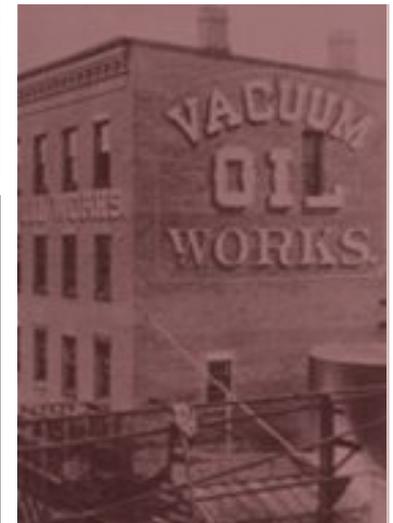


Nomination Study

Vacuum Oil - South Genesee River Corridor Brownfield Opportunity Area

A Revitalization Strategy for the South Plymouth
Neighborhood

April 2013



City of Rochester
Thomas S. Richards, Mayor

30 Church Street
Rochester, NY 14614

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SECTION 1: PROJECT DESCRIPTION & BOUNDARY

1.1 LEAD PROJECT SPONSORS

The City of Rochester is the sponsoring municipality of the Vacuum Oil - South Genesee River Corridor Brownfield Opportunity Area (BOA) Nomination Study, a program funded, administered, and overseen by the New York State Department of State (DOS), with technical support provided by the Department of Environmental Conservation (DEC). The Division of Environmental Quality (DEQ) is responsible for management of the project on behalf of the City. DEQ has been proactive and involved in a wide range of brownfield remediation initiatives within the City and specifically within the BOA study area.

In an effort to ensure the continued involvement of the community throughout the planning process, the DEQ established an Advisory Committee representing a broad range of local stakeholders, each providing valuable insight from their respective fields of expertise. Advisory Committee members provide a diverse background of interests, including economic development, housing and community development, brownfield redevelopment, community character, and business interests.

THREE STEPS OF THE BROWNFIELD OPPORTUNITY AREA PROGRAM		
<i>Phase 1: Pre-Nomination</i> <ul style="list-style-type: none">• Preliminary analysis of the community and potential brownfield sites• Identification of a study area• Establishment of partnerships with key stakeholders and initiation of public participation process• Initial identification and summarization of opportunities for renewal	<i>Phase 2: Nomination</i> <ul style="list-style-type: none">• Comprehensive analysis of the study area and individual brownfield sites• Analysis of economic and market trends to assist in strategy development• Development of specific recommendations for the revitalization of strategic sites	<i>Phase 3: Implementation</i> <ul style="list-style-type: none">• Detailed individual site assessments, as required, to determine remediation strategies and needs• Creation of a detailed reuse and redevelopment strategy for strategic sites• Development of a marketing strategy for individual redevelopment sites



Current Project

1.2 INTRODUCTION TO THE BOA PROGRAM

The BOA Program was developed in 2003 as the planning component of the NYS Superfund/Brownfield Law (GML Article 18-C, Section 970-r), providing municipalities and community-based organizations with financial and technical assistance to complete area-wide revitalization strategies for neighborhoods impacted by the presence of brownfields and environmental hazards. At the completion of the program, communities will be designated a Brownfield Opportunity Area, increasing their competitive position for access to funding and incentives under the DEC Brownfield Cleanup Program, the Empire State Development Corporation's economic development programs, and many other State and Federal assistance opportunities.

Brownfield sites are typically former industrial or commercial properties where operations may have resulted in environmental impairment. The DOS and DEC recognize the expansive detrimental impacts these sites have on their surrounding neighborhoods, and that brownfield impacts are not limited to individual sites or immediately adjoining property.

A “brownfield” is real property whose expansion, redevelopment or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”

The marketability and viability of entire neighborhoods can be negatively impacted by the presence, or potential presence, of contaminated sites through a decline in property values, perceived safety, and a lack of reinvestment. The BOA Program assists communities in identifying and analyzing sources of neighborhood distress, and provides the resources and capacity to develop and implement revitalization strategies for primary sites, brownfield sites, and neighborhoods. However, the BOA Program does not provide monies for direct cleanup efforts.

State and federal programs also exist for the direct remediation of sites, such as the DEC Environmental Restoration Program, the DEC Brownfield Cleanup Program, and the US Environmental Protection Agency's Brownfield Program. These programs focus on physical investigations and activities, further assisting local municipalities in dealing with brownfield properties and their impacts on communities.

1.3 PROJECT DESCRIPTION

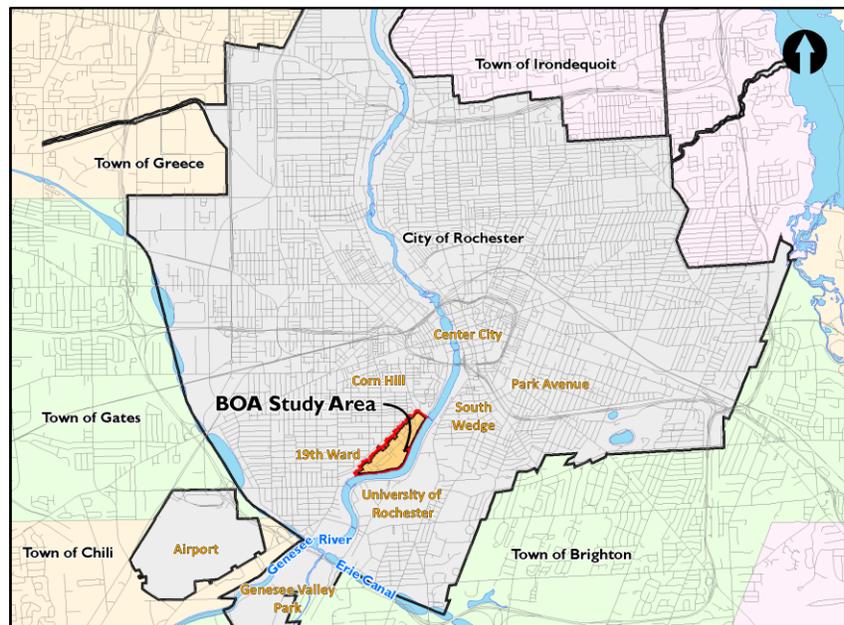
1.3.1 General Overview

In 2006, the City of Rochester completed a Pre-Nomination Study for the Vacuum Oil - South Genesee River Corridor. The approximately 58-acre Study Area included numerous known and potential brownfields centered on the former Vacuum Oil Rochester Works site along Flint and Exchanges Streets. In 2010, the City received a State assistance contract to complete the Step 2 Nomination Study report, which has expanded the scope of the Study Area to include portions of the adjacent neighborhoods.

As a result of an initial review of the BOA Study Area, the Vacuum Oil BOA has been expanded to an approximately 148 acre area located along the Genesee River and Plymouth Avenue south of Center City Rochester. The BOA is bounded by the Plymouth Avenue commercial corridor on the west, and includes components of the Plymouth-Exchange (PLEX) and South West Area Neighborhoods between Barton Street and Ford Street. As seen in Maps 1 and 2, the BOA is also located adjacent to the University of Rochester (across the Genesee River), the region's largest employer. The Study Area is connected to the University via a former railroad bridge spanning the Genesee River, which will undergo conversion to a pedestrian bridge in 2011-2012.

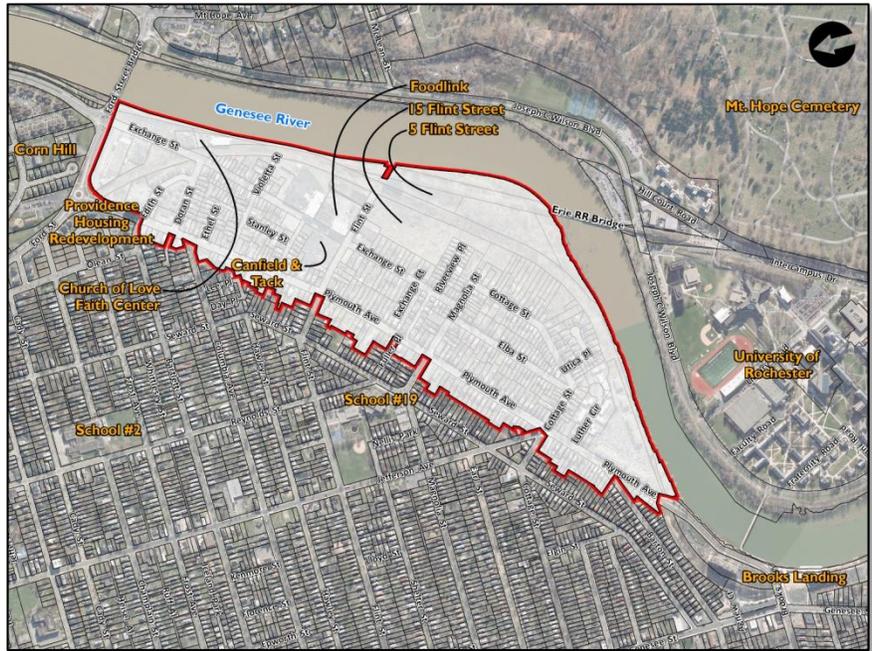
The Study Area includes a variety of industrial, commercial, retail and residential land uses. The largest and most prominent area within the BOA is the industrial zone east of Exchange Street, which extends from Violetta Street south to Magnolia and east to the Genesee River. During the late 19th and early 20th centuries, this area was dominated by the former Vacuum Oil Rochester Works facility, which refined, finished, canned, and distributed petroleum-based products throughout the United States and Europe. The Vacuum Oil Rochester Works site was in operation from 1867 to 1936, during which time Vacuum Oil was purchased by the Standard Oil Company of New York (Socony). The Rochester Works site is the primary focus of the BOA, and has been confirmed or is suspected of being contaminated by numerous spills, accidents and other industrial activities taking place since 1867.

Multiple environmental studies have been completed by private and public entities for individual parcels or sets of parcels within the Vacuum Oil Rochester Works footprint. In addition to the 2006 Pre-Nomination Study, the City has commissioned a series of land use and revitalization studies since 1984, with the most recent completed in 2001, to facilitate the revitalization of the BOA Study Area and the surrounding Genesee River South Corridor.



Map 1: Study Area Regional Context

However, none of these previous studies have encompassed and included the surrounding PLEX and South West neighborhoods. Plymouth Avenue represents a major north-south organizational feature of the neighborhood, with areas east of the corridor to the Genesee River negatively impacted by the current and historic industrial activity taking place at the former Vacuum Oil Rochester Works site. As a result, these portions of the neighborhood, including the BOA Study Area, have suffered from continued disinvestment. The Vacuum Oil BOA Nomination Study will outline a revitalization



Map 2: Study Area Neighborhood Context

strategy for the Study Area which will reduce the negative economic, social, aesthetic and quality of life impacts associated with current and former industrial activity in the neighborhood.

The BOA revitalization strategy will accomplish the following primary goals:

1. Provide recommendations for the redevelopment and reuse of vacant, abandoned and underutilized properties;
2. Develop strategies to strengthen and diversify residential neighborhoods; and
3. Reconnect the community with the Genesee Riverfront.

Of the 517 properties within the BOA, 28 were identified as part of this study as candidates for curbside assessments, covering 34.6 percent of parcel area within the Study Area (See Appendix D). In addition to these brownfields, an additional 129 vacant and underutilized parcels were identified as significant to the revitalization of the Study Area. Together, these 148 parcels represent 51 percent of the BOA. Of the remaining non-vacant, non-brownfield sites, 50 percent are classified as residential. More information on Vacant, Underutilized, and Potentially Contaminated Sites within the BOA can be found in the corresponding discussion in Section 3 of the BOA Nomination Study and on Map 7.

1.3.2 Redevelopment Potential

The primary driver of redevelopment potential within the BOA is the presence of vacant and underutilized land along the City’s Genesee River waterfront. Vacant and underutilized property within the Study Area accounts for 41 percent of the acreage, 27 acres of which are City-owned. Within the Study Area, three locations hold significant promise for large scale redevelopment activities due to the presence of contiguous underutilized and vacant former industrial parcels. As seen in Figure 1, these sites include the former Vacuum Oil Main Plant site north of Flint Street (A), the former Vacuum Oil Site south of Flint Street (B), and vacant land east of Magnolia Street and Riverview Place (C). In total, these three sites account for approximately 25 acres, or slightly less than 17 percent of the Study Area, yet represent 49 percent of total vacant and underutilized property within the BOA. The redevelopment of these sites will have the potential to create the greatest catalytic impact to the surrounding neighborhoods, spurring reinvestment in existing property and the redevelopment of adjacent vacant and underutilized sites as infill projects.

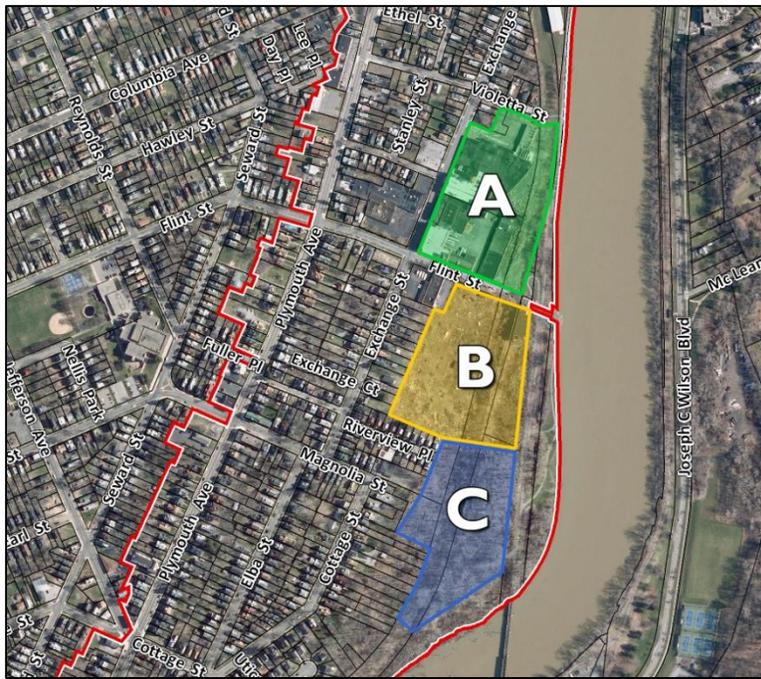


Figure 1: Primary Redevelopment Sites

The BOA is within the proposed Historic Southwest Riverfront District and the Rochester Heritage Corridor, and contains approximately 6,300 feet of shoreline along the Genesee River which offer significant opportunities for water-enhanced development. The BOA is also located on a significant bend in the river, providing dramatic views of the River, downtown, the University of Rochester and Mt. Hope Cemetery. An existing pedestrian trail follows the river from the South Plymouth north to the Ford Street Bridge underpass, yet fails to fully leverage the recreational and aesthetic potential of the riverfront in most areas of

the BOA Study Area. The Genesee River also presents significant opportunities for water-dependent and water-enhanced development, such as boat docks, public spaces, mixed-use development and housing. Each of the aforementioned primary redevelopment sites are located adjacent to the riverfront, further leveraging their potential as high impact, catalytic projects.

The City must focus on rebranding the BOA Study Area as a waterfront neighborhood by reconnecting the PLEX and South West neighborhoods to the Genesee River. This effort will serve to bolster recent investments along the Genesee River at Brooks Landing, Corn Hill Landing, the Riverview Apartments and other pending projects. The continued revitalization of the City’s waterfront will attract further attention from investors, supporting economic development and ultimately improving the quality of life for area residents.

1.3.3 Related Planning Studies and Efforts

SOUTHWEST ROCHESTER RIVERFRONT CHARRETTE, 2012

The Southwest Neighborhood Planning Group was obtained funding through the Rochester Area Community Foundation and the NYS Council on the Arts to conduct civic engagement project that established a community-inspired vision for the Plymouth Exchange and adjacent portions of the 19th Ward neighborhoods. The project area is inclusive of the BOA Study Area, and was conducted in parallel with the public participatory process of the Vacuum Oil BOA Nomination Study. The culminating Charrette was held in June 2012, which explored resident and design community ideas in six focus areas. Where applicable, the findings from the Charrette were incorporated into the BOA Master Plan.

SOUTHWEST QUADRANT STRATEGIC PLAN, 2010

The City Department of Neighborhood and Business Development (NBD) established teams of City Staff for each of the City's four quadrants. Each quadrant is charged with creating a strategic plan that develops an annual work program to engage residents, businesses, neighborhood groups and community stakeholders as partners in community, economic and business development efforts. The Strategic Plan outlines 11 Key Result Areas (KRAs) which focus on developing strategies that improve public safety, living standards, public engagement, and housing development, among other topic areas. The Southwest Quadrant Strategic Plan includes the BOA Study Area, and cites the Vacuum Oil Brownfield Opportunity Area as a KRA for business and economic development. The BOA Nomination Study will also support KRAs for quality of life, access to recreation, quality housing choices, and public safety.

HOUSING SUBDIVISION CONCEPT PLAN, 2006

This report was completed in tandem with the 2006 Pre-Nomination Study, and presents alternative development schemes for residential development, waterfront greenspace and recreation areas within the original BOA boundary. Known environmental data was utilized to site housing away from areas of high risk and contamination. These concepts will provide a foundation for understanding redevelopment potential within the BOA Study Area.

SOUTH GENESEE RIVER CORRIDOR STUDY, 2001

In 2001, the Department of City and Regional Planning at Cornell University prepared land use and development plans for the South Genesee River Corridor, in an update to the previously completed efforts by Lane, Frenchman in 1986. The Corridor Study focused on four key areas, including the Plymouth Avenue Corridor and the Exchange Street Riverfront on the west side of the river. The study identified target sites for revitalization, renovation, and new investment; and also developed recommendations for improving public access to the River, enhanced streetscapes, and the rehabilitation and redevelopment of existing industrial uses. A key recommendation for improving the riverfront communities was the rehabilitation of the Erie-Lackawanna Railroad Bridge for pedestrian use. This project has progressed through the design stage, and will begin construction in 2011-2012.

CITY OF ROCHESTER LOCAL WATERFRONT REVITALIZATION PROGRAM, 1999-PRESENT

The 1999 LWRP included substantial recommendations for several focus areas, including the Plymouth-Flint Redevelopment Project. Recommendations and policies within the 1999 LWRP advance the 1986 Genesee River South Corridor Land Use and Development Plan, many of which were carried forward to the development of the BOA Nomination Study. The City is currently updating the LWRP document to maintain consistency and coordination across the Genesee River waterfront and the numerous revitalization projects and programs taking place along the corridor.

ROCHESTER 2010: THE RENAISSANCE PLAN, 1999

The 2010 Renaissance Plan is the City of Rochester's most recent comprehensive plan, and incorporated the goals and visions of the ten sector plans prepared under the Neighbors Building Neighborhoods program. The plan articulates three themes upon which to base urban revitalization efforts: Responsibility, Opportunity, and Community. The Renaissance Plan includes seven focus areas which are consistent with the goals and vision of the BOA Program:

- Campaign One: Involved Citizens
- Campaign Three: Health, Safety, and Responsibility
- Campaign Four: Environmental Stewardship
- Campaign Six: Economic Vitality
- Campaign Seven: Quality Service
- Campaign Eight: Tourism Destination
- Campaign Nine: Healthy Urban Neighborhoods.

GENESEE RIVER SOUTH CORRIDOR LAND USE AND DEVELOPMENT PLAN, 1986

This land use and development plan for the South River Corridor recommends a coordinated series of improvements to reconnect the neighborhood with the River and redevelop vacant or underutilized properties to redensify the residential neighborhood. Major recommendations of the plan relevant to the BOA Study Area include:

- Closure of Exchange Street north of Doran Street to reduce truck traffic through neighborhood;
- Development of a dual loop roadway system to funnel traffic from Plymouth Avenue;
- Creation of new housing development sites along the River on vacant land;
- Rehabilitation and reuse of industrial buildings along Flint and Exchange Streets for mixed use;
- Development of a linear park along the Genesee River with numerous connections to intersecting neighborhood streets;
- Development of new housing adjacent to Utica Place and Doran Street (completed).

GENESEE RIVER SOUTH CORRIDOR PLAN GEIS, 1986

The Generic Environmental Impact Statement was completed in tandem with the Land Use and Development Plan, and identifies west bank residential development along the Genesee River South Corridor as having potentially significant environmental impacts. However, it goes on to conclude that positive economic and social impacts of the plan far outweigh any potential negative environmental impacts. The plan provides a comprehensive framework to guide land use and development along the river corridor. The plan promotes residential revitalization, expands the tax base, and leverages recreational advantages provided by the river for public enjoyment. The findings and mitigation measures from the 1986 GEIS document will be used to inform and support those from the Nomination Study and subsequent GEIS created as part of this BOA planning effort.

1.4 COMMUNITY VISION, GOALS AND OBJECTIVES

The City of Rochester has invested a significant amount of effort and money in preparation for revitalization. The Vacuum Oil BOA Nomination Study combines the energies put forth over the previous two-plus decades by both the City of Rochester and area residents towards the realization of a sustainable future for the Vacuum Oil site and the surrounding neighborhood. The following vision and goals will form the basis for future investments and activities at public and private levels, and presents a unifying approach to the revitalization of the Study Area.

1.4.1 A Vision for the BOA in 2020 and Beyond

A long term resident of the neighborhood describes the Vacuum Oil BOA neighborhood in 2031:

Just yesterday I was sitting on my front porch on Exchange Street with my good friend and neighbor talking about how things have changed over the past twenty years. It all started back in 2011 with an understanding between the City and our neighborhood that revitalization efforts would empower the people of this community and celebrate our unique culture and values. Standing shoulder to shoulder, we the residents and the leadership of Rochester held true to this simple tenant, built upon respect and trust.

Today, I watch children playing in the parks, people walking and riding their bicycles to the waterfront and not be concerned for their safety. I know that when my grandchildren come to visit, we can walk up to South Plymouth for lunch, go to church or get an ice cream and not pass derelict houses. I feel a sense of pride when I see the number of new families and owners who have moved into my neighborhood, renovating the old homes or building new ones on vacant lots. Many of these new homeowners were kids I watched grow up and reinvest in our neighborhood. Even more impressive, many of my neighbors work in the community and even own businesses that I shop in every day!

One of the greatest impacts to our neighborhood was the redevelopment of the former Vacuum Oil refinery property. For too many years that property dragged our neighborhood down. We were nervous at first when we heard someone was interested in redeveloping the property. However, the City kept us involved through the whole process, listening to our concerns and advocating

In 2031, the Vacuum Oil BOA will be:

- **An environmentally clean and sustainable neighborhood**
- **A safe place for residents of all ages and incomes**
- **A waterfront destination within the City**
- **A desirable place to establish a business**
- **A neighborhood that celebrates and shares its unique heritage**

for our recommendations. They even maintained the forested area and created enhanced open space areas so our residents and visitors can enjoy access to the river and wildlife that lives here year-round. Today, the redeveloped Vacuum Oil area has infused new investment in our community, providing needed jobs, housing opportunities and improved access to the Genesee River. What I like the most is how they tell the story of our history and culture in the design of the buildings, streets and landscaping.

I smile every time I think of the changes my neighborhood has experienced over the past twenty years. I am proud of the role I played in creating one of Rochester's most stable and sought after neighborhoods.

1.4.2 Goals and Objectives to Support the 2031 Vision

GOAL 1: FACILITATING NEIGHBORHOOD STABILIZATION AND EMPOWERMENT

Strong neighborhoods all have one thing in common, invested and engaged residents. When a sense of ownership in both the problem and solution are present, a community can transform itself while holding true to a set of common values. The Vacuum Oil BOA program will serve as a catalyst for neighborhood stabilization, defining the common values of the community and providing focused assistance for implementation. The community will be responsible for empowering the residents and business owners within the study area, rallying around the common cause of stabilizing and transforming the neighborhood.

- Empower residents to remain invested and engaged in the neighborhood.
- Maintain the continuity of neighborhood character.
- Strive to ensure housing options for all incomes and ages.

GOAL 2: ADVANCING ECONOMIC DEVELOPMENT AND JOB CREATION

Economic development in the Vacuum Oil BOA will require a mix of large and small scale redevelopment and reinvestment. It is essential to recognize that investment from outside the neighborhood will be required to advance the clean up and re-use of the former Vacuum Oil properties. However, this should not be the only focus for this study area; small scale and potentially resident driven revitalization is critical to this community. Importantly, a range of jobs and employment opportunities, including professions that result in a skilled labor force, are important to creating a sustainable workforce.

- Establish a realistic and achievable vision for the Vacuum Oil properties and collaboratively work to revitalize this area of the neighborhood.
- Encourage small scale business development to provide jobs and support the needs of residents and visitors
- Leverage the economic development potential afforded by our waterfront location.
- Maintain existing employers and encourage expansion where appropriate.

GOAL 3: IMPROVING OUR WATERFRONT EXPERIENCE AND RECREATIONAL RESOURCES

The Vacuum Oil BOA study area includes over 6,000 linear feet of waterfront, an ADA compliant trail system, current and future cross river linkages and a range of urban and natural experiences. The waterfront should be the recreational spine of the neighborhood. However, improvements to safety, interpretation, accessibility and connectivity along the waterfront are still needed. This includes consideration for how to extend the waterfront into the surrounding neighborhoods through thoughtful streetscape enhancements and neighborhood park design.

- Ensure clear and safe access to, and along, the waterfront.
- Conserve and improve open spaces along our waterfront.
- Maintain and improve recreational resources including parks, trails and bicycle facilities.
- Improve the condition and connectivity of our sidewalk systems.

GOAL 4: CELEBRATING OUR HERITAGE AND CULTURE

The Vacuum Oil BOA study area has a rich history, with links to the Civil War and Frederick Douglass and the abolitionist movement. Redevelopment of the former Vacuum Oil properties and waterfront should include opportunities to celebrate the unique story of this place. Just as importantly, it should serve to strengthen and ingrain the culture of our neighborhood, ensuring a cohesive sense of community.

- Educate the community on the unique heritage of the study area.
- Integrate historic interpretation through signage, architecture, landscape architecture and urban design throughout the study area.
- Define the culture of the community and ensure it is understood and celebrated.
- Improve local and regional awareness of the unique heritage and culture of the study area.

GOAL 5: ENCOURAGING STEWARDSHIP OF OUR ENVIRONMENT

The Vacuum Oil BOA study area is impacted by decisions and practices that had an adverse impact on the environment. The BOA affords a means to recognize and learn from these decisions in order to leave this community a better place for future generations. This area is unique in its urban setting, with extensive access to the waterfront, undeveloped lands and wildlife habitats. The natural features are part of the unique expression of place and quality of life for residents and should be protected.

- Encourage residents to get involved and stay informed regarding environmental conditions within the neighborhood.
- Remediate the Vacuum Oil site to allow for re-use and redevelopment where appropriate.
- Encourage remediation and redevelopment of all brownfield properties to return them to a viable use that has a positive impact on the neighborhood.
- Incorporate green infrastructure elements, both at a neighborhood and site specific level.

1.5 BOA BOUNDARY DESCRIPTION AND JUSTIFICATION

1.5.1 Summary Description

The original Vacuum Oil - South Genesee River Corridor BOA boundary from the Pre-Nomination Study followed the Genesee River from Ford Street to South Plymouth, yet only included the major vacant and industrial parcels along the River and Flint Street and excluded the surrounding residential neighborhoods. The Nomination Study recommends the extension of the western boundary line to include the South Plymouth mixed use corridor.

The proposed Vacuum Oil - South Genesee River Corridor BOA is bounded on the east by the Genesee River, on the west by South Plymouth Avenue, on the north by Ford Street, and on the south by the intersection of the Genesee River and South Plymouth Avenue. As shown in Map 3, the BOA is centered on the former Vacuum Oil Rochester Works site along Flint Street. This industrial area separates the neighborhood from the riverfront and negatively influences the PLEX community. The Erie-Lackawanna Pedestrian Bridge (to be completed in 2012) will provide access across the Genesee River to significant regional resources and destinations in the Southeast Quadrant, the U of R, and Strong Memorial Hospital.

1.5.2 Boundary Justification

NORTHERN BOUNDARY

Ford Street is a logical northern boundary for the BOA as the corridor represents a major thoroughfare and crossing point of the Genesee River south of Downtown Rochester. Ford Street is also a major boundary line within the Southwest Quadrant, separating Neighborhood Service Sectors 4 and 5, while also providing the limits for the PLEX and Corn Hill Neighborhoods. The character of the South Genesee River Corridor also makes a significant change at the Ford Street Bridge. North of the bridge the waterfront area is relatively open and accessible, with a generous swath of open space running parallel to Exchange Street and the river. South of the bridge, the waterfront becomes less open and more underdeveloped, with limited physical and visual access.

SOUTHERN BOUNDARY

Plymouth Avenue begins to traverse along the River's edge just south of Barton Street at the southern tip of the BOA Study Area. This 'pinch-point' is also a logical boundary that is consistent with the western boundary of Plymouth Avenue. Although not exactly coterminous with the limits of the PLEX neighborhood, areas south and west of Barton, Plymouth and Genesee Streets have no nexus with the core of the BOA and therefore are not included within the Study Area boundary.

WESTERN BOUNDARY

South Plymouth Avenue presents a strong physical, land use and community boundary within the Study Area. By extending the BOA boundary to include both sides of South Plymouth Avenue, the Study Area includes a complete and functioning neighborhood, with a strong residential core, a primary transportation corridor, an industrial and commercial center, and valuable waterfront land. Commercial revitalization of portions of Plymouth Avenue is directly tied to activities taking place within the residential neighborhood and along the waterfront.

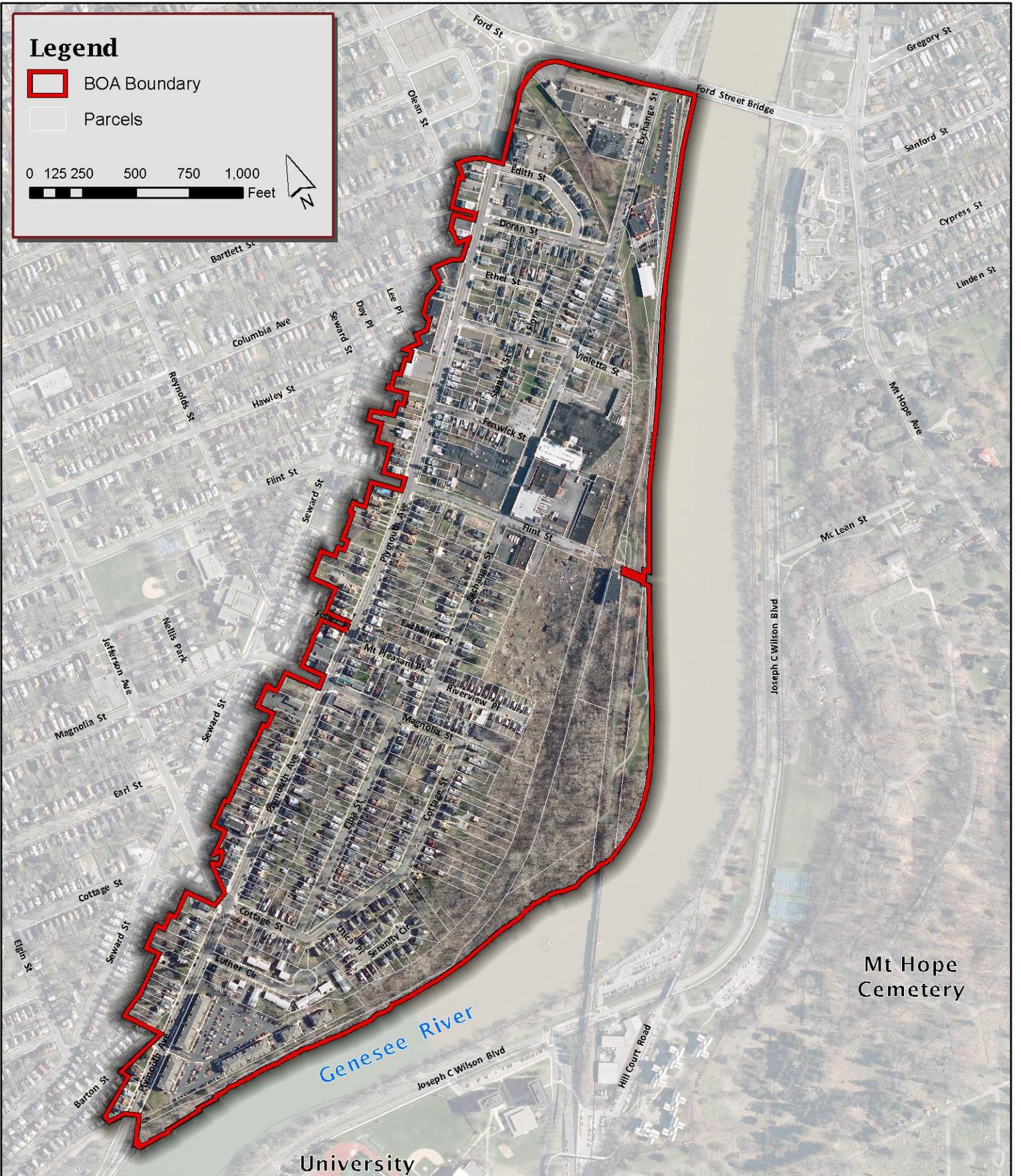
EASTERN BOUNDARY

The Genesee River is the strongest physical presence within the City, and is a physical barrier that separates the Study Area from other portions of the City.

Legend

-  BOA Boundary
-  Parcels

0 125 250 500 750 1,000 Feet



Genesee River

Mt Hope Cemetery

University of Rochester

City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
BOA BOUNDARY

MAP
3

This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

Map 3 of 20



SECTION 2: COMMUNITY PARTICIPATION PLAN

2.1 COMMUNITY PARTICIPATION PLAN

Community engagement and buy-in is imperative to the long-term successful implementation of the BOA Nomination Study. Community members, landowners, stakeholders, officials, and regional organizations must have a vested interest in the success of the plan, and, most importantly, must become partners in its implementation.

At the onset of the planning process, a Community Participation Plan (CPP) was created that outlined the methods and techniques used to engage the community throughout the course of the development of the BOA Nomination Study. Similar to previous planning and design efforts undertaken by the City, opportunities for public involvement were identified that range from general informational public meetings to small group working sessions. In addition, a project website offered continuous access to information and afforded all interested persons the opportunity to offer their perspectives.

The CPP included the following methods for engaging the community. The CPP can be found in Appendix A:

- Project Advisory Committee Meetings (Quarterly)
- Project Team Meetings (Monthly)
- Public Visioning Workshop
- Public Design Workshop
- Public Open House
- Stakeholder Meetings
- Neighborhood Outreach
- Project Website

2.2 ENLISTING PARTNERS

2.2.1 Project Oversight

The City of Rochester is being represented throughout the BOA process by the Division of Environmental Quality (DEQ). The DEQ is charged with facilitating the City's brownfield remediation and redevelopment projects, and has completed or in the process of completing over two dozen cleanup, investigation, monitoring and redevelopment brownfield projects. The DEQ has assigned a project manager for the City to provide direct guidance and supervision of the Nomination Study's development.

2.2.2 Consultation Methods and Techniques

The Nomination Study was preceded by the 2001 South Genesee Corridor Land Use Study conducted by Cornell University which began a dialogue with the community and project stakeholders on the future of the Vacuum Oil site. Community participation throughout the Nomination Study process was solicited through multiple meetings both open to the public and by invitation. The Advisory Committee provided

guidance for the development of recommendations that would take into consideration the needs of residents and property owners while being viable within and supportive of the surrounding neighborhood.

In addition to regularly scheduled Advisory Committee meetings, a series of public meetings and workshops provided opportunities for broad community input, while several stakeholder and neighborhood outreach meetings allowed for focused discussion on important issues facing the community.

PROJECT ADVISORY COMMITTEE

The Project Advisory Committee (PAC) was charged with providing feedback and guidance as the Nomination Study was developed. Quarterly PAC meetings were held to present information and gather feedback and input regarding project direction and visioning. The PAC meetings were also used as a forum to discuss and resolve comments resulting from public meetings, the review of project documents, advisory agency review, and coordination with other agencies. A complete listing of PAC membership can be found in Appendix A.

PUBLIC MEETINGS AND WORKSHOPS

Joint Public Forum Neighborhood Visioning Meeting

A Joint Public Visioning Forum for the BOA and Southwest Rochester Riverfront Charrette was held on October 5, 2011. The meeting included a summary overview of the BOA project and key findings to date, and a series of small group discussions on the following topics:

- Economic and Brownfield Development;
- Public Safety;
- Housing and Residential Neighborhoods;
- Open Space and Recreation;
- Youth and Senior Populations; and
- History and Waterfront.

A series of round-table discussions took place for each topic, with meeting attendees having the opportunity to rotate among three topic areas during the course of the one hour session. The comments received and findings from the meeting will be incorporated into the vision, goals and recommendations for the Study Area's revitalization. A meeting summary has been included in Appendix A for more information.

PLEX Neighborhood Revitalization Workshop

The City of Rochester and consultant team conducted a Design Workshop on March 21, 2012. The meeting included a summary overview of the project and the purpose of the design workshop, as well as an overview of the existing environmental and physical conditions present within the Study Area. Meeting attendees were asked to participate in a Community Character Survey, which asks the audience to rank a series of images on their level of appropriateness for the Study Area. The results from the survey are included in Appendix A. The audience was also broken into small working three groups to discuss future development and investment within the Study Area. A series of maps and designs were generated on paper, and a member of each small group was selected to provide a brief overview of their table's ideas at the end of the workshop. The results from the breakout groups are further detailed in Section 4.2 are included in Appendix A.

Preliminary Master Plan Presentation and Open House

On November 28, 2012, the City of Rochester and consultant team presented the preliminary Master Plan based upon the extensive analysis and public visioning process. The meeting provided a presentation of the master planning process, including a summary of the public's vision and pertinent findings from the inventory and analysis portions of the Study. The preliminary preferred master plan for 2035 was discussed as series of three phases which outlined key projects and assumptions necessary to facilitate redevelopment and revitalization within the Study Area. At the end of the presentation the audience was invited to ask questions and provide their thoughts and feedback on the conceptual master plan during a 1 hour open house session. The open house was divided into three separate stations, one for each phase, facilitated by a member of Bergmann staff.

Additional Public Meetings

Several additional public meetings have been held by the PLEX Neighborhood Association and other community groups outside of the BOA project. Monthly meetings were held with the PLEX neighborhood association during the planning process, and the feedback obtained from these meetings and the Southwest Rochester Riverfront Charrette contributed to the public participatory process.

NEIGHBORHOOD OUTREACH SESSIONS

In an effort to reach neighborhood residents directly, the project team participated in two regularly scheduled neighborhood meetings to introduce the BOA Planning process. On Tuesday, June 14th, 2011 the project team presented to the PLEX Neighborhood Group. The presentation included an overview of the project goals and objectives, preliminary findings and included a question and answer period. A second neighborhood-based meeting was held on Thursday, June 16th in conjunction with the monthly Southwest Common Council meeting. This presentation also focused on a brief overview of the project and identified opportunities for future community involvement in the planning process.

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SECTION 3: ANALYSIS OF THE PROPOSED BROWNFIELD OPPORTUNITY AREA

3.1 COMMUNITY SETTING

3.1.1 Historical Perspective

The Vacuum Oil BOA is located south of Center City Rochester along the Genesee River, and is most significantly associated with the former Vacuum Oil Rochester Works site (Site). The former Main Plant area was bounded by Exchange, Flint and Violetta Streets. The Vacuum Oil Company (VO) patented a process to refine crude petroleum under a vacuum, thereby improving the efficiency and effectiveness of generating refined products from crude oil. The Site history dates back to 1867, when the original vacuum still was constructed on Exchange Street. In 1869, the VOC Main Plant Site began importing crude oil from Pennsylvania along the Genesee Valley Canal until the waterway's abandonment in 1878, and later along the Western New York Pennsylvania Railroad until 1890. In 1890, VO ceased the refining of crude oil at the Main Plant Site, and began utilizing raw lubricants that received initial refinement at a site also owned by VO in Olean, NY. Raw materials were sent to Rochester by rail car for finishing, barreling, canning and shipping¹.

The VO Rochester Works Site grew and expanded at a considerable rate between 1870 and 1900, adding several buildings and refining facilities. During this period, a controlling interest in the Vacuum Oil Company was purchased by Standard Oil Company of New York in 1879, which led to significant investment. Additional facilities were constructed south of Flint Street, including a barrel manufacturing building and numerous tanks for the storage of finished products. In 1911, Standard Oil was broken into several companies and Vacuum Oil was again a separate company until 1931, at which time Vacuum Oil merged with Standard Oil Company of New York (Socony). However, by 1935 Socony-Vacuum had discontinued operations at the Rochester Works Site, and by 1938 the site was closed and several tanks and buildings were removed. Between the late 1930's and 1970, many of the properties had been sold off or subdivided, with the City retaining ownership of nearly all property from the bed of the former Genesee Valley Canal east to the Genesee River.

3.1.2 Population, Households and Families

Table 1 summarizes typical demographic and socioeconomic indicators for the Vacuum Oil BOA and makes comparisons to the Local Trade Area, the City of Rochester, and the Rochester Metropolitan Statistical Area where relevant. Total population in the Vacuum Oil BOA block groups has decreased by 9.43 percent from 2000 to 2010 and is expected to continue to decrease by another 2.57 percent through 2015. An overall population decrease of 11.76 percent from 2000 to 2015 indicates that the Vacuum Oil BOA is expected to decrease at a faster rate than in the Local Trade Area and City.

¹ Rochester Democrat and Chronicle, 1916

Similarly, the number of households in the BOA has decreased by 8.28 percent from 2000 to 2010 and is expected to continue to decrease by 2.37 percent from 2010 to 2015. The number of families has also decreased from 2000 to 2010, and this trend is expected to continue through 2015. With a decrease of 13.33 percent from the period between 2000 and 2015, the decrease in the number of families for the BOA is much more substantial than that of the MSA, which is projected to decrease by only 0.55 percent.

Average household size in the BOA has experienced a slight decrease from 2000 to 2010 and will likely remain constant at 2.24 from 2010 to 2015. Similarly, the City’s and MSA’s average household size has decreased by a small percentage from 2000 to 2010 and is expected to remain unchanged through 2015.

Table 1: Basic Demographic Information for BOA Study Area Census Blocks, 2000 to 2015

	2000	2010	2015	# Change 2000-2010	% Change 2000-2010	# Change 2010-2015	% Change 2010-2015
Population	2,194	1,987	1,936	-207	-9.43%	-51	-2.57%
Households	966	886	865	-80	-8.28%	-21	-2.37%
Families	465	416	403	-49	-10.54%	-13	-3.13%
Average Household Size	2.27	2.24	2.24	-0.03	-1.32%	0.00	0.00%
Owner Occupied Housing Units	254	251	244	-3	-1.18%	-7	-2.79%
Renter Occupied Housing Units	712	635	621	-77	-10.81%	-14	-2.20%
Median Age	32.4	34.6	35.5	2.2	6.79%	0.9	2.60%

Source: ESRI

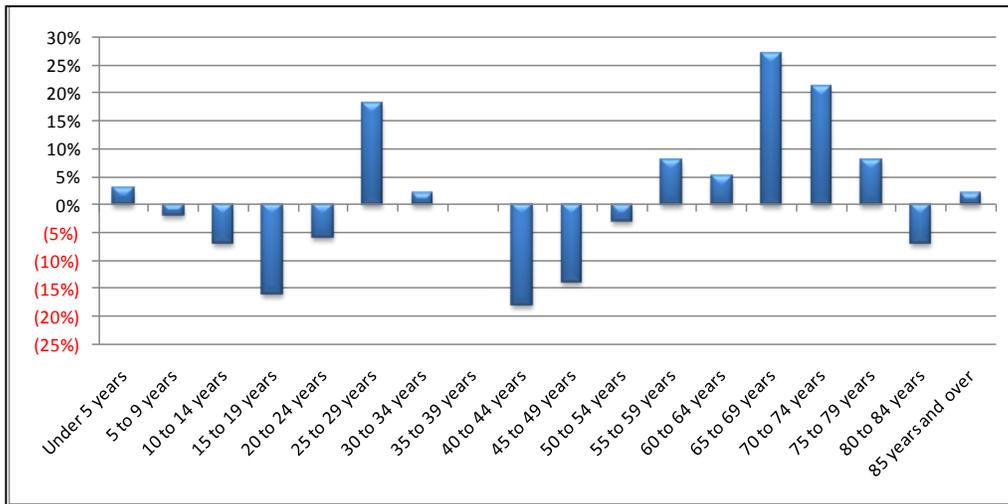
3.1.3 Housing

Given the decrease in total population, the number of households, and the number of families, it is no surprise that the BOA has also seen a decrease in occupied housing units from 2000 to 2010 and is projected to continue to experience this trend up to 2015. However, the decrease in occupied housing units appears to be primarily in renter-occupied housing units as opposed to owner-occupied units. In the BOA, only 3 (1.18%) owner occupied housing units were ‘lost’ from 2000 to 2010. During this same period, the BOA lost 77 (10.81%) renter-occupied housing units. Based upon generalized demographic trends the number of housing units in the BOA is projected to continue to decrease from 2010 to 2015, yet at a much more gradual rate of decline. There are several area-specific factors that call into question the validity of these generalized demographic projections. These include the effects of the University of Rochester’s continuing expansion, and the increasing trend for riverfront redevelopment south of the downtown core. These two factors may have a dramatic impact on the demand for housing within the BOA across several demographic age groups and will need to be considered during the development of recommendations for neighborhood revitalization.

3.1.4 Age

In addition to overall population growth of a region, a population’s age distribution is a strong baseline indicator of current and future demands for goods and services. Figure 2 indicates the projected change in age distribution in the City of Rochester from 2010 to 2015. A large shift is projected as the median age in the City continues to climb. The large decrease in ages 10-24 years is likely due to a continuing decline in the number of middle aged families within the City. A dramatic decline in the number of 40-49 year olds and an unequal increase in 50-59 year olds indicates that these families are leaving the City. The largest population shift in age groups within the City is projected to be an increase in the number of ‘Baby Boomers’ trend, which is typically defined as individuals born between 1946 and 1964. The high loss of youth and middle aged families is compounded by the increasing number of seniors, which is supported by a projected median age of 35.5 in the Vacuum Oil BOA in 2015, representing an increase of 2.60 percent from 2010. At 31 years, the Local Trade Area and City of Rochester will both have a younger population than the BOA and MSA by 2015.

Figure 2: Projected Population Change in the City of Rochester, 2010 to 2015



Source: EMSI

Key Findings: Age

1. The 65-74 year old group will grow by the largest percentage, indicating an increased need for services and housing alternatives aimed at seniors.
2. All age groups between 5-24 and 40-54 will decrease, indicating a decline in school age population and household incomes.
3. All age groups from 55-79 will increase, which also indicates a significant turnover in existing housing and a need for housing tailored to empty nesters, baby-boomers and seniors.

3.1.5 Income

Table 2 shows the median household income for 2010 and 2015 projections for the Vacuum Oil BOA, the Local Trade Area, the City of Rochester, the Rochester MSA, New York State, and the U.S. At \$19,565 the Vacuum Oil BOA currently has a very modest median household income that is expected to remain much lower than the other regions through 2015. In 2015, the median household income within the Vacuum Oil BOA will be \$23,683, slightly more than half that of the Local Trade Area.

Table 2: Median Household Income, 2010 to 2015 (Projected)

	2010	2015	# Change 2010-2015	% Change 2010-2015
Vacuum Oil BOA	\$19,565	\$23,683	\$4,118	21.1
Local Trade Area	\$32,539	\$41,643	\$9,104	28.0
City of Rochester	\$36,343	\$45,637	\$9,294	25.6
MSA	\$57,650	\$66,684	\$9,034	15.7
NYS	\$58,128	\$67,526	\$9,398	16.2

Source: ESRI

Table 2 also depicts the projected change in household income distribution in the Local Trade Area and the City of Rochester between 2010 and 2015. The percentage of households in the upper income brackets will increase significantly, while a decrease can be seen in the middle and lower income brackets. The largest increase in both the Local Trade Area and the City will occur in the \$50-75,000 income bracket, while the largest decrease for both areas will occur in the lowest income bracket of less than \$15,000. By 2015, the percentage of households with annual incomes of \$75,000 or more will increase by approximately 7 percentage points in both the Local Trade Area and the City, equating to approximately 24 percent of households. Some of this is due exclusively to inflation, and these changes likely reflect the rate of inflation and not actual growth in household income levels relative to other regions.

Key Findings: Overall Demographics

1. Within each of the geographies evaluated, the population is projected to decrease through 2015. Population loss is particularly acute in the BOA.
2. Over the past 10 years, there has been a significant decrease in the number of renter occupied units (over 10%, whereas the number of owner occupied units only dropped a few percentage points).
3. Though lower than New York State and the United States, median household income levels in the City of Rochester, Local Trade Area, and BOA are expected to increase at a faster rate than the larger comparative geographies.
4. The coexistence of college-aged residents and ‘baby boomers’ as ideal target populations for future development projects within the BOA should focus on the provision of flexible housing alternatives.

3.2 INVENTORY AND ANALYSIS

The inventory and analysis component of the Nomination Study is intended to provide a greater understanding of the existing conditions, opportunities, and reuse potentials specific to the Vacuum Oil BOA study area. The inventory and analysis is intended to lay the framework for specific recommendations for future land use and other implementation projects.

3.2.1 Existing Land Use

Understanding existing land use patterns is important when considering potential redevelopment scenarios for the Vacuum Oil BOA. Evaluating this information will assist in the identification of how proposed development can best fit into the existing urban fabric, and will indicate where regulatory changes might be required to realize the vision for the BOA Study Area.

There are a total of 517 parcels within the Study Area, occupying 125.2 acres of land. An additional 23 acres of land within the boundary is considered public street rights-of-way and are not provided a classification under the New York State Property Type Classification Code system (see Table 3). Land use within the Study Area is predominantly residential in use, with single- and multi-family homes and apartments occupying 49 percent of the land area.



The majority of Study Area residential streets have few vacant lots. The Study Area and its environs have recently received significant public and private investment, including multi-family and student housing within the northern and southern portions of the BOA.

More than a quarter of the study area acreage is considered vacant, while 21 percent is classified as commercial use. The majority of vacant land is located east of the former Pennsylvania Railroad right-of-way, with smaller vacant parcels interspersed within the neighborhood. Small-scale commercial uses are concentrated primarily along the west side of South Plymouth Avenue, while larger commercial and industrial activity is centered on the Flint/Exchange Street intersection. South Plymouth Avenue has a variety of commercial and retail uses, though numerous vacant storefronts currently exist. The commercial and industrial uses along Flint/Exchange Streets have had a blighting impact on the surrounding neighborhood, as much of the land sits underutilized or is generally vacant with minor improvements.

Land use along the Genesee River is largely undeveloped or vacant, with significant area available for additional housing, public open space and recreational lands.. An existing multiuse trail stretches the length of the Study Area's shoreline and connects the neighborhood to Center City Rochester and Genesee Valley Park.

Legend

 BOA Boundary

Land Use

 Residential

 Vacant

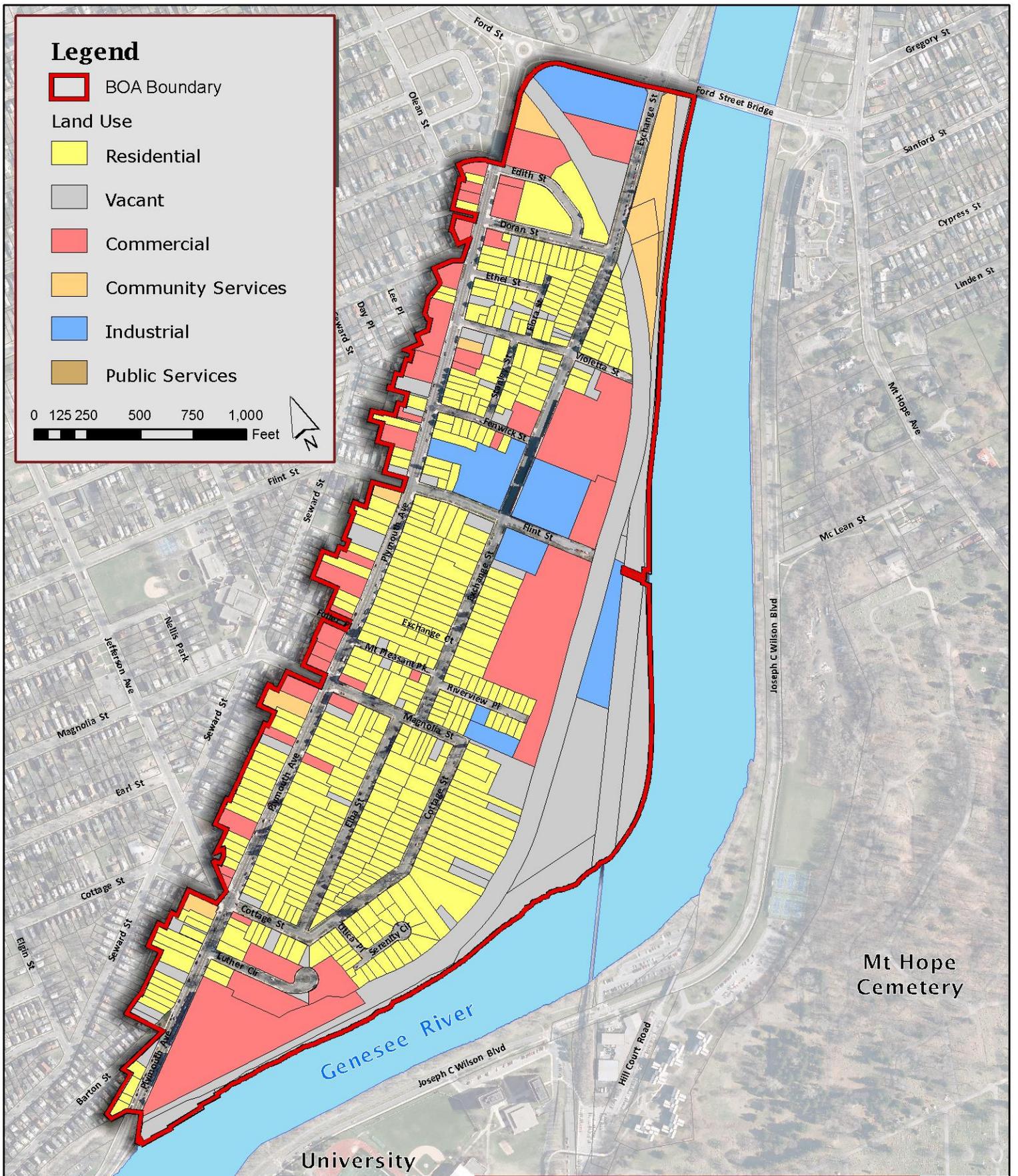
 Commercial

 Community Services

 Industrial

 Public Services

0 125 250 500 750 1,000 Feet



University of Rochester

Mt Hope Cemetery

City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area

LAND USE

MAP

4

This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

Map 4 of 20

Table 3: Existing Land Use

Land Use	Parcels		Assessed Value		Acreage	
	Total	Percent	Total	Percent	Total	Percent
Residential*	406	79	\$15,553,500	40	51.5	41
Vacant	54	10	\$834,550	2	33.1	26
Commercial	41	8	\$17,977,200	47	26.8	21
Community Services**	8	2	\$1,731,200	4	4.4	4
Industrial	7	1	\$2,405,800	6	9.3	7
Public Services***	1	0	\$1,000	0	0.1	0
	517	100	\$38,503,250	100	125.2	100

Source: City of Rochester Assessment Bureau

* Apartments are classified as commercial properties and are not included as residential uses.

** Community Services include uses such as schools, churches, government buildings and cultural facilities.

*** Public Services include uses such as public and private utilities, landfills and infrastructure.



The Genesee Riverway Trail south of Flint Street.



Recently constructed homes on Edith Street.



The former Vacuum Oil Works as seen from Exchange Street.



The intersection of Magnolia Street and S. Plymouth Avenue.

HOUSING UNIT DENSITY

The housing unit density for the Study Area is 7.8 units per acre, which is quite dense considering that 43 percent of dwelling units are classified as apartments.

Subtracting currently vacant land from the Study Area would increase the housing unit density to 9.5 units per acre.

At approximately 12 units per acre a neighborhood is approaching a residential density that can support a more self-sustaining commercial base of services and retail offerings.



The Study Area also includes several vacant, underutilized or abandoned properties, largely concentrated along the Flint Street/Exchange Street corridor and many of which are associated with the former Vacuum Oil refinery.

Key Findings: Land Use

1. Nearly half of Study Area is devoted to housing, indicating a high population density.
2. The South Plymouth corridor is largely residential with limited pockets of mixed use development.
3. Housing unit density is modest, with significant vacant land available for additional housing.
4. Genesee River waterfront area is currently underutilized with limited access for residents.
5. Industrial/commercial presence at Flint/Exchange Streets negatively impacts neighborhood and presents an opportunity for new development.
6. The nearest supermarket is greater than 1.5 miles away, classifying the BOA as a Food Desert according to criteria established by the USDA.

3.2.2 Existing Zoning

The BOA Study Area includes five of the City’s 16 zoning and overlay districts, with R-1 Low Density Residential being the most prevalent. As seen in Table 4 and Map 5, the Low Density Residential zoning district dominates the Study Area in overall geographic area. This district includes the majority of the vacant parcels along the Genesee River waterfront, and nearly all of the South Plymouth Avenue Corridor. Permitted uses within R-1 districts are limited to single-family attached and detached dwellings and other residential uses, with limited neighborhood services such as day care centers, parks and residential care facilities permitted as a special use. A small portion of the BOA is zoned R-3 High Density Residential, which permits single, two- and multi-family residences and other specified residential uses. The R-3 district currently occupies land recently redeveloped into new single-family attached and townhouse units as part of the Carlson Commons and Olean Heights development projects.

Table 4: Zoning Districts

Zone	Parcels	Acres	Buildings (SF)
Low Density Residential	492	104.4	1,042,179
Industrial	7	12.5	374,210
High Density Residential	6	4.1	82,108
Neighborhood Center	11	2.3	29,246
Open Space	1	2.0	0
	517	125.2	1,527,743

Two small pockets of C-1 Neighborhood Center commercial zoning occur along the South Plymouth Avenue corridor at Cottage Street and adjacent to Violetta Street. Neighborhood Center zoning permits low to medium density mixed use development which includes single family attached residential, retail and offices, with additional uses such as bars and restaurants permitted as a special use. The majority of intense commercial and industrial uses along the Flint/Exchange area are located in the M-1 Industrial district. The M-1 district is the second largest within the BOA and permits a wide range of commercial and industrial uses, with some flexibility allowed via the Limited Use and Special Use process to include other uses such as dwelling units, bars, restaurants and offices under controlled circumstances. The Open Space district occupies a small parcel within the BOA, but does not include land along the Genesee River. Current zoning districts within the BOA do not represent a significant constraint, as the Nomination Study will recommend zoning modifications that support preferred redevelopment alternatives.

Key Findings: Zoning

1. Low Density Residential zoning is pervasive and currently limits potential for mixed use development.
2. The area zoned Neighborhood Center is not sufficient to supply a critical mass of mixed use services.
3. Industrial zoning permits a broad range of activity that conflict with surrounding R-1 zone.
4. Current R-1 zoning classification along Genesee River does not fully leverage its potential for higher density housing and mixed use, water-enhanced development.

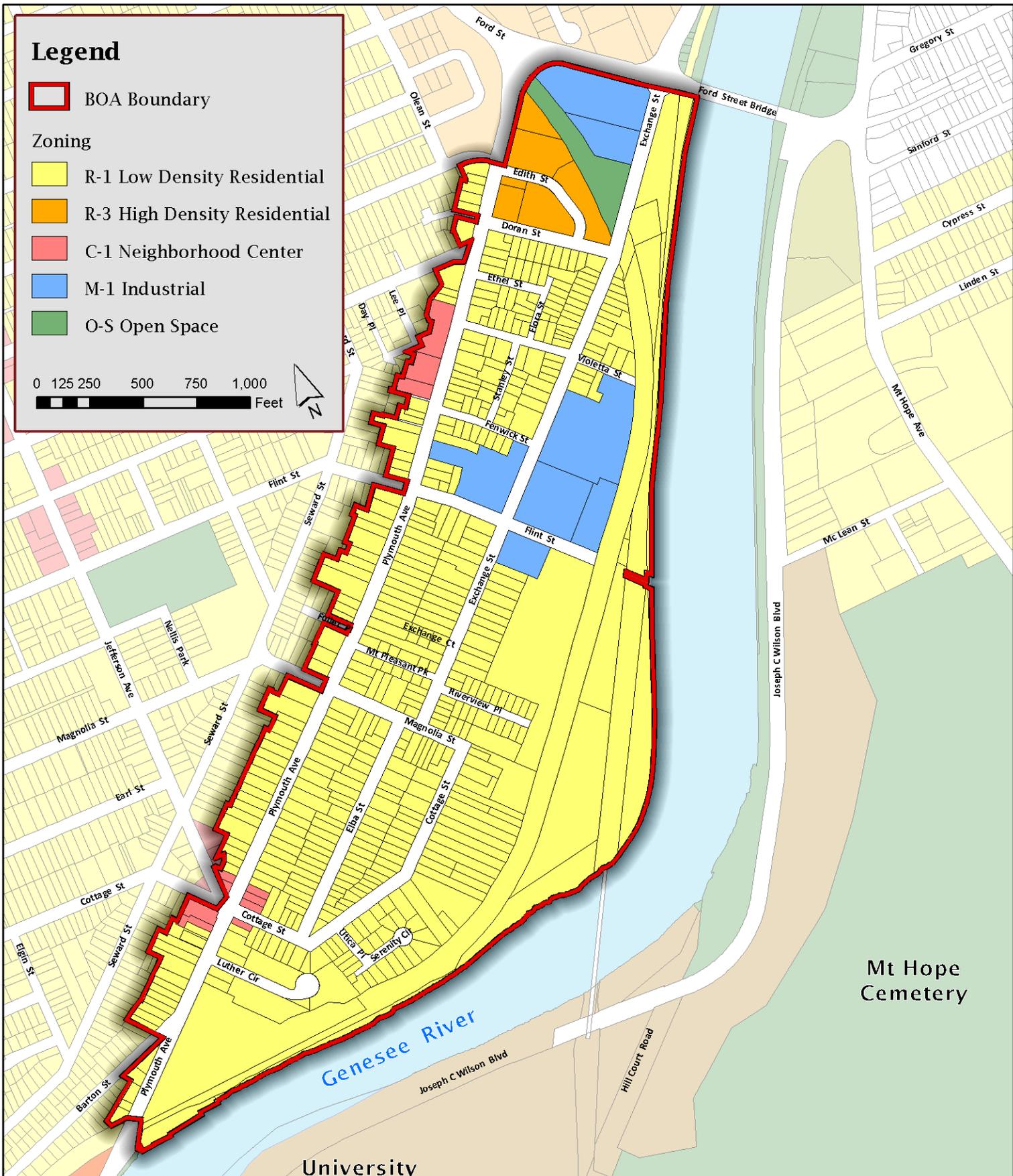
Legend

 BOA Boundary

Zoning

-  R-1 Low Density Residential
-  R-3 High Density Residential
-  C-1 Neighborhood Center
-  M-1 Industrial
-  O-S Open Space

0 125 250 500 750 1,000 Feet



University of Rochester

Mt Hope Cemetery

City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
ZONING

MAP
5

This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

Map 5 of 20

3.2.3 Brownfields

A primary objective of the NYS Brownfield Opportunity Area Program is to address communities that have been negatively impacted by the presence, or perceived presence, of environmentally sensitive sites. The presence of these sites often has notable impacts on a community, including depreciation of property values and the discouragement of investment in surrounding properties.

Although redevelopment of brownfield properties may be complicated, community-led revitalization plans can facilitate preparation of such sites for “shovel-ready” redevelopment by identifying steps towards remediation, marketing and recommending future uses that align with the community’s vision for the neighborhood. Active reuse of brownfields recognizes the intrinsic relationship between environmental sustainability and economic prosperity. Brownfield redevelopment benefits both individual property owners and the surrounding community. Brownfield property developers are eligible for tax credits and other financial and technical assistance that help make these redevelopment projects financially feasible. The surrounding community benefits from brownfield site investigation and cleanup, which encourages re-investment.

Community benefits become extremely tangible as projects move forward – properties are cleaned up and returned to beneficial and productive reuse. They are redeveloped to support the local tax base, and new uses serve as a catalyst for redevelopment on surrounding lands.

The benefits of brownfield redevelopment are tangible. They are realized by the community at-large and individual property owners who benefit from tax credits or other incentive programs.

In Rochester’s South Plymouth neighborhood the perception of contamination is very real. Within the BOA, a number of sites have undergone investigation and some level of remediation, and other sites remain with active industrial uses or remnants of active industrial uses and potential contaminants.

In order to better understand the environmental conditions within the study area and their implications on redevelopment, a preliminary Environmental Site Assessment (ESA) was conducted on each of the commercial, industrial and vacant properties located within the study area. Facility and site information maintained at the local, state and federal level was reviewed to identify preliminary site conditions. A total of 107 properties were identified as potential candidates for curbside assessments within the BOA boundary based on historic uses. Of those, 38 were identified as potential brownfields based on preliminary database research, as identified on Map 6. Collectively, these sites comprise 36 percent of total BOA parcel area. The research methods used to identify key sites and a description of all sites eligible for curbside assessments is included in Appendix D. Key brownfield sites and an overview of their history and current site conditions are highlighted in the following sections.

VACUUM OIL SITE

The Vacuum Oil Site is the largest and most significant brownfield within the BOA study area. The site, as addressed by this report, incorporates all or portions of 14 parcels (see Vacuum Oil Boundary inset). The Vacuum Oil Site was in operation from 1866 to 1936, after which several other industrial uses operated throughout the site. These uses have had significant environmental impact on the properties associated with Vacuum Oil as well as adjacent areas. The site contributes greatly to outside impressions of the neighborhood. Noted for historic heavy industrial use, various parcels associated with this site have undergone extensive environmental assessment since 1989 with two sites, 5 & 15 Flint Street, currently enrolled in the NYS DEC's Brownfield Cleanup Program (BCP; see inset map and sidebar). Previous investigations, reviewed as part of this effort, include:

- Hazardous Material Site Evaluation Flint & Exchange Street (1989)
- Site Investigation Report Former Vacuum Oil Site (2001)
- 950 & 984 South Exchange Street (2005)
- Historic and Current Site Conditions Report (2005)
- NYSDEC STIP Agreement (2008)
- Phase I ESA 5 Flint Street (2008)
- Phase I ESA 15 Flint (2008)
- Data Summary Package Phase II ESA 15 Flint Street (2008)
- Investigation Summary Report Flint and Exchange (2009)
- Investigation Summary Report (2009)

The following documents were prepared in association with these sites but were not available for review:

- Hazardous Material Site Evaluation Flint & Exchange Street (1989)
- Phase I ESA 5 Flint Street
- Roux RI Investigation Report for Flint and Exchange Streets

Brownfield Cleanup Program

*The **Brownfield Cleanup Program (BCP)** was established by the NYS DEC to assist property owners with overcoming the environmental, legal and financial obstacles that may hinder site reuse. The program aims to define the nature and extent of contamination, source areas, and assess impacts on public health and environmental resources. Data gathering and analysis facilitated by the program are intended to identify next steps to bring the site closer to reuse based on the current and anticipated future use of the site (i.e. development of a Remedial Work Plan). The program provides for a multi-track approach to remediation based on achievable cleanup levels. Taxpayers may be eligible for tax credits through the program, and additional funds are available if proposed redevelopment is consistent with the goals and priorities of the designated Brownfield Opportunity Area in which the site is located.*

Site Description

The primary Vacuum Oil Site was located at 5 and 15 Flint Street (Figure 3). The original footprint of the site, however, incorporated all or portions of 14 sites, including 22 Flint Street, 920 Exchange Street (later the Sears Warehouse), 925 Exchange Street, 950 Exchange Street as well as properties located along the Genesee River and former railway. At its largest, the refinery operated from Violetta Street, south and east to the Genesee River, and east of Exchange Street and Cottage Street to the river, approximately 40 acres (see inset). Since the time of its operation, this site has experienced other uses on portions of the overall site including a Sears Warehouse, a paper company, a printing company, a university, a scrap bailing company, government agencies, Foodlink, and a scrap yard, which ceased operations in 2007. The present site conditions of these sites are further discussed in the following sections.

History of Operation

In 1866, Matthew Ewing and Hiram Everest patented a vacuum distillation process to distill crude oil and produce kerosene. The process additionally produced a residual lubricant which was also patented, and through experimentation discovered an improved method for distilling petroleum. The Vacuum Oil Company was founded later that same year. During its early operations, the refinery primarily made kerosene, with the original oil used in finishing leather. The company was purchased by the Standard Oil Company of New York (SOCONY) in 1879, and by the late 1800s the refinery's primary products were lubricating oil for machinery and naphtha gas for street lighting.²

The site has an extensive history of documented industrial accidents, including:

- One tank car recovered from Genesee River (date unknown)
- Fire destroys wood still house (1874)
- Naphtha explosion, destroying shed (1878)
- Explosion inside still house (1882)
- 6,000 and 14,000 gallons of naphtha enter City sewer system causing four explosions (1887)
- Fire destroys warehouse (1889)
- Two buildings destroyed in fire (1900)
- Fire destroys large portion of works including a number of tanks (1901)

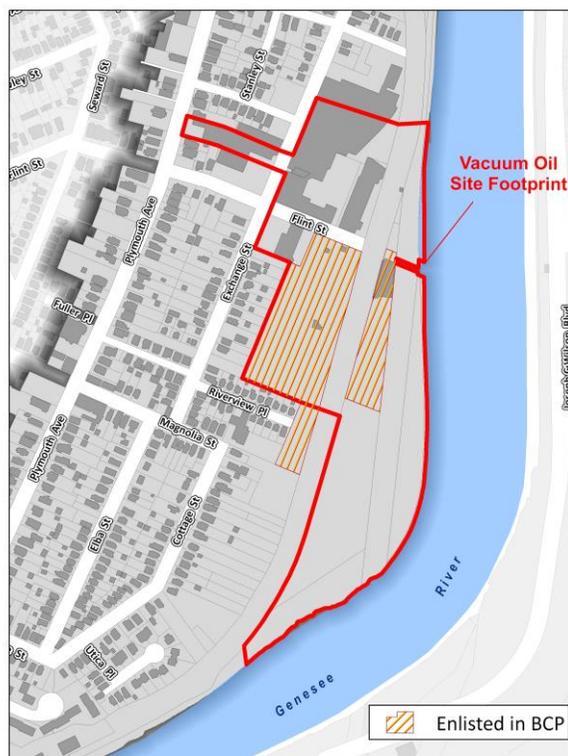


Figure 3: Vacuum Oil Site Boundary

² "Historic and Current Site Conditions Report", AMEC Earth and Environmental (2005).

By 1916, the site’s footprint was approximately 15 acres, which ultimately grew to 40 acres, and included a large facility, a barrel factory and a can factory. By the late 1920’s, however, it was no longer profitable to keep the Rochester Works site open and it closed in approximately 1936, then owned by SOCONY-Vacuum Oil (successor to Vacuum Oil). An overview of the use and reuse of key parcels that comprise the Vacuum Oil Site, as well as the current site conditions, is discussed in the following subsections.



Figure 4: Former areas associated with the Vacuum Oil Site and its operation. Site numbers are associated with the Vacuum Oil property descriptions beginning on the following page.

Vacuum Oil Property Descriptions (Figure 4)

(1) 15 Flint Street

The property located at 15 Flint Street was the former storage and operation area for the Vacuum Oil operations. Historically, aboveground storage tanks containing petroleum based product. The site also had a tank building, and several settling and condensing tanks were stored on-site. The main tank staging area was located at the northeastern edge of the property. A Phase I Site Assessment (2008) indicated the site was used as a scrap metal yard and for auto wrecking from 1940 to 2007, after which time it became vacant. Several structures containing lead-based paint were identified on-site. Subsequent sampling shows evidence of widespread VOC, SVOC, and PCB contamination in both the soil and groundwater, primarily concentrated at the northeast corner of the site where the tanks were staged during its operations.



(2) 5 Flint Street

The site at 5 Flint Street was the former barrel preparation and storage area, located east of the former canal/rail line and west of the Genesee River. The site is vacant, and is characterized by a three story building that was reportedly last used as a food warehouse. The building is constructed of fireproof brick and block, which would have been used in structures that housed furnaces or conducted incineration, though there is no evidence of this activity at the site. Debris (tires, metal cables, railroad ties and scrap materials) are known to be present on site. Initial subsurface investigations indicate industrial operations have contaminated both the soil and groundwater.



15 and 5 Flint Street are currently enlisted in the NYS DEC's BCP. Participation in the BCP makes the property owner eligible for tax credits following successful remediation and provides incentive for timely cleanup which poises the property for more immediate redevelopment. These tax credits are outlined in the New York State Department of Taxation's publication Tax Credits Available for Remediated Brownfields. Additional financial incentives are available if redevelopment is consistent with the goals and priorities outlined as part of the Brownfield Opportunity Area plan.

(3) 936 Exchange Street & 22 Flint Street

These properties were part of the Vacuum Oil footprint, after which Sears Roebuck and Company operated a warehouse and distribution facility (date unknown). Foodlink, a regional food bank, currently operates at the location. Foodlink is anticipated to discontinue its operation at the site in Fall 2011. Subsurface investigations did not include evaluation of this property. A Phase 1 ESA should be conducted if the nature of site use is to change.



(4) 920 Exchange Street

This site is currently home to Foodlink, and was also formerly a Sears Warehouse. The property was a major part of the Vacuum Oil Site with several tank buildings, a filling department, aboveground storage tanks, and a filter house. There is record of multiple spill events and abandoned drums at the site. Spill events have subsequently been closed. The site is currently vacant, however a large industrial building with loading docks and possible hydraulic tanks is visible from the right-of-way. Based on observations, it is likely that industrial operations at the site may have impacted site soil or groundwater. A Phase I and Phase II ESA would be necessary to identify any significant impacts if the site is identified for redevelopment.



(5) 950 Exchange Street

Site visits indicate this property is currently being used by Turn Key Operations. Several historic spill events, some of which have not been closed, have occurred on-site, impacting both soil and groundwater. A thick layer of petroleum contamination was encountered in the soils on the east end of the site, spanning approximately 25 feet by 180 feet at five feet below ground surface. In 2005, the site was evaluated to determine the costs associated with cleanup of existing contamination. Cost estimates were approximately \$250,000 covering further investigation, removal of underground storage tanks, insitu bioremediation, site restoration, confirmatory sampling, and final reporting. There is evidence of groundwater monitoring wells still present on the site, as well as drums located behind the building by the area of the loading dock.



(6) Former Genesee Valley Canal Right of Way and Rail Area

This area was used to facilitate Vacuum Oil’s product distribution while in operation prior to 1936. Between 1998 and 2000, a black petroleum material was discovered at the Northeast side of the Flint Street right-of-way opposite the entrance to the site. In addition, historic records indicate buried underground piping for naphtha and crude oil from the canal extending to Flint Street. Contamination is known to be present on-site. Today, the site is overgrown with large amounts of debris present in the canal bed, likely stemming from the former scrap yard located in the adjacent properties.



(7) Cottage Street

In 1992, sludge was encountered on the southeast portion of the former Vacuum Oil Site, located adjacent to the Genesee River. During NYS DEC’s preliminary evaluation of the site, between 400-500 tons of petroleum sludge were removed from this area. The property is currently vacant, however there was visual evidence of slag (fill) and yellow and red brick at the east end of the site, likely associated with Vacuum Oil operation and filling of the canal bed.



(8) 100 Riverview Place

The property located at 100 Riverview Place is located directly adjacent to the Genesee River. This site was the location of the Camp Fitz-John Porter Recruit Camp during the Civil War era. Historic operation of the Vacuum Oil Refinery impacted soil in the area, which was tested as part of the Phase II Environmental Site Assessment for 15 Flint Street. Subsequent site investigations at the site may include sampling of river sediment to identify whether the Genesee River was also impacted. Today, the site has been redeveloped as a park and has a commemorative marker noting the historic importance of the area.



History of Subsurface Investigations and Agreements

In 1989, the City of Rochester School District conducted a limited evaluation on an 11 acre portion of the site owned by the City. This investigation was intended to assess the suitability of the site for a new elementary school, but environmental conditions were unfavorable for development.

In 2001, the NYS DEC began investigation of 24 acres of the former Vacuum Oil Site. Between 400-500 tons of petroleum sludge were removed from the former rail yard which, today, is part of the Genesee Bike Trail (see inset map). Sampling indicated widespread semi-volatile organic (SVOC) contamination as well as contamination by Benzene, Toluene, Ethylene, and Xylene (BTEX) in all media tested (i.e. soil and groundwater). Testing also revealed the materials to be non-hazardous and, as such, the site was not recommended for inclusion in the NYS DEC's Inactive Hazardous Waste Disposal Program. In 2005, Day Environmental investigated the properties located at 950 and 984 South Exchange Streets. Four above ground storage tanks were buried at these contiguous sites between 1888 and 1940. Subsurface testing indicated petroleum contaminated soils, and a bioremediation agent was used in the cavity of the excavations as the recommended cleanup method.

Also in 2005, AMEC, on behalf of Exxon Mobil, prepared a site conditions report of the overall former Vacuum Oil site. The report provided a historical review of site operations and various environmental impacts that resulted from operation. In 2008, the NYS DEC issued a Stipulation Agreement to Exxon Mobil, the corporate successor to Socony. This agreement required submittal of a Work Plan detailing the nature and extent of contamination south of Flint Street, and at properties accessible to the City, namely 5 and 15 Flint Street. Also in 2008, Phase I Environmental Site Assessments were completed at 5 and 15 Flint Street by Stantec for the City. The 15 Flint Street report referenced prior reports citing the history of industrial accidents, subsurface investigations that revealed widespread contamination in both soil and groundwater, and noted several recognized environmental concerns (REC) on-site and off-site.

Overview of Select Contaminants Present On-site

Volatile Organic Compounds (VOC's) are emitted as gases and can be composed of a variety of chemicals. VOC's were typically used in household chemicals (i.e. varnishes, disinfectants and paints), and are found in fuel products. Chronic exposure to VOC's may have numerous health effects and some are known carcinogens.

BTEX is an acronym for benzene, toluene, ethyl benzene and Xylene which are compounds of VOC's. These compounds are found in petroleum derivatives, such as petrol, and exposure causes adverse impacts on the nervous system.

Semi-Volatile Organic Compounds (SVOC's) are chemicals that evaporate at higher temperatures than VOC's. As a result, contaminant flow may occur through volatilization, dissolution in water, and insoluble chemicals may adhere to soil particulates. SVOC's have been associated with carcinogenic and non-carcinogenic health impacts.

Polychlorinated Biphenyls (PCB's) are a type of SVOC common in mixtures known as aroclors found in oils used in electrical transformers. PCB's were banned from manufacture in the late 1970's but are still present in the environment due to their long life cycle.

A Phase II Environmental Site Assessment Data Summary package was also completed for 15 Flint Street in 2008 to address the RECs identified in the Phase I study and to better delineate the extent of contamination on the site. A total of 28 borings were advanced and 17 temporary wells installed. Soil samples were taken at 27 locations and each of the groundwater wells were sampled. The presence of Non-Aqueous Phase Liquid (NAPL), or hazardous organic material, was confirmed at the site. Various off-site concerns were referenced.

NYS DEC Cleanup Objectives

The BCP Legislation sets forth the requirements for soil and groundwater cleanup objectives. These standards were developed to be contaminant-specific and based on a site's current, intended or anticipated future use.



Sampling indicated the NYS DEC Cleanup Objectives were exceeded for metals, volatile organic compounds (VOCs), SVOCs in both soil and groundwater. PCBs were encountered in areas where asbestos containing material was present. “Hot spots”, or areas of contamination, were found in areas known as the Former Storage/Operations Area, Former Canal/Rail Area and the Former Barrel Preparation/Storage Area. These areas will require further investigation to determine remedial actions (Figure 5).

In 2009 Roux Associates, on behalf of Exxon Mobil, completed an investigation associated with Flint and Exchange Street properties suspected of being contaminated by past Vacuum Oil operations. The results of this investigation have not been reviewed.

Figure 5: Areas requiring further investigation.

In 2009, O’Brien & Gere provided a 3rd Party Review for the City of the 2009 Roux Report. The following is a summary of their general findings:

- A recommendation to perform soil vapor intrusion studies at occupied buildings on or adjacent to 5 Flint Street.
- Confirmation of removal activities of large amount of soil contamination associated with the northwest section of 15 Flint street.
- Confirmation of a buried pipe associated with 15 Flint Street.
- Priority pollutant metals at levels exceeding TAGM in deeper soils were not linked to any documented condition.
- A recommendation to install bedrock wells to characterize groundwater.

Recommendations from the 2009 O'Brien & Gere 3rd Party Review included:

- Identification of wetlands and utilities.
- Incorporation of all historical findings.
- Permanent well installation and overburden and bedrock elevations.
- Low flow sampling techniques for groundwater monitoring should be utilized.
- Subsequent investigation associated with the Former Storage/Operations, Canal and Rail, and Barrel Prep and Storage Areas.
- Further define nature and extent of Undeveloped, Bicycle Path, and former Canal and Rail areas.
- Sediment sampling associated with Genesee River.
- Test pitting associated with the former canal walls.
- Continued investigation on City-owned properties where constituents have been confirmed in excess of NYSDEC Cleanup Objectives.

Key Findings from Previous Studies

Previous studies recommend the following actions as next steps:

- Supplemental sampling of “hot spot” areas;
- Installation of permanent wells for long-term monitoring;
- Delineation of area of wetlands and utilities; and
- Collection and sampling of sediment from the Genesee River.

Based on contamination discovered in proximity to the Genesee, sampling sediment from the Genesee River would indicate the extent of impact to the river in those areas. Additionally, several hot spot areas include properties not currently incorporated in the BCP. Supplemental sampling and installation of permanent wells would enable long-term monitoring to better understand contaminant plumes present throughout the footprint and address any data gaps that exist.

Finally, several properties not included as part of prior subsurface investigations are likely to have been impacted by the Vacuum Oil property and other subsequent uses. High levels of VOC and SVOCs along Flint Street indicate the likely presence of contaminants on properties north of Flint Street. Specifically, the Foodlink site and adjacent properties should be evaluated to determine the extent of petroleum impact to the north and to better delineate the contaminant plume.

Groundwater Contamination

Groundwater samples collected as part of the Phase II ESA exceeded the NYS DEC Cleanup Objectives for both VOCs and SVOCs, which were detected in the majority of the samples. Several groundwater wells also exceeded applicable standards for metals and polychlorinated biphenyls (PCBs). Groundwater contamination is primarily concentrated on the main portion of the site at 15 Flint Street. VOCs were also detected in high concentrations in the southern portion of the site near the Genesee River. The extent of

groundwater contamination that exceeds NYS DEC standards is depicted on inset maps #1 and #2 on the following page.

Soil Contamination

High concentrations of VOCs and SVOCs were evident in soil samples collected throughout 15 Flint Street. VOCs were detected throughout the site, and 15 samples exceeded NYS DEC Cleanup Objectives. These samples were primarily located on the 15 Flint Street site. SVOCs were detected and exceeded cleanup objectives throughout the site footprint, and at locations off-site. Portions of the Vacuum Oil site where VOCs or SVOCs were detected and exceeded NYS DEC standards are illustrated on inset maps #3 and #4 on the following page.

Several additional properties, owned by the City, have been identified by the City of Rochester to possibly be incorporated into the BCP in the future. These properties, depicted in Figure 6, include:

- 1 Cottage Street
- 13 Cottage Street
- 31 Cottage Street
- 69 Cottage Street
- 75 Cottage Street
- 100 Riverview Place
- 1315 South Plymouth Avenue
- 102 Violetta Street
- 7 Flint Street
- 846 Exchange Street
- 940 Exchange Street

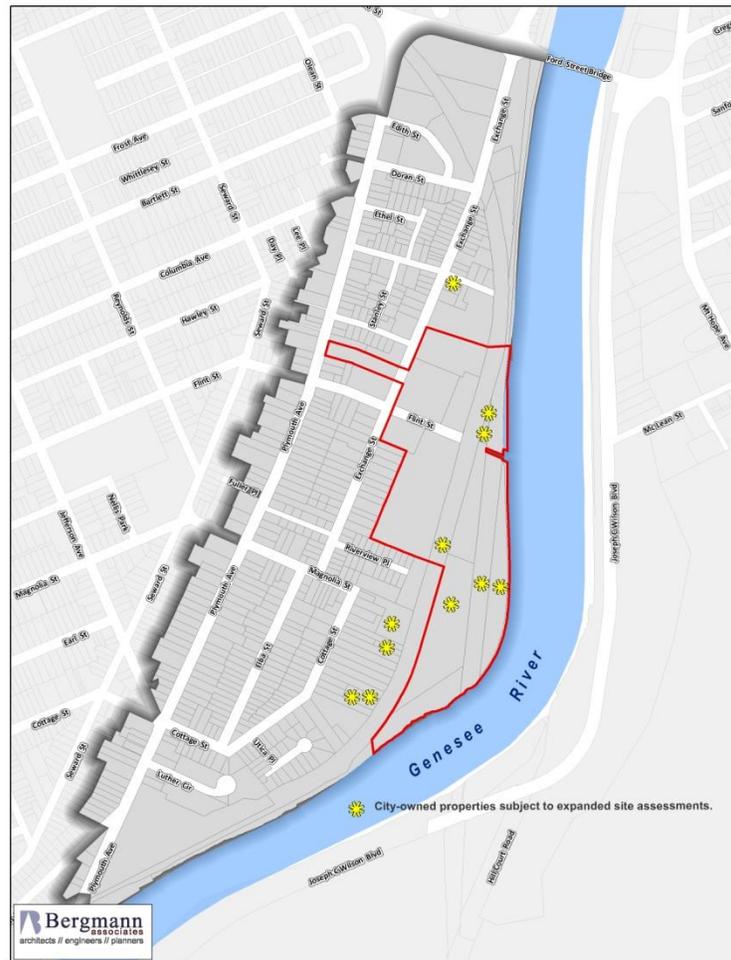
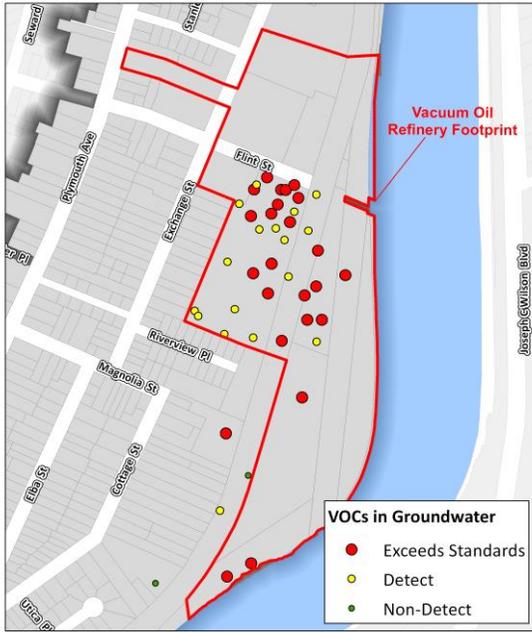


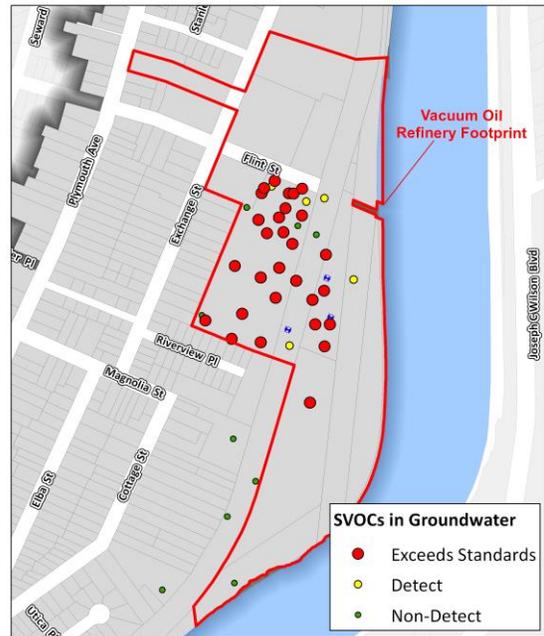
Figure 6: Asterisks indicate properties that may be subject to future participation in the BCP based on preliminary findings.

Note: All properties are currently owned by the City of Rochester

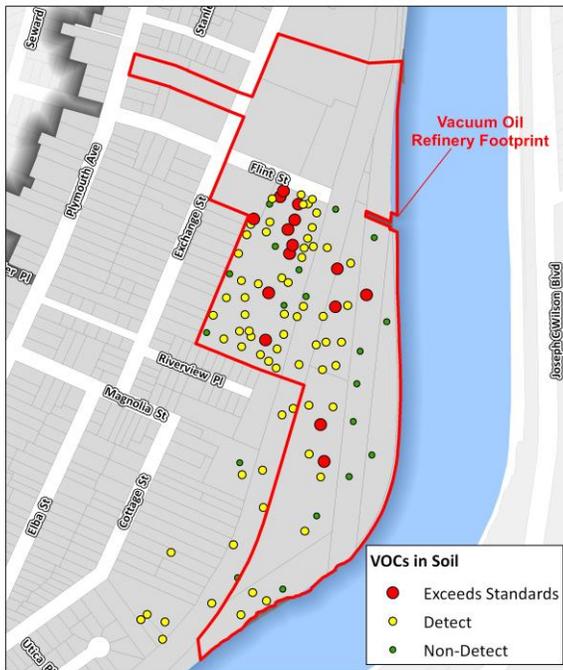
Inset Maps 1 through 4 illustrate sampling points for both groundwater and soil contamination. The presence of contamination (see sidebar on page 36) indicates remediation strategies will need to be identified before site reuse is viable (e.g. soil removal or instituting engineering controls).



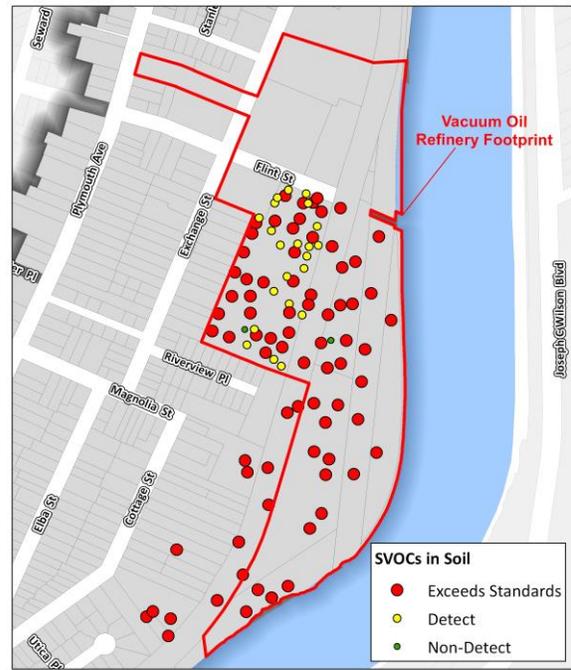
Inset Map #1: Volatile Organics detected in Groundwater



Inset Map #2: Semi-Volatile Organics detected in Groundwater



Inset Map #3: Volatile Organics detected in Soil

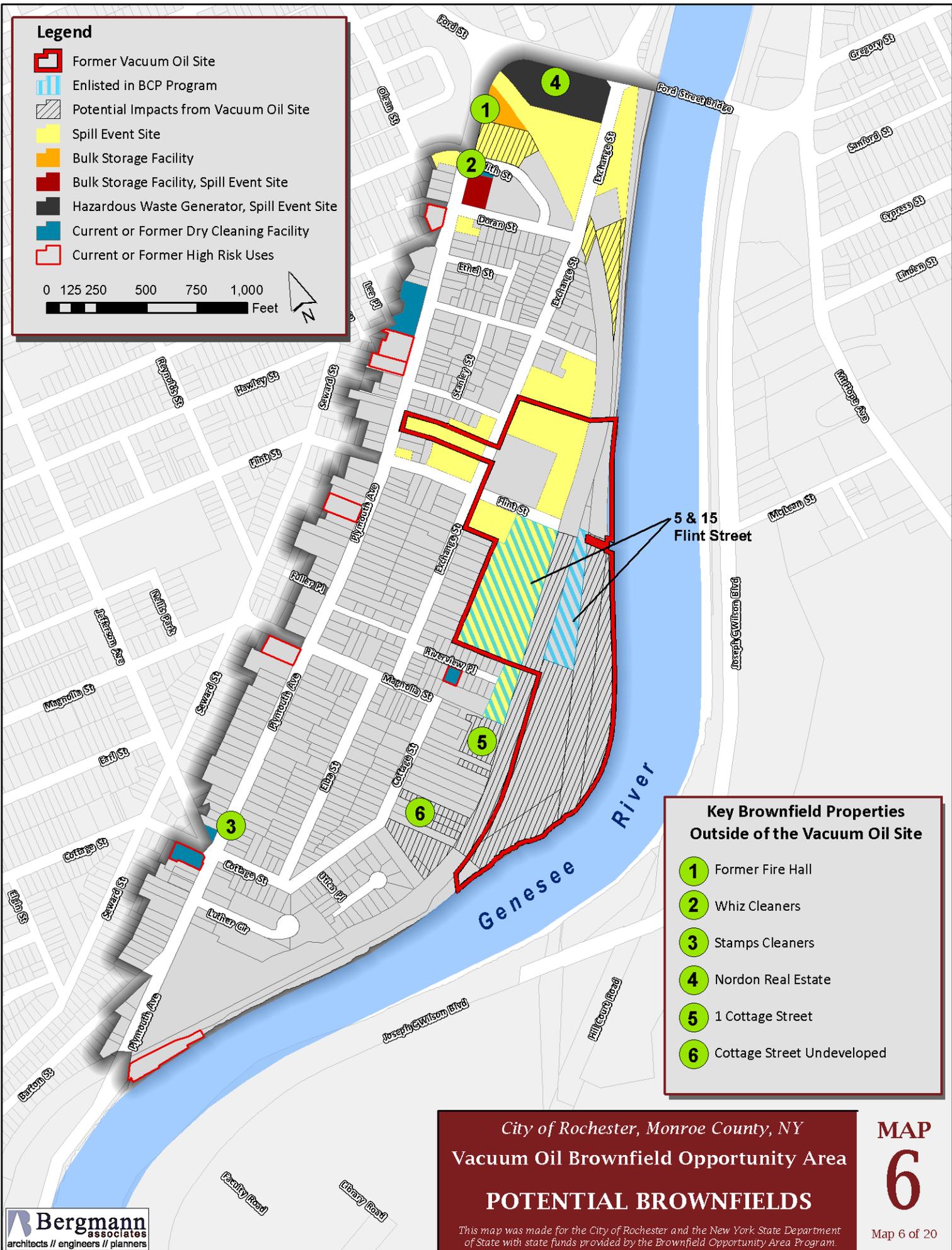


Inset Map #4: Semi-Volatile Organics detected in Soil

Legend

-  Former Vacuum Oil Site
-  Enlisted in BCP Program
-  Potential Impacts from Vacuum Oil Site
-  Spill Event Site
-  Bulk Storage Facility
-  Bulk Storage Facility, Spill Event Site
-  Hazardous Waste Generator, Spill Event Site
-  Current or Former Dry Cleaning Facility
-  Current or Former High Risk Uses

0 125 250 500 750 1,000 Feet



5 & 15
Flint Street

- Key Brownfield Properties Outside of the Vacuum Oil Site**
-  Former Fire Hall
 -  Whiz Cleaners
 -  Stamps Cleaners
 -  Nordon Real Estate
 -  1 Cottage Street
 -  Cottage Street Undeveloped

City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
POTENTIAL BROWNFIELDS

This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

MAP
6
 Map 6 of 20

ADDITIONAL KEY BROWNFIELD AND VACANT SITES

Although Vacuum Oil is the most notable brownfield located within the study area, several other properties with rigorous commercial and industrial uses were identified through desktop research and site visits. These sites represent those likely to have contamination based on past and present land uses and that may pose as favorable redevelopment opportunities after additional investigations and/or cleanup. Sites identified as suspect brownfield properties include active and former gasoline stations, properties with storage tanks and chemical storage and those located on suspected waste sites. Key brownfield properties are discussed further below.

(1) Former Fire Hall - 632 South Plymouth Avenue

The Former Fire Hall is a vacant site owned by the Rochester Housing Authority. The parking area shows signs of subsurface borings, indicating prior environmental investigations at the site. There was additional visual evidence of a former dispenser, and a pad-mounted transformer was evident on the north side of the building. The site is currently listed in the NYS DEC's database as an unregulated Petroleum Bulk Storage facility. Additional site investigations would likely be necessary prior to redevelopment.



(2) Whiz Cleaners - 676-680 South Plymouth Avenue

The 0.11-acre Whiz Cleaners Site was the location of a former dry cleaning facility and is currently owned by the Rochester Housing Authority. The site is currently used as a small parking lot with no structures present on-site. Prior use as a dry cleaning facility and current use as a parking lot indicate the potential of environmental contamination on-site.



(3) Stamps Cleaners - 1155-1159 South Plymouth Avenue

The Stamps Cleaners site contains an existing structure formerly used as a dry cleaning facility with small retail and upper floor apartments. The structure was recently renovated in 2012. Based on its status as a former dry-cleaning facility, further environmental investigation would be warranted prior to site redevelopment.



(4) Nordon Real Estate - 691 and 711 Exchange Street

Nordon Real Estate currently owns and operates large industrial buildings on these sites with visible steel tanks and loading docks in the rear. Tank vents were also observed from the roadway. The sites have a history of spill events during which oil impacted the soil; both spill events have been closed. Based on observations, site activities suggest that future spills may occur. An Environmental Site Assessment would be necessary to better identify any historic environmental impacts prior to redevelopment of the site.



(5) 1 Cottage Street

This property is located adjacent to 15 Flint Street and is currently undeveloped. It has been noted that drums have been found on-site, which likely stored petroleum based products. A property owner located to the northwest has been maintaining a portion of the property and is utilizing that portion for backyard space. Sampling conducted on-site as part of the 15 Flint Street Phase II investigations indicate petroleum soil and groundwater contamination. The City of Rochester has identified this site as a candidate for inclusion in the BCP.

(6) Undeveloped property along Cottage Street - 69 and 75 Cottage Street

These properties are contiguous undeveloped parcels located immediately west of the Vacuum Oil footprint. Both properties are owned by the City of Rochester and are being considered for inclusion in the BCP. Sampling indicates soil contamination on surrounding properties. Inclusion of these parcels in the BCP could help address data gaps and better delineate the extent of petroleum related contamination.

Key Findings: Sites of Environmental Concern

1. The Vacuum Oil Site, consisting of 14 properties, is the most significant brownfield within the study area.
2. Properties located at 5 and 15 Flint Street have known contamination in both the soil and groundwater. Although these sites are actively involved in the BCP, many of the other properties located within the Vacuum Oil Site also have known contamination.
3. Additional investigations will be necessary to identify a remedy, address data gaps, and assess the extent of impact on the river.
4. Operation of the Vacuum Oil Site is likely to have impacted properties located to the northeast of Flint Street. Subsurface investigations will be necessary to determine the extent of impact on properties not evaluated as part of the 5 & 15 Flint Street subsurface investigations (i.e. the Foodlink and adjacent properties).
5. Successful redevelopment of the Vacuum Oil site in particular has the potential to serve as catalyst for redevelopment throughout the BOA.
6. The study area is characterized by many commercial and industrial properties that are classified as potential brownfields. However, several of these have active uses that support the tax base within the area.
7. Viable businesses, whether on a brownfield or not, should be supported throughout the planning process while encouraging sustainable practices and solutions.

3.2.4 Vacant and Underutilized Sites

There are a total of 148 vacant and underutilized properties on 51.3 acres within the BOA, accounting for 29 percent of Study Area parcels and 41 percent of the land area, not including public rights of way (See Table 5 and Map 7). Of the total vacant and underutilized properties, 54 are vacant parcels with limited to no improvements on 33.1 acres of land. The City of Rochester is the largest landholder of vacant property within the BOA, controlling 27 parcels on 26.5 acres of land. The remaining 93 parcels are mostly small or undervalued single-family properties and comprise 18.2 acres of land. Of these properties, 29 contain vacant and/or abandoned structures according to data from the City of Rochester and site visits performed in summer 2011. Underutilized properties also include parking lots and other commercial properties with a low floor-to-area ratio, which indicates a small structure on a large lot that could likely be developed more efficiently.

Table 5: Vacant and Underutilized Sites

	Parcels	Public Ownership		Total Acres
		Parcels	Acres	
Vacant Land	54	27	26.5	33.1
Underutilized Only	65	3	0.35	13.3
Underutilized with Vacant Structure	29	3	0.25	4.9
Totals	148	33	27.1	51.3

DETERMINING UNDERUTILIZED PROPERTIES

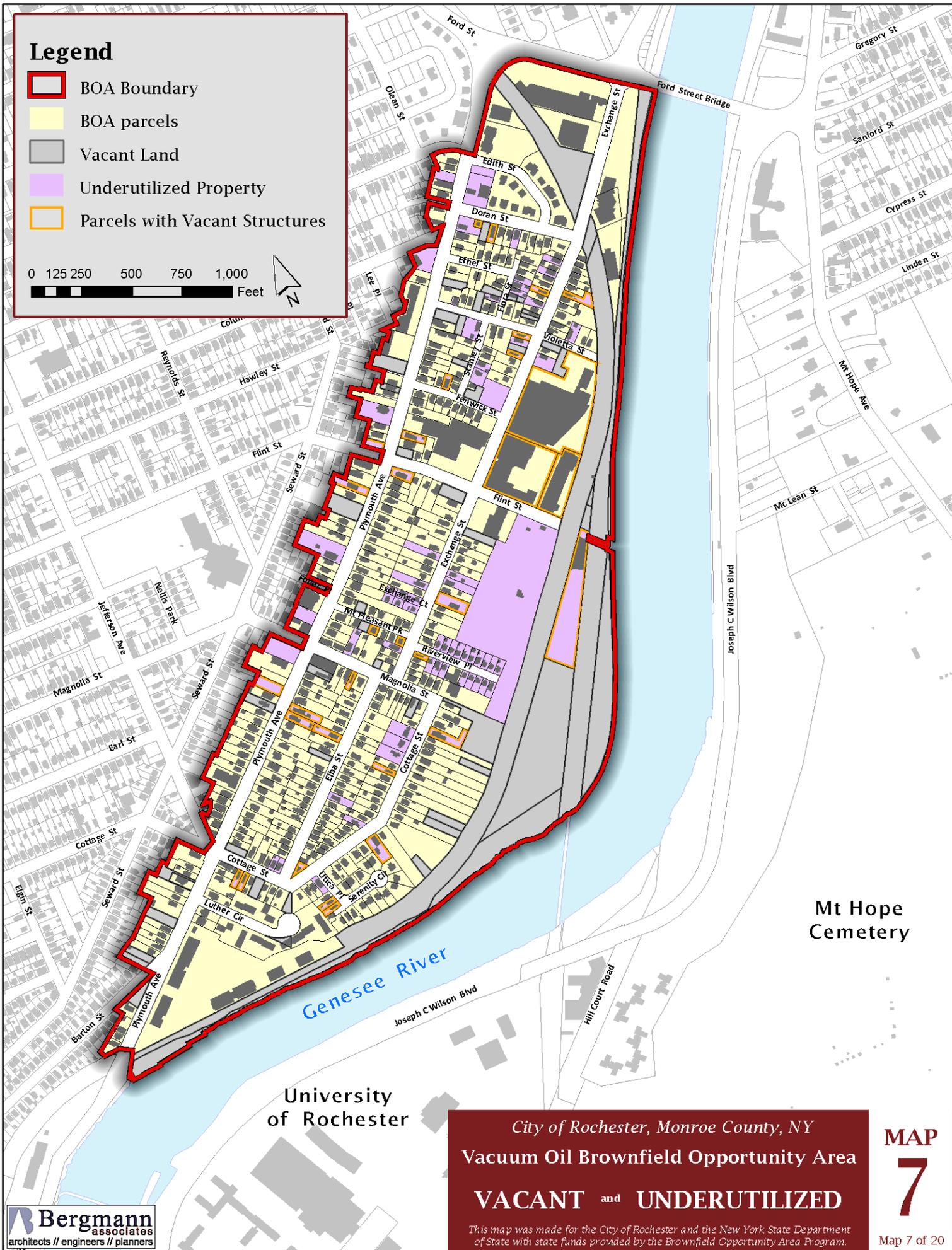
Underutilized properties were determined based upon three key factors: building square footage; value of improvements; and present status.

Residential properties are classified as underutilized if the structure is less than 960 square feet in size, or the per-square-foot assessed value of the property is less than \$12.50. These figures represent one standard deviation below the median for the Study Area.

Commercial properties with a Floor to Area Ratio (FAR) of less than 0.20 are considered underutilized, which includes properties used as commercial surface parking lots and commercial properties one standard deviation below the median for the Study Area.

Legend

- BOA Boundary
- BOA parcels
- Vacant Land
- Underutilized Property
- Parcels with Vacant Structures



City of Rochester, Monroe County, NY
 Vacuum Oil Brownfield Opportunity Area
VACANT and UNDERUTILIZED
 This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

MAP
7





Figure 7: Primary Underutilized and Vacant Sites

As seen in Figure 7 above, the largest area of vacant or underutilized properties are the three primary redevelopment sites east of Exchange Street (1) and along the Genesee River between Magnolia Street and Flint Street (2 and 3). This area includes large parcels and abandoned transportation corridors under both public and private ownership. A significant collection of vacant or underutilized properties are also located in the area bounded by South Plymouth Avenue, Exchange, Fenwick and Doran Streets, which is an area that has struggled with substandard housing conditions dating back to the 1980s (4).



Parking lots, such as the lot at the corner of Exchange and Fenwick Streets, are considered underutilized land (left). Parcels with no improvements, such as the lot at the corner of Exchange and Flint Streets, are considered vacant (right).



Parcels with improvements but no active use, such as the former Sears warehouse, are considered underutilized (left). Mt Pleasant Park (right) has transformed an otherwise vacant property into a beautiful oasis in the neighborhood.

Key Findings: Vacant & Underutilized Sites

1. The City of Rochester controls over 50% of vacant and underutilized properties.
2. The largest underutilized parcel is the privately-held 5.5-acre site at 15 Flint Street.
3. 80% of vacant and underutilized properties are residential uses on 23% of the land.
4. If developed to the current neighborhood density (9.5 du/ac), existing vacant land could provide over 300 additional housing units pending sufficient market demand.

3.2.5 Strategic Sites

The Vacuum Oil-South Genesee Brownfield Opportunity Area has several sites of strategic importance to the future revitalization of the PLEX neighborhood and the South Genesee River waterfront. The 17 strategic sites as depicted on Map 8 include 95 properties covering 46 acres that, either separately or in tandem with other sites, have the highest potential to act as catalysts for renewal and investment within the Study Area. The environmental background of these sites has been discussed in greater detail within section 3.2.4 Sites of Environmental Concern. Therefore, only a brief summary of the strategic importance and ownership of these sites will be described below.

- 1. 632 South Plymouth Avenue (public):** The former City fire station sits at the gateway to the Study Area, and is among the larger parcels along South Plymouth which improves its redevelopment potential.
- 2. 715-719 and 780 Exchange Street (public):** The two properties include Exchange Street Playground and lands across Exchange Street, offering the potential to extend the park south to a terminus at Violetta Street and connect to the Genesee River waterfront.
- 3. Doran Street, Flora Street, Violetta Street and Ethel Street residences (private):** The block between Doran Street and Violetta Street includes the BOA's most significant pocket of decline, covering 59 parcels on 5 acres. This site represents a significant opportunity to expand high quality, affordable owner-occupied housing within the BOA, similar to the recent successful redevelopment activities along Edith Street and Olean Street.
- 4. 761-793 (private), 801-811 (private), and 815-819 (public) South Plymouth Avenue:** This site includes public and private properties associated or adjacent to the existing strip plaza south of Columbia Avenue. The three parcels on 1.4 acres offer a notable redevelopment opportunity for retail uses with excellent visibility along well-traveled South Plymouth Avenue.
- 5. 12 Fenwick Street and 887 Exchange Street (private):** The half-acre site includes two vacant and underutilized properties that represent an opportunity for complementary mixed-use development adjacent to the former Vacuum Oil site.
- 6. 925 Exchange Street (private):** Canfield and Tack is a stable, thriving business within the Study Area. However, were the company to relocate in the future, this 2-acre site would have the potential to support a substantial mixed use development complementary to the character proposed for similar areas adjacent to the former Vacuum Oil site.
- 7. 950 and 965 Exchange Street (private):** These two properties anchor the southern portion of the Flint/Exchange intersection. Their future redevelopment will play a significant role in the character and urban form of the Study Area's central vehicular and wayfinding node.
- 8. 846-920 Exchange Street (private) and 91 Violetta Street (public):** These properties include the former Sears Warehouse site, the adjacent 4-story masonry structure and several small lots at the corner of Violetta Street. The 4-acre site represents a significant opportunity for redevelopment with excellent physical and visual access to the Genesee River waterfront.

9. **936 Exchange Street (private):** The former Foodlink building is currently vacant and offers the potential for adaptive reuse from warehouse space to a mixed-use development at the gateway to the Genesee River waterfront.
10. **22 Flint Street (private):** Similar to the property at 920 Exchange Street, this site has the potential for a strong connection to the waterfront.
11. **15 Flint Street (private):** This property is the single largest contiguous parcel with redevelopment value within the BOA Study Area.
12. **1315 South Plymouth Avenue (public):** As a portion of the former Genesee Valley Canal owned by the City of Rochester, this parcel represents a linear corridor bisecting the former Vacuum Oil refinery and should be included as part of larger redevelopment efforts to improve connectivity to the River.
13. **1315 S. Plymouth Ave., 100 Riverview Place, 102 Violetta St., 7 Flint St. & 940 Exchange St. (public):** The five (5) vacant parcels cover over 10 acres of prime waterfront lands and are owned by the City of Rochester, which could expedite their utilization as part of a broader revitalization plan for the Study Area.
14. **5 Flint Street (private):** The structure on this site is the closest to the waterfront within the BOA, and also has excellent views downstream towards downtown Rochester; these factors make this property highly valuable for adaptive reuse or redevelopment.
15. **13 Cottage Street (public):** This 4-acre wooded site owned by the City of Rochester has been undeveloped for a significant period of time. Its size, ownership status and location adjacent to the former Vacuum Oil site make it highly valuable for redevelopment as public open space that links future mixed use development with the Genesee Riverway Trail.
16. **1, 31, 69 & 75 Cottage Street (public):** These parcels are suspected of being contaminated by activities associated with former Vacuum Oil operations and the City is considering these sites for inclusion in future site assessment funding requests.
17. **Luther Circle (public):** The existing public housing on Luther Circle is dated and has been considered for redevelopment in the future, creating a significant opportunity to expand high-quality housing options for seniors within the Study Area.

A further description of how these properties fit into potential redevelopment master plans is discussed in greater detail in Section 5.0 BOA Master Plan.

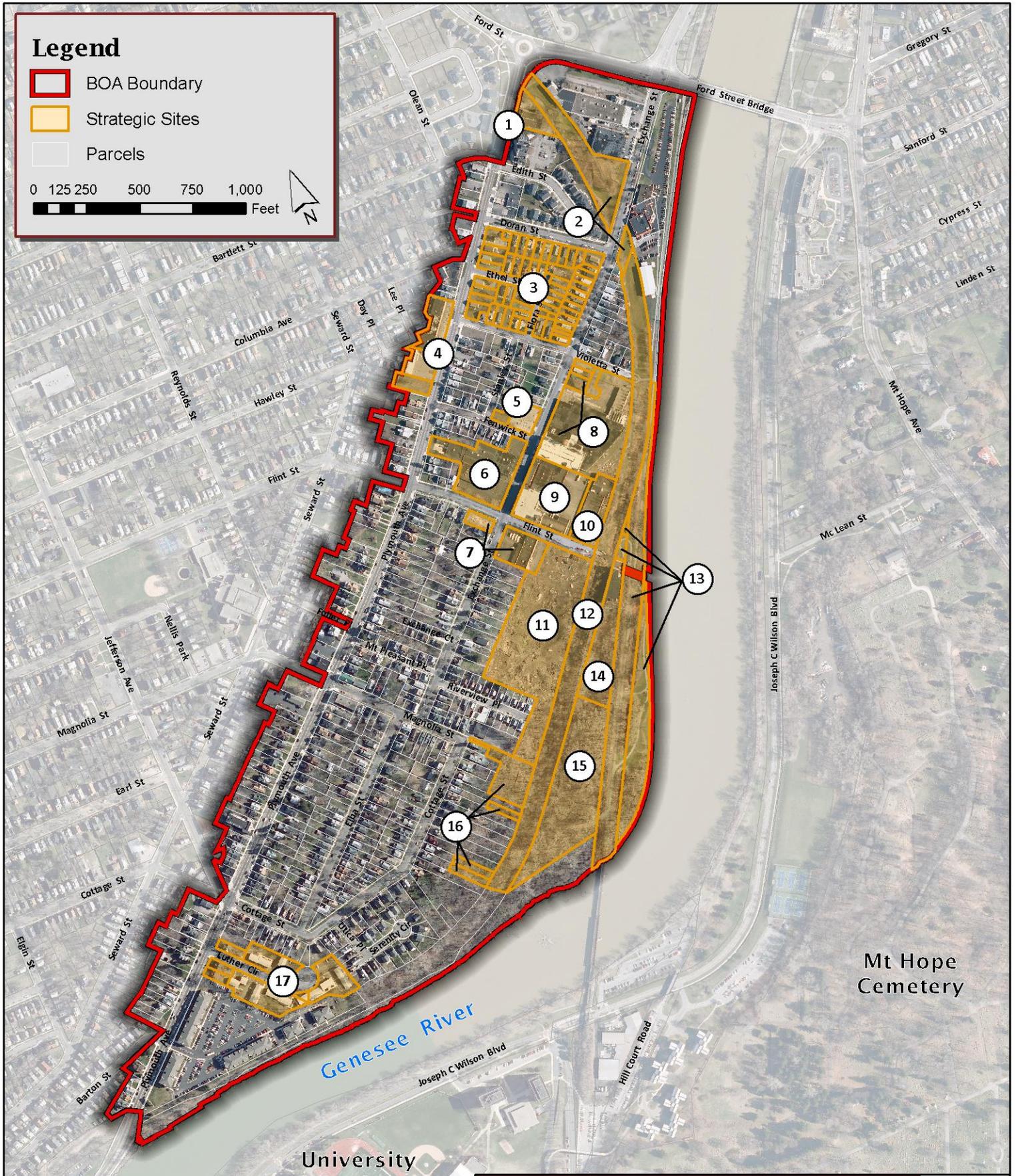
Key Findings: Strategic Sites

1. The private ownership of the majority of strategic sites will require close coordination and a detailed land assembly strategy to facilitate redevelopment.
2. Strategic sites include approximately one-third of the BOA's waterfront, representing significant opportunities to increase public access to the Genesee River.
3. The environmental status of vacant lands within the footprint of the former Vacuum Oil refinery represents an important unknown, yet these sites are also a significant opportunity for new investment within the neighborhood.

Legend

-  BOA Boundary
-  Strategic Sites
-  Parcels

0 125 250 500 750 1,000 Feet



City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
STRATEGIC SITES

MAP
8

This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

Map 8 of 20



Map designed by Bergmann Associates, Inc.

3.2.6 Land Ownership Patterns

Understanding how property ownership relates to future development opportunities along the Genesee Riverfront will be necessary when considering and identifying future projects and land uses. Specific projects may be more easily implemented and directed on lands owned by public entities. However, engaging private property owners throughout the planning process is critical to developing an agreed upon vision that will spur continued land owner cooperation in the revitalization process.

Engaging property owners and public agencies throughout the planning and visioning process is critical to the revitalization of the BOA Study Area.

Map 9 and Table 6 indicate there are four public entities with a controlling interest in 56 properties within the BOA, representing 29 percent of the total property area within the BOA. The majority of City of Rochester lands are classified as vacant; the public control over vacant lands will improve the speed with which redevelopment can take place. The majority of City holdings are former transportation corridors along the Genesee River, a portion of which have been dedicated as Park land for use by the Genesee Riverway Trail. A total of 151 housing units are controlled by public entities within the BOA, the majority of which are owned by the Rochester Housing Authority on Luther Circle.

Table 6: Public Land Ownership

Owner	Parcels	Acres
City of Rochester	37	28.0
Rochester Housing Authority	15	4.3
Rochester Urban Renewal Agency	2	0.4
State of New York	2	4.0
Totals	56	36.8

New York State controls only four acres of land within the BOA. However, this narrow strip follows the entire length of the Genesee River within the Study Area, requiring enhanced coordination with the State Office of General Services Real Estate Planning and Development (REPD) office for access and development along the

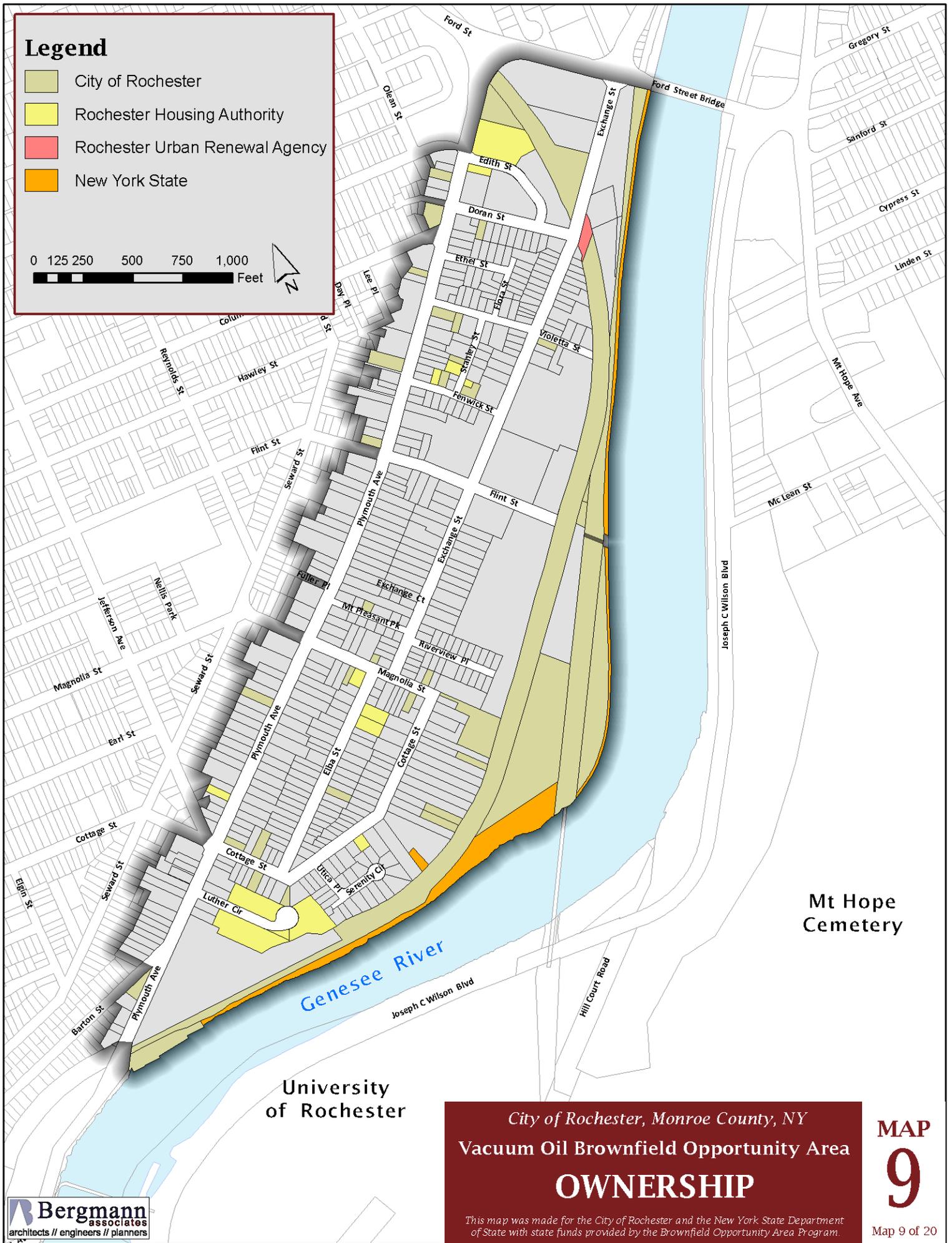
river’s edge. The REPD provides all real estate services within the State, including negotiating public or private space for agency use, managing the sale of state surplus lands and properties, and issuing easements, licenses and permits for public or private use of uplands and lands under water. The development of any waterside infrastructure, such as docks or promenades will require coordination and approval by this State office.

Key Findings: Ownership

1. Public control of 90 percent of all vacant land within the BOA should speed redevelopment activities.
2. 41 percent of public properties are considered potential brownfields.
3. The entire Genesee River corridor is bounded by lands in public control which should allow significant opportunities for public access to the waterfront.
4. Close coordination with NYS will be required to redevelop riverfront lands.

Legend

- City of Rochester
- Rochester Housing Authority
- Rochester Urban Renewal Agency
- New York State



University of Rochester

Mt Hope Cemetery

City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
OWNERSHIP

MAP
9

This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

Map 9 of 20



3.2.7 Parks and Open Space

There are several parcels of land within the BOA representing public and private open space, much of which functions as informal, passive recreation space. As depicted on Map 10, the only formal recreational spaces within the Study Area are walking trails, a small playground, and the Genesee Riverway Trail. There are no additional programmed activities, open fields or sport courts within the BOA. The Genesee Riverway Trail roughly parallels the Genesee River along the entire length of the BOA. The trail is accessible from the sidewalk network along Violetta Street and also from a switchback trail at the end of Flint Street. However, the Flint Street access point has no formal connection to the street sidewalk system, and residents are forced to traverse a severely deteriorated segment of the roadway between the trail and Exchange Street.



The rehabilitation of the former Erie-Lackawanna Railroad Bridge created a pedestrian linkage across the Genesee River to the University of Rochester.

The character of the Genesee Riverway Trail between Flint Street and the Riverview Commons student housing is heavily enclosed by vegetation and is a significant distance from adjacent development or structures. There are numerous open views of the Genesee River and expansive views north to Center City that are notable and worthy of preservation within the park-like setting. In some instances, the visual and physical isolation of this trail segment impacts the user’s sense of safety. The trail is now connected across the Genesee River to the University of Rochester campus by the Erie-Lackawanna railroad bridge, which increases connectivity, usage and ultimately safety of the corridor south of Flint Street.

The nearest programmed recreational destination adjacent to the Study Area is the Flint Street Community Center (FSCC) which is two blocks west of South Plymouth Avenue. The FSCC provides a full range of year-round recreation activities for area residents, including an outdoor pool, recreation fields, sport courts, playground, and organized game, education, and skill development activities for children, families and adults. The FSCC facility is a significant recreational and social resource for the BOA Study Area, and can be accessed from Flint Street and Magnolia Street. In addition to public recreational facilities, a small private garden/park on Mt Pleasant Park has been developed and maintained on private land for use by area residents. The passive recreation space functions as a large community flower garden, with seating and stone pathways that encircle the lot.

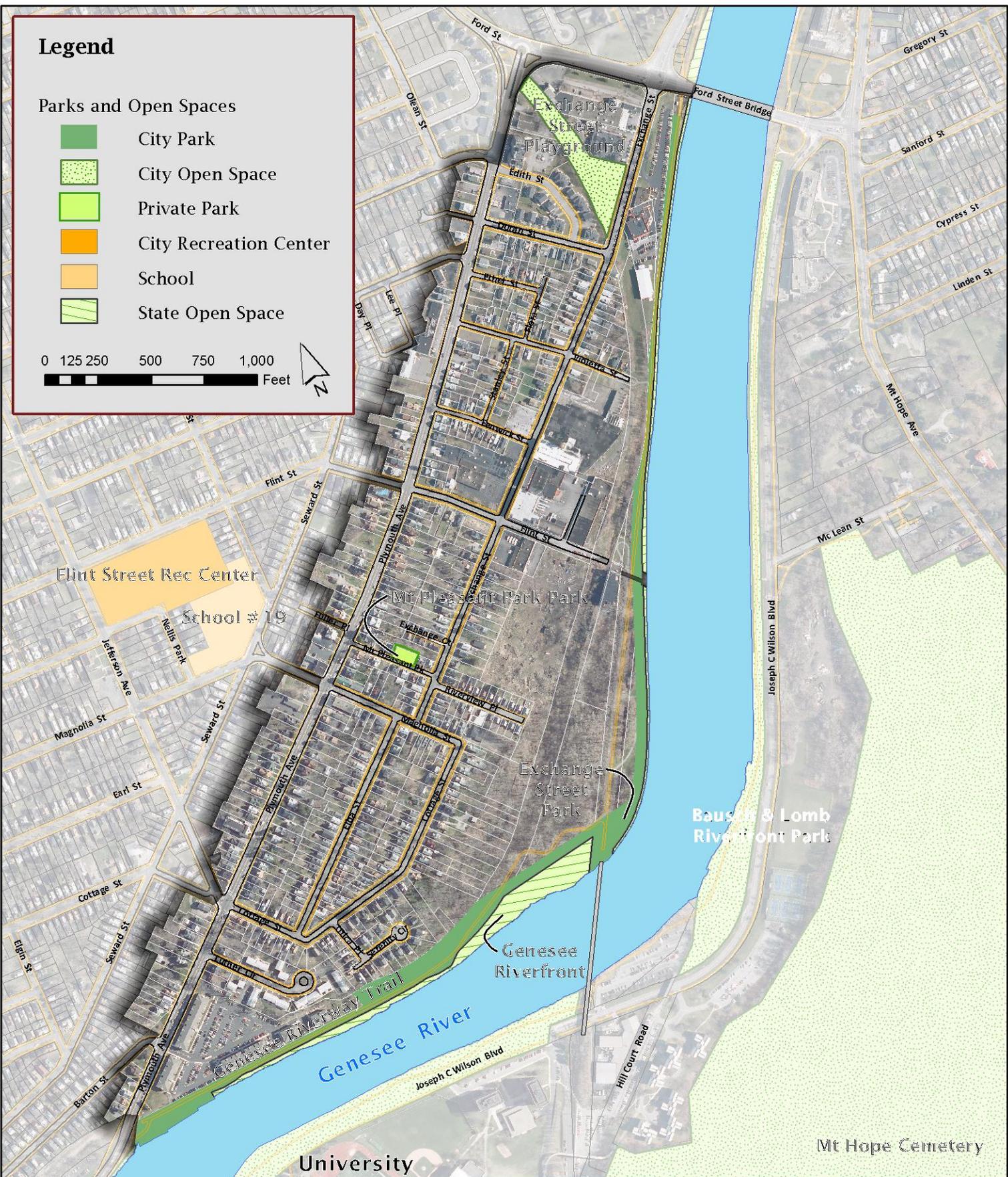
Key Findings: Parks and Open Space

1. The BOA lacks formal, dedicated park space to meet the needs of the neighborhood.
2. Access to the Genesee Riverway Trail is insufficient from area street and sidewalk networks.
3. Safety along the Genesee Riverway Trail continues to be an issue.

Legend

Parks and Open Spaces

-  City Park
-  City Open Space
-  Private Park
-  City Recreation Center
-  School
-  State Open Space



City of Rochester, Monroe County, NY
 Vacuum Oil Brownfield Opportunity Area
PARKS and OPEN SPACE
 This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

MAP
10
 Map 10 of 20

3.2.8 Building Inventory

Building information was compiled for potential brownfield sites to identify significant structures that may be incorporated into the master plan and revitalization strategy for the neighborhood. Site Profiles were generated for each site, describing existing physical and environmental conditions and are included as Appendix D. Map 11 illustrates the siting of the key structures, which are discussed below.

A. Former Vacuum Oil Site - The former Vacuum Oil Site includes all or portions of six properties with existing structures. These properties include 5 Flint Street, 15 Flint Street, 22 Flint Street, 920 Exchange Street, 925 Exchange Street and 950 Exchange Street. Some of these properties have been redeveloped to support active commercial or industrial uses.

A-1 5 Flint Street - This property is privately owned and has a three-story concrete building, which was constructed in 1930. The building is approximately 11,000 square feet in size on a 1.6 acre lot and is currently identified as vacant. This site is currently part of the NYS DEC's Brownfield Cleanup Program, and is discussed further in Section 3.2.3.

A-2 15 Flint Street - The property located at 15 Flint Street has one small, one-story brick building (approximately 1,000 square feet) located along Flint Street and is privately owned. According to data maintained by the City, the building was constructed in 1950 and is located on a 5.6 acre site and is currently being maintained by a caretaker. The site is currently vacant, and is part of the Vacuum Oil BCP program. The environmental concerns associated with this site are discussed further in Section 3.2.3.

A-3 22 Flint Street - This property is currently owned and operated by the Foodlink Foundation. The site includes a light industrial building approximately 25,500 square feet in size that was constructed in 1930. The building is located on 0.93 acres. Foodlink currently uses the site for storage, but will be vacating the site in Fall 2011.

A-4 920 Exchange Street – This property is part of the Vacuum Oil and Sears Warehouse site. The building is approximately 144,160 square feet and extends over two parcels. The building is a vacant industrial building with loading docks at the rear.

A-5 925 Exchange Street – This property is currently owned by Canfield & Tack, Inc. There is one building on site, constructed in 1970, which is approximately 42,190 square feet in size.

A-6 950 Exchange Street – Based on field observations, this property appears to be in use by Turn Key Operations. One steel industrial building (11,550 square feet) constructed in 1965 is located on this 0.78 acre lot. There is evidence of prior environmental testing throughout the site.

B. Midtown Printing and Graphic (700 Exchange Street) - One 16,270 square foot building constructed in 1940 is present on-site and is currently in use by the Church of Love. Previously, the site was used as a laboratory by Columbia Analytical to process environmental samples, and also was a former auto repair shop. Aboveground storage tanks are known to have been historically present onsite.

- C. Easy Food Market (684-700 South Plymouth Avenue)** - The Easy Food Market is currently an active Sunoco fuel station with one 3,250 square foot building used as a convenience store. The building is privately owned and was constructed in 1986 on the 0.44 acre site.
- D. Stamps Cleaners (1155-1159 South Plymouth Avenue)** - This is the site of a former mixed-use building that housed a dry-cleaner, store, and apartments. The 1,600 square foot building, constructed in 1900, is currently vacant and the site is privately owned.
- E. 718-720 South Plymouth** - This site has a single story residential structure, approximately 1,160 square feet, which is currently being used as a hair salon. The building was constructed in 1965 and is located on a 0.18 acre parcel.
- F. Nordon Real Estate (691/711 Exchange Street)** - This site consists of two parcels with two buildings: one 30,200 square foot industrial building located on a 2.4 acre site and one 17,000 building located on a one acre site. Both buildings were constructed in the 1960's. The building located at 611 Exchange Street has a loading dock in the rear of the building. The site is currently being used by Nordon Real Estate, LLC.
- G. Former Fire Hall (632 South Plymouth Avenue)** - The former Fire Hall, located at 632 South Plymouth Avenue, is the location of an old firehouse constructed in approximately 1935. The building is approximately 7,160 square feet in size and is located on a half acre lot currently owned by the City of Rochester. There is evidence of prior environmental investigations at the site. There are known structural and geotechnical issues with the building, which is currently vacant.
- H. Zweigles Incorporated (675 South Plymouth Avenue)** - The structure on this site was built in 1910 and is currently used as a neighborhood minimarket. The 2.5 story building is approximately 1,600 square feet and is located on a 0.19 acre lot.
- I. Martin Luther King Plaza (761-793 South Plymouth Avenue)** - The structure at this site is a one-story active strip mall occupying approximately 11,600 square feet. According to data maintained by the City, the structure was built in 1930. Active uses on the site include the Amazing Meat Market, King Fish Market, Nicholson High Fashions, Alie's Family Somali Community and development Association, and the AFLAH grocery store.

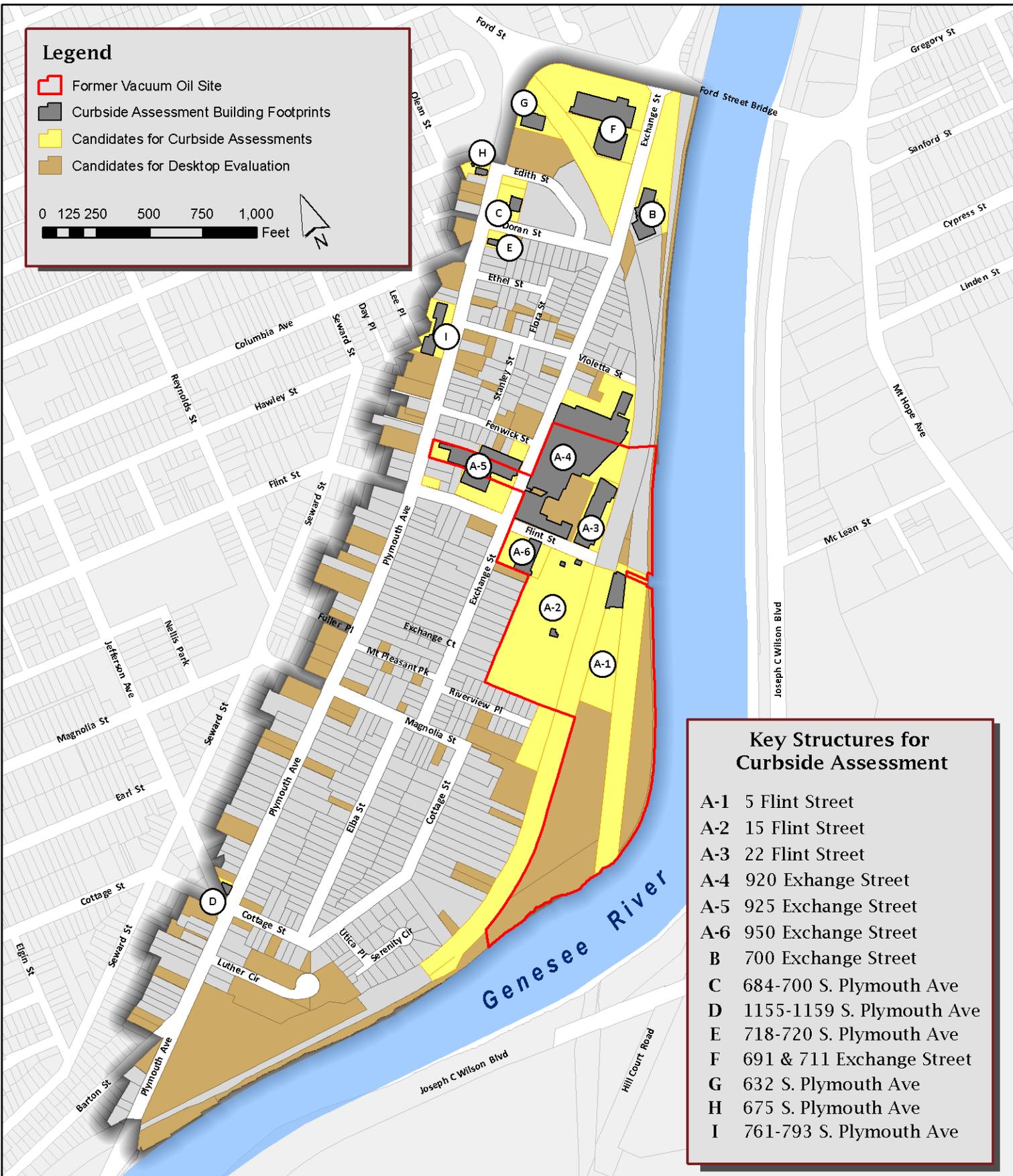
Key Findings: Building Inventory

1. Opportunity exists for the City to pursue redevelopment at several sites, many which are currently vacant (i.e. the Former Fire Hall and Stamps Cleaners).
2. Several sites may benefit from aesthetic enhancements to improve the business environment within the neighborhood. These sites include Martin Luther King Plaza and Zweigles.
3. The industrial buildings inventoried within the study area were primarily constructed prior to the 1960's and most are single-story, flat-roofed structures with little aesthetic appeal. The City has the opportunity to develop design guidelines or standards appropriate for new infill development.

Legend

- Former Vacuum Oil Site
- Curbside Assessment Building Footprints
- Candidates for Curbside Assessments
- Candidates for Desktop Evaluation

0 125 250 500 750 1,000
 Feet



Key Structures for Curbside Assessment

- A-1 5 Flint Street
- A-2 15 Flint Street
- A-3 22 Flint Street
- A-4 920 Exchange Street
- A-5 925 Exchange Street
- A-6 950 Exchange Street
- B 700 Exchange Street
- C 684-700 S. Plymouth Ave
- D 1155-1159 S. Plymouth Ave
- E 718-720 S. Plymouth Ave
- F 691 & 711 Exchange Street
- G 632 S. Plymouth Ave
- H 675 S. Plymouth Ave
- I 761-793 S. Plymouth Ave

City of Rochester, Monroe County, NY
 Vacuum Oil Brownfield Opportunity Area
BUILDING INVENTORY

MAP
11

This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

Map 11 of 20



Map designed by Bergmann Associates, Inc.

3.2.9 Historic and Cultural Resources

The history and development of the City of Rochester is largely tied to the Genesee River, which provided the foundation for its industrial heritage. The Genesee River bisects the City and forms the study area's eastern boundary. This natural resource is unique in that it flows north to its terminus in Lake Ontario.

The Genesee River serves as the study area's most prominent historic, cultural, and natural feature. The City has the opportunity to capitalize on the presence and changing role of this resource.

Historically, much of the river north of Brooks Landing and south of the study area was not navigable. These conditions forced river cargo to be off-loaded onto flat bottomed boats and this activity encouraged early settlement of the area. Navigational needs associated with area industry prompted the development of man-made waterways including the Feeder Canal, Genesee Valley Canal, and the Erie Canal Extension. Portions of the Genesee Valley Canal were located within the study area, paralleling the Genesee River (See Figure 8). As rail transport became more cost-efficient, it became less viable to maintain the full-length of the canal, which was forced to close in 1878. The Genesee Valley Canal was drained and converted into a track bed for the Western New York and Pennsylvania Railroad until its cessation in the 1970s. Today, portions of the rail right-of-way have been incorporated into the Genesee Riverway bicycle trail.



Vacant buildings at former Vacuum Oil Site

The City's industrial legacy is especially evident within the study area, where numerous industrial sites are located. In particular, the Vacuum Oil Site developed on Flint Street to capitalize on the City's canal and railroad assets. Established by Charles Everest in 1866, the refinery became known for its patented kerosene distillation process, the profitability of which caused the company's purchase by Standard Oil in 1879, and later by Socony in 1931. The site became equally well-known for one of the largest man-made disasters of the 19th Century, during which 14,000 gallons of naphtha seeped into the City's sewer system resulting in four explosions that killed several people in 1887

The site later became home to Sears, Roebuck and Company following the refinery's closing around 1930.

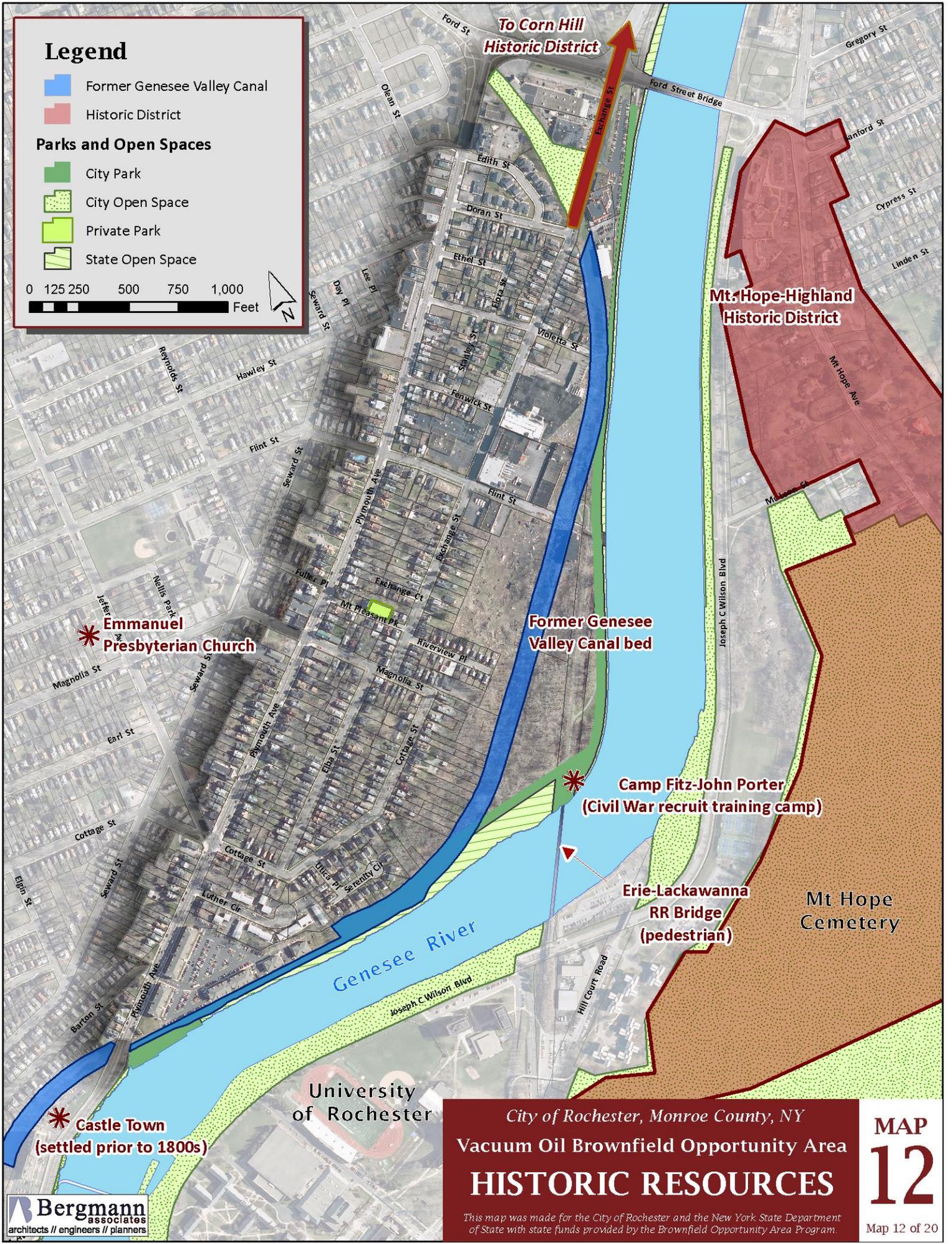
Legend

- Former Genesee Valley Canal
- Historic District

Parks and Open Spaces

- City Park
- City Open Space
- Private Park
- State Open Space

0 125 250 500 750 1,000 Feet



To Corn Hill
Historic District

Mt. Hope-Highland
Historic District

Former Genesee
Valley Canal bed

Emmanuel
Presbyterian Church

Camp Fitz-John Porter
(Civil War recruit training camp)

Erie-Lackawanna
RR Bridge
(pedestrian)

Mt Hope
Cemetery

University
of Rochester

Castle Town
(settled prior to 1800s)

City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
HISTORIC RESOURCES

MAP
12

This map was made for the City of Rochester and the New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

Map 12 of 20



The City’s transportation networks also played a prominent role in shaping its social history. Several Underground Railroad stations were located near the southwest river corridor. Fugitive slaves traveled along Plymouth Avenue to Kelsey’s Landing in the north, crossing Lake Ontario to Canada. Some used the Erie Canal to escape west to Cincinnati. The Genesee River additionally served as a location for Camp Fitz-John Porter, a center for training recruits at the onset of the Civil War. The site is bordered by Cottage, Magnolia, and Utica Streets in the southern portion of the study area and exists today as a park denoted by a commemorative marker.³

The study area is linked to the historic Corn Hill district by Exchange Boulevard, which extends north of the study area. The Corn Hill district was home to many of the City’s early founders and Erie Canal entrepreneurs. In addition, the Ford Street Bridge connects the study area to the Mt. Hope- Highland Historic District to the east. Located within the district were the Ellwanger and Barry Botanic Gardens as well as the Mt. Hope Cemetery. The district boasts several notable buildings including the Warner Castle, which today is home to the Rochester Garden Center.

Map 12 illustrates the historic and cultural resources in and around the study area, with the most prominent being the Genesee River.

Camp Fitz-John Porter is memorialized with a historic marker (right) describing the conditions at the camp and the involvement of local soldiers during the Civil War.

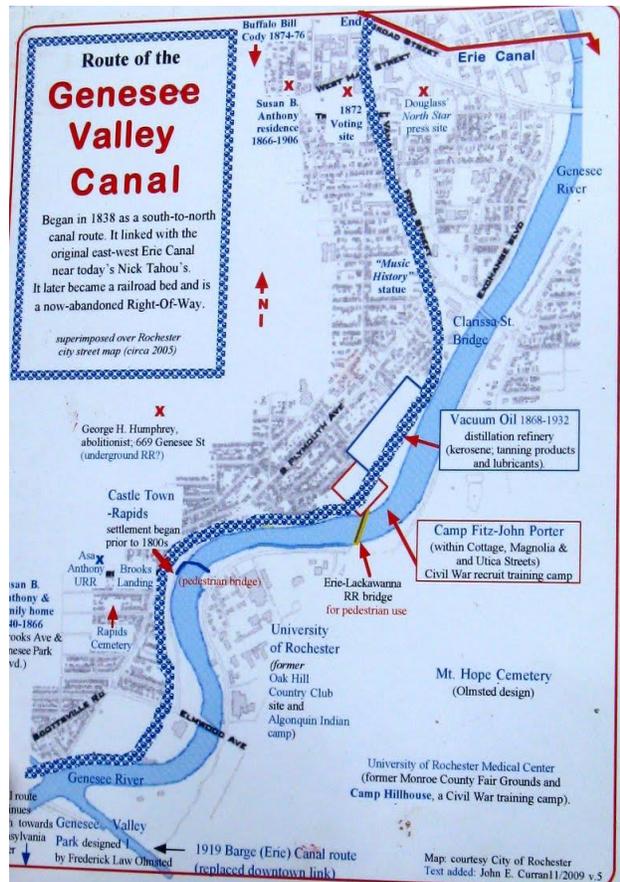
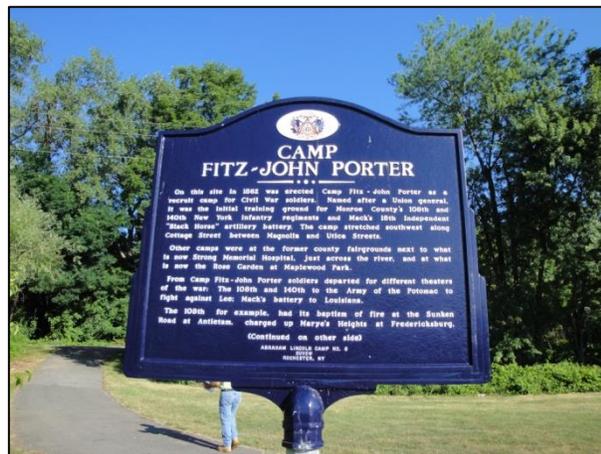


Figure 8: Path of former Genesee Valley Canal



³ "A Brief History of the Southwest Rochester Riverfront" by John E. Curran.

The City of Rochester is designated as a Certified Local Government (CLG), which is evidence of the City's dedication to historic preservation. The program strengthens efforts at the local level by assisting communities with preservation goals and the development of an action plan. Each State Historic Preservation Office (SHPO) administers the CLG program through a variety of services designed to help communities protect, preserve, and celebrate their historic resources. At minimum, a community must take the following steps to become a CLG:

- Establish a qualified historic preservation commission;
- Enforce state and local legislation for the designation and protection of historic properties;
- Maintain an inventory of local historic resources; and
- Provide for public participation in the program.

Rochester's participation in the CLG program makes it eligible for State funding. This funding could be used towards properties located within the BOA if designated as historic.

Key Findings: Historic and Cultural Resources

1. The City of Rochester should celebrate its industrial past by identifying opportunities for interpretive sites along the Genesee River.
2. The City is poised to re-identify the study area by capitalizing on the changing role of the Genesee River.
3. Opportunities may exist to designate historic sites, such as the Camp Fitz-John Porter site, at the local level.
4. The City of Rochester has history of redefining itself as economic and social conditions have changed. The developable land available within the study area and the presence of the Genesee River once again present the City with the opportunity to redefine itself and capitalize on this natural resource.

3.2.10 Transportation Systems

As seen on Map 13, the Study Area’s transportation system includes approximately 3.5 miles of roadway, with South Plymouth Avenue (State Route 383) functioning as the backbone of the Study Area and the central connective corridor between PLEX and adjacent neighborhoods. South Plymouth is a two-way, two lane arterial street that was recently reconstructed within the past decade. Parallel parked cars are protected at the intersections with curb bump outs, which also improve pedestrian safety at street crossings. Sidewalks are in good condition and are located on both sides of the street for the entire length of South Plymouth Avenue. The most recent data available from NYSDOT regarding traffic patterns indicated that volumes range from 7,000 cars per day south of Flint Street, to nearly 12,000 cars per day north at Ford Street, with approximately 19 percent of traffic coming from trucks and buses. Traffic volumes above 7,000 cars per day are generally required to support retail development. The level of truck and bus traffic indicates this corridor is heavily used for delivery and through traffic. Additionally, vehicles speeds average below the 30 mile per hour signed limit, indicating that crossing times for pedestrians should be above average.

Within the neighborhood, Exchange Street runs parallel to South Plymouth and functions as an internal north-south collector street. Exchange Street terminates to the north at Ford Street, and continues as Exchange Boulevard into Center City Rochester. Several streets within the Study Area terminate in awkward dead-end streets, including Violetta Street, Flint Street, and Riverview Place, with only Violetta Street having an improved pedestrian connection from the sidewalk system to the Genesee Riverway Trail. Streets internal to the Study Area average 60-foot right-of-ways with 25-foot pavement sections.

Map 13 also indicates that the neighborhood is well serviced with two primary Rochester Transit Service bus lines and 17 stops along South Plymouth Avenue. These routes provide access to numerous destinations within the City, including the U of R, the Memorial Art Gallery and School of the Arts, as well as shopping and services such the Village Gate and a local Tops Food Market. All residences are within 1,200 feet of a bus stop, which represents a travel time of 5 minutes or less at average walking speeds. In addition, most residents are less than a 10 minute walk from the Flint Street Recreation Center, a major neighborhood destination.

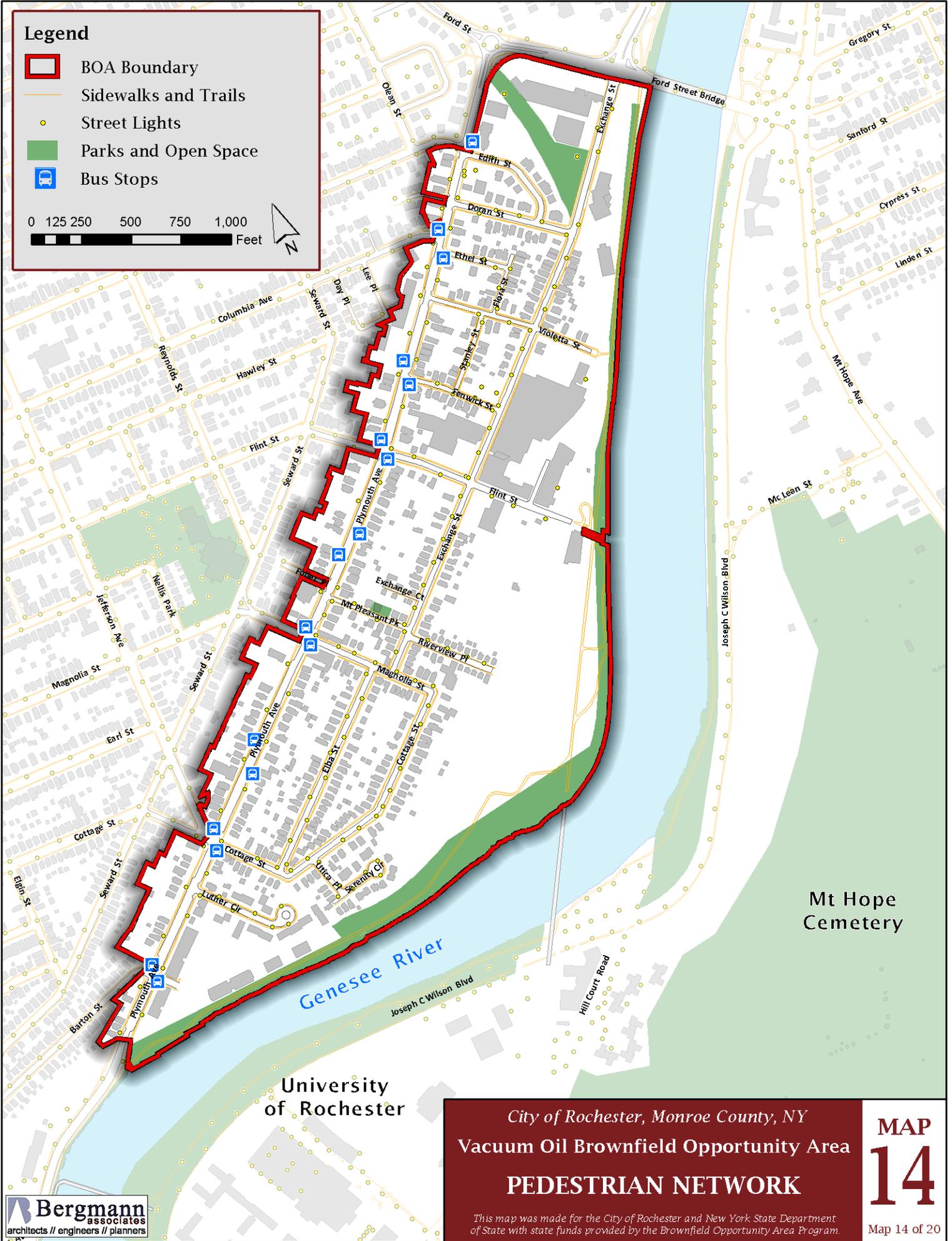


The Study Area’s transportation system is made up of the South Plymouth Avenue high-volume arterial (left) and several residential streets, including Riverview Place (right).

Legend

-  BOA Boundary
-  Sidewalks and Trails
-  Street Lights
-  Parks and Open Space
-  Bus Stops

0 125 250 500 750 1,000 Feet



Map designed by Bergmann Associates, Inc.

City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
PEDESTRIAN NETWORK

This map was made for the City of Rochester and New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

MAP
14
Map 14 of 20

Map 14 depicts the pedestrian network and available sidewalks and trails within the Study Area. All streets have sidewalks on both sides, and have adequately spaced street lights for improved pedestrian safety. The largest gap in sidewalk service is located along Flint Street, with lacks formal sidewalk from Exchange Street east to the River. The Genesee Riverway Trail is nearly 2 miles in length and traverses the riverfront from South Plymouth Avenue north to Ford Street. However, this trail lacks adequate connections to the adjacent neighborhood or roadway network.

Key Findings: Transportation

1. Traffic flows are reasonable and speeds are low.
2. On-street parking along South Plymouth provides significant supply of spaces.
3. Short walking distances enhance walkability and connectivity to transit and services.
4. Dead-end streets at Flint and Violetta limit connectivity for both motorists and pedestrians, and bus stops are a significant distance from the Genesee River waterfront.
5. Although transit service is well-connected, destinations for key services such as a supermarket are distant, requiring extensive travel times which severely impact user efficiency and convenience.

3.2.11 Infrastructure and Utilities

The Study Area contains significant utility infrastructure, including major water, sanitary and fiber optic corridors that support large portions of the surrounding city (See Map 15). The largest and most critical of these is a 36 inch diameter water main that crosses underneath the Genesee River from McLean Street to Flint Street, and continues along Exchange Street and Magnolia Street. This water main includes a 36 inch loop system along Flint Street between Exchange Street and the Genesee River, and represents a significant lifeline for the southwest quadrant of the City.

A major combined sewer flows along the corridor of the former Pennsylvania Railroad and Genesee Valley Canal. Owned and operated by the City's Rochester Pure Waters District, this sewer ranges in size from 26 to 42 inches in diameter and crosses the 36 inch water main at Flint Street. An additional combined sewer 18 inches by 30 inches in diameter flows along South Plymouth Avenue. All sanitary and storm sewers in this portion of the City are combined, and flow northward to the West Side Tunnel system developed as part of the City's Combine Sewer Overflow Abatement Program.

A fiber optic duct bank runs along South Plymouth Avenue and parallel to the combined sewer system. The communications corridor is utilized for data collection and transmission and remote operation of gates, valves, and other appurtenances within the larger Monroe County Pure Waters collection system.

The City operates an extensive street lighting system within the Study Area consisting of approximately 160 pole-mounted fixtures. These fixtures are utilized exclusively along street rights-of-way to enhance the safety and security of the roadway and sidewalk network. Areas not receiving street/pole-mounted lights are limited to the Genesee Riverway Trail which parallels the riverbank.



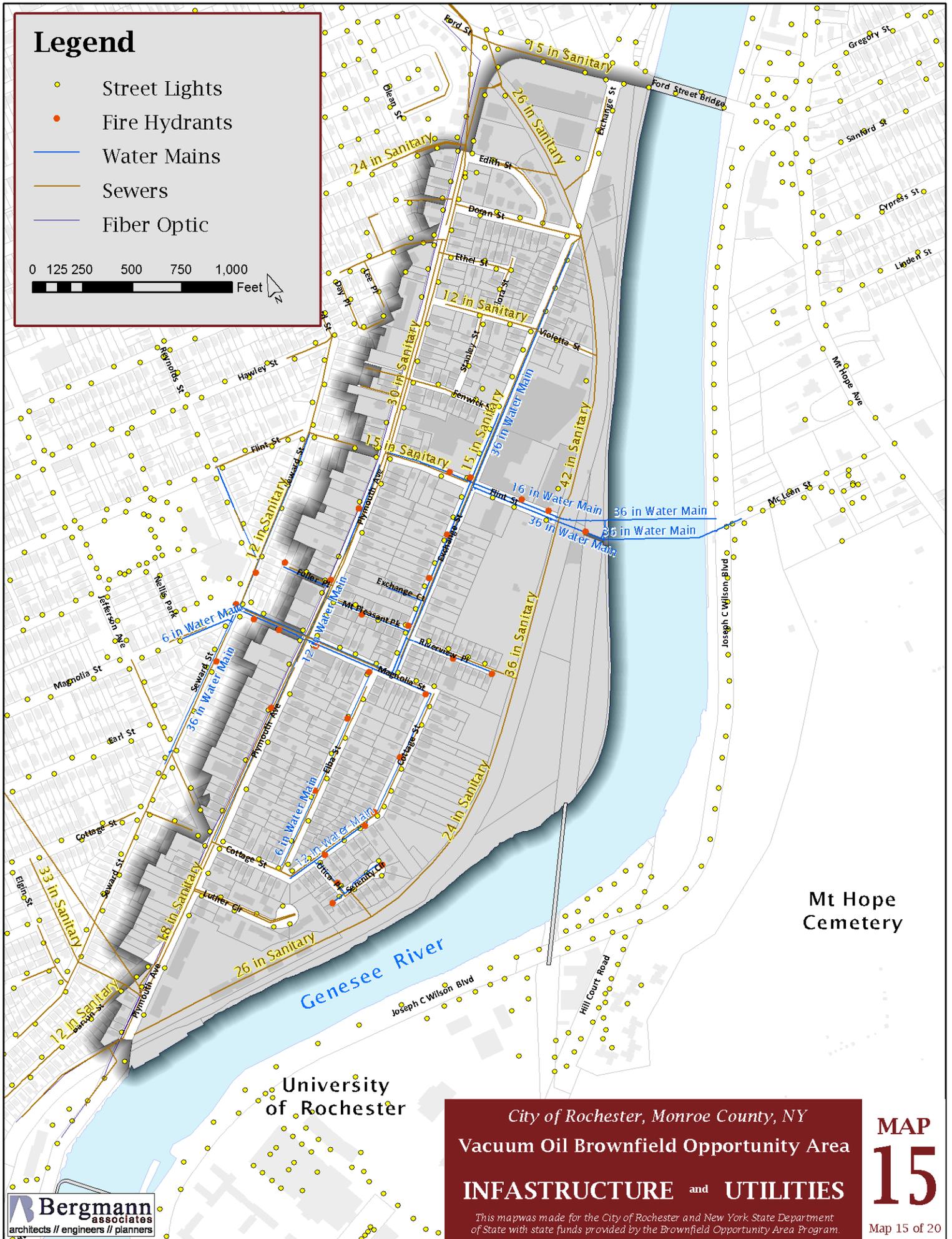
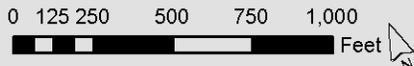
Major underground infrastructure along public lands close to the River may present added challenges to development

Key Findings: Infrastructure and Utilities

1. Water and sewer capacity appear to be adequate to support additional growth and development.
2. Major water and sewer infrastructure located near Flint Street and along the former Genesee Valley Canal may present development obstacles and increased costs to development if these utilities require relocation.
3. Riverfront area requires improved lighting to ensure safety of users.

Legend

- Street Lights
- Fire Hydrants
- Water Mains
- Sewers
- Fiber Optic



City of Rochester, Monroe County, NY
 Vacuum Oil Brownfield Opportunity Area
INFRASTRUCTURE and UTILITIES
 This map was made for the City of Rochester and New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

MAP
15
 Map 15 of 20

3.2.12 Natural Resources and Environmental Features

The quality and quantity of natural resources are directly related to quality of life, providing communities with clean and abundant groundwater and surface water, safe air to breathe, and natural landscapes that accommodate a diverse range of habitats. Natural resources can also contribute to economic vitality, encouraging recreation, tourism and increasing property values. Planning for future land use in concert with existing environmental conditions promotes protection of these key assets. Map 16 illustrates the prominent environmental features within the study area, which are discussed further in the following sections.

TOPOGRAPHY

The topography of the study area is relatively flat, exhibiting gentle sloping downward from the river to the west before slightly increasing near the study area's residential neighborhoods. The bike path, located along the river, is elevated and appears to have been built on the fill used to support the former rail. A concrete retaining wall is present at some locations along the Genesee River, and is anticipated to be associated with former operations at the Vacuum Oil Site. It is unlikely that steep slopes will present obstacles to redevelopment.

GENESEE RIVER WATERSHED

The study area is located in what is known as the *Genesee River Watershed*. A watershed is a single hydrologic system, or an area of land where all the water drains to the same location. The Genesee River Watershed encompasses 2,373 square miles, covering much of Livingston, Allegany, Monroe, Genesee, and Wyoming counties, and small portions of Ontario, Steuben and Cattaraugus counties. Approximately 5,048 miles of freshwater rivers and streams feed into the Genesee River. In addition, 31 freshwater lakes, ponds and reservoirs are located within the watershed.

WATER QUALITY

The quality of all waterbodies within the Genesee River Watershed is an important consideration to determine how to mitigate impacts to these valuable waterways to protect quality of life and advance sustainable practices. The most recent water quality assessment report for the Genesee River Watershed was completed in 2003, and cited urban stormwater and industrial runoff from the City of Rochester into the Genesee River as a major threat to water quality. Identifying ways to mitigate impacts from development on the water quality will be an important consideration to maintain the ecological, aesthetic and cultural value of this resource.

GROUNDWATER RESOURCES

Aquifers are permeable rock formations that facilitate groundwater flow. These formations are generally broken into two types: confined aquifers and unconfined aquifers. Unconfined aquifers are characterized by an impermeable layer underneath and lack a confining upper layer, making them more susceptible to

contamination from surface activity. According to data obtained by the NYS DEC and USGS, the study area is not located over a primary aquifer.

Because the BOA contained a number of industrial operations, a portion of the study area has been impacted by groundwater contamination. These areas generally include areas associated with the Vacuum Oil Site, which exhibit levels of VOC and SVOC contamination that exceed NYS DEC Cleanup Objectives for brownfield sites. Metals and polychlorinated biphenyls (PCBs) are also present in high concentrations throughout this area. All of the study area is serviced by public water so contaminated drinking water from past industrial uses is not a concern.

FLOOD HAZARD AREAS

According to mapping prepared by the Federal Emergency Management Agency (FEMA), the majority of the study area is located in a flood area classified as X, which are areas between the limits of the 100-year and 500-year floods. Portions of the study area's eastern boundary are located in an AE classified flood hazard area, which are within the 100-year floodplain. These areas are primarily located along the Genesee River and former Genesee Valley Canal footprint. Any development within the flood area will be subject to the regulations set forth in Chapter 56 of the City Code, "Flood Damage Protection." Areas impacted by the 100-year floodplain are illustrated on Map 16.

WETLANDS

The NYSDEC regulates wetlands that are 12.4 acres or greater in size. Currently no NYS DEC regulated wetland resources are located within the BOA study area based upon known mapping resources. However, the topography of the site is such that isolated wetlands may exist in the field. The federal government claims jurisdiction over any wetland resource connected to a navigable water. As such, areas in and along the Genesee River are included in the National Wetlands Inventory (NWI). All federally regulated wetlands within the study area are also located within the 100-year floodplain. The location of potential wetland areas primarily along the Genesee River corridor make it unlikely that these resources will impede future construction or redevelopment activities within the study area.

SOIL CHARACTERISTICS

All of the soil located within the study area is classified as Urban Land, reflecting its industrial history. Urban Lands are generally characterized by impervious surfaces made up of structures or paved services, with limited open space. Prior site investigations conducted at the Vacuum Oil Site identified a mixture of native soils and fill, generally consisting of bricks, slag, cinders, gravels, wood and debris. Native soils at the site consisted of sand, silt, and clay. Although bedrock was not positively identified in past subsurface studies, it is likely the site is underlain by the Silurian Lockport Formation, which is widespread throughout the Finger Lakes region. Although the site conditions are well known at the Vacuum Oil Site, redevelopment elsewhere in the study area may be subject to further geotechnical evaluation to better identify constraints associated with development. It is not anticipated that significant obstacles exist, as the study area is largely built out.

THREATENED AND ENDANGERED SPECIES

According to the United States Fish and Wildlife Service (USFWS), no federally listed or proposed endangered species are known to exist in Monroe County. The NYS DEC additionally maintains a database of rare plants and animals present throughout the state. The Enviro Mapper lists the American Burying Beetle as endangered within the vicinity of the BOA. Future projects within the study area will need to be sensitive to the potential presence of this protected species, and any impacts of redevelopment.

FISH AND WILDLIFE HABITATS

Limited areas within the study area are suitable wildlife habitats. The Genesee River, adjacent to the BOA, serves as a habitat for fish and aquatic life. However, industrial uses along the waterfront have led to water pollution and alteration of the lower channel which has reduced the environmental quality in these areas. According to the Coastal Fish and Wildlife Habitat report (DOS), the Genesee River serves as a warm water fisheries habitat supporting species that include smallmouth bass, brown bullhead, northern pike, catfish, walleye, and carp. The Genesee River serves as an important recreational fishery, attracting anglers within the Rochester area and from outside. Future redevelopment efforts should utilize sustainable techniques to mitigate further impacts to the Genesee River to protect these habitats.

Wildlife supported by the Genesee River are generally restricted to species tolerant of adjacent human activities. Possible bird species include mallard, wood duck, great horned owl, red-tailed hawk, red-winged blackbird, and various woodpeckers. Although wildlife activity is not well-documented within the area, the Genesee River and adjacent open space areas along the river corridor serve as important local habitats.

Key Findings: Natural Resources and Environmental Features

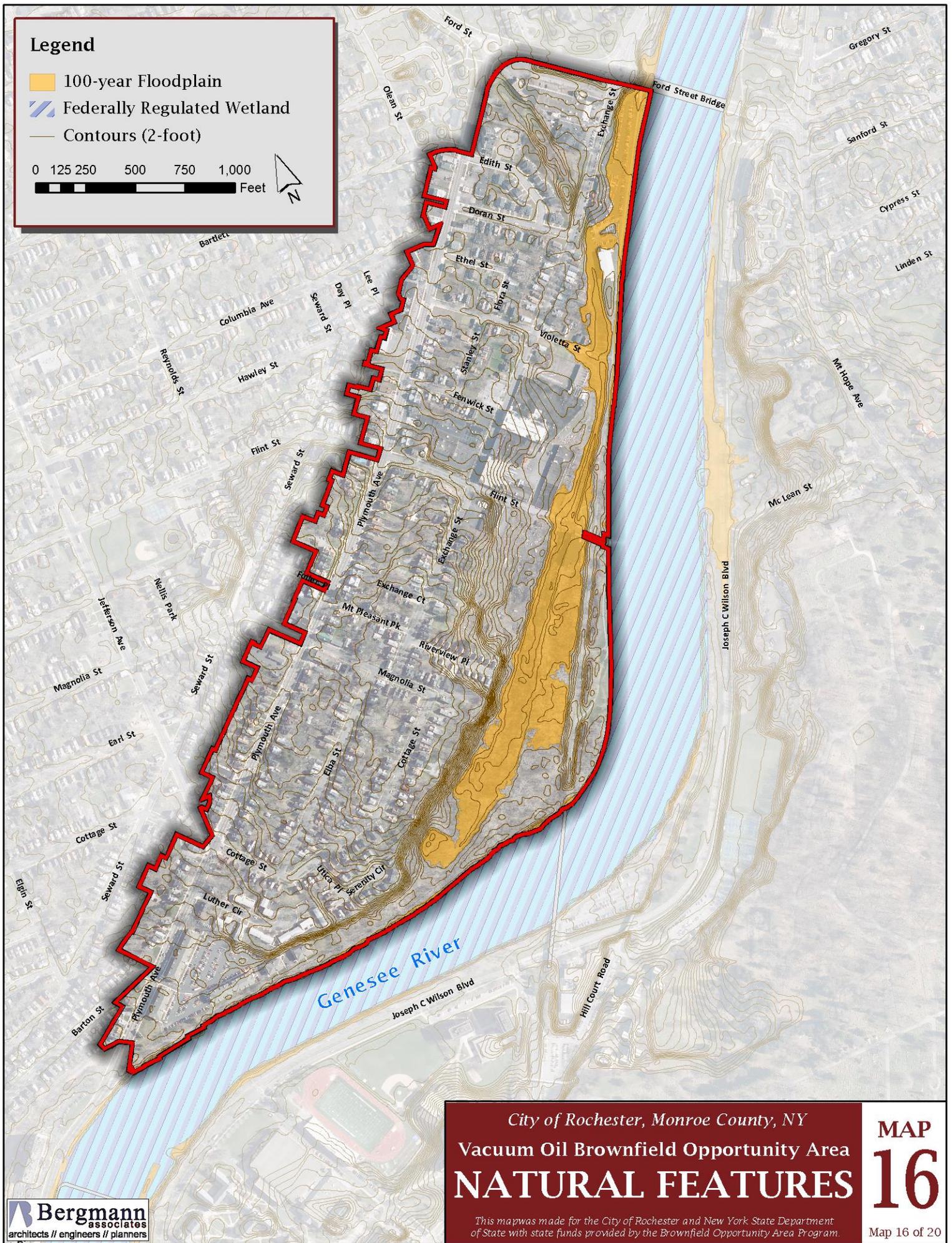
1. The Genesee River is a key natural resource. Future redevelopment should focus on adopting sustainable solutions to protect its environmental quality.
2. The study area is composed of urban land that has been largely built out. As a result, not many obstacles to site redevelopment are anticipated within the study area.
3. Groundwater resources within the study area have been impacted by heavy industrial uses both along the waterfront and further inland. As a result, redevelopment opportunities may be limited based on achievable remediation levels at certain sites.
4. The 100-year floodplain extends inland from the Genesee River, impacting lands north of the Genesee Riverway Trail. Any development proposed in these areas will be subject to the regulations set forth in Chapter 56 of the City Code.

Legend

- 100-year Floodplain
- Federally Regulated Wetland
- Contours (2-foot)

0 125 250 500 750 1,000

Feet



City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
NATURAL FEATURES

MAP
16

This map was made for the City of Rochester and New York State Department of State with state funds provided by the Brownfield Opportunity Area Program.

Map 16 of 20



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3.4 ECONOMIC AND MARKET TRENDS ANALYSIS

3.4.1 Executive Summary

A comprehensive market analysis of the Vacuum Oil Brownfield Opportunity Area was completed by Camoin Associates in July 2011. The full Economic and Market Trends Analysis can be found in Appendix B. The following represents a summary of key findings within the Key findings of the market analysis are as follows:

- The industry sectors with the largest employment in the Rochester MSA are health care and social assistance and government. These two industries are projected to account for more than 170,000 jobs by the year 2020.
- Manufacturing will see a large workforce decrease, losing 13,772 jobs by 2020.
- An overall employment increase is expected to occur in the Rochester MSA, though the rate of increase is projected to be much slower than the Nation or State.
- At around 16%, vacancy rates within the City of Rochester are very high; however, other Upstate New York cities are facing similar trends.
- The housing stock in the City of Rochester is quite old and may not provide the ideal set of housing opportunities to potential residents.
- The University of Rochester's student housing needs for off-campus housing are modest and may not fit well in the BOA.
- There may be an opportunity for some private-sourced housing for upper-level university students and university staff.
- There is demand for additional housing options within the \$150,000 to \$200,000 price range, for existing and future City residents.
- The current office market is one of oversupply; however, over the next 10 years the real estate market for office space within the Rochester MSA is projected to tighten, particularly for Class A office space.
- Like so many cities throughout the northeast, the overabundance of industrial properties within the region has flooded the industrial real estate market.
- Several retail sectors are experiencing significant sales leakage. There is demand for a variety of goods and services locally.
- While there is demand for grocery stores in the area, accessibility issues would limit the success of a typical grocery store. A smaller-sized co-op grocery store could be supported.

Individual sections of the following market analysis evaluate various land use categories independently - residential, office, industrial, and retail. However, due to the layout of the site, its location within the City, and potential accessibility issues, a mixed-use type of development that has some self-sustaining qualities may be the most suitable use. For example, new residential housing units would likely attract additional residents to the area who would serve a local customer base for some small retail uses.

The market analysis identified a number of potential redevelopment opportunities that will be examined in greater detail in the following phases of this project. However, depending on the extent of environmental contamination within the Vacuum Oil BOA, some redevelopment options may not be feasible due to the costs of remediation and/or level of contamination. Costs associated with cleaning up the BOA properties will be identified during a future site assessment. After completing the market analysis, it has become clear that redevelopment of the site will require sustained involvement on the City's part. Successful redevelopment of the site will likely necessitate the City to take a lead in environmental site investigations, land assembly, environmental cleanup, subsidizing development and/or marketing the site to potential developers.

The BOA offers a number of natural amenities unique to an urban environment that may be very attractive for developers. The physical geography of the site forms an arrangement of open space, wood cover, and waterfront that is uncommon in an urban setting. This area presents a one of a kind opportunity for the City of Rochester. The findings of the following market analysis will guide the next phase of this project, the development of site-specific scenarios and alternatives.

3.4.2 General Economic Outlook

The General Economic Outlook provides context for discussion of redevelopment scenarios within the BOA by illustrating regional trends that shape the commercial real estate market for the City of Rochester and, more specifically, the BOA. In order to identify important issues and opportunities impacting the BOA, employment and industry trends in the five-county Rochester MSA were examined. As discussed in the previous section, the Rochester MSA includes the following counties: Livingston, Monroe, Ontario, Orleans, and Wayne. The EMSI data includes all employment covered by unemployment insurance – only the self-employed, student workers, unpaid family workers, and some agricultural workers are excluded. Unlike the decennial Census, QCEW measures jobs by place of *work*, not place of *residence*, so it is a strong measure of economic activity taking place in a particular region. As indicated on Table 7, overall economic growth for the Rochester MSA is predicted to lag behind the state in nation for both jobs and wages.

Table 7: Employment Growth Summary, 2010 to 2010

Region	2010 Jobs	2020 Jobs	Change	% Change	Average Hourly Wage
Rochester MSA	608,091	633,195	25,104	4.13%	\$19.93
Upstate NY	3,257,585	3,407,290	149,705	4.60%	\$19.24
NYS	10,799,685	11,488,585	688,900	6.38%	\$24.05
US	170,866,026	189,113,448	18,247,422	10.68%	\$20.22

Source: EMSI Complete Employment 2011-2012

Key Findings: General Economic Outlook

1. The industry sectors with the largest employment in the Rochester MSA are health care and social assistance and government. These two industries are projected to account for more than 170,000 jobs by the year 2020.
2. Manufacturing will see a large workforce decrease, losing 13,772 jobs by 2020.
3. An overall employment increase is expected to occur in the Rochester MSA, though the rate of increase is projected to be much slower than the Nation or State.

3.4.3 Residential Market Analysis

The residential market analysis compares existing conditions and projected trends in residential development in the Rochester MSA to trends of the City of Syracuse and the City of Buffalo. This market analysis also takes into account findings and recommendations of the 2007 City-Wide Rochester Housing Market Study completed by Zimmerman/Volk Associates, Inc., which contains a thorough analysis of Rochester’s housing stock and demand for housing.

This analysis will help to identify potential development types that will serve currently unmet needs in the Rochester area as well as be feasible and marketable in the current real estate atmosphere. Local real estate agents were also interviewed to gather information on trends and pricing. Additionally, officials from the University of Rochester were contacted to gain information about future development needs of the college. As seen in Figure 9, the most significant trends in housing are the increase in vacant structures and the decrease in renter occupied housing units.

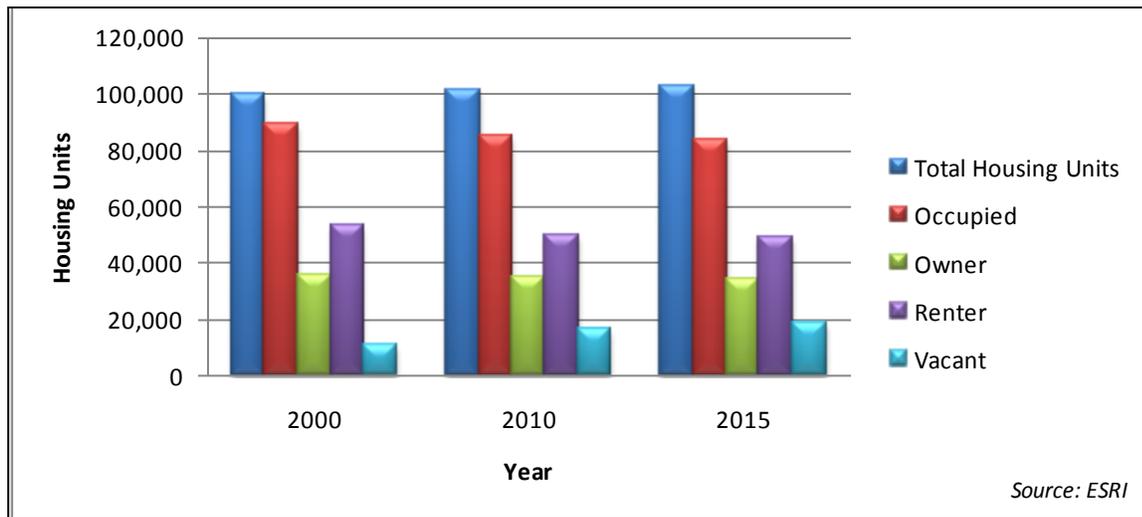


Figure 9: Housing Occupancy Trends, City of Rochester, 2000 to 2015

Key Findings: Residential Market Analysis

1. At around 16%, vacancy rates within the City of Rochester are very high; however, other Upstate New York Cities are facing similar trends.
2. The housing stock in the City of Rochester is quite old and may not provide the ideal set of housing opportunities to potential residents.
3. The University of Rochester’s student housing needs for off campus housing are modest and may not fit well in the BOA at this time.
4. There is demand for additional housing options within the \$150,000 to \$200,000 price range, for existing and future City residents.

3.4.4 Office & Industrial Market Analysis

The Office and Industrial Market Analysis evaluates recent trends and projections within the regional office and industrial space-utilizing industries to identify potential opportunities for development. This market analysis also provides a review of the market report produced by the leading national real estate firm CB Richard Ellis. This report takes a regional perspective which includes all of the counties of the Rochester MSA as well as adjacent Genesee County (hereafter referred to as ‘Greater Rochester’).

Additionally this region is divided into two sub-markets: Downtown Rochester (i.e. the City of Rochester) and Suburban Markets (areas outside of the City). As depicted in Table 8, the areas of the greatest potential growth in the region are health care, social assistance, scientific, and finance.

Following past trends, manufacturing and retail trade are declining rapidly.

Table 8: Rochester MSA Fastest Growing Industries, 2011 to 2020

NAICS Code	Description	2010 Jobs	2020 Jobs	Change	% Change	2011 Total EPW
62	Health Care and Social Assistance	84,809	95,311	10,502	12%	\$43,538
54	Professional, Scientific, and Technical Services	40,115	49,108	8,993	22%	\$57,021
52	Finance and Insurance	29,385	35,192	5,807	20%	\$63,056
61	Educational Services	32,734	36,759	4,025	12%	\$54,256
72	Accommodation and Food Services	35,900	38,816	2,916	8%	\$17,253
	Administrative and Support and Waste					
56	Management and Remediation Services	30,516	33,061	2,545	8%	\$33,205
53	Real Estate and Rental and Leasing	21,130	23,659	2,529	12%	\$22,012
81	Other Services (except Public Administration)	25,273	27,795	2,522	10%	\$30,906
71	Arts, Entertainment, and Recreation	13,882	16,017	2,135	15%	\$15,895
42	Wholesale Trade	18,972	20,249	1,277	7%	\$75,043
55	Management of Companies and Enterprises	12,946	13,388	442	3%	\$97,929
21	Mining, Quarrying, and Oil and Gas Extraction	1,446	1,864	418	29%	\$82,622
48-49	Transportation and Warehousing	13,761	13,916	155	1%	\$46,109
23	Construction	25,720	24,147	(1,573)	(6%)	\$55,944
44-45	Retail Trade	64,080	61,758	(2,322)	(4%)	\$27,702
31-33	Manufacturing	62,009	48,237	(13,772)	(22%)	\$75,048
	Total	608,091	633,195	25,104	4%	\$48,885

Source: EMSI Complete Employment - 4th Quarter 2010

Key Findings: Office and Industrial Market Analysis

1. The current office market is one of oversupply; however, over the next 10 years the real estate market for office space within the Rochester MSA is projected to tighten, particularly for Class A office space.
2. Like so many cities throughout the northeast, the overabundance of industrial properties within the region has flooded the industrial real estate market.

3.4.5 Retail Market Analysis

A retail market analysis was conducted which compares the supply and demand for goods and services within the two trade areas identified for the BOA Study Area. The process also identified unique characteristics of the Study Area upon which expanded retail trade can be built. The market analysis outlines consumer spending habits within the region, estimates retail demand, identifies household characteristics of potential consumers, and identifies business opportunities or niche markets not currently being met within the marketplace. Two trade areas are defined and analyzed for the retail market analysis:

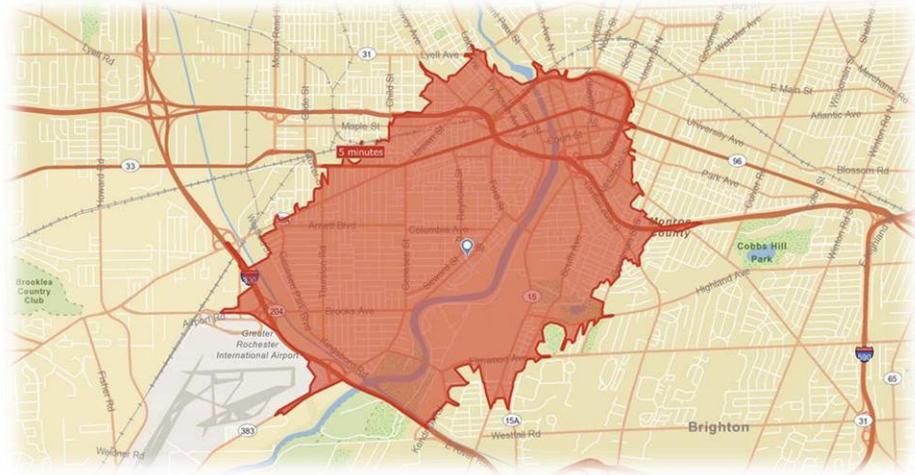


Figure 10: Vacuum Oil BOA Local Trade Area: 5-Minute Drive Time

- Local Trade Area - A 5-minute drive time from the center of the BOA;
- City of Rochester Trade Area.

RETAIL LEAKAGE/SURPLUS - LOCAL TRADE AREA

The demand for goods and services that is not being met locally is referred to as sales leakage. Leakage occurs when consumers make purchases at establishments located *outside* the defined trade area. Sales leakage is normally viewed as an opportunity to capture unmet demand in a trade area by opening new or expanding existing businesses. However, not all retail categories that exhibit leakage within a particular trade area are a good fit for that region. The industry groups experiencing the greatest leakage from the Local Trade Area include:

- Automobile Dealers;
- Gasoline Stations; and
- Grocery Stores;
- Department Store.

Conversely, if the supply of goods sold exceeds trade area demand, it is assumed that non-residents are coming into the trade area to spend money, creating a sales surplus. There are two likely reasons a sales surplus condition would exist. First, a cluster of competing businesses offering a similar good or product may be located within the trade area, creating a specialty cluster that draws in spending by households from outside the trade area. Secondly, a sales surplus may indicate a saturated retail market, where supply exceeds demand.

Industries that have a large sales surplus compared to their total sales include:

- Health and Personal Care Stores;
- Full Service Restaurants;
- Direct Selling Establishments;
- Drinking Places – Alcoholic Beverages;
- Book, Periodical and Music Stores; and
- Office Supplies, Stationary and Gift Stores.

RETAIL USE FEASIBILITY - LOCAL TRADE AREA

While the previous section identifies a number of industry sectors that are experiencing leakage, it does not necessarily mean that new businesses locating in the area would be successful. The following summarizes which of the industries with leakage may have enough sales to warrant opening a new store or expanding existing stores. The analysis assumes that 25 percent of the existing leakage in each category can potentially be recaptured by new businesses. The actual recapture rate for each category will vary based on existing amenities, commuting patterns, and consumer affinity towards certain stores or brands. Table 9 identifies industries experiencing sales leakage from the Local Trade Area and the number of new businesses that could be theoretically supported in each category.

Table 9: Local Trade Area Retail Opportunities

Industry Group	Retail Gap	25% Recapture Rate	Average Sales in Upstate NY	Number of Potential Businesses
Automobile Dealers	\$47,140,433	\$11,785,108	\$3,930,036	3.00
Grocery Stores	\$46,847,248	\$11,711,812	\$3,867,700	3.03
Gasoline Stations	\$37,699,794	\$9,424,949	\$3,956,399	2.38
Limited-Service Eating Places	\$11,803,225	\$2,950,806	\$732,580	4.03
Clothing Stores	\$8,068,888	\$2,017,222	\$364,833	5.53
Furniture Stores	\$4,508,348	\$1,127,087	\$886,319	1.27
Building Material and Supplies Dealers	\$4,368,784	\$1,092,196	\$793,556	1.38
Electronics & Appliance	\$3,195,237	\$798,809	\$435,449	1.83
Home Furnishings Stores	\$1,999,110	\$499,778	\$412,221	1.21
Sporting Goods/Hobby/Musical Instrument	\$1,992,634	\$498,159	\$144,367	3.45
Jewelry, Luggage, and Leather Goods	\$708,434	\$177,109	\$127,552	1.39

Source: ESRI

Key Findings: Retail Market Analysis

1. The current office market is one of oversupply; however, over the next 10 years the real estate market for office space within the Rochester MSA is projected to tighten, particularly for Class A office space.
2. Several retail sectors are experiencing significant sales leakage and there is demand for a variety of goods and services locally.
3. While there is demand for a large-scale standard grocery store, the area's accessibility issues would limit the success of this type of development. A smaller-sized co-op grocery store could be supported.
4. Like so many cities throughout the northeast, the overabundance of industrial properties within the region has flooded the industrial real estate market.

3.5 SUMMARY ANALYSIS OF THE BOA

A host of conditions were identified during the analysis of the BOA that may likely impact revitalization efforts. The Summary Analysis identifies opportunities and challenges across broad categories, including physical, regulatory, ownership, cultural and demographic/market conditions. In addition, the following section introduces preliminary recommendations for inclusion in the Section 5.0 Master Plan that seek to leverage the opportunities and overcome the challenges identified towards the development of a sustainable, market-driven and resident-supported revitalization program.

3.5.1 Physical Conditions Impacting Revitalization

Physical conditions impacting revitalization include; the type, scale and location of existing development; the environmental status of study area properties; and the capacity of existing infrastructure to support new development. The following provides a summary of conditions pertinent to the development of the master plan.

LAND USE, VACANT AND UNDERUTILIZED SITES

Residential

The Study Area is largely devoted to residential land uses which have created a relatively high population density in a neighborhood that also retains a high level of vacant and underutilized properties. Efforts should be made to strengthen connections between the BOA's population centers and locations of services and amenities such as the Genesee Riverfront and South Plymouth Avenue. Existing residential areas within the BOA Study Area should be supported and revitalized through targeted programs undertaken on a block by block basis that seek to strengthen the PLEX neighborhood as a unique housing market within the City. Single-family owner-occupancy should also be supported and promoted in the interior neighborhoods through existing City programs. Where appropriate, new housing constructed within the former Vacuum Oil site should be higher density and market rate to generate a critical mass capable of supporting the site as a primary mixed-use destination within the City's southwest quadrant. The South Plymouth corridor is largely residential in character and use, and should be strengthened through the addition of diverse, higher density housing options to provide additional activity and foot traffic to area businesses. Housing options for seniors should be focused along this corridor in close proximity to services and public transportation. Though recommendations are for an increased density along the corridor, the character of South Plymouth Avenue should be maintained at the single-family scale currently found along the corridor through the development of design standards.

Mixed Use and Commercial-Retail

The limited pockets of mixed-use development currently existing along South Plymouth Avenue offer opportunities for additional housing to add vibrancy and activity at the street level. Coupled with existing residential uses and the promotion of higher density housing along the corridor, mixed use development can generate additional foot traffic to support sustainable commercial/retail nodes at key intersections along South Plymouth Avenue. In addition, future commercial and retail development should continue to

be focused along South Plymouth Avenue at Cottage, Magnolia, Flint and Columbia Streets to leverage the corridor's high visibility while protecting residential areas from increased traffic volumes.

There is an abundant amount of vacant and underutilized property within the BOA, yet the majority of these properties located outside of the former Vacuum Oil site are scattered. In addition, properties along South Plymouth Avenue are very shallow, with lot depths averaging less than 150 feet, and less than 100 feet in some locations. The lack of concentrated areas of vacant and underutilized properties along with shallow lot depths will require added creativity and regulatory flexibility to foster meaningful and impactful redevelopment opportunities. For example, throughout the public involvement process many residents explained their struggles with a lack of convenient access to a supermarket or other retailers. However, the BOA does not contain the required two to three acres of vacant and/or underutilized property along South Plymouth Avenue to support the development of a contemporary retailer, such as a 14,000 square foot Aldi's grocery. Assembling land sufficient for this scale of redevelopment would be costly, time consuming and would require the procurement of numerous adjacent properties. The development of a multi-story structure with a smaller building footprint and a shared parking arrangement with adjacent businesses may provide a viable alternative to meet the needs of the neighborhood.

A growing development trend nationwide is the resurgence of retailers entering urban environments through the construction of small footprint stores. These stores cater to the needs of urban shoppers by concentrating on quick, in-out service and packaging that is capable of being carried on foot or transit. The City should investigate opportunities to attract this type of development along South Plymouth Avenue as retailers seek to advance into the urban marketplace.

An existing commercial-retail node along the west side of South Plymouth south of Columbia Street may offer an opportunity to assemble a group of parcels, including City-owned property, vacant and underutilized land for redevelopment. The City could conduct the property assembly process in advance in an effort to attract a viable developer.

Industrial Adaptive Reuse

Former industrial properties within the Vacuum Oil site offer an adaptive reuse and redevelopment potential in proximity to the Genesee River waterfront. These sites provide an opportunity to increase the housing diversity within the BOA in tandem with water-enhanced uses such as restaurants, office uses and cultural/historical uses. However, the development of housing in these locations will likely be complicated by potential environmental contamination. Retail/restaurant uses will require the establishment of a critical mass of residents and significant waterfront infrastructure, amenity and public safety improvements. In addition, roadway improvements along Flint Street and Exchange Street will be required to enhance visibility, wayfinding, and accessibility to make the former Vacuum Oil a viable and marketable redevelopment site. As part of the PLEX Neighborhood Waterfront Connector initiative, the City of Rochester is actively pursuing funding for the investigation and preliminary design of improvements along Flint Street east of Exchange Street for the creation of a gateway into the former Vacuum Oil site that also reconnects the neighborhood to the Genesee River waterfront.

Open Space and Recreation

Utilizing open space and programming standards developed by the National Recreation and Park Association (NRPA), the BOA's population of approximately 2,000 residents should be sufficient to support two miniparks one-quarter to one-half acre in size, and one four acre neighborhood park. In addition, NRPA standards suggest that a neighborhood the size of the BOA should have access to one baseball/softball diamond, one set of tennis courts and four basketball courts. The Trust for Public Land (TPL) recently completed an analysis of park systems within 40 cities across the United States and the findings suggest that a community the size of PLEX should have at least one dedicated playground.

Based upon NRPA and TPL standards, sufficient park and programmed recreation space to service the neighborhood's needs is lacking within the BOA Study Area. However, some of these needs can be met in park and recreation areas directly adjacent to the BOA, including the Flint Street Community Center (FSCC) and Genesee Valley Park West (GVP-W), which service the BOA and larger portions of the City and Monroe County. Accessibility is a major consideration in determining sufficient open space and programmed recreation space. The FSCC is located across South Plymouth Avenue, a busy roadway that is trafficked by approximately 7,000 to 12,000 cars per day which potentially presents a psychological barrier to children and young families. GVP-W is accessible from the South Plymouth Street sidewalk system via an approximate 15 to 20 minute walk, a distance and time commitment that also may present a barrier to users. Based upon these accessibility constraints, the BOA Study Area should likely include a minimum of two to four acres of park space with a playground and basketball courts east of South Plymouth Avenue to support the needs of neighborhood residents. Recreational needs such as sports fields can continue to be met via adjacent resources.

To meet recreational space needs, the City should investigate the redevelopment of the existing Exchange Street playground to serve the northern portions of the BOA. This park is currently underutilized, with a small play structure and limited usable open space due to topography and vegetation. This park should be redeveloped to enhance safety, accessibility and programmatic offerings. In addition, the expansion of the Exchange Street playground along the former railroad right-of-way to the Genesee River waterfront should be considered. The City is actively seeking funding for the investigation and design of these improvements as part of its PLEX Neighborhood Waterfront Connector initiative, which seeks to provide safe, efficient and enjoyable connections between the PLEX Neighborhood and the Genesee River waterfront.

Additional neighborhood park and recreation needs could be met through the development of a larger park along the Genesee River waterfront on lands former utilized by the Vacuum Oil. A 15 to 20 acre park at this location would be sufficient to support a large portion of the City's Southwest quadrant and 19th Ward neighborhoods, while also servicing the PLEX neighborhood. As part of this park, the Genesee Riverway Trail should be improved for safety and wayfinding.

EXISTING BUILDINGS

Existing buildings within the BOA Study Area vary widely in condition and adaptive reuse potential. Commercial properties along South Plymouth Avenue are primarily located at corridor intersections. While many of these sites are actively utilized, redevelopment opportunities exist in currently vacant

properties, such as the former Fire Hall near the Ford Street intersection and Stamps Cleaners at the intersection of Jefferson Avenue. The most significant potential adaptive reuse project within the BOA is the redevelopment of the former Foodlink building located at the intersection of Flint and Exchange Streets. This massive concrete and masonry structure offers the potential for mixed use redevelopment including ground level commercial and upper story residential. The views from the roof of the structure towards downtown Rochester are impressive, and may offer the potential for a roof-top amenity or use as part of a larger redevelopment project. Several buildings to the north and one to the east of the Foodlink building may also offer redevelopment potential. A complete structural and building systems analysis will be required on all former Vacuum Oil buildings prior to any redevelopment activity.

Several sites outside of the former Vacuum Oil site may also benefit from aesthetic enhancements to improve the business environment within the neighborhood. These sites include Mac's Cleaning Center, Zweigles Incorporated, and the hair salon located at 718-720 South Plymouth Avenue. Commercial and industrial buildings inventoried within the study area were primarily constructed prior to the 1960's and are typically single-story, flat-roofed structures with little aesthetic appeal. The establishment of design guidelines or standards should be considered to encourage the appropriate character and level of refinement for redevelopment and new infill activity within the BOA.

TRANSPORTATION AND INFRASTRUCTURE SYSTEMS

Existing traffic volumes within the BOA Study Area are reasonable, and speeds are generally acceptable along South Plymouth Avenue. However, residents have consistently voiced concerns regarding the need for traffic calming along Exchange Street and other internal residential streets where speeding is common place and a significant safety concern. The City should investigate the potential to deploy raised table intersections, crosswalks or similar traffic calming measures at critical points within the neighborhood to slow traffic and improve pedestrian safety.

Existing one-way traffic patterns and dead-end streets within the residential neighborhoods have an adverse impact upon connectivity, wayfinding and mobility. The terminus of Flint and Violetta Streets limits connectivity for both motorists and pedestrians to the Genesee River waterfront. In addition, the distance and visual separation of the Genesee River and South Plymouth Avenue is a significant deterrent to funneling residents to the River. In an effort to overcome these limitations, the City has created the PLEX Neighborhood Waterfront Connector initiative, which seeks to link the BOA neighborhood and adjacent areas to the Genesee River waterfront via highly visible and dedicated pathways along Flint Street and the former Genesee Valley Canal right-of-way. Flint Street and Exchange Street should become the two primary gateways into the neighborhood, the Vacuum Oil redevelopment and the Genesee River waterfront. Improvements along these corridors should include streetscape enhancements, traffic calming measures and wayfinding improvements to improve the pedestrian and motorist experience. Targeted improvements along South Plymouth Avenue should include the installation of highly visible crosswalks and traffic calming measures at key intersections, such as Flint Street and between Edith and Doran Streets, to improve safety for children and seniors seeking services west of the corridor.

Water and sewer infrastructure appear to be sufficient to support the redevelopment of the Vacuum Oil site, with access to ample water and sewer capacity currently in place. However, the location of significant underground infrastructure may pose challenges and obstacles to the redevelopment of areas adjacent to Flint Street. Where possible, impacts to existing infrastructure should be avoided to limit the cost and timing impacts associated with utility relocation. An infrastructure concern voiced by residents throughout the public engagement process has been the friendliness and safety of the Genesee Riverway Trail, particularly at night due to a lack of lighting. The City should investigate the provision of vandal-proof lighting and the integration of emergency call boxes similar to those located in the Riverview Apartments complex operated by the University of Rochester. The condition of the river wall within the BOA has been a major concern voiced by area residents; the wall is crumbling in many locations, and its height prohibits views to the water from the Genesee Riverway Trail. The structural integrity of this wall should be investigated similar to studies taking place north of the Ford Street Bridge. All future waterfront improvements in these areas should increase visual access to the Genesee River.

BROWNFIELDS

The BOA Study Area is characterized by 38 commercial and industrial properties classified as potential brownfields on approximately 45 acres. The Vacuum Oil site includes 14 (37 percent) potential brownfields on 40 acres of land, which is the equivalent of 89 percent of the total brownfield land area and 32 percent of the entire BOA.

Previous investigations completed within the former Vacuum Oil site footprint, primarily south of Flint Street, have identified significant soil and groundwater contamination. Remedial investigations and remedy selection have yet to be completed on any parcels within the Vacuum Oil site, therefore it is unclear how contaminant conditions and cleanup will impact redevelopment alternatives for these properties. Environmental cleanup and the final reuse of these properties will be dependent upon the level of cooperation from and willingness of the potentially responsible parties (PRPs) and current property owners to cooperate on remediation and redevelopment efforts.

The properties that have been the subject of the most environmental investigation activity to date are 5 Flint Street and 15 Flint Street. It is expected that some form of site cleanup will be required for these sites to allow any reuse, including lower intensity uses such as public recreation space. For remedial planning as well as long-term land use planning purposes, a combination of open space, cultural, mixed-use, and commercial uses has been identified for 5 and/or 15 Flint Street. Should site conditions result in environmental or public health based land-use restrictions, the BOA Master Plan will need to be flexible enough to preclude some of these uses on some or all of the parcels. The same principle would apply to any of the parcels on the former Vacuum Oil refinery. Until such time as environmental investigations, remedy selection, and cost estimating are completed the uses proposed in the Master Plan for any one parcel must remain flexible.

Based on historical research the areas located north of Flint Street within the former Vacuum Oil site footprint also carry significant potential for contamination. These properties include the Foodlink and former Sears Warehouse parcels. Additional investigations are needed to determine contamination conditions within the Vacuum Oil site between Flint Street and Violetta Street. Land use planning for

these areas should focus on higher density residential and mixed-uses pending the results of investigations and the determination of cleanup approaches and cost estimates.

The City is actively exploring entry into the State's brownfield cleanup program for properties under City ownership especially south of Flint Street. The City is also exploring potential grant funding opportunities for environmental investigations through the State's Consolidated Funding Application Process and Environmental Restoration Program. .

There are several potential brownfields outside of the Vacuum Oil site primarily located along South Plymouth Avenue, including the former Fire Hall, the Whiz Cleaners site and the Nordon Real Estate sites. Some of these properties are occupied by active and productive businesses. Suspected brownfield properties that are or become abandoned, vacant or underutilized inactive should be targeted for Phase I and Phase II environmental assessments as well as those for which a change of use is proposed. Proposed new uses of such properties should be consistent with both the environmental conditions present and the BOA Master Plan recommendations.

ENVIRONMENTAL FEATURES

The Genesee River is a key natural and recreational resource within the Study Area, City and region. Future redevelopment should focus on adopting sustainable solutions to protect its environmental quality. Future development within the BOA Study Area should employ sustainable practices such as the reduction of impervious surfaces and the use of green infrastructure to minimize adverse water quality impacts associated with storm water runoff.

The contamination of soils, fills, and ground water from previous industrial activities is a potential concern that may be encountered during excavation for the installation of utilities, mass grading, and construction of buildings and other proposed features within the BOA Study Area. Institutional controls including the development of Environmental Management Plans (EMP) will likely be required to guide future development activities. If sites are addressed under the State's Brownfield Cleanup Program, institutional controls such as Site Management Plans, EMP's, environmental easements, and engineering controls including long term groundwater monitoring may be required.

The 100-year floodplain extends inland from the Genesee River, impacting lands west of the Genesee Riverway Trail. Future development proposed in these areas will be subject to the regulations set forth in Chapter 56 of the City Code and should be coordinated with the NYSDEC Regional Floodplain Coordinator for the Genesee River basin. Although no NYS DEC jurisdictional wetlands were identified within the Study Area based upon known mapping resources, the topography of the site is such that isolated wetlands may exist in the field. Therefore, a further investigation into the existence of wetlands should be conducted as part of the Step 3 Implementation Strategy.

3.5.2 Regulatory, Ownership and Cultural Conditions Impacting Revitalization

Regulatory, ownership and cultural conditions impacting revitalization may have varying degrees of positive or adverse impacts upon the revitalization of the neighborhood. The following provides a summary of pertinent factors and corresponding considerations relevant to the development of the master plan.

ZONING

There are several instances where existing zoning district arrangements within the BOA Study Area have an adverse impact upon potential revitalization scenarios. Low Density Residential (R-1) zoning is pervasive and currently limits potential for mixed use development. Current R-1 zoning along both South Plymouth Avenue and the Genesee River waterfront does not fully leverage its potential for higher density housing, mixed use commercial/retail, and water-enhanced or water-dependent development. To effectively increase the population, service offerings and foot traffic present along South Plymouth, current R-1 zoning in targeted nodes and intersections will require a change to a zone which permits a greater mix of uses, as well as higher density residential uses. This change in zoning should be accompanied by a set of design standards to ensure future development maintains an appropriate scale and does not negatively impact residential uses along South Plymouth and in adjacent neighborhoods.

The existing areas zoned C-1 at the intersection of Cottage Street and South Plymouth Avenue and south of Columbia Avenue are not sufficient to supply a critical mass of mixed use services. It is proposed that this zoning district be expanded to include properties adjacent to the intersections of South Plymouth Avenue with Flint Street and Magnolia Street, and a slight expansion north to the intersection of Columbia Street. Design standards should be established to ensure the character of development conforms to the surrounding residential character. The Industrial zoning currently in place within the Vacuum Oil site permits a broad range of activity that conflict with the surrounding residential uses and proposed uses along the Genesee River waterfront. The Industrial zoning should be changed to reflect the desires for a mixed-use, water-enhanced destination along the Genesee River.

FEDERAL AND STATE AGENCIES JURISDICTIONS

Due to its status as a Navigable Water of the United States, the activities taking place within the Genesee River downstream to Corn Hill Landing are under the jurisdiction of the Army Corps of Engineers (ACOE), the NYS Department of Environmental Conservation (NYSDEC) and the NYS Canal Corporation. The US Coast Guard also has jurisdiction over navigable waters, yet would only have involvement for any bridges or structures spanning the watercourse. In addition, the NYS Office of General Services Real Estate Planning and Development office (NYSOGS) is the agency in control of the narrow strip of land along the Genesee River waterfront. Waterside improvements and activities anticipated to take place within the BOA would likely be limited to pile supported and/or floating structures along the shoreline for pedestrian usage and boat dockage. The permitting and approval process for waterside improvements can be very extensive. It is recommended that the NYSDEC, NYSOGS and ACOE be contacted early in future design processes to ensure timely results and efficient coordination.

PROPERTY OWNERSHIP

The City of Rochester and State of New York have control of 90 percent of all vacant land within the BOA, which should speed land assembly, design and redevelopment activities for these properties. In addition, 41 percent of public properties are considered potential brownfields, which increases the likelihood of environmental remediation due to increased access to State and federal funding. However, remediation concerns will likely also extend project timelines, and reduce the ability of the City to react quickly to any increases in market demand within the BOA. The entire Genesee River corridor is bounded by lands controlled by NYSOGS which should allow significant opportunities for public access to the waterfront. However, State involvement increases coordination requirements and also lengthens project timelines; each of these factors should be considered for shoreline and nearshore improvements.

HISTORY AND CULTURE

The BOA Study Area has a rich industrial and cultural history which should be celebrated by identifying opportunities for interpretive sites and potentially a modest cultural center along the Genesee River waterfront. A significant theme for historic interpretation could be the changing role of the Study Area over time. Interpretive nodes established along the Genesee Riverway Trail could function as a timeline, indicating important people, places and events and their connection to the City. Opportunities may also exist to locally designate historic sites, such as the Camp Fitz-John Porter Civil War site, and remaining portions of the former Vacuum Oil Works which had a notable impact on the automobile industry throughout the world. One of the most dramatic opportunities within the Study Area is the potential to physically interpret the former Genesee Valley Canal, which could potentially include the construction and re-watering of a portion of the historic canal bed. Such a contemporary water feature could become the focal point for public space improvements and the centerpiece of historic and cultural interpretation within the BOA.

3.5.3 Demographic and Market Trends Impacting Revitalization

Demographic and market trends will have a significant impact upon revitalization efforts within the PLEX neighborhood. The following summary highlights noteworthy characteristics that offer potential opportunities, as well as those factors that may need to be mitigated through creative marketing, financing or other pre-development activities.

POPULATION AND INCOME

The population within the BOA decreased over nine percent from 2000 to 2010, and is projected to further decrease through 2015. The loss of households and families in similar proportion likely indicate that population decline is more connected to the outmigration of entire families, rather than attrition through the passing of seniors or older children moving out of the home. The slight decline in average household size, a significant reduction in the number of families, and the increase in the median age indicate that the BOA is losing young families at a significant rate. The specific causes of outmigration within the BOA are unknown; however, there are several opportunities to create an environment which is attractive to young and growing families. These include the provision of accessible recreation space, high quality and affordable single-family housing, and a safe environment free of crime. Recommendations

made within the BOA Master Plan should focus on the provision of these and other enhancements to improve the attractiveness of the PLEX neighborhood to new families. Additionally, the rising senior population within the BOA is indicative of wider trends found throughout the United States where individuals and couples are living longer and choosing to age in place. Options and alternatives for seniors to stay in their homes and/or transition to alternative housing while staying within the neighborhood should be investigated to maintain the highly-valued mixed generational aspects of the BOA. Future housing specialized for seniors should be located in close proximity to transportation options, retail and personal services, and amenities.

The loss of families and an increase in the percentage of limited-income seniors is the most likely cause for the growth in median household income levels within the BOA to lag behind the trade area and City. Low median household income levels present a challenge to attracting market rate housing and retail offerings without substantial public incentives. An increase in median household income values within the BOA can be attained both by attracting new, higher income residents to the neighborhood, and also through the addition of higher paying jobs available locally.

HOUSING

The expanding University of Rochester student population and ‘baby boomer’ generation should become target populations future development projects within the BOA to provide flexible housing alternatives. Housing alternatives for college-students should focus on affordable graduate housing in both the communal and townhouse setting. Housing for baby-boomers should likely focus on low-maintenance townhomes with views of the Genesee River. Concurrently, additional new or revitalized single-family housing for young families should also be targeted to generate the critical mass necessary to support quality, affordable retail and commercial offerings.

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SECTION 4: MASTER PLAN FRAMEWORK

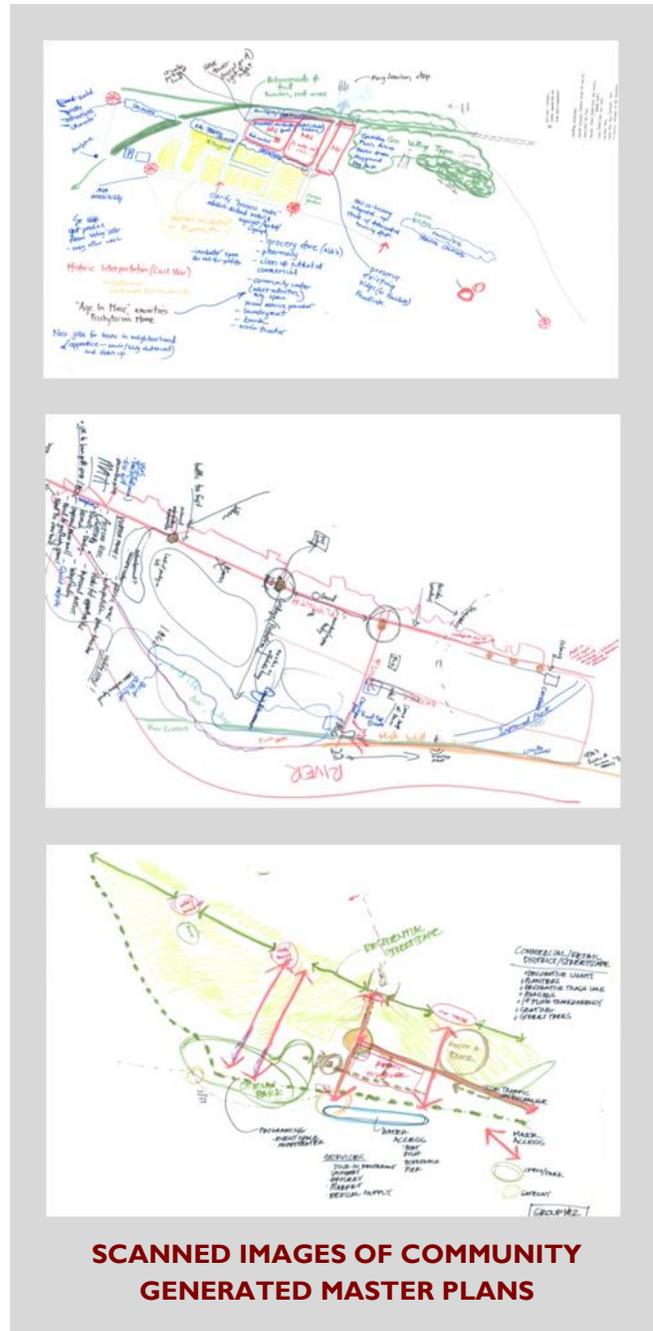
Throughout the course of the planning process, the City of Rochester and the design team were engaged with members of the community and local organizations such as the PLEX Neighborhood Association and the Sector 4 Community Development Corporation. The public engagement process included several meetings with community stakeholders and public workshops to gather input and ideas for revitalization of the Study Area. This input was collected, organized and synthesized to provide the basis for the development of the Master Plan. The following section provides an overview of the Master Plan Framework which was driven by the local community.

4.1 PUBLIC INPUT

Community engagement and involvement in the planning process was integral to the development of the Vacuum Oil BOA master plan. The design phase of the project kicked-off with a Design Workshop which was open to all members of the public. The Design Workshop included three primary components: a community character survey; an educational component regarding best-practices for design; and a hands-on, small group exercise whereby residents and meeting participants put their ideas and thoughts directly on paper.

The small-group, hands-on workshops proved to be a unique opportunity for residents to share their ideas and concerns about the future of the study area. The identification of local needs and hearing residents long-term vision helped to guide and shape later master planning exercises.

See Figure 11 for a consolidated set of ideas which compiled the results from each design breakout group. This graphic formed the basis of the public sentiment and detailed the relevant concerns of residents and stakeholders to be considered during the Master Plan phase.



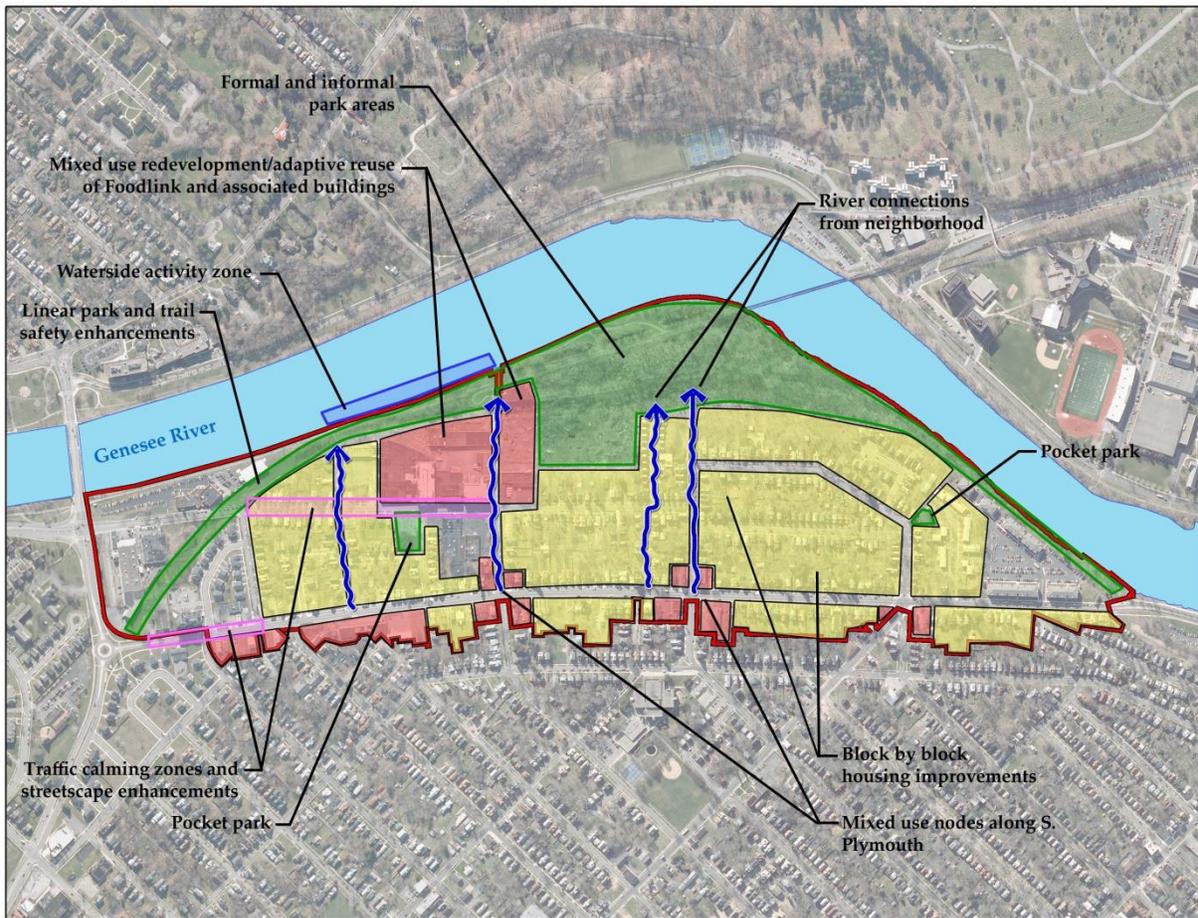


Figure 11: Summary of Community Ideas Generated at Design Workshop

The following is a summary of the ideas generated by community members during the Design Workshop, which contributed to the identification of the project Design Principles in Section 4.2.

4.1.1 Celebrate the Neighborhood

- Strengthen residential neighborhoods through selective housing rehabilitation and redevelopment, yet maintain affordable housing and housing for seniors.
- Leverage historic significance of spaces within the Study Area, including the former Civil War encampment and the former Genesee Valley Canal, for historic and educational interpretive opportunities.

4.1.2 Promote High Quality Urban Form and Placemaking

- The area containing the former Foodlink building and Vacuum Oil Works east of Exchange Street should be slated for adaptive reuse, where possible, to maintain the industrial character. Strong preference for mixed-use development here, including housing, retail, restaurants, and community business and cultural spaces, such as a business incubator, grocery, and performance space.
- Maintain the existing/abandoned water tower on the former Sears Warehouse building and improve with paint and lighting as an iconic element to brand the neighborhood.
- Consider providing access to building roofs for the creation of lookout and observation areas to take advantage of views to downtown, river, and U of R campus.
- Identify commercial/mixed-use nodes at major community intersections along South Plymouth, such as Cottage Street, Flint Street, Magnolia Street, and Violetta Street.

4.1.3 Enhance Connectivity and the Public Realm

- Public access along the Genesee River, with active water uses concentrated between Flint Street and Violetta Street.
- Maintain and develop large park and open space area along the waterfront between Flint Street and the landing of the Erie-Lackawanna Rail Trail Pedestrian Bridge. This area should be improved for safety with selective understory clearing, and include pockets of programming for event space, yet should be maintained with a strong transportation component.
- Improve the linear park space between Exchange Street and the Ford Street roundabout.
- Identify areas for potential pocket parks and playgrounds within the neighborhood to service residents and prevent them from the need to cross South Plymouth to access these amenities.
- Slow traffic on Exchange Street and make the corridor more pedestrian friendly with streetscape and safety enhancements.
- Flint Street and Exchange Street as primary access routes to former Vacuum Oil site redevelopment and waterfront. Magnolia and Riverview Place as primary access to large open space/park along waterfront.
- Streetscape for areas in between mixed-use nodes should be deferential to residential character.

4.2 DESIGN PRINCIPLES

The Master Plan for the Vacuum Oil BOA seeks to establish a unique recreational, social and economic destination centered on the Genesee River waterfront within the PLEX neighborhood. During the analysis portions of the Nomination Study and throughout the public involvement process several key principles formed a common thread on which to base the future Master Plan.

Each of the principles is described in further detail below:

4.1.1 Celebrate the Neighborhood

The PLEX neighborhood includes a diverse set of housing alternatives in close proximity to the Genesee River, downtown Rochester and the University of Rochester campus. The neighborhood should be maintained as an affordable location to raise a family, achieve gainful employment and live in modest comfort. The continued stabilization and revitalization of the neighborhood should establish a unique brand identity at celebrates its location and heritage through high quality public spaces.

Public spaces should concentrate on meeting the recreational needs of the existing neighborhood by providing park space, amenities and access to the Genesee River. Private development along the waterfront and adjacent areas should include thoughtfully designed public and quasi-public spaces that attract people and activity, both organized and impromptu. These public spaces should become the focal points along the waterfront, each uniquely recognizable, yet programmed utilizing a comprehensive theme and design aesthetic that coincides with the neighborhood brand identity.

The cultural and industrial past of the neighborhood are exceptional assets from which to create compelling public spaces that celebrate and interpret area's historical significance within the City. The former Genesee Valley Canal is one of these assets, and opportunities to interpret its importance and impact upon the development of the PLEX and Southwest neighborhoods should be explored. Additionally, any remaining structures or ruins associated with the Vacuum Oil refinery can be utilized as part of a larger discussion of Rochester's place within the American Industrial Revolution. Interpretive features and iconic elements in these spaces can be further bolstered within the BOA's wayfinding system to create known destinations and landmarks for enjoyment by residents and visitors.

4.1.2 Promote High Quality Urban Form and Placemaking

New development within the neighborhood should maintain and promote a high quality urban form to create walkable, pedestrian-scaled environments that foster vibrant streets and active public and quasi-spaces. Residential uses generate foot traffic necessary to support adjacent retail and personal services uses. Public and quasi-public spaces such as parks, plazas, promenades and outdoor dining areas provide

Vacuum Oil BOA Key Design Principles

- 1. Celebrate the Neighborhood**
- 2. Promote High Quality Urban Form and Placemaking**
- 3. Enhance Connectivity and the Public Realm**

a respite for residents, opportunities for people to interact with one another, and an enhanced public realm associated with private development. Within the Vacuum Oil BOA, it is envisioned that residential development will be sufficient to support high quality public spaces and moderate intensity commercial development. In conjunction with appropriately scaled and designed public spaces, mixed use developments also provide added activity throughout the day and may also enhance public safety. A high quality mixed use destination along the Genesee River waterfront is envisioned to become a catalyst for continued investment and revitalization throughout the PLEX neighborhood.

In addition to a mix of land uses along pedestrian-scaled streets, the design and development of waterfront spaces will have a significant impact upon the success and sustainability of revitalization. Public spaces along waterfronts are often the most popular destinations within communities for residents and visitors, and should be the cornerstone of placemaking efforts within the Master Plan. Places to sit, relax, congregate, take in views, or people-watch are most successful in locations with a dramatic backdrop, such as water, vistas, or a node of activity. The Master Plan should provide abundant public access opportunities along the waterfront that include memorable destinations and iconic spaces for public enjoyment that support private investment and economic activity.

4.1.3 Enhance Connectivity and the Public Realm

The PLEX neighborhood is well-connected to surrounding City and regional resources, with convenient transportation access to Interstate Routes 390 and 490 and proximity to downtown Rochester and the University of Rochester campus. This proximity provides neighborhood residents with the potential for reduced commute times to employment centers. In addition, the neighborhood offers an affordable, yet high-value waterfront location with a direct connection to the Genesee Riverway Trail system and the University of Rochester campus via the recently completed Erie-Lackawanna Rail to Trail pedestrian bridge. The BOA also benefits from proximity to extensive amounts of publicly controlled waterfront and impressive views towards the downtown skyline. Circulation and connectivity improvements should provide a series of loops linking South Plymouth Avenue to a new transportation corridor along the waterfront that draws the community to and along the waterfront.

The PLEX neighborhood has several waterfront access opportunities within easy walking distance, most notably in the Genesee Riverway Trail. Connectivity to these access points can be bolstered through improved pedestrian and vehicular circulation patterns that avoid dead-end streets and pathways to support expanded economic development and investment within the BOA. Future development and investments in public and private infrastructure within the BOA must increase waterfront accessibility, enhance neighborhood connectivity, and create circulation patterns that are safe, efficient and enjoyable. The City and private landowners should leverage these connectivity benefits through promotion and marketing of the BOA for future development and investment opportunities.

The public realm includes the network of streets, sidewalks, trails and public spaces available for use by the public. Connectivity and accessibility within the public realm is enhanced through the utilization of a consistent, coherent and intuitive wayfinding system. Wayfinding is the process of utilizing multiple pieces of information to understand and navigate through space. A successful wayfinding system is a key

component of the BOA Master Plan, and will provide an easily understood information system to improve circulation, connectivity and enjoyment of the public realm.

The gateway is one of the most frequently utilized wayfinding techniques that also provides public realm enhancements by denoting the passing into or out of a distinct place or space. The BOA's waterfront is accessible from numerous potential gateways along South Plymouth Avenue and Ford Streets. A coordinated system of unique design elements should be integrated throughout gateways that will draw people to the Genesee River.

While gateway elements largely denote the entrance into or exit from places and spaces, wayfinding signage systems provide location-based information, including orientation, interpretation and destination markers. Alternative wayfinding elements such as public and site-integrated art seamlessly weave orientation elements into the landscape without the use of overt text-laden signage. The BOA's cultural and industrial history can also be leveraged through a comprehensive wayfinding and interpretive signage system. The use of these wayfinding techniques along the waterfront and along major transportation corridors will improve the BOA's ability to attract visitors and should act to solidify the neighborhood's waterfront identity.

4.3 LAND USE AND MASTER PLAN OPTIONS

4.3.1 Introduction

The findings from the Inventory and Analysis, the Market Analysis, and the Public Design Workshop were synthesized into three conceptual alternative master plans (see Appendix E for full size maps) depicting varying levels of development throughout the Study Area. Within the three distinct master plan options were consistent themes and design components which largely stemmed from community feedback.

Consistent design themes among the three alternatives include:

- Enhanced waterfront trail system;
- Programmed waterfront spaces;
- Direct waterfront access;
- Residential neighborhood stabilization;
- Reuse of vacant properties in residential areas;
- Streetscape enhancements and traffic calming; and
- Visual and physical connectivity within neighborhood.

Each of these alternatives was presented to the Project Advisory Committee at their September 17th, 2012 meeting. Following a lengthy discussion period where many varying ideas and options were expressed, the Project Advisory Committee concluded that Conceptual Alternative 3 most closely met the goals and objectives of the community, but would require additional refinement.

The three alternatives are summarized to provide context for the origins of the Preferred Redevelopment Plan which is described in Section 5. Larger versions of these concepts can be found in Appendix E.



Figure 12: Conceptual Alternative 1 - Moderate Development Concept

Alternative 1: Master Plan Highlights

- **Moderate density**
- **Retains Foodlink building**
- **Exchange Street focus of commercial development**
- **Violetta Street housing improvements**
- **Luther Circle senior housing**
- **Surface parking**

Conceptual Alternative 1 provides for a medium density development encompassing a significant portion of the former Vacuum Oil refinery site. The concept provides for extensive programmed open space along the waterfront, and the construction of a new access roadway parallel to the Genesee River from Violetta Street to Riverview Place. A variety of housing options were proposed, including senior housing along an extension of Luther Circle, individual townhomes along Violetta Street, and condominiums and apartments on second and third stories in mixed use structures at the core of the neighborhood. This proposal retains the former Foodlink building, yet removes the structure on 5 Flint Street to free waterfront views and create a gathering space at the terminus of Flint Street. Waterfront improvements include kayak launches, small boat docks and significant public gathering spaces to provide waterfront access for residents and visitors.



Figure 13: Conceptual Alternative 2 - Open Space Concept

Alternative 2: Master Plan Highlights

- **Low density**
- **Extensive open space on waterfront and I5 Flint Street**
- **Retains Foodlink building and 5 Flint Street**
- **Development north of Flint Street**
- **Luther Circle student housing**

Conceptual Alternative 2 proposes the least dense development density, with structures proposed north of Flint Street within the footprint of the former Vacuum Oil refinery. The proposal retains both the former Foodlink building and 5 Flint Street for adaptive reuse. An extension of Luther Circle proposes new housing alternatives for college students, and infill commercial development is proposed along South Plymouth Avenue. A large community park is proposed for the area south of Flint Street, including active and passive recreation space intertwined with a system of trails that are part of the larger Genesee Riverway Trail system. Development densities are modest in scale, including mixed use structures two to three stories in height. Surface parking is located in centralized lots fronting on a new roadway parallel to the Genesee River between Flint Street and Violetta Street.



Figure 14: Conceptual Alternative 3 – Waterfront Development Concept

Alternative 3: Master Plan Highlights

- **Extensive mixed use development**
- **Retains Foodlink building and 5 Flint St.**
- **Structured parking to reduce pavements**
- **Doran/Violetta neighborhood revitalization**

Conceptual Alternative 3 proposes the greatest development density and the most expansive redevelopment footprint. A new roadway is proposed parallel to the Genesee River from Violetta Street to an extension of Magnolia Street, with development envisioned to the east and west of this roadway. The proposal retains 5 Flint Street and proposes additional residential development along the Genesee Riverway Trail to capitalize upon the viewshed to downtown Rochester. The extension of Luther Circle proposes new housing alternatives for seniors and includes a connection down-slope to the trail system. Large community open spaces are proposed between Flint Street and Riverview Place, as well as south of Magnolia Street. Development densities within the former Vacuum Oil site are three to four stories in height, sufficient to support the development of structured parking integrated into the site to limit the amount of site area consumed by surface lots.

SECTION 5: THE VACUUM OIL BOA MASTER PLAN

5.1 OVERVIEW

The Preferred Master Plan was developed as a result of significant interaction and engagement with local community members, City representatives and the Project Advisory Committee. The Master Plan reflects the vision and goals of the local community, while also recognizing the realities of the site and economic conditions. The Master Plan balances the communities' goals of neighborhood stabilization, waterfront access, safety and quality-of-life improvements with redevelopment projects that can help to enhance the overall character and aesthetic of PLEX. The proposed development seeks to support neighborhood objectives of expanded job opportunities and improved access to goods and services that are needed in this neighborhood. At the same time, a critical mass of density has been established to create a special waterfront destination in the City and larger region. Building on the Design Principles and community feedback, the preferred master plan was prepared around a foundation of key land uses, programs and neighborhood enhancement projects. These foundational elements of the master plan are described in broad terms below.

5.2 FUTURE LAND USE AND KEY DESIGN FEATURES

The Master Plan recommends noteworthy changes to land use patterns within the Study Area, including a transition away from industrial uses and the inclusion of a greater range of water-dependent and water-enhanced uses along the Genesee River waterfront. The following section describes the proposed land use character within the Study Area, including key elements which support the Design Principles established in Section 4.2.

5.2.1 Residential

The Master Plan first and foremost stresses the importance of maintaining and strengthening existing residential neighborhoods south of Violetta Street. Various programs can be utilized to achieve the objectives of increased home ownership and improved property maintenance within these PLEX neighborhoods. Community gardens, pocket parks and infill development will address maintenance and vandalism issues on vacant lots interspersed throughout the neighborhoods.

The proposed Master Plan also includes primary residential-focused revitalization areas at both the northern and southern ends of the Study Area. The northern area is focused on



Example of infill housing of an appropriate scale and style in Portsmouth, VT.

addressing disinvestment and distress between Doran and Violetta Streets. The plan recommends this area remain a single-family and two-family residential neighborhood, yet undergo necessary redevelopment to foster a similar character and development pattern found along other neighborhood streets, such as Elba or Cottage. The plan proposes the redevelopment of Luther Circle to meet the needs of the neighborhoods aging population and a roadway extension to connect with Serenity Circle. These improvements are intended to connect these currently isolated streets into the roadway and expanded pedestrian network of the Study Area.

5.2.2 Commercial Corridor

The vision for South Plymouth Avenue is envisioned to be maintained as a predominantly residential corridor, with modest pockets of commercial uses located at key nodes. The largest contiguous commercial segment of South Plymouth is located between Ethel and Fenwick Streets. The existing Martin Luther King Plaza is recommended to be redeveloped with a larger structure to contain multiple storefronts with direct access to the sidewalk and associated parking to the south of the new building. As noted in several community meetings and in research associated with this project, the Vacuum Oil BOA neighborhood is underserved with regards to access to grocery stores and fresh food. The location of the building to the streetline will also enhance the commercial presence of this short segment of South Plymouth, in similar character to existing commercial nodes at Cottage and Magnolia Streets. Other opportunities for mixed use infill development exist at key corridor intersections, including Flint Street, Cottage Street, and Barton Street. These areas should be a focus for convenience retail, personal services, and small office uses.



Commercial development of an appropriate scale for South Plymouth Avenue.

5.2.3 Mixed Use

The Master Plan provides a significant amount of mixed-use development located on the former Vacuum Oil refinery site east of Exchange Street adjacent to the Genesee River waterfront. In most instances, street level space would be reserved for public and quasi-public uses such as retail, restaurants and cultural facilities to encourage transparency, foot traffic and pedestrian/dining activity within the public realm. Professional office space and other private uses including owner-occupied and renter-occupied housing units would be reserved for upper stories. Architectural character is envisioned to be complementary in scale, proportion and massing to the surrounding neighborhood. However, design



Mixed use development at an appropriate scale within the BOA Study Area.

details, materials and the overall ‘look and feel’ of mixed-use development will create a unique sense of place that is pedestrian in scale and architecturally appropriate within the historical context of the BOA. The adaptive reuse of signature buildings and structures, such as the former Foodlink building and the water tower, would maintain the historic and iconic presence of the neighborhood’s former industrial identity.

5.2.4 Waterfront

The waterfront area includes all land east of the proposed north-south roadway linking Violetta Street and Magnolia Street. Waterfront uses within the Vacuum Oil BOA consist of residential and recreational offerings, including public gathering spaces and opportunities for water access via canoes and kayak docks and moorings for boats. Building development along the waterfront is limited to an area roughly equivalent to the boundaries of 5 Flint Street, with a slight expansion south towards Riverview Place. Upon the determination of feasibility, it is proposed that the existing structure located on 5 Flint Street remain for adaptive reuse as a mixed use structure containing ground floor cultural space and restaurant with residential or other private uses on the upper stories. This structure would be the focal point for cultural interpretation and public realm improvements along the waterfront. Programming and design of activity/gathering spaces along the waterfront will be anchored by a centralized plaza at the foot of Flint Street and a canal interpretive feature. The construction and re-watering of a portion of the historic Genesee Valley Canal bed is one of the most dramatic interpretive opportunities within the Study Area.

Existing access to the Genesee River waterfront is limited within the BOA Study Area; therefore, the provision of enhanced waterfront access is a primary focus of the Master Plan. Several new points of access are proposed from each street adjacent to the waterfront, including: Fenwick Street; Doran Street, Violetta Street; Flint Street; Riverview Place; Magnolia Street; and Luther Circle. A broad swath of land along the Genesee River waterfront has been reserved for public access, park and open space creating a greenway that extends along the entire shoreline within the BOA. This greenway follows the general alignment of the existing Genesee Riverway Trail system, and includes a spur trail that follows the former Genesee Valley Canal from Violetta Street north to the enhanced Exchange Street Park and playground area. In addition to providing access to the waterfront, the Master Plan proposes two points of direct access to the waterway via docks or kayak launches at the terminus of Violetta Street and Flint Street.



The fountain in the Lurie Garden at Millennium Park in Chicago is an appropriate example for waterfront public spaces in the BOA Study Area.

5.2.5 Open Space and Recreation

The Master Plan will transform the former Vacuum Oil refinery site into a place for people and a destination within the City. The Master Plan envisions significant public activity/gathering spaces along the waterfront, including play areas, a signature gathering space, and a canal interpretive feature. The master plan proposes the (re)construction of a portion of the Genesee Valley Canal as an interpretive water feature running along the new roadway and adjacent to a cultural facility housed in the ground floor of a rehabilitated structure on 5 Flint Street. Also adjacent to the cultural facility is a large waterfront plaza at the terminus of Flint Street. On the west side of the new roadway are large outdoor spaces abutting the mixed use development, intended for outdoor dining spaces. The combination of outdoor gathering, interpretive and dining spaces within a defined area at the terminus of Flint Street would create a prominent nexus of pedestrian activity.



A linear swath of greenspace along the waterfront similar to the above should be maintained along the Genesee Riverfront to increase public access to the water.

The Master Plan includes a centralized passive park between Riverview Place and Flint Street on a portion of 15 Flint Street. This three acre park will include picnic areas, a playground, passive recreation space and potentially community gardens. The park will be conveniently accessed from the neighborhood through trail extensions from Riverview Place and the Genesee Riverway Trail. A large area south of Magnolia Street is envisioned to remain undeveloped, yet improved as a public park and waterfront recreation destination for Southwest neighborhood residents. It is proposed that significant portions of this area would be cleared of understory brush and invasive scrub growth and replaced with a mown lawn sufficient for active or passive uses. The existing Exchange Street Playground is proposed to be rehabilitated and expanded to include a section of the former Genesee Valley Canal and a connection to the Genesee River waterfront.

Addition opportunities for pocket parks on vacant lots within the neighborhood are proposed throughout the Study Area.



A centralized and easily accessible community park similar to the above would be an appropriate recreation space for use and enjoyment by PLEX neighborhood residents.

5.2.6 Transportation and Infrastructure

The most significant expenditure of public funding will occur on the construction of roadways and necessary infrastructure to support future development. The street network as proposed in the Master Plan is a modified grid based largely off of existing roadway patterns. The most notable change is the proposed construction of a new road linking Violetta Street south, parallel to the River to a connection with an extension of Magnolia Street. Pending the outcome an engineer feasibility study, the new road would serve as the primary access spine to the Genesee River waterfront. Traffic would be funneled from South Plymouth Avenue and Exchange Street via the extension of Flint, Fenwick and Magnolia Streets, significantly improving accessibility to the waterfront for Southwest neighborhoods. Existing streets would be maintained at a pedestrian-scale, and the new roadway would provide extensive on-street parking to service adjacent development and promote traffic calming. The new roadway corridor would include the existing route of the existing large sanitary sewer, and would largely follow the City-owned corridor of the former Genesee Valley Canal. This alignment would facilitate the rapid construction of the roadway pending any necessary environmental remediation activities. Alternative alignments may be required pending the outcomes of traffic, parking and slope analyses during Step 3 activities.



High visibility crosswalks reduce traffic speeds and clearly identify the pedestrian realm within the street.

5.2.7 Gateways and Wayfinding

The establishment of a unique brand identity will advance positive perceptions of the PLEX neighborhood for both residents and property owners. In addition, extensive wayfinding improvements will assist in funneling pedestrians and motorists from the surrounding neighborhoods and downtown Rochester to the new mixed-use neighborhood center on the waterfront. Primary wayfinding nodes will coexist with primary gateways at the periphery and within the BOA. Several key gateways are identified at primary transportation intersections along South Plymouth Avenue, including: Magnolia Street; Cottage Street; Flint Street and Edith Street. These areas are proposed to include enhanced pavement treatments and crosswalks to improve visibility of pedestrians and calm traffic. In addition, the Exchange Street/Flint Street intersection is envisioned to become the primary ‘4-Corners’ of the revitalized neighborhood, and will function as the primary wayfinding node within the redevelopment area.



Wayfinding signage will be important in the development of a neighborhood identity for PLEX.

5.3 MASTER PLAN CAPITAL IMPROVEMENTS

Flexibility and adaptation in the phasing and implementation of the Master Plan should be anticipated and expected. During the course of the next 15 to 20 years available funding streams, property ownership, the marketplace and local economy will all likely change. In addition, the availability of information regarding known environmental contamination and site conditions will increase, potentially altering the proposed land use patterns and the development potential of parcels crucial to the implementation of the Master Plan in its current form. Therefore, the actual implementation of projects and the redevelopment of properties may differ significantly than as presented in the Master Plan. Success will continue to be achieved when the larger vision of community revitalization is realized.

5.3.1 Phasing

Map 17 identifies the 2035 BOA Vision Plan, which is divided into three development phases:

- Phase 1 projects represent catalytic investments needed to lay the groundwork for future projects while also establishing a benchmark for quality to be achieved in subsequent phases (see Map 18 and Table 10).
- Phase 2 projects are anticipated to build upon the momentum and groundwork provided in Phase I. These projects are expected to occur in years eight through 15, and should promote early signature projects enhancing the identity of the BOA Study Area (see Map 19 and Table 11).
- Phase 3 projects represent the culmination of 15 years of continued public and private investment. These projects are intended to maximize available density and development potential, while capitalizing upon the renewed identity of the PLEX neighborhood as a viable riverfront destination within the City of Rochester. (see Map 20 and Table 12).

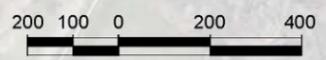
The implementation of Master Plan capital improvements will necessitate significant levels of investment and commitment. A phased approach is recommended to leverage previous investments and gather momentum for the on-going revitalization of the PLEX neighborhood. A 15 to 20-year implementation horizon is envisioned that balances neighborhood stabilization with market and economic realities. Not all projects may transpire exactly as proposed, yet the Master Plan provides the framework for thoughtful and careful execution of future public and private investment with the Study Area.

A significant number of variables and factors, both known and yet-to-be discovered, will impact the redevelopment of the Study Area over a 20-year span. Therefore, a series of assumptions were made to create a static starting point from which to build-upon. These assumptions include:

- *The assembly of public and private land to accommodate phased development is possible.*
- *Key property owners will be active, voluntary participants in redevelopment.*
- *Environmental and geotechnical investigations do not identify obstacles to development.*
- *Sufficient public and private sources of funding are identified, available, and secured.*
- *Structures identified for adaptive reuse are determined suitable.*

KEY

- 1. Commercial Redevelopment
- 2. Infill Development
- 3. Commercial Redevelopment
- 4. Flint Street Green Infrastructure Improvements
- 5. Multi-Family Housing and Roadway Connection
- 6. Trail Enhancements
 - Interpretation
 - Safety
 - Vegetation Clearing
- 7. Car Top Launch / Water Access
- 8. *Interim Parking Removed in 8-15 Year Plan*
- 9. Parkland and Trail Development
- 10. *Site Preparation Completed in 0-7 Year Plan*
- 11. New Road Construction
- 12. Exchange Street Gateway and Streetscape
- 13. Enhanced Trail Connection and Playground
- 14. Housing Redevelopment
- 15. Mixed Use Development
- 16. Foodlink Redevelopment
- 17. Mixed Use Development
- 18. Waterfront Mixed Use
 - Adaptive Reuse of 5 Flint Street
- 19. Waterfront Mixed Use with Structured Parking
- 20. Waterfront Amphitheater
- 21. Public Gathering / Event Space
- 22. Canal Interpretation / Water Feature
- 23. Wetland Interpretation and Nature Trail
- 24. Mixed Use Development with Structured Parking
- 25. Mixed Use Development



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City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
2035 VISION PLAN

This effort was made possible with the guidance and financial assistance provided by the New York State Department of State Brownfield Opportunity Area Program.

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5.3.2 Phase 1: 0-7 Years

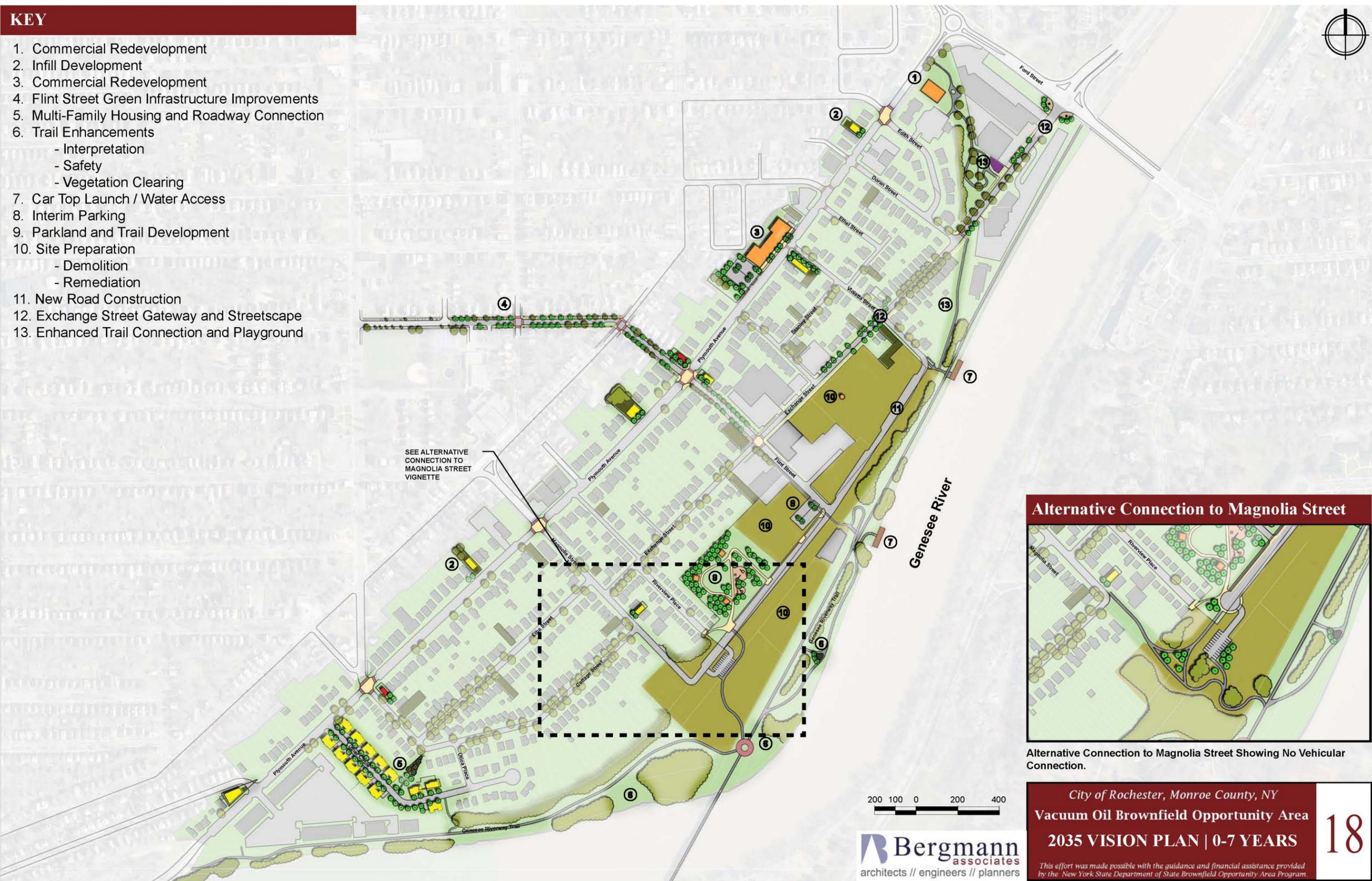
As indicated on Map 18, the first seven years of Master Plan implementation involve a significant level of public expenditure on environmental investigations, the acquisition of property, the demolition of substandard structures, and the installation of necessary infrastructure to support continued investments by private interests. There remains a high level of uncertainty regarding the extent and intensity of any environmental contamination present on sites within the former Vacuum Oil refinery footprint. As property becomes available for redevelopment, Phase 1 and/or Phase 2 Environmental Site Assessments will need to be conducted to ascertain the extent, if any, to which impairments will impact redevelopment.

The following is a detailed discussion of Phase I improvements, including required implementation activities associated with identified strategic sites. Table 10 provides a detailed description of anticipated costs, potential funding sources and time frames associated with the implementation of each project, and can be found at the end of each phase.

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KEY

- 1. Commercial Redevelopment
- 2. Infill Development
- 3. Commercial Redevelopment
- 4. Flint Street Green Infrastructure Improvements
- 5. Multi-Family Housing and Roadway Connection
- 6. Trail Enhancements
 - Interpretation
 - Safety
 - Vegetation Clearing
- 7. Car Top Launch / Water Access
- 8. Interim Parking
- 9. Parkland and Trail Development
- 10. Site Preparation
 - Demolition
 - Remediation
- 11. New Road Construction
- 12. Exchange Street Gateway and Streetscape
- 13. Enhanced Trail Connection and Playground



SEE ALTERNATIVE CONNECTION TO MAGNOLIA STREET VIGNETTE

Alternative Connection to Magnolia Street



Alternative Connection to Magnolia Street Showing No Vehicular Connection.



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1: REDEVELOPMENT OF FORMER FIRE STATION

The former fire station at 632 South Plymouth Avenue is located at a significant gateway to the Study Area, and the currently vacant structure negatively impacts the perception of the neighborhood. This site is currently owned by the Rochester Housing Authority and redevelopment options are currently being considered. Given the site's prime location and proximity to the Kennedy Towers senior assisted living facility and residential neighborhoods, a professional service or commercial use is recommended.

Identified as a potential brownfield, this site could be eligible for Phase 1 or Phase 2 Environmental Site Assessment funding through Step 3 of the BOA Program.

The fire station has been identified as a key redevelopment site by the local community whom would like to see it replaced with medical offices or small retail.

2: SOUTH PLYMOUTH AVENUE & NEIGHBORHOOD INFILL

The redevelopment of vacant lots along South Plymouth Avenue should maintain and preserve the existing scale and residential-detached character found throughout the corridor. Building form, massing and setbacks should be complementary to adjacent uses, and avoid deep setbacks and parking between the structure and the roadway. Appropriate uses include housing and personal service businesses to support PLEX neighborhood residents.

Within residential neighborhoods, appropriate uses on vacant residential lots would include similarly scaled single family residential development, neighborhood parks or community gardens.

As part of BOA Step 3 Implementation activities, design standards should be developed for the South Plymouth Avenue corridor to ensure consistency and appropriate design of future construction.



Multi-story detached structures with shallow setbacks, similar to those above, are complementary to the existing urban form along South Plymouth Avenue.

3: SOUTH PLYMOUTH AVENUE COMMERCIAL REDEVELOPMENT

The existing Martin Luther King Plaza located south of Columbia Street is recommended to be redeveloped with a larger, more prominent structure containing multiple storefronts and direct sidewalk access. This site has been identified as a preferred location for a local market or small-scale grocery. In order to accommodate this type of use, the existing site to the south would also need to be acquired to accommodate off-street surface parking. Additional consideration should also be given to acquisition of residential properties to the rear of this site for additional parking and truck/delivery access.

The PLEX neighborhood has been identified as a food desert with residents noting the need for greater access to fresh food and produce.

A new building should be reconstructed up to the streetline to enhance the commercial presence of South Plymouth. The first floor of the structure is proposed to be utilized for retail and the upper stories are proposed as residential units.

Conceptual plans indicate sufficient off-street parking for 25 to 30 in addition to available on-street parking, when considering the acquisition of the adjacent parcel to the south. Based on the available land area, the proposed building could be 10,000 square feet or more of first floor commercial, with 4 to 6 dwelling units or an additional 10,000 square feet of office space on upper floors.

A number of key steps would be required to move this project forward. In order to facilitate redevelopment, the City should consider property acquisition and assembly and then request proposals from developers and investors to construct the desired project. Additionally, the development of an incentive zoning law may provide additional regulatory flexibility for challenging infill development sites such as the Martin Luther King Plaza.

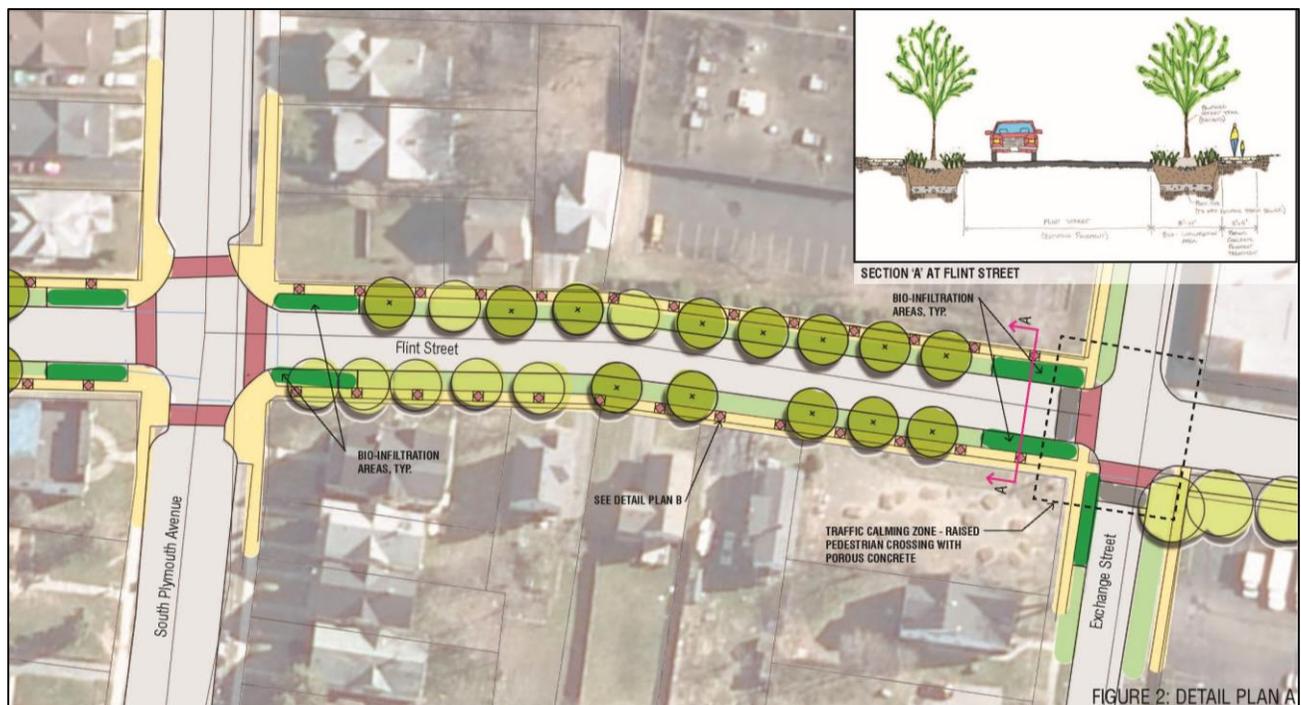


The commercial redevelopment of the Martin Luther King Plaza should include high quality façade treatments and enhanced transparency, similar to the above.

4: FLINT STREET GREEN INFRASTRUCTURE IMPROVEMENTS

The Flint Street Waterfront Connector will provide Green Street and pedestrian connectivity improvements between the Plymouth-Exchange / Southwest Area neighborhoods and the Genesee River waterfront. The project seeks to improve neighborhood accessibility with local, City and regional recreational destinations. The Connector begins at the Flint Street Community Center - the neighborhood hub for safe recreation and afterschool programming - and continues along Flint Street through the Vacuum Oil BOA to the Genesee Riverway Trail. The Waterfront Connector will enhance the ability of area residents and regional trail users to better access the Genesee River waterfront, the Genesee Riverway Trail, and the Flint Street Community Center.

The implementation of this project will be an additional revitalization initiative seeking to sustain and improve the quality of the residential experience within the PLEX neighborhood, as well as improve access to a regionally significant trail and open space network. The City should pursue funding for this regionally significant project through the 2013 Consolidated Funding Application process.



The City has developed conceptual designs for the installation of green infrastructure along Flint Street.

Access to recreational amenities is a major contributor to resident quality of life, and has the potential to positively impact neighborhood appeal and therefore indirectly increase property values.

5: MULTI-FAMILY HOUSING AND ROADWAY CONNECTION

The redevelopment of Luther Circle would likely be a public-private partnership towards the construction of new affordable housing options to support seniors who wish to age-in-place within the PLEX neighborhood yet are unable to do so in their current residence. As part of any housing redevelopment, the City of Rochester should assist with the extension of Luther Circle to Serenity Circle.

Housing character, density and massing are intended to be similar to the surrounding neighborhood, with a mixture of approximately 25 to 30 structures to meet the needs of the intended population. The design, redevelopment and extension of Luther Circle should meet requirements for ADA accessibility, while improving connectivity between the housing units and the adjacent pocket parks and the Genesee Riverway Trail system.

This will require additional investigation regarding alternatives to navigating the steep slope to the south, as well as potential City acquisition of property to facilitate redevelopment.

Residents have identified the need for more senior housing options in the neighborhood to allow aging residents a location in PLEX where they can “age-in-place”.



Single story housing, as depicted in images, would be attractive to older population group who desire one story living arrangements. This type of housing is not readily available in the neighborhood today.

6: WATERFRONT PUBLIC REALM ENHANCEMENTS

Significant public realm improvements are proposed for Phase 1, including the development of a new park (Project #9) and several waterside access improvements via the construction of docks at the termini of Flint Street and Violetta Street and associated trail head parking.

As part of the overall waterfront public realm enhancements specific projects associated with the Riverway Trail and adjacent lands are also recommended in order to enhance safety, usability and access to the riverfront. Recommended improvements include the clearing and grubbing of several acres of overgrowth and invasive species removal along the Genesee Riverway Trail, the replanting of this area to a park-like character, and the establishment of enhanced historic and cultural interpretive stations. The clearing of the trail corridor should include a narrow, level shoulder of mown grass to one side of the trail to support its use during winter for cross-country skiing. In addition, the refurbishment of the riverwall will improve the aesthetic environment along the riverfront and visual access to the Genesee River. The provision of enhanced lighting and emergency call boxes should be included to increase safety and the utilization of the waterfront during the early evenings and throughout the year.

Today, the Riverway Trail functions as a City park and is considered to be open for public use from dusk-to-dawn, eliminating the need for lighting in these areas. The Riverway Trail would be a safer, more utilized destination if lighting were installed to provide enhanced security to trail users.

In order to support increased activity and access to the waterfront, a small surface parking lot, constructed on pervious pavers or grass materials, should be installed at the extended foot of Magnolia Street.



The City has requested funding through Step 3 of the BOA program to better position the City and private developers to begin investing in public realm enhancements, including wetland and invasive species assessments; topographic surveys; riverwall improvement studies; and a waterfront park and recreation master plan.

The image represents desirable waterfront design features, as identified by local neighborhood residents during the planning process, including lighting, high volumes of people, benches and other trail amenities and physical and visual accessibility.

7: CAR TOP LAUNCH / WATER ACCESS

The development of water access locations for kayaks and canoes will provide the existing neighborhood with expanded opportunities to experience and enjoy the Genesee River waterfront. The installation of two sets of removable docks would allow for their preservation and protection from river ice flows, and would facilitate future expansions as demand arises. These docks would also provide opportunities for fishing, and the general enjoyment of being at the water's edge. Access to the Genesee River at the proposed locations would require the breach of the riverwall while maintaining flood protection. The accessible ramp system installed at the Cornhill Landing development may be a viable example to provide access and portage routes over the riverwall system. The feasibility of creating enhanced water access will be further explored and studied in Step 3 of the BOA process.



Example of car top boat launch that would provide access to the Genesee River and create kayak opportunities between PLEX and Genesee Valley Park.

Local community members have expressed the desire to improve visual and physical access to the Genesee River. A car top boat launch would provide local residents with access, while also providing an amenity for all City residents to enjoy.

8: INTERIM PARKING

A small interim parking lot is proposed at the terminus of Flint Street to service the expanded use of the Genesee River waterfront trail and park areas. Consisting of approximately 20 spaces, this lot will function as a temporary trailhead during the redevelopment process. In addition, this lot will also provide a short portage route to the nearby kayak launch. Depending upon the timing of the lot's construction and the anticipated redevelopment schedule of 15 Flint Street, this facility may be constructed of gravel or asphalt, and should provide sufficient lighting to ensure safety. Prior to redevelopment of any sites within the Vacuum Oil footprint, further investigation and remediation may be warranted.

9: PARKLAND AND TRAIL DEVELOPMENT

Following required environmental investigations and potential remediation on parcels south of Flint Street, the development of a neighborhood park is a short-term priority project for the study area. The PLEX neighborhood is currently underserved with regards to formal, dedicated parkland and residents of all ages would immediately benefit from a designated park that offers a range of amenities. As depicted on the Master Plan, the southern end of 15 Flint Street has been identified as one possible location for a park, though this site is currently privately owned. Therefore, other sites should be considered and evaluated in Step 3 of the BOA Program with a focus on publically owned or controlled parcels.

Regardless of location, the neighborhood park is envisioned to include approximately 2 acres of passive recreation space, with picnic, playground and open lawn areas. The park should include expansive areas of shade, covered shelters, and be easily accessible from the surrounding neighborhood via sidewalk and trail connections. Parking is proposed along the new waterfront road, with a temporary lot also located at the terminus of Flint Street. The new park location should have parking accessibility and should afford a direct linkage to the Riverway Trail system.

In an effort to facilitate public park investment, the City has requested Step 3 BOA funding to undertake environmental investigations of the site; a waterfront park and recreation master plan; property acquisition strategy; and conceptual and preliminary park design.



US National Park and Recreation standards indicate the need for a minimum of two additional acres of parkland within a 5 minute walk (1/4 mile) of PLEX neighborhood residences.

Neighborhood parkland should provide for a range of uses that would be desirable for nearby residents of various age groups.

10: SITE CLEARING AND REDEVELOPMENT PREPARATIONS

Structures at 920 and 936 Exchange Street and 22 Flint Street are proposed to be demolished to create a clean site for future redevelopment. The redevelopment of these sites will be the focal point for investment in future phases. This effort will likely require extensive environmental investigations for each site to determine requirements for abatement prior to demolition activities.

The former Foodlink Building and the existing water tower are to be the only structures maintained on site. The water tower is proposed to be maintained, painted and up-lit for integration into future development as an iconic historical element. The Foodlink building is proposed to undergo adaptive reuse for a mixed use development pending feasibility and structural integrity assessments. Upon the identification of a master developer, a detailed development master plan should be formulated and the subdivision of the site completed to facilitate private investment.

As an interim measure, the sites at 920 and 936 Exchange Street and 22 Flint Street should be graded with topsoil and seeded to establish lawn areas that maintain a clean, neat and enjoyable environment. Shade and street trees should be planted within the site and along the road frontages to break up expansive views and prevent the vacant site from negatively impacting the appeal of the neighborhood.

Similar remediation, clearing and grubbing are also proposed for 5 and 15 Flint Streets and areas to the south in preparation for future redevelopment. Upon completion of these activities, these sites should be graded with topsoil and seeded with low-mow grasses, successional old field, or meadow-type planting mixes to increase the attractiveness of these sites in the interim while reducing on-going maintenance needs.

The City has requested funding through Step 3 of the BOA program to complete Phase 1 and Phase 2 Environmental Assessments; building condition and structural analyses for 920 Exchange Street and 5 Flint Street; and developer site evaluation reports with economic pro-formas.

Properties within the former Vacuum Oil footprint have been highlighted as strategic sites for environmental investigation, clean up and redevelopment to reduce the blighting and negative impacts of these sites on the surrounding residential neighborhoods.

11: NEW ROAD CONSTRUCTION

The most extensive public infrastructure component proposed for Phase 1 is the construction of a new roadway connecting Violetta Street and Magnolia Street. The proposed new road begins at the present terminus of Violetta Street and parallels the City-owned former Genesee Valley Canal corridor south to a connection with a proposed extension of Magnolia Street. This roadway will serve as the primary north-south linkage for all future development adjacent to the Genesee River.

Gateways and streetscape amenities encourage residents to walk by improving the pedestrian experience. The additional foot traffic on the street will further enhance traffic calming, and the resulting activity and ‘eyes on the street’ can increase neighborhood safety.

The roadway will be relatively narrow to limit visual and physical impacts to the River shoreline; yet will be generous enough to support two-way traffic, sidewalks and tree lawns on both sides of the street, and on-street parking spaces on the southbound side. The roadway, on-street parking and sidewalks will be designed to permit the construction of additional intersecting roadway connections for Fenwick Street and private access drives during future development phases. In tandem with the construction of the new road, necessary utility infrastructure for public water and storm sewers will be included. An alternative for consideration may be the termination of the roadway at a cul-de-sac just west of proposed structures on 5 Flint Street. The roadway terminus would allow for access to structured parking, while also providing significant trail connectivity to surrounding parkland.

The construction of the new road as depicted in the Master Plan may require additional lands west of the former Genesee Valley Canal corridor. Depending upon the timing of construction and ownership of adjacent lands, takings or permanent easements may be required, and these conditions should be factored into funding and approval timelines. The City proposes several predevelopment activities for its BOA Step 3 Implementation Strategy to facilitate the development of this roadway, including: environmental, geotechnical and topographic feasibility studies; and the study of transportation and traffic impacts upon the adjacent neighborhood

12: EXCHANGE STREET GATEWAY AND STREETScape IMPROVEMENTS

Throughout the public involvement process, residents have consistently noted that traffic speeds on Exchange Street and South Plymouth Avenue are excessive and that traffic calming is needed to improve pedestrian safety. Improvements to Exchange Street are proposed that would significantly deter speeding, such as speed humps, raised table intersections or raised crosswalks, and curb bump outs to narrow the roadway. Improvements to the Ford Street gateway are necessary to provide a welcoming entrance into the neighborhood which mitigates the negative visual impacts of the adjacent industrial activity. Improvements to South Plymouth include aesthetic enhancements to paving surfaces at primary intersections that seek to slow traffic and highlight pedestrian crossings for added safety. The City intends to complete a Traffic Calming and Streetscape Plan as part of Step 3 of the BOA process.



Small-scale gateway signage, landscaping and decorative fencing and art are appropriate gateway treatments in the PLEX neighborhood. They could incorporate specific themes identified in the branding strategy proposed to be completed in Step 3 of the BOA.

13: ENHANCED TRAIL CONNECTION AND PLAYGROUND

This project includes the redevelopment of the Exchange Street playground and its expansion along the former railroad corridor east of Exchange Street to the Genesee River. The Exchange Street Playground is currently underutilized, lacks a sense of safety due to topography and vegetation, and is under programmed for use by the surrounding neighborhood. The playground and adjacent former railroad corridor present a straight forward linear connection to the waterfront along City-owned open space that is underutilized, yet full of opportunity. Similar to the terminus of Flint Street, the convergence of Violetta and the new linear park is envisioned to create a waterfront destination programmed for use by the neighborhood. The City should begin this effort through the identification of alternative design concepts for both the redevelopment of the playground and the expansion of the park as a linear element, including a multiuse trail, to the terminus of Violetta Streets. This design effort has been included in the City’s project request for Step 3 of the BOA program.

The construction of a new playground along the railroad corridor could provide opportunities to engage local youth in the design and construction process.

This location would also be an ideal place to consider naturalized play areas, possibly incorporating locally significant history into the design.



The improved park should include an expanded and highly durable playground with equipment and activities appropriate for a broad range of youth.

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Table 10: Phase I Capital Projects

Project No.	Name	Phasing and Anticipated Costs (all costs are shown in 2012 dollars)		Potential Funding Resources	Time Frame	Notes
1	Redevelopment of former Fire Station	Environmental Investigation	\$20,000	City, BOA	2014	Phase I or II ESA could be conducted as part of BOA Step 3 activities.
		Remedy Selection and Remediation	Unknown	City, BOA	2014/2015	As required, based on findings from site investigation.
		Design	Unknown	Private, City, BOA, ERP	2015	Dependent on final end use.
		Demolition/Construction	Unknown	Private, NYS HOME, CDBG, SLIHTC/LIHTC, HFA Bonds, HWF	2015	Assumes existing structure will be demolished for new construction.
2	South Plymouth Avenue Infill Development	Planning	\$35,000	City, Private	2014	Preparation of design guidelines for South Plymouth Avenue corridor.
		Construction	Varies	Private, PILOT, SLIHTC/LIHTC	2015	Varies on project by project basis.
3	South Plymouth Avenue Commercial Redevelopment	Site Acquisition (estimate)	\$200,000+/-	City	2014-2019	City assembly of land to facilitate redevelopment by private entity. Site acquisition costs would be based on property appraisal to be undertaken in Step 3 of BOA.
		Demolition/Construction	\$3,000,000 to \$5,000,000	Private, City, NMTC, PILOT, SLIHTC/LIHTC	2019	Costs based on new 20,000 to 30,000 square foot building.
4	Flint Street Green Infrastructure Improvements	Streetscape Design	\$100,000	City, EFC	2013-2014	City to apply for funding through Consolidated Funding Application in 2013. Based on design, site acquisition may be required and is not included in this cost estimate.
		Construction	\$800,000	City, EFC, TA, LWRP	2016	Contingent and dependent on success of future grant applications.
5	Multifamily Housing and Roadway Connection	Site Acquisition (estimate)	Unknown	City, Private	2014-2017	Anticipated that City would bear costs to acquire property for roadway extension. Site acquisition costs would be based on property appraisal.
		Construction	\$3,000,000 to \$4,000,000	City, Private, NYS HOME, CDBG, LIHTC, HFA Bonds, HWF	2016-2019	Costs based on +/- 26 new housing units; includes approximately \$500,000 for construction of new roadway to be contributed by the City.
6	Waterfront Public Realm Enhancements	Environmental Investigation	\$60,000	City, BOA	2014	Assumes necessary investigations for all waterfront properties completed in BOA Step 3.
		Remedy Selection and Remediation	Unknown	City, ERP	2015	Dependent on findings from site investigations
		Planning / Design	\$325,000	City, BOA	2014-2015	Waterfront Master Plan in Step 3 BOA. Detailed design with community engagement.
		Construction	\$2,000,000 - 4,000,000	City, CC, LWRP, RT	2015-2020	Significant costs include the rehabilitation of the riverwall.

Project No.	Name	Phasing and Anticipated Costs (all costs are shown in 2012 dollars)		Potential Funding Resources	Time Frame	Notes
7	Car Top Launch / Water Access	Planning / Design / Permitting	\$75,000	City, BOA, LWRP	2014-2015	Planning and conceptual design conducted as part of BOA Step 3 Implementation activities. Final design and permitting completed with City or LWRP funds.
		Construction	\$300,000	City, CC, EPF, LWRP	2015-2016	Construction completed in conjunction with Project 8, Interim Parking Lot.
8	Interim Parking	Site Acquisition (estimate)	\$75,000+/-	City	2014	Project will require acquisition of 15 Flint Street or relocation of interim parking lot onto alternative City owned property.
		Environmental Investigation	Unknown	City, BOA	2014	Required prior to construction of interim use. Assumes City ownership or willing private property owner.
		Remedy Selection and Remediation	Unknown	City, ERP	2015	Dependent on findings of additional site investigation.
		Final Design	\$15,000	City	2016	
		Construction	\$100,000	City	2016	Design and construction completed in conjunction with Project 7, Car Top Boat Launch.
9	Parkland and Trail Development	Site Acquisition (estimate)	\$75,000+/-	City	2014	Project would require City acquisition of 15 Flint Street. Actual cost would be based on property appraisal which could be completed as part of the Step 3 BOA.
		Environmental Investigation	\$35,000	City, BOA	2014	Required prior to redevelopment activity.
		Remedy Selection and Remediation	Unknown	City, ERP, Private	2015	Dependent on findings of further environmental investigations.
		Schematic Design	\$30,000	City, BOA, Private	2015	Preliminary design conducted as part of BOA Step 3 Implementation activities.
		Final Design	\$50,000	City, Private, TIF/PIF, EPF, LWRP	2016	
		Construction	\$1,200,000	City, Private, TIF/PIF, EPF, LWRP	2016-2020	Project will require acquisition of 15 Flint Street and potential remediation activities.
10	Site Clearing and Redevelopment Preparations	Site Acquisition (estimate)	\$400,000+/-	City	2014-2017	Project will require acquisition of 920 Exchange Street, 936 Exchange Street, 22 Flint Street and potential remediation activities.
		Environmental Investigation / Structural Analyses	\$200,000+/-	City, BOA, Private	2014-2018	Environmental investigations and structural analyses completed as part of BOA Step 3 Implementation activities.
		Remedy Selection and Remediation	Unknown	City, BOA, ERP	2015-2019	Dependent on findings from environmental investigations and structural analyses of existing buildings.
		Demolition	Unknown	City, Private, REDC, TIF, BCP, EDF	2016-2019	Dependent on findings from environmental investigations and structural analyses of existing buildings.

Project No.	Name	Phasing and Anticipated Costs (all costs are shown in 2012 dollars)		Potential Funding Resources	Time Frame	Notes
11	New Road Construction	Schematic Design	\$150,000	City, BOA	2014-2015	Preliminary planning conducted as part of BOA Step 3 Implementation activities.
		Final Design and Engineering	\$300,000	City, STEP	2015-2016	Final design and engineering required based on concept studies.
		Construction	\$3,800,000	City, STEP, REDC, TIF, LWRP, PWEAA, EDF	2017-2020	
12	Exchange Street Gateway and Streetscape Improvements	Schematic Design	\$30,000	City, BOA	2014-2015	Preliminary design conducted as part of BOA Step 3 Implementation activities.
		Final Design and Engineering	\$70,000	City, TA, HSIP	2016	Final design and engineering based on conceptual design study.
		Construction	\$700,000	City, TA, HSIP	2017-2019	
13	Enhanced Trail Connection and Playground	Conceptual Design	\$10,000	City, BOA, LWRP	2014	Preliminary design conducted as part of BOA Step 3 Implementation activities.
		Final Design	\$25,000	City, LWRP, EPF, Private	2014	Final design based on conceptual design studies.
		Construction	\$130,000	City, LWRP, EPF, KaBoom, Private	2014-2016	City should seek private funding sources to offset playground costs. Trail and safety enhancements completed by City.

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5.3.3 Phase 2: 8-15 Years

After approximately seven years, initial investments in the BOA should be well underway and the City will be poised to leverage the infrastructure and pre-development activities taking place in Phase I. Map 19 and Table 11 depict Phase 2 development projects which kick-off the building program and are anticipated to attract a critical mass of new residents to the neighborhood. Proposed development should include high-quality public realm improvements that will enhance the quality of life for existing residents, while also attracting on-going investment in complementary services to meet the needs of the expanded population such as retail, office, personal services and cultural facilities.

The initial redevelopment focus will take place on 5 Flint Street and 15 Flint Street, as these properties are underutilized and represent a significant investment opportunity within Study Area. The proposed redevelopment of these sites should drastically alter the character of Flint Street east of Exchange Street to improve perceived and actual connections with the Genesee River waterfront. Initial investment activity should also emphasize a high-quality public realm environment through the development of signature gathering, cultural and historic interpretation features.

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KEY

1. Commercial Redevelopment
2. Infill Development
3. Commercial Redevelopment
4. Flint Street Green Infrastructure Improvements
5. Multi-Family Housing and Roadway Connection
6. Trail Enhancements
 - Interpretation
 - Safety
 - Vegetation Clearing
7. Car Top Launch / Water Access
8. *Interim Parking Removed in 8-15 Year Plan*
9. Parkland and Trail Development
10. *Site Preparation Completed in 0-7 Year Plan*
11. New Road Construction
12. Exchange Street Gateway and Streetscape
13. Enhanced Trail Connection and Playground
14. Housing Redevelopment
15. Mixed Use Development
16. Foodlink Redevelopment
17. Mixed Use Development
18. Waterfront Mixed Use
 - Adaptive Reuse of 5 Flint Street
19. Waterfront Mixed Use with Structured Parking
20. Waterfront Amphitheater
21. Public Gathering / Event Space
22. Canal Interpretation / Water Feature
23. Wetland Interpretation and Nature Trail



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City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area
2035 VISION PLAN | 8-15 YEARS

19

This effort was made possible with the guidance and financial assistance provided by the New York State Department of State Brownfield Opportunity Area Program.

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14: HOUSING REDEVELOPMENT

The area bounded by Doran Street, Violetta Street and Exchange Street is negatively impacted by declining property maintenance, high crime levels and poor connectivity, resulting in a continued lack of reinvestment that must be addressed as part of a larger neighborhood revitalization strategy. It is proposed that the future redevelopment of this area follow the successful precedent set in the Olean Street and Edith Street revitalization projects to the north and west. Housing of a similar style and scale would include single-family and two-family units with garages. The proposed redevelopment should seek to extend Stanley Street through the block to Doran Street, and realign Ethel Street with Columbia Avenue. These improvements will reconnect the block to the larger neighborhood and will rationalize the circulation pattern. In addition, redevelopment should seek to create a residential density of approximately 7 units per acre within the 5-acre site.

Neighborhood residents have voiced their support for residential redevelopment projects that increase owner occupancy, maintain existing densities and character, and have a positive impact on property maintenance.

The complete redevelopment of the neighborhood may be unnecessary, and the City should seek to identify properties that can positively contribute to revitalization efforts through focused rehabilitation and reinvestment. As part of the BOA Step 3 process, the City will conduct a Housing Reinvestment Strategy that will also recommend a series of land assembly tools for use by the City, such as tax liens, outright purchases, land swaps, and takings. Step 3 activities will also include feasibility studies for the extension of Stanley Street and the realignment of Ethel Street.



The above images, ranked as desirable by local community members, represent the desired character of residential neighborhoods in the study area – pedestrian friendly, safe, open porches, green lawns and lush landscaping and tree canopies.

15: NEIGHBORHOOD INFILL DEVELOPMENT

The northwest corner of Fenwick Street and Exchange Street is currently a vacant, unused parking lot that is proposed for future redevelopment with a mixed use structure. The new two to three story building will be located along the street line with parking to the rear, and will function to define the urban form of the intersection in conjunction with future adjacent development. The future extension of Fenwick Street through to Ewing Place will make this intersection a focal point and node of activity. Potential first floor uses include health care, with additional offices or residential units in upper stories. Ground floor space should have extensive transparency, with large windows and glass storefronts. This location will be highly valuable for personal services, convenience retail or professional offices such as a physician's satellite/branch office. The next step towards development includes the City entering into discussions with the property owner regarding their intentions for the land, potentially fostering a public-private partnership to spur desired investment.

The desire of seniors within PLEX to 'age in place' supports the development of professional service, health care, and medical offices in the neighborhood.



Development of an appropriate scale for neighborhood infill to include first floor professional services such as a satellite physician's office.

16: FOODLINK REDEVELOPMENT

The former Foodlink Building is a large concrete and masonry structure located at the Flint Street/Exchange Street intersection. The original portions of the massive building are proposed to be adaptively reused as a mixed use structure. An addition off the southeast corner of the structure is proposed to be demolished to improve the development potential of adjacent 22 Flint Street.

The adaptive reuse and revitalization of this structure has been consistently supported in neighborhood outreach sessions, with proposals for future uses including a food co-operative, artist live-work spaces, loft apartments and a ‘green jobs’ business incubator. Upon the determination of structural integrity through BOA Step 3 activities, a market analysis of proposed uses and a preliminary building development program should be evaluated to determine required levels of investment and potential highest and best uses. A requirement of any future reuse will be the addition of windows, and this is anticipated to be one of the largest renovation expenses. A more detailed understanding of costs for renovations and potential remediation will be available upon completion of Step 3 activities, which includes Phase 1 and/or Phase 2 ESAs, developer site evaluation reports, and investment pro-formas.

Community members identified the desire to adaptively reuse the former Foodlink building to house businesses and activities that support local employment and vocational training options for residents.



The Russell Industrial Center in Detroit, MI is an adaptive reuse of a former automobile manufacturing facility repurposed for creative studios and live-work environments tailored to assisting small businesses, craftsman and artists.

17: MIXED USE DEVELOPMENT WITH STRUCTURED PARKING

Flint Street is proposed to become a central node of activity as future development is brought to the street line to improve the definition of vertical space adjacent to the prominent former Foodlink building. The southwest corner of Flint Street and Exchange Street is currently a vacant lot that is proposed for future redevelopment with a modest mixed use structure. A larger building is proposed for 950 Exchange Street, potentially consisting of an L-shaped, three-story mixed use structure with first floor flex-space to spur job creation and attract workforce training activities or a business/industrial incubator with shop and office space. Upper story development may include additional office space or residential uses and associated parking in the rear.

The Master Plan envisions a three-story, 90,000 square foot U-shaped structure on 15 Flint Street similar in character to the redevelopment of the adjacent 950 Exchange Street. The proposed structure could include approximately 25 to 30 upper story, market-rate residential units and 25,000 square feet of ground floor mixed commercial, retail and office space. Support parking for approximately 150 to 175 vehicles is contained in a multi-level structure obscured from the adjacent neighborhood within the core of the site. The structure's northeast corner at the intersection of Flint Street and the new roadway should include a prominent vertical element, such as a tower, to anchor the adjacent public gathering space. The proposed development would set the standard for quality and architectural character within the neighborhood, and should include the use of high quality materials and provision of refined public realm enhancements.

The City is proposing to conduct several activities as part of the BOA Step 3 Implementation Strategy to advance the redevelopment of these sites, including: environmental, geotechnical and floodplain investigations; an analysis of traffic and parking; and the creation of developer site evaluation reports and investment pro-formas to begin marketing potential real estate developers.



Development in Glenwood Park, Atlanta is of a similar size and scale to that proposed for the Vacuum Oil BOA along Flint and Exchange Streets.

18: ADAPTIVE REUSE OF 5 FLINT STREET

The redevelopment of 5 Flint Street includes the adaptive reuse of an existing structure, new construction, and significant public realm improvements that will make the Vacuum Oil BOA a riverfront destination within the City of Rochester. Initial redevelopment activity will focus on the three-story, 33,000 square foot historic structure that was originally part of the Vacuum Oil barrel factory. The adaptive reuse of this structure is proposed to include 11,000 square feet of ground floor civic use such as a museum or visitor center that will serve as the focal point for historic interpretation opportunities in the adjacent public realm improvements. With a floor plate of approximately 11,000 square feet, the upper stories of 5



The adaptive reuse of the 5 Flint Street should enhance the public realm through the inclusion of a ground floor civic space that generates foot traffic and functions as a catalyst for adjacent development.

Flint Street could be redeveloped for a moderately sized restaurant and/or 12 to 15 residential units. A particularly unique opportunity is the utilization of the structure's roof for public or quasi-public space to leverage the outstanding views downstream to the downtown Rochester skyline.

19: MIXED USE DEVELOPMENT WITH STRUCTURED PARKING

The Master Plan proposes additional development with structured parking on 5 Flint Street south of the current building. These structures are to include market-rate townhouses, condominiums and apartments on the upper floors and restaurant/eatery space at the ground level. Parking for these structures would be included in a multi-story garage beneath to limit the development footprint on site and to maximize open space for the enjoyment of the public along the Genesee River. Several breaks between structures are planned to retain visual and physical connectivity between the neighborhood and the waterfront.

Structured parking reduces impervious surfaces, increases development density, enhances the sense of security, and is a logical complement for mixed use destinations along high value waterfronts.

20: WATERFRONT AMPHITHEATER

A large outdoor amphitheater is proposed along the Genesee River waterfront that would become a significant public gathering space in the PLEX neighborhood to complement the larger urban plaza at the terminus of Flint Street. The amphitheater would support programmed events, concerts and festivals along the Genesee River in a more natural setting when compared to the urbanized space envisioned to the north.

The community consistently identified the Genesee River waterfront as an underutilized neighborhood resource, and voiced their desires for additional opportunities for access and public enjoyment to this unique regional destination.

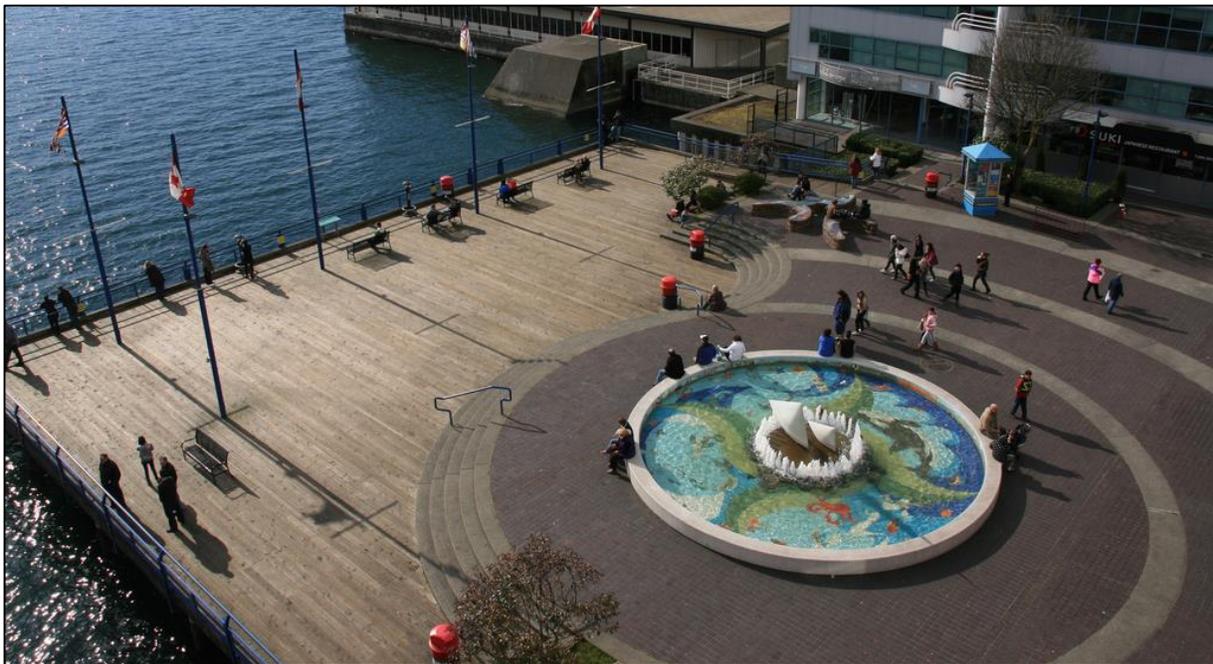


The amphitheater is envisioned to be an alternative gathering space for organized and impromptu neighborhood events.

21: SIGNATURE WATERFRONT PUBLIC GATHERING SPACE

Public realm improvements surrounding the redevelopment of 5 Flint Street include abundant space for plazas, lawn and park areas, and an expansion or widening of the Genesee Riverway Trail along the river frontage of these structures. The centerpiece of the outdoor experience is a large urban plaza at the terminus of Flint Street. It is envisioned that the design and materials would make this the premiere public gathering space in the PLEX neighborhood with sufficient space, utilities and amenities for programmed events, concerts and festivals among the dramatic backdrop of the Genesee River and downtown Rochester skyline. The redevelopment of 5 Flint Street and the surrounding public lands will create a distinctive sense of place and a hub of activity along the Genesee River.

The City of Rochester is proposing to conduct several activities as part of its BOA Step 3 Implementation Strategy that will progress the development of the signature waterfront plaza, including: floodplain, environmental and geotechnical investigations; traffic and parking analysis; and a waterfront recreation and public realm master plan. These studies and refined master plans should provide guidance and recommendations sufficient to ascertain any development challenges and associated costs for mitigation.



The waterfront plaza in Lonsdale Quay, North Vancouver, BC is very similar in size, scale and arrangement to that proposed for the terminus of Flint Street.

22: CANAL INTERPRETATION AND WATER FEATURE

The potential re-construction of the former Genesee Valley Canal as a signature water feature will further increase the PLEX neighborhood waterfront as a destination for residents and visitors. It is envisioned that the water feature could also allow residents to interact with the water through wading or dangling their feet in the feature to provide a cooling respite during hot summer months. Water features are significant ‘people attraction devices’ and become the focal point for pedestrian activity. Additional kiosks, public art installations and interpretive elements will surround and become integrated into the water feature to portray and explain the historic significance of the site. Canal interpretive improvements could also be combined with green infrastructure techniques to enhance educational interest and access to additional sources of funding for implementation. Next steps conducted as part of the BOA Step 3 Implementation Strategy will be similar to those conducted to advance Project # 21.



The Erie Harbor redevelopment in Buffalo, NY also includes a reconstruction of the former Erie Canal, which is the focal point for revitalization efforts on the Buffalo waterfront.

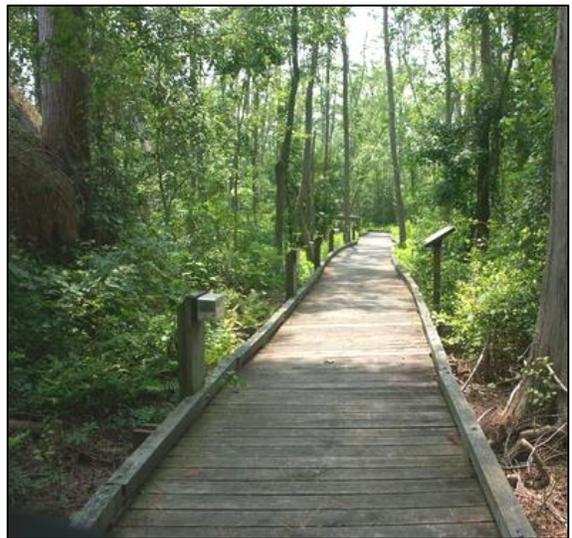
23: WETLAND INTERPRETATION AND NATURE TRAIL

Historic development patterns along the riverfront have created pockets of wetlands in low-lying areas between the former elevated railroad and upland areas at Cottage Street. The most significant of these areas should be restored and preserved through the removal of invasive species and the establishment and management of native vegetation. A trail connecting the residential neighborhood to the west across the wetland area via a boardwalk would increase connectivity to the Genesee Riverway Trail and riverfront while also providing recreational and educational opportunities seldom found within a dense urban setting and unique to the PLEX neighborhood. The boardwalk could be enhanced with educational and interpretive signage highlighting the active ecological processes taking place in the adjacent wetland and woodland areas. These improvements could be coordinated with the City of Rochester School District’s environmental science programming, affording opportunities for City students to obtain field experience within their own neighborhoods, while potentially fostering a greater appreciation for the natural environment.



Throughout the planning process, the community noted the natural environment along the waterfront as unique to PLEX within the City, and identified the need to maintain these areas as a natural buffer and as an educational opportunity to interact with the natural world.

A small boardwalk similar to the above is proposed for wetland areas along the shoreline.



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Table 11: Phase 2 Capital Projects

Project No.	Name	Phasing and Anticipated Costs (all costs are shown in 2012 dollars)		Potential Funding Resources	Time Frame	Notes
		Phase	Cost			
14	Housing Redevelopment	Strategic Planning	\$20,000	City, BOA	2014	Included in BOA Step 3 activities.
		Site Acquisition (estimate)	\$700,000+	City, Private	2015-2019	Requires innovative and aggressive approach to land acquisition with some participation by City likely required.
		Design	\$100,000+	Private	2019-2020	Site design and architecture.
		Construction	\$4,000,000+	City, Private, HOME, CDBG, LIHTC/SLIHTC, HFA Bonds, HFW	2020-2025	Includes reconfiguration of street network.
15	Neighborhood Infill Development	Design	Unknown	Private	2018	Market analysis identified the potential need for expanded access to health care services for area seniors which would be appropriate on vacant site,
		Construction	\$1,200,000+	City, Private, NMTC, PILOT	2021	Cost based on 6,000 square feet of new construction.
16	Foodlink Redevelopment	Site Acquisition (estimate)	\$50,000+	City, Private	2014-2016	Site acquisition would not be required if existing property owner were interested in teaming with City to complete subsequent redevelopment.
		Structural Building Analyses	\$10,000	City, BOA	2014	Included in BOA Step 3 activities.
		Environmental Investigations	Unknown	City, BOA	2014-2015	Included in BOA Step 3 activities.
		Remedy Selection and Remediation	Unknown	City, ERP, Private	2015-2018	To be determined based on outcomes of structural building analysis and environmental site investigations.
		Design	Unknown	City, Private, REDC, TIF, BCP, EDF, NMTC, PILOT	2018-2019	Design costs TBD based on outcomes of previous efforts.
		Construction	\$6,000,000+	City, Private, REDC, TIF, BCP, EDF, NMTC, PILOT	2019-2021	BOA Step 3 Implementation activities will further enhance understanding of anticipated costs for remediation and rehabilitation of the structure, if reuse is feasible. Costs based on 40,000 square feet of remediation and renovation.
17	Mixed Use Development	Design / Engineering	Unknown	City, Private, Institutional Partner	2020	Project anticipates that acquisition and remediation of 15 Flint Street will be completed as part of Project #9.
		Construction	\$24,000,000+	City, Private, REDC, TIF, BCP, EDF, NMTC, PILOT	2022-2028	BOA Step 3 Implementation activities will further enhance understanding of anticipated costs for remediation and structural needs of future development. Costs based on 100,000 square feet of mixed use space plus structured parking for 175 vehicles.

Project No.	Name	Phasing and Anticipated Costs (all costs are shown in 2012 dollars)		Potential Funding Resources	Time Frame	Notes
18	Adaptive Reuse of 5 Flint Street	Site Acquisition (estimate)	\$50,000+	City, BOA, Private	2014-2015	Site acquisition would not be required if existing property owner were interested in teaming with City to complete subsequent redevelopment.
		Structural Building Analyses	\$10,000	City, BOA	2014	Included in BOA Step 3 activities.
		Environmental Investigations	Unknown	City, BOA	2014-2015	Included in BOA Step 3 activities.
		Remedy Selection and Remediation	Unknown	City, ERP, Private	2015-2018	To be determined based on outcomes of structural building analysis and environmental site investigations.
		Design	Unknown	City, Private, REDC, TIF, BCP, EDF, NMTC, PILOT	2019	Design costs TBD based on outcomes of previous efforts.
		Construction	\$5,000,000+	City, Private, REDC, TIF, BCP, EDF, NMTC, PILOT	2020-2024	Costs based on 33,000 square feet of renovation, assuming existing structure is determined to be structurally adequate for an adaptive reuse project.
19	Waterfront Mixed Use with Structured Parking	Pre-Development Planning Studies	\$50,000+	City, BOA, LWRP	2014-2016	Pre-development planning includes the completion of studies to determine if site is developable as proposed. Pre-development studies include geotechnical analyses, floodplain studies, etc. Some studies will be completed through Step 3 of the BOA program.
		Environmental Investigations	\$50,000	City, ERP, Private	2014-2016	A Phase 2 Environmental Assessment may be completed in Step 3 of the BOA program.
		Design	Unknown	City, Private	2025	Project anticipates that acquisition and remediation of 5 Flint Street will be completed as part of Project #18. These sites are project to build out after completion of redevelopment on 5 Flint Street property.
		Construction	\$21,000,000+	City, Private, REDC, TIF, BCP, EDF, NMTC, PILOT	2028	Project 18 will further enhance understanding of anticipated structural needs of future development. Costs based on 90,000 square feet of mixed use space plus structured parking for 150 vehicles.

Project No.	Name	Phasing and Anticipated Costs (all costs are shown in 2012 dollars)		Potential Funding Resources	Time Frame	Notes
		Phase	Cost			
20	Waterfront Amphitheater	Schematic Design	\$20,000	City, BOA	2014-2015	Conceptual design may be included in BOA Step 3 activities.
		Final Design	\$30,000	City, EPF, LWRP, Private	2016-2018	Final design to be based upon outcomes of conceptual design from BOA Step 3 project.
		Construction	\$150,000 to \$200,000	City, EPF, LWRP, TIF, Private	2023	
21	Signature Waterfront Public Gathering Space	Schematic Design	\$20,000	City, BOA	2014-2015	Conceptual design may be included in BOA Step 3 activities.
		Final Design	\$100,000	City, EPF, LWRP, Private	2016-2018	Final design to be based upon outcomes of conceptual design from BOA Step 3 project.
		Construction	\$1,000,000+	City, EPF, LWRP, TIF, Private	2023	Cost based on one acre of high quality urban plaza.
22	Canal Interpretation / Water Feature	Schematic Design	\$25,000	City, BOA	2014-2015	Conceptual planning may be included in BOA Step 3 activities. Feasibility analysis required.
		Final Design	\$50,000+	City, EPF, LWRP, Private	2018-2020	Final design to be based upon outcomes of conceptual design from BOA Step 3 project.
		Construction	\$700,000	City, EPF, LWRP, TIF, Private	2025	Assumes all environmental investigations and associated studies are completed.
23	Wetland Interpretation and Nature Trail	Schematic Design	\$20,000	City, BOA	2014-2015	Conceptual design may be to be included in BOA Step 3 activities.
		Final Design	\$30,000	City, EPF, LWRP, Private	2016-2017	Final design to be based upon outcomes of conceptual design from BOA Step 3 project.
		Construction	\$90,000 to \$150,000	City, EPF, LWRP, TIF, Private	2020	Cost based on 300 feet of linear boardwalk at \$300-\$500 per linear foot.

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5.3.4 Phase 3: 15 Years and Beyond

After fifteen years of development, revitalization and investment the BOA should have established a critical mass of new residents and businesses capable of supporting a sustainable neighborhood economy. Map 20 and Table 13 depict Phase 3 development projects which bring the BOA to full build out and concentrate development within the former Vacuum Oil refinery footprint. By the beginning of Phase 3, the neighborhood will be a desirable location for ‘Living by the River’ in Rochester, and a neighborhood of choice with a diversity of housing alternatives and convenient access to employment opportunities, recreation options, and retail and personal services establishments.

Development within Phase 3 is concentrated on 22 Flint Street and 920 Exchange Street, with adjacent parcels included to complete the redevelopment of the block and rationalize the form, scale and massing of new development in relation to the surrounding neighborhood. Development character should be similar and complementary to Phase 2, with buildings ranging from two to four stories, a minimal amount of surface parking, a significant emphasis placed upon the quality and definition of public realm improvements, and the provision of ample open space for the use and enjoyment of the neighborhood.

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KEY

1. Commercial Redevelopment
2. Infill Development
3. Commercial Redevelopment
4. Flint Street Green Infrastructure Improvements
5. Multi-Family Housing and Roadway Connection
6. Trail Enhancements
 - Interpretation
 - Safety
 - Vegetation Clearing
7. Car Top Launch / Water Access
8. *Interim Parking Removed in 8-15 Year Plan*
9. Parkland and Trail Development
10. *Site Preparation Completed in 0-7 Year Plan*
11. New Road Construction
12. Exchange Street Gateway and Streetscape
13. Enhanced Trail Connection and Playground
14. Housing Redevelopment
15. Mixed Use Development
16. Foodlink Redevelopment
17. Mixed Use Development
18. Waterfront Mixed Use
 - Adaptive Reuse of 5 Flint Street
19. Waterfront Mixed Use with Structured Parking
20. Waterfront Amphitheater
21. Public Gathering / Event Space
22. Canal Interpretation / Water Feature
23. Wetland Interpretation and Nature Trail
24. Mixed Use Development with Structured Parking
25. Mixed Use Development



Alternative Exchange Street Redevelopment



Alternative Shows Example Redevelopment of Existing Canfield and Tack Site if Company Were to Relocate From Site.



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24: MIXED USE DEVELOPMENT WITH STRUCTURED PARKING

Cleared and remediated as necessary during Phase 2 activities to prepare for redevelopment, the four-acre site is anticipated to be the culminating investment opportunity within the BOA. This site occupies a key location along the new roadway and Genesee River waterfront adjacent to 15 Flint Street and 5 Flint Street. The linear site is proposed to include three to four, four story structures totaling 200,000 to 250,000 square feet of mixed use development with structured parking similar to the U-shaped development proposed for 15 Flint Street. The buildings are proposed to be oriented parallel to Exchange Street, with enlarged public spaces along the staggered road frontage. This expanded public realm affords the opportunity for individual, intimate spaces that can be tailored to the needs of ground floor tenants; yet also offer a continuous ribbon of pedestrian and dining activity facing the Genesee River canal interpretive feature and waterfront greenway. The development of this block will include the extension of Fenwick Street to Ewing Place, expanding the neighborhood street grid and improving the circulation of pedestrians and vehicular traffic from South Plymouth Avenue to the Genesee River.



Mixed use development in the final stages of the Master Plan should focus on increased density while providing high quality public spaces along the City's waterfront.

25: EXCHANGE STREET MIXED USE

The redevelopment of the Exchange Street corridor north of the former Foodlink building is proposed to include limited mixed use commercial development of a similar character, scale and massing to development in the adjacent neighborhood. Surface parking is proposed for the interior portions of the site. The streetscape along Exchange Street is also proposed to be modified along this development block through the expansion of the roadway cross section. The new cross section is proposed to include an 8 to 10 foot wide center median with trees and street lights and on-street parallel parking. The street frontage along Exchange Street and Fenwick Street may include a mixture of ground floor commercial/office space with upper story office, light industrial and flex space, or potentially residential units.

A development concept including space for boutique or artisanal manufacturing, or incubator space for small, early-stage businesses was consistently supported by the community throughout the planning process. These types of uses would provide high-value, skilled jobs within the neighborhood, while potentially encouraging employees to live within the surrounding area.

The final makeup of development along Exchange Street will be predicated on the extent and type of development in surrounding areas. Similar to Project #24, the site will be cleared for redevelopment during Phase 2 activities, and the City should play a significant role to coordinate owner participation in future redevelopment.

As the population of the neighborhood increases, employment opportunities within the neighborhood will become more attractive in the marketplace, potentially spurring the development of general office and/or flex space as employers desire to be located in an active, waterfront destination.



The proposed development would be a uniquely designed series of mixed use structures to include residential, office, lab and/or studio spaces which integrate education, vocational training and small business incubation.

Table 12: Phase 3 Capital Projects

Project No.	Name	Phasing and Anticipated Costs (all costs are shown in 2012 dollars)		Potential Funding Resources	Time Frame	Notes
24	Mixed Use Development with Structured Parking	Schematic Design	Unknown	City, Private	Beyond 2028	Project anticipates that acquisition, remediation and demolition will be completed as part of Project # 10.
		Final Design / Engineering	Unknown	City, Private, REDC	Beyond 2028	
		Construction	\$50,000,000+	City, Private, REDC, TIF, BCP, EDF, NMTC, PILOT	Beyond 2028	Costs based on 200,000 square feet of high quality mixed use space plus structured parking for 500 vehicles.
25	Mixed Use Development	Schematic Design	Unknown	City, Private	Beyond 2028	Project anticipates that acquisition, remediation and demolition will be completed as part of Project # 10.
		Final Design / Engineering	Unknown	City, Private, REDC	Beyond 2028	
		Construction	\$15,000,000+	City, Private, REDC, TIF, BCP, EDF, NMTC, PILOT	Beyond 2028	Costs based on 100,000 square feet of mixed use commercial/flex industrial space.

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5.4 NON-CAPITAL RECOMMENDATIONS

In addition to significant levels of capital investment within the BOA Study Area, there are a host of non-capital actions required to facilitate neighborhood stabilization and the revitalization of the former Vacuum Oil refinery site. Non-capital actions include recommendations and activities organized into three broad categories:

- Policy and regulatory recommendations;
- Economic development initiatives; and
- Public-private partnerships.

These recommendations include predevelopment actions, public-private coordination efforts, and policy changes recommended to advance revitalization. Also included are administrative actions such as the utilization of site-selection databases and websites and the establishment of marketing/branding initiatives necessary to implement the BOA vision. These recommendations set the stage for BOA Step 3 Implementation activities, and represent near-term recommendations for the City to undertake in tandem with implementation of Phase 1 of the Master Plan.

5.4.1 Policy and Regulatory Recommendations

UPDATE ZONING FRAMEWORK

Current zoning district arrangements will require modification in many instances to encourage and permit development and investment to occur as recommended within the Master Plan. Current R-1 and M-1 zoning along the Genesee River waterfront and Flint Street should be replaced with regulations that will fully leverage the potential for mixed use commercial/retail/residential and water-enhanced or water-dependent development. The application of existing zoning districts found elsewhere within the City's Code should be evaluated. If currently enacted language and regulations lack appropriateness for the Vacuum Oil BOA, new and/or modified language should be created as part of Step 3 Implementation Activities. It is recommended that current R-1 zoning in targeted nodes along South Plymouth at the intersections of Flint Street and Magnolia Street be modified to C-1, Neighborhood Commercial, to attract development that will increase the population, service offerings and foot traffic. These small pockets of activity should permit a greater mix of uses, as well as higher density residential uses.

Prior to the adoption of zoning amendments the City will be required to amend the 2020 Vision Plan for concurrence with the proposed changes, and to complete a Generic Environmental Impact Statement to study potential impacts pursuant to the State Environmental Quality Review Act. Upon completion of these steps, the City and public should have sufficient information to approve potential zoning updates. As part of this process, the City should explore the formation of a Planned Development District for the BOA that will provide the necessary flexibility to advance redevelopment in comprehensive, yet phased approach. Finally, any proposed changes in zoning should be accompanied by a set of design standards to ensure future development is at an appropriate scale within the context of existing residential neighborhoods.

ENFORCE PROPERTY AND BUILDING CODE

Several industrial and residential properties within the BOA sit vacant or abandoned, while others suffer from extreme disinvestment. Property owners have an obligation to maintain their properties in a safe and reasonable manner pursuant to City code. The enforcement of the Code and the ability to hold property owners accountable will prevent blight conditions from worsening. Further, small changes in the appearance of properties, coupled with a visible show of commitment by the City, may improve the attitudes of local residents and potential end users evaluating redevelopment opportunities.

INCREASE POLICE PATROLS

The former Vacuum Oil site north of Flint Street sits almost entirely vacant and/or abandoned. As a result, dumping and trespass have increased, further decreasing the visual appeal of the area and eroding public safety for neighborhood residents. An increased police presence may deter these activities. In addition, the City should seek to include this area within any future Clean Sweep or similar activities to bring attention to the neighborhood and promote an improved quality of life for residents.

5.4.2 Economic Development Initiatives

IDENTIFY AN ECONOMIC CATALYST

The City will need to identify a public, quasi-public or institutional end user to serve as an economic catalyst to attract residents and visitors to the neighborhood, generate demand for neighborhood support services, and gather momentum to facilitate private investor interest. The potential for a major civic use to occupy the ground floor of a rehabilitated 5 Flint Street should be explored to ensure that development leads the remediation process and accelerates the revitalization effort.

CREATE A NEIGHBORHOOD STABILIZATION STRATEGY

The stabilization and rehabilitation of the residential neighborhoods within the BOA Study Area will be a critical element of a sustainable, long-term revitalization strategy. A more detailed understanding of the neighborhood's role and place within the larger residential market should be obtained through the analysis of the existing housing stock and a comparison to currently successful market-driven housing alternatives. The neighborhood stabilization strategy should identify model programs to encourage reinvestment, incentivize single-family home ownership, and promote the recycling and renewal of available housing stock.

NEIGHBORHOOD BRANDING

An important factor in the successful revitalization of the Study Area will be the differentiation of the neighborhood within the larger community. The idea of 'Living by the River' is just one of many possible neighborhood brand identities to attract investment and new residents by promoting the neighborhood as a lifestyle choice. Key themes to be considered for the neighborhood's brand identity include waterfront accessibility, history and culture, and residential diversity.

PLACE NEIGHBORHOOD ON REGIONAL RADAR

The City should coordinate with the Monroe County Industrial Development Agency, the Finger Lake Regional Economic Development Council (FLREDC), and the Empire State Development Corporation to enhance the visibility and familiarity with future development-ready sites within the BOA. The City of Rochester has been actively engaging the FLREDC regarding the redevelopment of the Vacuum Oil BOA, and has made progress in having the project recognized as a priority community development investment within the region. In addition, the City is also seeking to have the Vacuum Oil BOA included as a sustainable economic development project in the Finger Lakes Regional Sustainability Plan. These efforts to expand the reach of the Master Plan beyond the neighborhood to leverage the potential regional benefits of investments in the Study Area should continue. In addition, the City should reach out to organizations such as the New York State Economic Development Council and the Greater Rochester and New York State Association of Realtors to educate local economic developers and real estate agents about investment opportunities within the BOA.

5.4.3 Public-Private Partnerships

LEVERAGE EXISTING HUMAN CAPITAL

The BOA Study Area significantly benefits from the active presence of the Plymouth-Exchange Neighborhood Association (PLEX) and the Sector 4 Community Development Corporation. The City should continue to partner with these community-based-organizations and seek opportunities to support and supplement their neighborhood building and public empowerment efforts. The City should explore a formalized, mutually-beneficial agreement with PLEX and Sector 4 CDC which transfers a significant portion of public outreach activities away from the City and into the hands of these successful organizations. In addition, the arrangement should identify expanded opportunities to promote volunteerism and educational outreach for neighborhood residents.

CONTINUE ENGAGEMENT WITH UNIVERSITY OF ROCHESTER

The University of Rochester (UR), Rochester Institute of Technology (RIT) and Monroe Community College (MCC) represent significant potential partners in the continued revitalization of the PLEX neighborhood. The City should continue to engage these and other institutional partners in dialogue to coordinate and attract investments in support services, housing and quasi-institutional activities to the BOA Study Area. Opportunities include expanded housing options for students, professors, and affordable workforce housing to meet the needs of future employees. In addition, the future development of affordable flex/incubator space within close proximity to both institutional campuses and downtown Rochester could be mutually beneficial for seed-stage and pre-seed-stage technology commercialization derived on-campus, yet realized and implemented in the PLEX neighborhood. The institutional community should also be engaged to enhance the perceptions of the PLEX neighborhood through community building activities. Such activities could include encouraging a graduating class to ‘adopt’ PLEX and partner with local schools and non-profits, such as Sector 4 CDC, to build neighborhood capacity and support volunteerism and educational outreach.

5.5 URBAN RENEWAL DISTRICTS AND MUNICIPAL REDEVELOPMENT PLANS

As part of the BOA Step 3 Implementation Strategy, the City should investigate the establishment of Urban Renewal Districts and/or Municipal Redevelopment Project Areas within the BOA pursuant to General Municipal Law Articles 15 and 18-C, respectively. These enabling laws provide tools for the acquisition, assembly, and redevelopment of blighted or deteriorating areas, including access to varying forms of local, state and federal funding. The City may also seek to establish a concurrent Tax (TIF) or PILOT (PIF) Increment Financing District for surrounding properties to provide revenues for public improvements such as parks, public realm improvements, waterfront infrastructure and roadway extensions. A further discussion of TIF and PIF opportunities is included in Section 6.5.

5.5.1 Urban Renewal Districts

The designation of one or more urban renewal districts in accordance with GMU Article 15 may be required to facilitate property assembly, construct necessary infrastructure improvements, and clear blighted or deteriorating areas for redevelopment in accordance with the BOA Master Plan. The Nomination Study meets several of the required metrics for the establishment of an Urban Renewal Plan pursuant to Article 15 §501-505. In particular, the BOA Master Plan identifies and documents the existing conditions present within the Study Area and provides a recommendation for the reuse, renewal and redevelopment of lands to prevent, arrest and eliminate blighting conditions.

Of particular significance are the statute's conferred powers to acquire lands by eminent domain. However, eminent domain proceedings can be quite costly in terms of time and resources, delaying the implementation of recommendations and hindering investment. Therefore, the use of eminent domain should be considered judiciously and in most instances whereby no other plausible means to implement the Master Plan will prove effective. The formation of an Urban Renewal District also permits the City to establish a concentrated code enforcement program which could be utilized in residential or commercial areas. In addition, monies bonded via the City's urban renewal powers can be utilized for environmental remediation in preparation for development by private interests.

5.5.2 Municipal Redevelopment Project Area

New York State Municipal Redevelopment Law Article 18-C provides the City of Rochester with an additional, flexible tool to organize, facilitate, finance and undertake the rehabilitation and redevelopment of the BOA Study Area. Unlike GMU Article 15, GMU Article 18-C precludes a municipality from acquiring real property on which an existing building is to remain on its present site and in its present form and use unless it requires alteration, improvement or rehabilitation. This may impose a practical limitation on the scope and scale of redevelopment efforts under this statute.

The Nomination Study meets several of the required metrics for the establishment of a Municipal Redevelopment Plan pursuant to Article 18-C §970-B through §970-G. A brief overview of those elements included within the Nomination Study and the identification of elements that will need to be completed as part of the Step 3 Implementation Strategy is included below.

STUDY AREA

The Survey Area has been designated as coterminous with the Brownfield Opportunity Area Boundary as depicted in Map 3 of the Nomination Study.

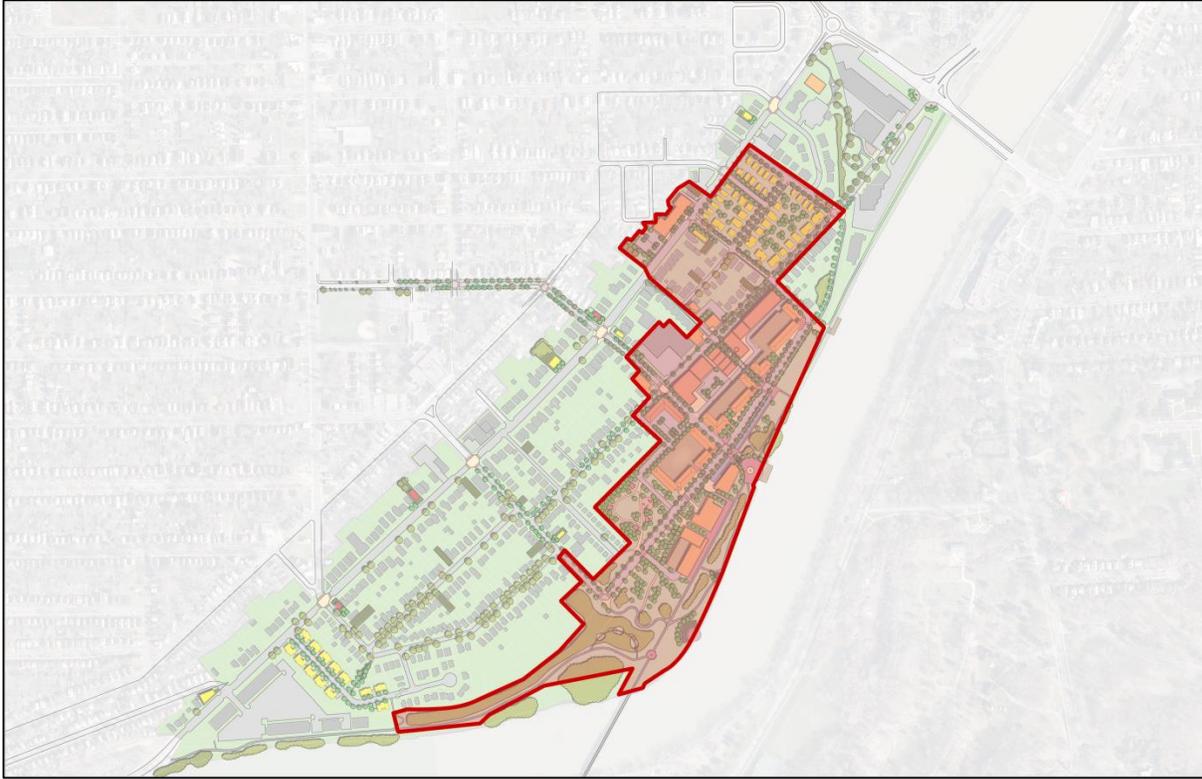


Figure 15: Preliminary Municipal Redevelopment Project Area within the existing BOA Study Area Boundary.

PROJECT AREA

A draft Project Area has been developed for consideration by the City of Rochester as depicted in Figure 15. Sections 4.1 and 5.2 of the Nomination Study provide a relevant discussion of land uses, population densities and design standards to guide the proposed redevelopment plan. The redevelopment and reinvestment in the Project Area would remove and/or rehabilitate blighting structures, provide for the sustainable reinvestment in the neighborhood’s housing stock, advance the redevelopment of valuable and underutilized waterfront lands, and increase access to the Genesee River waterfront and other recreational amenities for existing residents. Sections 3.2.2 and 3.5.2 discuss the general conformity of the redevelopment plan with the City’s existing zoning code and the 2020 Vision Plan.

The Step 3 BOA Implementation Strategy will need to provide a broader understanding of the impact of the project on the residents of the Project Area and surrounding neighborhood. In addition, a further justification will need to be provided regarding why the redevelopment of the Project Area would not take place organically via the private marketplace without the City’s intervention. Finally, a Generic Environmental Impact Statement to satisfy the requirements of the State Environmental Quality Review Act will need to be prepared as part of Step 3.

REDEVELOPMENT PLAN

Section 5.3 of this Nomination Study provides the overall scope and details of the redevelopment plan, including proposed street layouts, building densities, public open spaces and other property devoted to public uses. Section 3 of the Nomination Study provides the existing conditions components of the required neighborhood impact statement, while additional studies as proposed in Step 3 would provide further relevant information regarding potential impacts in terms of relocation, traffic, environmental quality and other matters. Section 4.3 discusses potential Master Plan alternatives and provisions for redevelopment if owners of key properties fail to participate in the redevelopment plan. The Step 3 Implementation Strategy will also need to further identify relevant safeguards to ensure the proper implementation and execution of the plan, in addition to adequate regulatory conditions such as design standards and zoning restrictions. Although Sections 5.3 and 6 provide an overview of potential funding sources and financing mechanisms currently available, the City will be required to prepare a formalized strategy for the expenditure of public monies to undertake and complete actions necessary to carry out redevelopment plan capital projects as proposed in Section 5.3. The potential utilization of tax increment financing as described in Article 18-C §970-O and §970-P should also be further investigated as part of the Step3 Implementation Strategy.

PLAN REVIEW

The Step 3 Implementation Strategy will need to provide for the review of the preliminary Redevelopment Plan by the City's Planning and Zoning departments and the Rochester City School District prior to consideration for adoption by City Council. In addition, the City will be required to conduct at least one public hearing prior to plan adoption to provide opportunities for written and oral comments by the general public on the redevelopment plan.

5.6 MOVING THE MASTER PLAN FORWARD

5.6.1 Advancement to BOA Step 3 Implementation

The City of Rochester has outlined a series of initial tasks associated with the Implementation Strategy (Step 3) of the NYS Brownfield Opportunity Areas Program. Tasks identified by the City are based on findings and recommendations included in the Nomination Study and have been divided into three distinct, yet flexible series' of complementary tasks that advance the implementation of the BOA vision and Master Plan. The proposed tasks encompass a wide range of activities, including environmental investigations, predevelopment due diligence, infrastructure analysis, and refined site-level master planning necessary to limit risk and liability while preparing for and attracting private investment. The City's Step 3 application was submitted in September 2012, totaling \$1,450,000 in activities as described below.

PHASE 1: Detailed Analysis and Pre-Development Activities - \$580,000

Phase 1 tasks are site specific activities necessary to clearly identify engineering and investment requirements for redevelopment, and provide expanded due diligence prior to the involvement of private sector investors. In addition, these tasks seek to maintain community involvement and public momentum through expanded civic engagement opportunities.

PHASE 2: Infrastructure and Housing Planning and Analysis - \$520,000

Phase 2 tasks investigate and prioritize Study Area-wide infrastructure and neighborhood revitalization recommendations and investments.

PHASE 3: Recreation Master Plan and Regulatory Updates - \$350,000

Phase 3 tasks add detail to long-term community recreation needs, and provide necessary regulatory updates to facilitate private investment and redevelopment within the Study Area.

5.6.2 PHASE 1: Detailed Analysis and Pre-Development Activities

Task 1.1: Geotechnical Investigations - \$80,000

The former Vacuum Oil refinery south of Flint Street was the site of several large structures and holding tanks as part of operations. These structures and tanks were razed in the early 1930s, with foundation remnants evident throughout the Study Area. Several areas of significant filling have been identified, and a thorough evaluation of geotechnical conditions is necessary to understand suitability for redevelopment. In addition, depth to bedrock, the make-up of the soil and the underlying geomorphology along the banks of the Genesee River may be a limiting factor regarding the foundation requirements for future buildings and structures along the waterfront. As part of these geotechnical investigations, the City should also include a feasibility analysis for the utilization of geothermal energy transfer technologies for space heating and cooling. The development of a heating and cooling district within the BOA is a potential economic development incentive which can subsidize costs and lower hydrocarbon energy usage.

Task 1.2: Phase I and Phase II Environmental Site Assessments - \$100,000

The City of Rochester currently controls 12 properties on 17.8 acres within the former Vacuum Oil site footprint where environmental contamination related to refinery operations is expected. Initial investigations funded through an EPA assessment grant, City capital funds and private investigations have indicated soil and groundwater impacts to eight properties south of Flint Street. The City is currently utilizing local funds programmed for the Vacuum Oil site to amend previous investigations and complete ASTM Phase I Environmental Site Assessments (ESA) for these eight City-owned parcels south of Flint Street within the footprint of the former refinery. The City requested Step 3 Site Assessment funding to supplement current on-going efforts to complete additional investigation of these City-owned properties, including four Phase I ESA's for properties north of Flint Street and Phase II ESA's for properties north and south of Flint Street pursuant to Phase I findings. Completed assessments per ASTM standards will be a required due diligence effort prior to remediation, redevelopment or reuse of these sites.

Task 1.3: Land Appraisals - \$90,000

The BOA Master Plan proposes a significant portion of the property within the footprint of the former Vacuum Oil refinery be redeveloped as mixed-use residential and commercial land uses. In addition, the BOA Master Plan recommends new roadways to improve waterfront accessibility and traffic circulation. The completion of land appraisals for both potential development parcels and portions of properties that may be required for right-of-way locations will be required for budgeting, cost estimating, financing and legal due diligence aspects to implement all future activities within the BOA.

Task 1.4: Floodplain Engineering Assessment and Mitigation Planning - \$35,000

Portions of the BOA are within the 100-year floodplain of the Genesee River and lie below its mean water elevation. The BOA Master Plan proposes development within areas impacted by the 100-year flood elevation, requiring an assessment of feasible alternatives for development, potential impacts to the floodplain and the identification of potential mitigation efforts. Information from the geotechnical investigations may also be utilized to inform the flood plain assessment.

Task 1.5: Wetlands and Invasive Species Assessment and Mitigation Planning - \$15,000

Portions of the Vacuum Oil BOA Study Area lie below the mean elevation of the Genesee River and were historically crisscrossed by the Genesee Valley Canal and several railroads. The construction of these transportation corridors left depressions and low spots within the BOA, many of which have been vegetated with wetland species. This task will review existing NYSDEC and National Wetlands Inventory mapping and perform a site inspection to identify presence and extent of wetlands on site. In addition, this effort will include the identification of invasive species along the Genesee Riverway Trail and waterfront and develop a scope of work to eradicate noxious species to prepare for landscape enhancements as part of BOA Master Plan implementation efforts.

Task 1.6: Building Condition and Structural Assessments - \$35,000

The remaining structures at 5 Flint Street and 920 Exchange Street formerly utilized as parts of the Vacuum Oil refinery are proposed as properties for potential adaptive reuse. The condition of these structures and their suitability for reuse requires further analysis to determine the extent of necessary structural repairs, code compliance improvements and associated costs. This task will include an architectural and structural inspection of the properties, the development of floor plans and elevations, and the completion of costs estimates for proposed improvements to prepare these structures for redevelopment.

Task 1.7: Building Asbestos Surveys - \$35,000

Based on their date of construction and high susceptibility to fire, former refinery structures at 5 Flint Street and 920 Exchange Street are expected to contain significant amounts of asbestos-containing materials within utility insulation and the concrete superstructure. A complete building asbestos survey will need to be completed prior to any disturbance or demolition of these structures, including the development of mitigation and air quality monitoring plans to protect the health and safety of the general public.

Task 1.8: Neighborhood Park Site Selection and Conceptual Design - \$25,000

A recurring theme throughout the visioning and public participation process was the lack of adequate recreation and community space within the PLEX neighborhood. An existing park located in the northern extent of the BOA is under-programmed, underutilized, and suffers from neglect and misuse. There are no parks or playgrounds located in the central or southern portions of the BOA, requiring residents to walk 15-20 minutes south to Genesee Valley Park West or cross South Plymouth Avenue and down a steep hill to the Flint Street Community Center. National Recreation and Park Association standards for parks and playgrounds suggest that a neighborhood the size of the BOA should have at least one fully functioning playground and two pocket parks. This task will seek to identify an appropriate conceptual design services for an additional park between Flint Street and the extension of Magnolia Street as indicated on the Master Plan.

Task 1.9: Civic Engagement & Neighborhood Branding Initiative - \$75,000

The PLEX Neighborhood Association and the Southwest Riverfront Planning Group are local community-based-organizations directly involved in the development of the BOA Master Plan and revitalization of the Study Area. These two organizations are also strong local champions for revitalization and investment within the BOA and the larger PLEX and Southwest neighborhoods. The City intends to coordinate all future civic engagement activities and public participatory efforts through the PLEX Neighborhood Association to continue the successful inclusion of community residents within revitalization efforts. In addition, the City will subcontract with a professional marketing and public relations firm to re-establish a strong brand and community identity for the BOA Study Area that will highlight the positive qualities of living and investing within the neighborhood. The branding initiative is envisioned to generate written, graphic, and multimedia materials for use by the City and neighborhood in promoting the future revitalization of the Study Area.

Task 1.10: Developer Site Evaluation Reports and Pro-formas - \$90,000

A primary outcome of the Step 3 BOA Implementation Strategy is the encouragement of private redevelopment of several strategic City-controlled sites within the BOA, particularly within the Vacuum Oil footprint. In an effort to spur developer interest and speed the redevelopment process, the City will complete Site Evaluation Reports for select strategic sites that aggregate extensive data and information pertaining to the condition of the site and its viability as an investment. These reports will be modeled from those currently utilized within the private real estate development industry during the due diligence and investment decision making process. As part of these reports, a model pro-forma will be developed to determine required cash flow, income and anticipated tax implications. Together, the Site Evaluation Reports and pro-formas will be utilized by the City to market the viable redevelopment or reuse of sites within the BOA.

5.6.3 PHASE 2: Infrastructure Analysis and Neighborhood Revitalization Strategies

Phase 2 tasks total \$520,000 to investigate and prioritize Study Area-wide infrastructure and neighborhood revitalization recommendations and investments.

Task 2.1: Transportation and Infrastructure Feasibility Studies - \$175,000

Several new, rehabilitated or extended roadways are proposed as part of the BOA Master Plan, the planning and design of which will be critical to improve access to the Genesee River waterfront and enhance the development viability for strategic sites. The City will study the feasible alignment, conceptual design and anticipated function of these roadways within the Study Area, including potential impacts to the existing neighborhood. In addition, an analysis of the existing utility infrastructure will be conducted to determine if the current capacity is sufficient to support proposed development density.

Task 2.2: Traffic and Parking Analysis - \$40,000

In coordination with feasibility and preliminary design services for new and expanded transportation infrastructure, the City will also conduct an analysis of anticipated traffic and parking impacts within the neighborhood as a result of the complete build-out of the BOA. The analysis will assist in the appropriate sizing, configuration and location of streets and parking areas, and will identify alternatives to meet anticipated parking demands.

Task 2.3: Riverwall Engineering Analysis and Preliminary Design - \$135,000

The existing riverwall along the Genesee River shoreline is in poor condition in several locations within the BOA. The City recently completed an analysis and design for riverwall improvement downstream of the Ford Street Bridge, and seeks to extend the planning and design of improvements upstream to assist in the revitalization of the BOA Study Area. This task will include the assessment and analysis of the existing hydraulic, hydrologic and geologic conditions impacting the design and reconstruction of this critical segment of flood protection within the neighborhood.

Task 2.4: Exchange Street Streetscape and Traffic Calming - \$90,000

Exchange Street is a primary entry corridor into the BOA Study Area from Downtown and the Ford Street Bridge. As a result, this corridor receives moderate truck traffic for existing industrial businesses and relatively high speed traffic to and from the residential neighborhood. A need for traffic calming along this corridor was a consistent theme during public participation meetings. The City will complete an analysis of existing streetscape and traffic conditions and determine appropriate alternatives to enhance accessibility, safety and aesthetics along the corridor and at primary intersections. The City envisions Exchange Street functioning as a high quality, pedestrian-friendly corridor that links the PLEX Neighborhood and the Vacuum Oil redevelopment to the adjacent Corn Hill and Center City neighborhoods.

Task 2.5: Housing Reinvestment Strategy - \$80,000

The City will complete a Housing Reinvestment Strategy to identify a series of recommendations based on several findings from the Nomination Study, including the demographic and market analysis, the findings from priority strategic site selection, and additional recommendations made as part of the infrastructure, land use, zoning and strategic sites analysis. Recommendations for the focused revitalization of neighborhood and housing conditions shall address the following:

- The identification of strategies to spur private reinvestment within the neighborhoods.
- Strategies for managing and overcoming vacant and abandoned housing;
- Strategies for decision making regarding investing limited resources in public infrastructure;
- The identification of how the PLEX neighborhood fits into the surrounding residential marketplace; and
- The development of strategies to promote a mix of housing types for a range of incomes and needs.

5.6.4 PHASE 3: Recreation Master Plan and Regulatory Updates

Phase 3 tasks total \$350,000 and add detail to long-term community recreation needs, and provide necessary regulatory updates to facilitate private investment and redevelopment within the Study Area.

Task 3.1: Waterfront Recreation and Public Realm Master Plan - \$150,000

The Waterfront Recreation and Public Realm Master Plan will identify, program and conceptually design public space improvements and historic/cultural interpretation opportunities within the BOA. In addition, the Master Plan will be used by the City of Rochester for capital improvement project planning purposes. The BOA Master Plan envisions a transformation of the former Vacuum Oil refinery site into a place for people and a destination within the City. The proposed Waterfront Recreation and Public Realm Master Plan will add significant detail to the programming and design of activity/gathering spaces along the waterfront, including a children's play area, a primary waterfront access point and a canal interpretive feature. The BOA Study Area has a rich industrial and cultural history to be celebrated through the interpretation of sites of local and regional significance. One of the most dramatic opportunities within the Study Area is the potential to physically interpret the former Genesee Valley Canal, including the construction and re-watering of a portion of the historic canal bed. Another potentially significant theme for historic interpretation could be the changing role of the Study Area over time. The Master Plan will explore the establishment of interpretive nodes along the Genesee Riverway Trail indicating important people, places and events and their connection to the City, such as the Camp Fitz-John Porter Civil War site, and remaining portions of the former Vacuum Oil Works which had a notable impact on the automobile industry throughout the world.

Task 3.2: Generic Environmental Impact Statement - \$135,000

The City will complete a Generic Environmental Impact Statement (GEIS) to identify potential adverse environmental impacts and mitigation alternatives to expedite future private redevelopment activities. Based upon the results of previous studies conducted throughout the Step 3 program, the GEIS will establish a set of development thresholds for development density, open space, traffic generation and parking as well as examine proposed zoning changes. Future development proposals that meet these criteria will be afforded the opportunity for an expedited review pursuant to the State Environmental Quality Review process.

Task 3.3: Urban Renewal District - \$10,000

Utilizing the alternatives and sub area plans developed as part of the Nomination Study pursuant to GMU Article 18-C of the NYS Municipal Redevelopment Law, the City will seek to form an Urban Renewal District pursuant to GMU Article 15 to better position the BOA Study Area for tax, private financing and public funding incentives.

Task 3.4: Zoning Updates and Design Standard for Development - \$55,000

As a culminating activity during the Step 3 Implementation Program, the City will codify a set of changes to the existing zoning code and map to reflect the vision for redevelopment within the BOA Study Area, including the creation of a set of graphic-rich design standards that visually depict appropriate design alternatives that meet the spirit and intent of the BOA vision. There are several instances where existing

zoning district arrangements within the BOA Study Area have an adverse impact upon potential revitalization scenarios. Existing Low Density Residential zoning does not fully leverage the neighborhood's potential for higher density housing, mixed use commercial/retail, and water-enhanced or water-dependent development. In addition, the Industrial zoning currently in place within the Vacuum Oil site permits a broad range of activity that conflict with the surrounding residential uses and proposed uses along the Genesee River waterfront. Changes in zoning should be accompanied by a set of design standards to ensure future development maintains an appropriate scale and does not negatively impact adjacent residential neighborhoods.

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SECTION 6: FUNDING

Funding for BOA Master Plan initiatives will come from a host of public and private resources. Timing and levels of public investment will be predicated on numerous issues including the disposition of State and Federal budgets and the regional, State and national economic outlook. However, the overwhelming majority of investment within the BOA will be provided by the private sector. The availability and costs of financing are major factors that dictate the extent and timing of private sector involvement. In addition, the perception of the Study Area and potential costs associated with environmental contamination are also deterring private sector interest. Although near-term public involvement will be required to facilitate investment, the long-term sustainability and financial viability of development within the Study Area will require the ability of projects to persist absent of public subsidies.

It is recognized that a consistent level of public dollars will be required in the beginning stages of implementation to reduce private sector risk and lure investment. As a result, the City should further investigate the establishment of an Urban Renewal District or Municipal Redevelopment Project Area within the BOA and opportunities to leverage funding strategies such as tax increment financing (TIF) pursuant to General Municipal Law Article 18-C §970. The City has commissioned a separate study regarding the potential for tax increment financing (see Appendix F). A brief summary regarding the utilization of the TIF mechanism is included below.

Maintaining momentum developed during the Nomination process is critical to ensuring that revitalization efforts take hold. The PLEX Neighborhood Association has been a key player and partner towards the development of the Master Plan. The ability of the City to bring about meaningful and visible investments and action within the neighborhood will send a strong signal to the community regarding the City's intent to revitalize PLEX. Therefore, the City should identify 'low-hanging fruit' - short-term projects and initiatives that can be accomplished with limited funding to provide maximum impact. The implementation of a few highly visible quick-wins, such as the clearing and grubbing of overgrowth along the Genesee Riverway Trail or the revitalization of the Exchange Street Playground, will signal commitment, activity, and momentum that should translate into continued public and private investment.

Funding for lower cost, high impact projects can come from more traditional sources, such as the New York State Environmental Protection Fund, New York Main Street Program, and the City's portion of Community Development Block Grants. The following provides an overview of available New York State funding resources and the recently enacted regional economic development policy approach promoted by the NYS Governor's Office.

6.1 ECONOMIC DEVELOPMENT FUNDING IN NEW YORK STATE

6.1.1 NYS Regional Economic Development Councils

In 2011, New York State created ten regional economic development councils (REDC) and mandated that each develop a five-year strategy which identifies an overall economic development approach for the region. Each regional strategy is updated annually to promote priority public sector investments and compete for access to a pool of State funding and development support. The use of State economic development funding for public or private sector projects is now directly tied to the advancement and implementation of regional economic development strategies. Funding priority will be given to projects which meet or advance the strategies and goals identified by the corresponding regional economic development council.

The Finger Lakes Regional Economic Development Council (FLREDC) identified four ‘umbrella’ strategies to promote a unified approach to public and private investment in the nine-county region. Each of the four strategic areas further outlines a series of specific projects that will enhance economic development and competitiveness within the Finger Lakes Region. In particular, the FLREDC identified the investment in communities, industrial development and infrastructure as a priority regional strategy. The revitalization of the PLEX Neighborhood and the Vacuum Oil BOA directly aligns with the goals of this strategy to reinforce the sense of place of existing neighborhoods, promote the adaptive reuse of existing buildings, increase access to affordable housing, and invest in projects that enhance access to water resources.

Each Regional Economic Development Council has a Capital Fund for catalytic projects within the region. The alignment of the BOA Master Plan with the regional economic development strategy will be critical to accessing these and other funds for implementation projects. Further, the ability of the City of Rochester to obtain priority project status for the Vacuum Oil BOA will greatly increase the likelihood of receiving large, potentially ‘game-changing’ infusions of seed funding for critical activities, such as obtaining comprehensive site control and preparation of lands for development.

Regional Strategy 4 of the Finger Lakes Regional Economic Development Council Strategic Plan seeks to invest in community, industrial development and infrastructure.

The revitalization of the PLEX neighborhood and Vacuum Oil BOA directly support the strategy by reinforcing the identity, sense of place and character within PLEX through a focus on adaptive reuse of existing structures, leveraging existing infrastructure, and promoting historic preservation.

6.1.2 Consolidated Funding Application Process

A significant amount of State funding is now procured through the Consolidated Funding Application (CFA) process, an initiative begun in 2011 in concert with the establishment of the regional economic development councils. The CFA process functions as a funding clearinghouse, whereby applicants can apply for multiple sources of traditional funding via a single application. Applications for CFA resources must be reviewed by both the funding agency and the REDC to be scored for compliance with agency and regional goals. The Vacuum Oil BOA Master Plan will require a broad range of capital projects, including waterfront and roadway infrastructure, environmental remediation, building demolition, housing rehabilitation, park and recreational amenities, and the construction of multi-story mixed use structures. These projects have several components which may be eligible for funding via the CFA process.

For 2011 and 2012, the Governor's Office announced a pool of funding from several sources, such as the Environmental Protection Fund (EPF), the Environmental Facilities Corporation (EFC), and the New York State Energy Research and Development Authority (NYSERDA), among others. Funding availability is typically announced once per year in late spring, with application deadlines in July or August.

6.2 STATE FUNDING AND INCENTIVE PROGRAMS

The following is a brief overview of key funding and incentive programs in existence as of 2013 organized by agency and important factors for consideration during the application process.

6.2.1 New York State Department of State

ENVIRONMENTAL PROTECTION FUND

The NYS Environmental Protection Fund (EPF) was created in 1996 as part of a statewide bonding initiative. This fund is utilized by two primary grant programs: the Local Waterfront Revitalization Program (LWRP); and the Parks, Recreation and Historic Preservation Program (OPRHP). Each of these programs will fund improvements up to \$400,000, requiring at least a 1:1 match, and state funds cannot equate to greater than 50 percent of the total project cost. Therefore, a project requesting the maximum of \$400,000 will be required to have additional resources committed equivalent to \$400,000 or more. Funding priority is given to projects within an approved BOA.

Local Waterfront Revitalization Program

The NYSDOS administers LWRP funding, which can be utilized for waterfront improvement projects in conjunction with an approved LWRP document. The ongoing update to the City of Rochester's LWRP should place the City in a strong position to compete for these funds upon an approved document. Funds can be utilized to finalize the design and construction of infrastructure and shoreline improvements and other capital projects such as trails and parks.

Vacuum Oil BOA capital projects, as depicted on Map 17, that should be competitive for this funding program include: riverwall improvements (Project 6); water access improvements (Projects 6 and 7); construction of the large public gathering space at the terminus of Flint Street (Project 21); and development of enhanced trail gateways and interpretive nodes (Projects 12 and 13).

Parks, Recreation and Historic Preservation Program

The Office of Parks, Recreation and Historic Preservation (OPRHP) administers a separate EPF grant program focusing on the acquisition, preservation and construction of park and historic preservation projects. This funding program supports the purchase of property and easements, the construction of public parks, and the preservation of historic resources and structures.

Several projects within the BOA should be a good fit for this funding program, including: development of the new park on portions of 15 Flint Street (Project 9); the revitalization of the Exchange Street Playground (Project 13); and the development of other pocket parks throughout the neighborhood.

Funding programs associated with the EPF are extremely flexible. Applicants can utilize other local, state, and in-kind funds towards their dollar for dollar match, and must be capable of funding the entire project prior to requesting reimbursement.

6.2.2 NYS Office of Community Renewal

NEW YORK MAIN STREET PROGRAM

The New York Main Street (Main Street) Program is funded by the NYS Housing Trust Fund and administered by the Office of Community Renewal. The Main Street Program mainly supports investment in private property. The PLEX Neighborhood Association and the Sector 4 Community Development Corporation would be logical applicants for Main Street funding for façade renovations, tenant space improvements, signage, and wayfinding improvements. The revitalization and reinvestment in existing commercial spaces along South Plymouth Avenue (Project 3) would be an appropriate target area for this funding source. This corridor would also be able to leverage the streetscape component of the funding program, and potentially provide assistance for renovations of 5 Flint Street. Main Street funding is also flexible, yet requires proof of committed investment by other state, federal or private sources. Similar to EPF programs, Main Street is also a reimbursement program, with varying levels of match dependent upon project type.

LOW INCOME HOUSING TAX CREDITS AND NYS HOME

The New York State Department of Housing and Community Renewal provides State Low Income Housing Tax Credits similar to federal HUD tax credits for qualified low to moderate income housing projects. In addition, the NYS HOME program further leverages private investments for the rehabilitation and construction of modern, affordable housing.

6.2.3 NYS Environmental Facilities Corporation

GREEN INNOVATIONS GRANT PROGRAM

The Green Innovation Grant Program (GIGP) is funded and administered by the New York State Environmental Facilities Corporation and funded through the NYS Clean Water Revolving Loan Fund which is capitalized largely through federal support. The GIGP supports projects that incorporate unique ideas for stormwater management, innovative green infrastructure design, and cutting-edge green technologies. GIGP-funded projects range from simple rain gardens to large-scale wastewater treatment sites. Uncontrolled stormwater runoff can overwhelm separate or combined-sewer systems in aging neighborhoods such as PLEX, leading to overflows into streets and homes and pollutants in the Genesee River.

Green infrastructure is used to manage rain where it falls, reducing runoff volume and the need to treat it through conventional piped drainage and water treatment infrastructure, much of which is already at or near capacity. Green infrastructure is a cost-effective and efficient tool that can be utilized along public streets, in parking lots and in small undeveloped portions of lots. There are several opportunities for green infrastructure in the Vacuum Oil BOA, including the proposed Flint Street Waterfront Connector (Project 4), in public parks, and in streetscape and public realm improvements such as the interpretive reconstruction of a segment of the former Genesee Valley Canal.

The GIGP program funds up to 90 percent of project costs with no defined maximum yet will only fund the green infrastructure portions of the project. Non-sustainable components will require coverage via other project funding.

6.2.4 NYS Department of Environmental Conservation

BROWNFIELD CLEANUP PROGRAM

In 2004, the establishment of the Brownfield Cleanup Program (BCP) provided tax credits for the remediation and redevelopment of brownfield sites in New York State. These tax credits are further enhanced within Brownfield Opportunity Areas and areas the Empire State Development Corporation has designated as Environmental Zones (EN Zone). The BCP establishes four separate levels of remediation based on final permissible uses and the need for continued engineering controls to protect the public health, safety and welfare; projects that pursue more extensive levels of remediation are eligible for greater tax benefits. Credits cannot be issued prior to the issuance of a Certificate of Completion which certifies remediation activities have been completed per agreement with the NYSDEC. As of January 2013, funding for the BCP will expire in December of 2015. The extensive timeline anticipated for projects entering the BCP to achieve a COC will require the City of Rochester and project partners to move quickly to take advantage of this important source of project financing.

There are three separate tax credits available in the BCP Program:

Brownfield Redevelopment Tax Credit

The brownfield redevelopment tax credit consists of the sum of three separate credit components: (1) site cleanup, (2) groundwater cleanup, and (3) development on a brownfield site. The brownfield redevelopment tax credit is available to taxpayers who incur costs for the remediation or redevelopment of a brownfield site in New York State that is, or will become, a qualified site. Upon completion of the required remediation, the DEC will issue a written Certificate of Completion (COC) to the remedial party. The COC will include the applicable percentages used to determine the amount of the credit. The amount of the brownfield redevelopment tax credit is a percentage of the eligible costs paid or incurred to clean up and redevelop a qualified site. A greater percentage is allowed for sites that are cleaned up to a level that requires no restrictions on use, sites located in a designated EN Zone, and sites located in a BOA. Within the Vacuum Oil BOA, this equates to an additional 10 percent credit.

Remediated Brownfield Credit for Real Property Taxes

A developer who has been issued a COC for a brownfield site, or who has purchased or acquired all or part of a qualified site is allowed a remediated brownfield credit for real property taxes paid. The amount of the credit is 25 percent of the product of the taxpayer's employment factor (a percentage based on the number of persons employed on a qualified site) and the taxpayer's "eligible real property taxes." If the Site is located in an EN Zone the credit is 100 percent of the product of the employment factor and the real property taxes paid.

Environmental Remediation Insurance Credit

This credit is available for premiums paid for Environmental Remediation Insurance up to the lesser of \$30,000 or 50 percent of the cost of the premiums.

ENVIRONMENTAL RESTORATION PROGRAM

Under the Environmental Restoration Program (ERP), the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100 percent of off-site eligible costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential or public use. Applications for this program have not been accepted since 2008 due to a lack of funding, but the 2013-2014 NYS Budget includes approximately \$40 million in unencumbered funding from previous years. The ERP is a significant potential source of funding for the City of Rochester to remediate City-owned property within the Vacuum Oil site. The State has indicated that funding priority will be given to projects within an approved BOA.

6.2.5 NYS Empire State Development Corporation

New York State has established several brownfield and economic development programs that incentivize private investment, including the remediation and redevelopment of contaminated properties. The NYS Department of Environmental Conservation's (NYSDEC) Brownfield Cleanup Program (BCP) and Environmental Restoration Program (ERP) provide tax incentives for private development and funding assistance to municipalities for the remediation of contaminated property as long as the entity was not a responsible party to the contamination.

In addition, the NY Empire State Development Corporation has developed the Environmental Zone program, which enhances tax credits available to private development in designated census tracts based on poverty and unemployment levels. The Excelsior Jobs Program (EJP) contains three relevant components which package tax credits for job creation, capital investments, and research and development activities.

ENVIRONMENTAL ZONE PROGRAM

The Empire State Development Corporation established Environmental Zones (EN Zone) as designated areas in which tax credits acquired through the BCP program could be further enhanced as an incentive for developers to remediate property in areas challenged by high poverty and unemployment. All land within the Vacuum Oil BOA is designated as an EN Zone and is available for up to an additional eight percent in credits under the Brownfield Redevelopment Tax Credit.

EXCELSIOR JOBS PROGRAM

Business investment within the Vacuum Oil BOA may qualify for fully refundable tax credits via the Excelsior Jobs Program (EJP). Businesses within the BOA may be eligible for three of the four EJP credits, which can be claimed over a 10 year period. To earn any of the following credits, firms must first meet and maintain the established job and investment thresholds as outlined by the New York Empire State Development Corporation, which include minimum eligibility criteria for jobs, overall investment and benefit-cost ratios.

The Excelsior Jobs Tax Credit

A credit of 6.85 percent of wages per net new job to cover a portion of the associated payroll cost.

The Excelsior Investment Tax Credit

The Investment Tax Credit is valued at two percent of qualified investments in tangible property, such as buildings or structural components of buildings located within New York State that have a useful life in excess of four years. This credit may be taken in tandem with the Investment Tax Credit for investments in research and development property or with brownfield tangible property credit, but not both.

The Excelsior Research and Development Tax Credit

The Research and Development Tax Credit is valued at 50 percent of the Federal Research and Development Credit, up to three percent of total qualified research and development activities conducted in New York State.

To be eligible for inclusion in the EJP, firms must operate in one of seven key industries:

- financial services data center or back office operation;
- manufacturing;
- software development and new media;
- scientific research and development;
- agriculture;
- creation or expansion of back office operations;
- distribution center, or
- an industry with significant potential for private sector growth and development.

OTHER EMPIRE STATE DEVELOPMENT CORPORATION PROGRAMS

Empire State Development Corporation maintains discretionary capital funds in support of statewide economic development initiatives and business investments. This includes development bonds to support significant private sector investments, the Urban and Community Development Program for feasibility and pre-development activities, and the Build Now-NY/Shovel Ready Program, among others.

6.2.6 New York State Energy Research and Development Authority

CLEANER, GREENER COMMUNITIES PROGRAM

The New York Cleaner, Greener Communities Program empowers regions to create more sustainable communities by funding smart growth practices. The Finger Lakes Regional Sustainability Plan (FLRSP) is undergoing draft development as of April 2013, and is being developed through a partnership among public and private experts across a wide range of fields. The FLRSP will recommend implementation projects that will significantly improve the economic and environmental health of the region. These projects will be funded in three rounds of \$30 million beginning in 2013. The City should encourage the inclusion of the Vacuum Oil BOA revitalization program within the implementation recommendations as a model for sustainable neighborhood and brownfield redevelopment.

6.3 TRANSPORTATION FUNDING

The most likely means of implementing transportation improvement recommendations identified in the BOA Master Plan will be to seek multiple funding sources, including a combination of public funding from various governmental levels.

6.3.1 Federal Sources

Federal transportation funding for projects associated with road reconstruction or trail development are typically available via the formalized Transportation Improvement Program process coordinated by the Genesee Transportation Council (GTC). This would include Projects:

- 4 - Flint Street Green Infrastructure Improvements;
- 5 - Extension of Luther Circle to Serenity Circle;
- 6 - Trail enhancements along the Genesee Riverway Trail;
- 11 - New road reconstruction;
- 12 - Exchange Street gateway and streetscape improvements;
- 13 - Enhanced Trail Connection and Playground; and
- 14 - Roadway improvements associated with neighborhood redevelopment.

The Federal Government provides funds for transportation projects through various funding programs contained within multi-year federal transportation legislation, with the current appropriations bill referred to as MAP-21, or Moving Ahead for Progress in the 21st Century. MAP-21 is a new two-year federal transportation act that was signed in July 2012 after the expiration of SAFETEA-LU in March 2012. The new act created the Transportation Alternatives Program (TAP) which combines several SAFETEA-LU programs under a single heading, continuing funding support for programs and projects defined as transportation alternatives, including:

- on- and off-road pedestrian and bicycle facilities;
- community improvement projects;
- recreational trail program projects; and
- safe routes to school projects.

MAP-21 also continues the Surface Transportation Program (STP) and the Highway Safety Improvement Program (HSIP) which supply potential federal funding sources for roadway and trail improvements.

SURFACE TRANSPORTATION PROGRAM (STP)

The Surface Transportation Program is a primary core Federal-aid program within MAP-21 utilized for local highway and trail improvement projects. The STP provides flexible funding that may be used for a variety of projects through numerous sub-programs, including all project types eligible for funding under

the Transportation Alternatives Program. STP funds can also be ‘Flexed’ or transferred to fund multi-modal and transit projects, as approved by GTC. STP funds could support the following activities associated with the Vacuum Oil BOA Master Plan:

- 5 - Extension of Luther Circle to Serenity Circle;
- 11 - New road reconstruction;
- 12 - Exchange Street gateway and streetscape improvements; and
- 14 - Roadway improvements associated with neighborhood redevelopment.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with an overall purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements. HSIP funds must be consistent with the State Strategic Highway Safety Plan. The Exchange Street gateway and streetscape improvements project (Project 12) may be eligible for HSIP funds.:

TRANSPORTATION ALTERNATIVES PROGRAM (TAP)

The Transportation Alternatives Program functions as an umbrella for three separate programs formerly functioning separately under SAFETEA-LU. With some minor exceptions within the Recreational Trails program, all TAP funding requires a 20 percent local match that may be cash or in-kind services.

Transportation Enhancements (TE)

Transportation Enhancements (TE) funds are now included under the Transportation Alternatives Program, and administered by the New York State Department of Transportation (NYSDOT) with assistance in project solicitation and selection being provided by GTC. In order to maximize the use of the available TE funding, this program provides innovative financing alternatives for local matching requirements of 20 percent. TE funds would support the following Projects associated with the Vacuum Oil BOA:

- 4 - Flint Street Green Infrastructure Improvements;
- 6 - Trail enhancements along the Genesee Riverway Trail;
- 11 - New road reconstruction;
- 12 - Exchange Street gateway and streetscape improvements; and

Safe Routes to School (SRTS)

Similar to TE funds, SRTS funds are now included under the TAP umbrella. The SRTS Program provides funding to enable and encourage children, including those with disabilities, to walk and bicycle to school; to make walking and bicycling to school safe and more appealing; and to facilitate the planning, development and implementation of projects that will improve safety, and reduce traffic, fuel

consumption, and air pollution in the vicinity of schools. SRTS funding within the Vacuum Oil BOA would likely be limited to the Flint Street Green Infrastructure Project (Project 4) corridor to a connection with the nearby School 19 west of South Plymouth Avenue.

Recreational Trails (RT)

The Recreational Trails Program provides funding to construct and maintain recreational trails. Each state must establish a State Recreational Trails Advisory Committee that represents both motorized and non-motorized recreational trail users to distribute funds. Of funds distributed to a state, 30 percent must be used for motorized trails, 30 percent must be used for non-motorized trails, and the remaining 40 percent can be used for either type of trail. A typical RT award is \$50,000 to \$100,000. Recreational Trails funds would support the continued development of the Genesee Riverway Trail and Exchange Street Playground Trail Extension (Projects 6 and 13).

6.4 OTHER FUNDING SOURCES

Several other local and federal funding and financing programs will likely be required to facilitate additional implementation projects. The following is a brief overview of other relevant funding sources to be considered for the revitalization of the BOA Study Area.

- The Monroe County Industrial Development Agency (COMIDA) has a suite of tools to assist private development, including tax exempt bond financing, sales/mortgage tax exemptions, and payment-in-lieu-of-tax (PILOT) exemptions for property taxes. In addition, COMIDA can assist projects through the purchase and sale/leaseback of land, existing facilities and new equipment. Private development projects within the BOA may potentially be eligible for assistance from COMIDA.
- The US EPA's Brownfields Program provides direct funding for brownfields assessment, cleanup, revolving loans, and environmental job training. In addition to direct brownfields funding, EPA also provides technical information on brownfields financing matters. The remediation of 5 Flint Street and 15 Flint Street may be eligible for EPA assistance.
- The City's HUD Community Development Block Grant funding could also be leveraged through the use of the Section 108 Loan Guarantee Program, which aids communities with a source of financing for economic development, housing rehabilitation, public facilities, and large-scale physical development projects. Section 108 loan commitments are often paired with Economic Development Initiative (EDI) or Brownfield Economic Development Initiative (BEDI) grants, which can be used to pay predevelopment costs of a Section 108-funded project. They can also be used as a loan loss reserve (in lieu of CDBG funds), to write-down interest rates, or to establish a debt service reserve.
- The New Markets Tax Credit Program (NMTC) was established by Congress in 2000 to spur new or increased investments into operating businesses and real estate projects located in low-income communities. The NMTC Program attracts investment capital to low-income communities by permitting individual and corporate investors to receive a tax credit against their Federal income tax return in exchange for making equity investments in specialized financial institutions called Community Development Entities (CDEs). The credit totals 39 percent of the original investment amount and is claimed over a period of seven years. There are several qualified CDEs located in the Rochester region, including the Sector 4 Community Development Corporation which is a significant partner in revitalization for the PLEX neighborhood. Projects 1, 2, 3, 15, 16, 17 and 18 may be capable of obtaining credits through this program.

6.5 TAX AND PILOT INCREMENT FINANCING

6.5.1 Tax Increment Financing

As part of Municipal Redevelopment Law (MRL) GMU-Article 18-C, the State of New York has approved the use of Tax Increment Financing (TIF), which enables municipalities and private entities to borrow capital for significant investments and allocate the proceeds from resultant increases in property tax revenues to cover debt service. Tax increment financing has two primary variations: Project TIFs and Area TIFs. Project TIFs are organized around financing for a single project, utilizing a small TIF district that may coincide with a few properties or even just a few buildings. Area TIFs designate a larger district within the City, and divert the resultant increased tax revenues into district-wide improvements such as infrastructure, parks, museums, and other public or quasi-public amenities.

New York State, through the MRL, permits the establishment of large TIF districts which contain an area suffering from blight or a preponderance of abandoned structures; the Vacuum Oil BOA and in particular the former Vacuum Oil refinery site has a significant amount of structures that have a blighting influence on the community. To take advantage of the potential for TIF to fund a portion of public improvements within the Vacuum Oil BOA, a subarea within the BOA that includes the former Vacuum Oil refinery site should be established as a Redevelopment Project Area. This activity is proposed for Step 3 Implementation, and was included in the City's recent application for project advancement.

6.5.2 PILOT Increment Financing

TIF utilization within New York State remains low due to legal concerns regarding the constitutionality of revenue diversion to repay TIF debt. These concerns have led municipalities and their bond counsels to shy away from the use of TIF as a redevelopment financing mechanism. In many instances, this uncertainty has led municipalities to utilize PILOT (Payment in Lieu of Taxes) Increment Financing, or PIFs, to finance property acquisition, demolition, infrastructure and construction.

The most significant difference between TIF and PIF financing is that PIFs establish a fixed dollar payment to taxing jurisdictions, which eliminates uncertainty for bond underwriting. In addition, a fixed tax payment schedule also provides a greater level of comfort for taxing jurisdictions and developers to project future revenues and expenditures. PIFs also allow for taxing jurisdictions to receive full base year taxes plus an annual increment to partially offset inflationary costs. After the diversion of the fixed 'increment' portion of the taxes to cover debt service, the remaining tax revenue, if any, continues to flow to the taxing jurisdiction. Similar to TIF, PIF can utilize the BOA study area to formulate the PIF District, therefore accelerating the process.

Finally, a significant benefit of PIF over TIF financing within BOA redevelopment projects is the inclusion of a private party to the transaction. Private entities may be eligible for tax credits, which can be utilized as a partial or full reimbursement for PILOT payments. In the Vacuum Oil BOA, the ability

for a private party to access Brownfield Cleanup Program tax credits would be very beneficial to redevelopment.

As part of the BOA Step 3 Implementation Strategy, a refined understanding of available funding mechanisms to implement key catalytic projects will be developed to spur further private investment and revitalization within the City of Rochester. Continued success will require a consistent and up to date understanding of potential funding resources currently available today and those developed in the future.

APPENDIX A: COMMUNITY PARTICIPATION MATERIALS

A-1: Community Participation Plan

A-2: Advisory Committee Meeting Summaries

A-3: Plymouth-Exchange Neighborhood Association Feedback

APPENDIX A-1: COMMUNITY PARTICIPATION PLAN

**City of Rochester Vacuum Oil South Genesee River
Brownfield Opportunity Area (BOA)
Community Participation Plan**

This effort was made possible with the guidance and financial assistance provided by the NYS Department of State Brownfield Opportunity Area Program.

A. Introduction

1) Purpose of the Plan: The Community Participation Plan (CPP) identifies a variety of forums and outreach mechanisms to engage the public and community stakeholders in the planning and revitalization process for the City of Rochester’s Vacuum Oil South Genesee River Brownfield Opportunity Area (BOA). The CPP is a *guide* to involving the community in the planning process, not a checklist of required actions. Some elements of the plan may change as the planning process unfolds. Other opportunities for public engagement not identified in this plan may be identified and utilized as the City, consultant team and community continue to dialogue throughout the process. This CPP is consistent with the Department of State Work Plan and Bergmann Associates’ agreement with the City of Rochester. The CPP does not include tasks related to the development of GIS data and other non-public participation services.

2) Elements of the Plan:

1. City Staff Meetings
2. Project Advisory Committee Meetings
3. Project Stakeholder Meetings
4. Neighborhood Outreach Sessions
5. Public Visioning Workshop
6. Public Design Workshop
7. Public Open House
8. Additional Elements

3) Contacts:

The primary contacts for the project and their contact information is listed below:

- Mark Gregor, Division of Environmental Quality, City of Rochester Project Manager
mark.gregor@cityofrochester.gov, 585.428.6855
- Elaine Miller, NYS Department of State
elaine.miller@dos.state.ny.us, 607.721.8756
- Bart Putzig, PE, Division of Environmental Remediation, NYS DEC Region 8
bxputzig@gw.dec.state.ny.us, 585.226.5349
- Andrew Raus, AICP, Bergmann Associates
araus@bergmannpc.com, 585.232.5135 ext. 495
- Kimberly Baptiste, AICP, Bergmann Associates
kbaptiste@bergmannpc.com, 585.232.5135 ext. 323

**City of Rochester Vacuum Oil South Genesee River
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4) Community Participation Schedule

- See Attachment A for proposed schedule of community outreach tasks.

B. Elements of the Community Participation Plan

1. Project Team Meetings

a) Purpose:

- The purpose of the Project Team meetings is to present and discuss the current status of the project with key project team members.
- For the purposes of this project, City of Rochester Staff will provide direct guidance on this project and will have the greatest contact with and oversight of the consultants.

b) Membership:

- This group is composed of select City staff representing various internal departments

c) Public Participation:

- Meetings are not open to the public for attendance.

d) Notification:

- E-mail from Mark Gregor, Division of Environmental Quality, City of Rochester, or Bergmann Associates.

e) Schedule:

- Meetings to be held monthly or on an as-needed basis.

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2. Project Advisory Committee Meetings

a) Purpose:

- The Project Advisory Committee (PAC) is charged with providing feedback and guidance for the overall revitalization vision and recommendations. The purpose of PAC meetings are to present, discuss, and receive feedback on project specifics, as well as to discuss and resolve comments resulting from review of project documents, advisory agency review, and coordination with other agencies.

b) Membership:

- This group is made up of key stakeholders, community members, and agency staff.
- Appendix A includes a list of the committee's representatives and their contact information.

c) Public Participation:

- Meetings can be open to the public for attendance. However, in the interest of ensuring productive meetings, comments or participation from the public in meeting proceedings are at the discretion of the Advisory Committee.

d) Notification:

- E-mail from Mark Gregor, Division of Environmental Quality, City of Rochester, or Bergmann Associates.

e) Schedule:

- Meetings to be held quarterly and/or in coordination with significant project milestones. Please refer to Attachment B, Overall Project Schedule, for anticipated Advisory Committee meeting dates. Specific dates will be determined based on overall project schedule.
- Approximately seven meetings are anticipated to be scheduled for the project.

**City of Rochester Vacuum Oil South Genesee River
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3. Project Stakeholder Meetings

a) Purpose:

- To communicate and obtain information from significant stakeholders (land owners, interested parties) within the neighborhood in an effort to gain insight into desired goals for parcels within the Study Area, as well as the identification of any constraints that may affect re-use potential.

b) Membership:

- Individual meetings will be held with ExxonMobil and the University of Rochester as determined necessary. Additional Stakeholder Meetings may be held with other individuals as the need is identified throughout the planning process.

- The City and project team will also reach out to the Monroe County IDA and Empire State Development Corporation.

c) Public Participation:

- Meetings will not be open to the public.

d) Notification:

- E-mail from Mark Gregor, Division of Environmental Quality, City of Rochester and Bergmann Associates.

e) Schedule:

- As needed.

**City of Rochester Vacuum Oil South Genesee River
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4. Neighborhood Outreach Sessions

- a) **Purpose:**
 - To communicate and obtain information and direct feedback on the project from community members, and to gain insight into desired goals for the neighborhood revitalization strategy.
- b) **Membership:**
 - A series of meetings will be held with the Plymouth-Exchange Neighborhood Association (PLEX) and the South West Common Council (SWCC) to acquire share information associated with the planning process and answer questions.
- c) **Public Participation:**
 - Meetings will be open to the public.
- d) **Notification:**
 - Through PLEX and SWCC.
- e) **Schedule:**
 - Meetings will be held twice during the planning process. The first meeting will be held early on to kick-off and introduce the project. A later meeting will provide updates and findings from the analysis and the status of the project.

**City of Rochester Vacuum Oil South Genesee River
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5. Public Visioning Workshop

a) Purpose:

- The purpose of the visioning workshop is to educate the community regarding the potential benefits of this project. Due to varying levels of planning expertise and interest amongst the potential participants, the process requires an educational and transparent approach to ensure an accurate understanding, and to elicit broader and more effective involvement in the planning process.
- To identify the desired direction, goals, and objectives of the community for the study area. This will provide a framework for the project vision and policies.
- It is anticipated that the Visioning Workshop will include a large group educational component, as well as small group interaction sessions facilitated by City and Bergmann staff.

b) Membership:

- Advisory Committee members, general public and City project team.

c) Public Participation:

- The Public Visioning Workshop is open to the public for attendance and will be advertised in advance.
- Bergmann will provide presentation materials after each meeting for posting on the website.

d) Notification:

- The City of Rochester will be responsible for posting announcements on the City website (www.cityofrochester.gov), along with relevant print media (Democrat and Chronicle, City Newspaper, etc.). Bergmann Associates will assist the City with preparing appropriate notification.
- All public notice submissions are the responsibility of the City of Rochester.
- Advisory Committee members will be encouraged to forward notifications to their respective network of stakeholders and known interested parties.

e) Meeting Coordination:

- Responsibility for obtaining an appropriate meeting venue and assisting, where possible, with required media technology needs lies with the City of Rochester.
- Bergmann Associates will provide laptops, projectors, and other materials as appropriate.
- Refreshments will be provided and coordinated by City of Rochester staff.
- Bergmann will prepare meeting summary for distribution to PAC members.

f) Schedule:

- Proposed schedule is identified in Attachment B.

**City of Rochester Vacuum Oil South Genesee River
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6. Public Design Workshop

a) Purpose:

- The Public Design Workshop will occur after a solid understanding of existing conditions is established, market realities are known, and a vision statement is drafted.
- Interactive surveys (preferred development survey, placemaking survey, etc.) will be used in a large group setting to facilitate community participation in the conceptual design and physical layout of the study area.
- A brief educational primer on urban design best practices in a large group setting will provide participants with a set of tools to be utilized during the design session.
- In addition, benchmark communities will be used to describe to participants what other communities are doing with similar sites/neighborhoods.
- Small group interactive design sessions will provide opportunities for detailed discussion amongst tables of 6-10 participants.

b) Membership:

- PAC members, general public and City project team.

c) Public Participation:

- The Community Design Workshop is open to the public for attendance and will be advertised in advance.
- Bergmann will provide presentation materials after each meeting for posting on the project website.

d) Notification:

- The City of Rochester will be responsible for posting announcements on the City website (www.cityofrochester.gov), along with relevant print media (Democrat and Chronicle, City Newspaper, etc.). Bergmann Associates will assist the City with appropriate notification.
- All public notice submissions are the responsibility of the City of Rochester.
- Advisory Committee members will be encouraged to forward notifications to their respective network of stakeholders and known interested parties.

e) Meeting Coordination:

- Responsibility for obtaining an appropriate meeting venue and assisting, where possible, with required media technology needs lies with the City of Rochester.
- Bergmann Associates will provide laptops, projectors, and other materials as appropriate.
- Refreshments will be provided by City of Rochester.
- Bergmann will prepare meeting summary for distribution to PAC members.

f) Schedule:

- Proposed schedule is identified in Attachment B.

**City of Rochester Vacuum Oil South Genesee River
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7. Public Open House

- a) **Purpose:**
- The Public Open House will be held upon the completion of the final draft Nomination Study to gather comments and feedback on the recommended revitalization strategy.
 - The meeting is anticipated to be conducted in an informal but structured format with a series of stations providing detailed information broken down by logical project components. Each station will be facilitated by City or Bergmann staff.
- b) **Membership:**
- PAC members, general public and City project team.
- c) **Public Participation:**
- Meeting will be advertised to the public in advance, and is open to all.
 - Bergmann will provide presentation materials after the meeting for posting on the project website.
- d) **Notification:**
- The City of Rochester will be responsible for posting announcements on the City website (www.cityofrochester.gov), along with relevant print media (Democrat and Chronicle, City Newspaper, etc.). Bergmann Associates will assist the City with appropriate notification.
 - All public notice submissions are the responsibility of the City of Rochester.
 - Advisory Committee members will be encouraged to forward notifications to their respective network of stakeholders and known interested parties.
- e) **Meeting Coordination:**
- Responsibility for obtaining an appropriate meeting venue and assisting, where possible, with required media technology needs lies with the City of Rochester.
 - Bergmann Associates will provide laptops, projectors, and other materials as appropriate.
 - Refreshments will be provided by City of Rochester.
 - Bergmann will prepare meeting summary for distribution to PAC members.
- f) **Schedule:**
- Proposed schedule is identified in Attachment B.

**City of Rochester Vacuum Oil South Genesee River
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8. Additional Elements

a) Website Development:

- Bergmann Associates will develop a website at the onset of the project to be hosted by the City of Rochester. Initially, this will provide a basic review of key information such as the project purpose and contact information. Over time, it will expand to include meeting dates, work products, maps, and interactive content.
- The City of Rochester will continue to operate and manage website information related to the project as the BOA moves into future implementation phases.

b) Community Contact List:

- Bergmann Associates will prepare, update, and maintain a community contacts list that includes the names, addresses, telephone numbers, and email addresses of individuals and organizations that have the potential to be impacted by the propose project. The list will to be used on a regular basis to notify stakeholders of upcoming outreach opportunities and meeting dates.

**City of Rochester Vacuum Oil South Genesee River
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Attachment A: Advisory Committee Membership

<p>Sharon Leighton Director of Community Relations NYS Canal Corporation 200 Southern Blvd Albany, NY 12209 518- 471-5033</p>	<p>Michael A. Lamarre ExxonMobil, Environmental Services 1001 Wampanoag Trail Riverside, Rhode Island 02915 401-434-7358 (primary) /401-434-2772 (secondary)</p>
<p>John Curran, Chair Southwest Planning Committee 112 Gregory Hill Road Rochester, NY 14620 585-271-1053</p>	<p>Adam Driscoll/Tom Masaschi DHD Ventures 620 Park Avenue, Suite 185 Rochester, New York 14607 585-329-0232</p>
<p>Dorothy Hall PLEX PO Box 14037 Rochester, NY 14614-0037 585-328-9010</p>	<p>Tom Ferraro Executive Director Foodlink 936 Exchange Street Rochester, NY 14608 585-328-3380 Ext. 119</p>
<p>David Knoll (PLEX neighborhood resident & property owner) 969 South Plymouth Rochester, NY 14608 585-235-6385 (Alternate: David Skinner – property owner/resident)</p>	<p>Judy Seil, Director Monroe County Department of Planning & Development 8100 City Place 50 West Main Street Rochester, NY 14614 585 753-2000</p>
<p>Joan Roby-Davison Sector 4 CDC 89 Genesee Street, First Floor Rochester, New York 14611 585-328-5750</p>	<p>David Zorn Executive Director Genesee/Finger Lakes Regional Planning Council 50 West Main Street – Suite 8107 Rochester, NY 14614</p>
<p>David Hawkes, Southwest NSC City of Rochester 923 Genesee Street Rochester, NY 14611 585-428-7632</p>	<p>Elaine Miller NYSDOS BOA Program Coordinator Office of Coastal, Local Government and Community Sustainability NYS Department of State 44 Hawley Street - State office Building Binghamton, NY 13901-4455 607-721-8756</p>

**City of Rochester Vacuum Oil South Genesee River
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Attachment A: Advisory Committee Membership, continued

<p>Richard Pifer Associate Vice President Facilities and Services University of Rochester PO Box 270345 271 East River Rd., Room 218 Rochester, NY 14627-0345</p>	<p>Bart Putzig, PE Regional Engineer Division of Environmental Remediation NYSDEC Region 8 6274 East Avon-Lima Road Avon, NY 14414-9519</p>
<p>Doug Benson City of Rochester Neighborhood & Business Development/Planning & Zoning 30 Church Street – Room 125B Rochester, NY 14614 585-428-6824</p>	<p>Rick Rynski City of Rochester Neighborhood & Business Development/Business & Housing Development 30 Church Street – Room 005A Rochester, NY 14614 585-428-6932</p>
<p>B. Robert Amjad/Todd Davis Hemisphere Development LLC 3 Hemisphere Way Bedford, Ohio 44146 216-464-4105 Office</p>	<p>Joni Monroe Executive Director Rochester Regional Community Design Center The Hungerford Complex 1115 East Main Street, Door 4 Rochester, NY 14609 585-271-0520</p>

**City of Rochester Vacuum Oil South Genesee River
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Attachment B: Community Outreach Schedule

2011										2012							
Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug

Phase																		
Phase 1: Verification and Visioning																		
Phase 2: Data Collections and Analysis																		
Phase 3: Conceptual Master Planning																		
Phase 4: Plan Refinement																		
Phase 5: Plan Delivery & Advancement																		
Meetings (tentative schedule and meeting formats to be confirmed in Community Participation Plan)																		
Project Advisory Committee																		
City Staff																		
Public Visioning																		
Public Workshop																		
Public Open House																		

APPENDIX A-2: ADVISORY COMMITTEE MEETING SUMMARIES

meeting summary

City of Rochester Vacuum Oil Brownfield Opportunity Area

Project Advisory Committee Meeting #3
February 7, 2011 • 6:30 – 9:00 PM

Meeting Attendees

- Mark Gregor, City of Rochester
- Vicki Brawn, City of Rochester
- Joe Biondolillo, City of Rochester
- Rick Rynski, City of Rochester
- Doug Benson, City of Rochester
- John Curran, SRRC
- Mike Lamarre, ExxonMobil
- Adam Driscoll, Property Owner
- David Knoll, Resident
- Tom Ferraro, Foodlink
- Joan Roby-Davison, Sector 4 CDC
- Greg Albert, GFLRPC
- Kimberly Baptiste, Bergmann Associates
- Andy Raus, Bergmann Associates
- Michael Grenzer, Hemisphere
- Bob Amjad, Hemisphere
- Todd Davis, Hemisphere

Welcome and Introductions

Mark Gregor opened the meeting and requested meeting attendees to introduce themselves. Mark provided a quick status update on the project and handed meeting over to Bergmann Associates.

Vision, Goals and Objectives

Bergmann Associates distributed copies of the draft vision statement and goals and objectives for the BOA Nomination Study. Andy Raus reviewed the proposed goal areas and identified the key points that have been articulated to date which have been incorporated into the vision statement and goal areas. Committee members were asked to review the vision, goals and objectives in greater detail and to provide feedback and comments to the project team for consideration and revision.

meeting summary

Future Land Use Planning

Kimberly presented a series of slides to lay the framework for the land use planning exercise to occur at a later point in the meeting. The first series of slides included maps that graphically identified planning constraints and opportunities to consider when identifying and suggesting potential land uses and projects within the BOA. The second series of slides identified land use precedents representing projects and potential uses that have been successfully implemented in other communities in upstate New York and across the country. The goal of these slides was to engage participants and have them consider alternative ideas for future land uses within the study area.

Future Land Use Exercise / Break-Out Groups

Committee members were asked to break out into two groups for small-group exercises focused on identifying future land use areas, projects and enhancements they would like to see within the BOA study area. Each group spent approximately 50 minutes discussing ideas and each group then had 5 minutes to present the highlights from their discussion to the full committee.

Key highlights and feedback from Group #1 (led by Andy Raus)

- Need to consider geotechnical issues
- Programmed open space near foot of pedestrian bridge
- Can't identify uses for Vacuum Oil site – too many unknowns – possibly multifamily residential with parking on ground level and units above
- Interpretive / environmental station at foot of Flint Street
- Enhance streetscape along Exchange
- MLK Plaza is redevelopment opportunity
- Redevelop RHA site in southern end of study area
- Retain residential neighborhoods south of Flint, north of Flint some crime issues
- Church of Love is neighborhood asset
- More neighborhood connections to trail and waterfront

Key highlights and feedback from Group #2 (led by Kimberly Baptiste)

General

- High density residential throughout waterfront area – capitalize on the water as an asset
- Retain greenway along Genesee Valley Canal, particularly at its intersection near Ford Street
- Need to upgrade commercial options and existing businesses on South Plymouth Avenue
- Exchange Street improvements and widening
- Demo or use vacant lots to expand parking
- Conversion to one-way streets to allow for on-street parking
- Exchange was formerly known as “Mansion Street”
- Look into geotechnical constraints
- Additional road connections linking future waterfront development

meeting summary

- Adaptive reuse of Foodlink and 5 Flint Street
- Water access (public) at foot of Flint Street
- Re-water canal
- Build on positive energy and development around Brooks Landing

Geographic specific

- Luther Circle – Redeveloped as student or multifamily housing
- Reuse of Foodlink building – Food hub / open air market (Charleston, SC model)
- Riverview Place – Student or workforce housing (Dayton model)
- Former Vacuum Oil properties – Multi-family residential with some mixed uses and retain lots of green space south of Riverview Place
- Significant green space development at foot of pedestrian bridge and foot of Flint Street

Public Design Workshop

Kimberly discussed that the next public meeting would be a workshop in a format similar to the committee meeting. Timing was set for early March with exact date to be provided. Location was identified as Carlson Commons. John, Dorothy or Joan will check on availability of Commons once date is confirmed. Meeting time will be 6:00 PM – 8:00 PM or 6:30 – 8:30 PM.

Next Steps

Next major event will be public workshop. Following public input Bergmann Associates will develop land use alternatives for consideration by PAC in May 2012. Project remains on schedule for wrap-up of final draft submittal to DOS in late summer or early fall.

MEETING SUMMARY

Consultant Scoping Meeting / February 28, 2011

MEETING ATTENDEES

Mark Gregor	City of Rochester (DEQ)	mgregor@cityofrochester.gov
Doug Benson	City of Rochester (Planning)	bensond@cityofrochester.gov
Todd Davis	Hemisphere Advisors	tdavis@hemispheredev.com
Bob Amjad	Hemisphere Advisors	bamjad@hemispheredev.com
Michael Greitzer	Hemisphere Advisors	mgreitzer@hemisphereresorts.com
Joe Biondolillo	City of Rochester (DEQ)	Biondj@cityofrochester.gov
Andrew Raus	Bergmann Associates	araus@bergmannpc.com
Frank Sowers	NYS DEC	flsowers@gw.dec.state.ny.us
Rick Rynski	City of Rochester NBD	rynskir@cityofrochester.gov
Jane Forbes	City of Rochester (DEQ)	forbesj@cityofrochester.gov
Vicki Braun	City of Rochester (DEQ)	vbrown@cityofrochester.gov
Kimberly Baptiste	Bergmann Associates	kbaptiste@bergmannpc.com
Elaine Miller*	NYS Department of State (BOA)	
Renee Parsons*	NYS Department of State (LWRP)	

**participated via conference call*

MEETING CONTENT

1. Introductions / Project Background / Status

Mark Gregor introduced the project and provided a brief overview. All attendees introduced themselves and provided a short summary of their role in association with the project.

2. Project Review

a. Project Scope and Work Plan

Mark noted that everyone present was familiar with the project scope and work plan. Mark and Elaine determined it was not necessary to review the scope and work plan in detail.

b. Study Area Boundary

Maps of the current study area boundary were distributed. Discussion of any possible modification to the study area boundary should occur at the first Project Advisory Committee (PAC) meeting. Preliminary discussion centered around possibly extending boundary to Plymouth Avenue, though residential areas were not identified as being an initial focus area. There are both pros and cons to an expanded boundary, which will be discussed at the PAC meeting. An additional consideration associated with the final boundary is how it relates to the LWRP boundary (currently Plymouth Avenue). It was recommended that Bergmann prepare a map showing the two boundaries as a point for future discussion purposes.

c. Community Participation and Visioning

Project Advisory Committee

Mark distributed a copy of potential Project Advisory Committee members. Mark reviewed list and asked for feedback from consultant team members, city staff and DOS. It was noted that Monroe County and GFLRPC were both regional planning entities and it may not be necessary to have both on the PAC. The potential role of RRCDL on the PAC was also discussed. No final decision regarding the participation of these agencies was determined. The question was raised regarding what the real role of the PAC was and it was determined to be strictly advisory in nature. It was suggested that maybe there be two levels of committee – the broad advisory committee that only meets every 3-4 months and a smaller, working committee of true stakeholders.

Elaine Miller suggested a number of additional considerations for the PAC, including a representative from the Planning Commission, a representative from City Council, and possibly representatives from State and Federal political representative offices. After discussion, it was determined that with regards to City Council representation it would be best to involve them through their monthly Council Work Sessions. Elaine noted that GFLRPC might be a good fit for the PAC because they currently have a BOA application submitted for a regional BOA in Monroe County and there might be some overlap.

Mark would like to have the PAC list finalized by March 9th, 2011 so invitations can be developed. First PAC meeting date TBD. Anticipate first meeting will be held in early April. Mark stressed the PAC will advise the process, not steer the process.

Approaches for Participation

Meeting attendees discussed the actual approach for engaging and involving the public. First meeting should focus on education, acknowledging work that has been done, and confirming past efforts are still relevant today. Key studies that should be reviewed and provided to consultant team include: Comprehensive Plan; 1999 LWRP; South River Corridor Study and GEIS; and Rochester housing study. Kimberly will share access information to a project FTP site so documents and background information can be uploaded and shared with the entire group. Subsequent public meetings should focus on generating alternatives and ideas. Specific meeting formats will be discussed further and refined as part of the development of a project Community Participation Plan.

It was noted that stakeholder interviews should also be considered as part of the Community Participation Plan because they can reach a targeted group of individuals. Stakeholder interviews should include Citywide, countywide, and regional agencies, organizations and stakeholders that may play a role in the future of the study area.

The Southwest Common Council's monthly meetings were discussed as a possible way to update the public about the planning process – possibly through Joan Roby-Davidson?

Briefing Meetings

Briefing meetings with Exxon and the University of Rochester should occur early in the process. Target date for arranging meetings is early April 2011. Mark will make initial contact with Exxon representative and University contact to arrange meetings.

Project Website

Bergmann Associates described the typical content of a project website. The website will likely be linked to the City website. Bergmann will need a contact at the City for coordinating the website specifics with regards to hosting, etc. Project website will be discussed in greater detail at the first PAC meeting.

d. Project Goals and Objectives

This topic was not discussed at length in the meeting. Project-specific goals and objectives will be developed as part of the planning process in concert with City staff, the PAC and the community.

e. Existing Information

The extent of existing information available for the study area was discussed.

- Utility information and mapping is available from the City.
- From an environmental perspective, significant work has been done south of Flint Street and east of Exchange (Phase I and II ESA's).
- The parcels at 5 and 15 Flint Street have been accepted into Brownfield Cleanup Program. A Work Plan has been submitted but no cleanup is underway.
- City owned properties may enter BCP pending agreement with Exxon Mobil. Deadline for getting tax credits through the program is March 31, 2015 (work completed).
- Joe has electronic copies of most environmental research and documentation. This will be uploaded to the project FTP site. Information includes maps summarizing contamination.
- Relevant land use plans are noted above under *Approaches for Participation*.
- Other relevant projects to understand as part of future planning include Brooks Landing, University of Rochester capital projects, and Riverview.
- No comprehensive environmental constraints map currently available for study area.

f. Roles and Responsibilities

General roles and responsibilities were discussed as part of the introduction. Bergmann Associates discussed the roles of the project subconsultants. Camoin Associates will be responsible for the Market and Economic Analysis and site pro formas. The exact scope of work for Interface Studio has not been determined. The level of effort will be determined, in part, by the extent of the study area. Interface will have a greater role if the study area boundary is extended into the surrounding residential neighborhoods.

Role and scope of work being undertaken by Hemisphere was described. Their final deliverable, which remains "to be determined", is intended to be an Appendix to the BOA document. Hemisphere discussed the similarities between this project and their work at the University of Dayton.

A TIF Study is also currently being completed by Evans Paul.

Harter Secrest is serving as the City of Rochester's BCP advisor.

g. Budget and Schedule

Project budget is set. City has already requested and received the 25% advance payment from the DOS. Schedule was confirmed to be 18 months.

h. SEQRA

Elaine Miller identified that they strongly encourage that a positive declaration be made in association with SEQRA. In Step II, the City will be required to declare a lead agency, complete Part 1 of the Long Form EAF and participate in a scoping meeting. The GEIS will be prepared in Step 3. How this relates to SEQRA in association with the LWRP that is expected to be completed in the same timeframe is TBD.

i. Deliverables and Work Products

This agenda item was not discussed in detail. General work product requirements are understood by the City and consultant team members. Elaine noted to keep in mind that recommendations should be very specific and implementable.

3. Project Administration

a. Work Products and Deliverables

The City and DOS noted that payment requests by the consultant team should be contingent upon receipt of an acceptable work product. No parties saw this as an issue or concern.

b. & c. Consultant and Grant Payment Requests

See above. Consultant is familiar with City invoice process. Mark noted that the City is changing their invoice system to electronic invoicing on July 1st, 2011. He noted that, as they get used to new system, invoice payments are certain to slow down after July 1st. Consultant team should invoice as much as possible prior to June 15th. Elaine noted that BOA applications are being accepted for submittal to the Governor by March 31, 2011 and a second round in September 2011.

d. Progress Reporting

Bergmann Associates will be responsible for the preparation of the Semi-Annual Reports required by the Department of State.

4. Near Term Deliverables – Work Products

Bergmann Associates will be responsible for preparing the scoping meeting summary and project outline.

The first PAC meeting date will be targeted for early April. Specific date, time and location TBD.

City of Rochester **Vacuum Oil Brownfield Opportunity Area**

PROJECT OUTLINE

On February 28, 2011 a project scoping meeting was attended by City of Rochester staff, members of the consultant team, and representatives from the NYS Department of Environmental Conservation and NYS Department of State. The project outline is intended to summarize meeting outcomes and serves as an initial guide for the development of the Brownfield Opportunity Areas Program report. The project outline should be reviewed in tandem with the project scoping meeting summary.

a. Study Area Boundary

Study area boundary will be confirmed and refined in conjunction with the Project Advisory Committee Meeting.

b. Project Oversight

Final Project Advisory Committee (PAC) membership to be determined. Two levels of committee may be warranted. One working, decision-making committee that meets on a regular basis and a secondary, advisory committee that will meet at key points during the planning process. City will consider options and report back to consultant team.

c. Public Involvement

Public involvement techniques and schedule will be solidified as part of the development of the Community Participation Plan. Multiple levels of involvement are anticipated, including City staff meetings, committee meetings, stakeholder meetings, public meeting/workshop/open house(s), and individual meetings with key stakeholders, including Exxon and University of Rochester.

In addition to the development of a Community Participation Plan, the creation of a project website will be an early planning action focused on public education and integration into the planning process.

d. Background Information

Background information should be reviewed and understood prior to the start of the planning process. The following documents shall be provided to the Bergmann team by the City of Rochester:

- Comprehensive Plan;
- LWRP Update (1999);
- South River Corridor Study and GEIS;
- Existing utility information, including mapping;
- All environmental research and documentation, including contamination mapping;

- City of Rochester Draft TIF Study; and
- Project specific updates associated with Brooks Landing and Riverview;
- City Housing Study.

All team members will have access to a project FTP site. Background materials should be uploaded to this site.

e. Short-Term Next Steps

<u>Tasks</u>	<u>Responsibilities</u>	<u>Timeframe</u>
Preparation of meeting summary.	Bergmann Associates	March 2011
Finalize PAC membership.	City / Bergmann Associates	March 2011
Distribute invitations to committee.	City	March 2011
Share background information.	City	March 2011
Schedule briefing meetings (UR/Exxon)	City	March 2011
Review background information.	Bergmann Associates	March 2011
Prepare draft Community Participation Plan.	Bergmann Associates	March 2011
Host PAC / committee meetings.	City / Bergmann Associates	April 2011
Participate in briefing meetings.	City / Bergmann Associates	April 2011
Confirm and draft Boundary narrative.	Bergmann Associates	April 2011

meeting summary

City of Rochester Vacuum Oil Brownfield Opportunity Area

Project Advisory Committee Meeting #1
April 18, 2011 • 6:30 PM

INTRODUCTIONS, BACKGROUND AND PRESENTATION

- Mark Gregor and Andy Raus presented the powerpoint presentation after introductions.
- Mark Gregor pointed out that the current grant from the NYS Department of State funds planning only. The BOA project will result in the preparation of land use plan for the BOA and a Nomination Study which will be submitted to the NYSDOS for approval. The nomination study will include recommendations and strategies for the implementation of site cleanup and redevelopment at targeted sites within the BOA. Mark also pointed out that the City of Rochester currently has no funding available for environmental cleanup projects within the BOA.

COMMUNITY INVOLVEMENT

- Mark Gregor will reach out to Dorothy Hall of the PLEX neighborhood group to identify some dates for a presentation. I see this as a City-Bergmann presentation but am open to other suggestions. Similarly it was also suggested that the City present the BOA project to the Southwest Common Council, and Mark will follow up on dates for that.
- It was suggested that the City invite the Church of Love to have a representative on the Project Advisory Committee (PAC).
- Bergmann will prepare and issue a PAC meeting summary that we can submit to the NYSDOS.
- It was suggested that a project web site would be helpful and a good way for residents to access project documents.

Bergmann Associates will be developing a project website for the project and will determine best way to deploy website to maximize its use.

BOUNDARY DISCUSSION

- Bergmann will need to assess the scope of work and budget implications of pushing the boundary out to include South Plymouth Avenue and provide the City with this information to determine if the project budget can fund such an expansion.

Based upon Bergmann's review following the PAC meeting, it was determined that there would not be any increases in cost or significant timeline impacts with the expanded boundary. Most of the mandatory work plan elements will require our team to look at a broader boundary. The only exceptions that may cause an increase in cost would include:

- ✓ *Additional renderings, 3D modeling or photo-simulations associated with the expanded boundary*
 - ✓ *Additional goal, objective and general policy development focusing on neighborhood or S. Plymouth revitalization*
 - ✓ *Additional meetings associated with neighborhood education, involvement and information dissemination*
- It was discussed that since the application for BOA funds in 2006 the Riverview Student Apartment complex was constructed and therefore the project team should consider a change in the scope to reflect the redevelopment of previously identified brownfield properties at the south end of the BOA.
 - Expanding the boundary to include both sides of South Plymouth Avenue will encourage the involvement and participation of residents in the neighborhood.
 - There was general agreement that both sides of S. Plymouth Avenue should be included if the boundary is expanded.
 - It was suggested that the City and consultant team consider the elevations when confirming the BOA boundary.

ROUNDTABLE DISCUSSION

- David Knoll, a resident, noted that he owns 26 properties in the area and is interested in seeing change and participating in the BOA project.
- Tom Ferraro of Foodlink 9(22 Flint Street and 936 Exchange) indicated that he was glad to see the BOA process underway. He also offered to share a market study that was completed on the Foodlink properties. Study was completed by CARP Associates for 936 Exchange Street.
- John Curran, Southwest Rochester Riverfront Planning Committee (SRRPC), suggested that the BOA process consider the history of the Genesee Valley Canal and abolitionist movement during the project. Specifically, Mr. Curran stated the planning effort should re-brand the area using the history, in order, including the Genesee Valley canal, then abolition, then Civil War and finally the Vacuum Oil site. He suggested focusing on how these historically relevant topics impacted the evolution of the neighborhood. He also mentioned that the SRRPC was applying for a Civic Engagement Grant from the Rochester Area Community Foundation.
- Richard Pifer, University of Rochester, indicated that the U of R is pleased to participate in the BOA PAC and desires to be a good neighbor.
- Adam Driscoll, DHD Ventures & owner of 5 and 15 Flint Street, indicated that DHD is pleased to be part of the process.

- Joan Roby Davison, Sector 4 CDC, suggested that expanding the project boundary to include residential properties would help engage owners and tenants. Joan also asked that the age and use of the housing in the area be considered during the study. Joan mentioned that she would follow up with the City or Bergmann Associates regarding the sharing of information that was viewed as important background on recent funding requests and grant applications, as well as ways to stay informed about what is going on in the neighborhood, such as www.location19.org.
- Mike LaMarre, ExxonMobil, referred to ExxonMobil's legacy operations at the Vacuum Oil facility and also indicated that ExxonMobil no longer owns any properties in the BOA.
- Greg Albert, Genesee Finger Lakes Regional Transportation Council, indicated GFLRTC's interest in the BOA and noted that the Vacuum Oil site is already indicated as a priority site by the City of Rochester in GFLRPC's Comprehensive Economic Development Strategy document.
- Dorothy Hall, PLEX, requested that the project team keep residents informed and noted that PLEX views the BOA as a potential growth opportunity. She indicated that it would be important to inform residents in advance of meetings to encourage participation, and asked that the project team present the project at a special PLEX meeting. The City will reach out to PLEX to identify a meeting day and time for a City/Bergmann presentation.
- Joni Monroe, Rochester Regional Community Design Center, indicated she was pleased to be part of the PAC and was encouraged by the level of participation in the project. She also mentioned she is working with the neighborhood to help empower local citizens.

meeting summary

City of Rochester Vacuum Oil Brownfield Opportunity Area

Project Advisory Committee Meeting
September 20, 2011 • 6:30–8:30 PM

Meeting Attendees

- Mark Gregor, City of Rochester
- Joe Biondolillo, City of Rochester
- Rick Rynski, City of Rochester
- John Curran, SRRC
- Adam Driscoll, Property Owner
- Tom Ferraro, Foodlink
- Joni Monroe, RRCDC
- Joan Roby-Davison, Sector 4 CDC
- David Zorn, GFLRPC
- Elaine Miller, Department of State (via conference call)
- Bart Putzig, NYSDEC
- Kimberly Baptiste, Bergmann Associates
- Gary Flisnik, Bergmann Associates
- Christa Franzi, Camoin Associates

Welcome and Introductions

Mark Gregor opened the meeting and requested meeting attendees to introduce themselves. Mark reviewed the meeting agenda and the various phases of the overall planning process. Elaine Miller, the Department of State representative, participated via conference call and welcomed committee members.

Presentation of Existing Conditions

Kimberly Baptiste began the presentation of existing conditions by reviewing the various topics and elements covered in the inventory and analysis and discussed how they relate to the overall conceptual master planning process. She noted the existing conditions document is available on a project FTP site and urged committee members to download and review the draft. Kimberly reviewed key findings associated with land use, zoning, vacant and underutilized sites, natural resources, property ownership, and parks and open space. Gary Flisnik presented key findings associated with potential brownfield sites in the study area, including a summary of known findings and potential brownfield sites that could serve as catalyst for further neighborhood revitalization. Christa Franzi provided a brief overview of key findings associated with the economic and market analysis, including regional and neighborhood specific

meeting summary

opportunities and constraints. Potential redevelopment opportunities for short-, mid-, and long-term projects were identified and discussed.

The committee provided comment and feedback, including follow-on efforts that will be pursued by the consulting team, as noted below:

- Camoin Associates to reach out to additional colleges and universities to discuss their anticipated growth and potential development needs, including student housing. Camoin to have additional conversations with University of Rochester, RIT and MCC. City to help identify contacts at each institution.
- Consider reviewing case studies for how other similar cities have successfully attracted grocery stores and/or co-ops to lower income, underserved neighborhoods.
- Consider opportunities for linear park (former canal bed) on west side of river, as they currently have on east side.
- Need to ensure, as process moves forward, that there is sensitivity to existing residents.
- Retaining public access to the waterfront is important – waterfront should not become privatized.
- Medical office uses may be appropriate in this neighborhood as economic analysis indicated. There is history of satellite services in urban neighborhoods within City. Due to aging population in PLEX neighborhood, this is a needed service for seniors.

Visioning and Public Workshop Overview

Kimberly discussed the next visioning phase of the project which will set the stage for future land use and master planning efforts. Elaine Miller requested that the committee weigh in on their vision for the future of the neighborhood.

- See neighborhood remaining residential with an expanded commercial component.
- Riverfront will remain accessible to all.
- Plan needs to adapt to changing roles and needs, such as University of Rochester.
- Need to consider changing lifestyle and the impacts of energy, transportation, etc.
- Vision needs to be sensitive to people living in neighborhood today.
- Gentrification of mid-size cities throughout the US. It's a good thing.
- Need to change perception of the neighborhood as a challenged area.
- If the residents become part of the solution and can get assistance in implementing small projects to help the condition of the neighborhood and individual homes, it can have widespread and immediate impacts on perception, making it easier to attract a range of residents and ultimately businesses to the neighborhood.

meeting summary

- Promote incentives offered by Unity Hospital and U or R for employees to buy homes in Sectors 4 and 6, including closing cost and down payment assistance.
- Consider how historic homeowner tax credit may be beneficial to local homeowners.
- Address issues of absentee landlords.
- Review Finger Lakes Regional Economic Development Council plan that is coming out in draft form in October 2011. Project identified as a priority planning initiative in City of Rochester.

Kimberly reviewed the Joint Public Visioning Forum scheduled for October 5, 2011. The visioning forum will be held in collaboration with the Southwest Riverfront Charrette project. The format of the meeting will include a brief presentation introducing the BOA project and charrette projects to the community, followed by seven (7) breakout groups / listening stations. All committee members were urged to attend and spread the word.

Project Schedule

Kimberly reviewed the project schedule, highlighting major project phases, future public involvement dates, and coordination with the neighborhood charrette process.

Next Steps

The meeting concluded with a review of next steps in the project including:

- Visioning Workshop
- Draft Vision, Goals and Objectives
- Refinement of Existing Conditions
- Initiate Conceptual Master Planning process

meeting summary

City of Rochester Vacuum Oil Brownfield Opportunity Area

Project Advisory Committee Meeting #4
June 11, 2011 • 6:30 – 8:30 PM

Meeting Attendees

- Mark Gregor, City of Rochester
- Vicki Brawn, City of Rochester
- Joe Biondolillo, City of Rochester
- Rick Rynski, City of Rochester
- John Curran, SRRC
- Adam Driscoll, Property Owner
- Tom Ferraro, Foodlink
- Dorothy Hall, Resident
- Joni Monroe, RRCD
- David Zorn, GFLRPC
- Joan Roby-Davison, Sector 4 CDC
- Kimberly Baptiste, Bergmann Associates
- Andy Raus, Bergmann Associates

Project Status

Mark Gregor opened the meeting by providing an update of the project status and anticipated directions moving forward. Kimberly reviewed the project schedule and anticipated dates for major project milestones, including conceptual master plan designs and the development of the application for project advancement.

Summary of Public Workshop Outcomes

Kimberly distributed copies of the Meeting Summary from the March Public Workshop. She also reviewed key outcomes of the meeting, beginning with the results of the Community Character Survey. The top 10 and bottom 10 ranked images were reviewed, as well as the top 3 and bottom 3 in each of the image categories – waterfronts, neighborhoods and commercial. Kimberly also identified the design elements that were consistent between each of the three breakout groups that were held at the workshop. The consistent themes were divided into four categories – waterfront and open space, new development, transportation, and neighborhood revitalization. The common themes are included within the Public Workshop Meeting Summary.

meeting summary

Southwest Riverfront Charrette

Joan Roby-Davison, Dorothy Hall and John Curran provided information on the Southwest Riverfront Charrette scheduled from 8:30 AM – 4:30 PM on Saturday, June 16th. There was discussion on how this would be incorporated into the BOA planning process and how continued coordination would be highly valuable to both efforts. Joni Monroe (RRCDC) described the deliverables associated with the charrette effort and noted that delivery of the summary document was anticipated on or before July 16th.

Next Steps

The project team will commence the development of master plan alternatives to be prepared over July and August. During this time there will be regular review and status meetings between the City of Rochester and consultant team members.

The next committee meeting to review master plan alternatives will be in September 2012. This will be followed by a City Council briefing in October 2012 and public meeting in November 2012.

meeting summary

City of Rochester Vacuum Oil Brownfield Opportunity Area

Public Design Workshop: Carlson Commons
March 21, 2012 • 6:30 – 8:30 PM

Meeting Attendees

- Mark Gregor, City of Rochester
- Joe Biondolillo, City of Rochester
- Rick Rynski, City of Rochester
- Kimberly Baptiste, Bergmann Associates
- Andrew Raus, Bergmann Associates
- Matt Chatfield, Bergmann Associates
- Mark Johns, Bergmann Associates
- Sue Steele, Bergmann Associates
- Michael Grenzer, Hemisphere
- Bob Amjad, Hemisphere
- Todd Davis, Hemisphere
- See attached sign in sheet for public attendance

Project Overview, Community Character Survey and Design Primer

Mark Gregor opened the meeting and provided an overview of the project and the purpose of the design workshop and handed the presentation over to Bergmann Associates. Kimberly Baptiste continued the presentation with an overview of the existing environmental and physical conditions present within the Study Area. The audience was then invited to participate in a Community Character Survey. During this exercise, a series of images were projected on the screen for approximately 20 seconds each; the audience was asked to rank these images on their level of appropriateness for the Study Area. The results from this survey have been tabulated and summarized below and included in Attachment A. Andrew Raus continued the presentation with a brief design primer that portrayed the elements of design critical for the creation of successful urban neighborhoods and waterfront spaces.

Community Character Survey Results Summary

The Community Character Survey was divided into three categories, each with 15 representative images: Waterfront; Neighborhoods and Housing; and Commercial. Each image was scored from 1-10, with a score of 10 indicating that this image is the most representative of what an individual would like to see in the Study Area. Attachment A provides a breakdown of overall image scoring and scoring by character category. The average score for each image is included in the upper right corner, with the image rank in the upper left corner. As indicated by the results, residents showed preference for public open space along the waterfront, and least preferred waterfronts that were overly privatized and

meeting summary

developed. Housing and neighborhood category scoring indicated that residents preferred walkable, pedestrian-scaled environments with quality streetscapes and late 19th century architecture. Residents indicated a strong rebuke of housing and neighborhoods that lacked character and displayed large, anonymous building facades. Commercial areas of preference included first floor retail, generous sidewalks with public seating and outdoor dining, and activated upper stories.

Design Breakout Group Summary

The audience was broken into three groups, each facilitated by a member of Bergmann Associates staff. Over the course of 45 minutes, the small groups provided meaningful insight and design ideas for the revitalization of the Study Area. A series of maps and designs were generated on paper, and a member of each small group was selected to provide a brief overview of their table's ideas at the end of the workshop (see Attachment B for each table's plan). There were several recurring themes present within the plans drafted by each group, including the following:

Waterfront Public Access and Open Space

- Public access along the Genesee River, with active water uses concentrated between Flint Street and Violetta Street.
- Maintain and develop large park and open space area along the waterfront between Flint Street and the landing of the Erie-Lackawanna Rail Trail Pedestrian Bridge. This area should be improved for safety with selective understory clearing, and include pockets of programming for event space, yet should be maintained with a strong transportation component.
- Improve the linear park space between Exchange Street and the Ford Street roundabout.
- Identify areas for potential pocket parks and playgrounds within the neighborhood to service residents and prevent them from the need to cross South Plymouth to access these amenities.

Development Potential

- The area containing the former FoodLink building and Vacuum Oil Works east of Exchange Street should be slated for adaptive reuse, where possible, to maintain the industrial character. Strong preference for mixed-use development here, including housing, retail, restaurants, and community business and cultural spaces, such as a business incubator, grocery, and performance space.
- Maintain the existing/abandoned water tower on the former Sears Warehouse building and improve with paint and lighting as an iconic element to brand the neighborhood.
- Consider providing access to building roofs for the creation of lookout and observation areas to take advantage of views to downtown, river, and U of R campus.
- Identify commercial/mixed-use nodes at major community intersections along South Plymouth, such as Cottage Street, Flint Street, Magnolia Street, and Violetta Street.

Transportation

- Slow traffic on Exchange Street and make the corridor more pedestrian friendly with streetscape and safety enhancements

meeting summary

- Flint Street and Exchange Street as primary access routes to former Vacuum Oil site redevelopment and waterfront. Magnolia and Riverview Place as primary access to large open space/park along waterfront.
- Streetscape for areas in between mixed-use nodes should be deferential to residential character.

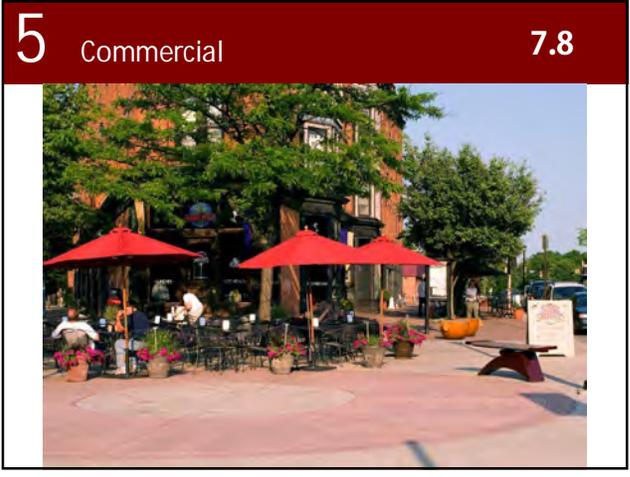
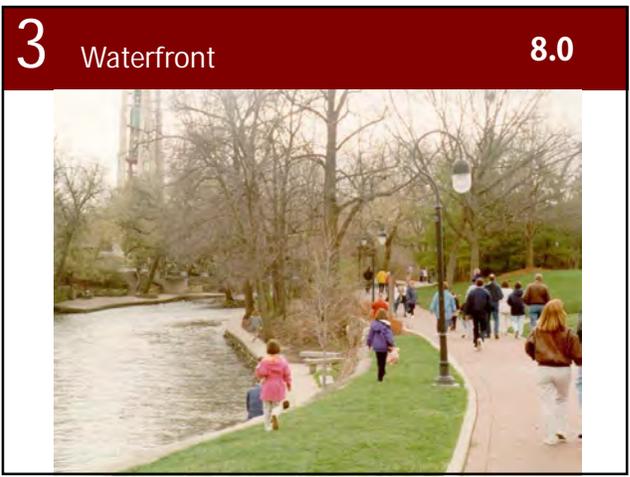
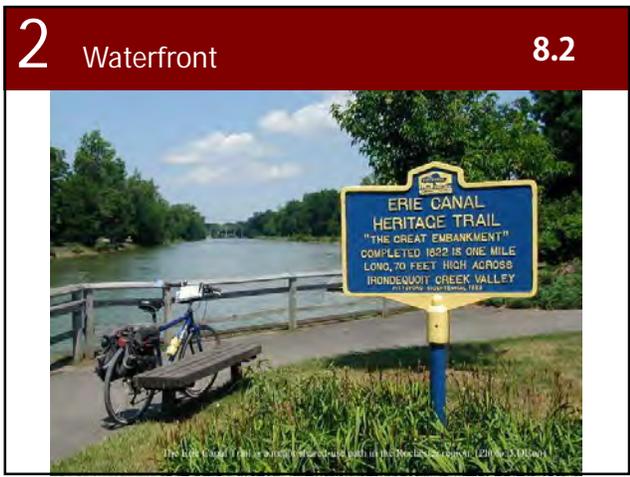
Community Revitalization

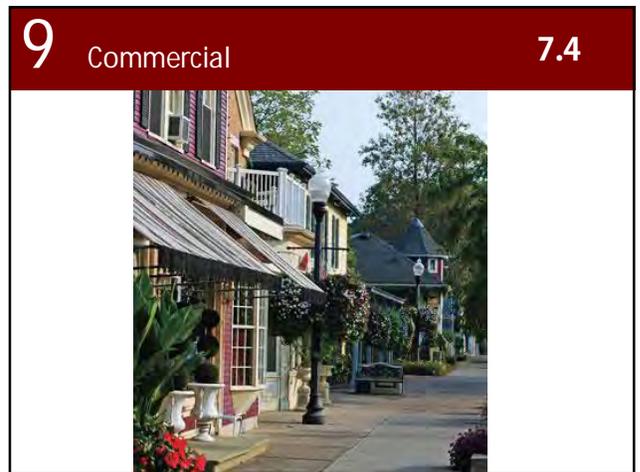
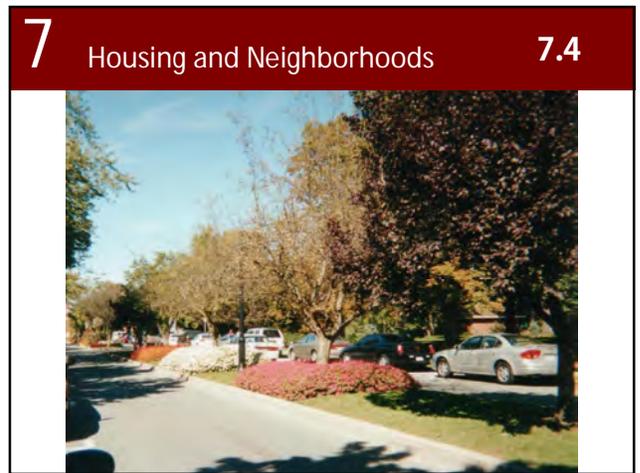
- Strengthen residential neighborhoods through selective housing rehabilitation and redevelopment, yet maintain affordable housing and housing for seniors.
- Leverage historic significance of spaces within the Study Area, including the former Civil War encampment and the former Genesee Valley Canal, for historic and educational interpretive opportunities.

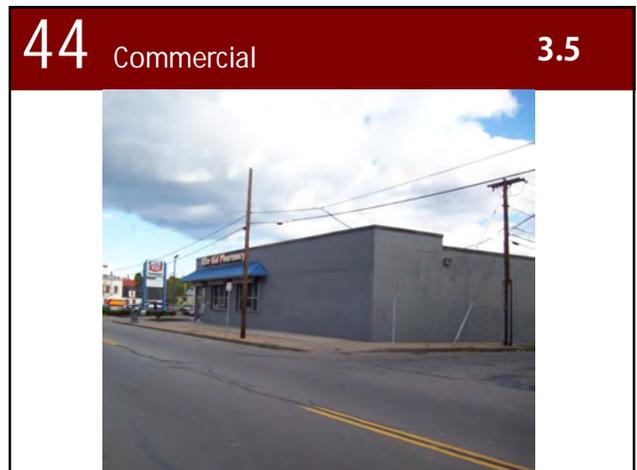
Next Steps

The next major event in the planning process will be the non-BOA funded Southwest Rochester Riverfront Corridor (SRR) public design charrette in June. The SRR process is a public-lead initiative running concurrent with the BOA and includes the BOA Study Area. Input from the BOA public workshop in May will be combined with the findings from the June SRR charrette to draft a preferred conceptual master plan. The project remains on schedule for wrap-up of final draft submittal to DOS in early fall.

attachment A







43 Housing and Neighborhoods **3.6**



42 Commercial **4.4**



41 Commercial **4.5**



40 Commercial **4.6**



39 Commercial **4.7**



38 Waterfront **4.7**

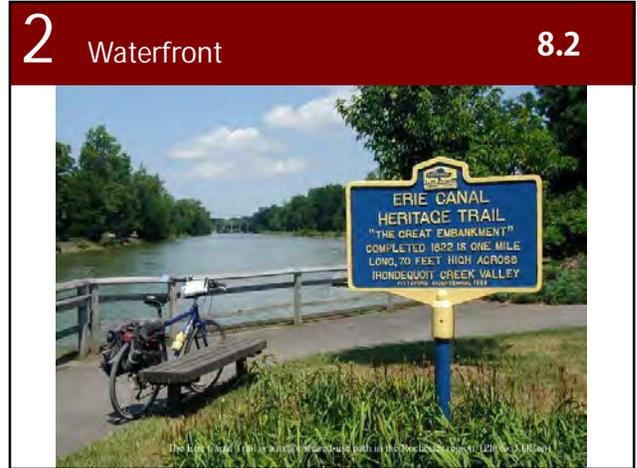
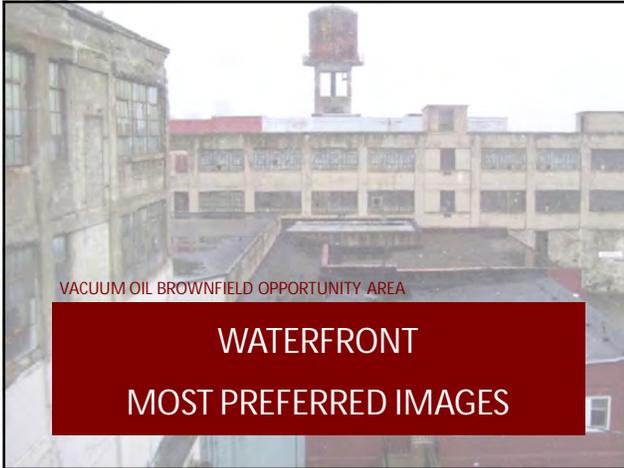


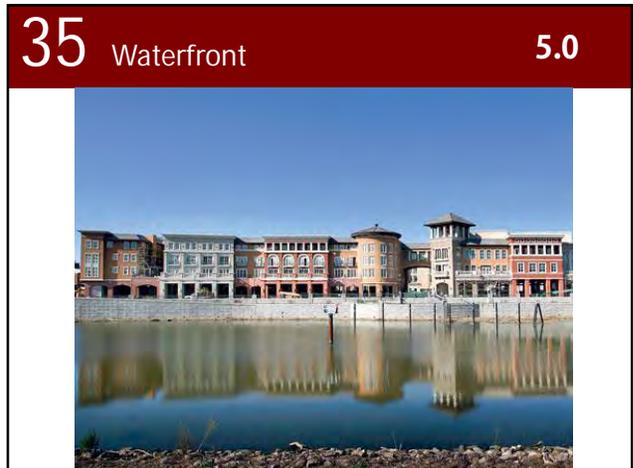
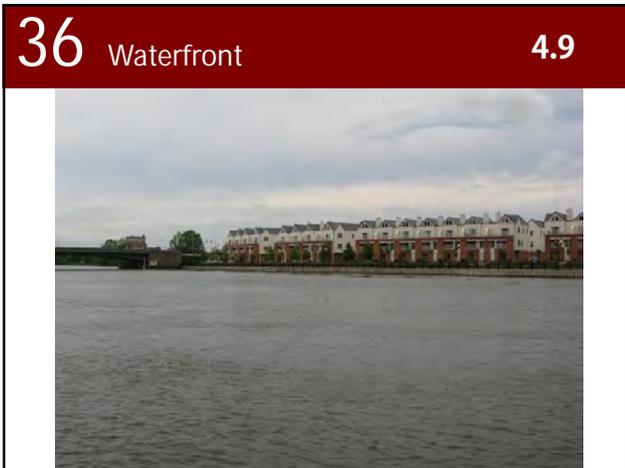
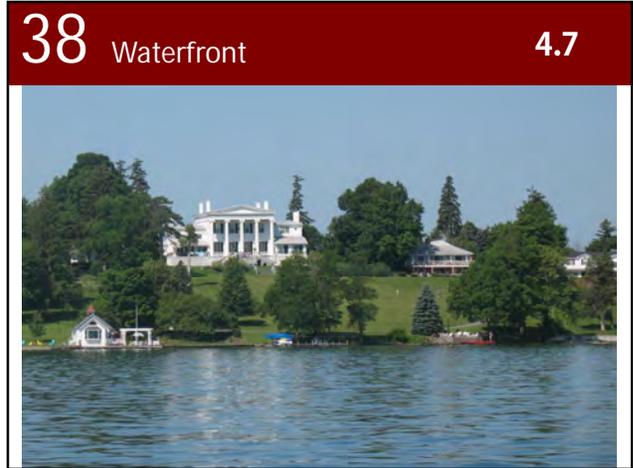
37 Housing and Neighborhoods **4.9**



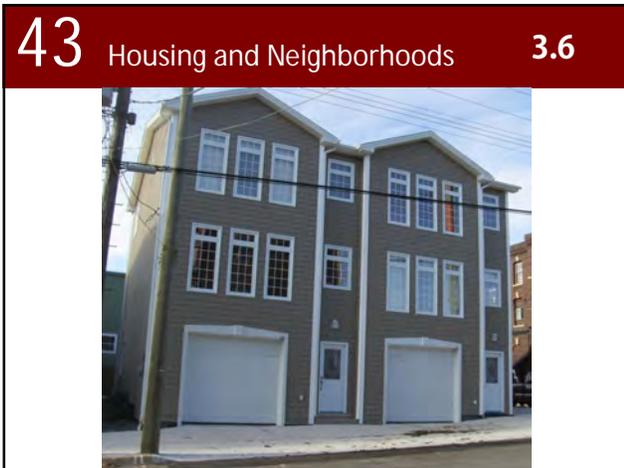
36 Waterfront **4.9**



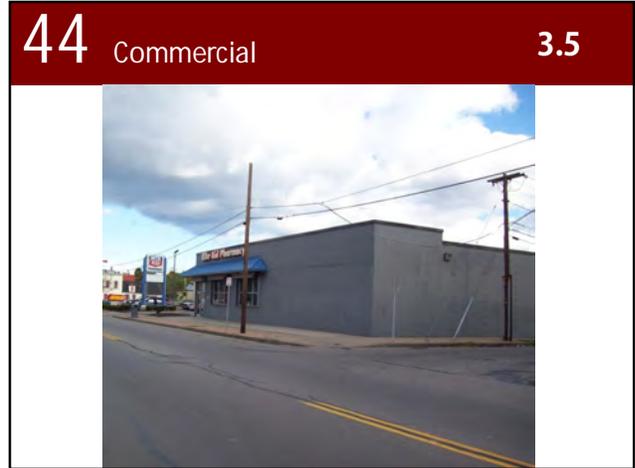










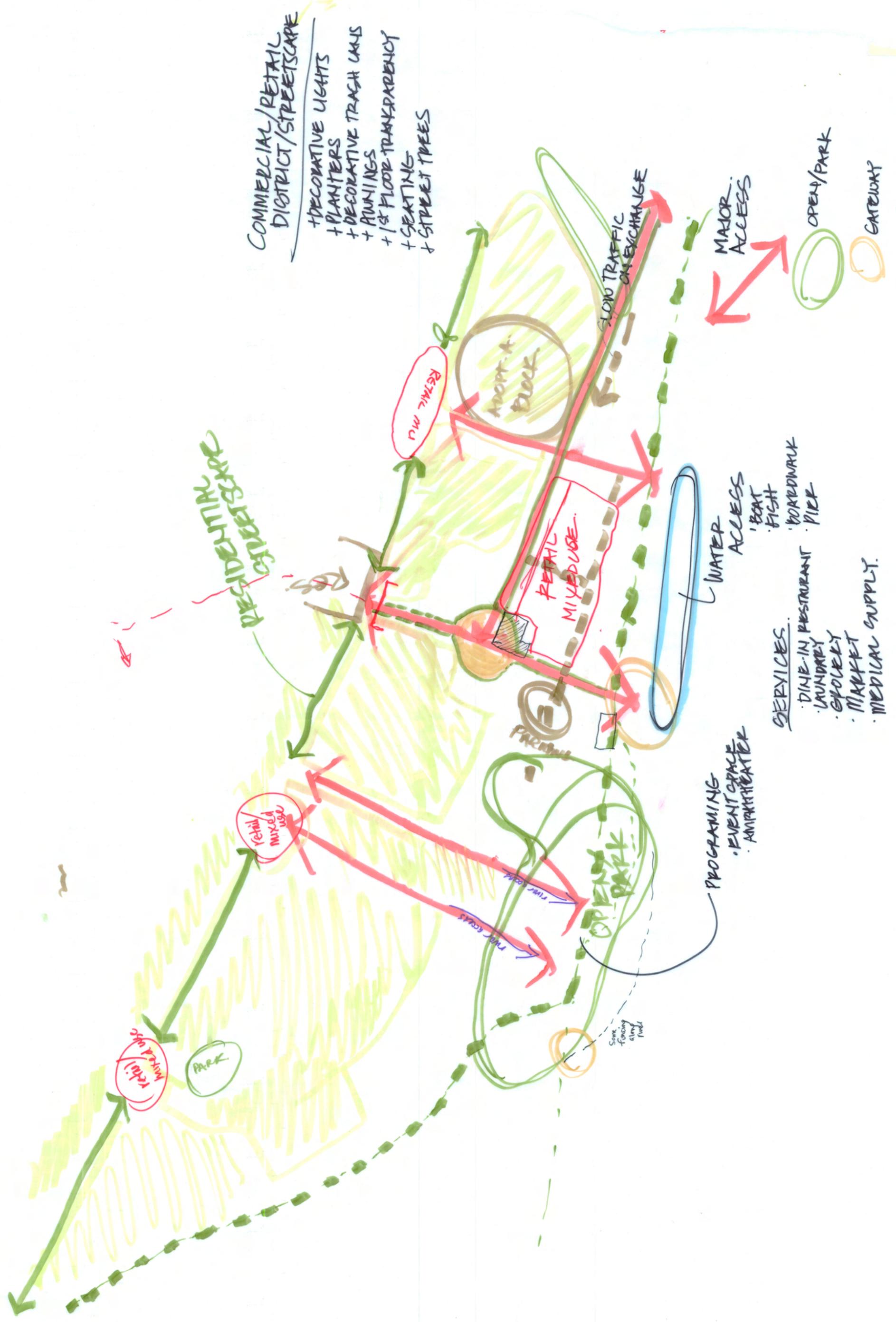


attachment B

COMMERCIAL/RETAIL DISTRICT/STREETScape

- + DECORATIVE LIGHTS
- + PLANTERS
- + DECORATIVE TRASH CANS
- + AWNINGS
- + 1st FLOOR TRANSPARENCY
- + SEATING
- + STREET TREES

RESIDENTIAL/RESIDENTIAL SCAPEScape



PROGRAMMING

- EVENT SPACE
- AMPHITHEATER

SERVICES

- DINE-IN RESTAURANT
- LAUNDRY
- GROCERY
- MARKET
- MEDICAL SUPPLY

WATER ACCESS

- BOAT
- FISH
- BOARDWALK
- PIER

MAJOR ACCESS

OPEN/PARK

GATEWAY



Historic Interpretation (Civil War)

Sr. bldgs
get produce
from "visiting" seller
- every other week

+ Gateways
Landscape, Enhancements

"Age In Place" amenities
Presbyterian Home

No jobs for teens in neighborhood.
Apprentice - enviro/bldg abatement
and clean up.

Maintain residential
on Plymouth

- incubator space
for not-for-profits.

Clarify "business nodes"
establish distinct nodes/
highlight market
signage

- grocery store (Aldi's)
- pharmacy
- clean up outdated
commercial

- Community center
(adult-activities,
mtg. space)
- social service provider
- laundrymat
- bank
- movie theater

Need CO-housing
integrated... repl.
housing w/ deteriorated
housing stock.

Preserve
existing
bldgs (as feasible)
Foodlink

Comm. Garden
FAMILIAL/KID
TRAFFIC CALMING

* CIVIL WAR: CIVIC
INTERP. OPPORTUNITIES FOR
RIVER TRAIL/WATERFRONT

- UNIVERSAL ACCESSIBLES
- BUSINESS INCUBATION (INNOVATION KITCHENS FOR PAINT, ETC.)
- EMPLOYMENT FOR KIDS
- FARMERS MARKET (UNDER SCENE WHAT ACCORDS C KENNEDY PARKS)
- MOVIE THEATRE/PART. ART SPACE
- NON-PROFIT OFFICE
- RETAIN EXIST. BLDG (INDUSTRIAL) SPACE
- CO-HOUSING - MIXED-USE AND BART RESIDENTIAL



meeting summary

City of Rochester Vacuum Oil Brownfield Opportunity Area

Project Advisory Committee Meeting #5
September 17, 2012 • 6:00 – 8:00 PM

Meeting Attendees

- Mark Gregor, City of Rochester
- Vicki Brawn, City of Rochester
- Joe Biondolillo, City of Rochester
- Rick Rynski, City of Rochester
- Doug Benson, City of Rochester
- Chris Bauer, NYS DOS
- John Curran, SRRC
- Adam Driscoll, Property Owner
- Tom Ferraro, Foodlink
- Craig Labelle, Exxon Mobil
- Michael Lamarre, Exxon Mobil
- Kristin Mobyed, Exxon Mobil
- Vince Giglio, Turnkey Operations
- Colleen McCarthy, University of Rochester
- Dorothy Hall, Resident
- Joni Monroe, RRCDC
- Greg Albert, GFLRPC
- Joan Roby-Davison, Sector 4 CDC
- Kimberly Baptiste, Bergmann Associates
- Andy Raus, Bergmann Associates

Welcome and Introductions

Mark Gregor opened the meeting by providing an update of the project status and anticipated directions moving forward. Meeting attendees were asked to introduce themselves.

Mark noted that Senator Kirsten Gillibrand was at the Vacuum Oil site on Flint Street on September 14, 2012 for a press conference regarding a waterfront brownfield bill she is introducing to the Senate.

Mark shared the City's intent to move forward with an application for Step 3 Implementation funding through the BOA Program.

meeting summary

Application for Project Advancement

Kimberly further discussed the City's application for project advancement, due to the Department of State on Thursday, September 27th. The City intends to pursue funding for projects that will further the understanding of development opportunities and constraints as well as advancing design components associated with the Preferred Development Scenario. Examples of projects being considered as part of the funding request are noted below:

- Geotechnical investigations
- Feasibility and design study for proposed waterfront connector road
- Phase I and II Environmental assessments
- Land appraisals and assembly strategies
- Streetscape design and traffic calming
- Engineering and preliminary design for riverwall improvements
- Building condition and structural assessments and asbestos surveys
- Developer pro formas / financing packages
- Civic engagement
- Neighborhood and housing revitalization and reinvestment strategy
- Neighborhood branding initiative
- Invasive species assessment and wetland delineation
- Waterfront recreation master plan
- Generic Environmental Impact Statement (GEIS)
- Zoning updates and design standards

Presentation of Master Plan Options

Kimberly discussed the master planning process, to date. She noted that there have been several common themes that have been consistent throughout the process with regards to future redevelopment in the BOA study area. Common themes and directions include:

- Enhanced waterfront trail system
- Enhanced waterfront spaces
- Water access
- Residential neighborhood stabilization
- Active uses on vacant sites – parks, gardens, playgrounds
- Streetscape enhancements
- Visual and physical connectivity

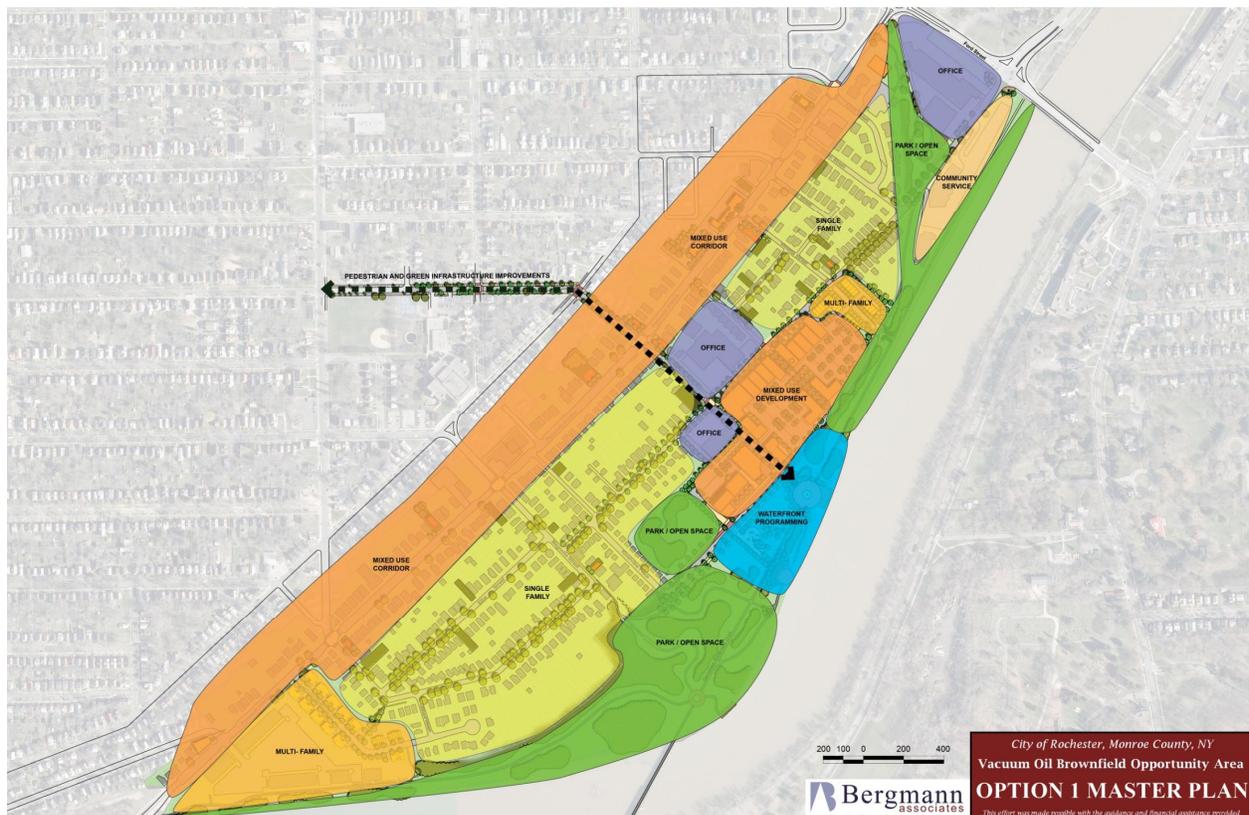
Kimberly reviewed development constraints (unknown site conditions, floodplains, existing infrastructure), noting these need to be taken into consideration when identifying a preferred master plan concept. Kimberly also noted that if developed under current zoning, the vast majority of the study area, including waterfront lands could only be developed as single family residential or industrial.

Before presenting the three master plan options, Kimberly noted these are 20-30 year plans and a phasing plan approach will be developed for the preferred master plan.

meeting summary

Option 1

Kimberly reviewed the land use concept associated with Option 1.



Following the land use discussion Kimberly presented a conceptual master plan that reflects the proposed land use concept. Highlights of the Option 1 Master Plan include:

- Mixed use development flanking Flint Street
- Extensive programmed open space and outdoor, public facilities
- Range of new housing products – townhomes and new multi-family housing on Luther Circle
- Redevelopment of Martin Luther King Plaza and adjacent site into new commercial space
- Enhanced trail connection from Ford Street roundabout to waterfront
- Improved waterfront access for pedestrians
- New waterfront road connection between Violetta and Riverview
- Pocket parks and gardens interspersed through single family residential
- Multiple opportunities for water access for small boats (non-motorized)
- Streetscape and traffic calming along South Plymouth, Flint and Exchange

Following the presentation of the master plan Kimberly showed representative images of how proposed development may look in this scenario.

meeting summary

Option 2

Kimberly reviewed the land use concept associated with Option 2.



Following the land use discussion Kimberly presented a conceptual master plan that reflects the proposed land use concept. Highlights of the Option 2 Master Plan include:

- Mixed use development only on north side of Flint Street
- South side of Flint Street remains green space, formal outdoor gathering areas and event spaces
- Retain Foodlink (mixed use) and 5 Flint Street (mixed use / public) structures
- Expanded student housing adjacent to existing student housing on Luther Circle
- Martin Luther King Plaza retained with façade and site enhancements
- Improved waterfront access for pedestrians at foot of Riverview and Magnolia (incl. bridge)
- New waterfront road connection between Violetta and Flint
- Pocket parks and gardens interspersed through single family residential
- Multiple opportunities for water access for small boats (non-motorized)
- Streetscape and traffic calming along South Plymouth, Flint and Exchange

Following the presentation of the master plan Kimberly showed representative images of how proposed development may look in this scenario.

meeting summary

Option 3

Kimberly reviewed the land use concept associated with Option 3.



Following the land use discussion Kimberly presented a conceptual master plan that reflects the proposed land use concept. Highlights of the Option 3 Master Plan include:

- Mixed use development only on north and south side of Flint Street, along waterfront trail
- Enhanced trail and greenspace south of proposed new development
- Retain 5 Flint Street (mixed use / public) structure as center of public space improvements
- Canal interpretive element
- Expanded commercial redevelopment along Plymouth/Flint at intersection
- Multi-family housing at southern end adjacent to student housing
- Martin Luther King Plaza redeveloped with new commercial
- Improved waterfront access for pedestrians at foot of Riverview
- New waterfront road connection between Violetta and Magnolia
- Formal gathering space at foot of Flint on waterfront
- Housing redevelopment north of Violetta

Following the presentation of the master plan Kimberly showed representative images of how proposed development may look in this scenario.

meeting summary

Master Plan Discussion

Following the presentation of the master plan options, committee members were asked to share their ideas and thoughts on the master plans and what they liked and disliked about each. The following summarizes input generated as part of this discussion:

Graphic Presentation

- Zoom out graphics so you see context of how BOA relates to surrounding development
- Include inset of context plan on master plan

General

- Is there any dedicated park space. Important to understand before working with SHPO.
- Bulldoze MLK Plaza
- Possibly show a grocery store on Plymouth?
- Neighborhood access to fruits and veggies is important – Foodlink/NEAD Model
- Identify opportunities to capitalize on proximity to University population
- Use large, open space for farmer’s markets and other events that can attract large crowds
- Create regular schedule of events (similar to Providence, RI Water Fire attraction)
- Identify alternative uses for 5 Flint Street building – maybe its not public/community space
- Final plan should have density and land area assumptions
- Identify investment costs – public, etc.
- Cost estimates by phase

Option 1

- Strengthen pedestrian connection at Magnolia

Option 2

- Strengthen pedestrian connection at Magnolia

Option 3

- The waterfront development and subsequent activity will actually help to improve safety
- Possibly add buildings along trail/waterfront north of Flint
- Shows access through development, don’t lose that as plans move forward
- Show additional development at back side of 15 Flint Street site, not just greenspace
- Canal interpretation is great, tie into history of Underground Railroad
- Integrate student housing into mixed use development
- Make sure there is some office space identified in final plan
- Mixed use development could have single story senior housing integrated within that would be very attractive to existing residents that want to continue to reside in neighborhood (elevator access)

meeting summary

- Depict structure parking graphically on plans
- Option 3, change senior housing in south (to multi family or student) and incorporate senior housing into mixed use instead
- Show wetland creation areas that will be necessary to address development in floodplains
- Nature walk / wetland interpretive area in southern end near new pedestrian bridge
- Could Canal interpretation be part of wetland offset?
- Ensure senior housing products are offered
- If new housing replaces existing housing consider funding that would allow for current residents to have first priority in new housing
- Anthony Square model – higher density with set aside for seniors (some % of total units)
- Multipurpose green space with turf fields (low maintenance, year round use)
- Retain Canfield & Tack

Next Steps

The meeting closed with a discussion of next steps in the process as summarized below:

Submittal of Step 3 Application	Sept. 27 th
Comments submitted to Kimberly kbaptiste@bergmannpc.com	Oct. 3 rd
PAC Meeting #6	November
Final Public Meeting	November
Mayor / Council Briefing	November
Nomination Study Submittal to DOS	January

meeting summary

City of Rochester Vacuum Oil Brownfield Opportunity Area

Public Design Workshop: Carlson Commons
November 28, 2012 • 6:30 – 8:30 PM

Meeting Attendees

Project Team

- Mark Gregor, City of Rochester
- Kimberly Baptiste, Bergmann Associates
- Andrew Raus, Bergmann Associates
- Matt Chatfield, Bergmann Associates

Steering Committee & Community Members

- See attached sign in sheet for public attendance

Project Overview, Master Plan

Mark Gregor opened the meeting and provided an overview of the project and the purpose of the meeting and handed the presentation over to Bergmann Associates. Kimberly Baptiste continued the presentation with a brief review of the project's timeline and what has been accomplished to date. Kimberly continued into a presentation of the master planning process and a discussion of the preferred 2035 master plan and phasing scheme of 0 to 7 years, 8 to 15 years, and beyond 15 years. At the end of the presentation the audience was invited to ask questions and provide their thoughts and feedback on the conceptual master plan during a 1 hour open house session. The open house was divided into three separate stations, one for each phase, facilitated by a member of Bergmann staff. Mark Gregor also provided feedback and answers to questions regarding the master plan during the open house.

The City and consultant team provided information on next steps, including the current request for additional funding from NYSDOS BOA Step 3 to complete several studies intended to provide more definitive answers regarding logistical and physical challenges anticipated during the lengthy redevelopment process. It was stressed to the audience that the current version of the master plan may change significantly dependent upon the findings from these additional fact-finding studies. The current 2035 master plan utilizes numerous assumptions for a best case scenario that would permit development as indicated in the plans. As additional information is obtained, the master plan will be modified as needed to reflect a development scenario most likely to occur.

meeting summary

The following represents a summary of questions and responses to the proposed 2035 master plan.

Waterfront Areas and Open Spaces

- Plant a public “food forest” in all parks and along river trail, similar to Bountiful Cities program in Asheville, NY where edible fruit and nut trees are planted in the public realm for public consumption.
- Flip the new Flint Street redevelopment and the Park, with Park between Flint and Magnolia Streets and development between Flint and Violetta.
- Keep the area south of Flint Street along the River trail free of development.

Development

- Consider master plan options that take into consideration alternative grocery models, for instance a co-op model or other locally controlled business, and avoid relying strictly on design practices for ‘chain’ stores.
- Consider the existing South Plymouth Avenue plaza as an alternative site for a grocery rather than the site across the street.
- Ensure that there are no definitive ‘rear’ of building areas for development between the river and neighborhood; what will these buildings look like? Rear of building should look nice and not detract from existing housing within neighborhood.
- Scale and height of buildings along river is important; don’t cut the neighborhood off from the river through the placement of tall structures that block views and access.
- Keep development north of Flint Street.
- Ensure that the adjacent population is sufficient to support a grocery; no vacant buildings.
- Ensure there is no conflict with the City’s recent RFP for a grocery along nearby Jefferson Avenue; neighborhood can likely only support 1.
- Consider utilizing permaculture and phytoremediation techniques for environmental remediation sites.

Transportation

- The steep slopes behind Cottage Street will make an extension of Magnolia Street very difficult and expensive.

Housing

- Neighborhood needs housing assistance programs so people can maintain their properties.
- Neighborhood needs more single family homes; becoming too dense.
- Be careful of the redevelopment plans between Doran and Violetta; no urban renewal, no eminent domain!

Other

- The community needs job training facilities and programs. The use of permaculture techniques for the remedial activities could also include training local youth and residents on how to grow and maintain healthy plants; the knowledge gained while doing this within the brownfield areas could be transferred to their own homes for local food production.

meeting summary

Next Steps

The next major event in the planning process will be the completion of the master plan through the incorporation of comments obtained at this meeting. A final proposed master plan is likely to be completed in January 2013.

APPENDIX A-3: PLYMOUTH-EXCHANGE NEIGHBORHOOD ASSOCIATION FEEDBACK

**PLEX -Southwest Riverfront Planning
Executive Committee**

Review of *BOA Public Workshop 3/21/12 Meeting Summary* and
PLEX Charrette Preliminary Report

Attendance: Dorothy Hall; Nolia Brooks; Gloria Edmonds; Joan Roby Davison and John Curran
Excused: Eleanor Coleman; David Knoll; Bonny Mayer (Corn Hill neighborhood)

The meeting began with a review of the output from the City's Meeting Summary of the 3/21/12 Brownfield Workshop which included:

Residential / Housing focus area: Recurring Themes from BOA Public Design Session

- Preferences:*
1. “walkable, pedestrian-scaled environments”(p.2)
 2. quality streetscapes (p.2)
 3. late-19th century architecture (p.2)
 4. “Strengthen residential neighborhoods through selective housing rehabilitation and redevelopment. (emphasis added)
 - 5.) (*continues from preceding statement*) [“Yet] **maintain affordable housing**” . . .
 - 6.) (*continues from preceding statement*) [“and] and **housing for seniors.**”

Dislike:“housing & neighborhoods that lacked character & displayed anonymous building facades.”

The Executive Committee agreed with all of the overarching preferences cited in the City’s public workshop summary. It was noted, *however*, strengthening the neighborhood’s existing housing should be a broad-based effort available to ALL of the residences, not just a few selective examples. The Committee was pleased to see that the PLEX neighborhood resident sentiments voiced at the public workshop, PLEX public forums and input at the Project Advisory Committee have been incorporated in the *Meeting Summary’s* language. The meeting focused on PLEX preferential considerations based on the BOA summary. The meeting ended before the PLEX Charrette design output options could be discussed.

Streetscaping Comments:

- Pedestrian-scale is important throughout PLEX neighborhood.
- Street lighting: the black pole examples near the Carlson Commons building are worth repeating in the neighborhood where possible. Avoid cobra-style or “too-tall” fixtures.
- Understory tree limb and vegetation clearance to improve visibility and lighting throughout PLEX neighborhood and BOA.
- Street curbing: restore to proper heights using durable stone.
- Tree lawns: regarded as a property-owner issue.
- Roadway intersection highlighting: PLEX prefers that important intersections have an attractive appearance and incorporate safety considerations for pedestrians. Discuss details later based upon economic considerations. Use durable materials (not items that will deteriorate shortly after installation).
- Bump-outs at key intersections to serve as traffic-calming measures.
- Speed humps; already under consideration for Exchange St.; regarded as a Block Club issue.
 - consider reducing traffic lanes (e.g. from four-to-two) if possible.
- Additional crosswalks: some key streets have long gaps in between crosswalks. Add more safe places to cross the street. Medians were not considered essential in this respect.

- Sidewalk planters: considered a Block Club issue. Snow plow damage was a concern.
- Bus Shelters: are considered as a preferred option but need to be located to avoid loitering;
- Benches: although desirable as an aid for seniors, there is a concern that they will invite loitering. Not a preferred option at this time. Revisit topic after initial streetscaping is done.
- Additional parking space: once vacant lots have been identified, collaborate with PLEX to see if there can be shared parking opportunities for businesses (assessment district?) or additional parking spaces to add to neighborhood streets. Possibly consider “woonerfs”. It was noted that neighborhood streets are already limited for additional parking.
 - From a preferential standpoint, PLEX emphasizes walkable neighborhoods; resolving parking issues follows later (a zoning issue with collaborative input).

Housing:

- The PLEX Executive Committee prefers that existing housing stock be maintained for home ownership as the priority. (Legal-based strategies needed here.)
 - **Improving and maintaining homes should be an option available to ALL residential units and NOT to a few selective properties**
- Avoid the too-expensive new residential models of southwest riverfront housing (e.g. Corn Hill Landing and new residences at former Jewish orphanage along Genesee Street).
 - New housing must remain affordable to the residents living currently in PLEX.
 - Especially any potential housing along the riverfront.
- Rental properties need upkeep as well.
 - Avoid converting homes into multiple-dwelling units. Insist on language that deals with renting homes to more than 3 unrelated persons
 - Resist pressures leading to gentrification of residential units.
- Create opportunities to assist current homeowners and residents to remain in PLEX.
 - Encourage new home ownership.
 - PLEX prefers that rehabilitation opportunities be made available to homeowners and investors in the neighborhood with financial support (low interest loans and grant support)
- Retain the unique character of streets featuring distinct housing-types.
- Find ways to cap taxes for current residents (“grandfather-in”) as anticipated housing prices increase in PLEX.
- Avoid developing new housing structures that do not fit in well with the existing housing stock (e.g. Avoid the new housing style in the South Wedge near the Ford St. Bridge.)
- Preserve the character of the existing housing without getting into restrictive Preservation expectations (inability to change existing features). Some desirable preservation techniques might be too expensive to maintain over time.
 - e.g. the homes along Riverview place built for vacuum Oil employees.
- Upper-floor housing (over a first-floor commercial / professional establishment) is desirable.
- Redeveloping the current Dr. Martin Luther King, Jr. Plaza is preferable.
 - Consider a completely-new structure with upper-floor housing.

- (end) -

submitted 8/21/12 jec

Next PLEX executive committee meeting: Mon. Sept. 10th; 1:00 pm Carlson Commons

Topic: COMMERCIAL Focus area (details to follow)

Preparation Notes for PLEX Executive Committee Meeting Jan. 3, 2013:
WITH SUMMARY NOTES ADDED IN BLUE TEXT 1/4/13
A Review of the November 28, 2012 Vacuum Oil BOA Master Plan Presentation

The following topics derive from Kimberly Baptiste's PowerPoint presentation when the City presented its BOA Master Plan to PLEX residents on November 28th.

We are now in the "*Further Plan Refinement and Implementation Strategy*" phase (Dec. 2012 - Jan. 2013). In February 2013, the "*Final Draft Nomination Study*" will be submitted to the New York State Department of State.

A. Additional Studies will be required:

- Geotechnical (soil and rocks)
- Environmental investigations (contamination; pollution)

B. Cooperation of private property owners is needed.

C. Funding is needed for the Clean-Up, Building Demolitions, Roadways and Utilities; Riverfront & Recreational Opportunities; Trail Enhancements.

Consider the following when reviewing the **3 Master Plans (0-7 Years; 8-15 Years; 16+ Years)**:

- *Enhanced Waterfront Trail System:*
- *Programmed Waterfront Spaces:*
- *Direct Water Access:*
- *Residential Neighborhood Stabilization:*
- *Reuse of Vacant Properties in Residential Areas:*
- *Streetscape Enhancements & Traffic Calming:*
- *Connectivity*

(not included in BOA PowerPoint list: *Economic Redevelopment* (especially Food Availability)

NOTE: The City BOA plan favors an Edith-Doran-Ethel Street-Plymouth grocery site.

A. 0-7 Year Plan: Site Preparation and Public Investment

- Highlights as depicted in map consistently (from left-to-right) = [south -to- north]

Assuming that: a) Land assembly is possible; b) Key property owners participate; c) obstacles are not identified; d) funding is identified and secured; and e) retained structures are suitable for adaptive use, *then consider the following:*

a) **Multi-Family housing** at Luther Circle: (comment) : **PLEX feels that Rochester Housing Authority will play a deciding role here. Glad to see that area will remain residential. But NO student housing here.**

- Pocket park at Cottage near Plymouth: (comment) **Please note that PLEX is willing to consider using the Cottage Street vacant lots for parking purposes to help build up the small business sector at Plymouth and Cottage. Existing small businesses have limited parking here.**

b) **Thinning and Opening view spaces** along riverfront (from Riverview Student Housing to northwest end of Erie RR Bridge: (comment) **Check with Colleen McCarthy (UofR Government and Community liaison) to see if she has learned whether the developer of the Riverview Student Housing has a prior responsibility to do some vegetation & surplus tree-trimming . Trees alongside the river edge border of the Riverway Trail have a distinctive red**

paint blotch that supposedly indicated that the trees were “non-contributing” and should be removed (presumably by the property developer).

- c) **NEW roadway with on-street parking:** from Magnolia Street to Violetta St.) (comment) {“Freedom Seeker Way”} (?) ; “Genesee Valley Canal Way” (?) ; “Vacuum Oil Lane” (?)...
(we didn't discuss possible names)

NOTE: THE LENGTH OF THIS ROADWAY IS A MAJOR CONCERN TO PLEX. PLEX WOULD PREFER THAT THE NEW ROADWAY EXTEND FROM VIOLETTA STREET TO FLINT STREET (NOT AS FAR SOUTH AS MAGNOLIA STREET).

PLEX prefers the arrangement shown in the earlier PREFERRED OPTION #2 rendition and NOT THE ROADWAY SHOWN IN THE NOVEMBER 2012 MASTER PLANS.

- **PLEX feels that it would be too expensive to link to Magnolia Street owing to the elevation of the bluffs. Having the roadway proceed uphill from the riverfront towards current Magnolia Street would cost too much and not produce a significant gain regarding riverfront access. Pedestrian trail access would be more affordable in the Magnolia St. area.**

d) **Dock** just north of Erie RR Bridge: (comment) ; **PLEX considers this dock to be more of a rest area instead of a boat launching site based on map information. Focus of car access to the waterfront for boat loading / unloading should be at Violetta Street area. Dock here is OK but it seems to lack motor vehicle access to transport watercraft.**

e) **Park** with Passive Recreation, Picnic Areas and Play Area (south half of #15 Flint; former scrapyards): (comment) **PLEX foresees difficulty with private property owner agreeing to the location of a park here. *Is this a known health hazard site?* PLEX wants the area south of Flint Street preserved as Greenspace**

f) **Camp Porter** enhanced interpretation: (comment) **Happy to see that Camp's identity is preserved but it is too early to be specific about enhancements. Signage welcome. PLEX would like the early attention to the Camp spent on reclaiming further land for greenspace where the sludge pits had been located. PLEX plans to spend next few years on commemorating Harriet Tubman within BOA area (most likely near the Plymouth Ave. traffic roundabout).**

g) At Flint Street near riverfront:

1) **interim parking** (comment) **PLEX likes this as a preliminary step to develop parking for boat-launching purposes and visitors to see the camp. Needs support from property owner.**

2) **kayak launch:** (comment) **PLEX wants the watercraft launching site here accessible by motor vehicle and to serve small fishing craft.**

If not accessible by vehicle here, then the Violetta St. launching site needs to accommodate cars unloading directly at the river's edge. **Violetta is preferred site for boat launching.**

h) **Flint Street Green Infrastructure Improvements** (creates a route that cuts east-west and leads to School #19, Flint St. Rec Center and Gandhi Institute.: (comment).

It is great to see this incorporated as a Year 0-7 project. PLEX hopes that the water improvement landscaping techniques can be repeated elsewhere in the BOA.

i) Plymouth Avenue: 1) **MLK Plaza facade and landscaping** for existing plaza: (comment)

THIS IS PLEX'S BIGGEST CONCERN:

PLEX WANTS ACQUISITION AND DEMOLITION OF THE DR. MARTIN LUTHER KING, JR. PLAZA AS A YEARS 0-7 PROJECT. (save money by having a shorter new roadway from Flint Street to Magnolia Street)

PLEX WANTS THE "15,000 SQUARE FT. GROCERY" LOCATED WHERE THE MLK PLAZA IS CURRENTLY LOCATED.

- ADJACENT (west side) PLYMOUTH PROPERTIES COULD BE GATHERED TOGETHER TO EXPAND THE FOOTPRINT OF A POTENTIAL PLAZA (ADD THE LIMOUSINE STORAGE GARAGE, THE NEWLY-ABANDONED CORNER STORE AND DERELICT RESIDENTIAL PROPERTIES BEHIND THE MLK PLAZA TO INCREASE THE FOOTPRINT AT THE MLK PLAZA

PURCHASE THE PROPERTY NOW BEFORE THE AREA IS IMPROVED. IT IS VERY LIKELY THAT THE MLK PLAZA OWNER WILL RAISE THE PROPERTY PRICE SIGNIFICANTLY ONCE THE AREA'S APPEARANCE IMPROVES. PLEX HAS A CONTENTIOUS RELATIONSHIP WITH THE PROPERTY OWNER WHO MAY DECIDE TO BECOME AN OBSTRUCTIONIST.

2) infill (firehouse); (comment) **IT SEEMS THAT THE FIREHOUSE PROPERTY IS BEING DEVELOPED ALREADY FOR A PURPOSE THAT WILL MEET THE MEDICAL NEEDS OF THE AREA.**

j) From Violetta to Ford Street: 1) **vegetation thinning** (viewscape); (comment) **OK**

2) **playground trail connection** (not Riverway) and improvement near Church of Love - play area is installed opposite COLFC (west side of Exchange St.) (comment) **THIS PLAYGROUND TRAIL CONNECTION WILL ASSUME GREAT IMPORTANCE AS PLEX PURSUES COMMEMORATING HISTORICAL FIGURE HARRIET TUBMAN WITH A COMMEMORATIVE STATUE AT THE PLYMOUTH AVENUE TRAFFIC CIRCLE ROUNDABOUT .THE TRAIL WILL LINK PLEX WITH THE HISTORICAL ATTRIBUTES OF CORN HILL; C.O.T.S. AND THE SUSAN B. ANTHONY AREA. FORD STREET, NORTHWARD FROM HERE, FOLLOWS THE ROUTE OF THE GENESEE VALLEY CANAL AND LEADS TO THE MORSE LUMBER YARD WHERE THE GENESEE VALLEY CANAL AND THE ERIE CANAL LINKED.**

k) **Gateways: Please avoid pavement materials that don't hold up well over time due to abrasion from traffic.**

1) Plymouth-Jefferson-Cottage (comment) : **Good location. Please note that part of this corner has a very recent gateway treatment for the Jefferson Avenue Focused Investment Area improvement. Needs complementary treatment.**

2) Flint and Plymouth : (comment): **Good location. Focus on safe street-crossing.**

3) Plymouth & Edith: (comment) **Good location. Focus on safe street-crossing.**

4) Exchange Street Gateway: (comment) **NOTE: please consult with the Corn Hill Neighbors Association. They share PLEX’s concerns for safe pedestrian crossing here. Their charrette has come up with specifics worth considering jointly with PLEX for gateway treatment here.**

+++++

B. 8-to-15 Year Plan: Mixed-Use Development; Enhanced Public Spaces and Residential Redevelopment

- *Highlights as depicted in map consistently(from left-to-right) = [south -to-north]*

- *Does not include projects already listed in Years 0-7 Plan*

a) Near Western End of Erie RR Bridge: (already has dock in place)

1) Enhanced Trail Gateway / Interpretation Area: (west end of Erie Bridge) **[hub]**(comment)

PLEX likes the viewscape clearance here. There is an elevation problem here that needs addressing. Too sharp turn here plus steep sudden descent for bicyclists.

A. **Interpretive Walk and Bridge in Wetlands:** (comment) **PLEX likes having this area maintained as a greenspace with trails.**

B. **Amphitheatre** (slightly south of camp memorial plaque at river bend): (comment) **The actual location of the amphitheatre along this river bend is flexible for PLEX. Maybe move amphitheatre nearer to memorial plaque? What effect will “later” buildings have for site?**

b) **Mixed-Use Development** (just south of Flint Street): (comment)

1. site of the former full-length barrel-making building (north of Magnolia but south of #5 Flint) **PLEX PREFERS THE PREFERRED OPTION TWO RENDITION FOR THIS SPACE. PLEX IS CONCERNED THAT THIS WOULD BE TOO MUCH DEVELOPMENT IN THIS AREA. (But do not use the Student housing option shown in Preferred Option Two).**

2. #5 Flint Street existing building: **Depends on what private owners want**

c) **Public Gathering Space** Flint Street at riverfront: (Comment): **Would this be a location for boat launching? If so, do roadways need enhancement? Would cars be able to unload boats here? PLEX prefers Violetta Street as the boat-launching site.**

d) **Water Feature** (Genesee Valley Canal bed from south end of #5 Flint to south of Fenwick Street) **- Try to incorporate cut-stone embankment (PLEX request)**

NOTE: In Phase 8-15 Years, does Fenwick connect with new roadway ??? (map is unclear)

e) **REPURPOSING OF FOODLINK BUILDINGS and RAILYARD** property

(across from water feature)

not listed on “Years 8-15” map as caption (but shown on footprint map) (Comment):

PLEX hopes that the buildings can be repurposed

- PLEX wants the new roadway to extend from Flint Street to Violetta Street only.

- OK for both north and south sides of Flint Street to have mixed use development

- Exchange Street Foodlink Buildings (East side buildings only)

listed as “**Flex / Incubator / Workforce Training**” (Comment): **VERY DESIRABLE**

- The **Railyard** space opposite the water feature is listed as **Mixed-Use Development**

(Comment): **Development here is desirable**

- the “Sears” building (one-storey warehouse) is not yet addressed in this phase.

f) **Improved trail access** near “Fenwick St. extension” to Riverway Trail. : **OK for walking trail**

g) **Mixed Housing Development** (single family / duplex / townhouses)

Doran - Ethel - Violetta Streets form a campus. *Edith Street has new homes already.*

(Comment): **PLEX likes the mix of single family / duplex / townhouses here.**

h) **“15,000 Sq. Ft. Grocery Store”** : depicted on northeast corner of S. Plymouth and Violetta

- shown as being opposite the current MLK plaza (in its “facade improvement” phase)

(Comment): PLEX WANTS THE GROCERY STORE SITUATED AT AN EXPANDED-FOOTPRINT LOCATION WHERE THE MLK PLAZA NOW EXISTS. MAKE DEMOLITION OF THE MLK PLAZA PROPERTY A PHASE ONE (0-7 YEARS) PROJECT.

KEEP THE VIOLETTA & PLYMOUTH AVENUE “15,000 SQUARE FOOT” SITE TO BE IN ADDITION TO THE MLK GROCERY STORE SITE FOR SOME OTHER MIXED COMMERCIAL USE.

+++++

c. 15+ Year Plan: Expanded Mixed-Use Development

- Highlights as depicted in map (from left-to-right) = [south -to-north]

- Does not include projects already listed in Years 0-7 Plan or Years 8-15 Plan

a) **Mixed -Use development** at **North Half** of former scrapyard at #15 Flint Street

not listed on Phase 15+ Years map as caption (but shown on footprint) (Comment):

- the **south half** was developed as “**Park with Passive Recreation , Picnic Areas and Play Area** in the first Phase (0-7 Years)

PLEX favors Mixed-Use activity on south border of Flint St. facing north side Flint mixed-use

b) **Former Sears Warehouse buildings** bordered by Exchange Street, Violetta and new Roadway become **Mixed-Use development** (lower floor commercial / cultural; upper-floor residential).

(Comment): **Mixed-use activity welcome at this location**

c) **West side of Exchange St.** (current Canfield & Tack plus Flint St. to both corners of Fenwick) becomes Mixed-Use development (lower floor commercial / cultural; upper-floor residential).

PLEX’s MAJOR CONCERN is avoiding the loss of current successful businesses here. They are stable job-producing and tax-paying resources to the neighborhood.

- *the 15+ Year Phase does not make it explicit on the 2035 Master Plan map that the Martin Luther King, Jr. Plaza is demolished and rebuilt although potential examples are shown of 2- and 3-storey buildings.*

Once again, acquisition and demolition of the current Dr Martin Luther King, Jr. Plaza during Phase One (0 -7 Years) is a PRIORITY to PLEX

- The Powerpoint presentation shows examples of enhanced waterfront programming / interpretation. (comment): **PLEX favors a boat launching site for light watercraft including trailer-carried small fishing boats. Facility should be able to accommodate a trailer from the Genesee (Valley Park) Waterways facility carrying multiple small watercraft. Be able to launch & retrieve high school / collegiate racing-shell boats from here. Make area a fireworks observation spot.**

+++++
Closing Segment of Powerpoint: Application for Project Advancement (VERBATIM)

“Funding Request: *The Master Plan will be further refined and modified as a result of these planning studies and analyses:*

- Geotechnical investigations:
- Environmental assessments: **Let PLEX know where it is OK for community service projects**
- Land appraisals
- Streetscape design / traffic calming: **Focus on pedestrian safety**
- Engineering and preliminary design for riverwall improvements : **PLEX wants riverwall treatment to complement Corn Hill riverwall planning (make river edge a walkable promenade).**
- **Building condition / structural assessments / asbestos surveys**
- Developer *pro formas* / financing packages
- Civic engagement: **What will be expected from PLEX?**
- Housing analysis and reinvestment strategy
- Marketing and branding initiative: **PLEX wants to be a partner in this process**
- Invasive species assessment along River Trail: **Address Japanese Knotweed and Poison ivy now.**
- Waterfront Recreation Master Plan: playgrounds, interpretation, open space, water access
- GEIS for Vacuum Oil footprint
- Zoning updates and design standards: **PLEX wants to be a partner in this process**

APPENDIX B: DEMOGRAPHIC AND MARKET TRENDS ANALYSIS



CITY OF ROCHESTER
VACUUM OIL BROWNFIELD OPPORTUNITY AREA:
MARKET ANALYSIS

July 22, 2011

Prepared By:



P.O. Box 3367
Saratoga Springs, NY 12866
518.899.2608



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EXECUTIVE SUMMARY

As a sub consultant to Bergmann Associates, Camoin Associates completed a comprehensive market analysis of the Vacuum Oil Brownfield Opportunity Area (referred to as the 'Vacuum Oil BOA' or the 'BOA'). Key findings of the market analysis are as follows:

- Population levels within the BOA and the City of Rochester are projected to decrease through 2015.
- The number of renter-occupied housing units is projected to decrease significantly over the next five years, while the number of owner-occupied housing units will remain relatively stable.
- Though lower than New York State and the United States, median household income levels in the City of Rochester, Local Trade Area, and BOA are expected to increase at a faster rate than the larger comparative geographies.
- College-aged residents and 'baby boomers' are the two largest population segments. These groups are ideal target populations for future development projects within the BOA.
- The industry sectors with the largest employment in the Rochester MSA are health care and social assistance and government. These two industries are projected to account for more than 170,000 jobs by the year 2020.
- Manufacturing will see a large workforce decrease, losing 13,772 jobs by 2020.
- An overall employment increase is expected to occur in the Rochester MSA, though the rate of increase is projected to be much slower than the Nation or State.
- At around 16%, vacancy rates within the City of Rochester are very high; however, other Upstate New York cities are facing similar trends.
- The housing stock in the City of Rochester is quite old and may not provide the ideal set of housing opportunities to potential residents.
- The University of Rochester's student housing needs for off-campus housing are modest and may not fit well in the BOA.
- There may be an opportunity for some private-sourced housing for upper-level university students and university staff.
- There is demand for additional housing options within the \$150,000 to \$200,000 price range, for existing and future City residents.
- The current office market is one of oversupply; however, over the next 10 years the real estate market for office space within the Rochester MSA is projected to tighten, particularly for Class A office space.
- Like so many cities throughout the northeast, the overabundance of industrial properties within the region has flooded the industrial real estate market.
- Several retail sectors are experiencing significant sales leakage. There is demand for a variety of goods and services locally; the next step is for the project team to identify suitable options for the BOA.
- While there is demand for grocery stores in the area, accessibility issues would limit the success of a typical grocery store. A smaller-sized co-op grocery store could be supported.

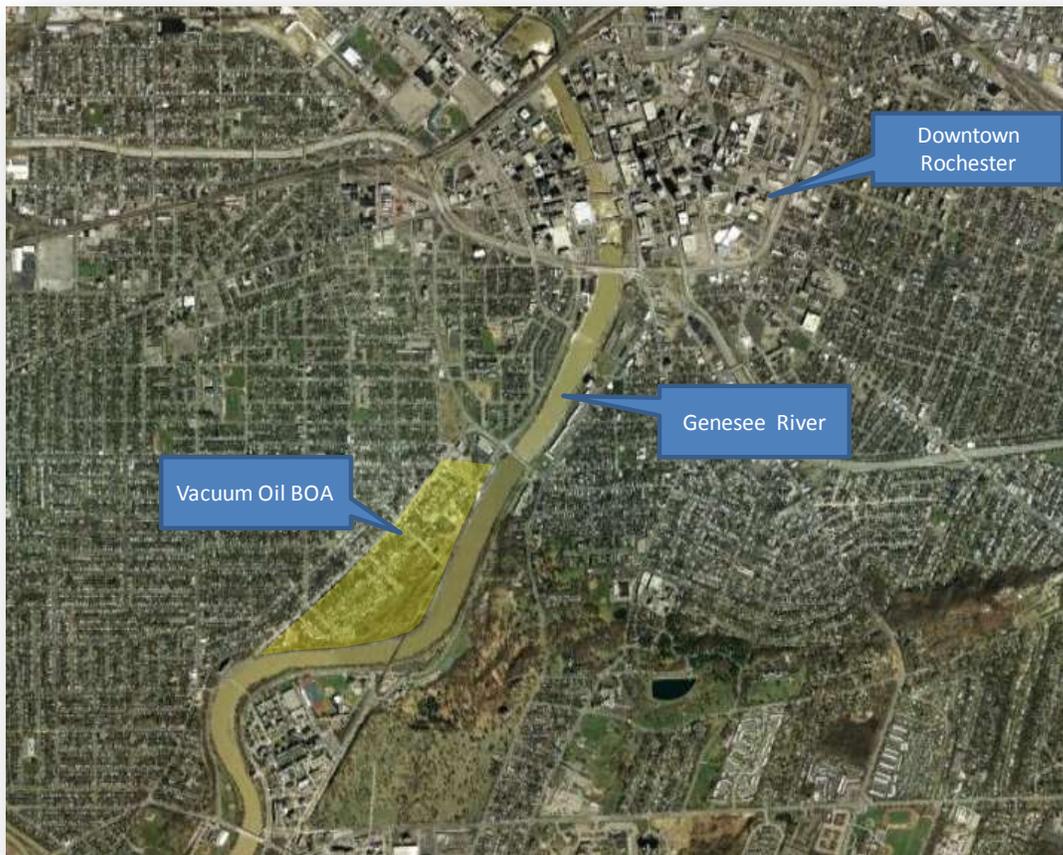
Individual sections of the following market analysis evaluate various land use categories independently - residential, office, industrial, and retail. However, due to the layout of the site, its location within the City, and potential accessibility issues, a mixed-use type of development that has some self-sustaining qualities may be the most suitable use. For example, new residential housing units would likely attract additional residents to the area who would serve a local customer base for some small retail uses.

The market analysis identified a number of potential redevelopment opportunities that will be examined in greater detail in the following phases of this project. However, depending on the extent of environmental contamination within the Vacuum Oil BOA, some redevelopment options may not be feasible due to the costs of remediation and/or level of contamination. Costs associated with cleaning up the BOA properties will be identified during a future site assessment.

After completing the market analysis, it has become clear that redevelopment of the site will require sustained involvement on the City's part. Successful redevelopment of the site will likely necessitate the City to take a lead in environmental site investigations, land assembly, environmental cleanup, subsidizing development and/or marketing the site to potential developers.

The BOA offers a number of natural amenities unique to an urban environment that may be very attractive for developers. The physical geography of the site forms an arrangement of open space, wood cover, and waterfront that is uncommon in an urban setting. This area presents a one of a kind opportunity for the City of Rochester. The findings of the following market analysis will guide the next phase of this project, the development of site-specific scenarios and alternatives.

Vacuum Oil BOA



INTRODUCTION

As a sub consultant to Bergmann Associates, Camoin Associates completed a comprehensive market analysis of the Vacuum Oil Brownfield Opportunity Area (referred to as the 'Vacuum Oil BOA' or the 'BOA'). The following market analysis consists of five interrelated studies:

- Demographic & Socioeconomics Analysis
- General Economic Outlook
- Residential Market Analysis
- Office & Industrial Space Market Analysis
- Retail Market Analysis

Each section is introduced with a brief description of the methodology employed and the geographies analyzed. Following the introduction, a section entitled *Takeaway Findings* lists the key findings of the analysis that will guide the project team during the next phase of this study, which will involve the development of site-specific scenarios and alternatives.

Data Sources

Much of the data in this report were purchased from ESRI Business Analyst Online (ESRI) and Economic Modeling Specialists, Inc. (EMSI). ESRI's base data is the 2000 and 2010 Census. It uses proprietary statistical models and updated data from the U.S. Census Bureau, the U.S. Postal Service, and various other sources to project current statistics and future trends. ESRI data is often used for economic development, marketing, site selection, and strategic decision making. For more information, visit www.esri.com.

EMSI data are compiled from several sources, including the U.S. Census Bureau and U.S. Departments of Health and Labor using specialized proprietary processes and models to estimate current statistics and predict future trends. Visit www.economicmodeling.com for additional information.

In addition to gathering statistical data, Camoin Associates spoke with local business owners, economic development officials, City officials, local realtors, and other stakeholders to gain information on the trends occurring within the Rochester MSA, City of Rochester, and the BOA. A list of the individuals interviewed can be found at the end of the report.

Geographies Studied

Data for the market analysis were analyzed for the following geographies:

- Vacuum Oil BOA - Delineated by closest Census Block Groups
- Local Trade Area - 5-minute drive time from the intersection of Plymouth Avenue South and Mount Pleasant Park
- City of Rochester - Municipal boundary
- Rochester Metropolitan Statistical Area (MSA) - Livingston, Monroe, Ontario, Orleans and Wayne Counties

Looking at the data at different geographic scales allowed an analysis of current trends within the region as well as those that are specific to the BOA. Demographic, economic, and market data were all examined to illustrate how these factors may impact the local and regional economy and potential development opportunities within the BOA. The following maps depict the Vacuum Oil BOA Block Group Area, the Local Trade Area, and the Rochester Metropolitan Statistical Area.

Vacuum Oil BOA Census Block Groups



Vacuum Oil BOA Local Trade Area: 5-Minute Drive Time



Rochester Metropolitan Statistical Area (MSA)



DEMOGRAPHIC & SOCIOECONOMIC ANALYSIS

To begin the market analysis, general demographic and socioeconomic data was reviewed to gain an understanding of past trends, existing conditions, and future projections. This information was collected for the Vacuum Oil BOA, Local Trade Area, City of Rochester and the Rochester MSA.

Takeaway Findings

Important findings of the demographic and socioeconomic analysis include:

- Within each of the geographies evaluated, the population is projected to decrease through 2015. Population loss is particularly acute in the BOA.
- Over the past 10 years, there has been a significant decrease in the number of renter occupied units (over 10% whereas the number of owner occupied units only dropped a few percentage points).
- Though lower than New York State and the United States, median household income levels in the City of Rochester, Local Trade Area, and BOA are expected to increase at a faster rate than the larger comparative geographies.
- College-aged residents and 'baby boomers' are the two largest population segments. These groups are ideal target populations for future development projects within the BOA.

Basic Demographic Trends

The following table summarizes typical demographic and socioeconomic indicators for the Vacuum Oil BOA, Local Trade Area, the City of Rochester, and the Rochester MSA. Total population in the Vacuum Oil BOA block groups has decreased by 9.43% from 2000 to 2010 and is expected to continue to decrease by another 2.57% through 2015. Population levels in the Local Trade Area and City of Rochester are experiencing similar trends with around a 3% reduction in population from 2000 to 2010 and almost a 1.5% decrease projected from 2010 through 2015. The Rochester MSA shows a slight increase (0.43%) in population from 2000 to 2010 but will likely decrease by 0.34% from 2010 to 2015. Of the geographies studied, only the MSA is projected to experience a slight increase (0.09%) in population from 2000 to 2015, which may be indicative of City residents moving to the suburbs on the outskirts of the City. The data show that, with an overall decrease of 11.76% from 2000 to 2015, population in the Vacuum Oil BOA is expected to decrease at a faster rate than in the Local Trade Area and City.

Similarly, the number of households in the BOA has decreased by 8.28% from 2000 to 2010 and is expected to continue to decrease by 2.37% from 2010 to 2015. The Local Trade Area and City are also expected to experience a decline in the number of households, but at a slower rate than the BOA. As with population, the number of households in the MSA increased slightly from 2000 to 2010, but will likely decrease by a small percentage (0.08%) from 2010 to 2015.

For each of the geographies studied, the number of families has decreased from 2000 to 2010, this trend is expected to continue through 2015. With a decrease of 13.33% from the period between 2000 and 2015, the decrease in the number of families for the BOA is much more substantial than that of the MSA, which is projected to decrease by only 0.55%. During the same period, the number of families in the Local Trade Area and City are projected to decrease by 9.23% and 8.93% respectively.

Average household size in the BOA has experienced a slight decrease from 2000 to 2010 and will likely remain constant at 2.24 from 2010 to 2015. Similarly, the City's and MSA's average household size has decreased by a small percentage from 2000 to 2010 and is expected to remain unchanged through 2015.

The average household size in the Local Trade Area has decreased during the period from 2000 to 2010, this is projected to continue this trend through 2015.

Given the decrease in total population, the number of households, and the number of families, it is no surprise that the BOA has also seen a decrease in occupied housing units from 2000 to 2010 and is projected to continue to experience this trend up to 2015. However, the decrease in occupied housing units appears to be primarily in renter-occupied housing units as opposed to owner-occupied units. In the BOA, only 3 (1.18%) owner occupied housing units were 'lost' from 2000 to 2010. During this same period, the BOA lost 77 (10.81%) renter-occupied housing units. While the number of housing units in the BOA is projected to continue to decrease from 2010 to 2015, the percentage of owner-occupied and renter-occupied housing units projected to be lost during this time is much lower at 2.79% and 2.20% respectively. Housing units in the Local Trade Area and City have experienced similar trends from 2000 to 2010 with decreases of less than 2% in owner-occupied units and around 6% for renter-occupied units. It is probably that a decrease will also occur in the number of housing units in the Local Trade Area and City from 2010 to 2015. Again, this decrease is expected to occur at a much lower rate for owner-occupied (around 2%) and renter-occupied (just over 1%) housing units. Conversely, in the MSA, an increase occurred in both owner- and renter-occupied housing units. Again, this points to a trend of former City residents moving out of the City proper and into outlying communities.

Median age in the Vacuum Oil BOA increased by 6.79% from 2000 to 2010 and will increase another 2.60% from 2010 to 2015, reaching 35.5 by 2015. A similar trend can be seen in the Rochester MSA with an increase in the media age from 2000 to 2010, although the median age in the MSA will remain constant at 38.4 from 2010 to 2015. The Local Trade Area and City of Rochester both have a younger population than the BOA and MSA with a median age of approximately 31 by 2015.

Basic Demographics							
Vacuum Oil BOA							
	2000	2010	2015	# Change 2000-2010	% Change 2000-2010	# Change 2010-2015	% Change 2010-2015
Population	2,194	1,987	1,936	-207	-9.43%	-51	-2.57%
Households	966	886	865	-80	-8.28%	-21	-2.37%
Families	465	416	403	-49	-10.54%	-13	-3.13%
Average Household Size	2.27	2.24	2.24	-0.03	-1.32%	0.00	0.00%
Owner Occupied Housing Units	254	251	244	-3	-1.18%	-7	-2.79%
Renter Occupied Housing Units	712	635	621	-77	-10.81%	-14	-2.20%
Median Age	32.4	34.6	35.5	2.2	6.79%	0.9	2.60%
Local Trade Area							
	2000	2010	2015	# Change 2000-2010	% Change 2000-2010	# Change 2010-2015	% Change 2010-2015
Population	58,377	56,848	56,026	-1,529	-2.62%	-822	-1.45%
Households	22,905	21,909	21,601	-996	-4.35%	-308	-1.41%
Families	11,394	10,582	10,342	-812	-7.13%	-240	-2.27%
Average Household Size	2.30	2.28	2.27	-0.02	-0.87%	-0.01	-0.44%
Owner Occupied Housing Units	8,308	8,178	8,017	-130	-1.56%	-161	-1.97%
Renter Occupied Housing Units	14,597	13,730	13,585	-867	-5.94%	-145	-1.06%
Median Age	30.0	30.7	31.0	0.7	2.33%	0.3	0.98%
City of Rochester							
	2000	2010	2015	# Change 2000-2010	% Change 2000-2010	# Change 2010-2015	% Change 2010-2015
Population	219,773	211,999	208,151	-8,474	-3.86%	-3,148	-1.49%
Households	88,999	84,902	83,666	-4,097	-4.60%	-1,236	-1.46%
Families	47,165	43,910	42,955	-3,255	-6.90%	-955	-2.17%
Average Household Size	2.36	2.35	2.35	-0.01	-0.42%	0.00	0.00%
Owner Occupied Housing Units	35,747	35,189	34,459	-558	-1.56%	-730	-2.07%
Renter Occupied Housing Units	53,252	49,713	49,207	-3,539	-6.65%	-506	-1.02%
Median Age	30.8	31.5	31.4	0.7	2.27%	-0.1	-0.32%
Rochester MSA							
	2000	2010	2015	# Change 2000-2010	% Change 2000-2010	# Change 2010-2015	% Change 2010-2015
Population	1,037,831	1,042,248	1,038,737	4,417	0.43%	-3,511	-0.34%
Households	397,303	401,073	400,735	3,770	0.95%	-338	-0.08%
Families	262,084	261,829	260,650	-255	-0.10%	-1,179	-0.45%
Average Household Size	2.51	2.48	2.48	0.03	-1.20%	0.00	0.00%
Owner Occupied Housing Units	269,879	270,810	270,810	931	0.34%	322	0.12%
Renter Occupied Housing Units	127,424	130,263	130,263	2,839	2.23%	-660	-0.51%
Median Age	36.2	38.4	38.4	2.2	6.08%	0.0	0.00%

Source: ESRI

The following table shows the median household income for 2010 and 2015 projections for the Vacuum Oil BOA, the Local Trade Area, the City of Rochester, the Rochester MSA, New York State, and the U.S. At \$19,565 the Vacuum Oil BOA currently has a very modest median household income that is expected to remain much lower than the other regions through 2015. In 2015, the median household income within the Vacuum Oil BOA will be \$23,683, slightly more than half that of the Local Trade Area which

will be \$41,643. With a median household income of \$32,539 in 2010, the Local Trade Area is expected to experience the largest percent increase from 2010 to 2015 (nearly 28%). The City of Rochester will also experience a significant increase (over 25%) in median household income from 2010 to 2015. In the Rochester MSA, household income levels were just slightly below State levels in 2010; this trend is expected to continue through 2015.

Median Household Income				
	2010	2015	# Change 2010-2015	% Change 2010-2015
Vacuum Oil BOA	\$19,565	\$23,683	\$4,118	21.05%
Local Trade Area	\$32,539	\$41,643	\$9,104	27.98%
City of Rochester	\$36,343	\$45,637	\$9,294	25.57%
MSA	\$57,650	\$66,684	\$9,034	15.67%
NYS	\$58,128	\$67,526	\$9,398	16.17%
USA	\$54,442	\$61,189	\$6,747	12.39%

Source: ESRI

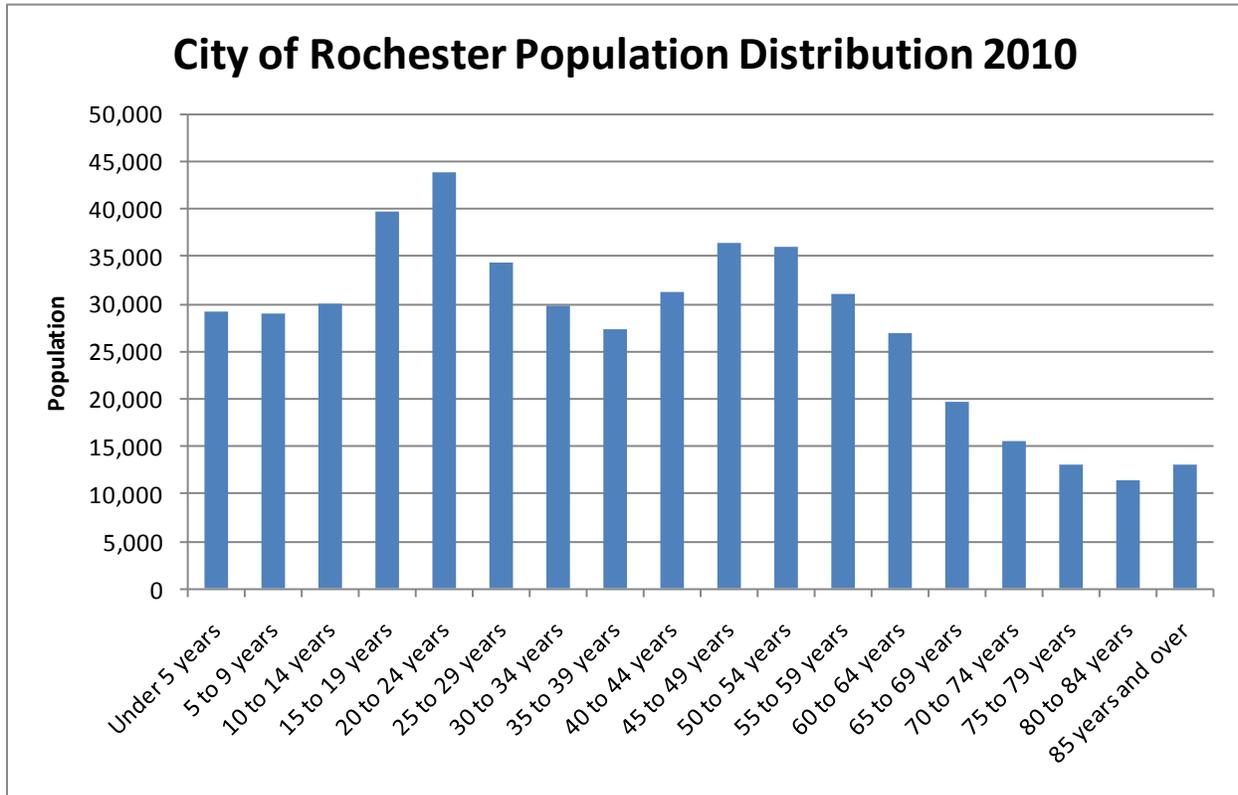
The following chart summarizes annual projected growth rates for various economic indicators for the Vacuum Oil BOA, Local Trade Area, City of Rochester, and the Rochester MSA and compares these indicators to those of New York State and the U.S. All indicators for the Vacuum Oil BOA, with the exception of median household income, are expected to grow at a rate below the other areas. With a projected increase of 3.89% annually, Median household income will increase at a rate faster in the Vacuum Oil BOA than in the MSA, the State and the U.S. However, as indicated above, median household income in the BOA will still be significantly lower than in the other areas studied.

Annual Projected Growth Rates from 2010 to 2015					
	Population	Households	Families	Owner HHs	Median HH Income
Vacuum Oil BOA	-0.52%	-0.48%	-0.63%	-0.56%	3.89%
Local Trade Area	-0.29%	-0.28%	-0.46%	-0.40%	5.06%
City of Rochester	-0.30%	-0.29%	-0.44%	-0.42%	4.66%
MSA	-0.07%	-0.02%	-0.09%	0.02%	2.95%
NYS	0.20%	0.20%	0.12%	0.19%	3.04%
USA	0.76%	0.78%	0.64%	0.82%	2.36%

Source: ESRI

Age Distribution

In addition to overall population growth of a region, a population's age distribution is a strong baseline indicator of current and future demands for goods and services. The graph below shows the current age distribution in the City of Rochester. The largest age groups in the City are young adults aged 15-24 years old and adults aged 45-54 years old. The high level of 45-54 year olds reflects the national 'Baby Boom' trend, which is typically defined as a high number of individuals born between 1946 and 1964. The high level of young adults in the City is likely due to the cumulative effect of Baby Boomers having children and a high number of colleges and universities located in the City attracting college-aged students.

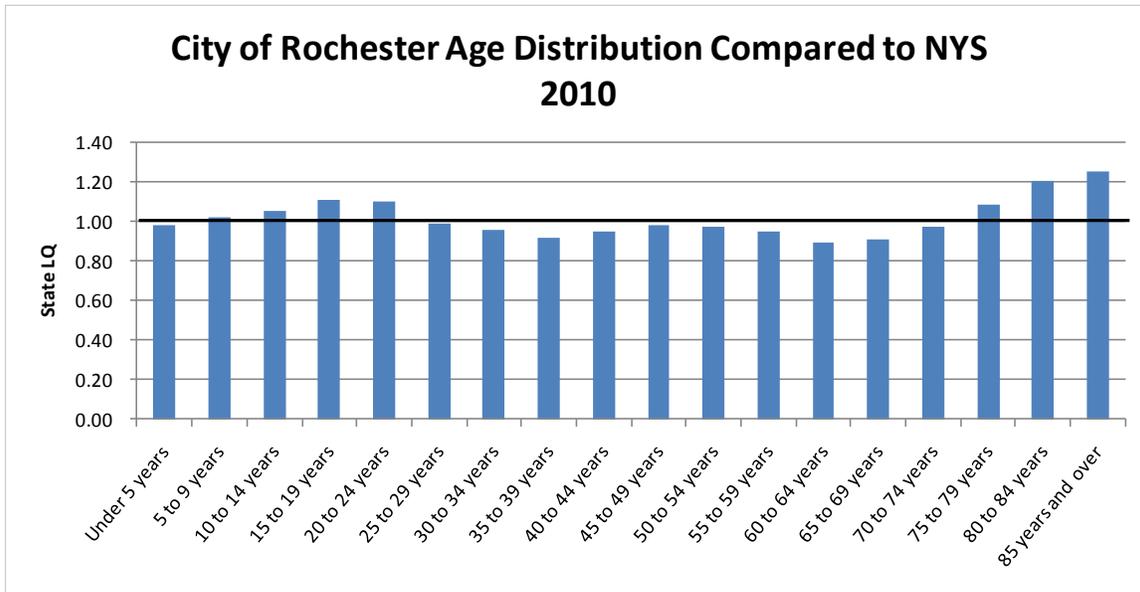


Source: EMSI

The bar graph below shows the results of a Location Quotient (LQ) analysis of age groups in the City of Rochester compared to the statewide population. The LQ analysis compares the percentage of the City's population in each age group to the percentage of the statewide population in each age group. The black line represents the statewide distribution; the blue bars show how closely the percentage of each age group in the Local Trade Area resembles the statewide distribution.

As shown, there is a significantly larger portion of the City's population in age groups over 75 than in New York State, particularly the population over the age of 85 years. Possible reasons for this may be that older Rochester City residents tend to stay in one place while the younger population is leaving or perhaps people may move into the Rochester area after retirement to be closer to services and assistance available in the City (public transportation, assisted-living housing, medical services, etc.).

Additionally, there is a slightly lower percentage of the population in the age groups from 30 to 74 years old in the City of Rochester compared to New York State, and a slightly higher percentage in the age group 5 to 24 years. In general, this graph shows that the City of Rochester's age distribution is similar to the State in most age groups except the age group between 15 and 24 and those above 75 years of age. In each of these age cohorts, the City has a greater concentration of population than New York State.

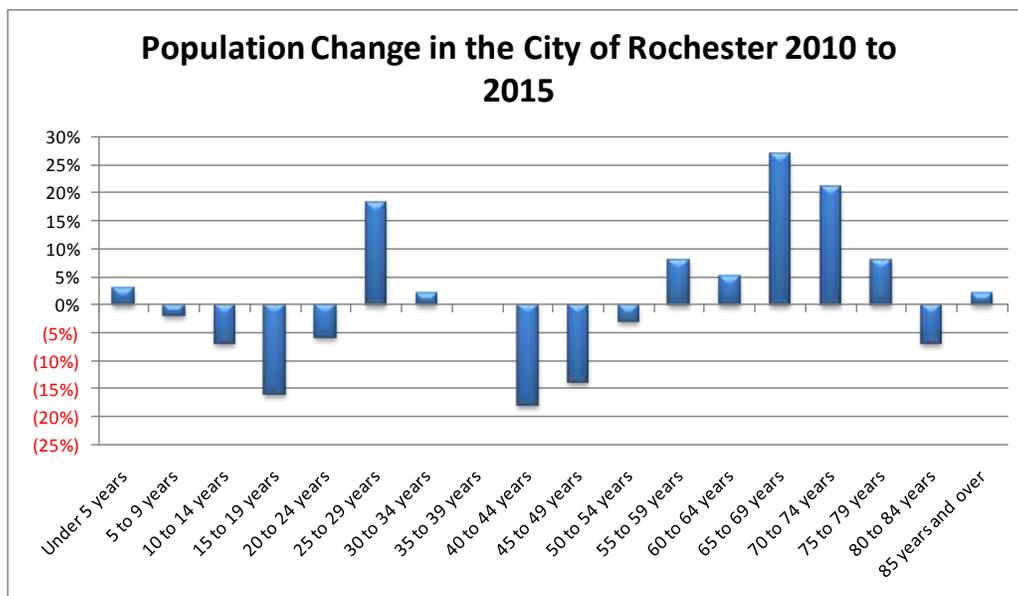


Source: EMSI

The projected changes in age groups in the City are shown in the bar graph below. Key trends that are shown in this data include:

- The 65-69 year old group will grow by the largest percentage.
- All age groups between 5-24 and 40-54 will decrease.
- All age groups from 55-79 will increase.

The age group from 25 to 29 are showing a significant increase; however, this is a data anomaly. The model does not take into account that this age groups is college students, who likely move away following graduation and be replaced by a new class.

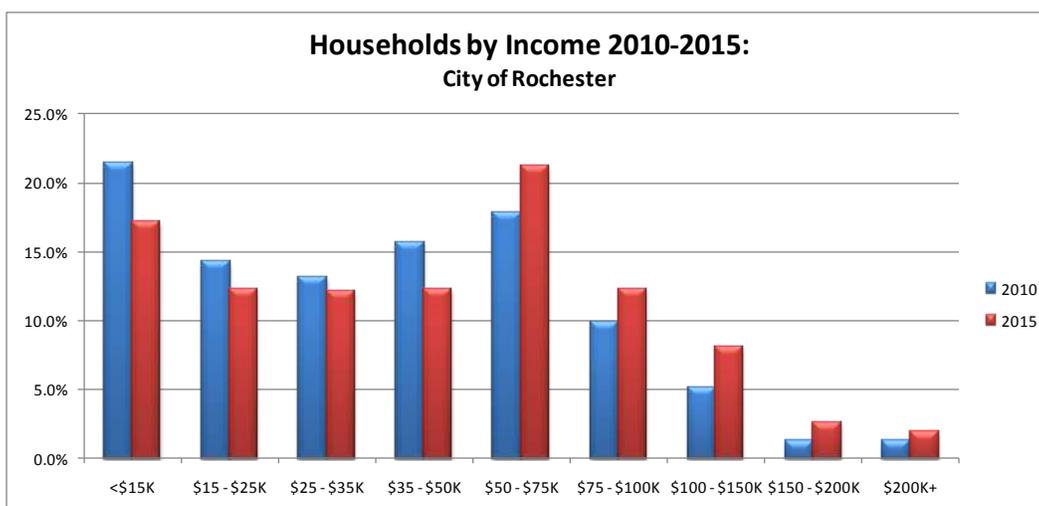
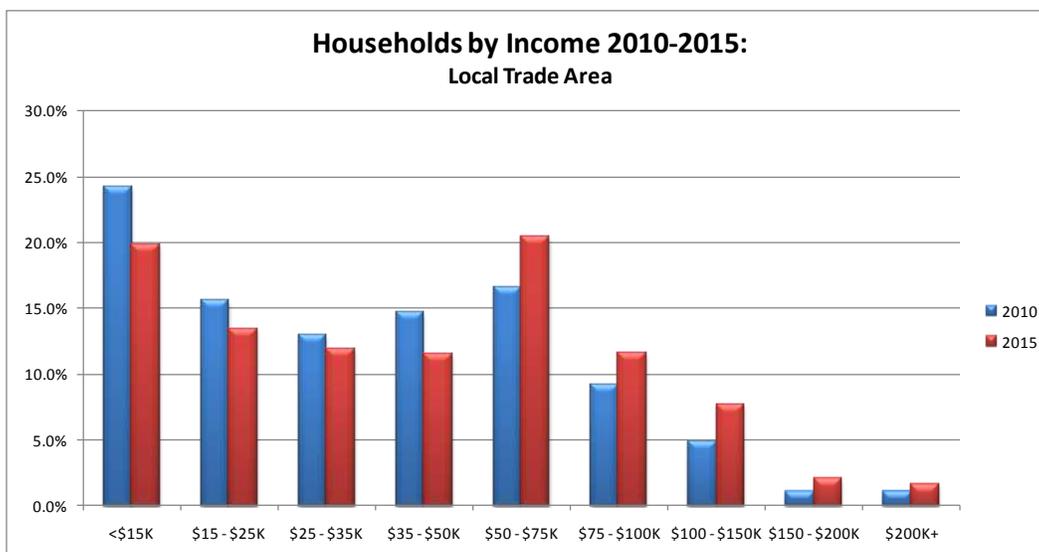


Source: EMSI

Household Income Distribution

The graphs below show the projected change in household income distribution in the Local Trade Area and the City of Rochester between 2010 and 2015. The percentage of households in the upper income brackets will increase significantly, while a decrease can be seen in the middle and lower income brackets.

The largest increase in both the Local Trade Area and the City will occur in the \$50-75,000 income brackets with increases of 4.0% and 3.4% respectively. Conversely, the largest decrease for both areas will occur in the lowest income bracket of less than \$15,000. This income bracket will decrease by 4.4% in the Local Trade Area and 4.2% in the City. By 2015, the percentage of households with annual incomes of \$75,000 or more will grow by approximately 7 percentage points in both the Local Trade Area and the City. By 2015, households with annual incomes over \$75,000 will make up 23% of all households in the Local Trade Area and 25% of all households in the City. Some of this is due exclusively to inflation. These changes likely reflect the rate of inflation and not actual growth in household income levels relative to other regions.



Source: ESRI

Conclusions

As noted above, the Vacuum Oil BOA is experiencing a decrease in population while the Rochester MSA's population is increasing slightly. This could indicate that residents are leaving the City proper and moving to the more suburban areas. It is also important to note that the Vacuum Oil BOA has a very low median household income compared to the Local Trade Area, City, MSA, New York State and the US. Given the high concentration of young adults and Baby Boomers, future development projects should look to target these age groups.

GENERAL ECONOMIC OUTLOOK

The General Economic Outlook provides context for discussion of redevelopment scenarios within the BOA by illustrating regional trends that shape the commercial real estate market for the City of Rochester and, more specifically, the BOA. In order to identify important issues and opportunities impacting the BOA, employment and industry trends in the five-county Rochester MSA were examined. As discussed in the previous section, the Rochester MSA includes the following counties: Livingston, Monroe, Ontario, Orleans, and Wayne.

The EMSI data includes all employment covered by unemployment insurance – only the self-employed, student workers, unpaid family workers, and some agricultural workers are excluded. Unlike the decennial Census, QCEW measures jobs by place of *work*, not place of *residence*, so it is a strong measure of economic activity taking place in a particular region.

Most of the data presented in this report are broken down into industry sectors, organized using the North American Industrial Classification System (NAICS). The analysis was performed primarily at the two-digit NAICS code level, which is the highest aggregated level available. A listing of the 2-digit NAICS codes used for this analysis can be found below.

NAICS Code	Description
11	Agriculture, forestry, fishing and hunting
21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale trade
44-45	Retail trade
48-49	Transportation and warehousing
51	Information
52	Finance and insurance
53	Real estate and rental and leasing
54	Professional and technical services
55	Management of companies and enterprises
56	Administrative and waste services
61	Educational services
62	Health care and social assistance
71	Arts, entertainment, and recreation
72	Accommodation and food services
81	Other Services, Except Public Administration
90	Government

Source: EMSI Complete Employment

For comparative purposes, data from the Rochester MSA is compared to industry data from Upstate New York. The 'Upstate New York Region' (shown on the following map) includes all New York State counties except: Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, and Westchester. The data for Upstate New York is provided for comparison to the Rochester MSA without the data being skewed by New York City statistics, which tend to be much different than the rest of New York State.

Upstate New York Region



Takeaway Findings

Notable findings of the General Economic Outlook analysis include:

- The industry sectors with the largest employment in the Rochester MSA are health care and social assistance and government. These two industries are projected to account for more than 170,000 jobs by the year 2020.
- Manufacturing will see a large workforce decrease, losing 13,772 jobs by 2020.
- An overall employment increase is expected to occur in the Rochester MSA, though the rate of increase is projected to be much slower than the Nation or State.

Employment by Industry

Existing employment levels and projections by industry sector are evaluated to identify the relative size of industries in an area's economy and any expected change in employment levels within of industries. The table below shows projected employment change by industry from 2010 to 2020 and average annual earnings per worker (EPW) for 2011. The industries are listed from largest to smallest in terms of the number of workers in 2010.

The data below reflect positive projected growth in the regional economy at an overall increase of 4% from 2010 to 2020. Health care and social assistance and government are the largest industries by employment in 2010. Filling out the top five industry sectors are retail trade; manufacturing; and professional, scientific and technical service industries. These five industries will continue to be the sectors with the greatest number of jobs through 2020 with only a slight shift with manufacturing slipping to the fifth largest sector and professional, scientific, and technical services moving ahead to be the fourth largest sector.

Of note is that a number of sectors will experience significant growth during this time period. These fast-growing sectors are highlighted in the table below. The health care and social assistance industry, for example, will add more than 10,500 jobs up to the year 2020. Similarly, the professional, scientific and technical services industry will add nearly 9,000 jobs during that time period. However, a significant loss of manufacturing jobs is anticipated during this time period.

Rochester MSA Projected Employment Change by Industry						
NAICS Code	Description	2010 Jobs	2020 Jobs	Change	% Change	2011 Total EPW
62	Health Care and Social Assistance	84,809	95,311	10,502	12%	\$43,538
54	Professional, Scientific, and Technical Services	40,115	49,108	8,993	22%	\$57,021
52	Finance and Insurance	29,385	35,192	5,807	20%	\$63,056
61	Educational Services	32,734	36,759	4,025	12%	\$54,256
72	Accommodation and Food Services	35,900	38,816	2,916	8%	\$17,253
56	Administrative and Support and Waste Management and Remediation Services	30,516	33,061	2,545	8%	\$33,205
53	Real Estate and Rental and Leasing	21,130	23,659	2,529	12%	\$22,012
81	Other Services (except Public Administration)	25,273	27,795	2,522	10%	\$30,906
71	Arts, Entertainment, and Recreation	13,882	16,017	2,135	15%	\$15,895
42	Wholesale Trade	18,972	20,249	1,277	7%	\$75,043
55	Management of Companies and Enterprises	12,946	13,388	442	3%	\$97,929
21	Mining, Quarrying, and Oil and Gas Extraction	1,446	1,864	418	29%	\$82,622
48-49	Transportation and Warehousing	13,761	13,916	155	1%	\$46,109
22	Utilities	1,819	1,728	(91)	(5%)	\$113,170
11	Agriculture, Forestry, Fishing and Hunting	7,101	6,932	(169)	(2%)	\$27,414
51	Information	11,021	10,491	(530)	(5%)	\$65,713
90	Government	75,472	74,767	(705)	(1%)	\$61,416
23	Construction	25,720	24,147	(1,573)	(6%)	\$55,944
44-45	Retail Trade	64,080	61,758	(2,322)	(4%)	\$27,702
31-33	Manufacturing	62,009	48,237	(13,772)	(22%)	\$75,048
	Total	608,091	633,195	25,104	4%	\$48,885

Source: EMSI Complete Employment

Employment Growth

The following table shows the projected change in total private sector employment in the Rochester MSA, Upstate New York, New York State, and the U.S. for 2010 through 2020. As shown, employment in the Rochester MSA is projected to increase by 25,104 jobs (4%) over the next ten years. The Rochester MSA is adding jobs at a slightly slower rate than Upstate New York, and New York State. With a growth rate of almost 11% from 2010 to 2020, the U.S. is projected to add jobs at a much faster rate than the other geographies analyzed. The average hourly wage rates are fairly similar in the Rochester MSA compared to Upstate New York and the Nation. At \$24.05 an hour, New York State as a whole has a much higher wage rate than the other geographies, mostly as a result of wages in New York City.

Employment Growth Summary					
Region	2010 Jobs	2020 Jobs	Change	% Change	Average Hourly Wage
Rochester MSA	608,091	633,195	25,104	4.13%	\$19.93
Upstate NY	3,257,585	3,407,290	149,705	4.60%	\$19.24
NYS	10,799,685	11,488,585	688,900	6.38%	\$24.05
US	170,866,026	189,113,448	18,247,422	10.68%	\$20.22

Source: EMSI Complete Employment - 2011.2

Unemployment by Industry

The table below shows total current jobs and unemployment numbers in the Rochester MSA for the second quarter of 2011 by two-digit NAICS code. The unemployment rate is shown as a percentage of total jobs in that category for the Rochester MSA, New York State, and the U.S. as a whole. The unemployment rate is especially high in the following industries:

- Mining
- Construction
- Accommodation and Food Services
- Arts, Entertainment and Recreation
- Government

The unemployment rate is relatively low in the following industries:

- Management of Companies and Enterprises
- Real Estate and Rental and Leasing
- Finance and Insurance
- Utilities
- Health Care and Social Assistance

Rochester MSA Unemployment						
NAICS Code	Description	2010 Jobs	March Unemployment	% of Total Jobs		
				MSA	NYS	US
90	Government	75,472	4,622	6.12%	5.33%	4.60%
44-45	Retail Trade	64,080	4,293	6.70%	8.44%	9.13%
31-33	Manufacturing	62,009	4,174	6.73%	7.38%	7.60%
72	Accommodation and Food Services	35,900	4,145	11.55%	12.23%	12.85%
23	Construction	25,720	4,021	15.63%	19.90%	19.95%
56	Administrative and Support and Waste Management and Remediation Services	30,516	3,072	10.07%	9.55%	9.27%
62	Health Care and Social Assistance	84,809	2,603	3.07%	4.24%	5.46%
71	Arts, Entertainment, and Recreation	13,882	1,600	11.53%	10.32%	10.09%
54	Professional, Scientific, and Technical Services	40,115	1,396	3.48%	3.27%	4.02%
61	Educational Services	32,734	1,318	4.03%	4.31%	6.50%
81	Other Services (except Public Administration)	25,273	1,243	4.92%	5.75%	5.60%
52	Finance and Insurance	29,385	823	2.80%	2.82%	3.46%
51	Information	11,021	702	6.37%	5.32%	8.92%
42	Wholesale Trade	18,972	667	3.52%	3.32%	2.88%
48-49	Transportation and Warehousing	13,761	529	3.84%	4.96%	5.88%
53	Real Estate and Rental and Leasing	21,130	472	2.23%	2.73%	2.75%
11	Agriculture, Forestry, Fishing and Hunting	7,101	321	4.52%	3.48%	8.87%
21	Mining, Quarrying, and Oil and Gas Extraction	1,446	245	16.94%	11.87%	3.85%
55	Management of Companies and Enterprises	12,946	129	1.00%	0.92%	0.94%
22	Utilities	1,819	54	2.97%	3.76%	9.56%
	Total	608,091	36,430	5.99%	6.30%	7.18%

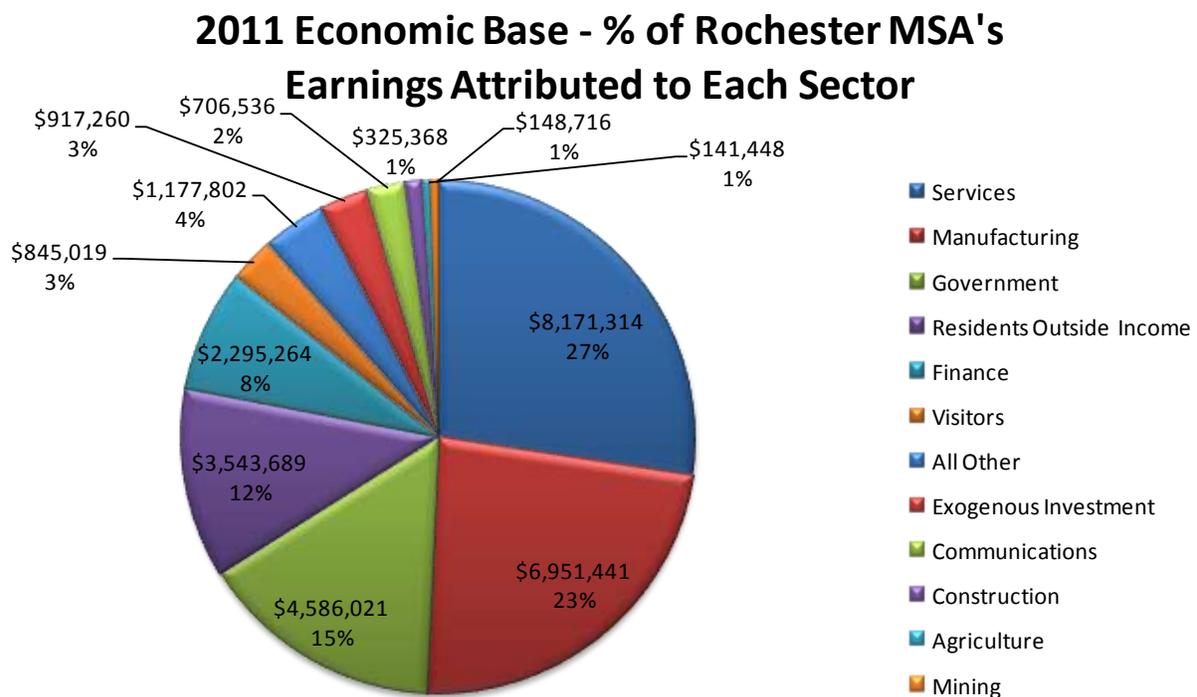
Source: EMSI Complete Employment - 2011.2, Camoin Associates

Economic Base

Another way of examining the regional economy is to look at which sectors and industries are responsible for bringing income to the region. Industries generally do this by exporting products and services to purchasers located outside the study region. This approach attempts to show which groups of industries really drive a region's economy; that is, which sectors bring the most dollars into a region, rather than circulating dollars that are already present.

Economic base sectors are groupings of broadly related industries with no claims made about their inter-dependence. In contrast, NAICS sectors are grouped by similar products and production processes. Economic base sectors are created for convenience to describe a broad type of activity that brings money into a region, for example, 'Manufacturing' or 'Visitors.'

The following chart and table show how much of the region's earnings can be attributed to the activities of regional establishments in each sector. Note that the size of each of these sectors depends more on each one's export orientation than on each one's total employment.



Source: EMSI

Rochester MSA - Economic Base					
Sector	Jobs	Earnings(K)	Jobs %	Earnings %	EPW(K)
Services	171,398	\$8,171,314	28%	27%	\$48
Manufacturing	118,201	\$6,951,441	19%	23%	\$59
Government	85,624	\$4,586,021	14%	15%	\$54
Residents Outside Income	93,602	\$3,543,689	15%	12%	\$38
Finance	44,829	\$2,295,264	7%	8%	\$51
Visitors	28,928	\$845,019	5%	3%	\$29
All Other	21,450	\$1,177,802	4%	4%	\$55
Exogenous Investment	18,653	\$917,260	3%	3%	\$49
Communications	14,115	\$706,536	2%	2%	\$50
Construction	6,313	\$325,368	1%	1%	\$52
Agriculture	4,305	\$141,448	1%	0%	\$33
Mining	2,379	\$148,716	0%	0%	\$63

Source: EMSI Complete Employment - 2011.2

Services, manufacturing, and government make up the three largest income generating sectors in the Rochester MSA. The pie graph shows that 27% of the region’s earnings can be attributed to the services sector. Services that generate the most earnings are colleges, universities, and professional schools (\$1.4 billion); corporate, subsidiary, and regional managing offices (nearly \$900 million); and general medical and surgical hospitals (over \$700 million). Service operations, such as colleges, corporate headquarters, and hospitals located within the Rochester MSA attract many visitors from outside the region. These visitors buy food, clothes, hotel rooms, entertainment, etc., which supports jobs in the industries that provide those goods and services. Those jobs are thus included in the services sector of the region’s economic base because it is “responsible” for those jobs through its jobs multiplier.

The manufacturing industry has historically been a major part of the Rochester MSA’s economy and this remains true today. The pie graph shows that 23% of the region’s earnings can be attributed to this sector. Existing infrastructure, history, accessibility, and proximity to major consumer markets make the region a good location for manufacturing. With the location of Eastman Kodak in the Rochester MSA, the two manufacturing sub-sectors that generate the most earnings are photographic film, paper, plate and chemical manufacturing (over \$580 million) and photographic and photocopying equipment manufacturers (over \$510 million). It is also important to note that employees of the manufacturing industry exhibit relatively high earnings per worker. At \$59,000, the manufacturing sector has the second highest earnings per worker behind only mining with \$63,000.

Government accounts for 15% of earnings in the Rochester MSA according to the pie graph above. Similar to the manufacturing sector, government sector workers have a relatively high earnings per worker at \$54,000.

Residents’ outside income includes various sources of income from outside the region, which residents in turn spend in the regional economy. Examples of outside income include outside earnings (e.g., income of residents who commute or telecommute to an employer outside the region), capital or property income (investment dividends, royalties, rents), and transfer payments (unemployment benefits, welfare, Social Security payments, etc.). This sector accounts for 15% of the jobs and 12% of the earnings in the Rochester MSA. This high percentage might reflect the workers who commute from adjacent communities outside the region, such as Genesee, Ontario, Wyoming, Yates, and Seneca

Counties. A portion of this sector might also reflect Rochester MSA residents who receive transfer payments.

Cluster Analysis

A group of industries closely connected by supply chains and/or similar labor pools is considered an industry cluster. The following table and chart show the top 10 clusters in the region that will experience the greatest increase in terms of job numbers from 2010 to 2020. The businesses and financial services cluster is the largest employment cluster within the Rochester MSA. Top occupations within this cluster include personal financial advisors; securities, commodities, and financial services sales agents; accountants and auditors; management analysts; and real estate sales agents. Together, these top five occupations within the businesses and financial services industry cluster will add 6,898 jobs from 2010 to 2020 and will experience an overall growth of over 38%. The businesses and financial services cluster as a whole is projected to add 14,657 jobs during the period from 2010 to 2020.

The biomedical/biotechnical (life sciences) and education and knowledge creation industry clusters are also in the top three clusters within the Rochester MSA. Top occupations within the biomedical/biotechnical (life sciences) cluster include registered nurses; home health aides; nursing aides, orderlies and attendants; licensed practical and licensed vocational nurses; and medical and health services managers. The top occupation in the education and knowledge creation cluster is postsecondary teachers, which will have 5,531 jobs by 2020 and will experience a 24% growth during the period from 2010 to 2020. Given the location of the Strong Children’s Hospital, Rochester Institute of Technology and Rochester University within the MSA, these two clusters represent a significant portion of the growth that will occur in the regional economy. Both clusters are expected to grow through 2020, and together, they will add nearly 9,500 jobs between 2010 and 2020.

Rochester MSA Cluster Analysis				
Cluster Name	2010 Jobs	2020 Jobs	Change	% Change
Business & Financial Services	66,804	81,461	14,657	22%
Biomedical/Biotechnical (Life Sciences)	61,190	66,072	4,882	8%
Education & Knowledge Creation	32,149	36,766	4,617	14%
Arts, Entertainment, Recreation & Visitor Industries	20,490	22,428	1,938	9%
Energy (Fossil & Renewable)	24,790	26,304	1,514	6%
Defense & Security	13,575	13,942	367	3%
Transportation & Logistics	8,851	9,167	316	4%
Apparel & Textiles	3,306	3,563	257	8%
Primary Metal Manufacturing	254	320	66	26%
Electrical Equipment, Appliance & Component Manufacturing	1,486	1,524	38	3%

Source: EMSI Complete Employment - 2011.2

Best Industries to Meet Rochester MSA Requirements¹

The table below shows the purchasing needs of existing regional industries at the most detailed level available (6-digit NAICS code level), along with how much of those needs are satisfied inside and outside the region. The difference between these is the “import gap.” For example, businesses and residents in the Rochester MSA purchase \$395 million each year from businesses in the Engineering Services industry. However, only \$60 million of that spending stays locally in the region. The remaining \$335 million leaks out of the region to other parts of the state and nation.

The ten industries with the largest import gaps in the Rochester MSA are shown in the table below. All of the industries listed below are present in the region, with the exception of plastics material and resin manufacturing. Within each of these industries there is room to expand current operations or target additional companies. Of note is the fact that many of the industries that are projected to grow as pointed out above (commercial banking, physicians offices, and real estate agents) also appear here as industries with existing import gaps. This indicates that there is an opportunity for more companies of these types to locate in the Rochester MSA in the future.

Best Industries To Meet Rochester MSA Requirements					
NAICS Code	Description	\$ Required (K)	\$ Satisfied in Region (K)	Import Gap (K)	In Region
324110	Petroleum Refineries	\$1,003,323	\$7,722	\$995,602	yes
522110	Commercial Banking	\$1,365,125	\$371,132	\$993,993	yes
621111	Offices of Physicians (except Mental Health Specialists)	\$1,253,542	\$813,421	\$440,121	yes
533110	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	\$430,919	\$12,651	\$418,268	yes
325211	Plastics Material and Resin Manufacturing	\$395,052	\$0	\$395,052	no
531210	Offices of Real Estate Agents and Brokers	\$671,214	\$300,660	\$370,554	yes
524126	Direct Property and Casualty Insurance Carriers	\$531,703	\$179,827	\$351,876	yes
541330	Engineering Services	\$395,101	\$60,136	\$334,965	yes
551114	Corporate, Subsidiary, and Regional Managing Offices	\$1,123,058	\$793,920	\$329,138	yes
511210	Software Publishers	\$407,571	\$87,626	\$319,945	yes

Source: EMSI Complete Employment - 2011.2

Conclusions

While unemployment in the Rochester MSA is high in a number of industries, there are also several industries experiencing relatively low unemployment that may present development opportunities for the Vacuum Oil BOA. For example, the finance and insurance industry is experiencing low unemployment and is expected to grow by 20% from 2010 to 2020. The professional, scientific, and technical services industry is also expected to experience significant growth during that time (22%) and

¹ The “Best Industries to Meet Regional Requirements” analysis is based on EMSI’s input-output model which uses the national input-output matrix provided by the federal Bureau of Economic Analysis. This is combined with the national Total Gross Output, the regional Total Gross Output, the land area of the subject region, regional dividends, interest, rent and transfers data and regional in/out commuter patterns in order to calculate regional requirements, imports and exports. After using matrix algebra to calculate the regional multiplier, the resulting matrix is multiplied by the sales vector and converted back to jobs or earnings. Specifically, this data comes from the U.S. Department of Commerce, Bureau of Economic Analysis, and Industry Economic Accounts: Benchmark & Annual Input-Output (I-O) Accounts. Source: EMSI.

represents an opportunity for industry development in the Vacuum Oil BOA. Currently, 50% of the earnings in the Rochester MSA and 47% of the jobs come from the services and manufacturing sector indicating that there is a substantial economic base and related infrastructure for these sectors. Of the best industries for the Rochester MSA listed above, some may present potential opportunities for development of office space within the Vacuum Oil BOA including commercial banking, direct property and casualty insurance carriers, and engineering services. A more detailed analysis of office space utilizing industries and absorption rates is provided in the *Office & Industrial Market Analysis* section of this report.

RESIDENTIAL MARKET ANALYSIS

The residential market analysis compares existing conditions and projected trends in residential development in the Rochester MSA to trends of the City of Syracuse and the City of Buffalo. This market analysis also takes into account findings and recommendations of the 2007 City-Wide Rochester Housing Market Study completed by Zimmerman/Volk Associates, Inc., which contains a thorough analysis of Rochester's housing stock and demand for housing.

This analysis will help to identify potential development types that will serve currently unmet needs in the Rochester area as well as be feasible and marketable in the current real estate atmosphere. Local real estate agents were also interviewed to gather information on trends and pricing. Additionally, officials from the University of Rochester were contacted to gain information about future development needs of the college.

Takeaway Findings

The significant findings of the Residential Market Analysis include:

- At around 16%, vacancy rates within the City of Rochester are very high; however, other Upstate New York Cities are facing similar trends.
- The housing stock in the City of Rochester is quite old and may not provide the ideal set of housing opportunities to potential residents.
- The University of Rochester's student housing needs for off campus housing are modest and may not fit well in the BOA at this time.
- There is demand for additional housing options within the \$150,000 to \$200,000 price range, for existing and future City residents.

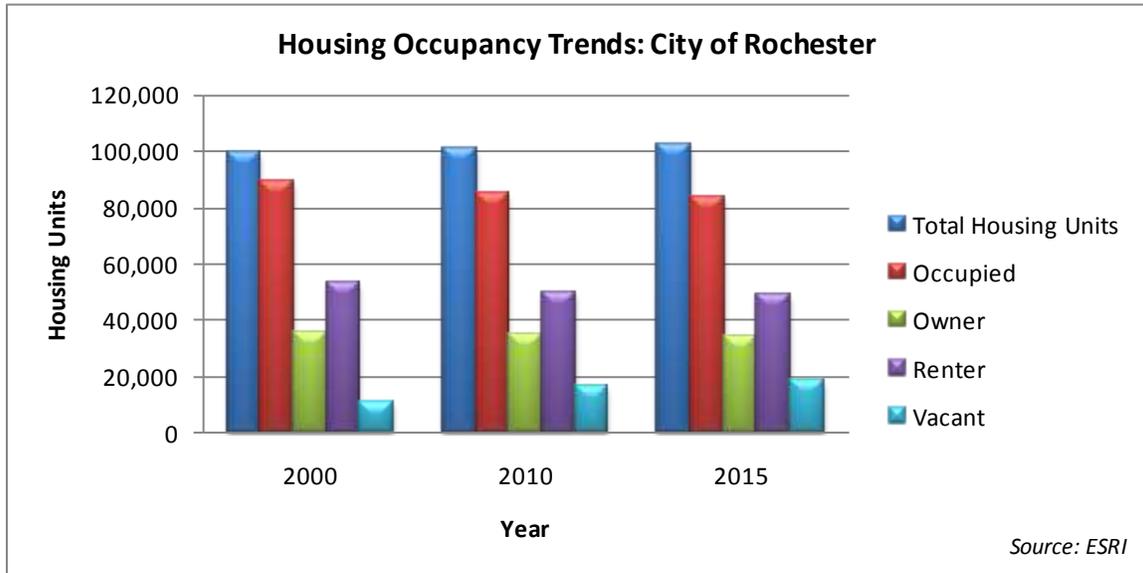
Housing Stock Trends & Conditions

According to a 2008 article 'Close to Home: Rochester, N.Y., Market is Soft', the housing market in the City of Rochester does not experience the extreme highs and lows that areas in other parts of the Country have.² It is not that the area completely sidestepped the recent mortgage and credit crises, rather, the regional housing market plunged in the 1990's following considerable workforce downsizing of some of the area's largest employers (Kodak and Xerox) and the region is still recovering. The high vacancy rates identified in the following tables are a relic of this significant job loss.

Occupancy & Vacancy Rates

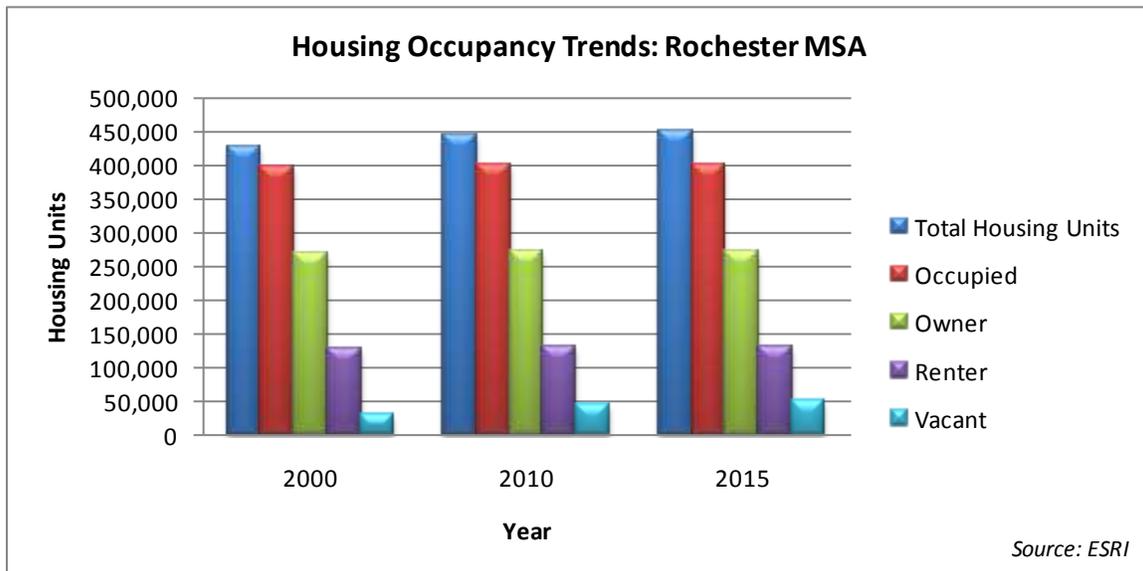
The chart below outlines the status and trends of housing units in the City of Rochester, which had a total of 101,528 units in 2010. Approximately 35% of the available housing stock in the City is owner-occupied, 49% is renter-occupied, and 16% is vacant. The total existing housing stock is expected to remain relatively stable through 2015, only adding 817 units; however, the number of vacant units is projected to increase by approximately 12% or 2,053 units.

² Dugas, Christine. 'Close to Home: Rochester, N.Y., Market is Soft' USA Today. April 2008.
<http://www.usatoday.com/money/economy/housing/closetohome/2008-04-14-rochester-new-york_N.htm>



As shown in the following chart, the Rochester MSA has a total of 446,240 units, up from 427,172 units in 2000. Around 90% of the housing stock in the Rochester MSA is occupied; approximately 61% of the total units are owner-occupied and 29% are renter-occupied. The vacancy rate of the total MSA hovers around 10%. When the City of Rochester is excluded from the MSA its residential vacancy rate drops to 8%; once again indicating that high vacancy rates exist within the City rather than the non-city parts of the MSA.

Similar to the City of Rochester, the housing stock in the Rochester MSA is projected to remain stable through 2015 with just a minor increase of approximately 322 owner-occupied units and a decrease of 660 renter-occupied units. Over this five-year timeframe the vacancy rate in the MSA is expected to increase at roughly the same rate as the City's (12%) adding roughly 5,503 vacant properties by 2015.



The table below looks at the City of Rochester as it compares to other regional cities. As far as the share of owner, renter, and vacant properties, the City of Rochester mirrors the City of Syracuse. Compared to the City of Buffalo, Rochester has similar owner-occupied levels, but a higher renter-occupied rate and a lower vacancy rate.

City Housing Occupancy Status: 2010						
	City of Rochester		City of Syracuse		City of Buffalo	
	Number	Percent	Number	Percent	Number	Percent
Total Housing Units	101,528	100.0%	69,389	100.0%	145,228	100.0%
Occupied	84,902	83.6%	57,943	83.5%	113,033	77.8%
Owner	35,189	34.7%	23,980	34.6%	49,916	34.4%
Renter	49,713	49.0%	33,963	48.9%	63,117	43.5%
Vacant	16,626	16.4%	11,446	16.5%	32,195	22.2%

Source: ESRI

When evaluating the status of vacant properties, it is helpful to compare the study area geographies to state and national levels. The table below shows that the City of Rochester is similar to the Upstate New York, which includes all of the counties north of Dutchess County, and the Nation.

The higher number of vacant rental units in the Rochester MSA, compared to the Upstate New York and the Nation, indicates that there is a soft market or a “renters market” for rental units, potentially having implications on the redevelopment of the BOA site. With a high percentage of rental units currently vacant, there may be an oversupply of rental properties in this region or the current stock of rental properties is not meeting the demands of residents who desire rental properties.

2000 Residential Vacancy Status: Regional Comparison			
	Rochester MSA	Upstate NY	USA
For Rent	35.6%	21.4%	25.1%
For Sale Only	13.3%	9.8%	11.6%
Rented/Sold, Unoccupied	7.0%	5.0%	6.7%
Seasonal/Recreational/Occasional Use	22.1%	44.9%	34.3%
For Migrant Workers	0.5%	0.1%	0.2%
Other Vacant	21.5%	18.7%	22.1%

Source: ESRI

To compare the City of Rochester to other regional cities facing similar issues, the following table provides residential vacancy status of the City of Rochester, City of Syracuse, and the City of Buffalo. The three cities are very similar, and for most of the categories, the percent of vacant housing in City of Rochester is between the other two cities.

2000 Residential Vacancy Status: City Comparison			
	Rochester	Syracuse	Buffalo
For Rent	48.8%	54.7%	37.8%
For Sale Only	13.0%	14.0%	10.3%
Rented/Sold, Unoccupied	7.2%	5.7%	7.1%
Seasonal/Recreational/Occasional Use	2.0%	2.1%	1.1%
For Migrant Workers	0.0%	0.0%	0.0%
Other Vacant	29.0%	23.5%	43.7%

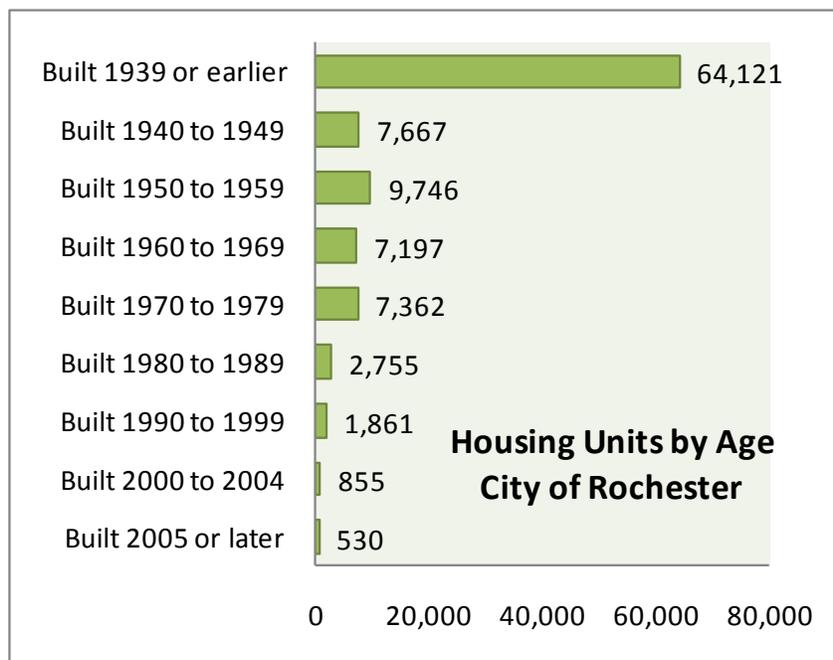
Source: ESRI

Age of the City's Housing Stock

The age of an area's housing stock is an important indicator because it can provide a high-level estimate of the quality of the housing stock. Although well-maintained older homes can contribute to the preservation of an area's local history and community character, older houses also tend to be more costly to maintain and have more structural and environmental concerns. As in many communities throughout the Northeast, substandard older housing is often occupied by those residents that are least able to afford regular the maintenance that an older home requires.

With its rich industrial past, it is no surprise that many of the residential structures within the City of Rochester are quite old. According to data collected from the 2005-2009 American Community Survey, over 60% of the City's residential housing stock was constructed more than 70 years ago and only about 1% of the residential structures within the City are less than 10 years old.

The significant lack of modern housing within the City of Rochester may suggest that the existing housing stock is not meeting the demands of current City residents. This is one of the issues identified in a 2007 city-wide housing market study completed by Zimmerman/Volk Associates, which recommend a renewal of the City's housing stock with 'new residential products that address the market demand'. Some key findings and recommendations of this report relative to the Vacuum Oil BOA are summarized in the following section.



Source: EMSI

Residential Value & Market Conditions

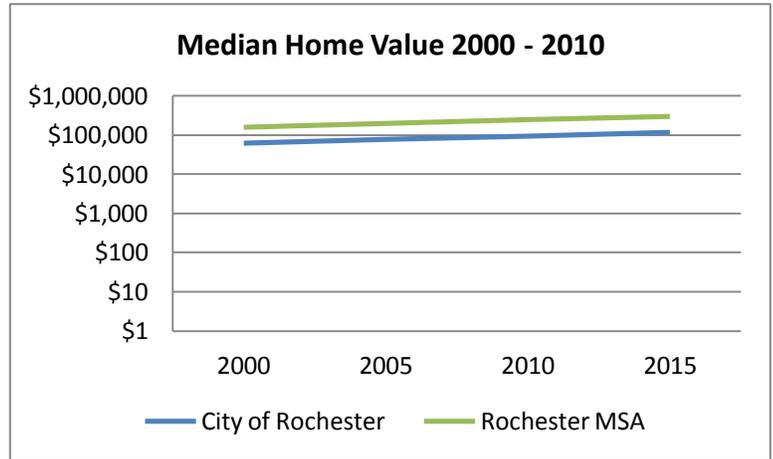
Owner occupied units in the City of Rochester and the Rochester MSA have been generally increasing in value. As shown in the adjacent chart, the median home value in the Rochester MSA is higher than in the City of Rochester. Additionally, the median home value in the MSA is increasing at a slightly faster rate than those within the City of Rochester.

In 2000, over half of the owner occupied units in the City were valued between \$50,000 and \$100,000; by 2015 this number is projected to drop to just over 31%. In 2015, the majority (about 55%) of the houses in the City are projected to be valued between \$100,000 and \$200,000. The number of homes valued between \$200,000 and \$300,000 is projected to increase from over 1% in 2000 to almost 7% in 2015.

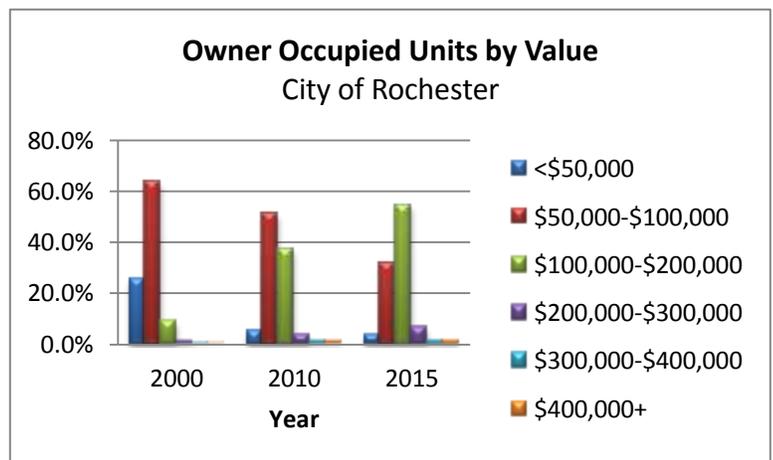
For the Rochester MSA in 2000, just under half of the housing units were valued between \$100,000 and \$200,000. Housing values are projected to increase faster in the MSA than in the City of Rochester, with about 45% of the occupied housing units projected to be valued between \$100,000 and \$200,000 and almost 28% valued between \$200,000 and \$300,000 in 2015.

According to Trulia, an 'all in one' real estate website, the average price per square foot for the City of Rochester is \$71, which is an increase of 6% over the previous year. From November 10th through January 11th, 266 homes sold with a median sale price of \$110,000. This price is a 25.7% increase over the previous year; however, the number of homes sold decreased by 66.7% during this time period. Sales prices have appreciated 5.8% over the last five years in the City of Rochester.

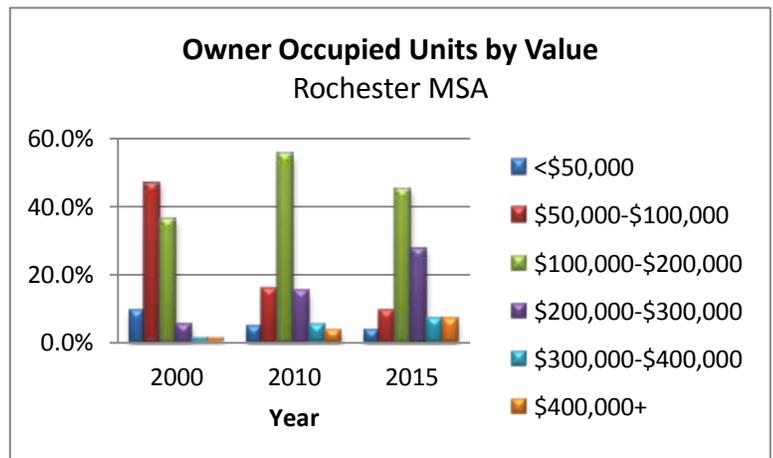
Real estate professionals familiar with the local and regional housing markets explained that 'not too long ago' (10-15 years ago) houses valued around \$150,000 to \$190,000 were considered up-scale, whereas today that range is considered



Source: ESRI



Source: ESRI



Source: ESRI

affordable. The general consensus among those interviewed is that the City needs more housing options within this price range.

Market Potential

In 2007, the City of Rochester hired Zimmerman/Volk Associates, inc. to conduct a comprehensive housing market study (the “housing study”). The Vacuum Oil BOA is situated within the housing study’s “Plymouth Exchange” study area; which is delineated as the properties bound by Ford Street and the Genesee River to the East and South, Bronson Avenue to the north, and Reynolds Street to the west.

The target market methodology employed in the analysis identified a potential market for this region of up to 860 younger singles and couples, empty nesters and retirees, and traditional and non-traditional families.

According to the housing study, the Plymouth Exchange study area has the potential to support between 86 and 130 new housing units per year. The average distribution by rent and sale prices that could be absorbed annually over the next 5-10 years in the Plymouth Exchange Study is provided in the adjacent table. These absorption rates are based on the target household mix identified in the housing study, and incomes of these targeted households. Overall, the housing study estimates that the Plymouth Exchange area has the potential to capture approximately 115 residential units per year.

The 2007 housing study suggests that the Plymouth Exchange study area has the greatest potential to meet the local and regional demand for new loft/apartment rental properties with the distribution of rental prices weighed slightly toward the lower-cost units. Since the study was completed, the rental-property market has weakened following a drastic drop in demand.

The housing study also indicated that this region could support approximately 24 new owner occupied loft/apartment style properties annually. This recommendation may be more in-line with current market trends.

Based on the findings of the housing study, the price ranges that have the greatest potential to be absorbed by the market are the \$50,000 to \$100,000 range and the \$150,000 to \$200,000 range. Feedback gathered from real estate professionals for this Market Analysis supports these price ranges. The real estate professionals suggested that the \$150,000 - \$190,000 price range was very attractive to many of their clients and more housing within this range would be good for the market. Real estate professionals also mentioned on a number of occasions that City residents typically prefer to ownership rather than renting.

Plymouth Exchange Study Area: Housing Distribution by Price/Rent Range	
Loft/Apartment Distribution by Rent	
Monthly Rent Range	New Units per Year
\$500-\$700	9
\$700-\$900	9
\$900-\$1,100	9
\$1,100-\$1,300	9
\$1,300-\$1,500	6
\$1,500-\$1,700	6
\$1,700-\$1,900	6
\$1,900-\$2,100	6
\$2,100 and up	4
Total	64
Loft/Apartment Distribution by Price	
Price Range	New Units per Year
\$50,000-\$100,000	6
\$100,000-\$150,000	4
\$150,000-\$200,000	4
\$200,000-\$250,000	3
\$250,000-\$300,000	3
\$300,000-\$350,000	2
\$350,000 and up	2
Total	24
Townhouse Distribution by Price	
Price Range	New Units per Year
\$50,000-\$100,000	1
\$100,000-\$150,000	1
\$150,000-\$200,000	1
\$200,000-\$250,000	1
\$250,000-\$300,000	1
\$300,000 and up	1
Total	6
Single-Family Detached Distribution by Price	
Price Range	New Units per Year
\$50,000-\$100,000	3
\$100,000-\$150,000	4
\$150,000-\$200,000	5
\$200,000-\$250,000	4
\$250,000-\$300,000	3
\$300,000 and up	2
Total	21

Source: Zimmerman/Volk Associates, Inc. 2007.

Recent Residential Development Success

According to many local real estate professionals and several of the other individuals interviewed for this study, one of the most successful residential development projects in the City of Rochester in recent years is the Corn Hill Landings development. This townhome/apartment complex is located just north of the BOA on the Genesee River. Designed with the ambiance of a European village, Corn Hill Landings offers residents boutique shops and services, as well as a number of dining opportunities within walking distance. The design of this development is also very welcoming to the general public with ample parking and access to the waterfront. This style of development is unique to the City of Rochester; based on the success of this project, many of the real estate professionals and other individuals interviewed for the analysis suggested that the City could use more of this type of development.

Pricing for these units is as follows:³

- 2 Bedroom Townhome: \$1,025.00 + Utilities
- 3 Bedroom Townhome: \$1,225.00 + Utilities
- 1 Bedroom Apartments: \$725.00 - \$815.00 + Utilities
- 1 Bedroom Lower Apartment: \$750.00 + Utilities
- 1 Bedroom Lower w/Basement: \$815.00 + Utilities
- 1 Bedroom Upper Apartment: \$795.00 + Utilities

University Housing Needs

The University of Rochester is located across the Genesee River, slightly south of the Vacuum Oil BOA. A pedestrian bridge spans the river just south of the BOA boundary, connecting the Brooks Landing student housing complex on the west side of the river to the main campus. North of this site, the Riverview Apartments student housing complex sits just inside the southernmost tip of the BOA boundary.

The housing study completed by Zimmerman/Volk Associates suggested that there is a 'major opportunity for university-related development' within the BOA region. As such, the City of Rochester requested that this Market Analysis for the Vacuum Oil BOA explore the University's housing needs and potential for the BOA to meet those needs.

Based on discussions with University officials, the college itself does not have a need for additional student housing development beyond their current ongoing projects, which include the College Town development and other dormitory renovations. The College Town development project will expand their housing capacity to 5,000 beds. There may be a need for a small numbers of beds (around 250); however, it is important to note that any student housing projects not adjacent to existing University properties would be very costly for the University to provide security, transportation, and technological services. Any small-scale student housing project not located directly adjacent to existing University properties would not be financially feasible.

Currently, students that choose to live off campus tend to rent apartments in the 19th Ward Neighborhood located to the west of the Main Campus. University officials expect this trend to continue; however, as the college continues to grow, the BOA may present an opportunity to provide residential housing for upper-classmen, graduate students, and/or university staff that desire modern

³ Source: <http://www.cornhilltownhouses.com/pricing.html>.

amenities within close proximity to campus. Once complete, the rail-trail that extends from the southeast corner of the BOA southward toward the campus will serve as a direct pedestrian thoroughfare between the BOA and the college; a very attractive amenity for any development option.

Figure: Southern Vacuum Oil BOA & University of Rochester



Conclusions

The City's housing market is continuing to recover from the significant reduction in workforce that occurred within the manufacturing sector in the 1990's. Ongoing issues that currently plague the market include a very old housing stock and overabundance of rental properties that do not meet the needs of existing or potential residents.

Are there opportunities for residential development within the Vacuum Oil BOA? Based on the above analysis, there may be. The current market demands affordable, modern housing. Townhouses or row houses, where residents can own a little 'patch of grass' without needing to take on the continued maintenance of a single-family house or the repairs of an older home, could meet this demand.

There is also a potential opportunity for some privately-sourced housing for University of Rochester students who want to live off campus or staff who want to live nearby. Empty nesters and young professionals without kids may also be a good target market, especially those looking for a 'return to downtown' experience. These target markets are profiled in the *Tapestry Segmentation* section of the *Retail Market Analysis*, which explains that these individuals lead busy lifestyles entwined within a downtown-urban atmosphere. They will require convenient amenities and entertainment options.

OFFICE & INDUSTRIAL MARKET ANALYSIS

The Office and Industrial Market Analysis evaluates recent trends and projections within the regional office and industrial space-utilizing industries to identify potential opportunities for development. This market analysis also provides a review of the market report produced by the leading national real estate firm CB Richard Ellis. This report takes a regional perspective which includes all of the counties of the Rochester MSA as well as adjacent Genesee County (hereafter referred to as ‘Greater Rochester’). Additionally this region is divided into two sub-markets: Downtown Rochester (i.e. the City of Rochester) and Suburban Markets (areas outside of the City).

Individuals who are knowledgeable about the local and regional commercial real estate market were interviewed, including real estate professionals, property owners, business owners, and others. The combination of interviews and research helped to further refine the understanding of the current market conditions and the types of development occurring in the region.

Takeaway Findings

- The current office market is one of oversupply; however, over the next 10 years the real estate market for office space within the Rochester MSA is projected to tighten, particularly for Class A office space.
- Like so many cities throughout the northeast, the overabundance of industrial properties within the region has flooded the industrial real estate market.

Existing Office Space

Building classifications are used to report market data in a manner that differentiates between building types. Office space is generally classified as being in a Class A, Class B, or Class C. Each market varies in how each classification is defined, but generally Class A buildings represent the highest-quality buildings within a market (including considerations for access, visibility, and neighborhood quality) and Class B and Class C buildings are classified relative to Class A.

According to the 2011 Rochester Market Outlook, by CB Richard Ellis, the Greater Rochester office market is comprised of approximately 15.7-million square feet of competitive, multi-tenanted Class A and B office space.⁴ This report only uses two classifications for office space, Class A and B. Non-competitive office space - defined as single-tenant, owner-occupied office space - adds an additional 5-million square feet to this total. Non-competitive office space is excluded from vacancy rate figures.

Downtown Rochester contains approximately 6.9-million square feet of office space, and the suburban markets contains on the order of 8.8-million square feet. The two predominate suburban markets for office space in the Greater Rochester Area are located in the south central region and the south east, with space concentrated in Brighton and Perinton.

Square Feet of Existing Competitive Office Space			
	Class A	Class B	Total
Downtown Rochester	2,550,000	4,350,000	6,900,000
Suburban Markets	5,150,000	3,650,000	8,800,000
Total	7,700,000	8,000,000	15,700,000

Source: 2011, CH Richard Ellis/Rochester, NY LLC.

⁴ 2011 Market Outlook: Rochester, New York. CB Richard Ellis, NY LLC.

Downtown Rochester is home to approximately 1.3-million square feet of vacant office space. Vacancy rates for Class A office space in the downtown were around 15.3% at the end of 2010, up by 2.4 percentage points from the year prior. With an overall rate of 21.9%, Class B properties have consistently shown a higher vacancy rate than Class A properties. As is common for downtown sections of old industrial cities, some of the square footage comprising the Class B vacancy is contained within properties that are functionally obsolete and are candidates for conversion to alternative uses.

Rochester’s suburban office market contains approximately 1.3-million square feet of vacant space. With a relatively consistent vacant rate for both classes of just over 14%, the Rochester suburban office market is in line with the current national average. Generally, vacancy around 10% is considered a healthy long-term vacancy rate. Based on this measure, the City and Suburban markets are considered to be in oversupply for both Class A and B office space.

Square Feet of Vacant Competitive Office Space					
	Class A		Class B		Total
	Vacancy Rate	Vacant Space	Vacancy Rate	Vacant Space	
Downtown Rochester	15.3%	390,150	21.9%	952,650	1,342,800
Suburban Markets	14.3%	736,450	14.5%	529,250	1,265,700
	-	1,126,600	-	1,481,900	2,608,500

Source: 2011, CH Richard Ellis/Rochester, NY LLC.

Existing Industrial Space

The Greater Rochester industrial real estate market is comprised of approximately 82.9-million square feet of industrial space, including nearly 19-million square feet of space owned by two of Rochester’s largest industrial corporations: Eastman Kodak and Xerox. Eastman Business Park, Eastman Kodak’s main facility, spans across parts of the City of Rochester and the Town of Greece. Xerox operates its Rochester operations in the northeast suburb of Webster.

Square Feet of Existing Industrial Space	
City of Rochester	35,600,000
Suburban Markets	47,300,000
Total	82,900,000

Source: 2011, CH Richard Ellis/Rochester, NY LLC.

Overall, the City of Rochester houses a considerable portion of the total industrial market, with around 35.6-million square feet or 43% of the total market. In 2010 the City’s inventory remained flat, which has been the general trend for the last few years. The suburban market inventory consists of 47.3-million square feet of owner and tenant occupied space. This market experienced a slight increase in 2010 of approximately 120,000 square feet.

All together, the vacancy rate of the industrial market increased by approximately one half of one percent to 13.6%. Even though the City’s total inventory remained flat in 2010, the vacancy rate increased from 8.7% to 10.2%. As such, net absorption was negative for 2010. On the other hand, the vacancy rate in the suburban market decreased slightly to 16.1%, ending a three-year increasing trend and moving the net absorption rate into positive territory.

Square Feet of Vacant Industrial Space		
Region	Vacancy Rate	Vacant Space
City of Rochester	10.2%	3,631,200
Suburban Markets	16.1%	7,615,300
Total	13.6%	11,246,500

Source: 2011, CH Richard Ellis/Rochester, NY LLC.

Regional Growth

The industries projected to experience the most growth through 2020 are those that are typically office utilizing industries. For example, health care and social assistance, professional services, and the finance industries all require office space. Most of the industry sectors that typically utilize traditional industrial or manufacturing space are losing jobs in the Rochester MSA.

Rochester MSA Fastest Growing Industries 2011-2020					
NAICS	Description	2011 Jobs	2020 Jobs	% Change	Change
62	Health Care and Social Assistance	87,150	95,989	10%	8,839
54	Professional, Scientific, and Technical Services	41,554	48,866	18%	7,312
52	Finance and Insurance	29,790	34,119	15%	4,329
53	Real Estate and Rental and Leasing	21,903	24,861	14%	2,958
61	Educational Services	32,587	35,050	8%	2,463
72	Accommodation and Food Services	36,192	38,550	7%	2,358
71	Arts, Entertainment, and Recreation	14,427	16,671	16%	2,244
81	Other Services (except Public Administration)	26,089	28,085	8%	1,996
56	Administrative and Support and Waste Management	31,147	32,214	3%	1,067
42	Wholesale Trade	19,132	19,503	2%	371
21	Mining, Quarrying, and Oil and Gas Extraction	1,511	1,818	20%	307
55	Management of Companies and Enterprises	13,167	13,388	2%	221
48-49	Transportation and Warehousing	13,658	13,708	0%	50
22	Utilities	1,940	1,857	(4%)	(83)
11	Agriculture, Forestry, Fishing and Hunting	6,982	6,882	(1%)	(100)
51	Information	10,902	10,243	(6%)	(659)
90	Government	74,103	73,441	(1%)	(662)
23	Construction	25,516	24,467	(4%)	(1,049)
44-45	Retail Trade	62,956	60,954	(3%)	(2,002)
31-33	Manufacturing	58,425	48,003	(18%)	(10,422)
	Total	609,130	628,669	3%	19,539

Source: EMSI Complete Employment - 4th Quarter 2010

Regional Growth in Office Utilizing Industries

As stated above, employment projections indicate that there will be growth in the majority of the industries that typically utilize office space. The following table lists the top ten office utilizing industries, ranked by the estimated number of jobs added from 2011 to 2020. All together, these industries are expected to increase by 8% and add about 28,000 jobs over the next nine years. This equates to an increase of almost 3,100 jobs annually. Industries projected to add the most jobs include the Health Care and Social Assistance; Professional Scientific, and Technical Services; and Finance and Insurance industries.

Rochester MSA: Growth in Office Utilizing Industries 2011 - 2020					
NAICS	Description	2011 Jobs	2020 Jobs	% Change	Change
62	Health Care and Social Assistance	87,150	95,989	10%	8,839
54	Professional, Scientific, and Technical Services	41,554	48,866	18%	7,312
52	Finance and Insurance	29,790	34,119	15%	4,329
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56	Administrative & Support and Waste Management	31,147	32,214	3%	1,067
55	Management of Companies and Enterprises	13,167	13,388	2%	221
51	Information	10,902	10,243	(6%)	(659)
90	Government	74,103	73,441	(1%)	(662)
	Total	368,392	396,256	8%	27,864

Source: EMSI Complete Employment - 4th Quarter 2010

For comparative purposes, the table below shows the projected Rochester MSA growth rate for industries that typically utilize office space alongside the projected growth rates of the same industries in New York State and the U.S. The growth rate for office utilizing industries in the Rochester MSA is just below than the growth rate for the State. However, employment in office utilizing industries nationwide is projected to increase about 5% percentage points faster than the Rochester MSA. The data suggest that the demand for office space in the Rochester MSA will increase over the next nine years; however, this increase in demand will likely be less than that at the national level.

Compared Growth of Office Utilizing Industries				
	2011 Jobs	2020 Jobs	Change	% Change
Rochester MSA	368,392	396,256	27,864	8%
New York State	7,082,480	7,740,966	658,486	9%
United States	99,906,790	113,430,328	13,523,538	14%

Source: EMSI Complete Employment - 2011.2

The projected employment increase in office utilizing industries can be used to estimate the increase in demand for office space. If on average, each new employee requires approximately 250 square feet of office space; by 2020 the 27,846 new employees in the Rochester MSA will need roughly 7,000,000 square feet of office space (including competitive and non-competitive space). As reported above, there is currently about 2,600,000 square feet of vacant-competitive office space in the Greater Rochester Region (includes Genesee County). CB Richard Ellis reports about 5 million square feet of existing non-competitive office space in the Greater Rochester Region, vacancy rates for non-competitive office space were not provided.

Conclusions

Currently, the regional real estate market for both office and industrial space is very loose, and will likely remain this way for several years.

Over the next 10 years the real estate market for office space within the Rochester MSA is projected to tighten, particularly for Class A office space. This growth may lead to potential office space development opportunities within the BOA.

Like so many cities throughout the northeast, the overabundance of industrial properties within the region has flooded the industrial real estate market. Industrial development is not currently a viable option for redevelopment of the Vacuum Oil BOA.

RETAIL MARKET ANALYSIS

The goal of a retail market analysis is to look at the supply and demand for goods and services within the region in question. This process also helps to identify the unique characteristics that an area has that can be built upon. The market analysis outlines consumer spending habits within the region, estimates retail demand, identifies household characteristics of potential consumers, and can help areas identify business opportunities or niche markets that are not being met by the current market.

Two trade areas are analyzed for the retail market analysis:

- Local Trade Area - A 5-minute drive time from the center of the BOA.
- City of Rochester Trade Area

Takeaway Findings

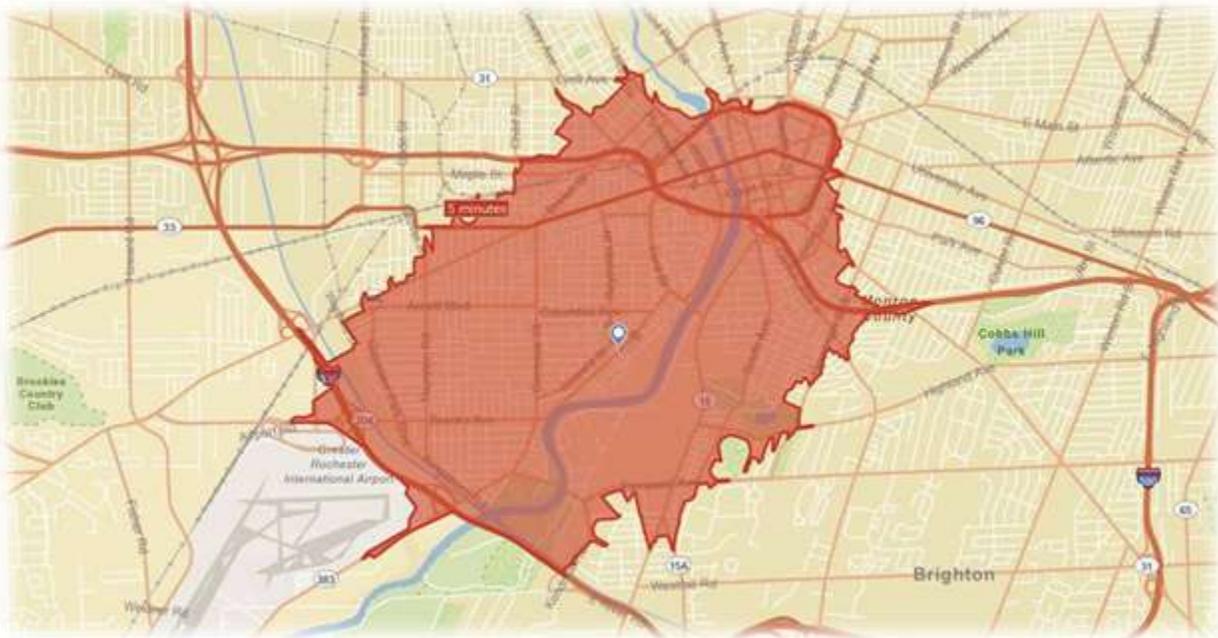
Key findings of the retail market analysis include:

- Several retail sectors are experiencing significant sales leakage. There is demand for a variety of goods and services locally; the next step is for the project team to identify options that are suitable for within the BOA.
- While there is demand for a large-scale standard grocery store, the area's accessibility issues would limit the success of this type of development. A smaller-sized co-op grocery store could be supported.

Local Trade Area

The 5-Minute Drive Time Trade Area (Local Trade Area) provides insight into local business and consumer trends in and around the Vacuum Oil BOA. Analyzing a trade area at this scale can help to identify whether demands of local consumers within or in close proximity to the BOA are being met by existing businesses.

Vacuum Oil BOA Local Trade Area: 5-Minute Drive Time



Retail Leakage/Surplus

The table below shows existing retail sales (“supply”) in the Local Trade Area compared to retail potential (“demand”). The difference between the retail sales demand and supply is referred to as the retail gap.

The demand for goods and services that is not being met locally is referred to as sales leakage, shown in the following table as a positive retail gap. The leakage occurs because consumers make purchases at establishments located outside the defined trade area. For example, there were approximately \$24 million of retail sales in the Grocery Store category in the Local Trade Area. However, residents of the Local Trade Area spend approximately \$71 million on these goods. Therefore, residents spent about \$47 million outside of the Local Trade Area on groceries; this \$47 million is considered sales leakage.

Sales leakage is normally viewed as an opportunity to capture unmet demand in a trade area by opening new or expanding existing businesses. However, not all retail categories that exhibit leakage within a particular trade area are a good fit for that region. The industry groups experiencing the greatest leakage from the Local Trade Area include:

- Automobile Dealers
- Grocery Stores
- Gasoline Stations
- Department Stores

The retail potential for additional stores within the Vacuum Oil BOA is analyzed later in this report and identifies which industries have enough sales leakage to potentially support additional retail outlets.

Conversely, if the supply of goods sold exceeds trade area demand, it is assumed that non-residents are coming into the trade area to spend money, creating a sales surplus. A sales surplus is shown as a negative retail gap in the following table. There are two likely reasons a sales surplus condition would exist. First, a cluster of competing businesses offering a similar good or product may be located within the trade area, creating a specialty cluster that draws in spending by households from outside the trade area. Secondly, a sales surplus may indicate a saturated retail market, where supply exceeds demand. The data show that there is a large number of health and personal care stores in the Local Trade Area generating over \$132 million in sales. This is due, in part, to the large number of pharmacies located in the Local Trade Area. Industries that have a large sales surplus compared to their total sales include:

- Health and Personal Care Stores⁵
- Full Service Restaurants
- Direct Selling Establishments
- Drinking Places – Alcoholic Beverages
- Book, Periodical and Music Stores
- Office Supplies, Stationary and Gift Stores

Industry sectors with leakage can be good markets to pursue in that residents are currently going outside of the trade area to make purchases. A new business or an expansion by an existing business

⁵ There are several pharmacies located within the Local Trade Area that contribute to the large sales figure for this industry.

could potentially capture some of the spending by those residents. Alternatively, an industry with a surplus could indicate a niche market that the trade area could build on and create an identity around.

Local Trade Area Surplus and Leakage				
Industry Group	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Number of Businesses
Motor Vehicle & Parts Dealers (NAICS 441)	\$70,380,869	\$21,292,891	\$49,087,978	24
Automobile Dealers (NAICS 4411)	\$60,722,698	\$13,582,265	\$47,140,433	13
Other Motor Vehicle Dealers (NAICS 4412)	\$4,512,753	\$1,567,332	\$2,945,421	3
Auto Parts, Accessories, and Tire Stores (NAICS 4413)	\$5,145,418	\$6,143,294	-\$997,876	8
Furniture & Home Furnishings Stores (NAICS 442)	\$8,660,561	\$2,153,103	\$6,507,458	6
Furniture Stores (NAICS 4421)	\$5,281,998	\$773,650	\$4,508,348	2
Home Furnishings Stores (NAICS 4422)	\$3,378,563	\$1,379,453	\$1,999,110	4
Electronics & Appliance Stores (NAICS 443/NAICS 4431)	\$9,997,507	\$6,802,270	\$3,195,237	16
Bldg Materials, Garden Equip. & Supply Stores (NAICS 444)	\$9,459,792	\$4,355,181	\$5,104,611	14
Building Material and Supplies Dealers (NAICS 4441)	\$8,700,510	\$4,331,726	\$4,368,784	13
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)	\$759,282	\$23,455	\$735,827	1
Food & Beverage Stores (NAICS 445)	\$76,665,752	\$30,142,432	\$46,523,320	72
Grocery Stores (NAICS 4451)	\$70,971,035	\$24,123,787	\$46,847,248	56
Specialty Food Stores (NAICS 4452)	\$1,647,899	\$1,675,934	-\$28,035	7
Beer, Wine, and Liquor Stores (NAICS 4453)	\$4,046,818	\$4,342,711	-\$295,893	9
Health & Personal Care Stores (NAICS 446/NAICS 4461)	\$15,686,506	\$132,844,010	-\$117,157,504	13
Gasoline Stations (NAICS 447/NAICS 4471)	\$50,916,402	\$13,216,608	\$37,699,794	6
Clothing and Clothing Accessories Stores (NAICS 448)	\$15,071,928	\$5,329,969	\$9,741,959	58
Clothing Stores (NAICS 4481)	\$12,434,458	\$4,365,570	\$8,068,888	42
Shoe Stores (NAICS 4482)	\$1,445,678	\$481,041	\$964,637	5
Jewelry, Luggage, and Leather Goods Stores (NAICS 4483)	\$1,191,792	\$483,358	\$708,434	11
Sporting Goods, Hobby, Book, and Music Stores (NAICS 451)	\$3,327,951	\$3,442,432	-\$114,481	24
Sporting Goods/Hobby/Musical Instrument Stores (NAICS 4511)	\$2,618,308	\$625,674	\$1,992,634	15
Book, Periodical, and Music Stores (NAICS 4512)	\$709,643	\$2,816,758	-\$2,107,115	9
General Merchandise Stores (NAICS 452)	\$27,722,987	\$9,323,063	\$18,399,924	7
Department Stores Excluding Leased Depts. (NAICS 4521)	\$10,551,552	\$18,914	\$10,532,638	1
Other General Merchandise Stores (NAICS 4529)	\$17,171,435	\$9,304,149	\$7,867,286	7
Miscellaneous Store Retailers (NAICS 453)	\$5,436,222	\$6,896,940	-\$1,460,718	46
Florists (NAICS 4531)	\$277,006	\$1,219,458	-\$942,452	6
Office Supplies, Stationery, and Gift Stores (NAICS 4532)	\$1,230,819	\$2,720,600	-\$1,489,781	13
Used Merchandise Stores (NAICS 4533)	\$555,239	\$366,266	\$188,973	11
Other Miscellaneous Store Retailers (NAICS 4539)	\$3,373,158	\$2,590,616	\$782,542	16
Nonstore Retailers (NAICS 454)	\$20,170,444	\$9,032,018	\$11,138,426	4
Electronic Shopping and Mail-Order Houses (NAICS 4541)	\$15,498,542	\$1,119,894	\$14,378,648	1
Vending Machine Operators (NAICS 4542)	\$721,925	\$0	\$721,925	0
Direct Selling Establishments (NAICS 4543)	\$3,949,977	\$7,912,124	-\$3,962,147	3
Food Services & Drinking Places (NAICS 722)	\$53,634,536	\$59,347,280	-\$5,712,744	194
Full-Service Restaurants (NAICS 7221)	\$23,301,995	\$38,264,452	-\$14,962,457	114
Limited-Service Eating Places (NAICS 7222)	\$23,796,369	\$11,993,144	\$11,803,225	37
Special Food Services (NAICS 7223)	\$5,381,592	\$4,855,637	\$525,955	11
Drinking Places - Alcoholic Beverages (NAICS 7224)	\$1,154,580	\$4,234,047	-\$3,079,467	32

Source: ESRI

Retail Use Feasibility

While the table in the previous section identifies a number of industry sectors that are experiencing leakage, it does not necessarily mean that new businesses locating in the area would be successful. The following section identifies which of the industries with leakage may have enough sales to warrant opening a new store or expanding existing stores. This analysis will help the City of Rochester to target businesses that will be successful by capturing a large enough portion of the current sales leakage to be profitable. The analysis assumes that 25% of the existing leakage in each category can potentially be recaptured by new businesses. The actual recapture rate for each category will vary and depends on existing amenities, commuting patterns, and consumer affinity towards certain stores or brands.

The table below identifies the industries that are experiencing sales leakage from the Local Trade Area and the number of new businesses that could be theoretically supported in each category if 25% of the sales leakage is recaptured and the new businesses have similar annual sales as the Upstate New York average for stores in each category.

Local Trade Area Retail Opportunities				
Industry Group	Retail Gap	25% Recapture Rate	Average Sales in Upstate NY	Numer of Potential Businesses
Automobile Dealers (NAICS 4411)	\$47,140,433	\$11,785,108	\$3,930,036	3.00
Grocery Stores (NAICS 4451)	\$46,847,248	\$11,711,812	\$3,867,700	3.03
Gasoline Stations (NAICS 447/NAICS 4471)	\$37,699,794	\$9,424,949	\$3,956,399	2.38
Limited-Service Eating Places (NAICS 7222)	\$11,803,225	\$2,950,806	\$732,580	4.03
Clothing Stores (NAICS 4481)	\$8,068,888	\$2,017,222	\$364,833	5.53
Furniture Stores (NAICS 4421)	\$4,508,348	\$1,127,087	\$886,319	1.27
Building Material and Supplies Dealers (NAICS 4441)	\$4,368,784	\$1,092,196	\$793,556	1.38
Electronics & Appliance (NAICS 443/NAICS 4431)	\$3,195,237	\$798,809	\$435,449	1.83
Home Furnishings Stores (NAICS 4422)	\$1,999,110	\$499,778	\$412,221	1.21
Sporting Goods/Hobby/Musical Instrument (NAICS 4511)	\$1,992,634	\$498,159	\$144,367	3.45
Jewelry, Luggage, and Leather Goods (NAICS 4483)	\$708,434	\$177,109	\$127,552	1.39

Source: ESRI

Legend

Trade Area Retail Gap: Equals sales leakage in Trade Area for industry group.

25% Recapture Rate: Equals 25% of the Retail Gap.

Average Sales in Upstate NY: Equals average sale per store of indicated type in Upstate NY including all counties except Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk and Westchester.

of Potential Businesses: Potential recapture divided by Upstate Average Sales.

Most of the industries shown are experiencing very large retail gaps, suggesting that there is an opportunity for new or expanded businesses to recapture some sales. There are many amenities and retail needs not being met within the Local Trade Area that may be suitable for placement within the BOA, as appropriate to the scale and design of the land use. Some industries that demonstrate a high potential for new businesses and could be successful within the BOA are:

- Clothing Stores
- Limited Service Eating Places
- Sporting goods/Hobby/Musical Instrument Stores
- Grocery Stores
- Electronic and Appliance Stores

Grocery stores are shown as having a high potential for success within the Local Trade Area; however, transportation access within this region is limited and it is unlikely that a standard grocery store would succeed. A more local co-op style store may be more appropriate for this area.

Consumer Spending Patterns

Expenditures on goods and services are used to evaluate the spending patterns of residents in the Local Trade Area. This particular looks at spending by local residents but does not show where these expenditures were made. The analysis presents the purchasing power of the households within the Local Trade Area.

The table below shows spending by Local Trade Area residents on selected retail goods and services. Variables shown include the average annual spending per household on a particular good or service, the Local Trade Area total spending on that good, and the spending potential index (SPI). The SPI represents household expenditures on a product or service relative to a national average of 100. SPI's with values greater than 100 indicate that on average households within the Local Trade Area spend more on that particular good than the average U.S. household.

A very high SPI can mean a number of things, a few examples may include:

- Costs of goods and services within that particular spending category are much higher locally within a trade area than they are elsewhere throughout the nation.
- Residents within a trade area may be wealthier than the national average.
- Population characteristics can drive up SPI in certain categories. For Example a trade area with a large retired population will likely spend more on healthcare and Medicare.

SIP is a good preliminary measure used to identify market characteristics that may necessitate additional attention within an analysis.

Total expenditures for households in the trade area are significantly less than the national average, with an SPI of 63. Local Trade Area households are spending less than the national average on every consumer item with available data except for two categories: Apparel Products & Services and Rental of Furniture. Areas where the residents in the Vacuum Oil trade area are spending closer to the national average include Smoking Products, Dating Services, School Books, and Supplies & Catered Affairs.

Spending on Rental of Furniture indicates that residents most likely do not have enough discretionary spending money to purchase these items outright. Additionally, residents are more likely to be renting furniture as they are more likely to be renters than home owners. A high SPI on Apparel Products and Services, which includes purchase of sewing supplies and materials, has also been seen in other areas of the Northeast and is a regional, not local, trend. Consumers spend much less than the national average on non-necessities such as Food Away from Home and Entertainment and Recreation.

Local Trade Area 2010 Consumer Spending by Category			
Category	SPI	Average Amount Spent	Total Amount Spent
Apparel Products and Services	131	\$122.88	\$2,692,256
Rental of Furniture	110	\$5.09	\$111,482
Smoking Products	81	\$347.38	\$7,610,661
Dating Services	79	\$0.61	\$13,268
School Books and Supplies	79	\$83.95	\$1,839,167
Catered Affairs	77	\$19.06	\$417,620
Medicare Prescription Drug Premium	73	\$36.37	\$796,850
Pets	73	\$314.70	\$6,894,766
Telephone Services	71	\$1,022.08	\$22,392,796
Alcoholic Beverages	71	\$406.64	\$8,909,080
Medicare Payments	70	\$288.65	\$6,324,091
Electricity	70	\$1,178.88	\$25,828,086
Utilities, Fuel & Public Services	68	\$3,076.46	\$67,402,171
Food at Home	68	\$3,044.07	\$66,692,568
Education	68	\$832.44	\$18,237,831
TV/Video/Audio	68	\$844.74	\$18,507,401
Natural Gas	68	\$445.71	\$9,765,146
Food Away from Home	67	\$2,160.06	\$47,324,715
Health Insurance	64	\$1,238.06	\$27,124,726
Transportation	64	\$6,446.92	\$141,245,538
Shelter	64	\$10,152.45	\$222,430,063
Health Care	63	\$2,364.31	\$51,799,721
Entertainment and Recreation	63	\$2,015.01	\$44,146,784
Vehicle Loans	63	\$3,076.07	\$67,393,515
Total Expenditures	63	\$42,379.58	\$928,494,129

Source: ESRI, Camoin Associates

Market Segmentation

In addition to basic demographic data analysis, another useful tool in determining the characteristics of a particular trade area is market segmentation, which is defined as the classification of consumers according to demographic, socioeconomic, housing, and lifestyle characteristics. Market segmentation is based on the concept that people with similar demographic characteristics, purchasing habits, and media preferences naturally gravitate toward each other and into the communities in which they live. Businesses utilize market segmentation analysis to identify their best markets, measure the potential demand for new products or services, and reach their markets more effectively. Market segmentation data for the Local Trade Area were obtained from ESRI's 'Community Tapestry' segmentation model.

It is important to recognize that the classifications and labels for defined market segments are generalizations. The descriptions of each segment are based on comparisons with the U.S. as a whole and reflect the propensity of households within that segment to exhibit certain demographic, lifestyle, and consumer characteristics relative to the overall population. Nevertheless, market segmentation analysis can provide a useful perspective in understanding existing and potential customers residing within a defined area.

The table below shows the five largest tapestry segments as identified by ESRI in the Local Trade Area for the Vacuum Oil BOA, followed by a brief description of each segment. As shown, these five tapestry segments make up 47% of the Local Trade Area Market, providing a large window into local consumer characteristics and preferences.

Local Trade Area Tapestry Segmentation	
Tapestry Segment	Percent of Households
Metro City Edge	17.7%
City Commons	17.3%
Great Expectations	14.2%
Social Security Set	12.9%
Inner City Tenants	5.8%
Total	67.9%

Source: ESRI, Camoin Associates

Metro City Edge (17.7%): These neighborhoods are typically made up of households with married couples, single parents, and multigenerational families. The median age is low at 29.4 years because it includes children, including adult children, who still live at home. Grandparents are caregivers in 4 percent of households, which is twice the U.S. rate. More than 78 percent of the households derive income from wages and salaries and 9 percent receive public assistance with another 9 percent receiving supplemental security income. The median household income is \$33,018. The majority of those working are in the service industry and unemployment is much more predominant in these neighborhoods at double the U.S. rate. Most residents live in older suburban neighborhoods of large metropolitan cities and reside in single family homes. The home ownership rate is 53 percent with a median home value of \$70,892. These residents must spend their money wisely and tend to shop at grocery stores such as Aldi. They watch movies, attend sports games, and read music and baby magazines.

City Commons (17.3%): Single-parent households or singles that live alone comprise most of these very young households that have a median age of 24.6. Approximately half of these households have children. Most have graduated from high school. With the majority of these residents employed in part-time service occupations, the median household income is \$16,830 and the median home value is \$67,943. More than three-quarters of the households are rented and nearly half of these residents have moved within the last 5 years. City commons residents shop at discount stores and buy a lot of baby and children products. Most families enjoy eating out at fast food restaurants several times a week. An annual travel destination is probably to a theme park. They buy game systems for children, listen to urban radio, and would prefer to go to a movie theater than rent a DVD to watch at home.

Great Expectations (14.2%): This market segment is dominated by young singles and young married-couple families with a median age of 33.3 years. Median household income is approximately \$40,243. In general, these residents are typically just starting their career, not yet focused on retirement investing, and do not have the resources to travel extensively. Primary employers of this market include manufacturing, retail, and the service industries. Residents in this market segment enjoy a young and active lifestyle including going out to dinner, night clubs, and movies. They occasionally eat at fast food chains and often shop at major discount and department stores.

Social Security Set (12.9%): Four in ten of these households are aged 65 or older and most residents live alone. Although Social Security Set households live on very fixed incomes, they have accumulated some wealth that they can tap into now that they are retired. Their median household income is the lowest of the top five segments at \$16,805. The service industry provides jobs for more than half of the residents who are still part of the labor force. Owner-occupied households in these neighborhoods have

a median value of \$111,801. Limited resources somewhat restrict the activities; they shop at discount stores but tend to prefer grocery stores closer to home. Many rely on Medicare or Medicaid to pay healthcare costs. These residents are avid newspaper readers, subscribe to cable television enjoying daytime and primetime TV shows.

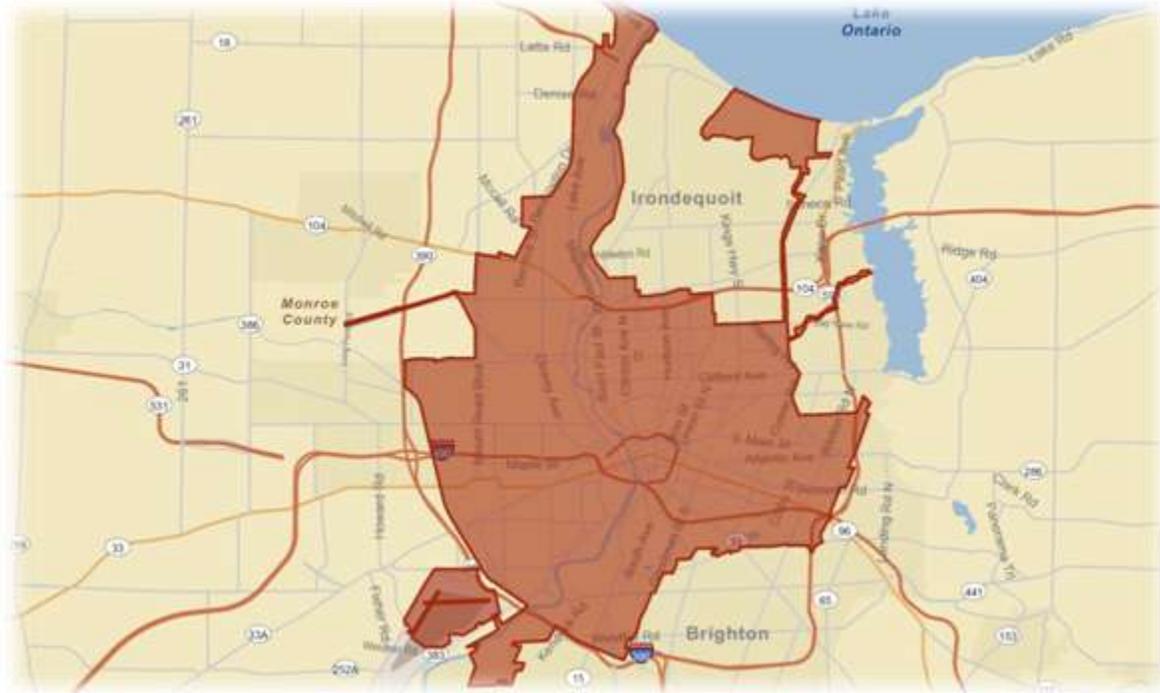
Inner City Tenants (5.8%): These neighborhoods are characterized by urban multicultural diversity and are represented by white, black and Hispanic cultures. Residents also tend to be younger with a median age of 27.8 years. Household types vary with 34 percent being single, 28 percent married-couple families; 21 percent single parents, and 10 percent with shared housing. Median household income in these neighborhoods is \$34,041 and 83 percent of residents earn income from wages and salaries with an additional 7 percent receiving public assistance. Earning a college degree is one of their top goals and more than 45 percent of the residents over 25 years of age have some college. Half of the employed residents work in white-collar occupations. Most of the population lives in economical apartments in mid- or high-rise buildings. Only one-fifth of the housing is owner-occupied with a median home value of \$103,092. Because they have such busy lifestyles, many residents eat at fast-food restaurants and prefer easy to prepare frozen and canned foods. They go to the movies and pro football and basketball games and enjoy reading magazines and the local nightlife.

In general, most of the Local Trade Area market is quite young. Household income is generally lower than the national average and many residents hold jobs within the service industry. As such, residents are conscious of their spending, frequently shopping at discount merchandise stores. Based on their location within the City of Rochester, most of these individuals live in apartment buildings or rented homes. Due to their young age, residents of the local trade area move frequently. There is little need for spending on lawn care or home maintenance supplies. Most residents enjoy active, busy lifestyles.

City of Rochester Trade Area

The City of Rochester Trade Area (City Trade Area) provides insight into the overall health of the economy and what factors are driving business decisions in and around the City. Analysis of a trade area at this scale can help to identify whether demands of City consumers are being met by existing businesses.

City of Rochester Trade Area



Retail Leakage/Surplus

The table below shows existing retail supply and demand in the City Trade Area. As described above, the difference between the sales demand and supply is referred to as the retail gap.

Industry groups that are not being met within the City of Rochester and are experiencing significant sales leakage (i.e. a positive retail gap) include:

- Automobile Dealers
- Grocery Stores
- Gasoline Stations
- Clothing Stores

Conversely, industries with a sales surplus (i.e. a negative retail gap) include:

- Health and personal care stores
- Vending Machine Operators
- Drinking Places – Alcoholic Beverages
- Book, Periodical and Music Stores

City of Rochester Surplus and Leakage			
Industry Group	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap
Motor Vehicle & Parts Dealers (NAICS 441)	\$294,113,536	\$89,951,963	\$204,161,573
Automobile Dealers (NAICS 4411)	\$253,641,821	\$61,358,253	\$192,283,568
Other Motor Vehicle Dealers (NAICS 4412)	\$18,990,679	\$10,126,284	\$8,864,395
Auto Parts, Accessories, and Tire Stores (NAICS 4413)	\$21,481,036	\$18,467,426	\$3,013,610
Furniture & Home Furnishings Stores (NAICS 442)	\$36,282,325	\$13,418,775	\$22,863,550
Furniture Stores (NAICS 4421)	\$22,145,662	\$7,799,007	\$14,346,655
Home Furnishings Stores (NAICS 4422)	\$14,136,663	\$5,619,768	\$8,516,895
Electronics & Appliance Stores (NAICS 443/NAICS 4431)	\$41,936,516	\$28,628,309	\$13,308,207
Bldg Materials, Garden Equip. & Supply Stores (NAICS 444)	\$39,641,114	\$16,359,732	\$23,281,382
Building Material and Supplies Dealers (NAICS 4441)	\$36,469,199	\$16,277,391	\$20,191,808
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)	\$3,171,915	\$82,341	\$3,089,574
Food & Beverage Stores (NAICS 445)	\$321,920,043	\$210,173,631	\$111,746,412
Grocery Stores (NAICS 4451)	\$298,047,913	\$186,114,336	\$111,933,577
Specialty Food Stores (NAICS 4452)	\$6,930,595	\$10,245,662	-\$3,315,067
Beer, Wine, and Liquor Stores (NAICS 4453)	\$16,941,535	\$13,813,633	\$3,127,902
Health & Personal Care Stores (NAICS 446/NAICS 4461)	\$65,319,683	\$159,776,848	-\$94,457,165
Gasoline Stations (NAICS 447/NAICS 4471)	\$212,876,758	\$84,526,059	\$128,350,699
Clothing and Clothing Accessories Stores (NAICS 448)	\$63,456,014	\$14,904,723	\$48,551,291
Clothing Stores (NAICS 4481)	\$52,299,803	\$10,043,991	\$42,255,812
Shoe Stores (NAICS 4482)	\$6,095,960	\$1,343,380	\$4,752,580
Jewelry, Luggage, and Leather Goods Stores (NAICS 4483)	\$5,060,251	\$3,517,352	\$1,542,899
Sporting Goods, Hobby, Book, and Music Stores (NAICS 451)	\$14,031,590	\$9,180,474	\$4,851,116
Sporting Goods/Hobby/Musical Instrument Stores (NAICS 4511)	\$11,033,134	\$2,216,655	\$8,816,479
Book, Periodical, and Music Stores (NAICS 4512)	\$2,998,456	\$6,963,819	-\$3,965,363
General Merchandise Stores (NAICS 452)	\$116,365,817	\$53,199,945	\$63,165,872
Department Stores Excluding Leased Depts. (NAICS 4521)	\$44,336,315	\$12,603,890	\$31,732,425
Other General Merchandise Stores (NAICS 4529)	\$72,029,502	\$40,596,055	\$31,433,447
Miscellaneous Store Retailers (NAICS 453)	\$22,817,119	\$21,546,154	\$1,270,965
Florists (NAICS 4531)	\$1,155,465	\$2,765,768	-\$1,610,303
Office Supplies, Stationery, and Gift Stores (NAICS 4532)	\$5,156,872	\$7,062,743	-\$1,905,871
Used Merchandise Stores (NAICS 4533)	\$2,336,671	\$1,973,561	\$363,110
Other Miscellaneous Store Retailers (NAICS 4539)	\$14,168,111	\$9,744,082	\$4,424,029
Nonstore Retailers (NAICS 454)	\$85,424,397	\$39,728,422	\$45,695,975
Electronic Shopping and Mail-Order Houses (NAICS 4541)	\$65,121,199	\$9,519,101	\$55,602,098
Vending Machine Operators (NAICS 4542)	\$3,041,838	\$9,837,876	-\$6,796,038
Direct Selling Establishments (NAICS 4543)	\$17,261,360	\$20,371,445	-\$3,110,085
Food Services & Drinking Places (NAICS 722)	\$225,063,592	\$169,394,953	\$55,668,639
Full-Service Restaurants (NAICS 7221)	\$97,833,840	\$92,467,641	\$5,366,199
Limited-Service Eating Places (NAICS 7222)	\$99,774,329	\$48,727,045	\$51,047,284
Special Food Services (NAICS 7223)	\$22,571,383	\$18,496,131	\$4,075,252
Drinking Places - Alcoholic Beverages (NAICS 7224)	\$4,884,040	\$9,704,136	-\$4,820,096

Source: ESRI

Retail Use Feasibility

The retail use feasibility for the City Trade Area identifies a number of retail sectors that have an opportunity to expand in the City and recapture some of the spending that is currently leaking out of the City. Industries with the greatest potential for success include:

- Clothing Stores
- Limited Service Eating Places
- Sporting goods/Hobby/Musical Instrument Stores
- Grocery Stores

City of Rochester Retail Opportunities				
Industry Group	Retail Gap	Average Sales in Upstate NY	25% Recapture Rate	Number of Potential Businesses
Beer, Wine, and Liquor Stores (NAICS 4453)	\$3,127,902	\$780,630	\$781,976	1.00
Special Food Services (NAICS 7223)	\$4,075,252	\$832,219	\$1,018,813	1.22
Used Merchandise Stores (NAICS 4533)	\$363,110	\$62,477	\$90,778	1.45
Department Stores Excluding Leased Depts. (NAICS 4521)	\$31,732,425	\$5,448,496	\$7,933,106	1.46
Auto Parts, Accessories, and Tire Stores (NAICS 4413)	\$3,013,610	\$506,463	\$753,403	1.49
Other General Merchandise Stores (NAICS 4529)	\$31,433,447	\$3,862,761	\$7,858,362	2.03
Electronic Shopping and Mail-Order Houses (NAICS 4541)	\$55,602,098	\$5,398,027	\$13,900,525	2.58
Other Motor Vehicle Dealers (NAICS 4412)	\$8,864,395	\$753,010	\$2,216,099	2.94
Jewelry, Luggage, and Leather Goods (NAICS 4483)	\$1,542,899	\$127,552	\$385,725	3.02
Furniture Stores (NAICS 4421)	\$14,346,655	\$886,319	\$3,586,664	4.05
Lawn and Garden Equipment and Supplies (NAICS 4442)	\$3,089,574	\$190,491	\$772,394	4.05
Other Miscellaneous Store Retailers (NAICS 4539)	\$4,424,029	\$254,728	\$1,106,007	4.34
Full-Service Restaurants (NAICS 7221)	\$5,366,199	\$301,777	\$1,341,550	4.45
Shoe Stores (NAICS 4482)	\$4,752,580	\$244,955	\$1,188,145	4.85
Home Furnishings Stores (NAICS 4422)	\$8,516,895	\$412,221	\$2,129,224	5.17
Building Material and Supplies Dealers (NAICS 4441)	\$20,191,808	\$793,556	\$5,047,952	6.36
Grocery Stores (NAICS 4451)	\$111,933,577	\$3,867,700	\$27,983,394	7.24
Electronics & Appliance (NAICS 443/NAICS 4431)	\$13,308,207	\$435,449	\$3,327,052	7.64
Gasoline Stations (NAICS 447/NAICS 4471)	\$128,350,699	\$3,956,399	\$32,087,675	8.11
Automobile Dealers (NAICS 4411)	\$192,283,568	\$3,930,036	\$48,070,892	12.23
Sporting Goods/Hobby/Musical Instrument (NAICS 4511)	\$8,816,479	\$144,367	\$2,204,120	15.27
Limited-Service Eating Places (NAICS 7222)	\$51,047,284	\$732,580	\$12,761,821	17.42
Clothing Stores (NAICS 4481)	\$42,255,812	\$364,833	\$10,563,953	28.96

Source: ESRI

Legend

Trade Area Retail Gap: Equals sales leakage in Trade Area for industry group.

25% Recapture Rate: Equals 25% of the Retail Gap.

Average Sales in Upstate NY: Equals average sale per store of indicated type in Upstate NY including all counties except Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk and Westchester.

of Potential Businesses: Potential recapture divided by Upstate Average Sales.

Market Segmentation

Three of the five market segments that make up the Local Trade Area (described in the previous section) are within the top five segments that make up the City Trade Area, suggesting that consumer preferences within both trade areas are similar. As shown in the table below, city Dimensions and Metro Renters are the two segments that appear only in the City Trade Area's top five largest segments. These two segments replace the Inner City Tenants and Social Security Set segments identified in the analysis of the Local Trade Area. A description of these 'new' segments is provided below.

City of Rochester Tapestry Segmentation	
Tapestry Segment	Percent of Households
City Commons	14.7%
City Dimensions	12.4%
Metro City Edge	12.2%
Great Expectations	11.9%
Metro Renters	9.8%
Total	61.0%

Source: ESRI, Camoin Associates

City Dimensions (12.4%): The median age of residents of these neighborhoods is low at just 29.2 years. Households are diverse in their type and ethnicity. Most households are singles who live alone (31%), married-couple families (30%), or single-parent families (23%). The median household income is \$28,963. Some residents receive SSI (10%) and others receive public assistance (11%). Overall unemployment is high at 20% but those who do work are employed full-time or part-time typically in the service, manufacturing, and retail trade industry sectors. There is a mix of housing types in these neighborhoods but more than half of the residents live in a rented apartment unit in a multiunit building. These residents watch TV often, like gaming systems, are sports enthusiast and prefer to shop at discount stores and use store brands. They go out to eat and to the movies.

Metro Renters (9.8%): Metro Renters neighborhoods are found made up of young, educated singles who are starting their professional careers. To offset high rent rates, residents will often share housing. Households are either a single person or shared. With a median age of 33.6 years, these residents are younger than the US population and are more ethnically diverse. Median household income for these neighborhoods is \$56,311 and is rising. As one of the most educated segments, more than one in four *Metro Renters* have a graduate degree, one in three has a bachelor's degree and more than 80% have attended college. Employed residents primarily work in the professional and management occupations (60%). As renters, home products are a low priority for residents of these neighborhoods. They buy clothes from traditional stores or online, use the dry cleaners for work apparel and regularly work out at clubs. For entertainment, they go dancing, visit museums, attend classical or rock concerts and enjoy traveling.

Conclusions

In the analysis of both the Local Trade Area and the City Trade Area, several retail sectors experiencing significant sales leakage were identified. The analysis shows that there is demand for a variety of goods and services locally; the next step is for the project team to identify options that are suitable for within the BOA.

Based on the retail market data analyzed above and interviews with local stakeholders, one recommendation for a business that would likely succeed in the Local Trade Area is a co-op style grocery store. While a typical grocery store, such as Wegmans or Tops, would not fit in this part of the City, a smaller-sized co-op grocery store could be supported in this market. This would assist not only the

underserved population of the BOA, but would also be a great amenity for students at the University of Rochester. By recruiting volunteer labor in exchange for discounts on groceries, this type of establishment can also help to stimulate the local economy and can serve as a catalyst for other redevelopment projects in the area.

The Vacuum Oil BOA presents a one of a kind opportunity for the City of Rochester. Due to the limited accessibility of the site, a mixed-use type of development that has some self-sustaining qualities may be the most suitable use. For example, development of residential housing units would bring in new residents to the area and create a solid customer base for some small-scale retail and/or entertainment uses. As described above, target markets that would benefit the most from this type of development include upper-level college students, young professionals (particularly college employees), and empty nesters.

The physical geography of the site forms an arrangement of open space, wood cover, and waterfront that is uncommon in an urban setting. A compact mixed-use development would allow for efficient use of space while retaining the natural integrity of the site.

INDIVIDUALS INTERVIEWED

Thank you to the following individuals who provided valuable input for the market analysis:

- Adam Driscoll - DHD Ventures
- Damian Vanetti - Sterns & Wheeler
- Howard Konar - Konar Properties
- Jane Forbes, Environmental Specialist - City of Rochester
- Kent Gardner, Ph.D., President & Chief Economist - Center for Governmental Research
- Mark Gregor, Manager of Environmental Quality - City of Rochester
- Richard Pifer, Associate Vice President - University of Rochester
- Robert Amjad, Managing Director - Hemisphere Development, LLC
- Sal Tripi, Real Estate Professional - Realty USA: Rochester Office

APPENDIX C: SITE DEVELOPMENT ADVISORS REPORT

In a separate yet related project, the City of Rochester contracted with Hemisphere Advisors LLC on the redevelopment potential of the Vacuum Oil brownfield site and the revitalization of the BOA Study Area. Hemisphere Advisors LLC is a nationally recognized redeveloper and catalyst in bringing new life to vacant, abandoned and environmentally contaminated real estate. The following Appendix represents their findings regarding the redevelopment potential of the Vacuum Oil site and the long-term revitalization of the PLEX neighborhood.



HEMISPHERE

3 HEMISPHERE WAY

CLEVELAND, OH 44146-4216

216 464 4105

FAX 440 439 4134

www.hemispheredev.com

MEMORANDUM

To: Mark Gregor – City of Rochester
Andrew Raus – Bergmann Associates

From: Bob Amjad, Michael Greitzer, Todd Davis – Hemisphere Advisors LLC

Date: May 16, 2012

Re: Brownfield Opportunity Area Redevelopment Status

Overview

Under the terms of its agreement with the City, Hemisphere Advisors ("Hemisphere") has prepared a summary status memorandum on the Brownfield Opportunity Area ("BOA") and the Vacuum Oil site in the City of Rochester. Hemisphere has focused most time and attention on the Vacuum Oil site, as it represents a subset of the expanded BOA area that includes the largest land tracts and presents the greatest challenges and opportunities to environmental cleanup and redevelopment.

Hemisphere has met with or communicated with each of the major Former Vacuum Oil site property owners (prior and current) in an attempt to better understand their objectives. Most, but not all, of these owners are embroiled in a complex litigation focused on assessing responsibility for the eventual environmental remediation of the former Vacuum Oil Property. Hemisphere has endeavored to open the lines of communication for an expedited resolution to this litigation to facilitate the redevelopment process. These discussions remain ongoing. However, based on initial discussions, the parties appear open to a creative solution which will help resolve pending litigation involving the former Vacuum Oil site and facilitate redevelopment within the BOA. Nonetheless, a number of significant redevelopment challenges, as well as recommendations to overcome identified hurdles, are discussed briefly below.

Development Hurdles

At this time, a variety of high-level issues represent major obstacles to advancing the redevelopment opportunity for the Vacuum Oil Refinery portion of the BOA. At this stage, a commercially viable master plan that includes aspects of community input, as well as commercially viable projects, is critical to defining the redevelopment path. The plan must include a development catalyst that is most likely to be some type of **government/institutional** use. Economic and infrastructure conditions in the surrounding neighborhood complicate the ability for a purely commercial venture to lead new development in this neighborhood.

A cohesive, market-based redevelopment plan, which contemplates existing site constraints, will provide the main tool necessary to garner support for the project and the necessary funding. Certainly, a plan all stakeholders rally around is critical to these efforts. The plan would show potential site users and financing sources that a clear vision for the site's redevelopment exists. At this early stage, coordinated leadership is vital to integrating the development activities into a seamless and marketable redevelopment plan. Currently, due in large part to the existing Vacuum Oil site litigation and data gaps for the refinery site, the separate BOA land use planning process is only able to loosely link conceptual master planning to market-based development opportunities.

Closer examination of age and income demographics within 1 – 3 miles of the site are also required. Our preliminary review implies there is likely a significant college student age population that may mask the average incomes and also impacts average age. Better understanding both demographic parameters will give more insight into potential redevelopment options.

A realistic master plan will guide critical future studies, as well as the resolution of the following major development hurdles, listed below:

1. Critical Development Issues:

- **The Litigation.** The Vacuum Oil litigation has significantly reduced progress on the site redevelopment. Resolution of the litigation is critical to enabling the development to move forward. From our perspective, the City should try to assist the parties in resolving the litigation as quickly as possible.
- **Funding.** Given current economic constraints facing the City, it is imperative to begin researching alternative funding immediately. Federal and state sources may be available. Creative local approaches (such as land swaps and/or facility relocations to this neighborhood) may simultaneously provide a development catalyst, as well as funds for the redevelopment. A realistic (as opposed to conceptual) master plan and vision are fundamental tools in the fundraising process.
- **Economic Catalyst.** Given the condition (both physical and economic) of the surrounding neighborhood, an economic catalyst for the redevelopment also is critical. Currently, the best opportunity to bring a catalyst to this development is identifying either a government or institutional end user. Research should be conducted to locate potential end users. If we cannot identify either an institutional or government end user, it is likely that the development catalyst will follow the remediation process, not lead it. Therefore, it is imperative that the City leadership team and its advisory team build and accelerate momentum toward identifying a potential economic catalyst.

- **Environment Studies.** The lack of comprehensive environmental studies identifying the Vacuum Oil baseline environmental conditions is another critical hurdle. Comprehensive environmental due diligence regarding the site is a critical step in meaningfully evaluating potential redevelopment options, as well as litigation settlement options. Without this environmental baseline information, no one can either truly understand potential costs, risks, or formulate creative development plans to integrate remedial activities with a realistic development plan.

2. High Priority Development Issues:

- **Geotechnical Concerns.** The lack of geotechnical studies on the Vacuum Oil site is another significant hurdle. Comprehensive geotechnical studies are also critical to understanding redevelopment costs and constraints. Decades of fill activity have left areas of the site presumably unstable for development. Understanding where these areas are located, as well as potential site grading costs, are critical to cost estimates and planning.
- **100-Year Flood Plain.** Large portions of the Vacuum Oil site are currently designated to lie within the 100-year flood plain. Understanding options to manage and resolve this issue are critical for cost and timing estimates, as well as for any master planning exercise.
- **Master Plan.** A market-based master plan for both the Expanded BOA and the Vacuum Oil site that reflects both community input and site constraints (environmental, geotechnical, flood plain, etc.) will provide vision for the project and guide/refine cost estimating.
- **Disparate Ownership.** In all likelihood, it will take the City, or another experienced entity with the support of the City, to either facilitate the transfer or to take ownership directly of the parcels within the Vacuum Oil site, for a coordinated redevelopment to take place. Clearly identifying one team to lead this process will maximize the potential success and velocity of site redevelopment opportunities.
- **Infrastructure.** Based on the Master Plan, the City must gain a comprehensive understanding of all existing infrastructure, potential future infrastructure needs/constraints, and potential costs for relevant modifications.
- **Community Perception.** In all of the community meetings, concerns were raised about how redeveloping this site could lead to the neighborhood's gentrification. The redevelopment plan for the Vacuum Oil site, and the Expanded BOA, ultimately will need public input, if it is to gain the community's acceptance and support. However, tempering community enthusiasm with the economic realities associated with current site environmental and market

conditions is also important. Balancing these issues, likewise, should remain an important City goal.

Recommendations

Based on the foregoing analysis, there are a number of significant action steps the City can take now to expedite the redevelopment process. Therefore, our recommendations have been outlined as short-term, mid-term and long-term actions. These steps will lay the necessary groundwork to overcome a number of major development hurdles.

Short-Term Recommendations

- Spearhead Settlement Discussions. Lead the conversations to resolve the litigation, either directly or through a credible intermediary.
- Gain Comprehensive Site Control. Structure a plan to bring the major stakeholders into a collaborative ownership structure to help facilitate redevelopment (i.e. obtain comprehensive site control).
- Lead the Environmental Investigation of the Entire Vacuum Oil Site. Regardless of the litigation's path, the environmental investigation needs to proceed to identify baseline environmental conditions. Ultimately, the information generated through this process will be beneficial to help resolve the pending legal proceedings and help to formulate a preliminary redevelopment strategy.
- Conduct a Critical Assessment of the Surrounding Public Infrastructure. Regardless of the site's ultimate use, there will be some increased demand placed on the surrounding public utility and roadway infrastructure. It will be important to understand these challenges and obligations for both the City and the ultimate site developer, if other than the City.
- Lead the Geotechnical Investigation of the Entire Vacuum Oil Site. Regardless of the litigation's path, the geotechnical investigation needs to proceed. The information generated through this process will be critical in determining how much of the site is viable for vertical development and what costs would be involved in restructuring other areas for development.
- Property and Building Code Enforcement. In its currently blighted condition, the Vacuum Oil site represents a potential hazard to the neighborhood and its residents. The current property owners have an obligation to maintain their properties in a safe and reasonable manner pursuant to City code. Certain buildings may require demolition. Failure to enforce these code issues may allow blight conditions to worsen. Further, based on our experience, small changes in the neighborhood's look and feel will reap large benefits in the attitudes of local residents, and potential end users evaluating this redevelopment opportunity.
- Clear the Site of Overgrown Vegetation. This action could also be characterized as a property owner responsibility. Further, it will help contractors perform site

environmental investigation activities and should be viewed a good faith gesture from the City to the neighborhood.

- Increase Visible Patrols of the Area. The recent departure of Food Link has created a vacant and abandoned feel to the area. There are piles of recently dumped materials along the roadway, scrap tire piles and evidence of trespassing through the vacant structures. An increased police presence may deter these activities.

Mid-Term Recommendations

- Create Market-Based Master Plan. Create a site master plan utilizing the data generated above to ensure the vision meets site constraints and market conditions
- Develop Constraint Map. Develop a realistic constraint map of the Vacuum Oil site and the Expanded BOA area. Once the environmental and geotechnical site investigations have been completed, the next step would be to layer these areas of concerns on a site map. This information, along with the outline of the 100-year flood plain areas, will create an important development tool for any form of future site development. Once developed, this "constraint" map will provide the necessary information to guide efficient and safe site planning and redevelopment.
- Develop a Matrix of the Highest and Best Site Uses. Develop a matrix of the highest and best site uses. There has been ample positive public input generated to date about future site uses; Public Opportunities – Affordable Multifamily Housing, Community Services Hub, Police / Fire Substation, Charter or Magnate School, Entrepreneurial / Business Incubator, Interpretive Center, Public Park. Private Opportunities – Market Rate Housing, University Housing, University Research or Program Space, Light Industrial or Flex Work Space, Office Condominiums.
- Prioritize Data. Prioritize this data by using critical qualifiers such as site constraints, flood plain limitations, utility and roadway infrastructure, demand generation, market-based criteria, etc.
- Identify Economic Catalysts. As previously mentioned, realistic site redevelopment will need some form of economic catalyst to attract development. Evaluate the economic value of each potential use identified in a highest and best use matrix.
- Research and Identify Potential Project Funding Sources. Once again, using the highest and best use matrix, match the proposed development with potential funding sources, both public and private, that align with potential uses.
- Inform Legislators. Present the redevelopment opportunity to your state and federal legislative delegations. Once a development plan for the site has been determined, make sure that your state and federal legislative delegations are well informed about the project and its potential economic impact on the neighborhood and the City. While specific earmarks might be difficult, there are a variety of department-level grant programs that could provide a similar level of support.

- Facilitate Resolution of the DHD v. Exxon Litigation – This resolution likely would allow conversations and assessment work the litigation currently prevents from happening in a more expedited fashion.

Long-Term/Game Changers

- The Designation of the Expanded **BOA** as an Urban Renewal District – This designation enables various funding mechanisms potentially to be secured for the project.
- The Modification of the **Genesee Riverway Roils to Trails** pedestrian Bridge– If this pre-existing rail bridge, which is currently under construction for pedestrian reuse, could be modified to accommodate passenger vehicles, or the City could construct a passenger vehicle bridge connecting Flint Street and McLean Street, attracting private development and/or institutional interest in site development would be exponentially enhanced.
- The **Illumination** of the **Genesee Riverway** Trail and Bridge – Perceptions of safety are critical. The absence of lighting on the path near the BOA site and the bridge vastly limits the attractiveness of these major amenities.

Conclusions

Either the City itself, or another experienced entity with the City's support, must take an active leadership role to pursue the resolution of these complex issues impacting the Vacuum Oil site, as well as the less complex issues affecting the broader Expanded BOA, on parallel paths. The major property owners of the Vacuum Oil site seem open to creative ideas for resolving the current litigation – although the flexibility and realistic nature of these negotiations are hard to predict at this stage. However, with the right mediation, there appears to be a window of opportunity to resolve the litigation, even in the short-term. Certainly, it is equally possible that a lack of realism regarding the litigant's goals could result in a lengthy, costly and exhaustive litigation process. Additionally, both BOA and Vacuum Oil redevelopment expectations should be balanced with cost-effective site remediation efforts that protect human health and safety but that also may leave portions of the site underdeveloped from a traditional real estate view to mitigate cost and safety concerns.

The City can, however, take a number of immediate, concrete steps to transform the BOA process from conceptual to market-based. Yet, without necessary baseline site information, including environmental and geotechnical data, meaningful progress will be challenging in the short-term. The City should take these steps to improve current site conditions, (i.e. debris removal, site clearing, code enforcement) promptly. The City also should evaluate whether a public end use could be the catalyst for building increased project momentum.

APPENDIX D – ENVIRONMENTAL SITES

D-1 : Curbside Assessment Methodology and Findings

D-2: Brownfield Terminology Quick Reference Guide

D-3: Curbside Assessment Inventory

D-4: Environmental Site Profiles

APPENDIX D-1
CURBSIDE ASSESSMENT METHODOLOGY
AND FINDINGS

METHODOLOGY

Brownfields are typically commercial or industrial properties where mismanagement or improper handling of hazardous chemicals may have jeopardized the environmental integrity of the community, creating potential health risks. Sites that handle large amounts of chemicals or hazardous materials are subject to increased regulations from the NYS DEC and EPA due to increased risk for potential environmental contamination.

To better understand the environmental conditions and impacts associated with properties located within the BOA, a preliminary Environmental Site Assessment (ESA) was conducted for each vacant, industrial or commercial property located within the BOA. Facility and site information, maintained at the local, state and federal level, was reviewed to identify preliminary site conditions on each of these properties. Information was obtained from five main sources, including:

- **Spills Incident Database (NYS DEC)** - Maintained by the NYS DEC, this contains a listing of chemical and petroleum spills throughout New York State, dating back to 1978. Information includes the type and/or volume of contaminant spilled, media impacted, and the status of the spill.
- **Remedial Site Database (NYS DEC)** - This database contains listing of all properties that are currently enlisted in one of the DEC's remediation programs. The DEC programs are distinguished by property ownership, type of assistance and level of cleanup required.
- **Bulk Storage Database (NYS DEC)** - This database contains information on all Bulk Storage Facilities within New York State including petroleum bulk storage, chemical bulk storage, and major oil storage facilities. Facilities are classified by the volume of substance stored on-site.
- **Envirofacts Database (US EPA)** - Information contained within this database is used to identify whether or not a facility is certified to handle hazardous waste. The EPA utilizes specific testing methods to determine whether or not material is hazardous.
- **City of Rochester Dry Cleaning Facility Database** - The City of Rochester maintains a database with an inventory of all existing and former dry cleaning facilities located in the city. This list was utilized to identify additional properties eligible for curbside assessments.

Sites listed in any of the NYS DEC or EPA databases often warrant further attention because of historic contamination at the site, or because the nature of the facility has the potential for environmental contamination is greatly increased. Likewise, the City of Rochester and Monroe County Department of Health maintain property use information at the local level, which additionally served to inform the inventory process. Properties within the BOA boundary were first selected if they had a commercial, industrial or vacant land use. These properties may have had more rigorous land uses, or be more immediately poised for redevelopment based on vacancy status. Research was conducted through each of the sources listed above to identify those sites that may have had adverse environmental impacts.

Consideration was given to:

- whether or not environmental contamination has occurred;
- the media impacted (i.e. soil or groundwater); and
- the potential for future environmental contamination to occur (i.e. presence and condition of petroleum or chemical bulk storage).

A visual site assessment of each site with a documented environmental history, identified through this desktop research, was conducted on July 7, 2011 and July 27, 2011. The purpose of the site visits was to identify the presence or likely presence of any hazardous substances or petroleum products on the property that indicate an existing release, possible prior release, or the threat of future releases onto the property. Of the 106 commercial, industrial and vacant properties present within the study area, a total of 28 sites were identified as candidates for curbside assessments.

Information gathered during the ESAs and site visits was downloaded to a database designed specifically for the Vacuum Oil Brownfield Opportunity Area project. The database will streamline the City's access to property specific information, as well as enable modification of information as conditions within the city change. Community and planning factors relating to redevelopment potential were not taken into consideration during the preliminary assessment. The existing conditions of sites warranting curbside assessments are described further in the following subsections.

Spill Event Sites

Sites with documented spill events may warrant additional attention because of the type and amount of contaminant spilled, the media impacted, and because site activity may indicate the likelihood of future spills to occur. The NYS DEC classifies spill events as "Active" or "Closed." Active spills sites indicate that action is necessary through investigation or remediation prior to closure. Closed spill sites are those the DEC determines have been adequately addressed, but does not necessarily imply the site is fully remediated. The DEC retains the right to require further actions on a site, even following closure, if it determines in the future that remedial action is necessary.

Within the study area 13 sites have history of spill events, constituting 2.5 percent of properties located within the study area.

Remedial Site Database

Two properties (5 and 15 Flint Street), comprising 5.6 percent of the study area's parcel acreage, are currently enrolled in existing DEC remediation programs. Enrollment in any one of the DEC's programs is indicative of environmental contamination that must be addressed through Phase I, Phase II and/or Phase III Environmental Site Assessments. Fourteen additional properties have been identified as either possibly having been impacted by or as part of the original Vacuum Oil footprint. Each site associated with the Vacuum Oil Site is discussed in the body of the report (Section 3.2.3).

Bulk Storage Facilities

Bulk storage facilities are broken into three categories by the NYS DEC: Major Oil Storage Facilities (MOSF), Chemical Bulk Storage Facilities, and Petroleum Bulk Storage Facilities. Generally sites listed as such by the NYS DEC store over a certain threshold of product on-site. Sites with bulk storage may warrant additional attention because the threat of environmental contamination is higher due to the volume of material being handled on-site. If storage tanks are not properly maintained, leaks or spills may occur impacting the soil and possibly groundwater.

Within the study area, two sites were listed as Bulk Storage Facilities. These sites are located on 632 South Plymouth Avenue and 684-700 South Plymouth Avenue. The property located at 632 South Plymouth is a former fire station that is currently vacant, and the property located at 684-700 South Plymouth is an active gas station. Both sites are listed as petroleum bulk storage facilities and are depicted on Map 7 and further described in Appendix B-3.

City of Rochester Dry Cleaning Facility Database

The City of Rochester maintains a database with an inventory of all existing and former dry cleaning facilities located in the city. This list was utilized to identify additional properties eligible for curbside assessments. These properties were not listed in the other NYS DEC or EPA databases. Even so, locations where dry cleaning facilities existed warrant additional attention because of the types of chemicals and processes used on-site. Perchloroethylene (PERC), a substance commonly used in dry cleaning facilities and with recorded use at three sites identified within the BOA, may enter the air or soil and be transported through groundwater. Long-term exposure may have adverse health effects in humans (i.e. kidney or liver damage). The following sites within the BOA were identified as existing or former dry cleaning facilities:

- Stamps Cleaners (1155-1159 South Plymouth);
- Mac's Cleaning Center (761-793 South Plymouth); and
- Whiz Cleaners (676-680 South Plymouth).

Monroe County Department of Health

The Monroe County Department of Health (MCDOH) maintains a database of confirmed waste sites located within Monroe County. From this database, the City identified 65 additional properties classified as waste sites by the MCDOH. The majority of these properties are residential (72.3 percent) and were not evaluated as part of this effort. The remaining 18 sites were not included in any other databases, and were not subject to curbside assessments. Eight properties identified as MCDOH waste sites had additional environmental concerns and were evaluated as part of this study. These sites are summarized in Appendix A-3.

APPENDIX D-2
BROWNFIELD TERMINOLOGY QUICK
REFERENCE GUIDE

BROWNFIELD QUICK REFERENCE GUIDE

Curbside Assessments

Completed as part of this investigation, these are visual assessments that are intended to identify the types of activities taking place on a site and characteristics of a site that allude to prior environmental impact (i.e. the presence of groundwater monitoring wells). This assessment is conducted independently of the EPA certified standard practices for environmental site assessments, and is intended to be a preliminary investigation.

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment is a voluntary, non-intrusive investigation into historical uses of the site and visible evidence of environmental conditions based on publicly available records and sources. Generally this phase consists of:

- site inspection;
- interviews of site owners;
- review of available documents and databases; and
- consideration of potential impacts from adjacent properties.

Phase II Environmental Site Assessment

If a Phase I establishes that there is a recognized environmental condition, a Phase II ESA may be conducted to evaluate the potential impacts. Typically this includes sampling of environmental media which may include soil, air, groundwater and surface water.

Phase III Environmental Site Assessment

Based on the Phase II report, a Phase III may be determined necessary. A Phase III consists of:

- design and implementation of remediation measures; and
- necessary reports and permits to achieve cleanup of the site to site specific standards.

“Closed” Spill Event:

- Has been adequately addressed, according to the NYS DEC, and no further actions are required.
- In some cases, this does not indicate that the site has been fully remediated.
- A spill may be closed for administrative reasons, such as multiple reporting of the same incident.
- The NYS DEC retains the right to require additional remedial work in the future if it determines further action is necessary.

“Active” Spill Event:

- Indicates that actions are necessary prior to acceptance for closure (i.e. groundwater monitoring or soil removal and disposal).

Chemical Bulk Storage Facility: storage of any of the more than 1,000 chemicals identified by the DEC.

Major Oil Storage Facility: storage of more than 400,000 gallons of product.

Petroleum Bulk Storage Facility: has combined capacity of more than 1,100 gallons.

Hazardous Waste: The EPA has specific procedures in place for identifying hazardous wastes, which it defines as any waste that is potentially hazardous to health or the environment.

Large Quantity Hazardous Waste Generator: Any facility that is **certified** to generate more than 1,000 kilograms of hazardous waste per month.

APPENDIX D-3
CURBSIDE ASSESSMENT INVENTORY

Environmental Sites – Curbside Assessment Inventory

<i>Site Name / Address</i>	<i>Ownership</i>	<i>Environmental Concern</i>	<i>Curbside Assessment</i>	<i>Rationale & Recommendation</i>
Vacuum Oil Site (multiple properties)	Public / Private	Spill Event Site Remediation Program MCDOH Waste Site	Yes	This site has a history of rigorous use, spill events, and is currently listed in the NYS DEC BCP program. Groundwater and soil contamination are well documented. See section 3.2.3 of report for additional details regarding all properties part of the former Vacuum Oil Site.
Midtown Printing and Graphic (700 Exchange Street)	Private	Spill Event Site Former Coal Yard	Yes	This site has a spill event, which has subsequently been closed. Prior use was for evaluation of environmental samples.
Zwiegles Incorporated (675 South Plymouth Ave.)	Private	Spill Event Site	Yes	The site is currently home to a Neighborhood Mini Market. Curbside assessments revealed a vent pup located on the north side of the building. The site has a history of spill events in which hydraulic oil impacted both soil and groundwater. Spill events have subsequently been closed by the NYS DEC.
Nordon Real Estate (691 Exchange Street)	Private	Spill Event Site Hazardous Waste Generator MCDOH Waste Site	Yes	The Site has former spill events, which have subsequently been closed. Site visits indicate that tanks remain present on the property and a tank vent was visible from Exchange Street. Site use may result in future spill events. Additionally, this site was listed as a Hazardous Waste Generator, indicating it handles waste stringently regulated by the EPA.
Whiz Cleaners (676-680 S.Plymouth Ave.)	Rochester Housing Authority	Former dry cleaning facility	Yes	This site is a former dry cleaning facility that is currently a small parking lot with no buildings present. If redevelopment were to become feasible, it is likely additional environmental assessments would be warranted due to the type of chemicals used and the nature of such facilities.
Easy Food Market (684-700 S. Plymouth)	Private	PBS Facility, Spill Event Site, Active gasoline Station	Yes	Due to the volume of chemicals and/or hazardous waste that may be handled at the site and a history of multiple spill events, there is an elevated potential for environmental contamination.
Mac's Cleaning Center (761-793 S. Plymouth Ave.)	Private	Former dry cleaning facility	Yes	The site is a former dry cleaning facility that is currently an active strip mall. Curbside assessments indicated a vent visible on the roof of one of the tenants. It is likely the site would require further environmental assessments due to the type of chemicals and nature of activities associated with dry cleaners.
Stamps Cleaners (1155-1159 S. Plymouth Avenue)	Private	Vacant, former dry cleaning facility	Yes	This site is a former dry cleaning facility with a vacant mixed-use building on-site. Vents were visible from the basement. If redevelopment were to become feasible, additional environmental assessments would be warranted due to the type of chemicals used and the nature of such facilities.
Former Fire Hall (632 South Plymouth Ave)	City of Rochester	PBS Facility Filling Station	Yes	The site is a former PBS facility which expired in 3/19/2009. It's possible that historic use of petroleum products have jeopardized the environmental integrity of the property

Environmental Sites – Curbside Assessment Inventory

<i>Site Name / Address</i>	<i>Ownership</i>	<i>Environmental Concern</i>	<i>Curbside Assessment</i>	<i>Rationale & Recommendation</i>
872 South Plymouth Avenue	Private	Spill Event	Yes	This site had a spill event as recently as 2003 in which 80 gallons of diesel was released. Today, the site is vacant grassy area located at the corner of Flint and South Plymouth. It is unlikely further environmental evaluation would be necessary prior redevelopment or infill development initiatives at the site.
719-775 Exchange Street	City of Rochester	Spill Event Site Former Vacuum Oil Pipelines	Yes	This site is currently an open grassy area with a paved walking path through center. A spill occurred with an unknown amount of petroleum released, and was subsequently closed. It is not anticipated that further environmental investigation would be necessary on this site.
718 – 720 South Plymouth Avenue	Private	Spill Event Site	Yes	The site had a spill event when used as a private dwelling. Today site is used as a hair salon. It is unlikely that future remediation is necessary.
1 Cottage Street	Public	Known Petroleum Contamination MCDOH Waste Site	Yes	This site has been identified by the City of Rochester as a candidate for participation in the BCP. Drums used to store petroleum product have been found on-site, and sampling indicates petroleum based soil and groundwater contamination. The site is currently undeveloped.
69 Cottage Street	City of Rochester	Known Petroleum Contamination at surrounding properties MCDOH Waste Site	Yes	This site has been identified by the City of Rochester as a candidate for inclusion in the BCP. Petroleum based contamination is known to be present at surrounding properties. The site is currently undeveloped.
75 Cottage Street	City of Rochester	Known Petroleum Contamination at surrounding properties MCDOH Waste Site	Yes	This site has been identified by the City of Rochester as a candidate for inclusion in the BCP. Petroleum based contamination is known to be present at surrounding properties. The site is currently undeveloped.

APPENDIX D-4

ENVIRONMENTAL SITE PROFILES

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Former Fire Station
Strategic Site Number: I

Location: Property is located near the gateway to the BOA along South Plymouth Avenue; high visibility.

Current Use: Vacant

Occupancy: Vacant
Site Address: 0632 S PLYMOUTH AV
Tax ID: 1216122700
Acres: 0.519590631920709

Owner: CITY OF ROCHESTER

Brownfield: Yes
Zoning: R-3
Use Potential: TBD; Based on environmental investigations; potential commercial site



Property Information

Infrastructure: Yes

Comments: Property has access to all applicable infrastructure.

Proximity to Existing Transportation Networks:

Public Transit Access: Bus stop at adjacent senior housing complex

Road Access: South Plymouth Avenue

Pedestrian Access: Sidewalks along South Plymouth Avenue

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: public open space - Exchange Street Playground

S: Senior Housing Complex

E: public open space - Exchange Street Playground

W: Multifamily housing

Land Use History: Unknown

Notable Site Features: Property occupies a high visibility location near the Ford Street roundabout at the gateway to the BOA. Feasible reuse for commercial services to support adjacent multifamily and senior housing should be considered.

Building Information

Number of Buildings: 1

Gross Floor Area (sq. ft.): 0

Year Built: 1935

Stories: 1

Original Use: Former Fire Station

Current Use: Vacant

Condition: Fair

Building Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: Yes **Comments:** Unregulated PBS; expiration 3/19/2009. Listed as 649 Plymouth South Ave.

Spill Event Site: No **Status:** Not Applicable **Comments:**

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: Property may be eligible for Phase 1 or 2 ESA

Visual Observations from Curbside Site Assessment:

Other Notes:



One of many borings on-site



Rear of the building



Pad-mounted transformer



Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Exchange Street Playground Extension
Strategic Site Number: 2

Location: Located on the southeast side of Exchange Street.

Current Use: N/A

Occupancy: TBD
Site Address: 0780 EXCHANGE ST
Tax ID: 1216937500
Acres: 0.198585661290755

Owner: ROCHESTER URBAN RENEWAL AGENCY

Brownfield:
Zoning: Yes
Use Potential: R-1
Open space



Property Information

Infrastructure: Yes

Comments: Property contains large sanitary sewer to be avoided.

Proximity to Existing Transportation Networks:

Public Transit Access: approximately 1/8 mile to west

Road Access: No curb cuts onto Exchange Street

Pedestrian Access: potential sidewalk access from Exchange and trail in adjacent park

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Community Service

S: Residential

E: Community Service

W: Residential, public open space

Land Use History: former Genesee Valley Canal

Notable Site Features: Property has potential as part of expanded public open space connecting adjacent Exchange Street Playground with Violetta Street and Genesee River waterfront.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: N/A

Current Use: N/A

Condition: TBD

Building Notes: N/A

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: Yes **Status:** Closed **Comments:** Naptha found here during previous site work.

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: Site may be considered for Phase 1 or 2 ESA

Visual Observations from Curbside Site Assessment:

vacant field

Other Notes:

Pipelines document in this area related to Vacuum Oil site.



View from Exchange Street

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Exchange Street Playground Strategic Site Number: 2

Location: Property is located along the former Genesee Valley Canal between Ford Street and Exchange Street.

Current Use: N/A

Occupancy: Vacant
Site Address: 0719-775 EXCHANGE ST
Tax ID: 1216213901
Acres: 1.96582500840511

Owner: CITY OF ROCHESTER

Brownfield: Yes
Zoning: O-S
Use Potential: Public open space



Property Information

Infrastructure: Yes

Comments: Property contains large sanitary sewer to be avoided.

Proximity to Existing Transportation Networks:

Public Transit Access: Less than 1/8 mi

Road Access: No curb cuts along roadways

Pedestrian Access: Sidewalks along S. Plymouth and Exchange; site includes paved walking path

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Industrial

S: Residential

E: Community Services

W: Residential

Land Use History: Former Genesee Valley Canal.

Notable Site Features: Existing playground on site is in poor condition. Site could benefit from improved visibility and modest clearing to enhance safety and use. Potential expansion of park to the south/east being considered to link site with Genesee River waterfront.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: N/A

Current Use: N/A

Condition: TBD

Vacuum Oil BOA

Brownfield Site Profile Form

Building Notes: N/A



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: Yes **Status:** Closed **Comments:** Spill #9400185. Unknown amount of petroleum spilled with soil impact. Closed 8/6/2003.

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence:

Visual Observations from Curbside Site Assessment:

Other Notes:



View towards Exchange St



View towards S Plymouth

Vacuum Oil BOA Brownfield Site Profile Form



View towards Exchange St



Playground and picnic area

Vacuum Oil BOA Brownfield Site Profile Form

 **Bergmann**
associates
architects // engineers // planners



Vacuum Oil BOA Brownfield Site Profile Form



Site Name: I Flora St
Strategic Site Number: 3

Location: Vacant lot land locked behind 1.5 Flora Street

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0001 FLORA ST
Tax ID: 1216935501
Acres: 0.0253713958858353

Owner: PROVIDENCE SOUTH PLYMOUTH HSG

Brownfield: No
Zoning: R-1
Use Potential: Residential infill when combined with adjacent lands.



Property Information

Infrastructure: No

Comments: It is doubtful that this land locked property has access to any utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Property is within 1/8 mile of bus stop

Road Access: No

Pedestrian Access: No

Rail Access: No

Water Access: No

Other Access: Not Applicable

Adjacent uses:

N: Residential

S: Residential

E: Residential

W: Residential

Land Use History: Single family residential

Notable Site Features: Property is within Strategic Site 3.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:**

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 1.5 Flora Street
Strategic Site Number: 3

Location: Vacant property located on east side of Flora St

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0001.5 FLORA ST
Tax ID: 1216935502
Acres: 0.0368882892374222

Owner: HOLLAND LOUIS & DEBORAH E

Brownfield: No
Zoning: R-1
Use Potential: Residential infill if combined with adjacent lands



Property Information

Infrastructure: Yes

Comments: It is assumed the property has access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile of bus stop

Road Access: Curb cut on Flora Street

Pedestrian Access: Sidewalks on Flora Street

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Residential

S: Residential

E: Residential

W: Residential

Land Use History: Single/Multi family residential

Notable Site Features: Property is within Strategic Site 3.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use:

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:**

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 2 Flora Street
Strategic Site Number: 3

Location: Vacant property on west side of Flora St.

Current Use: N/A

Occupancy: Vacant
Site Address: Flora St
Tax ID: 1216936300
Acres: 0.0828872763019223

Owner:

Brownfield: No
Zoning: R-1
Use Potential: Residential infill



Property Information

Infrastructure: Yes

Comments: It is assumed that the property has access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: Curb cut on Flora St.

Pedestrian Access: Sidewalk on Flora St.

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Residential

S: Residential

E: Residential

W: Residential

Land Use History: Single family residential as recently as 2007.

Notable Site Features: Property is within Strategic Site 3.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: N/A

Current Use: N/A

Condition: Not Applicable

Building Notes: N/A

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:**

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 17-19 Doran Street
Strategic Site Number: 3

Location: Property is located adjacent to the vacant

Current Use: N/A

Occupancy: Vacant
Site Address: 0017-19 DORAN ST
Tax ID: 1216123200
Acres: 0.0925841678732807

Owner: CITY OF ROCHESTER

Brownfield: No
Zoning: R-1
Use Potential: Residential infill



Property Information

Infrastructure: Yes

Comments: Site is anticipated to have access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Less than 1/8 mi to west

Road Access: Doran Street curb cut

Pedestrian Access: Sidewalks along Doran Street

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Residential/commercial

S: Residential

E: Residential

W: Residential

Land Use History: single family residential home until demolition in 2008/2010

Notable Site Features: Property is part of Strategic Site 3, and is envisioned to become residential infill development.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: N/A

Current Use: N/A

Condition: TBD

Building Notes: N/A

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:**

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 28 Vilotetta Street
Strategic Site Number: 3

Location: Vacant property located on north side of street.

Current Use: N/A

Occupancy: Vacant
Site Address: 0028 VIOLETTA ST
Tax ID: 1216936603
Acres: 0.0938707995341456

Owner: CITY OF ROCHESTER

Brownfield: No
Zoning: R-1
Use Potential: Residential infill



Property Information

Infrastructure: Yes

Comments: It is assumed that property has access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mi of bus stop

Road Access: Curb cut onto Violetta Street

Pedestrian Access: Sidewalks along Violetta

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Residential

S: Residential/Vacant

E: Residential

W: Residential

Land Use History: Single/Multi family residential

Notable Site Features: Property is within Strategic Site 3.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: N/A

Current Use: N/A

Condition: TBD

Building Notes: N/A

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:**

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 718-720 S. Plymouth Avenue
Strategic Site Number: 3

Location: High visibility site along South Plymouth Avenue

Current Use: N/A

Occupancy: Vacant
Site Address: 0718-720 S PLYMOUTH AV
Tax ID: 1216123701
Acres: 0.183545310013612

Owner: ETA RHO CHAPTER OF ALPHA PHI

Brownfield: Yes
Zoning: R-1
Use Potential: Single or multifamily residential; possibly low intensity commercial



Property Information

Infrastructure: Yes

Comments: Assumed site has access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Less than 1/8 mi.

Road Access: Curb Cut along Doran Street

Pedestrian Access: Sidewalks along Doran Street and S. Plymouth Avenue.

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Commercial/gas station

S: Residential

E: Residential

W: Residential/Commercial

Land Use History:

Notable Site Features: Property is part of Strategic Site 3, which envisions the long-term redevelopment of the Doran/Violetta block.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: N/A

Current Use: N/A

Condition: Not Applicable

Building Notes: N/A

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: Yes **Status:** Closed **Comments:** Spill #9406903. Abandoned drums with unknown material at vacant private dwelling. Spill closed 12/13/1994.

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:



Vacant lot and hair salon



View from the southwest

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 754 South Plymouth Avenue
Strategic Site Number: 3

Location: Vacant lot located along South Plymouth Avenue.

Current Use: N/A

Occupancy: Vacant
Site Address: 0754 S PLYMOUTH AV
Tax ID: 1216937300
Acres: 0.105570190777634

Owner: PROVIDENCE SOUTH PLYMOUTH HSG

Brownfield: No
Zoning: R-1
Use Potential: Residential infill



Property Information

Infrastructure: Yes

Comments: Property is assumed to have access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile

Road Access: No curb cut along South Plymouth.

Pedestrian Access: Sidewalks along South Plymouth.

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Residential

S: Residential

E: Residential

W: Commercial/retail

Land Use History: Single family residence

Notable Site Features: Property may be linked to adjacent multifamily residential redevelopment and unavailable for future infill.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: N/A

Current Use: N/A

Condition: TBD

Building Notes: N/A

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:**

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 835 Exchange Street
Strategic Site Number: 3

Location: Narrow vacant lot on west side of Exchange Street.

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0835 EXCHANGE ST
Tax ID: 1216935101
Acres: 0.0404184162368727

Owner: WILSON OSCAR & CONSTANCE

Brownfield: No
Zoning: R-1
Use Potential: Lot is very narrow. Under common ownership with 831 Exchange Street.



Property Information

Infrastructure: TBD

Comments: It is unknown if this lot has an existing water connection or sewer lateral.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: No curb cut to Exchange Street

Pedestrian Access: Sidewalks on Exchange Street

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Residential

S: Vacant

E: Residential

W: Residential

Land Use History: Single family residential; vacant since at least 2007.

Notable Site Features: This property is part of Strategic Site 3.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 837 Exchange Street
Strategic Site Number: 3

Location: Narrow vacant lot

Current Use:

Occupancy: Vacant
Site Address: 0837 EXCHANGE ST
Tax ID: 1216935102
Acres: 0.0401224659508801

Owner: MASSACHI BIJAN

Brownfield: No
Zoning: R-1
Use Potential: Lot is very narrow. Under common ownership with 837 Exchange Street.



Property Information

Infrastructure: Yes

Comments: The property is assumed to have access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: Curb cut onto Exchange Street

Pedestrian Access: Sidewalks on Exchange Street

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Residential

S: Residential

E: Residential

W: Residential

Land Use History: Unknown; vacant since at least 2007.

Notable Site Features: Property is within Strategic Site 3.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use:

Current Use:

Condition: TBD

Building Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Martin Luther King Plaza
Strategic Site Number: 4

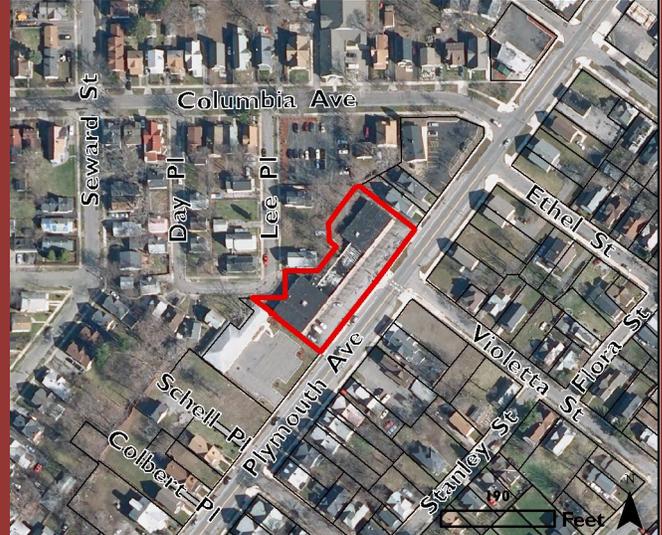
Location: Located on west side of South Plymouth Avenue

Current Use: Strip commercial

Occupancy: Occupied
Site Address: 761-793 S PLYMOUTH AV
Tax ID: 121.69-2-44.001
Acres: 0.667669937687286

Owner: Jones Tracey W

Brownfield: No
Zoning: C-1
Use Potential: Potential commercial, retail or mixed use



Property Information

Infrastructure: Yes

Comments: Property is assumed to have access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/10 mile of bus stop

Road Access: 2 curb cuts on South Plymouth Avenue

Pedestrian Access: Sidewalks along South Plymouth Avenue

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Residential

S: Commercial

E: Residential

W: Residential

Land Use History: Unknown

Notable Site Features: Property has been noted by public for potential redevelopment. Site is considered a prime location for a future neighborhood grocery.

Building Information

Number of Buildings: 1

Gross Floor Area (sq. ft.): 11400

Year Built: 1970

Stories: 1

Original Use: Unknown

Current Use: Strip commercial

Condition: Poor

Building Notes: Building and parking lot are in poor condition.

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not applicable.

Spill Event Site: No **Status:** Not Applicable **Comments:** Not applicable.

Hazardous Waste: No **Comments:** Not applicable.

DEC Remediation Site: No **Comments:** Not applicable.

Environmental Due Diligence: None.

Visual Observations from Curbside Site Assessment:

Other Notes:



View from across the street



View from across the street

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Metropolitan Limousines
Strategic Site Number: 4

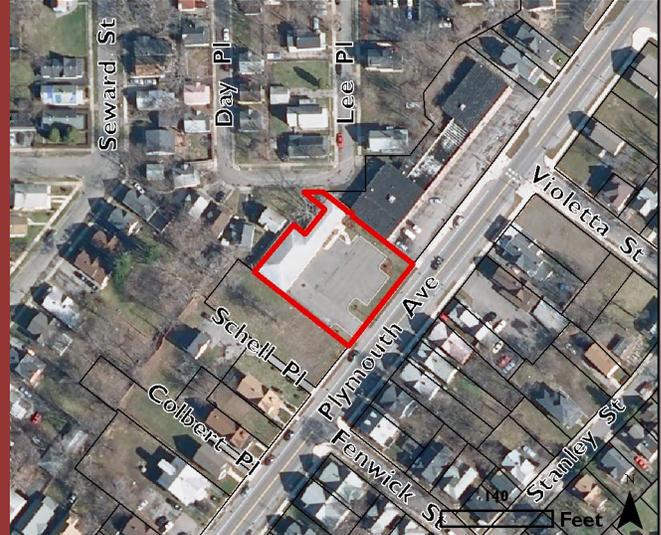
Location: Commercial property with block building; several garage doors along east side.

Current Use: Warehouse or storage

Occupancy: Occupied
Site Address: 0801-811 S PLYMOUTH AV
Tax ID: 1216924402
Acres: 0.433545420550429

Owner: KAMATH AJAY C

Brownfield: No
Zoning: C-1
Use Potential: Potential commercial, retail or mixed use.



Property Information

Infrastructure: Yes

Comments: Property is assumed to have access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/10 mile to bus stop

Road Access: Curb cut on Exchange Street

Pedestrian Access: Sidewalks on Exchange Street

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Commercial/retail

S: Vacant

E: Residential

W: Residential

Land Use History: Commercial

Notable Site Features: Property is part of Strategic Site 4.

Building Information

Number of Buildings: 1

Gross Floor Area (sq. ft.): 5100

Year Built: 1940

Stories: 1

Original Use: Unknown

Current Use: Warehouse or storage

Condition: Fair

Building Notes: Property is currently functioning as a limousine business.

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None . Potential high risk use.

Visual Observations from Curbside Site Assessment:

Warehousing

Other Notes:

High risk warehouse use code

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: South Plymouth Vacant I
Strategic Site Number: 4

Location: Vacant lot on west side of South Plymouth Avenue

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0815-819 S PLYMOUTH AV
Tax ID: 1216924501
Acres: 0.273677690005293

Owner: CITY OF ROCHESTER

Brownfield: No
Zoning: C-1
Use Potential: Commercial, retail or multifamily



Property Information

Infrastructure: Yes

Comments: Site is assumed to have access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/10 mile to bus stop

Road Access: Curb cut on South Plymouth

Pedestrian Access: Sidewalks on South Plymouth

Rail Access: No

Water Access: No

Other Access: N/A

Adjacent uses:

N: Commercial

S: Residential

E: Residential

W: Residential

Land Use History: Unknown

Notable Site Features: Property is part of Strategic Site 4.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Vacant lot

Other Notes:

High risk use code

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Exchange Street Parking Lot
Strategic Site Number: 5

Location: Property located at corner of Exchange Street and Fenwick Street

Current Use: Not Applicable

Occupancy: Underutilized
Site Address: 0887 EXCHANGE ST
Tax ID: 1216941600
Acres: 0.368629344511256

Owner: CANFIELD & TACK INC

Brownfield: No
Zoning: R-1
Use Potential: Residential, commercial, mixed use infill



Property Information

Infrastructure: TBD

Comments: It is unclear if this site has any existing utility services; though new service is readily available along Exchange Street or Fenwick Street.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/10 mile of bus stop

Road Access: Curb cut on Exchange Street

Pedestrian Access: Sidewalk access from Exchange Street

Rail Access: No

Water Access: No

Other Access: Within 1/8 mile of waterfront

Adjacent uses:

N: Residential

S: Industrial

E: Industrial/brownfield

W: Residential, vacant

Land Use History: Formerly single family residential until late 1960s.

Notable Site Features: Property is part of Strategic Site 5.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:



View north from Fenwick St



View across lot to Fenwick St

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Canfield and Tack
Strategic Site Number: 6

Location: Property spans from South Plymouth Avenue to Exchange Street, Flint Street to Fenwick Street.

Current Use: Commercial printing

Occupancy: Occupied
Site Address: 0925 EXCHANGE ST
Tax ID: 1216944401
Acres: 1.9309550756416

Owner: CANFIELD & TACK INC

Brownfield: No
Zoning: M-1
Use Potential: Industrial, commercial mixed use



Property Information

Infrastructure: Yes

Comments: Fully operational building.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/10 mile of bus stop

Road Access: Property has access to South Plymouth Avenue and Exchange Street.

Pedestrian Access: Sidewalk access from South Plymouth Avenue and Exchange Street

Rail Access: No

Water Access: No

Other Access: Within 1/8 mile of waterfront

Adjacent uses:

N: Residential

S: Industrial, commercial

E: Industrial/brownfield

W: Residential

Land Use History: Formerly owned by Vacuum Oil, yet never developed as part of adjacent complex.

Notable Site Features: Property is included in Strategic Site 6.

Building Information

Number of Buildings: 4

Gross Floor Area (sq. ft.): 41000

Year Built: 1960

Stories: 1

Original Use: Unknown

Current Use: Commercial printing

Condition: Good

Building Notes: Property has been regularly improved through building expansions since the early 1960s.

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:



Main entrance on Exchange St.

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Turn Key Operations
Strategic Site Number: 7

Location: Property located in southeast corner of Exchange and Flint Streets intersection.

Current Use: Office/warehouse

Occupancy: Occupied
Site Address: 0950 EXCHANGE ST
Tax ID: 1217715400
Acres: 0.780162340808923

Owner: VSJ LLC

Brownfield: Yes
Zoning: M-1
Use Potential: Commercial/light industrial mixed use



Property Information

Infrastructure: Yes

Comments: It is assumed that this property has access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/10 mile of bus stop

Road Access: Access to Exchange Street and Flint Street

Pedestrian Access: Sidewalks on Exchange Street

Rail Access: No

Water Access: No

Other Access: Within 1/10 mile of waterfront

Adjacent uses:

N: Industrial

S: Vacant/brownfield, residential

E: Vacant/brownfield

W: Vacant, residential

Land Use History: Formerly part of Vacuum Oil refinery operations.

Notable Site Features: Property is part of Strategic Site 7, which includes vacant lot across the street.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 1965

Stories: 0

Original Use: Unknown

Current Use: Office/warehouse

Condition: TBD

Building Notes: The site had a structure as part of Vacuum Oil operations. Unknown if this structure dates to that period.

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: Yes **Status:** TBD **Comments:** Multiple spill events. Unknown amounts of petroleum spilled with soil and groundwater impact. Several spills remain active.

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: Potential candidate for Phase 1/Phase 2 ESA

Visual Observations from Curbside Site Assessment:

Other Notes:

Historic maps indicate several large tanks on site behind the building. Known environmental contamination on adjacent properties should be considered during redevelopment contingency planning.



View from Flint St



One of the monitoring wells

Vacuum Oil BOA Brownfield Site Profile Form



Drum and possible propane tank



View from Exchange St

Vacuum Oil BOA Brownfield Site Profile Form

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associates
architects // engineers // planners



Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Vacant Lot - Community Garden
Strategic Site Number: 7

Location: Property is located at the intersection of Exchange and Flint Streets.

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0965 EXCHANGE ST
Tax ID: 1217710600
Acres: 0.178594561347334

Owner: FOODLINK FOUNDATION INC

Brownfield: No
Zoning: R-1
Use Potential: Commercial, residential infill



Property Information

Infrastructure: No

Comments: It is assumed that this property has no existing water service, sewer laterals, or gas/electric service; though new connections are likely possible along Flint Street or Exchange Street.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile of bus stop

Road Access: No access from Flint Street or Exchange Street

Pedestrian Access: Sidewalks along Flint Street and Exchange Street

Rail Access: No

Water Access: No

Other Access: Within 1/8 mile of waterfront

Adjacent uses:

N: Industrial, residential

S: Commercial/warehouse

E: Industrial/brownfield

W: Residential

Land Use History: No structures in historic record; potentially a parking lot for adjacent uses.

Notable Site Features: Property is part of Strategic Site 7.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Property sits well above street grade

Other Notes:



View looking east



View from Exchange St



View to west

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 91 Violetta Street
Strategic Site Number: 8

Location: Site located on south side of Violetta Street

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0091 VIOLETTA ST
Tax ID: 1216933600
Acres: 0.138835454352935

Owner: JOHN K AND ASSOCIATES INC

Brownfield: No
Zoning: R-1
Use Potential: Commercial, residential mixed use



Property Information

Infrastructure: TBD

Comments: Unknown if this site has any active utility services.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile of bus stop

Road Access: No curb cut on Violetta

Pedestrian Access: Sidewalks along Violetta Street

Rail Access: No

Water Access: No

Other Access: Within 1/10 mile of waterfront

Adjacent uses:

N: Residential

S: Industrial/brownfield

E: Vacant

W: Residential

Land Use History: Single family residential

Notable Site Features: Property is part of Strategic Site 8.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: Dependent upon outcome of adjacent investigations.

Visual Observations from Curbside Site Assessment:

Property is essentially functioning as part of the larger adjacent warehouse property, absent of formal resubdivision process.

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 846 Exchange Street
Strategic Site Number: 8

Location: High visibility corner lot at Exchange and Violetta Streets

Current Use: Not applicable

Occupancy: Vacant
Site Address: 0846 EXCHANGE ST
Tax ID: 1216934000
Acres: 0.0799234753705581

Owner: CITY OF ROCHESTER

Brownfield: No
Zoning: R-1
Use Potential: Residential, commercial or mixed use infill development



Property Information

Infrastructure: Yes

Comments: It is assumed property has access to all applicable site utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: Curb cut on Violetta Street

Pedestrian Access: Sidewalks on Exchange and Violetta

Rail Access: No

Water Access: No

Other Access: Within 1/10 mile of waterfront

Adjacent uses:

N: Residential

S: Residential/Industrial

E: Vacant

W: Residential

Land Use History: Single family residential

Notable Site Features: Property is part of Strategic Site 8.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not applicable

Current Use: Not applicable

Condition: TBD

Building Notes: Not applicable

Vacuum Oil BOA Brownfield Site Profile Form

 **Bergmann**
associates
architects // engineers // planners



Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Former Vacuum Oil Site & Sears Warehouse
Strategic Site Number: 8

Location: Property located on Exchange Street and Violetta Street

Current Use: Vacant, no tenants

Occupancy: Vacant
Site Address: 0920 EXCHANGE ST
Tax ID: 1216933704
Acres: 3.51958158189576

Owner: JOHN K AND ASSOCIATES INC

Brownfield: Yes
Zoning: M-1
Use Potential: Commercial mixed use



Property Information

Infrastructure: Yes

Comments: Site is assumed to have access to all applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile of bus stop

Road Access: Loading dock and curb cut on Exchange Street and curb cut on Violetta Street

Pedestrian Access: Sidewalks along Exchange Street and Violetta Street

Rail Access: No

Water Access: No

Other Access: Less than 500 feet to waterfront

Adjacent uses:

N: Residential, vacant

S: Industrial/brownfield

E: Vacant

W: Residential, commercial

Land Use History: Part of former Vacuum Oil refinery

Notable Site Features: Property is part of strategic site 8.

Building Information

Number of Buildings: 2

Gross Floor Area (sq. ft.): 150000

Year Built: 1930

Stories: 3

Original Use: 3-story structure part of original Vacuum Oil site; warehouse constructed in 1930s.

Current Use: Vacant, no tenants

Condition: Poor

Building Notes: Properties are in poor condition and have significant deficiencies.

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: Yes **Status:** Closed **Comments:** Multiple spill events and abandoned drums. Diesel with soil impact. All spill events closed.

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: Phase I/II ESA

Visual Observations from Curbside Site Assessment:

Other Notes:

Property was part of original Vacuum Oil refinery operations, with significant above ground tanks documents in the historical record. Site may require extensive remediation.



View from Violetta St



Unknown elevated tank

Vacuum Oil BOA Brownfield Site Profile Form



View from Exchange St



View from Exchange St

Vacuum Oil BOA Brownfield Site Profile Form

 **Bergmann**
associates
architects // engineers // planners



Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Former Vacuum Oil & Foodlink Building Strategic Site Number: 9

Location: Located at corner of Exchange Street and Fenwick Street

Current Use: Buildings are currently vacant

Occupancy: Vacant
Site Address: 0936 EXCHANGE ST
Tax ID: 1217710700
Acres: 1.956376778117

Owner: FOODLINK FOUNDATION INC

Brownfield: Yes
Zoning: M-1
Use Potential: Light industrial, commercial, business incubator, live-work



Property Information

Infrastructure: Yes

Comments: Buildings were fully functional recently, therefore assumed that all utilities are in place.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile of bus stop

Road Access: Curb cut along Flint Street

Pedestrian Access: Sidewalks along Exchange Street frontage only

Rail Access: No

Water Access: No

Other Access: Within 1/10 mile of waterfront

Adjacent uses:

N: Industrial/brownfield

S: Vacant/brownfield

E: Industrial/brownfield

W: Commercial, vacant

Land Use History: Part of Vacuum Oil refinery site.

Notable Site Features: Property is part of Strategic Site 9.

Building Information

Number of Buildings: 3

Gross Floor Area (sq. ft.): 150000

Year Built: 1920

Stories: 3

Original Use: Part of former Vacuum Oil refinery operations

Current Use: Buildings are currently vacant

Condition: Poor

Building Notes: Building to the north is in extremely poor condition and may not be salvageable.

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: Phase I/II ESA

Visual Observations from Curbside Site Assessment:

Foodlink building at corner is very prominent in the neighborhood.

Other Notes:



View looking east



View to north from Flint St



View from Flint St



View from Exchange St

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Former Vacuum Oil Site
Strategic Site Number: 10

Location: Property is at the end of Flint Street on the north side

Current Use: Warehouse

Occupancy: Occupied
Site Address: 0022 FLINT ST
Tax ID: 1217710800
Acres: 0.929096316950283

Owner: FOODLINK FOUNDATION INC

Brownfield: Yes
Zoning: M-1
Use Potential: Commercial mixed use



Property Information

Infrastructure: Yes

Comments: Functioning building assumed to have access to all utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: Driveway access from Flint Street

Pedestrian Access: No sidewalks

Rail Access: No

Water Access: No

Other Access: Less than 500 feet to waterfront

Adjacent uses:

N: Industrial/brownfield

S: Open space, industrial

E: Open space

W: Industrial/brownfield

Land Use History: Part of former Vacuum Oil refinery operations.

Notable Site Features: Property is Strategic Site 10.

Building Information

Number of Buildings: 1

Gross Floor Area (sq. ft.): 25600

Year Built: 1920

Stories: 1

Original Use: Part of Vacuum Oil refinery operations

Current Use: Warehouse

Condition: Fair

Building Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: Yes **Status:** Closed **Comments:** Spill #8706537. Unknown amount of #2 fuel oil impacting groundwater. Closed 11/4/1987.

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: Phase I/II ESA

Visual Observations from Curbside Site Assessment:

Other Notes:



View from the south



View along east side



Pole-mounted transformers



View of fence and beyond

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 15 Flint Street
Strategic Site Number: 11

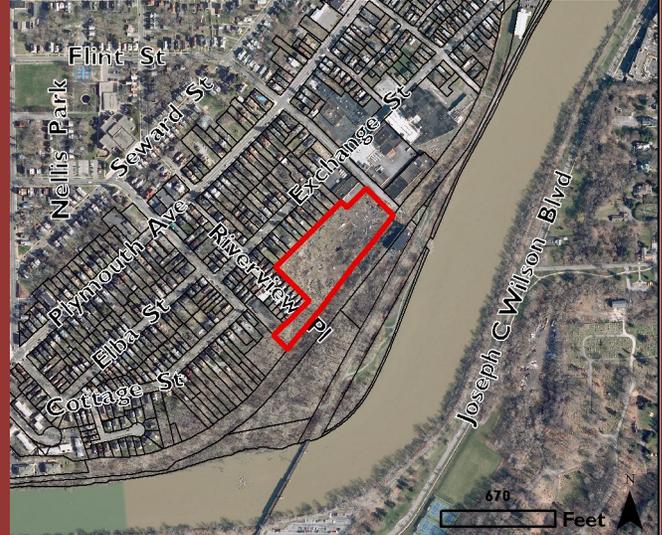
Location: Property located at the end of Flint Street on the south side

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0015 FLINT ST
Tax ID: 1217711100
Acres: 5.54722673843361

Owner: DHD Ventures New York LLC

Brownfield: Yes
Zoning: R-1
Use Potential: Commercial mixed use, open space



Property Information

Infrastructure: No

Comments: It is assumed property has no active utility services.

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: Driveway access from Flint Street only

Pedestrian Access: No sidewalks

Rail Access: No

Water Access: No

Other Access: Within 500 feet of waterfront

Adjacent uses:

N: Industrial

S: Open space

E: Open space

W: Residential

Land Use History: Part of former Vacuum Oil refinery

Notable Site Features: Property is part of Strategic Site 11.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: Yes **Status:** Closed **Comments:** Spill #0750738. Unknown material spilled impacting soil. Closed 11/3/2008.

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: Yes **Comments:** Brownfield Cleanup Program, Classification A

Environmental Due Diligence: Phase II ESA

Visual Observations from Curbside Site Assessment:

Other Notes:

Property has been subject of extensive environmental investigations, which indicate soil and groundwater contamination by heavy metals, VOCs, SVOCs and PCBs.



View of scrapyard entrance



Building entrance



View from the north



View west from trail

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Former Genesee Valley Canal
Strategic Site Number: 12

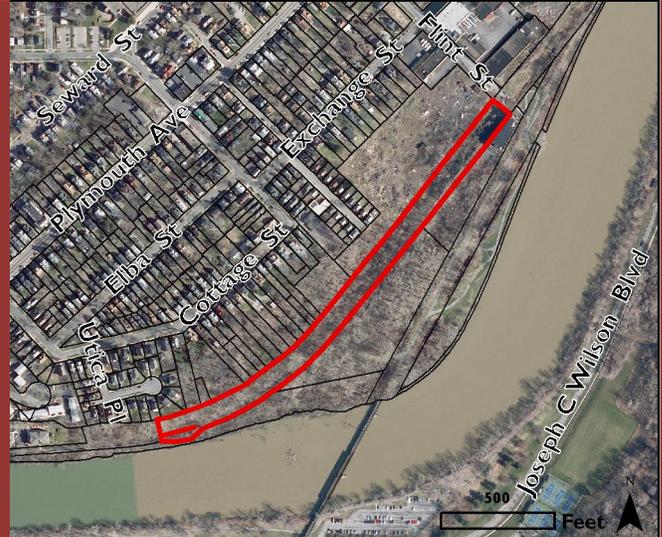
Location: Property is located parallel with the Genesee River east of Flint Street

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 1315 South Plymouth Avenue
Tax ID: 135.35-118.04
Acres: 4.77652459074106

Owner: City of Rochester

Brownfield: TBD
Zoning: R-1
Use Potential: Open space



Property Information

Infrastructure: No
Comments: Not Applicable

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop
Road Access: Potential access from Flint Street and Violetta Street
Pedestrian Access: Portions of trail are adjacent to and accessible from the Genesee Riverway Trail
Rail Access: No
Water Access: No
Other Access: Within 50 feet of the waterfront in certain locations

Adjacent uses:

N: Industrial
S: Open space
E: Vacant, open space, industrial
W: Residential

Land Use History: Genesee Valley Canal, Pennsylvania Railroad

Notable Site Features: Property is part of Strategic Site 12.

Building Information

Number of Buildings: 0
Gross Floor Area (sq. ft.): 0
Year Built: 0
Stories: 0
Original Use: Not Applicable
Current Use: Not Applicable
Condition: Not Applicable
Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not applicable

Hazardous Waste: No **Comments:** Not applicable

DEC Remediation Site: Yes **Comments:** Conditional involvement - subject to future BCP application by the City of Rochester.

Environmental Due Diligence: Phase II ESA

Visual Observations from Curbside Site Assessment:

Property is being utilized for illegal dumping.

Other Notes:

Site possibly impacted by Vacuum Oil site.



View north from Flint St

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 940 Exchange Street
Strategic Site Number: 13

Location: Property is located behind 7 Flint Street

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0940 EXCHANGE ST
Tax ID: 1217710900
Acres: 0.0427054967815313

Owner: CITY OF ROCHESTER

Brownfield: TBD
Zoning: R-1
Use Potential: Open space



Property Information

Infrastructure: No

Comments: It is assumed this site has no access to utilities

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: No roadway access

Pedestrian Access: Accessible from Genesee Riverway Trail

Rail Access: No

Water Access: No

Other Access: Site is within 200 feet of Genesee River

Adjacent uses:

N: Open space

S: Open space

E: Open space

W: Open space

Land Use History: Part of former Vacuum Oil refinery operations

Notable Site Features: Property part of Strategic Site 13

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: Phase I/II ESA

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Camp John Fitz Porter Site
Strategic Site Number: 13

Location: Property located along Genesee River waterfront

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0100 RIVERVIEW PL
Tax ID: 1362110200
Acres: 2.0243464293522

Owner: CITY OF ROCHESTER

Brownfield: Yes
Zoning: R-1
Use Potential: Open space



Property Information

Infrastructure: No

Comments: It is assumed this site has no access to applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Greater than 1/4 mile to bus stop

Road Access: No

Pedestrian Access: Genesee Riverway Trail

Rail Access: No

Water Access: Yes

Other Access:

Adjacent uses:

N: Open space

S: Genesee River

E: Genesee River

W: Open space

Land Use History: Part of Vacuum Oil refinery operations

Notable Site Features: Property is part of Strategic Site 13.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: Yes **Comments:** Conditional involvement - subject to future BCP application by the City of Rochester.

Environmental Due Diligence: Phase I/II ESA

Visual Observations from Curbside Site Assessment:

Property includes the Camp John Fitz Porter local historic site. Site also has high quality views north to downtown skyline.

Other Notes:



Dumpster and RR Ties



South end of trail



North end of trail

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Former Erie & Lackawanna Railroad
Strategic Site Number: 13

Location: Property located parallel to Genesee River

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 102 Violetta Street
Tax ID: 1217013901
Acres: 3.19319191396712

Owner: City of Rochester

Brownfield: TBD
Zoning: R-1
Use Potential: Open space



Property Information

Infrastructure: No

Comments: It is assumed that this property has no access to utilities

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: No

Pedestrian Access: Genesee Riverway Trail

Rail Access: No

Water Access: No

Other Access: Within 100 feet of Genesee River

Adjacent uses:

N: Industrial, open space

S: Open space, Genesee River

E: Open space

W: Open space

Land Use History: Part of former Erie Lackawanna Railroad

Notable Site Features: Property is part of Strategic Site 13

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not applicable

Hazardous Waste: No **Comments:** Not applicable

DEC Remediation Site: Yes **Comments:** Conditional involvement - subject to future BCP application by the City of Rochester.

Environmental Due Diligence: Phase I/II ESA

Visual Observations from Curbside Site Assessment:

Other Notes:

Site possibly impacted by Vacuum Oil site.



View south along trail



View to River at Flint St

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Vacuum Oil Site
Strategic Site Number: 13

Location: Small property at terminus of Flint Street on north side

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0007 FLINT ST
Tax ID: 1217711002
Acres: 0.106069930194726

Owner: CITY OF ROCHESTER

Brownfield: TBD
Zoning: R-1
Use Potential: Open space



Property Information

Infrastructure: No

Comments: It is assumed site has no access to utilities

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: No direct right-of-way access to Flint Street

Pedestrian Access: Accessible from Genesee Riverway Trail

Rail Access: No

Water Access: No

Other Access: Within 200 feet of Genesee River

Adjacent uses:

N: Open space

S: Industrial/brownfield

E: Open space

W: Open space

Land Use History: Part of former Vacuum Oil refinery operations

Notable Site Features: Property is part of Strategic Site 13

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: Phase I/II ESA

Visual Observations from Curbside Site Assessment:

Site includes a switch-back for the Genesee Riverway Trail

Other Notes:

Proximity to former Vacuum Oil operations should be considered during redevelopment contingency planning



View west from trail



View from Flint St

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 5 Flint Street
Strategic Site Number: 14

Location: Property is located at the terminus of Flint Street

Current Use: Vacant

Occupancy: Vacant
Site Address: 0005 FLINT ST
Tax ID: 1217711001
Acres: 1.60803512163024

Owner: DHD Ventures New York LLC

Brownfield: Yes
Zoning: R-1
Use Potential: Commercial mixed use, civic



Property Information

Infrastructure: TBD

Comments: It is unknown if this site has access to all applicable utilities

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/4 mile of bus stop

Road Access: No

Pedestrian Access: Accessible from Genesee Riverway Trail

Rail Access: No

Water Access: No

Other Access: Property is within 200 feet of Genesee River

Adjacent uses:

N: Open space

S: Open space

E: Open space

W: Open space

Land Use History: Property part of former Vacuum Oil refinery operations

Notable Site Features: The property is part of Strategic Site 14.

Building Information

Number of Buildings: 1

Gross Floor Area (sq. ft.): 33000

Year Built: 1920

Stories: 3

Original Use: Part of Vacuum Oil refinery operations -

Current Use: Vacant

Condition: Very Poor

Building Notes: Building is in failing condition and may not be salvageable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: Yes **Comments:** Brownfield Cleanup Program, Classification A

Environmental Due Diligence: Phase I/II ESA

Visual Observations from Curbside Site Assessment:

Property is severely deteriorated and suffers from vandalism and neglect

Other Notes:

Property was constructed after 1912.



Vacant Vacuum Oil Building



View alongside building



Land behind vacant building

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Former Vacuum Oil Site
Strategic Site Number: 15

Location: Property is located between the former Genesee Valley Canal and former Erie-Lackawanna Railroad.

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0013 COTTAGE ST
Tax ID: 1362110300
Acres: 3.98203732376504

Owner: CITY OF ROCHESTER

Brownfield: Yes
Zoning: R-1
Use Potential: Open space, commercial mixed use



Property Information

Infrastructure: No

Comments: It is assumed that the property does not have access to applicable utilities.

Proximity to Existing Transportation Networks:

Public Transit Access: Property is greater than 1/4 mile to bus stop

Road Access: No

Pedestrian Access: Property is accessible from Genesee Valley Canal

Rail Access: No

Water Access: No

Other Access: Property is within 200 feet of Genesee River

Adjacent uses:

N: Vacant industrial

S: Open space

E: Open space

W: Open space

Land Use History: Part of former Vacuum Oil refinery operations

Notable Site Features: Property is part of Strategic Site 15.

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: Yes **Comments:** Conditional involvement - subject to future BCP application by the City of Rochester.

Environmental Due Diligence: Phase II ESA

Visual Observations from Curbside Site Assessment:

Property is highly wooded, and presents a significant departure from the surrounding urban form. Setting does not feel as if it's located in the middle of a city.

Other Notes:



Steel



Tires and Cement Wall



Brick Tires and Cement Wall



Tank

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 31 Cottage Street
Strategic Site Number: 16

Location: Property is located behind Cottage Street adjacent to former Genesee Valley Canal

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0031 COTTAGE ST
Tax ID: 1362110400
Acres: 0.1244043780678

Owner: CITY OF ROCHESTER

Brownfield: Yes
Zoning: R-1
Use Potential: Open Space



Property Information

Infrastructure: No

Comments: It is assumed this site has no access to utilities

Proximity to Existing Transportation Networks:

Public Transit Access: Property is greater than 1/4 mile to bus stop

Road Access: No

Pedestrian Access: No

Rail Access: No

Water Access: No

Other Access: Property is within 500 feet of Genesee River

Adjacent uses:

N: Residential

S: Open space

E: Residential

W: Open space

Land Use History: Unknown

Notable Site Features: Property is part of Strategic Site 16

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: Not Applicable

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

There are no records or indications of contamination on site; however, proximity to former Vacuum Oil refinery site and known spills on adjacent properties should be considered as part of redevelopment contingency planning.

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: I Cottage Street
Strategic Site Number: 16

Location: Property is located behind Cottage Street adjacent to former Genesee Valley Canal

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0001 COTTAGE ST
Tax ID: 1362110100
Acres: 0.792638860465057

Owner: CITY OF ROCHESTER

Brownfield: TBD
Zoning: R-1
Use Potential: Open Space, infrastructure



Property Information

Infrastructure: No

Comments: It is assumed this site has no access to utilities

Proximity to Existing Transportation Networks:

Public Transit Access: Property is greater than 1/4 mile to bus stop

Road Access: No

Pedestrian Access: No

Rail Access: No

Water Access: No

Other Access: Property is within 1/8 mile of Genesee River

Adjacent uses:

N: Residential

S: Open space

E: Residential

W: Open space

Land Use History: Unknown

Notable Site Features: Property is part of Strategic Site 16

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: TBD

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: Yes

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

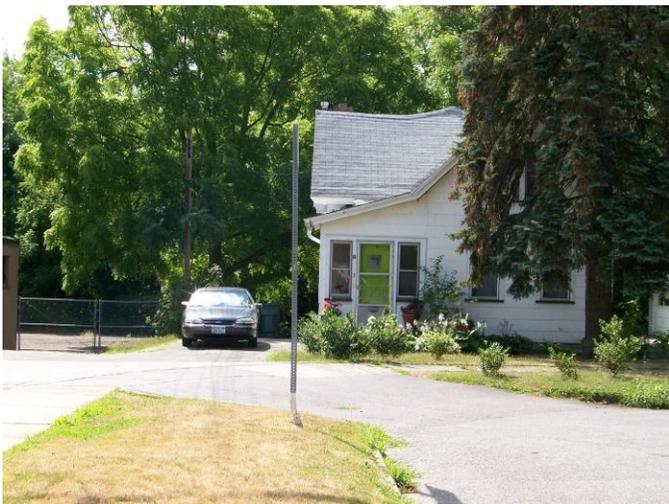
DEC Remediation Site: No **Comments:** Conditional involvement - subject to future BCP application by the City of Rochester.

Environmental Due Diligence: Phase II ESA

Visual Observations from Curbside Site Assessment:

Other Notes:

Site possibly impacted by Vacuum Oil site.



Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 69 Cottage Street
Strategic Site Number: 16

Location: Property is located behind Cottage Street adjacent to former Genesee Valley Canal

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0069 COTTAGE ST
Tax ID: 1352824500
Acres: 0.182155030418884

Owner: CITY OF ROCHESTER

Brownfield: TBD
Zoning: R-1
Use Potential: Open Space



Property Information

Infrastructure: No

Comments: It is assumed this site has no access to utilities

Proximity to Existing Transportation Networks:

Public Transit Access: Property is greater than 1/4 mile to bus stop

Road Access: No

Pedestrian Access: No

Rail Access: No

Water Access: No

Other Access: Property is within 500 feet of Genesee River

Adjacent uses:

N: Residential

S: Open space

E: Residential

W: Open space

Land Use History: Unknown

Notable Site Features: Property is part of Strategic Site 16

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: TBD

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: Yes **Comments:** Conditional involvement - subject to future BCP application by the City of Rochester.

Environmental Due Diligence: Phase II ESA

Visual Observations from Curbside Site Assessment:

Property is nearly inaccessible on foot

Other Notes:

Site possibly impacted by Vacuum Oil site.

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: 75 Cottage Street
Strategic Site Number: 16

Location: Property is located behind Cottage Street adjacent to former Genesee Valley Canal

Current Use: Not Applicable

Occupancy: Vacant
Site Address: 0075 COTTAGE ST
Tax ID: 1352824400
Acres: 0.178783699536872

Owner: CITY OF ROCHESTER

Brownfield: TBD
Zoning: R-1
Use Potential: Open Space



Property Information

Infrastructure: No

Comments: It is assumed this site has no access to utilities

Proximity to Existing Transportation Networks:

Public Transit Access: Property is greater than 1/4 mile to bus stop

Road Access: No

Pedestrian Access: No

Rail Access: No

Water Access: No

Other Access: Property is within 500 feet of Genesee River

Adjacent uses:

N: Residential

S: Open space

E: Residential

W: Open space

Land Use History: Unknown

Notable Site Features: Property is part of Strategic Site 16

Building Information

Number of Buildings: 0

Gross Floor Area (sq. ft.): 0

Year Built: 0

Stories: 0

Original Use: Not Applicable

Current Use: Not Applicable

Condition: TBD

Building Notes: Not Applicable

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: Yes **Comments:** Conditional involvement - subject to future BCP application by the City of Rochester.

Environmental Due Diligence: Phase II ESA

Visual Observations from Curbside Site Assessment:

Property is nearly inaccessible on foot

Other Notes:

Site possibly impacted by Vacuum Oil site.

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Luther Circle Housing Site 1
Strategic Site Number: 17

Location: Property is located on north side of Luther Circle - Fairfield Village

Current Use: Multifamily housing

Occupancy: Occupied
Site Address: 0030 LUTHER CIR
Tax ID: 1352825801
Acres: 0.586339617808491

Owner: ROCHESTER HSG AUTHORITY

Brownfield: No
Zoning: R-1
Use Potential: Residential infill



Property Information

Infrastructure: Yes

Comments: Fully functioning building

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile of bus stop

Road Access: Access from Luther Circle

Pedestrian Access: Sidewalks along Luther Circle

Rail Access: No

Water Access: No

Other Access:

Adjacent uses:

N: Residential

S: Residential

E: Residential

W: Residential

Land Use History: Residential single family

Notable Site Features: Property is part of Strategic Site 17

Building Information

Number of Buildings: 3

Gross Floor Area (sq. ft.): 10280

Year Built: 1970

Stories: 2

Original Use: Multifamily housing

Current Use: Multifamily housing

Condition: Fair

Building Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Luther Circle Housing Site 2
Strategic Site Number: 17

Location: Property is located on south side of Luther Circle - Fairfield Village

Current Use: Multifamily housing

Occupancy: Occupied
Site Address: 0035 LUTHER CIR
Tax ID: 1352826200
Acres: 0.880963089650802

Owner: ROCHESTER HSG AUTHORITY

Brownfield: No
Zoning: R-1
Use Potential: Residential infill



Property Information

Infrastructure: Yes

Comments: Fully functioning building

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile of bus stop

Road Access: Access from Luther Circle

Pedestrian Access: Sidewalks along Luther Circle

Rail Access: No

Water Access: No

Other Access:

Adjacent uses:

N: Residential

S: Residential

E: Residential

W: Residential

Land Use History: Residential single family

Notable Site Features: Property is part of Strategic Site 17

Building Information

Number of Buildings: 5

Gross Floor Area (sq. ft.): 14704

Year Built: 1970

Stories: 2

Original Use: Multifamily housing

Current Use: Multifamily housing

Condition: Fair

Building Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Luther Circle Housing Site 3
Strategic Site Number: 17

Location: Property is located on south side of Luther Circle - Fairfield Village

Current Use: Multifamily housing

Occupancy: Occupied
Site Address: 0068 LUTHER CIR
Tax ID: 1352826101
Acres: 0.676136378741138

Owner: ROCHESTER HSG AUTHORITY

Brownfield: No
Zoning: R-1
Use Potential: Residential infill



Property Information

Infrastructure: Yes
Comments: Fully functioning building

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile of bus stop
Road Access: Access from Luther Circle
Pedestrian Access: Sidewalks along Luther Circle
Rail Access: No
Water Access: No
Other Access:

Adjacent uses:

N: Residential
S: Residential
E: Residential
W: Residential

Land Use History: Residential single family

Notable Site Features: Property is part of Strategic Site 17

Building Information

Number of Buildings: 3
Gross Floor Area (sq. ft.): 13780
Year Built: 1970
Stories: 2
Original Use: Multifamily housing
Current Use: Multifamily housing
Condition: Fair
Building Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Site Name: Luther Circle Housing Site 4
Strategic Site Number: 17

Location: Property is located on south side of Luther Circle - Fairfield Village

Current Use: Multifamily housing

Occupancy: Occupied
Site Address: 0065 LUTHER CIR
Tax ID: 1352825701
Acres: 0.0657222785044306

Owner: ROCHESTER HSG AUTHORITY

Brownfield: No
Zoning: R-1
Use Potential: Residential infill



Property Information

Infrastructure: Yes

Comments: Fully functioning building

Proximity to Existing Transportation Networks:

Public Transit Access: Within 1/8 mile of bus stop

Road Access: Access from Luther Circle

Pedestrian Access: Sidewalks along Luther Circle

Rail Access: No

Water Access: No

Other Access:

Adjacent uses:

N: Residential

S: Residential

E: Residential

W: Residential

Land Use History: Residential single family

Notable Site Features: Property is part of Strategic Site 17

Building Information

Number of Buildings: 1

Gross Floor Area (sq. ft.): 0

Year Built: 1970

Stories: 2

Original Use: Multifamily housing

Current Use: Multifamily housing

Condition: Fair

Building Notes:

Vacuum Oil BOA Brownfield Site Profile Form



Environmental Information

Pre-nomination Site: No

Registered PBS or CBS Facility: No **Comments:** Not Applicable

Spill Event Site: No **Status:** Not Applicable **Comments:** Not Applicable

Hazardous Waste: No **Comments:** Not Applicable

DEC Remediation Site: No **Comments:** Not Applicable

Environmental Due Diligence: None

Visual Observations from Curbside Site Assessment:

Other Notes:

APPENDIX E: MASTER PLAN CONCEPTUAL ALTERNATIVES



City of Rochester, Monroe County, NY
 Vacuum Oil Brownfield Opportunity Area
OPTION 1 MASTER PLAN
 This effort was made possible with the guidance and financial assistance provided by the New York State Department of State Brownfield Opportunity Area Program.

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PLAY AREA

NEW ROAD WITH ON-STREET PARKING AND NEW PEDESTRIAN CONNECTIONS

MIXED USE DEVELOPMENT

WATER FEATURE / CANAL INTERPRETATION

WATER ACCESS

Genesee River

PUBLIC GATHERING SPACE / INTERPRETIVE AREA

INTERPRETIVE CENTER / COMMUNITY FACILITY

PLAY AREA

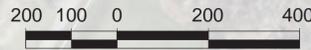
AMPHITHEATER

PARK WITH PASSIVE RECREATION AND PICNIC AREAS

PEDESTRIAN BRIDGE TO CONNECT THE GENESSEE RIVERWAY TRAIL TO THE NEIGHBORHOOD

WATER ACCESS

ENHANCED TRAIL GATEWAY / INTERPRETATION AREA



INFILL DEVELOPMENT, TYP.

INFILL NEIGHBORHOOD GREENSPACE, TYP.

EXPANDED STUDENT HOUSING

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City of Rochester, Monroe County, NY
Vacuum Oil Brownfield Opportunity Area

OPTION 2 MASTER PLAN

This effort was made possible with the guidance and financial assistance provided by the New York State Department of State Brownfield Opportunity Area Program.



City of Rochester, Monroe County, NY
 Vacuum Oil Brownfield Opportunity Area
OPTION 3 MASTER PLAN
 This effort was made possible with the guidance and financial assistance provided by the New York State Department of State Brownfield Opportunity Area Program.

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APPENDIX F: GENESEE RIVERWAY TRAIL CLEARING PLAN

Genesee Riverway Trail Clearing Plan

IN THE PLYMOUTH EXCHANGE (PLEX) NEIGHBORHOOD
MARCH 2014



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Invasive Plant Species and Methods of Removal.....	7
Identification.....	7
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Appendices

Appendix A – NYSDEC List of Invasive Species

Appendix B- NYSDOT Methods of Removal

Appendix C – Indiana Bat Project Review Fact Sheet

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Genesee Riverway Trail Clearing Plan

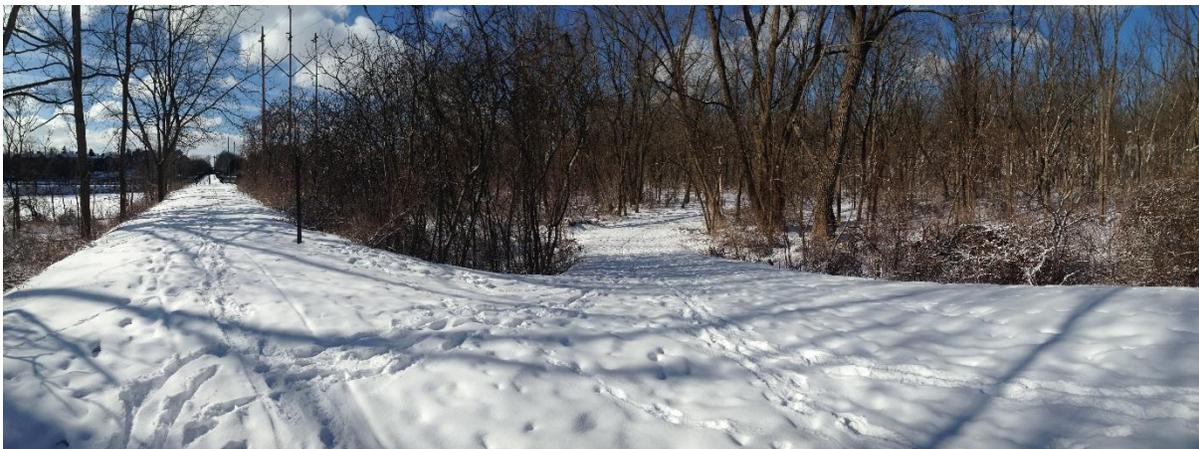
IN THE PLYMOUTH EXCHANGE
(PLEX) NEIGHBORHOOD

Overview

Project Background

The Genesee Riverway Trail is an off-road multi-use trail along the banks of the Genesee River that runs from the southern boundary of the City of Rochester north to Lake Ontario. The trail, approximately 16 miles in total length, links many cultural and historic landmarks, city neighborhoods and institutions. A segment of the trail runs through the Plymouth Exchange (PLEX) neighborhood which includes the land area from the Riverview Apartments north to Violetta Street. This segment of the trail provides a direct pedestrian connection between the University of Rochester, Brooks Crossing, the PLEX neighborhood and downtown Rochester. This portion of the trail is within the defined study area of the Vacuum Oil Brownfield Opportunity Area (BOA). The BOA 2035 Vision Plan (Figure 1) makes recommendations for mixed-use development adjacent to the trail, trail improvements and additional connections to the PLEX neighborhood. Safety, visual access and physical connections were identified as key priorities by local residents during the BOA community engagement process.

This document offers recommendations to help improve safety, increase access to the riverfront, and enhance wayfinding and trail identity.



View looking south along the Genesee Riverway Trail towards the pedestrian bridge over the Genesee River

Specific recommendations and strategies are discussed in the following sections.

- Clearing Plan
- Invasive Plant Species and Methods of Removal
- Wayfinding and Plant Recommendations
- Green Infrastructure
- Conclusion

Summary of Vegetation Clearing and Wayfinding Plan

The Vegetation Clearing and Wayfinding Plan (Figure 2) illustrates the recommendations described in the following sections. The plan identifies areas for proposed vegetation clearing adjacent to the trail, at major trail decision points and between the trail and the river to open viewsheds and enhance safety. The plan also identifies a new trail spur to increase the visibility of trail users, and locates major decision points and areas for wayfinding plantings to give trail users visual cues when they are approaching a trail entrance/exit or trail spur. Potential areas for green infrastructure are also located on the plan to collect stormwater runoff from the trail, from the roads and residential properties to the west as well as any future development as part of the Vacuum Oil BOA 2035 Vision Plan.

Clearing Plan

The PLEX segment of the Genesee Riverway Trail is surrounded by dense vegetation, which blocks views between the trail, the river and nearby residential homes. The strong sense of enclosure along portions of the trail can lead to a feeling of isolation, making trail users uneasy. The following strategies, as illustrated in Figure 2 can be implemented to open views and enhance the perception of safety.

Trail Main Line

Increasing visibility to and from the trail will enhance the feeling of safety and open views to major destinations such as downtown Rochester, the U of R campus, Wilson Boulevard and the Genesee River. Specific recommendations are as follows:

- Clear and trim vegetation immediately adjacent to the trail approximately 8-10' to create an open shoulder.
- Remove non-native invasive understory growth and canopy trees to open viewsheds to the water between the trail and the western bank of the river to expose activity occurring on them as illustrated in the graphic below.
- Retain native canopy trees between the trail and the river. Plant low, native understory shrubs that will fill in over time but will retain open views to and from the river.



Viewsheds between trail and river

Trail Decision Points

The following strategies will help to enhance safety at major decision or transition points (as depicted on Figure 2).

- Maintain views at a minimum 100' down the trail or trail spur to give trail users advance warning of activity on the trail, eliminate the sense of surprise and enhance the feeling of safety.
- Clear understory vegetation and limb up existing trees approximately 8-10' to open views around major trail decision points. These areas include the area between the northern landing of the pedestrian bridge and the trail heading to the southwest, at the entrance to the trail spurs along the river and at the trail entrances at Flint Street and Violetta Street. Strategically clearing vegetation will open views to and from the trail, pedestrian bridge and river.

New Trail Spurs

The addition of new trail spurs will give trail users more recreational options as well as enhance safety.

- Add a new trail spur between the end of the former canal wall near the Riverview Apartments to the pedestrian bridge along the elevated river bank. The existing trail in this location is depressed into the landscape and densely vegetated. Although this segment of trail offers a unique experience of walking through the woods just minutes from downtown, it can feel secluded and unsafe. The addition of the new spur will give trail users the option to walk through the woods or along the water with increased visibility to and from the trail, pedestrian bridge and river.

- Clear vegetation at future planned trail connections to Magnolia Street and Riverview Place. Clearing vegetation in these locations will open views to and from the trail and neighboring residential homes.

KEY

1. Commercial Redevelopment
2. Infill Development
3. Commercial Redevelopment
4. Flint Street Green Infrastructure Improvements
5. Multi-Family Housing and Roadway Connection
6. Trail Enhancements
 - Interpretation
 - Safety
 - Vegetation Clearing
7. Car Top Launch / Water Access
8. *Interim Parking Removed in 8-15 Year Plan*
9. Parkland and Trail Development
10. *Site Preparation Completed in 0-7 Year Plan*
11. New Road Construction
12. Exchange Street Gateway and Streetscape
13. Enhanced Trail Connection and Playground
14. Housing Redevelopment
15. Mixed Use Development
16. Foodlink Redevelopment
17. Mixed Use Development
18. Waterfront Mixed Use
 - Adaptive Reuse of 5 Flint Street
19. Waterfront Mixed Use with Structured Parking
20. Waterfront Amphitheater
21. Public Gathering / Event Space
22. Canal Interpretation / Water Feature
23. Wetland Interpretation and Nature Trail
24. Mixed Use Development with Structured Parking
25. Mixed Use Development



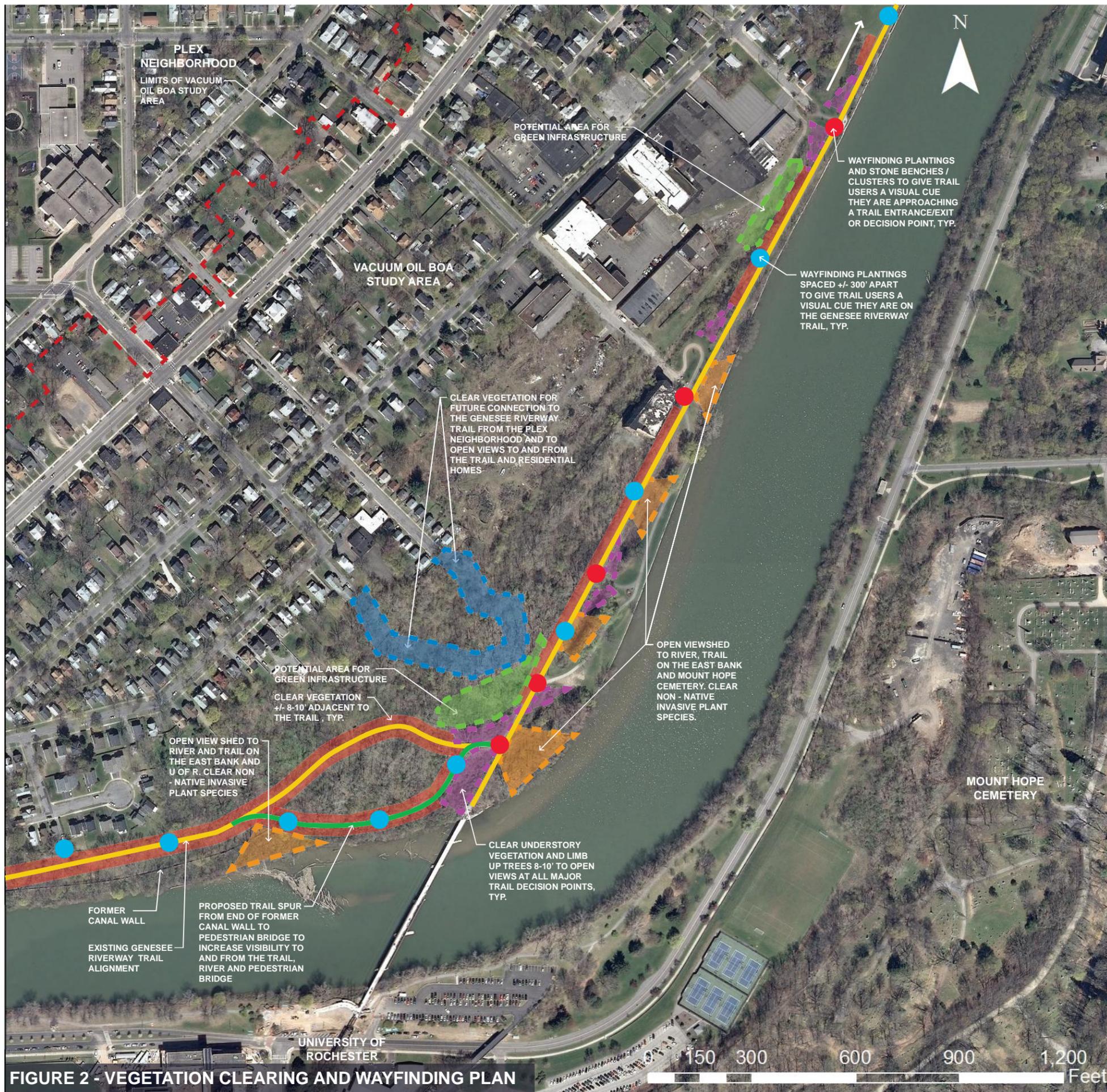
FIGURE 1

City of Rochester, Monroe County, NY
 Vacuum Oil Brownfield Opportunity Area
2035 VISION PLAN

This effort was made possible with the guidance and financial assistance provided by the New York State Department of State Brownfield Opportunity Area Program.

200 100 0 200 400

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LEGEND

- EXISTING GENESSEE RIVERWAY TRAIL
- PROPOSED TRAIL SPUR
- PROPOSED VEGETATION CLEARING ADJACENT TO TRAIL
- PROPOSED VEGETATION CLEARING AT MAJOR TRAIL DECISION POINTS
- PROPOSED VEGETATION CLEARING TO OPEN VIEWSHEDS TO RIVER, TRAIL ON THE EAST BANK
- PROPOSED VEGETATION CLEARING FOR FUTURE TRAIL CONNECTION TO THE PLEX NEIGHBORHOOD AND TO OPEN VIEWS TO AND FROM RESIDENTIAL HOMES
- POTENTIAL LOCATION FOR GREEN INFRASTRUCTURE
- TRAIL DECISION POINTS
- WAYFINDING TREATMENT

FIGURE 2 - VEGETATION CLEARING AND WAYFINDING PLAN

Invasive Plant Species and Methods of Removal

Identification

Invasive plant species are plants that can threaten native plant and animal bio-diversity and can cause significant changes to the environment. The removal of invasive plant species will open views to and from the trail and will also help to create a more sustainable diverse environment. Based on initial site observations, invasive woody plant species specific to the trail in the PLEX neighborhood include but are not limited to:

- Amur Honeysuckle,
- Black Swallow-Wort,
- Common Buckthorn,
- Japanese Knotweed,
- Norway Maple, and
- Poison Ivy

The New York State Department of Conservation (NYSDEC) has compiled a list of plant species that are widely recognized as invasive or potentially invasive in New York State. This list can be found in Appendix A. Identification of invasive plant materials should be conducted by a qualified Horticulturalist or Landscape Architect.

Methods of Removal

The method of removal for invasive plants can vary depending on the species. Methods of removal (with varying success rates) include:

Mechanical control methods:

- pulling and digging of the plant,
- suffocation of small seedlings and herbaceous plants with layers of thick UV-stabilized plastic sheeting,
- thick layers of mulch, or
- cutting and mowing on a consistent basis so the plants do not gain a foothold and continue to spread.



Amur Honeysuckle



Black Swallow-Wort



Common Buckthorn



Japanese Knotweed

Chemical control methods:

- foliar applications, herbicides applied to the foliage of the plant, or
- cut stem treatments, herbicides applied to the cut stems of the plant.

Proper disposal of removed invasive plant material is also crucial to the control process. Removed plant material can be burned, buried, piled or composted. As in the removal of invasive plants, the correct disposal method will vary depending on the species. Once a specific invasive plant is identified for removal, the correct method of removal and disposal should be determined as well as the correct time of year to maximize the chances of its eradication. The New York State Department of Transportation (NYSDOT) has identified several methods for removal and disposal of invasive species in the document, *Invasive Control Methods for Maintenance and Construction* (Appendix B). The document outlines the degree of effectiveness and labor intensity of each method.

Removal and disposal methods should also minimize environmental impacts on the remaining vegetation, soils, water courses and animal habitats, and in environmentally sensitive areas, shall be conducted in coordination with any federal or state requirements. For example, the Indiana Bat, listed on federal and state endangered species lists may be present in the PLEX neighborhood in the spring, summer, and fall months. Summer roosting habitat is characterized by trees with exfoliating bark, cracks or crevices that could potentially be used by Indiana bats to roost. The smallest size roost tree observed to date is 2.5 inches in diameter for males and 4.3 inches in diameter for females. Maternity colonies however generally use trees greater in size at approximately 9 inches in diameter. If vegetation clearing is to occur, larger diameter trees, no matter their condition should be preserved. Clearing should also be conducted when the Indiana bats are not roosting in the trees which is generally between

October 31st to March 31st. More information on the Indiana bat habitat can be found in the Indiana Bat Project Review Fact Sheet (Appendix C)



Indiana Bat

Wayfinding and Plant Recommendations

Wayfinding

Existing trail wayfinding signage through the PLEX Neighborhood shows evidence of vandalism, making the signs illegible. Alternative methods of wayfinding, such as the use of distinctive plant materials or clusters of boulders, can be strategically located to signal the trail users when they are on the main trail or approaching an entrance/exit or decision-making point as depicted on Figure 2. Potential plant materials that offer notable seasonal interest throughout the year include, but are not limited to:

- American Planetree
- Birch
- Highbush Blueberry
- Red Twig Dogwood
- Native Suppressing Groundcovers
 - o Butterfly Milkweed
 - o Little Bluestem
 - o Moss Phlox
 - o White Heath Aster

A potential wayfinding option using stone boulders and plant material is illustrated the wayfinding plan on the following page. The form, color and texture of the Dogwood and Highbush Blueberry are distinctively different than the surrounding vegetation and offer seasonal interest throughout the year giving trail users visual cues directing them towards Downtown Rochester and the U of R. Groupings of stone boulders and stone benches could be placed at major trail entrances/exits giving trail users a visual cue they are approaching a decision-making point.



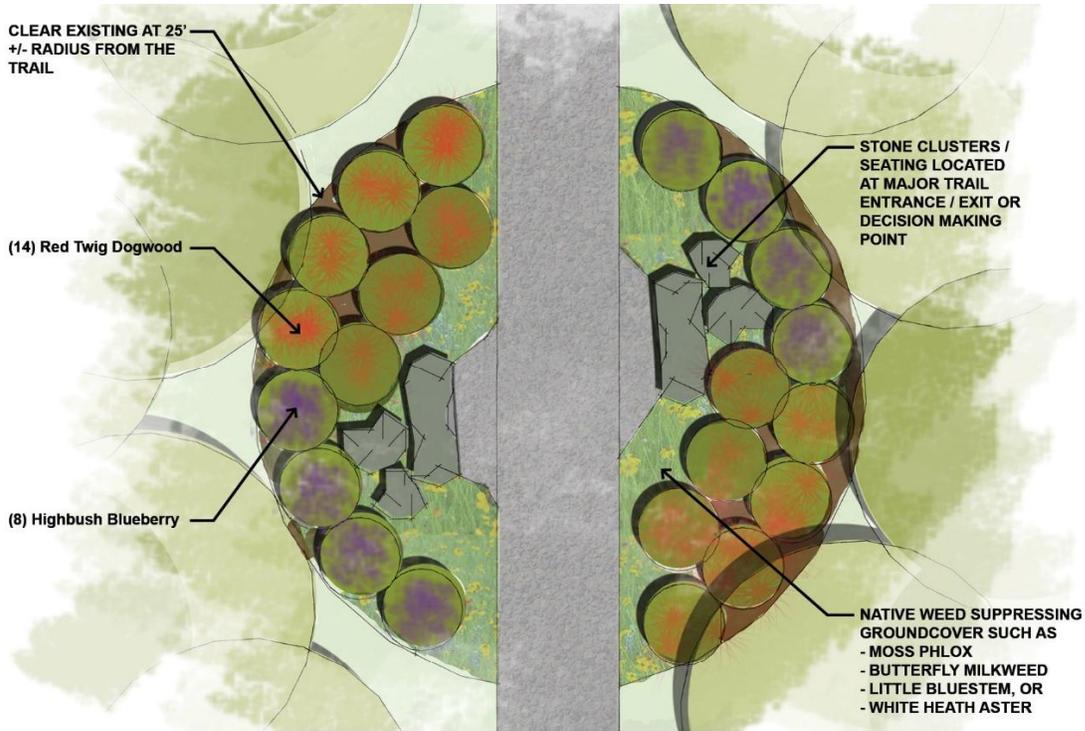
Unique bark of the American Planetree



Color contrast between Birch bark and surrounding landscape



Stems of the Red Twig Dogwood offer seasonal interest in winter



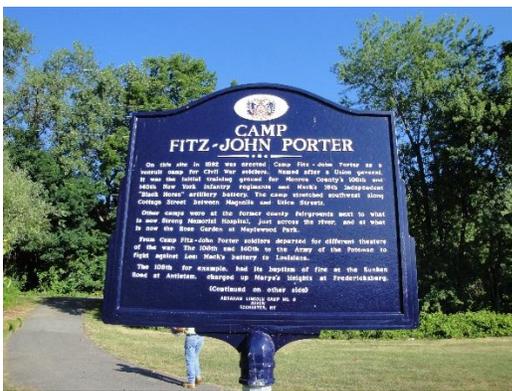
Wayfinding Treatment

Plant Recommendations

Edible native plants could be planted in groupings along the trail to help give an identity to the corridor. Community members in the PLEX neighborhood have expressed interest in using edible native plants as a way to interpret cultural and historic uses of the corridor including the Underground Railroad and the Camp Fitz-John Porter site, which was used a recruit camp during the civil war.

Potential edible native plantings to be used near the Camp Fitz-John Porter site and throughout the corridor include;

- Apple Trees
- Blackberry
- Black Raspberry
- Chokeberry
- Elderberry
- Highbush Blueberry
- Pawpaw
- Northern Bayberry
- Ostrich Fern
- Persimmon
- Shellbark Hickory



Camp Fitz-John Porter



Edible Native Plantings – Black Raspberries and Elderberries

Other native plants to be used along the trail that offer food and shelter for our native birds and wildlife could include the following;

- Eastern Redbud
- Fragrant Sumac
- Red Maple
- Red Oak
- River Birch
- Serviceberry

Green Infrastructure

The natural topography of the landscape between the Genesee Riverway Trail and the residential homes to the west lends itself to the collection of stormwater runoff. Green infrastructure practices could be put in place to deal with any runoff from the trail, from the roads and residential properties to the west as well as any future development as

part of the Vacuum Oil BOA 2035 Vision Plan. Managing stormwater runoff on site will help to maintain a more sustainable environment and enhance the quality of the land and water surrounding the trail

Conclusion

Implementing the strategies described in the previous sections will help to create a sustainable environment along the Genesee Riverway Trail in the PLEX Neighborhood that will enhance safety, provide visual and physical access to the water, enhance wayfinding and trail identity and the connection between downtown Rochester and the U of R.

A qualified Landscape Architect should be involved throughout the entire process to ensure the strategies are implemented in ways that are aesthetically appealing and achieve the goals of the plan.

Appendix A

REVISED INTERIM LIST OF INVASIVE PLANT SPECIES IN NEW YORK STATE

14 May 2012

Purpose

This list was not prepared pursuant to ECL 9-1705 (5) (h), the so-called “four-tier system”.

The primary purpose of this list to inform New York State agencies so they can incorporate invasive species management into their funding, regulatory and other activities pursuant to ECL 9-1705 (b) and especially ECL 9-1709 (2):

“...[DEC] in cooperation with [DAM] shall have the authority...to... coordinate state agency and public authority actions to do the following: (a) **phasing out uses of invasive species**; (b) **expanding use of native species**; (c) **promoting private and local government use of native species as alternatives to invasive species**; and (d) wherever practical and where consistent with watershed and/or regional invasive species management plans, **prohibiting and actively eliminating invasive species at project sites funded or regulated by the state;....”**

It is intended to inform regulatory actions pursuant to existing statutory authorities, e.g., protection of waters (ECL Article 15), wetlands (ECL Articles 24 and 25), State Environmental Quality Review (ECL Article 8), biocontrol (ECL Article 11), and pesticides (ECL Article 33). This list is also intended to inform non-regulatory management decisions and actions, such as for planning and priority-setting, prevention, early detection, monitoring, rapid response, control and eradication, restoration, research, and public education.

This list does not include *all* plant species that are invasive or potentially-invasive in New York State. Rather, it includes many of those plant species that are widely-recognized as invasive or potentially-invasive in New York State. ECL 9-1703 (10) defines “invasive species” as:

“...a species that is: (a) nonnative to the ecosystem under consideration; and (b) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. For the purposes of this paragraph, the harm must significantly outweigh any benefits.”

Thus, when complying with the provisions of 9-1709, agency staff use professional judgment in assessing the potential environmental harm (or harm to human health) when considering particular species in particular contexts.

Invasive Plants Field and Reference Guide: An Ecological Perspective of Plant Invaders of Forests and Woodlands

http://www.fs.fed.us/ne/newtown_square/publications/information_bulletins/NA-TP-05-04.pdf

Mistaken Identity? Invasive Plants and their Native Look-alikes: an Identification Guide for the Mid-Atlantic

http://www.nybg.org/files/scientists/rnaczi/Mistaken_Identity_Final.pdf

* * *

REVISED INTERIM LIST OF INVASIVE PLANT SPECIES IN NEW YORK STATE

Species are assigned to the most commonly known plant category, although overlap may exist.

Floating & Submerged Aquatic		
Common Name	Scientific Name	Draft Rank
Water Thyme	<i>Hydrilla verticillata</i>	Very High
Common Frogbit	<i>Hydrocharis morsus-ranae</i>	Very High
Floating Primrose Willow	<i>Ludwigia peploides</i>	Very High
Broadleaf Water-milfoil	<i>Myriophyllum heterophyllum</i>	Very High
Eurasian Water-milfoil	<i>Myriophyllum spicatum</i>	Very High
Water Chestnut	<i>Trapa natans</i>	Very High
Rock Snot (diatom)	<i>Didymosphenia geminata</i>	Not Ranked
Carolina Fanwort	<i>Cabomba caroliniana</i>	High
Brazilian Waterweed	<i>Egeria densa</i>	High
Parrot-feather	<i>Myriophyllum aquaticum</i>	High
Yellow Floating Heart	<i>Nymphoides peltata</i>	High
Curly Pondweed	<i>Potamogeton crispus</i>	High

Emergent Wetland & Littoral		
Common Name	Scientific Name	Draft Rank
Uruguayan Primrose-willow	<i>Ludwigia grandiflora</i> spp. <i>hexapetala</i>	Very High
Floating Primrose-willow	<i>Ludwigia peploides</i> spp. <i>glabrescens</i>	Very High
Purple Loosestrife	<i>Lythrum salicaria</i>	Very High
European Common Reed Grass	<i>Phragmites australis</i>	Very High
Tall Glyceria	<i>Glyceria maxima</i>	High
Yellow Iris	<i>Iris pseudacorus</i>	High
Broad-leaf Pepper-grass	<i>Lepidium latifolium</i>	High
Marsh Dewflower	<i>Murdannia keisak</i>	High
Reed Canary-grass	<i>Phalaris arundinacea</i>	High

Terrestrial - Herbaceous		
Common Name	Scientific Name	Draft Rank
Garlic Mustard	<i>Alliaria petiolata</i>	Very High
Slender False Brome	<i>Brachypodium sylvaticum</i>	Very High
Black swallow-wort	<i>Cynanchum louiseae</i>	Very High
Pale Swallow-wort	<i>Cynanchum rossicum</i>	Very High
Japanese Knotweed	<i>Fallopia japonica</i>	Very High
Japanese Stilt Grass	<i>Microstegium vimineum</i>	Very High
Lesser Celandine	<i>Ranunculus ficaria</i>	Very High
Wild Chervil	<i>Anthriscus sylvestris</i>	High
Mugwort	<i>Artemisia vulgaris</i>	High
Small Carpgrass	<i>Arthraxon hispidus</i>	High
Narrowleaf Bittercress	<i>Cardamine impatiens</i>	High
Spotted Knapweed*	<i>Centaurea stoebe</i> ssp.	High

	<i>micranthos</i>	
Canada Thistle	<i>Cirsium arvense</i>	High
Chinese Yam	<i>Dioscorea polystachya</i>	High
Cut-leaf Teasel	<i>Dipsacus laciniatus</i>	High
Winter Creeper	<i>Euonymus fortunei</i>	High
Cypress Spurge	<i>Euphorbia cyparissias</i>	High
Leafy Spurge	<i>Euphorbia esula</i>	High
Giant Hogweed	<i>Heracleum mantegazzianum</i>	High
Japanese Hops	<i>Humulus japonicus</i>	High
Cogon Grass	<i>Imperata cylindrica</i>	High
Chinese Lespedeza	<i>Lespedeza cuneata</i>	High
Garden Loosestrife	<i>Lysimachia vulgaris</i>	High
Chinese Silver Grass	<i>Miscanthus sinensis</i>	High
Wavyleaf Basketgrass	<i>Oplismenus hirtellus</i>	High
Cup-plant	<i>Silphium perfoliatum</i>	High

Terrestrial - Vines		
Common Name	Scientific Name	Draft Rank
Oriental Bittersweet	<i>Celastrus orbiculatus</i>	Very High
Japanese Honeysuckle	<i>Lonicera japonica</i>	Very High
Mile-a-minute Weed	<i>Persicaria perfoliata</i>	Very High
Kudzu	<i>Pueraria montana</i>	Very High
Porcelain Berry	<i>Ampelopsis brevipedunculata</i>	High
Japanese Virgin's-bower	<i>Clematis terniflora</i>	High

Terrestrial - Shrubs & Trees		
Common Name	Scientific Name	Draft Rank
Norway Maple	<i>Acer platanoides</i>	Very High
Japanese Angelica Tree	<i>Aralia elata</i>	Very High
Japanese Barberry	<i>Berberis thunbergii</i>	Very High
Autumn Olive	<i>Elaeagnus umbellata</i>	Very High
Winged Euonymus	<i>Euonymus alatus</i>	Very High
Amur Honeysuckle	<i>Lonicera maackii</i>	Very High
Morrow's Honeysuckle	<i>Lonicera morrowii (incl. xbella)</i>	Very High
Common Buckthorn	<i>Rhamnus cathartica</i>	Very High
Black Locust	<i>Robinia pseudoacacia</i>	Very High
Multiflora Rose	<i>Rosa multiflora</i>	Very High
Wineberry	<i>Rubus phoenicolasius</i>	Very High
Rusty Willow	<i>Salix atrocinerea</i>	Very High
Sycamore Maple	<i>Acer pseudoplatanus</i>	High
Smooth Buckthorn	<i>Frangula alnus</i>	High
Border Privet	<i>Ligustrum obtusifolium</i>	High
Amur Cork Tree	<i>Phellodendron amurense</i>	High
Beach vitex	<i>Vitex rotundifolia</i>	High

* Brown and Black Knapweed have also been known to be problematic in grassland habitats.

~ END ~

Appendix B

INVASIVE SPECIES CONTROL METHODS FOR MAINTENANCE AND CONSTRUCTION, 9/10/04

This attachment is considered to be a “living document” and will be updated and revised, as appropriate, to incorporate innovations and advances in the science of invasive species control.

I. General Considerations – Adapted From Adirondack Park Invasive Plant Program Principle Partners “Best Management Practices”, March 2004

1. Identification – Learn to identify the priority invasive plant species in your area. Throughout NYS, four priority species are Purple Loosestrife, Common Reed (Phragmites), Japanese Knotweed and Giant Hogweed. Additional invasive species may be of priority concern in your area. Once you know which invasive species are a priority in your area, learn to identify these plants.

2. Inventory – Developing an inventory of the priority invasive plants in your area is important for several reasons. First and foremost, knowing where the invasive plants live is essential to any future control efforts. Secondly, since invasive species will not disappear on their own (too bad, huh!), once their locations are known, they will continue to exist and spread until they are controlled. Thirdly, since invasive species can show-up at any time and are easiest to control when they first invade an area, it’s important to continually update the inventory.

3. Early Detection and Rapid Response – Invasive species, by their nature, spread very rapidly once introduced to a new area. Therefore it is essential that **new infestations** be identified and controlled as quickly as possible. Control practices for small populations are far more likely to succeed, are significantly less expensive and provide more options for control methodology.

4. Minimize Soil Disturbance – Due to the nature of invasive plants to rapidly colonize areas of disturbed soil, out-compete native species and become firmly established very quickly, it is essential to minimize areas of soil disturbance.

5. Temporary Erosion and Sediment Control – Department policy requires sound temporary erosion and sediment control practices on all projects that disturb soil. This practice is particularly important in preventing the introduction and continued spread of invasive plant species. Where invasive species are known to exist, rapid and diligent erosion and sediment control, as per section 209 of the Department Specifications is particularly important.

Note: Some of the methods described below require actual digging or pulling of plants from the

soil. In all cases they require removal of vegetation whether or not there is actual soil disturbance. Each situation must be studied to determine if the proposed control method will destabilize soils to the point where erosion is threatened (or invasive plants may re-establish).

6. Mulch – Due to the nature of invasive plants to rapidly colonize any area of disturbed soil, it is essential that all disturbed areas be mulched and seeded as soon as possible. If outside the growing season for seed germination, disturbed sites should still be mulched. Sources of mulch should be free of invasive plant parts or seeds. Use of straw or wood fiber mulch is preferred. If hay mulch is used, it should be verified as originating from an invasive free source.

7. Rapid Revegetation - Although not a specific condition, replanting or reseeded with native species is highly desired. All of the control methods below are aimed at reducing or eliminating invasive species so that natives are encouraged to grow and re-establish stable conditions that are not conducive to invasive colonization. In most cases removal or reduction of invasive populations will be enough to release native species and re-establish their dominance on a site. Replanting may be desirable on private lands where it can be used as a quid pro quo with the landowner for permission to remove invasive plants.

II. General Control Concepts by Activity Type – Developed by NYSDOT, Kyle Williams, 9/10/04

1. Mowing - Don't be "Johnny Phragmite Seed"! Maintenance roadside mowing, while essential for safety, operational, aesthetic and environmental purposes, can, has and does play a significant role in the introduction, spread and proliferation of invasive plants. If considered as a control practice, due to the tremendous reproduction and rapid growth rates of invasive plants, repeated and time-specific mowing will be required. Considering that mechanical mowing spreads invasive plant seeds and that each segment of many invasive plants, including the rootstock, can vegetatively sprout a new plant, priority invasive plant species should be mowed with due consideration for the following factors:

Note – Since drainage ditches, streams and wetlands can rapidly spread invasive plants through dispersal of seeds and, to a lesser degree, plant parts, it is strongly recommended to control (herbicide, excavate, etc.) priority invasive plant populations in and adjacent to drainage ditches and streams, prior to mowing. This also will provide operational benefits because invasive plant populations in the drainage system that are "only" mowed will immediately re-grow and spread and therefore require additional mowing. Isolated (upland) roadside populations of invasive plants can be mowed with less chance of dispersing the plant seeds and parts to new areas, however mowing should always be done prior to seed maturation – generally prior to **August 1st**.

Mowing Considerations :

- a.** When mowing untreated or uncontrolled invasive plant populations, do so prior to seed maturation (generally prior to **August 1st** for the first mowing of the year);
- b.** Plan on mowing invasive plant populations 2 – 3 times per year, prior to seed maturation, for successive years if mowing is the only control practice used. The “mowing only” option should be used in locations that are not in or adjacent to drainage ditches and are inaccessible or too large for other control options;
- c.** Control small invasive plant populations comprised of tender, young plants with herbicide early in the summer, prior to mowing, especially in and adjacent to drainage ditches;
- d.** If invasive plant populations consist of large, mature plants, mow the plants prior to seed maturation, allow the plants to re-grow to a height of 2 - 4 feet and then treat with foliar herbicide, especially in or adjacent to drainage ditches;
- e.** Physically remove flower or seed heads (cut and bag) of **small** invasive plant populations prior to mowing, especially in and adjacent to drainage ditches;
- f.** Physically remove rootstock (mechanically excavate) of **small** invasive plant populations prior to mowing, especially in and adjacent to drainage ditches;
- g.** Control large purple loosestrife plant populations with biocontrol beetles (*Hylobias* sp. or *Galruccella* sp.) prior to mowing. Beetle releases will take several years to significantly reduce purple loosestrife populations;
- h.** If mowing occurs after seed maturation, hand clean, with brush or broom, upper parts of contaminated mowing equipment prior to moving to new locations – especially uncontaminated locations. This is especially important for purple loosestrife as each mature plant is capable of producing up to 2.5 million viable seeds;
- i.** Take care to minimize scalping and rutting during mowing operations. These situations can be avoided by properly adjusting the equipment and avoiding operating equipment directly in wet areas or rough terrain. Any scalped or rutted areas should be immediately seeded and mulched. Any badly rutted areas should be repaired, seeded and mulched; and
- j.** Use of optional mowing equipment, such as “over-the-rail” boom-type mowers may be necessary in some situations to reach invasive plants;

2. Herbicides – Judicious use of herbicides is an important tool in invasive plant control efforts. All herbicide use shall be in accordance with label instructions, state and federal law (including adjacent landowner notification requirements) and will be conducted by, or under the supervision of certified applicators. Herbicide application techniques will generally fall under two types – foliar application or stem cut and treat. As a general rule, foliar herbicides should be applied to young, tender, actively growing plants prior to flowering. If the plants are too mature for effective herbicide application, a common practice is to mow an invasive plant infestation, prior to seed maturation, allow the plants to re-grow to a height of 2 – 4 feet and then apply the appropriate foliar herbicide. This process will weaken the plant and prevent spread by seed, and maximize the effectiveness of the herbicide application. Due to the vigorous nature of many invasive plants, especially knotweed and phragmites, this process may need to be repeated 2 or 3

times over consecutive years. Stem “cut and treat” herbicide applications involve the cutting and removal of the growing plant stems and then the spot application of herbicide to the freshly cut surface of the remaining rooted portion of the stem. The herbicide will then be translocated down into the plants root system. “Garlon” works well for this type of treatment. The “spot” application can be accomplished with a swab or hand sprayer and should occur as soon as possible but not more than one hour from the time the stem is cut (within 15 minutes is preferred for best results). A common practice is to have one person cut the stems while a second person follows and applies the herbicide to the recently cut stems. It is important to mark which stems have been treated – using a marker dye is a common technique. This technique is recommended in situations where foliar treatments are not possible or effective – this technique works well with Japanese Knotweed. If stands of invasive plants extend beyond the R.O.W., consider obtaining a written release from the adjacent landowner to implement controls. All sites where herbicides are applied should be inspected 3 – 4 weeks post application to assess success and to determine if natural re-vegetation by native or non-invasive plants is adequate or if additional restoration, e.g. seeding and mulching, is required;

3. Biological Controls – On large, dense stands of purple loosestrife (1/2 acre or larger), use of *Hylobius* sp. and *Galurucella* sp. beetles is a very effective control option. Cornell University conducted extensive research prior to the selection of this particular species and prepared a Generic Environmental Impact Statement for their release throughout New York State. These beetles feed exclusively on purple loosestrife (they will starve rather than eat any other plants), will reproduce after release and can be harvested from prior release sites for use in other locations. NYSDOT currently has a *hylobius* “doner” site in Region 2 at the Utica Marsh complex. See Page 8, No. 3 for additional information regarding biological controls.

Research is currently well underway by Cornell University to identify and test an effective biological control(s) for Common Reed (*Phragmites*). Unfortunately, no acceptable biocontrols currently exist for Japanese Knotweed;

4. Ditching - Many priority invasive plants prefer moist soil conditions and are tolerant of saline environments; therefore they grow very well in highway drainage ditches and other components of the drainage system. As the dense root systems of invasive plants such as purple loosestrife, *phragmites* and Japanese knotweed proliferate, they rapidly clog drainage ditches and reduce sight distances, especially where water velocities slow, e.g. up gradient of culvert inverts, above check dams, etc. Due to the rapid growth of invasive plants, maintenance cycles are far more frequent where they exist. Prior to excavating the plants from drainage ditches, the entire invasive plant infestation should be treated with the appropriate herbicide, e.g. rodeo or other aquatic-use registered herbicide. This will ensure that the plants, seeds and root parts will not spread and re-establish. Failure to treat the invasive plants prior to physical removal will most likely result in immediate re-growth of the plants in the ditch and the spread of the plant to adjacent and downstream areas. In addition, if the invasive plants are not killed prior to ditch

cleaning, the spoil produced can further spread the plants upon disposal (see No. 8. below);

5. Shoulder Scraping - Removing the build-up of organic material along highway shoulders is essential to maintaining pavement quality, providing adequate sheet flow drainage and providing safe driving conditions. Due to their disturbed nature and harsh growing conditions, highway shoulders provide a prime area for invasive plants to establish and spread. This is due to the nature of invasive plants to rapidly colonize disturbed areas and to tolerate harsh environmental conditions. Therefore it is essential that shoulder scraping activities address invasive plant control. Prior to scraping highway shoulders, all existing priority invasive plants should be treated with appropriate herbicide or other control measure to kill seeds and plant parts, including the root stock. This will prevent the plant from reseeding, re-sprouting in-situ or spreading to adjacent areas via, water, wind, hitching a ride on equipment or through spoil disposal (See No. 8. below regarding disposal);

6. Vine, Brush and Tree Removal - Several common species of vines, brush and trees that grow profusely along highway roadsides are considered invasive species. These species frequently cause a nuisance to maintenance workers, block traffic signs or limit sight distances and therefore are removed in routine maintenance operations. In the evaluation of these removal priorities, invasive species should be given preference and controlled by accepted practices that will ensure no re-sprouting and prevent additional spread through seed dispersal. Since these species do not reproduce vegetatively, plant parts do not need to be buried or land-filled and equipment does not require cleaning. Accepted methods of control include foliar herbicide treatment or cutting followed by stump treatment with herbicide. Mowing alone, frequently results in re-sprouting and cloning and is not an effective control methodology;

7. Poisonous Plant Removal - A few invasive species pose serious a threat to worker safety and public health. **Giant Hogweed**, *Heracleum mantegazzianum*, is such a plant. Upon dermal contact this plant causes severe skin burns which are exacerbated through exposure to sunlight. Where ever this plant is encountered, the location should be located using GPS coordinates and reference marker identification, the size of the population noted and maintained in a regional database. When encountered, Giant Hogweed populations should be controlled using the guidance on page 12 – 13. This plant's distribution is being tracked by the NYS Department of Ag & Markets and NYSDOT can provide significant information to this statewide inventory effort. A similar invasive plant that is spreading throughout the state is Cow Parsnip, *Heracleum lanatum*. This plant is smaller than Giant Hogweed and results in many of the same symptoms although to a far less severe degree. We'll have to keep an eye on Cow Parsnip as it appears to be spreading along roadsides and may elevate to a status of statewide significance.;

8. Disposal – Proper disposal of harvested invasive plant parts and soil containing invasive plant seeds or root stock (rhizomes) is essential to controlling the spread of invasive plants. Full consideration should be given, as appropriate, as follows:

Transportation - While on the treatment site, bag all cut living plant material in heavy duty, 3 mil or thicker, black contractor quality plastic clean-up bags. Securely tie the bags and transport from the site in a truck with a topper or cap to securely fasten the load, in order to prevent spread of the plant material from the project work site. Transport the material to an appropriate disposal location;

Compost - Because of the extremely robust nature of invasive species, composting in a typical backyard compost pile or composting bin is not appropriate. However, methods can be used whereby sun-generated heat can be used to destroy the harvested plant materials. For instance, storage in a sealed 3 mil thickness (minimum) black plastic garbage bags on blacktop in the sun until the plant materials liquefy is effective. If a larger section of blacktop is available, make a black plastic (4 mil thickness minimum) envelope sealed on the edges with sand bags. The plant material left exposed to the sun will liquefy in the sealed envelope without danger of dispersal by wind. The bags or envelopes must be monitored to make sure the plants do not escape through rips, tears or seams in the plastic;

Bury – Due to the incredible capacity of many invasive species to reproduce by seed, clone and vegetative propagation, it is absolutely imperative that spoil material contaminated with invasive plant material **NOT** be disposed-of in an indiscriminant manner. It is recognized that the Contractor owns spoil material and therefore, contract documents should identify locations of contaminated soil and address disposal options. Spoil material that contains invasive plant material should be buried in an excavated pit, covered with woven geotextile and covered with at least three feet of uncontaminated fill material;

Landfill – If harvested invasive plant parts or spoil material containing invasive plant material is not, composted or buried, it should be transported directly to a sanitary landfill for proper disposal;

9. Bridge Washing – All bridge washing activities, whether for biannual maintenance or in preparation for re-painting, require the use of water. Several invasive plant and animal species are aquatic or are dispersed through water, therefore, Department activities that require the transport and use of water need to consider invasive species control. Control considerations include use of municipal water sources, filters on water intakes, decontamination/sanitation of equipment and use of in-situ water sources. In addition, the equipment used in transporting and spraying water should be cleaned prior to use or between use at sites in different watersheds. See additional guidance in NYSDOT Engineering Instruction EI 02-032 “Maintenance Cleaning and Washing of Bridges”, 10/07/02.;

10. Construction Equipment in Water Bodies – Several invasive species are aquatic and many additional non-aquatic species are readily spread by the movement of flowing water. Many aquatic invasive species are capable of survival out of water for extended periods. To prevent the accidental introduction of invasive species that are “hitching a ride” on construction equipment, all equipment that is to be placed in a water body should be cleaned, as appropriate,

e.g. tracks, buckets, to remove invasive species and their seeds and propagules. This requirement applies to equipment arriving on the project and equipment that is being relocated within the project;

11. Restricted Construction Equipment Access – To prevent the accidental introduction of invasive plants during construction or maintenance activities, all tracked equipment involved in earthwork should be cleaned to remove plants, seeds and propagules that may be hitch hiking, prior to arrival on-site. If tracked equipment is used in earth work on a portion of a project where invasive species are known to exist, this portion of the earthwork should be conducted last, or the equipment shall be cleaned **prior** to use on any portion of the site that is known to be free of invasive plants; and

12. Cleaning of Construction Equipment - Cleaning should occur prior to equipment arriving on-site. Once on-site, if equipment involved in earthwork is contaminated with invasive species, the equipment should be cleaned prior to moving into uncontaminated areas. Cleaning shall consist of using physical means and hand tools, such as brushes, brooms, rakes or shovels, on all track and bucket/blade components to adequately remove all visible dirt and plant debris. If water is used, the water/slurry shall be contained so as to restrict introduction of invasive plants, seeds and propagules into the project or off-site through future surplus material disposal.

III. Detailed Control Practices by Priority Plant Species - Developed by the Adirondack Park Invasive Plant Program Principle Partners, March 2004

PURPLE LOOSESTRIFE, *Lythrum salicaria*

Plant Description

Purple loosestrife is a wetland perennial native to Eurasia that forms large, monotypic stands throughout the temperate regions of the U.S. and Canada. It has a vigorous rootstock that serves as a storage organ, providing resources for growth in spring and re-growth if the plant has been damaged from cuttings. New stems emerge from the perennial roots enabling the plant to establish dense stands within a few years. Seedling densities can approach 10,000-20,000 plants/m² with growth rates exceeding 1 cm/day. A single, mature plant can produce more than 2.5 million seeds annually which can remain viable after 20 months of submergence in water. In addition, plant fragments produced by animals and mechanical clipping can contribute to the spread of purple loosestrife through rivers and lakes.

Management Options

1. Digging/pulling

Effectiveness: Can be effective in small stands i.e.:<100 plants, low-med density(1-75%area), & <3 acres, especially on younger plants.

Methods: Hand-pull plants<2 years old. Use mini-tiller for plants>2 years - gets most of roots w/minimum soil disturbance, has 3 heavy duty prongs on 1 side that are pushed under base of

plant, then pry back on handle to leverage plant out of ground. Use weed wrench for plants > 2 years old - good w/minimal soil disturbance. In mucky conditions, put base of wrench on small piece of wood (e.g.: piece of 2x4) to keep wrench from sinking into mud. Use shovel for plants > 2 years old - dig up plant, then replace soil and any existing cover.

Cautions: May increase habitat disturbance & increase spread of loosestrife. Requires follow-up treatments of sites for 3 years to eliminate re-sprouting from fragments left behind. Must pull/dig ENTIRE rootstock or re-sprouting will occur. Must pull/dig before the plants begin setting seed or must remove flower/seed heads first (cut into bags) to prevent spread of seeds. Also remove previous years dry seed heads. Erosion control may be necessary.

Disposal: Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits)..

2. Cutting

Effectiveness: Can be effective in small stands i.e.<100 plants, low-med density (1-75% area), & <3 acres, especially on younger plants.

Methods: Remove flower heads before they go to seed, so seed isn't spread when cutting or mowing. Must do repeated cutting & mulching to permit growth of grasses.

Cautions: Need to repeat for several years to reduce spread of plants. Doesn't affect rootstalk & thus, cut pieces can be spread that will re-sprout. Once severed, stems are buoyant and may disperse to other areas and re-sprout.

Disposal: Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

3. Herbicide

Effectiveness: Use when >100 plants & <3-4 acres in size.

Methods: Use glyphosate formulations only. If possible spray seedlings before they reach 12" in height. Cut and bag flower heads before applying herbicide. Apply prior to or when in flower (late July/Aug) so plants are actively growing.

For spot application use:

- sponge tip applicator w/wick.
- injection into stem(w/large gauge needle).

Cautions: Be careful to avoid non-target plant species(i.e.: if spraying, do <25-50% plant foliage to minimize over-spraying to other plants). Use RODEO formulation if loosestrife is growing in standing water or if spray will contact water.

3. Biocontrol

Two species of leaf-feeding beetle, *Galerucella californiensis* and *G. pusilla*, have been shown to be effective in controlling purple loosestrife. Over 5 million of these beetles have been released in 30 states including New York, the northeastern and midwestern states as well as all of the Canadian Provinces. The beetles have shown dramatic decreases in purple loosestrife populations with subsequent increases in populations of native species. The scientific literature indicates that the beetles are very specific to purple loosestrife with only minor *Aspilover* effects that do not compromise non-target plant populations.

Effectiveness: Use if site has at least a half acre of purple loosestrife of medium to thick density.

Best type of control for large patches of loosestrife > 3-4 acres.

Methods: The number of beetles released per site should be based on the size of the site, the density of loosestrife and the economics of purchase. More beetles are generally better than fewer.

Cautions: Use only if mowing, pesticide and herbicide use are not active practices on the site.

The site must not be permanently flooded and should be sunny. Use only if winged loosestrife, (*Lythrum alatum*) and waterwillow (*Decodon verticillatus*) are not major components of the plant community on the release site.

COMMON REED (PHRAGMITES), *Phragmites australis*

Plant Description

Common Reed, or Phragmites, is a perennial grass that can grow to 14 feet in height. Flowering and seed set occur between July and September, resulting in a large feathery inflorescence, purple-hued turning to tan. Phragmites is capable of vigorous vegetative reproduction and often forms dense, virtually monospecific stands. It is unclear what proportion of the many seeds that Phragmites produces are viable.

Note: In addition to the non-native invasive phragmites, a native variety, *Phragmites australis* var. *berlandieri*, also occurs in New York State although it is far less common than non-native phragmites, especially inland. In general, native phragmites has a lower stem density and has a reddish-purple basal-stem coloration in the spring and summer. In fall the native stem bases fade to chestnut brown and continue to fade to lighter brown-gray during winter. Non-native phragmites stem bases are uniform tan in color. Stems of native phragmites are smooth and shiny, as if polished, particularly in the winter, while the stems of non-native phragmites are dull, rough and ribbed. Specific identification guidelines can be found at www.invasiveplants.net/invasiveplants/phragmites/nativeandintroduced.asp. Information on assistance with diagnostic services are available through Cornell University at the same site.

Management Options

1. Cutting and Pulling

Effectiveness: Need to repeat annually for several years to reduce spread of plants. Hand-pulling, though labor intensive, is an effective technique for controlling phragmites in small areas with sandy soils.

Methods: The best time to cut phragmites is when most of food reserves are in aerial portion of plant (when close to tassel stage, e.g. at end of July/early August to decrease plant's vigor. Some patches may be too large to cut by hand, but repeated cutting of the perimeter of a stand can prevent vegetative expansion. Phragmites stems should be cut below the lowest leaf, leaving a 6" or shorter stump. Hand-held cutters and gas-powered hedge trimmers work well. Weed whackers with a circular blade were found to be particularly efficient, though dangerous.

Cautions: If cut before in tassel stage or at wrong time, stand density may increase because Phragmites is a grass. Remove cut shoots to prevent sprouting & forming stolons.

Disposal: Cut or pulled material should be removed from the site and composted or allowed to decay on the upland to prevent sprouting and formation of stolons. Do not attempt to compost rhizomes.

2. Herbicide

Effectiveness: Herbicide use is a 2 year, 2 step process because the plants may need A touch-up@ application, especially in dense stands since subdominant plants are protected by thick canopy & may not receive adequate herbicide in the first application.

Methods: Use glyphosate formulations only. Apply after tasseling stage when nutrients going back to rhizome and will translocate herbicide into roots. After 2 to 3 weeks following application of glyphosate, cut or mow down the stalks to stimulate the emergence and growth of other plants previously suppressed. If the plants are too tall to spray, cut back in mid summer and apply glyphosate when re-growth reaches 2 to 3 ft. tall. Use spray bottle for individual foliar spot treatments. For smaller sites use swab or syringe w/large gauge needle to apply 1-2 drops directly to cut stems if cutting done first.

Cautions: This herbicide is not selective (kills both monocots & dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants. Don't apply in windy conditions because spray will drift and kill other plants. Don't apply if rain is forecast w/in 12 hours because herbicide will be washed away before it can act. Choose Rodeo formulation for applications in standing water or along a shoreline.

3. Black Plastic

Effectiveness: Can be effective in small stands i.e.: <100 plants, low-med density(1-75% area). Plants die off w/in 3-10 days, depending on sun exposure.

Methods: Cut plants first to 6-8" (hand-pushed bush hog or week whacker w/blade). After cutting a stand of phragmites, anchor a sheet of black plastic over the cut area using sand bags or rocks. High temperatures under the plastic will eventually kill off the plants. This technique works best when the treated area is in direct sunlight. Black plastic is better than clear plastic because has higher heat levels. Should be at least 6 millimeters thick. Hold plastic in place with sandbags, rocks, etc. Can treat runners along edge w/spot application of Rodeo or Roundup. Cut holes in plastic in Oct.- Nov. to promote germination of cattail shoots. The plastic can be removed the following year when the covered plants have been killed. A few phragmites shoots may return. These can be cut or hand-pulled.

Cautions: Must monitor to determine if shoots are extending out from under the plastic.

Disposal: Can leave cut material under plastic or bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

4. Cutting/Mulching

Effectiveness: Can be effective in small stands i.e. <100 plants, low-med density (1-75% area) & <3 acres.

Methods: Cut and mulch dead stems in winter to remove them and promote germination of other species. Repeat in second year and then every 3-5 years. Can do after herbicides (late

summer/fall application of Rodeo while leaves are still green).

Sanitation: Clean all clothing, boots, & equipment to prevent spread of seed.

5. Pulling

Effectiveness: Can be effective in small plants i.e.<100 plants. Very labor intensive. OK for small patches. Best with sandy soils.

Methods: Hand-pull plants<2 years old. Use shovel for plants>2 years old-dig up plant, then replace soil and any existing cover.

Disposal: Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation: Clean all clothing, boots, & equipment to prevent spread of seed.

6. Excavation

Effectiveness: Can be effective for patches up to **2** acre. Cost is the limiting factor.

Methods: Heavy equipment that may be tracked or rubber tired will be used.

Cautions: The patch should be excavated to below the depth of rhizome development. Follow-ups later in the season or the following year must be conducted to verify that all the plants have been removed.

Disposal: Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

JAPANESE KNOTWEED, *Polygonum cuspidatum*

Plant Description

Japanese knotweed is an herbaceous perennial which forms dense clumps 1-3 meters (3-10 feet) high. Its broad leaves are somewhat triangular and pointed at the tip. Clusters of tiny greenish-white flowers are borne in leaf axils during August and September. The fruit is a small, brown triangular achene. Knotweed reproduces via seed and by vegetative growth through stout, aggressive rhizomes. It spreads rapidly to form dense thickets that can alter natural ecosystems. Japanese knotweed can tolerate a variety of adverse conditions including full shade, high temperatures, high salinity, and drought. It is found near water sources, in low-lying areas, waste places, and utility rights of way. It poses a significant threat to riparian areas, where it can survive severe floods.

Management Options

1. Digging

Effectiveness: This method is appropriate for very small populations.

Methods: Remove the entire plant including all roots and runners using a digging tool. Juvenile plants can be hand-pulled depending on soil conditions and root development.

Cautions: Care must be taken not to spread rhizome or stem fragments. Any portions of the root system or the plant stem not removed will potentially re-sprout.

Disposal: All plant parts, including mature fruit, should be bagged and disposed of in the trash to prevent re-establishment (stockpile at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation: Clean all clothing, boots, & equipment to prevent spread of seed.

2. Cutting

Effectiveness: Repeated cutting may be effective in eliminating Japanese knotweed. Manual control is labor intensive, but is a good option where populations are small and isolated or in environmentally sensitive areas.

Methods: Cut the knotweed close to the ground at least 3 times a year. Plant native species as competitors as an alternative to continued treatment..

Cautions: This strategy must be carried out for several years to obtain success. Both mechanical and herbicidal control methods require continued treatment to prevent reestablishment of knotweed.

Disposal: Bag all plant parts & remove from site (stockpile at DOT Residency, dispose of in an approved landfill or incinerate with appropriate permits).

Sanitation: Clean all clothing, boots, & equipment to prevent spread of seed.

3. Herbicide

Effectiveness: Glyphosate or Trichlopyr (Garlon) treatments in late summer or early fall are much more effective in preventing re-growth of Japanese knotweed the following year.

Methods: Use Glyphosate or Trichlopyr (Garlon) formulations only.

Strategy:

1) Late June - Cut or mow down stalks.

2) Allow knotweed to re-grow.

3) After August 1, spray knotweed with ROUNDUP, RODEO or GARLON

Cautions: Established stands of Japanese knotweed are difficult to eradicate even with repeated herbicide treatments. However, herbicide treatments will greatly weaken the plant and prevent it from dominating a site. Adequate control is usually not possible unless the entire stand of knotweed is treated (otherwise, it will re-invade via creeping rootstocks from untreated areas).

Empirical evidence is that Garlon is more effective than Roundup in causing Japanese knotweed mortality.

4. Compost

Because of the extremely robust nature of invasive species, composting in a typical backyard compost pile or composting bin is not appropriate. However, methods can be used whereby sun-generated heat can be used to destroy the harvested plant materials. For instance, storage in a sealed 3 mil thickness (minimum) black plastic garbage bags on blacktop in the sun until the plant materials liquefy is effective. If a larger section of blacktop is available, make a black plastic (4 mil thickness minimum) envelope sealed on the edges with sand bags. The plant material left exposed to the sun will liquefy in the sealed envelope without danger of dispersal by wind. The bags or envelopes must be monitored to make sure the plants do not escape through rips, tears or seams in the plastic.

GIANT HOGWEED, *Heracleum mantegazzianum* – Developed by NYSDOT, Kyle Williams, 9/10/04

Plant Description

Giant Hogweed is a biennial or perennial herb growing from a forked or branched taproot. Plants sprout in early spring from the roots or from seeds. The best time to identify Giant Hogweed is when it's blooming in late summer. Numerous small white flowers in July, clustered into a flat-topped umbel up to 2 ½ feet across. Stems are hollow, ridged, 2-4 inches in diameter, 8-14 feet tall with purple blotches and coarse hairs. The hairs are especially prominent that circle the stem at the base of the leaf stalks. Leaves are lobed, deeply incised and up to 5 feet across. Fruit (containing the seed) is dry, flattened. Oval, about 3/8 inch long and tan with brown lines. Giant Hogweed can be confused with the following 3 plants that also grow along roadsides: 1. Cow Parsnip, *Heracleum lanatum*; 2. Angelica, *Angelica atropurpurea*; and 3. Poison Hemlock, *Conium maculatum*. All 3 of these plants are much smaller and flower earlier, May – June, typically. Cow Parsnip is the most likely to be confused with giant hogweed, however in addition to being much smaller, only 5-8 feet tall, the stems are only 1-2 inches in diameter and lack purple blotches and leaves are only 2-2 ½ inches in diameter. Angelica is also much smaller, seldom reaching 8 feet tall, has a smooth stem, round greenish-white flower clusters and 2 foot diameter compound leaves with dozens of small leaflets. Poison Hemlock is 4-9 feet tall with smooth stems with purple blotches. Leaves are very finely dissected and fernlike and small white flowers are arranged in numerous flat-topped clusters on many branches.

About Giant Hogweed

Giant Hogweed is a member of the carrot or parsley family. It is native to the Caucasus region of Eurasia and was introduced to North America in the early 1900's. It's massive size and imposing appearance made it desirable for arboretums and gardens, however it soon escaped from cultivation and became established in rich moist soils along roadside ditches, stream banks, waste ground, along tree lines and open wooded areas. In New York State, giant hogweed escaped from cultivation near Rochester and has spread from this point, primarily east and west along the Thruway corridor.

Health and Safety Concerns

This robust plant is a worker and public health hazard because of it's potential to cause severe skin irritation in susceptible people. Plant sap produces painful, burning blisters with 24-48 hours after contact. Plant juices can also produce painless red blotches that later develop into purplish or brownish scars that may persist for several years. For an adverse reaction to occur, the skin, contaminated with plant juices, must be moist (perspiration) and then exposed to sunlight. Giant hogweed is a Federal Noxious weed, making it unlawful to propagate, sell or transport this plant. The NYS Department of Agriculture and Markets should be notified whenever this plant is encountered.

Management Options

1. Digging

Digging is NOT recommended as a control option due to the large perennial root system that will soon resprout.

2. Cutting

Mowing, cutting or weed whacking are NOT recommend as control options because the large perennial root system will soon re-sprout and because of the potential exposure to the plant sap. The exception to not cutting, is that mature seed heads should be hand cut, placed in black plastic garbage bags and disposed of at a licensed landfill.

3. Herbicide

Recommend foliar spray application by certified applicator and in accordance with all label instructions and state and federal laws of Thinvert, Garlon or Glyphosate. To minimize risk of exposure to the plant's sap, cutting the plant prior to herbicide application is not recommended.

IV. Sample NYSDOT Regional Specifications and Special Notes

1. Region 1 Note – Zebra Mussel Control
2. Region 8 Note – Zebra Mussel Control
3. Region 8 Specification – Invasive Plant Control
4. Region 7 Specification – Japanese Knotweed Control
5. Region 1 Specification – Phragmites Control

1. Region 1 Zebra Mussel Control Special Note

Special Note

Lake George Drainage Basin

Zebra Mussel Decontamination and Disinfection Procedures

for Equipment and Tools

Procedures for the Transfer of Construction Equipment from possible Infested Waters to Waters in the Lake George Drainage Basin

Machinery, tools, work clothing and other equipment used in water bodies outside of the Lake George Drainage Basin, **will** be thoroughly cleaned, decontaminated and disinfected before being used in any water body or tributary to Lake George. The cost of disinfecting equipment, tools and other supplies is included in the payment for the work in which it is used. No separate payment will be made for disinfecting. New equipment, being used for the first time, will be exempt from these requirements.

The moving of large and small construction equipment from one body of water to another may contribute to the spread of zebra mussels. Construction activities need to take great care to avoid the transfer of zebra mussel "stowaways". The smaller the mussel the more likely it is to be seen and therefore inadvertently transported. Although an adult mussel can survive for a week or more in a cool, moist, shaded area, smaller mussels and veligers, the larval stage, cannot survive out of water for as long. Veligers can die quite quickly when exposed to drying or the sun.

Equipment that has been in the water for more than 1 or 2 days may have mussels attached to it. More often the mussels are found attached to aquatic plants that have been snagged by ropes or pump units. These are easily transported from water body to water body, and make a naturally moist and shaded environment in which the mussel may remain alive. The zebra mussel can also be inadvertently transported in tanks, drums, cooling systems, and on other equipment parts.

Zebra mussels also settle on aquatic plants that can be caught on props, anchors, chains, that hold in place items like turbidity curtains and silt fences and can be accidentally transported from an infested water source to a clean one. Once relocated, they could easily establish a dense population. Following the guidelines below will not only help to slow the spread of the zebra mussel across North America, but will help to prevent zebra mussels from fouling Lake George and contractors equipment, and avoid potentially expensive removal procedures.

The agencies responsible for the Lake George Drainage Basin, the various state and federal agencies recommend taking the following precautions to minimize further unintentional zebra mussel introductions into currently uninfested waters.

Methods for equipment decontamination

Small equipment (pumps, hoses, barriers, silt fences, floating booms, cofferdams, shovels, rakes, jumping jacks, plate tampers, boots, buckets, etc.)

All field equipment needs to be visually inspected and all mussels removed and killed. The equipment must then be cleaned by soaking, dipping in, or scrubbing with a chlorine solution or steam-cleaned and allowed to dry completely before use. Particular attention must be given to places where the mussels could be accidentally trapped, such as the treads of boots, inside of pumps and hoses, ropes and chains, attached to fabric of silt fences or floating booms, etc.

Large equipment (backhoes, excavators, trucks, rollers, trailers, etc.)

All surfaces and other compartments that could hold water from an area outside of the Lake George Drainage Basin area will be drained of water before bringing to the project area, and flushed with disinfectant solution and/or hot water or steam cleaned, and allowed to dry before the next use. If appropriate, the possible contaminated water may be drained back into the original body of water, as long as conditions are such that this would not cause chemical or biological contamination. Otherwise, such water must be collected into a suitable container for treatment prior to final disposal.

If water is drained and collected, it must be disinfected and then disposed of by suitable means to avoid causing environmental damage or contamination.

After washing and/or draining contained water, all inaccessible compartments should be filled with a disinfecting solution, and whenever feasible, the disinfectant should be retained in the compartment until arrival at the next site. If the compartment is too large to make filling practical, rinse it thoroughly with a disinfecting solution, and repeat.

Equipment surfaces:

Option 1: All surfaces must be scrubbed to remove any clinging material from the field site, then visually inspected and any remaining material removed, and finally steam cleaned or hosed down with high pressure water.

Option 2: All equipment surfaces will be assumed to be free of live mussels if they have been thoroughly scrubbed, visually inspected, any visible field site material removed, and has remained dry and out of the water for at least 2 weeks, or 1 week in dry weather > 20 °C.

Regardless of which option is used for cleaning, visual inspection must follow with *special attention* being paid to: 1) cracks and crevices in which mussels may become trapped, and 2) aquatic plants, (milfoil, Lilly pads, etc.) harboring juvenile mussels that may be present on all surfaces. Particular attention must be paid to soft materials, (erosion fabrics, plastic sheeting, gloves, waders, etc.) which could trap tiny mussels. If possible, such material should be removed from the equipment before doing work in the Lake George Drainage Basin.

Acceptable methods for disinfection

Chemical disinfection: The effectiveness of chemical disinfection is dependent on the concentration of the disinfectant used and the contact time. Since adult zebra mussels can close up and survive for extended periods of time under toxic external conditions, chemical disinfecting as a means to kill adult musseks.

Disinfectant	Concentration	Minimum Contact Time
Chlorine Bleach (>5% sodium hypochlorite)	100ml/20 L of Solution (3 oz/5 gallons of water)	1 Hour

Heat: Temperature and exposure time determine the effectiveness of temperature treatments. Live steam, autoclaving, or boiling are all believed to be 100-percent effective against all zebra mussel life stages, as well as potential parasites they may contain. Minimum exposure times of 3 min at full heat for individual mussels and 10 min for clusters are recommended.

Freezing: Adult zebra mussels have a relatively low tolerance to freezing. Equipment must be kept at a temperature equal to or below -10 °C (14°F) for a minimum of 4 hr. For example, the equipment has been stored outside all winter and hasn't been in use since then, it is safely assume a combination of freezing and dessication has destroyed the mussels.

Physical: Crushing is an effective way to kill adult mussels, but may not be effective against attached larval or juvenile stages. Therefore, crushed adult remains should also be exposed to a chemical disinfectant solution prior to final disposal.

Desiccation: Desiccation is effective if allowed to continue for a long enough period of time. There are

reports that live adult zebra mussels have survived for up to 21 days out of water under ideal conditions in a controlled laboratory setting. However, complete desiccation and exposure to warm dry air and/or direct sunlight should be effective in a week or less, but must be confirmed.

2. Region 8 Zebra Mussel Control Special Note

SPECIAL NOTES FOR BRIDGE WASHING IN THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION WATERSHED

For bridges that cross water bodies or wetlands within the New York City Department of Environmental Protection (NYCDEP) watershed area, the contractor may either withdraw water from local (on-site) sources for bridge washing or bring stored water that can be verified as originating from a zebra mussel free source. All water storage and application equipment shall be sanitized in such a manner as to eliminate the threat of zebra mussel contamination of the reservoir system by the use of such equipment. If the contractor elects to withdraw water from the NYC source, s/he must contact the NYCDEP for prior written permission. If the contractor chooses to use water from an off-site source, s/he must notify NYCDEP.

3. Region 8 Invasive Plant Control Specification

DESCRIPTION

This work shall consist of controlling invasive plants in accordance with the contract documents and as directed by the Engineer.

MATERIALS

Six (6) mil Polyethylene Sheeting, black color.

Glyphosate based herbicide or equivalent water-soluble, non-selective foliar applied herbicide having no residual soil activity conforming to Section 713-13.

CONSTRUCTION DETAILS

Season. The work shall be performed during the season(s) specified in the contract documents.

- a. Plants shall be treated with an herbicide at least once during the active growing season between May and October.
- b. If the invasive plants have reached a height of greater than one (1) meter (m), the Contractor shall cut the specified plants to a height of 250-500 mm.
- c. Immediately after cutting, all plant parts shall be carefully placed in heavy black plastic bags and tightly secured and moved off-site.
- d. Within two (2) hours following cutting, the remaining stems and plant parts of the invasive shall be treated with the herbicide.
- e. Six (6) to eight (8) weeks after the initial herbicide application, the invasive species shall be inspected for re-growth and all re-sprouted plants shall be cut to a height of 250-500 mm. Cuttings shall be removed as described in (c) and cut plants immediately treated with the approved herbicide mixture as described in (d).

- f. A final inspection of the treated area shall be performed in late September/early October. If re-growth has occurred, (b), (c) and (d) shall be repeated.
- g. The herbicide application shall be accomplished by, or under the direct supervision of a NYS Department of Environmental Conservation certified commercial applicator in the Highway-Right-of-Way category.
- h. Herbicide application shall be accomplished by hand-sprayer, back pack, wick application, stem injection or herbicide clippers. Broadcast herbicide applications are not allowed.
- i. The contractor shall abide by the special notes and provisions contained in the contract documents.
- j. The contractor shall abide by any environmental and other permits necessary to complete the work.
- k. Usage of any herbicide other than glyphosate shall be approved by the Regional Maintenance Environmental Coordinator or Regional Landscape Architect/Environmental Manager.

Disposal of Material. Material bagged and removed from the project site or from cleaning operations, shall be dried or decomposed at an approved location, disposed of in an approved landfill or incinerated at an approved facility or with the appropriate burn permits. Secure disposal shall be accomplished in such a manner as to prevent the invasive plant from re-establishing at a new location either by seed, roots or other viable plant parts.

Equipment Cleaning. All clothing, boots, and equipment used in areas containing invasive plant species shall be cleaned prior to leaving the site to prevent the spread of seeds, roots, or other viable plant parts. Loose material that has been removed from clothing, boots, or equipment shall be securely disposed as described above.

METHOD OF MEASUREMENT

This work will be measured as the number of square meters of each satisfactory completion of one cutting and herbicide treatment cycle of invasive plants.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all labor, materials, equipment, disposal, and incidentals necessary to satisfactorily complete the work.

DESCRIPTION

This work shall consist of applying herbicides, cutting, removing, transporting, and isolated disposal of identified invasive plant species as currently recommended by the best management practices of The Nature Conservancy, USDA Natural Resource Conservation Service, The Invasive Plant Council of New York or The Adirondack Park Agency General Permit GP 2002G-2. The objective of this item is to eliminate the invasive infestation and/or regrowth at specified locations in the contract documents or as directed by the Engineer in Charge (EIC).

MATERIALS

A water-soluble, non-selective foliar applied herbicide having no residual soil activity conforming to Section 713. The herbicide shall be approved for use by the EIC.

4. Region 7 Invasive Plant Control Specification – Japanese Knotweed

CONSTRUCTION DETAILS

An invasive plant management plan shall be submitted to the engineer for approval 5 days prior to beginning the application process. The management plan shall be based on current best management practices from the above sources. As a minimum the plan shall include:

1. Locations to be treated
2. Herbicide and application rates
3. Application timing
4. Site preparation
4. Eradication monitoring dates
5. Remediation plans
6. Proposed disposal isolation methods
7. Herbicide Material Safety Data Sheet (MSDS)
8. Adirondack Park Agency application form 2002G-2 (If project is within park)

Within the Adirondack Park, application and material limitations are described under the Adirondack Park Agency General Permit GP-2002G-2 “Management of terrestrial invasive plant species in or within 100' of wetlands in the Adirondack Park”.

Performance: No later than 6 weeks after initial application, the EIC determines if the identified invasive species has been satisfactorily eliminated. Based upon the results of this inspection it may be necessary for the Contractor to repeat or modify the best management practices until the target invasive plant species is eliminated in the identified areas. Any areas requiring more than one treatment shall be retreated at no cost to the State.

Season: The work shall be performed when recommended by the best management practices in conjunction with herbicide label directions.

Disposal of Material: Plant material shall be covered and secured for removal from the project site. Material transportation and disposal shall follow best management practices of isolation and secure disposal at a landfill, incinerator or other suitable material disposal site that has no possibility for future propagation.

Cleaning: Supplemental to section 107-01 (A) of the Standard Specifications. All clothing, boots, and hand tools used in areas containing invasive plant species shall be cleaned prior to leaving the site to prevent the spread of seeds, roots, or other viable plant parts. Loose material that has been removed from clothing, boots, or equipment shall be disposed of at a secured site .

Care of Controlled Areas During Construction. Care shall consist of keeping the areas free of resprouting, by implementing best management practices. The Contractor shall care for the controlled areas of invasive plants until final acceptance of the contract.

METHOD OF MEASUREMENT

Controlling invasive plants will be measured as the number of square meters of surface area that have been satisfactorily controlled.

BASIS OF PAYMENT

The unit price bid per square meter shall include the cost of all labor, materials and equipment, including disposal, and incidentals necessary to complete the work. The item shall not be considered complete until satisfactory control, as approved by the EIC, of the targeted invasive plants has been achieved.

Payment will be made under:

Item No.	Item	Pay Unit
_____	M Controlling Invasive Plants	Square Meter

5. Region 1 Invasive Plant Control Specification - Phragmites

DESCRIPTION

This work shall consist of applying herbicides, cutting, removing, transporting, and disposing of identified invasive plant species, and/or using polyethylene sheeting to control their spread and/or regrowth as specified in the Contract Documents or as directed by the Engineer.

MATERIALS

Six (6) mil UV resistant, Polyethylene Sheeting

A water-soluble, non-selective foliar applied herbicide having no residual soil activity, or other herbicide as specified in the Contract Documents conforming to Section 713. The herbicide shall be approved by the Regional Landscape Architect prior to use.

CONSTRUCTION DETAILS

Season. The work shall be performed during the season(s) specified in the Contract Documents.

Site Preparation

I. Using Polyethylene Sheeting.

- a. Cut invasive plants to a height of between 150 - 200 mm in the locations shown in the plans and at the times specified in the Contract Documents.
- b. All cut plant parts shall be carefully placed in heavy black plastic bags and tightly secured before moving them off-site **or as specified in contract documents.**
- c. Cover the cut plant stems with black plastic and securely anchor.

II. Using Herbicides.

- a. Cut invasive plants to a height of 100 mm as shown on the plans and at the times specified in the Contract Documents
- b. All plant parts shall be carefully placed in heavy black plastic bags and tightly secured before moving them off-site.
- c. Immediately after cutting the plant stems, all cut plant stem surfaces shall be carefully treated with an approved mixture of herbicide and distilled water.
- d. Three (3) to four (4) weeks later, all resprouted plants shall be cut to a height of 100 mm, with the cut plant parts carefully bagged and secured before removing from the site. The remaining plant stems shall be immediately treated with the approved herbicide mixture.

III. By Pulling.

- A. Hand or mechanically pull all stems and associated roots within the designated areas shown and at the times specified in the Contract Documents.
- B. All cut plant parts shall be carefully placed in heavy black plastic bags and tightly secured before moving them off-site or as specified in the contract documents.
- C. Care shall be taken in pulling stems to remove as much of the root mass as possible. Some supplemental digging may be required.

IV. By Digging.

- A. Mechanical methods may be used to remove plant material.
- B. A removal perimeter should be established no less than two times the average height of the adjacent plants to be removed.
- C. Excavation shall extend a minimum of 600 mm below the last part of the root mass.
- D. Material should be transported, covered, to a secure site with no possibility for further propagation.

Liability. When the Engineer determines that the identified invasive species have not been satisfactorily eliminated after a suitable period of time has elapsed, the Contractor shall repeat the above-specified steps until the target invasive plant species is satisfactorily controlled in the identified areas. Any areas requiring additional treatments, as determined by the Engineer will be at the Contractor's expense. The contract will not be accepted until satisfactory control of the targeted invasive plants has been achieved.

Disposal of Material. Material bagged and removed from the project site, or from cleaning operations, shall be dried or decomposed at an approved location, disposed of in an approved landfill or incinerated at an approved facility or with the appropriate burn permits.

Equipment Cleaning. All clothing, boots, and equipment used in areas containing invasive plant species shall be cleaned prior to entering the site and prior to leaving the site to prevent the spread of seeds, roots, or other viable plant parts. Loose material that has been removed from clothing, boots, or equipment shall be disposed of at a secured site with no possibility for future propagation.

Care of Controlled Areas During Construction. Care shall consist of keeping the areas free of resprouting, by repairing/replacing polyethylene sheeting, cutting and treating new sprouts, pulling, or digging newly emergent invasive plants. The Contractor shall care for the controlled areas of invasive

plants until final acceptance of the contract or as required under “Period of Disestablishment for Invasive Plants”.

Period of Disestablishment for Invasive Plants shall begin one year after the satisfactory completion of all invasive species control methods or when the contract is complete, whichever is later, as confirmed in writing by the Engineer. The Contractor shall be required to continue the work specified under “**Care of Controlled Areas During Construction**” for a period of one additional year.

METHOD OF MEASUREMENT

Controlling invasive plants will be measured as the number of square meters of surface area that have been satisfactorily controlled.

BASIS OF PAYMENT

The unit price bid per square meter shall include the cost of all labor, materials and equipment, including disposal, and incidentals necessary to complete the work.

Payment will be made under:

Item No.	Item	Pay Unit
01615.0301 M	Controlling Invasive Plants with Plastic	Square Meter
01615.0302 M	Controlling Invasive Plants with Herbicides	Square Meter
01615.0303 M	Controlling Invasive Plants by Pulling	Square Meter
01615.0304 M	Controlling Invasive Plants by Digging	Square Meter

Appendix C

Indiana Bat Project Review Fact Sheet
New York Field Office

This fact sheet is intended to provide information to assist project sponsors, as well as any involved Federal and state agencies, with the review of projects (*e.g.*, residential or commercial development) and activities that occur within the likely range of the Indiana bat (*Myotis sodalis*) within the state of New York (State) to assist in compliance with the Federal Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). **PLEASE NOTE - this fact sheet does not apply to wind development projects as they involve many unique considerations.** Contact the U.S. Fish and Wildlife Service (Service) directly for technical assistance for wind projects. In addition, information on evaluating impacts from wind projects on Indiana bats can be found at <http://www.fws.gov/midwest/endangered/mammals/inba/WindEnergyGuidance.html>.

The Indiana bat is Federally- and State -listed as an endangered species with a range that extends from the Midwest to northeastern and southeastern parts of the United States. Additional information on Indiana bat occurrences can be found at <http://ecos.fws.gov> and <http://www.fws.gov/northeast/nyfo/es/section7.htm>.

In the northeastern United States, multiple state and Federal agencies have investigated Indiana bat movements. In the spring of 2002 through 2007, the New York State Department of Environmental Conservation (NYSDEC) and the Service successfully tracked female Indiana bats from their hibernacula in Essex, Ulster, Jefferson, and Onondaga Counties to their spring roosts, with average distances of up to approximately 40 miles. However, they are capable of flying distances much greater than that and have been documented doing so in other parts of their range (Winhold and Kurta 2006).

The Indiana bat typically hibernates in caves/mines in the winter and roosts under bark or in tree crevices in the spring, summer, and fall. Suitable potential summer roosting habitat is characterized by trees (dead, dying, or alive) or snags with exfoliating bark, or containing cracks or crevices that could potentially be used by Indiana bats as a roost. The minimum size roost tree observed to date is 2.5 inches diameter breast height (d.b.h.) for males and 4.3 inches d.b.h. for females. However, maternity colonies generally use trees greater than or equal to 9 inches d.b.h. Overall, roost tree structure appears to be more important to Indiana bats than a particular tree species or habitat type. Females appear to be more habitat specific than males presumably because of the warmer temperature requirements associated with gestation and rearing of young. As a result, they are generally found at lower elevations than males may be found. Roosts are warmed by direct exposure to solar radiation, thus trees exposed to extended periods of direct sunlight are preferred over those in shaded areas. However, shaded roosts may be preferred in very hot conditions. As larger trees afford a greater thermal mass for heat retention, they appear to be preferred over smaller trees. Additional information on potentially suitable summer habitat can be found in the Draft Indiana Bat Recovery Plan (Service 2007) at <http://www.fws.gov/northeast/nyfo/es/IndianaBatapr07.pdf>.

Streams associated with floodplain forests, and impounded water bodies (ponds, wetlands, reservoirs, etc.) where abundant supplies of flying insects are likely found provide preferred foraging habitat for Indiana bats, some of which may fly up to 2-5 miles from upland roosts on a regular basis. Indiana bats also forage within the canopy of upland forests, over clearings with early successional vegetation (*e.g.*, old fields), along the borders of croplands, along wooded

Indiana Bat Project Review Fact Sheet
New York Field Office

fencerows, and over farm ponds in pastures (Service 2007). While Indiana bats appear to forage in a wide variety of habitats, they seem to stay fairly close to tree cover.

Threats include habitat loss or degradation, human disturbance, disease (white-nose syndrome), contaminants, and collision with wind turbines.

Evaluation of Presence or Absence of Suitable Habitat

To determine whether the proposed project site may provide suitable habitat for the Indiana bat, the Service recommends the following analytical approach¹:

1. Is the proposed project within a county² identified by the Service as known or likely to contain Indiana bats?
 - If no, no further coordination regarding the Indiana bat is necessary at this time.
 - If yes, proceed to Step 2.
2. Is the proposed project at an elevation of ≤ 900 feet above sea level (the maximum elevation we have observed Indiana bat summer use in New York)?
 - If no, no further coordination regarding the Indiana bat is necessary at this time.
 - If yes, proceed to Step 3.
3. Is there any suitable Indiana bat habitat³ present within the proposed action project area?
 - If no, no further coordination regarding the Indiana bat is necessary at this time.
 - If yes, determine whether the proposed project involves any direct or indirect effects to Indiana bats.

Determination of Direct or Indirect Effects

Each project will need an individual assessment of whether direct (those that would result from activities while Indiana bats are present) or indirect effects (those effects that are caused by or will result from the proposed action and are later in time, but are still reasonably likely to occur [50 CFR 402.02]) to Indiana bats are expected.

For example, consider whether a project may result in temporary or permanent increases in noise, vibration, dust, chemical use, lighting, vehicle use, and general levels of human activity. Also, consider whether a project may result in temporary or permanent loss, degradation, and/or fragmentation of roosting, foraging, swarming, commuting, or wintering habitat.

¹ This reflects our current understanding, but future studies may result in a revision to this guidance.

² Review county information provided at <http://ecos.fws.gov> or <http://www.fws.gov/northeast/nyfo/es/section7.htm>

³ Refer to the Recovery Plan and Indiana Bat Section 7 and Section 10 Guidance for Wind Energy Projects document located at <http://www.fws.gov/midwest/angered/mammals/inba/index.html> for description of suitable habitat.

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Surveys for Indiana Bats

Should suitable Indiana bat habitat be present and should the proposed project have the potential for impacting Indiana bats, a determination must be made as to whether the species is present by conducting species surveys which follow current Indiana bat survey protocols⁴. If the species is present, the potential impacts that may result from the proposed project must be evaluated. Due to the limited time frame when bat surveys can be completed and to avoid project delays, it is strongly recommended that the project sponsor (or involved Federal agency) contact the Service as early as possible during project planning to determine if surveys or additional avoidance and/or minimization measures will be necessary. Should Indiana bat presence be detected, the Service should be contacted immediately for further assistance in determining whether your action may adversely affect Indiana bats. If no bats are detected after protocol surveys, please submit the results to the Service as soon as possible for our review.

Conservation Measures

Conservation measures are designed to minimize the likelihood of adverse impacts or result in beneficial effects to Indiana bats from projects. The following guidance represents general recommendations that may be incorporated into the proposed project design as appropriate.

Project Siting

- Avoid removing or damaging known roosts.
- Avoid impacts to forest patches with known roosts/foraging use.
- Minimize impacts to all forest patches.
- Maintain forest patches and forested connections (e.g., hedgerows, riparian corridors) between patches.
- Maintain natural vegetation between forest patches/connections and developed areas.
- Maintain at least 35%⁵ of forest habitat within maternity colony home range⁶.
- Restore and/or protect on- and off-site habitat.
- Avoid impacting potential roost trees to the greatest extent practicable.
 - Retain standing live trees that have exfoliating (separated from cambium) bark and are greater than 12 inches d.b.h.
 - Retain black locust, shellbark, shagbark, and bitternut hickories as much as possible, regardless of size or condition (live, dead, or dying).
 - Retain standing snags as much as possible regardless of species.

⁴ Found at <http://www.fws.gov/midwest/Endangered/mammals/inba/index.html>.

⁵ Minimum % forest cover within Indiana bat maternity colony home range (NYSDEC unpublished data).

⁶ For explanation of how to delineate Indiana bat maternity colony home range, please see the Indiana Bat Section 7 and Section 10 Guidance for Wind Energy Projects document located at <http://www.fws.gov/midwest/Endangered/mammals/inba/index.html>

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Project Construction

- When >10 miles from a Priority 3 (P3) or Priority 4 (P4) hibernaculum or >20 miles from a Priority 1 (P1) or Priority 2 (P2) hibernaculum⁷, but within the summer range of the Indiana bat, the clearing of potential roost trees, generally ≥ 4 inches should occur from October 1 through March 31⁸.
- When <10 miles from a P3 or P4 hibernaculum or <20 miles from a P1 or P2 hibernaculum, clearing should be conducted from October 31 to March 31.
- Use bright flagging/fencing to demarcate trees to be cleared.

Project Operations/Maintenance

- Minimize lighting impacts (e.g., limit number of lights, direct lights downward, fully shield lights, use motion sensors or timers).
- Avoid use of chemicals (e.g., colorants, copper sulfate) in stormwater detention basins.

As we better understand a given proposed project, including any proposed conservation measures for Indiana bats, we may have additional recommendations. Project sponsors should seek assistance from the Service to develop these measures.

Information to Provide to the Service

The project's environmental documents should identify project activities that might result in adverse impacts to the Indiana bat or their habitat. Information on any potential impacts and the results of any recommended habitat analyses or surveys for the Indiana bat should be provided to the New York Field Office and will be used to evaluate potential impacts to the Indiana bat or their habitat, and to determine the need for further coordination or consultation pursuant to the ESA. We encourage the project sponsor to submit these materials as early in the planning process as possible to all appropriate parties (e.g., involved Federal/State agencies, NYSDEC, Service).

Specifically, the following information should be provided:

- a detailed project description,
- a map of the proposed project area with coarse vegetation cover types (e.g., emergent wetland, open field) in acres,
- a summary table of current vs. proposed future acreage of each cover type,
- provide a summary of the number and description of trees proposed for removal, or if too large to count individual trees, provide the acreage and description of the impact,
- an overlay of new construction on the vegetation map,

⁷ See Service 2007 for definitions of Priority 1-4 hibernacula. Contact the NYFO for information regarding the closest hibernaculum to your project

⁸ Site specific information may allow for deviations from the listed dates. Also, there may be cases (e.g., very small number of trees) when we believe the likelihood of impacts is low regardless of when tree removal occurs.

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- a description of the forested area onsite, including the type of forest (e.g., oak-hickory), approximate stand age, and presence of dead or live trees with split branches or trunks or exfoliating bark,
- photographs representative of all cover types on the site and encompassing views of the entire site,
- a topographic map with the project area identified, and
- a summary of proposed conservation measures.

References:

- U.S. Fish and Wildlife Service. 2007. Indiana Bat (*Myotis sodalis*) Draft Recovery Plan: First Revision. U.S. Fish and Wildlife Service, Fort Snelling, MN. 258 pp.
- Winhold, L. and A. Kurta. 2006. Aspects of Migration by the Endangered Indiana Bat, *Myotis sodalis*. Bat Research News 47:1-11.