

HOUTMAN & PHILLIP GREEN PARK MASTER PLAN Media Borough



DE PALLO
DESIGN & PLANNING, LLC
LANDSCAPE ARCHITECTURE & LAND PLANNING

Houtman Park and Phillip Green Park Master Plan

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Houtman Park and Phillip Green Park Master Plan

Section 1 - Executive Summary

Media Borough initiated the master plan for Houtman Park and Phillip Green Park under a grant from PECO Energy. The two park sites, across Lincoln Street from one another are mostly in Upper Providence Township, with only a portion of Phillip Green Park in Media Borough. The parks are largely wooded open spaces containing stream valleys and are most appropriate for passive uses. Media Borough set the following goals for the study:

- Increase usage and enjoyment by residents
- Erosion Control
- Tree Health
- Invasive Plant Eradication
- Safety Features
- Public Facilities
- Improve Storm water run off to Ridley Creek

Summary of Resident Surveys

In addition to holding meetings with the Steering Committee, public participation was undertaken with two primary tools, a survey sent out to residents of the Borough and adjacent bordering neighbors in Upper Providence Township and a public meeting to review those surveys and seek further, more detailed input from the public. The residents' survey identified the following as the five most highly desired facilities and/or programs for the park sites:

1. Benches
2. Walking Trails
3. Environmental programming
4. Invasive plant eradication
5. New planting of trees and shrubs (tie)
Picnic tables (tie)

The public meeting confirmed these findings and identified the following areas of relative consensus:

1. Lighting needs to be improved around the parks perimeter.
2. Residents prefer no access be provided to the lower, creek level of Phillip Green Park.
3. Improve views into the park.
4. Clean up the parks, but provide very limited facilities, passive in nature.

Summary of Recommendations:

Based on a physical review of the park sites and the site analysis contained in this report, coupled with the information from the public input, the following are recommendations for the improvements to the two parks. Further, more detailed recommendations are illustrated on the graphic Master Plan for each park.

Houtman Park

- Provide new pedestrian friendly access to park from Lincoln Street, near the existing park sign via a new trail and bridge over the creek. Replace the existing bridge.
- Provide a perimeter walking trail around the central open space, to near the creek.
- Remove fallen trees, debris, concrete pipes
- Selectively remove vegetation to open up views into the park from new entry.
- Improve lighting around perimeter by replacing broken and damaged lights and supplementing the quantity of street lights.

Phillip Green Park

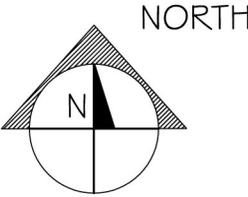
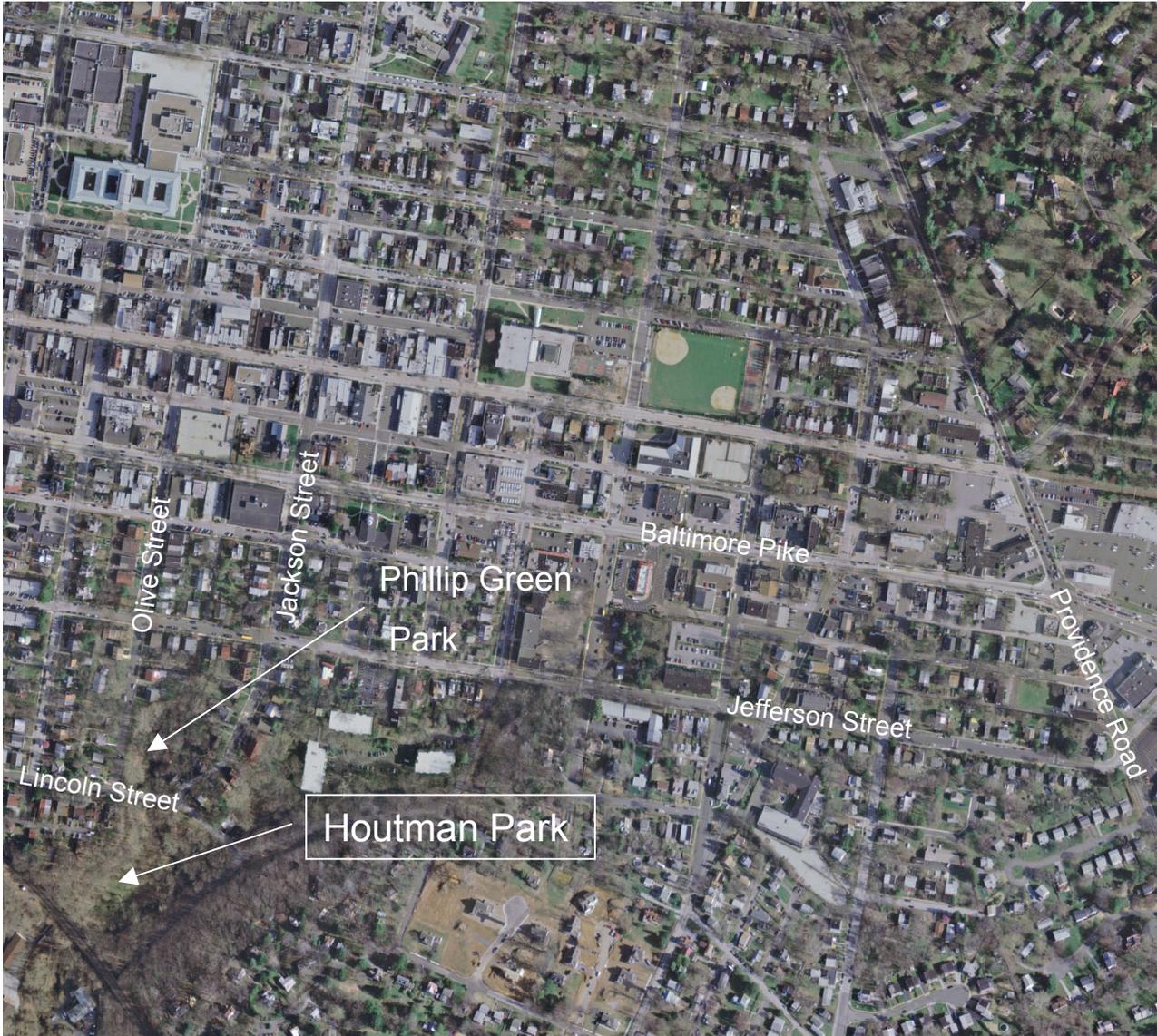
- Clean up, remove invasive plant species.
- Stabilize slopes, repair and stabilize eroded channel from street.
- Improve viewing opportunities into the park from street level.
- Provide a seating area at the upper terrace of the park on Olive Street.

General Recommendations for both Parks

- Improve connection to the community via extension of sidewalks from the neighborhoods.
- Develop a plan and schedule for the removal of invasive species.

Houtman Park and Phillip Green Park
Master Plan

Location Map



Houtman Park and Phillip Green Park Master Plan

Section 2 - Site Review and Analysis

Houtman Park

Houtman Park, located at the corner of Park Avenue and Lincoln Street, is a wooded park site of approximately 2.6 acres, located in Upper Providence Township. Photographs and a Site Analysis follow this section. The overall open space area, from the base of the railroad track embankment to Providence Road, is approximately 3.5 acres. It is bordered on two sides by local streets and one side by residences and the fourth side by the railroad. There are no active recreational facilities on the site. There is a large flat area between the base of slope parallel to the bordering residence and the stream, ranging in width from 100-150 feet and approximately 350 feet long, located roughly in the middle of the park. There is an established access into the center of the park, although it is steep, in excess of 10%.

The park is characterized by steep slopes on the two street frontages on the north and the east as well as the residential border to the west and the railroad tracks to the south. There are areas, such as the residential border to the west at street level and the railroad border to the south (at the trail) that are less steep. Gayley Run bisects the site from north to south, but is primarily the eastern property line of the park. There is a distance of approximately 50 feet from the park boundary to Providence Road. The western and southern slopes are extremely steep, approximately 2:1 in most places, although two terraces traverse them. One serves as the main entrance to the large open space; the other extends across property owned by adjacent residents to the railroad tracks. There are a number of stockpiled logs and stumps and various tree debris at the base of slopes from past clean up of dead and uprooted trees. There is minimal evidence of dumping and trash, although it varies at different times, indicating Borough staff has been removing these items. The slope down to the headwall across the street from Olive Street is comprised of rip-rap and broken concrete, apparently to stabilize an earlier slope failure or erosion issue.

The Sewage Treatment Pumping Station is located at the southeast corner of the site. Steps from a flat open area on Lincoln Street provide access to the Pump Station and to a lower level near a tributary to Gayley Run. The south edge of the site is bordered by the SEPTA R3 line railroad embankment. It sits significantly higher than the site. Its slopes are wooded.

There is an old post and wire guardrail in serious disrepair along Lincoln Street. It should be replaced. There are no sidewalks along the park perimeter, nor any walking trails in the park proper

There are good views into the stream valley from street level, partially obscured by vegetation, particularly in the summer, once invasive vines have established. The views at stream level are excellent. The stream itself is natural in appearance with a good

balance of pools and riffles and natural rock. Access to the stream is difficult, due primarily to dense vegetation. There are approximately 200 feet of undercut stream bank along Gayley Creek, near the headwall under the railroad and approximately 50 feet of stream bank erosion on either side of the existing pedestrian bridge in the park.

The vegetation on site is comprised of a mix of native and invasive species. The vast majority of invasive trees are Norway Maple. There are also Mulberry, Ailanthus and Paulownia trees. The native trees consist of Tuliptrees, Walnut, Sycamore, Beech, Red and Scarlet Oaks, Red Maple, Cherry and less desirable species such as the invasive Black Locust. The herbaceous and shrub layers include invasive exotic species such as Lesser Celandine, Multiflora Rose, Japanese Honeysuckle, Garlic Mustard, Winged Euonymus, Privet, Japanese Knotweed and English Ivy. The English Ivy covers many of the trees. Native shrubs and herbaceous plants include Spicebush, Sedges, Jewel Weed and Skunk Cabbage.

There are approximately fifty (50) recently installed shade trees running along the top of the bank. They include Basswood, Planetree, Honeylocust, Swamp White Oak, Chestnut Oak, Red Maple and Sugar Maple. They were part of a Tree-vitalize grant.

Both park sites are wholly (Houtman Park) or partially (Phillip Green Park) in Upper Providence Township. As such the uses at the site are subject to that township's zoning code. The sites are located in the RO Recreation and Open Space District. Within the RO District the following uses are permitted by right:

- Use C5 - Municipal/Government Facility
- Use E19 - Flea Market
- Use F3 - Health/Recreation Facility, Outdoor
- Use I2 - Non-residential Accessory Use
- Use I4 - Non-residential Accessory Structure.

Existing Conditions

Houtman Park



Culvert with slope stabilization



Culvert looking towards bridge and pump house



Access from Lincoln Street



Steep slopes inside park

Park
Entrance,
facing
Lincoln
Street



View of concrete pipes from pathway located off Park property

Existing Conditions Houtman Park



View of open flat area in Park



Adjacent Rail Line & Residences



Path to Rail Line



Bridge with Steps (note safety issue with railing)

Recently
planted trees
& fallen trees



Gayley Run

Houtman Park Analysis

LEGEND

- OVERLOOK # MAIN ACCESS POINT
- INUNDATED SOIL
- EXISTING OPEN SPACE
- EXISTING ROADWAY
- EXISTING CREEK
- EXISTING VEGETATION
- EXISTING WALKWAY/TRAIL
- EXISTING RAIL LINE
- ACCESS POINT
- EXISTING TREES (CANOPY ONLY)
- DIRECTIONAL VIEWS
- PARK PROPERTY LINE

ANALYSIS

Vegetation

Vegetation at Houtman Park include natives such as Tulip Trees, Boxelder, Walnut, Sycamore, Beech, Oak, Maple, Cherry, Spicebush, Sedges and Skunk Cabbage. Invasive Species include Mexican Bamboo, Winged Euonymus, English Ivy and Garlic Mustard. A few of the larger trees in the Open Space are not in the best condition, while others are healthy and strong, including those that have been planted next to Gayley Run.

Location, Circulation & Access

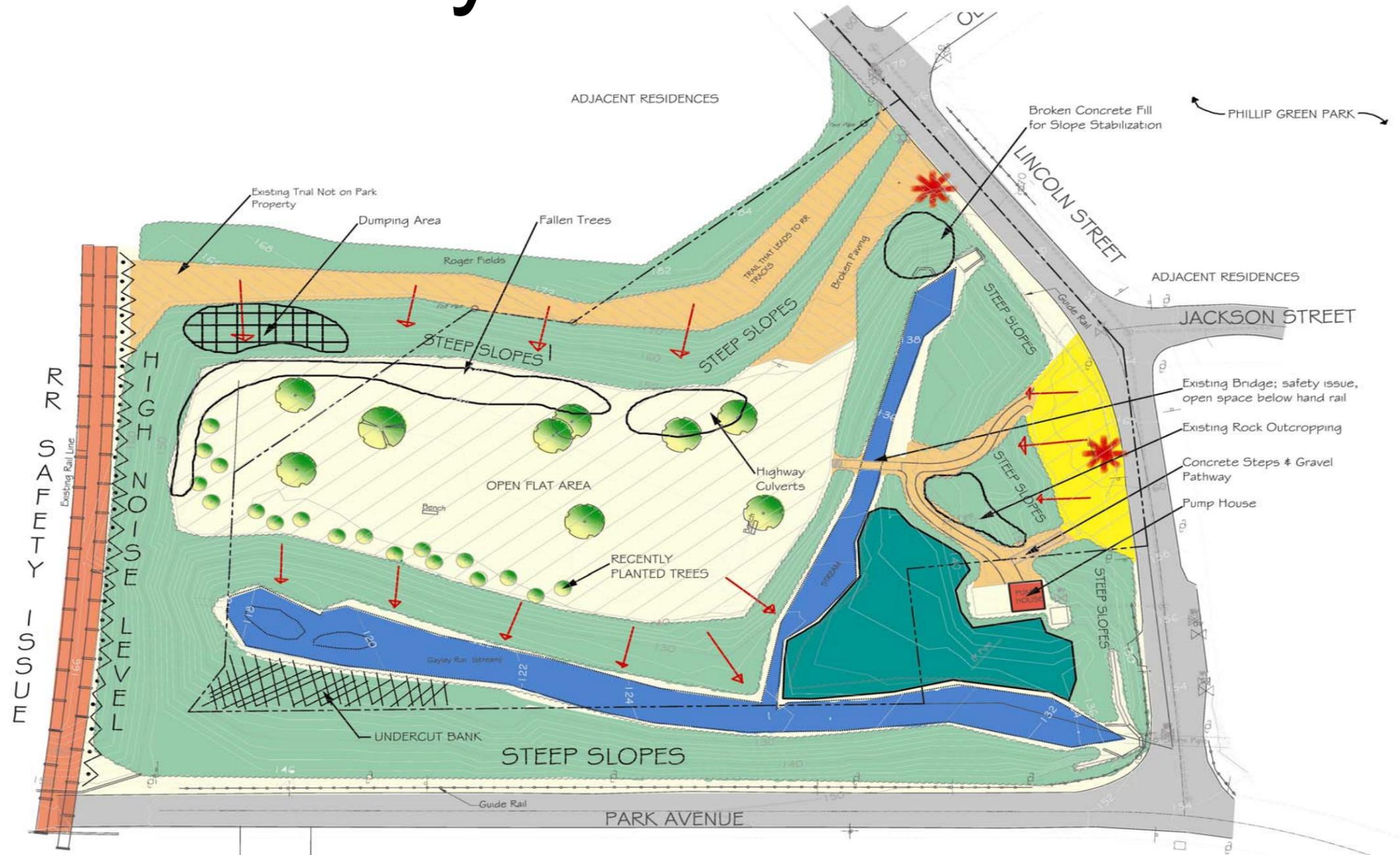
Houtman Park is surrounded by roads on two sides, Park Avenue and Lincoln Street; Woodlands & Residential on the third side, and the Rail Road Line on the fourth side. Proximity to residential housing and easy access to the site allow for optimum use. The Rail Road Line is considered a safety and noise issue, and should be taken into consideration. There are currently two major access points to the park: The Primary entrance on Lincoln Street, and the Secondary entrance adjacent to the corner of Lincoln & Olive. Neither entrance is currently ADA accessible, while the bridge next to the Pump House has unsafe railings.

Gayley Run

The Stream, known as Gayley Run, acts as a physical and noise barrier between Park Avenue and Houtman Park, while providing users with a pleasant visual amenity and calming sound. Gayley Run has the ability to attract water fowl to the site, as well as other small passive creatures.

Views

Though this park is surrounded by steep slopes on all four sides, the views into and out of the park are not lacking. When standing outside the Park, one has a view of the adjacent Rail Road Line, Stream, Pump House, Old Fire Place, the Bridge and vegetation. From within the Park, the space seems wide open, and has many visual opportunities along the stream. The interior of the park is isolated, so steps should be taken to make users feel safe within the space, while also preventing unwanted activities.



Site Analysis

Media Borough Parks Master Plan

Houtman Park

Scale: 1" = 30'-0"



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Houtman Park and Phillip Green Park Master Plan

Section 2 - Site Review and Analysis

Phillip Green Park

Phillip Green Park, located at the corner of South Olive Street and Lincoln Street, is a wooded park site of approximately $\frac{3}{4}$ acres, located in both Media Borough and Upper Providence Township. It is bordered on two sides by local streets and two sides by residences. There are no active recreational facilities on the site. There is a small flat area ranging in width from 20-35 feet at street level on the western edge of the park. There is no established access into the center of the park. Photographs and a Site Analysis follow this section.

The park is characterized by steep slopes on the two street frontages on the west and the south as well as the residential border to the north. The residential border to the east is less steep. A tributary to Gayley Run bisects the site from north to south. The western and southern slopes are extremely steep, in excess of 2:1 in many places. There are a number of slumps where trees have died or uprooted and areas of slope failure. On closer inspection, the slopes are largely manmade with evidence of dumping. The slopes along Olive Street are comprised of fill material, broken asphalt and concrete as well as dumped leaves and other organic debris, such as branches, old potted plants, etc.

At the southwest corner of the site, some failed curbing allows concentrated stormwater flows down the slope and into the creek. There is advanced gully erosion in this area. The south edge of the site is bordered by an old wood and wire guiderail in serious disrepair. It should be replaced.

There are good views into the stream valley from street level, partially obscured by vegetation. The views at stream level are good. The stream itself is natural in appearance with a good balance of pools and riffles. Access to the lower area is non-existent.

The vegetation on site is comprised of approximately 90% invasive species. The vast majority of trees on the Olive Street slopes are invasive tree species, including Mulberry, Paulownia and Norway Maple. The native trees are less desirable species such as Boxelder and Black Locust. Along the eastern residential side of the property are more desirable species, including some large Ash trees and White Oak bordering the site. The herbaceous and shrub layers include invasive exotic species such as Lesser Celandine, Japanese Stilt Grass, Multiflora Rose, Wineberry, Japanese Knotweed, Bittersweet vine, Japanese Honeysuckle, Mile-a-minute vine, Porcelainberry and English Ivy. The English Ivy covers many of the trees. Native herbaceous plants present include Virginia Jumpseed, Pokeweed and White Snakeroot. At the larger flat area near the corner of Olive and Lincoln Streets there is a very large Sycamore tree, $\pm 50''$ diameter. There are ten (10) recently installed shade trees running along the top of the bank, including Basswood and Honeylocust. They were part of a Tree-vitalize grant.

Existing Conditions Phillip Green Park



View of Creek



Culvert



Park Entrance Sign



Flat area on Olive street



Adjacent Properties Between
park and Jackson Street



Steep, eroding slopes

Existing Conditions Phillip Green Park



Lincoln Street Drainage



Lincoln Street Drainage & Debris



Lincoln Street guard rail and
view into Park



Dumping, fallen trees &
erosion at corner

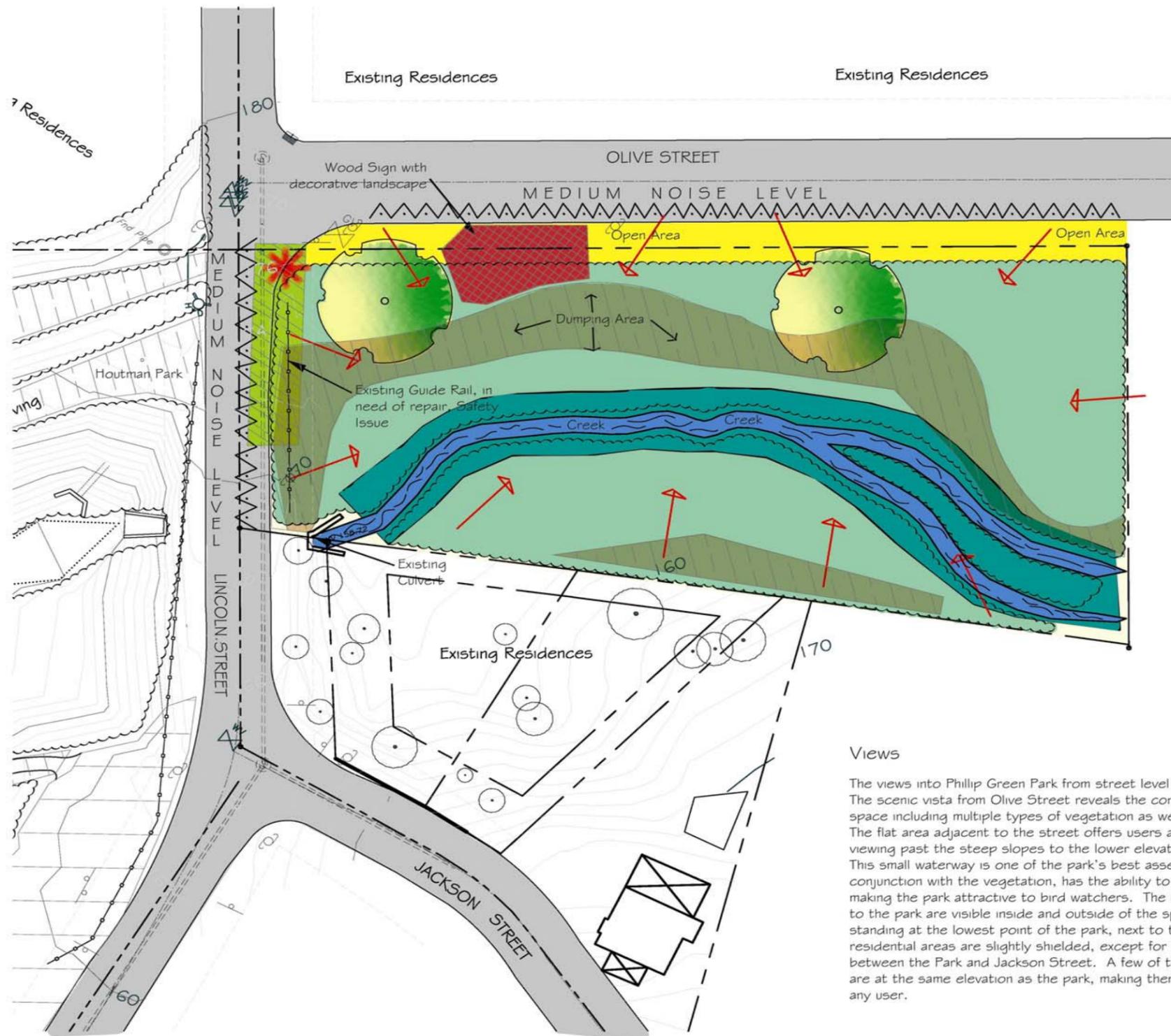


Dumping and Debris



General view from within Park

Phillip Green Park Analysis



LEGEND

- FLAT AREA, MAIN OVERLOOK
- INUNDATED SOIL
- EXISTING OPEN SPACE
- EXISTING ROADWAY
- EXISTING CREEK
- EXISTING VEGETATION (TREE CANOPY, SHRUB LAYER, HERBACEOUS LAYER)
- SIGNAGE & ORNAMENTAL LANDSCAPING
- STEEP SLOPE
- DRAINAGE ISSUE
- ACCESS POINT
- EXISTING TREES (CANOPY)
- DIRECTIONAL VIEWS
- PARK PROPERTY LINE

ANALYSIS

Erosion Control

Steep Slopes surround the site, making slope stabilization an area of importance when designing the park. Much of the soil on the steep slopes parallel to Olive Street is debris filled from previous dumping. Additionally there is a drainage issue on the corner of Olive Street and Lincoln Street, that may be eroding the steep slopes on Lincoln Street, thereby causing sediment to wash into the creek, which can interrupt the creek's ability to remove the stormwater that has been directed toward the outflow structure on the site.

Vegetation

Vegetation at Phillip Green Park include natives trees such as Elm, Ash, Oak and Sycamore. The many invasive species include Mulberry, Norway Maple, Multiflora Rose, Japanese Honeysuckle and English Ivy. Strategic clearing of invasives will make the site more open, so as to open the views of the stream valley. Planting natives will not only attract certain types of small wildlife, such as butterflies, but can stabilize eroding slopes found around the perimeter of the park.

Location, Circulation, Access

Phillip Green Park is directly adjacent to Olive Street and Lincoln Street. The other two sides of the park are surrounded by residential housing. Because there are no designated access points going into the park, the majority of green space is inaccessible, save for the area on Olive Street where the Park sign is located. The steep, eroding slopes make access difficult. The size of the park and the slopes also make ADA compliant access to the stream impossible.

Views

The views into Phillip Green Park from street level are picturesque. The scenic vista from Olive Street reveals the contents of this green space including multiple types of vegetation as well as the creek. The flat area adjacent to the street offers users a casual area for viewing past the steep slopes to the lower elevations of the park. This small waterway is one of the park's best assets, and in conjunction with the vegetation, has the ability to attract birds, making the park attractive to bird watchers. The residents adjacent to the park are visible inside and outside of the space. When standing at the lowest point of the park, next to the creek, the residential areas are slightly shielded, except for those located between the Park and Jackson Street. A few of these residences are at the same elevation as the park, making them highly visible to any user.

Site Analysis

Media Borough Parks Master Plan

Phillip Green Park

Scale: 1" = 20'-0"



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Houtman Park and Phillip Green Park Master Plan

Section 2 - Site Review and Analysis

Community

Media Borough is largely built out. The Borough does not own a great deal of public land for recreation or open space. Most land used for active recreation space is either leased from the Rose Tree Media school district or is in parks outside the Borough. The Comprehensive Plan Update, prepared in 2005 recommends the following Recreation Initiatives:

1. Recreational facilities should be improved to enhance their use.
2. Recreational programs should be expanded to improve the health and fitness of all age groups.
3. Barrall Community Park and the Scott-Lowrie Playground should be maintained and enhanced.
4. Basketball maintenance at the Media Elementary School should be improved.
5. Glen Providence Park should be rehabilitated and enhanced.
6. The Media Borough Recreation Board should continue to promote recreational programs for Borough residents and property owners.
7. The Borough should consider the enactment of a Recreational Fee-in-Lieu Ordinance Amendment to the Subdivision and Land Development Ordinance to accrue funds for recreational site enhancement.
8. Acquire open space to expand passive recreational opportunities.
9. Indoor sports opportunities should be studied and programmed.
10. A new Neighborhood Park in the northwest quadrant at the Borough should be considered.
11. A Borough-wide Recreation, Parks and Open Space Plan should be prepared to evaluate existing facilities, programs and operations for persons of all ages and to explore multi-municipal opportunities.

The acquisition and development of Houtman and Phillip Green Parks addresses Master Plan Initiative 8 in the Comprehensive Plan. As detailed in this report and as indicated by the resident surveys and public meetings, coupled with being physically located in Upper Providence Township, these two park sites are not suited to address any of the active recreational initiatives identified in the Comprehensive Plan. The Comprehensive Plan also identified the Top 13 Goal Themes. The development of these two park sites addresses three of those goals directly, Sidewalks, Community Facilities and Quality of Life/Safety. These two parks can also function as a Gateway to the community and a link between Media Borough and Upper Providence Township.

Linking these two sites to the Borough sidewalk network is supportive of the Comprehensive Plan objectives and recommendations to provide sidewalks on at least one side of every Borough street and to “better enable pedestrians to walk, versus drive, throughout the Borough.”

Houtman Park and Phillip Green Park Master Plan

Section 2 - Site Review and Analysis

Other Park, Recreation and Open Space Facilities

Other park and recreation facilities exist throughout the Borough, offering a limited variety of park and open space opportunities. Not all of these facilities are located in parks. The following facilities in Media Borough offer park, recreation and open space opportunities:

1. Boys Club Complex

The Boys Club Complex is located on Youth Way, between Monroe Street and North Providence Road. The property consists of a building located on approximately 1 acre of ground. The building is adjacent to the Borough Water Towers. There are no developed facilities. The Borough Public Works Department cuts the grass and removes the trash. Facilities include an open lawn area with removable toys and play equipment.

2. Media Elementary School / Barrall Fields

This complex on Radnor Street between State and Front Streets is leased from the School District. It contains 2 baseball fields, 2 tennis courts, a basketball court and a playground. The facilities are used for virtually all of the Borough active recreational activities, including softball and baseball leagues as well as a Summer Camp. Borough Public Works employees cut the grass, remove trash 3 times per week and daily for the 5-6 week duration of the summer camp.

3. Water Tower

The Borough owns and is responsible for the maintenance of 3 contiguous tracts of ground totaling 1 ½-2 acres around the water tower between North Providence Road, Monroe Street and the adjacent Boys Club property. Maintenance consists of cutting the grass and occasional trash removal. The properties abut the Boys Club property, but fencing and other obstructions do not invite the public to use the area.

4. Borough Hall Complex

The Borough hall complex, in addition to the police, administration and community buildings contain gardens, passive open space and a playground.

Media Borough Public Works Department maintain several other smaller open space lots that contain mostly lawn and some trees at intersections in the Borough.

Houtman Park and Phillip Green Park Master Plan

Section 3 - Residents Surveys

Facilities and Programming

A survey was sent to Borough residents with the Newsletter mailing requesting their input on the development of the park. The following table summarizes the resident's ratings for the importance of various park facilities and programs.

Residents were asked to rate the importance of facilities and programs at the two parks on a scale of 1 to 5, with 1 being not interested to 5 being the most important. Each response was multiplied by the number of that response. A total value for each Facility or program was developed. For instance, the category "Improved Access" was assigned a value of 87 as follows: $[(9 \times 1) + (2 \times 2) + (3 \times 6) + (2 \times 4) + (10 \times 5)] = 87$. The higher value programs or facilities are reflected by the larger number in the Total column.

Facility	Rating Scale					Total	No Response
	1	2	3	4	5		
a. Improved Access	9	2	6	2	10	87	2
b. Improved Visibility from Street	12	2	8	2	3	63	4
c. Improved Lighting	12	2	5	3	5	68	4
d. Invasive Plant Eradication	7	2	4	10	5	88	3
e. New Planting Trees & Shrubs	5	1	7	5	8	88	5
f. Bird Watching	9	3	5	3	9	87	2
g. Walking Trails	6	3	3	5	11	96	3
h. Handicap Accessibility	8	2	5	5	5	72	6
I. Exercise/Fitness Trail	12	2	3	2	7	68	5
j. Challenge trail	15	3	2	2	4	55	5
k. Picnic Tables	4	4	6	7	6	88	4
l. Grills	13	2	7	3	2	60	4
m. Picnic Shelter/Gazebo	12	4	7	3	3	68	2
n. Benches	2	1	2	10	13	115	3
o. Game Tables	19	2	4	2	1	48	3
p. Horseshoe Pits	15	0	7	2	4	64	3
q. Nature Trail	10	3	3	3	10	87	2
r. Interpretive Signage	12	2	3	5	4	65	5
s. Environmental Programming	6	2	9	4	8	93	2
t. Improved Access to Creek	11	1	7	2	8	82	2

The five highest ranked facilities and/or programs are Benches, Walking Trails, Environmental Programming, Invasive Plant Eradication, New Planting of Trees and Shrubs and Picnic Tables.

The five least desired facilities or programs are Game Tables, Grills, a Challenge Trail, Improved Visibility from the street and Horseshoe Pits.

Houtman Park and Phillip Green Park Master Plan

Section 3 - Residents Surveys

Community Involvement

The following table summarizes the Resident ratings for the importance of community involvement in the planning, development and ongoing maintenance of the parks.

The same rating system presented for facilities is used below

Program	Rating Scale					Total	No Response
	1	2	3	4	5		
a. Development of a Friends of the Park Group	3	0	10	4	13	114	1
b. Partner with Environmental organizations	3	2	9	3	12	106	2
c. Use of the Site for Community Volunteer Days	4	2	11	3	9	98	2

The responses indicate a recognition of the importance of community participation in the planning, development and ongoing maintenance for these park sites. The high total value eclipses most of the facility rankings.

The section of the Resident's Survey that asked if the resident was willing to pay increased taxes to fund the cost of physical improvements and maintenance of the implemented improvements yielded mixed results. Of the 31 responses, they break down as follows

No Response	1
Yes	13
No Response	16
Not Applicable	1 (identified themselves as a resident of Upper Providence)

Of the Yes responses, all 13 identified themselves as Media Borough residents. Of the 16 No responses, 4 identified themselves as Upper Providence residents, 11 as residents of Media Borough and 1 did not indicate in which municipality they resided. A slight majority of those that identified themselves as Media Borough residents indicated they would be willing to pay more taxes for the improvements to the two parks (13 Yes to 11 No).

In response to the question of whether or not they currently used the parks, 15 respondents indicated they did not, 2 offered no response and 14 indicated they did use the parks currently. Of the 14 indicating they used the parks, the following usages were reported.

Walk / Play with Dog	9
Bird Watch / Meditate	1
Nature / Children's Play	3
Walking	1

One of the 15 people that reported not using the parks indicated they had not heard of the parks and did not know where they were located.

Houtman Park and Phillip Green Park Master Plan

Section 4 – Recommendations

Based on a physical review of the park sites, the site analysis contained in this report, coupled with feedback from the Grant Committee and information from the public input, the attached graphic Parks Master Plans were developed for each of the parks. The public participation through a resident's survey and public meeting revealed a desire for minimal development at the park sites. Most sentiment was to clean up the parks and provide greater maintenance while enhancing the experience for park users.

The site reviews and analysis support preserving the passive nature of the parks. Very little land on either park site is appropriate for active recreation uses and that land which is appropriate for that form of park development is not easily accessed. Although the ecosystems of both park sites are disturbed and out of balance, the topography, streams and wooded nature of the parks provide strong foundations for their further development as passive open space amenities.

The following are recommendations for the improvements to the two parks. Further, more detailed recommendations are illustrated on the graphic Park Master Plans for each park.

Houtman Park

- Provide a new highly visible entry to the park near the existing park sign.
- Install park information kiosk at new entry.
- Provide new pedestrian friendly access to park from entry plaza on Lincoln Street via a new trail and bridge over the creek. Remove the existing bridge.
- Provide a perimeter walking trail around the central open space, to near the creek.
- Remove fallen trees, debris, concrete pipes.
- Selectively remove vegetation to open up views into the park from new entry.
- Provide an observation area near the creek. Selectively clear sight lines between this area and the new entry for surveillance.
- Improve lighting around perimeter by replacing broken and damaged lights and supplementing the quantity of street lights.
- Improve connection to the community via extension of sidewalks from the neighborhoods.
- Install safety fencing between new sidewalk and park slope.
- Develop a plan and schedule for the removal of invasive species.
- Install new gate at existing entry to limit access to all but maintenance and emergency vehicles.
- Stabilize eroded and undercut slopes.
- Extend new perimeter trail system onto adjacent non-park lands if agreements can be reached.
- Provide benches, trash receptacles and picnic tables around perimeter walking trail and central open space.
- Provide interpretive signage for Environmental Programming at the park.

LEGEND

-  PROPERTY LINE
-  PROPOSED TREES
-  EXISTING TREE
-  EXISTING TREE LINE
-  EXISTING WATERWAY
-  STEEP SLOPES
-  OPEN SPACE
-  SLOPE STABILIZATION
-  STREAM BANK STABILIZATION
-  PROPOSED SIDEWALK
-  PROPOSED PAVERS
-  PROPOSED TRAIL
-  PROPOSED BENCH
-  PROPOSED TRASH RECEPTACLE

NOTES:

1. CUT BACK OVERHANGING NORWAY BRANCH @ EXISTING PARK ENTRANCE & REMOVE TWO NORWAY AND WALNUT TREES NEXT TO FIRE HYDRANT TO OPEN UP PARK. INSTALL GATE.
2. REMOVE DEAD BLACK LOCUST (LARGE, 3 TRUNKS) LOCATED AT SPLIT BETWEEN UPPER TRAIL AND EXISTING ACCESS, FOR SAFETY.
3. REMOVE LARGE FALLEN TREES STOCKPILED AT BASE OF SLOPE AND CONCRETE STORM PIPES FROM SITE.



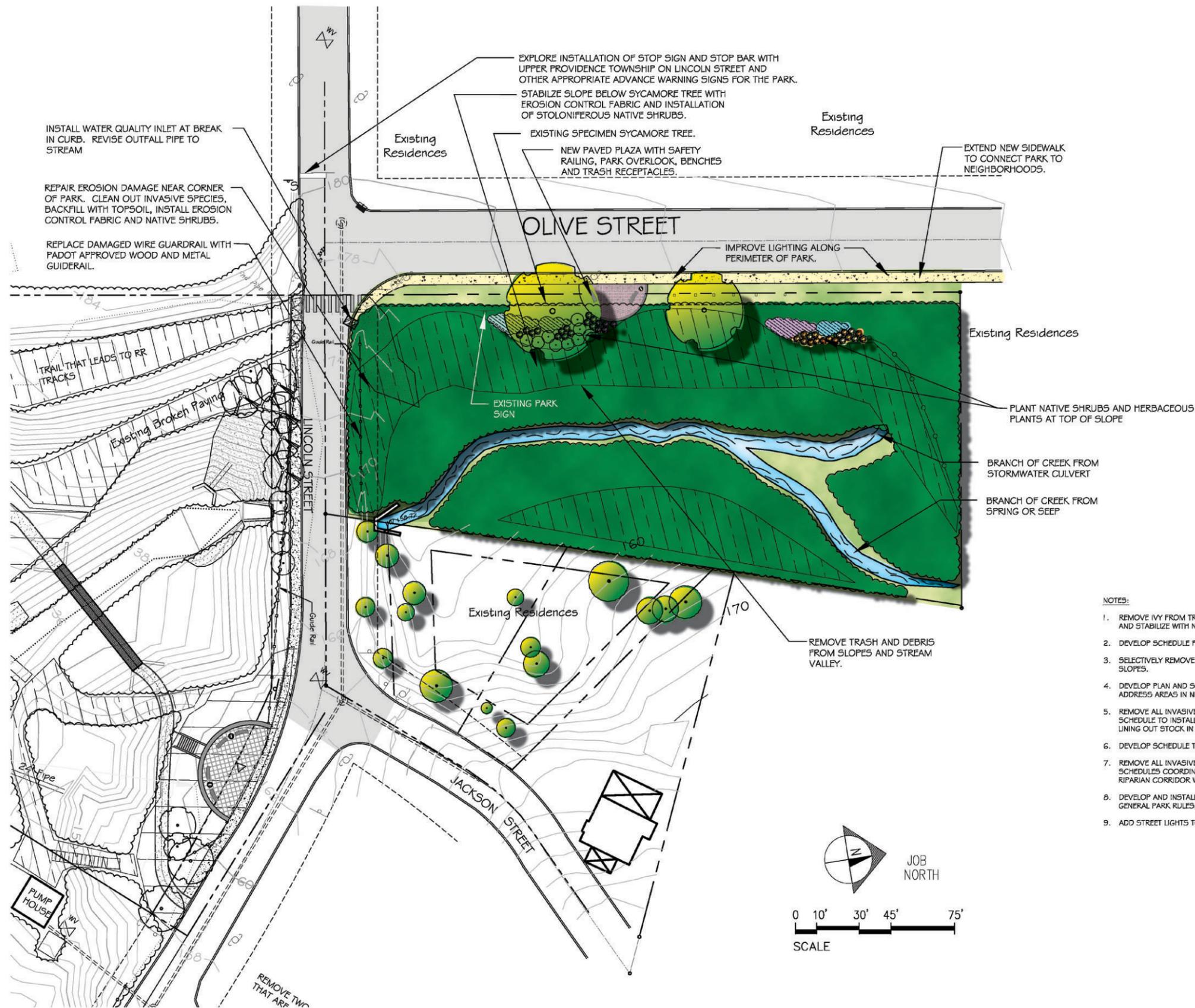
Master Plan

HOUTMAN PARK

Phillip Green Park

- Clean up, remove invasive plant species.
- Repair and stabilize eroded channel from the street.
- Improve viewing opportunities into the park from street level.
- Provide a seating area at the upper terrace of the park on Olive Street.
- Develop a plan and schedule for the removal of invasive species.
- Improve lighting around perimeter by replacing broken and damaged lights and supplementing the quantity of street lights.
- Improve connection to the community via extension of sidewalks from the neighborhoods.
- Stabilize eroded slopes.
- Develop a plan and schedule for the removal of invasive species.
- Install native landscape beds at the top of slope to showcase native plants that will be used in the restoration of the two park sites. Provide interpretive signage.
- Install a water quality inlet at the corner of Olive Street and Lincoln Street to treat street runoff before it reaches the streams.

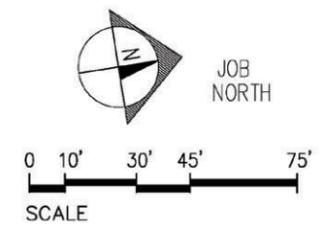
In addition to the above recommendations and the graphic Park Master Plans for Houtman Park and Phillip Green Park, this section contains recommendations for addressing invasive species, water quality and provides a recommended plant list for landscape installations in the parks.



LEGEND

- PROPERTY LINE
- PROPOSED TREES
- EXISTING TREE
- EXISTING TREE LINE
- EXISTING WATERWAY
- STEEP SLOPES
- OPEN SPACE
- STEEP SLOPE STABILIZATION
- PROPOSED SIDEWALK
- PROPOSED PAVERS
- PROPOSED BENCH
- PROPOSED TRASH RECEPTACLE

- NOTES:
1. REMOVE IVY FROM TREES. DEVELOP SCHEDULE TO REMOVE IVY FROM PARK AND STABILIZE WITH NATIVE PLANTINGS.
 2. DEVELOP SCHEDULE FOR VINE REMOVAL. 2-4 TIMES YEARLY.
 3. SELECTIVELY REMOVE EXCESS FALLEN DEBRIS FROM STREAM VALLEY AND SLOPES.
 4. DEVELOP PLAN AND SCHEDULE TO ADDRESS AREAS OF SLOPE FAILURE. ADDRESS AREAS IN NEED OF SLOPE STABILIZATION AT TIME OF REMOVALS.
 5. REMOVE ALL INVASIVE TREE SPECIES, 2" DIAMETER AND SMALLER. DEVELOP SCHEDULE TO INSTALL NATIVE TREES ON SLOPES. INSTALL ± 1" DIAMETER LINING OUT STOCK IN EARLY SPRING OR LATE FALL.
 6. DEVELOP SCHEDULE TO REMOVE INVASIVE TREE SPECIES OVER 2" DIAMETER.
 7. REMOVE ALL INVASIVE SHRUBS FROM PARK. DEVELOP PLANS AND SCHEDULES COORDINATING REMOVALS WITH REVEGETATION OF SLOPES AND RIPARIAN CORRIDOR WITH APPROPRIATE NATIVE SPECIES OF SHRUBS.
 8. DEVELOP AND INSTALL APPROPRIATE PARK SIGNAGE, ADDRESSING USAGE, GENERAL PARK RULES, HOURS, DOG RULES, ETC.
 9. ADD STREET LIGHTS TO UTILITY POLES THAT DO NOT CURRENTLY HAVE LIGHTS.



Master Plan

PHILLIP GREEN PARK

Houtman Park and Phillip Green Park Master Plan

Section 4 - Recommendations

Invasive Species

Invasive exotic species are those that are not indigenous to an area and by their nature are aggressive growers that can crowd out and displace native plant materials. Houtman and Phillip Green Parks are both effected by invasive exotic plant materials; Phillip Green Park more so than Houtman Park. The following table summarizes the invasive exotic species observed at the two park sites, with a brief description and lists recommended control methods for each species. The table is organized by category: Trees, Shrubs, Herbaceous Plants and Vines.

Species	Description	Ecological Threat	Control
TREES			
<i>Acer platanoides</i> Norway Maple	Large growing shade tree to 90 feet. Often confused with Sugar Maple, especially when young. Leaf stem produces a milky sap when pulled from branch.	Prolific seeder, dense early season shade that displaces native herbaceous plants. Excretes toxic substance from roots that inhibits growth of other tree seedlings and wildflowers.	Pull or dig trees up to 2" D. by hand. Cut larger trees to the ground. Remove any resprouts immediately.
<i>Ailanthus altissima</i> Tree of Heaven	Rapidly growing deciduous tree to 80 feet. Smooth bark, large compound leaves with up to 25 leaflets. Large clusters of small flowers in June produce a mass of samaras on the female tree. When young, confused with Sumacs.	Prolific seeder. The samaras can be carried far by wind and water. Reprouts aggressively when cut.	Remove large female trees to eliminate seed bank. Pull young trees when soil is moist to avoid leaving roots that may resprout. Girdle base of large trees. Apply herbicide to cut stems to avoid resprouting.
<i>Morus alba</i> WhiteMulberry	The White Mulberry are invasive trees with mitten shaped leaves, fast growing to 50 feet tall. Large berries are palatable to birds.	Invades open habitats. Vigorous growth replaces native species. Spreads by seed and vegetative growth.	Seedlings can be pulled. Cut larger trees and grind stump. Apply glyphosate to cut stump. Girdle the tree.
<i>Paulownia tomentosa</i> Princess Tree	Medium height shade tree to 60 feet.. Leaves large, hairy on upper surface. Heart shaped. Flowers often confused with Wisteria. Fruit is a hard brown capsule.	Prolific seeder, easily transported by the wind and water. Very fast grower. Flowers at young age.	Pull or dig trees up to 2" D. by hand. Cut larger trees to the ground prior to seed formation. Apply systemic herbicides to stump.
SHRUBS			
<i>Euonymus alata</i> Burningbush	An ornamental spreading shrub, growing to 12 feet tall and wide. Green branches with corky twigs. Bright green leaves in the summer turning bright scarlet red in the fall. Red purple fruit capsule matures in the late summer to fall.	Burningbush is still sold in nurseries and is widely planted for its fall color. It grows well in deep shade or full sun, dry to moist soils, forming dense thickets that crowd out native woody and herbaceous species. Prolific seeder.	Do not plant this shrub. Can be removed by pulling or digging out the very fibrous dense root mass. Established shrubs can be cut then paint the stump with glyphosate. Foliar spraying with glyphosate in early summer can be used on large populations.

<i>Ligustrum spp.</i> Privet species	Privet is a fine leaved shrub used widely as a hedge that has escaped cultivation. Can grow to 15 feet. Tolerates sun or shade. Small white fragrant flowers in clusters at ends of branches produce blue-black berries in late summer	Berries are highly browsed by birds and spreads through seed dispersal that way. Forms dense thickets that crowd out native species.	Do not plant privet. Dig out or pull small plants. For larger plants, either dig up or spray leaves with a glyphosate herbicide.
<i>Lonicera maackii</i> Amur Honeysuckle	Shade tolerant, upright spreading shrub, to 10 feet high and wide. Leaves opposite, along the stem. Flowers fruits and seeds all occur in pairs at the leaf axils. Flower is creamy white, tubular.	Prolific fruit production is attractive to birds. Out competes native plants by decreasing moisture, nutrients and light. Vegetative sprouting, from cut plants or disturbed roots	Hand removal of plants, being careful to get as much of the root as possible. Target removals prior to fruit set to eliminate future crops.
<i>Rosa multiflora</i> Multiflora Rose	Dense, thorny, thicket forming shrub rose. Tolerant of most soils, sun or shade. Covered with white fragrant 1" flowers in mid-spring with red fruits appear in mid-summer and last to winter.	Aggressive, Thicket forming, crowds out native species. Spread by seed, stolons and arching canes that touch down and root. Seeds are viable for up to 20 years.	Pull young plants. Cut back or mow down older plants repeatedly or apply contact systemic to cut shoots. Follow up treatments are usually necessary.
<i>Rubus phoenicolasius</i> Wineberry	Dense, thorny spreading shrub to 6 foot height in the raspberry family. Occurs in open woods. Edges and along streams. Conspicuous hairy red stems. Raspberry type fruit.	Aggressive, crowds out native species. Spread by seed, root buds and arching canes that touch down and root.	Plants can be pulled or the canes can be treated with a systemic herbicide such as glyphosate or triclopyr
HERBACEOUS PLANTS			
<i>Alliaria petiolata</i> Garlic Mustard	A biennial herb in the mustard family, approx. 2 feet in height with clusters of small white flowers in spring. Leaves kidney shaped with a wavy edge.	Garlic Mustard blooms and sets seed in its second year. Invades disturbed areas in shade and along stream corridors. Not browsed by deer. Displaces native spring wildflowers	Seeds survive for long periods. Control should involve removal of first year plants and second year plants in early spring before seeds set. Cutting of plants close to ground before flowering also effective since plant is biennial
<i>Microstegium vimineum</i> Japanese Stiltgrass	An annual grass forming dense colonies throughout the eastern United States. Plants have lance shaped leaves, 3" long. Spreads by seed and vegetatively by rooting from the nodes that then root when touching the ground.	Forms dense patches, replacing native plants and natural habitats in open to shady, and moist to dry locations. Long period of seed viability.	Shallow rooted. Pull by hand at any time. Cut back plants with a mower or line trimmer before seed set. Large established stands need to be treated with a contact systemic.
<i>Polygonum cuspidatum</i> Japanese Knotweed	Wide spread invasive to 10 ft. height, with large broad oval leaves to 6". Upright, shrubby forming colonies. The stems are erect, smooth and bamboo like. Flowers in summer are small but occur in large sprays on the plant. Fruit are winged.	Persistent, tolerates a wide range of habitats. Often found near water sources and low lying areas. Spreads rapidly to form dense thickets via seed dispersal by wind and water and underground via rhizomes.	Regrows easily from sprouts. Complete removal of the plant when soil is moist, so entire root and all runners can be extracted. Glyphosate and triclopyr herbicides can be applied to foliage and cut stems.
<i>Ranunculus ficaria</i> Lesser celandine	A low growing ephemeral groundcover found primarily in moist forested areas, including floodplains. Covered with small yellow to golden buttercup type flowers March through May. Leaves are shiny, dark green and kidney shaped. Begin to appear at the end of winter.	Emerges very early in spring, before native spring ephemerals and if left untreated will form a dense mat that is impenetrable to native species, especially native spring flowering plants. Spreads primarily underground through tubers and bulblets	For small infestations, remove by hand, being careful to get all of the small bulblets below ground. Use of a contact systemic early in the season before the emergence of other plants is recommended for larger infestations.

VINES			
<i>Amelopsis brevipedunculata</i> Porcelainberry	Mistaken for the native grape, the leaves of Porcelainberry are bright green, coarsely toothed, and slightly hairy on the underside. They vary from a simple, heart-shaped "grape leaf" form, to a slightly three- to five-lobed shape, to a deeply dissected lobed form. Berries in the fall range in color from white to lilac, purple and sky blue	The climbing vine attacks the shrub, sapling and sub-canopy levels of forest edges as it climbs. It forms dense green mats as it out-competes our native species for light, water, and nutrients. Seeds germinate readily in disturbed soils. Spread by birds and small animals.	Hand prune in the fall before berry set and spring to prevent flower set. Cut and remove vines from trees. Apply systemic herbicide to leaf surfaces.
<i>Celastrus orbiculatus</i> Oriental Bittersweet	A twining vine that can climb to 60 feet in the tree canopy. Grows on forest edges and in open forest canopies. Vines can attain a girth of 4" diameter. Leaves are oval to nearly round, medium green turning yellow in the fall. Berries are red and yellow. Roots are orange.	Aggressive, grower, spread by seed dispersed by birds, stolons and rhizomes and root suckering. Can shade out the canopy and ground layer in areas where it becomes established. Twining nature can strangle young trees	Plants should be pulled, tracing the root as much of the root as possible. Foliar sprays are effective as is application of triclopyr to the cut stems.
<i>Hedera helix Ivy</i> English Ivy	Evergreen climbing vine, escaped cultivation from the garden. Woody vine with dark evergreen five lobed leaves, turning oval with age.	Grows well in deep shade where it can form solid stands, both on the ground where it inhibits growth of native woodland plants and the canopy where it adds dangerous weight to the trees. Solid mass on herbaceous and woody plants. Also harbors a plant pathogen that is harmful to Oaks, Elms and Maples.	Do not plant ivy in the landscape. Hand pull vines growing along the ground. Cut vines from trees to kill upper portion of vine and strip vine from lower portion of tree. Treat cut stems with a triclopyr herbicide. Contact systemics applied to leaf surfaces are not very effective.
<i>Lonicera japonica</i> Japanese Honeysuckle	Trailing and twining semi-evergreen woody vine. Older stems brown with shedding bark, hollow. Opposite leaves, oblong in shape. White to pale yellow fragrant flowers throughout the summer	Vigorous twining nature will cover and choke out many native shrubs and young trees. Can girdle the bark of younger plants. Will shade out native herbaceous and woody plants.	Small populations can be controlled by hand pulling. Remove all roots and remove all trailing vines. Apply glyphosate to larger infestations in fall, when other vegetation is dormant. Re-application will likely be required.
<i>Polygonum perfoliatum</i> Mile-a-Minute	An herbaceous trailing vine with light green triangular shaped leaves, distinctive circular cup shaped leafy structures along the stems at nodes and downward pointing barbs on the stem occurring in disturbed open areas and forest edges.	Grows rapidly as its name suggests, covering everything in its path. Chokes off light, limiting native plants ability to photosynthesize. Barbs on the stem make mechanical controls difficult. Prolific seeder from June to October, with seed persisting in the soil up to 7 years. Seed can be dispersed by water or animals.	Protective clothing and heavy duty gloves must be worn to manually pull vines. Vines best pulled early in the season before the barbs harden. Vines with mature fruit should not be pulled as it may spread the seed. Vines should be pulled continually throughout the growing season to reduce seed set. Yearly follow up is necessary. Use of a contact systemic at a low concentration to avoid damage to the underlying plants can be effective.

Additional information on invasive plant species in our area and their control is available from Bowman's Hill Wildflower Preserve at www.bhwp.org and from the Pennsylvania Department of Conservation and Natural Resources (DCNR) at www.dcnr.state.pa.us/Forestry/wildplant/invasivelist.aspx, The National Invasive Species Information Center www.invasivespeciesinfo.gov, and the Plant Conservation Alliance's Alien Plant Working Group www.nps.gov/plants/alien/.

In order to maintain the progress of restoring the natural habitat of the two park sites, the ongoing participation and vigilance of volunteer groups is paramount. An organized volunteer effort to remove exotic invasive species, check their spread and monitor their re-occurrence is essential. All "heavy lifting", such as the removal of large or fallen trees, will likely be the responsibility of the Borough. Lighter duty work that requires hands on maintenance, such as the removal of vines, woody saplings and seedlings and similar can easily be accomplished by volunteers.

In order to organize and maintain the volunteer effort, it is recommended a "Friend of the Parks" group be formed. The effort should start in the immediate neighborhood, as those most effected by the condition of the parks are most likely to have the greatest interest. The group can become a community building organization. Media Borough and Upper Providence Township should assist in this effort by publicizing the new parks organization on their web sites and in their newsletters. The municipalities may also lend a hand by providing some equipment or crews during workdays, to assist in the removal of debris.

Local conservation organizations with similar missions can be enlisted to help in these efforts. They can be asked to notify their membership of the newly formed park group to enlist additional members with the interest and possibly expertise to aid in the effort to restore the parks' ecosystem. The aid of their professional staff can be sought to assist workday efforts or to develop a plan for the ongoing maintenance and stewardship of the parks.

Houtman Park and Phillip Green Park Master Plan

Section 4 – Recommendations

Water Quality

Water quality of the streams in Houtman Park is generally good. It is tested a minimum of three times per year by the state. The majority of the flows in the stream originate in the streets of Media Borough.

There is little room in the parks to install water quality BMP's nor is there reason as the source of pollutants lies outside the park boundary. Treatment at the source, in the inlets is possible. Some examples appear at right.

Sedimentation in the streams as a result of localized stream bank erosion should be addressed by appropriate bio-engineering solutions.



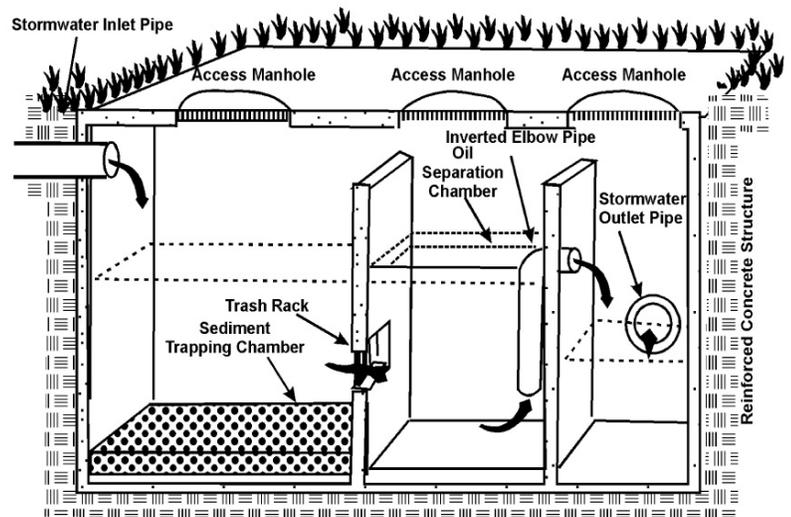
Drain Inlet Filters trap Sediment, Debris, Heavy Metals, and Floating Solids. They can be inserted directly into a standard Type-M inlet as a retrofit. The filter is less expensive than a Water Quality Inlet, but has less capacity and requires more frequent maintenance.

Optional Porous Paving Material can be used as the material in new paved plazas, to reduce runoff to the streams and increase infiltration.

Although the technology for porous concrete is improving, the proposed sidewalks are too steep for porous concrete to achieve maximum effectiveness.



Proposed Water Quality Inlets will have the benefits of providing pollutant removal in stormwater released into the borough's storm drains. Pollutants contained in the runoff are separated by the chambers within the inlet. Soil particles are trapped in the first chamber but must be periodically removed to prevent re-suspension. Floating debris will also be trapped in the first chamber. Subsequent chambers will separate oil from water as oils are floated to the top. Best as an off-line BMP or as a stand alone basin, as high flows reduce effectiveness.



Houtman Park and Phillip Green Park Master Plan

Section 4 – Recommendations

The Plant Schedule

The restoration of the Houtman and Phillip Green Parks involves, among other things, the removal of extensive invasive exotic species of plants. The restoration offers the opportunity to showcase many native plants, commonly available that thrive in the differing habitats of the two parks and that offer a diversity of aesthetic attributes. Listed below are the plant types that are recommended for the landscaping of Houtman and Phillip Green Parks.

Deciduous and Evergreen Trees:

Acer rubrum, Red Maple
Acer saccharum, Sugar Maple
Betula nigra, River Birch
Carpinus caroliniana, American Hornbeam
Cercis canadensis, Eastern Redbud
Cornus alternifolia, Pagoda Dogwood
Fagus grandifolia, American Beach
Fraxinus pennsylvanica, Green Ash
Halesia carolina, Carolina Silverbell
Ilex opaca, American Holly
Liquidambar styraciflua, American Sweetgum
Magnolia virginiana, Sweetbay Magnolia
Picea Glauca, White Spruce
Quercus coccinea, Scarlet Oak

Deciduous and Evergreen Shrubs:

Aronia arbutifolia, Red Chokeberry
Aronia melanocarpa, Black Chokeberry
Cornus racemosa, Gray Dogwood
Cornus sericea, Red-osier Dogwood
Hamamelis vernalis, Witchhazel
Ilex verticillata, Winterberry Holly
Lindera benzoin, Spicebush
Myrica pennsylvanica, Northern Bayberry
Viburnum dentatum, Arrowwood Viburnum
Viburnum lentago, Nannyberry Viburnum
Viburnum nudum, Smooth Witherod
Viburnum prunifolium, Blackhaw Viburnum

Perennials and Grasses:

Amsonia tabernaemontana, Blue Star
Asclepias tuberosa, Butterfly Weed
Aster divaricatus, Wood Aster
Baptisia australis, False Indigo
Boltonia asteroides, False Aster
Carex plantaginea, Plantain Sedge
Chelone lyonii, Pink Turtlehead
Chysogonum virginianum, Golden-Star
Coreopsis verticillata, Threadleaf Coreopsis
Echinacea purpurea, Purple Coneflower
Eupatorium maculatum, Joe Pye Weed
Helenium autumnale, Helen's Flower
Heuchera americana, American Alumroot
Iris versicolor, Blue Flag
Liatris spicata, Spiked Gayfeather
Molinia caerulea, Purple Moor Grass
Muhlenbergia capillaris, Pink Muhly
Panicum virgatum, Switch Grass
Physotegia virginiana, Obedient Plant
Polygonatum biflorum, Small Solomon's Seal
Polygonatum commutatum, Great Solomon's Seal
Rudbeckia fulgida, Orange Coneflower
Senecio aureus, Golden Groundsel
Solidago species and hybrids
Sorghastrum nutans, Indiangrass
Sedum ternatum, Woodland Stonecrop
Tiarella cordifolia, Foamflower

Houtman Park and Phillip Green Park Master Plan

Section 5 – Cost Analysis

The costs associated with establishing a park consist of three primary components, development costs; including the costs of acquisition, design and related expenses, construction costs; associated with the costs to build the park improvements and operating costs associated with the ongoing maintenance and repair of the parks over time. Related to all three is the Phased Capital Program, which presents a proposed scheduling for the implementation of the park improvements.

Development Costs

Many of the development costs for the two parks have been expended. The Borough of Media owns the parks. A grant from PECO Energy is being utilized to pay for this study. Additional development costs for the two parks involve design fees for construction documentation for proposed improvements, permitting and administrative costs for the preparation of grant proposals.

The design costs associated with construction documentation vary with the size, scope and complexity of a project. Design costs can range from 8-15% of construction costs. A smaller project with many different components will tend toward the high end of the range, while a higher cost project with few components that are similar in nature will tend toward the lower end of the range, due to greater efficiencies. The cost of boundary and topographic survey must also be factored into the development costs.

Permitting costs depend on the nature of the work. Most park projects will involve the submission of plans to the County Conservation District for Erosion and Sedimentation Control permit and an NPDES permit. The presence of the streams on the two sites, depending on the project may require some form of DEP general permit. Based on the proposed Master Plans for the parks, the most likely permit is a GP-7, Minor Road Crossing for the construction of the proposed bridge. It may also be necessary to have wetland and floodplain delineations performed, due to the proposed work near the stream corridors.

Construction Costs

The proposed improvements for Houtman Park are more extensive than those proposed for Phillip Green Park and, as such, the costs are higher.

The construction costs for the proposed improvements at Houtman Park are estimated to be approximately \$340,000. The largest single cost is the new bridge and related construction. This is proposed to provide a safe accessible path to the heart of the park.

The proposed work at Phillip Green Park is predominated by clean up and ongoing maintenance items. The construction costs for the proposed work is estimated at slightly

over \$130,000. The largest single item, accounting for about half of that amount is the water quality inlet and related storm water improvements at the corner of Olive Street and Lincoln Street.

Costs are based on estimated 2009 construction costs. A 10% contingency has been added to the estimates for each park site.

**Construction Cost Estimate
Phillip Green Park**

Item Description	Unit	Qty.	Unit Price	Est. Total
Demolition and Removals	LS	1	5,000.00	\$5,000.00
Concrete Sidewalk Paving	SF	1500	\$8.00	\$12,000.00
Plaza Pavers	SF	400	\$20.00	\$8,000.00
Water Quality Inlet	EA	1	\$55,000.00	\$55,000.00
Headwall & Storm Pipe	LS	1	\$7,500.00	\$7,500.00
Slope Stabilization	SF	2000	\$4.00	\$8,000.00
Plaza Fencing, 4' Ht.	LF	40	\$20.00	\$800.00
Benches	EA	2	\$1,750.00	\$3,500.00
Trash Receptacles	EA	1	\$1,200.00	\$1,200.00
New Guiderail	LF	160	\$75.00	\$12,000.00
Landscaping - Large Flowering Shrubs	EA	10	\$100.00	\$1,000.00
Landscaping - Grasses	EA	40	\$35.00	\$1,400.00
Landscaping - Perennials	EA	160	\$24.00	\$3,840.00
SUBTOTAL				\$119,240.00
CONTINGENCY & ESCALATION		10%		\$131,164.00

As noted above, the proposed improvements for Houtman Park are more extensive than those proposed for Phillip Green Park. In addition to the new bridge and related construction, park improvements include new sidewalk, new fencing, a new walking trail, benches, picnic tables and two new seating areas. The cost estimate for those improvements is on the following page.

Proposed phasing for the master plan site improvements is included later in this section of the report.

**Construction Cost Estimate
Houtman Park**

Item Description	Unit	Qty.	Unit Price	Est. Total
Clearing and Demolition	LS	1	10,000.00	\$10,000.00
Relocate Entry Signage	LS	1	\$500.00	\$500.00
Wooden Guardrails	LF	170	\$50.00	\$8,500.00
Wooden Access Gate	EA	1	\$3,000.00	\$3,000.00
Concrete Sidewalk Paving	SF	1500	\$8.00	\$12,000.00
Entry Plaza Pavers	SF	1000	\$20.00	\$20,000.00
Observation Plaza Pavers	SF	365	\$20.00	\$7,300.00
Modular Retaining Wall	FSF	300	\$40.00	\$12,000.00
Plaza Kiosk	LS	1	\$15,000.00	\$15,000.00
Benches, Plaza	EA	6	\$1,750.00	\$10,500.00
Trash Receptacles	EA	3	\$1,200.00	\$3,600.00
Benches, Walkway	EA	2	\$1,500.00	\$3,000.00
Picnic Tables	EA	2	\$2,000.00	\$4,000.00
Trash Receptacle, Walkway	EA	2	\$1,000.00	\$2,000.00
Bridge and Abutments	LS	1	\$100,000.00	\$100,000.00
Safety Fence at Bridge & Sidewalk	LF	250	\$20.00	\$5,000.00
Stone Fines Trail	SF	5250	\$5.00	\$26,250.00
Stone Fines Trail, Adjacent Land	SF	1250	\$5.00	\$6,250.00
New Asphalt Walk to Bridge	SF	750	\$5.00	\$3,750.00
New Concrete Steps w/ Handrail	LS	1	\$5,000.00	\$5,000.00
Slope Stabilization	SF	3500	\$4.00	\$14,000.00
Interpretive Signs	EA	4	\$1,100.00	\$4,400.00
Landscaping Shade Trees, 2 1/2-3" Cal.	LS	10	\$500.00	\$5,000.00
Landscaping - Shade Trees, 12-14' Clump	EA	10	\$800.00	\$8,000.00
Landscaping - Flowering Trees, 8-10' Ht.	EA	10	\$450.00	\$4,500.00
Landscaping - Flowering Shrubs, 3' Ht.	EA	50	\$80.00	\$4,000.00
Landscaping - Grasses	EA	50	\$40.00	\$2,000.00
Landscaping - Perennials	EA	100	\$40.00	\$4,000.00
Landscaping - Ground Cover	EA	100	\$24.00	\$2,400.00
	SF	800	\$5.00	\$4,000.00
SUBTOTAL				\$309,950.00
CONTINGENCY & ESCALATION		10%		\$340,945.00

Operating Costs

The successful operation of these two passive open spaces will be best served by a partnership between the Borough, stakeholders, volunteer organizations and conservation organizations.

The day to day maintenance of the parks, including cutting of grass, removal of trash, emergency removal of trees and debris should be the responsibility of the Borough Public Works Department. The Borough Public Works Department has 12 full time and 2 part time employees. Although there is some specialization, all employees are involved in all maintenance activities, including street and storm sewer maintenance, repair of street signs and traffic signals, as well as landscape maintenance of parks and open spaces. Landscape maintenance involves the cutting of grass, spraying and pruning, tree removals, site clean up and repair of washouts. The Borough Public Works Staff currently maintain Houtman Park and Phillip Green Park. The maintenance varies by season. Based on an interview with Ralph DeRosa, Public Works Director for Media Borough, the current man-hours expended for maintenance of the two parks is as follows:

Spring

- Weekly grass cutting
- Weekly clean up
- Debris removal
- 2 men, 3 hours per week.

Summer

- Weekly Clean up
- Bi-weekly grass cutting
- Debris removal
- 2 men, 1 hour per week

Special storm events, fallen trees and other events that may occur sporadically, are extra work in addition to the regular maintenance devoted to the parks.

In reviewing the recommended master plan improvements at the two park sites, it was indicated the improvements would not significantly impact the required maintenance tasks and that current staffing levels could accommodate any additional maintenance requirements. Borough wide, Mr. DeRosa indicated that 5 men, 2 days per week are currently dedicated to landscape maintenance of public open spaces during the growing season.

Based on conversations with the Public Works Director, it was indicated that the Borough could accommodate a schedule of additional work sessions, four times yearly, to remove invasive exotic plant species and address erosion issues in the park. Two current staff members can be assigned to each workday. Those work sessions could be combined with or compliment works being undertaken by volunteer groups or can additionally utilize

community service workers (6-8 on a given work session). As time progresses and a more balanced plant community becomes established, both the frequency and intensity of the work sessions can begin to diminish.

Annual Maintenance work will include general cleanup and debris removal, lawn cutting and minor tree pruning, edging, weeding and mulching of new landscape beds and trees and replenishing the stone dust trail. Anticipated costs for the annual maintenance are:

Item	Occurrence	Cost	Total Cost
General Clean up	4	\$750	\$3,000
Lawn Cutting	26	\$200	\$5,200
Pruning, edging, mulching	4	\$600	\$2,400
Replenish Stone Dust Trail	25	\$60/CY	\$1,500
		Total	\$12,100

As noted above, the costs for lawn cutting are already being performed and are not expected to increase significantly.

Phasing

Phasing of the park improvements will depend on a number of factors. Chief among these is funding for the design and construction of the proposed improvements enumerated in this Master Plan. The available funding will have a major impact on the phased development of the parks. The following administrative and construction phasing are recommended:

Administrative Phasing

First Year:

- Apply for grants for the design of the parks.
- Form a friends of the park group to organize volunteer efforts and in-kind services.
- Develop a plan and a schedule for removal of invasive plant species.
- Institute a schedule of regular work days in the parks.
- Work with Upper Providence to develop a schedule and funding mechanism to extend the sidewalks to the parks.
- Develop RFP and award contract for design of the parks.

Second Year

- Work with consultant on the design of the parks and phasing of construction.
- Raise funds for the local match portion of grants.
- Develop value for in-kind services for grant applications.
- Develop construction phases based on projected funds available.
- Apply for grants for park construction.

Construction Phasing

Phase 1 - Houtman and Phillip Green Parks

Phase 1 will include the construction items related to providing new access to both Phillip Green and Houtman Park and improving safety. It will include the removal and replacement of the existing guardrail and construction of new concrete sidewalks to connect the neighborhoods to the park sites. This will include the safety fencing at Houtman Park between the sidewalk and the slope.

Item Description	Unit	Qty.	Unit Price	Est. Total
Demolition and removal of guardrail (both parks)	LS	1	7,000.00	\$7,000.00
Wooden Guardrails (both parks)	LF	330	\$50.00	\$16,500.00
Concrete Sidewalk Paving	SF	3000	\$8.00	\$24,000.00
Safety Fence at Sidewalk	LF	190	\$20.00	<u>\$3,800.00</u>
SUBTOTAL				\$51,300.00
CONTINGENCY & ESCALATION		10%		\$56,430.00

Phase 2 - Houtman Park

Phase 2 will include the construction items related to providing new access to Houtman Park and improving safety. It will include the removal and replacement of the existing bridge, construction of a new entry plaza and access path to the park and construction of the central walkway.

Item Description	Unit	Qty.	Unit Price	Est. Total
Clearing and Demolition	LS	1	8,000.00	\$8,000.00
Relocate Entry Signage	LS	1	\$500.00	\$500.00
Wooden Access Gate	EA	1	\$3,000.00	\$3,000.00
Entry Plaza Pavers	SF	1000	\$20.00	\$20,000.00
Plaza Kiosk	LS	1	\$15,000.00	\$15,000.00
Benches, Plaza	EA	4	\$1,750.00	\$7,000.00
Trash Receptacles	EA	2	\$1,200.00	\$2,400.00
Benches, Walkway	EA	2	\$1,500.00	\$3,000.00
Picnic Tables	EA	2	\$2,000.00	\$4,000.00
Trash Receptacle, Walkway	EA	2	\$1,000.00	\$2,000.00
Bridge and Abutments	LS	1	\$100,000.00	\$100,000.00
Safety Fence at Bridge	LF	60	\$20.00	\$1,200.00

Stone Fines Trail*	SF	6500	\$5.00	\$32,500.00
New Asphalt Walk to Bridge	SF	750	\$5.00	\$3,750.00
New Concrete Steps w/ Handrail	LS	1	\$5,000.00	<u>\$5,000.00</u>

SUBTOTAL				\$207,350.00
CONTINGENCY & ESCALATION		10%		\$228,085.00

* Assumes construction of trail on park property & adjacent railroad property as well

Phase 3 - Houtman and Phillip Green Parks

Phase 3 will include the construction items related to providing slope stabilization and erosion control in Houtman and Phillip Green Parks. It will also include Park improvements to both parks, including a new seating plaza in Phillip Green Park, the observation plaza in Houtman Park, the Water Quality Inlet at Phillip Green Park and other miscellaneous and related items. It also includes landscape improvements.

Item Description	Unit	Qty.	Unit Price	Est. Total
Modular Plaza Pavers (both parks)	SF	765	\$20.00	\$15,300.00
Modular Retaining Wall	FSF	300	\$40.00	\$12,000.00
Benches, Plaza	EA	4	\$1,750.00	\$7,000.00
Trash Receptacles (both parks)	EA	2	\$1,200.00	\$2,400.00
Slope Stabilization (both parks)	SF	5500	\$4.00	\$22,000.00
Water Quality Inlet	EA	1	\$55,000.00	\$55,000.00
Headwall & Storm Pipe	LS	1	\$7,500.00	\$7,500.00
Plaza Fencing, 4' Ht.	LF	40	\$20.00	\$800.00
Interpretive Signs	EA	4	\$1,100.00	\$4,400.00
Landscaping Shade Trees, 2 1/2-3" Cal.	LS	10	\$500.00	\$5,000.00
Landscaping - Shade Trees, 12-14' Clump	EA	10	\$800.00	\$8,000.00
Landscaping - Flowering Trees, 8-10' Ht.	EA	10	\$450.00	\$4,500.00
Landscaping - Large Flowering Shrubs	EA	10	\$100.00	\$1,000.00
Landscaping - Flowering Shrubs, 3' Ht.	EA	50	\$80.00	\$4,000.00
Landscaping - Grasses	EA	90	\$40.00	\$3,600.00
Landscaping - Perennials	EA	260	\$40.00	\$10,400.00
Landscaping - Ground Cover	EA	100	\$24.00	\$2,400.00
	SF	800	\$5.00	<u>\$4,000.00</u>
SUBTOTAL				\$169,300.00
CONTINGENCY & ESCALATION		10%		\$186,230.00

Funding

The park improvements may be funded over time from two primary sources, including local government and grants. Local government can fund the improvements through the annual budgeting process from the capital improvement budget. It can also raise taxes to create a dedicated fund for the improvements or float a bond to pay for the improvements.

Grants to help fund the design and construction of the park improvements are available from a number of sources. Many grants for park and open space development require a local match. As an example, the DCNR grants generally require a 50% local match. In some instances this can be in the form of in-kind services in additions to cash.

Community Conservation Partnership Program grants from the Department of Conservation and Natural Resources (DCNR) include:

- **Community Grants** are awarded to municipalities for recreation, park and conservation projects. These include the rehabilitation and development of parks and recreation facilities; acquisition of land for park and conservation purposes; and technical assistance for feasibility studies, trails studies, and site development planning.
- **Land Trust Grants** provide 50 % funding for acquisition and planning of open space and natural areas which face imminent loss. Lands must be open to public use and priority is given to habitat for threatened species. Eligible applicants are nonprofit land trusts and conservancies.
- **River Conservation Grants** are available to municipalities, counties, municipal and intermunicipal authorities, and river support groups to conserve and enhance river resources. River support groups must be nonprofits which are designated to act on behalf of interested municipalities. Planning grants are available to identify significant natural and cultural resources, threats, concerns and special opportunities and to develop river conservation plans. Implementation grants are available to carry out projects or activities defined in an approved river conservation plan. Gayley Creek is within the boundaries of the Ridley Creek Conservation Plan, adopted in 1997

Pennsylvania Community Forests Grants program Municipal Challenge Grant

Funding from \$1000 – \$5000, matches may be in-kind services.

- Geared to projects in public spaces and right-of-ways.
- Aimed at supporting municipal tree inventories, and tree planting.
- Available for the planting of trees in public places (streets, parks, and other public lands such as municipal parking lots, riparian areas, roadside gateways)

Many private foundations and businesses offer grants for conservation and open space programs in the region, such as the William Penn Foundation.

Media Borough

Houtman and Phillip Green Parks Master Plan

APENDICES

- June 9, 2008 Public Meeting Agenda
- June 9, 2008 Public Participation Meeting Minutes
- Upper Providence Zoning Review
- Recommended Seed Mix

Media Borough

Houtman and Philip Green Parks Master Plan

June 9, 2008
Meeting Agenda

1. Project Introduction and Overview
2. Presentation of Park properties; Location, physical nature and condition.
3. Review of Goals
4. Presentation of Site Analysis
5. Presentation of Resident Survey results
6. Discussion of Community desires for the two park sites.
7. Next Actions



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June 27, 2008

MEETING MINUTES

Houtman and Phillip Green Parks Master Plan

Date of Meeting: June 9, 2008

A public participation meeting for the Master Planning Study for Houtman and Phillip Green Parks was held at Media Borough Hall on Monday June 9, 2008. A general presentation and overview of the study was given. After the presentation, the community's input was sought through a series of questions and discussions. The following was discussed:

1. The consultant gave an overview of the project, its goals and objectives. The passive nature of the parks was stressed.
2. The location of the parks, their physical nature and their relation to the rest of the borough was presented.
3. A detailed site analysis of each of the parks was presented. Phillip Green Park is nearly inaccessible, due to steep slopes and serves primarily as a visual space. Houtman Park is accessible from Lincoln Street in three locations, although steep slopes limit access to some degree. The large open area in the middle of the park offers many passive recreational use opportunities.
4. The results of the Resident's Survey were presented. The five most desired programs or facilities are Benches, Walking Trails, Environmental Programming, Picnic Tables, Invasive Plant Eradication and New Planting of Trees and Shrubs. The five least desired programs or facilities were Game Tables, Grills, a Challenge Trail, Improved Visibility from the Street and Horseshoe Pits. See attached synopsis of the Resident's Survey for the full results.
5. The public was asked what they felt were the important factors in the development of the two sites. An open discussion of the communities desires and concerns about the park sites ensued. The following responses were noted:
 - a. Property owners near the parks expressed concern about lighting in the parks, although the resident surveys indicated improved lighting of the parks as a low priority. Further discussion revealed that the improved lighting desired was around the perimeter of the site, better street lighting. Many street lights are out and there are gaps in the lighting. Township and Borough officials in attendance agreed to follow up on the issue of non-functioning street lights.
 - b. Those in attendance verified that lighting in the parks themselves is not desired, although some adjacent neighbors expressed a preference for some minimal amount

- of light on the interior of the parks to make surveillance easier. Others expressed the opinion that any level of lighting will encourage nighttime usage of the parks.
- c. Many residents expressed they did not want to see development that would increase traffic. It was noted that speed is a problem on Lincoln Street between Park Avenue and South Avenue, with speeds reaching 50 mph. Residents asked if a stop sign could be installed on Lincoln Street at Olive Street.
 - d. Views into the parks should be improved, but don't want to see too many trees come down.
 - e. Local residents expressed concern about illicit activity in Houtman Park. It was expressed that they were not aware of problems in Phillip Green Park, largely because of the limited access. They do not want to see access into Phillip Green Park provided.
 - f. Many residents expressed a need for more trash and recycling receptacles in Houtman Park and also bags for dog droppings.
 - g. There should be adequate pet signage to alert pet owners to the park rules relative to pets.
 - h. A large percentage of the audience wanted to see the parks cleaned up, with the removal of the concrete pipes, large stockpiled trees and brush.
 - i. A resident noted that the area adjacent to the drive into the park was used for dumping. Large debris, like old office furniture is thrown over the embankment toward the culvert at the base of the hill. Some form of fencing or structure to control this activity was suggested.
 - j. A resident near Phillip Green park was concerned that the eroding condition of the slopes may eventually undermine the large Sycamore tree near the corner. Some form of slope stabilization in key areas is important.
 - k. One resident expressed they did not like the idea of picnic tables, but could accept that use if more trash receptacles and an anti-litter campaign accompany the installation of tables.
 - l. Signs that say "Park closes at Dusk" are desired, as well as enforcement of that closure.
 - m. Confusion on whom to call when there is a problem was expressed by some residents, as the park is a Media Borough park, but it is located in Upper Providence Township.
 - n. The possibility of a trail to connect to the apartments on South Avenue was brought up. It was noted there were trails there. Some in the audience indicated this was a private development and the trails were not public.
 - o. Many expressed the parks remain essentially as they are now, as open wooded sites, with minimal facilities, but cleaned up, with an improved natural experience.
 - p. One resident wanted to see environmental programming geared toward young children, with related facilities, such as a Secret garden, an arbor, a butterfly garden, etc.
 - q. One resident raised a concern with terrible sewage smells emanating from the site. Ralph DeRosa, Media Borough Public Works Director indicated that at peak flow times the storage area in the pump station fills up and gases are vented out. It is not

an overflow situation. Mr. DeRosa indicated the pump house is operated by the Little Washington Company, a subsidiary of Aqua.

- r. A resident asked if the wet swampy area below the pump house was a sign of pollution. It was noted that this wet area appears to be a natural seep or spring with native skunk cabbage and other wetland plants growing there.
 - s. It was noted by a resident that Asplundh recently did some line clearance work in Phillip Green Park.
 - t. Memorial benches, plaques, etc. were mentioned as a means to raise money for the park projects.
6. A conversation about water quality followed the above question about sewage smells. Mr. DeRosa indicated the waters of the creek are tested 3 times per year, just downstream from the pump house. The testing is done by the state. Water quality is good.

Councilman Williamson, in response to a question about the source and quality of the streams in the park gave an overview of the limits of the watershed of the two creeks. It was noted that as far as the Borough is aware, there are no hazardous properties draining into the watershed that could cause water quality problems, beyond those associated with storm drainage.

- 7. A resident noted that restoring a disturbed forest to its natural condition then maintaining it in a natural state is difficult. The key is reaching a sustainable condition. It is an ongoing process.
- 8. A resident noted that the Williamson School may be a potential partner in the ongoing development and restoration of the parks.
- 9. Potential access improvements into Houtman Park were reviewed. The degree of site disturbance and difficulty of providing a less steep entry to the large flat area in the park was reviewed. Opportunities of providing accessible use of the park from perimeter locations were discussed. The existing footbridge over the tributary to Gayley Run may be modified to provide access. It does not currently meet safety standards due to the configuration of the railings. The steps on one side limit accessibility.

A copy of the Powerpoint presentation will be provided to the Borough in pdf format for posting on the web site or distribution to those who request it.



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Memo

To: Media Borough
From: Jim Fries, RLA
CC:
Date: 2-14-08
Job Name: Media Borough – Houtman and Philip Green Parks Master Plan

I reviewed the Upper providence Zoning Ordinance. The site is in the RO Recreation and Open Space District. Table A in Section 1256.03 lists a limited number of Permitted Uses in the RO district. They include:

1. Use C5 - Municipal/Governmental Facility
2. Use E19 – Flea Market
3. Use F3 - Health/Recreational Facility, Outdoor
4. Use I2 - Non-residential Accessory Use
5. Use I4 - Nonresidential Accessory Structure

There are also a number of Conditional Uses allowed, most of which are not park related. Those uses allowed as a Conditional Use, which could be considered Community or Park related include:

1. Library or Museum
2. Health/Recreation Facility, Indoor
3. Emergency Services
4. Flood Control Structures
5. Utility Facilities

Use A5, Riding Academy is allowed by Special Exception.
Use C7, Community Center is specifically excluded as a permitted use in this district.

DRAFT

Partially Shaded Area Roadside Mix

% Botanical Name	Common Name
20.00% <i>Elymus hystrix</i>	Bottlebrush Grass
20.00% <i>Elymus virginicus</i>	Virginia Wild Rye
15.00% <i>Schizachyrium scoparium, PA Ecotype</i>	Little Bluestem, PA Ecotype
6.00% <i>Penstemon digitalis</i>	Tall White Beard Tongue
6.00% <i>Zizia aurea</i>	Golden Alexanders
5.00% <i>Chamaecrista fasciculata</i>	Partridge Pea
5.00% <i>Panicum clandestinum, 'Tioga'</i>	'Tioga' Deer Tongue
5.00% <i>Rudbeckia hirta</i>	Black Eyed Susan
3.00% <i>Aster prenanthoides</i>	Zigzag Aster
2.00% <i>Agrostis perennans</i>	Autumn Bentgrass
2.00% <i>Geum canadense</i>	White Avens
2.00% <i>Heliopsis helianthoides</i>	Ox Eye Sunflower
2.00% <i>Monarda fistulosa</i>	Wild Bergamot
2.00% <i>Monarda media, PA Ecotype</i>	Purple Bergamot, PA Ecotype
2.00% <i>Solidago bicolor</i>	White (Silver Rod) Goldenrod
2.00% <i>Vernonia noveboracensis</i>	New York Ironweed
1.00% <i>Penstemon laevigatus, PA Ecotype</i>	Appalachian Beard Tongue, PA Ecotype

100.00% Total

Seeding Rate: 15 lb per acre, or 1/3-1/2 lb per 1,000 sq ft
Use: Woodland & shaded areas.