity, natural gas and potable water. Estimated demands from the development of the marina and the maximum proposed development of the site are also provided. Mitigation measures, such as the use of renewable energy technologies, energy-efficient facility designs, and re-use of existing materials on the site for new site construction, are presented.

For both new building construction and renovation of existing buildings, the United States Green Building Council (USGBC) has developed a "LEED" (Leadership in Energy and Environmental Design) Certification rating system. The design of the proposed boater services building is intended for LEED Certification. It is possible that the permanent LORC building, as well as buildings on the private development parcels, may also be designed for LEED Certification.

LEED certification provides independent, third-party verification that a building project meets the highest green building and performance measures. LEED certified buildings are designed to lower operating costs, increase asset value, reduce waste sent to landfills, conserve energy and water, be healthier and safer for occupants, reduce harmful greenhouse gas emissions, and demonstrate an Owner's commitment to environmental stewardship and social responsibility. To accomplish this certification, specific application of and compliance with the USGBC is required. "Prerequisites" are required such as construction activity pollution prevention, water use reduction, minimum energy performance, fundamental commissioning of building energy systems, storage and collection of recyclables, minimum indoor air quality performance, and others. "Points" are obtained by applying for achievable "credits" in various categories such as sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation in design, and regional priority.

2. Existing Setting

2.1 Energy Supply

The proposed project is located within an existing metropolitan area of the City of Rochester already serviced by gas and electric utilities. The site is currently occupied by the former fast ferry Terminal Building, which houses several restaurants, a U.S. Customs Service office, City of Rochester Security, and other office space used by the City. Aside from the Ontario Beach Park Labor Operations Center, a small accessory building at 4576, and site lighting, there are currently no other sources of energy consumption located at the site.

2.1.1 Natural Gas

The annual quantity of natural gas energy consumed at the existing site is approximately 44,000 therms. This represents the actual usage metered by Rochester Gas and Electric (RG&E) between June 2009 and June 2010.

RG&E has noted that the existing natural gas supply to the Charlotte area is deficient as a result of under-sized mains in Lake Avenue, and that the demand created by future residential or commercial development at the Port may overwhelm supply.

2.1.2 Electricity

The current electricity usage at the site is estimated at 1,152,000 kilowatt-hours (kWh) annually. This is based on RG&E records and meter information from June 2009 to June 2010.

It was noted by RG&E that there is ample electric capacity in the area, and no service issues will likely be created by new development at the Port.

2.2 Energy Demands

2.2.1 Natural Gas

The City anticipates that future energy demands for the Terminal Building will remain consistent with the 2009 and 2010 usages or may increase slightly as the building sees more use at all times of the year.

2.2.2 Electricity

The City anticipates that future energy demands for the Terminal Building will remain consistent with the 2009 and 2010 usages. RG&E noted that the electricity usage at the Terminal Building is below the current capacity of the installed equipment.

3. Impacts and Mitigation

With the development of the proposed project, there will be an increase in the quantity of energy consumed. This assumes that the existing businesses and facilities, currently operating at the site, will remain and continue with similar usage to that described in *Section IV N 2* above.

Temporary increases in energy use will result from the use of various types of machinery and heavy equipment during construction of all the improvements. Heavy equipment and construction vehicles will require energy to operate, most likely diesel or other fossil fuels. Electricity will also be required for smaller machinery and equipment used by contractors performing the work. Rather than requiring electricity from the onsite sources, contractors typically provide their own electric power using portable generators that run off of gasoline or diesel fuels.

3.1 Marina

The proposed marina design will include electrical services for each boat slip (157 slips at full build). The boater services building near the entrance to the marina will likely require electrical, potable water and natural gas services. The electrical needs for the building will include, but may not be limited to, interior lighting and exterior building-mounted lighting; computers and other control/monitoring systems, air-conditioning, fans, and communication systems. Lighting around the marina basin will generally be LED solar powered light bollards. Finally, electric power will be used to operate pumps and water circulation facilities.

It is anticipated that natural gas consumption will be limited to heating the boater services building, and to power laundry dryers and one or two water heaters in the boater services building.

Boat fueling facilities are not proposed to be located at the marina. An existing fueling facility and fuel tanks installed to service the former fast ferry operation have been abandoned, drained of their fuel, and will be removed as part of the project.

3.1.1 Natural Gas

The City does not anticipate that the Marina will require natural gas to operate, except for resources required to operate the boater services building. During the winter, the boater services building will need to be heated, unless the design of the building incorporates features that allow it to be "winterized." It is not planned to extend natural gas lines to individual dock slips.

An estimate for the potential demand for natural gas at the boater services building was calculated based on typical natural gas usage for heat and water heaters in commercial buildings. It was assumed that the boater services building would be approximately 2,000 square feet in size and be operated at a normal to high level for 6 months of the year (to also account for laundry dryer use) and at a relatively low level for the 6 month off-season. The result was an estimated increase in demand for natural gas of approximately 1,080 therms per year. The total energy demand generated by the boater services building is relatively small in

comparison with the existing uses in the Port of Rochester Terminal Building (44,000 therms per year).

In order to reduce natural gas consumption and encourage energy conservation, a minimum target of LEED Silver certification will be established for the boater services building. Energy saving strategies may be incorporated into the design of the structure such as passive ventilation, vegetated or high albedo roof surfaces, and building commissioning. Energy conservation measures will be a focus of ongoing operational and management strategies.

3.1.2 Electricity

Electricity will be required to operate the marina, including the pumps and water circulation mechanisms as well as the boater services building. Electric conduits and cable will be provided to all of the dock slips in the basin. This will provide boaters, specifically transient boaters, with shore-based power.

Lighting at the site will be designed to be energy-efficient. This may include the use of LED fixtures, which do not require as much energy to operate as high pressure sodium (HPS) and metal halide lights. Site lighting adjacent to the marina could incorporate dark-sky strategies to reduce energy use.

Power saving strategies that may be incorporated into the design of the boater facility building include day-lighting with individual controls, building commissioning, and the use of on-site alternative energy sources, including Building Integrated Photovoltaic systems or small scale wind turbines.

In addition, management strategies may be implemented as part of the marina operations plan to reduce energy use, including individual metering for electricity usage at each slip and surcharge pricing structures for electricity. This strategy is directed toward reducing the number of boaters who continuously run air conditioning and refrigeration systems on boats at the moorings while not being used. Additional management strategies include purchase agreements with energy providers for use of energy from renewable sources, and ongoing building commissioning to ensure maximum efficiency of building systems.

3.2 Right-of-Way (ROW) Improvements

3.2.1 Natural Gas

The Right-of-Way Improvements will not create a demand for natural gas. A natural gas main will be relocated in the rights-of-way of North River Street and River Street Extension, as described in *Section IV L Utilities*.

3.2.2 Electricity

Electricity use within the limits of the ROW Improvements will be limited to lighting along its alignment for safety and visibility for vehicles and pedestrians. Lighting will be designed to City of Rochester standards, and fixtures will be selected based on energy efficiency and useable life. Light fixtures can also be placed on timers or photo cells which help conserve energy and limit electricity use to nighttime operations.

3.3 Lighthouse Trail

3.3.1 Natural Gas

No natural gas energy will be required for construction or operation of the Lighthouse Trail, and therefore no increase in demand will result.

3.3.2 Electricity

The overall demand for electricity for operation of the trail lighting, if provided, is relatively minor and can easily be accommodated by the existing facilities.

3.4 Lake Ontario Resource Center (LORC)

The use of the "link building" portion of the Terminal Building for the interim Lake Ontario Resource Center or construction of a permanent LORC building adjacent to the Terminal Building will have negligible impacts on the use and conservation of energy resources. The LORC will consume a base level of energy for heating and air conditioning. Energy efficient equipment and renewable energy technologies will be incorporated to the extent possible.

3.4.1 Natural Gas

The link building is heated through the Terminal Building. If a new building is constructed, the demands for gas energy will be analyzed and the proper size of gas mains determined during design.

Energy efficient fixtures and heaters, including programmable thermostats, will be considered for the LORC building to avoid heating when the building is not in use. If new insulation is incorporated in the LORC, recycled materials will result in a more green building and provide further energy efficiency.

3.4.2 Electricity

Electric use in the link building is limited to lighting installed to accommodate the fast ferry operation. It is likely that lighting and electrical equipment in the building will need to be upgraded with the renovation of the building to become a research center. If a permanent LORC building is constructed, electric demand will be coordinated with RG&E. As previously stated, the existing transformer that supplies the Terminal Building is underutilized and would have ample capacity to serve the LORC.

In order to minimize electric demand, lighting systems installed in the LORC can incorporate different types of motion sensors which will allow for lighting to turn off after long periods of non-use. Energy efficient mechanical systems and equipment will be incorporated to the extent possible.

3.5 Relocation of the Public Boat Launch

It is not expected that the energy demands at a new Public Boat Launch will differ from the energy demands of the existing boat launch.

3.5.1 Natural Gas

Operation of the boat launch does not consume natural gas, and the relocation of the boat launch will not result in a change in natural gas consumption.

3.5.2 Electricity

Electricity will be needed at the new site of the boat launch to supply site lighting at the ramp, within the accessory building, and within the parking area. Energy efficient site lighting will be installed. It is not anticipated that energy to power site lighting at the new facility will exceed that of the existing facility.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

Relocation of the Ontario Beach Park Labor Operations Center will not significantly affect overall energy consumption. It is not expected that the energy demands at a new Labor Operations Center will increase significantly from the energy demands of the existing Labor Operations Center. Additional energy demands of the new center will be assessed during the site-specific review.

3.6.1 Natural Gas

With the relocation of the Labor Operations Center, gas mains and services that currently supply the current building will need to be capped or removed from the site.

Natural gas supply for the new Labor Operations Center building will be analyzed during design to determine the demand for natural gas and the size of mains and services needed. However, it is anticipated that demand would be modest. The capacity of gas mains in the area at the time of the relocation of the Labor Operations Center will be evaluated during the site-specific review process.

3.6.2 Electricity

Electric facilities that serve the current Labor Operation Center will be removed from the building as part of its demolition. Electricity for the new Labor Operations Center will be coordinated with RG&E during design. As there is ample electric capacity in the area, and no significant increase in use will occur, no adverse impacts on electricity will occur as a result of the relocation of the Labor Operations Center.

3.7 Incremental Private Development

The private mixed use development on Parcels I through III will likely entail some combination of residential (apartments/condominiums), commercial (retail shops, restaurants), and other possible uses. Currently, plans for full-build out include up to 430 private residential condos, apartments or townhouse units, and approximately 44,000 square feet of commercial space.

At this point, the exact size, number of proposed units, specific uses, and design of internal/external energy consuming components of the buildings are unknown. It is anticipated that the addition of the mixed-use buildings will significantly increase energy usage at the site, but actual estimates of specific consumption are not provided as they would be inaccurate at this stage of the project.

As each private development parcel is proposed for development and actual uses and facilities are defined, potential impacts on energy consumption will be evaluated during the site-specific environmental review for that parcel.

The developers of the mixed-use buildings/sites will be encouraged to incorporate energy-efficient systems, designs, and materials to minimize the potential energy consumption and the production of waste. At the time these future mixed use developments are designed and implemented, it is expected that increases in the cost effectiveness and popularity of such strategies will further encourage developers to incorporate energy-efficient systems, eco-friendly designs, and "green" technologies. Specific mitigation measures will be identified during the site-specific review for each parcel.

3.7.1 Natural Gas

RG&E has noted that the natural gas supplied to the Charlotte area is deficient due to undersized mains in Lake Avenue and that the demand created by future residential or commercial development at the Port may overwhelm supply. The City has had several communications with RG&E in 2011 regarding this issue and has provided RG&E with additional information on the estimated demand in terms of BTU's per unit and number of units per development parcel. With the submission of this information, the City is attempting to clarify at what stage of the project a new gas main would be needed.

RG&E noted that the closest gas hub to bring a large gas main and therefore more gas supply to the area is in the Latta Road and Dewey Avenue area, a distance of approximately two miles. More information on utility infrastructure is provided in *Section IV L Utilities*.

3.7.2 Electricity

Electrical installations that will service the development parcels will likely be installed from the electric conduits installed with the rights-of-way of North River Street and River Street Extension. At utility agency meetings on the project, RG&E electrical engineers noted that transformer locations will need to be coordinated during final design. Transformers will be housed in underground vaults or above-ground vaults which will be strategically located to serve each of the parcels. The electrical supply to the area has ample capacity to accommodate full build-out of the project.

O Solid Waste Management

1. Introduction

This section covers the impacts of the Solid Wastes (e.g., refuse, municipal wastes, cinders, coals, slag, ash, etc.) that will be generated from the excavation and construction of the proposed marina, the construction of public roadway, right of way and trail improvements, and marina operations. It will discuss the project's application for a Beneficial Use Determination (BUD) for the slag material that exists in the subsurface of the site. This section will also examine the impact of solid waste generated from operations at the Terminal Building and from the future private mixed use development. Finally, this section will include mitigation measures for the impacts identified including potential plans for managing, monitoring, and disposing of Solid Wastes, including slag.

2. Existing Setting

2.1. Solid Waste Generated by Terminal Building & Existing Port Site Operations

There are five restaurants operating in the Terminal Building, as well as City office, security, and building maintenance functions. The solid waste generated from these operations is typical food and trash waste associated with commercial restaurants and office waste. Refuse from the terminal tenants and operations is stored in dumpsters on site, collected weekly and disposed at a 6NYCRR Part 360 permitted landfill. Minor amounts of solid waste refuse are generated and collected from the use and operation of the Public Boat Launch as well as the activities at the current Monroe County Parks Operations facility. These wastes are collected on a regular basis and similarly loaded and transported to a permitted landfill for final disposal.

2.2. Subsurface Materials and Conditions

The existing site includes surface soils and constructed features such as asphalt parking lots and concrete curbing and walks, various fill materials, sediments, and native soils that are generally present in consistent patterns in the east-west direction and in the north-south direction across the project site. The top twelve to eighteen inches of material typically consists of an asphalt pavement section, topsoil, or other organic material.

Fill materials, including iron slag, are present beneath the surficial soils and man-made features. The fill materials vary in thickness and depth. Fill is encountered at elevations that vary slightly across the site but generally are encountered as shallow as 2 feet and extend to depths of more than 20 feet below ground surface. Slag exists in a layer of variable thickness approximately 5 to15 feet below ground surface. Beneath the fill materials a layer of organic peat is found 15 to 20 feet below ground surface over portions of the project

site. Also found below the fills are naturally occurring glacial tills on the western portion of the site, and alluvial deposits increasing in thickness and depth in a west to east direction toward the Genesee River on the eastern half of the site.

The various fill materials when excavated can become regulated solid waste depending on the characteristics of the fill and how the material was originally generated. The generation of excavation spoils that are characterized as solid wastes results in requirements for proper handling, transportation, and disposal of such fill material.

Since 2000, the subsurface conditions at the Port area have been investigated on multiple occasions. The investigations have resulted in a well documented profile of subsurface conditions at the Project sites. Over two hundred soil borings have been performed and have analyzed in order to establish locations, vertical and horizontal extent, and characteristics of the fill materials that would be excavated during the project. In addition numerous soil and groundwater samples have been tested for various potential contaminants as well as for physical composition in order to assist with the characterization of fills that will be excavated. The most recent investigations took place in 2007, 2008, 2009, and 2010. Data about the fill materials including railroad ties, lines and ballast, construction and demolition debris, and wastes from industrial uses such as ash, cinders, coal, and slag was obtained from these investigations. Soils and groundwater testing results are further summarized in *Sections IV A and IV B* and are provided in detail included in the appendices of this DEIS. *Sub-Section IV O 3.1.3* below provides more information about subsurface conditions from the site's Environmental Management Plan (EMP).

2.3. River Sediments

Portions of the Genesee River, including the near shore location adjacent to the proposed Port Project site, require periodic maintenance dredging and removal of built up of sediment, including silts, clays, and some sands. Sediments are removed from the river bottom using a mechanical or hydraulic dredge and placed into hoppers aboard a ship or scow for transport to the open water discharge site. Sediment, although not a solid waste under 6 NYCRR Part 360, is a regulated material and dredging, including dredging that would be required to construct the marina entrance, must be performed under NYSDEC and US ACOE permits. The City of Rochester currently has the required permits for maintenance dredging of the Port Terminal dock and Public Boat Launch area. Sediment deposition from the Genesee River occurs as a general rate of 1-2 feet per year but can vary significantly based on features and obstructions in and along the river bank as well as flow velocities. No dredged sediments have been placed on the proposed project site.

Sediment contaminant data is required prior to permitting and dredging. Sediments are analyzed in accordance with joint USEPA/USACE protocols contained in the Great Lakes Dredged Material Testing and Evaluation Manual (1988). Shallow, recently deposited sediments at the Port are generally uncontaminated and suitable for open water disposal. The current open water discharge site is located approximately 1.5 miles from the Charlotte Pier. Deeper sediments, specifically in the areas along the Port Terminal building and the Public Boat Launch, contain some contaminants such as cadmium and silver that may condition or limit disposal options. The City will need to modify and deepen its dredging permits for the marina entrance area to include the removal of deeper sediments.

3. Impacts and Mitigation

3.1. Project Excavation and Solid Waste Management

3.1.1. Overview

The excavation of fills containing regulated solid waste during the construction of the various project components will require significant solid waste management activities. Due the presence of Regulated Solid Waste within the fill materials across at the Port site, developers and contractors disturbing the subsurface are required to follow the procedures outlined in a site wide Environmental Management Plan. In addition to the EMP, additional specifications and requirements will be developed for specific aspects of the project such as the contract for the marina excavation.

As mentioned in sub-section 2, a significant quantity of iron slag is present across the project site. Slag is a manufacturing by-product from the production of steel and iron and is a regulated solid waste. The City of Rochester has applied to the NYSDEC for a Beneficial Use Determination which would allow the City to beneficially reuse the slag. Under the requested BUD the slag would no longer be considered a solid waste as long as it is used for the agreed upon beneficial uses.

The next two sub-sections will describe the management of slag excavated at the site under a Beneficial Use Determination and the Solid Waste management actions and requirements under the EMP. The remaining sections will discuss the impacts and mitigation measures specific to each project component.

3.1.2. Beneficial Use Determination (BUD) for Slag

As part of the proposed project, the City of Rochester has applied for a case-specific Beneficial Use Determination for the excavated slag in accordance with Solid Waste Management Facility Regulations (6NYCRR Part 360). The BUD, once approved, will be a NYSDEC approved plan and will supersede the EMP for slag only, which will be permitted to be moved off the site in the conditions detailed in the approved BUD. The BUD requirements will articulate how slag will be managed and processed while on site, the general specifications for reuse, and requirements for notifications regarding off site locations for storage and reuse of slag. From the point of excavation until processing on-site, the slag will be managed as a solid waste. Slag will be segregated from other fills and regulated waste materials and processed separately to meet the approved specifications for general fill and road base.

According to the National Slag Association, iron slag is an extremely versatile and durable building material with applications in concrete, asphalt pavement, masonry units, lightweight embankments, and waterway applications. Some of the processed slag will likely be used on-site as a base or sub-base for construction roadways, building foundation backfill, and parking area surfacing. A portion of the processed slag will be used off-site on other City public ROW or City controlled non-residential project sites.

The City's consultant, LaBella Associates, has collected composite samples of slag from the soil borings completed at the project site. The samples were analyzed for semi-volatile organic compounds (SVOCs), metals, and leaching of heavy metals using the synthetic precipitation leaching procedure (SPLP). No SVOCs were detected in the slag samples, and all metals meet the NYSDEC Part 375 Soil Cleanup Objectives (SCOs) for unrestricted use, with the exception of chromium which meets the SCOs for restricted residential use. In addition, very low concentrations of metals leached from the slag were found in the analysis, indicating that the material is suitable for reuse.

As part of its BUD application, the City prepared a BUD Solid Waste Control Plan (BUD SWCP) in January 2011 (see Appendix V). The BUD SWCP is intended to guide the removal, processing, staging, and management of the excavated slag material. All other materials encountered during the excavation of the Site, including unrecoverable slag, will be managed in accordance with the Environmental Management Plan. The BUD SWCP details the approach and the classification system that will be used to field screen and segregate excavated materials during recovery of the slag layer. In accordance with the NYSDEC approved BUD, the slag will need to be processed before it is re-used.

During the excavation activities, soils and other materials from the excavations will be visually assessed continuously for the presence of slag, mixed fill materials, and soils exhibiting staining, odors, or elevated photo-ionization detector (PID) readings (i.e., greater than 25 parts per million) collectively referred to as "evidence of impairment."

Six classes of materials are expected to be generated by the activities associated with the proposed excavation. Each of these six classes of material will be managed and handled in a manner dictated by the evidence of environmental impairment, visual observations during excavation, or the existing analytical data. These six classes of material described in the BUD SWCP are as shown in the following Table O-1.

Table O-1
Materials Handling Descriptions

Class of Material	Physical Description
Class 1	Predominately slag excavated with very minor quantities of mixed fill materials to be processed in accordance with NYSDEC approved BUD.
Class 2	Regulated Solid Wastes (cinders, coals, ash, C&D debris, petroleum impacted soils, and all other miscellaneous debris) disposed of off-site at a NYSDEC Part 360 permitted landfill, or if suitable, re-used on-site in accordance with Part 360-1.7 (b) or the 2002 letter to Dan David of the NYSDEC provided in Appendix 1 of the EMP prepared by LaBella and dated July 2005 (Appendix Z).
Class 3	Processed Slag to be re-used off-site in accordance with the NYSDEC approved BUD.
Class 4	Processed Slag to be re-used on-site in accordance with the NYSDEC approved BUD.
Class 5	Clean fill (topsoil, undisturbed native soil) to be re-used on site.
Class 6	Clean fill (topsoil, undisturbed native soil) to be removed from the Site.

3.1.3. Environmental Management Plan (EMP)

A Project Specific EMP is under preparation to guide the handling of the excavated materials outlined in Table O-1 above. The Project Specific EMP will utilize data gathered from all previous subsurface investigations and observations made at the Port of Rochester. The documents associated with the previously completed subsurface investigations at the Port of Rochester include the following:

- Phase I Environmental Site Assessment – Charlotte Port of Rochester, New York by Galson dated April 1999.
- Port of Rochester Harbor Improvement and Harbor Ferry Terminal - Phase II Environmental Site Assessment, Preliminary Site Characterization Report by LaBella Associates, P.C. dated May 31, 2001.
- Phase III Environmental Site Assessment: Remediation Closure Report – NYSDEC Spill Number 990601 - Area #1 by LaBella Associates, P.C. dated October 2002.
- Geotechnical Site Characterization, Port of Rochester Harbor Improvement and Harbor Ferry Terminal by Haley & Aldrich of New York dated January 22, 2001 (see Appendix W).
- Phase II Environmental Site Assessment: Underground Storage Tank Closure Report – Soil Sampling and Analysis: Port of Rochester Orphan Tank Discovered September 2003 by LeCesse Constriction.
- Underground Storage Tank Removal, Excavation Closure Sampling and Groundwater Sampling Report - North Warehouse, Port of Rochester; Rochester New York: Remediation Closure Report dated January 2003.
- Memo – January 15, 2003, Vortex Excavation – Port of Rochester Parking Lot Improvements (see Appendix X).
- Memo – February 17, 2004, Groundwater Sample Results – Future Underground Storage Tank Excavation, Port of Rochester – Fast Ferry Terminal, Rochester, New York.
- Memo – September 11, 2002, Questionable wastewater discharge relating to groundwater encountered and pumped at the South 24” sewer outfall trench; Beach Avenue and North Parking Lot Improvements Project – Port of Rochester and drawing showing approximate areas where these issues were addressed (see Appendix Y).
- Letter from the City of Rochester of NYSDEC Active Spill #990601 to the NYSDEC dated May 6, 2004.
- Letter from the NYSDEC of Spill #990601 to the City of Rochester dated June 14, 2004 (see Appendix Z).
- Remedial Investigation Report by LaBella Associates, P.C. dated March, 2007 (See Appendix I).

- Predevelopment Subsurface Conditions Analysis Investigation Report by LaBella Associates, P.C. dated March 2009 (see Appendix G).
- Data Summary Package: Port Marina Site Conditions Data Gap Investigation by LaBella Associates, P.C. dated September 2009 (see Appendix F).
- Port of Rochester Solid Waste Control Plan by LaBella Associates, P.C. dated January 2011 Draft (see Appendix V).

The cumulative findings of these reports indicate a large portion of the project site contains fills that when excavated would require management as Regulated Solid Waste. Fill material at the site includes slag, railroad ties, railroad ballast, wastes from industrial uses, ash, cinders, railroad lines, and coal. These materials are generally considered by the NYSDEC to be Regulated Solid Waste because they were material derived from industrial sources.

Not included in the above list, but crucial to the preparation of the Project Specific EMP, is an Environmental Management Plan prepared for the general Port site in 2005, entitled: *Port of Rochester Environmental Management Plan, LaBella Associates, P.C., July 2005.* The 2005 EMP was completed prior to the definition of the Proposed Action (as presented in this EIS) and the preparation of site plans. Therefore, while the 2005 EMP contains valuable information about the general site area, it is not focused on the marina footprint nor on other details specific to the current project.

The Project Specific EMP will be completed for the project prior to commencement of any excavation work. In order to provide background information on the general project area until completion of the Project Specific EMP, the contents and recommendations of the 2005 EMP are summarized below.

Port of Rochester Environmental Management Plan, July 2005

The layer of slag intermixed with foundry waste is found in an approximately 625,000 square foot area and averages approximately four-feet thick. Estimates of the total volume of slag, ash, and foundry waste indicate that approximately 93,000 cubic yards of this material is present at the Port area. The depth from the current ground surface elevation to the slag layers varies widely over the site. The depth from ground surface to the slag layers in the outlying portions of the project site ranges from 3 to 5 feet below ground surface, whereas in the center portion of the site the layer of slag can be reached as little as one foot below the ground surface.

Excavated fill materials that would be characterized as Regulated Solid Waste are present in the footprint of the proposed marina. These materials include, but are not limited to, the following:

- Slag (unless managed under a BUD);
- Railroad ties;
- Railroad ballast;
- Construction and demolition debris from industrial uses;
- Ash;
- Cinders;
- Railroad lines; and,
- Coal.

Representative samples of slag material from the Port site were analyzed to determine if contaminants might be present in the slag that would require management of excavated slag as hazardous waste. Sampling and laboratory analysis for Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), eight (8) Resource Conservation and Recovery Act (RCRA) Metals, cyanide, and Polychlorinated Biphenyls (PCBs) was performed. The test results of analysis indicate that the slag is not a RCRA hazardous waste.

Metals detected in the slag samples include arsenic, cadmium, and barium. Arsenic was the only compound that appeared to be consistently elevated above eastern USA soil background levels. Appendix 2 of the 2005 EMP contains tables summarizing analytical results of the slag and man-made fill materials from samples referenced in the Port of Rochester Harbor Improvement and Harbor Ferry Terminal - Phase II Environmental Site Assessment, Preliminary Site Characterization Report by LaBella Associates, P.C. dated May 31, 2001.

In approximately 20 percent of the soil samples analyzed in the 2005 EMP, the levels of arsenic were elevated above the NYSDEC TAGM #4046 Eastern USA background levels and above the New York State Department of Health (NYSDOH) recommended level of 20 part per million (ppm).

Analyses of the ash/cinders have typically detected low-levels of petroleum related SVOCs. In addition, petroleum-hydrocarbon related compounds were detected in the soil and groundwater (not from ash/cinders) at intermittent locations in the vicinity of historical petroleum storage tanks. These may be related to potential historic spills from former railroad activities in the Port area.

In general, the available test results from soil and fill samples collected during previous site investigations may be considered sufficient for solid waste characterization of slag, coal, cinders, railroad ballast, and ash (fill) that is present at the Port area. The presence of coal, cinders, railroad ballast and ash can be visually identified during excavation.

Existing test results are likely not sufficient for accurate waste characterization of subsurface petroleum impacted soils or fill. If petroleum impacted soils or fill are encountered, additional waste characterization sampling and analysis will be required to determine proper disposal.

General impacts from excavation-derived solid waste materials include the potential for dust and odors, the need for proper management and staging prior to use on site or disposal, the need for erosion control and storm water management, and the need for sampling and analytical testing of certain waste streams (such as petroleum contaminated material) prior to disposal.

During excavation activities, the 2005 EMP recommends that a qualified Environmental Project Monitor (EPM) be on-site to make determinations regarding the solid waste status of spoils generated during the construction. In addition, criteria should be established for waste characterization, handling and staging procedures, tracking, and disposal. A community air monitoring plan (CAMP) and site health and safety plan (HASP) will be prepared and followed, as part of the Site Specific EMP.

The requirements of the 2005 EMP and the BUD (undergoing final approval) have been described. Both of these documents are incorporated into the DEIS as appendices (see Appendices Z and AA). The management of all materials encountered during excavation for the various project components will be consistent with the Project Specific EMP. The BUD, when approved, will supercede the EMP with respect to slag, allowing for off-site reuse of processed slag.

3.1.4. Requirements Regarding On-site Reuse of Regulated Solid Wastes

NYSDEC regulations regarding management of Regulated Solid Waste are contained in 6NYCCR Part 360. A provision has been included in Part 360 that allows for non-hazardous Regulated Solid Waste to be properly managed and replaced within the confines of an inactive solid waste site with NYSDEC approval. Proper management requires that care be taken in planning, monitoring, and testing of excavated waste and fill material to confirm that the material does not meet the regulatory

definition of hazardous waste, and to allow proper replacement and re-use on-site. A letter from LaBella Associates, P.C. to the NYSDEC dated January 21, 2002 documented the NYSDEC's acceptance of the re-use of the man-made fill materials at the Port area. The NYSDEC approval of re-use of man-made fill materials was specifically for the Port of Rochester Harbor Improvement and Harbor Ferry Terminal project. A copy of this letter in included in Appendix 1 of the 2005 EMP (Appendix Z).

Regulated Solid Waste that is excavated should not be used as backfill in utility trenches. Regulated Solid Waste may be relocated on-site or legally disposed of at a NYS Part 360 Landfill. The relocation area of Regulated Solid Waste will be subject to the requirements of the EMP and performed under the oversight of the Environmental Project Monitor.

Requirements and re-use of Regulated Solid Waste and Petroleum Impacted Soil and Groundwater at the Port area are summarized in Table O-2 below.

Table O-2
On-Site Re-Use Requirements

Material Classification	Material Description	Disposal / Re-use	On-Site Cover Requirements
Class 1	• Regulated Solid Waste including but not limited to slag, ash, cinders, railroad ballast and ties, etc. (Railroad ties cannot be re-used on-site in most situations.) • Petroleum hydrocarbon related compounds that are less than the NYSDEC TAGM 4046 Guidance Values*.	• Can be re-used at the Port area with NYSDEC approval OR (slag only) reused off-site in accordance with the NYSDEC approved BUD. • If cannot be re-used at the Port area or recycled per the BUD, must be legally disposed of at a NYS Part 360 landfill	If reused on-site, must be covered with 12 (commercial) or 24 (residential) inches with non-impacted soil or fill, or with asphalt or concrete paving.
Class 2	• Impacted on-site media with petroleum hydrocarbon related compounds that are above the NYSDEC TAGM 4046 Guidance Values*.	• Cannot be re-used at the Port area without treatment. Must be legally disposed of at a permitted NYS Part 360 landfill.	Cannot be re-used on-Site. Must be staged on and covered with 6-mil polyethylene sheeting pending disposal at a NYS Part 360 landfill.

*NOTE: The Project-Specific EMP will utilize current NYSDEC soil clean-up objectives (i.e., NYSDEC CP-51 Soil Cleanup Levels denotes New York State Department of Environmental Conservation Commission Policy-51 Soil Cleanup Levels for Gasoline Contaminated Sites and Fuel Oil Contaminated Site). The July 2005 EMP utilized the now obsolete, NYSDEC TAGM 4046 Guidance Values.

3.2. Marina Construction and Excavation

3.2.1. Solid Waste Generation

The primary solid waste impact of the excavation and construction of the Phase 1 of the Marina will be the generation of excavation spoils that would be characterized as solid waste and require disposal at a permitted solid waste disposal facility. Creation of the Phase 1 Marin basin will involve the removal of approximately 62,000 cubic yards (cy) of iron slag, 31,000 cubic yards of fills likely to be Regulated Solid Waste and 85,000 cubic yards of native soils and other non-regulated fill materials. The estimated quantities of material to be excavated were determined using a three dimensional model of the marina in conjunction with the soil boring information provided in the various subsurface investigation reports and boring log information completed for the project site.

At Full Build (Phase 2 Marina Expansion), the proposed project will require the total excavation of approximately 225,000 cubic yards of material. Approximately 75,000 cubic yards is iron slag, approximately 20,000 cubic yards is estimated to be Regulated Solid Waste, and the remaining approximately 130,000 cubic yards are native soils and other non-regulated fill materials. Table 0-3 below summarizes these excavation estimates.

Table O-3 - Excavation Amounts for Proposed Marina

	Phase 1 Marina	Phase 2 Marina Expansion (Full Build-Out)
Slag	62,000 cy	75,000 cy
Regulated Wastes	31,000 cy	20,000 cy
Fill & Native Soils	85,000 cy	130,000 cy
Total	***178,000 cy***	***225,000 cy***

General impacts from excavation-derived solid waste materials include the potential for dust and odors, the need for proper management and staging prior to use on site or disposal, the need for erosion control and storm water management, and the need for sampling and analytical testing of certain waste streams (such as petroleum contaminated material) prior to disposal.

A primary mitigation measure that will be implemented during the project is the beneficial reuse of the excavated iron slag. Beneficial reuse of the slag will remove approximately 62,000 cubic yards from the solid waste stream during construction of Phase 1 Marina and a total of 75,000 cubic yards upon Phase 2 Marina Expansion (Full Build). Aside from beneficial reuse of this slag, the BUD would likely reduce slag trucking costs because reuse locations would be in the City of Rochester

and not require the same length of transportation to a permitted solid waste landfill. In addition beneficial reuse will avoid placement of slag, a rocklike, inert, and environmental benign material, in a permitted solid waste landfill.

3.2.2. Solid Waste Handling and Disposal

Slag and other Regulated Solid Waste generated during construction can also be reused on the site in accordance with a provision in 6NYCRR that allows replacement of certain solid waste materials excavated within a project site to be reused on-site as general fill. This technique provides the same benefits as a BUD, but involves little or no requirement for trucking, reduces fuel consumption and air emissions, and lowers associated off-site transportation costs.

Under the proposed BUD, additional slag material may be reused off-site in approved methods, such as road base, structural fill, and general fill cement mixes. Regulated Solid Waste excavated from the marina basin that cannot be reused will need to be disposed of at a NYSDEC approved facility, as described in the following sub-section.

It is estimated that a total of approximately 5,000 cubic yards of processed slag may be used on-site as sub base for the construction of roadways or walkways. Other uses identified for reuse of the slag material in the draft BUD includes its placement at City owned parking lot areas. The City could stockpile the slag material on its various properties and equipment yards in order for it to be used for future City projects, as long as the use and projects are approved in the BUD.

Processing slag on-site will require approximately up to 2.5 acres of land for the necessary equipment and an area to stockpile finished materials until they are transported to its final BUD approved destination. During Phase 1 of the marina construction, the proposed slag processing and stockpile location identified through a constructability review of the project includes a portion of the block east of Lake Avenue and west of River Street between Portside and Corrigan Streets. During the Phase 2 Marina Expansion, the current locations of the Public Boat Launch and the Monroe County Parks Operations Center could be used for staging. These two locations together can accommodate the estimated acreage needed for the operation. This will require that both facilities be relocated and operational in another location before the expansions of the marina can proceed, unless the staging requirement can be reduced.

During the preparation of the plans and specifications for the construction of the marina, existing data and information about subsurface conditions will be used to make preliminary determinations regarding the waste status of the material to be excavated. The project

EMP will also outline the criteria to be used to determine the solid waste status of excavated material. Critieria will include prior subsurface contaminant data and soil/fill characterization, visual appearance, odors, vapor monitoring results, and if there are indications of petroleum contamination. Regulated Solid Wastes and soils exhibiting petroleum impacts excavated from the marina basin will not be re used on-site and will need to be disposed of at a NYSDEC permitted solid waste disposal facility.

A comprehensive waste management decision matrix will be included in the EMP. The staging of Regulated Solid Waste will be performed in a manner so that it is segregated from non-regulated materials. The Environmental Project Monitor and construction inspectors will guide the management and disposition of all excavation spoil and waste streams. Prior to excavating in areas where Regulated Solid Waste is anticipated, the Contractor will be required to remove the top layer of non-regulated materials (i.e. topsoil, native soil, asphalt, etc.), as practicable, and keep the material segregated from any Regulated Solid Waste (i.e., cinders, coals, slag, etc.). If the material is to be relocated for re-use on-site, Regulated Solid Waste is required to be covered with an impervious material (e.g. asphalt or concrete) or with a minimum of 12-inches of non-impacted soil or fill (commercial locations).

In order to comply with all the applicable requirements, material excavated from the ground will be sorted and tested in accordance with the EMP. Samples collected for laboratory testing will be taken in 10,000 cubic yard increments at an interval of 1 grab sample for every 2,000 cubic yards. These samples will be sent to an approved laboratory and results of tests performed on the soils will be sent to the NYSDEC. Regulated Solid Waste is not allowed to leave the Port work area without expressed written consent from the Environmental Project Monitor. An Environmental Project Monitor will be required to be on-site to oversee the excavation, the sorting of materials being loaded, waste shipping paperwork, and trucking of wastes to their final destination. Requirements for these processes will be included in the both the EMP and the project plans and specification to disclose the information to contractors.

The potential for excavation of a special Regulated Solid Waste, “petroleum impacted soil,” is present within the proposed Marina footprint in an area where petroleum contamination was detected during the construction of the Terminal Building. In accordance with the EMP, solid (non-aqueous) petroleum impacted soil which cannot be readily separated will be segregated into separate stockpiles and staged and covered with one layer of 6-mil thick polyethylene sheeting at the end of each work day. If necessary, groundwater exhibiting petroleum impacts will be pumped into a holding tank, approved of by the EPM. Petroleum

impacted soil is not allowed to leave the Port of Rochester work area without written authorization from the City Division of Environmental Quality and/or the Environmental Project Monitor.

3.2.3. Consistency with EMP and Applicability of Beneficial Use Determination

The requirements of the EMP and BUD have been described in the previous section, and both of these documents are incorporated into the DEIS as appendices (see Appendices Z and AA). The management of all subsurface materials encountered during marina excavation and construction will be consistent with the EMP. The BUD for processed slag, if approved, will supercede the EMP, allowing for off-site slag reuse.

3.3. Marina Operations and Management

3.3.1. Solid Waste Generation

Solid wastes generated by the operation of the marina include boater refuse, wastes from trash receptacles, and waste materials from marina cleaning and maintenance activities. Quantities of new waste from the marina will not be significant and is expected to be much less than the volume of solid waste currently generated by the Terminal Building restaurants and operations.

Pump out facilities will be provided for the removal of sanitary wastes from boats. Although not regulated as a solid waste, sanitary wastes will require proper management and disposal. The marina operator will be responsible for operations and maintenance of the pump-out facilities and proper waste disposal either to the sanitary sewer system or with a waste collection vendor.

3.3.2. Solid Waste Handling and Disposal

Attention to refuse containers and regular refuse collection will be part of the requirements of marina management. Once operational, the marina will occasionally generate other wastes, in the form of floating debris or vegetation that may build up on the water surface or edge of the marina. This material will be removed periodically by the marina operator and taken off-site to be disposed.

The accidental spilling of oil and gasoline into the marina waters from boats will require management and result in the generation of solid wastes such as used adsorbent spill pads or booms. Generally trace quantities of oils and gas from boats will not require a response by the marina operator.

The marina operator will be responsible for inspection of the marina, reporting of spills, and initial spill response. The marina operator will be responsible for establishing a spill response contract with a qualified environmental professional and for compliance with state and federal maritime spill response and notification requirements. Boat maintenance will generally not be permitted in the public marina which should reduce the potential for oil, fuel or chemical spills and releases.

3.3.3. Consistency with EMP and Applicability of Beneficial Use Determination

The Environmental Management Plan and Beneficial Use Determination are not applicable to the disposal of wastes generated by the operation of the marina.

3.4. Right-of-Way (ROW) Improvements

3.4.1. Solid Waste Generation

Solid wastes that are generated from the construction of the extension of River Street, the realignment of North River Street, and the extension of Corrigan Street will include slag and other Regulated Solid Wastes that have been discussed above in *Section IV O 3.1.1* of this EIS.

Other wastes, specifically associated with these roadway segments, may include milled or large pieces of asphalt, sewer pipe materials (i.e. PVC), crushed stone, vegetation, sign posts, fence posts, and guide rails. Contaminated soils and slag would also be generated during the excavation and installation of utilities within the rights-of-way of these roadways, and during the installation of new roadway pavement. Light poles and fixtures will likely be removed and replaced along North River Street.

3.4.2. Solid Waste Handling and Disposal

The non-regulated wastes discussed above can largely be disposed by recycling. Any leftover asphalt, crushed stone, or concrete may be recycled by transporting it to a local facility that accepts such materials. Other materials such as leftover sewer pipe materials may be recycled or may even be able to be reused on other projects.

Materials that are removed from the site to create the alignment of the River Street Extension such as fence posts, sign posts and trees are typically disposed of at junk yards or landfill facilities. Some of these materials may be saved by the City of Rochester and stockpiled for use on other City projects or at other City facilities such as parks.

Slag material and other Regulated Solid Waste that is not reused in accordance with the BUD will be disposed of at a regulated facility that is approved by the NYSDEC. Regulated Solid Waste will be segregated from non-regulated solid waste. Staging locations of Regulated Solid Waste will be approved by the City DEQ and the EPM.

Prior to excavating in areas where Regulated Solid Waste is anticipated, the Contractor will be required to remove the top layer of non–regulated solid waste (i.e. topsoil, asphalt, etc.) as practicable and keep the material segregated from any Regulated Solid Waste. If the material is to be relocated for re-use on-site, the Regulated Solid Waste will be required to be covered with an impervious material (e.g. asphalt or concrete) or with a minimum of 12-inches of non-impacted soil or fill (commercial locations).

3.4.3. Consistency with EMP and Applicability of Beneficial Use Determination

The requirements of the EMP and BUD have been described in *Sub-Sections IV O 3.1.2 and 3.1.3*. Both of these documents are incorporated into the DEIS as appendices (see Appendices Z and AA). The management of all subsurface materials encountered during the construction of the right-of-way improvements will be consistent with the EMP. The BUD, if approved, will supercede the EMP for processed slag, allowing for off-site slag reuse.

3.5. Lighthouse Trail

3.5.1. Solid Waste Generation

The construction of the Lighthouse Trail will produce a limited amount of unregulated materials such as vegetation debris, rocks, concrete, and asphalt. It is not anticipated that slag or other potentially regulated solid wastes would be encountered during excavation operations in preparation for the trail. Iron slag material has not been previously documented south of the CSX rail right of way. Moreover, the location of the Trail site is physically separate from the former iron works and all known areas of slag disposal, and the site is about 30 feet higher than the elevation of the marina site.

3.5.2. Solid Waste Handling and Disposal

The small amounts of construction related solid waste generated by the contractor will be required to be disposed of properly as part of the contract documents. However, if the project were to encounter slag, obvious waste material, or suspicious conditions, the EMP and BUD will be used to ensure proper solid waste management. Solid waste

generation associated with future use of the Lighthouse Trial will likely be limited to occasional litter cleanup and garbage cans that will require periodic emptying and disposal.

3.5.3. Consistency with EMP and Applicability of Beneficial Use

It is currently anticipated that no Regulated Solid Waste or petroleum impacted soil will be encountered in the area of the project site where the Lighthouse Trail will be constructed. Application of the procedures required by the EMP and BUD is unlikely for this component of the project.

3.6. Lake Ontario Resource Center (LORC)

3.6.1. Solid Waste Generation

The construction of the interim LORC within the "link building" of the Terminal Building, will generate minimal levels of regulated solid waste. Construction of the permanent LORC building at a site adjacent to the Terminal Building may result in the removal of existing site features such as light poles, asphalt pavement, concrete, and bollards to make way for the new building footprint. Other materials generated during new building construction will include drywall, sheet metal, asphalt roof materials, concrete, drywall, paint, conduits, plastic, and other miscellaneous materials.

The construction of the permanent LORC will require excavation of a foundation and installation of utility services. Depending upon the final site selected for a new LORC building, some Regulated Solid Waste may be generated by this excavation. The location of the permanent LORC may be partially situated an area which formerly contained soil impacted by petroleum. However, the EMP will contain information for the excavation of petroleum impacted soil and groundwater, if encountered.

The operation of the LORC by the SUNY College at Brockport will increase the daily amount of solid waste produced in the Port area. Non-regulated solid wastes produced by the LORC facility will include typical trash and paper products. Depending upon the type of research and experiments performed at the LORC, chemical waste and process waters toxins may be generated.

3.6.2. Solid Waste Handling and Disposal

Non-regulated solid waste materials generated during construction of the permanent LORC building will be recycled, stockpiled at the City's or SUNY's discretion, or disposed of at landfills.

If excavated materials such as Regulated Solid Waste are encountered, subsurface materials will be sorted and tested prior to disposal. This operation will require a geotechnical and/or environmental engineer on-site during the excavation process to assist with the sorting and identification process. The transportation of the material to its final destination will also be monitored. Regulated Solid Waste will be handled and disposed of in accordance with the project EMP, BUD and soils management plan

The staging of Regulated Solid Waste should be performed in a manner such that it is segregated from non-Solid Waste Impacted Media. Staging locations of Regulated Solid Waste will be approved by the City DEQ and the EPM.

Prior to excavating in areas where Regulated Solid Waste is anticipated, the Contractor will remove the top layer of non–regulated solid waste as practicable and keep the material segregated from any Regulated Solid Waste. If the material is to be relocated for re-use on-site, the Regulated Solid Waste will be covered with an impervious material (e.g. asphalt or concrete) or with a minimum of 12-inches of materials that are not Regulated Solid Waste (commercial locations).

Everyday regulated solid waste and trash that is produced by the LORC can be disposed of in garbage cans, containers, and dumpsters. These garbage collection containers will be picked up by the City of Rochester's Department of Environmental Service trash collection personnel, or by an independent contractor hired by the tenant of the building.

Depending on the nature of the laboratory activities at the LORC waste waters may be disposed of under a sewer use permit with Monroe County Pure Waters or separately collected and managed. Any hazardous waste materials that may be produced by the LORC will be disposed of in specific containers that prohibit the leaking of hazardous materials. These containers will be disposed of in the proper manner in accordance with NYSDEC and other applicable regulations.

3.6.3. Consistency with EMP and Applicability of BUD

The requirements of the EMP and BUD have been described in *Sub-Sections IV O 3.1.2 and 3.1.3*. Both of these documents are incorporated into the EIS as appendices (Appendix Z & AA). The management of all subsurface materials encountered during the construction of the LORC will be consistent with the EMP. The BUD for processed slag, if approved, will supercede the EMP, allowing for off-site slag reuse.

3.7. Relocation of the Public Boat Launch

3.7.1. Solid Waste Generation

Relocation of the Public Boat Launch will result in a modest decrease in the amount of solid waste that is currently generated from boat launch maintenance and operations. In addition, non-regulated materials will be generated by the removal of the existing boat launch. Non-regulated solid waste generated by these activities will likely include soils, concrete, asphalt and wood or metal bulkheads.

Some of the materials removed from the existing boat launch may be able to be re-used in the new boat launch. This will reduce the amount of non-regulated materials that may require disposal from the elimination of the launch at its current location.

Solid waste generation, impacts, and mitigation of the construction and operation of a new launch at a different location will be considered as part of the site specific environmental review at the time the new site is selected. Once operational, the amount of non-regulated solid waste generated by the new Public Boat Launch will not differ significantly from the amount of non-regulated solid waste generated by the existing boat launch facility, and no significant impacts will occur.

3.7.2. Solid Waste Handling and Disposal

Removal of the existing Public Boat Launch may involve limited excavation of the regulated solid wastes. Concrete and asphalt may be recycled. Should any wood or metal bulkheads be removed, they can be reused in the construction of the new launch or recycled as appropriate. Regulated solid waste, including slag, that may need to be excavated to remove the launch may need to be transported to alternate sites for disposal. Should Regulated Solid Waste be encountered, it will need to be managed in accordance with the EMP, the BUD and all applicable NYSDEC requirements.

3.7.3. Consistency with EMP and Applicability of Beneficial Use Determination

The requirements of the EMP and BUD have been described in *Sections IV O 3.1.2 and 3.1.3*. Both of these documents are incorporated into the DEIS as appendices (see Appendices Z and AA). The management of all materials encountered during the removal of the existing boat launch will be consistent with the EMP. The BUD, if approved, will supercede the EMP for processed slag, allowing for off-site reuse.

3.8. Relocation of the Ontario Beach Park Labor Operations Center

3.8.1. Solid Waste Generation

Prior to the demolition of the Labor Operations Center, an asbestos containing materials (ACM) survey is required to be completed in accordance with 12 NYCRR Sub-Part 56. An ACM survey would quantify the amount of ACM, if any, within the Labor Operations Center to provide for the appropriate abatement procedures, if needed.

Relocation of the Labor Operations Center to a new site will generate regulated solid waste and construction and demolition debris, primarily associated with for the excavation of the new building foundation and the removal of the existing Labor Operations Center building. Waste materials generated by these activities will likely include soils, concrete, asphalt, lumber, piping, drywall, masonry, asphalt roofing materials, drywall, and paint. Some of the materials removed from the existing Labor Operations Center will be able to be re-used at the new site, which would reduce the amount of non-regulated solid waste generated by this project component.

A determination of subsurface conditions at the new site for the Labor Operations Center will be undertaken before construction begins.

Once operational, the amount of non-regulated solid waste generated by the new Labor Operations Center will not differ significantly from the amount of solid waste generated by the existing Labor Operations Center, and no significant impacts will occur.

3.8.2. Solid Waste Handling and Disposal

Materials produced as the building is demolished will be disposed of at a landfill facility or recycled to the extent practical. Concrete and masonry units can be taken to concrete batch plants or bulk material yards to be crushed for use as stone base materials. Lumber materials can be taken to facilities to be reused as mulch or in other lumber processes. Plastics can be sent to recycling facilities for melting and

reuse, and piping can be brought to metal scrap yards for sorting and reuse.

While considered unlikely, if Regulated Solid Waste are encountered, they will be disposed of in accordance with the EMP, the BUD and all applicable NYSDEC requirements. If present, asbestos will be removed by a qualified contractor, and wastes will be disposed of properly and in accordance with applicable asbestos removal procedures.

3.8.3. Consistency with EMP and Applicability of Beneficial Use Determination

The requirements of the EMP and BUD have been described in *Sections IV O 3.1.2 and 3.1.3*. Both of these documents are incorporated into the DEIS as appendices (Appendix Z & AA). The management of all subsurface materials encountered during the demolition of the existing Operations Center site will be consistent with the EMP. The BUD for processed slag, if approved, will supercede the EMP, allowing for off-site slag reuse.

3.9. Incremental Private Development

3.9.1. Solid Waste Generation

As the construction of private mixed use development occurs on Parcels I, II, and III, leftover construction debris materials will be produced, including concrete, lumber, drywall, paints, plastics, piping, and roofing materials. In addition, trees and other vegetation will be removed. Many of these materials can be disposed of at landfills or recycling plants.

Most of the parcels will require the removal and disposal of existing asphalt surfaces in order to start the excavation process. (For example, Parcel II will be constructed in an area that is currently used for parking and is almost all asphalt pavement.) This asphalt material may be brought to an asphalt plant for recycling.

Excavation of building foundations may encounter subsurface materials that would be characterized as Regulated Solid Waste. As a condition of the sale of land for development, Regulated Solid Waste will be handled and disposed of in accordance with the project EMP and/or BUD.

Following construction, the mixed use development will generate solid waste from the operations of the new residential units and associated commercial activities located there. The waste generated is expected to be similar in nature to the waste generated from other residential/mixed use developments.

3.9.2. Solid Waste Handling and Disposal

Some of the materials generated by the construction of private mixed use development on Parcels I through III will likely be recycled. In particular, the existing asphalt material can be brought to batch plants where it is turned into recycled asphalt pavement. Off-site disposal of regulated solid waste to permitted solid waste disposal facilities is required. Construction and demolition debris may be re-used on-site as appropriate, or disposed of at a registered construction and demolition landfill. Vegetation may be disposed of at an approved land clearing debris facilities.

All Regulated Solid Waste excavated and removed from Parcels I through III will be sorted and tested prior to disposal. This operation will require a geotechnical and/or environmental engineer on-site during the excavation process to assist with the sorting and identification process. The transportation of the material to its final destination will also be monitored. Regulated Solid Waste will be handled and disposed of in accordance with the project EMP and/or BUD.

The trash, daily waste, and debris that are produced by the mixed use development, once operational, will be disposed of in trash receptacles and dumpsters. These collection containers is required to be collected by a permitted solid waste hauler and transported to a permitted solid waste disposal facility.

3.9.3. Consistency with EMP and Applicability of Beneficial Use Determination

The requirements of the EMP and BUD have been described in *Sections IV O 3.1.2 and 3.1.3*. Both of these documents are incorporated into the DEIS as appendices (see Appendices Z and AA). The management of all subsurface materials encountered during the construction of the three areas of proposed mixed use development will be required to be consistent with the EMP. The BUD for processed slag, if approved, will supercede the EMP, allowing for off-site slag reuse.

P. Public Health and Safety

1. Introduction

This section of the DEIS reviews project potential for threats to public health and safety. Potential public health and safety impacts associated with the new public marina and promenade facilities are evaluated and mitigating measures, including facility design options, are discussed. Additional information regarding specific Impacts and Mitigation Measures to public health and safety during construction is provided in *Section IV S Temporary Construction Impacts.*

2. Existing Setting

A large portion of the Port of Rochester Site contains slag, ash and foundry waste. The layer of slag and foundry waste is found in an approximately 625,000 square foot area and averages approximately 4-feet thick. Estimates of the total volume of slag, ash, and foundry waste indicate that approximately 93,000 cubic yards of this material is present at the Port of Rochester Site. A detailed discussion of the hazardous nature of the materials present at the site and the methods for their safe removal is provided in *Section IV O*.

The Genesee Riverway Trail links downtown Rochester to the Port area. The Trail currently runs adjacent to River Street, terminating at the north boundary of 490 River Street. From there, bicyclists and pedestrians continue north, which involves crossing railroad tracks and traversing unimproved highway/municipal drives, until they reach Portside Drive at the intersection of North River Street. At this point, there is a shoulder and sidewalks that take them to Corrigan Street and Ontario Beach Park.

3. Impacts and Mitigation

3.1 Marina

The basic function of a marina is to provide safe and functional infrastructure for the mooring of recreational vessels. Inherent in the design of marinas is the necessity to provide pedestrian access between fixed landside amenities and floating dock infrastructure that accommodates dynamic water levels, and direct access between fixed landside amenities and boats themselves. In order for the facilities to function properly, typical railing and edge protection solutions are not always possible. Furthermore, access to the water's edge and views of the boats by the non-boating public is a primary goal of the design.

In order to accommodate both the functional requirements of the marina facilities and the safety of pedestrians on the adjacent public promenade, the design will incorporate and comply with the requirements of Americans with Disabilities Act (ADA) 2010 requirements for recreational boating facilities, American Society of Civil Engineers (ASCE) Manual 50, Planning and Design Guidelines for Small Craft Harbors, and the Harbor Development

Standards Guidance Manual by the Michigan Department of Natural Resources (MDNR), Parks & Recreation Bureau. While not a national guideline, the MDNR manual provides guidance directly applicable to northern Great Lakes marinas and is relevant to the conditions anticipated in Rochester, New York. Neither the State of New York nor the City of Rochester provides any specific guidance on these issues.

Specific strategies that will be incorporated in the design include the following:

- All promenade areas adjacent to exposed edge conditions are level with a maximum cross slope of two percent to provide proper drainage, and the width of the promenade is increased to approximately 16 feet in these areas.
- Where possible, the main path of travel of the pedestrian promenade is separated from the edge of the marina basin by a seatwall barrier.
- Pedestrian paths leading to the marina edge promenade are aligned to route cyclists and pedestrians parallel with the basin wall. Where paths lead directly toward the marina edge, landscape treatments and the seatwall provide a visual and physical barrier to direct cyclists and pedestrians away from the marina edge.
- Marina pedestal light bollards visually define the marina edge, and edge protection on exposed vertical areas will comply with ADA requirements.
- Ladders will be provided at regular intervals along vertical walls and on floating docks to provide a means of egress from the water. The bottom rung of each ladder shall extend to two feet below low water datum.
- USCG approved life rings will be provided at regular intervals along vertical walls to provide emergency floatation.

The new public marina and promenade facilities present no significant negative impacts to public health and safety. There are, however, a number of potential risks inherent in all public marinas and pedestrian facilities, as discussed for the proposed project below.

The pedestrian promenade will ultimately become part of the Genesee Riverway Trail. Starting at Ontario Beach Park, the Riverway Trail follows the existing concrete paved promenade located adjacent to the Genesee River until it reaches the north side of the Terminal Building. Once the marina is in place, the trail user will have a choice of routes at this point. The first option will allow the trail user to continue south along the river's edge to the proposed boater services building and the mouth of the marina basin. From there, the trail user will follow the pedestrian promenade around the marina basin and continue on the Genesee River Trail to the south.

The second option for the trail user at the north end of the Terminal Building is to head west along the north side of the Terminal Building and cross a vehicular drive within 1000 North River Street in order to connect to the pedestrian promenade adjacent to the marina basin. The promenade continues to Portside Drive, where a small pedestrian plaza will be located. South of Portside Drive, the Genesee Riverway Trail continues along the east side of the River Street extension and follows the Genesee River to downtown Rochester.

The width of the pedestrian promenade along the edge of the marina basin will be twenty feet, with a minimum clear pathway of twelve feet at all locations. Along the north and east sides of the Terminal Building, an existing twenty foot wide walkway will be maintained, also with a minimum clear pathway of twelve feet. This paved area will be increased in width by 18 feet to allow for the future expansion of outdoor seating and a potential new entry along the north side of the building.

The most significant impact to pedestrian and bicycle safety on the promenade and Riverway Trail are the points at which these paths cross vehicular traffic at internal drives at the Terminal Building and the multiple entries to the Public Boat Launch parking area. The first route described above allows the trail user to avoid all potential vehicle conflicts north of Portside Drive. Potential safety impacts for the second route will be mitigated with traffic control measures, such as a raised table crossing of the internal drive at the intersection with Corrigan Street.

Further south, the Public Boat Launch parking includes multiple vehicle entries and exits that cross the Genesee Riverway Trail alignment. Raised table crossings are not practical alternatives at these locations as boat trailers using a table crossing can cause damage to both the paving and trailers. Instead, painted cross walks and signage will be used to warn both the trail users and drivers of the potential conflict, and cyclists will be warned to walk their bikes through this section. Upon Full Build of the project, the public boat launch will be relocated, thereby reducing the number of vehicle crossings in this area.

3.2 Right-of-Way Improvements

Extension of River Street is required to maintain an overall acceptable level of service as well as to meet the goals set forth in the Local Waterfront Revitalization Plan. These goals include the creation of a vital secondary north-south public right-of-way into the Port/harbor area, new and improved access to Ontario Beach Park, the Genesee River and the Terminal facilities at the Port of Rochester, and to fully support development at the Port of Rochester.

In addition to the normal day-to-day activities at the Port, it should be noted that special events, which are substantially increasing in number, can attract crowds of 5,000 persons (and to 50,000 persons at least once during the summer season). Safety and quick access at these events are the number one priority for emergency responders.

The closest firehouse to this area is located one mile to the south on Lake Avenue. The only existing public highway access to the Port Area is via Lake Avenue located along the west side of the Port area. Any incidents on Lake Avenue restrict critical security and emergency vehicle access. Currently emergency responders are forced to use temporary and municipal facility roadways when traffic congestion on Lake Avenue compromises response time.

The Right-of-Way Improvements will provide the alternate public access needed to manage traffic flow within the Port site, and more importantly to allow fire, police, Homeland Security agencies and ambulance service responding to events a means of secondary access critical to a timely performance.

The extension of the Genesee Riverway Trail along River Street will additionally improve public safety as the trail will be off road, well-delineated, marked with improved signage. The project will result in a trail link between the Genesee Riverway Trail and the Marina promenade which is off road as well. Impacts to pedestrian and bicycle safety are discussed in *Section 3.1*, above.

3.3 The Lighthouse Trail

The Lighthouse Trail will not include crossings of vehicular streets along its length. The construction of the Lighthouse Trail will not create any public health and safety issues. Rather, the implementation of this project component will increase public safety in accessing the Charlotte Genesee Lighthouse.

3.4 Lake Ontario Resource Center (LORC)

No public safety issues have been identified regarding the construction of the Lake Ontario Resource Center, whether it is established in the "link building" associated with the Terminal Building or within a newly constructed building.

3.5 Relocation of the Public Boat Launch

Demolition of the Public Boat Launch will not create any public health and safety impacts. The construction area will be fenced off during demolition to prevent public access to this area.

The area has not been chosen for relocation of the Public Boat Launch. When a site is selected, impacts related to public safety will be analyzed as part of the site specific environmental review required for the relocation project.

3.6 Relocation of the Ontario Beach Park Labor Operations Center

Demolition of the Labor Operations Center will not create any public health and safety impacts. The construction area will be fenced off during demolition to prevent public access to this area.

A site has not been chosen for relocation of the Labor Operations Center. When a site is selected, impacts related to public safety will be analyzed as part of the site specific environmental review required for the relocation project.

3.7 Incremental Private Development

No public health and safety issues have been identified with regard to private development of Parcels I, II, and III. The parcels will be developed in accordance with the *Marina District* zoning and the Form Based code which will provide for safe pedestrian-ways and appropriate siting of building facilities and maintenance operations. The incremental private development on these parcels will be subject to site specific environmental review where the City will be able to ensure that all public health and safety measures are implemented in the plans.

Q. Economic/Fiscal

This section will review and summarize the current economic and fiscal conditions providing a context for the proposed projects. The review will include property values of the existing project sites and adjacent parcels, economic factors related to maintenance of public infrastructure, property assessments, property tax rates and sales tax generation. A cost-benefit analysis will be presented for the Marina development, build out of the proposed mixed-use development, and relocating the Ontario Beach Parks Labor Operations Center and Public Boat Launch. Factors that will be evaluated include projected costs for new public facilities, projected private investment, property tax revenues, land sale and slip licensing revenues, marina operating revenue and expense cash flow and feasibility, and marina boating related economic impacts. This section will also discuss the projection of permanent jobs as a result of the marina and surrounding private residential and commercial development. Indirect economic impacts, such as spending and jobs created by boaters, will also be discussed.

This section includes four components:

- Economic and Fiscal Condition of the Site;
- Cost Benefit Analysis of the Marina Development;
- Indirect Economic Impacts; and,
- Job Impacts.

1. Economic and Fiscal Condition of the Site

The 22-acre project site currently includes 968 parking spaces (1,187 if spaces along adjacent streets are included) and significant roadway and utility infrastructure constructed for a former cross-lake ferry, mass-transit operation. The fast ferry service ceased operations in the fall of 2005, leaving the now underutilized infrastructure in place, in addition to the 53,000 square foot refurbished Terminal Building. All of the property is in public ownership, so the associated real estate tax value is currently non-existent. The value of the publicly-owned site is negatively influenced by the fact that it is currently a single-use facility which includes much site infrastructure and a terminal facility that are underutilized.

A mix of commercial developments exist along the west side of Lake Avenue immediately adjacent to the project site. These include restaurants, bars, and local retail operations which generate sales as well as property tax revenue. There are also several modest residential structures adjacent to and just west of the commercial developments along the west side of Lake Avenue. This commercial and residential area lies within a small neighborhood bounded by Lake Avenue, the CSX rail line to the south, and Ontario Beach Park to the north and west. Some of these parcels are being marketed with assessed values ranging from $40,000 to $120,000.

There has been a lack of certainty regarding future development of the Port of Rochester site since the fast ferry service ceased in 2005. This is believed to have contributed to the low level of significant improvements on surrounding properties and recent investments by private entities that has come to prevail within the area in succeeding years. It is believed that construction of the Phase 1 Marina and the initial private redevelopment of sites made available by the project will serve to remove much of this uncertainty. Property values west of Lake Avenue near the project site are expected to improve and market conditions are expected to become more conducive to capital improvements on these properties as a consequence.

The cost to operate and maintain the 53,000 square foot Terminal Building significantly exceeds the revenue currently generated by the existing tenants. In 2010 approximately 16,000 square feet was under lease. More than half of the leasable space remains vacant and generates no revenue. Annual maintenance, operations, and security costs for the Port terminal facilities have ranged from about $250,000 to $700,000 during the first five years of operations. Revenues from current leases are currently inadequate to cover these costs and the facility operates at a loss. The costs to maintain the public parking lots, landscaped areas, the Public Boat Launch, the temporary access road connecting River Street to Portside Drive, as well as the periodic costs to perform dock wall maintenance dredging, are in addition to the costs cited above. The City's current fiscal condition and the imbalance between projected costs and revenues for Port operations and maintenance is one of several factors underlying the City's pursuit of changes at the Port.

2. Cost Benefit Analysis of the Marina Development

The 2009 Marine Engineering Study and Feasibility Study (Appendix C) provided the anticipated public investment costs associated with the Marina development project as summarized in Table Q-1:

Table Q-1 Summary of Project Costs (2009 Estimates)

		Phase 1	Phase 2	Total
I.	Utility Infrastructure / Roadwork / Relocations	$5.6	$1.3	$6.9
II.	Marina	$5.9	$2.5	$8.4
III.	Open Space Amenities	$3.4	$1.5	$4.9
IV.	Buildings	$1.0		$1.0
V.	Required Miscellaneous Cost		$3.9	$3.9
VI.	River Street Extension*	$0*		
	Total	$15.9	$9.2	$25.1

Note: Above values are represented in millions,
Source: 2009 Marine Engineering Study and Feasibility Study (see Appendix C).

*River Street Extension was a separate City design and construction project at the time of the 2009 cost estimate.

The updated summary of project costs included below in Table Q-2 has been developed from the 50% design construction estimates completed in 2011. The extension of River Street has now been included in these updated estimates and the values shown in the following table.

Table Q-2 Summary of Project Costs (2011 Estimates)

Marina Phase 1 50% Design Project Construction 2011 Estimate:	
Mobilization	$ 446,000
Site Preparation and Demolition	$ 364,000
Utility & Roadway	$ 3,984,000
Basin Excavation & Marina Construction	$ 8,542,000
Promenade Construction, Landscaping, and General Site Amenities	$ 862,000
Marina Boater Infrastructure & Amenities	$ 1,583,000
Boater Services Building	$ 460,000
Subtotal:	$16,241,000

Recycled fill materials and engineering efficiencies	**-1,750,000**
Subtotal AFTER Engineered Efficiencies:	$ 14,491,000
Contingencies (15% @ 50% Design Estimate):	$ 2,608,000
Inflation (3%):	$ 217,000
Total Construction Cost:	**$ 17,316,000**
Construction Phase Engineering & Inspection:	$ 2,424,000
Total Construction Phase Cost:	**$ 19,740,000**

The investment of approximately $19,740,000 for Phase 1 Marina public infrastructure (now including the construction of River Street Extension) and an additional $9.2 million (from the 2009 estimate) for future marina expansion will generate economic benefits that can be classified as direct economic benefits, indirect economic benefits, and other benefits from job creation. Direct economic benefits are described in the following paragraphs. Indirect benefits and those related to job creation are described in more detail below under their respective headings.

Table Q-3 which follows summarizes only the direct economic benefits anticipated as a consequence of the proposed project. The summary table does not include the following non-direct economic benefits characterized in a later sub-section:

- Increased property taxes to county and schools from directly involved properties.
- Increased property values and tax base on other parcels not directly involved in project.
- Economic benefit from stimulation of business activity and increased sales taxes.
- Indirect benefit to community as a whole derived from flourishing, thriving waterfront.
- Creation of approximately 2,500 construction jobs.
- Creation of approximately 300 permanent (non-construction) jobs.

Table Q-3
Summary of Direct Economic Benefits

	Alternate Scenarios			
	Lower Density - 280 units		*Higher Density - 430 units*	
	Conservative	*Probable*	*Conservative*	*Probable*
Marina Operations	$ 5,020,000	$ 5,020,000	$ 5,020,000	$ 5,020,000
Sales of Land & Slip Licenses	$ 5,290,000	$ 5,290,000	$ 12,130,000	$ 12,130,000
Increased Property Taxes (City)	$ 6,130,000	$ 12,330.000	$ 8,970,000	$ 18,580,000
Combined	**$ 16,440,000**	**$ 22,640,000**	**$ 26,120,000**	**$ 35,730,000**

Notes: Values are shown above as present worth.
Value shown for Marina operations is from rental of 118 slips less expenses.
Value shown for Marina operations assumes a level income stream over 20 years.
Increased tax revenues shown are over a period of 20 years.
Increased tax revenues shown are on those parcels within the project limits.
*Increased county **property tax revenues are not shown**.*
Indirect economic benefits and job creation benefits are not included above.

Direct Economic Benefit Associated with Marina Operations: $5,020,000 present worth, approximately. Direct economic benefit to City is anticipated as a consequence of marina operations. The revenue included in this benefit will be derived from the renting and leasing of slips. Appendix C of the *2009 Marine Engineering Report and Feasibility Study* (see Appendix C) forecast cash flows over the first five years of marina operations as having an equivalent present value of $5,020,000. This estimate of the anticipated direct economic benefit was based upon a model which included only 79 slips in Phase 1 and only 118 slips at full build, compared to the updated proposal to develop 85 slips in Phase 1 and as many as 157 slips at full build out.

The forecasted cash flows included the expenses of operations as well as revenues. Were the additional 6 slips now being proposed in Phase 1 and the additional 39 additional slips now proposed at Full Build-Out to be included in the analysis, the value of the forecast cash flows would be greater. Although the marina's role in stimulating development of the entire project has not been included in the foregoing calculation, the importance of the marina in this regard should not be overlooked.

Direct Economic Benefit from Sale of Land for Development and from Sale of "Committed" Slips: From $5.3 million to $12.1 million, approximately. The project calls for the City of Rochester to sell land for residential and commercial development and for the sale of a limited number "committed" marina slips. Revenue anticipated from these sales has been estimated in the *2009 Marine Engineering Report and Feasibility Study* (see page 35 of Appendix C). The analysis found in the study presents two scenarios, one low-range density scenario in which 280 residential units and 44,000 square feet of commercial space are developed and a second, high-range density scenario in which 430 residential units and 44,000 square feet of commercial space are developed. Net revenue of approximately $5.3 million is anticipated in the low-range scenario and of approximately $12.1 million in the high-range scenario. In the low-range scenario, the anticipated net revenue consists of $4.49 million from sales of land for residential development, $200,000 from sales of land for commercial development and $600,000 from sales of approximately 50 "committed" slips. In the high-range scenario, the anticipated net revenue consists of $10.68 million from sales of land for residential development, $400,000 from sales of land for commercial development and $1.05 million from sales of approximately 50 "committed" slips.

Direct Economic Benefit from Increased City Property Taxes: From $6.1 million to $18.5 million present worth, approximately, upon project completion. The anticipated increase in property tax revenues associated with development of project properties and the resulting increase in the tax base has been estimated in the *2009 Marine Engineering Report and Feasibility Study* (see page 36 of Appendix C). Two projections were developed: a conservative analysis and a probable analysis. Each analysis included a low density (280 residential units) and a high density (430 residential units) alternative. The aggregate value of involved properties upon project completion were estimated to range between $88.9 million and $193.8 million depending upon the number of residential units and the conservatism of the analysis. The present value of increased property tax revenues over a period of twenty years was computed and found to range from $6.1 million to $18.5 million.

Direct Economic Benefit from Increased City, County and School Property Taxes combined: From $33.8 million to $93.4 million. Utilizing the same methodology described above, the anticipated increase in City/School and County Property taxes combined upon project completion were estimated and found to range from $33.8 million to $93.4 million. These estimates include the corresponding estimates for City Property Tax increases reported in the foregoing bullet.

3. Other Indirect Economic Benefits

Indirect Economic Benefit from Increased Property Values and Property Taxes. The project is anticipated to serve as a catalyst for the overall economic development and enhancement of the Lake Avenue corridor. Property values are expected to increase, potentially significantly, in the Charlotte area, especially the area closest to Lake Avenue. The resulting increases in the tax base will lead to corresponding increases in property tax revenue just as will the increases in property values for parcels directly involved in the project.

Indirect Economic Benefit from Stimulation of Business Activity and Increased Sales Tax Revenues. As has already been stated, the project is anticipated to serve as a catalyst for the overall economic development and enhancement of the Lake Avenue corridor. Business activity is anticipated to increase significantly within the Charlotte neighborhood in general, and especially among Lake Avenue businesses and within the existing Terminal Building. These increases are expected to lead to increase sales tax revenues.

Indirect Economic Benefit to the Community as a Whole. The potential also exists for the Port to benefit the City of Rochester as a whole. For example, a flourishing, thriving waterfront development will create new housing, boating, and entertainment opportunities that will help local corporations recruit new professionals to live and work in Rochester. The completion of the community's vision for a new Port waterfront has stimulated economic growth and created new housing opportunities for waterfront living along a beach within the boating community. Companies will include the Port Marina development on their tours of the best places to live in Rochester when recruiting new professionals. This will also benefit the general community of Rochester as a whole by creating a vibrant waterfront with entertainment amenities, increased public access to the waterfront, and new boating activities accessible to everyone in Rochester. The project will complete the Genesee Riverway Trail, connecting downtown Rochester with Ontario Beach Park, and new attractions such as an in-water boat show could be held in the marina. These shows would include boats of interest to a very wide range of buyers, from skiffs and kayaks to large yachts for sale or rental. When complete, the Port of Rochester will be significantly enhanced as a waterfront destination for boaters, visitors, and residents alike.

4. Additional Economic Benefits from Job Creation

The project will lead to growth of permanent and temporary jobs, both directly and indirectly. It is projected that approximately 2,500 construction jobs and 300 permanent jobs in a variety of economic sectors will be created as a result of this project.

Construction Jobs. Construction jobs are projected as outlined in Table Q-4 below for both public infrastructure and private investments:

Table Q-4 Construction Jobs

	$25M Public Infrastructure	$75M Private Investment (Housing/Commercial)	Total Construction Jobs
Direct	125	375	500
Indirect	275	825	1100
Inducing	225	675	900
Total	625	1875	2500

Source: Boating Economic Impact Model, Drs. Ed Mahoney, Dan Stynes, and Yue Cui, Michigan State University

Direct and Indirect Permanent (non-Construction) Jobs. Three hundred new permanent jobs are projected as a result of construction of the marina and surrounding private residential and commercial development. The total is estimated based upon similar waterfront projects in the Great Lakes region. This estimate is supported by the *Marina Economic Impact Analysis* found in Appendix D (pages *x - xvii*) of the *2009 Marine Engineering Report and Feasibility Study* (see Appendix C). The analysis focuses upon the potential impacts of the marina (non-housing or commercial) upon the local economy. The Michigan State University model indicates that fifty jobs will be created due to the marina in and of itself (both direct effect and secondary effect). An additional 250 jobs will be created as a result of the development of the residential (condominium, hotel, etc.) and commercial components of the project (44,000 square feet commercial). These jobs are in addition to the foregoing construction jobs and any indirect employment growth that would result from the increased business/commercial activity within the Lake Avenue commercial district and the redevelopment of the Terminal Building.

5. April 2011 Update Regarding Direct Economic Benefits

In April 2011, Edgewater Resources updated its analysis of the planned private development associated with the marina development (see Appendix E, Edgewater Resources Memorandum to Mark Gregor, City of Rochester, April 28, 2011 for a summary). The full April 2011 analysis included a refined and more detailed plan for private development than was included in the 2009 Feasibility Study. The analysis also included updated projections for several economic benefits of the marina and associated private development at approximately the maximum residential density, 430 units, envisioned by the 2009 Feasibility Study. The 2011 updated analysis identified overall economic benefits similar to those referenced in the 2009 Marina Feasibility Study.

The April 2011 update re-stated the expectation that the Port marina development is anticipated to result in income to the City of Rochester that is both continuing (on an annual basis) and one time. The update identifies the following sources:

1. Sales of land for condominium development
2. The sale of Slip License Fees
3. Ongoing revenue from property taxes on private development of the Port
4. Ongoing revenue from the slip income

The one time sales of land for residential development would occur over a period of several years, though the income from the sale of the all or portions of Development Parcel I could provide revenue to the City upon completion of the Phase 1 of the Marina. The April 2011 update also recognizes an anticipated increase in the value of the Port Terminal Building as a consequence of the improvements proposed in this action. Although there is no proposal to sell this building, an increase in this publicly-owned facility is of some economic benefit.

Sales of Land for Condominium Development and the potential for future sale of the Port Terminal Building. The income from the sale of parcels for residential and commercial condominium development and the potential future sale of the Port Building are one time additions to potential revenue, though the sale of the parcels would occur over a number of years. Edgewater's projection for the revenue produced by the sales of land for private development is $2,170,000 to $4,340,000.

Slip Licensing. This income source will also be a one-time revenue source per slip. Approximately 50 licenses were considered at Full Build-Out of the marina (Phases 1 and 2) in the 2009 Feasibility Study. Given the number of potential new residential units planned demand is likely to be high for the slips in the marina, especially from condominium owners or developers. Using slip values of $10,000 to $20,000 per slip the projected income from slip licensing over course of the marina development is estimated to be $600,000.

Annual Revenues to the City of Rochester - Real Estate Taxes. Using the development plan and estimated prices, the updated projected property taxes to the City of Rochester for private Development Area I alone is $1,670,678 based on 215 residential units and 20,000 square feet of associated commercial and retail space.

Based on fiscal year 2011, City of Rochester property tax rates projections for future tax revenues were updated by Edgewater. An assumption was made that two thirds of the residential units will be eligible for the homestead tax status in the calculation of the projected tax revenue. Because the Development Parcel I represents approximately 50 percent of the total development, tax revenue from the fully developed property (Parcels II and III developed) can be considered to be approximately double that calculated for Development Parcel I.

Annual Revenues to the City of Rochester - Marina Operations Net Income. The final income source for the City is the net income from marina operations and is the income before any debt service. We have previously estimated this income as $126,544 to $236,000.

Using average marina income of $181,272, the present value of this anticipated revenue stream to the City is estimated as $1,851,950.

R. Environmental Justice

This section includes a discussion of potentially significant issues of environmental justice (e.g., public access to the waterfront and waterfront activities). Any mitigation measures to offset or lessen potential impacts shall be identified.

The New York State Department of Environmental Conservation Commissioner Policy 29, Environmental Justice and Permitting, defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Environmental justice efforts focus on improving the environment in communities, specifically minority and low-income communities, and addressing disproportionate adverse environmental impacts that may exist in those communities.

The Charlotte neighborhood is not an environmental justice area as defined by Commissioner Policy 29, and the uses proposed will not generate negative environmental impacts that disproportionately impact the Charlotte community. The planning process for the project held to date has utilized "enhanced" public participation and notification mechanisms described in Commissioner Policy 29. The project has undergone a preliminary review by NYSDEC, and no potential adverse environmental impacts were identified.

Therefore, strictly speaking, the proposed project will not result in any environmental justice issues. However, two potential negative impacts have been identified by the community, and these impacts are the primary focus of the discussion in this section.

Traffic Issues

The first potential negative impact is traffic congestion, created by a desire of the greater Rochester community to visit the new and improved public waterfront to enjoy the natural resources and entertainment opportunities and to visit the 430 new residents. The popularity of the site is partially facilitated by the existing provision of free parking, which encourages visitors to drive to the site while providing little incentive to utilize existing public transportation or other car pool opportunities.

Viewed from another perspective, the traffic congestion issue suggests that the natural amenities or commercial opportunities present at the site are highly valued by the community. This presents an opportunity to generate additional private investment in the local community that further enhances the popularity and economic well-being of the neighborhood.

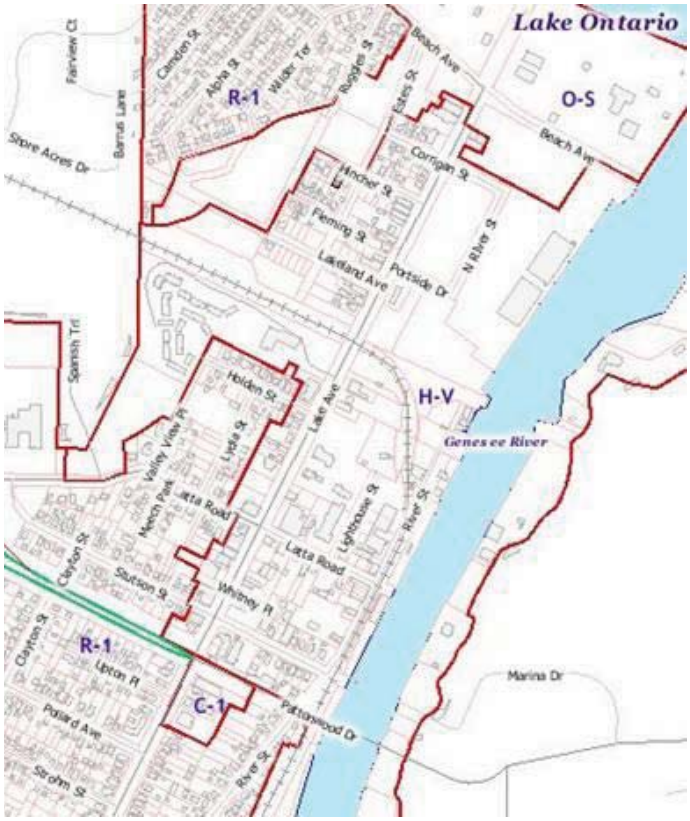
The proposed action is reliant upon the natural and commercial amenities of the Port area, and therefore the City has a vested interest in developing strategies that resolve potential traffic congestion issues. These strategies will include mitigating the loss of existing surface parking within walking distance where possible, the utilization of advanced traffic management strategies to respond to peak traffic events, the improvement of pedestrian and bicycle safety, and the potential creation of free or low cost shuttles to and from convenient remote lots (see *Section IV K Transportation*).

Increased Property Values

The second potential impact perceived by a small contingent of the existing local residents is the associated potential increase in property values that could increase the cost of living within the areas affected by the growth inducing impacts (see *Section IV M.*) While increases in property values are generally considered a positive benefit by the majority of property owners, the possibility exists that some of the current residents may no longer be able to afford to rent in their current location.

As outlined in *Section IV M*, the area that will most likely be impacted by increased property values is defined by Lake Avenue to the east, the existing rail lines to the south, and Ontario Beach Park to the north and west. While an increase in property values is likely to be an unavoidable impact of the proposed project, the most significant impacts will likely be limited to the area described above, within the foreseeable future. However, additional housing of similar price and quality exists within the neighborhood immediately south of the project site along both sides of Lake Avenue, north of Lake Ontario State Parkway (see Figure R-1). These homes are located within a ten to twenty minute walk of the project site, and are further supported by public transportation.

Figure R-1
Depiction of Area along Lake Avenue South of the Project Site
Where Comparably Priced Housing Available



Positive Environmental Justice Impacts

Two of the primary goals of the project are to increase public access to the waterfront and to increase opportunities for water-based recreation. Of the many positive outcomes that will be achieved through the construction of this project, the following directly increase public access to the waterfront and waterfront activities.

The construction of the Phase 1 Marina will create approximately 4.7 acres of new public water body accessible to the public for boating and fishing. In addition to the creation of dockage for boats, the Marina will increase fish habitat along the Genesee River. The Marina will be constructed on property that was originally used for vehicular loading, parking and inspection for the former fast ferry service. As the former vehicular loading and inspection process was operated by Customs and Border Patrol, this parking area was constructed to be very secure and is currently inaccessible to the public. Therefore, the proposed action will open up currently inaccessible and un-utilized waterfront space and make it available to the public with the creation of a marina and promenade.

The construction of the marina basin will create 55 new seasonal boat slips and 30 slips for transient vessels greater than twenty-six feet in length. These slips will help address the shortage of 200 to 500 additional slips identified in market studies completed in 2009.

A public pedestrian promenade will form the edge of the marina, ensuring that the waterfront is always accessible to the public. The promenade will wrap entirely around the marina basin and the existing Port of Rochester Terminal Building, extending public access along the riverfront that is currently inaccessible and fenced off as part of the former immigration control area for the former fast ferry service.

The construction of the public promenade and a trail segment along the River Street Extension will complete the segment of the Genesee Riverway Trail, from Ontario Beach Park to Lower Falls. The Genesee Riverway Trail is a publicly accessible, off-road, multi-modal, non-motorized trail that provides bicycle and pedestrian access along approximately seven miles of riverfront. The completion of the link in this trail makes easier access available to the public between downtown Rochester and Lake Ontario, including to the local and regional attractions along the way such as Turning Point Park, the Genesee River gorge, Lower Falls, etc.

The Lighthouse Trail will also improve access to the primary historic feature in the Port area: the Charlotte Genesee Lighthouse. No easy public access to the Lighthouse is currently available from Lake Avenue, the primary thoroughfare in the area. The existing access via Lighthouse Street is not well marked, and as a result, few pedestrians make their way to this historic landmark building. Moreover, views from the Lighthouse property are currently blocked by brush and low trees. The proposed action will provide convenient, well-marked public access to the Lighthouse grounds from Lake Avenue along a well-groomed trail from which views will be maintained by managing the vegetation and landscaping.

In summary, construction of the project will increase public access to the waterfront, open up 4.7 acres of restricted area to public access (by completion of Phase 1 Marina), complete the Genesee Riverway Trail, and provide a new trail and enhanced views on the Charlotte Genesee Lighthouse property. These opportunities will be available to any member of the public at no cost. Additionally, new boating and recreation opportunities are created and will be available for lease to the public.

S. Temporary Impacts Related to Construction Activities

The proposed sequence of construction for the project considers and attempts to minimize potential impacts to existing traffic, activities, and nearby businesses.

1. Phase 1 Public Improvements: Phase 1 Marina, Right-of-Way Improvements, Lighthouse Trail, Lake Ontario Resource Center (LORC)

1.1 Schedule / Sequencing

The Phase 1 Marina and Right-of-Way Improvements are proposed to be constructed in a single coordinated effort. Components of these improvements include the construction of the initial phase of the Marina, the realignment of North River Street to the west, the extension of River Street from Portside Drive southward to connect with the southern portion of River Street, the relocation and extension of utilities to meet the new demands of the site, and the reconfiguration of the Public Boat Launch necessitated by the extension of River Street. Phase 1 development milestones are summarized in the following Table S-1 and in the narrative which follows. The milestones are also described in more detail in the following *Sub-section 6 – Transportation: Traffic and Parking*.

Table S-1 Project Phase 1 Schedule Summary

Phase 1 Development Milestone	Cumulative Duration in Months	Anticipated Date
Groundbreaking: Phase 1 Marina, ROW improvements, Lighthouse Trail & LORC Development	0	September, 2012
Begin utility relocations	0	September, 2012
Begin roadway, pavement and Marina construction	7	April, 2013
Complete relocation of utilities in advance of Phase 1 Marina basin excavation	8	May, 2013
Open Corrigan Street, drop off loop at Terminal Building and River Street Extension (south of Portside) for public use	9	May 27, 2013 (Memorial Day)
Complete remaining roadway and pavement construction and continue Marina construction	9	June, 2013
Complete Marina and all other Phase 1 public improvements	20	May, 2014

As shown in the foregoing table, the anticipated construction schedule envisions a September 2012 start and extends through May of 2014. During this time period, construction will affect different areas of the overall project site. Figure S-1 (attached at the end of this Section) indicates the area that will primarily be affected between September 2012 and May 2013. Figure S-2 indicates the area that will be affected from May 2013 and completion of the Phase 1 Marina.

Construction will begin with the relocation and extension of utilities in and around the Marina site and along the corridors of Corrigan Street, North River Street and River Street Extension. Roadway construction along Corrigan Street and River Street Extension will follow immediately behind the utility work in order to open Corrigan Street and River Street Extension, south of Portside Drive, for public use as soon as possible and, in any event, prior to Memorial Day of 2013 (May 27).

The schedule also anticipates that the section of North River Street between Portside Drive and Corrigan Street will remain closed and only be available for use by Marina construction traffic. Therefore, during construction, access to the Terminal and the Ontario Beach Park will be restricted to Corrigan Street.

A portion of development Parcel I will be made available for management of materials excavated from the Marina basin. Construction of the realigned North River Street will be completed and open to the public following the completion of the Phase 1 Marina in 2014.

Construction of the Phase 1 Marina will commence shortly after the relocation of critical utilities and is expected to run concurrent with continued utility work and roadway construction. Thus the schedule anticipates that majority of disturbance to roadways around the Marina site will occur during the winter months and that the Corrigan Street Extension, the drop off loop at the Terminal Building, and River Street Extension will be in service early in 2013. It is further anticipated that major construction activities after that time will be confined by Corrigan Street to the north, the drop off loop to the east, River Street Extension and Portside Drive to the south, and Lake Avenue to the west.

Pedestrian and vehicular access to the Terminal and Labor Operations Center during utility relocation and road construction will be maintained throughout the construction period. Access to the Terminal Building will be via Corrigan Street to the intersection of the westernmost driveway of the Ontario Beach Park parking lot, through that parking lot and into the parking lot north of the Terminal. Access to the Parks Labor Operations Center will be continued as it is currently.

The construction manager will be responsible for providing advanced notice to the County Parks Department, the Ontario Beach Park Program Committee, and users and occupants of the Terminal Building of any detours or parking interruptions related to construction.

1.2 Water Resources

All construction work will be complete in accordance with Rochester Pure Waters guidelines/approvals, and the City of Rochester Plumbing Codes.

Temporary erosion and sediment controls will be utilized during construction in accordance with New York State Standards for Erosion and Sediment Control. These measures will serve to prevent impacts created by erosion and transport of soil particles during construction. Given the potential reduction in runoff, the availability of stormwater utilities of adequate capacity and the anticipated reliance on temporary erosion and sediment controls, no significant adverse impacts related to stormwater runoff are anticipated.

Dewatering of mass excavations and trenches related to the Marina and utility construction will be achieved using mechanical pumping methods. Groundwater entering excavations will be pumped to specific areas elsewhere within the project site developed to promote percolation through soils before reentering the local groundwater aquifer. Direct discharge to Waters of the United States, e.g. Genesee River, Lake Ontario, etc, will not be permitted.

1.3 Air

Demolition and excavation within the project site will be accomplished using heavy equipment and manual labor. Implosion or the use of other explosive-type methods is not proposed. Dust and other airborne particulates will be generated by the demolition and excavation activities.

Mitigation measures will be implemented to minimize the amount and dispersal of dust and particulate matter from the site to adjacent buildings, the Genesee River and Ontario Beach Park areas, and pedestrian streetscape/sidewalk areas. The mitigation program would be particularly stringent given the proximity of the Marina site to the Genesee River and Ontario Beach Park.

During the demolition, excavation and construction periods, emissions of exhaust from heavy equipment would occur. These emissions would be temporary and would not significantly affect the ambient air quality of the Charlotte area.

1.4 Dust Reduction Measures

The contractor will be directed to schedule construction activities during normal working hours. To reduce dust and other air pollutants the contractor will be directed to minimize the area of exposure of erodible soil, apply dust suppression materials and water down the exposed areas, and using covered haul trucks. All roadways will be sprayed with water or dust suppression liquids to reduce dust generation and roadways will be cleaned at least twice per

working shift. The speed limit through the construction site will be limited to 10 mph to reduce generation of dust.

The project scope includes on-site sorting and processing of spoil materials from trenching and excavation activities in order to reduce the amount of earthen material directed to landfills. These materials include previously generated and placed blast furnace slag, a by-product of an earlier industrial use of the site. Slag materials will be segregated and crushed for reuse as fill material on a future City of Rochester project. Crushing or material handling equipment will be fitted with spray equipment or dust suppression controls. Air misters will be used in the material processing areas to control fugitive dust emissions.

Other construction dust mitigation measures may include:

- Daily or periodic wetting of construction/demolition areas;
- Keeping dumpsters covered;
- Following recommended federal, state and local regulations for identifying and abating hazardous materials;
- Use of vegetative cover measures or fabrics to stabilize areas of exposed earthen materials; and,
- Instituting regular cleaning of site debris and litter; and,
- If explosives are determined necessary for demolition or rock removal (not anticipated), the blasting plan should include provisions for dust control and clean-up following the work.

1.5 Aesthetic/Visual Resources

Temporary impacts to Aesthetics/Visual Resources resulting from construction will include those commonly associated with construction in an urban environment, including highly visible warning signage, staging areas, barriers and fencing, visibility of on-site construction activities, equipment, etc. Large areas of bare soil may be temporarily exposed or covered with erosion control fabric. Stockpiled materials, including dirt, roadbed materials, landscaping materials, would likely be visible to road users. Lighted signage and devices for maintenance and protection of traffic will be visible at night. All of these visual construction impacts would be temporary and removed upon completion of a given phase of construction.

1.6 Transportation: Traffic and Parking

Temporary impacts to traffic and parking will be directly related to the construction schedule and sequencing of project activities outlined in *Sub-Section IV S 1* above. The schedule for Phase 1 was established to begin after the busy summer season to minimize impacts on vehicular traffic and access to

the existing Terminal Building, as this phase will impact existing traffic flow on portions of Corrigan Street, Portside Drive, River Street, and North River Street.

The City of Rochester Traffic Control Board will conduct careful review of the proposed sequence of construction and will have a high level of oversight on the project before any lane closures or detours are put in place. Members of the Traffic Control Board include employees of several City departments plus the Monroe County Department of Transportation.

The following represents a summary of proposed construction activities, the impact to local traffic and mitigative measures to be undertaken. The schedule assumes that construction will start in September 2012.

1.6.1 September 2012 to May 2013 – Relocate utilities in advance of Marina excavation

This will impact Corrigan Street east of River Street, Portside Drive, North River Street, and River Street Extension from Portside Drive southward. Due to the number and types of affected utilities (water, sanitary sewer, drainage, electric, gas, telecom), and the depth of excavations, it will be necessary to completely close these roads as the utilities are relocated/constructed. Much of the utility work will occur during the off-peak, winter months, in order to minimize the impacts to traffic.

Beginning at this time, parking at the following locations will be permanently eliminated: the drop-off loop in front of the Terminal, the lot west of the drop-off loop, the lot west of North River Street, the former embarking and disembarking lots south of the Terminal Building, and the lot west of the embarking and disembarking lots.

During this time, Corrigan Street from Lake Avenue to the North River Street intersection will be the primary access point to the north parking lots and Terminal Building. Parking will be provided within the Ontario Beach Parking lots and the parking lot to the north of the Terminal Building.

1.6.2 April 2013 to June 2013 – Roadway and pavement construction and commencement of Marina construction

The drop-off loop, Corrigan Street and River Street Extension (Portside Drive southward) will be reconstructed and reopened for public use as soon as possible. This work will need to take place during warmer and dryer weather to ensure proper compaction of subgrade and subbase materials beneath roadway pavements. Provisions to maintain continual access to the Public Boat Launch throughout this period will be undertaken including the use of flagmen, signage and devices to control

the interaction of construction vehicles and the motoring public. Other means to be used to maintain local access include detours and movable construction zones.

Pavement construction in the above areas will stop after the placement of the binder course. The final course of pavement will be installed with that of the realigned section of North River Street as it is reconstructed concurrent with or following the construction of the Marina.

1.6.3 June 2013 to May 2014 – Continuation of Marina construction

The realigned North River Street will remain closed and made available for use by contractors for the duration of the Marina construction. The major construction activities during this time will be confined to area bounded by Corrigan Street to the north, the drop off loop to the east, River Street Extension and Portside Drive to the south, and Lake Avenue to the west. No public access will be provided through the site during this period. Vehicular and pedestrian traffic traversing from north to south and vice versa will be routed to Lake Avenue.

Depending on the contractors method of managing removal of spoils from the Marina excavation, up to 100 trucks transporting excavated materials will leave the site daily.

Pavement construction is anticipated to occur following completion of Marina excavation activities. The final course of pavement will be installed with that of the River Street Extension near the completion of overall construction activities.

It is important to note that many general measures would be implemented to mitigate impacts to traffic and transportation operations from construction activities. The most important measure would be the preparation of detailed plans for Maintenance and Protection of Traffic (MPT) for each stage of construction. The plans would be developed in close coordination with the City, MCDOT, contractor and engineer, and would be reviewed and approved by the City and other affected agencies.

1.7 Public Transit

Detours and lane closures will be reviewed by the City Traffic Control Board, and if possible, road closures would be limited to off-peak hours. If lane closures conflict with RTS bus stops, the RGRTA would be notified and alternate bus routes would be planned (see *Section IV K*). The entire demolition and future construction operations would be inspected by various engineers and reviewing agencies, and traffic along adjacent roadways would be closely monitored.

1.8 Pedestrian

Any full road closures throughout the Phase 1 Public Improvements will have a clearly posted detour route along existing routes, and will be scheduled in advance. It is anticipated that sidewalk closures would be clearly posted to direct pedestrians to the opposite side of the roadway or other routes and that pedestrian access to the Terminal Building will continue.

1.9 Utilities

Temporary impacts to utilities will be limited to connections between newly constructed facilities and those to remain. Minor disruptions in service, if necessary, will be short-term, and will be limited to the period of time need to make physical connections between the facilities. Affected customers will be notified in advance of any temporary disruptions in service.

1.10 Noise/Odor

1.10.1 Noise Reduction Measures

The most significant sounds contributed to the environment by the project would result from construction or demolition activities. However, these sounds are temporary and common place (due to building and infrastructure maintenance) in an urban environment.

Construction sounds would consist of running equipment such as excavators, compressors, jackhammers, and vehicle backup alarms. Table S-1 below shows the sound levels from typical construction equipment. It may also include sound from falling debris or breaking building materials. If either implosion is used for demolition (not anticipated), or explosives are used for rock removal (not anticipated), these may add significantly higher sound levels but they would be of very short duration. If implosive demolition or explosives for rock removal are considered, a blasting plan should be developed which would document measures to be used to minimize sound impacts to nearby receptors.

Construction noise would be of relatively short duration. It would occur mostly during daylight hours and only during the construction period. Construction will occur largely during winter months when windows are usually closed. Additional measures that can mitigate construction sound include:

- Use of alternative, quieter construction methods and equipment where possible (eg. using electric motors instead of compressed air driven equipment);

- Maintaining construction equipment (for example, ensuring mufflers are in good working condition on construction vehicles);
- Placing noise generating equipment in the center of the job site and behind existing structures as available,
- Limiting idling of equipment when not in use;
- Replacing back-up beepers on machinery with strobe lights (subject to other requirements, such as OSHA regulations, as applicable);
- Erecting and maintaining physical barriers;
- Appropriate siting of staging areas; and,
- Limiting hours of construction to between 7AM and 10PM.

Implementation of these measures can reduce or avoid adverse noise effects. The construction manager on-site will be responsible for monitoring complaints and adjusting construction processes accordingly.

Table S-2 Typical Noise Levels Associated with Construction Equipment

Equipment	Decibel Level	Distance (ft)
Augered Earth Drill	80	50
Backhoe	83-86	50
Cement Mixer	63-71	50
Chainsaw Cutting Trees	75-81	50
Compressor	67	50
Garbage Truck	71-83	50
Jackhammer	82	50
Paving Breaker	82	50
Wood Chipper	89	50
Bulldozer	80	50
Grader	85	50
Truck	91	50
Generator	78	50
Rock Drill	98	50

As noted, the duration of the construction noise impact and the distance it extends from the site are anticipated to be short. However, depending on construction equipment and methods used, the impact on receptors immediately adjacent to the site could be significant. The most significant impact may be on open areas near the site and upon Lake Avenue restaurants and other commercial buildings within the

immediate neighborhood. These would include the sidewalks and pedestrian ways around the site, and the nearby Ontario Beach Park. These adjacent open areas may experience increased noise levels during the construction period. Additionally, only personnel authorized by the Contractor would be permitted within the construction boundaries during the construction period thereby reducing noise exposure to the general public.

1.10.2 Odor Reduction Measures

During construction, open dumpsters, severed sewer lines, and onsite portable restrooms may contribute to odors within the vicinity. No significant impacts are anticipated; however any potential odor impacts can be mitigated by the following measures:

- Maintaining equipment to minimize emissions;
- Providing adequate ventilation;
- Covering, and periodically cleaning, all dumpsters and the surrounding areas;
- Preventing blockages in storm and sewer lines;
- Scheduling sewer line interconnection work to minimize the time the line would be open; and,
- Scheduling regular emptying and cleaning of restroom.

The contractor should be instructed to schedule construction activities such that odorous sources are uncovered or unsealed for as short a time as possible and during the time of day when odors are observed to be at a minimum (generally during low-flow hours).

1.11 Public Health and Safety

Demolition and new construction activities of the project can pose several threats to public health and safety (additional discussion of Public Health and Safety issues is provided in *Section IV P)*. Hazards to the public during demolition and construction could include falling debris, possible proximity to dangerous or heavy equipment, large construction vehicles with limited visibility, and explosive hazards if used for demolition or rock removal. There are also risks to construction workers from equipment, falls, and handling of hazardous materials.

These potential construction risks and hazards to the public will be mitigated by:

- Development, and adherence to, a demolition plan;
- Publication of advance notices to the public regarding construction and related road closures;

- Securing the site with perimeter fencing, installing protective scaffolding over pedestrian walkways, and appropriate signage (traffic detour and warning, sidewalk closings, etc);
- Cautious demolition procedures and use of appropriate equipment by qualified operators;
- Use and maintenance of backup buzzers or strobes on construction equipment;
- Maintenance of equipment in good, safe working order;
- Development and strict adherence to a blasting plan if explosives are to be used for any reason (not anticipated). This should include provisions addressing site security during blasting, public notification, clearing the site, acceleration monitoring/potential for flying debris, and other measures to protect the public;
- Maintenance of MSDS information for all hazardous materials on site during construction and adherence to the prescribed handling and storage requirements; and,
- Regular safety meeting requirements for contractors, and strict adherence to Occupational Safety and Health Administration (OSHA) regulations (such as wearing hardhats, visibility vests, and fall protection harnesses).

As described in *Section IV O*, a more detailed hazardous material assessment is to be performed on the complex. This would identify all ACM and other hazardous materials present in preparation for abatement. A contract would then be let for the abatement of these materials. Abatement would, for most of these materials, precede demolition which would minimize risk to the public by contaminated dust and other debris. To mitigate any hazards, any contaminated soils or hazardous materials found during work would be addressed in a manner conforming to local, state, and federal regulations.

2. Phase 2 Public Improvements: Phase 2 Marina Expansion, Relocation of the Public Boat Launch, and Relocation of the Ontario Beach Park Labor Operations Center

With the exception of the Phase 2 Marina Expansion, Phase 2 Public Improvements will be subject to future site specific reviews, as will be the Incremental Private Development. Specifically, the private development upon the proposed development parcels, the relocation of the Public Boat Launch, and the relocation of the Ontario Beach Park Labor Operations Center will all be subject to site-specific review and temporary construction impacts will be evaluated at that time.
Regarding the Phase 2 Marina Expansion, excavation of the enlarged basin will be immediately preceded by demolition of Public Boat Launch and demolition of the Labor Operations Center. As these activities commence, measures comparable to those summarized in the foregoing discussion of Phase 1 will also be implemented during this subsequent Phase 2. It is anticipated that these demolitions and the following excavation will require an additional 8 to 12 months to complete.

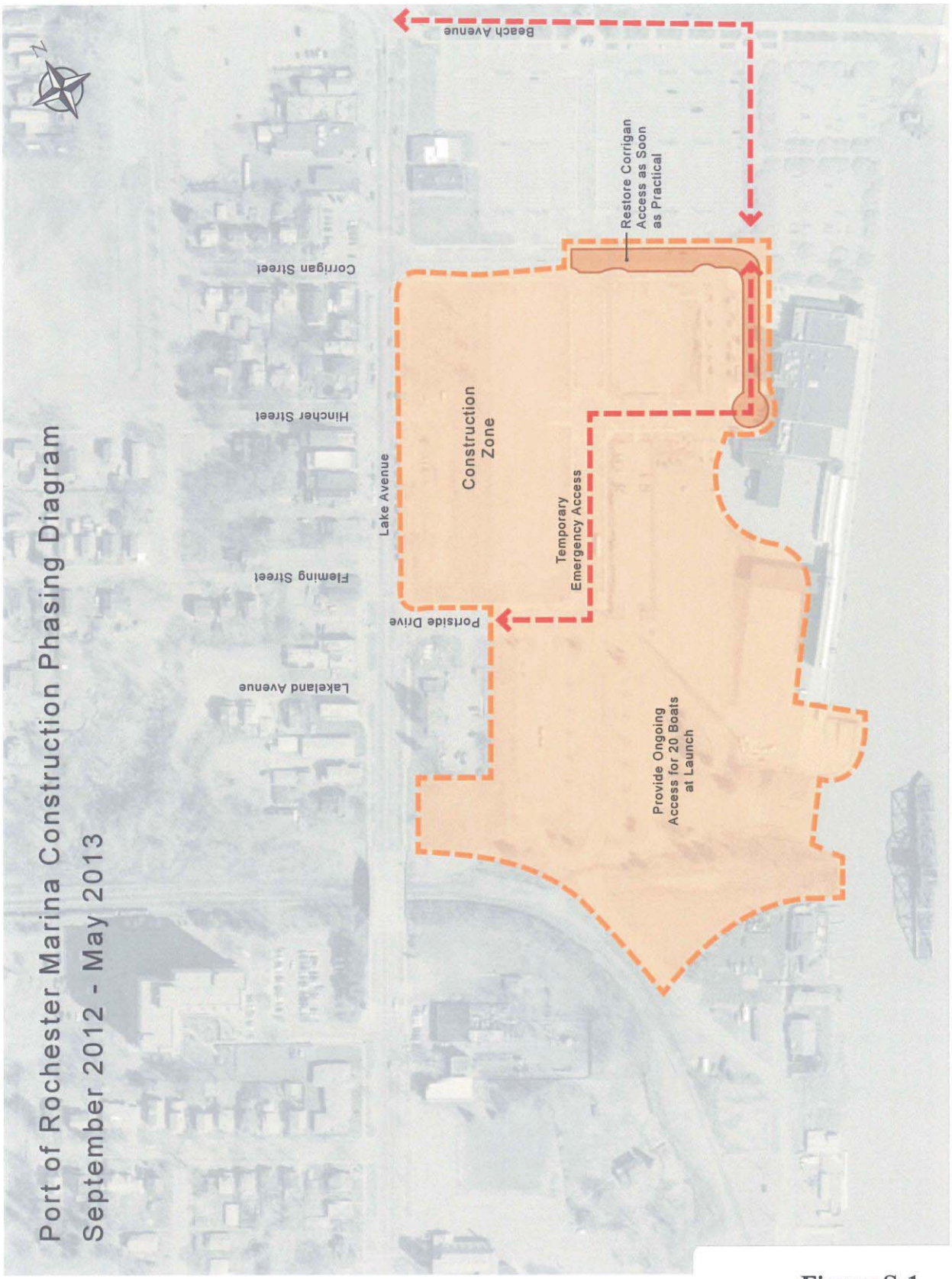


Figure S-1
Port Marina Project
First Construction Sequence

Figure S-2
Port Marina Project
Second Construction Sequence

T. Unavoidable Adverse Impacts

1. Introduction

This section of the EIS identifies potentially significant adverse impacts that are likely to occur despite mitigation measures. The following sections evaluate the potentially adverse unavoidable impacts have been identified for the project.

2. Marina Entrance

The construction of the marina basin requires creation of an entrance for the basin along the western shore the Genesee River. The entrance is located as far south as possible for the Phase 1 Marina, between the existing boat launch ramp and the existing vehicle loading platform for the former ferry service. The process which resulted in the selection of this location is outlined in detail in *Section V B Marina Location Design Alternatives*. In summary, this location is least impacted by waves and storm surge, and therefore requires the least amount of space to construct and the least amount of infrastructure for erosion protection. Construction of Phase 2 Marina Expansion will not change the marina entry in any way.

In order to create the opening, approximately 63 linear feet of existing concrete wall and 25 linear feet of existing steel sheet pile wall will be removed. The final width of the entrance will be 60 feet. Scour protection necessary to protect the entry from erosion will impact approximately 6,000 square feet of river bottomland. Scour protection generally involves installing a layer of stone on the bottom of the river to minimize erosion. All reasonable efforts will be made to salvage, recycle, or reuse any materials recovered in the process of creating the marina entrance.

3. Increased Property Taxes

The improvement of the existing underutilized facilities at the Port of Rochester site is expected to spur economic growth, and over time, increase property values within the nearby Charlotte neighborhood. If this occurs, the increased value of the affected land and properties will result in a corresponding increase in property taxes. While increased property values are generally considered a positive impact by the majority of property owners, some owners and tenants view this as a negative impact, due to the increased cost of living.

There is no mitigation for this impact proposed. However, the extent of the area directly impacted will be generally limited to the areas immediately adjacent to the proposed development and the portion of Ontario Beach Park west of Lake Avenue. In the near term, property values between the CSX rail line and Lake Ontario State Parkway will likely remain stable, providing a range of housing opportunities within three quarters of a mile of Ontario Beach Park.

4. Short Term Construction Impacts

The construction of the proposed project will create temporary construction impacts to the parcels and roads within the project site. These impacts generally include increased noise, dust, ground disturbance, and truck traffic, as detailed in *Section IV S Temporary Construction Impacts*.

5. Loss of Convenient Public Parking Spaces

The existing public parking areas between Lake Avenue, Portside Drive, Corrigan Street, and the Terminal Building will be permanently removed during the initial construction phase. Public parking areas north of Corrigan will not be impacted. The loss of parking is further discussed in *Section IV K Transportation*.

6. Lost Views from Lake Avenue

The proposed project will impact the visual environment of the Port area. Some views of the waterfront from Lake Avenue will be blocked by the proposed development.

The City has developed a Visual Preference Survey that interested parties and local residents have the option to complete (see *Section IV F*). The Visual Preference Survey will allow the City to evaluate the significance of the project's impacts on the visual resources of the Port area. The City will address the results of the survey in the Final Environmental Impact Statement.

7. Relocation of Utilities Installed within the last Ten Years

Utilities installed within the project area between 2000 and 2004 will be removed prior to the expiration of their useful life.

8. Project May Compete with Private Sector

The Port of Rochester Marina will be one of two marinas operated by the City of Rochester. In addition, several privately owned and operated marinas exist within the greater Rochester Harbor. Marina market studies completed in 2009 indicate a demand for an additional 200 to 500 slips of 26 feet or greater in length, above what already exists. This represents a demand for two to four times more new slips than are proposed by the proposed project. Slip lease rates will be comparable to private slip rates of comparable quality and amenities.

9. Preclusion of a Vehicular Passenger Service Ferry Operation

Construction of the marina will remove the existing vehicle queuing, loading and inspection areas that were related to the former fast ferry operation. Development, as proposed, will preclude the operation of such a large-scale vehicular ferry operation in the future.

U. Irreversible and Irretrievable Commitment of Resources

The primary irreversible and irretrievable commitment associated with the proposed action is the excavation of the marina basin. Once the Phase 1 Marina is excavated, encompassing approximately 4.7 acres of land, it is unlikely that the affected area will ever be converted back to land-based development again. As the excavation of the Phase 2 Marina Expansion will be dependent upon a number of factors and market conditions, the excavation of the additional acres is not considered an irreversible and irretrievable commitment, until such time as it is undertaken.

It is important to note that the land to be affected by the Marina excavation is not native soil, having been subject to fill due to historic land uses in the area. Moreover, the fill that exists at the proposed Marina site has known contamination issues. As such, the excavation and removal of this fill under the methodology described in *Section IV O* of this document will result in ancillary benefits with regard to groundwater, soils and solid waste.

To the extent that the Ontario Beach Park Labor Operations Center and the Public Boat Launch and the energy embodied within them can be considered resources, demolition of these facilities would represent an irreversible and irretrievable commitment of resources.

The private mixed-use development activities associated with this action involve many incidental instances of the irreversible and irretrievable commitments of resources. These include building materials and other similar natural or man-made resources that would be consumed, converted, or otherwise made unavailable for future use as a consequence of the redevelopment and the preceding demolition efforts.

Staff is required to maintain and operate the public infrastructure, public parkland and marina. Additional staff is also required to provide public works services (e.g., trash collection) to the residents, tenants and users of the private development.

V. ANALYSIS OF ALTERNATIVES

A. No Action Alternative

The "no action" alternative is intended to assess the adverse or beneficial impacts that are likely to occur in the future if the proposed project is not undertaken.

With regard to this project, the "no action" alternative would avoid the need for excavation of a new marina basin, for road re-alignments and extensions, for trail construction, for utility relocations, for relocation of facilities such as the Public Boat Launch and Labor Operations Center, for alienation of parkland, for a reduction in the number of available parking spaces, for temporary construction impacts, and for other impacts described in more detail in *Section IV*.

At the same time, the City's commitment to the re-positioning of the existing Port of Rochester Terminal Building to a viable office/retail complex would remain unfulfilled in a "no action" scenario as there is no indication that such re-positioning would be accomplished in the absence of a project like that being proposed. In that instance, this public waterfront area would remain under-developed and would not become a year round recreation-oriented resource able to complement other significant public resources in the area. The existing public waterfront recreational facilities would not be enhanced and would remain insufficient to support economic development consistent with the City's Local Waterfront Revitalization Program.

More specifically, were the "no action" alternative to be selected, the economic benefits of the project outlined in Section III of this DEIS would not be realized. The anticipated $89 to $194 million in assessed value improvements and additional $2.9 to $8.1 million in additional annual property tax revenues (see Appendix C, 2009 Edgewater Marina Engineering Report and Feasibility Study, page 36) associated with the development area would not be realized. The anticipated annual marina operational revenue with an estimated present value of approximately $5.0 million would not be received by the City. Indirect economic and property value improvements in the Charlotte area would be unlikely. The No Action alternative would also eliminate as much as $4.2 million in NYS and Federal grant funding that has been awarded to the City of Rochester or is pending in current grant applications.

Leaving the project site in its present condition would keep the substantially underutilized waterfront from realizing its full potential for increasing and improving public access. Inaccessible vacant parking lots related to the defunct fast ferry operation would remain as such. There would be no extension of the Genesee Riverway Trail to improve trail connections to the Port and Ontario Beach Park. The needed traffic and safety improvements and the needed secondary means of north-south vehicular travel related to the River Street Extension would not be realized. This extension was identified by the Fire Chief, Police Chief and traffic engineers as a much needed improvement to the Port site.

Currently, there are insufficient public boat slips in the Rochester Harbor that can accommodate the boats greater than 30 feet. Without the proposed action, this demand would not be met. In addition, no new boater oriented or recreational attractions would be established at the Port. Without the proposed Marina, which will include engineered wave attenuating structures, there would continue to be no publicly available safe harbor for seasonal and transient boaters during rough lake conditions, storms, or wave surge events on the Genesee River.

The tourism potential related to the additional attractions, boat docks, boater and tourism information center, commercial venues, and open space would not be realized.

The relocation of the Public Boat Launch and the Labor Operations Center would not be required and the facilities would remain in their current locations.

Without the Lighthouse Trail, the community would not have the benefit of a dedicated public access from Lake Avenue to the Lighthouse and to Lighthouse Street. Access to scenic views of the Lake and River would not be available from this vantage point.

B. Marina Location and Design Alternatives

1. Introduction

A number of key issues, opportunities and site constraints have influenced the design of the marina layout. Achieving a balance between the issues and constraints involved incorporation of sound engineering principles, community input, and careful planning to maximize community benefits while minimizing negative impacts. Engineering issues, including soil structure, topography, and wave dynamics, contributed to the form of the marina basin, with planning, existing uses, and regulatory constraints have also been taken into consideration.

Six options for marina design and location were identified during the preparation of the Marina Engineering Report and Feasibility Study prepared in May 2009 (Appendix C). These six alternatives were presented to public focus groups, and a seventh alternative was formulated which maximized the revenue-producing components of the project and minimized the negative impacts.

The seventh alternative was identified as the "preferred alternative" in early 2010 at the end of the public focus group sessions and formed the basis for the Preferred Alternative currently put forth in this EIS. As is more fully described in *Section V H*, the currently Preferred Alternative described in this EIS underwent further changes during the environmental review process itself, based on impacts identified and other findings of the review.

This section describes the six original alternatives as well as the seventh alternative and provides a summary of the public/agency input that shaped the process. In addition, the alternative of not constructing the marina, and instead, building broadside docks alongside the Terminal Building within the Genesee River will be discussed.

2. Public Participation

The City of Rochester held numerous public meetings and hearings regarding the development of the Port property in 2008 and 2009. Nine specific meetings were held during the review process for the Marina Concept Plan / Feasibility Study and subsequent 30 percent engineering study. The dates of each meeting, as well as the overall response leading to the endorsement of Option Seven are detailed within Appendix B of the Marina Engineering Report and Feasibility Study completed in May 2009(see Appendix C). In addition, a public meeting was held in April 2010 to review the 30% Design for the project.

3. Alternatives Considered

3.1 Feasibility Study Option One

The concept plan for Option One was similar to the plan proposed in 2006 by Sasaki (see Figure V-B-1 Option One Plan. *Note: all Figures are attached at the end of this section*). Key elements of Option One included an internal marina basin in the northeast corner of the site, surrounded by residential development on a grid-based street pattern throughout the rest of the property. The primary reason this concept was eliminated was the impact of wave dynamics at the proposed marina entrance. The marina entrance, as proposed in Option One, would be impacted by three to five foot waves during major northeasterly storms, and the significant cost of mitigating these wave impacts both inside the basin and at the entrance of the marina made this option impractical. Additionally, the basin location isolated the Terminal Building from Ontario Beach Park and would require relocation of a 72-inch interceptor storm sewer which would cost in excess of $1,000,000.

3.2 Feasibility Study Option Two

The concept plan for Option Two proposed a larger and more linear internal marina basin that wrapped around the west side of the Terminal Building and connected to the river to the north in a location similar to that in Option One (see Figure V-B-2 Option Two Plan). The wave dynamic issues identified in Option One were addressed through design of an "offset S" type marina entrance, and the layout of the basin was oriented to avoid the necessity of relocating the 72-inch interceptor. Additionally, a structure designed to deflect silt from entering the basin was included at the mouth of the basin, reducing maintenance. The goal of the linear marina basin alignment was to increase property values by increasing the number of parcels located adjacent to the water.

This option was rejected for several reasons. The offset S marina entrance, while functional, consumed nearly one acre of land and resulted in a more difficult navigation route for boaters maneuvering through the entry. Further, the marina basin in this option bisects and isolates the Terminal Building from the beach and public areas, requiring an alternative access route from the south.

3.3 Feasibility Study Option Three

The concept plan for Option Three was shaped by the goal of minimizing impacts to the existing uses on the site, including parkland, the existing boat launch, roadways, and utility infrastructure (see Figure V-B-3 Option Three Plan). The basin was connected to the river at the south side of the existing Terminal Building, which resolved a number of significant issues identified in Options One and Two, including: impacts due to wave dynamics, impact to the

72-inch interceptor, and separation of the Terminal Building from Ontario Beach Park.

This option was rejected because it created a marina basin that was isolated from adjacent developments sites on all sides by roads, and it resulted in a marina basin shaped more like a canal than a navigable basin. This constrained the slip mix and sizes, reduced the number of possible slips, and reduced potential marina revenue as well as the potential increase in adjacent property values.

3.4 Feasibility Study Option Four

The concept plan for Option Four expanded on the structure established in Option Three and increased the size of the basin to create a more functional and economically viable marina (see Figure V-B-4 Option Four Plan). Further, the concept reorganized the adjacent development pads and roadway orientation to increase the value of these parcels by locating them adjacent to the marina basin. The location of the marina entry is the most desirable location to minimize impacts from wave dynamics.

The downside to this concept is its complexity and the length of the schedule associated with the development process. The marina entrance location will require relocation of the existing boat launch facility, which will delay the project until that facility is replaced elsewhere. Additionally, alienation of existing parkland may be necessary, which would involve legislative approval from the State of New York prior to marina construction.

3.5 Feasibility Study Option Five

The concept plan for Option Five was based largely on the development pattern and marina basin shown in Option Four, but moved the marina basin entry to the north of the existing vehicle loading platform and introduced a phased development strategy (see Figure V-B-5 Option Five Plan). The structure of Phase One of the proposed marina basin was arranged to locate all elements entirely within lands owned and controlled by the City of Rochester (see Figure V-B-6 Option Five Phase One Plan). Phase One would require no parkland alienation, land acquisition, or modifications to the existing boat launch. Development parcels were proposed immediately adjacent to the marina basin to the south and west, with public park spaces proposed between these two development parcels and to the north of the basin along Corrigan Street.

The phased approach would allow for the development of Phase One to begin immediately and for construction to be underway, while the more complex development process for Phase Two was undertaken. This strategy would also allow the Phase Two development to be modified to respond to market conditions, increasing the likelihood of success of the overall project.

3.6 Feasibility Study Option Six

The concept plan for Option Six was very similar to Option Five, with two significant changes (see Figure V-B-7 Option Six Plan). First: the north end of the marina basin was reduced and the basin edge moved to the south to create space for an additional development parcel in place of the public park space identified in Option Five. Second: the northern stretch of River Street was realigned to maintain the current intersection with Corrigan Street. Option Six maintained more of the existing parking along Ontario Beach Park than Option Five. However, the reduction of the marina basin makes phasing of the project infeasible due to the small size of the northern portion of the proposed basin. Further, the character of the marina basin in this option is decidedly more private, with only a small portion of the marina basin edge dedicated as open park space.

3.7 Feasibility Study Option Seven

Option Seven was developed through the analysis of Options One through Six, and was the recommended plan at the time (see Figure V-B-8 Option Seven Plan). The plan considered the site constraints and conditions, and was determined to be the plan that best minimized negative impacts while emphasizing the positive features of the project. Further, this plan was determined to provide the best balance of public recreational opportunities and private investment options that could be leveraged to make the public components a reality.

Option Seven was based primarily on Option Five but incorporated several key refinements to the proposed layout of the development parcels while expanding the size of the public space along the northern end of the marina basin. Development parcels north of Corrigan Street were simplified and located immediately adjacent to the intersection of River Street and Corrigan Street. Like Option Five, this plan was based on a phased approach with Phase One occurring on lands controlled by the City of Rochester (see Figure V-B-9 Option Seven Phase One Plan).

4. Rochester Harbor Capacity Analysis

Rochester Harbor is an active waterway with existing recreational and commercial boat traffic. The Genesee River has more than enough excess capacity to support the increase in traffic anticipated due to the construction of the proposed project. In order to illustrate this point, the following paragraphs compare Rochester Harbor with a very similar harbor on Lake Michigan in St. Joseph, Michigan. Both harbors have similar occupancy rates, numbers of marinas, drawbridges, turning bridges, yacht clubs, and commercial shipping traffic.

Slips

With the completion of the proposed marina, Rochester Harbor will be home to eight marinas and approximately 950 slips within 1.5 miles of Lake Ontario. By comparison, St. Joseph Harbor is home to eight marinas and nearly 1,200 slips within 1.5 miles of Lake Michigan, plus an additional 440 slips less than another 1.5 miles upriver. This includes more than 100 dry rack slips, and amounts to roughly 42 percent more slips than Rochester Harbor. Boater facilities are summarized visually in Figure V-B-10 and Figure V-B-11.

Boat Launches

Rochester Harbor is currently home to one municipally-owned and operated boat launch with parking for approximately 104 vehicles with trailers. In 2009, approximately 1,800 paid launches occurred at the public boat launch. St. Joseph Harbor is home to two municipally owned launch facilities with a combined total of approximately 242 parking spaces for vehicles with trailers. Two additional similarly-sized, municipally-owned launch facilities are provided two and four miles upstream respectively. Combined, more than 20,000 boats were launched from these facilities in 2009. According to the Michigan Department of Natural Resources, the facility located nearest to Lake Michigan accounted for more than half of those launches.

Commercial Shipping

Rochester Harbor includes one commercial shipping terminal, which receives an average of 40 deliveries per year from the ESSROC Cement Company. The ESSROC cement carrier Stephen B. Roman is approximately 490 feet long. St. Joseph Harbor is home to three commercial terminals, and receives an average of over 100 vessels per year. This includes a variety of bulk carriers and barge vessels up to 650 feet, including a cement operation similar to Rochester.

Navigation Channels

There are a several locations where the navigable width of the Genesee River in the Rochester Harbor is constrained. These include two channels 123 feet in width at the abandoned CSX turning rail bridge, a channel 258 feet in width between the Rochester Yacht Club and the former fast ferry loading dock, and a channel 442 feet in width between the east and west piers into at the Genesee River opening into Lake Ontario. In comparison, navigation in the St. Joseph River is constrained at three similar locations. These include two channels 90 feet in width at the active CSX turning rail bridge, a channel 245 feet in width between the US Coast Guard facility and Silver Beach Park, and a channel 317 feet in width between the north and south piers in Lake Michigan.

In summary, the navigable waterway of the Genesee River in Rochester is more than 30 percent wider than the navigable waterways on the St. Joseph River. However, St. Joseph Harbor has 57 percent more slips than the Rochester Harbor, and supports more than eight times the number of trailer-able boats entering the waterway from boat launches. Additionally, the St. Joseph River sees two and a half times more commercial traffic than the Genesee River. It is concluded that commercial and

recreational boat traffic could be more than doubled on the Genesee River before it reaches the density of traffic in St. Joseph Harbor.

According to the United States Coast Guard Stations in St. Joseph and Rochester, neither location has experienced a single boat-to-boat incident in the last two years. In terms of wave climate and weather impacts on navigation, St. Joseph and Rochester Harbors have similar fetches of approximately 50 miles across Lake Michigan and Lake Ontario, respectively, but St. Joseph experiences more high wave weather events due to its exposure to storms from the west compared to Rochester's exposure to less frequent storms from the north and northeast.

Figure V-B-1
Port Marina Project
Feasibility Study
Option One Plan

Figure V-B-2
Port Marina Project
Feasibility Study
Option Two Plan

Figure V-B-3
Port Marina Project
Feasibility Study
Option Three Plan

Figure V-B-4
Port Marina Project
Feasibility Study
Option Four Plan

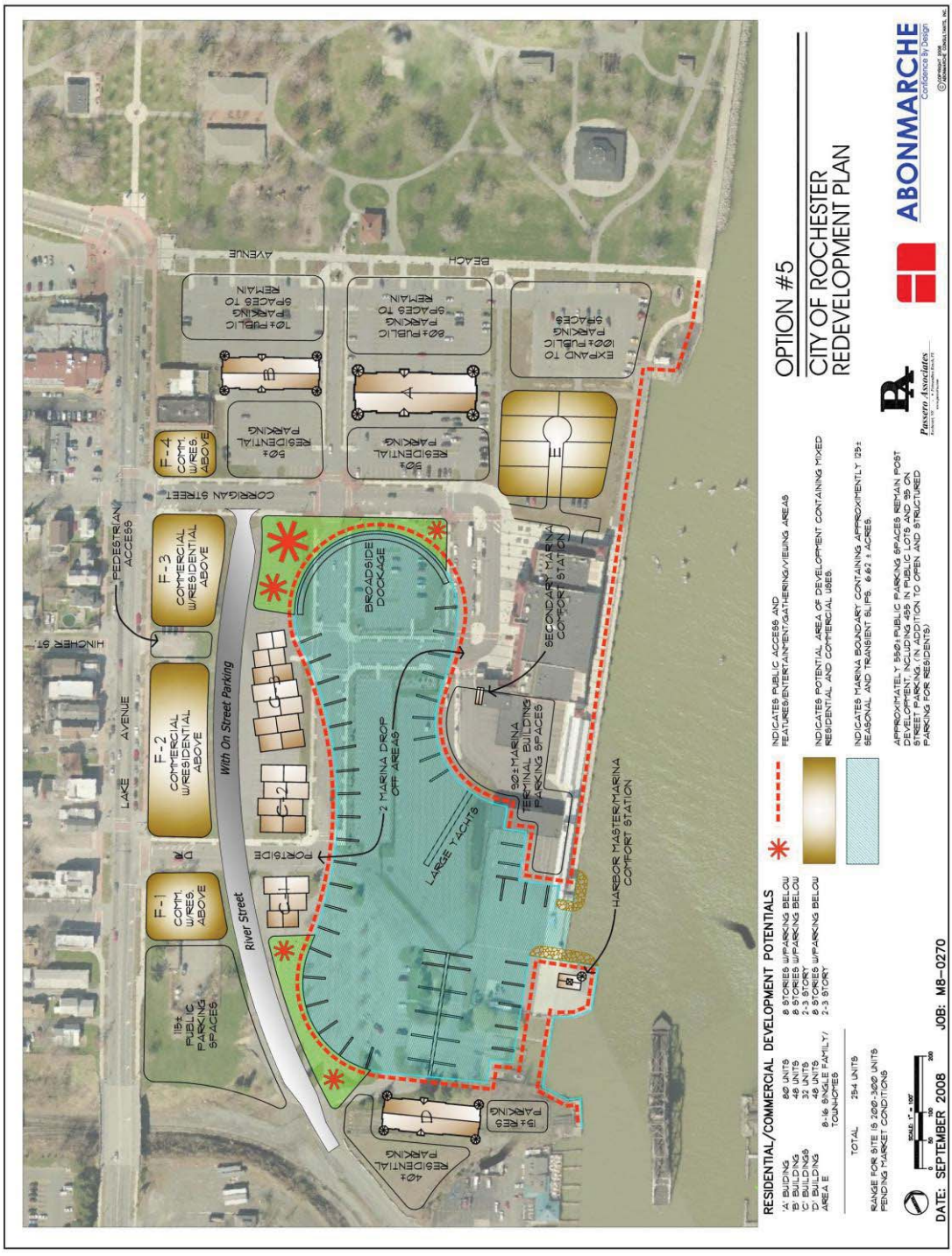


Figure V-B-5
Port Marina Project
Feasibility Study
Option Five Plan

Figure V-B-6
Port Marina Project
Feasibility Study
Option Five Phase One Plan

Figure V-B-7
Port Marina Project
Feasibility Study
Option Six Plan

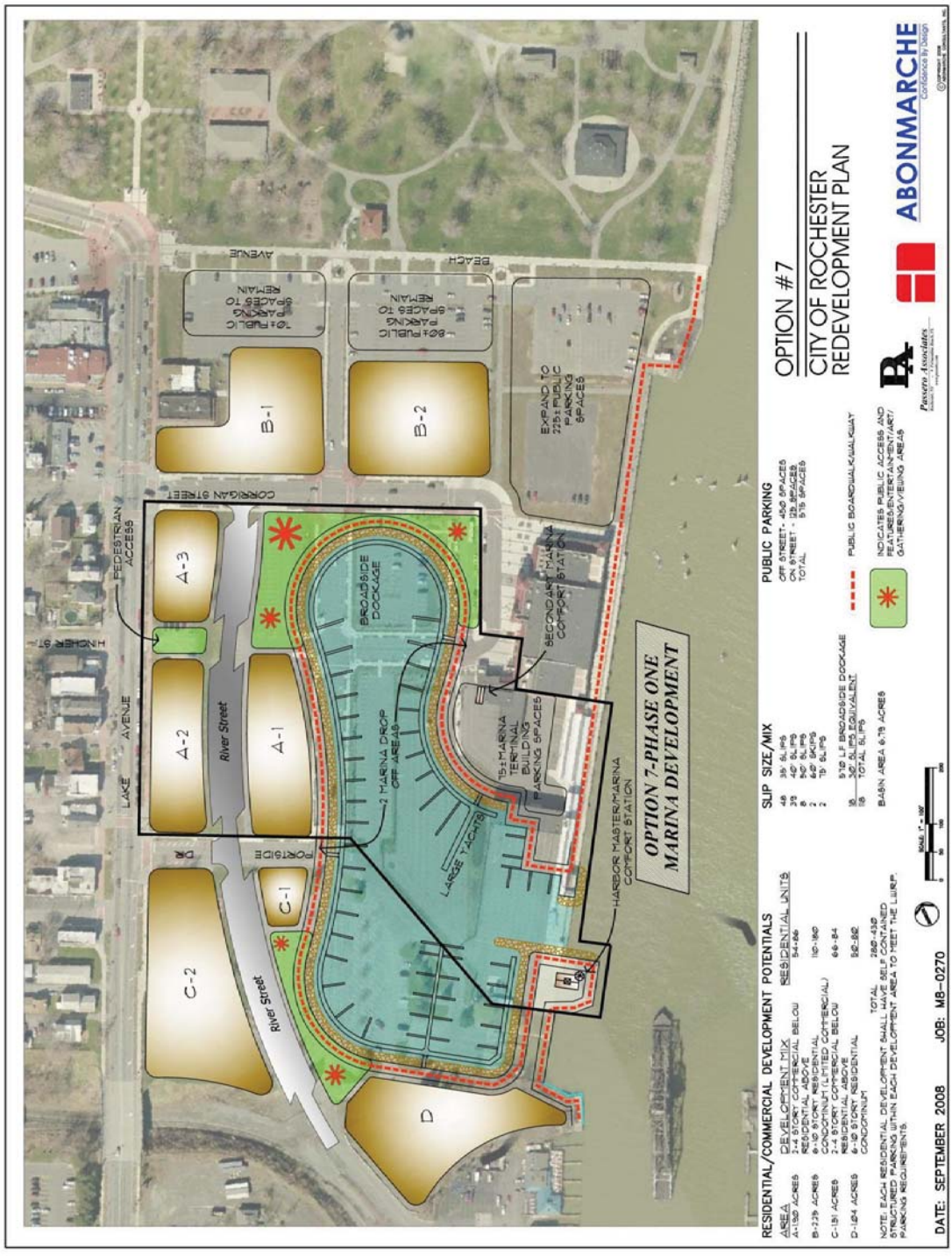


Figure V-B-8
Port Marina Project
Feasibility Study
Option Seven Plan

Figure V-B-9
Port Marina Project
Feasibility Study
Option Seven Phase One Plan

Figure V-B-10
Port Marina Project
Boater Facilities
Rochester, New York

Figure V-B-11
Port Marina Project
Boater Facilities
St. Joseph, Michigan

C. Marina Operation Alternatives

This section discusses the alternatives for operating the marina and funding the ongoing marina operations. Marina operations and maintenance may be performed by City of Rochester employees, a contractor under agreement to the City, or a marina operator under a license agreement with the City. Marina operations and maintenance activities are expected to be full time during the summer boating season with winter responsibilities being defined as needed. These operations and management activities will be part of a Marina Management Plan prepared by the marina operator and approved by the City of Rochester. Off-season recreational opportunities and alternatives are discussed at the end of this section.

1. Marina Operation Fundamentals

The operational requirements of a marina vary widely based primarily on the location, number of slips, and services provided at the marina. Staffing requirements are directly associated with the amenities and services provided, with most of the positions being seasonal in nature and active from April 1 through November 1 in the Great Lakes. Marinas are fundamentally part of the hospitality industry, and successful marinas are operated from this perspective. All boaters should be treated as guests, and customer service provided by helpful, knowledgeable, and friendly staff makes more of a difference to the success of a marina than any other single element of the operation.

The Port of Rochester marina will provide basic marina services including:

- Seasonal slips,
- Transient or “guest” slips,
- Boater Services Building including a small ship store, and
- Pump-out facilities.

It will not include ancillary marina services such as engine or fiberglass repair, winter storage, fuel, or boat haul out. The staffing required for a marina of this size (100-125 slips) and complexity includes the Marina Manager and two to five seasonal staff during the boating season.

2. Operational Approaches

2.1 Municipal Operation

The Municipal Operation approach is based on all elements of the marina remaining under the direct operation and ownership of a municipal agency such as the City, a Park Department within the City, or some other municipal agency such as a Port Authority or District. The municipality is responsible for all costs associated with the operation, and is the beneficiary of any profits generated by the operation. Similarly, the agency is responsible for all liabilities as well. All staff are typically employees of the City or agency.

Among the challenges associated with this management approach is the need for the municipal agency to hire the staff necessary to operate the facility. In some cases, municipal agencies face significant internal resistance to hiring new staff for any reason, or labor agreements may make labor costs prohibitively expensive. Further, the municipality would be responsible for all operational losses.

Among the advantages associated with this management approach is the ability to generate an operating surplus which can be used to fund expansion or improvement of the marina or other nearby amenities. Additionally, the municipality retains a much higher level of control and flexibility in the operation of the marina. For instance, a municipality can more freely implement programs that may benefit the community or environment but conflict with the profit motive inherent in other operational alternatives involving third parties. These programs could include in-water boat shows, special boat tours, and water-based festivals such as tall ships or classic wooden boat festivals that bring visitors to the area. Private operators typically prefer to avoid these types of events as they do not directly benefit the operator and may generate additional costs for staffing, cleanup, services, and/or extra policing and traffic management.

In general, a properly sized and designed marina under competent management should be revenue positive or at worst revenue neutral during normal market conditions. Marinas are relatively simple to operate, and staff accredited as a Certified Marina Manager is reasonably available. This approach generally has the lowest total cost and highest potential return for the municipality.

In many cases, full time marina management staff takes on other seasonal responsibilities within the municipality during the off-season, such as an ice rink operation within the municipality. Part time seasonal staff is often college students on summer break or retired people looking for part time work.

2.2 Contractor to Municipality

The Contractor to Municipality approach is very similar to the Municipal Operation concept, except the employment status of the staff is an independent contractor instead of being directly employed by municipality. Depending on the indirect costs associated with hiring employees, this option may be more or less expensive than directly hiring staff internally.

In this option, the municipality generally retains a similar level of control as the Municipal Operation, along with the benefits and liabilities associated with ownership of the project. The contract between the independently contracted Marina Manager spells out all costs, specifies a “salary,” and oftentimes includes incentive payments associated with specific financial performance targets.

2.3 Third Party Operator

The Third-Party Operator approach involves contracting with a marina management company that provides marina management services to municipal or private owners. In this scenario, the marina management company negotiates an operating contract with the marina owner that establishes roles and responsibilities. There are no industry wide standard operating agreements, and the advantages and liabilities associated with this approach depend entirely on the final agreement.

One common approach involves the owner and third party operator negotiating a defined management fee over and above the operating costs for the marina (regardless of whether the marina is profitable in a given year) and incentives for achieving specific financial targets. In this scenario, the costs to the municipal owner could include the management fee (and incentives), labor costs at negotiated rates, utilities, and maintenance/capital improvements.

The length of the operating agreement varies by contract, generally between five and twenty years. Generally a shorter term agreement of five years with options to extend based on performance provides a reasonable length of contract for the operator while limiting the exposure to the owner due to poor performance or unforeseen contractual issues.

Depending on the contract language, this approach can be quite simple for the owner to manage. However, this scenario is beneficial to the operator, or possibly skewed to the benefit of the operator, at the expense of the owner. There are examples on the Great Lakes where third-party operators return a significant budget surplus to the municipal owner, and other cases where the third party operator returns no money at all to the municipal owner. Another element to consider is whether the operator is expected to construct phase 2 of the marina or simply operate the marina.

The length of the operating agreement varies by contract, typically between five and twenty years. Generally a shorter term agreement of five years with options to extend based on performance provide a reasonable length of contract for the operator, while limiting the exposure to the owner due to poor performance or unforeseen contract issues.

In nearly all cases, this approach will result in less revenue being returned to the municipal owner when compared to competent internal staff, simply because an additional party is involved with reasonable expectations to make a profit by providing a valuable service. Some owners find the trade-off of lower returns for fewer operational challenges in-house to be a reasonable compromise. On the other hand, the owner generally retains much of the financial risk associated with operating the marina while the potential rewards are reduced.

2.4 Licensee / Leasehold Operator

The Licensee / Leasehold Operator approach is similar to the third party operator approach, except more of the risk is transferred to the operator. The premise of this approach is that the operator leases a specific property and constructs and operates a for-profit marina on leased public land. The municipal owner negotiates a lease arrangement with the operator, who then does everything required to operate a successful marina. The return for the city is generally fixed regardless of the financial performance of the marina, but this can vary by contract. Additionally, the financial risk associated with the marina is generally shifted from the owner to the leaseholder.

In some cases, the municipal owner agrees to construct certain nonrevenue-producing infrastructure elements such as breakwaters, roads, and parking as an incentive to the marina licensee. This is often the case when the marina is constructed as part of a waterfront revitalization project and the municipality is eligible for state or federal funding for infrastructure improvements for which a private developer would not be eligible.

This scenario generally provides the lowest financial return for the municipal owner, along with the lowest risk. Additionally, this approach is usually for a longer term of twenty to thirty years.

3. Environmental Considerations

Assuming the City of Rochester maintains meaningful oversight of the marina operation, either through direct management or through appropriate contractual requirements of outside contractors, potential economic and fiscal impacts to the City of Rochester are the only significant differences in the potential environmental impacts of the various operational approaches. No adverse environmental impacts are associated with any approach. Direct City management of the operation may allow more flexibility and a more proactive response to new programs, issues, or opportunities compared to an outside contractor. The length of the operating agreement may affect responsiveness.

4. Proposed Operational Approach

As outlined above, all options under consideration are viable and similar in non-fiscal environmental impact. The primary differences among the various operational alternatives are financial cost/benefit to the City, convenience, flexibility and responsiveness.

The “Municipal Operation” alternative is well within reasonable expectations of competent municipal employees and should be the most financially beneficial approach for the City. This is particularly true given the relative simplicity of the proposed operation, which excludes more complex activities such as storage, boat hauling, and mechanical, electrical, and fiberglass repair services. Further, this

approach provides the most flexibility and responsiveness to changing market conditions and developing environmental best practices.

The potential challenges in this approach include the hiring of additional City employees and liability for potential operational losses. The employment cost issues could be mitigated by minimizing full time staff and seeking out primarily part-time employees.

The potential for operating losses are mitigated by several factors. First, a market study completed in 2009 indicates demand for two to five times more slips than are proposed. Second, the length of slips proposed will take into consideration the current market trend of consistently high occupancy of slips forty feet in length or longer, versus high vacancy in slips thirty-five feet long and less. This trend was identified by market analysis and communication with marinas on the Great Lakes in the summer of 2010. The demand for larger slips has remained constant despite the challenging economic conditions of the past several years for two primary reasons: owners of larger boats are generally less impacted by the economy and boats forty feet and longer cannot generally be stored at home. As the cost to store the boat on land is not significantly less than storing the boat in the water, owners are more likely to keep the boat in the water and simply use it less if finances are an issue. Owners of smaller boats are generally more impacted by the economy, and they can more easily trailer their boats and store them at home. Finally, as noted above, the relative simplicity of the operation minimizes expenses and operational liabilities.

5. Off-season Recreational Alternatives

The design of the marina is primarily focused on maximizing the use and function of the facilities during their active summer season, with winter considerations focused primarily on durability and management of impacts created by ice within the basin. Most marina facilities on the Great Lakes close for the season between November and April and provide no wintertime recreational activities within the basin. Nearly all facilities are closed for the winter, with the exception of associated indoor yacht club structures that may be active year round.

Depending on weather conditions, portions of the marina basin may freeze for extended periods. This may create the opportunity for winter activities such as ice fishing throughout the basin or ice skating on the north portion of the basin. Access to the ice could be accommodated through the use of the marina gangways and docks. Active monitoring and management of these opportunities would be required to ensure safety.

Potential recreational opportunities will be considered by the marina operator and added to the Marina Management Plan. It is not expected that offseason recreational alternatives will have any environmental impacts, but if alternatives with potential impacts are identified, an environmental review will be undertaken at that time.

D. Relocation of the Ontario Beach Park Labor Operations Center

1. Relocation

The proposed Preferred Alternative will require the relocation of the Ontario Beach Park Labor Operations Center which is currently located at 4600-4650 Lake Avenue (see Exhibit 4). The City-owned, County-operated Labor Operations Center would be relocated from its existing location to another location in or adjacent to Ontario Beach Park. Certain locations may make it possible for the center to be combined with a facility for the Charlotte Youth Athletic Association (CYAA). The cost of a new facility will be financed with City sources. Execution of an amendment to the City-County Parks Operation and Maintenance Agreement will be required. Once the Labor Operations Center is relocated, the existing building at 4600-4650 Lake Avenue will be removed and the land will remain designated parkland until a private development proposal makes alienation necessary.

2. Alternatives to Relocation

As was summarized in *Section V B Marina Location and Design Alternatives*, a total of seven alternate development configurations were explored during the planning phase as this project evolved. Each included the need for relocation of the Labor Operations Center. In none of the seven scenarios was the existing facility displaced by the proposed basin, roadway alignment or other public improvements. Rather, in each of the scenarios, the current site of the Labor Operations Center was envisioned as a key development parcel at a high-value location positioned between the envisioned marina basin and Lake Avenue.

The current plan seeks to maximize opportunities for incremental private development surrounding the Marina as it is this private development that will deliver the intended benefits of increased tax base, higher tax revenue, more commercial activity, greater sales tax revenue, job growth and other benefits cited in *Section III Purpose, Public Needs and Benefits* and described more fully in *Section IV Q Economic/Fiscal.* The site currently occupied by the Labor Operations Center is one of only three such sites being proposed for private development. There are no other alternative sites with comparable advantageous locations available for private development, if the Labor Operations Center were to remain in its current location. Therefore, development of a project alternative in which this site is not made available for private development would be costly and would lead to a much-reduced economic return on the proposed public investment.

3. Alternative Relocation Sites

This section will discuss the alternative sites/configurations that have been and continue to be under consideration. A description of the process that will be used by the City to select the preferred site will be provided.

Alternate locations are being evaluated based on the Monroe County Parks Department's facility programming requirements, including: proximity to Ontario Beach Park, community impact, land ownership, and project cost. In 2007, the City of Rochester Real Estate Division evaluated preliminary site alternatives and costs for potential sites on Lake Avenue, along Estes Street, and in existing Ontario Beach Park land located west of Estes Street. In June 2009, Architectura, P.C. completed a Feasibility Study Report and Design that evaluated the potential for combining the Labor Operations Center with a planned and partially funded Charlotte Youth Athletic Association multi-use building in the park land area west of Estes Street.

The following section provides a description of the alternative sites and options that are currently being considered for the relocation of the Labor Operations Center. Figure V-D-1 at the end of this section illustrates the potential alternative sites.

1. Alternative Site 1 (East Side of Lake Avenue)

   Alternative Site 1 for the Labor Operations Center is located on the east side of Lake Avenue and includes the parcels at 4576 Lake Avenue, 4560 Lake Ave, and a portion of 4554 Lake Avenue (see Figure V-D-1). The City currently owns the parcel at 4576 Lake Avenue but would have to acquire the remaining two parcels. There is uncertainty about the costs and timing of such acquisitions, as indicated below.

   - 4554 Lake Avenue: this parcel is owned by Rochester Gas and Electric and acquisition of a portion of this parcel is indefinite.
   - 4560 Lake Avenue: The owner of this parcel was not interested in selling in 2007. Moreover, the existing building at 4560 Lake Avenue would require modifications to meet Monroe County Park's programming requirements. These modifications would include paving, fencing, partitioning and retrofitting of the interior for locker room/ office/work shop and equipment storage areas. In addition, it is likely that petroleum contamination of soil and groundwater from underground storage tanks is present at 4560 Lake Avenue, as indicated by environmental site investigations performed in 2009 on the southern property line of 4576 Lake Avenue.

   The total project cost for relocating the Labor Operations Center to Alternative Site 1, excluding any required environmental remediation, is expected to be $600,000 or more. This location would require that Monroe County Parks Operations use Lake Avenue to travel back and forth from Ontario Beach Park. This site also provides a connection from Lake Avenue to the Charlotte Genesee Lighthouse.

Alternative Site 1 would likely have fewer impacts to surrounding properties than other alternatives. The CSX railroad and the RG&E substation would act as a buffer between the Labor Operations Center facility and other privately owned properties. Acquiring the land at the rear of the RG&E substation would provide additional land for the Lighthouse Trail, which will ultimately result in greater access to the Charlotte Genesee Lighthouse and to River Street from Lake Avenue. The City considers that this site will likely be somewhat less expensive than other alternatives. However, the extent of environmental contamination from underground petroleum storage tanks historically located on the parcel at 4560 Lake Avenue is unknown, along with the nature and cost of any required cleanup.

2. Alternative Site 2 (Parkland West of Estes Street)

   Alternative Site 2 is on existing parkland west of Estes Street and east of Wilder Terrace, between the soccer field and CYAA baseball diamonds (see Figure V-D-1). This site includes portions of the parcels at 201 Beach Avenue, 55 Corrigan Street, 55 Ruggles Street, and 90 Ruggle Street. This park land is owned by the City of Rochester and is currently used by the Charlotte Youth Athletic Association and the community.

   The CYAA had received a $100,000 NYS member item appropriation to help finance the construction of a new multi use facility at this site. In light of this, Architectura was directed by the City to evaluate the feasibility of combining the Ontario Beach Park Labor Operations Center with the planned CYAA facility. Programmatic requirements for both facilities were determined, and site factors and conditions were analyzed by Architectura. This analysis considered the current uses and features, site topography, utilities, potential operational impacts on the neighborhood, the park land status of the site and City Council Resolution 91-31, and the opportunities presented by the relocation and combination of the Parks and CYAA uses.

   Based on this analysis, three preliminary schematic layouts were developed and construction cost estimates were prepared. The layouts were contrasted based on a number of factors including operational impacts, accessibility, utilities, parking, aesthetic and visual impacts, and potential nuisance impacts to neighboring properties. The cost estimate for the preferred alternative was $1.45 million, excluding the costs to demolish the existing Labor Operations Center. Of this amount $390,000 was attributed to the CYAA elements of the facility. These costs and options for funding the combined facility were evaluated by the City in the fall of 2009 and winter of 2010.

In April 2010, the City presented the results of the feasibility study to neighborhood residents. Neighbors expressed a number of concerns about the impact of the location and operation of the preferred alternative. Comments and suggestions included considering the extreme southern portion of the park area near the rail right of way for the Ontario Beach Park Labor Operations Center site, as well as general concerns about combining the CYAA and Labor Operations Center facilities.

3. Additional Alternative Sites

As a result of the neighborhood concerns, the City determined that it would evaluate two additional alternative locations (see Figure V-D-1), including:

- Alternative Site 3: the parcel at 183 Beach Avenue, west of Lake Avenue and east of Estes Street across from Ontario Beach Park.
- Alternative Site 4: the southern portion of the park area west of Estes Street (includes portions of 101 Lakeland Avenue, 155 Lakeland Avenue, and 4585 Lake Avenue).

Architectura is in the process of performing this analysis. This evaluation will also address the City's and County's continuing efforts to manage of algae and debris in an off-site location (i.e. not at the new Labor Operations Center) and the loss of parking for park users. The management of algae and debris that is periodically removed from Lake Ontario beach is an operation that currently occurs at the existing Labor Operations Center and produces nuisance conditions including odors.

In evaluating the various alternatives listed above and making a final site selection, the City will consider factors including:

1) the programmatic requirements of the Monroe County Parks Department and/or CYAA operations (including proximity to Ontario Beach Park);
2) negative impacts on surrounding properties;
3) viable and effective approaches to mitigating negative impacts;
4) the disruption of established residential, commercial, and / or recreational uses;
5) time requirements and costs for land acquisition;
6) level of current or readily available utility service;
7) legal and regulatory compliance requirements; and,
8) estimated design and construction costs for each alternative.

Relocation of Ontario Beach Park Labor Operations Center
Rochester, New York

Figure V-D-1
Port Marina Project
Labor Operations Center
Relocation Alternative Sites
(preliminary)

E. Right-of-Way (ROW) Alternatives

1. ROW Extensions and Re-alignments

A number of alternatives have been considered that would potentially affect the location of River Street, North River Street, and two intersections along these roads: the intersection of River Street Extension/North River Street with Portside Drive and the intersection of North River Street with Corrigan Street. These alternatives were identified and considered during the Marina Engineering Report and Feasibility Study dated May 2009 (Appendix C), and during the subsequent planning process for the project. Site considerations include the presence of the CSX rail line which limits the potential alignments alternatives to the west, and existing structures along the Genesee River, which limit the potential alignments alternatives to the east. The most important criteria considered during the analysis of River Street Alternatives for the marina project include:

- Sound engineering practice and roadway design standards,
- Impacts to properties crossed, and efficiency of resulting parcel dimensions, and
- Pedestrian safety and impacts on alignment of Genesee Riverway Trail.

The sub-sections below describe the alternative alignments considered for the River Street Extension portion of the project and the North River Street portion of the project. The City has determined that the preferred alignment best serves the public while facilitating maximum development potential along this street.

2. Alternatives Avoiding Proposed ROW Extensions and Re-alignments

Section V B Marina Location and Design Alternatives reviews seven alternate development configurations explored during the project planning phase. Of these, two configurations (Options One and Three) extended River Street but did not re-align North River Street. The other five configurations, including Option Seven from which the current Preferred Alternative was derived, proposed re-alignment of North River Street as well as extension of River Street. As described in *Section V B Marina Location and Design Alternatives* and in the 2009 Edgewater Marina Engineering Report and Feasibility Study (Appendix C), development of a marina basin with a proper configuration to facilitate navigation, accommodate an adequate number of slips, and thereby foster interest in the surrounding real estate, is a crucial factor that will influence whether the project's intended economic benefits are realized. As a review of *Section V B* will show, no basin configuration sufficient to accomplish the foregoing benefits and avoid extension and realignment of the affected streets was identified. For that reason, no project alternative avoiding the proposed ROW extensions and realignments has been included.

3. River Street Extension Alternatives

The River Street Extension is designed to connect River Street from a point approximately 400 feet north of Latta Road to the re-aligned North River Street at its intersection with Portside Drive. The alignment of the River Street Extension was a key variable considered during the feasibility study.

The location of the proposed marina basin requires the location of the River Street Extension approximately 100 feet to the west. As such, the intersection of River Street Extension/North River Street with Portside Drive will also be located approximately 100 feet west of the current intersection.

Seven alternatives were identified in the Feasibility Study. Given the narrow corridor through which the alignment is to be routed, differences among the alternatives are slight. In all seven alternatives, the southern portion of River Street is located parallel to the CSX rail line. The primary differences between the alternatives are the radius of the curve connecting River Street with North River Street and the layout of the curve immediately north of the intersection with the CSX rail line (see Section V B Marina Design Location Alternatives for additional detail on the proposed concept alternatives.) All alternative alignments seek to maximize the size and efficiency of the resulting parcels.

As previously described, the preferred alternative locates the intersection of the River Street Extension with Portside Drive is located 100 feet west of the current intersection.

4. North River Street Re-alignment Alternatives

Alternatives for North River Street re-alignment include the portion of North River Street between Portside Drive and Corrigan Street and the intersection of North River Street with Corrigan Street.

The final concept recommended by the feasibility study showed the northern terminus of North River Street connecting with Corrigan Street at a point west of the current intersection. However, subsequent traffic engineering and design studies completed for the Port of Rochester Marina Development project (30% engineering) concluded that, in order to provide adequate queuing for existing traffic on Corrigan Street, the northern terminus should be at the existing intersection. The existing location of the North River Street intersection with Corrigan Street is now the proposed layout.

Three alignments were considered for the location of North River Street between Portside Drive and Corrigan Street.

The first alignment split the parcel defined by Lake Avenue, Portside Drive, the proposed marina basin, and Corrigan Street roughly in half, with development parcels on both the east and west sides of North River Street. It was determined that the resulting development parcels in this alignment would be less efficient and limit public view of the marina basin from North River Street. Moreover, this alternative located the northern terminus of North River Street west of its current intersection with Corrigan Street. As described above, it was ultimately determined that the safest and most efficient traffic pattern would be achieved by locating the terminus at the current intersection. As a result, this alternative was not selected as part of the preferred alternative.

The second alignment located North River Street along the western edge of the marina basin. The intersection of North River Street and Portside Drive was moved as close as possible to the western edge of the marina basin, creating an improved pedestrian experience and the opportunity to create an overlook above the marina basin. The north end of North River Street terminated at the current intersection of North River Street and Corrigan Street. The alignment of North River Street between Portside Drive and Corrigan Street included an angled portion of road that followed the alignment of below-grade utilities. This alignment resulted in a single larger development parcel and had better visual access to the marina basin from North River Street. However, the angled alignment did not correspond well with adjacent road alignments and negatively impacted the shape of the marina basin. As a result, this alternative was not selected as part of the preferred alternative.

The third alignment has been incorporated into the preferred alternative. This option locates the intersection of North River Street and Portside Drive adjacent to the western edge of the marina basin and connects North River Street with Corrigan Street at the current intersection. The centerline of North River Street parallels Lake Avenue north of Portside Drive and south of Corrigan Street. The River Street Extension and North River Street are connected as far north as possible with tight radii to create an orderly alignment that incorporates traffic calming measures to increase pedestrian safety. Additionally, this alignment allows the north end of the marina basin to be enlarged somewhat to increase the size of vessels that can moor in the marina. This alignment also creates an efficient development parcel with opportunities for internal parking solutions and effective traffic flow.

F. Public Boat Launch Relocation and Design/Operation Alternatives

1. Public Boat Launch Relocation

As previously described, the Full Build scenario for the proposed project will require the relocation of the existing Public Boat Launch. The Public Boat Launch will remain in its current location during Phase 1 of the Public Improvements, including the Phase 1 Marina. During this time, the Marina and the Public Boat Launch will essentially share the same opening into the Genesee River. The only other change at the Public Boat Launch during the first phase of the project will be a reconfiguration of its existing parking lot, which will result in the loss of about 9 trailer parking spaces (from 104 to 95).

Prior to the marina expanding to its full size (Phase 2 Marina Expansion), the Public Boat Launch will be relocated. Three preliminary alternative sites have been identified for the new location of the boat launch, as described below and shown in Figure V-F-1 (*Note: all referenced figures are attached at the end of the section*). These sites are currently under consideration by the City, and no decision has been made or alternative selected. The timeframe for relocating the Public Boat Launch cannot be accurately estimated as it will largely depend upon development, market, and funding conditions. However, it is unlikely that the Public Boat Launch will be relocated before 2015.

2. Alternatives Avoiding Boat Launch Relocation

As was already stated in the two preceding sections, a total of seven alternate development configurations were explored during the planning phase. These are described in *Section V B Marina Location and Design Alternatives*. Of these seven configurations, all called for relocation of the existing Public Boat Launch. The Boat Launch site was displaced by the marina basin Options Four through Seven. In the earlier options where no conflict between the existing Boat Launch and proposed basin existed (Options One through Three), the Boat Launch site was nonetheless designated as an ideal site for private development.

The discussions in the preceding two sections (*Section V D Ontario Beach Park Labor Operations Center* and *Section V E River Street Alternatives*) regarding avoidance of ROW changes and avoidance of Labor Operations Center relocation have cited the need to maximize opportunities for incremental private development surrounding the Marina, as it is this private development that will deliver the intended benefits of increased tax base, higher tax revenue, more commercial activity, greater sales tax revenue, job growth and other intended benefits. These discussions have also cited the need for development of a marina basin with a proper configuration sufficient to facilitate navigation, accommodate an adequate number of slips, and thereby foster interest in the surrounding real estate.

The site currently occupied by the Public Boat Launch has proven to be critical in providing a marina basin with a proper configuration sufficient to meet the project's needs and to enhance the likelihood of a successful economic result. The site is also key in maximizing the potential for private development adjoining the basin. As no acceptable configuration meeting these requirements but leaving the existing Boat Launch in place has been identified, no alternative that does not require its relocation has been carried further in this analysis.

3. Alternative Locations for Boat Launch Relocation

Boat Launch Alternative Site #1

Boat Launch Alternative Site #1 is located on the west side of the Genesee River, on River Street, north of Latta Road (see Figure V-F-2). This alternative would provide 105 parking spaces (10 feet x 45 feet) for vehicles and boat trailers. The parking area would be accessed from River Street and the CSX railroad tracks, across from the boat launch.

The parcel proposed for Alternative Site #1 is currently occupied by a parking area and two existing buildings operated by the Tapecon company. The buildings and parking areas would be demolished, and the site redeveloped for the Public Boat Launch and parking area.

The advantages associated with Boat Launch Alternative Site #1 include the site's location adjacent to the River Street Marina, its proximity to the location of the existing launch facility, and it's good access from River Street and Latta Road. A disadvantage associated with Alternative Site #1 is the relatively high cost of construction which would be needed to overcome site constraints, including a retaining wall along Lighthouse Street, building demolition, and removal of the river wall. Other disadvantages include the high cost of property acquisition and demolition; potential conflicts with vehicles, trains, and pedestrians; and the fact that most of the land is not currently owned by the City.

Boat Launch Alternative Site #2

Boat Launch Alternative Site #2 is located on the east side of the Genesee River, just south of the O'Rorke Bridge at Pattonwood Drive (see Figure V-F-3). Alternative Site #2 involves the construction of a proposed parking area and public boat launch just south of the bridge. This alternative would provide 105 parking spaces (10 feet x 45 feet) for vehicles and boat trailers and would be accessed from Marina Drive off of Pattonwood Drive. A portion of the parking would be located under the O'Rorke Bridge.

The site is currently a gravel access road and boat storage area for boat slip users along the east side of the river. The City of Rochester currently owns a 100 to 250 foot strip of land in the area, and a private marina operator leases the slips from the City.
Advantages of Alternative Site #2 include the minimal amount of land acquisition necessary as the City currently owns much of the property, the use of underutilized land under the bridge, and the fact that previous planning studies proposed a marina and boat launch at this location. Disadvantages include the distance from the existing launch site, the fact that the boat launch would be on the opposite side of the river from the proposed marina, and the need to relocate the existing multi-use trail.

Boat Launch Alternative Site #3

Boat Launch Alternative Site #3 is located on the west side of the Genesee River at Petten Street (see Figure V-F-4). Alternative Site #3 involves the construction of a public boat launch and parking area at the end of Petten Street, south of the existing boat trailer parking area. This alternative would provide 105 parking spaces (10 feet x 45 feet) for vehicles and boat trailers. The site is currently used for vehicle parking associated with the City of Rochester public marina.

An advantage of Alternative Site #3 is that previous planning, design and permit efforts envisioned a boat launch at this location, and a parking lot was constructed that accommodates sixty vehicles and nine trailer spaces. Other advantages include the minimal amount of land acquisition necessary as the City currently owns much of the property, and the compatibility of the proposed boat launch with existing land use, as the area is currently used for boating facilities. Disadvantages include potentially difficult access through a residential area with steep grades; legal issues regarding property acquisition and shared access; and the distance upriver to the Port area and Lake Ontario.

4. Review and Approval Process

The advantages and disadvantages of each of the three alternative sites identified at this time are summarized in Table V-F-1 below. The three alternatives remain under consideration, and no decisions have been made regarding a final proposed plan.

The final location of the Public Boat Launch will be influenced by several key factors including site access, existing infrastructure and uses, proximity to the Port of Rochester and Lake Ontario, construction cost, and land acquisition cost. The evaluation of these factors will incorporate sound design and engineering principles, community outreach and input, and careful planning to develop a plan that will maximize community benefits while minimizing negative impacts.

Table V-F-1
Summary of Advantages and Disadvantages of Boat Launch Alternative Sites

Boat Launch Alternative	Advantages	Disadvantages
Alternative Site #1	✹ Site location adjacent to the River Street Marina ✹ Proximity to the location of the existing launch facility ✹ Good access from River Street and Latta Road	✹ Relatively high cost of construction to overcome site constraints ✹ Potentially high cost of property acquisition ✹ Potential conflicts with vehicles, trains, and pedestrians ✹ Most of the land is not currently owned by the City
Alternative Site #2	✹ Minimal amount of land acquisition necessary ✹ Use of underutilized land under the bridge ✹ Previous planning studies proposed a marina and boat launch at this location	✹ Need for an inter-municipal agreement with Town of Irondequoit ✹ Distance from existing launch site ✹ The boat launch would be on the opposite side of the river from the proposed marina ✹ May conflict with a plan for a multi-use trail at this location
Alternative Site #3	✹ Parking lot has been constructed on site as a result of previous planning efforts for a boat launch ✹ Minimal amount of land acquisition necessary ✹ Compatibility of the proposed boat launch with existing land use	✹ Difficult access through a residential area with steep grades ✹ Legal issues regarding property acquisition and shared access ✹ Farther from the Port area and Lake Ontario

Boat Launch Relocation-Alternative Sites
Rochester, New York

Figure V-F-1
Port Marina Project
Boat Launch Relocation
Alternative Sites ***(preliminary)***

Boat Launch Relocation-Alternative Site #1
Rochester, New York

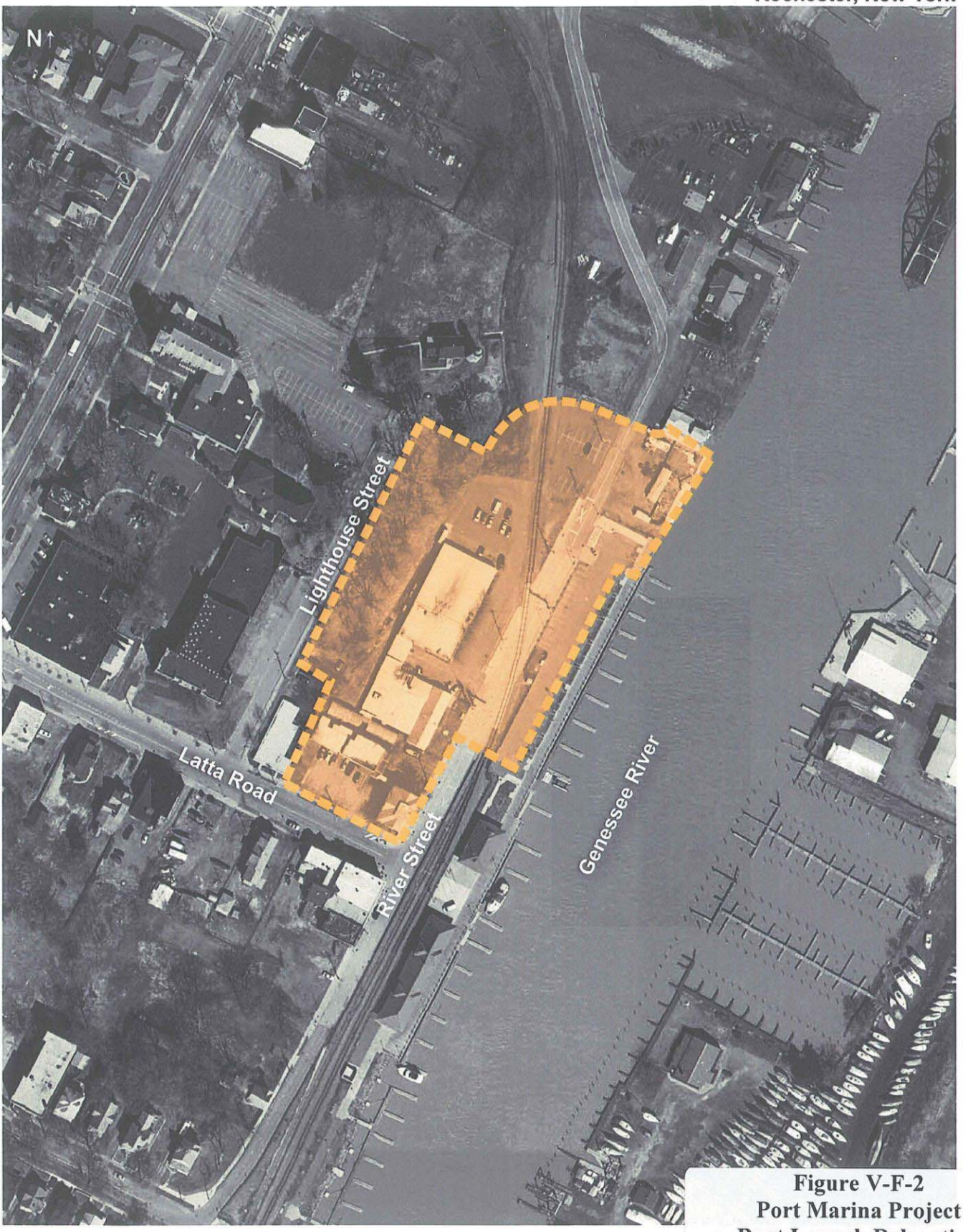


Figure V-F-2
Port Marina Project
Boat Launch Relocation
Alternative Site #1
(preliminary)

Boat Launch Relocation-Alternative Site #2
Rochester, New York

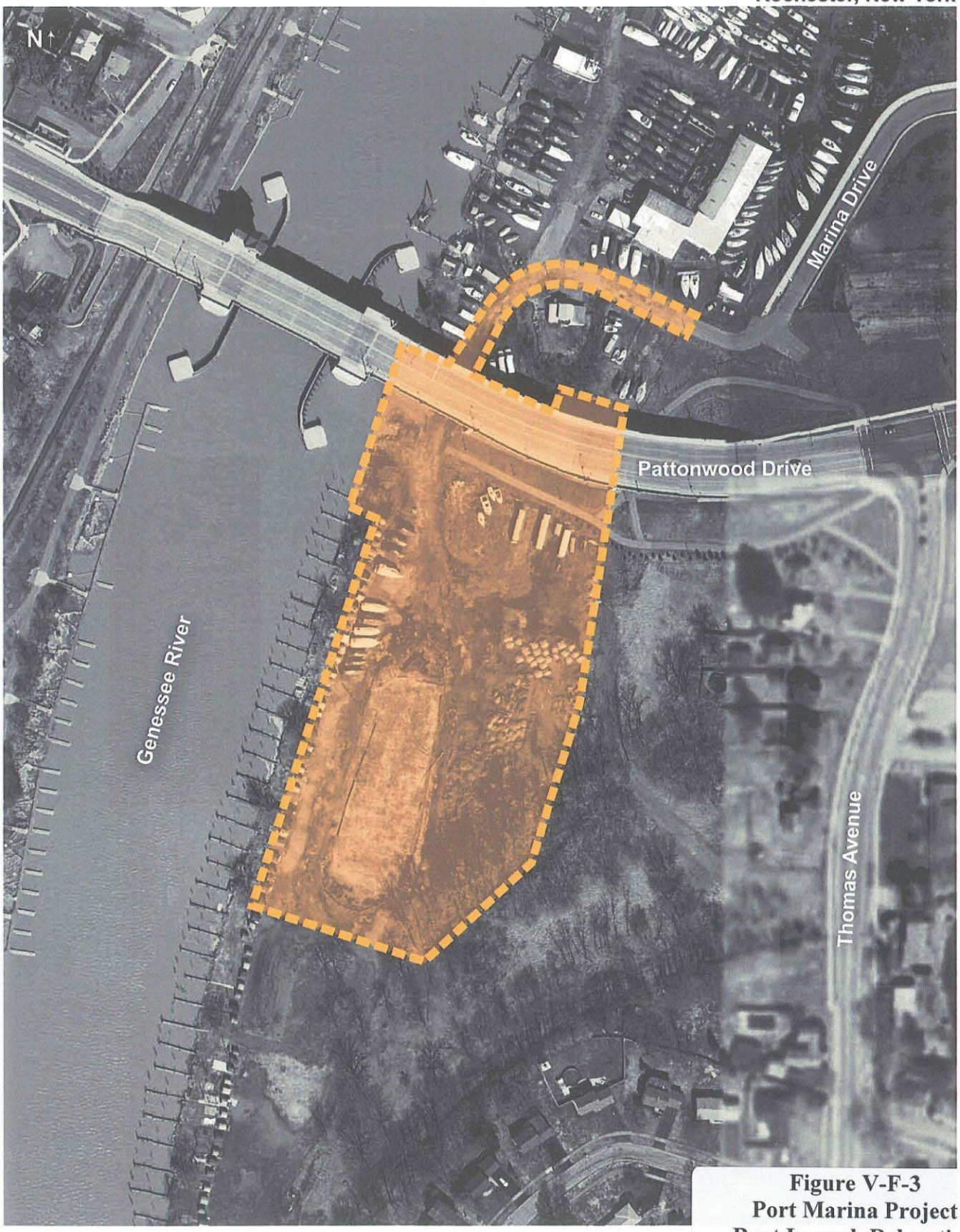


Figure V-F-3
Port Marina Project
Boat Launch Relocation
Alternative Site #2
(preliminary)

Boat Launch Relocation-Alternative Site #3
Rochester, New York

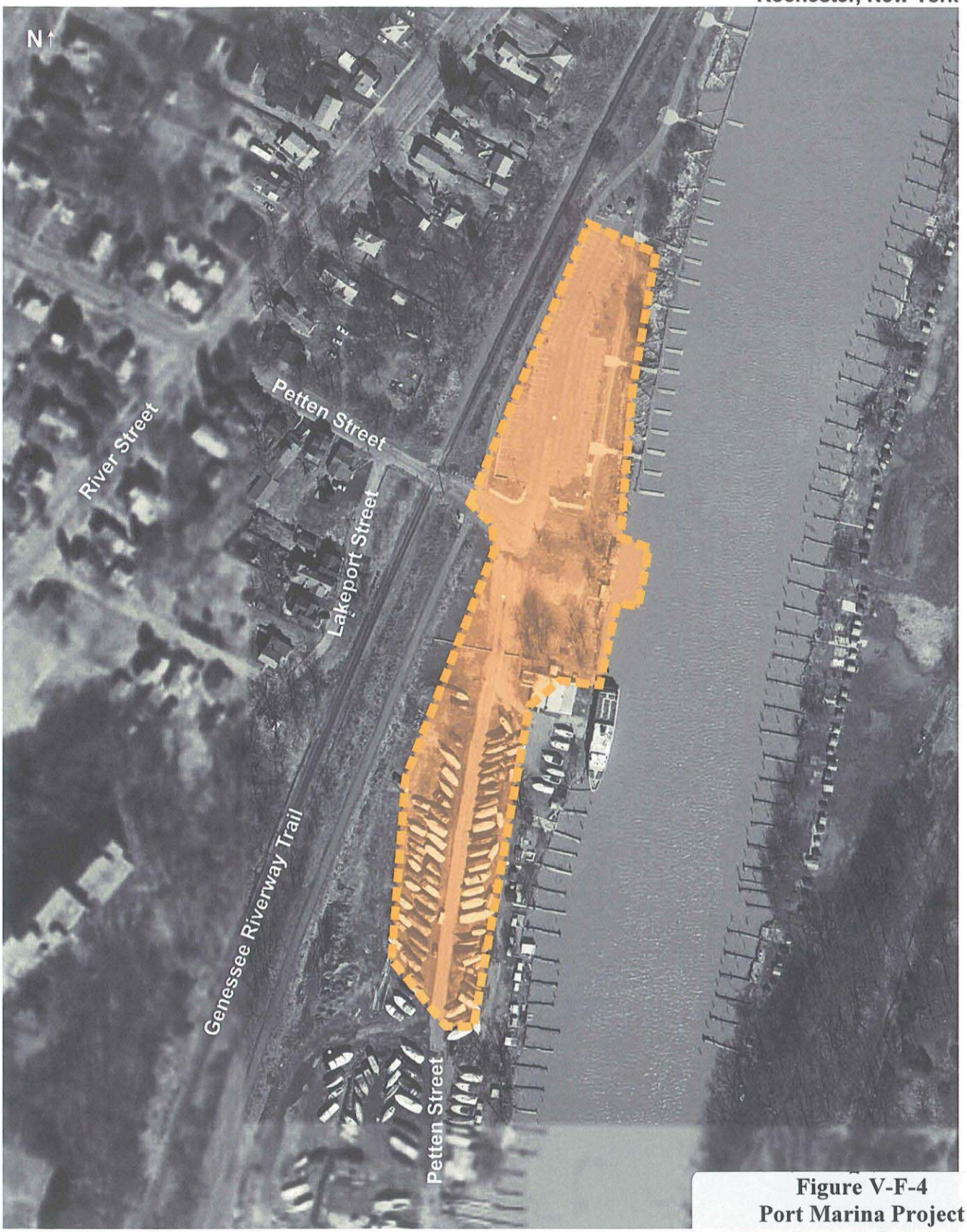


Figure V-F-4
Port Marina Project
Boat Launch Relocation
Alternative Site #3
(preliminary)

G. Development Density Alternatives

1. Comparable Alternative Densities

The planning process for this site included studies for new marinas with adjacent new residential projects going back at least as far as 1981. Over the course of these planning efforts, a series of potential development densities for the Port of Rochester site were reviewed that ranged from a very high urban density of over 133 units per acre to a less intensive resort community density of under five units per acre. Based on input from the Charlotte community, projections of market demand, and urban design strategies intended to maximize the value of each unit while expanding public access to the site, the 2009 Marina Engineering Report and Feasibility Study proposed the development of between 280 and 430 residential units located within a few taller mixed-use development structures on portions of the site comprising Private Development Parcels I, II, III and IV.

Together, these four Development Parcels represent a 6.4 acre portion of the site. The residential densities proposed upon these four parcels ranged from 31 to 51 units per acre with an average density of 44 units per acre in a Lower Density scenario. In a corresponding Higher Density scenario, the residential densities proposed upon these four parcels ranged from 50 to 83 units per acre with an average density of 67 units per acre. Residential Floor Area Ratios (assuming an average 1,500 square feet per unit) ranged from 1.07 to 1.75 with an average of 1.50 in the Lower Density Scenario and from 1.70 to 2.87 with an average of 2.3 in the Higher Density Scenario. The Floor Area Ratios were somewhat higher (1.66 and 2.46) when including approximately 44,000 square feet of anticipated commercial development space in the calculation.

As is described in the following *Section V H Private Development Site Alternatives – Parcel IV*, the proposed project has been modified since the completion of the 2009 Marina Engineering Report and Feasibility Study. The modification eliminated Parcel IV as a potential site for private development. Elimination of Parcel IV as a development site avoided the loss of 219 existing parking spaces, avoided potential impacts to views of the adjacent park and waterfront features, and avoided the need for the alienation of designated parkland located upon Parcel IV. A review of the Form-Based code developed to guide the design of structures proposed for development on Parcels I, II, III and IV revealed that Parcels I, II and III alone could accommodate the entire program originally proposed for development upon all four parcels.

As a consequence of the elimination of the Parcel IV site, the residential density now being proposed upon the remaining three development sites having a combined area of 5.9 acres is an average 48 units per acre in a Lower Density scenario and an average 73 units per acre in a Higher Density scenario. Assuming an average of 1,500 square feet per unit, the Average Residential Floor Area Ratios in the same two scenarios (Lower and Higher Density) are 1.63 and 2.51, respectively. When

including an additional 44,000 square feet of additional anticipated commercial space, these Average Floor Area Ratios increase to 1.81 and 2.68, respectively.

The new Form-Based code drafted specifically for this site will guide the proposed design of structures being developed upon these sites. Form-Based codes replace traditional zoning codes and incorporate much more specific requirements relating to building height, scale, massing, materials, and setbacks (see *Section IV I* for more information). The goal of the Form-Based code for this site is construction of buildings that complement the existing neighborhood form, scale, and character of the Charlotte community.

The proposed development form is generally more vertical than previous plans, which achieves several key goals. First, it allows the project site to achieve appropriate densities on less land area, preserving more of the existing parking and increasing and improving public access to the waterfront. This will be achieved by ultimately creating a seven acre public marina basin with a public promenade around the perimeter. The promenade will connect to and extend the Genesee Riverway Trail approximately 3,600 linear feet adjacent to the water, thus completing a critical trail connection.

Second, a small number of vertical structures have less impact on existing views than a larger number of lower structures. This is because the majority of views from the site and onto or through the site are from ground level or from existing one or two story structures. Most of these existing views would therefore be impacted by any structure two stories or above. The master plan considers historic views to and from the Lighthouse, and fewer structures will result in fewer impacted views.

Third, an approach using fewer vertical structures is generally more sustainable than a plan incorporating a large number of lower structures. Vertical structures are inherently more efficient and create less impervious surface per unit.

Finally, the value of the proposed development sites lie in their proximity to the marina, Genesee River, Ontario Beach Park, and views of Lake Ontario. The greater the value of each unit, the greater the economic benefit is to the City. Vertical structures will create a larger number of units with high quality views, and values that increase as structures get taller.

2. The following section describes key Port plans that were used to develop the proposed project density, as well as other comparable Great Lakes waterfront development with various densities that were considered by the City's current marina project design team as part of the Port planning process. Aerial and site imagery for each of the Great Lakes Waterfront developments is provided at the end of this section. For means of comparison, aerial and site imagery for the Rochester Port is provided in Figure V-G-1.

Great Lakes Waterfront Development Comparisons

2.1 Chicago

Lake Point Tower is a 70 story high rise development in the heart of downtown Chicago at the mouth of the Chicago River. The project is located on a 5.4 acre site for a density of 133.3 units per acre. At an average 1,500 square feet per unit, the estimated Floor Area Ratio is 4.6. See Figure V-G-2 for aerial and site imagery. Chicago is mentioned here not because it is considered a comparable project site but to provide an example of a high density urban waterfront development.

2.2 Racine

Racine, Wisconsin is a small to mid-size community of 82,000 residents on the western shore of Lake Michigan, approximately 30 minutes south of Milwaukee, Wisconsin. Racine is roughly a 90 minute drive north of Chicago, and more boaters in Racine come from Chicago than Milwaukee. The residential project immediately adjacent to Racine Harbor includes 295 units on 12.5 acres, for a density of 23.6 units per acre. At an average 1,500 square feet per unit, the estimated Floor Area Ratio is 0.81. The units are located within five buildings of three to four stories each, and a sixth building of approximately ten stories. See Figure V-G-3 for aerial and site imagery.

2.3 New Buffalo

New Buffalo, Michigan is a very small community of 2,500 residents, located approximately 70 miles (75 minutes) from downtown Chicago, in the very southeast area of Lake Michigan. The New Buffalo harbor is home to approximately 410 residential units located on 21.1 acres of land, or 19.4 dwelling units per acre. At an average size of 1,500 square feet per unit, the estimated Floor Area Ratio is 0.67. The buildings range in scale between two and four stories, generally constructed as ten separate attached condominium buildings, and approximately four three story town home structures. See Figure V-G-4 for aerial and site imagery.

2.4 Saint Joseph

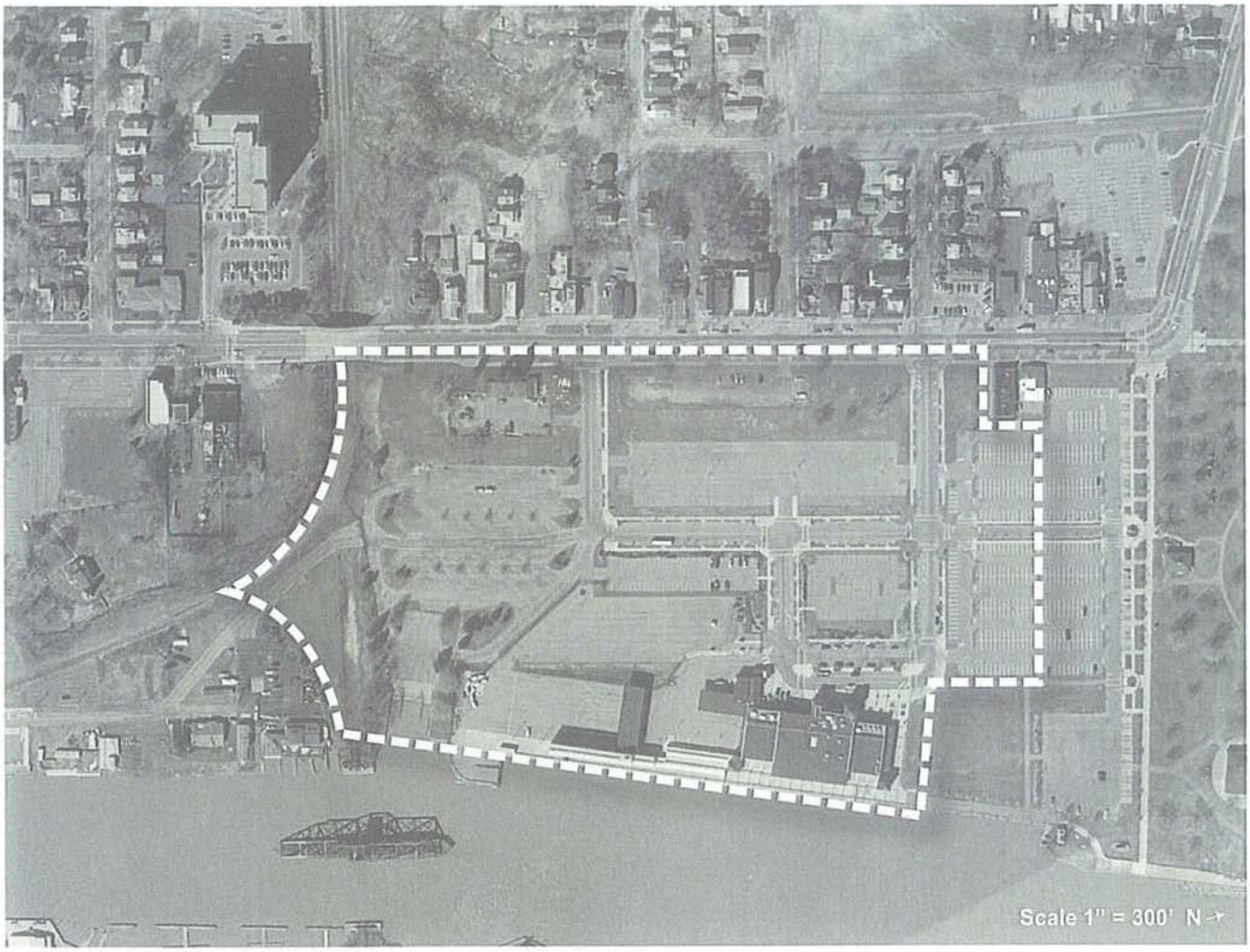
Saint Joseph, Michigan is a coastal community of 10,000 residents located 100 miles from Chicago. The Lighthouse marina development project includes 82 units on 6.4 acres for a density of 12.8 units per acre. At an average of 1,500 square feet per unit, the estimated Floor Area Ratio is 0.44. The units are located within three buildings of eight to ten stories each, and two three-story townhouse. See Figure V-G-5 for aerial and site imagery.

2.5 Manistee

Harbor Village in Manistee, Michigan is a primarily second home community approximately four hours north of Grand Rapids, Michigan and even further removed from both Chicago and Detroit. Manistee is a small coastal community of approximately 25,000 residents that has successfully navigated the transition from a former industrial based economy to a tourism and recreation based economy. Harbor Village is a community of 373 units located on 54 acres, for a density of 6.9 units per acre. The majority of units are 1,500 square foot units located within twelve two-three story attached condominium structures and eighteen duplex units. The approximate Floor Area Ratio is O.24. See Figure V-G-6 for aerial and site imagery.

2.6 Bay Harbor

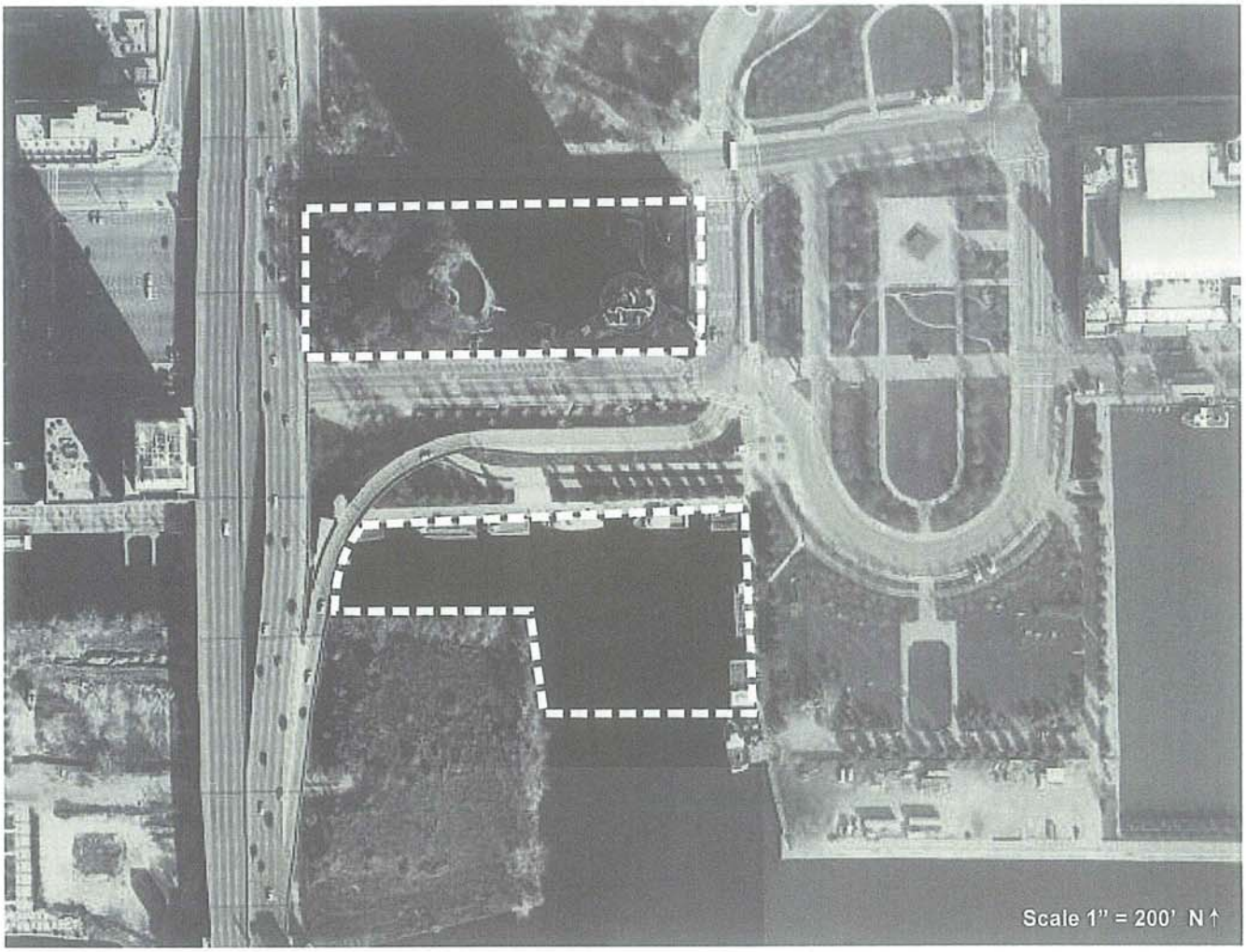
Bay Harbor, Michigan is a nationally recognized luxury second home community located approximately five hours north of Detroit. Roughly 500 units exist within the community. This includes sixty-six attached condominium units surrounded by a mixture of detached units, ranging from cottages of about 1,500 square feet to homes of about 20,000 square feet or more. The condominium project is a relevant comparison, and with a site of 13.9 acres, the density is 4.7 units per acre. At an average of 1,500 square feet per unit, the estimated Floor Area Ratio is 0.16. The units are located within two buildings of three to five stories each. See Figure V-G-7 for aerial and site imagery.

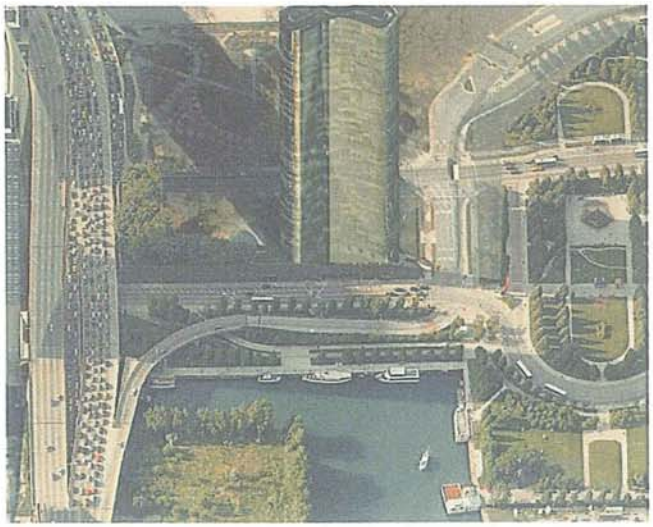


Rochester, NY

Units: 280	Units: 430
Acres: 24.8	Acres: 24.8
DU/AC: 11.3	DU/AC: 17.3

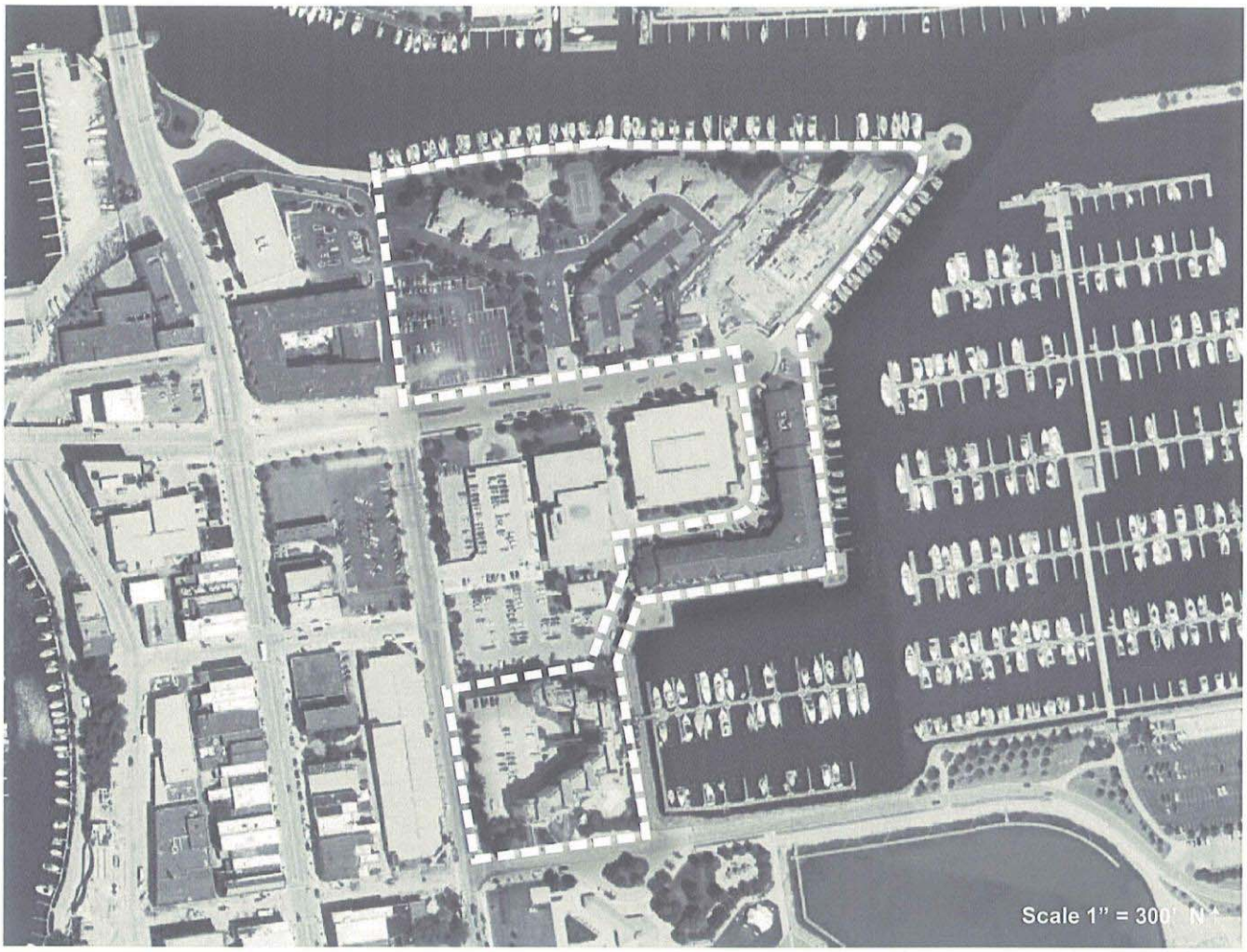
Figure V-G-1
Port Marina Project
Aerial & Site Imagery for the Rochester Port

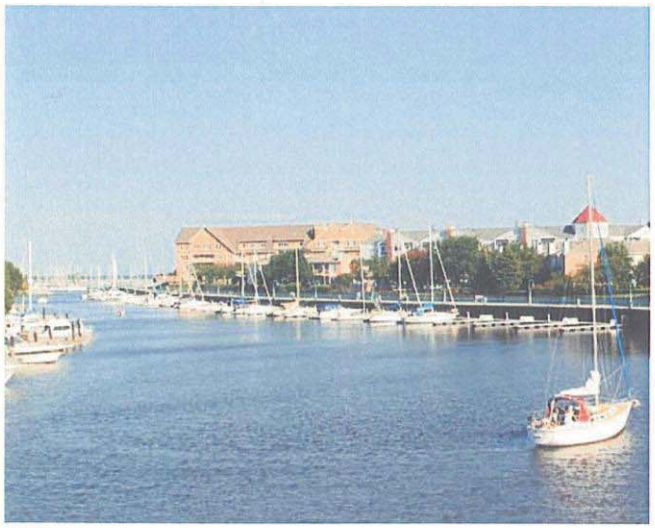




Chicago, IL
Units: 720
Acres: 5.4
DU/AC: 133.3

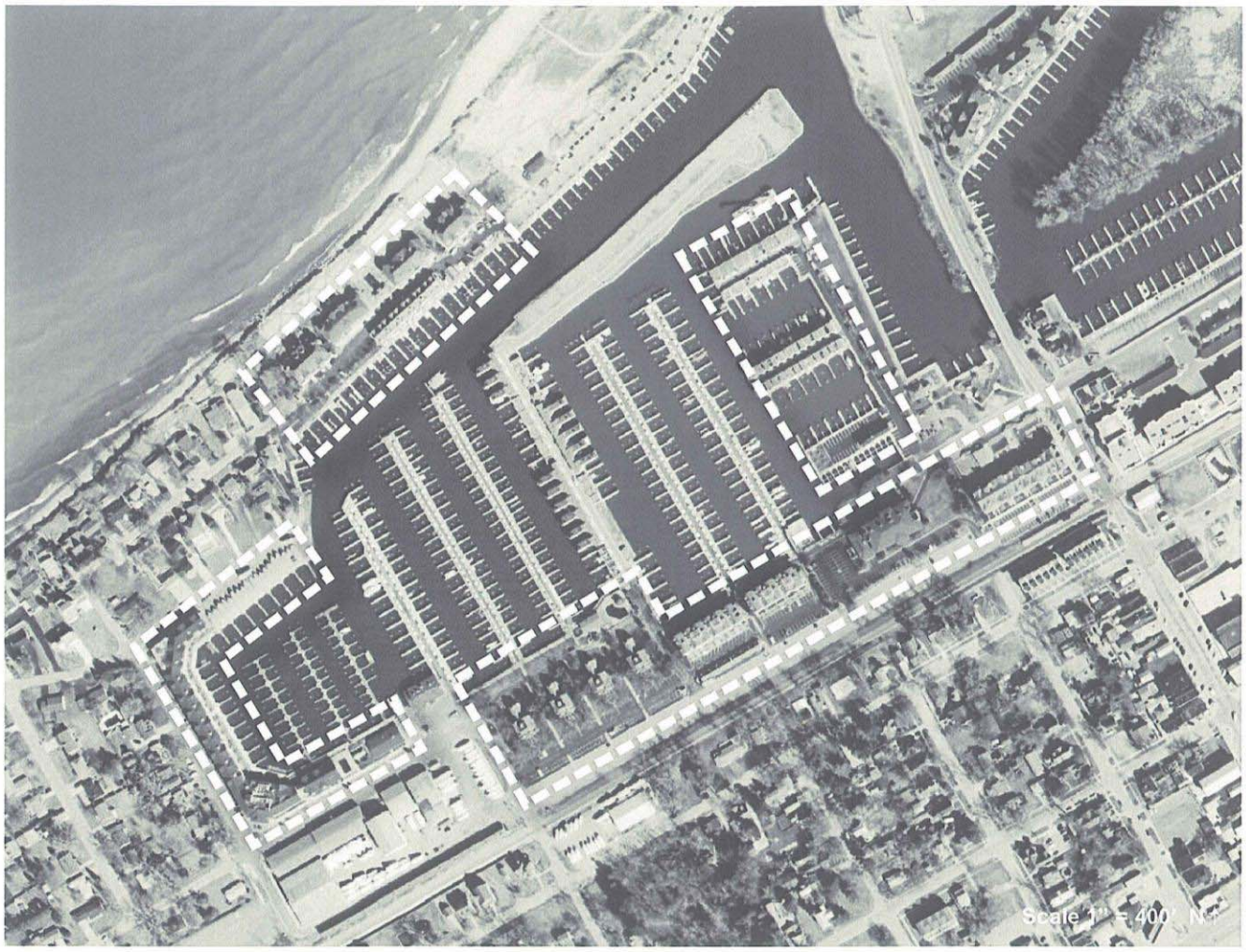
Figure V-G-2
Port Marina Project
Aerial & Site Imagery
for Chicago, IL





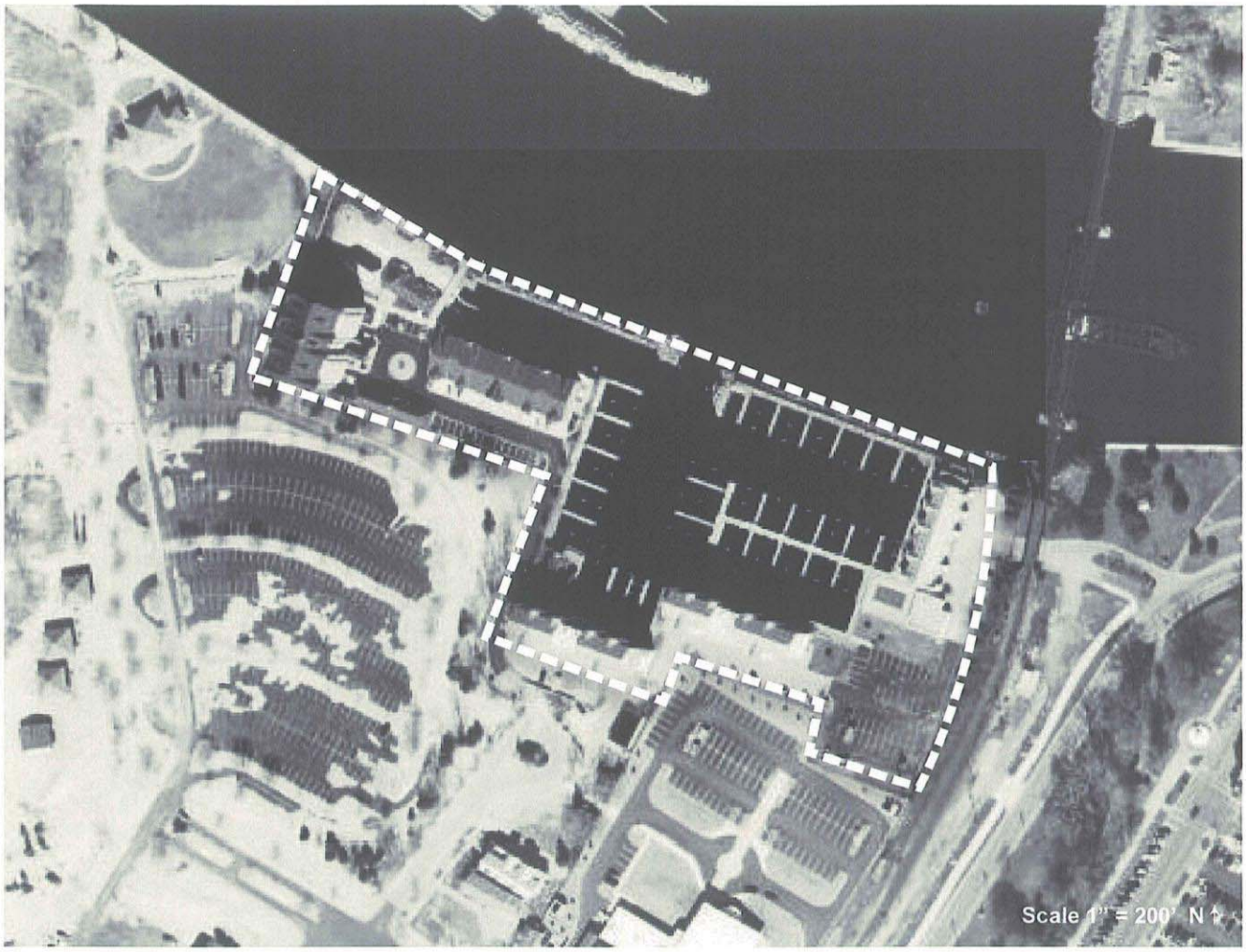
Racine, WI
Units: 295
Acres: 12.5
DU/AC: 23.6

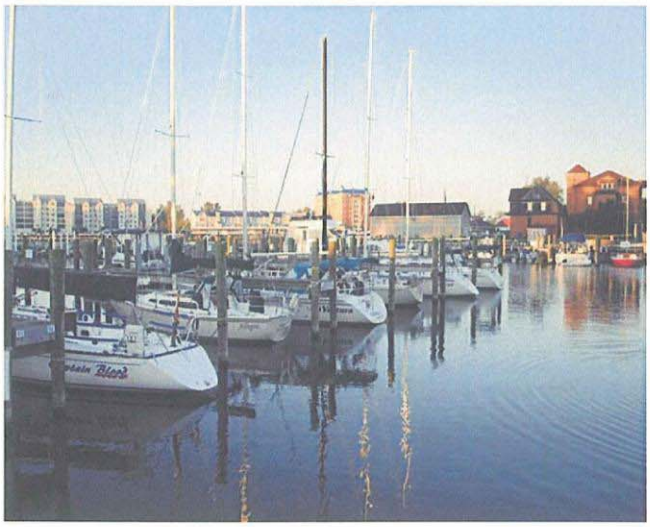
Figure V-G-3
Port Marina Project
Aerial & Site Imagery
for Racine, WI



New Buffalo, MI
Units: 410
Acres: 21.1
DU/AC: 19.4

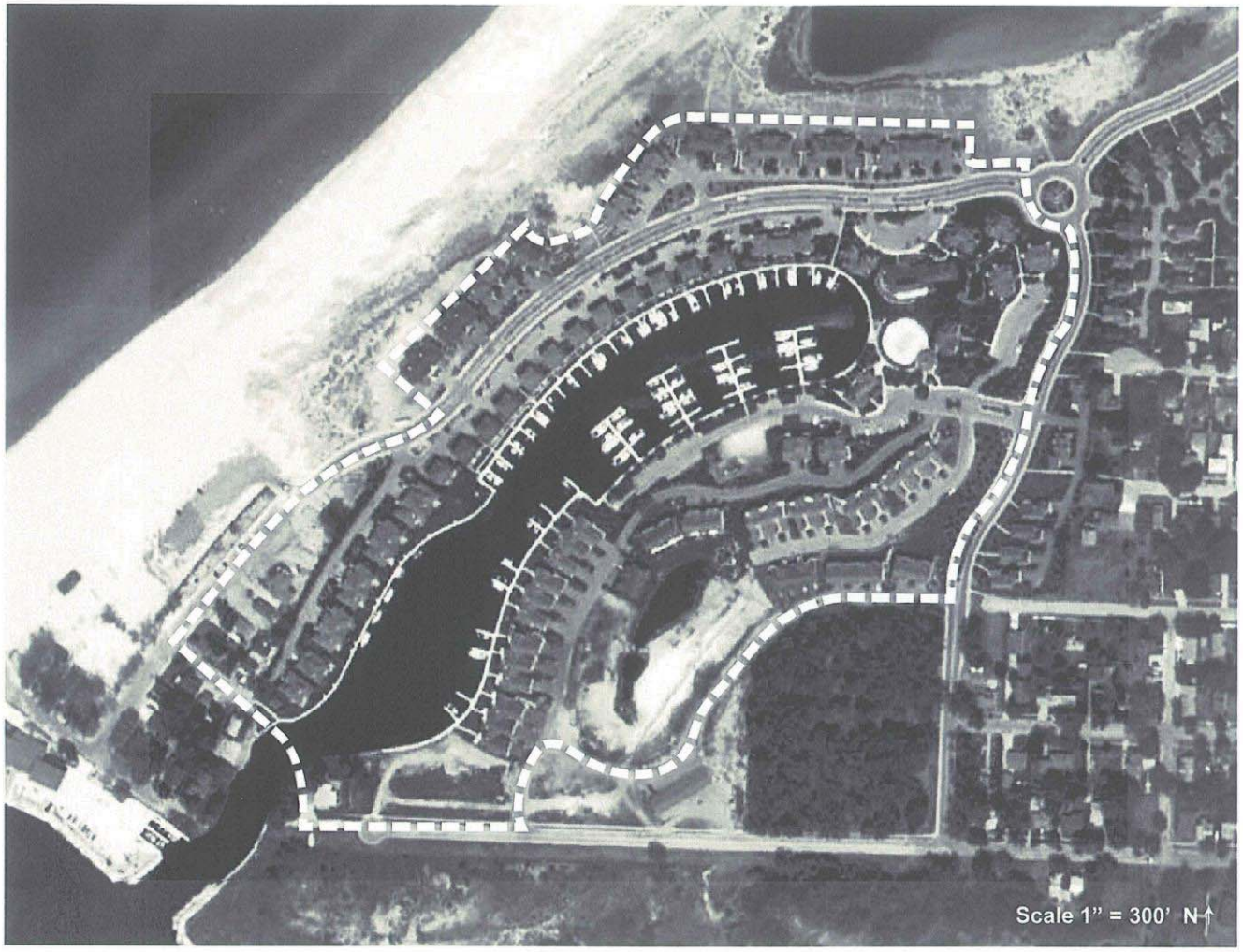
Figure V-G-4
Port Marina Project
Aerial & Site Imagery for
New Buffalo, MI





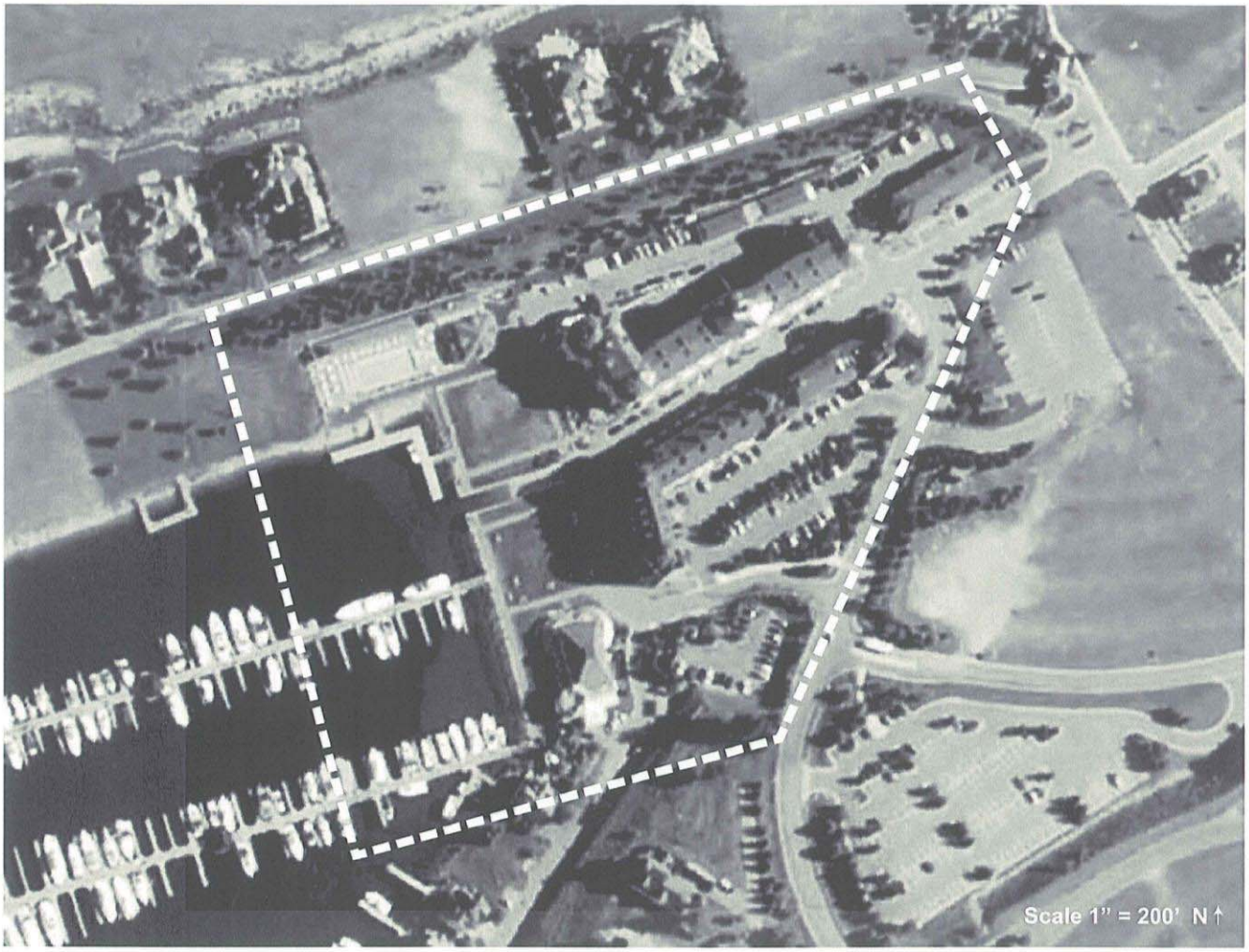
St. Joseph, MI
Units: 82
Acres: 6.4
DU/AC: 12.8

Figure V-G-5
Port Marina Project
Aerial & Site Imagery for
St. Joseph, MI



Manistee, MI
Units: 373
Acres: 54
DU/AC: 6.9

Figure V-G-6
Port Marina Project
Aerial & Site Imagery for Manistee, MI



Bay Harbor, MI
Units: 66
Acres: 13.9
DU/AC: 4.7

Figure V-G-7
Port Marina Project
Aerial & Site Imagery for
Bay Harbor, MI

H. Private Development Site Alternatives – Parcel IV

As stated in *Section II Proposed Action*, the preferred alternative originally called for private development upon four sites identified as Parcels I, II, III and IV. As preparation of this statement and evaluation of impacts progressed, the prospect for private development upon Parcel IV raised particular concerns. As indicated in the 2010 Port of Rochester Traffic and Parking Analysis included as Appendix T, development on Parcel IV would lead to the loss of 219 existing parking spaces. It was also recognized that development upon Parcel IV could potentially impact views of the adjacent park and waterfront features. Finally, as is the case with both Parcel II and III, designated parklands exist on Parcel IV and these would have to be alienated prior to any private development.

The Form-Based code developed to guide development on Parcels I, II, and III was reviewed as part of this evaluation. The review revealed that Parcels I, II and III could accommodate the entire program originally proposed for development upon all four parcels. That being so, it was concluded that Parcel IV could be eliminated as a potential site for private development without diminishing the project's capacity to achieve the benefits described in *Section III Purpose, Public Needs and Benefits*.

As the inclusion of Parcel IV led to potential impacts to parking, aesthetics and parklands, and as its elimination did not compromise the project in any meaningful way, development upon Parcel IV was eliminated from the preferred alternative. The preferred alternative now being proposed includes private development only upon Parcels I, II and III. This modified alternative has fewer parking impacts, has less potential to impact views within the vicinity, and requires less parkland to be alienated.

I. Slip Density Alternatives

Throughout the planning for this project, the development of the marina and its attendant slips has been recognized as a key project component with the potential to serve as an important catalyst for the anticipated private development and related economic benefits. As the market demand for slips has been estimated to exceed 157 slips, the development of that number rather than only 118 should provide additional incentive to developers and could potentially improve the return on the public investment.

The preferred alternative originally called for development of 75 to 80 boat slips in the Phase 1 Marina and an additional 38 to 43 slips in the Phase 2 Marina Expansion for a final total of 118 slips. As preliminary plans for the marina basin evolved, it became clear that the basin could accommodate additional slips. The preferred alternative now being proposed has been modified to incorporate these additional slips. Specifically, the preferred alternative originally proposed has been replaced by a modified alternative calling for the development of 85 slips in Phase 1 and for the development of an additional 72 slips in Phase 2, a combined final total of 157 slips. These slips can be developed within the basin without any increase in the basin's extent and without compromising navigation within the basin. As was stated in *Section II Proposed Action*, permit applications now pending for approval of 118 slips will be amended, or supplementary applications will be submitted, to request approval for 157 slips rather than 118.

J. Phasing Alternatives

1. Introduction

This section will identify phasing alternatives and evaluate the potential impacts associated with each alternative. The proposed phasing of the project is based on establishment of the proposed marina and associated infrastructure as a catalyst to private mixed-use developments on adjacent Parcels I through III. The completion of a marina basin and facilities will improve access to the existing amenities of the site, including lake views, park access, and nearby commercial and entertainment activities. This combination creates a series of development sites with adjacency to valuable amenities currently unavailable in the region. Development of each site will support the overall development and enhance the value of subsequent projects and the existing neighborhood.

The Marina Engineering Report and Feasibility Study considered seven alternative marina concept plans, which are outlined in *Section V B Marina Location and Design Alternatives*. The concept plan selected for implementation was proposed to be completed in two phases. Construction of the entire marina in a single phase was considered and rejected due to cost and the time it will take to alienate parkland.

Although the project could be completed in a single phase, it was determined that a significant portion of the project could be completed in a first phase, which would facilitate a measured approach to the entire project as well as the implementation of adjacent development projects in segments appropriately scaled to the anticipated rate of absorption by the market.

2. Construction Sequence

The proposed sequence of construction for the project considers and attempts to minimize potential impacts to existing traffic, activities, and nearby businesses.

2.1 Lighthouse Trail

The anticipated construction schedule for the Lighthouse Trail project is spring and summer of 2013. The phasing for the Lighthouse Trail project is not contingent upon any other elements of the project and does not impact the phasing of any other elements of the project.

2.2 Lake Ontario Resource Center (LORC)

The anticipated construction schedule for either the Interim or the Permanent Lake Ontario Resource Center (LORC) is dependent on the timing of the negotiation and execution of a lease-purchase option between the City of Rochester and SUNY College at Brockport. The phasing for the LORC is not contingent upon any other elements of the project.

2.3 Phase 1 Marina, Boat Launch Reconfiguration, Right-of-Way Improvements

The Phase 1 Marina, Boat Launch Reconfiguration, and Right-of-Way Improvements are proposed to be constructed in a single coordinated effort. The City of Rochester is advancing these public infrastructure projects. The proposed schedule envisions construction starting in September 2012, with the first construction sequence complete in May of 2013.

The schedule for the first construction sequence was established to occur after the busy summer season to minimize impacts on vehicular traffic and access to the existing Terminal Building, as this phase will impact existing traffic flow on portions of Corrigan Street, Portside Drive, River Street, and North River Street. While construction efforts will occur on all areas within the construction zone identified in Figure V-J-1 throughout the construction period, the relocation of utilities, the reconstruction of Corrigan Street, and the reconfigured entry to the Terminal Building will be prioritized to minimize access conflicts.

2.3.1 Reconfigured Boat Launch

Access to the Public Boat Launch will be maintained at all times. The reconfiguration of the Public Boat Launch will begin with construction of the new interim parking facility located immediately south of the existing parking area on former CSX property. Once this is complete, the existing parking lot will be reconfigured, and vehicles with trailers will park in the new lot to the south. The reconfigured Boat Launch is expected to be complete by May of 2013.

2.3.2 Right-of-Way Improvements

The Right-of-Way Improvements will be completed in phases to maintain access to the Public Boat Launch at all times, either from Portside Drive to the north or from River Street to the south. Construction of River Street from the CSX rail line to Portside Drive is expected to be complete by May of 2013.

2.3.3 Phase 1 Marina

Excavation of the approximately 5-acre marina basin and processing of the slag is expected to commence in September of 2012 and continue through the May of 2013 and beyond. At the completion of the first construction sequence in May of 2013, the only road closure will be North River Street between Portside Drive and Corrigan Street.

The second construction sequence continues from May of 2013 through project completion in May of 2014. The primary activities in the second construction sequence include the completion of the marina basin and marina facilities. This includes excavation of the marina basin, processing of slag (for details, refer to *Section IV O*), construction of the marina sheet pile and armor stone walls, installation of wave attenuation structures, construction of the basin connection to the river, and installation of the dock structures and associated utilities.

The processing of the slag will require a work area of approximately three acres, and the plan anticipates this activity will occur on development Parcel I. At the completion of the slag processing effort, North River Street will be completed and opened to traffic as soon as possible. The construction sequencing plan identifies a potential additional laydown area on the site east and south of the existing Ontario Beach Park Labor Operations Center (between the CSX rail lines, the realigned River Street extension, Portside Drive, and Lake Avenue).

The floating marina infrastructure will be installed as soon as practical once the basin is complete and full of water. The completed Phase 1 Marina is expected to open in May of 2014, but portions of the Marina could possibly be open at some point during the 2013 summer boating season depending on the pace of construction.

2.4 Incremental Private Development: Parcel I

Development Parcel I is defined by Lake Avenue, Corrigan Street, North River Street, and Portside Drive. The parcel is composed of two parts, Parcel I-N and Parcel I-S, generally defined by the extension of the centerline of Hincher Street. The City of Rochester will develop a request for redevelopment proposals for this parcel and solicit competitive proposals from qualified developers.

Parcel I-N will be the first site made available for sale to the private development community. This area will not be available for private development until the Phase 1 Marina construction activities are nearing completion, including the slag processing operations and the completion of North River Street, sometime in the second half of 2013. Development of Parcel I-N may occur in two stages depending on market conditions. If this is the case, it is anticipated that the east half of the parcel would be developed first. Construction of the first development in I-N would likely be completed around May of 2014.

Parcel I-S is expected to follow completion of Parcel I-N, and is likely to be developed in a single project based on the success of Parcel I-N. The timing of development of Parcel I-S could conceivably occur as soon as the site is available for construction in the second half of 2013. However, it will likely not begin until market conditions are favorable and development of Parcel I-N is successfully complete or well underway.

2.5 Phase 2 Marina Expansion

Phase 2 Marina Expansion is located immediately south of the Phase 1 Marina site at the location of the existing boat launch parking area. Construction of the Phase 2 Marina Expansion is contingent upon the preceding construction and initiation of operations of a nearby replacement boat launch facility providing an equivalent level of service. The requisite alienation of parkland associated with the existing Public Boat Launch would also have to be completed prior to construction of the Phase 2 Marina Expansion.

2.6 Incremental Private Development: Parcel II

Development Parcel II is located immediately south of Parcel I, on the current site of the Ontario Beach Park Labor Operations Center and the surrounding area defined by Lake Avenue, Portside Drive, River Street, and the CSX Rail lines. Development of this site is contingent upon relocation of the Labor Operations Center and completion of the parkland alienation process. As the lack of a Labor Operations Center would present significant obstacles, it is anticipated that development and initiation of operations at a replacement center for operations would have to precede abandonment of the existing center and development on Parcel II.

2.7 Incremental Private Development: Parcel III

Development Parcel III, located immediately south of the Phase 2 Marina Expansion, between River Street and the Genesee River, is partially located on the Public Boat Launch which is parkland. Development of Parcel III is contingent upon construction of a replacement boat launch facility at an alternate site, a step which is anticipated to precede construction of the Phase 2 Marina Expansion. Private redevelopment of areas currently part of the Public Boat Launch will require the completion of the parkland alienation process.

3. Alternate Phasing Options

Alternate phasing options may include interim uses of the mixed-use development parcels that would be permissible give the ownership, parkland status and current uses. Alternate options for developing Parcels II and III may also be considered if the Phase 2 Marina Expansion is delayed or is removed from the overall plan at some point in the future.

VI. INFORMATION SOURCES AND EXTENT AND QUALITY OF INFORMATION

Section IV. A. Geology, Soils and Topography

- *Geotechnical Site Characterization, Port of Rochester Harbor Improvement and Harbor Ferry Terminal, Rochester, New York, Haley & Aldrich, Inc., September 2000*
- *United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey*
- *Port Marina Predevelopment Site Conditions, Gap Investigation, LaBella Associates, September 2009*
- *Predevelopment Subsurface Conditions Analysis Investigation Report, LaBella Associates, March 2009*
- *Topographic Survey Map of the Port of Rochester, City of Rochester Department of Environmental Services, Architecture and Engineering Services, 3/30/09*
- *City of Rochester Local Waterfront Revitalization Program, City of Rochester Planning Bureau, Adopted by City Council September, 1990, Approved by NYS Secretary of State November, 1990, Concurred by the US Office of Ocean and Coastal Resource Management January, 1991*
- *Draft Design Report/NEPA Environmental Assessment/SEQR Draft Generic Environmental Impact Statement, Public Redevelopment, Focus Site No. 1 – Local Waterfront Revitalization Plan and Specific Projects: Pins 4753.02, 4752.60, and 4752.62, City Code No. 99021, LaBella Associates, BTA Architects, Erdman Anthony and Associates, Bourne Consulting Engineering, Cavendish Partnership, and Haley & Aldrich, January 22, 2001*
- *Final Design Report/NEPA Environmental Assessment/SEQR Final Generic Environmental Impact Statement Part A, Public Redevelopment, Focus Site No. 1 – Local Waterfront Revitalization Plan and Specific Projects: Pins 4753.02, 4752.60, and 4752.62, City Code No. 99021,LaBella Associates, BTA Architects, Erdman Anthony and Associates, Bourne Consulting Engineering, Cavendish Partnership, and Haley & Aldrich, March 2001*
- *Design Analysis Main Report on Proposed Navigation Improvements at Rochester Harbor, New York, USACE, Buffalo District, May, 1995*
- *Draft Wave Study Report for Rochester Harbor, New York, for the City of Rochester Redevelopment Plan, United Design Associates, 2009*
- *City of Rochester Marina Harbor Wave Analysis, United Design Associates and Edgewater Group, July 2009*
- *Operation and Maintenance Dredging and Dredged Material Placement, Rochester Harbor, Monroe County, New York, USACE, Issue Date 12/03/08*
- *Remedial Investigation Report, Proposed Port of Rochester Marina and Garage, LaBella Associates, March 2007*
- *Final Habitat Restoration Feasibility Study for the Rochester Harbor Federal Navigation Project, Rochester, Monroe County, New York, URS Group, February 2007*
- *NYSDOS Coastal Management Program, State Coastal Policies, excerpted from the State of New York Coastal Management Program and Final Environmental Impact Statement, Section 6, August 1982 with changes made to incorporate routine program changes approved in 1983 and 2001*
- *Before Dredge Survey Sounded 8/15/08 and 8/21/08, After Dredge Survey Sounded 9/09/08, and Non Fed Area 1 After Dredge Survey Sounded 7/13/09, USACE*

- *Marina Engineering Report and Feasibility Study, City of Rochester, New York, Passero Associates, Edgewater Group, and Abonmarche, May 2009*
- *Port of Rochester Joint Application Form, Passero Associates and Edgewater Group, 12/31/09*
- *Marina Phase 1 and Full Build out Site Plans for DEIS Scoping Submission, drawings 1 of 6 through 6 of 6, issued 3/22/10, Passero Associates and City of Rochester Department of Environmental Services, Architecture and Engineering Services*
- *IGLD 1985, Brochure on the International Great Lakes Datum 1985, USACE Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data, January 1992*
- *Rochester Harbor, NY Harbor Features and Dredging Project Needs,USACE, February, 2010*

Section IV. B. Water Resources

- *Port Marina Predevelopment Site Conditions, Gap Investigation, LaBella Associates, September 2009*
- *Predevelopment Subsurface Conditions Analysis Investigation Report, LaBella Associates March 2009*
- *Existing Conditions Topographic Survey, provided by City of Rochester Survey Department, 2008*
- *Draft Design Report/NEPA Environmental Assessment/SEQR Draft Generic Environmental Impact Statement, January 2001*
- *New York State Stormwater Design Manual, New York State Department of Environmental Conservation, August 2003*
- *Better Site Design, New York State Department of Environmental Conservation Division of Water, April 2008*
- *The Final New York State 2008 Section 303(d) List of Impaired Waterbodies Requiring a TMDL/Other Strategy, New York State Department of Environmental Conservation, May 26, 2008*
- *Draft New York State 2010 Section 303(d) List of Impaired Waterbodies Requiring a TMDL/Other Strategy, New York State Department of Environmental Conservation, January 2009*
- *The 2001 Genesee River Basin Waterbody Inventory and Priority Waterbodies List Report, New York State Department of Conservation, March 2003*
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Section IV. E. Air, Odors, and Noise

- *Draft Design Report/NEPA Environmental Assessment/SEQR Draft Generic Environmental Impact Statement, Public Redevelopment, Focus Site No. 1 – Local Waterfront Revitalization Plan and Specific Projects: Pins 4753.02, 4752.60, and 4752.62, City Code No. 99021, LaBella Associates, BTA Architects, Erdman Anthony and Associates, Bourne Consulting Engineering, Cavendish Partnership, and Haley & Aldrich, January 22, 2001*
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- *Water Meter Readings for the 1000 North River Street site by the City between June 2009 and June 2010, provided by the City of Rochester on 7/30/10*
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- *Memo – Questionable wastewater discharge relating to groundwater encountered and pumped at the South 24" sewer outfall trench; Beach Avenue and North Parking Lot Improvements Project – Port of Rochester (September 11, 2002) and Drawing showing approximate areas where these issues were addressed.*
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- *Handbook of Environmental Acoustics, James P. Cowan, 1994 as referenced in NYSDEC Assessing and Mitigating Noise Impacts, 2001*

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- The DEC's Article 15 program uses IGLD'85 so the documents will utilize the 247.3 foot mean high water line on the plans.
- The International Joint Commission (IJC) website and publications will be used with respect to the topic of water level management.