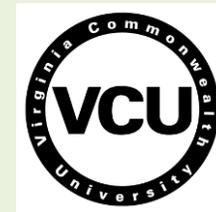


Pocahontas Island Neighborhood Plan

Prepared for the City of Petersburg
Department of Planning and
Community Development



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Executive Summary

Pocahontas Island in Petersburg Virginia has a location and story demanding attention. Surrounded on three sides by The Appomattox River, it is a short walk from Historic Old Towne and a quick drive off of Interstate 95. Established as a town separate from Petersburg in 1752 and named after the famous Powhatan princess who is said to be an ancestor of one of its founders, it quickly developed as a commercial center for Virginia's leading crop, tobacco. During the 18th Century, it grew into one of the earliest Free Black communities in North America and following the Civil War it symbolized African-American self-determination and cultural pride. Industry propelled the island to greater significance over the next fifty years, and it was home to Petersburg's main train station and later the Roper Bros Lumber Facility along with other manufacturing uses. After a peak around the middle of the 20th century, the island, mirroring the larger Petersburg community, suffered decades of population and economic decline. Roper Bros closed in 2009 and the current population is a fragment of what it was. But the residents who remain have a strong intergenerational connection to the island's history and maintain a tight-knit community. They are determined to see Pocahontas Island prosper once again.

Because of its waterfront location adjacent to a growing downtown Petersburg, the island is vulnerable to radically transformative forces. Many stakeholders consider it inevitable that the old Petersburg port, just south of Roper Bros, will be dredged. While not addressing this possibility directly, the plan advocates a resilient Pocahontas, able to maintain its identity in the face of the increased attention dredging would bring. With blighted houses, a large, empty factory, and an aging population, development pressures threaten to undermine the cultural fabric of the neighborhood, to the concern of residents. The City of Petersburg, responsive to this threat but also interested in reconnecting to the island, long separated by the hulking and unfortunately polluting Roper Bros Lumber Site, requested this plan to forge a path for both preserving the neighborhood and building upon its abundant assets. Currently developing a new comprehensive plan, the Department of Planning and Community Development strives to promote Petersburg's cultural resources, revitalize its struggling neighborhoods, and enhance the local economy. This plan aims to assist with all of those desires.

Key stakeholders in the Pocahontas Neighborhood and throughout the city participated in a series of community meetings, focus groups, and surveys to focus the direction the plan would take. A collaborative process developed goals and objectives that were used to analyze potential plan actions alongside considerations of market and funding feasibility. The future of the neighborhood and the Roper Site were combined in this process because the two are inextricably linked through a shared history and location. Their revitalization will succeed and/or fail together. Plan recommendations revolve around the promotion of history, environmental sustainability, residential preservation, asset building, recreation, and aesthetic beauty. The final Pocahontas Island Neighborhood Plan simultaneously reinforces the area's distinct past while formulating a new and resilient neighborhood prepared to thrive in the coming decades. The cover of this plan symbolizes its purpose. At the intersection of the Pocahontas Island's people, history, and location lies the indelible foundation on which a vibrant neighborhood can rise. Ultimately, this researcher and this plan are deeply indebted to the proud residents of the island, who made the following pages possible and will make the realization of the community vision they established a reality.

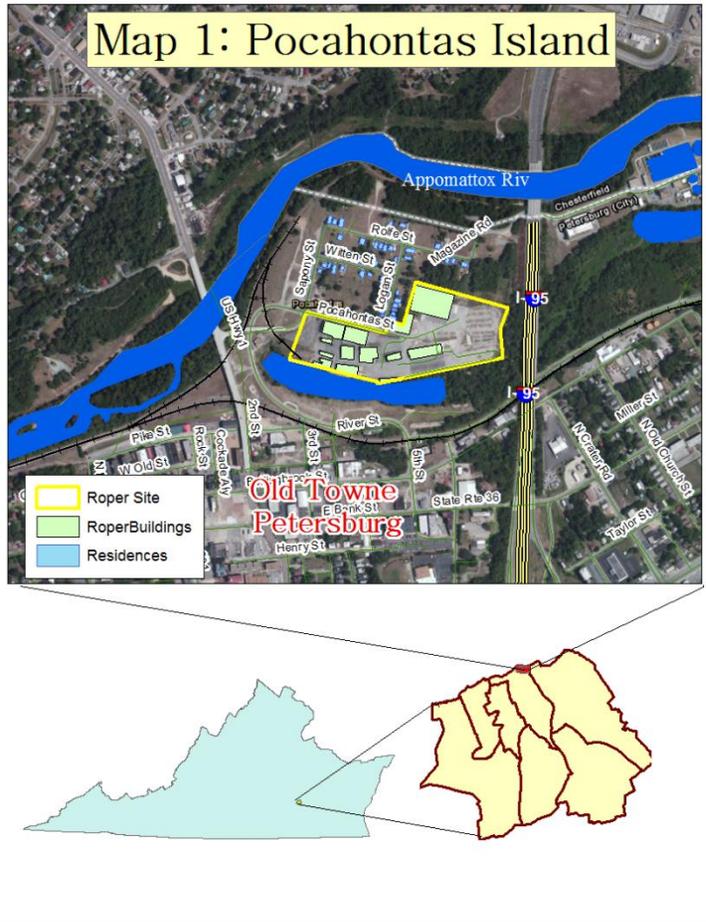
Introduction

Client

The Petersburg Department of Planning and Community Development requested The Pocahontas Island Neighborhood Plan, which also fulfills the requirements of the Master of Urban & Regional Planning program in the L. Douglas Wilder School of Government and Public Affairs at Virginia Commonwealth University. The planning department consists of a Director, Historic Preservation Planner, and a Community Development Block Grant (CDBG) Administrator. Its mission is to “preserve and enhance the quality of life of all residents of the city by encouraging and promoting the orderly use of land for redevelopment and growth through intermediate and long range comprehensive and strategic planning, implementing the city's Zoning Ordinance, Subdivision Ordinance, and other land use regulations and policies, and by fostering neighborhood revitalization and stability” (Petersburg Department of Planning and Community Development). Every aspect of this mission influences The Pocahontas Island Neighborhood Plan, but orderly development, proper land use regulations, and neighborhood revitalization direct its motivation and potential implementation.

The planning department utilizes many tools to achieve this mission. It is currently developing a new long-term, strategic comprehensive plan that will advance the interests of Petersburg as a whole, while targeting development for areas and neighborhoods needing special consideration. One strategy the city uses for targeted development is the allocation of CDBG funding. The Request for Proposals (RFP) states that said funding can be used for acquisition and disposition, rehabilitation and preservation, clearance and demolition, and public services and facilities improvement. Proposals must also assist in reducing blight, benefit low to moderate income residents, or address urgent community needs (Ibid). In pursuance of similar goals, the planning department advocates for fair housing policies and investigates housing discrimination. The Development Review Team ensures orderly land development consistent with city plans and federal and state regulations by analyzing project and development proposals. Finally, the Preservation Planning Office and an Architectural Review Board promote historical preservation in seven designated historic districts through the application of grants, tax credits, and design guidelines. History is perhaps Petersburg’s greatest asset, and it is The Petersburg Department of Planning and Community Development’s aim to stress it.

Map 1: Pocahontas Island



Plan Purpose

The Pocahontas Island Neighborhood Plan proposes the mutual development of both the Pocahontas residential neighborhood and the abandoned Roper Bros Lumber facility, a large site situated on the island between the residential area and downtown Petersburg that is, combined with the nearby stretch of the Appomattox River, potentially contaminated with the chemicals used to produce and transport lumber and the byproducts of other neighboring historical industrial uses, thus constituting a brownfield. Michelle Peters, the Petersburg Planning Department Director, explained that the City of Petersburg wants a plan for Pocahontas Island to respond to the decades of population decline and neighborhood deterioration afflicting the neighborhood (Peters, 2013). They are considering infill single and two-family residential development on Pocahontas and the utilization of the island's vast historical resources. This plan evaluates the potential of such aims alongside other variables including the wishes of residents, environmental constraints, and market and funding feasibility. The city understands that the streets, public spaces, housing, and infrastructure on the island must be upgraded and maintained for revitalization to occur, and it is prepared to commit Capital Improvements resources to this end. With a new director, small staff, and limited resources, the Petersburg Planning Department is in a period of transition and cannot currently address the needs of Pocahontas directly. This plan can be incorporated into the new

comprehensive plan and strengthen it. The city has taken steps to prepare the island for transformation. In 2011 the Petersburg Economic Development Department purchased the Roper Site, allowing Petersburg to have some control over its future redevelopment. The city is excited about the potential economic opportunities of dredging the river adjacent to Roper, bringing boat traffic back to the old port, and using the vast acreage of the old lumber facility for recreation, entertainment, and commercial purposes. The city also purchased the oldest and most historically significant structure on the island, the Jarrett House, and asked that this plan address its stabilization and maximum best use. Finally, the city expects this plan to identify resources and provide practical strategies so implementation can begin immediately.

Plan Context

Pocahontas Island maintains a unique position for such a plan. As with much of Petersburg, it has a rich and vibrant historical legacy. Home to one of the earliest free black communities in the United States, the island contains a house most likely used as a stop on the Underground Railroad (Ward, 2013). This legacy is proudly presented at the island's Black History and Cultural Museum. Also, a sign on Pocahontas Street on the island's eastern side proclaims "Pocahontas: Oldest Black Community in the United States", although its location in the neighborhood interior lessens its utility as a gateway marker or neighborhood entrance. In 2008 the neighborhood was listed on The National Register of Historic Places. But this history has also led to the local perception (fairly or not) of decades of city leadership neglect due to the legacy of slavery and racial segregation in Virginia and Petersburg in particular (Peters, 2013). The physical location of the area also calls for a plan. More of a peninsula than an island, Pocahontas is surrounded on three sides by the Appomattox River (see map above) and sits adjacent to Historic Old Towne Petersburg, the main tourist draw to the city. The island has a tight social fabric centered upon a chapel and community center and the residents are fiercely proud of their neighborhood. Although never home to more than 400 people, residential density on the island was greater in past decades, well above the current residential population of 90 (Ward 2013). The 1993 tornado that touched down in Petersburg also caused extensive damage to the island. The Roper Bros Lumber Facility, abandoned in 2009, sits like an open sore on the island's southern bank, taking up 23.6 of the island's 70 acres. The 1990 partial dredging of a nearby section of the Appomattox River by the Army Corps of Engineers uncovered creosote, a chemical used in the preservation of lumber (Broyhill 2012, 19). This, combined with the nearby Petersburg wastewater facility, presents environmental constraints to the potential development of both the Roper Site and the larger neighborhood.

Recent plans for the island threaten to undermine this social fabric. In what James H. Carr calls the "implicit tension between maximizing vernacular culture and seeking development and growth" (Carr and Servon 2009, 30), both the 2007 Regional/Urban Design Assistance Team (R/UDAT) Plan and the 2012 Operation Bootstrap: Appomattox River Development Plan proposed changes unwelcomed by island residents. The former calls for a commercial and multi-family residential density above resident desires (R/UDAT 2007, 32), while the latter proposes converting the island to a historical theme park, thus radically altering its primarily residential land use (Wiggins, 2012). The island's proximity to Historic Old Towne is both an opportunity and a threat. Economic growth and historical preservation downtown offer hope for the same on the island. But they also risk consuming the island if not directed appropriately. Petersburg needs economic growth and Pocahontas needs focused revitalization efforts, but they must be pursued in concert rather than conflict. One longtime resident expressed his fear that the next generation would be unable to hold on to the island in its current residential form and a large developer would install a golf course or hotel (Stewart 2013). The island's prime

location near downtown, straddling the river, and next to I-95 makes it a target for development. This plan advances the city's mission of orderly development while forwarding the wishes of the residents.

Theoretical Framework

Pocahontas Island and the Roper Bros Lumber Facility are intricately connected, and this connection demands a unified neighborhood and brownfield redevelopment plan for the island. One will not be successful without the other. The American Planning Association (APA) defines neighborhoods as “diverse, dynamic social and economic entities with unique characteristics, which are recognized by residents of both the neighborhood and community at large” (American Planning Association 1998, 1). The APA also argues that brownfield redevelopment can play a vital role in “community transformation” (American Planning Association 1997, 23). The Roper Site contributes to the unique characteristics on the island. In a situation such as that on Pocahontas Island, successful planners use every tool at their disposal to ensure revitalization. These tools include collaborative planning and community visioning, place and people based development, asset mapping, analysis of alternatives’ ability to achieve goals, the establishment of partnerships, and accessing funding.

Neighborhood planning is a collaborative process. Planners first establish trust in a community, which is built from the bottom up as opposed to top down (Sirrianni 2007, 376). The planner uses active outreach to develop this trust. She does not sit in her office, look at maps, and establish goals in a vacuum (Ibid). The successful neighborhood planner embraces the messiness of engagement through surveys, focus groups, community meetings, and one-on-ones with key stakeholders. By bringing people together, contemporary planners educate themselves on conditions and aspirations and build momentum and capacity for change (Burkholder 2003, 6). They identify community leadership and empower residents with ownership of the planning process. An inclusive visioning process guarantees the authenticity of neighborhood plans.

The guiding principles of visioning are that it should:

- Be inclusive
- Have a flagship idea
- Be comprehensive
- Be community driven
- Address implementation (Burkholder 2003, 31)

The Historic Eastside Plan for Longmont Colorado (2006) informs this process. In Longmont, planners used a series of community meetings and surveys to outline assets and areas for improvement in the neighborhood and used a three-step process (1. preparing a detailed inventory of priorities, 2. developing a plan ensuring the preservation, maintenance, and enhancement of the neighborhood, and 3. implementation) to formulate a plan representative of resident wishes (Ferencak 2006, 17). Asset-based community development is another key methodology for neighborhood planning. It shifts neighborhood revitalization away from a traditional needs-based approach to one where the strengths and pride of a community are used as a foundation for positive change. An asset-based approach helps residents assert themselves as actors rather than clients (Kretzmann and McKnight 1996, 23). It also preserves vernacular culture, which Carr and Servon define as “locally rooted characteristics of the neighborhood that can attract investment” (Carr and Servon 2009, 30). Finally, a plan with a comprehensive community vision is harder for politicians to ignore and therefore is more likely to be implemented (Burkholder 2003, 7)

Effective neighborhood planners are also excellent communicators. This communication helps overcome the challenges of neighborhood planning, such as the effects of the regional economy, parochialism, and Not In My Back Yardism (NIMBY) (Ibid). It also helps neighborhood residents view their situation in the broader context of the larger community (American Planning Association 1998, 2). Planners educate neighborhood residents through the presentation of research findings, technical information and documents, and maps (Ibid). Communication goes both ways and creates a greater understanding. Planners both learn from and inform the residents for whom the outcome of the plan will have the greatest impact. In the end, the planner develops a toolkit for citizens to enhance their own agency, containing resources on topics such as housing, land use, environmental constraints, funding mechanisms, open space, and historic preservation (Sirianni 2007, 378). This back and forth of communication, education, and empowerment increases the effectiveness and sustainability of neighborhood plans.

All neighborhoods are different, and thus all neighborhood plans are different. However, persistent aspects contribute to contemporary planning theory. Above all, good neighborhood plans address both physical development and quality of life issues (Burkholder 2003, 9). Effective planning accounts for Clarence Perry’s prescriptive neighborhood unit formula outlining ideal neighborhood size, street networks, and access to schools, commerce, and open space (Perry 1929, 34). But it also accounts for the people who reside in and visit that neighborhood. Housing rehabilitation may be necessary, but so may be the development of a community advocacy group or neighborhood watch.

Neighborhood plans include some if not all of the following:

- A definition of neighborhood boundaries
- A directory of involvement and roles
- A vision statement and clear objectives
- A physical plan
- Specific tasks and assignments
- Design guidelines
- Neighborhood statistics
- Maps showing neighborhood resources
- An implementation chart
- Dates for adoption and review
- Connections to city-wide objectives
- Short term implementation projects to build support and momentum
- A directory of resources (American Planning Association 1998, 5)

Stakeholders tire of endless meetings that lead nowhere, so neighborhood plans include objectives that are immediately attainable. This builds momentum needed to overcome the larger obstacles of the plan. Once a vision with accompanying goals and objectives has been established, different actions are analyzed to determine their ability to meet said goals. The Bakerville Neighborhood Plan for Georgetown Colorado (2003) highlights such an analysis. In it, four land use options of varying intensity were graded based on their ability to accomplish the objectives set forth earlier in the plan. Through this grading process the planners determined which mix of the four options was best for the neighborhood (Winston Associates 2003, 13). Finally, neighborhood planners include implementation as an essential part of their final plan. In what Carmen Sirianni terms an “approval and adoption matrix”, each recommended action is accompanied by a ranking of priority, time frame, and expected implementing agency (Sirianni 2007, 383). Potential sources of funding, such as CDBG or HOME funds, a Capital Improvements Program, private development dollars, grants, and tax credits are also included in an implementation plan.

As with neighborhood planning, brownfield redevelopment starts with collaboration and community visioning. The APA outlines the basic steps of brownfield redevelopment as:

1. Develop a community vision
2. Identify sites
3. Assess level of contamination
4. Determine reuse options
5. Evaluate cleanup options
6. Implement redevelopment plan (American Planning Association 1997, 9)

Brownfield planning promotes the participation of local communities in the decision making process. The essential questions of community visioning are 1. Where are we now? 2. Where are we going? 3. Where do we want to be? 4. How do we get there? (Ibid, 30). The answers to these questions require public access to information regarding brownfield sites. The planner provides details such as the location of environmentally sensitive areas, surrounding land uses and zoning, permitting requirements, and infrastructure availability (Thomas 2003, 63). This information is provided to all stakeholders: residents, city officials, developers, and local businesses. Technology such as Geographic Information Systems (GIS) mapping and web based environmental and parcel inventories assist in making this information more accessible as well (Ibid, 66).

Once sites are determined, planners analyze various reuse options. This begins with an environmental analysis of constraints and potential contamination (Ibid, 63). Different end uses require different levels of remediation. In addition, zoning may limit potential reuse options. Next, conducting a market analysis decides what local land use demand will support (American Planning Association 1997, 36). Planners then utilize knowledge from the community visioning process to assess the needs of the community (Ibid, 36). These inputs are used to create a list of potential reuse options. Finally, planners analyze redevelopment alternatives through a criteria grading process. The Redevelopment Plan for the Westhampton School Site and Surrounding Area, completed by Virginia Commonwealth University Masters of Urban and Regional Planning students in 2010, although not strictly a brownfield plan, exemplifies such a grading process. The plan provided three options for the adaptive reuse of the site, established clear criteria for grading the potential uses, and then graded each option by the established criteria. Finally, the grades for each option were summed to determine the best end use of the site (Barre et al 2010, 68).

Following the decision on the best reuse of a brownfield, planners turn to cleanup and funding. Brownfield redevelopment is a complicated and costly endeavor requiring partnerships between residents, community organizations, developers, and all levels of government (American Planning Association 1997, 11). The Environmental Protection Agency (EPA) provides funding to support brownfield redevelopment through revolving loan, assessment, cleanup, and job training funds (Environmental Protection Agency). The Virginia Department of Environmental Quality also has a Voluntary Remediation Program, which reduces liability risk for developers who undertake brownfield remediation (Virginia Department of Environmental Quality). Other local funding options include Tax Increment Financing, Community Land Trusts, and tax incentives. City planning agencies use these funds to complete Phase 1 and Phase 2 environmental assessments of the site, which determine the level of contamination. Cleanup options vary. Contamination can be treated on site or removed. Planners also establish land use controls which limit citizen's contact with the

contamination (APA BF Guide 70). The ultimate goal is to reduce both the risk of contamination and the risk to investors. Throughout the process, well publicized public investments build confidence and momentum for involved stakeholders (Greening the Rust, 12).

Approach and Methodology

In the execution of this plan, key questions were answered. With supporting sub-questions, these include

What do the key stakeholders involved want to see on the island?

What improvements do the residents desire?

How can revitalization on Pocahontas Island support city-wide goals?

What are the existing conditions on the island?

What are the environmental constraints on the island?

What is the condition of the housing stock and its occupancy?

What are the demographics on the island?

What is the land use and zoning on the island?

How does the wastewater treatment plant impact the neighborhood?

How safe is the island?

What is the parcel ownership situation on the island?

What is the condition of the Roper Site?

What assets are available on the island to build upon?

What do the residents consider the island's assets?

What historical story does the neighborhood have to tell?

How can historical preservation and tourism be incorporated into the plan?

What land on the island could be used more effectively to meet stakeholder wants?

What improvements on the island will the market support?

What is the demand for infill housing in Petersburg?

What redevelopment of the Roper site will the market support?

How can island improvements be best connected with the larger market, especially that of Old Towne?

What is the feasibility of improvements in the neighborhood and at The Roper site?

What funding is readily available for all aspects of the plan?

What tax incentives and grant funding could be used to facilitate plan implementation?

What federal and Virginia incentives are available for brownfield cleanup of the Roper Site?

What are Virginia Standards for site cleanup based on end use

The plan answers these questions by analyzing the island's environment and history, researching government documents and census data, engaging the community, mapping assets, exploring the site, targeting potential budgeting and financing options, and determining market conditions. The environmental analysis includes GIS mapping (floodplains, land cover, topography, etc.) to identify suitable areas for any new development on the island. Research into contamination at the Roper Site and in the river helps determine the possibilities and feasibility for Roper redevelopment options. Historical research tells the story of Pocahontas and examines the potential for preservation and tourism options. The plan examines local and regional government documents to determine parcel ownership on the island, infrastructure conditions, and potential funding opportunities for development. This information is factored into the later analysis of implementation actions. A series of four community meetings and one oral history focus group were held to establish a community vision, inform residents, develop goals and objectives, set alternatives for Roper redevelopment, and enhance citizen energy in plan implementation. In these meetings and through site visits, community assets were mapped using GIS to highlight areas of potential growth and preservation. With help from the Petersburg Planning Department, the plan inventories and measures budgeting and finance options such as the Capital Improvement Program, state and private grants, and local pools of rehab money such as the budgeted General Fund and CDBG funding. This data is then used as a feasibility grading criteria for both the neighborhood and brownfield alternatives analysis and to develop a framework for implementation. The market analysis focuses on the viability of redevelopment options.

Following this research, the plan creates and grades options for both neighborhood and Roper Site development. The options evolved through the community engagement process and through the expressed interests of the planning department and community-wide stakeholders. The plan separates alternatives for neighborhood development into four categories; minimum intensity, moderate intensity, advanced intensity, and maximum intensity. Intensity refers to the degree of deviation from baseline conditions in each category. The plan then grades each level of intensity based on its ability to advance the plan's goals, preserve the environment, be implemented, and maximize the use of existing assets. Following the grading process, the plan combines the highest scoring aspects of each intensity level into one set of proposed actions. The plan then establishes four alternatives for redeveloping the Roper Site. The criteria used for grading are market and funding feasibility, ability to advance plan goals, and compatibility with city-wide objectives. Finally, the plan combines the chosen alternatives as a unified course of action.

Upon the final selection of alternatives, the plan establishes an implementation roadmap. Utilizing the results of the budgetary and financing research, the plan establishes an approval and adoption matrix and totals the projected costs for all improvements and redevelopment. It then lays out implementation and funding timeframes over a ten-year period.

The Document

The Pocahontas Island Neighborhood Plan is separated into three parts with added appendices. Part 1 lays the groundwork for the plan by describing the history and current conditions on the island and at the Roper Site. It also demonstrates the vision and desires of key stakeholders. The first section of Part 1 highlights the dynamic history on the island through both traditional document research and oral history. Section 2 describes the key stakeholders engaged in the plan and their desires for the island. Section 3 outlines the existing demographic, economic, housing, transportation, land use, zoning, and physical conditions on the island. Section 4 analyzes the environmental conditions on the island including topography, floodplains, river contamination, land cover, and the Roper Site, as well as island parcel ownership and safety. This analysis is used to establish both environmental needs and constraints for future development on the island. Section 5 presents island assets, both people-based and physical, which are described and mapped. Also, this section suggests how each asset may be used in plan development and implementation. Section 6 analyses the market demand for development options in both the neighborhood and at the Roper Site. Section 7 highlights potential sources of funding for plan proposals.

Part 2 presents the goals and objectives of the plan, analyzes different development alternatives, and communicates plan proposals through maps and models. Section 1 describes goals and objectives for the plan stemming from the results of the existing conditions analysis, community input, the environmental analysis, and the needs of the larger community. Section 2 grades alternative scenarios for neighborhood development and presents a final neighborhood plan. Section 3 grades alternative scenarios for redevelopment of the Roper Site and presents a final recommendation for its reuse. Section 4 lays out the potential design of a historical walking trail on Pocahontas Island.

Part 3 outlines the implementation strategies for the Pocahontas Island Neighborhood Plan. Section 1 presents an approval and adoption matrix for plan actions, while Section 2 calculates total costs. Section 3 establishes an implementation timeframe and schedule for the plan. Section 4 lays out a public and private non-profit funding timeline to support implementation. Finally, an appendix presents tables and graphs outlining the results of the community engagement sessions and surveys, the asset map, a detailed analysis of the Roper Site, alternative grading explanations, cost calculations, potential remediation strategies for the Roper Site and Appomattox River contamination, and additional sources of information for regulatory compliance and implementation funding.

Part 1: Pocahontas Island

History

The story of Pocahontas Island is captivating. Named after the famous Powhatan princess believed to have visited it, the island has a long legacy of cultural self-determination and pride. Laid out in its current grid form in 1749 in Chesterfield County and established as a separate town in 1752, it was not incorporated into neighboring Petersburg until 1784 (United States Department of the Interior National Park Service 2006, 23). Pocahontas emerged as a commercial site in the late 18th century with tobacco warehouses and inspection stations on the island side, and a lumberyard on the Petersburg side. During this time the island evolved into one of the earliest free black communities in the country (See Image 1). The free-black population increased following an uptick of manumissions in the years after the Revolutionary War, and many of these freed slaves moved to Pocahontas for a sense of community and to escape the legal restrictions limiting their rights of full citizenship. Larger Petersburg was home to many free blacks as well. The 1790 census counted 310. By 1830 that number had increased to 2,072 and by 1860 to 3,244 (Ibid, 24).

In the decades leading up to The Civil War, Pocahontas Island blossomed into a bastion of African American resistance and cultural identity. A strong oral tradition places an Underground Railroad stop at 215 Witten St, further supported by a hidden crawl space under its floor. Some of the last hangings resulting from Nat Turner's Rebellion were also carried out on the island (Ward, 2013). In an age of limited citizenship, even for free blacks, the cultural unity of Pocahontas allowed strength and agency to flourish. In the antebellum period, Pocahontas converted from a majority-white to majority-black neighborhood.

The island developed as a mixed-use neighborhood throughout the 19th and earlier 20th centuries, as many more African Americans flocked to the community. Residents, with assistance from the New York Freedman's Relief Society, built the Pocahontas Chapel in 1866 (See Image 2), and

Image 1: Current Gateway Sign



January 18 Site Visit

Image 2: Pocahontas Chapel



April 6 Site Visit

Petersburg's main train station was located on the island until the late 19th century. Industry popped up around the train station and old port, but the strong economic downturn hitting the entire South following The Civil War similarly affected the island, making overcrowding and unemployment rampant. Petersburg built a diversion channel around the northern part of the island in 1915, which has since become the main body of that section of the Appomattox River (United States Department of the Interior National Park Service 2006, 5). By this same year the Roper Bros Lumber Facility occupied its current location.

As the 20th century unfolded, the island stabilized and eventually began losing population. Periodic floods in the 1910s and 20s drove many residents to other neighborhoods in Petersburg (Ibid, 37). The numerous stores on the island began disappearing around this time. Once the island supported two small grocery stores, now only a photography store remains. Roper Bros tried unsuccessfully to rezone the whole island industrial in the 1970s. In 1972 a large flood struck the island and it was around this time that the port area began to fill with a large amount of sediment. The island lost many residents in the last decades of the 20th century and the 1993 tornado hit the island and its residents hard and created new open space. A once thriving and dynamic mixed use neighborhood has developed into one that is quiet and residential.

An oral history focus group held at the Chapel on January 18 provided more information about the island's fascinating history. Participants responded to the following prompts and questions:

- Describe your earliest memory of the island.
- What did your parents and grandparents tell you about the island's history?
- What led to the change in the island?
- Describe the connection between the island's residents and the Roper facility.
- Describe the relationship between city leadership and the island.
- If you were telling the island's history, what would you say?

The conversation painted a vivid picture of the island's past (see Appendix A for a more detailed description of responses and a map of the neighborhood in the mid Twentieth Century). For one, it used to actually be an island with a bridge connecting it to downtown Petersburg. Participants described a strong community emanating pride, with houses on every lot and kids joyfully waving to neighbors on their porches. The train ran every night and there used to be a baseball field down by the current playground on Magazine Rd. Grandparents spoke of old speakeasies, trolley garages, and a slaughterhouse near the river. Parents warned their children to stay out of the river and punished them if they did, but some still took illicit dips. One famous resident rode horses and raised pigs. Legend has it he also drank the blood of freshly slaughtered ones. Another legend says a train car derailed off the bridge and remains in the river. Many of the men on the island worked at Roper Bros and its connection to the community was strong until

the residents rose up to prevent the island from industrial rezoning in the 1970s, souring relations. Residents went downtown to shop. Participants want the island's history told, particularly that of the free black community, the Underground Railroad and Jarrett Houses, the Chapel, and Joseph Jenkins Roberts, a resident of the island who went on to be a founding father of Liberia. They said that most of the older people have died and the younger people have left the island. Current residents do not have the income to fix up their homes as they would like. These memories demonstrate a neighborhood of profound identity and value with a population ready to tell the tale.

In preparation for the analysis of options for the Pocahontas Island Neighborhood Plan, community meetings, government documents, site visits, surveys, census records, GIS information, conversations with experts, and various public and private studies were analyzed to provide answers to the essential questions of this plan. This analysis examined the conditions on the island, in the greater community, and in the public and private funding sectors to develop a framework for feasible and responsive improvements that pursues the interests of the broadest range of stakeholders. These essential questions are:

1. What do the key stakeholders want to see on the island?
2. What are the existing conditions on the island?
3. What assets are available on the island to build upon?
4. What improvements on the island will the market support?
5. What is the feasibility of improvements in the neighborhood and at The Roper Site?

Stakeholders

The first step identified key stakeholders. Pocahontas Island's distinct position in the larger community and its proximity to Old Towne Petersburg make its development significant for many different groups. Stakeholders in this plan were identified as the island residents themselves, Petersburg residents not living on the island, and city officials.

An analysis of Petersburg's comprehensive plan and communications with city officials indicated a strong desire to formulate a plan for the island. The neighborhood is not one of Petersburg's historic districts, but the 2011 comprehensive plan includes it in a list of the city's cultural resources, thus indicating their desire to preserve it (Petersburg Department of Planning and Community Development 2011, 51). The city also purchased the oldest structure on the island; the early 19th century constructed Jarret House. The building is an excellent example of Federalist style architecture and although the city does not have specific plans for its use, it erected support beams to prevent its collapse with the intention of future renovation. The city has also purchased other parcels on the island. The planning department wants infill residential development in Pocahontas and hosted an open house in March 2014 to market the

smaller parcels which it owns. It does not have the resources to develop these parcels itself, but it believes that a unified plan for the neighborhood will entice developers to invest (Peters, 2013). The city also purchased the Roper Site to have control over its future development.

Petersburg city officials envision Pocahontas Island as a significant gateway to the larger community. The Roper Site is a key feature of this gateway. If drivers crossing over the Appomattox River bridge on I-95 see something beautiful and exciting there, they may be compelled to get off on exit 52 and explore, thus bringing outside revenue to the city. A long term objective is to dredge the old port, which now sits heavily silted between the island and historic Old Towne Petersburg (Jones, 2014). Feasibility studies and environmental analyses conducted by the Army Corps of Engineers indicate that contamination in this silt, further described below, does not preclude dredging. Redevelopment of the Roper Site combined with Pocahontas neighborhood improvements will assist in the financing of this endeavor because of the increased city revenue and appeal of the island to developers. But the city wants to approach any plan for the island carefully, as it understands that the neighborhood residents have a profound devotion to Pocahontas and any redevelopment that threatens its essential nature will undermine the culture that makes it so valuable.

The residents of the island have the largest stake in the island's development and the plan gives their interests primary importance. A series of four community meetings held at the Pocahontas Chapel revealed what the residents believe are the needs, strengths, and opportunities for improvements on the island. The researcher contacted a respected island community member to help with recruiting residents to attend the meetings. This community member helped pass out flyers and spread the invitation via word of mouth in the small close-knit neighborhood. The researcher collected phone numbers, addresses, and email addresses at the meetings and used various forms of communication to follow up and extend invitations to future meetings. Thank you cards were mailed out following the first meeting to instill confidence and a personal touch. The meeting sequence was designed to evolve from more intimate to more inclusive: island residents only in the first, city officials added to the second, and non-island city residents included in the third and fourth. Table 1 highlights the meeting dates, topics, and attendees.

Date	Topic	Attendance
Oct 16, 2013	Plan Purpose and Visioning	11 Residents
Dec 17, 2013	Visioning, Presentation of research, Asset mapping	7 residents and Michelle Peters
Feb 11, 2014	Potential Neighborhood and Roper Improvements	9 Pocahontas residents, 2 Non-Pocahontas Petersburg residents, Michelle Peters, and Vandy Jones
Mar 11, 2014	Plan Feedback and Implementation	11 Pocahontas Residents, Michelle Peters, and Kevin Brown (City Treasurer)

The initial community meeting on October 16, 2013 began the discussion on a community vision for the island. The researcher used the majority of the meeting to describe the purpose of the plan and get to know as much about the island from the residents as he could, wisdom not found in official documents or maps. The question, “What do I need to know about the island?” provoked the following responses.

- The community is close-knit
- The neighborhood is quiet
- The residents love the island
- The population is elderly
- A playground was removed seven years ago
- The streets are in disrepair
- Heavy trucks heading to and from the waste water treatment plant violate the dawn to dusk hours of operation
- There are too many speeding cars
- There are a lot of weeds on the west side of Sapony Street
- There are a lot of geese

These responses demonstrate both the residents’ devotion to their neighborhood and their frustration over its current state. At the same meeting, residents completed a survey indicating their desires for improvements on the island. The results, detailed in Appendix B, indicate significant interest in a new playground, housing renovation, and historical preservation, moderate interest in increased residential density, employment opportunities, and port restoration, and little interest in more shopping options on the island or an increased access to the Appomattox River. These early results indicated a correlation between the city’s goals of historical preservation, blight reduction, and economic development on the island and the similar desires of resident stakeholders.

A second community meeting, held on December 17, 2013, provided the opportunity for Michelle Peters, the Petersburg Planning Department Director, to communicate the city’s interests in the island. Residents also worked together to formulate a vision for the

island in their own words, completed a survey eliciting feedback on potential goals, improvements, and design guidelines for the plan, and identified community assets. Three groups created and presented vision statements. The researcher then combined these group vision statements into the following unified voice for the island, which was approved at the February 11 meeting and guided the development of this plan:

We, the Pocahontas community, desire a beautiful and sustainable residential neighborhood that respects the proud legacy of the island

The survey results, detailed in Appendix B, reinforced the survey results from the first community meeting. Renovated housing and enhanced aesthetic appeal were the most consistently expressed goals. New residential development, environmental preservation, and historical preservation were secondary goals. New commercial and tourism development and a greater connection to the river were lesser goals. The same survey asked residents to rank by priority what they would like to see on the island. The researcher compiled the responses, and in order from most favored to least favored, the residents wanted to see:

1. Improved or added streets
2. A new playground
3. More street lights
4. Historical preservation
5. Redevelopment of the Roper Site
6. Traffic calming measures
7. Improved storm water drainage
8. More moderate-income housing
9. More elderly housing
10. Improved sidewalks
11. Improved Appomattox River Heritage Trail
12. Better access to public transit
13. A new park
14. More low density housing
15. More shopping options

A survey question designed to determine the design of any new or renovated housing demonstrated an even split between those wanting requirements that it be the same as the existing housing stock and those allowing for more modern design. In terms of aesthetic appeal, survey respondents indicated a strong desire for the renovation of blighted houses, the planting of new trees, and the removal of weeds and junk cars. Of lesser, but still noted concern was a desire for new housing on vacant lots, improved neighborhood signage, and repaired sidewalks.

A third community meeting was held on February 11, 2014. A broader spectrum of stakeholders was invited to and attended this meeting, including more city officials and non-island Petersburg residents. The researcher presented the vision statement and asset

map developed from the input of the second meeting and elicited feedback. Following this, small groups created, presented, and discussed potential goals based on the approved vision statement. The presentations closely mirrored survey responses, indicating a strong desire for infill and renovated housing, recreation, and community based amenities. However, some residents expressed new interests as well, such as the potential for limited neighborhood-scale shopping options, water- dependent uses, and even uniformity in neighborhood urban design. Throughout, a unifying thread was the wish to maintain the current integrity of the island.

Next, the attendees addressed their interests in redeveloping the Roper Site. Following a presentation on the existing conditions at Roper, each individual received a map of the site and sketched improvements they would like to see with accompanying written descriptions (See Appendix C for detailed sketches). Responses on and locations of improvements varied, but common themes emerged. Attendees also completed a closed-response survey asking them to rank potential improvements at the site. The two sources of feedback are compared in Table 2.

Table 2: Roper Site Redevelopment Options

Sketching Activity	Mentions	Survey Responses	Rank
Shopping	5	Park or Playground	1
Recreation	4	Community Center	2
Parking	4	Water Dependent Use	3
Entertainment Venue	3	Museum	4
Assisted Living	3	Single Family Housing	5
Housing	2	Mixed Use Housing and Shopping	6
Trail/Walking Area	2	Keep it as is	7
Water-Dependent Use	1	Apartments	8
Restaurant	1	New Industrial Use	9
Information/Tourism Center	1	Other	10
Office	1	Lodging	
Signage	1	Clear and Plant Trees	
Park	1	Recreational Mixed Use	

Based on information gathered through community meeting discussions, interviews with city officials, and survey responses, the key stakeholders understand the significance of the Roper Site to any neighborhood plan for the island. They also understand the environmental constraints of a property situated on a 100-year floodplain and contaminated from past uses, further described below. While they do not all agree on the ultimate outcome, they share an interest in it being something other than what it is now, an empty, locked-off parcel. The sketches indicate that stakeholders envision a mixed redevelopment of the expansive site, with a variety of cooperative uses.

In summation, Pocahontas Island stakeholders wish to preserve the historical and cultural tradition of the neighborhood, but embrace the possibility of innovative improvements that will enhance quality of life. At the March 11 community meeting, stakeholders provided feedback on the plan and discussed the implications of implementation (See Table 23: Appendix B). Residents understand the island’s unique position to assist in city-wide goals, but do not want the island consumed by the larger community. City officials and non-island residents envision the island as a hidden Petersburg treasure that should be discovered. Driving along I-95 it is the first part of the city that travelers see, and everyone involved wants it to make a good impression. A combination of feedback from the first three community meetings established the following priorities for The Pocahontas Island Neighborhood Plan.

- Preservation of residential character
- Renovated and infill housing
- Enhanced recreational opportunities
- Historical preservation
- Mixed Roper Site redevelopment
- Improved streets and sidewalks
- Remediation of contamination
- Enhanced aesthetic appeal

Existing Conditions

Demographics

Pocahontas is a small but stable community. The counted population in both the 2000 and 2010 census was 90 people (US Census Bureau). This is a dramatic decrease from mid-twentieth century highs approaching 400 people (Ward, 2013). This decline mirrors the overall population decrease and stabilization of Petersburg over the past few decades. From 1980 to 2000, the population of Petersburg declined from 41,055 to 33,740, a decrease of 21%. Since 2000, Petersburg’s population has leveled off, and in 2010 stood at 32,420, a ten year decrease of only 4% (US Census Bureau).

Pocahontas Island comprises nine census blocks in census tract 8113 in Petersburg. The island’s population is elderly and predominantly African American. Table 3 highlights demographic characteristics for the island from the 2010 census

Table 3: Pocahontas Island Demographics

Block	Population	Median Age	Afr. Amer	White	Amer. Ind
Total/Avg	90	52	79	9	2

US Census Bureau

Table 4: Economic and Education Demographics for Census Tract 8113, Petersburg, Va. (2012 American Community Survey 5 year estimates)

	8113	Petersburg	Virginia
Median Income	\$42,021	\$36,289	\$61,741
Families Below Poverty Line	23.1%	17.6%	7.8%
Unemployment Rate	7.9%	9.0%	4.5%
Unaffordable Housing*	33.7%	37.0%	31.5%
Education**	27.9%	29.2%	13.1%

* Families spending more than 30% of income on housing
 ** Percentage of population 25 yrs and older with less than High School Diploma
 US Census Bureau

For privacy reasons, economic and education demographics are only available down to the census tract level. Census tract 8113 is low-income and undereducated compared to the state of Virginia and just slightly higher in all categories than Petersburg, except for the percentage of families below the poverty line. Table 4 shows this comparison.

Housing

The housing stock on Pocahontas is aging, totaling 58 structures with an average year of construction of 1964. Shotgun and one-story, side-gable style houses make up the majority of the units on the island, and only four houses are two-story. The majority of houses have a front porch and any driveways in the neighborhood are small and located to the side of buildings. The Crater Planning District Commission grades 96% of the occupied housing units as average in quality (Crater Planning District Commission, 2014). The homes average 4.7 total rooms and 2.4 bedrooms. The average lot frontage is 62.7 feet and the average lot depth is 122.4 feet. The mean building value is \$48,281 and the mean lot value is \$51,750. There are 50 total parcels with a land value greater than their building value, indicating parcels with potential for redevelopment.

Pocahontas Island has significant blight and vacancy. Of the 104 parcels on the island, 46 do not contain a structure, totaling 12 acres of vacant land (See Map 3 for locations). In fact, Petersburg’s number 7 tax map shows Witten St extending east beyond Logan St, with seven parcels fronting the street. This extension no longer exists. Of the 58 parcels that do contain a structure, nine residential units stand vacant (Petersburg Real Estate Assessor, 2014). There is also a high percentage of renting on the island. The number of vacancies decreased between 2000 and 2010 while the number of renters increased, demonstrating the recent trend of rental expansion on the island. Table 5 highlights vacancy and occupancy status for the island in 2000 and 2010. There is also one unit used for Section 8 housing (Petersburg Housing Authority, 2014).

The nine vacant houses are in poor condition and require renovation or removal. Two of these structures (The Underground Railroad House and the Jarret House) have historical significance. Image 3 highlights typical housing styles and blighted homes in the neighborhood. Map 3 below shows vacant and occupied land and buildings on the island.

Year	Total Units	Vacant	Owner	Renter
2000	55	17	27	11
2010	50	9	20	19

US Census Bureau

Image 3: Housing Styles and Vacancies



Road Network and Transportation

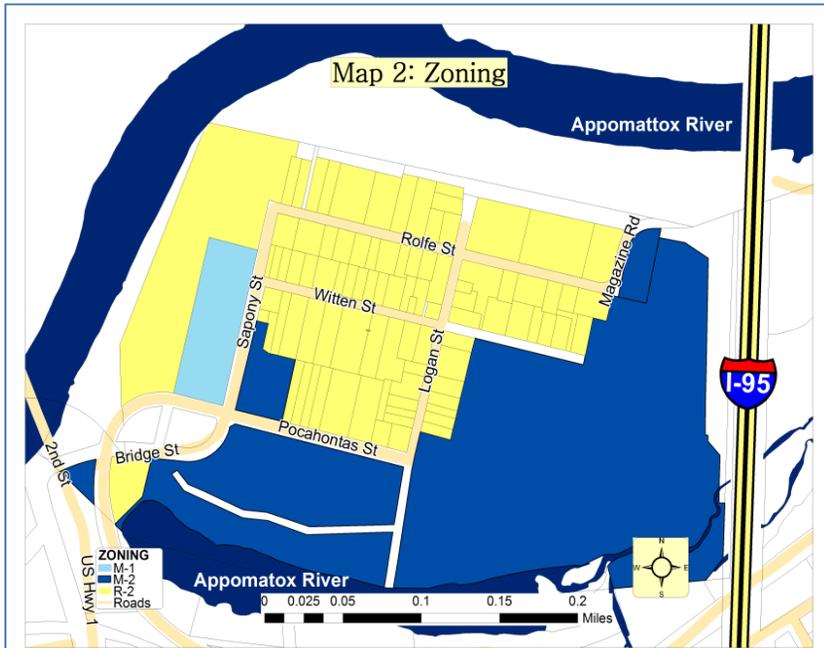
The Pocahontas Island neighborhood's road network is laid out in a grid pattern virtually unchanged since its original 1749 design. It is connected to Petersburg by Bridge St and both Petersburg and Colonial Heights via the Martin Luther King Bridge. Sapony and Logan Streets have a north/south orientation, while Rolfe, Witten, and Pocahontas Streets have an east/west orientation (See Map 2). During community meetings residents repeatedly decried the poor state of the streets, blaming it on the heavy truck traffic going to and from the South Central Waste Water Authority treatment plant east of I-95 on Magazine Rd. These trucks enter the island along Bridge St, travel north on Sapony St, and then turn east on Rolfe St (Gordon, 2014). In 2013, a total of 2,248 heavy trucks hauling biosolids, septage, and chemicals drove over these streets (Ibid). The roads on this route are in poor condition, which the pictures in Image 4 demonstrate. The loud, early-morning truck traffic combined with its damaging effect on the roads contributes to the belief of residents that their interests are being neglected. Where they are present, neighborhood sidewalks are narrow and in disrepair, similar to the streets, with many abandoned driveway curb cuts providing an uneven walking experience. Pocahontas currently has no crosswalks or similar pedestrian amenities, but is well served by public transit with four Petersburg Area Transit bus stops.

Image 4: Street and Sidewalk Conditions



Zoning and Land Use

Pocahontas is zoned primarily R-2 residential, totaling 93 parcels. In the Petersburg zoning ordinance, R-2 zoning allows for single-family residential. One parcel is zoned M-1, light industrial, which allows for light manufacturing, fabricating, warehousing, wholesale distributing, and any use of a general commercial district. However this parcel currently lies vacant. Four parcels are zoned M-2, heavy industrial, which allows for any manufacturing use not hazardous to human health (Petersburg Department of Planning and Community Development 1972, 29). These parcels include the old Roper Bros Lumber facility, a storage facility for Delta Oil, the small parcel on Magazine St now home to the playground, and a small photography business on the corner of Sapony and Pocahontas Streets. Map 2 below shows zoning on the island.



Land Use on Pocahontas Island closely matches zoning, as shown in Maps 2 and 3. The only disconnect is the basketball court and park zoned heavy industrial. The majority of land on the island, 8.2 acres, is currently used as single-family residential. One parcel is used for industrial purposes, one for religious purposes (Pocahontas Chapel), and one as the neighborhood community center. By far the largest parcel on the island, the Roper Site, takes up 23.6 acres on the island’s southern and eastern boundaries. The Appomattox River Heritage Trail extends for just over 3,000 feet around the northern and western boundary of the island (Map 3). Trail maintenance is infrequent and has no set schedule. Trail trash cans are emptied once a month in the winter and weekly during the summer (Riggelman, 2014). Trail amenities are in disrepair and a few signs exhibit obvious neglect, as shown in Image 5 below. But the trail has great beauty, with pleasant views of the Ettrick Village Bluffs north of the River and the old train trusses, as seen in Image 6.

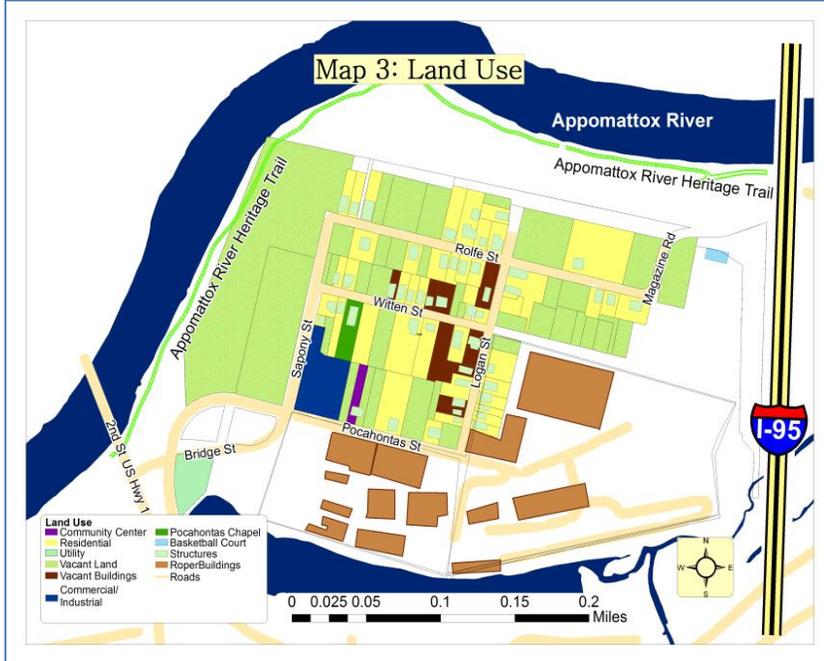


Image 5: Trail Disrepair



Image 6: Trail Beauty



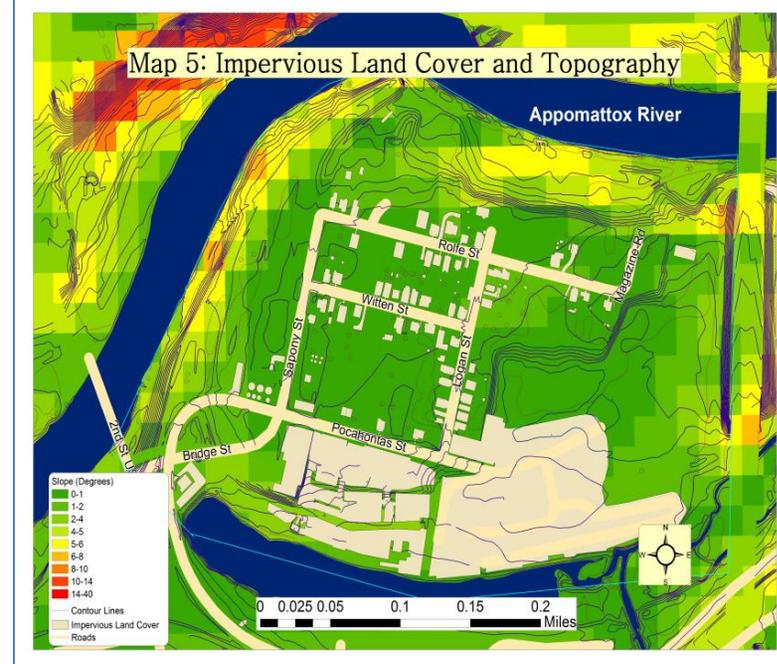
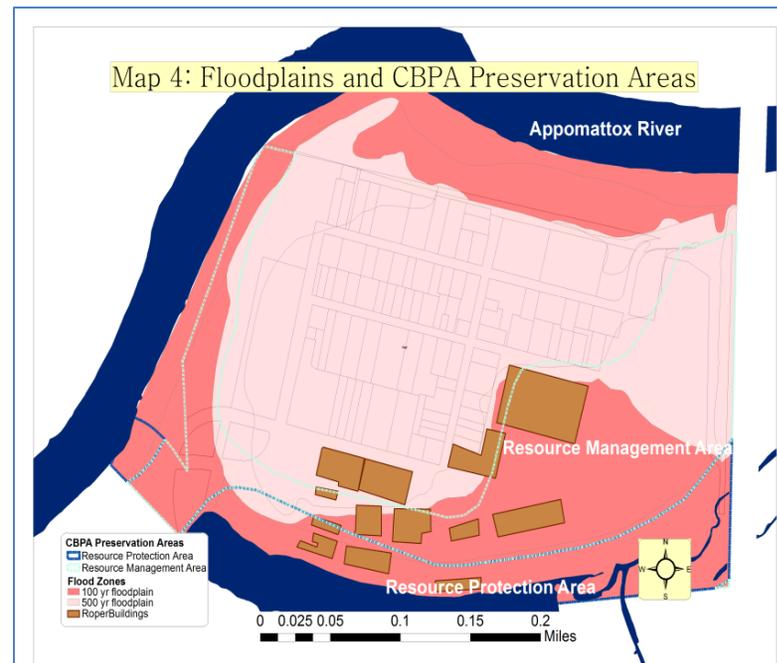
Source: Crater Planning District Commission

Environment

Pocahontas Island's proximity to the Appomattox River makes it vulnerable to flood events. Just over 35 acres on the island's edges are classified by The Federal Emergency Management Agency (FEMA) as lying in a 100-year floodplain, while just over 38 acres of land in the island interior are classified as a 500-year floodplain (FEMA, 2014). In 1972, the Appomattox River flooded and dumped sediment into the river around the island. Approximately two-thirds of the Roper Site lie in a 100-year floodplain, making redevelopment tricky, and the purchase of flood insurance mandatory (Federal Emergency Management Agency). These floodplains align almost exactly with Resource Protection (RPA) and Management (RMA) areas delineated by The Chesapeake Bay Preservation Act (CBPA), designed to lessen the impact of non-point source water pollution. On the island's southern bank, 10.5 acres, approximately one-third of the Roper Site, are designated a RPA. The CBPA allows limited development by right, such as water dependent uses and flood control and storm water management facilities in these areas.

More intense development requires the completion of a Water Quality Impact Assessment. Any new development must also comply with the area's comprehensive plan, provide access to the site with limited land disturbance, implement storm water, erosion, and sediment control management measures, and create no net increase in impervious land cover (Virginia Department of Conservation and Recreation 2005, 1). RPAs require a 100-foot vegetated buffer on their edges, and any new development cannot encroach further into that buffer. Essentially, any redevelopment in an RPA cannot increase intensity.

RMAs are contiguous to RPAs, but not as heavily regulated. Development may occur in these areas, but must be managed so as not to negatively affect RPAs. Any development that increases impervious surfaces by 16% or more must treat storm water runoff through Best Management Practices (Virginia Department of Environmental Quality, 2014). Floodplains and the CBPA areas are shown in Map 4.



Source: Crater Planning District Commission

The large amount of vacant land on Pocahontas Island provides for ample pervious land cover. Of the island's total of 74 acres, only 14, most of which lies on the old Roper Bros Lumber Facility Site, have impervious surfaces. It is vitally important to preserve or enhance the amount of pervious land cover on the island to limit polluting storm water runoff into the Appomattox River. Another method for accomplishing this is to provide vegetative buffers between development and waterways. The northern and western boundaries of the island have sufficient buffers, but the southern shore of the Roper Site does not.

The island is relatively flat, with gentle slopes around the northern and western banks of the Appomattox River and in the curve of the Roper Site east of Logan St. Nowhere does the slope exceed 10.5 degrees in angle and only approaches that amount on the western side of the island near the river, an area unsuitable for development since the Appomattox River Heritage Trail currently runs through it. Slope will not be a factor in potential improvements on the island. Map 5 shows impervious land cover and topography for the island.

An area of concern for any new development in either the neighborhood or on the Roper Site is existing contamination. Pollutants from the Roper Bros Lumber processing and past Petersburg industrial uses have been detected in the old Petersburg Harbor area on the southern shore of the island. In addition, the Virginia Department of Environmental Quality (VDEQ) found fecal coliform, a bacteria that generates in fecal matter, in the stretch of the river approaching from the west and polychlorinated biphenyl (PCB) in fish tissue in the same area (Virginia Department of Environmental Quality, 2014). In 2002, The Army Corps of Engineers conducted an analysis of the soil in the old harbor area to determine the environmental impact of dredging. It has long been a desire of the local Petersburg Government to dredge the old port and revive boat traffic. The study indicated the presence of petroleum hydrocarbons, beryllium, antimony, arsenic, and creosote, a chemical used in the preservation of lumber (Wade et al 2002, 80). The same study estimated that approximately 500,000 yd³ of material would need to be dredged to restore and maintain the navigation channel to the needed depth for boat traffic of 10 feet below its current level (Ibid, 16). Ultimately, the study concluded that despite these contaminants, although costly, dredging is feasible. Any development on the island, especially a water-dependent use on the Roper Site, must not exacerbate and ideally remediate this contamination.

The Roper Bros Lumber Company installed two underground storage tanks (USTs) in 1986 just west of the intersection of Witten and Sapony Streets. Although not completely explained in the documents, the tanks were likely placed in this location, off of the actual site, because the facility is in a flood prone area and has a high water table. Another possibility is that the company wished to avoid the potential fire hazard of having fuel stored adjacent to highly flammable lumber. Both tanks were constructed out of bare steel and protected cathodically, a method for preventing oxidation which diverts electrical current causing rust away from tank walls. They each held 2,000 gallons, one of gasoline and the other diesel. Both were closed in place in 1998 and filled with petro-fill polyurethane foam. Monitoring indicated no releases during closure, but confirming soil samples were not taken (Brandon III 2004, 1). USTs pose a

problem for development as disturbance may release chemicals into the soil and even groundwater. Overall, the land itself is suitable for increased development if managed appropriately, but potential contamination must be addressed in any implementation of improvements.



Source: Crater Planning District Commission

	2010	2011	2012	2013
Larceny	2	0	1	0
Vandalism	3	0	0	0
Aggravated Assault	0	0	1	1
Burglary	0	0	1	0
Total	5	0	3	1

Petersburg Bureau of Police

Ownership

Land ownership on the island is consolidated. Of its 104 parcels, 41 are owned by four families. The City of Petersburg owns 12 parcels. The significant amount of city ownership provides an opportunity for direct intervention where needed. A potential barrier to full implementation of a plan on the island is that 14.5 acres on the northern edge of the island lie in Chesterfield County. Petersburg pays taxes to the county to operate the wastewater treatment plant located just east of the neighborhood on the other side of I-95. Any planned improvements to this area would require cooperation with Chesterfield. Map 6 highlights ownership on the island.

Safety

The perception of crime can hinder neighborhood development. Residents mentioned during community meetings that they wished the police would make more visits to the island. They also pine for the old days when they “kept their doors open all the time”. However, the numbers indicate that Pocahontas Island has a very low crime rate. Even for a population of only 90, a total of 9 reported crimes over a four year span is incredibly low. In addition, from 2011-2013, there were only 151 police calls coming from the island, 20 of which were 911 hang ups and 17 animal complaints. Reported crimes are shown in Table 6.

Image7: View of Roper from Old Port

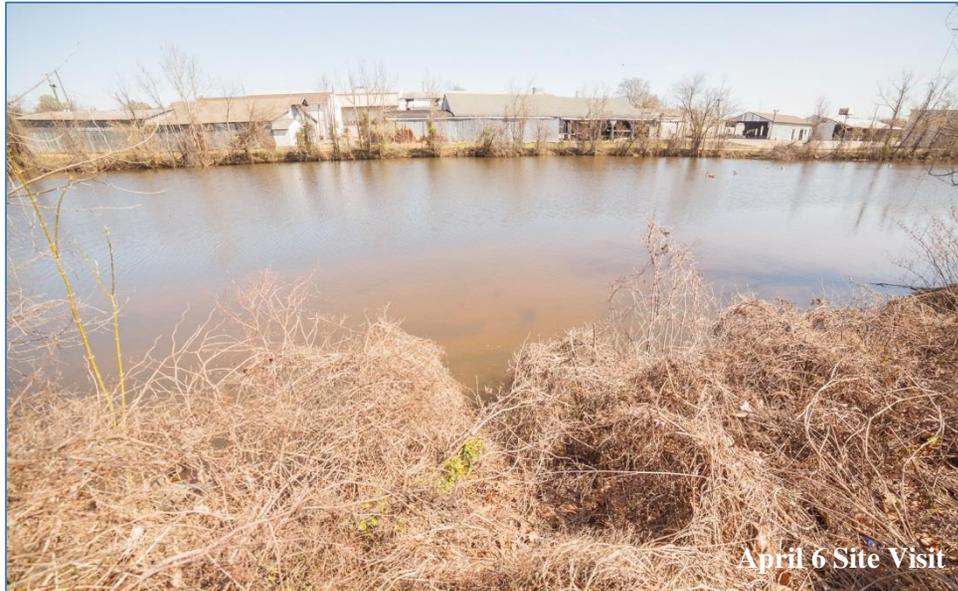


Image 8: Petersburg Skyline from Roper



Roper

The Roper Brothers Lumber Company incorporated in 1909 and opened up shop on Pocahontas Island shortly thereafter (Buettner, 2009). Over the following one-hundred years it grew to be one of the largest employers in Petersburg. In the late 1950s it provided easements for the construction of I-95 (Deed of Sale from Roper Bros Lumber to Richmond-Petersburg Turnpike Authority, 1958). Throughout the second half of the twentieth century it purchased most of the land south of Pocahontas St and east of Logan St (Deed of Sale to Roper Bros Lumber, 1972). But a company downturn in the first decade of the twenty-first century led to the island factory closing in 2009. Roper Bros. Holdings sold the site to DMV Sport and Entertainment, Inc. for \$3,139,500, well under the assessed value of \$4,602,800 (Deed of Sale to DMV Sport and Entertainment, Inc from Roper Bros. Holdings, L.L.C., 2010). Roper Bros held on to a small sliver of land near the highway on which they rent billboard space. DMV soon ran into debt and sold the site to The Economic Development Authority of the City of Petersburg in 2011 for the sum of \$2,362,500. The land and all improvements are now assessed at \$1,946,200.

Roper sits between the Pocahontas neighborhood and Old Towne Petersburg, blocking the view from both sides with rusted metal buildings and raggedy concrete. The city currently stores a few vehicles and equipment at the site and used it as a location to clean out trash cans when it switched to private waste collection in 2013. The twelve existing buildings vary in quality and design, with a mix of office and warehouse functions. During a site visit on January 31, 2013 the buildings were inventoried, photographed, and graded based on their appearance and visible structural integrity using a scale of 1(Poor), 2(Fair), and 3(Good). Four buildings were graded

as poor, five as fair, and three as good. Not surprisingly, the four buildings in the worst condition are located closest to the river, likely damaged by high water throughout the years. The five buildings graded as fair are located in the center of the site, while the three buildings graded as good are scattered throughout. Any redevelopment of the site should consider whether the standing structures should be renovated or demolished. See the Appendix D for pictures and a map of the site.

Island Assets

During the second community meetings, residents identified and located assets on the island. Assets are here defined as people and places that can contribute to improvement of the neighborhood. The asset map is shown in Appendix E. The residents signified a handful of extended families that either live on or have deep ties to the island as assets, and these families tend to be those that own significant property on the island. People-based assets are essential to the formulation and success of a neighborhood plan, as they promote objectives and actions serving the resident population and help maintain momentum for implementation. The residents also created the Concerned Citizens of Pocahontas community group following the 1993 tornado. This group purchased the parcel at 139 Pocahontas St intending to build a community center on it. The parcel was too small for a community center, but the group still maintains the property. The plan can engage this group in implementation.

Asset	Type
Pocahontas Chapel	Community
Community Center	Community
Business	Community
Farmer's Market	Community
Jarrett House	History
Underground Railroad House	History
Site of Old Train Station	History
Black History Museum	History
Roper Bros Lumber Facility	Potential
Old Port	Potential
Vacant Land	Potential
Open Space	Potential
Appomattox River	Recreation
Playground	Recreation
Appomattox River Heritage Trail	Recreation

Residents and the researcher highlighted numerous physical assets on the island as well. These assets were broken down into historical, recreational, community, and potential assets. Table 7 lists these assets. A neighborhood plan can build on this strong foundation. The chapel and community center provide gathering places and locations of identity. For example, all of the community meetings for this plan were held at the chapel. The Saturday Petersburg Farmer's Market also recently moved under the nearby Martin Luther King Bridge, providing a location and platform to promote the island. Perhaps the island's greatest asset is its well-documented history, most significantly represented by the Underground Railroad and Jarrett Houses and the Black History Museum, all located in close proximity near the intersection of Witten and Logan Streets and shown in images 9, 10, and 11. The large amount of vacant land, indicative of population decline on the island, also provides an opportunity for new growth, recreational opportunities, and infill housing. The island's proximity to the river heritage trail contributes access to recreation, not only for the island's residents, but also to the larger Petersburg community and visitors.

Image 9: Underground Railroad House



Image 10: The Jarrett House



Image 11: Black History Museum



Historic preservation is a pivotal tool for the Petersburg Planning Department that can be applied to Pocahontas Island. The island’s black history museum (Image 11) already attracts hundreds of visitors every year and the historical sites and structures on the island could attract more. Pocahontas Island is listed on the National Register of Historic Places. This designation documents a site’s historical significance and provides access to federal grants and tax credits for planning and rehabilitation, preservation easements to non-profit organizations, and safety code alternatives (National Register of Historic Places, 2014). Petersburg provides historic preservation easements to owners, restricting their ability in perpetuity to alter the property dramatically. In return the owner receives a tax credit for the charitable donation (Petersburg Department of Planning and Community Development 2011, 49). This could be applied to the Underground Railroad House (Image 9), currently privately owned. There are state historical preservation incentives as well. Petersburg is a Certified Local Government (CLG) by the Virginia Department of Historic Resources. CLG grants can be used for the rehabilitation of buildings listed on the National Register and for public education programs concerned with heritage stewardship. The city has used this funding for historical surveys, workshops, and historical design reviews in the past (Morgan, 2014). Local private funding is also available. The Cameron Foundation, an organization founded in 2003 and located on Sycamore St in Petersburg, provides grants for historic preservation (Cameron Foundation, 2014). One former island resident is writing an application to get the Underground Railroad and Jarrett Houses (Image 10) listed by Preservation Virginia as historically endangered sites, bringing needed attention to these valuable historical resources (Free, 2014). These structures present obstacles however. The Underground Railroad House has asbestos siding requiring abatement. The city owns the Jarrett house and put a copper roof on it a few years ago. Support beams prevent its western wall from collapsing, and it is in need of serious repair. In a 2011 report, an engineer recommended that “a competent masonry contractor, experienced in “Antique Masonry Restoration” be employed to address the extremely weathered conditions by repainting the open joints and replacing lower-level missing brick to stabilize the walls” (Norman, 2011). Despite the challenges, both the island residents and the city want to preserve the history of Pocahontas, and the sites and funding are available to do so.

Finally, Pocahontas Island's location and infrastructure are key assets for its redevelopment. A short drive from I-95, it is directly connected to the rest of Petersburg and Colonial Heights via the Martin Luther King Bridge. Its proximity to Old Towne Petersburg increases its development marketability and tourism visibility. The island is also well-served by infrastructure. It has 74 electric poles covering the street grid. The neighborhood contains 14 light poles, but they are primarily located along Witten and Rolfe Streets, the two streets with the highest concentration of housing. The island has five catch basins and two culverts to manage storm water. Drinking water is supplied throughout the neighborhood and in the western portion of the Roper Site by 12 pressurized mains extending for 6,913 feet. A pressurized sewer main runs for 2,962 feet along Sapony and Rolfe Streets and gravity sewer mains run throughout the neighborhood for a total of 8,144 feet. All sewer mains run to the waste water treatment plant just northeast of the neighborhood. The island contains 27 manholes providing easy access to upgrades as needed. The island has the engineering capacity to handle a rebirth of the population density from years past and any potential redevelopment of the Roper Site (Crater Planning District Commission, 2014).

Market Analysis

Both Petersburg and Pocahontas Island's populations are relatively stable. With a neighborhood population of only 90, any new commercial or residential development must be supported by an influx of shoppers or residents from outside the study area. Petersburg is not projected to grow significantly by 2030. The Virginia Employment Commission projects a population of only 32,697 in 2020 and 33,319 in 2030 (Virginia Employment Commission 2014, 9). These numbers would indicate limited demand for new shopping or housing on Pocahontas Island. However, Old Towne Petersburg, adjacent to the island, has seen significant growth in recent years. The conversion of old warehouses to lofts (e.g. High Street Lofts: 2008, Perry St Apts: 2011) is projected to add an additional 920 downtown residents by 2016 (RKG Associates 2012, 54). See Appendix F for a map of these lofts. Residential occupancy in Petersburg is also trending towards single-adult and empty nester/retiree households (Ibid), meaning that the demand for housing may increase even if the population is not growing. Local institutional growth may also increase demand for housing and shopping in the study area. Virginia State University (VSU), only two miles from Pocahontas, intends to double its enrollment amount to 10,000 by 2020 (Ettrick VSU Special Area Plan 2010, 2). VSU is also building a 160,000 ft² convocation center to be completed by 2016. Fort Lee, a military installation 5 ½ miles from the study area grew by 1,698 personnel in 2010. It is also increasing student capacity in its Army Logistics University classes (RKG Associates 2012, 35). The Roper Buildings are not suitable for conversion into lofts, but as the apartment market in downtown saturates, many new residents could choose to move into newly built or renovated single-family housing or new low-density multi-family housing on the island.

A 2013 highest and best use analysis completed by the Real Property Research Group for the Jefferson South of the James Apartment (JSOTJ) complex captured the current housing market in Petersburg. This study analyzed a site located three miles south of the study area, but many of its findings are applicable to Pocahontas. The researchers concluded that the best use of the site was for rental,

affordable, and general rather than age-restricted housing (Real Property Research Group 2013, 11). The for-sale housing market in Petersburg is weak and dominated by older more affordable homes and the sales of distressed properties. Two new single-family subdivisions, West Park and Berkeley Estates sold only one and six homes respectively in 2012 (Ibid, 79). The researchers recommended affordable rather than at-market rental housing because of the modest income levels of Petersburg residents, poorly performing schools, and the JSOTJ site's location away from retail and institutional services. The first two factors apply to Pocahontas, but it is much more connected to services than is the JSOTJ site. The study also recommended general over age-restricted housing due to the site's relative isolation from services (daily shopping, health care), that seniors require. Pocahontas Island is much closer to shopping opportunities, and while the major regional hospital, Southside Regional Medical Center is located six miles away, Pocahontas Island is located within 1 ½ miles of the Petersburg Health Department and well-served by public transit. The two age-restricted rental units analyzed in the study, Bolling Park and Claiborne Square, had only one and zero vacancies respectively at the time of the study. Claiborne Square had a waiting list of 17 (Ibid, 57). This indicates that age-restricted rental housing is in demand in Petersburg and possible on Pocahontas Island. Residents expressed interest in such housing at the community meeting on February 11.

Development in Old Towne Petersburg is creating a market for commercial uses downtown, and by extension neighboring Pocahontas Island. One private investor has expressed interest in developing two business class hotels in downtown (RKG Associates 2012, 4). Hotel occupancy rates in the Greater Petersburg Region rose 11% from 2010 to 2012 to 67%. A downtown Petersburg development study conducted by RKG Associates in 2012 concluded that population growth spurred by the construction of lofts and these new hotels would increase retail space demand downtown by up to 19,865 ft² (Ibid, 6). Another development that may increase both commercial and tourism demand on the island is the proposed National Park Service Center at the Southside Depot at 37 River St. When completed, it will offer interpretive historical programs, tours, exhibits, and directions to related attractions in the area to visitors (Ibid, 42). The same study calculated the following retail leakage rates (gap between local demand for retail goods and services and the amount of these sales captured by local businesses) for a one mile radius area around downtown, which includes Pocahontas:

Grocery Stores: \$6.8 million

Department Stores: \$4.9 million

Limited-Eating Service Establishments: \$5.5 million

Health and Personal Care Stores: \$4.5 million (RKG Associates 2012, 65)

Downtown Petersburg and Pocahontas are not likely to support a full-size grocery store, and the proximity of Southpark Mall (one exit north on I-95 in Colonial Heights) hinders the likely success of a new department store in the area. However, limited-eating service establishments (e.g. fast food restaurants) and health and personal care stores for an aging population may find an eager market if developed on or near Pocahontas Island.

Overall, the market for housing and shopping in and around Pocahontas Island does not call for intense development. But the continued revitalization of Old Towne, historical tourism, and the expansion of VSU and Fort Lee provide opportunities for targeted development in both the neighborhood and at the Roper Site.

Available Funding

Petersburg has both direct and indirect funding mechanisms for proposed improvements on the island. While the fiscal year 2014/15 fiscal budget is yet to be adopted, the 2013/14 budget indicates potential sources of money. The General Fund totals \$2,302,436 and increased 33.8% from 2012/13 to 2013/14. It is designed to “improve the current level of municipal services, programs, and physical projects.” Specific to this plan, this includes public improvements to infrastructure such as dredging the Appomattox River, street resurfacing, and economic development (City of Petersburg 2013, 8). This budget also included an 11.9% bi-monthly increase for city water and sewer rates designed to fund improvements at the South Central Wastewater Treatment Plant on Pocahontas, of which the city owns 52%. Indirectly, the city allocated \$448,394 to the CDBG project budget in 2013/14. The city’s CDBG allotment for the upcoming fiscal year is \$700,000, which includes administrative costs. Typically, the city awards \$50,000 to \$100,000 for city projects and the rest is awarded to non-profits through a competitive bidding process (Peters, 2014). CDBG funding could be used for sidewalk and infrastructure upgrades related to job creation, with the Department of Public Works (DPW) as the applicant (Ibid). Interested non-profits could also use their awards for development projects on Pocahontas, but the city does not prescribe areas of focus in their CDBG Requests for Proposals (RFPs).

The city is also interested in allocating Capital Improvements Program (CIP) funding to infrastructure and recreational upgrades that may be recommended in The Pocahontas Island Neighborhood Plan. Such funding would be provided to DPW and the Department of Parks and Leisure Services (DPLS). Table 8 highlights CIP allocations from 2014 to 2018 for these two departments.

CIP Year	DPW	DPLS
2014	\$670,000	\$425,000
2015	\$4,682,520	\$80,000
2016	\$12,265,000	\$478,000
2017	\$9,795,000	NA
2018	\$5,820,000	NA
City of Petersburg		

This funding is already promised elsewhere, but demonstrates that in the years following 2018, significant financial resources could be allocated, if so chosen, through the CIP to improvements on the island. DPW could assign its funding to street and sidewalk renovations, infrastructure improvements at the Roper Site, storm water management upgrades, and sewer or water main upgrades designed to support any increased residential density or intensified land use on Pocahontas. DPLS could assign its funding to building a new playground or park or to any enhancements to the Appomattox River Heritage Trail.

State and private grant funding is available for improvements on the island. From 1987-2008, the Virginia Department of Historic Resources awarded Petersburg \$115,651 in total, funding historical preservation projects through its Certified Local Government Program (Morgan, 2014). Similar funding could be used for renovating the Jarrett House, developing a historical walking trail, or promoting public education programs highlighting the island's history. The local Cameron Foundation provides private funding for historical preservation projects in the Petersburg Region. Their Significant Historic Structures and Sites Project Grants provide up to \$25,000 in funding requiring a 50/50 match by the grant recipient to preserve or restore structures or sites listed as contributing to a resource listed on the National Register of Historic Places (Cameron Foundation, 2014). Petersburg could partner with an eligible non-profit organization to fund the renovation of the Jarret House. Pocahontas Island also lies in a Virginia Department of Housing and Community Development Enterprise Zone (EZ). Businesses or individuals investing at least \$100,000 in industrial, commercial, or mixed-use rehabilitation projects or at least \$500,000 in new construction projects in an EZ are eligible for a Real Property Investment Grant (RPIG) (Virginia Department of Housing and Community Development, 2014). Grants up to 20% of the real property investment are available (Ibid), which could be used to support commercial or mixed-use development at the Roper Site.

Federal funding can assist in the assessment and remediation of brownfield sites such as The Roper Bros Lumber Facility. Federal assistance can come in the form of Environmental Protection Agency (EPA) assessment, cleanup, and job training grants, which were expanded with 2002's Small Business Liability Relief and Brownfields Revitalization Act (American Planning Association). Petersburg has a history with these grants. A 2001 EPA assessment grant helped the city convert some vacant warehouses to lofts, and a local Community Development Corporation, Pathways, has directed an Environmental Workforce Development Program through an EPA job-training grant since 2011, training local residents in the hazardous work of brownfield remediation (Pathways, 2014). Assessment grants usually top off at \$200,000, but can go as high as \$350,000 for highly contaminated sites (EPA Brownfields Assessment Grants, 2009). Up to \$200,000 is available in a cleanup grant, but is also requires a 20% cost share (labor, materials, etc) from the awarded entity (EPA Brownfields Cleanup Grants, 2009). Municipalities are eligible for these grants, and since Petersburg owns the Roper Site, this funding could be directly applied to assessment and remediation in preparation for redevelopment. Table 9 breaks down available funding for implementation of this plan.

Funding Type	Funding Use	Source	Annual Amount
General Fund	Infrastructure, Economic Development	City of Petersburg	\$2,302,436
Water and Sewer Rates	Wastewater Treatment Plant Improvements	City of Petersburg	-----
Community Development Block Grants	Infrastructure	City Of Petersburg	\$50,000 - \$100,000
Community Development Block Grants	Neighborhood Revitalization	City Of Petersburg	≈ \$500,000
Capital Improvements Plan	Infrastructure, Park Development	City of Petersburg	\$1 Million - \$12.5 Million
Certified Local Government Program	Historical Preservation and Education	Virginia Department of Historic Resources	\$25,000
Enterprise Zone	Industrial, Commercial, or Mixed-Use Rehabilitation or New Construction Projects	Virginia Department of Housing and Community Development	Up to 20% of Investments of at least \$100,000 in Rehabilitation projects and at least \$500,000 in New Construction projects
Significant Historic Structures and Sites Project Grants	Historic Preservation of Sites or Buildings	Cameron Foundation	Up to \$25,000 in funding requiring a 50/50 match
Brownfield Assessment Grant	Assessing Brownfield Contamination	Environmental Protection Agency	\$200,000 - \$350,000
Brownfield Cleanup Grant	Remediation Brownfield Contamination	Environmental Protection Agency	Up to \$200,000 with a 20% Cost Share

There are more incentive programs at the state level. Virginia has a Voluntary Remediation Program (VRP) in which interested property owners can enroll. When a property has been satisfactorily remediated, the Virginia Department of Environmental Quality issues the landowner a “certification of satisfactory completion of remediation”, which assures that the site will not be subject to further environmental liability unless new contamination is discovered (Virginia Department of Environmental Quality, 2014). The proper application of this liability protection could attract private funding and stakeholder involvement in the redevelopment of the Roper Site following cleanup. Enrollment in the VRP requires the submittal of a report as governed by 9VAC 20-160-70 of the Virginia Code of regulations. This report must contain a 1. Site characterization, 2. Risk assessment including surrounding properties, 3. Remedial action work plan, and 4. Demonstration of remedial work completion and documentation of public notice. The Virginia Code of Regulations also addresses remediation requirements. For a site desiring unrestricted use (residential), “it shall be deemed to have met the requirements for unrestricted use if the remediation levels, based on either background or standard residential exposure factors, have been attained throughout the site and in all media” (Virginia Waste Management Board, 2001). No remediation techniques or land use controls (e.g. restrictions on site access) that require continual management can be used to achieve unrestricted status. Although the full level of contamination at the Roper Site has not been determined, the legal requirements for remediation based on intended end use must be addressed.

Part 2: The Plan

Goals and Objectives

The following goals and objectives for The Pocahontas Island Neighborhood Plan stem from stakeholder feedback and research of the island's conditions, representing the objective application of the community visioning process. They simultaneously harken back to the neighborhood's bright past and delve forward into a promising future. Individually, each goal and its accompanying objectives call for actions worth pursuing. They are listed below with no order of priority. Collectively, these goals and actions forge a path of comprehensive development for both the neighborhood and the Roper Bros Lumber brownfield site and aim to build upon the island's unique history, location, and community.

Goals: Pocahontas Island shall be a neighborhood that aspires to the following

1. Is residential in character with an increased number and variety of aesthetically pleasing housing options

- Objective 1.1: Reduce blighted housing throughout neighborhood
- Objective 1.2: Place residential infill housing on vacant parcels
- Objective 1.3: Increase the amount of affordable housing
- Objective 1.4: Unify the design of residential structures
- Objective 1.5: Increase the number of senior housing units

2. Has recreational opportunities for residents and visitors that utilize the island's unique location

- Objective 2.1: Expand playground square footage and amenities
- Objective 2.2: Enhance the physical appeal of the Appomattox River Heritage Trail
- Objective 2.3: Develop water-dependent land uses
- Objective 2.4: Expand open space acreage
- Objective 2.5: Develop new recreational land uses

3. Maintains a sustainable balance between island's urban land use and its environment

Objective 3.1: Assess and remediate area contamination

Objective 3.2: Limit development on 100-year floodplains and measure development on 500-year floodplains

Objective 3.3: Reduce impervious land cover

Objective 3.4: Increase vegetative buffers adjacent to Appomattox River

Objective 3.5: Reduce stormwater runoff into Appomattox River

4. Preserves the island's vernacular culture

Objective 4.1: Preserve the Underground Railroad and Jarrett Houses

Objective 4.2: Enhance communication of and access to the island's unique and enduring historical legacy

Objective 4.3: Develop a community action group to guide plan implementation and preserve community identity

Objective 4.4: Increase access to local shopping needs

Objective 4.5: Maintain quiet residential character

5. Is beautiful and safe with efficient and resilient infrastructure

Objective 5.1: Improve vehicular and pedestrian network

Objective 5.2: Enhance neighborhood lighting

Objective 5.3: Slow vehicular traffic

Objective 5.4: Enhance aesthetic and pedestrian appeal

Objective 5.5: Mitigate effect of Waste Water Treatment Plant truck traffic on neighborhood

Analysis of Neighborhood Alternatives

The first part of the plan alternative analysis focused on the Pocahontas Island Neighborhood, distinct from the Roper Site. Key stakeholder surveys and discussion at the four community meetings established potential neighborhood improvements to advance the goals and objectives of this plan (See Appendix B for a detailed description of survey data). Respondents uniformly expressed some desired actions (repave streets), while advocating others (building a neighborhood store) more selectively. The plan's purpose is to create a framework through which the community vision becomes reality. Some improvements will assist in the process more than others, and an analysis transitions from goals and objectives to implementable actions.

Intensity Levels

Pulling from the information gained through stakeholder feedback, the plan formulated a range of alternatives for actionable strategies, expressed in terms of intensity levels. Intensity level indicates the overall amount of development and deviation from baseline conditions, as defined in the existing conditions analysis. Four levels (Minimum, Moderate, Advanced, Maximum) distinguished varying intensities. For example, minimum intensity might advocate sidewalk repair, while maximum intensity may call for the installation of new sidewalks. Each intensity level contains a list of potential neighborhood improvements. Actions in the minimum level were highly agreed upon by the majority of stakeholders. From there, each intensity level expands the scale and impact of improvements and adds those that may not be shared by all respondents, resulting in a much longer list of actions in the maximum level than that in the minimum level. Table 10 describes the potential improvements in each intensity level and the goals they address. Through the progression of intensity levels the list grows longer, and while many actions are shared in multiple levels, the general pattern is for greater deviation from baseline conditions as the intensity level increases.

Table 10: Defined Development Intensity Levels	
Minimum Intensity	
Action	Goals Addressed
Renovate or remove dilapidated houses on Logan St	1
Clean up Appomattox River Heritage Trail, repair signs, intensify maintenance schedule	2,5
Repave and maintain Spony and Rolfe Streets	5
Brighten existing streetlights	5
Clean and maintain large lot west of Spony	5
Renovate current playground, add picnic tables and benches	2
Maintain Underground Railroad and Jarrett Houses in current state	4
Repair current sidewalks	5
Plant street trees along Witten Street	3,5
Enforce 7 am -7 pm Waste Water Treatment Plant truck delivery schedule	5

Table 10: Defined Development Intensity Levels	
Moderate Intensity	
Action	Goals Addressed
Renovate or remove dilapidated houses on Logan and Witten Streets	1
Clean up Appomattox River Heritage Trail, repair current signs and install new historical signs, intensify maintenance schedule	2,5
Repave and maintain Sapony, Rolfe, and Witten Streets	5
Brighten existing streetlights and install new ones on Witten Street	5
Renovate current playground, add picnic tables and benches, and expand to include a jungle gym	2
Preserve Underground Railroad and Jarrett Houses to historically representative conditions	4
Repair current sidewalks	5
Build new sidewalks on eastern side of Logan Street and western side of Sapony Street	5
Plant street trees along Witten and Sapony Streets	3,5
Enforce 7 am -7 pm Waste Water Treatment Plant truck delivery schedule	5
Selective Infill R-2 housing on interior vacant lots	1
Adopt ordinance requiring all infill development to reflect current housing design	1
Install benches on Witten Street	5
Move current gateway sign on Pocahontas Street to neighborhood entrance on bridge Street	4
Locate closed Roper Bros Lumber underground storage tanks and sample surrounding soil	3

Table 10: Defined Development Intensity Levels	
Advanced Intensity	
Action	Goals Addressed
Renovate or remove dilapidated houses throughout neighborhood	1
Clean up Appomattox River Heritage Trail, repair current signs and install new historical signs, intensify maintenance schedule	2,4,5
Repave and maintain streets throughout neighborhood	5
Brighten existing streetlights and install new ones on Witten and Pocahontas Streets	5
Renovate current playground, add picnic tables and benches, and expand to include a jungle gym	2
Expand playground into Roper Site Redevelopment east of Logan Street	2
Preserve Underground Railroad and Jarrett Houses to historically representative conditions and conduct scheduled tours	4
Repair current sidewalks	5
Build new sidewalks on eastern side of Logan Street and western side of Sapony Street	5
Plant street trees along every neighborhood street	3,5
Limit Waste Water Treatment Plant truck delivery schedule to 8 am – 6 pm	5
Infill R-2 housing on interior vacant lots, rezone parcels west of Sapony to R-2 and develop affordable R-2 housing there	1
Adopt ordinance requiring all infill and new residential development to match current housing design	1
Install benches on Witten and Pocahontas Streets	5
Install a new gateway sign at neighborhood entrance on Bridge Street or move current gateway sign on Pocahontas Street to this location	4
Locate closed Roper Bros Lumber underground storage tanks, sample surrounding soil, and remove if necessary	3
Extend Appomattox River Heritage Trail (including signage) into neighborhood west of Sapony Street and east of Logan Street. Include Underground Railroad House, Jarrett House, Pocahontas Chapel, and Black History Museum on the trail, using sidewalks as segments of trail where appropriate	2,3,5
Develop Witten Street as primary neighborhood corridor	4,5
Install raised crosswalks at intersections of Witten and Sapony Streets and Witten and Logan Streets	5
Advertise historical sites and walking trail at the new National Park Service Center	4
Build a community garden west of new housing on Sapony Street	3,4,5
Rezone the western corner of Sapony and Pocahontas Streets to commercial use and encourage development of neighborhood convenience store	4

Maximum Intensity	
Action	Goals Addressed
Renovate or remove dilapidated houses throughout neighborhood	1
Clean up Appomattox River Heritage Trail, repair current signs and install new historical signs, install a boat ramp off of Magazine Rd, and intensify maintenance schedule	2,4,5
Repave and maintain streets throughout neighborhood	5
Brighten existing streetlights and install new ones on all neighborhood streets	5
Renovate current playground, add picnic tables and benches, and expand to include a jungle gym	2
Expand playground into Roper Site Redevelopment east of Logan Street	2
Preserve Underground Railroad and Jarrett Houses to historically representative conditions and convert to museums	4
Repair current sidewalks	5
Build new sidewalks on eastern side of Logan Street, western side of Sapony Street, and Northern side of Rolfe Street	5
Plant street trees along every neighborhood street	3,5
Build new Waste Water Treatment Plant access road extending north from East Street east of 1-95 with accompanying bridge over the Appomattox River	5
Infill R-2 housing on interior vacant lots and rezone parcels west of Sapony Street to R-3	1
Develop affordable housing in new R-3 area	1
Adopt ordinance requiring all infill and new residential development to match current housing design (One Story with front porch only)	1
Install benches on Witten, Pocahontas, and Rolfe Streets	5
Install a new gateway sign at neighborhood entrance on Bridge Street	4
Locate closed Roper Bros Lumber underground storage tanks, sample and remediate surrounding soil, and remove	3
Extend Appomattox River Heritage Trail into neighborhood west of Sapony Street and east of Logan Street. Include Underground Railroad House, Jarrett House, Pocahontas Chapel, and Black History Museum , using sidewalks as segments where appropriate	2,4,5
Develop Witten Street as primary neighborhood corridor	4,5
Install raised crosswalks at all Witten and Pocahontas Street intersections	5
Advertise island historical sites and walking trail at the new National Park Service Center	4
Create beginning of trail in downtown Petersburg	4
Build a community garden and pocket park west of new housing on Sapony St and put in care of Concerned Citizens of Pocahontas	3,4,5
Rezone the western corner of Sapony and Pocahontas Streets to commercial use and encourage development of neighborhood convenience store	4

Alternative Grading Process

These levels were then graded by their ability to promote plan goals, the feasibility of their implementation (including existing funding), and their capacity to maximize the island’s already existing assets. The analysis included feasibility and assets in the grading process to ensure an accounting for practical implementation requirements, as all key stakeholders desire a plan that is achievable. Criteria were further broken down into the respective subcategories of objectives, funding streams, and types of assets. Each intensity level was graded against these subcategories on a scale range earning the following scores.

Score	Reasoning
Negative: 0	<ul style="list-style-type: none">• Negatively affected objective• No funding access• Neglected assets
Neutral: 1	<ul style="list-style-type: none">• No impact• Limited funding access
Positive: 2	<ul style="list-style-type: none">• Supported objective• Possible funding access• Utilized asset
Very Positive: 3	<ul style="list-style-type: none">• Significantly supported objective• Ready funding access• Maximized asset

Grades resulted from an objective analysis of each intensity level’s actions and are highlighted in Table 11 below. If the implementation of a level’s component would result in the achievement of an objective, if a funding stream existed for it, or if it utilized an existing asset, it was assigned a positive or very positive score depending on the degree of impact, availability of funding, or level of asset promotion, respectively. If it negatively affected an objective or had no effect, had no or limited access to funding, or neglected an island asset, it was assigned a neutral or negative score depending on its degree of harm, infeasibility, or asset disregard, respectively. See Appendix G for a more detailed explanation of grading methodology and reasoning. Some of the sub-categories are more applicable to the redevelopment of the Roper Site, such as those promoting the goal of sustainability and the availability of federal funding, and therefore received predominantly neutral scores in the neighborhood analysis of alternatives. Following the grading of intensity levels based on these sub-categories, the analysis summed total points to determine the highest scoring intensity level in each larger category, and then summed category scores to calculate a final grade for each intensity level. The higher the final score, the better suited that intensity level was to bringing the neighborhood community vision to life.

Table 11: Intensity Level Grading

Criteria	Criteria				Minimum Intensity	Moderate Intensity	Advanced Intensity	Maximum Intensity
	Negative 0	Neutral 1	Positive 2	Very Positive 3				
Is residential in character with an increased number and variety of aesthetically pleasing housing options					4	9	12	13
Reduce blighted housing throughout neighborhood					2	2	3	3
Place residential infill housing on vacant lots					0	2	3	3
Increase amount of affordable housing stock					1	2	3	3
Unify the design of residential structures					0	2	2	3
Increase the number of senior housing units					1	1	1	1
Has recreational opportunities for residents and visitors that utilize the island's unique location					8	8	12	14
Expand playground square footage and amenities					2	2	3	3
Enhance the physical appeal of Appomattox River Heritage Trail					2	2	3	3
Develop water-dependent land uses					1	1	1	2
Expand open space acreage					1	1	2	3
Develop new recreational land uses					2	2	3	3
Maintains a sustainable balance between island's urban land use and its environment					7	8	7	4
Assess and remediate area contamination					1	2	3	3
Limit development on 100-year floodplain and measure development on 500-year floodplains					3	3	1	0
Reduce impervious (asphalt) cover					1	1	0	0
Increase vegetative buffers adjacent to river					1	1	1	0
Reduce stormwater runoff into Appomattox River					1	1	2	1
Preserves the island's vernacular culture					7	9	12	12
Preserve Underground Railroad and Jarrett Houses					1	3	3	3
Enhance communication of and access to island's unique and enduring historical legacy					1	2	3	3
Develop community action group to guide plan implementation and preserve community identity					1	1	2	3
Increase access to local shopping needs					1	1	3	3
Maintain quiet residential condition					3	2	1	0

Table 11: Intensity Level Grading

Criteria				Minimum Intensity	Moderate Intensity	Advanced Intensity	Maximum Intensity
Negative 0	Neutral 1	Positive 2	Very Positive 3				
Is a beautiful and safe location with efficient and resilient infrastructure				8	9	13	15
Improve vehicular and pedestrian network				2	2	3	3
Enhance neighborhood lighting				2	3	3	3
Slow vehicular traffic				0	0	2	3
Enhance aesthetic and pedestrian appeal				2	2	3	3
Mitigate effect of Waste Water Treatment Plant truck traffic on neighborhood				2	2	2	3
Implementation Feasibility				12	16	14	12
Market feasibility				3	3	2	0
Availability of direct city funding				3	3	2	2
Availability of CDBG funding				3	3	3	3
Availability of State funding				1	3	3	3
Availability of Private funding				1	3	3	3
Availability of Federal funding				1	1	1	1
Maximizes Island's Assets				8	8	12	10
People assets				1	1	2	1
Community assets				1	1	3	3
Historical assets				1	2	3	3
Recreational assets				2	2	3	3
Supportive infrastructure				3	2	1	0
Final Grade (Highest is Best)				54	67	82	80

Results and Alternative Synthesis

The results of the grading process indicate that the advanced (82 points) and maximum (80 points) levels best promote the Pocahontas Island Neighborhood Plan vision, while the minimum (54 points) and moderate (67 points) levels do not. However, this analysis considered both final and individual criteria scores in determining a course of action. For example, both the advanced and maximum intensity levels scored poorly on their ability to meet the objectives of Goal 3 (sustainability). They also scored negatively in the criteria sub-categories of maintaining a quiet residential condition, market feasibility, and supportive infrastructure. Improvements demanding greater development often threaten environmental sustainability, increasing the amount of impervious surfaces, impeding floodplains, reducing vegetative land cover, and accelerating solid waste production during the construction process and the subsequent intensified land use. The plan mitigates this threat by advocating an environmentally prescriptive redevelopment of the Roper Site, analyzed below. Intense development also requires greater public and private investment and risks undermining the positive features of baseline conditions. For this reason, the Pocahontas Island Neighborhood Plan synthesizes a course of action.

While many of the actions proposed in the maximum intensity level scored highly on their ability to advance plan goals, infeasibility in terms of both market demand and funding availability limits their potential. As noted before, all key stakeholders desire an implementable plan. Also, complete implementation of the actions proposed in the maximum intensity level would threaten the residential nature of the neighborhood and risk undermining the island's vernacular culture. Therefore, the final proposed plan for the Pocahontas Island Neighborhood builds upon the advanced intensity level as a baseline. While the majority of plan proposals derive from this baseline, it was strengthened by supplanting actions promoted in other intensity levels in the sub-categories in which the advanced intensity struggled, primarily Goals 4 and 5 and market feasibility. Improvements are prioritized below based on stakeholder feedback. See Appendix B for details on this feedback. Table 12 and Map 7 outline the neighborhood actions advocated in The Pocahontas Island Neighborhood Plan.

Table 12: Final Action Plan Prioritized

Action by Stakeholder Priority		Source Level	Goal Addressed
1.	Enforce 7 am -7 pm Waste Water Treatment Plant truck delivery schedule	Mod	5
2.	Renovate and expand playground into Roper Site Redevelopment east of Logan Street	Adv	2
3.	Repave and maintain streets throughout neighborhood	Adv	5
4.	Install raised crosswalks at all Witten and Pocahontas Street intersections	Max	5
5.	Renovate or remove dilapidated houses throughout neighborhood	Adv	1
6.	Preserve Underground Railroad and Jarrett Houses to historically representative conditions	Mod	4
7.	Locate closed Roper Bros Lumber underground storage tanks, sample surrounding soil, and remove if necessary	Adv	3
8.	Repair current sidewalks	All	5
9.	Plant street trees along all neighborhood streets	Adv	3,5
10.	Install benches on Witten and Pocahontas Streets	Adv	5
11.	Build new sidewalks on eastern side of Logan Street, western side of Sapony Street, and northern side of Rolfe Street	Max	5
12.	Replace existing streetlights with brighter LED lights and install new LEDs on Witten, Logan, and Pocahontas Streets	Adv,Max	5
13.	Clean up Appomattox River Heritage Trail, repair current signs and install new historical signs, install a boat ramp off of Magazine Rd, expand existing parking lot, and intensify trail maintenance schedule	Max	2,4,5
14.	Extend Appomattox River Heritage Trail (including signage) into neighborhood west of Sapony Street and east of Logan Street (into Roper Site redevelopment). Include Underground Railroad House, Jarrett House, Pocahontas Chapel, and Black History Museum. Convert into historical walking trail	Adv	2,4,5
15.	Infill R-2 housing on interior vacant lots, rezone parcels west of Sapony to R-2, and develop affordable R-2 housing there	Adv	1
16.	Adopt ordinance requiring all infill and new residential development to match current housing design	Adv	1
17.	Develop Witten Street as primary neighborhood corridor	Adv	4,5
18.	Install a new gateway sign at neighborhood entrance on Bridge Street	Max	4
19.	Advertise historical sites and walking trail at the new National Park Service Center	Adv	4
20.	Build a community garden or pocket park west of new housing on Sapony Street and place in care of Concerned Citizens of Pocahontas	Adv,Max	3,4,5
21.	Rezone western corner of Sapony and Pocahontas Streets to commercial and encourage development of neighborhood convenience store	Adv	4

Map 7: Final Neighborhood Site Plan



Source: Crater Planning District Commission

Final Neighborhood Plan

The final plan for the Pocahontas Island Neighborhood advocates the realization of the community vision by strategically building upon the neighborhood's assets to create a community reminiscent of the past but prepared for the future. The goal of preserving and enhancing the residential character of the island is promoted through the renovation or demolition of blighted structures. This will simultaneously beautify the neighborhood and make it more appealing for new construction. The vacant parcels, zoning, and infrastructure will support new R-2 infill housing, which will in turn increase the likelihood of new commercial uses and enhance the island's resiliency to development pressures threatening to alter its character. Developing affordable housing on Sapony Street will ensure a diversity of housing options. Enforcing housing design unity in new construction will strengthen the neighborhood's identity and singularity.

This plan also calls for a better utilization of the neighborhood's open space and environmental assets. Renovating and adding amenities to the current playground on Magazine Street will provide both island residents and the larger community with access to recreational resources. Improved maintenance of the Appomattox River Heritage Trail combined with increased signage and a new boat ramp off of Magazine Street will reconnect people to the water, long the lifeblood of both Pocahontas Island and Petersburg. Locating and remediating the old Roper Bros Lumber underground storage tanks will ensure that the soil and groundwater on the island are clean for future generations. The development of a new pocket park and/or community garden west of Sapony Street will build upon an open space asset that now sits empty and underused and provide residents with an area for quiet reflection, family gatherings, or neighborly interaction. Perhaps the Concerned Citizens of Pocahontas can even set up a stand at the nearby Saturday Farmer's Market to sell the garden's produce.

The island's historical assets, while commonly known in the neighborhood, sit neglected and overlooked by the larger community. The renovation of the Underground Railroad and Jarrett Houses to historically representative conditions will preserve and spread the island's powerful story of African American self-determination. This plan does not call for converting these structures into museums, as this will undermine the neighborhood's vernacular culture by overwhelming its residential character. Rather, the development of a historical walking trail that includes these sites at the culmination of its path will strike a balance between historical and residential preservation on the island.

Finally, repaired streets and sidewalks combined with new sidewalks, benches, street trees, and crosswalks will enhance the pedestrian and aesthetic appeal of Pocahontas Island. Everyone wants to live in a beautiful neighborhood, and people enjoy visiting those areas that provide a pleasing visual experience. A pedestrian network centered on Witten Street and connected to a redeveloped Roper Site and to larger Petersburg via the historical walking and Appomattox River Trails will intertwine the island's assets and bring to life the vision of a beautiful and sustainable residential neighborhood that respects the proud legacy of the island.

Witten Street Corridor

This plan proposes the development of Witten Street as the primary corridor in the Pocahontas Neighborhood and the final stretch of the historical walking trail (see below). Spatially, it lies in the center of the neighborhood, while culturally it contains the greatest housing density and main physical assets (Pocahontas Chapel, Underground Railroad House, Black History Museum) in the neighborhood. Also, the Jarrett House is only a few feet away on Logan Street. This corridor development will improve the neighborhood aesthetic appearance and attract visitors and eventually new residents and investment. The images below distinguish Witten Street's current condition and this plan's vision for its future.

Image 12: Current View of Witten Street Looking East from Sapony Street



Image 13: Rearview of Jarrett House with Supports



Image 14: Sign Outside of Pink House at 212 Witten Street



Image 15: 212 Witten St



Image 16: Proposed Witten Street Corridor View Looking East from Sapyony Street



This is a view of Witten Street looking east from Sapyony Street. In the image you can see the proposed raised crosswalks at the intersection, new street trees, infill housing, repaired sidewalks, visitors, and a sign at the corridor entrance that would be a stop on the proposed historical walking trail (See Below).

Image 17: Bird's Eye View of Entire Corridor Looking West from Logan Street



Image 17 is a bird's eye view of the entire corridor looking west from Logan Street. In the image you can see the renovated Jarrett House in the foreground. Images 18, 19, and 20 below highlight the corridor's assets (with insets showing current conditions) and demonstrate the added benches that will improve the pedestrian appeal of the neighborhood.

Image 18: Pocahontas Chapel 2



Image 19: Underground Railroad House 2



Image 20: Black History Museum and Pink House



Analysis of Roper Site Redevelopment Alternatives

The second part of the plan alternative analysis focused on potential redevelopment options for the Roper Bros Lumber brownfield site. Survey responses and design sketches from the community meeting on February 11 provided possibilities for four site options (see Table 2 above and Appendix C). These alternatives, similar to the neighborhood alternatives, increase in land use intensity from limited redevelopment to maximum mixed use redevelopment, but all offer a profound deviation from the site's current condition of abandonment and decay. However, it is very important to note that no alternative promotes a radical reformulation of land use, forever altering the residential nature of the island and pricing its current residents out of their homes. Resident stakeholders rightfully fear the threat best personified by the amusement park plan described in the introduction. Roper Site redevelopment will help reconnect the island to larger Petersburg, but this plan will not allow it to overwhelm the island's vernacular culture. Rather, it will act as a buffer serving to preserve and strengthen Pocahontas. The following pages outline the features for each of the four possible alternatives.

Maps and narrative descriptions highlight the details for each alternative. As with the neighborhood alternative analysis, many improvements for the four options overlap. In addition to these visual and written descriptions, the following attributes for each alternative are identified and were used as inputs into the subsequent alternative analysis grading process. These attributes were chosen as significant inputs for one of two reasons. Either they have a direct impact on one of the criteria given extra weight in the grading process, or they have a direct impact on the island's vernacular culture, which is threatened by any redevelopment of the Roper Site. In parentheses, the criteria for each attribute used as an input are indicated.

Level of Required Contamination Remediation: Residential end uses require a more stringent level of remediation, therefore increasing the cost of redevelopment. (Input to funding feasibility criterion)

Required City Expenditures: To accommodate the public uses for the site that the key stakeholders envision, The City of Petersburg will have to expend financial resources in its preparation. (Input to funding feasibility criterion)

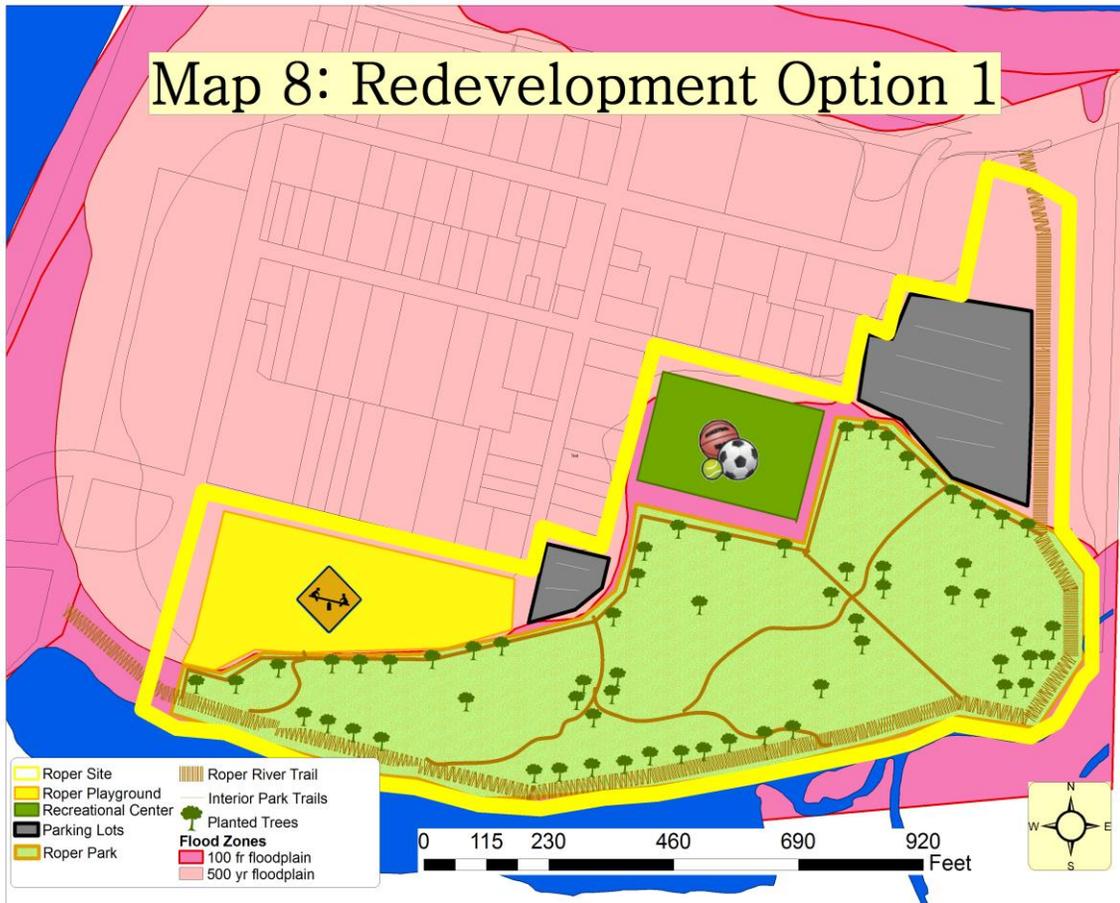
Projected End Use Value: Increased land use value enhances Petersburg tax revenue and promotes further development on the island (Input to market feasibility and compatibility with city goals criteria)

Projected Annual Visitor Traffic: Higher visitor traffic increases viability and economic impact of site, but also more significantly alters the neighborhood's baseline condition. (Input to compatibility with city goals and vernacular culture criteria)

Projected Increase in Abutting Property Values: Redevelopment of the Roper Site will increase property values in the adjoining neighborhood, thus elevating taxes and rent. Marisol Beccera found that remediated brownfield sites raised values of properties within .25 miles by up to 2%. Attributes for the alternatives in this plan are approximations based on redevelopment intensity (Beccera 2013, 43). (Input to vernacular culture and compatibility with city goals criteria)

Reduction in Impervious Cover from Baseline: Total net acreage and percentage reduction after redevelopment, accounting for both the removal of existing Roper Bros impervious cover and the installation of new parking lots. (Input to sustainability criterion)

Map 8: Redevelopment Option 1

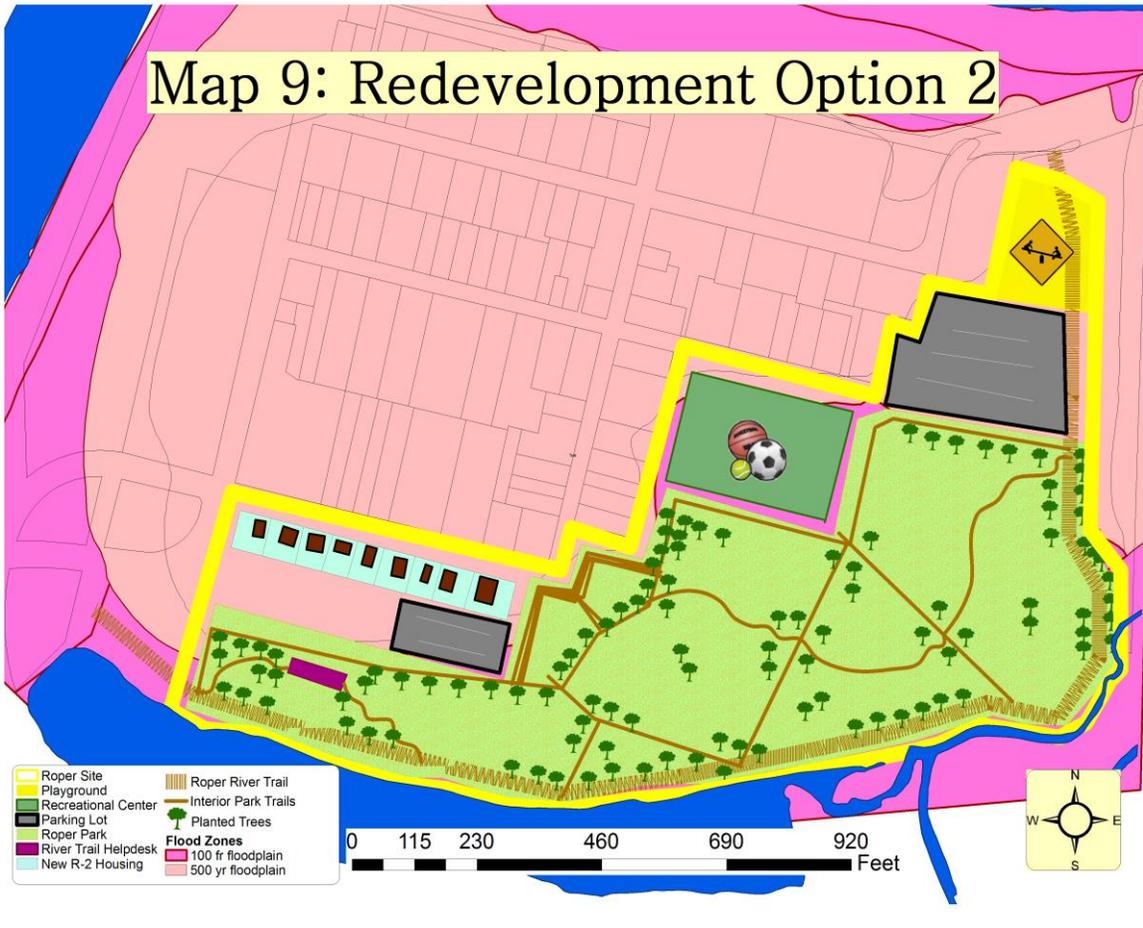


Redevelopment Option 1: This alternative proposes the most limited redevelopment. The majority of the site would be converted to a park roughly following the extent of the 100-year floodplain. A River Walk/Trail would be installed along the southern edge of the Roper Site and a network of interior trails established within the park. Building L (Green in Map) of the Roper Site would be converted into a recreational center with indoor sports and exercise facilities that could also be used for large community gatherings. The western most segment of the Roper Site, located outside of the 100-year floodplain, would be converted into a playground. Two new parking lots would be installed to support increased traffic visiting the park and the new recreational facilities.

Source: Crater Planning District Commission

Attributes	
Level of Required Contamination Remediation:	Low (No residential End Use)
Required Expenditures:	Demolition of 11 buildings, Building two new parking lots, Remediating Contamination, Installing new playground, Developing trails, Tearing up old asphalt for park development, Planting trees, Repurposing Building L to a new community center
Projected End Use Value:	Moderate
Projected Annual Visitor Traffic:	Moderate
Projected Increase in Abutting Property Values:	0.50%
Reduction in Impervious Cover from Baseline:	6.2 acres (54%)

Map 9: Redevelopment Option 2

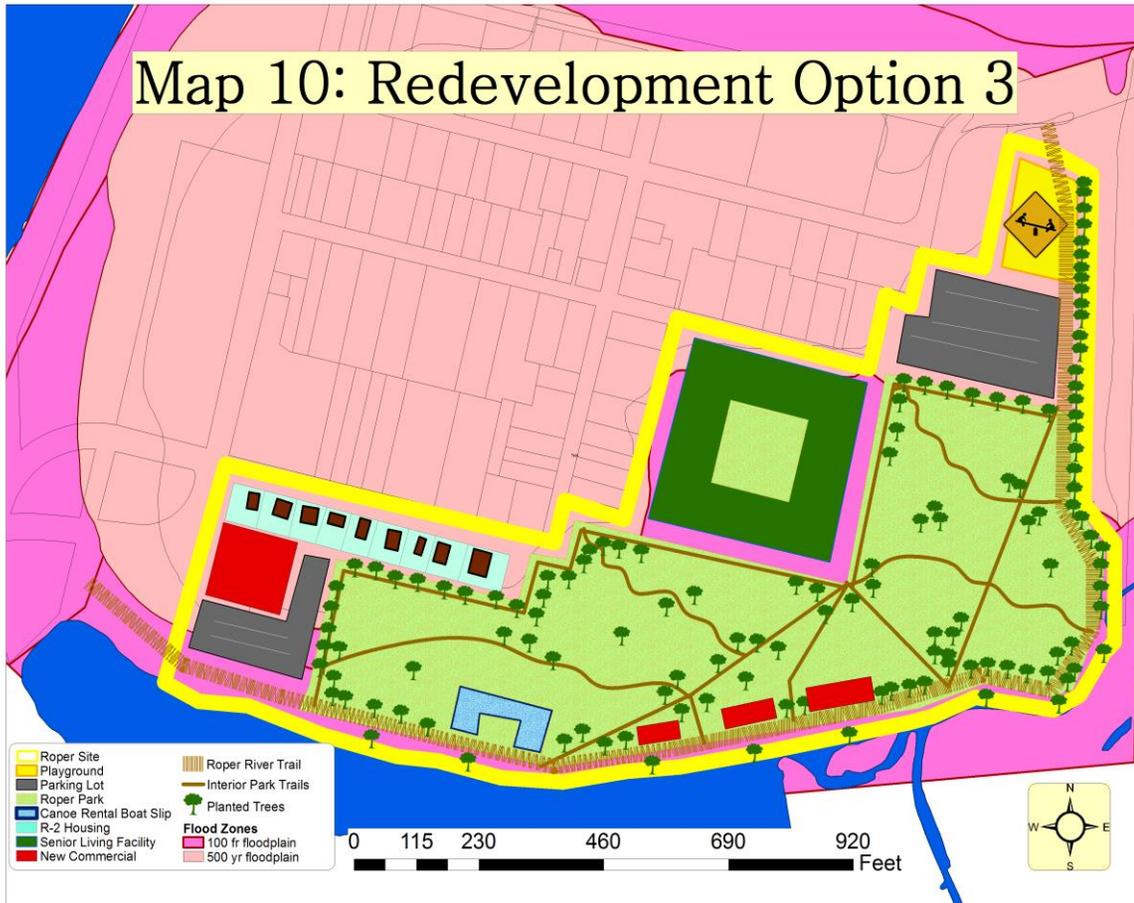


Redevelopment Option 2: This alternative proposes mixed R-2 and recreational redevelopment. As with Option 1, the majority of the site would be converted to a park that roughly follows the extent of the 100-year floodplain. A River Walk/Trail would be installed along the southern edge of the site and a network of interior trails established within the park. Building L (Green in Map) of the Roper Site would be similarly converted into a recreational center with indoor sports and exercise facilities that could also be used for large community gatherings. The western section of the site along Pocahontas Street would be rezoned for R-2 for the development of single-family housing. Rather than a new playground on the western side, the existing playground on Magazine St would be expanded into the northern section of the site. A new parking lot would be built next to the expanded playground. Finally, a River Walk/Trail help desk would be established in the old Roper Bros office building south of the new housing and provide historical tourism information to visitors.

Source: Crater Planning District Commission

Attributes	
Level of Required Contamination Remediation:	Moderate (Residential End Use)
Required Expenditures:	Demolition of 10 buildings, Building one new parking lot, Remediating Contamination, Expanding playground, Tearing up old asphalt for park development, Developing trails, Planting Trees, Staffing help desk, Repurposing Building L to a new community center
Projected End Use Value:	Moderate
Projected Annual Visitor Traffic:	Moderate
Projected Increase in Abutting Property Values:	1%
Reduction in Impervious Cover from Baseline:	7.1 acres (61%)

Map 10: Redevelopment Option 3

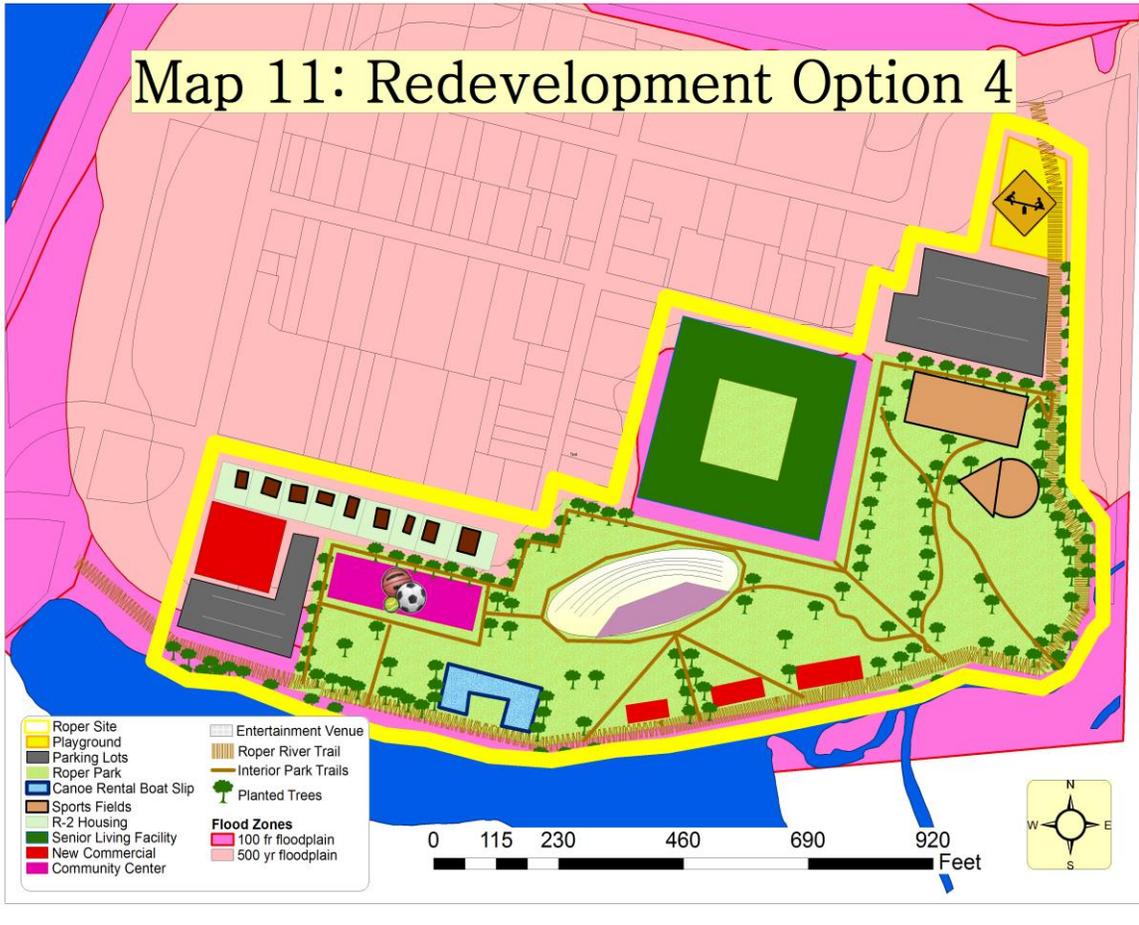


Source: Crater Planning District Commission

Redevelopment Option 3: This alternative proposes mixed R-2, commercial, and recreational redevelopment. The majority of the site would be converted to a park. A River Walk/Trail would be installed along the southern edge of the site and a network of interior trails established. Building L of the Roper Site would be evaluated for potential conversion to a senior living facility. If not suitable, it would be demolished and a senior living facility built in its place. The western section of the site along Pocahontas Street would be rezoned to R-2 for the development of single-family housing. The existing playground on Magazine St would be expanded. A new parking lot would be built next to the expanded playground and another one for a new store on the western end of site. A canoe rental/boat slip facility along this trail would also serve as an island information kiosk. A small parcel below the new R-2 housing would be carved out of the Roper parcel and zoned for commercial to establish a small neighborhood store or restaurant. In addition, small vendors would be encouraged to set up along the River Walk/Trail to serve park visitors.

Attributes	
Level of Required Contamination Remediation:	High (Multiple Residential End Uses)
Required Expenditures:	Demolition of 11 or 12 buildings, Building one new parking lot, Remediating Contamination, Expanding playground, Tearing up old asphalt for park development, Developing trails, Planting Trees, Building new community center
Projected End Use Value:	High
Projected Annual Visitor Traffic:	Moderate to Intense
Projected Increase in Abutting Property Values:	1.5%
Reduction in Impervious Cover from Baseline:	5.5 acres (48%)

Map 11: Redevelopment Option 4



Source: Crater Planning District Commission

Redevelopment Option 4: This alternative proposes mixed R-2, commercial, entertainment, and recreational redevelopment. The majority of the site would be converted to a park. A River Walk/Trail would be installed along the southern edge of the site with a network of interior trails. Building L of the Roper Site would be evaluated for potential conversion to a senior living facility, and if not suitable be demolished and a senior living facility built in its place. The western section of the site along Pocahontas Street would be rezoned to R-2 for the development of single-family housing. The existing playground on Magazine St would be expanded. A new commercial parcel would be established south of the R-2 housing and vendors encouraged along the river walk/trail. A canoe rental/boat slip facility along this trail would double as an island information kiosk. Outdoor sports fields would be built south of the expanded playground. A community/recreational center would be built south of the R-2 housing. Finally, the center of the park would contain an open air amphitheater for events in the warmer months, and be visible from I-95.

Attributes	
Level of Required Contamination Remediation:	High (Multiple Residential End Uses)
Required Expenditures:	Demolition of 11 or 12 buildings, Building one new parking lot, Remediating Contamination, Expanding playground, Tearing up old asphalt for park development, Developing trails, Planting Trees, Installing two sports fields, Building a new community center
Projected End Use Value:	High
Projected Annual Visitor Traffic:	Intense
Projected Increase in Abutting Property Values:	2%
Reduction in Impervious Cover from Baseline:	4.2 acres (36%)

Alternative Grading Process

In a process similar to that of the neighborhood intensity analysis, the plan graded the four Roper Site redevelopment alternatives on their ability to promote plan goals and the feasibility of their implementation. Compatibility with city goals replaced asset utilization as a grading criterion. This was done for two reasons. First, the Roper Site itself is a major asset for the island, and therefore any redevelopment of it inherently utilizes an asset. Second, The City of Petersburg’s main interest in this plan is the redevelopment of the Roper Site, so larger community interests were given primary consideration. Because any redevelopment of the Roper Site will require a large influx of both public and private financing, greater weights were also applied to the grading criteria of market feasibility, funding availability, and compatibility with city-wide goals, the main determinants of implementation potential. Greater weight was also applied to Goal 3, environmental sustainability, because the Roper Site is so large, contaminated, and adjacent to the river. Also, the final neighborhood action plan is less supportive of Goal 3. Criteria were further broken down into the respective subcategories of objectives, market demand and end-use value, funding streams, and specific city objectives. Each alternative was graded against these sub-categories on a scale range earning the following scores.

Score	Reasoning	
Negative: 0	<ul style="list-style-type: none"> Negatively affected objective No funding access 	<ul style="list-style-type: none"> No market demand Community misalignment
Neutral: 1	<ul style="list-style-type: none"> No impact Limited funding access 	<ul style="list-style-type: none"> Limited market demand
Positive: 2	<ul style="list-style-type: none"> Supported objective Possible funding access 	<ul style="list-style-type: none"> Market demand Compatible with city goals
Very Positive: 3	<ul style="list-style-type: none"> Significantly supported objective Ready funding access 	<ul style="list-style-type: none"> Significant market demand Promoted city goals

Grades resulted from an objective analysis of each alternative’s actions and are highlighted in Table 13 below. If the implementation of an alternative aspect would result in the achievement of an objective, if market demand would support it, if a funding stream existed for it, or if it advanced a city objective, it was assigned a positive or very positive score depending on the degree of impact, level of demand, availability of funding, or significance of community alignment, respectively. If it negatively affected an objective or had no effect, had no or limited market demand or access to funding, or failed to promote a city objective, it was assigned a neutral or negative score depending on its degree of harm, synchronicity with demand, availability of funding, or significance of community misalignment, respectively. See Appendix H for a more detailed explanation of grading methodology and reasoning. Some objectives, such as renovating blighted housing, are not applicable to the Roper Site redevelopment and received predominantly neutral scores. Following the grading of alternatives based on sub-categories, the analysis summed total points to determine the highest scoring alternative in each criterion, and then summed criteria scores to calculate a final grade for each alternative. The higher the final score, the better suited that redevelopment alternative was to being an actionable strategy for the site.

Table 13: Roper Site Redevelopment Alternatives

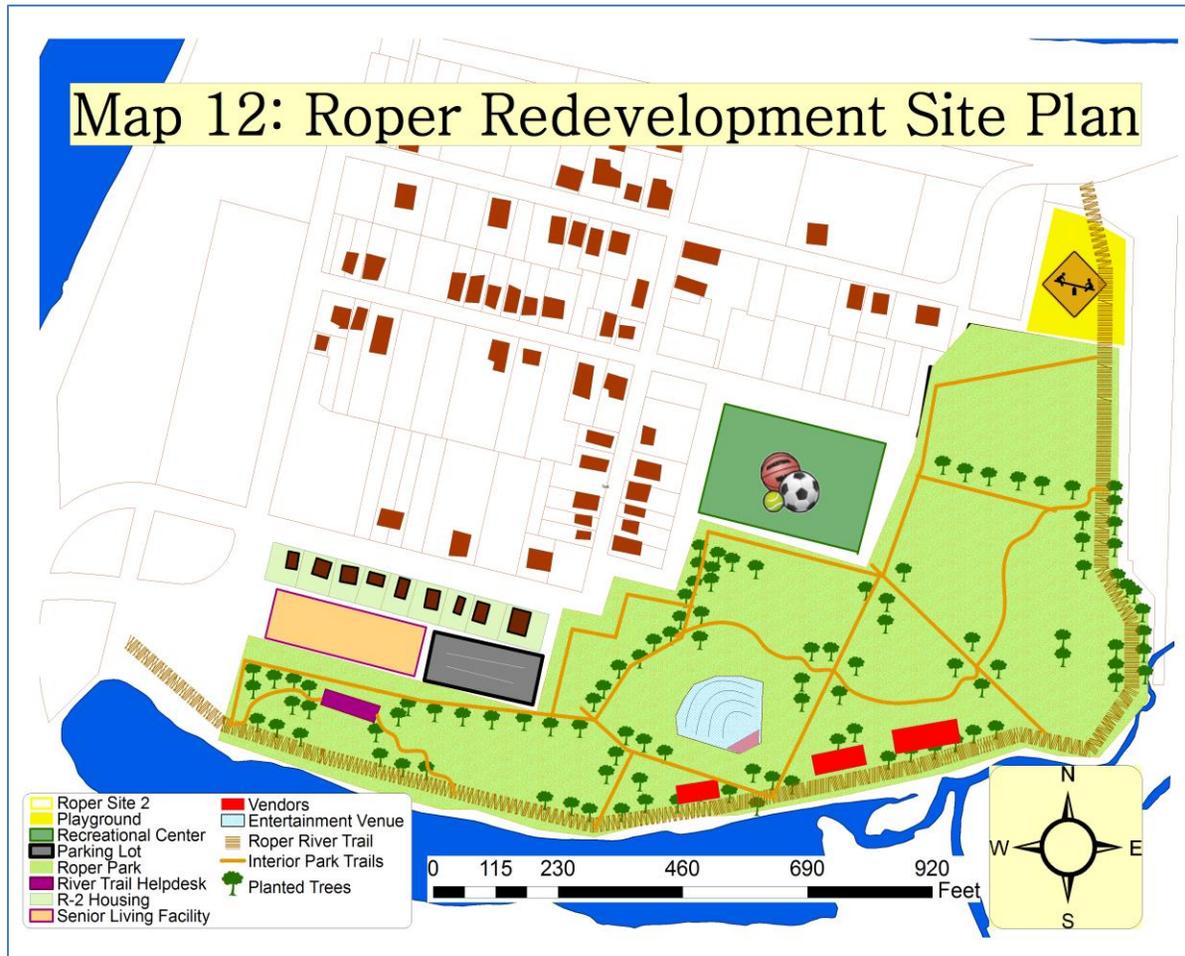
Criteria	Option 1:	Option 2:	Option 3:	Option 4:
	Limited Park and recreational	Mixed housing and recreational	Mixed housing, shopping, and recreational	Mixed housing, shopping, recreational, entertainment
Negative 0	Neutral 1	Positive 2	Very Positive 3	
Is residential in character with an increased number and variety of aesthetically pleasing housing options	5	7	9	9
Reduce blighted housing throughout neighborhood	1	1	1	1
Place residential infill housing on vacant lots	1	1	1	1
Increase amount of affordable housing stock	1	2	2	2
Unify the design of residential structures	1	2	2	2
Increase the number of senior housing units	1	1	3	3
Has recreational opportunities for residents and visitors that utilize the island's unique location	12	12	14	15
Expand playground square footage and amenities	3	3	3	3
Enhance physical appeal of Appomattox River Heritage Trail	2	2	3	3
Develop water-dependent land uses	1	1	3	3
Expand open space acreage	3	3	3	3
Develop new recreational land uses	3	3	2	3
Maintains a sustainable balance between island's urban land use and its environment x 2	28	28	18	16
Assess and remediate area contamination	2	3	3	3
Limit development on 100-year floodplain and measure development on 500- year floodplains	3	2	0	0
Reduce impervious (asphalt) cover	3	3	2	2
Increase vegetative buffers adjacent to river	3	3	2	2
Reduce stormwater runoff into Appomattox River	3	3	2	1
Preserves the island's vernacular culture	8	8	7	8
Preserve Underground Railroad and Jarrett Houses	1	1	1	1
Enhance communication of and access to island's unique and enduring historical legacy	1	2	1	2
Develop community action group to guide plan implementation and preserve community identity	2	2	1	2
Increase access to local shopping needs	1	1	3	3
Maintain quiet residential condition	3	2	1	0

Table 13: Roper Site Redevelopment Alternatives

Criteria	Option 1: Limited Park and recreational				Option 2: Mixed housing and recreational				Option 3: Mixed housing, shopping, and recreational				Option 4: Mixed housing, shopping, recreational, entertainment			
	Negative 0	Neutral 1	Positive 2	Very Positive 3	Negative 0	Neutral 1	Positive 2	Very Positive 3	Negative 0	Neutral 1	Positive 2	Very Positive 3	Negative 0	Neutral 1	Positive 2	Very Positive 3
Is a beautiful and safe location with efficient and resilient infrastructure																
8																
2																
1																
1																
3																
1																
Market feasibility x2																
20																
3																
1																
3																
1																
2																
2																
3																
1																
3																
Funding feasibility x2																
22																
3																
2																
2																
1																
3																
Compatibility with city-wide goals x2																
14																
2																
1																
1																
1																
2																
Final Grade (Highest is Best)																
117																
127																
118																
119																

Results and Alternative Synthesis

The results of the grading process indicate that Option 2 (127 points) surpasses the other options, separating itself with high scores in the Goal 3 (sustainability), market feasibility, and funding availability criteria. The other three options received very similar total scores, with only 2 points separating the three. Option 2 scored poorly relative to the other options in Goals 1 (residential: 7 pts) and 2 (recreational: 12 pts) and in the compatibility with city goals category: 20 pts. Option 1 failed to meet the objectives of both the key stakeholders and the city. Option 3 struggled in the sustainability, vernacular culture, and feasibility categories. Option 4 received very low scores for sustainability and feasibility.



Source: Crater Planning District Commission

Although Option 2 was the clear-cut winner of the options presented and analyzed, strong attributes of the other options in the criteria categories in which it struggled were added to bolster both its ability to advance the community vision and its potential for implementation. Map 12 shows a synthesized site plan for redevelopment of the Roper Site with floodplains removed and neighborhood buildings added.

Final Roper Site Plan

The final site plan for redevelopment of the Roper Site shares many of the basic characteristics of Option 2. The vast majority of the site, 14.8 acres, comprises a park with a River Walk/Trail along the southern edge along the Appomattox River and interior trails crisscrossing its expanse. Stakeholders indicated repeatedly that they wanted more access to open space and recreation on the island. This conversion to open space has environmental benefits as well. It reduces overall impervious cover on the Roper Site by 8.6 acres (74%), which is higher than any of the other options. To accomplish this, the final site plan expanded the park westward to the corner of Pocahontas and Logan Streets and northward to the playground expansion, removing the new parking lot Option 2 proposes in that location. This plan also calls for the planting of over 100 trees, with many along the River Walk/Trail acting as a vegetative buffer to the river, as required by the Chesapeake Bay Preservation Act. These trees will help increase infiltration of stormwater runoff over the site by pulling water in through their roots, thus reducing soil saturation and enhancing its capability to hold greater amounts of runoff. In addition, the final Roper Site Plan avoids any development in the site's Resource Protection Area 100 foot buffer. The increase in open space and trees will also improve neighborhood and city air quality.

The final plan also better preserves the island's vernacular culture and more significantly increases recreational opportunities than does Option 2. The River/Walk help desk will take over the structurally sound Roper Bros office building (see Appendix D) and serve as an entrance point for both the site and the historical walking trail advocated in the neighborhood section of the plan. Here, visitors can access a summary of the island's history and a map of the historical walking trail. Converting the old Roper Building L, also structurally sound (see Appendix D), from a warehouse to a recreational center will provide both residents and visitors with increased access to physical fitness opportunities. This expansive building (60,571 ft²) is well-suited for conversion into a structure containing sports courts and a large gathering area for community meetings or special events such as weddings. In addition, an expanded playground adjacent to the current one will increase outdoor recreational opportunities for children and responds to the most consistent request of stakeholders at community meetings.

Stakeholders also indicated their desire for a greater amount and variety of housing in the neighborhood. This redevelopment plan accomplishes that by rezoning the western edge of the site along Pocahontas Street to R-2 and Multi-Family housing. This will reflect history; in the past, Pocahontas Street was lined with single family houses. This is the best location for housing development on the Roper Site as well, since it lies outside of the 100-year floodplain and is well served by existing infrastructure. The removal of the Roper Bros Lumber Building D, which now occupies this space, will open up the view for neighborhood residents and visitors, once again providing a glimpse of the Petersburg skyline. The final site plan includes a smaller senior-living facility just south of the R-2 housing along Pocahontas Street. Options 3 and 4 scored high in Goal 1 because they included a senior-living facility at the location of this site plan's recreational center, Building L, a site chosen as a result of stakeholder feedback. Unfortunately, this site lies in a 100-

year floodplain and is not suitable for residential use. A recreational center, which does not require continuous use, is viable in such a location. A senior-living facility on the Roper Site makes logistical, demographic, and market sense. Water and sewer infrastructure already serves this location and as the island population continues to age, many residents may desire the security of supported living close to home. The market demand for senior living units in Petersburg is also strong, as indicated by the market analysis in Part 1 above.

One of Option 2’s weakest graded criteria, compatibility with city-wide goals, is also strengthened by the final site plan alterations. Petersburg wants any redevelopment of the Roper Site to spur economic development and improve the island as a visual gateway off of the highway. The River Walk/Trail help desk and connection to the historical walking trail will attract tourists interested in either history, recreation, or both. The proposed redevelopment also adds a scaled down version of Option 4’s open air amphitheater. Its location in the center of the park will draw visitor attention but also buffer the noise and crowds of concerts or community events from the neighborhood residential population. Constructed with an appropriate orientation towards the highway, it will attract drivers along I-95 to visit Petersburg as well. This final site plan does not propose a canoe/rental boat slip on the site, as this section of the river is not easily navigable and the neighborhood plan proposes a boat slip off the Appomattox River Heritage Trail. However, this site plan will make the eventual dredging of the old port more likely, as it will attract visitors and attention to the area. Once the port is dredged, a canoe rental/boat slip building would become more viable. Finally, the proposed Roper Site redevelopment plan adds the riverside commercial vendors of Options 3 and 4 without adding a larger commercial space on the western end of the site. These vendors will enhance the appeal of the River/Walk Trail and create jobs. The potential for an expansion of commercial use should be revisited in the future, but the market most likely will not support the development of two new stores in the area, as one is already proposed in the neighborhood improvements part of the plan, outlined above. The final site plan attributes are indicated below.

Final Site Plan Attributes	
Level of Required Contamination Remediation:	High (Multiple Residential End Uses)
Required Expenditures:	Demolition of 11 buildings, Building one new parking lot, Remediating contamination, Expanding playground, Tearing up old asphalt for park development, Developing trails, Planting Trees, Installing two sports fields, Repurposing Building L to a community center
Projected End Use Value:	High
Projected Annual Visitor Traffic:	Intense
Projected Increase in Abutting Property Values:	1.5%
Reduction in Impervious Cover from Baseline:	8.6 acres (74%)

Historical Walking Trail

The Pocahontas Island Neighborhood Plan proposes the development of a historical walking trail that will provide visitors and residents access to the unique history and open-space opportunities on the island. It will bind together the two parts of the plan, neighborhood improvements and Roper Site redevelopment, and promote the goals of increased recreational opportunities, sustainability, preservation of vernacular culture, and aesthetic appeal by creating an outlet for exercise and historical exploration, and by increasing vegetative land cover and visual beauty. It will also bring visitors to the City of Petersburg, thus increasing tourist revenue, a portion of which can be reinvested in the island. The trail will begin at the new River Walk/Trail help desk and navigate around the island, culminating at the location of the three main historical attractions on the island, the Underground Railroad House, Black History Museum, and Jarrett House, here referred to as the Triumvirate. History is one of the island’s strongest assets, and this trail will enhance it. Map 13 highlights the potential trail path and historical stops, while Table 14 provides details on the stops.



Source: Crater Planning District Commission

Number	Historical Stop/Education
1	River Trail Help Desk: Island’s Industrial Legacy
2	Old Port Area: Native American History
3	Adjacent to I-95: Building of 1-95
4	Old Witten St Extension: Neighborhood in the 20 th century
5	Beginning of Appomattox River Heritage Trail: Boatsmen and River Uses
6	Abandoned Railroad Trusses: Island Legends
7	Site of Old Train Station: Train Station, Commerce, Archaeology
8	Witten St Entrance: African American Self Determination
9	Chapel: Development of Free Black Community on Island
10	The Triumvirate: Underground Railroad House, Black History Museum, Jarrett House

Part 3: Implementation

Approval and Adoption Matrix

The synthesized neighborhood plan and final Roper Bros Lumber site plan are combined below in an approval and adoption matrix, which summarizes implementation in detail. The matrix (Table 15) distinguishes proposed actions for each goal and objective of the Pocahontas Island Neighborhood Plan, ranks them by priority, indicates an implementation timeframe, designates the implementing agency, estimates cost, and highlights potential sources of funding. Sources for cost estimations are indicated by a superscript and cited below the table. Cost estimations are subject to change based on market fluctuations or unforeseen circumstances. Some costs will need to be determined at a later date and are indicated by “TBD” (To Be Determined). Actions that advance multiple goals are repeated, but their costs are not. Total costs are summed in Table 16. See Appendix I for cost calculations. Community meeting survey and discussion feedback established priorities, while scope and cost of proposed actions determined time-frames.

Pocahontas Island Shall be a Neighborhood that Aspires to the Following

Table 15: Approval and Adoption Matrix					
Goal 1. Is residential in character with an increased number and variety of aesthetically pleasing housing options					
Objective and Actions	Priority Ranking	Timeframe	Implementing Agency	Cost to Implementing Agency	Potential Funding Source
1.1: Reduce blighted housing throughout neighborhood					
Action 1.1.1: Renovate or remove dilapidated houses throughout neighborhood	High	2-4 years	Private Owners CDBG Recipients	Demolition = \$16,183 ¹ Renovation = TBD	Private Owners General Fund CDBG
1.2: Place residential infill housing on vacant parcels					
Action 1.2.1: Infill R-2 housing on interior vacant lots	Medium	5-8 years	CDBG Recipients	\$3,560,400 ²	CDBG

Objective and Actions	Priority Ranking	Timeframe	Implementing Agency	Cost to Implementing Agency	Potential Funding Source
Action 1.2.2: Rezone parcels west of Sapony St and carve out parcels south of Pocahontas St on Roper Site and convert to R-2.	Medium	1-2 years	Department of Planning and Community Development	NA	NA
Action 1.2.3: Develop R-2 housing on Roper Site along Pocahontas St	Medium	5-8 years	Private Developers	\$696,600 ²	Private Funding CDBG
1.3: Increase the amount of affordable housing					
Action 1.3.1: Develop affordable R-2 housing on R-2 parcels west of Sapony St	Medium	8-10 years	CDBG Recipients	\$387,000 ²	Private Funding CDBG
1.4: Unify the design of residential structures					
Action 1.4.1: Adopt ordinance requiring all infill and new residential development to reflect current housing design	Medium	1-3 years	City of Petersburg	NA	NA
1.5: Increase the number of senior housing units					
Action 1.5.1: Carve out and rezone a Multi-Family Residential parcel from Roper Site south of new R-2 on Pocahontas St	Medium	3-5 years	City of Petersburg	NA	NA
Action 1.5.2: Develop senior living facility south of new R-2 housing on Roper Site	Low	8- 10 years	Private Developers	\$1,325,000 ³	Private Funding + Enterprise Zone Incentives

Goal 2. Has recreational opportunities for residents and visitors that utilize the island's unique location

Objective and Actions	Priority Ranking	Timeframe	Implementing Agency	Cost to Implementing Agency	Potential Funding Source
2.1: Expand playground square footage and amenities					
Action 2.1.1: Renovate current playground on Magazine St	High	1-2 years	Department of Parks and Leisure	\$25,000 ⁴	CIP
Action 2.1.2: Expand playground into Roper Site Redevelopment east of Logan Street	Medium	3-5 years	Department of Parks and Leisure	\$50,000 ⁴	CIP
2.2: Enhance the physical appeal of the Appomattox River Heritage Trail					
Action 2.2.1: Clean up Appomattox River Heritage Trail, repair current signs and install new historical signs, and intensify maintenance schedule	Medium	1-2 years	Department of Parks and Leisure	\$120,000 ⁵	CIP CDBG
Action 2.2.2: Expand Appomattox River Trail to include River Walk section on southern river bank of the Roper Site	Medium	3-5 years	Department of Parks and Leisure	\$306,000 ⁵	CIP CDBG
2.3: Develop water-dependent land uses					
Action 2.3.1: Expand Appomattox River Trail to include River Walk section on southern river bank of the Roper Site	Medium	3-5 years	Department of Parks and Leisure	See Above	CIP CDBG
Action 2.3.2: Install a boat ramp near parking lot off of Magazine Rd and expand existing parking lot	Low	5-8 years	Department of Parks and Leisure	\$75,000 ⁶	CIP DGIF Grant ¹⁶

Objective and Actions	Priority Ranking	Timeframe	Implementing Agency	Cost to Implementing Agency	Potential Funding Source
2.4: Expand open space acreage					
Action 2.4.1: Develop 15 acre park on Roper Site	Medium	3-5 years	Department of Parks and Leisure	\$2,331,695 ^{1,5}	CIP
Action 2.4.2: Expand Appomattox River Trail to include River Walk section on southern river bank of the Roper Site	Medium	3-5 years	Department of Parks and Leisure	See Above	CIP CDBG
2.5: Develop new recreational land uses					
Action 2.5.1: Convert Roper Site Building L to a community recreational center	Medium	3-5 years	City of Petersburg	\$9,085,650 ⁵	CIP
Action 2.5.2: Expand playground into Roper Site Redevelopment east of Logan Street	Medium	3-5 years	Department of Parks and Leisure	See Above	CIP
Goal 3. Maintains a sustainable balance between island's urban land use and its environment					
3.1: Assess and remediate area contamination					
Action 3.1.1: Locate closed Roper Bros Lumber underground storage tanks, sample surrounding soil, and remove if necessary	High	1-2 years	City of Petersburg	\$1,600 ⁷	CIP
Action 3.1.2: Apply for and access EPA Phase I brownfield assessment grant and use to determine amount of contamination at Roper Site and in old port section of River	High	1-2 years	Petersburg Economic Development Authority	NA	EPA Grant

Objective and Actions	Priority Ranking	Timeframe	Implementing Agency	Cost to Implementing Agency	Potential Funding Source
Action 3.1.3: Apply for and access EPA brownfield cleanup grant and use to remediate contamination at Roper Site and in old port section of river in preparation for redevelopment	Medium	3-5 years	Petersburg Economic Development Authority	NA	EPA Grant
3.2: Limit development on 100-year floodplain and measure development on 500-year floodplain					
Action 3.2.1: Develop 15 acre park on Roper Site	Medium	3-5 years	Department of Parks and Leisure	See Above	CIP
Action 3.2.2: Develop senior living facility south of new R-2 housing on Roper Site	Low	8- 10 years	Private Developers	See Above	Private Funding + Enterprise Zone Incentives
3.3: Reduce impervious land cover					
Action 3.3.1: Develop 15 acre park on Roper Site	Medium	3-5 years	Department of Parks and Leisure	See Above	CIP
3.4: Increase vegetative buffers adjacent to Appomattox River					
Action 3.4.1: Plant trees in Roper Park	Medium	3-5 years	Department of Parks and Leisure	\$14,040 ⁸	CIP
3.5: Reduce stormwater runoff into Appomattox River					
Action 3.5.1: Develop 15 acre park on Roper Site	Medium	3-5 years	Department of Parks and Leisure	See Above	CIP
Action 3.5.2: Plant trees in Roper Park	Medium	3-5 years	Department of Parks and Leisure	See Above	CIP

Objective and Actions	Priority Ranking	Timeframe	Implementing Agency	Cost to Implementing Agency	Potential Funding Source
Action 3.5.3: Plant street trees along all neighborhood streets	Medium	3-5 years	Department of Public Works	\$13,000 ⁸	CIP
Goal 4. Preserves the island's vernacular culture					
4.1: Preserve the Underground Railroad and Jarrett Houses					
Action 4.1.1: Preserve Underground Railroad and Jarrett Houses to historically representative conditions	High	3-5 years	Department of Planning and Community Development	TBD	Certified Local Government Cameron
4.2: Enhance communication of and access to the island's unique and enduring historical legacy					
Action 4.2.1: Install a new gateway sign at neighborhood entrance on Bridge Street	Medium	1-2 years	City of Petersburg	\$1,200 ⁹	CIP Certified Local Government
Action 4.2.2: Extend Appomattox River Heritage Trail (including signage) into neighborhood west of Sapony Street and east of Logan Street (into Roper Site redevelopment) and develop historical walking trail	Medium	3-7 years	Department of Parks and Leisure	\$54,000 ⁵	CIP Certified Local Government Cameron
Action 4.2.3: Convert Roper Bros Office Building into River Walk/Trail help desk	Medium	3-5 years	City of Petersburg	TBD	CIP Certified Local Government
Action 4.2.4: Advertise island historical sites and walking trail at the New Park Service Center	Low	5-7 years	City of Petersburg	Negligible	General Fund

Objective and Actions	Priority Ranking	Timeframe	Implementing Agency	Cost to Implementing Agency	Potential Funding Source
4.3: Develop community action group to guide plan implementation and preserve community identity					
Action 4.3.1: Convert Roper Site Building L to a community recreational center	Medium	3-5 years	City of Petersburg	See Above	CIP
Action 4.3.2: Build a community garden or pocket park west of new housing on Sapony Street and put in care of Concerned Citizens of Pocahontas	Low	5-8 years	Department of Public Works	\$100,000 ⁵	CIP
4.4: Increase access to local shopping needs					
Action 4.4.1: Rezone the western corner of Sapony and Pocahontas Streets to commercial use and encourage development of neighborhood convenience store	Low	5-8 years	Department of Planning and Community Development	NA	Private Funding + Enterprise Zone Incentives
Action 4.4.2: Encourage commercial vendors along Roper River Walk/Trail	Low	5-8 years	Petersburg Economic Development Authority	NA	Private Funding + Enterprise Zone Incentives
4.5: Maintain quiet residential character (<i>No Action Needed</i>)					
Goal 5. Is beautiful and safe with efficient and resilient infrastructure					
5.1: Improve vehicular and pedestrian network					
Action 5.1.1: Repave and maintain streets throughout neighborhood	High	1 year	Department of Public Works	\$35,120 ^{10,11}	CIP CDBG
Action 5.1.2: Repair current sidewalks	High	1 year	Department of Public Works	\$61,000 ¹²	CIP CDBG

Objective and Actions	Priority Ranking	Timeframe	Implementing Agency	Cost to Implementing Agency	Potential Funding Source
Action 5.1.3: Build new sidewalks on eastern side of Logan Street, western side of Sapony Street, Northern side of Rolfe Street, and eastern section of Sapony Street between Witten and Rolfe Streets	Low	3-5 years	Department of Public Works	\$45,000 ¹³	CIP CDBG
Action 5.1.4: Install raised crosswalks at all Witten and Pocahontas Street intersections	Low	5-8 years	Department of Public Works	\$78,000 ¹⁴	CIP CDBG
5.2: Enhance neighborhood lighting					
Action 5.2.1: Replace existing streetlights with brighter LED streetlights	High	1 year	Department of Public Works	\$1,386 ¹⁵	CIP
Action 5.2.2: Install new LED streetlights on Witten, Logan, and Pocahontas Streets	Medium	3-5 years	Department of Public Works	\$1,584 ¹⁵	CIP CDBG
5.3: Slow vehicular traffic					
Action 5.3.1: Install raised crosswalks at all Witten and Pocahontas Street intersections	Low	5-8 years	Department of Public Works	See Above	CIP
5.4: Enhance aesthetic and pedestrian appeal					
Action 5.4.1: Repair current sidewalks	High	1 year	Department of Public Works	See Above	CIP CDBG
Action 5.4.2: Plant street trees along all neighborhood streets	Medium	3-5 years	Department of Public Works	See Above	CIP CDBG
Action 5.4.3: Install benches on Witten and Pocahontas Streets	Medium	3-5 years	Department of Public Works	\$3,972 ¹⁶	CIP CDBG

Objective and Actions	Priority Ranking	Timeframe	Implementing Agency	Cost to Implementing Agency	Potential Funding Source
Action 5.4.4: Build entertainment venue in center of Roper Park	Low	3-5 years	City of Petersburg	TBD	General Fund
Action 5.4.5: Build new sidewalks on eastern side of Logan Street, western side of Sapony Street, and northern side of Rolfe Street	Low	3-5 years	Department of Public Works	See Above	CIP CDBG
Action 5.4.6: Install raised crosswalks at all Witten and Pocahontas Street intersections	Low	5-8 years	Department of Public Works	See Above	CIP
Action 5.4.7: Develop Witten Street as primary neighborhood corridor	Low	8-10 years	City of Petersburg	TBD	
5.5: Mitigate effect of Waste Water Treatment Plant truck traffic on neighborhood					
Action 5.5.1: Enforce 7 am -7 pm Waste Water Treatment Plant truck delivery schedule	High	Immediately	City of Petersburg	NA	_____
Action 5.5.2: Repave and maintain streets throughout neighborhood	High	1 year	Department of Public Works	See Above	CIP CDBG

1 Source: Michelle Peters email

2 Source: City-Data.com

3 Source: Reed Construction Data.com

4 Source: City of Petersburg

5 Source: Pros Consulting

6 Source: Adams

7 Source: Pat Quilter email

8 Source: Lowes Home Improvement

9 Source: Signs Alive

10 Source: Bill Riggleman email

11 Source: Yahoo Answers

12 Source: Kudzu.com

13 Source: Homewyse.com

14 Source: Virginia Department of Transportation

15 Source: MacManus

16 Source: Belson Outdoors.com

Project	Cost (\$)	Project	Cost (\$)
Renovate or remove dilapidated houses throughout neighborhood	16,182	Preserve Underground Railroad and Jarrett Houses	<i>TBD</i>
Infill R-2 housing on interior vacant lots	3,560,400	Install a new gateway sign at neighborhood entrance (Bridge Street)	1,200
Develop affordable R-2 housing on R-2 parcels west of Sapony St	387,000	Extend Appomattox River Heritage Trail into neighborhood	54,000
Develop senior living facility south of new R-2 housing on Roper Site	1,325,000	Convert Roper Bros Office into River Walk/Trail help desk	<i>TBD</i>
Renovate current playground on Magazine St	25,000	Build a community garden or pocket park	100,000
Expand playground into Roper Site Redevelopment east of Logan Street	50,000	Repave and maintain streets throughout neighborhood	35,120
Clean up Appomattox River Heritage Trail	120,000	Repair current sidewalks	61,000
Expand Appomattox River Trail to include River Walk	306,000	Build new sidewalks	45,000
Install a boat ramp near parking lot off of Magazine Rd and expand parking lot	75,000	Install raised crosswalks at all Witten and Pocahontas Street intersections	78,000
Develop 15 acre park on Roper Site	2,331,695	Replace existing streetlights with brighter LED Streetlights	1,386
Convert Roper Site Building L to a community recreational center	9,085,650	Install new LED streetlights on Witten, Logan, and Pocahontas Streets	1,584
Locate closed Roper Bros Lumber underground storage tanks	1,600	Install benches on Witten and Pocahontas Streets	3,972
Plant trees in Roper Park	14,040	Build entertainment venue in center of Roper Park	<i>TBD</i>
Plant street trees along all neighborhood streets	13,000	Total	\$17,691,829

Implementation Schedule

Table 17 outlines the schedule for implementation of the Pocahontas Island Neighborhood Plan over a 10 year span. Implementation is broken down into three phases, roughly distinguished as short-term (1-2 years), mid-term (3-5 years), and long-term (5-10 years), which are separated below with dividers. It is important to implement easily accessible actions quickly, such as those in Phase 1, to build momentum and enthusiasm for the plan. The actions of each phase build upon those that come later and provide a foundation for strategic development. Implementation years are indicated with a red fill and were assigned using stakeholder survey feedback (Appendix B), scale of deviation from existing conditions, and cost considerations.

	Year									
Action	1	2	3	4	5	6	7	8	9	10
Action 5.5.1: Enforce 7 am -7 pm Waste Water Treatment Plant truck delivery schedule										
Action 5.5.2: Repave and maintain streets throughout neighborhood										
Action 5.4.1: Repair current sidewalks										
Action 5.2.1: Replace existing streetlights with brighter LED Streetlights										
Action 4.2.1: Install a new gateway sign at neighborhood entrance on Bridge Street										
Action 2.1.1: Renovate current playground on Magazine St										
Action 3.1.1: Locate closed Roper Bros Lumber underground storage tanks, sample surrounding soil, and remove if necessary										
Action 3.1.2: Apply for and access EPA Phase I brownfield assessment grant and use to determine amount of contamination at Roper Site and in old port section of River										
Action 2.2.1: Clean up Appomattox River Heritage Trail, repair current signs and install new historical signs, and intensify maintenance schedule										
Action 1.2.2: Rezone parcels west of Sapony to R-2										

Table 17: Implementation Schedule (Phase 2)

Action	Year									
	1	2	3	4	5	6	7	8	9	10
Action 1.1.1: Renovate or remove dilapidated houses throughout neighborhood										
Action 2.1.2: Expand playground into Roper Site Redevelopment east of Logan Street										
Action 2.2.2: Expand Appomattox River Trail to include River Walk section on southern river bank of the Roper Site										
Action 2.4.1: Develop 15 acre park on Roper Site										
Action 2.5.1: Convert Roper Site Building L to a community recreational center										
Action 3.1.3: Apply for and access EPA brownfield cleanup grant and use to remediate contamination at Roper Site and in old port section of river in preparation for redevelopment										
Action 3.4.1: Plant trees in Roper Park										
Action 3.5.3: Plant street trees along all neighborhood streets										
Action 4.1.3: Install benches on Witten and Pocahontas Streets										
Action 4.1.1: Preserve Underground Railroad and Jarrett Houses to historically representative conditions										
Action 4.2.3: Convert Roper Bros Office Building into River Walk/Trail help desk										
Action 5.2.2: Install new LED streetlights on Witten, Logan, and Pocahontas Streets										
Action 5.1.3: Build new sidewalks on eastern side of Logan Street, western side of Sapony Street, and northern side of Rolfe Street										
Action 5.4.4: Build entertainment venue in center of Roper Park										

Table 17: Implementation Schedule (Phase 3)

Year	1	2	3	4	5	6	7	8	9	10
Action	1	2	3	4	5	6	7	8	9	10
Action 4.2.2: Extend Appomattox River Heritage Trail (including signage) into neighborhood west of Sapony Street and east of Logan Street (into Roper Site redevelopment) and develop historical walking trail										
Action 4.2.4: Advertise island historical sites and walking trail at the New National Park Service Center										
Action 1.2.1: Infill R-2 housing on interior vacant lots										
Action 1.2.2: Develop R-2 housing on Roper Site along Pocahontas St										
Action 2.3.2: Install a boat ramp near parking lot off of Magazine Rd and expand parking lot										
Action 4.3.2: Build a community garden or pocket park west of new housing on Sapony Street and put in care of Concerned Citizens of Pocahontas										
Action 4.4.1: Rezone the western corner of Sapony and Pocahontas Streets to commercial use and encourage development of neighborhood convenience store										
Action 4.4.2: Encourage commercial vendors along Roper River Walk/Trail										
Action 5.1.4: Install raised crosswalks at all Witten and Pocahontas Street intersections										
Action 1.3.1: Develop affordable R-2 housing on R-2 parcels west of Sapony St										
Action 1.5.1: Develop senior living facility south of new R-2 housing on Roper Site										
Action 5.4.7: Develop Witten Street as primary neighborhood corridor										

Funding Schedule

With a price tag just shy of \$18 million with expenses yet to be determined, full implementation of the Pocahontas Island Neighborhood Plan will not come cheap. Significant public and private investment will be necessary to achieve the goals and objectives as outlined above. A measured approach to funding laid out strategically over the ten year timeline of the plan can assure implementation while maintaining reasonableness within the City of Petersburg budget. Wherever possible, Petersburg should access federal and state public funding along with private non-profit financing to supplement expenditures. Some aspects of the plan, such as housing rehabilitation, new residential construction, and commercial development will require private investment. These actions are designed to be implemented later in the plan, after public upgrades create an environment on the island more inviting to investment. Table 18 lays out potential sources of public and non-profit financing of those plan actions demanding funding over the ten-year plan lifespan and is intended to be a guide only. Some action names have been shortened to facilitate table formatting.

Plan Action	Year 1		Year 2	
	Source	Amount	Source	Amount
Repave and maintain streets throughout neighborhood	General Fund	\$35,120		
Repair current sidewalks	General Fund	\$61,000		
Replace existing streetlights with brighter LED Streetlights	CIP	\$1,386		
Install a new gateway sign at neighborhood entrance on Bridge Street			CIP	\$1,200
Renovate current playground on Magazine St			CIP	\$25,000
Locate closed Roper Bros Lumber underground storage tanks, sample surrounding soil, and remove if necessary	EPA Assessment Grant	\$1,600	EPA Cleanup Grant	\$25,000
Clean up Appomattox River Heritage Trail, repair current signs and install new historical signs, and intensify maintenance schedule	CIP	\$60,000	CIP	\$60,000

Plan Action	Year 2		Year 3		Year 4		Year 5	
	Source	Amount	Source	Amount	Source	Amount	Source	Amount
Renovate or remove dilapidated houses throughout neighborhood	CDBG	\$5,400	CDBG	\$5,400	CDBG	\$5,400		
Expand playground into Roper Site Redevelopment east of Logan Street			CIP	\$17,000	CIP	\$17,000	CIP	\$17,000
Expand Appomattox River Trail to include River Walk section on southern river bank of the Roper Site			CIP	\$102,000	CIP	\$102,000	CIP	\$102,000
Develop 15 acre park on Roper Site			EPA Cleanup Grant	\$175,000	CIP	\$1.1 Million	CIP	\$1.1 Million
Convert Roper Site Building L to a community recreational center			CIP	\$3 Million	CIP	\$3 Million	CIP	\$3 Million
Plant trees in Roper Park					CIP	\$14,040		
Plant street trees along all neighborhood streets							CIP	\$13,000
Install benches on Witten and Pocahontas Streets							CIP	\$3,972
Preserve Underground Railroad and Jarrett Houses to historically representative conditions			Cameron Foundation	\$25,000	Matching Funding	\$25,000	General Fund	???
Convert Roper Bros Office Building into River Walk/Trail help desk							CIP	???
Install new LED streetlights on Witten, Logan, and Pocahontas Streets			CIP	\$1,500				
Build new sidewalks			CIP	\$15,000	CIP	\$15,000	CIP	\$15,000
Build entertainment venue in center of Roper Park			CIP	TBD	CIP	TBD	CIP	TBD

Plan Action	Year 3		Year 4		Year 5		Year 6		Year 7		Year 8	
	Source	Amount	Source	Amount	Source	Amount	Source	Amount	Source	Amount	Source	Amount
Extend Appomattox River Heritage Trail	CIP	\$12,000	CIP	\$12,000	CIP	\$12,000	CIP	\$12,000	CIP	\$12,000		
Infill R-2 housing					CDBG	\$50,000	CDBG	\$50,000	CDBG	\$50,000	CDBG	\$50,000
Develop R-2 housing on Roper Site					CDBG	\$50,000	CDBG	\$50,000	CDBG	\$50,000	CDBG	\$50,000
Install a boat ramp							DGIF Grant ¹⁶	\$25,000	CIP	\$50,000		
Build a community garden or pocket park									CIP	\$50,000	CIP	\$50,000

16 Department of Game and Inland Fisheries: Grants to Localities for Public Boating Access Facilities

Plan Action	Year 5		Year 6		Year 7		Year 8		Year 9		Year 10	
	Source	Amount	Source	Amount	Source	Amount	Source	Amount	Source	Amount	Source	Amount
Install raised crosswalks	CIP	\$20,000	CIP	\$20,000	CIP	\$20,000	CIP	\$20,000				
Develop affordable R-2 housing							CDBG	\$50,000	CDBG	\$50,000	CDBG	\$50,000
Develop senior living facility							Enterprise Zone	\$89,000	Enterprise Zone	\$89,000	Enterprise Zone	\$89,000

Conclusion

Full implementation of the Pocahontas Island Neighborhood Plan constitutes a significant departure from existing conditions on the island while preserving its distinct vernacular culture. This plan is needed because Pocahontas Island sits in an enviable location adjacent to downtown on the banks of the Appomattox River; a location enticing to potential developers. The measured approach advocated here helps prevent a complete island reformulation which would displace residents and trample its legacy.

Ultimately the success of this plan hinges on a stakeholder compromise. Residents want to preserve the residential nature of the island while the larger community wishes to access its abundant physical and historical assets for the benefit of all. This plan develops a path on which these two desires walk in concert rather than conflict. Understandably, municipal and private funding of island improvements must see a return on investment. Ethically, the current community on Pocahontas cannot be displaced in the pursuit of economic growth. The plan embraces both the centuries-old and more recent 20th century histories of the island by advocating for the preservation of historic structures and promoting a return to the residential density that disappeared over the last few decades. At the same time the plan aligns with the larger community's desire for economic development and increased access to open space. Resident feedback at community meetings indicated a willingness for change if the residential nature of Pocahontas can be preserved (See Table 23: Appendix B). The heart of the stakeholder compromise lies in the redevelopment of the Roper Site and the historical walking trail. Both of these actions will bring the appropriate level of attention and investment to a neighborhood that sorely needs it, while preventing a radical transformation that will consume it. Most likely, the old port will eventually be dredged. While this plan does not call for that action, the strong foundation it builds will both increase the likelihood of dredging and establish a resilient neighborhood capable of withstanding the increased attention of water-front development that dredging will bring.

The plan unfolds over a calculated ten year period. Beginning gradually in Phase 1, it addresses the immediately pressing concerns of resident stakeholders. Phase 2 prepares both the neighborhood and the Roper Site for change by addressing environmental contamination, increasing recreational resources, improving infrastructure, preserving history, and enhancing the island's aesthetic appeal. Phase 3 establishes a stable neighborhood by increasing residential density, developing commercial uses, implementing economic development through mixed tourism and entertainment uses, and promoting a neighborhood heart along the Witten Street Corridor. Throughout the process, a Pocahontas Community Action Group will guide development and suggest adjustments as needed. In the end, drivers along I-95 will marvel at the beautiful and exciting scene on Pocahontas Island and eagerly pull off on exit 52. City officials will direct interested tourists to the island's numerous amenities. And most importantly, island residents will rest comfortably with the knowledge that their home is beautiful, safe, and enduring.

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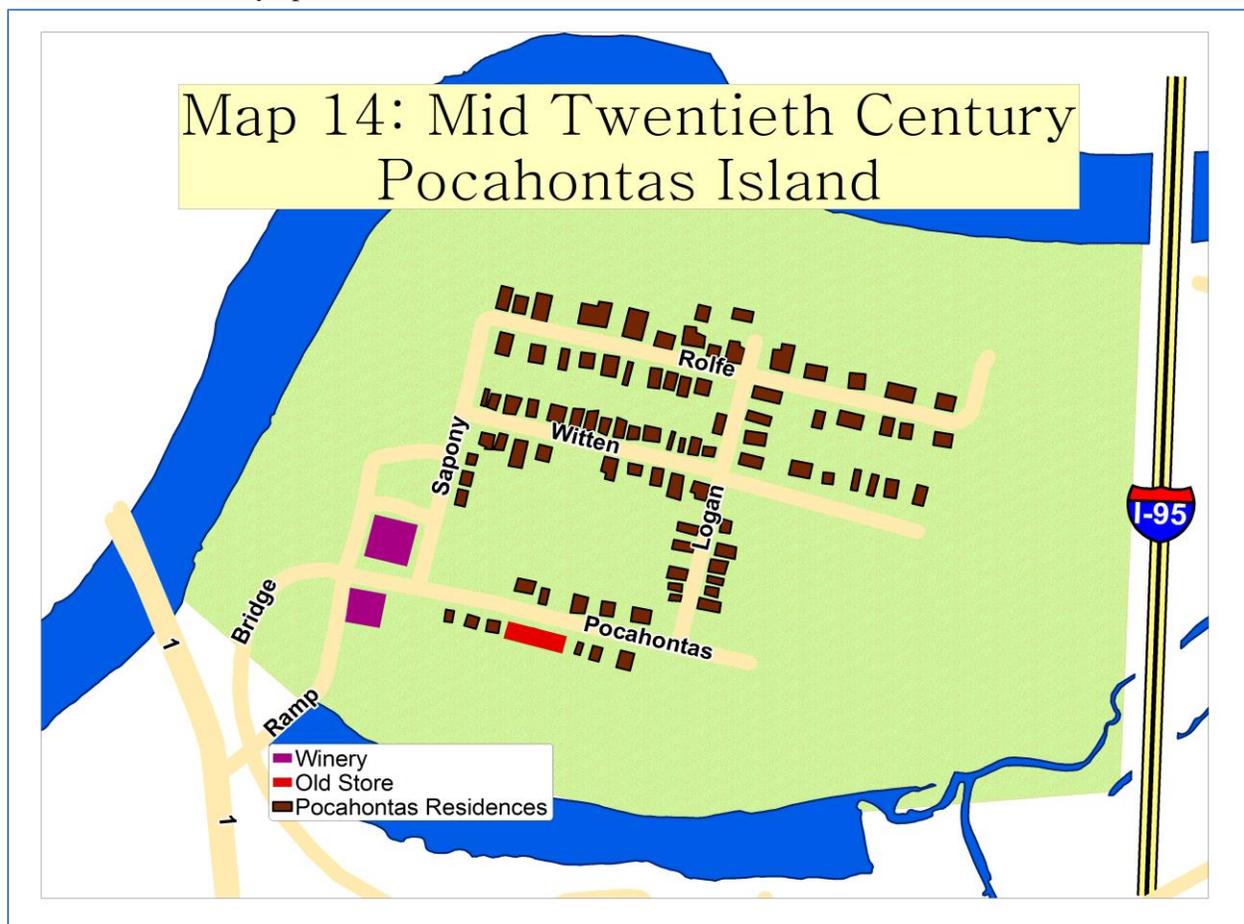
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Appendix A: Oral History Focus Group Responses (January 18)

Three residents in attendance responded to the numbered questions/prompts posed by researcher and assisted with the creation of Map 14

1. Describe your first memory of being on the island.
 - I grew up here and it was a strong community where everyone looked out for each other
 - It used to be an island and the river was full and deep
 - The old Pocahontas Bridge connected the island to downtown Petersburg
 - Following the flood of 1972 and especially in the early 1990's, the river started to fill in with sediment
 - There was a grocery store where you could get three cookies for a penny, bread pudding "slugs", meats and canned goods, the best bologna.
 - We went shopping for the older people on the island and couldn't say no
 - There were so many more houses on the island and it was a joy to walk around (See Map 14)
 - There was a baseball field on the eastern end of Rolfe Street
 - A railroad engine ran along the old tracks on Sapony St every night. We got used to it until we barely noticed it
 - Four of us had a singing group called "The Wonderlites"
 - Most of the men worked at Roper Bros Lumber
 - The winery opened in the 40s or 50s, but closed in 1978



Source: Crater Planning District Commission

2. What did your parents and grandparents tell you about the island?
 - There was an old cattle slaughterhouse down by the river
 - Trolley garages
 - The Solid Rock Church with Reverend Jeffro White conducted services on Rolfe St
 - The island had old speakeasies
 - There was an old horse trough on Rolfe St
 - One resident rode horses around the island and would let the kids ride the more docile ones. It was rumored he also drank the blood of his freshly slaughtered pigs
 - It was a no-no to go in the river, but many kids did anyway
 - There was no fear of crime back then
 - There is an old legend that a train car ran into the river and is still there

3. What led to the change in the island?
 - People died off and the younger people left
 - Those with a fixed income were not able to fix up their houses
 - There used to be houses on both sides of Pocahontas Street
 - The 1993 tornado and its aftermath
 - Knocked down a lot of houses
 - No power or phones for a long time
 - The Red Cross provided three meals a day for three months
 - Walmart helped out
 - The Tornado led to more bonding in the community
 - The Chapel had two walls knocked down and they held church outside
 - It brought a lot of outside attention to Pocahontas Island for the first time
 - The community founded The Concerned Citizens of Pocahontas following the tornado
 - Letters went out to many homeowners on island in 2012-13 asking if they wanted to sell their homes. It scared many people

4. Describe the connection between the island's residents and the Roper facility.
 - In earlier years, many residents worked there, but not so many in later years
 - Mr. Roper tried to rezone the whole island industrial in the 1970's. The residents resisted and hired a lawyer to fight him. Mr. Roper retaliated by hiring fewer island residents
 - Roper Bros used to have a door/chest/carpentry shop that sold finished wood goods
 - On a whole, the relationship was good though

5. Describe the relationship between the city leadership and island residents.
 - City did not bother the island much
 - Police did not come unless called because there was no reason to
 - The city moved a basin on the island to Poplar Park on Sycamore St in the 1990's. They would like it back to put in a new playground, but also understand why the city took it
 - They currently feel that city leadership does not contact them unless it needs them for something

6. What are the most important historical aspects of/on the island?
- The Twitty House (Underground Railroad House)
 - The Jarrett House
 - The Smith House (Yellow with a trap door in front bedroom)
 - The Pocahontas Chapel, built in Hopewell in 1700s and brought to the island after The Civil War. It was also used as a school for a long time
 - Old Train station site west of Sapony St
 - The original paving rocks under the asphalt on Sapony St
 - 131 Witten St House was built in 1800s
 - Pocahontas visited the island herself
 - Joseph Jenkins Roberts, a founder of Liberia, lived on the island
 - Either Lee or Grant visited the island during the siege of Petersburg

Appendix B: Aggregate Survey Responses

Question	Average
There should be more parks and playgrounds on the island	4.09
The city should intervene to either renovate or remove blighted houses	3.36
There should be more physical, social, and economic connection between the island and the rest of Petersburg	3
Pocahontas island's history should be advertised and celebrated more	2.91
Restoration of the old port area is very important	2.73
There should be more residential density on the island	2
There should be more employment options on the island	1.73
I would welcome more tourists on the island	1.73
Access to and use of the river surrounding the island should be increased	1.64
There should be more shopping options on the island	1.27
1. Completely Disagree 2. Somewhat Disagree 3. Not Sure/Neutral 4. Somewhat Agree 5. Completely Agree	

Improvements	Sum Priority (Higher Number Equals Higher Priority)
Improve and/or add streets	38
New playground	36
Install more street lights	34
Historical tourism improvements	34
Redevelop Roper Site	32
Traffic calming measures	32
Improve stormwater drainage	30
Improve current housing	30
More moderate income housing	29
More elderly housing	29
Install/improve sidewalks	28
Improve Appomattox River Heritage Trail	27
Better access to public transit	26
New park	22
More med/high density housing	21
More low density housing	18
More shopping	17

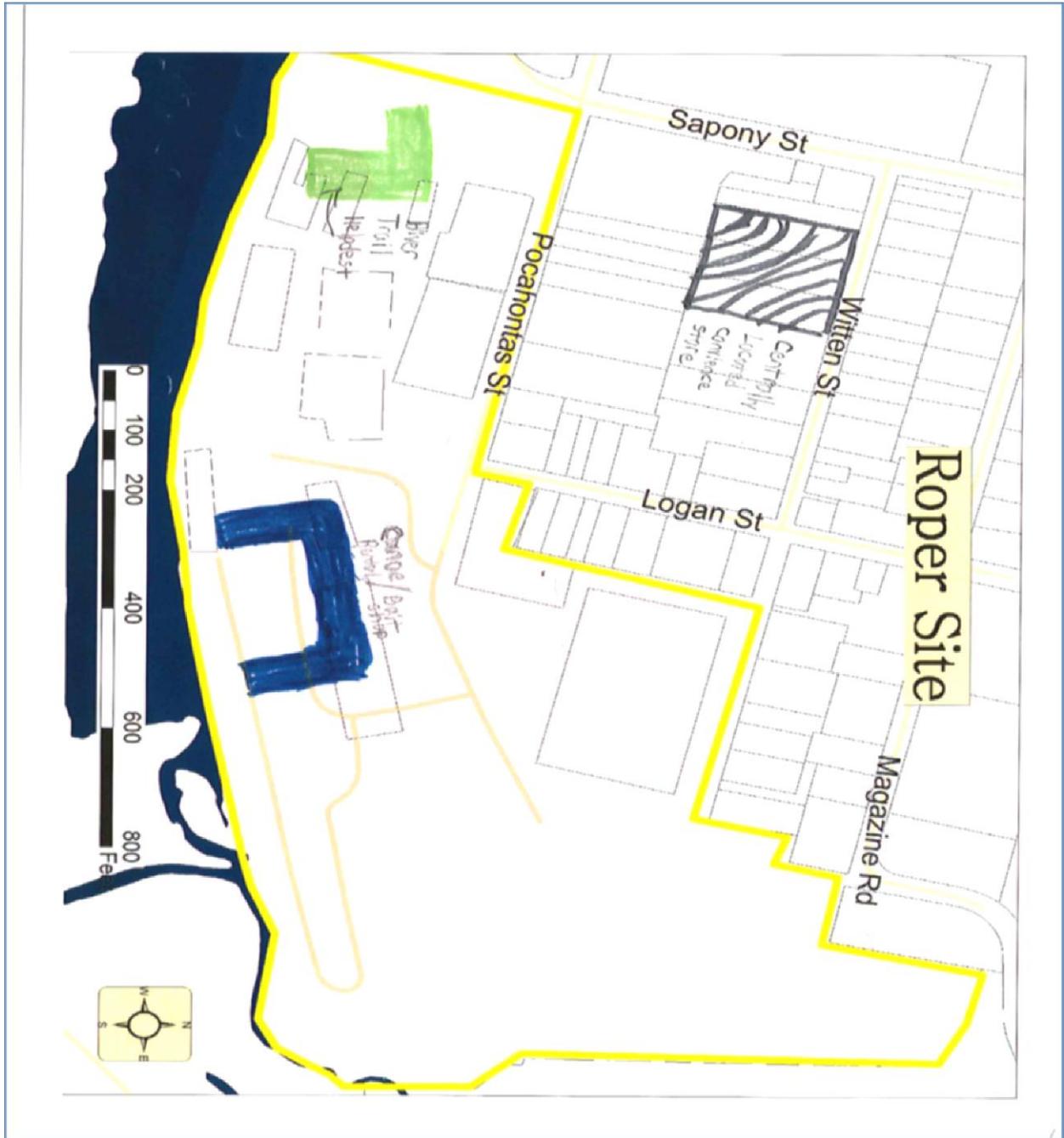
Goal Ranking	Sum Ranking (Lower Number Equals Higher ranking)
Renovated Current Housing	12
Aesthetic Appeal	14
New Residential Development	22
Enviro Preservation	23
Economig growth benefitting island and city	25
Kid Friendly	25
Historical Preservation	29
Easily Accessible to all forms of transportation	34
Better Social, cultural connection with the city	38
More Connected to river	42
New Commercial Development	62
Tourism Attractor	68

Improvement Timeframe Priority	Sum Priority (Lower Number Equals Higher Priority)
Build a new playground	29
Repair and/or build new streets	31
Renovate Current Housing	33
Implement Traffic Calming Measures	56
Preserve the Jarret and Underground Railroad House	63
Redevelop Roper Site	76
Install/Improve Sidewalks	79
Install More Streetlights	82
Improve Stormwater Drainage	87
Develop Elderly Housing	93
Increase Access to Public Transit	94
Improve Appomattox River Heritage Trail	103
Develop Moderate Income Housing	105
Dredge and Restore Old Port	119

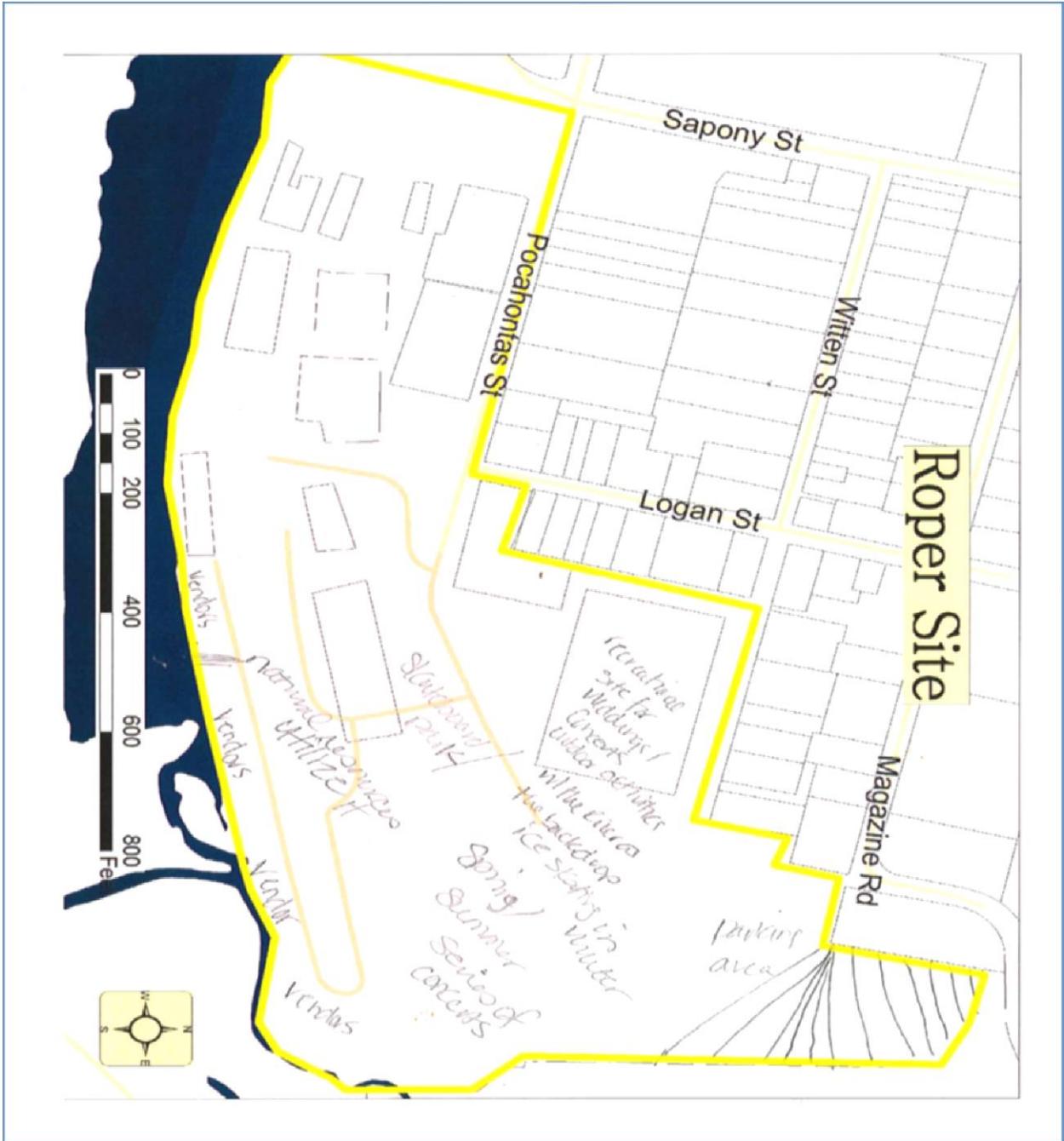
Table 23: Implementation Survey Responses (Mar 11, 2014)	Avg
I think the city should devote the necessary resources to implement this plan	4
I would like to take part in a community action group overseeing plan implementation	3.4
I would welcome more tourists on the island if it meant other neighborhood improvements were more likely to be implemented	3.4
I believe that the proposed plan can be implemented as is	3.2
I approve of the plan's implementation schedule	3.1
I would welcome a raise in my property taxes or rent if this plan is implemented	2.6
1. Completely Disagree 2. Somewhat Disagree 3. Not Sure/Neutral 4. Somewhat Agree 5. Completely Agree	

Appendix C: Detailed Roper Sketches

Image 21: Community Roper Sketches

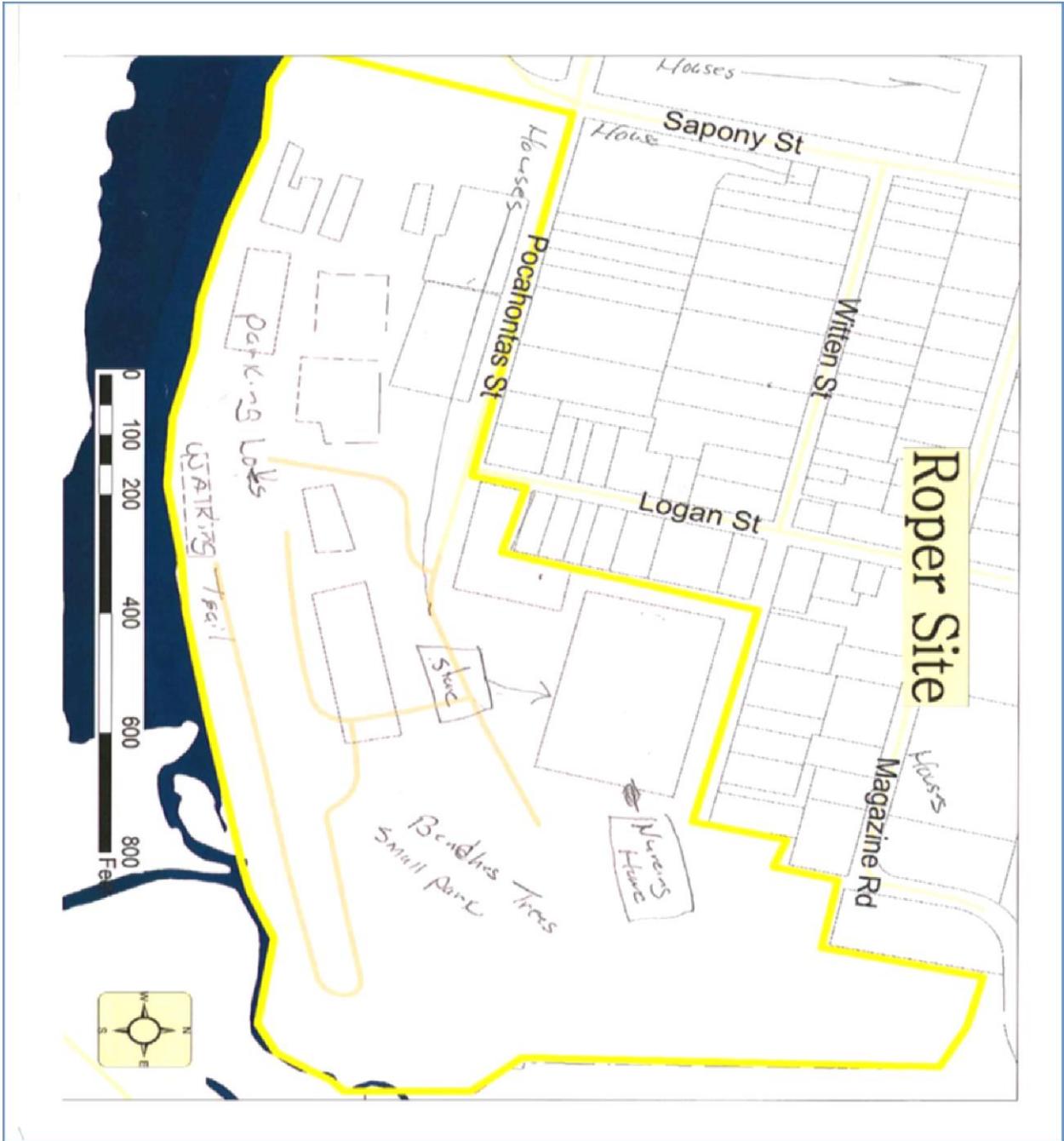


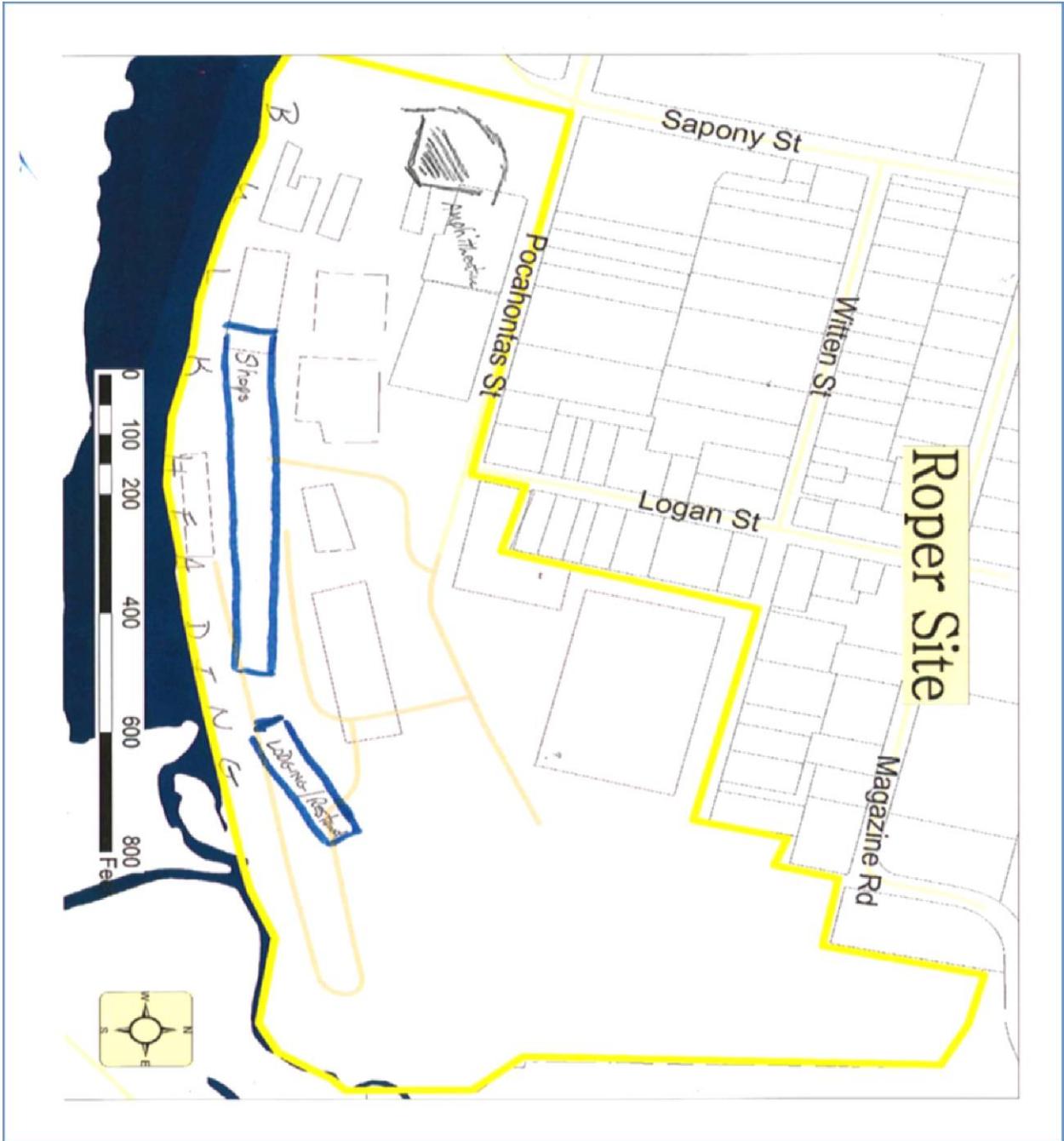


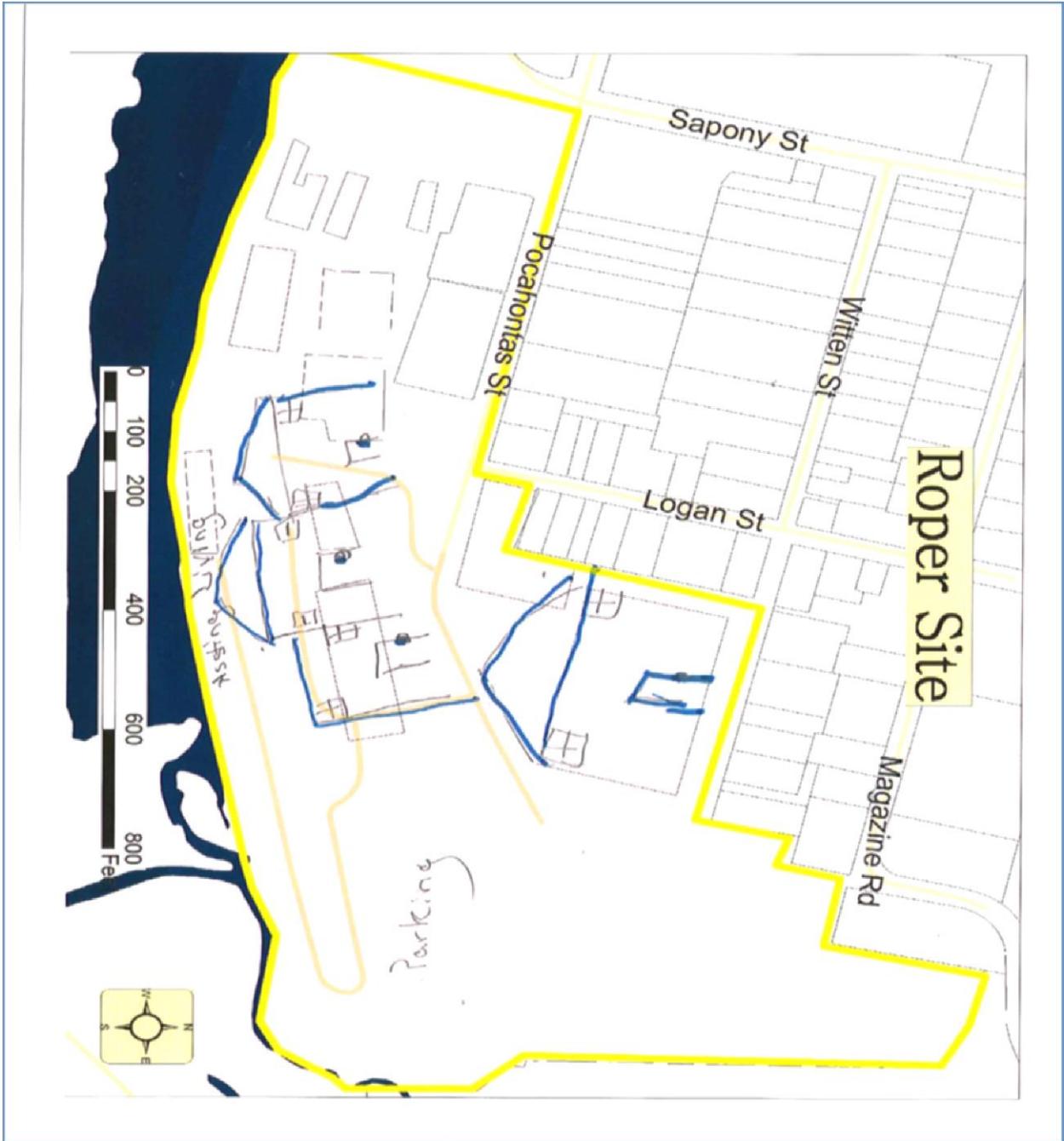




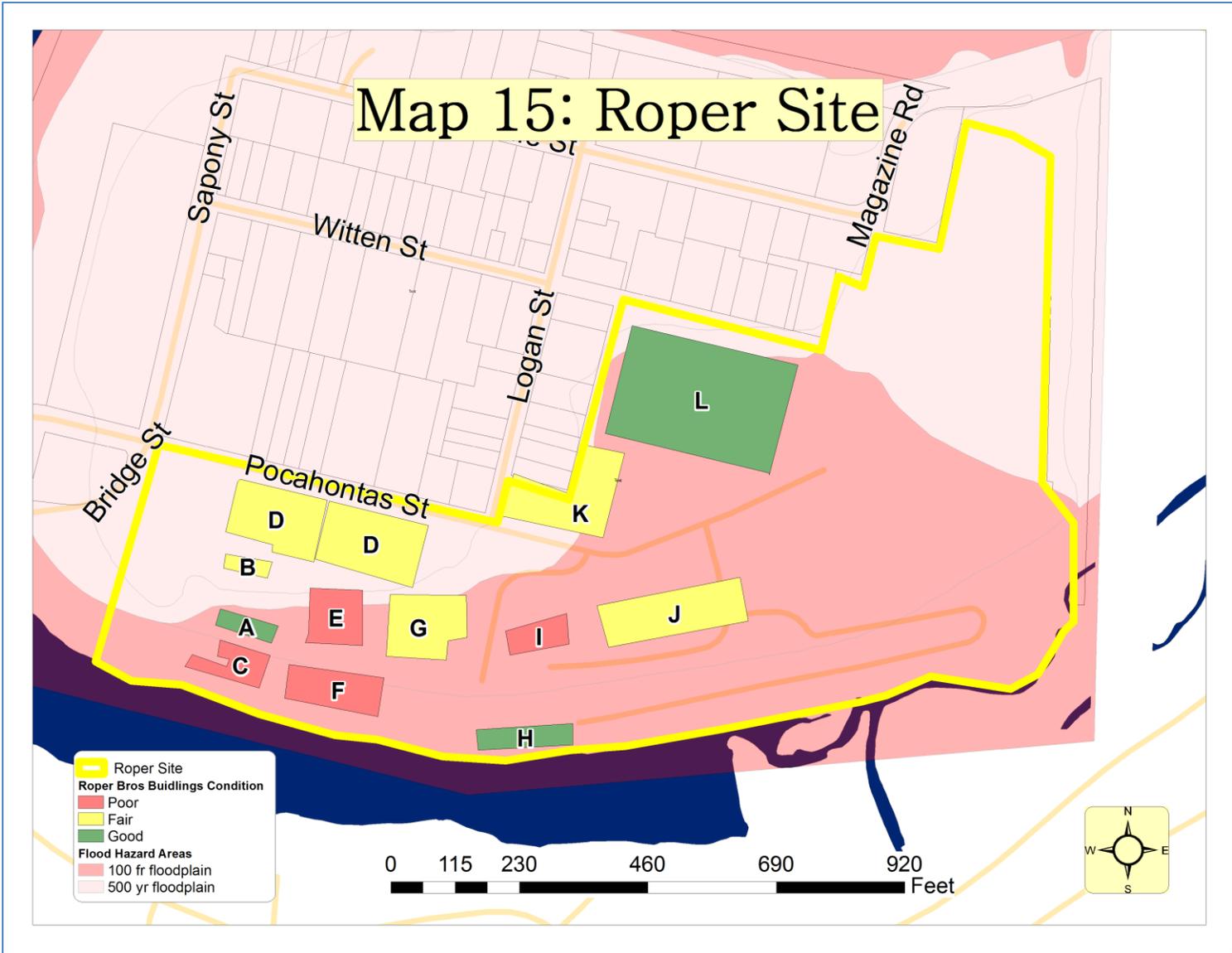








Appendix D: Roper Site Conditions and Pictures



Source: Crater Planning District Commission

Image 22: Roper Buildings

Building L



Building K



Building J



Building I



Building H



Building G



Building F



Building C



Building A



Building E



Building B

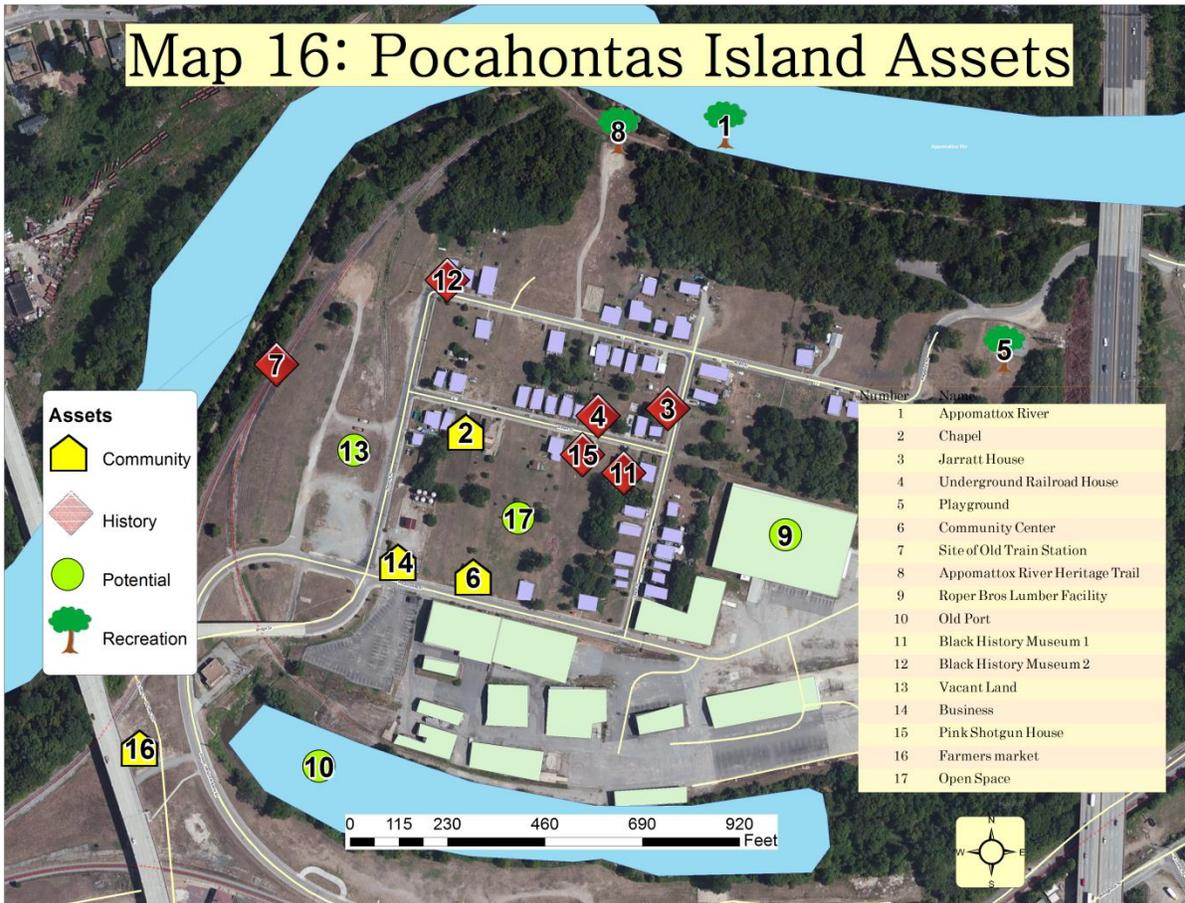


Building D



Appendix E: Asset Map

Map 16: Pocahontas Island Assets



- Assets**
- Community
 - History
 - Potential
 - Recreation

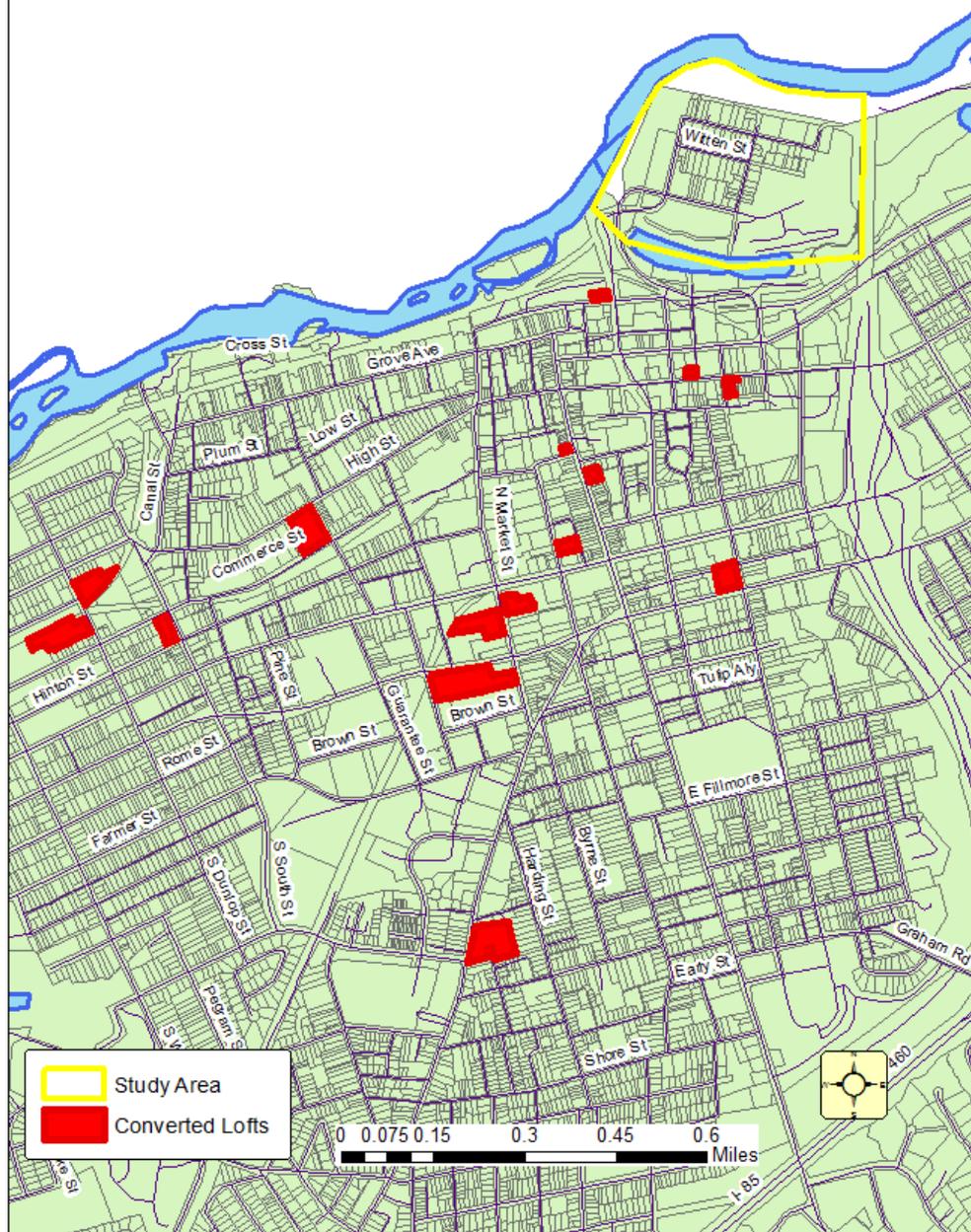
Number	Name
1	Appomattox River
2	Chapel
3	Jarratt House
4	Underground Railroad House
5	Playground
6	Community Center
7	Site of Old Train Station
8	Appomattox River Heritage Trail
9	Roper Bros Lumber Facility
10	Old Port
11	Black History Museum 1
12	Black History Museum 2
13	Vacant Land
14	Business
15	Pink Shotgun House
16	Farmers market
17	Open Space

0 115 230 460 690 920 Feet



Appendix F: Downtown Loft Development

Map 17: Converted Lofts



Source: Crater Planning District Commission

Appendix G: Neighborhood Alternative Grading Explanations

The plan graded the list of potential improvements for each intensity level on their ability to meet the criteria listed below in Table 24. To ensure that each grading criteria had equal weight, the plan assigned five subcategories for every criteria except for implementation feasibility, which was assigned six subcategories. For the five plan goals, the subcategories are plan objectives. For implementation feasibility, the six subcategories are market feasibility and funding streams. For island assets, the subcategories are the assets as indicated in the asset map and the island’s supportive infrastructure. Table 24 highlights each subcategory’s grade with a brief explanation of reasoning in parentheses.

Table 24: Intensity Level Grading Explained				
Criteria	Minimum Intensity	Moderate Intensity	Advanced Intensity	Maximum Intensity
	Negative 0	Neutral 1	Positive 2	Very Positive 3
Is residential in character with an increased number and variety of aesthetically pleasing housing options	4	9	12	13
Reduce blighted housing throughout neighborhood	2 (Incomplete reduction)	2 (Incomplete reduction)	3 (All blight removed)	3(All blight removed)
Place residential infill housing on vacant lots	0 (Blight removal may increase this)	2 (Selective only)	3 (All infilled)	3(All infilled)
Increase amount of affordable housing stock	1 (Potential in renovated housing)	2 (Potential in renovated and infill housing)	3 (New housing west of Sapony)	3 (New housing west of Sapony)
Unify the design of residential structures	0 (Blight removal may lessen this)	2 (Infill ordinance requirements)	2 (Infill ordinance requirements)	3 (Infill and new housing requirements)
Increase the number of senior housing units	1 (No effect)	1 (No effect)	1(No effect)	1(No effect)
Has recreational opportunities for residents and visitors that utilize the island's unique location	8	8	12	14
Expand playground square footage and amenities	2 (Limited playground upgrades)	2 (Limited playground upgrades)	3 (Expanded playground)	3 (Expanded playground)
Enhance physical appeal of Appomattox River Heritage Trail	2 (Limited trail improvements)	2 (Limited trail improvements)	3 (Major trail improvements)	3(Major trail improvements)
Develop water-dependent land uses	1 (No effect)	1(No effect)	1 (No effect)	2 (New boat ramp)
Expand open space acreage	1 (No effect)	1(No effect)	2 (Community garden)	3 (Community garden and pocket park)
Develop new recreational land uses	2 (Playground improvements)	2(Playground improvements)	3 (Expanded playground)	3(Expanded playground)

Maintains a sustainable balance between island's urban land use and its environment x 2	7	8	7	4
Assess and remediate area contamination	1 (No effect)	2 (Limited effect)	3 (Direct action on USTs)	3 (Direct action on USTs)
Limit development on 100-year floodplain and measure development on 500-year floodplains	3 (None)	3 (None)	1 (Playground expansion into 100 yr and limited commercial/residential in 500 yr)	0 (Playground expansion into 100 yr and considerable commercial/residential in 500 yr)
Reduce impervious (asphalt) cover	1 (No effect)	1 (No effect)	0 (Increase)	0 (Increase)
Increase vegetative buffers adjacent to river	1 (No effect)	1 (No effect)	1 (No effect)	0 (Trail expansion will reduce)
Reduce stormwater runoff into Appomattox River	1 (No effect)	1 (No effect)	2 (Numerous street trees and community garden)	1 (Numerous street trees and community garden countered by land use intensity)
Preserves the island's vernacular culture	7	9	12	12
Preserve Underground Railroad and Jarrett Houses	1 (Prevention but not preservation)	3 (Preserved)	3 (Preserved)	3 (Preserved)
Enhance communication of and access to island's unique and enduring historical legacy	1 (No effect)	2 (Gateway sign and historical preservation)	3 (Gateway sign, historical preservation, historical walking trail)	3 (Gateway sign, historical preservation, historical walking trail)
Develop community action group to guide plan implementation and preserve community identity	1 (No effect)	1 (No effect)	2 (Community garden)	3 (Community garden in care of Concerned Citizens of Pocahontas)
Increase access to local shopping needs	1 (No effect)	1 (No effect)	3 (Commercial on corner of Sapony and Pocahontas)	3 (Commercial on corner of Sapony and Pocahontas)
Maintain quiet residential condition	3 (Maintains baseline)	2 (Increased tourism)	1 (More increased tourism)	0 (Increased tourism and water use)

Table 24: Intensity Level Grading Explained

Criteria	Minimum Intensity	Moderate Intensity	Advanced Intensity	Maximum Intensity
	Negative 0	Neutral 1	Positive 2	Very Positive 3
Is a beautiful and safe location with efficient and resilient infrastructure	8	9	13	15
Improve vehicular and pedestrian network	2 (Repaired streets/sidewalks)	2 (Repaired streets/sidewalks)	3 (Repaired streets/sidewalks and new sidewalks)	3 (Repaired streets/sidewalks and new street/sidewalks)
Enhance neighborhood lighting	2 (Brightened existing)	3 (Brightened and new streetlights)	3 (Brightened and new streetlights)	3 (Brightened and new streetlights)

Slow vehicular traffic	0 (Repaired streets = faster cars)	0 (Repaired streets = faster cars)	2 (Limited traffic calming measures)	3 (Significant traffic calming measures)
Enhance aesthetic and pedestrian appeal	2 (Sidewalks, streetlights, street trees)	2 (Sidewalks, streetlights, street trees)	3 (Significant sidewalks, streetlights, street trees)	3 (Significant sidewalks, streetlights, street trees)
Mitigate effect of Waste Water Treatment Plant truck traffic on neighborhood	2 (Enforcement)	2 (Enforcement)	2 (Changed Schedule)	3 (New WWTP access street)
Implementation Feasibility	12	16	14	12
Market feasibility	3 (Supply won't exceed demand)	3 (Supply won't exceed demand)	2 (Requisite demand to meet supply)	0 (Limited demand for R-3)
Availability of direct city funding	3 (Limited expenditures required)	3 (Limited expenditure requirements)	2 (Significant expenditures required)	2 (Significant expenditures required)
Availability of CDBG funding	3 (For blight removal)	3 (For blight removal and new housing)	3 (For blight removal and new housing)	3 (For blight removal and new housing)
Availability of State funding	1 (No preservation or enterprise zone funds)	3 (Preservation funding)	3 (Preservation and historical education funding)	3 (Preservation and historical education funding)
Availability of Private funding	1 (No historical preservation funding)	3 (Historical preservation funding)	3 (Historical preservation and education funding)	3 (Historical preservation and education funding)
Availability of Federal funding	1 (None available)	1 (None available)	1 (None available)	1 (None available)
Maximizes Island's Assets	8	8	12	10
People assets	1 (No effect)	1 (No effect)	2 (Community garden)	1 (People drowned out by intense development)
Community assets	1 (No effect)	1 (No effect)	3 (Historic walking trail, community garden)	3 (Historic walking trail, community garden)
Historical assets	1 (Prevention, no preservation)	2 (Preservation)	3 (Preservation and historical walking trail)	3 (Preservation and historical walking trail)
Recreational assets	2 (Playground and trail limited development)	2 (Playground and trail limited development)	3 (Expanded playground and trail)	3 (Expanded playground, park, and trail)
Supportive infrastructure	3 (Very limited development pressure)	2 (Limited development pressure)	1 (Enhancements may be necessary)	0 (Existing not sufficient)
Final Grade (Highest is Best)	54	67	82	80

Appendix H: Roper Alternative Grading Explanations

The plan graded the list of potential improvements for each Roper Site redevelopment alternative on their ability to meet the criteria listed below in Table 25. The plan assigned five subcategories for every criterion. For the five plan goals, the subcategories are plan objectives. For market feasibility, the five subcategories are market demand and the subsequent increase in property values for both the Roper Site and the abutting neighborhood properties. Higher end use value for the Roper Site was graded positively, as it will increase city tax revenue for and make the site economically viable, while higher property value for abutting properties was graded negatively, as it will increase the economic hardship of residents in a neighborhood already struggling economically (See Table 4). For funding feasibility, the subcategories are funding streams. For compatibility with city goals, the subcategories are goals as outlined in the comprehensive plan and in communication with city officials. See Part 2 of the plan for an explanation of weighting methodology and reasoning. Table 25 highlights each subcategory’s grade with a brief explanation of reasoning in parentheses.

Table 25: Roper Site Redevelopment Alternative Grading Explained

Criteria	Option 1: Limited Park and recreational	Option 2: Mixed housing and recreational	Option 3: Mixed housing, shopping, and recreational	Option 4: Mixed housing, shopping, recreational, entertainment
	Negative 0	Neutral 1	Positive 2	Very Positive 3
Is residential in character with an increased number and variety of aesthetically pleasing housing options	5	7	9	9
Reduce blighted housing throughout neighborhood	1 (No blighted housing on site)	1 (No blighted housing on site)	1 (No blighted housing on site)	1 (No blighted housing on site)
Place residential infill housing on vacant lots	1 (No vacant parcels on site)	1 (No vacant parcels on site)	1 (No vacant parcels on site)	1 (No vacant parcels on site)
Increase amount of affordable housing stock	1 (No residential end use)	2 (potential at new R-2)	2 (potential at new R-2)	2 (potential at new R-2)
Unify the design of residential structures	1 (No residential end use)	2 (potential at new R-2)	2 (potential at new R-2)	2 (potential at new R-2)
Increase the number of senior housing units	1 (No senior end use)	1 (No senior end use)	3 (New senior facility)	3 (New senior facility)
Has recreational opportunities for residents and visitors that utilize the island's unique location	12	12	14	15
Expand playground square footage and amenities	3 (New playground)	3 (Expanded playground)	3 (Expanded playground)	3 (Expanded playground)
Enhance physical appeal of Appomattox River Heritage Trail	2 (New Roper River walk)	2 (New Roper River walk)	3 (New Roper River walk with amenities)	3 (New Roper River walk with amenities)
Develop water-dependent land uses	1 (No new wd uses)	1 (No new wd uses)	3 (Canoe Rental/Boat Slip)	3 (Canoe Rental/Boat Slip)
Expand open space acreage	3 (New Park)	3 (New Park)	3 (New Park)	3 (New Park)
Develop new recreational land uses	3 (Rec Center)	3 (Rec Center)	2 (No new rec center)	3 (Rec Center)

Maintains a sustainable balance between island's urban land use and its environment x 2	28	28	18	16
Assess and remediate area contamination	2 (Limited due to no residential end uses)	3 (R-2 end use)	3 (R-2 and senior living end use)	3(R-2 and senior living end use)
Limit development on 100-year floodplain and measure development on 500-year floodplains	3 (Vast majority Park)	2 (New housing, but mostly park)	0 (Senior facility in floodplain)	0 (senior facility in floodplain)
Reduce impervious (asphalt) cover	3 (54%)	3 (61%)	2 (48%)	2 (36%)
Increase vegetative buffers adjacent to river	3 (Along southern trail)	3 (Along southern trail)	2 (River side uses limit buffer)	2 (River side uses limit buffer)
Reduce stormwater runoff into Appomattox River	3 (combo of above)	3 (combo of above)	2 (combo of above)	1 (combo of above)
Preserves the island's vernacular culture	8	8	7	8
Preserve Underground Railroad and Jarrett Houses	1 (No effect)	1(No effect)	1(No effect)	1(No effect)
Enhance communication of and access to island's unique and enduring historical legacy	1(No effect)	2 (Historical info center)	1 ((No effect)	2 (Comm center)
Develop community action group to guide plan implementation and preserve community identity	2 (Community/rec)	2 (Community/rec)	1 (No effect)	2 (Comm cent)
Increase access to local shopping needs	1 (No effect)	1(No effect)	3 (New commercial)	3 (New commercial)
Maintain quiet residential condition	3 (Low visitor traffic)	2 (Moderate visitor traffic)	1 (Moderate to intense visitor traffic)	0 (Intense visitor traffic)

Table 25: Roper Site Redevelopment Alternative Grading Explained

Criteria	Option			
	Option 1: Limited Park and recreational	Option 2: Mixed housing and recreational	Option 3: Mixed housing, shopping, and recreational	Option 4: Mixed housing, shopping, recreational, entertainment
Is a beautiful and safe location with efficient and resilient infrastructure	8	8	8	9
Improve vehicular and pedestrian network	2 (New trails and parking lots)	2 (New trails and parking lots)	2 (New trails and parking lots)	2 (New trails and parking lots)
Enhance neighborhood lighting	1 (No effect)	1 (No effect)	1 (No effect)	1 (No effect)
Slow vehicular traffic	1 (No effect)	1 (No effect)	1 (No effect)	2 (So much going on)
Enhance aesthetic and pedestrian appeal	3 (New park and trails)	3 (New park and trails)	3 (New park and trails)	3 (New park and trails)
Mitigate effect of Waste Water Treatment Plant truck traffic on neighborhood	1 (No effect)	1 (No effect)	1 (No effect)	1 (No effect)

Market feasibility x2	20	18	16	16
R-2 Housing demand	3 (No new housing)	2 (Downtown, VSU, Fort Lee development pressures)	2(Downtown, VSU, Fort Lee development pressures)	2(Downtown, VSU, Fort Lee development pressures)
Senior housing demand	1 (no effect)	1 (no effect)	2 (community demand)	2(community demand)
Commercial demand	3 (No new commercial)	3 (No new commercial)	1 (Potential restaurant, health care, or tourist demand commercial)	1 (Potential restaurant, health care, or tourist demand commercial)
End use value	1 (Lowest intensity)	2 (Moderate intensity)	3 (advanced Intensity)	3 (Maximum intensity)
Increase in abutting property values	2 (Light increase)	1 (Moderate increase)	0 (Dramatic increase)	0 (Dramatic increase)
Funding feasibility x2	22	26	22	20
Availability of direct city funding	3 (CIP)	3(CIP)	2 (CIP limited)	1(CIP Very limited)
Availability of CDBG funding	2 (Infrastructure)	3 (Infrastructure and revitalization)	3(Infrastructure and revitalization)	3(Infrastructure and revitalization)
Availability of State funding	2 (VRP)	2 (Hist educ and VRP)	2(Enterprise Zone)	2(Enterprise Zone)
Availability of Private funding	1 (None)	2 (Cameron)	1 (None)	1 (None)
Availability of Federal funding	3 (BF Grants)	3(BF Grants)	3(BF Grants)	3(BF Grants)
Compatibility with city-wide goals x2	14	20	24	26
Improved city gateway	2 (Aesthetically Pleasing)	2(Aesthetically Pleasing)	3(Aesthetically Pleasing and exciting)	3(Aesthetically Pleasing and exciting)
Potential for port development	1 (no effect)	2 (increased attention)	3(increased attention and commerce)	3(increased attention and commerce)
Preservation of cultural resources	1 (no effect)	2 (historical info center)	1 (no effect)	1 (no effect)
Economic development	1 (limited effect)	2 (tourist draw)	2 (tourist and commerce draw)	3 (tourist, commerce, and entertainment draw)
Job development	2 (Park development)	2 (Park and construction)	3 (Park, construction, commerce)	3(Park, construction, commerce)
Final Grade (Highest is Best)	117	127	118	119

Appendix I: Cost Calculations

(Plan Rational in *italics*)

Table 26: Cost Calculations

Plan Action	Calculation Explanation	Source										
Action 1.1.1: Renovate or remove dilapidated houses throughout neighborhood	<p>Cost of Demolition = \$2.50/ft²</p> <p>Total Square Footage of blighted non historical buildings = 6,473.20 ft²</p> <p>\$2.50/ft² x 6,473.20 ft² = \$16,183</p>	Peters										
Action 1.2.1: Infill R-2 housing on interior vacant lots	<p>2012 Average Single Family home construction in Petersburg = \$77,400</p> <p>46 Vacant Lots</p> <p>\$77,400 x 46 = \$3,560,400</p>	City-Data										
Action 1.2.3: Develop R-2 housing on Roper Site along Pocahontas St	<p>2012 Average Single Family home construction in Petersburg = \$77,400</p> <p>9 New Parcels</p> <p>\$77,400 x 9 = \$696,600</p>	City-Data										
Action 1.3.1: Develop affordable R-2 housing on R-2 parcels west of Sapony St	<p>2012 Average Single Family home construction in Petersburg = \$77,400</p> <p>5 New Parcels</p> <p>\$77,400 x 5 = \$387,000</p>	City-Data										
Action 1.5.2: Develop senior living facility south of new R-2 housing on Roper Site	<p>Costs of Constructing Apartment Building with Brick Veneer and Wood Frame in Petersburg Va (2013)</p> <table border="1" data-bbox="483 1157 1339 1318"> <thead> <tr> <th>Cost Category</th> <th>Cost/ft²</th> </tr> </thead> <tbody> <tr> <td>Construction</td> <td>\$98.34</td> </tr> <tr> <td>Contractor Fees</td> <td>\$24.59</td> </tr> <tr> <td>Architectural Fees</td> <td>\$9.83</td> </tr> <tr> <td>Total</td> <td>\$132.76</td> </tr> </tbody> </table> <p>9,984 ft² three story senior living facility</p> <p>\$132.76 x 9,984 ft² ≈ \$1,325,000</p>	Cost Category	Cost/ft ²	Construction	\$98.34	Contractor Fees	\$24.59	Architectural Fees	\$9.83	Total	\$132.76	Reed Construction
Cost Category	Cost/ft ²											
Construction	\$98.34											
Contractor Fees	\$24.59											
Architectural Fees	\$9.83											
Total	\$132.76											
Action 2.1.1: Renovate current playground on Magazine St	<p>2014 Low Street Playground improvements = \$75,000 but also include the construction of a shelter</p> <p><i>This action includes only new playground equipment = \$25,000</i></p>	Petersburg CIP										
Action 2.1.2: Expand playground into Roper Site Redevelopment east of Logan Street	<p>2014 Low Street Playground improvements = \$75,000 but also include the construction of a shelter</p> <p><i>This action includes expansion and new playground equipment but no shelter = \$50,000</i></p>	Petersburg CIP										

<p>Action 2.2.1: Clean up Appomattox River Heritage Trail, repair current signs and install new historical signs, and intensify maintenance schedule</p>	<p>Cost of trail development = \$600,000/mile</p> <p><i>Price per mile cut by 2/3 because this action only calls for cleanup and renovation rather than new development = \$200,000 mile</i></p> <p>3,148 feet of trail on island = .6 miles</p> <p>.6 miles x \$200,000/mile = \$120,000</p>	<p>Pros Consulting</p> <p>Richmond Parks Master Plan</p>
<p>Action 2.2.2: Expand Appomattox River Trail to include River Walk section on southern river bank of the Roper Site</p>	<p>Cost of trail development = \$600,000/mile</p> <p>2,667 ft of new trail = .51 miles</p> <p>.51 miles x \$600,000 = \$306,000</p>	<p>Pros Consulting</p> <p>Richmond Parks Master Plan</p>
<p>Action 2.3.2: Install a boat ramp near parking lot off of Magazine St</p>	<p>Engineering design and permitting - \$15,000 - \$25,000; add costs for other environmental issue (wetlands mitigation)</p> <p>16' x 40' ramp not including coffer dam - \$16,000 - \$20,000</p> <p>Coffer dams average \$40,000 per site (if required), sized for double lane ramp</p> <p><i>This will be a small boat ramp and the need for a coffer dam is yet to be determined</i></p> <p>Safe estimation with coffer dam = \$75,000</p>	<p>Adams</p> <p>Va Department of Game and Inland Fisheries</p>
<p>Action 2.4.1: Develop 15 acre park on Roper Site</p>	<p>Average cost of developing a regional park = \$2,000,000</p> <p>Cost for demolishing 9 buildings totaling 132,678 ft² = \$331,695</p> <p>\$2,000,000 + \$331,695 = \$2,331,695</p>	<p>Peters</p> <p>Pros Consulting</p> <p>Richmond Parks Master Plan</p>
<p>Action 2.5.1: Convert Roper Site Building L to a community recreational center</p>	<p>Cost of upgrading recreational centers = \$150/ft²</p> <p><i>This is an upgrade since it is an adaptive reuse project</i></p> <p>Roper Building L = 60,571 ft²</p> <p>\$150/ft² x 60,571 ft² = \$9,085,650</p>	<p>Pros Consulting</p> <p>Richmond Parks Master Plan</p>
<p>Action 3.1.1: Locate closed Roper Bros Lumber underground storage tanks, sample surrounding soil, and remove if necessary</p>	<p>Two person crew working at \$100/hr for one day</p> <p>\$100 x 2 x 8 hours = \$1,600</p>	<p>Quilter</p>
<p>Action 3.4.1: Plant trees in Roper Park</p>	<p><i>While the price of trees varies wildly at Lowes, assuming a mixture of small and more mature trees and a discount for buying in bulk, the cost per tree ≈ \$130</i></p> <p>108 new planted trees</p> <p>\$130 x 108 ≈ \$14,040 (No labor costs included)</p>	<p>Lowes</p>

<p>Action 3.5.3: Plant street trees along all neighborhood streets</p>	<p><i>While the price of trees varies wildly at Lowes, assuming a mixture of small and more mature trees and a discount for buying in bulk, the cost per tree ≈ \$130</i></p> <p>100 new planted trees</p> <p>$\\$130 \times 100 \approx \\$13,000$ (Labor costs not included)</p>	<p>Lowes</p>
<p>Action 4.2.1: Install a new gateway sign at neighborhood entrance on Bridge Street</p>	<p>Cost of 4' x 6' sign = $\\$1,200$ (Labor costs not included)</p>	<p>Signs Alive</p>
<p>Action 4.2.2: Extend Appomattox River Heritage Trail (including signage) into neighborhood west of Sapony Street and east of Logan Street (into Roper Site redevelopment) and develop historical walking trail</p>	<p>Cost of trail development = \$600,000/mile</p> <p>482 ft of new trail = .09 miles</p> <p>.09 miles x \$600,000 = $\\$54,000$</p>	<p>Pros Consulting Richmond Parks Master Plan</p>
<p>Action 4.3.2: Build a community garden or pocket park west of new housing on Sapony Street and put in care of Concerned Citizens of Pocahontas</p>	<p>Cost of neighborhood park upgrade = $\\$100,000$</p> <p><i>This area is already open space, so this plan considers it an upgrade rather than new installation</i></p>	<p>Pros Consulting Richmond Parks Master Plan</p>
<p>Action 5.1.1: Repave and maintain streets throughout neighborhood</p>	<p>Petersburg pays \$80/ton for asphalt street paving</p> <p>Pocahontas neighborhood streets = 4,039 linear feet</p> <p>Pocahontas neighborhood streets = 17 feet wide</p> <p>$4,039' \times 17' = 68,663 \text{ ft}^2$ total repaving area $68,663^2 = 7,629 \text{ yd}^2$</p> <p>Asphalt generally weighs 115 lbs/ yd² at 1" of thickness</p> <p>$7,629^2 \times 115 = 877,335 \text{ lbs}$</p> <p>$877,335 \text{ lbs} = 439 \text{ tons}$</p> <p>$439 \text{ tons} \times \\$80/\text{ton} = \\$35,120$</p>	<p>Riggleman Yahoo Answers</p>
<p>Action 5.1.2: Repair current sidewalks</p>	<p>Cost to repair sidewalks = \$4/ft²</p> <p>Total sidewalk repairs = 3,050 linear feet</p> <p>Pocahontas neighborhood sidewalks = 5 feet wide</p> <p>$3,050' \times 5' = 15,250 \text{ ft}^2$</p> <p>$\\$4/\text{ft}^2 \times 15,250 \text{ ft}^2 = \\$61,000$</p>	<p>Kudzu</p>

<p>Action 5.1.3: Build new sidewalks on eastern side of Logan Street, western side of Sapony Street, Northern side of Rolfe Street, and eastern section of Sapony Street between Witten and Rolfe Streets</p>	<p>Cost to install new sidewalks in Petersburg Zip Code \approx \$3.39/ft²</p> <p>Total new sidewalks = 2,665 linear feet</p> <p>Pocahontas neighborhood sidewalks = 5 feet wide</p> <p>$2,665' \times 5' = 13,325 \text{ ft}^2$</p> <p>$\\$3.39/\text{ft}^2 \times 13,325 \text{ ft}^2 \approx$ \$45,000</p>	<p>Homewyse</p>
<p>Action 5.1.4: Install raised crosswalks at all Witten and Pocahontas Street intersections</p>	<p>Cost of installing a raised sidewalk = \$2,500 - \$8,000</p> <p>12 raised crosswalks at Pocahontas and Witten Street intersection</p> <p><i>Plan calculates an above average cost of \$6,500 per raised crosswalk for margin of error</i></p> <p>$\\$6,500 \times 12$ raised crosswalks = \$78,000</p>	<p>VDOT</p>
<p>Action 5.2.1: Replace existing streetlights with brighter LED streetlights</p>	<p>\$99 for a new Cree LED streetlight</p> <p>$\\$99 \times 14$ existing lights = \$1,386 (Labor costs not included)</p>	<p>MacManus</p>
<p>Action 5.2.2: Install new LED streetlights on Witten, Logan, and Pocahontas Streets</p>	<p>\$99 for a new Cree LED streetlight</p> <p>$\\$99 \times 16$ new streetlights = \$1,584 (Labor costs not included)</p>	<p>MacManus</p>
<p>Action 5.4.3: Install benches on Witten and Pocahontas Streets</p>	<p>48' aluminum street bench = \$331</p> <p>12 new street benches (6 per street)</p> <p>$\\$331 \times 12 =$ \$3972</p>	<p>Belson Outdoors</p>

Appendix J: Potential Remediation Strategies for Roper Site Contamination

Soil at both The Roper Bros Lumber brownfield site and in the adjacent section of the Appomattox River is contaminated with creosote, heavy metals, and petroleum hydrocarbons. While Phase 1 and 2 environmental assessments will be needed to ultimately determine the required level of remediation, the Environmental Protection Agency and the Army Corps of Engineers have established methods for such a project.

Soil Remediation

- Removing contaminated soil and disposing in landfill (Wade et al 2002, 4)
- Bioremediation: Stimulating soil microorganisms (bacteria and fungi) through the introduction of nutrient rich water to break down the contaminant (Office of Technology Assessment 1995, 37)
- Incineration: Using very high temperatures to burn hazardous waste materials (Office of Technology Assessment 1995, 35)
- Soil Washing: A water based process in which contaminants are removed from excavated soil by dissolving them in a solution which binds the chemicals to clay and silt particles. These particles are then removed from the rest of the soil, which can then be returned to the site (Office of Technology Assessment 1995, 39)
- Solvent Extraction: Using organic solvents such as alcohols, alkanes, or ketones to remove contaminants from excavated soils (Office of Technology Assessment 1995, 40)
- Thermal Desorption: Using heat and agitation to separate and lessen the volume of contaminants, reducing the volume demand of later incineration or disposal methods (Office of Technology Assessment 1995, 41)

Appendix K: Resources for Regulatory Compliance and Implementation Funding

Regulatory Compliance

1. **Chesapeake Bay Preservation Act:** Provides guidance for sustainable redevelopment of sites located in Resource Management and Protection Zones

Available from: <http://www.deq.virginia.gov/Programs/Water/ChesapeakeBay/ChesapeakeBayPreservationAct>

2. **Virginia's Voluntary Remediation Program:** Explains the legal and regulatory process for accessing liability protection from brownfield redevelopment in Virginia

Available from: <http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RemediationProgram>

3. **Virginia Code of Regulations for Brownfield Remediation:** Outlines requirements for remediating a brownfield to levels suitable for residential end use

Available from: <http://register.dls.virginia.gov/vol18/iss03/v18i03.pdf>

Implementation Funding Sources

1. **Virginia Department of Historic Resources:** Provides information on the application of the Certified Local Government Program to local historical preservation projects and the availability of tax credits for privately funded historic preservation projects

Available from: <http://www.dhr.virginia.gov/clg/clg.htm>

2. **Environmental Protection Agency Brownfield Program:** Details federal funding availability through the EPA's Brownfield and Land Revitalization Office

Available from: <http://www.epa.gov/brownfields/>

3. **Virginia Department of Housing and Community Development Enterprise Zone Program:** Provides eligibility, access, and value information for Enterprise Zone Tax Incentives in Virginia

Available from: <http://www.dhcd.virginia.gov/index.php/community-partnerships-dhcd/downtown-revitalization/enterprise-zone.html>

4. **Cameron Foundation:** Describes application process and available funding for preserving historic structures in Petersburg

Available from: <http://camfound.org/grants/before-you-apply/types-of-grants>

5. **Virginia Department of Game and Inland Fisheries:** Outlines availability and purpose of grants designed to assist localities in Virginia with developing public boating facilities

Available from: <http://www.dgif.virginia.gov/boating/access/grant>

