

REVITALIZATION & ACTION PLAN

PREPARED FOR:
WHITPAIN TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA



COMMITTEE MEMBERS:

Fred Conner, Vice-Chairman, Treasure
Tony Greco, Secretary, Board of Supervisors
Roman Pronczak, Township Manager
E. Van Rieker, Township Planner
Dave Mrochko, Assistant Township Manager
Jim Blanch, Township Engineer
Kurt Baker, Director - Parks & Recreation
Bill H. McManus, Assistant Zoning Inspector
Diane Burgess, Community Resident
Jerry Burgess, Community Resident
Athena Cummings, Community Resident
Otis Hightower, Community Resident
Alice Johnson, Community Resident
Jeff Featherstone PhD, Center for Sustainable Communities - Temple
Kris Matzko, Environmental Protection Agency
Joe McDowell, Environmental Protection Agency
Steven F. Ware, AICP, PP, TOWNSHAPES LLC
Bob Adams, Wissahickon Valley Watershed Assn.
Dave Froehlich, Wissahickon Waterfowl Preserve, LLC

THIS STUDY WAS PREPARED BY:

SIMONE COLLINS LANDSCAPE ARCHITECTURE
HUNT ENGINEERING
URBAN PARTNERS
ENVIRONMENTAL STANDARDS

FEBRUARY 2013
SC#: 12013.10

TABLE OF CONTENTS

Chapter 1: Background	2
Neighborhood Challenges and Opportunities	2
Project Goals	4
Flood Mitigation and Stormwater Control	5
Brownfield/ Superfund Site Reutilization	7
Neighborhood Revitalization	8
Public Participation Process	9
Chapter 2: Neighborhood Revitalization	12
Neighborhood Revitalization Analysis	12
Circulation	12
Streetscape	15
Streetscape Recommendations	16
Open Space and Recreation Facilities	17
Neighborhood Redevelopment	20
Chapter 3: Brownfield Site Revitalization	26
Superfund Site	26
Planning and Design Recommendations	28
Chapter 4: Flood Mitigation & Stormwater Control	38
Stormwater Analysis	38
Center for Sustainable Communities Study	40
Chapter 5: Plan Recommendations & Timeline	44
Recommendations	44
Potential Funding Sources	47
Appendix	52

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 1:

PROJECT BACKGROUND

The neighborhood of West Ambler is located in the northeast corner of Whitpain Township, Montgomery County, Pennsylvania. It is bounded to the south by the Wissahickon Creek, to the east by Upper Dublin Township, and to the north by the SEPTA railroad right-of-way, which creates the border between the Borough of Ambler and Whitpain Township. See project area location map.

With its high-density dwellings and adjacent (and sometime integral) industrial uses, West Ambler is in some ways indistinguishable from the Borough of Ambler. The community's legacy includes having once been home to many of the hardest-working, but lowest paid laborers at the nearby asbestos material factories. Remnants of the factories, their associated dumps, and tailings ponds are still visible today. The neighborhoods industrial history, along with other factors outside the control of residents and business owners, continues to have a deleterious effect on the community's quality of life and property values.

In addition to the legacy of asbestos manufacturing and contaminated waste, West Ambler is also subject to the recurrent impacts of flood waters from the Rose Valley Creek. During significant rain events, the Rose Valley Creek can breach its banks and the walls of the existing "sluice-way", flooding the neighborhood. Most recently, two storms in 2009 and two others in 2011 required evacuations and emergency rescue operations to protect residents.

Neighborhood Challenges & Opportunities

Whitpain Township's neighborhood of West Ambler faces several challenges to its' revitalization including flooding, major environmental contamination, and absent or aging infrastructure that has resulted in depressed property values and a quality of life that is not as positive as in other sections of the Township.

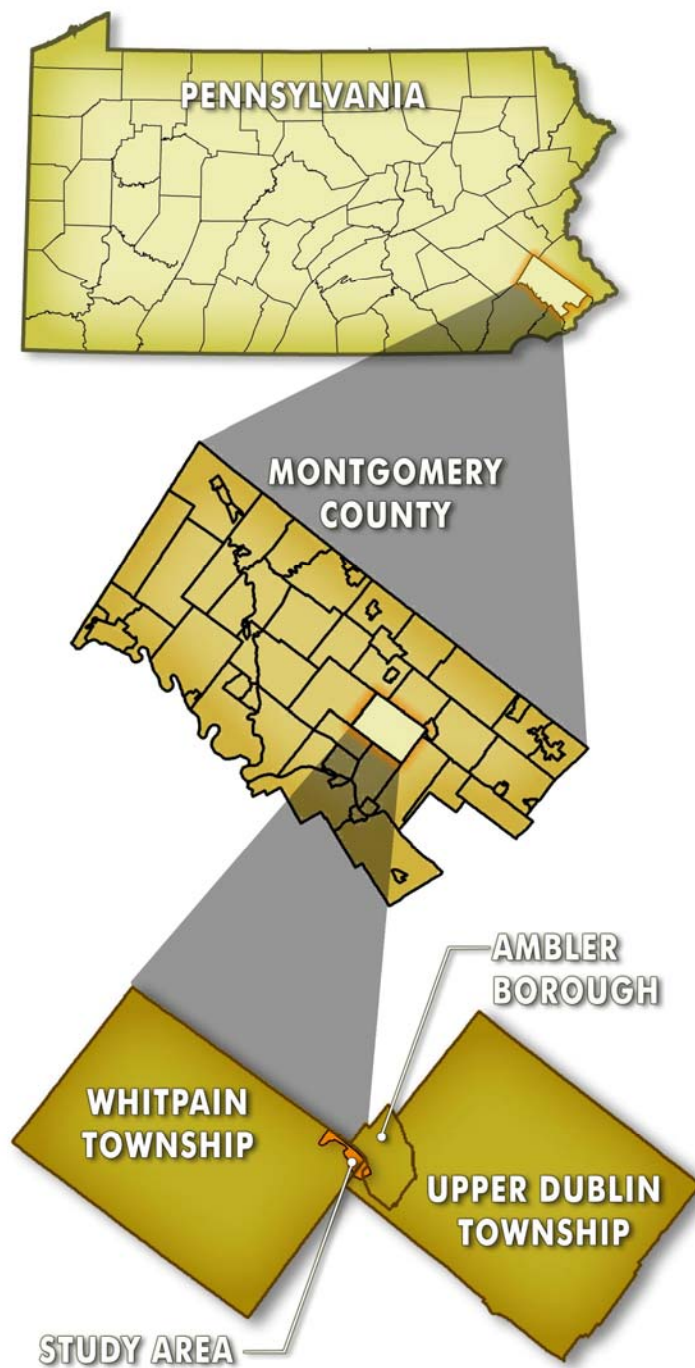


Figure 1.1 Project Location

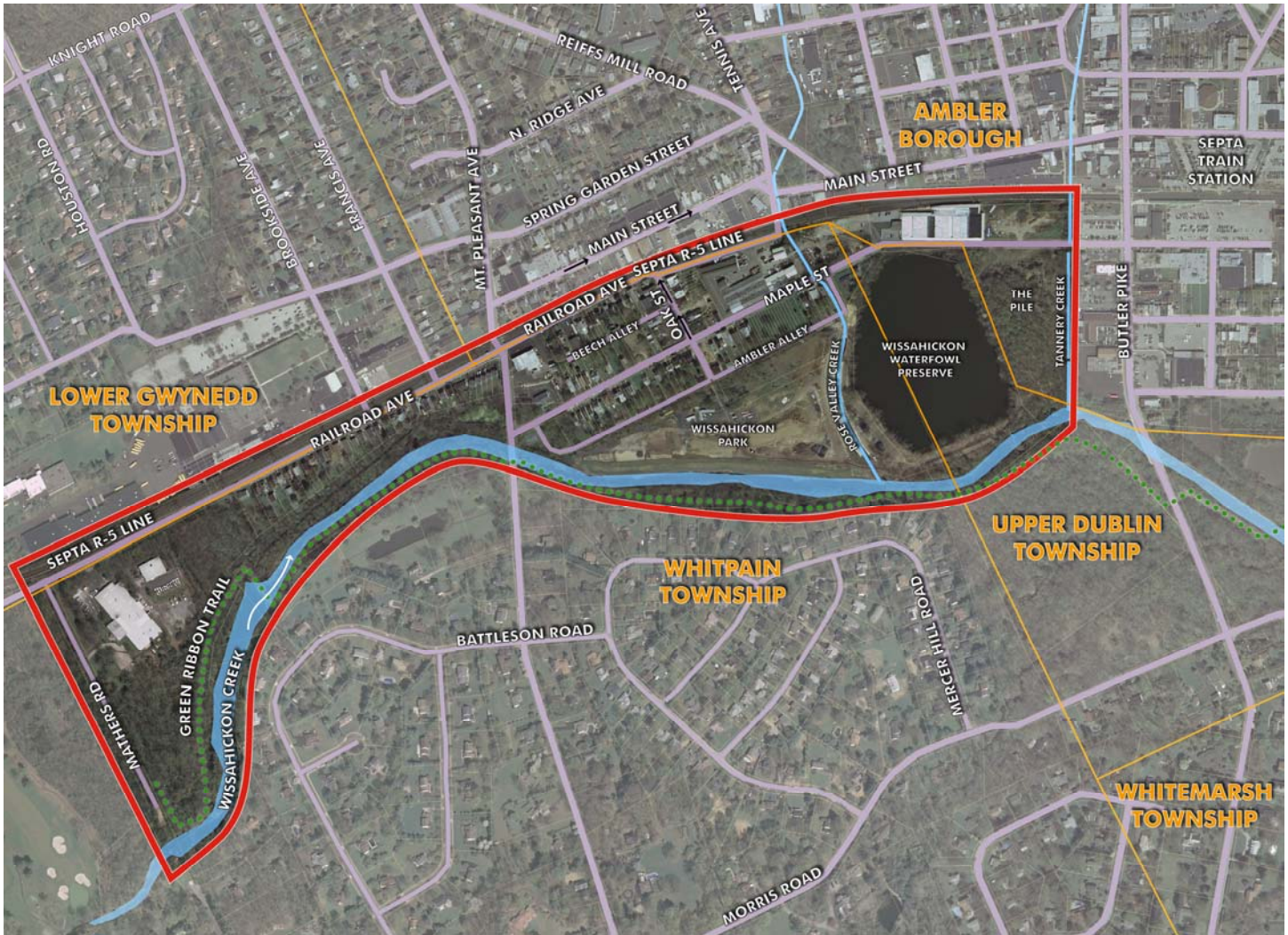


Figure 1.2 West Ambler Study Area

The negative aspects of West Ambler's heritage as an industrial village continue to define this neighborhood, even as serious environmental contamination and regional flooding issues are being addressed by local and federal government agencies.

Despite these challenges, West Ambler has an equal number of great opportunities that potentially outweigh these challenges. The West Ambler project area is within easy walking distance of the Ambler Train Station providing access to regional mass transit. A reinvigorated Borough of Ambler presents West Ambler residents with close-to-home opportunities for shopping, dining, and entertainment. West Ambler is located on the Wissahickon Valley Watershed Preserve's (WVWP) Green Ribbon Trail, a 200 acre linear greenway preserve along

the Wissahickon Creek that extends from Upper Gwynedd Township to Fort Washington State Park, providing residents with direct access to incredible open space resources. Existing property values provide opportunity for enhanced real estate values, as the area's larger challenges are successfully addressed. The neighborhood's vacant parcels, double lots, old industrial parcels, and underutilized lots offer opportunities for infill development.

The West Ambler Revitalization and Action Plan is a tool to create a coordinated community effort aimed at the revitalization of the West Ambler neighborhood. The plan combines the many studies and initiatives centered on the West Ambler neighborhood. The plan's many goals and findings will be coordinated into a plan

of action with benchmarks and timelines. To develop this plan and guide its implementation, the Township retained a multi-disciplinary consultant team, and formed a committee of Township officials and interested community members to help guide and work with the consultant team.



Figure 1.3 *Project Goals*

Project Goals

Reaching the ultimate goal of a safe, successful, and vibrant West Ambler neighborhood will require the resolution of three broad initiatives::

Flood Mitigation and Storm-Water Control. A study is being completed by the Temple University Center for Sustainable Communities for the Wissahickon Creek Watershed including the Rose Valley Creek Watershed within the West Ambler neighborhood. It will identify causation sources of flooding; short-term and long-term flood mitigation measures; storm-water improvements, potential funding sources, and an implementation plan for improvements to the Rose Valley Creek and sluice-way.

Brownfield / Superfund Site Reutilization. US EPA is currently in the process of implementing an emergency response cleanup plan and developing a long term remediation plan for the 37.64-acre BoRit Superfund site. The site has three (3) areas:

Whitpain Township's 17.73-acre site, formerly Wissahickon Park;

The Wissahickon Waterfowl Preserve's 14.0-acre reservoir site (located in Whitpain and Upper Dublin Township); and

The 5.91-acre "pile" site located in the Borough of Ambler (currently up for sheriff's sale, the site has no current owner).

The Action Plan will facilitate community involvement to develop practical reutilization options for the full site, coordinate site partners, identify relevant milestones and governmental responsibilities both during and after the clean-up processes, identify potential funding sources, and layout steps to implement the improvements necessary to reutilize the BoRit Superfund Site.

Neighborhood Revitalization. Develop a plan for revitalization of the community. The plan will identify and prioritize improvements, identify options for public-private partnerships, incorporate preferred solutions for flood control and for reutilization of the Superfund Site into a cohesive neighborhood plan.



Figure 1.4 *West Ambler is a diverse 'Village' with businesses, homes, and community centers such as churches and the Legion Post.*

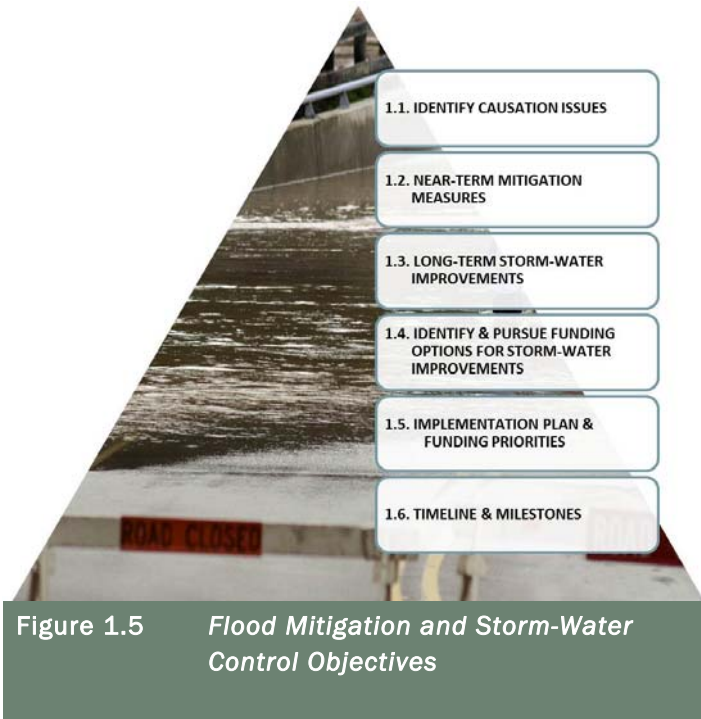


Figure 1.6 *Rose Valley Creek Sluice-way north of West Maple Street.*

Flood Mitigation & Stormwater Control

The Rose Valley Creek has a watershed of approximately two (2) square miles with its headwaters located near Temple University's Ambler Campus in Upper Dublin Township. It flows in a southerly direction through the Borough of Ambler via a network of pipes and culverts that convey the waterway toward its confluence with the Wissahickon Creek. The convergence of the two creeks is located just south of and adjacent to West Ambler.

In the past, the Rose Valley Creek was utilized as a mill race with the creek running through a concrete culvert, eleven (11) feet wide and approximately four (4) feet deep. This culvert is estimated to have been constructed in the early 1900's. The creek runs this course with the culvert being mostly closed, but also open at some points. The Rose Valley emerges from the culvert approximately 850-feet upstream from the confluence with the Wissahickon Creek.

A number of attempts have been made in the past to resolve the neighborhood's flooding issues. Most significantly, in the early 1980's a plan was devised to divert some storm water during high-flow events through a

seven (7) foot diameter steel pipe. The area of diversion is located near the intersection of North Main Street and Tennis Avenue in the Borough of Ambler. This seven (7) foot diameter steel pipe extends south under the CONRAIL right-of-way until it reaches a junction box on West Maple Street in West Ambler. At the junction box, the flow from the pipe is channeled into two (2) smaller pipes which then discharge at the end-wall where the Rose Valley Creek emerges from the concrete culvert. The junction box is contributing to the acceleration and surcharging of the creek by constricting the flow through this area.



Figure 1.7 *Damage to warehouse and West Maple Street after Tropical Storm Lee in 2011.*

In the major area of flooding near the intersection of West Maple Street and Chestnut Street, there are six (6) properties which have required evacuation and rescue operations in the past. The floodwaters near these properties spill over West Maple Street from the sluiceway, which is an open concrete culvert with one side actually being the foundation of a warehouse compound. When storm flows are constricted by flowing under West Maple Street, the water breaches the walls of the sluiceway and floods onto West Maple Street with great velocity. In the summer of 2011, the cumulative effects of much higher than average annual rainfall amounts combined with Hurricane Irene and Tropical Storm Lee caused a partial collapse of the warehouse.

Because of its frequent, and sometimes life threatening flooding, the Rose Valley Creek is an important focus area of an ongoing research project by Temple University's Center for Sustainable Communities (CSC). A team of CSC researchers is currently engaged in a \$1.2 million, 30-month study to assess, model, and map flooding conditions in the Wissahickon Creek Watershed in Montgomery and Philadelphia counties. The study includes the creation of a Digital Elevation Model for the watershed; an evaluation and field verification of flood elevations and stream obstructions; hydrologic/hydraulic modeling; the preparation of new 100- and 500-year floodplain maps and floodways; and development of an enhanced storm-water management plan for the watershed. Whitpain Township anticipates partnering with the CSC to create new flood hazard maps, computer simulations depicting water flow and flooding in different flood events, and to identify specific storm-water improvements in West Ambler and upstream. Modeling will be conducted on the improvements to determine the potential reduction of flooding and pollution as well as the potential costs. The West Ambler portion of the study is expected to be completed in 2013.



Figure 1.8 Damage to Tennis Ave after Tropical Strom Lee in 2011.



Figure 1.9 Flood Prone Areas of West Ambler.



Figure 1.10 *Brownfield / Superfund Site Reutilization Objectives.*

Brownfield/Superfund Site Reutilization

The seventeen (17) acres of undeveloped space between the Wissahickon Creek and West Ambler's Ambler Alley was once a heavily used community park known as Wissahickon Park. As late as the 1960s, the tract had large mounds of asbestos waste piled on it. The mounds were flattened and covered with soil to create a park to serve residents of the area. In October 1984, the park



Figure 1.11 *View of Ambler from atop the 'Pile'.*

was closed due to the potential risks and liability from the large amounts of Asbestos Containing Material (ACM) remaining in the surficial soils of the tract. The site is currently undergoing remediation actions by the U.S. Environmental Protection Agency (EPA) as a "Superfund Site." The current phase of activity is referred to as "emergency removals". Since 2008, substantial efforts by EPA have been undertaken to remove some ACM waste from the banks of the Wissahickon Creek, Rose Valley Creek, and Tannery Run and also to cover, cap and stabilize these areas to contain the remaining waste. The cap and cover being utilized by EPA is a geotextile liner, covered with two (2) feet of clean fill. The top 4 to 6 inches of the fill is topsoil.

Beginning in 2009, EPA commenced a Remedial Investigation and Feasibility Study (RIFS) of the entire 38-acre BoRit Site to determine the best, long-term remediation options. Today, "emergency removal" activities and the RIFS are continuing concurrently. The emergency removal actions are scheduled to be completed in 2013.

In addition to Whitpain's 17-acre parcel, the BoRit Site includes areas known as the "asbestos pile" and the "reservoir." The six (6) acre property in Ambler Borough known as the "pile" was mostly a 20 to 30-foot tall hilltop wedged between the confluence of the Wissahickon Creek, Rose Valley Creek, Tannery Run and

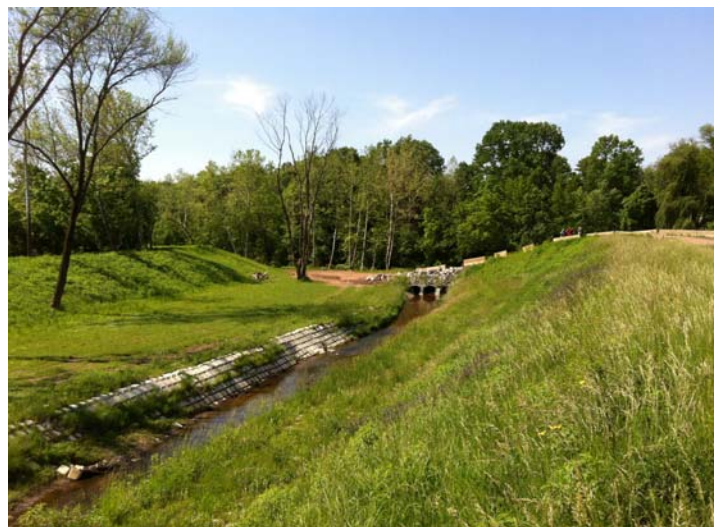


Figure 1.12 *The EPA bank restoration of Rose Valley Creek in Wissahickon Park .*

what has become a small lake. Throughout 2005, the property was the subject of considerable area interest after a development company unsuccessfully proposed capping the parcel and building a 17-story condominium tower on top. The very public debate over the project helped prompt the ongoing EPA actions. The Pile is currently up for sheriff's sale.

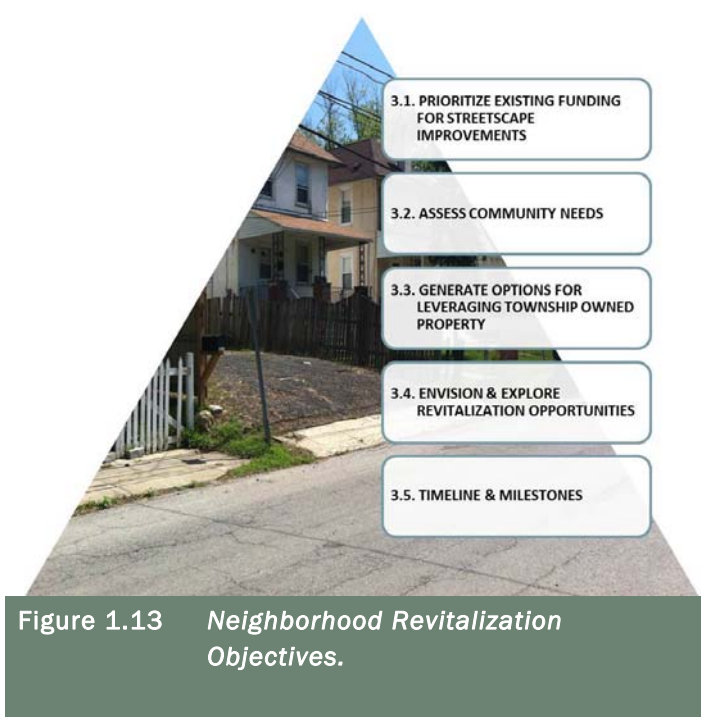
The 15-acre "Ambler Reservoir" parcel includes the ten (10) acre lake and adjacent wetlands that lie mainly in Upper Dublin Township. This body of water had served as a tailings pond for the asbestos factories that once operated nearby. Early in 2006, the Wissahickon Waterfowl Preserve (WWP), a subsidiary of the Wissahickon Valley Watershed Association (WVWA), took ownership of the tract. The National Audubon Society has since designated the area an Important Bird Area (IBA) because of the many species of waterfowl that use the site for breeding and resting during migration. After remediation of the site, WWP seeks to install amenities along West Maple Street that would promote birding and improve the aesthetic value of the area.

Additional information on the BoRit Site is available at the following websites:

[HTTP://WWW.EPA.GOV/REG3HWMD/NPL/PAD981034887.HTM](http://www.epa.gov/reg3hwmd/npl/PAD981034887.HTM)

[HTTP://WWW.BORITCAG.ORG/](http://www.boritag.org/)

[HTTP://WWW.WVWA.ORG/PDFS/WVWA-ACA.PDF](http://www.wvwa.org/pdfs/WVWA-ACA.PDF)



Neighborhood Revitalization

The effects of flooding, environmental contamination and numerous other factors have combined to depress both the property values and quality of life of West Ambler residents and business owners. Despite these negative characteristics, the neighborhood and surrounding area have great potential if the risks of flooding can be mitigated and the future land use issues associated with the adaptive reuse of the Superfund Site can be solved.

West Ambler's positive attributes include proximity to transportation networks, especially the Ambler regional rail station that is just blocks away. Nearness to Ambler's increasingly revitalized Main Street and Boiler House districts provide employment and cultural opportunities. The fine educational resources of the Wissahickon School District, Montgomery County Community College, and Temple University's Ambler Campus are also all close-by.

There is also tremendous potential for access to and enjoyment of the natural resources surrounding West Ambler. There are nearly 60-acres of open space and

natural areas between Butler Pike and Mt. Pleasant Avenue roughly centered on the Waterfowl Preserve. All of the area's municipal Open Space Plans call for connecting their valuable green spaces to the Wissahickon Green Ribbon Trail which runs parallel to the West Ambler neighborhood along the Wissahickon Creek.

In addition to the larger contamination and flooding problems, there are more localized infrastructure issues that should be addressed toward revitalization of the neighborhood.

Public Participation Process

The public participation process was conducted over a nine month period and consisted of a series of five committee meetings and four public meetings. All of the committee meetings were held at the Township. The public meetings were held at the Daniel W. Dowling American Legion Post, which is located on West Maple Street in the West Ambler neighborhood. Generally, all meetings were very well attended and there was a substantial amount of lively discussion at each meeting.

THE PROJECT MEETING SCHEDULE IS BELOW:

COMMITTEE MEETING #1	TUE MAY 22, 4:00 PM
PUBLIC MEETING #1	MON JUNE 4, 7:00 PM
COMMITTEE MEETING #2	WED JUNE 27, 4:00 PM
COMMITTEE MEETING #3	WED SEPT 19, 4:00 PM
PUBLIC MEETING #2	MON SEP 17, 7:00 PM
COMMITTEE MEETING #4	WED OCT 17, 4:00 PM
PUBLIC MEETING #3	MON NOV 19, 7:00 PM
COMMITTEE MEETING #5	WED FEB 14, 4:00 PM
PUBLIC MEETING #4	MON FEB 25, 7:00 PM

All project meeting minutes were posted on the Township website along with a copy of the Powerpoint presentation from each meeting. All meeting minutes are contained in the appendix of this report.

At the public meetings, attendees developed a series of Goals, Facts and Concepts about the project site. These public suggestions were recorded and are illustrated here.

Additionally, there were several meetings between the Township / consultant team and the EPA team over the

course of the project. The Township / consultant team also met with the Borough of Ambler to discuss the project, and the Township / consultant team made a presentation to the Community Advisory Group (CAG) on December 5, 2012 to review the project with the larger community. The CAG is composed of citizens and officials from Whitpain Township, Ambler Borough, Upper Dublin Township that meets bi-monthly to review the clean-up process at the entire Superfund Site.

- GET THE PARK BACK
- FLOODING SOLUTIONS PRIORITY #1
- PRIORITY ON NEED NOT BEAUTY
- WEST AMBLER IS A BOS PRIORITY
- NEED COMMUNITY BUY-IN FOR SUCCESS
- ADDRESS BIG ISSUES TO ATTRACT PRIVATE INVESTMENT
- INCREASE HOME OWNERSHIP
- FOCUS TOWNSHIP ON WEST AMBLER

GOALS



Figure 1.14 The public's goals, facts, and concepts are solicited during an open brainstorming session.

- HISTORY OF NEIGHBORHOOD FRUSTRATION
- \$250,000 FOR PHASE I STREETSCAPE
- FEMA PRELIMINARY MAPS 1970 HYDROLOGY OUTDATED
- FLOOD FUNDING \$150,000
- MAPLE ROAD NO CROWN
- ROUTE ON TO MT. PLEASANT, VERY HARD TO CROSS RR
- TOO MUCH POLICE ADDRESS UNDER- LYING ISSUES
- 17 ACRE – WEST AMBLER PARK
- GROUND WATER RISES ON MAPLE (335)
- RACCOON PROBLEMS IN BIDDLE WAREHOUSE
- 327 W. MAPLE HOUSE DEMO ILL-ADVISED
- AREA OF VISIBLE ASBESTOS AT RESERVOIR EMBANKMENT
- OAK STREET FIRE JUST HAPPENED
- WAREHOUSE OWNER HAS OPTION TO REBUILD
- CRACKS IN WAREHOUSE WALLS (TO BE ADDRESSED IN “WEEKS”)
- IMPROVEMENTS TO TOT-LOT NEEDED
- BARRIER OF TRACKS
- WAREHOUSE UNSIGHTLY & SAFETY CONCERNS
- DRAINAGE ON BACK ALLEY ISSUES (326)
- RAT & MICE PROBLEM
- RAT TRAP DONATION HAPPENED IN PAST
- WALL IN SMALL PARK CRUMBLING
- MULTI-CULTURAL COMMUNITY
- NO STREET STORM DRAINS
- TREE ON POWER LINE CORNER OF OAK & MAPLE NEEDS TRIMMING
- EPA DRIVING WRONG WAY ON ONE WAY STREET (OAK)
- VACANT LOTS VEGETATION IN SIDEWALK
- TOWNSHIP CODE REVIEW PROCEDURES FOR TENANT COMPLAINTS
- RESERVOIR SPRING FEED TERRA COTTA PIPE

FACTS



- GET FUNDING FOR FLOODING REMEDIATION
- COMMUNITY BUY-IN ON FUTURE PHASES
- CREATE UPSTREAM IMPROVEMENTS TO HOLD WATER
- WAREHOUSE PRIVATE-TOWNSHIP MUST ACT TO CORRECT DAMAGE
- FOCUS ON ‘COMMUNITY’ FOR SAFETY ‘COMMUNITY WATCH’
- ADDRESS ASBESTOS AROUND RESERVOIR (WHAT IS PLAN?)
- INCLUDE WACA IN COMMUNITY MEETINGS
- TRANSPORTATION FOR KIDS IN SUMMER TO YMCA
- FENCE OFF OPEN SPACE ON TOWNSHIP LAND TO CREATE TEMPORARY PARK
- NEED 4 WAY STOP SIGN AT OAK AND MAPLE
- SPEED HUMP SIGNS
- IDENTIFY GRANT \$ FOR W AMBLER
- MAPLE STREET DESIGN PROCESS
- TREES ALONG STREETS
- FORWARD THINKING WITH TODAY’S IMPROVEMENTS
- PERVIOUS PAVING – GREEN STREETS PROGRAM
- SIDEWALKS ON RAILROAD AVE
- EVERGREEN BUFFER ALONG TRACKS
- EARLY IDENTIFICATION OF BUY OUT PROPERTIES
- FEMA PURCHASE BUY OUT PROPERTIES
- PLAYGROUND SAFETY DISTANCE
- UPSTREAM WATER STORAGE
- REDEFINED 100 YR FLOOD PLAIN
- FEMA REVIEW 12-16 MONTHS
- STOP SIGNS/ BUS STOPS ON RAILROAD
- ADD STREET STORM DRAINS
- 2013 FLOOD HAZARD AREAS
- NEW PLAYGROUND SURFACE
- BOYS & GIRLS CLUB
- REPAIR AGEING INFRASTRUCTURE
- NEW EQUIPMENT FOR PLAYGROUND
- STREET LIGHTING
- SWINGS
- INDOOR/ OUTDOOR BASKETBALL ORGANIZATION LEAGUES
- RECREATION BUILDING ON TOWNSHIP LOTS WITH SENIORS
- GET TOT LOT & BASKETBALL COURT INTO NEW PARK SITE
- SENIORS CITIZENS PROGRAMS
- STREET RESURFACING NEEDED
- COMMUNITY SERVICE PROJECTS
- DEDICATION PARK TO COMMUNITY “HERO”
- WALK ALL OF MAPLE STREET 200 BLOCK
- SPOT REPAIRS SUMMER
- STREET SWEEPING NEEDED

CONCEPTS



THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 2: NEIGHBORHOOD REVITALIZATION

Neighborhood Revitalization – Analysis

The West Ambler neighborhood has a mix of opportunities and challenges that were identified and discussed with the community throughout the planning process. While this study primarily addressed physical issues, economic, social and related issues were also discussed. Certainly, the majority of physical issues relate to the Superfund site and the flooding issues along the Rose Valley Creek. These challenges are discussed in more detail later in this report. However, many of the issues identified by the

community and consultant team can be viewed separately from the larger Superfund site and flooding issues, and are identified and discussed below.

Circulation

Vehicular and pedestrian circulation throughout the neighborhood was an important topic of interest and discussion. As in most residential neighborhoods, community members were concerned with motor vehicles traveling through the neighborhood too fast and not stopping at street intersections. The lack of pedestrian infrastructure was also a big concern. Residents felt that the three (3) school bus stops in the neighborhood lacked adequate waiting space (expanded sidewalks) and that there were no sidewalks from these bus stops to other parts of the neighborhood. A few of these issues were addressed by the Township during the planning process (installation

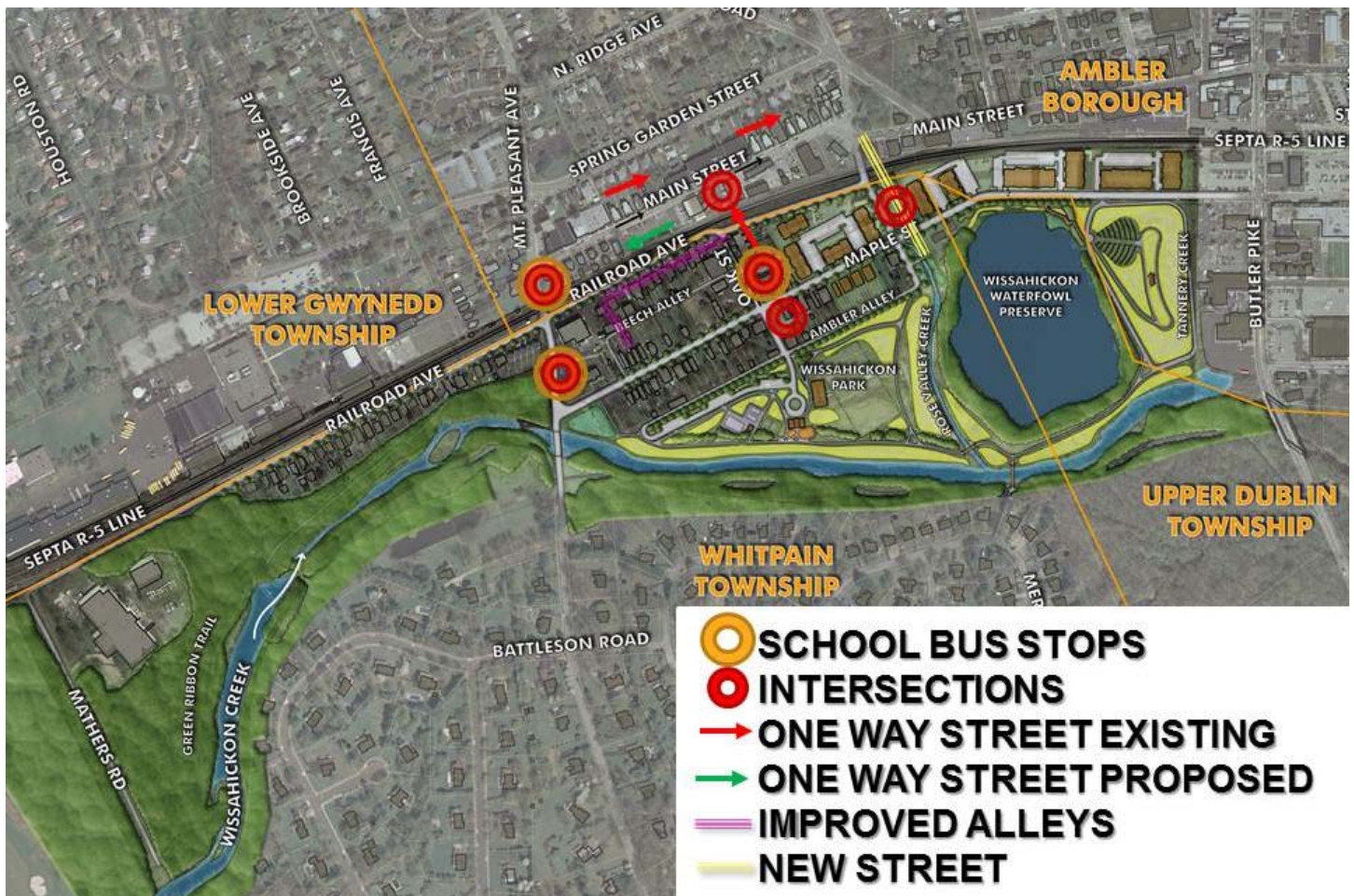


Figure 2.1 During the public process many concerns about the neighborhood circulation were discussed.

of a new stop sign at Oak and Maple, for example) and others are included in the recommendations for this study.

Changing some two-way streets to one-way streets was discussed and creating a new street – extending Tennis Avenue from Railroad Avenue to West Maple Street through one of the industrial parcels (when this parcel is redeveloped) was also discussed.

Chief among these preliminary circulation recommendations was that a traffic engineer observe and analyze the conditions in the West Ambler Neighborhood and issue a report to recommend and/or expand on the recommendations made as a part of this study.

In the later part of 2012, the Township contracted with McMahon Associates – the Township’s transportation engineer to analyze the project neighborhood for circulation and traffic control and also to examine where there may be a need for additional stop signs or other traffic controls. McMahon Associates examined all of the traffic and traffic safety issues discussed at the community meetings. On January 23, McMahon Associates issued two letter reports entitled: 1. Multi-way Stop Analysis for Mt. Pleasant Avenue / West Maple Street and 2. Circulation and Traffic Control Study for West Ambler. The narrative recommendations from each letter are included as an appendix to this report. The traffic counts and circulation diagrams are not, but are available from the Township. The recommendations from the McMahon letter reports are as follows:

MULTI-WAY STOP ANALYSIS FOR MT. PLEASANT AVE. / WEST MAPLE ST..

- **Install** a “STOP” (R1-1) sign, a white stop bar (24” wide), and “STOP” pavement marking along both approaches of Mt. Pleasant Avenue at West Maple Street;
- If traffic conditions are monitored, and the Township prefers to eliminate the southbound stop sign to eliminate queuing through Railroad Avenue, then the following additional signage should be provided at a future date to the other approaches:
- “ONCOMING TRAFFIC DOES NOT STOP” plaque (W4-

4bP) for the northbound approach of Mt. Pleasant Avenue, and

- “TRAFFIC FROM RIGHT DOES NOT STOP” plaque (W4-4aP) for the westbound approach of West Maple Street.
- Install a “STOP AHEAD” (W3-1) sign approximately 250 to 300 feet in advance of the new stop bars for each approach;
- Install a “DO NOT STOP ON TRACKS” (R8-8) sign at the southbound approach to the railroad crossing; and
- Install a modified “INTERSECTION AHEAD” (R2-7R) sign with a roadway name plaque (W16-8aP) approximately 75 feet in advance of the railroad crossing along the southbound approach.

The installation of a stop sign along the northbound approach of Mt. Pleasant Avenue or both approaches of Mt. Pleasant Avenue should improve the safety of all turning movements from West Maple Street to Mt.



Figure 2.2 Looking South along Mt. Pleasant from West Maple Street.

Pleasant Avenue given the sight distance restriction caused by the adjacent bridge structure over the Wissahickon Creek. If one of the alternatives was implemented and post-installation observations were to indicate any operational issues, then the intersection configuration could easily be modified to comply with the other (two-way) stop-control alternative, although non-traditional.

CIRCULATION AND TRAFFIC CONTROL STUDY FOR WEST AMBLER

MT. PLEASANT AVENUE/WEST MAPLE STREET INTERSECTION

Provide a three-way (multi-way) stop for all intersection approaches. Provide appropriate signage and pavement markings as noted in the separate letter report, which includes additional signage between Railroad Avenue and the railroad tracks for southbound Mt. Pleasant Avenue traffic to prevent vehicles from stopping on the tracks.

MT. PLEASANT AVENUE/RAILROAD AVENUE INTERSECTION

Designate through appropriate signage and pavement markings that the eastern leg of Railroad Avenue is one-way eastbound (ingress) only from Mt. Pleasant Avenue to Oak Street.

WEST MAPLE STREET

Provide a consistent 26-foot wide cartway that is striped to delineate a 6-foot wide shoulder/parking area along the



Figure 2.4 Looking East along Railroad Ave from Mt Pleasant Ave.

south side of the road and stripe the travel lanes to provide two 10-foot wide lanes.

RAILROAD AVENUE

Designate a 6-foot to 8-foot wide parking/shoulder area along the south side of the roadway through appropriate striping and signage from Mt. Pleasant Avenue to Oak Street.

OAK STREET

Re-designate through appropriate new signage and pavement markings that the flow of traffic along Oak Street will be converted from the current one-way northbound only to one-way southbound only from Railroad Avenue to West Maple Street. This will include a new stop sign along the Oak Street approach to West Maple Street.

Resurface and/or improve the pavement along Oak Street.

BEECH ALLEY

Provide appropriate signage to designate the flow of traffic to be from West Maple Street to Oak Street only. A stop sign should be installed at the alley intersection with Oak Street, along with signal indicating that the roadway is one-way and traffic cannot enter from Oak Street.



Figure 2.3 West Maple St looking east towards Chestnut Street.

Resurface and/or improve the pavement along Oak Street.

Streetscape

The existing streetscape in the project area exhibits a variety of conditions. While there exist sidewalks in good condition along some streets, other streets are completely lacking these facilities. Existing curbs are similarly in various conditions. In many locations, curbs have minimal reveals due to repaving and street repair over the years. Street lighting is spotty and there are no pedestrian scale light fixtures. There are no consistent planting of street trees in the neighborhood. The existing right of way width is almost fully utilized for the street cartways and sidewalks where sidewalks exist. There is limited room for street tree planting within the right of way.

There exists a very a limited storm drainage system in the project area. The existing system and the proposed improvement to this system are illustrated in this section of the report.

Residents along the south side of Railroad Avenue experience a unique challenge to their daily existence – the noise and dust of the SEPTA rail system that brings train cars past their part of the neighborhood every day. Residents identified the need for a safety barrier along



Figure 2.6 Typical streetscape improvement section.

this rail right-of-way and also the need to mitigate the noise and dust caused by the trains. The installation of a sound barrier wall was discussed with residents during the design process and residents felt that a sound barrier wall system would be an improvement welcomed by residents on Railroad Avenue.

Streetscape Recommendations

Recommended streetscape improvements in the project area include the provision of basic infrastructure designed to allow safe pedestrian circulation through the neighborhood while enhancing the aesthetic appearance of the community. These improvements include:



Figure 2.5 Conceptual Storm Sewer Plan

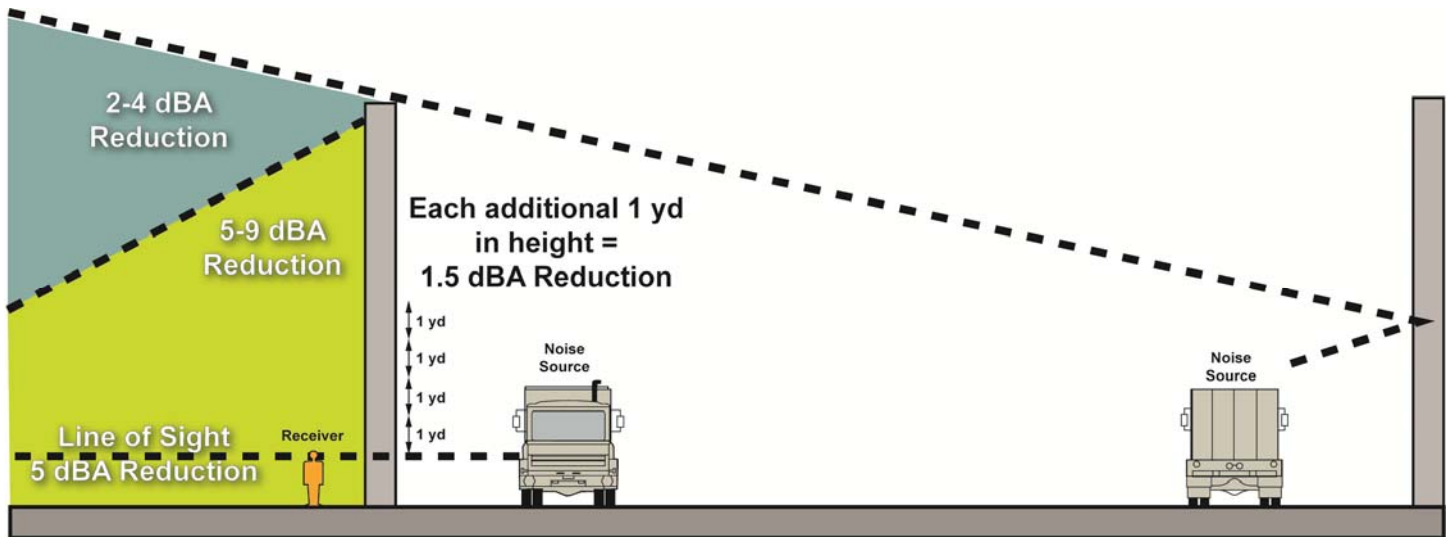


Figure 2.7 Sound barrier noise reduction

- New sidewalks on both sides of all streets and curbs where needed.
- Repaving of existing streets
- Crosswalks and sidewalk ramps that meet universal accessibility requirements.
- Street lighting and pedestrian level lighting
- Street tree planting wherever possible. Trees may need to be planted just outside of the public right of way on private land. This will require the agreement of the property owner(s).
- Expanded areas of paving at school bus stops
- Additional regulatory signage (stop signs, etc.)
- A new / expanded stormwater drainage system designed to accommodate normal rain events in the neighborhood. This system should be designed to include Best Management Practices (BMPs) wherever possible such as rain gardens and bio-swales designed to infiltrate stormwater back into the soil.
- Sound barriers along the length of Railroad Avenue along with new plant materials to soften the effects and appearance of the walls.

These streetscape and stormwater drainage improvements have been quantified and probable costs have been estimated as shown in the table below. Street by street information is contained in the appendix.

As previously discussed, the revitalization of the West Ambler neighborhood is also dependent on the positive actions and cooperation of Ambler Borough and Upper Dublin Township since they share both the Superfund site and the extended streetscape of West Maple Street from the project site to Ambler Borough and to Bethlehem Pike. Certainly, key to enhancing the desirability of the West Ambler neighborhood is the vehicular and most importantly the pedestrian experience from the neighborhood along West Maple Street. The improvement of the West Maple Street streetscape along the length of this road is a critically important adjunct to the work in Whitpain. Whitpain should work closely with Ambler Borough and Upper Dublin Township to ensure an enhanced streetscape is implemented in the near future.

LOCATION	ESTIMATED COST	COMMENT
RAILROAD AVE - WEST OF MT. PLEASANT AVENUE	\$ 565,956	INCLUDES \$298,000 FOR SOUND BARRIERS
RAILROAD AVE - EAST OF MT. PLEASANT AVENUE	\$ 596,454	INCLUDES \$287,000 FOR SOUND BARRIERS
OAK STREET - RAILROAD AVE TO MAPLE STREET	\$ 129,363	
OAK STREET - MAPLE TO PARK SITE	\$ 78,442	
MAPLE STREET - OAK STREET TO ROSE VALLEY CREEK AREA	\$ 220,276	
STORM SEWER SYSTEM	\$ 205,750	ENTIRE NEIGHBORHOOD
SUBTOTAL	\$1,796,241	
CONTINGENCY (20%)	\$ 359,248	
TOTAL ESTIMATED COST	\$2,155,489	

Figure 2.8 Streetscape Cost Estimate

Open Space and Recreational Facilities

A critical part to any community's quality of life are opportunities for access to and enjoyment of open space and parks. Presently, there are two (2) small open space areas in the West Ambler neighborhood. There is a small playground, West Side Park is located on Oak Street between Ambler Alley and West Maple Street. There is also a small green area called West Side Courts with a half basketball court at the intersection of West Maple Street and West Mount Pleasant Avenue.

As previously noted, Wissahickon Park served the community for many years. When the park was closed due

to contamination, the community lost this park facility. It is the Township's intent that when EPA's work at the park is completed, Wissahickon Park will again become available to the community for open space and recreational use. Park and open space use on the remediated Superfund site is not a new idea. The 2009 study: [Planning for the Future: Reuse Assessment for the BoRit Asbestos Site, Ambler, Pennsylvania](#), prepared by the EPA recommended adaptive reuse of the entire BoRit site for open space / recreation. In 2008-2009, The CAG also prepared concept plans for the adaptive reuse of Wissahickon Park.

There are many examples of contaminated sites, that after remediation and/or capping have been successfully utilized for parks and open space. This report highlights summary examples from around the world of other site so utilized.

The adaptive reuse of the Superfund Site will also provide direct access to the Green Ribbon Regional Trail network that parallels the Wissahickon Creek. This regional trail provides access to other regional trails and is a tremendous open space amenity. The open space and park is also an important amenity for the neighborhood and is critical infrastructure toward revitalization.

Since it may be 3 to 5 years until the adaptive reuse of the Superfund Site into a park is complete, the community suggested the use of the Township-owned lots on West Maple Street as a temporary park. The community concept is to provide a safe, green place for neighborhood children to play. The site is approximately 1 acre, and would be fenced with a 4 foot tall chain link fence, the existing grades smoothed out and seeded, some trees and benches added and other minimal improvements. Until the new Wissahickon Park is completed, this "Temporary Park" could provide some community greenspace over the short term. The decision on whether or not to utilize Temporary Park will be based on how soon Wissahickon Park might be available, if the flood study shows any liabilities with the property and other factors to be determined by the Township.



Figure 2.9 Above the existing West Side Courts and below West Side Park

Gas Works Park

1975 SEATTLE, WA

ENVISIONED BY RICHARD HAAG, SEATTLE'S AWARD-WINNING GAS WORKS PARK WAS ONE OF THE EARLIEST REMEDIATED SITES IN WHICH MATERIALS OF ENVIRONMENTAL CONCERN WERE KEPT ONSITE AND INCORPORATED INTO THE DESIGN OF THE PROJECT. A GASIFICATION PLANT OCCUPIED THIS SPACE BETWEEN 1906 AND 1956 LEAVING HYDROCARBONS AND TAR. WERE IT NOT FOR THE RECYCLING OF MUCH OF THE PLANT BUILDING AND SURROUNDING SOILS, THIS PROJECT COULD NOT HAVE BEEN COMPLETED BECAUSE OF THE GREAT COST OF REMOVAL. MOREOVER, THE APPLICATION OF GREEN REMEDIATION MEANT THAT THESE VAST AMOUNTS OF RECYCLED MATERIAL WERE NOT CONTRIBUTING TO SECONDARY ENVIRONMENTAL ISSUES. FORMING A ONE-OF-A-KIND PARK OVERLOOKING LAKE UNION, GAS WORKS HAS BECOME A PLAYGROUND FOR ADULTS AND CHILDREN ALIKE.

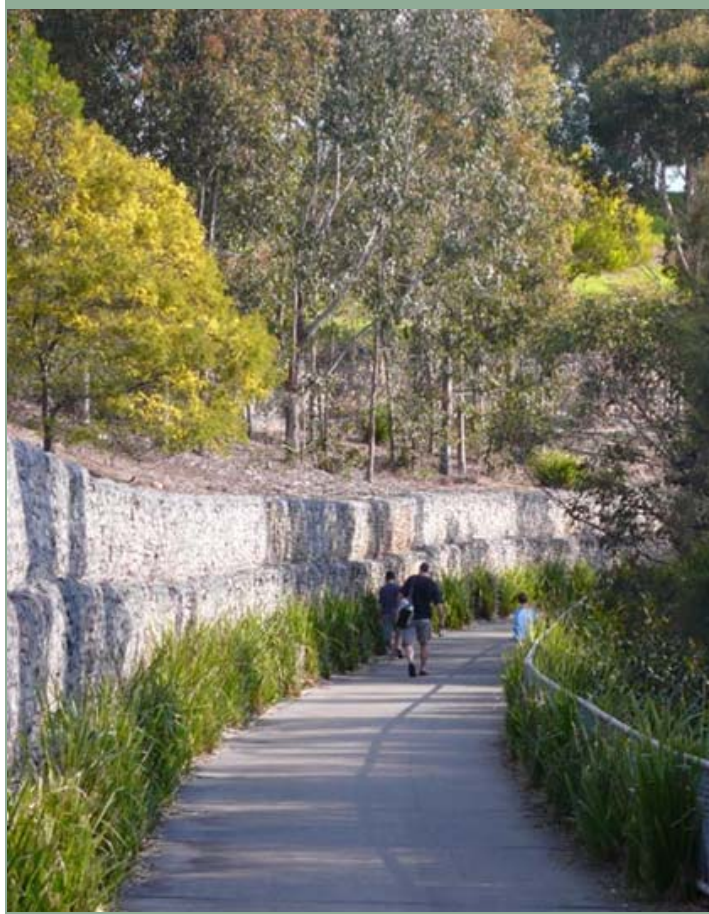


Millennium Park

(SYDNEY OLYMPIC PARK)

2001 SYDNEY, AUSTRALIA

This former domestic and industrial landfill contained asbestos, industrial hydrocarbons, acid sulfate soils, and petroleum waste. Peter Walker and Partners found a creative way to recycle and save money by burying the majority of the waste in pits or building it into clay-capped mounds forming the profile of the park. The Millennium Parklands, constructed for the 2000 Sydney Olympics is the largest project of its kind in Australia.



Westergasfabriek Culture Park

2003 AMSTERDAM, THE NETHERLANDS

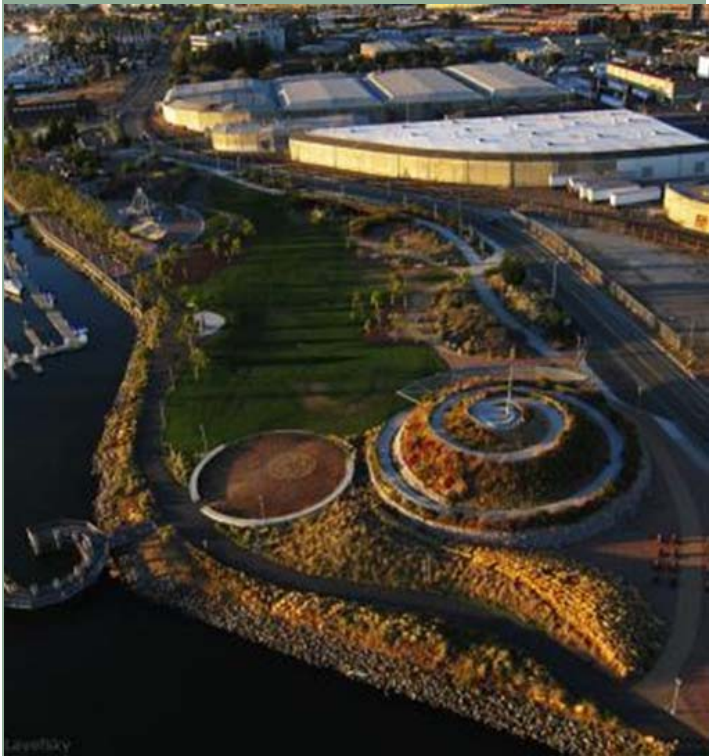
The site of this culture park was occupied by Amsterdam's largest gasworks from 1885 to 1967. This industrial heritage introduced aromatics, tar compounds, mineral oil, cyanide, and asbestos. Original plans to excavate and remove materials of concern would have cost in excess of 300 million euros. Instead, designer Kathryn Gustafson developed a plan requiring minimal removal by utilizing an asphalt cap contained with sheet piling. Final clean-up costs were reduced to below 15 million euros and secondary environmental issues associated with the transport of such a large volume of material were avoided almost completely.



Union Point Park

2004 OAKLAND, CA

This portion of the Oakland waterfront has since served as home to a number of industrial businesses that left petroleum, pesticides, and industrial solvents in their wake. A 1997 community initiated campaign to turn the former industrial site into a park, almost ended in failure when it was discovered that it would take as much as \$3 million to remove all the contaminated soil. A new plan to safely encapsulate soils under a large lookout hill within the park saved the project.



Item	Unit	Quantity	Unit Cost	Cost
Finish grade and seed	SF	33,500	\$0.50	\$16,750.00
Fencing	LF	740	\$35.00	\$25,900.00
Benches	EA	6	\$1,200.00	\$7,200.00
Trash receptacles	EA	4	\$900.00	\$3,600.00
shade trees	EA	12	\$350.00	\$4,200.00
Park sign	EA	1	\$500.00	\$500.00
Erosion and sediment control	ls	1	\$2,000.00	\$2,000.00
Subtotal				\$60,150.00
Contingency (10%)				\$6,015.00
total estimated cost				\$66,165.00

Figure 2.11 Probable cost of Development for Temporary Park

Neighborhood Redevelopment

When the Superfund Site clean up / remediation work is completed and the Temple Flood Study has identified new FEMA floodway and floodplain boundaries in West Ambler, it is highly probable that redevelopment interest in the neighborhood will increase. As a part of this study, a Residential Market Analysis has been completed. The Residential Market Analysis indicates that there is good potential for both residential sale and rental units, based on residential activity and sales in the project area over the last 5 to 8 years. The full Residential Market Analysis is contained in the appendix of this report. Resolution of the larger contamination and flooding issues, along with reasonable property values, proximity to transit, the Borough and its amenities, and

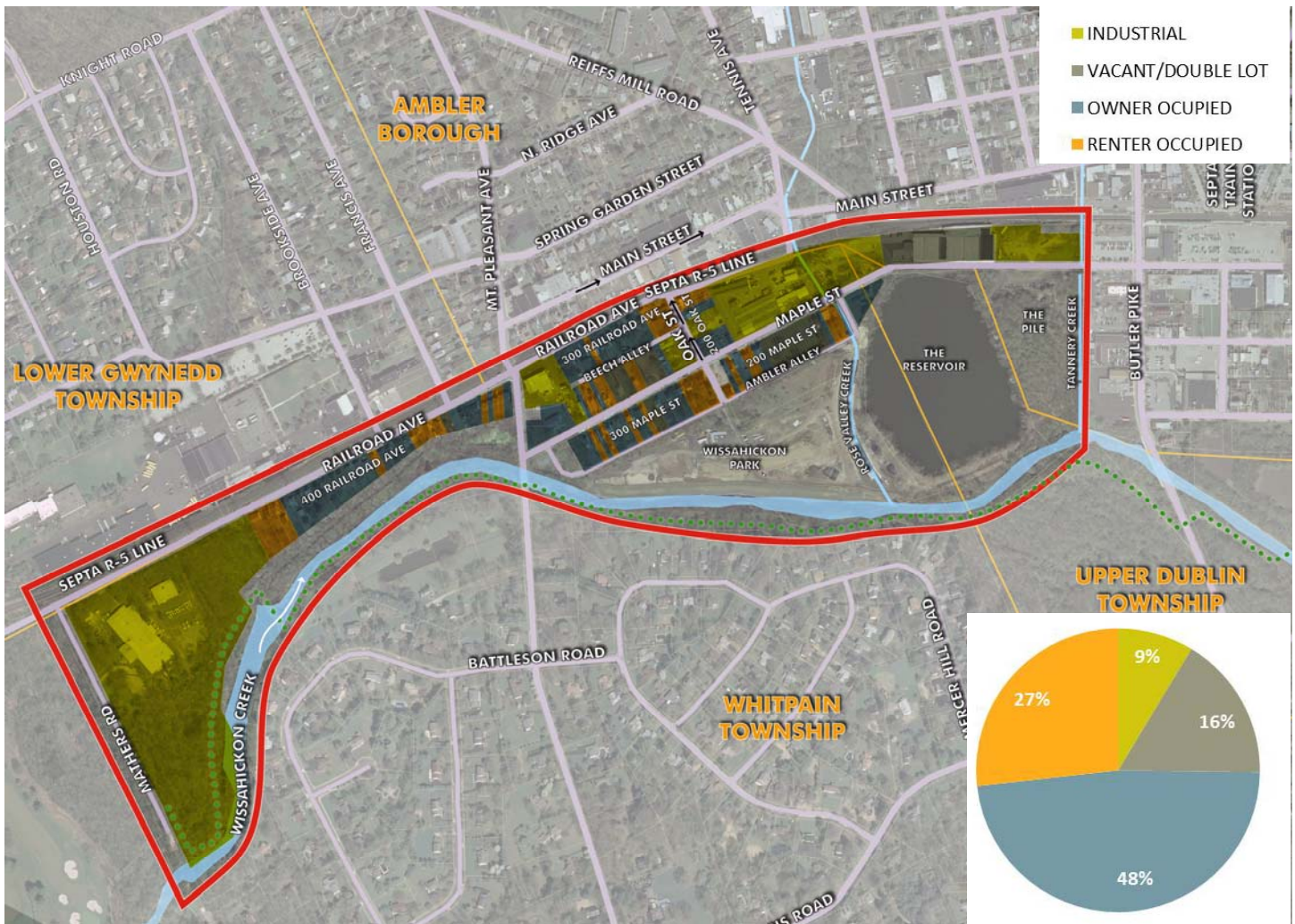


Figure 2.10 West Ambler Neighborhood Land Use

the economic vitality of the general area, all point to the likelihood of redevelopment activity in West Ambler.

Based on visual observations in the project area, the conditions of existing housing runs the full gamut from very good to poor, with most dwelling units in the “good” or “average” condition category. As redevelopment interest increases, renovations to existing homes is also likely.

Based on available property data, approximately 59% of existing residences/lots in the project area are owner-occupied; 26% percent are rental; 7% are industrial uses and 12% of the lots are “vacant”. These figures vary by block and the block-by-block data will help to pinpoint where infill development vs. property renovations may be most probable.

Initial redevelopment opportunities may occur on lots that are presently vacant. New development in the project area will accomplish several things: New construction will have the effect of raising property values for existing homes and properties; and, an influx of new residents to the neighborhood will bring new energy to the community. Increased property values for existing properties may enhance homeowner’s ability to leverage home value for capital for renovations.

There are several key properties that appear to be the best candidates for infill development.

The township-owned lots on West Maple Street appear to be some of the best candidate lots for infill development. This study speculates that single family residences, similar in size to those that existing presently in the neighborhood may be most appropriate. However, developer interest will most likely strive to construct higher density units to realize the greatest return on investment. The Township must decide how this land will be sold and confirm the development scenario that is desired. Presently, the land is zoned R-4 Village Preservation District that permits single family, two family and row houses (not to exceed seven units per building). Other special exception uses include small retail grocery and drugstores, home occupations, churches, libraries, recreational or community service buildings, and the

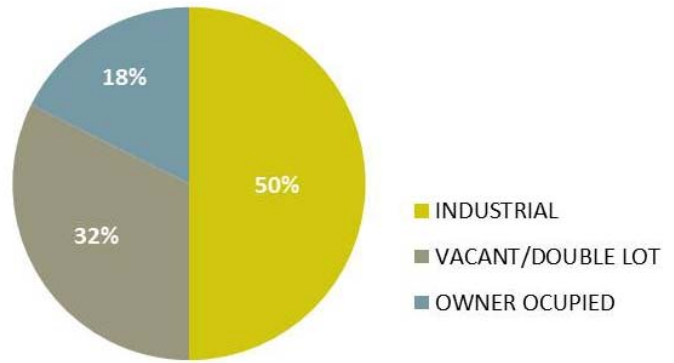


Figure 2.11 Maple 200 Block Landuse

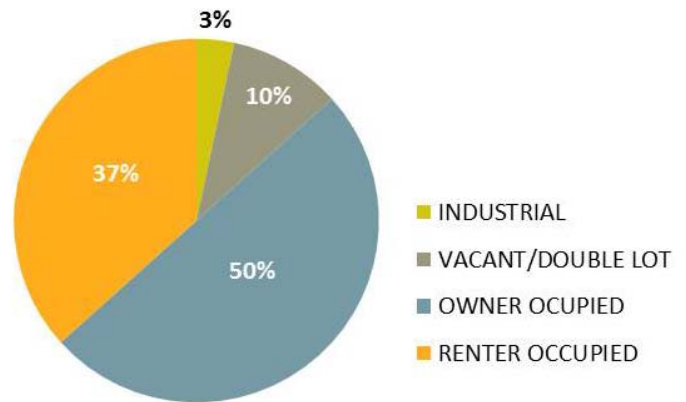


Figure 2.12 Maple 300 Block Landuse

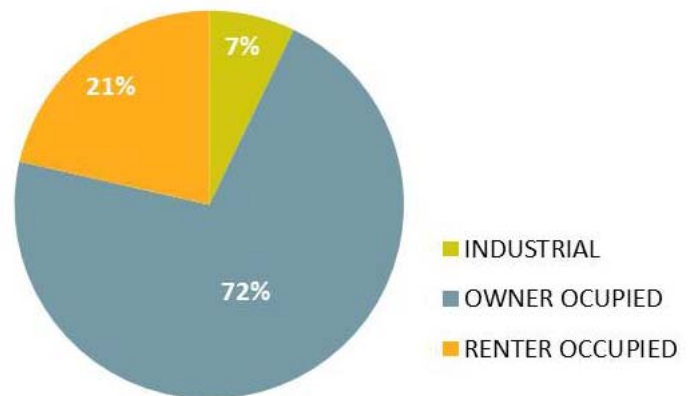


Figure 2.13 Railroad 300 Block Landuse

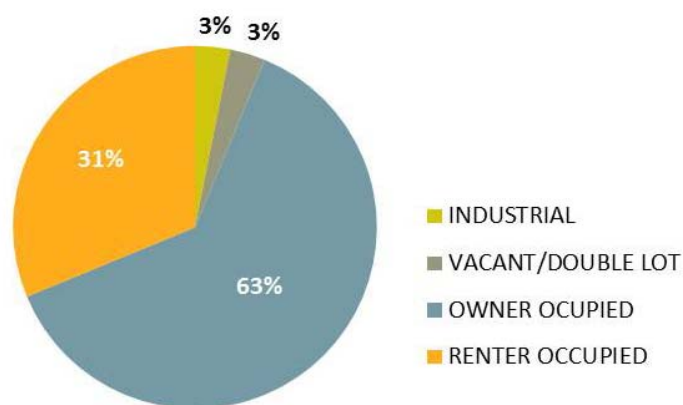


Figure 2.14 Railroad 400 Block Landuse

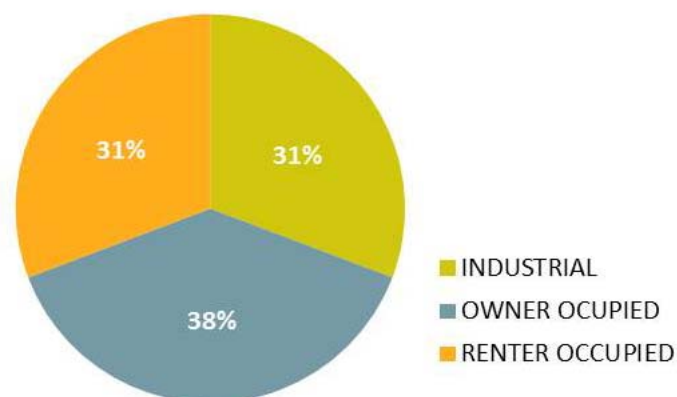


Figure 2.15 Oak Street Landuse

The Transit Revitalization Investment District Act (Pennsylvania House Bill 994) is a mechanism to fund public improvements through future commercial development tax increment financing (TIF) for up to twenty years. It enables municipalities to create TRID districts to promote transit-oriented development (TOD) through public/private partnerships. Each community that undertakes the TRID process may come up with very different needs and solutions: the common denominator will be the focus on increasing transit ridership and strengthening the community's economic base and identity.

conversion of single family dwellings subject to certain conditions. It is interesting to note that the several industrial uses in the R-4 zoning district are pre-existing, non-conforming uses. It may be appropriate to consider new zoning or adjustments to the zoning, especially for the north side of West Maple Street to allow denser residential uses and to better blend with allowed uses, zoning and redevelopment goals in the adjacent municipalities of Upper Dublin Township and Ambler (see below). As long as the results of the flood study do not show these properties to be subject to regular flooding, and/or mitigation can be implemented to negate any flooding problems on these sites, then they appear to be excellent candidate sites for infill development.

Other candidate sites that appear to hold promise for infill development are located on the north side of West Maple Street. These industrial use sites are large (3, 5 and 5.5 acres respectively – west to east) may be appropriate for higher density residential units. The western-most industrial site is located in Whitpain Township. The other lots are located partially in Upper Dublin Township and mostly in Ambler Borough.

The odd-shaped parcels that are located in Upper Dublin are zoned A-Residential and AHS Apartment House Special. However most of the latter district is located on the reservoir (Wissahickon Waterfowl) site.

The industrial lots that are located in Ambler Borough are a part of the TRID (Transportation Investment District) The TRID plan, completed in 2010, contemplated a total of approximately 60,000 square feet of mixed use development along West Maple Street with over 300 parking spaces, some of these spaces for the SEPTA train station. This area in Ambler is zoned RSC (Retail and Service Commercial) in Ambler with a RO (Redevelopment Overlay District). Clearly, the Borough's goal is to redevelop this area. Whitpain should work closely with the Borough (and Upper Dublin Township) to ensure that redevelopment in the Borough is compatible and supportive of the revitalization on West Ambler.

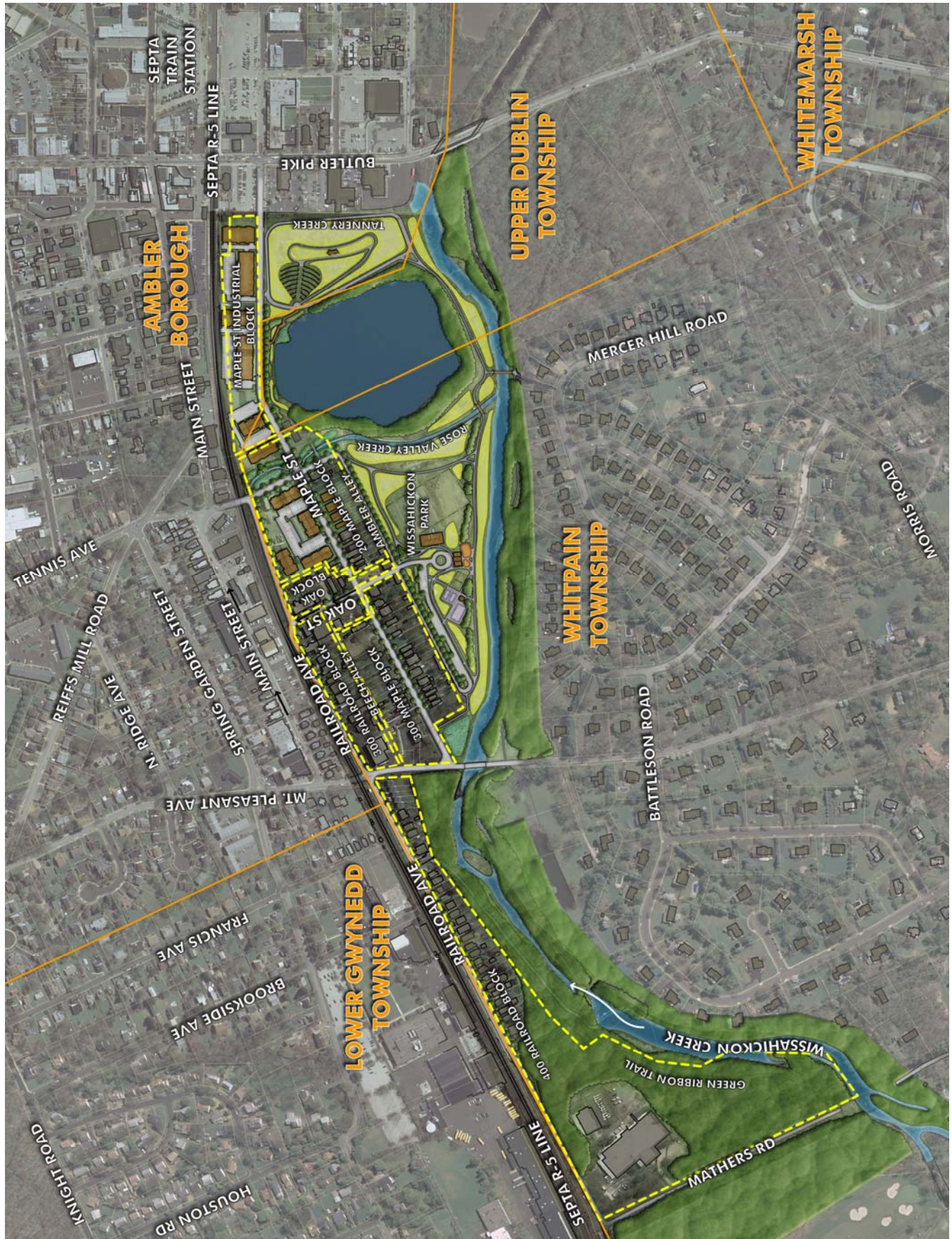


Figure 2.16 West Ambler Neighborhood Potential Redevelopment plan (Infill housing concept provided by Steven F. Ware, AICP, PP, TOWNSHAPES LLC).

There may be other industrial sites that become candidates for redevelopment in the Whitpain Township project area. This will be dependent on land values, owner interest and external market forces. It is expected that as redevelopment proceeds in the neighborhood, existing industrial uses will no longer be the “highest and best use” and new residential infill will be more appropriate and in keeping with the neighborhood.

It is important to note that there will need to be site investigations for possible contamination on all sites to be redeveloped. This is due to the industrial heritage of the area and the general contamination in the Ambler area, it will not be a surprise to find some contamination, especially on industrial sites. Contamination clean-up will increase redevelopment costs and based on the specifics of each site, will effect the timing and cost of redevelopment.



Figure 2.17 *West Maple St. looking West with a Vacant building pad to the right.*

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 3:

BROWNFIELD SITE REUTILIZATION

SuperFund Site

The 36 acre Superfund Site is generally referred to as the Bo-Rit Site is actually comprised of three sites each in separate ownership.

The origin of the asbestos product waste and soils contaminated with asbestos materials is from the several asbestos product industries that were based in the Ambler area. The history of the asbestos industry in the area is well-known and well-documented, including the health problems that have been caused by the asbestos contamination in the area.

The 4 acre “Pile” site is the eastern-most site (closest to Butler Pike) was a large, tall mound of asbestos product

waste that was covered with trees and other vegetation. This location that was proposed for a high-rise apartment by Kane Core Inc. in 2005. Community concern about development of the contaminated site led local government to engage the EPA in designating the site as a Superfund Site and led to the current emergency removals and remediation plan that is currently occurring. EPA has maintained the profile of “the pile”, a dramatic thirty foot tall mound, which is an anomaly in the landscape. The Pile has been covered by a geotextile and two feet of clean fill and is planted with meadow grasses as at least an interim solution to containing contaminated materials.

The 15 acre “reservoir” site is comprised of a 10 acre lake and surrounding land was purchased by the Wissahickon Waterfowl Association (WWA) to be preserved as a bird sanctuary. The property is partially located in Upper Dublin Township, Ambler Borough and a small portion in Whitpain. WWA intends to restrict public access to the site by maintaining fencing around its perimeter in order to preserve the integrity of the

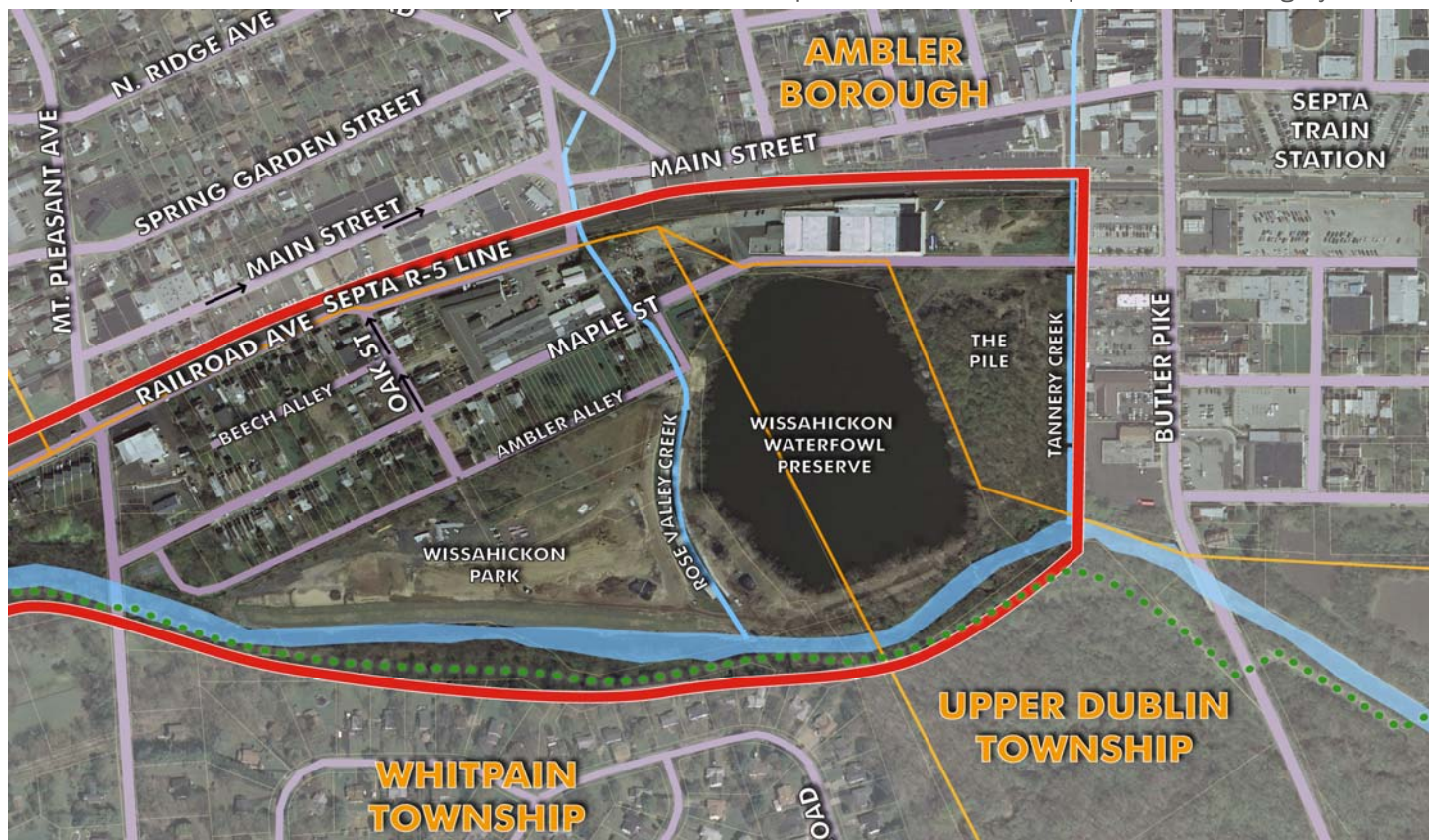


Figure 3.1 Superfund Existing Conditions Map

wildlife sanctuary. During the EPA emergency removals phase, much asbestos contaminated materials were removed and buried here or at the pile site and covered with a geotextile liner beneath two feet of clean fill. However, at the time that work, WWA requested that the waterfront embankments of the reservoir be maintained so that the existing mature trees that line most of the pond embankments could remain and provide shade and cover for the wildlife that the sanctuary attracts. Since it is intended that access to the site be permanently restricted and since this request came from the property's owner, EPA agreed with the property owner's request.

There exists a slow "seep" at the southwest corner of the reservoir below the containment embankment. EPA is in conversation with the US Army Corp of Engineers to discuss possible USACOE involvement with evaluation of the reservoir embankment.

The 17 acre Wissahickon Park site, located in and owned by Whitpain Township, was for many years a community park. The park was closed in the mid 1980s due to

heightened awareness and concern about the asbestos contamination in the park.

The emergency removals plan for Wissahickon Park is the same as for the rest of the site: geotextile cover with two feet of fill. This cover cross-section was also used on the embankments along the Wissahickon Creek and Rose Valley Creek. Additionally, the Rose Valley Creek bed and side slopes has been heavily armored with concrete blankets to prevent erosion and deterioration of any of the cover materials on the creek embankments during floods and periods of high velocity water flows.

The EPA's "emergency removals" phase will be completed in mid-2013 with the covering of the remainder of the Wissahickon Park site. The "remedial investigation" which EPA will determine if additional final measure are needed on the site. If no further actions to the site are determined, then a "Record of Decision" (ROD) will be prepared for review and public comment. This could be concluded in 2015. If additional remedial actions are determined to be

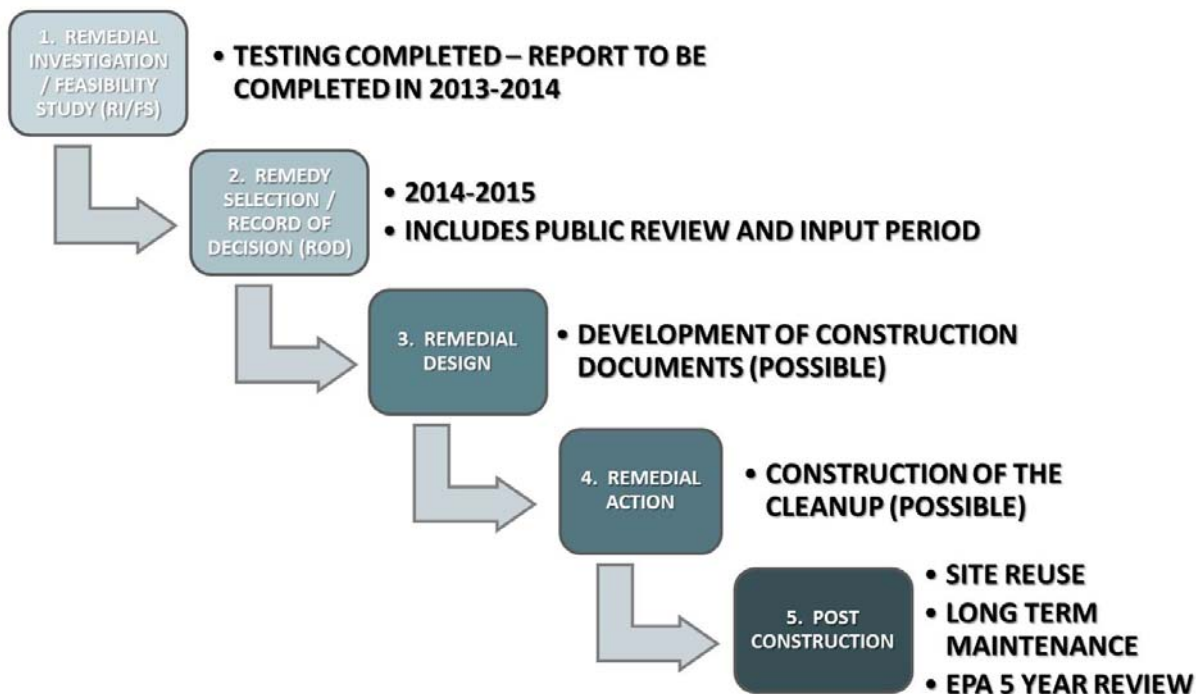


Figure 3.2 EPA Remediation Process

needed, then a remedial design will be prepared and the remedial action / construction will be undertaken. Until this possible work is determined, a timeline cannot be estimated. When this work is completed, then the site would be ready for possible reuse and continuing maintenance.

Planning & Design Recommendations

THE PILE

ADAPTIVE REUSE

While the Pile site is zoned by Ambler Borough as Retail and Service Commercial with a Redevelopment Overlay District, given the contamination on this site, the only possible feasible use without additional remediation seems to be open space / recreational use. This assumes that the site contamination is defined by EPA as an “acceptable risk” a term used by EPA to signify that the site is acceptable for certain uses. The site is also a part of the proposed TRID District that has been proposed by Ambler Borough. . While it is conceivable that contaminated materials could be removed, the removal costs would be astronomical. Based on a positive remediation study and a Record of Decision (ROD) by EPA that the contamination covered is at a level of “acceptable risk” then open space / recreational use appears to be

one of the only reasonable reuses of the site. The ROD is expected to be finalized in 2015. The concept plan for the park indicates no grading “cuts” or excavations to the cover that has been put in place by EPA. It is assumed that this cover will be the final solution by EPA. However, it must be noted that this could change based on the ROD conclusions. The access driveway that encircles the bottom of the Pile should be enhanced and maintained as a running / jogging track. The access driveway up the northwest corner of the Pile will be



Figure 3.3 The “Pile” site after EPA emergency response work.

Figure 3.4 examples of Tensile shade structures



Figure 3.5 Wissahickon Park Concept Plan (see appendix for plan enlargement).

maintained and enhanced as a small amphitheater with seating cascading down the slope. The top of the Pile could have an a promenade walkway, with bench seating and a small canopy for shade. The top of the pile is a wonderful location to enjoys views of the surrounding area. Community star-gazing events could be held here. This might even be a good site for community fireworks for special events. The slopes of the Pile will make excellent sledding hills in the winter.

OWNERSHIP

The ownership of the Pile remains one of the issues to be “solved”. Presently, the Pile is being offered for Sheriff’s sale by the County for property taxes owed on the site. The owners of record, Kane Core Inc. are defunct, bankrupt (it is believed) and non-functioning. If through the sheriff’s sale process, no owner emerges, the property will eventually revert back to Montgomery County. However, it is assumed that the county would prefer not to own the site. Assuming open space / recreation use of the site, the entities that appear to be best suited to assume ownership of the property include: Wissahickon Waterfowl

Association, Montgomery County; and Ambler Borough. Ownership will be determined in the months ahead.

ACCESS

Currently, access is restricted by fencing that surrounds the site. Future access will be largely determined based on future ownership of the property. Assuming public (municipal) or quasi-public ownership (non-profit), access to the Pile site would most likely be unrestricted, as long as the future owner can assure EPA of a management plan and organizational structure that is necessary to maintain and protect the integrity of the cap over the long term.

MAINTENANCE

The primary responsibility for the future owner of the Pile will be maintenance to ensure the long term integrity of the cap. This responsibility will include creating a maintenance plan that meets the approval of EPA and the periodic inspections that will be conducted by the owner. Vegetation management of the site is key, as is repairing any holes created by burrowing animals, repairing any erosion on the site and like tasks.

COST ESTIMATES

The cost estimate for improvements to the Pile site including the improvements mentioned above is \$323,000. Annual maintenance for the improved site (as currently conceived) is estimated to cost approximately \$5,000.00 per acre for a total of approximately \$20,000 annually.

WWA WILDLIFE PRESERVEADAPTIVE REUSE

The use proposed by WWA appears to be a good use for the facility. Anecdotal accounts of the water level of the reservoir indicates that the water level appears stable, even in periods of drought. The intent to prohibit public access appears to be a reasonable strategy given the wildlife sanctuary use. The WWA decision to let existing trees on the pond embankment remain, while a good short strategy, has long term implications that should be re-examined. When the existing trees die, it may not be advisable to plant new trees that will continue to provide shade and cover for birds. Tree fall could expose deep roots and expose asbestos containing materials. This plan suggests that EPA consider a different long term strategy for the treatment of the interior embankments around the reservoir. It is recommended that all existing trees be removed and that additional fill be placed around the pond edge to create a safe, long-term planting medium for



Figure 3.6 View across the reservoir from the proposed boardwalk location.

Figure 3.7 Examples of boardwalk / viewing platforms.



Figure 3.8 View of the reservoir from the top of the "Pile"

trees. The new embankment should have a finished minimum top width of ten (10) feet with a maximum 3 to 1 embankment slope that can be planted with native vegetation. This new embankment will allow the long term growth of trees and continual replanting that will be required over time. This will prove assurance that shade and cover can be provided to birds who will visit the sanctuary.

OWNERSHIP

The site is owned by the Wissahickon Waterfowl Association.

ACCESS

No public access is planned for this site. A boardwalk / overlook, accessible from West Maple Street is planned by WWA to allow safe viewing into the preserve. Additionally, if the Pile site allows public access, this elevated site will provide a great viewing area into the wildlife preserve.

MAINTENANCE

All owners of EPA Superfund Sites are subject to a maintenance plan that meets the approval of EPA.

WISSAHICKON PARK

ADAPTIVE REUSE

It has always been the intent of Whitpain Township to return the site to park use, once EPA completed its work at the site. The park concept plan shows a mix of passive and active uses, with some options that will be determined by the Township in the next few years. The park concept plan has determined a preliminary, general layout of proposed park improvements. The park is conceived as a mix of facilities that will accommodate both active and passive activities. Trails around the park are planned for circulation, walking and jogging. These will also serve as maintenance access for small township vehicles. The primary vehicular access to the park will be from Oak Street into a turn-around and small parking area. The concept plan envisions a park building with restrooms and storage combined with a roofed pavilion area. A children's playground is suggested near this building. A basketball court, pickle ball courts or a tennis court, a large open field area, and interpretative signage is also suggested by the plan. One park layout option is for a community building that is approximately 5000 SF in size. This structure could accommodate classrooms, indoor areas for exercise classes, dance or martial arts and other community activities.

Another building option for consideration is that the park would be the location for a proposed new Ambler Boys and Girls Club. This building would be approximately 47,000 SF in size and would be located



Figure 3.9 Wissahickon Park looking north along the Wissahickon Creek



Figure 3.10 *Wissahickon Park Concept Plan with Boys & Girls Club Building (see appendix for plan enlargement).*

at the northern edge of the park near Ambler Alley. A local group has been exploring the concept of a new youth club in the area. The alternate park layout master plan suggests that the Boys and Girls Club can be accommodated on the site with the required parking. In weighing this option, the Township will need to consider how the Boys and Girls Club will change the use and activity at the park site. Certainly, activity at the park will be increased over a greater length of a day, with activity at the club continuing to 9 or 10 pm. In terms of park facilities, the building would occupy what would otherwise be a large open multi-purpose field area.

The park plan also shows the locations for the planting of many trees and shrubs. EPA's emergency removals plan includes a two foot layer of clean fill and topsoil above a geotextile layer. The geotextile layer is intended to be primarily a marker to future residents about the contaminated soil materials below. EPA does not encourage the planting of large stature trees in this two foot layer of fill, since when trees mature in 70 to 100 years, normal "tree fall" (when tree roots can be ripped up from the soil), could expose asbestos containing

materials. This is not a desirable event. Planting of smaller shrubs is permitted in this area, since there is no chance of root exposure with these smaller plants.

Parks, by their nature, often contain trees, as these plants provide shade, bird habitat, color, texture and help add to the spatial definition of a park. To this end, the Wissahickon Park is proposed to be planted with smaller stature trees – species that only grow to 20 or 30 feet in height (in contrast to the 70 or 80 foot height



Figure 3.11 *Indian Valley Boys & Girls Club*

ACCESS

There are three (3) primary access points to the site planned. The primary access will be at Oak Street via a driveway and pedestrian walk. A second vehicular access will be at the west end of the site at the western end of Ambler Alley. These first two vehicular access points will remain open most of the time. A third vehicular access point, near the Rose Valley Creek, will be a maintenance only access point to the eastern-most end of the alley.

An additional pedestrian access point may be feasible at the southeast corner of the site, across the ford near the mouth of the Rose Valley Creek to the Pile site. The creek will have very low flows most of the time.



Figure 3.12 Examples of volleyball sand court (above), basketball court (middle), and Pickle ball court (below)



Figure 3.13 Example of open multi-use fields for unstructured play / pick up games.

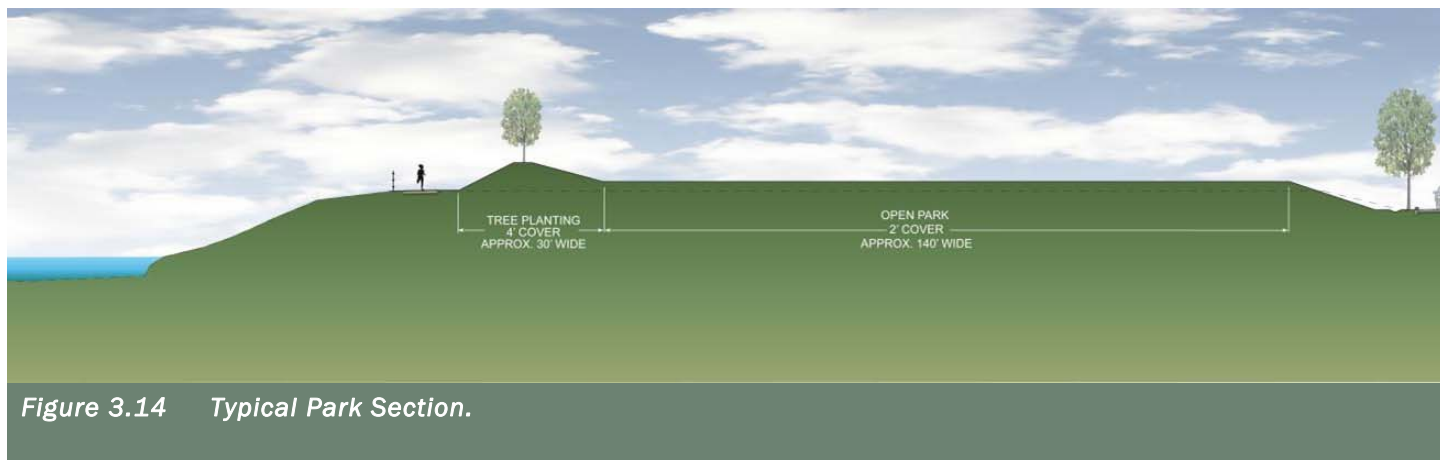


Figure 3.14 *Typical Park Section.*

MAINTENANCE

The Township will complete the normal park maintenance, similar to what would be completed at any park. However, since this is an EPA Superfund Site the Township will be required to sign a maintenance agreement with EPA to conduct periodic inspections of the park to ensure that the integrity of the soil cap will be maintained. Simple but important maintenance measures such as filling in holes from burrowing animals, clearing volunteer trees from creek embankments, and other similar tasks will help to maintain the integrity of the soil cap.

COST ESTIMATES

The cost estimate for the park site work totals just over \$3 million. This includes \$322,000 for the pile site (owner undetermined) and \$82,000 for the Reservoir / Sanctuary site owned by WWA. This results in a park cost estimate of approximately \$2.6 million. This number includes a 5000 SF community building (\$750,000) and a separate park pavilion /restroom building (\$300,000). A detailed cost estimate follows.

ITEM	UNIT	QTY	UNIT PRICE	TOTAL	SUB TOTALS
Main Park Entrance					\$ 1,118,955
Mobilization /Demolition / Site Preparation	LS	1	\$ 20,000	\$ 20,000	
Excavation (8")	CY	400	\$ 35	\$ 14,000	
Asphalt Paving	SY	800	\$ 32	\$ 25,600	
Meadow	SF	2,682	\$ 0	\$ 805	
Pavilion/ Restrooms	SF	2,000	\$ 150	\$ 300,000	
8' Asphalt Walkway	LF	342	\$ 25	\$ 8,550	
Community Building	SF	5,000	\$ 150	\$ 750,000	
Playground					\$ 293,600
Site Preparation	LS	1	\$ 2,000	\$ 2,000	
Play Equipment (includes installation)	LS	1	\$ 250,000	\$ 250,000	
Safety Surface (wood carpet)	SF	2,980	\$ 5	\$ 14,900	
Gravel base (12") for Playground Area	CY	110	\$ 30	\$ 3,300	
PVC Underdrain	LF	200	\$ 35	\$ 7,000	
Geotextile Fabric	SY	350	\$ 4	\$ 1,400	
Benches	EA	4	\$ 1,500	\$ 6,000	
Pathway Lighting	EA	5	\$ 1,000	\$ 5,000	
Trash Receptacles	EA	4	\$ 1,000	\$ 4,000	
Active Recreation Facilities					\$ 207,604
Site Preparation / Demolition	LS	1	\$ 2,000	\$ 2,000	
Basketball Courts (1)					
Asphalt Paving	SY	345	\$ 25	\$ 8,625	
Color coat surface with lines	SF	3,200	\$ 1	\$ 3,200	
Basketball Hoops	EA	3	\$ 2,000	\$ 6,000	
Pickle Ball Courts (2)					
Asphalt Paving	SY	410	\$ 25	\$ 10,250	
Color coat surface with lines	SF	1,760	\$ 1	\$ 1,760	
Pickle ball Nets	EA	2	\$ 500	\$ 1,000	
Perimeter Fencing - 8' High Chain Link	LF	240	\$ 60	\$ 14,400	
Grass Volleyball Courts (1)					
Excavation (12")	SY	207	\$ 4	\$ 828	
Volleyball Net	EA	1	\$ 500	\$ 500	
Edging Material	LF	200	\$ 10	\$ 2,000	
Geotextile Fabric	SY	207	\$ 4	\$ 828	
Low Bouldering Wall	LF	900	\$ 20	\$ 18,000	
8' Asphalt Walkway	LF	3,235	\$ 25	\$ 80,875	
Meadow	SF	150,000	\$ 0	\$ 45,000	
Open Lawn Area					
Grass (Lawn Seeding)	SF	82,250	\$ 0	\$ 12,338	

ITEM	UNIT	QTY	UNIT PRICE	TOTAL	SUB TOTALS
Secondary Entrance/ New Pedestrian Walkway / Parking					\$ 216,789
Site Preparation / Demolition	LS	1	\$ 5,000	\$ 5,000	
8' Asphalt Walkway	LF	5,460	\$ 25	\$ 136,500	
Asphalt Paving	SY	2,100	\$ 32	\$ 67,200	
Concrete Wheel Stops	EA	30	\$ 100	\$ 3,000	
Pavement Markings	LF	600	\$ 1	\$ 600	
Grass (Lawn Seeding)	SF	9,000	\$ 0	\$ 1,350	
Shade Trees	EA	7	\$ 400	\$ 2,800	
Meadow	SF	1,130	\$ 0	\$ 339	
Pedestrian Bridge over the Wissahickon Creek					\$ 255,000
Site Preparation / Demolition	LS	1	\$ 5,000	\$ 5,000	
Bridge (936 SF)	LS	1	\$ 250,000	\$ 250,000	
Pile Site					\$ 258,292
Site Preparation / Demolition	LS	1	\$ 20,000	\$ 20,000	
12' Asphalt Pathway	LF	1,780	\$ 40	\$ 71,200	
Amphitheater					
Meadow	SF	107,450	\$ 0	\$ 32,235	
Seating	LF	922	\$ 40	\$ 36,880	
Grass (Lawn Seeding)	SF	43,180	\$ 0	\$ 6,477	
Tensile Structure	SF	790	\$ 75	\$ 59,250	
8' Asphalt Walkway	LF	1,290	\$ 25	\$ 32,250	
Reservoir Site					\$ 66,254
Boardwalk/ Observation Decks					
Deck	SF	2,365	\$ 20	\$ 47,300	
Meadow Seeding	SF	7,650	\$ 0	\$ 2,295	
Grass Seeding	SF	4,715	\$ 0	\$ 707	
Wetland Seeding	SF	3,950	\$ 0	\$ 1,778	
Reservoir Bank Habitat Restoration					
Shade Trees	SF	50	\$ 250	\$ 12,500	
Meadow Seeding	SF	2,520	\$ 0	\$ 756	
Grass Seeding	SF	2,800	\$ 0	\$ 420	
Wetland Seeding	SF	1,107	\$ 0	\$ 498	
Total Improvement cost					\$ 2,416,493
15% Overhead/Profit/Bond					\$ 362,474
10% Contingency					\$ 241,649
Total					\$ 3,020,616

PAGE INTENTIONALLY LEFT BLANK

CHAPTER 4: FLOOD MITIGATION & STORMWATER CONTROL

Stormwater Analysis

The project scope of work outlines the work to be completed regarding the chronic flooding in the West Ambler neighborhood:

Identify causation sources and short-term and long-term flood mitigation measures and storm-water improvements, likely funding sources, and an implementation plan for improvements to the Rose Valley Creek sluice-way.

The Rose Valley Creek has a watershed of approximately two (2) square miles with its headwaters located near Temple University's Ambler Campus in Upper Dublin Township. It flows in a southerly direction through the Borough of Ambler via a network of pipes and culverts that convey the waterway toward its confluence with the Wissahickon Creek. The convergence of the two creeks is located just south of and adjacent to West Ambler.

In the past, the Rose Valley Creek was utilized as a mill race with the creek running through a concrete culvert, eleven (11) feet wide and approximately four (4) feet deep. This culvert is estimated to have been constructed in the early 1900's. The creek runs this course with the culvert being mostly closed, but also open at some points. The Rose Valley emerges from the culvert approximately 850-feet upstream from the confluence with the Wissahickon Creek.

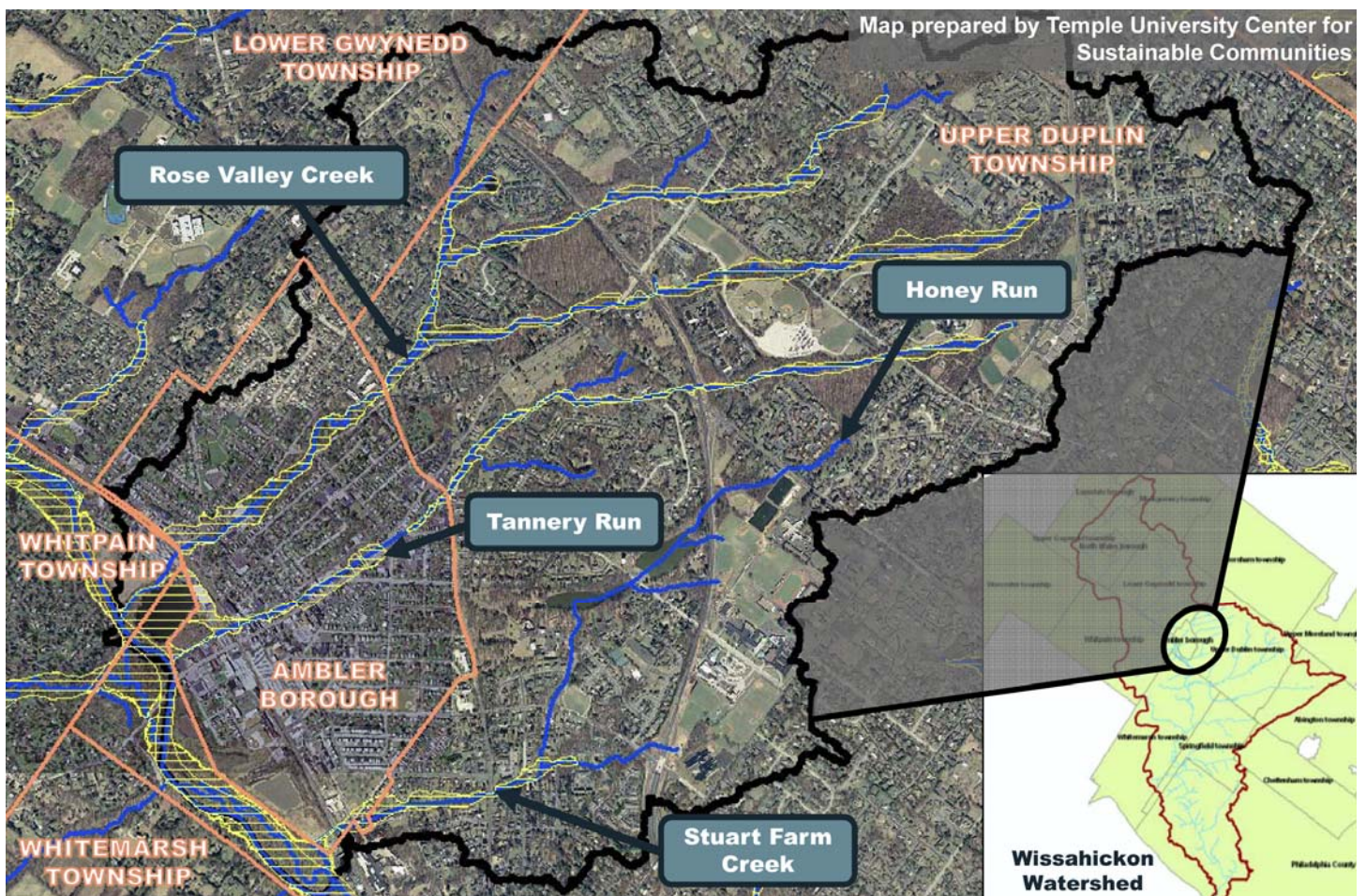


Figure 4.1 Study Area Watershed Map



Figure 4.2 Intersection of West Maple and Chestnut after Tropical Storm Lee.

A number of attempts have been made in the past to resolve the neighborhood's flooding issues. Most significantly, in the early 1980's a plan was devised to divert some storm water during high-flow events through a seven (7) foot diameter steel pipe. The area of diversion is

located near the intersection of North Main Street and Tennis Avenue in the Borough of Ambler. This seven (7) foot diameter steel pipe extends south under the CONRAIL right-of-way until it reaches a junction box on West Maple Street in West Ambler. At the junction box, the flow from the pipe is channeled into two (2) smaller pipes which then discharge at the end-wall where the Rose Valley Creek emerges from the concrete culvert. The junction box is contributing to the acceleration and surcharging of the creek by constricting the flow through this area.

In the major area of flooding near the intersection of West Maple Street and Chestnut Street, there are six (6) properties which have required evacuation and rescue operations in the past. The floodwaters near these properties spill over West Maple Street from the sluiceway, which is an open concrete culvert with one side actually being the foundation of a warehouse compound. When storm flows are constricted by flowing under West Maple Street, the water breaches the walls of the sluiceway and floods onto West Maple Street

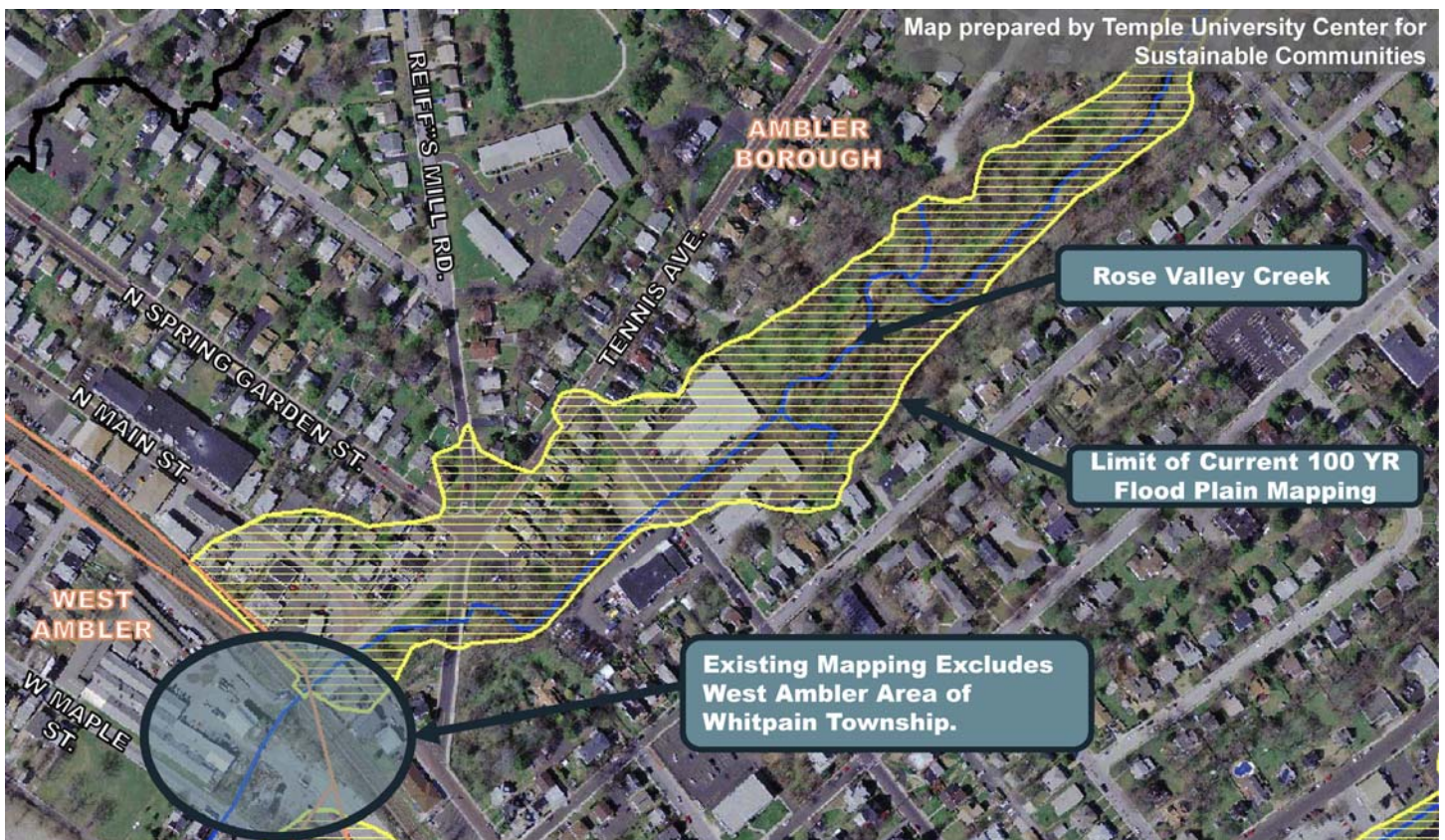


Figure 4.3 Current floodplain mapping does not include areas of West maple Street that experience severe flooding.

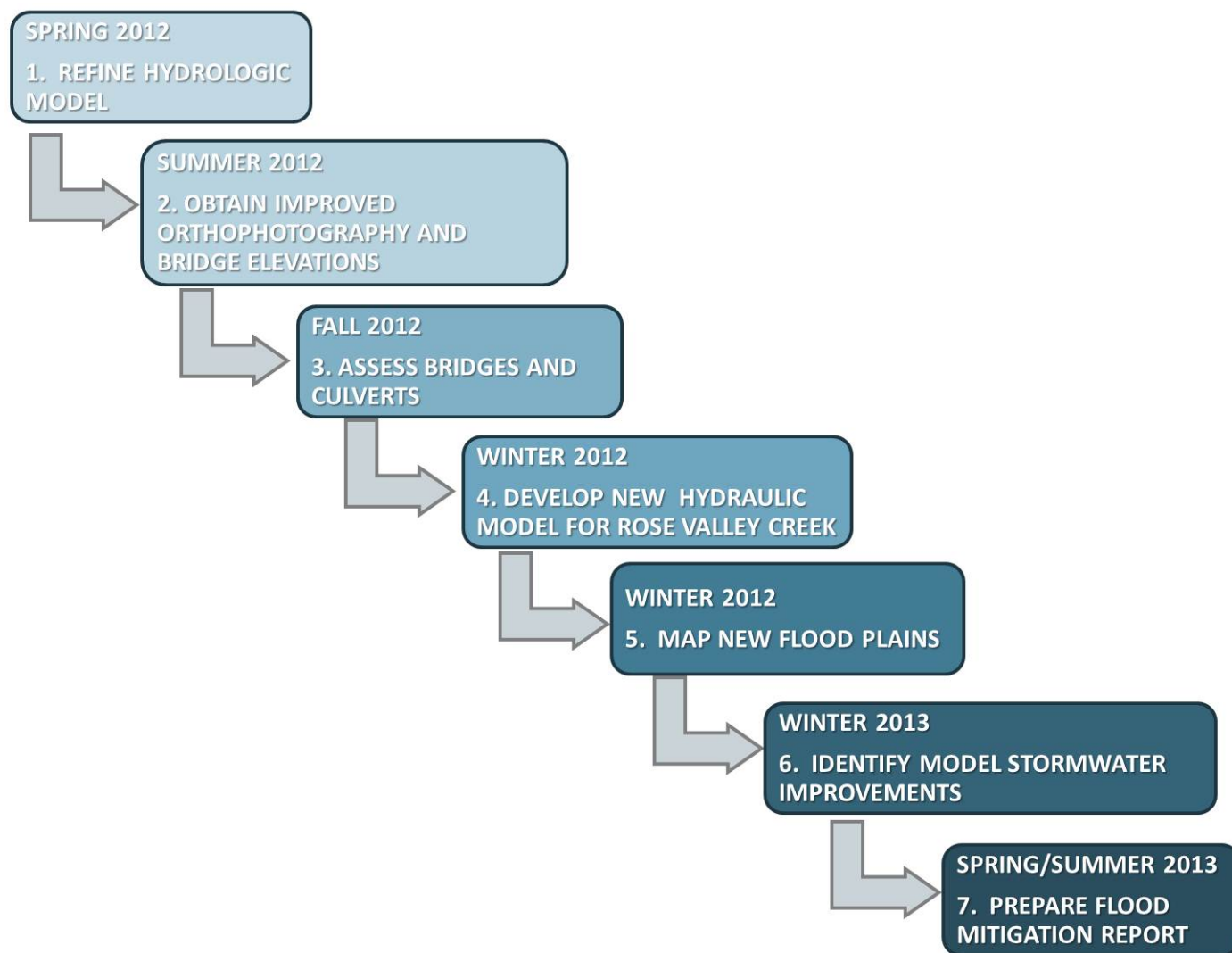


Figure 4.4 Center for Sustainable Communities timeline for floodplain mapping.

with great velocity. In the summer of 2011, the cumulative effects of much higher than average annual rainfall amounts combined with Hurricane Irene and Tropical Storm Lee caused a partial collapse of the warehouse.

Center for Sustainable Communities Study

Because of its frequent, and sometimes life threatening flooding, the Rose Valley Creek is an important focus area of an ongoing research project by Temple University's Center for Sustainable Communities (CSC). A team of CSC researchers is currently engaged in a \$1.2 million, 30-month study to assess, model, and map flooding

conditions in the Wissahickon Creek Watershed in Montgomery and Philadelphia counties. The study includes the creation of a Digital Elevation Model for the watershed; an evaluation and field verification of flood elevations and stream obstructions; hydrologic/hydraulic modeling; the preparation of new 100- and 500-year floodplain maps and floodways; and development of an enhanced storm-water management plan for the watershed. Whitpain Township anticipates partnering with the CSC to create new flood hazard maps, computer simulations depicting water flow and flooding in different flood events, and to identify specific storm-water improvements in West Ambler and upstream. Modeling will be conducted on the improvements to determine the potential reduction of flooding and pollution as well as the potential costs.

The West Ambler portion of the study is expected to be completed in 2013.

The Study is being completed by the Temple University Center for Sustainable Communities (SCS). It is anticipated that this study will be completed late in 2013. The scope of the Temple University Study includes the following:

- Community Involvement and Coordination – CSC will conduct a minimum of six (6) community coordination meeting involving the public officials from the study area including the Townships of Whitpain and Upper Dublin and the Borough of Ambler. These meetings shall provide an arena where community officials can provide information and details pertaining to the types of problems, possible solutions and other information relevant to the watershed conditions within the project area;
- CSC will develop apportion sub-basins within the Rose Valley Creek Watershed using available information as part of the Act 167 Study process to refine the peak flows within stream reaches within each sub-basin;
- CSC shall obtain updated Orthophotography throughout the study area necessary to improve the existing contour and bridge elevation data within the project area. When possible, the Contractor will use the Pennsylvania Department of Conservation and Natural Resources (DCNR) digital geospatial map (PAMAP);
- CSC shall field measure all stream crossing (bridges and culverts) and gather critical physical information necessary for hydraulic modeling;



Figure 4.5 Flood waters overflow Rose Valley Creek sluiceway during Tropical Storm



Figure 4.6 Conceptual plan for Tennis Ave extension and Rose Valley Creek day lighting.

- CSC will utilize the refined hydrologic model and accurate bridge and contour information to develop a hydraulic model of the Rose Valley Creek watershed using the HEC-RAS modeling system.
- CSC will develop a hydraulic model for the main stem of the Wissahickon Creek near the Rose Valley Creek Watershed, to determine the effects of backwater on the project area. The Contractor will obtain additional obstruction data as necessary through field measurements along a four-mile long reach of the main stem beginning downstream of the gage located near the Route 73 Bridge.
- CSC will delineate new 100-year and 500-year floodplain and floodway boundaries to support revisions to the existing Flood Insurance Rate Maps.
- CSC will evaluate the condition and performance of existing flood control and stormwater facilities and outline strategies to improve their performance, including retrofits and stormwater best management practices (BMPs) and other improvements. The

Contractor will also identify sites for potential new facilities. Using the hydrologic and hydraulic models and cost-effectiveness methodology, the Contractor will evaluate the available storage from potential BMP's to demonstrate expected impacts on downstream flows and runoff volume. The Contractor will use the results to develop potential cost-effective combinations of improvements for consideration of implementation by the impacted communities.

- CSC will evaluate flood-prone structures, with and without the recommended improvements, and develop recommendations on candidates for additional mitigation opportunities such as acquisition and flood-proofing. The Contractor also will evaluate options for implementing a flood warning system to alert residents of impending flood conditions and enable first responders to reach flood victims.
- CSC will produce a final report outlining a series of recommendations to mitigate flooding in the Rose Valley Creek Watershed.

While it is impossible to exactly predict the results of CSC work, it is reasonable to assume that the study will show that a substantial portion of the West Ambler neighborhood in the vicinity of the Rose Valley Creek will be within the 100 year flood plain and even within the floodway of the Creek. It is likely that several of the houses in this vicinity will be within the 100 year floodplain and will qualify for FEMA funding, possibly for the buyout of these properties to remove them from repeated damage caused by repeat flooding.

The limits of the 500 year flood plain in the West Ambler neighborhood will extend further and these limits, while not nearly as limiting as the 100 year flood plain must be taken into account when planning for the revitalization of the community.

It is possible that the CSC study will recommend the development of some types of stormwater mitigation facilities such as temporary stormwater holding basins.

It is also anticipated that the CSC study will recommend upstream stormwater management and control methods that will have significant impacts downstream in the West Ambler neighborhood that will reduce and/or mitigate the effects of periodic flooding in the community.



Figure 4.7 *New flood gate installed on Rose Valley Creek at West maple Street following Tropical Storm Lee.*

The Revitalization Plan recommends the extension of Tennis Avenue south from its current “L” at Railroad Avenue down to West Maple Street through one of the industrial properties. While this road extension will allow for better access to a redeveloped industrial site (possibly as residential use) it will also allow for a widening and daylighting of the existing stormwater culvert removing an obstruction to drainage flows. Chapter 5 and a memo in the appendix outlines potential FEMA funding that should be available once the new floodplain maps are completed and adopted by FEMA.

The proposed streetscape improvements include the design and installation of a stormwater management system throughout the neighborhood. This will collect run-off from normal rain events. It is discussed further in Chapter 2.

It is likely that following the completion of the CSC study in late 2013, it may require a decade to implement a sufficient number of study recommendations that will have a positive impact to the flooding situation in the vicinity of Rose Valley Creek in the West Ambler neighborhood.

PAGE INTENTIONALLY LEFT BLANK

CHAPTER 5: PLAN RECOMMENDATIONS & TIMELINE

Recommendations

The Recommendations as contained in this report narrative are summarized here in the matrix contained in this section of the report (see page 45-46). Recommendations are categorized as short term (1-2 years), medium term (3-6 years) and long term (7 -10 years) along with calendar dates. Some recommendations such as streetscape improvements, stormwater improvements and Wissahickon Park Improvements will

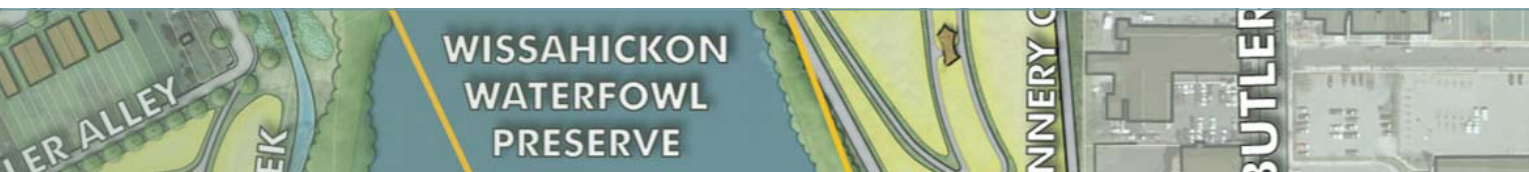
be multi-phase projects lasting several years and will require several phases of design, obtaining funding and construction. Other initiative such as adding select improvements to the official map or zoning changes will be low cost and more quickly accomplished.



Figure 5.1 Action Plan Timeline

Matrix of Recommendations

<u>RECOMMENDED IMPROVEMENTS</u>	<u>ACCOUNTABLE ENTITY</u>	<u>APPROXIMATE COST</u>	<u>SHORT (1-2 YRS)</u>
			<u>MEDIUM TERM (3-6 YRS)</u>
			<u>LONG TERM (7-10 YRS)</u>
Traffic and Stop Signs	Whitpain Township	\$12,000	Short Term
Add Road, Trail , Stormwater Management and Infrastructure Improvements to Township Official Map	Whitpain Township	\$2,000	Short Term
Possible Temporary Park Improvements	Whitpain Township	\$200,000	Short Team
Evaluate and Revise Zoning	Whitpain Township	\$5,000.00	Short Term
Streetscape Improvements	Whitpain Township	\$2.0 million	Short, Medium, Long Term
Beech Alley Extension	Whitpain Township	TBD	Medium & Long Term
Park Master Plan for Entire Superfund Site	Whitpain Township	\$50,000	Short Team
Roadway Directional and other changes (some part of streetscape)	Whitpain Township	\$10,000	Short & Medium Term
Storm sewer Infrastructure	Whitpain Township	\$246,900	Medium Term
Additional Earthen embankments around reservoir perimeters for long-term tree replanting	EPA , Wissahickon Waterfowl Association	TBD	Medium to Long Term
Wissahickon Park Improvements (approximate cost includes community building)	Whitpain Township	\$2.6 million	Medium Term & Long Term
Wildlife Preserve Improvements	Wissahickon Waterfowl Association,	\$82,000	Medium & Long Term
Flood Mitigation & Flood Claims Assistance	Whitpain Township, FEMA, PEMA,	TBD	Medium & Long Term
Residential Infill Development	Private Sector Whitpain Township	Unknown	Medium & Long Term
Improvements at The Pile	TBD	\$323,000	Medium & Long Term
Boys and Girls Club (possible)	Ambler Area Boys & Girls Club Committee	\$5 million	Long Term



<u>APPROXIMATE DATE</u>	<u>POSSIBLE FUNDING SOURCE</u>	<u>COMMENTS</u>
2013	Whitpain Township	Requires ordinance(s), staff time
2013-2014	Whitpain Township	Staff Time, map preparation, legal
2014-2015	Whitpain Township / DCNR / CFA	These improvements depend on when access to Wissahickon park is opened, and determination of FEMA Flood mapping
2013-2014	Whitpain Township	Discussion with private sector real estate developers will yield suggestions. Consider TRID district similar to the Borough of Ambler
2013-2020	Whitpain Township PA DCED (CFA)	First phase to be constructed in 2013
2015-2022	DCED, CFA, Whitpain Township, Public Private Partnership	Cost does not include possible acquisition costs.
2014-2015	Whitpain Township PA DCNR	Possible partners include WA, Montgomery County, Ambler Borough
2014-2017	Whitpain Township	Some of these improvements include in streetscape costs
2015-2018	Whitpain Township PENNVest , PA DCED (CFA)	First phase to be constructed in 2013
2015-2022	EPA US Army Corps of Engineers	Should be determined during mitigation phase.
2015-2022	Whitpain Township, PA DCNR PA DCED (CFA), PENNVest , PA DEP Public / Private Partnerships	Multi phase project
2015-2020	Wissahickon Waterfowl Association William Penn Foundation	Possible EPA work during remedial phase on pond embankments
2016-2020	FEMA PEMA	Possible actions include buy-out of properties located in floodway, assistance to homeowner with floor-related repairs, creation of stormwater / flood mitigation areas near Rose Valley Creek.
2016-2022	Private Sector , PA DE (Brownfields), PA DCED (HOME) Whitpain Twp. (Infrastructure)	
2018-2022	Future owner, Montgomery County PA DCNR, PA DCED, PENNVest	
2018-2022	Community fund-raising, Public— Private Partnerships	

Potential Funding Sources

Please note that some of these programs may have limited funding due to the current recession.

PA DEPARTMENT OF RECREATION AND NATURAL RESOURCES (DCNR) COMMUNITY CONSERVATION PARTNERSHIP PROGRAM

The DCNR Community Conservation Partnership Program (C2P2) provides funding for communities and nonprofit organizations to acquire, plan and implement open space, conservation and recreation resources, including trails. DCNR has grant application periods annually, with applications typically due in mid-April. DCNR requires a 50-50 match (cash or in kind services) to its grant awards for park development projects. This funding can be used

for a detailed park master plan as recommended by this report and for acquisition funding, as could be appropriate for the Pile site. More information on this program can be found at the DCNR website:

WWW.DCNR.STATE.PA.US/BRC/GRANTSINDEXGRANTSINSTRUCT.ASPX

DCED COMMUNITY REVITALIZATION FUNDS

The Pennsylvania Department of Community and Economic Development (DCED) Community Revitalization Fund is a state program that supports local initiatives that improve the stability of communities and enhance local economies. This agency has an open application periods throughout the year. The grant



Figure 5.2 The success of the West Ambler Revitalization & Action Plan is dependent on the network of partners involved in the project.

programs cover a wide range of eligible uses including acquisition of land, buildings, and right-of-ways; trail, civic, and recreation projects; programs and developments that build capacity of the local community and relevant local organizations to better serve the needs of the community, and other reasonable and necessary expenses related to community-based activities.

A new program under DCED called the Commonwealth Financing Authority (CFA) was recently established. CFA has specific programs for Watershed Restoration Protection and Greenways, Trails and Recreation (including parks). The CFA funds do not require a match but cannot be used as a match to DCNR funds. The CFA website is:

[HTTP://WWW.NEWPA.COM/FIND-AND-APPLY-FOR-FUNDING/COMMONWEALTH-FINANCING-AUTHORITY](http://www.newpa.com/find-and-apply-for-funding/commonwealth-financing-authority)

Active support of the district's state senator and / or state representative is critical in a successful grant application. More information on this program can be found at the DCED website:

[HTTP://WWW.NEWPA.COM/FIND-AND-APPLY-FOR-FUNDING/FUNDING-AND-PROGRAM-FINDER/INDEX.ASPX](http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/index.aspx)

PENNVEST

Pennvest oversees the administration and finance of the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) for the state of Pennsylvania. The CWSRF program provides funding to projects throughout Pennsylvania for the construction and maintenance of wastewater treatment facilities, storm water management projects, nonpoint source pollution controls, and watershed and estuary management. The program offers low interest loans with flexible terms to assist a variety of borrowers that include local governments, municipalities, and privately owned entities and to establish partnerships to leverage other funding sources.

Additional information is available at:

[HTTP://WWW.PORTAL.STATE.PA.US/PORTAL/SERVER.PT/COMMUNITY/FUNDING_PROGRAMS/9322](http://www.portal.state.pa.us/portal/server.pt/community/funding_programs/9322)

PA HISTORICAL & MUSEUM COMMISSION

The Pennsylvania Historical & Museum Commission (PHMC) offers a number of grant programs targeted towards projects that identify, preserve, promote and protect historic and archaeological resources throughout Pennsylvania. The rich history of the site relative to the agricultural and industrial use and the existing historic farmstead structure would certainly offer many opportunities to apply for the grant programs provided by this agency. More information on the programs offered by PHMC can be found on the following website:

[HTTP://WWW.PORTAL.STATE.PA.US/PORTAL/SERVER.PT/COMMUNITY/GRANTS_AND_FUNDING/3748](http://www.portal.state.pa.us/portal/server.pt/community/grants_and_funding/3748)

PENNSYLVANIA ENVIRONMENTAL EDUCATION

The Pennsylvania Environmental Education Grants Program awards funding to schools, nonprofit groups and county conservation districts to develop new or expand current environmental education programming. Administered through the Pennsylvania Department of Environmental Protection, the funds are used for projects ranging from creative, hands-on lessons for students and teacher training programs to ecological education for community residents. Educational resources, including exhibits, educational signage, and demonstration projects, also qualify for funding. Funds from this source might be used for interpretive signage at the site informing visitors of the area's and site's history of manufacturing, contamination and reclamation. Additional information is available at:

[HTTP://WWW.PORTAL.STATE.PA.US/PORTAL/SERVER.PT/COMMUNITY/ENVIRONMENTAL_EDUCATION/13903/GRANTS/588549](http://www.portal.state.pa.us/portal/server.pt/community/environmental_education/13903/grants/588549)

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

The West Ambler neighborhood does not have a delineated floodplain, as the current FEMA FIRM (map no. 42091C0286 E, effective date December 19, 1996) notes that the limit of detailed study is North of Railroad Avenue. As soon as the Temple University (TU) flood study is done, and a FEMA floodplain is delineated, the

areas shown on a new FIRM map will be eligible for a number of funding programs.

FEMA NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

Mitigates future flood losses nationwide through community-enforced building and zoning ordinances.

Provides affordable, federally backed flood insurance protection for property owners.

Participation in NFIP is based on an agreement between LOCAL COMMUNITIES and the FEDERAL GOVERNMENT (administered by FEMA) that says if a community will adopt and enforce a floodplain management ordinance to reduce future flood risks to new construction in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community.

SFHA is a high-risk area defined as any land that would be inundated by a flood having a 1-percent chance of occurring in a given year (100 year storm/base flood).

Please refer to the Memorandum dated February 6, 2013 for a more complete summary of this program.

US ARMY CORPS OF ENGINEERING

The US Army Corps of Engineers has a Beneficial Uses of Dredged Material (CAP Section 204) program. The program allows for the use of dredge material in the restoration of wetland and wildlife habitat. To program is open to Nonprofit Groups, Conservation District, Water and Wastewater Utilities, Local Government, State/Territorial Agency. Future work at the Wildlife Preserve or the Pile site might be able to take advantage of USACOE funding.

Additional information is available at:

[HTTP://CFPUB.EPA.GOV/FEDFUND/PROGRAM.CFM?PROG_NUM=107](http://cfpub.epa.gov/fedfund/program.cfm?prog_num=107)

[HTTP://WWW.CBTRUST.ORG/SITE/C.MIJPXPCJNH/B.5457271/K.C58E/GRANTS.HTM](http://www.cbtrust.org/site/c.MIJPXPCJNH/B.5457271/K.C58E/GRANTS.HTM)

MONTGOMERY COUNTY

Montgomery County may be of assistance with two aspects of the Revitalization Plan.

The County has historically supported revitalization efforts in locations such as Norristown, Pottstown, Ambler and others. The socio-economic characteristics of the West Ambler neighborhood provide ample qualifying statistics for County support of revitalization initiatives in West Ambler. The County (through the Redevelopment Authority) was directly involved with the redevelopment of “The Boiler Plant” project in Ambler Borough, as just one example.

Although the County’s historic support of open space funding has been curtailed due to the recession it is hoped that in the future, funding by the County of projects like Wissahickon Park and the Pile site would be of interest to the County and garner its support.

Aside from funding, the County has one of the best Planning Commission staffs in the region. In-kind planning and design services can be a very valuable way that the County has support the Revitalization Plan.

DELAWARE VALLEY REGIONAL PLANNING COMMISSION (DVRPC)

DVRPC has various planning programs through which they typically fund planning for a variety of project types. A current emphasis of DVRPC is helping to fund regional trails (with both planning and construction funds), such as the Green Ribbon Trail that is contiguous to Wissahickon Park and the West Ambler neighborhood. Wissahickon Park will act as a trail head and as such, may be of interest to DVRPC since the development of the park – partially as a trail head to the greenway – is an integral component to the regional trail.

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PA DEP)

The PA DEP offers a variety of programs for Brownfield (contaminated sites) clean up. There is a good probability that the industrial properties on the north side of West Maple Street have some contamination. DEP can offer assistance to both the public and private

sectors on site clean-up toward adaptive reuse of these sites:

[HTTP://WWW.DEPWEB.STATE.PA.US/PORTAL/SERVER.PT/COMMUNITY/ENVIRONMENTAL_CLEANUP_BROWNFIELDS/6049](http://www.depweb.state.pa.us/portal/server.pt/community/environmental_cleanup_brownfields/6049)

HOME INVESTMENT PARTNERSHIP PROGRAM (HOME)

The Commonwealth will distribute the HOME Program allocation each fiscal year in accordance with the Consolidated Plan, the requirements of the National Affordable Housing Act of 1990, the Final HOME Rule - 24 CFR 92, September 16, 1996, the May 28, 1997 Technical Amendment and August 22, 1997 Streamlining to the Final Rule, and the October 21, 1998 amendments to the Appropriations Act.

In accordance with the Commonwealth's Consolidated Plan as updated in the Action Plan, DCED administers the HOME Program but also transfers a portion of the Commonwealth's allocation to the Pennsylvania Housing Finance Agency (PHFA) as a sub-recipient to administer for rental projects and homebuyer projects, including American Dream Down payment Initiative (ADDI) funds. PHFA uses approximately 35 percent of the Commonwealth's annual allocation of HOME funds for rental housing construction and development for projects with ten or more units through its PennHOMES Program.

PHFA has also agreed to under write all HOME projects requiring under writing. For more information on the PennHOMES Program, contact PHFA at (717) 780-3876, or via e-mail at kavery@phfa.org.

The balance of the HOME funds will be administered by DCED through a competitive application process in a joint review between PHFA and DCED. The nature of the applicant and project will determine whether DCED or PHFA will contract to administer these projects. The HOME program can help to keep current residents in their homes and assist in rehabilitation of structures as property values in the West Ambler neighborhood increase in value.

IN-KIND SERVICES

Some grant programs allow "in-kind" services in place of cash to count as a local match. It is strongly suggested that the Township and WWA immediately begin to keep a detailed inventory of staff and/or official time spent on site projects. Occasionally, grantors may allow time spent to date to count as part of the in-kind match for funds. This record will also demonstrate a continuing commitment on the part of the Township and WWA to the successful implementation of the Revitalization Plan.

PRIVATE FOUNDATIONS

There are various corporations and foundations, which support public works such as park improvements. The competition for these funds has become brisk, but the opportunities should be researched. Funding must often be awarded to non-profit organizations.

SCHOOLS

Local schools and Universities may also be of assistance in several ways. The student body might get involved with clubs, fundraising events, and site cleanup days. While the amount of funds raised may be relatively small, this process builds constituents and support for the park, critical to its long-term success.

LOCAL ORGANIZATIONS

Local Organizations such as garden clubs or a watershed alliance may be willing to contribute in the same manner as the school groups to help implement site improvements.

PAGE INTENTIONALLY LEFT BLANK

APPENDIX LISTING

PLANNING FOR THE FUTURE: REUSE ASSESSMENT FOR THE BoRiT ASBESTOS SITE, EPA, APRIL, 2009	54
BoRiT COMMUNITY ADVISORY GROUP - FUTURE USES GROUP - DRAFT VISION PLAN PRESENTATION, JUNE 4, 2010	78
EPA MEETING OF MAY 30, 2012, MEETING MINUTES	89
ROSE VALLEY CREEK FLOOD HAZARD ANALYSIS, STATEMENT OF WORK, AUGUST 8, 2012	94
RESIDENTIAL MARKET ANALYSIS, OCTOBER, 2012	101
ENVIRONMENTAL STANDARDS MEMO OF OCTOBER 10, 2012	112
TEMPLE CSC MEETING OF NOV 11, 2012 MEETING MINUTES	117
EPA MEETING OF NOV 12, 2012, MEETING MINUTES	118
STREETSCAPE IMPROVEMENTS – CONCEPTUAL COST ESTIMATE, NOVEMBER 15, 2012	1 2 1
MULTI-WAY STOP ANALYSIS FOR MT. PLEASANT AVENUE / MAPLE AVENUE, JANUARY, 23, 2013	1 2 6
CIRCULATION AND TRAFFIC CONTROL STUDY FOR WEST AMBLER, JANUARY 23, 2013	1 3 6
MEMORANDUM ON FEMA ASSISTANCE AND PROGRAMS, FEBRUARY 6, 2013	1 4 6
COMMITTEE MEETING MINUTES (PARTIAL)	1 5 1
PUBLIC MEETING MINUTES (PARTIAL)	1 6 2
PARK DRAFT MASTER PLAN: OPTION 1	1 7 0
PARK DRAFT MASTER PLAN: OPTION 2 - BOYS & GIRLS CLUB	1 7 2

PAGE INTENTIONALLY LEFT BLANK