RUTGERS
New Jersey Agricultural Experiment Station

Hamilton Township (Mercer County)

Stormwater Mitigation Plan

Developed by the Rutgers Cooperative Extension Water Resources Program

Funded by Hamilton Township, Mercer County, New Jersey

December 21, 2018

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Acknowledgements

The *Hamilton Township (Mercer County) Stormwater Mitigation Plan* has been produced by the **Rutgers Cooperative Extension Water Resources Program**.

Funding for this project was generously provided by the **Township of Hamilton, Mercer County, NJ** and in part by the **New Jersey Agricultural Experiment Station** through the United States Department of Agriculture.

Background on Stormwater Mitigation Planning[1]

The Stormwater Management rules, N.J.A.C. 7:8, establish design and performance standards for stormwater management that address water quality, water quantity and groundwater recharge. These standards are to be met on the site of a proposed development and, to the maximum extent practicable, are to use nonstructural stormwater management strategies. The New Jersey Department of Environmental Protection (NJDEP) recognized that situations may arise in which the design and performance standards may be impossible to meet on the site of a proposed project due to site constraints. Therefore, at N.J.A.C. 7:8-4, the Stormwater Management rules allow a municipality to develop a mitigation plan to accommodate these special cases.

A municipal mitigation plan is an optional element of a Municipal Stormwater Management Plan, but is required for a municipality to grant a variance or exemption to the design and performance standards for stormwater runoff quality, stormwater runoff quantity, and ground water recharge. A municipal mitigation plan must identify the measures necessary to offset the deficit created with respect to the design and performance standard(s) that would result from the granting of a variance or exemption at a project site. The plan must ensure that the mitigation is completed in the drainage area and for the performance standard(s) for which the variance or exemption was granted for a project. To be in effect, a municipal mitigation plan must be adopted into the municipal stormwater control ordinance and approved by the county review agency.

The existence of a mitigation plan does not supersede the requirements that an applicant meet the design and performance standards for ground water recharge, stormwater quantity, and stormwater quality on-site to the maximum extent practicable and that the standards be met using non-structural techniques to the maximum extent practicable. Instead, it allows municipalities, in limited circumstances, to waive strict compliance with one or more of the performance standards, where full compliance cannot reasonably be accommodated on-site, provided there is mitigation of the effect of the deficient compliance provided in accordance with an approved mitigation plan. The test of reasonable accommodation includes reducing the size, scale, or layout of the proposed

[1] The background text has been adapted from "Guidance for the Development of Municipal Mitigation Plans – February 2006."

project to meet the design and performance standards on-site and thereby avoid the need to seek a variance or exemption. A waiver cannot be granted if the project requesting a waiver or exemption would result in a localized adverse impact or create a compliance deficit that cannot be compensated for by offsite mitigation.

Subject to the caveats for applicability and consistent with the provisions of an approved mitigation plan, a municipality may waive one or more of the design and performance standards for projects reviewed under the Municipal Land Use Law (MLUL) or for projects undertaken by the municipality that are not subject to MLUL. Waivers for linear development projects must be evaluated using the requirements under N.J.A.C. 7:8-5.2(e), which includes the requirement to address mitigation for the performance standard for which strict compliance was not obtained. Where the NJDEP issues a permit that includes a stormwater management review and an associated waiver under the provisions of the specific permit, the municipality is not required to further consider the project under the provisions of the municipal mitigation plan. However, the municipality may choose to require mitigation for projects receiving a waiver from the NJDEP.

A mitigation plan can also be used to identify existing problems resulting from current stormwater management practices and the means to address them proactively. In addition, where current stormwater management practices contribute to water quality problems or designated use impairments, total maximum daily load (TMDL)[2] implementation plans can target problem areas and prioritize funding available for watershed restoration. Further, measures to address existing stormwater management problems can become a regulatory requirement when they are identified as "additional measures" in a municipal stormwater permit. "Additional measures" become a permit requirement when they are identified in an adopted TMDL or water quality management plan amendment.

[2] TMDLs are developed for impaired waterways in the state. They identify and quantify the impairment, and determine the pollutant load reductions needed to achieve water quality criteria.

Introduction

Located in Mercer County in central New Jersey, Hamilton Township covers over 40 square miles east of the City of Trenton. Hamilton Township is dominated by urban land uses (Figure 1). Over half of the municipality's land area, approximately 58%, is considered urban. A large portion of the urban land use, 39.7%, is residential, single unit, medium density development (Figure 2). Based upon the 2007 NJDEP land use/land cover data, Hamilton Township has impervious cover totaling 22.7%. In many regions of the country, as little as 10% watershed impervious cover has been linked to stream degradation, with the degradation becoming more severe as impervious cover increases[3]. Hamilton Township has made a commitment to better manage stormwater to reduce the impact to water quality and decrease localized flooding.

Methodology

Hamilton Township contains portions of eight watersheds (Figure 3). For this plan, a series of potential mitigation projects have been identified in each of these watersheds. Initially, aerial imagery was used to identify potential project sites with extensive areas of impervious cover. Field visits were made to each of these sites to determine the viability for reducing impervious cover or disconnecting impervious surfaces from draining directly to the municipal storm sewer system or local waterway. During these site visits, appropriate stormwater best management practices (BMPs) were identified. Sites that already have stormwater BMPs were eliminated from consideration.

For each potential mitigation project site, land use specific aerial loading coefficients were used to determine the annual runoff loads for total phosphorus (TP), total nitrogen (TN), and total suspended solids (TSS) (Table 1). These are the same aerial loading coefficients that NJDEP uses in developing TMDLs for impaired waterways in the state. The percentage of impervious cover for each site was extracted using the 2007 NJDEP land use/land cover GIS dataset. For impervious

[3] Schueler, T. 1994. The Importance of Imperviousness. *Watershed Protection Techniques* 1(3): 100-111.

areas, runoff volumes were calculated for the 2-year design storm (3.3 inches of rain) and for the annual rainfall total of 44 inches.

For each potential mitigation project site, drainage areas were determined for suggested BMPs. Preliminary runoff volumes were then calculated for each BMP opportunity to provide a preliminary order-of-magnitude understanding of the stormwater mitigation potential at each site. BMPs for stormwater mitigation need to be designed to manage the 2-year design storm, enabling these BMPs to capture 95% of the annual rainfall. The reduction in TSS loading was also calculated for each drainage area for each BMP opportunity using the aerial loading coefficients in Table 1. The maximum volume reduction in stormwater runoff for each BMP for a storm was determined by calculating the volume of runoff captured from the 2-year design storm. For each BMP, the peak discharge reduction potential was determined through hydrologic modeling in HydroCAD. For each BMP a cost estimate is provided. These costs were determined based upon the square footage of the BMP and the real cost of BMP implementation in New Jersey.

The potential mitigation project sites identified in this plan provide examples of the types of stormwater mitigation possible in Hamilton Township. The list is not all inclusive and applicants should review this list with Township officials prior to selecting a mitigation project site. The calculations provided and BMP opportunities identified are preliminary and will require further detailed evaluation and design. Applicants looking to conduct mitigation on these sites or other sites will be responsible for verifying all conditions, completing design plans in conformance with state and municipal guidance, obtaining property owner permission, and determining requirements for operations and maintenance.

Selecting a Mitigation Project to Offset a Deficit

Attachment 1 contains potential mitigation project sites by watershed. Each project identifies a BMP opportunity and an approximate drainage area that this BMP can treat. For example, a project site may identify bioretention as a BMP opportunity and includes an estimated drainage area to be managed by the BMP. A mitigation project may include all or a portion of a site as needed to satisfy the stormwater management deficit. For each potential mitigation project site, estimates

for the recharge potential, TSS removal potential, maximum volume reduction potential per storm, and the peak reduction potential are provided. This should enable an applicant to determine if a potential mitigation project would adequately offset the stormwater management deficit. Finally, estimated costs are provided.

An alternative to selecting a project from those provided in this plan is for the applicant to identify a different project. All the information described above must be provided for the project along with the specific information discussed below.

Whether a project is selected from those included in this plan or a different project is identified by the applicant, an applicant must provide specific information to demonstrate that an appropriate mitigation project has been selected to offset the deficit as described below. An assessment of the impact that would result from the requested deviation from full compliance with the stormwater management rules in the drainage area affected by the proposed project is required. For example, a waiver for stormwater quantity requirements must focus on the impacts of increased runoff on flooding, considering both quantity and location. Stormwater quality mitigation must aim to prevent an increase in pollutant load to the waterbodies that would be affected by the waiver/exemption. Ground water recharge mitigation must seek to maintain the baseflow and aquifer recharge in the area that would be affected by the waiver/exemption. For the purpose of this discussion, the term "sensitive receptor" is used to refer to a specific area or feature that would be sensitive to the impact assessed above.

Selection of an appropriate mitigation project for a requested waiver/exemption must adhere to the following requirements:

1. The project must be within the same area that would contribute to the receptor impacted by the project. *Note that depending on the specific performance standard waived, the sensitive receptor and/or the contributory area to that receptor may be different.* If there are no specific sensitive receptors that would be impacted as the result of the grant of the waiver, then the location of the mitigation project can be located anywhere within the

municipality and should be selected to provide the most benefit relative to an existing stormwater problem in the same category (quality, quantity, or recharge).

2. Legal authorization must be obtained to construct the project at the location selected. This includes maintenance and any access needs for the project in the future. It is important to note that legal authorization has **not** been obtained for the potential projects included in Attachment 1 of this plan. The applicant must obtain this authorization.
3. The project should be close to the location of the original project, and if possible, be located upstream at a similar distance from the identified sensitive receptor. This distance should not be based on actual location, but on a similar hydraulic distance to the sensitive receptor. For example, if the project for which a waiver is obtained discharges to a tributary, but the closest location discharges to the main branch, it may be more beneficial to identify a location discharging to the same tributary.
4. For ease of administration, if sensitive receptors are addressed, it is preferable to have one location that addresses any and all of the performance standards waived, rather than one location for each performance standard.
5. It must be demonstrated that implementation of the mitigation project will result in no adverse impacts to other properties.
6. Mitigation projects that address stormwater runoff quantity can provide storage for proposed increases in runoff volume, as opposed to a direct peak flow reduction.

Additional considerations are discussed below for each of the stormwater management requirements.

Stormwater Quantity Considerations

Increased stormwater runoff volume from new development can cause damages to property and habitat due to increased flood elevations and/or flood velocities. Mitigation project areas can include locations that will provide for additional storage and slower release of excess stormwater. Mitigation of stormwater quantity can be accomplished by increasing flood storage areas along the waterway, creating new BMPs to control previously uncontrolled runoff or by retrofitting existing stormwater structures to decrease volume and peak runoff.

In areas adjacent to the stream, a hydrologic and hydraulic analysis can be performed to determine if increasing storage capacity would offset the additional volume of runoff and associated peak increase from sites upstream of the storage area. Increases in the storage capacity of an existing structure, such as upstream of a bridge or culvert, can also be considered provided that it is demonstrated that such an increase does not exacerbate flooding at other areas.

Note that work in regulated areas, such as floodplains and wetlands must be performed in accordance with applicable regulations such as the Flood Hazard Area Control Act Rules and the Freshwater Wetland Act Rules. Also, many areas of open space in New Jersey have received funding from the Department's Green Acres Program, and many of those encumbered lands have restrictions placed on them as a result of that funding. Any and all restrictions placed on these lands must be investigated by the municipality before these areas can be utilized for mitigation to ensure that there are no conflicts.

Some examples of areas or features sensitive to changes with regard to flooding include:

- Culverts and bridges—these features may constrict flow and cause flooding or may provide storage that, if lost, would cause downstream flooding problems
- Property subject to flooding—areas of concern include those where there is historical evidence of recurrent problems, particularly if exacerbated over time because of increasing impervious surface in the contributing watershed
- Eroding/widening stream banks or channels—particularly if due to changes in hydrology due to effects of development
- Category One waters—flooding effects could alter habitat that was the basis for the designation
- Wetlands—changes in hydrology can affect the viability of wetlands, either by increasing or decreasing volumes and velocities of water discharging to the wetlands

Stormwater Quality Considerations

Stormwater quality is regulated for the purpose of minimizing/preventing nonpoint source pollution from reaching the waterway. Mitigation for stormwater quality can be achieved either by

directing the runoff from the water quality design storm into a natural area where it can be filtered and/or infiltrated into the ground, by constructing a new BMP to intercept previously untreated runoff or by retrofitting existing stormwater systems that previously did not provide sufficiently for water quality.

Existing forested and other vegetated non-wetland areas also can be used as a water quality mitigation area if runoff is discharged as sheet flow through the area in a non-erosive manner and if the vegetated area is restricted from future development. A discussion of the appropriate widths for these vegetative filters is provided in Chapter 9 of the New Jersey Stormwater Best Management Practices Manual (BMP Manual).

If a mitigation project cannot be identified that would compensate for a waiver related to water quality, and provided the project requiring a waiver would not result in a measurable change in water quality relative to TSS and nutrients, the mitigation project could be designed to address another parameter of concern in the watershed (as indicated by an impairment listing and/or an adopted TMDL) for which stormwater is a source, such as fecal coliform.

Some examples of areas or features sensitive to water quality changes include:

- Trout associated waters—chemical pollutants and temperature effects can diminish viability of populations
- Lakes, ponds or other impoundments—these waterways are sensitive to the addition of nutrients
- Threatened and endangered species or their habitats—sensitive to both quality and quantity changes
- Drinking water supplies—adverse effects on quality can increase the cost of treatment or threaten the use
- Category One waters—an issue where quality was the basis of the designation
- Waterways with a water quality or use impairment—deterioration of quality in an impaired waterway will increase the cost and challenge of restoration

Ground Water Recharge Considerations

Recharge is regulated to maintain the availability of ground water as a water supply source as well as to provide a stable source of baseflow in streams.

There are two requirements associated with the recharge standard. The first is that 100 percent of the site's average annual pre-developed ground water recharge volume be maintained after development, and the second is that 100 percent of the difference between the site's pre- and post-development 2-year runoff volumes be infiltrated. To mitigate for ground water recharge design requirements, either computational method can be utilized to determine the volume lost that needs to be provided by the mitigation project.

One method to accomplish ground water recharge mitigation is to discharge runoff as sheet flow across a vegetated area to allow for the infiltration of runoff. It should be noted that, if this measure is used, calculating compliance with the recharge standard is limited to the 2-year storm standard, given existing methods.

Some examples of areas or features sensitive to ground water recharge changes include:

- Springs, seeps, wetlands, white cedar swamps—sensitive to changes in ground water level/hydrology
- Threatened and endangered species or their habitats—some are sensitive to changes in ambient ground water levels
- Streams with low base flow or passing flow requirements—would be particularly sensitive to changes in hydrology
- Aquifer recharge zones—loss of recharge in these areas can adversely affect ground water supply
- Category One waters—loss of base flow can affect many of the bases for designation

Nonstructural Stormwater Management Strategies

All applicants are required to meet the design and performance standards in the Stormwater Management rules to the maximum extent practicable by incorporating nonstructural stormwater management strategies into the design. The applicant is required to identify the nonstructural strategies incorporated into the design of the project. If the applicant contends that it is not feasible for engineering, environmental, or safety reasons to incorporate any nonstructural stormwater management strategies, the applicant shall identify the strategy and provide a basis for the contention. If the applicant cannot satisfy the "maximum extent practicable[4]" requirement or cannot provide an engineering, environmental, or safety reason for not incorporating a nonstructural strategy into the design, a waiver may be granted, and this deficit can be offset by providing the Township funding to implement one of the following programs:

- Downspout disconnection program for homeowners
- Rain garden rebate program for homeowners
- Rain barrel distribution program
- *Stormwater Management in Your Schoolyard* educational program
- Water conservation program for businesses and homeowners
- Stormwater basin maintenance, repair, and improvement

The amount of funding required for the nonstructural stormwater management strategies deficit offset will be determined by the Township.

Administrative Requirements

Hamilton Township has a Tier A NJPDES Municipal Stormwater General Permit and is required to file an annual report to demonstrate continuing compliance with permit requirements. The Township will indicate in the annual report form whether any variances or exemptions from stormwater management standards have been given. When submitting the annual report as

[4] The nine nonstructural management strategies are listed in Attachment 2 along with the requirements to demonstrate the "maximum extent practical" requirement.

required by the NJPDES permit, the Township will provide an annual submission of its variances, exemptions, and related mitigation projects to the NJDEP. This annual report to NJDEP will include both projects reviewed by the municipality under the MLUL as well as the municipality's own projects that are unable to fully comply with design and performance standards. The following information will be provided for each waiver granted from the performance standard(s).

- Impact from noncompliance: A table quantifying what would be required for the project to achieve the standards, the extent to which this value will be achieved on-site and the extent to which the value must be mitigated off-site will be provided.

- Narrative and supporting information regarding the need for the waiver including:
  - The waiver cannot be due to a condition created by the applicant. If the applicant can comply with the Stormwater Management rules through a reduction in the scope of the project, the applicant has created the condition and a waiver **cannot** be issued. The Township will provide information that demonstrates that the need for a waiver is not created by the applicant.

  - Provide a discussion and supporting documentation of the site conditions peculiar to the subject property that prevent the construction of a stormwater management facility that would achieve full compliance with the design and performance standards. Site conditions may include soil type, the presence of karst geology, acid soils, a high groundwater table, unique conditions that would create an unsafe design, as well as conditions that may provide a detrimental impact to public health, welfare, and safety.

  - Demonstration that the grant of the requested waiver/exemption would not result in an adverse impact that would not be compensated for by offsite mitigation.

- Sensitive Receptor: The sensitive receptor(s) related to the performance standard from which a waiver is sought will be identified. Information will be provided that demonstrates that the mitigation site contributes to the same sensitive receptor.

- Design of the Mitigation Project: Design details of the mitigation project will be provided. This includes, but is not limited to, drawings, calculations, and other information needed to evaluate the mitigation project.

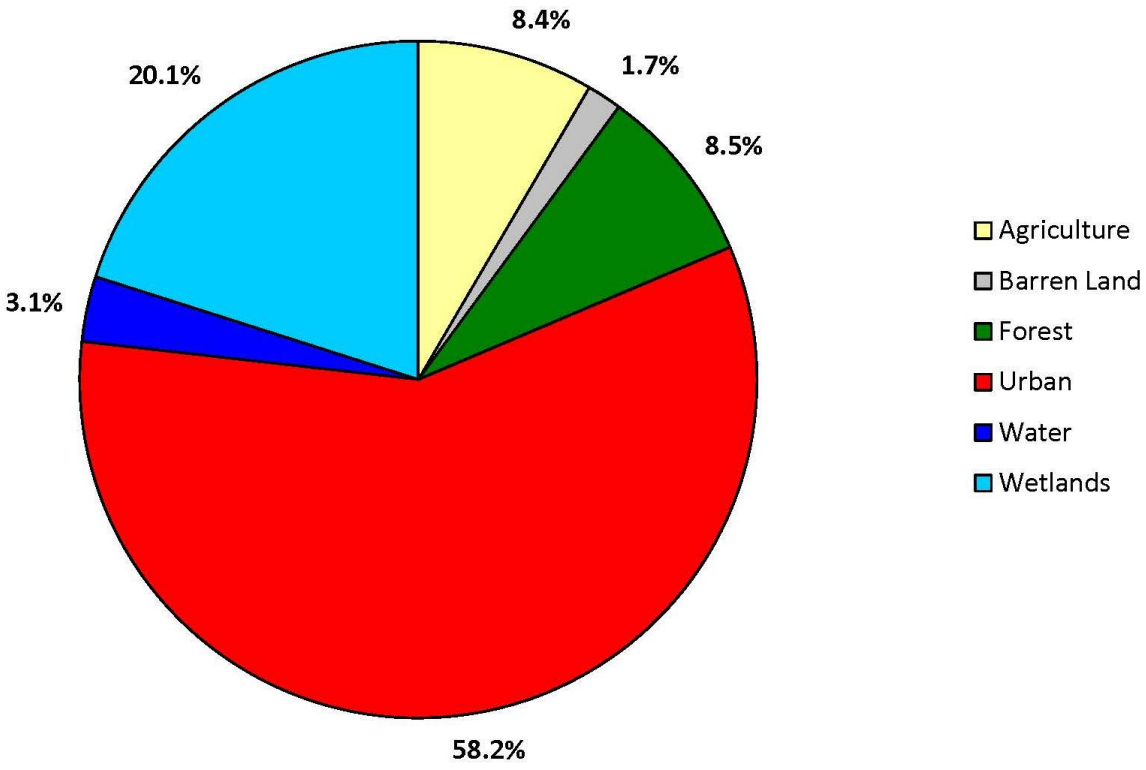
- Responsible Party: Information on the party or parties responsible for the construction and the maintenance of the mitigation project will be provided. Documentation will be provided to demonstrate that the responsible party is aware of, has authority to, and accepts the responsibility for construction and maintenance. Under no circumstance shall the responsible party be an individual single-family homeowner. Selection of a project location that is under municipal authority avoids the need to obtain authority from a third party for the construction and future maintenance of the project.

- Maintenance: A maintenance plan that addresses the maintenance criteria at N.J.A.C. 7:8-5.8 will be provided. In addition, if the maintenance responsibility is being transferred to the municipality or another entity, the entity responsible for the cost of the maintenance must be identified. The municipality may provide the option for the applicant to convey the mitigation project to the municipality, if the applicant provides for the cost of maintenance in perpetuity.

- Permits: Any and all necessary local, state or other applicable permits for the mitigation measure or project will be obtained prior to the municipal approval of the project for which mitigation is being provided.

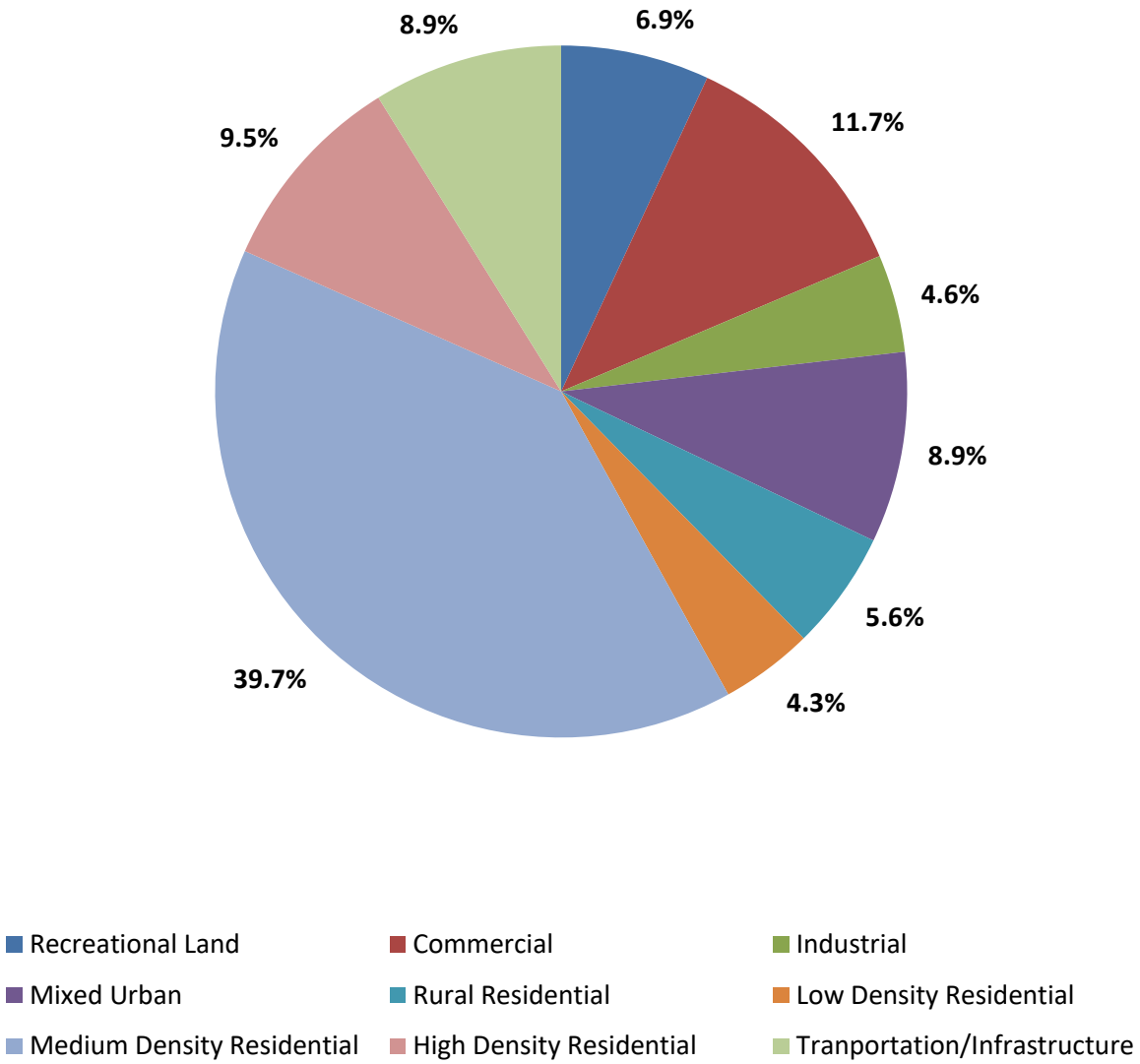
- Construction: The Township will provide information to demonstrate that the construction of the mitigation project coincides with the construction of the proposed project. A certificate of occupancy or final approval by the municipality for the project requiring mitigation cannot be issued until the mitigation project or measure receives final approval. Any mitigation projects proposed by the municipality to offset the stormwater impacts of that municipality's own projects must be completed within six months of the completion of the municipal project to remain in compliance with their NJPDES General Permit.

Figure 1



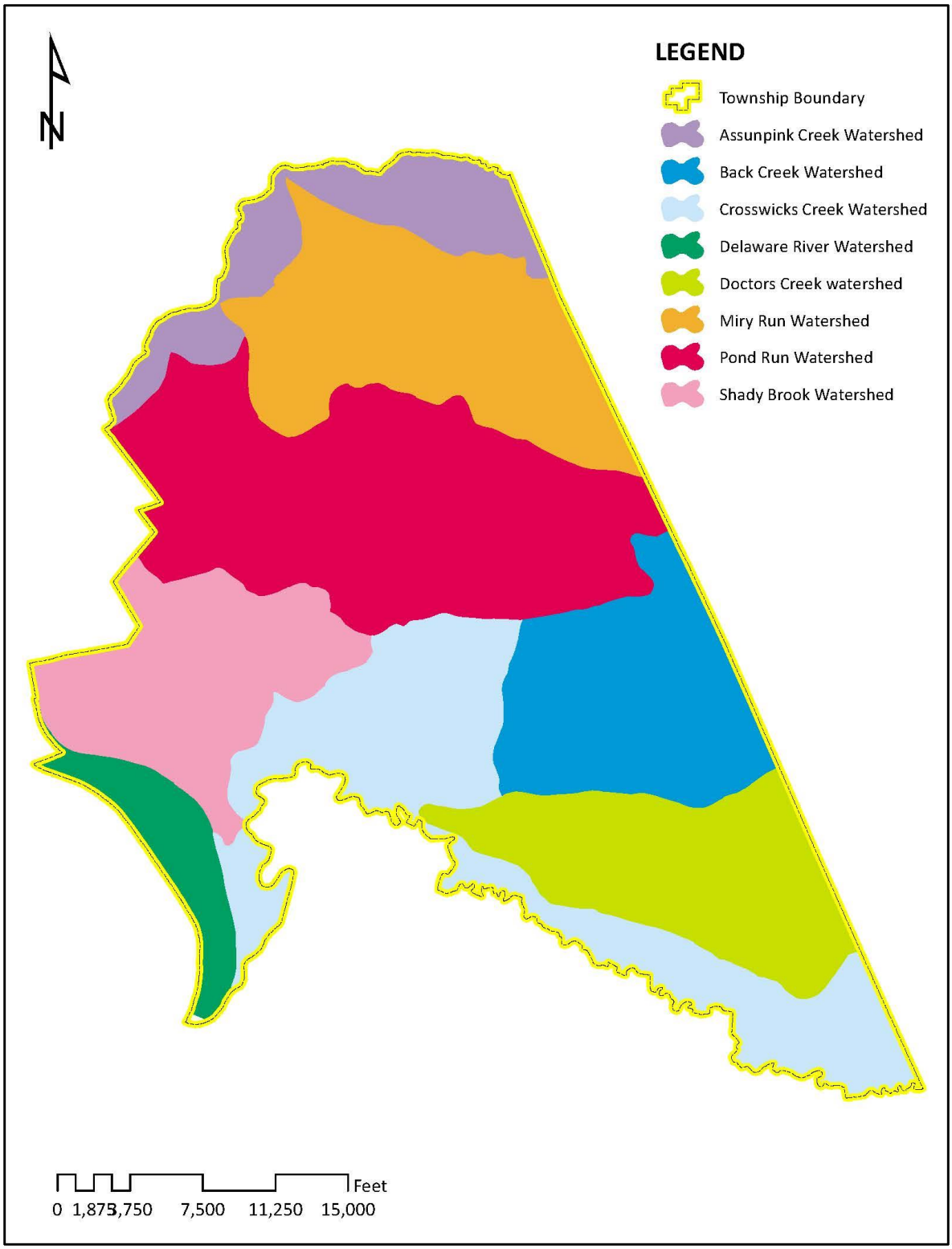
Pie chart illustrating the land use in Hamilton Township (Urban, Agricultural, Forest, Wetlands, Barren Land, and Water).

Figure 2



Pie chart illustrating the various types of urban land use in Hamilton Township (low density residential, medium density residential, high density residential, mixed urban, commercial, industrial, etc.)

Figure 3



Subwatershed Map of Hamilton Township

Table 1

Land Cover	TP load (lbs/acre/yr)	TN load (lbs/acre/yr)	TSS load (lbs/acre/yr)
High, Medium Density Residential	1.4	15	140
Low Density, Rural Residential	0.6	5	100
Commercial	2.1	22	200
Industrial	1.5	16	200
Urban, Mixed Urban, Other Urban	1.0	10	120
Agriculture	1.3	10	300
Forest, Water, Wetlands	0.1	3	40
Barrenland/Transitional Area	0.5	5	60

Ref: NJDEP Stormwater Best Management Practice Manual, 2004.

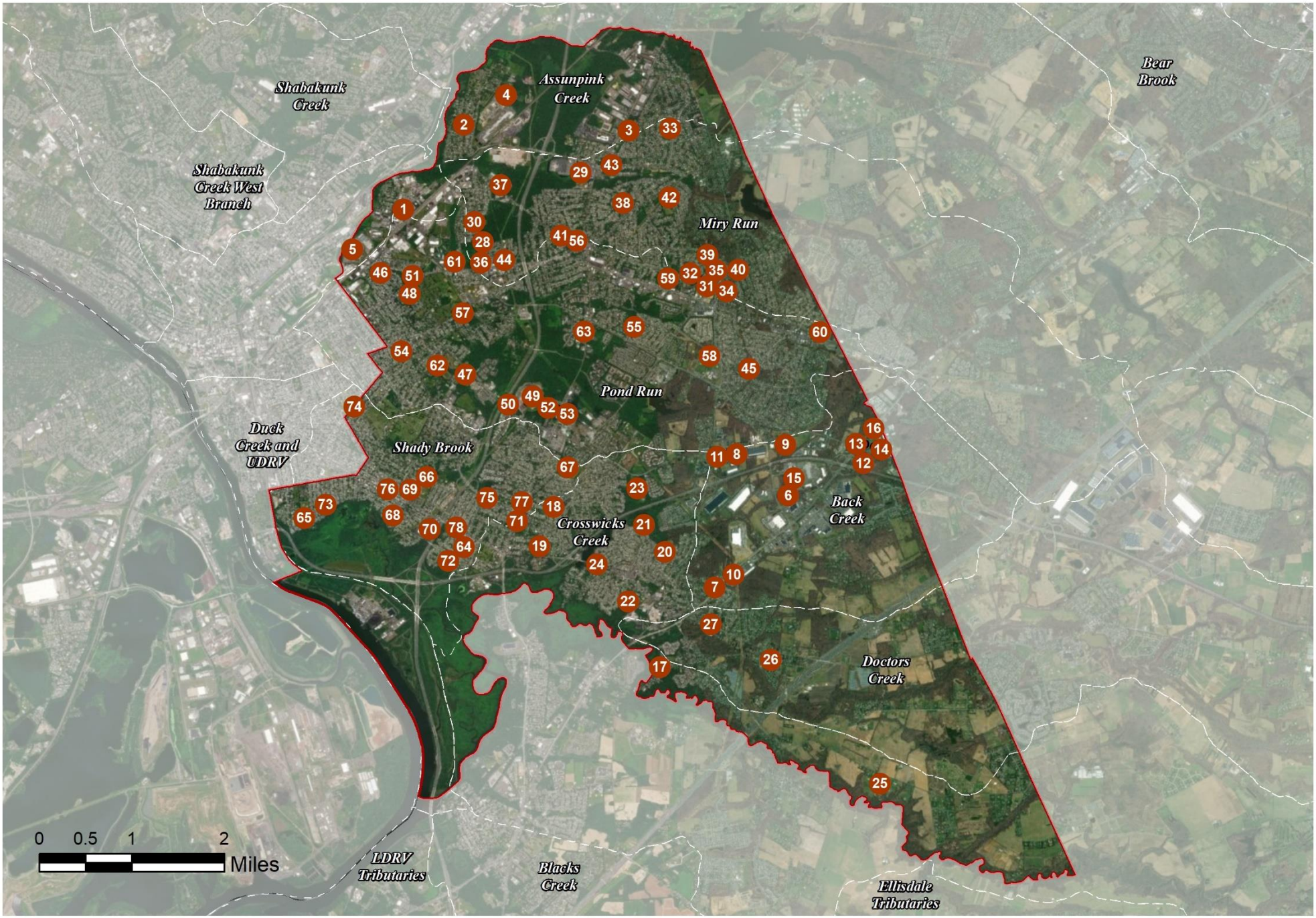
Aerial Loading Coefficients

December 21, 2018

Attachment 1

Potential Stormwater Mitigation Project Sites by Subwatershed

HAMILTON TOWNSHIP: GREEN INFRASTRUCTURE SITES



SITES WITHIN THE ASSUNPINK CREEK SUBWATERSHED

1. BLV Holding Company Inc.
2. Cornell Heights Field
3. Ibis Plaza Office Suites
4. Medallion Care
5. Siemens Industry & Delaval Turbomachinery

SITES WITHIN THE BACK CREEK SUBWATERSHED

6. AAA Mid Atlantic
7. Abandoned Restaurant
8. Caola Company
9. Crockett Middle School
10. Custom Calibrations Solutions, LLC
11. Hamilton Medical Arts
12. Kleinfelder
13. S. T. Peterson & Co. Inc. Office Space
14. Skylink Technologies
15. Verizon
16. York Risk Services

SITES WITHIN THE CROSSWICKS CREEK SUBWATERSHED

17. Grow-Ville Community Day School
18. Robinson Elementary School
19. St. Raphael-Holy Angels Parish
20. Sunnybrae Elementary School
21. Sunnybrae League Park
22. Switlik Park
23. The Stone Terrace
24. Yardville Heights Elementary School
25. YMCA

SITES WITHIN THE DOCTORS CREEK SUBWATERSHED

26. St. George Ukrainian Orthodox Church
27. Yardville Elementary School

SITES WITHIN THE MIRY RUN SUBWATERSHED

28. Christ Presbyterian Church
29. Clover Square
30. Enterprise Volunteer Fire Co.
31. First Pentecostal Prayer of Faith Church
32. First Presbyterian Church/YMCA Young Wonders
33. H.D. Morrison Elementary School
34. Hamilton Square Baptist Church
35. Hamilton Township School District
36. Klockner Elementary School
37. Merlin Industries Inc.
38. Morgan Elementary School
39. Nottingham Little League
40. Nottingham Volunteer Fire Company Station 17
41. Our Lady of Sorrows School
42. Saint Mark United Methodist Church
43. University Plaza
44. VFW Hamilton Township Post

SITES WITHIN THE POND RUN SUBWATERSHED

45. Alexander Elementary School
46. Bromley Park
47. Colonial Volunteer Fire Company
48. Greenwood Elementary School
49. Hamilton Golf Center
50. Hamilton Lanes
51. Hamilton Township Building
52. Hamilton Township Library
53. Hamilton Township Police Division
54. Kuser Elementary School
55. Langtree Elementary School
56. Mercerville Elementary School
57. Pace Charter School
58. Reynolds Middle School
59. Sayen Elementary School
60. St. Gregory the Great Catholic Church
61. Suburban Plaza (Walmart)
62. Trenton Catholic Academy
63. Whitehorse Plaza Shopping Center

SITES WITHIN THE SHADY BROOK SUBWATERSHED

64. Aldi
65. Duetzville Park
66. George E. Wilson Elementary School
67. Grice Middle School
68. Hamilton Educational Program
69. Hamilton High School West
70. Independence Mall
71. K McCoy Inc. Insurance Agency
72. Kisthardt Elementary School
73. Lalor Elementary School
74. Life St. Francis
75. McGalliard Elementary School
76. Rusling Hose Fire Company
77. St. Mark Lutheran Church
78. True Servant Preschool Academy

BLV HOLDING COMPANY INC.

Subwatershed: Assunpink Creek

Site Area: 128,109 sq. ft.

Address: 3 Industrial Drive
Hamilton, NJ 08619

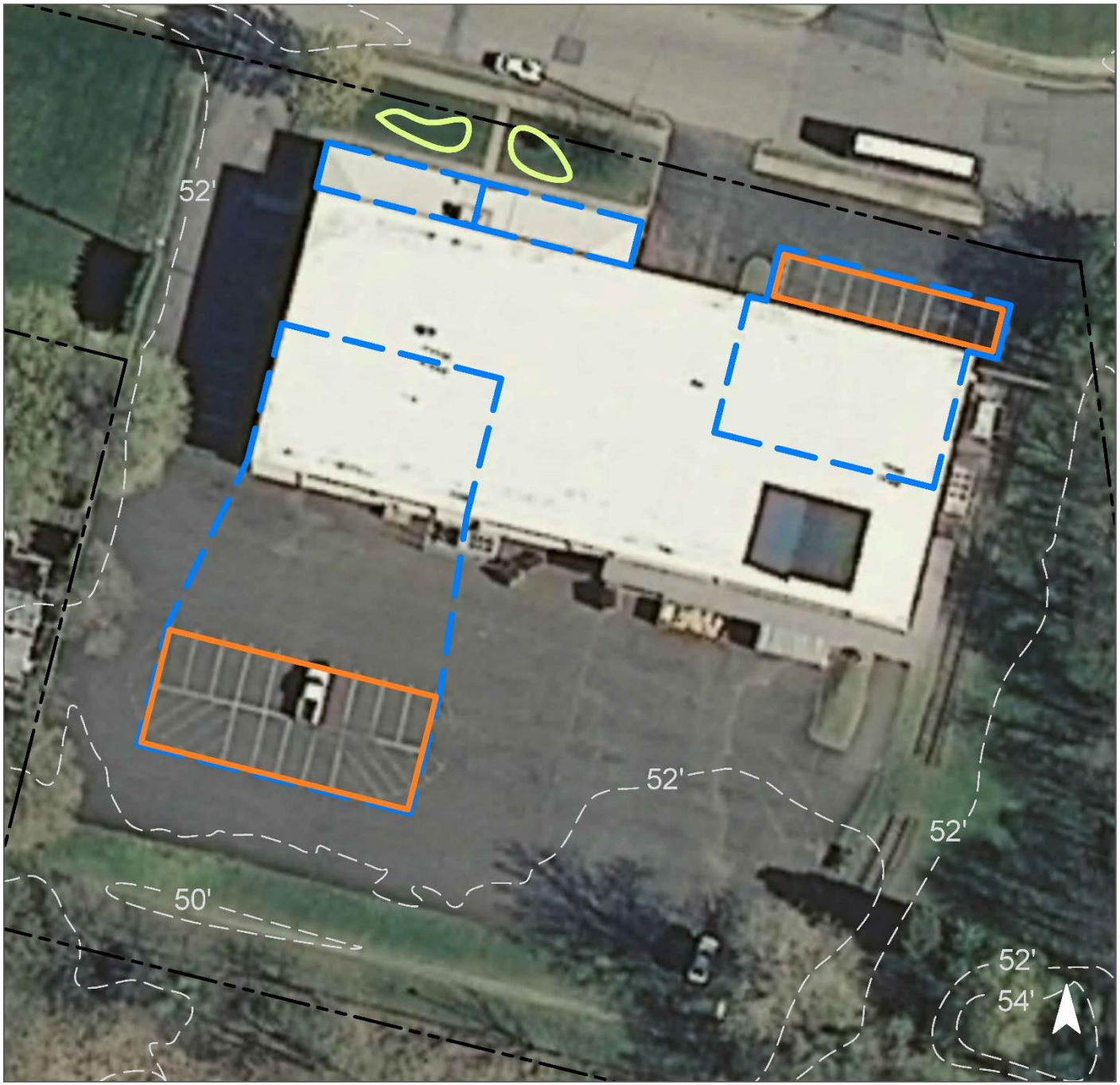
Block and Lot: Block 1581, Lot 13,14

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff in front of the building. Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
60	76,494	3.7	38.6	351.2	0.060	2.10

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.042	7	3,060	0.11	400	$2,000
Pervious pavement	0.437	73	32,090	1.21	5,080	$127,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



BLV Holding Company Inc.

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

CORNELL HEIGHTS FIELD

Subwatershed: **Assunpink Creek**

Site Area: **207,769 sq. ft.**

Address: **301 Amherst Avenue**
Hamilton, NJ 08619

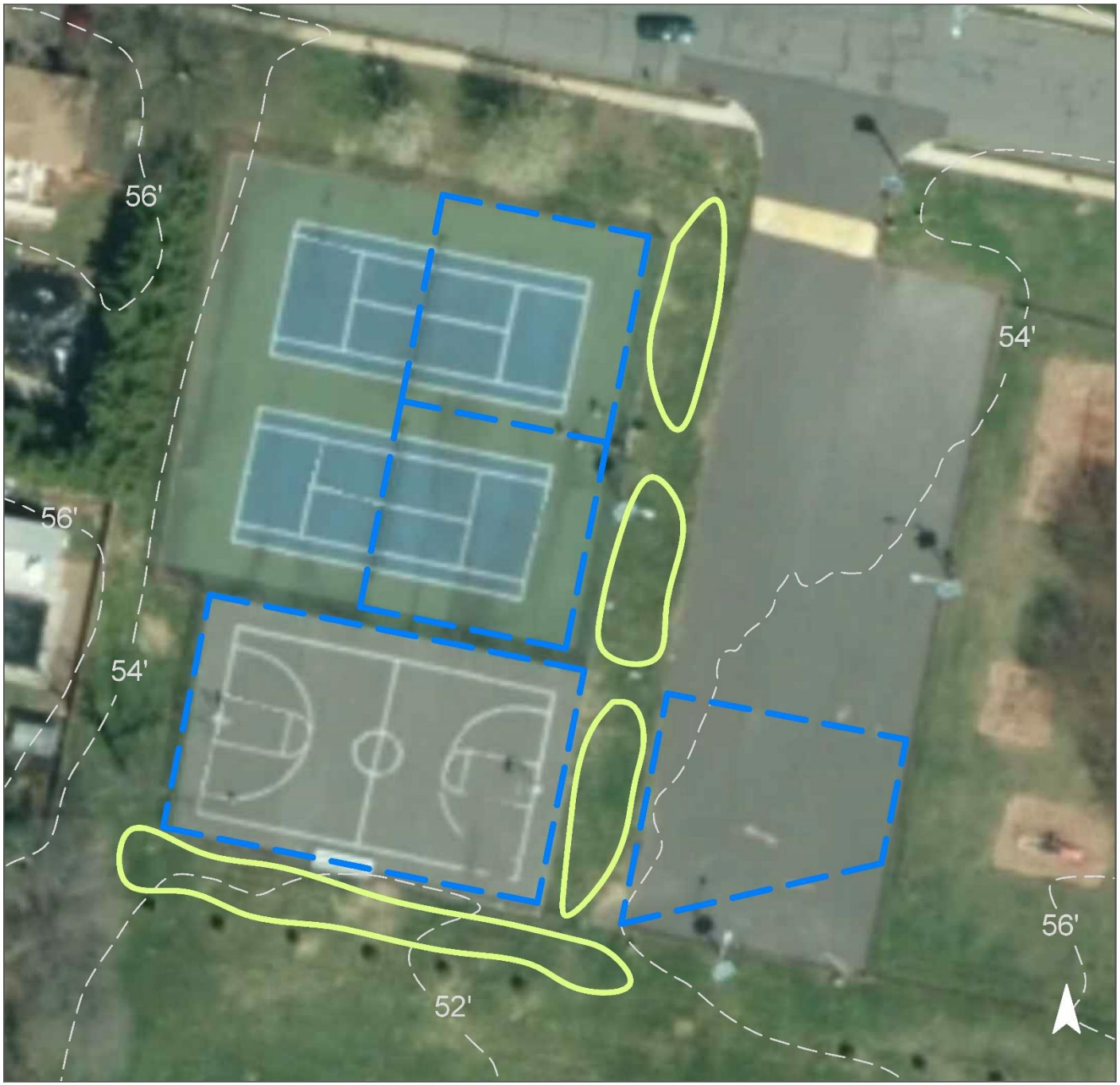
Block and Lot: **Block 1535, Lot 19**

Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
24	49,319	2.4	24.9	226.4	0.038	1.35

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.396	66	29,060	1.09	3,850	$19,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Cornell Heights Field

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 20' 40'

IBIS PLAZA OFFICE SUITES

Subwatershed: **Assunpink Creek**

Site Area: **363,367 sq. ft.**

Address: **3525 Quakerbridge Road**
Hamilton, NJ 08619

Block and Lot: **Block 1521, Lot 111,113,114**

Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
86	313,593	15.1	158.4	1,439.8	0.244	8.60

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	1.200	201	88,070	3.31	11,380	$284,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

Ibis Plaza Office Suites

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

MEDALLION CARE

Subwatershed: **Assunpink Creek**

Site Area: **728,833 sq. ft.**

Address: **1 Electronics Drive**
Hamilton, NJ 08619

Block and Lot: **Block 1505, Lot 9**

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
45	325,970	15.7	164.6	1,496.6	0.254	8.94

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.724	121	53,140	2.00	8,250	$206,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

Medallion Care

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

SIEMENS INDUSTRY & DELAVAL TURBOMACHINERY

Subwatershed: **Assunpink Creek**

Site Area: **1,643,180 sq. ft.**

Address: **840 Nottingham Way**
Trenton, NJ 08638

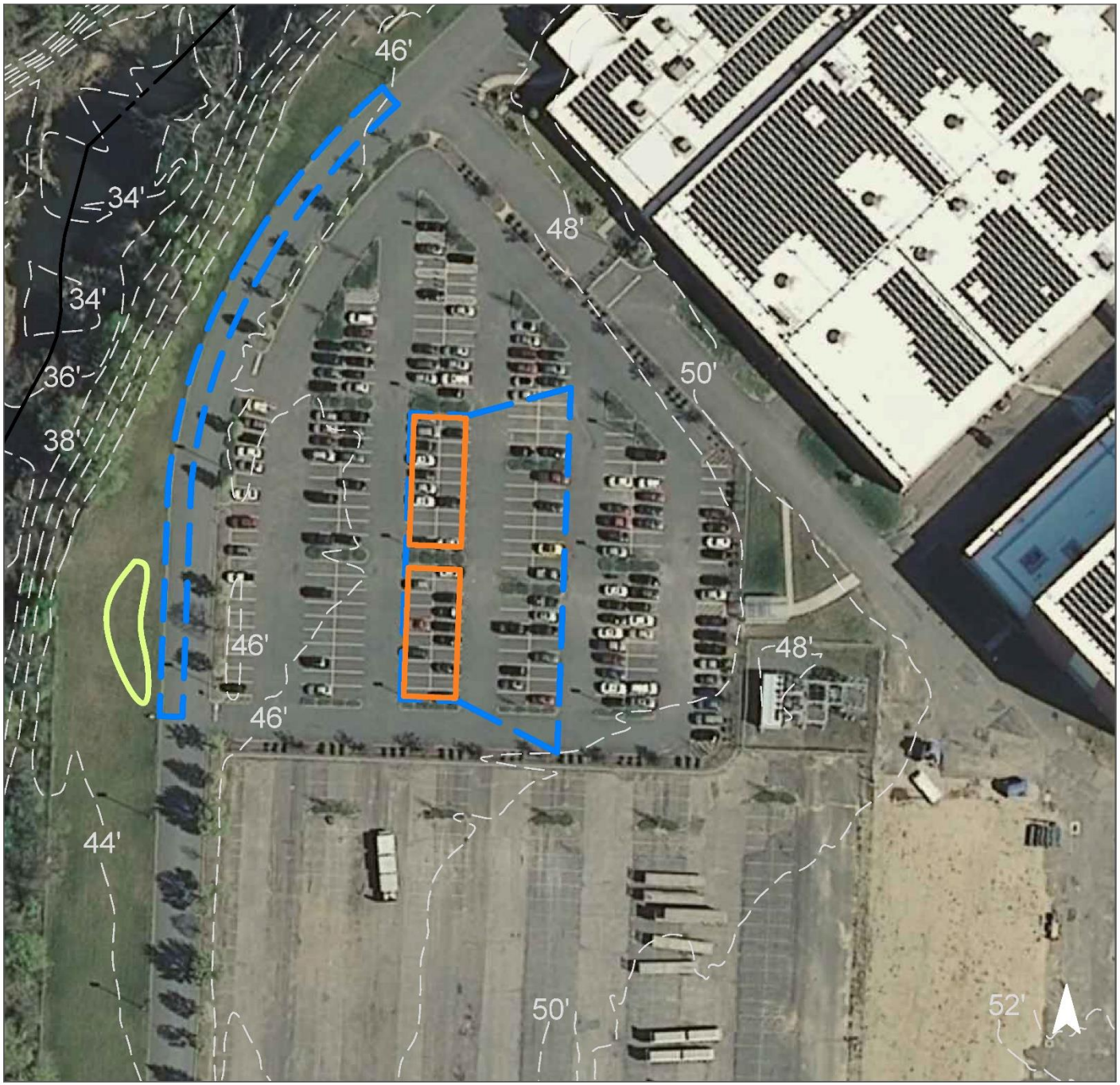
Block and Lot: **Block 1517, Lot 1**

A bioretention system can be installed to capture, treat, and infiltrate runoff draining from the driveway. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
68	1,109,814	53.5	560.5	5,095.6	0.865	30.44

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.175	29	12,810	0.48	1,675	$8,375
Pervious pavement	0.547	92	40,150	1.51	6,690	$167,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Siemens Industry & Delaval Turbomachinery

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

AAA MID ATLANTIC

Subwatershed: Back Creek

Site Area: 924,624 sq. ft.

Address: 700 Horizon Drive
Hamilton, NJ 08691

Block and Lot: Block 2612, Lot 5.02

Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff via existing curb cuts. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
30	276,011	13.3	139.4	1,267.3	0.215	7.57

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.154	26	11,280	0.42	1,475	$7,375
Pervious pavement	2.758	462	202,370	7.60	26,850	$671,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

AAA Mid Atlantic

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

ABANDONED RESTAURANT

Subwatershed: Back Creek

Site Area: 79,478 sq. ft.

Address: 429 NJ-156
Hamilton, NJ 08620

Block and Lot: Block 2686, Lot 1,2

Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
82	65,161	3.1	32.9	299.2	0.051	1.79

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.429	72	31,450	1.18	3,720	$93,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Abandoned Restaurant

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

CAOLA COMPANY

Subwatershed: **Back Creek**

Site Area: **94,850 sq. ft.**

Address: **2 Crossroads Drive**
Hamilton, NJ 08691

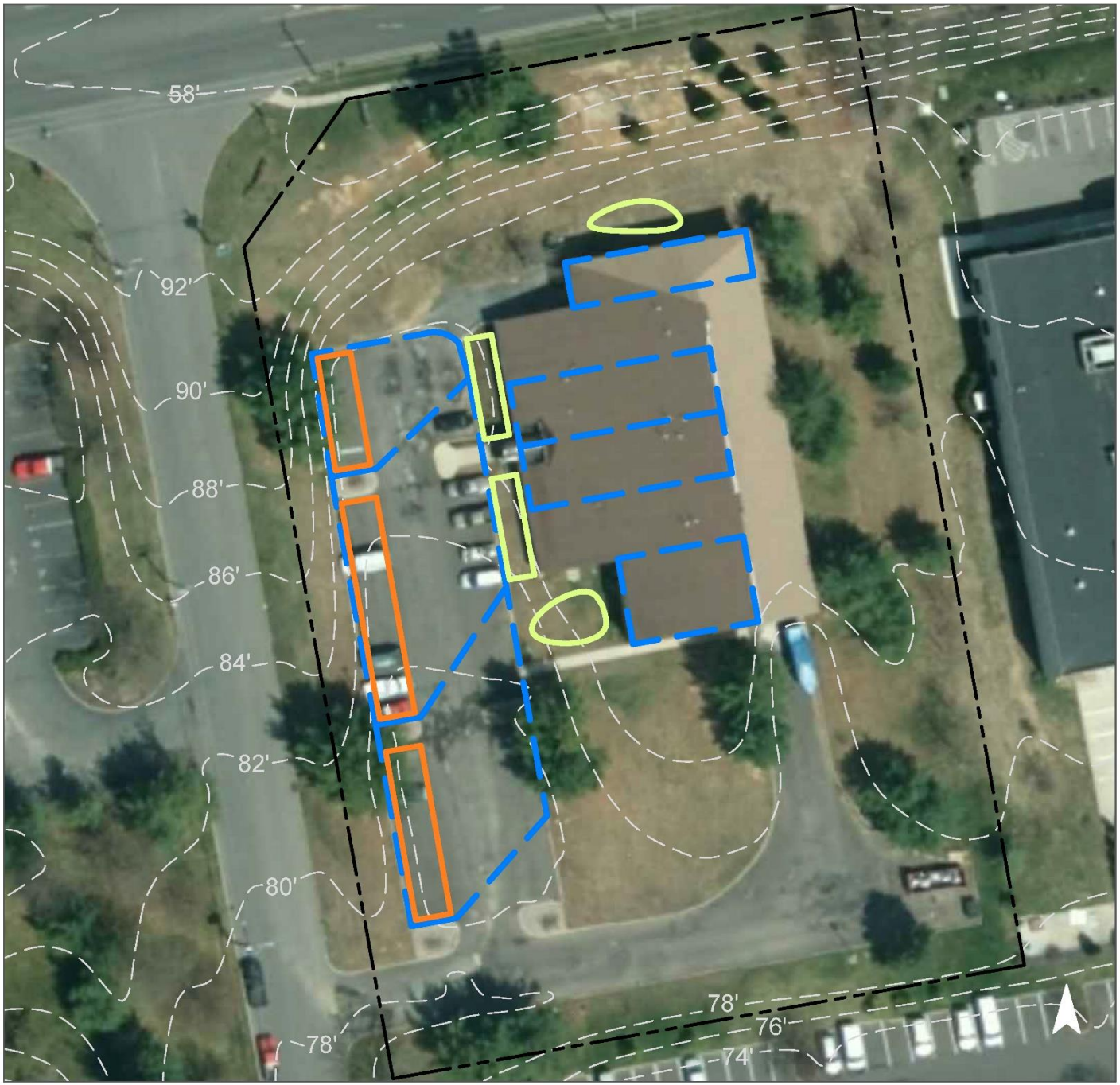
Block and Lot: **Block 2591, Lot 14**

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
53	50,019	2.4	25.3	229.7	0.039	1.37

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.162	27	11,860	0.45	1,550	$7,750
Pervious pavement	0.336	56	24,660	0.93	3,755	$93,875

GREEN INFRASTRUCTURE RECOMMENDATIONS



Caola Company

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

CROCKETT MIDDLE SCHOOL

Subwatershed: **Back Creek**

Site Area: **1,751,814 sq. ft.**

Address: **2631 Kuser Road**
Hamilton, NJ 08691

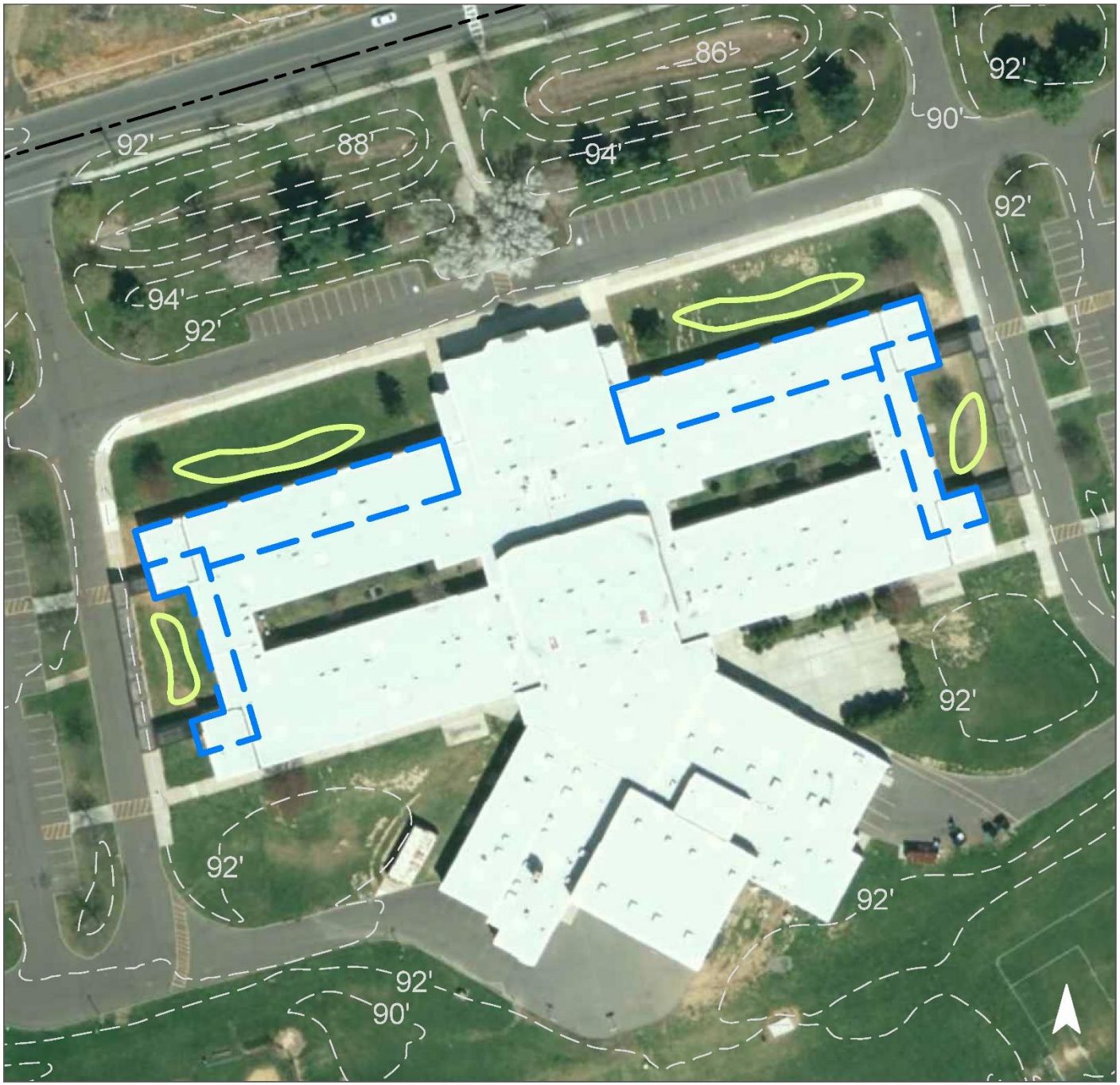
Block and Lot: **Block 2592, Lot 2**

Bioretention systems can be installed to capture, treat, and infiltrate rooftop runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
14	252,991	12.2	127.8	1,161.6	0.197	6.94

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.534	89	39,200	1.47	5,130	$25,650

GREEN INFRASTRUCTURE RECOMMENDATIONS



Crockett Middle School

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

CUSTOM CALIBRATION SOLUTIONS, LLC

Subwatershed: Back Creek

Site Area: 201,089 sq. ft.

Address: 535 US-130
Hamilton, NJ 08620

Block and Lot: Block 2712, Lot 130

A bioretention system can be installed to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed to allow roof runoff to be reused and can overflow to the adjacent pervious pavement. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
40	81,426	3.9	41.1	373.9	0.063	2.23

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.313	52	22,940	0.86	3,000	$15,000
Pervious pavement	1.085	182	79,640	2.99	8,680	$217,000
Planter boxes	n/a	1	n/a	n/a	3 (boxes)	$3,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Custom Calibrations Solutions, LLC

- bioretention system
- pervious pavement
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

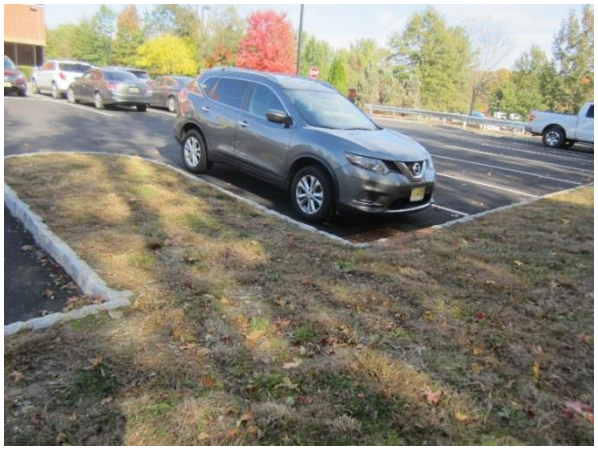
HAMILTON MEDICAL ARTS

Subwatershed: Back Creek

Site Area: 182,831 sq. ft.

Address: 2501 Kuser Road
Hamilton, NJ 08691

Block and Lot: Block 2591, Lot 7



Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
66	121,379	5.9	61.3	557.3	0.095	3.33

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.804	135	59,020	2.22	6,970	$174,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

Hamilton Medical Arts

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

KLEINFELDER

Subwatershed: Back Creek

Site Area: 309,617 sq. ft.

Address: 3 AAA Drive
Hamilton, NJ 08691

Block and Lot: Block 2597, Lot 13

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A bioretention system can be installed to capture, treat, and infiltrate roadway runoff via curb cuts. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
40	124,614	6.0	62.9	572.2	0.097	3.42

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.065	11	4,780	0.18	625	$3,125
Pervious pavement	1.200	201	88,070	3.31	11,380	$284,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

Kleinfelder

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

S. T. PETERSON & CO. INC. OFFICE SPACE

Subwatershed: Back Creek

Site Area: 305,378 sq. ft.

Address: 1 AAA Drive
Hamilton, NJ 08691

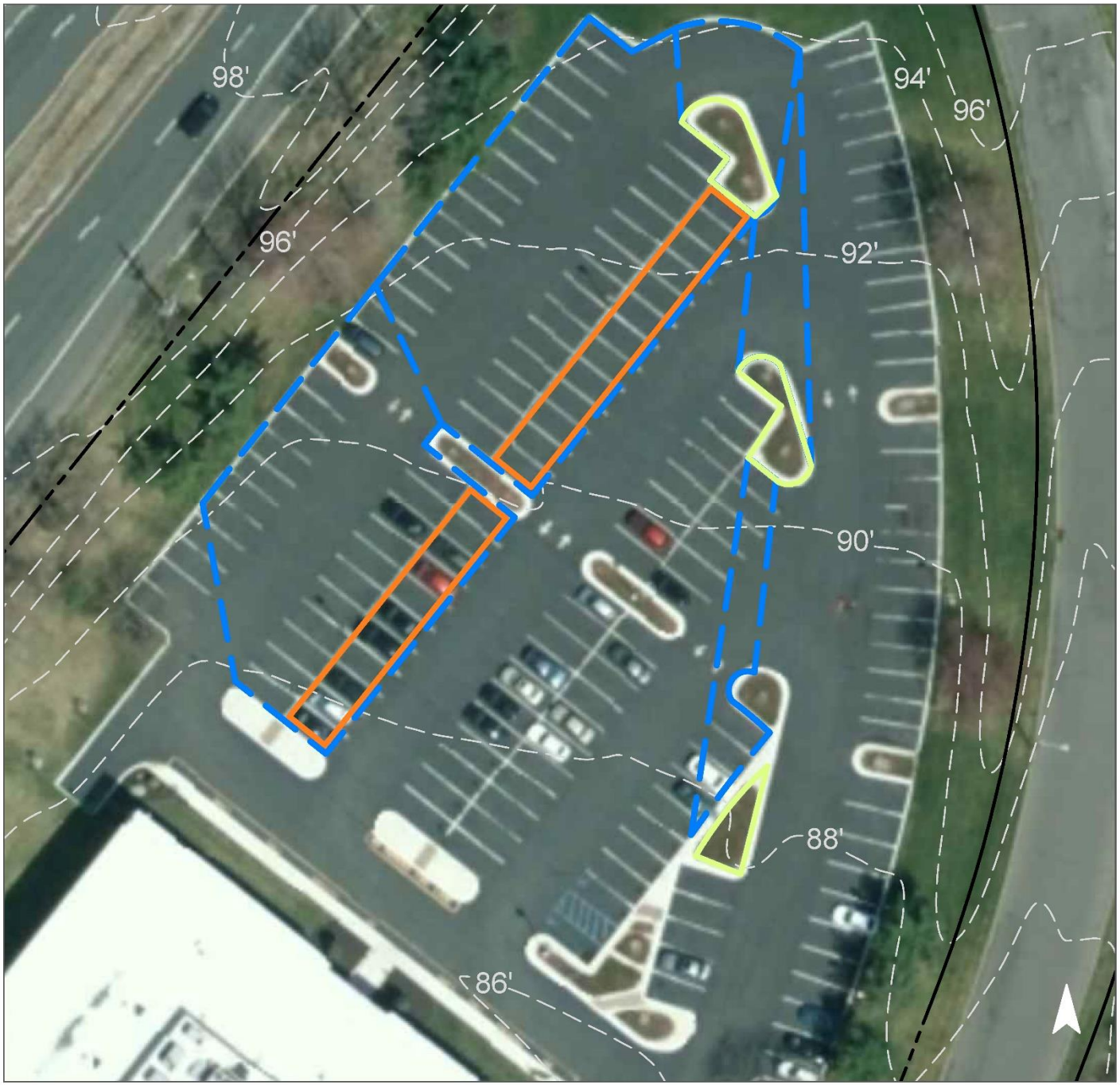
Block and Lot: Block 2597, Lot 14

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Parking lot islands can be transformed into bioretention systems to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
38	116,632	5.6	58.9	535.5	0.091	3.20

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.115	19	8,450	0.32	1,120	$5,600
Pervious pavement	0.482	81	35,370	1.33	4,100	$102,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



S. T. Peterson & Co. Inc. Office Space

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

SKYLINK TECHNOLOGIES

Subwatershed: Back Creek

Site Area: 69,930 sq. ft.

Address: 5 Marlen Drive
Hamilton, NJ 08691

Block and Lot: Block 2597.01, Lot 5

A bioretention system can be installed to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
89	62,020	3.0	31.3	284.8	0.048	1.70

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.052	9	3,820	0.14	500	$2,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

Skylink Technologies

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 20' 40'

VERIZON

Subwatershed: Back Creek

Site Area: 907,720 sq. ft.

Address: 600 Horizon Drive
Hamilton, NJ 08691

Block and Lot: Block 2612, Lot 5.07, 5.08

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
48	431,354	20.8	217.9	1,980.5	0.336	11.83

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	4.965	831	364,300	13.69	40,880	$1,022,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Verizon

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

YORK RISK SERVICES

Subwatershed: Back Creek

Site Area: 422,358 sq. ft.

Address: 2 South Gold Drive
Hamilton, NJ 08691

Block and Lot: Block 2597.01, Lot 1

Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
37	154,883	7.5	78.2	711.1	0.121	4.25

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.187	31	13,730	0.52	1,825	$9,125
Pervious pavement	0.809	135	59,360	2.23	6,150	$153,750

GREEN INFRASTRUCTURE RECOMMENDATIONS

York Risk Services

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

GROW-VILLE COMMUNITY DAY SCHOOL

Subwatershed: Crosswicks Creek

Site Area: 30,612 sq. ft.

Address: 449 Church Street
Hamilton, NJ 08620

Block and Lot: Block 2661, Lot 24, 26

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
85	26,020	1.3	13.1	119.5	0.020	0.71

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.032	5	2,330	0.09	305	$1,525
Pervious pavement	0.416	70	30,510	1.15	2,850	$71,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

Grow-Ville Community Day School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 15' 30'

ROBINSON ELEMENTARY SCHOOL

Subwatershed: Crosswicks Creek

Site Area: 408,677 sq. ft.

Address: 495 Gropp Avenue
Hamilton, NJ 08610

Block and Lot: Block 2548, Lot 17,18,19

A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Bioretention systems can be installed to capture, treat, and infiltrate runoff from the surrounding paved surfaces. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
28	113,018	5.4	57.1	518.9	0.088	3.10

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.518	87	38,000	1.43	4,970	$24,850
Pervious pavement	0.408	68	29,940	1.13	4,790	$119,750

GREEN INFRASTRUCTURE RECOMMENDATIONS

Robinson Elementary School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

ST. RAPHAEL-HOLY ANGELS PARISH

Subwatershed: Crosswicks Creek

Site Area: 611,220 sq. ft.

Address: 3500 South Broad Street
Hamilton, NJ 08610

Block and Lot: Block 2542, Lot 30, 32

Bioretention systems can be installed at the rectory and convent to capture, treat, and infiltrate roof runoff. Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
48	293,454	14.1	148.2	1,347.4	0.229	8.05

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.107	18	7,880	0.30	1,035	$5,175
Pervious pavement	0.799	134	58,620	2.20	7,700	$192,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

St. Raphael-Holy Angels Parish

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

SUNNYBRAE ELEMENTARY SCHOOL

Subwatershed: Crosswicks Creek

Site Area: 294,171 sq. ft.

Address: 166 Elton Avenue
Hamilton, NJ 08620

Block and Lot: Block 2606, Lot 126

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff from the school. Parking spaces and play areas can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
26	75,555	3.6	38.2	346.9	0.059	2.07

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.352	59	25,850	0.97	3,400	$17,000
Pervious pavement	0.264	44	19,400	0.73	4,850	$121,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

Sunnybrae Elementary School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

SUNNYBRAE LEAGUE PARK

Subwatershed: Crosswicks Creek

Site Area: 1,138,686 sq. ft.

Address: 5 Pleasant Drive
Hamilton, NJ 08620

Block and Lot: Block 2606, Lot 96, 98

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A bioretention system can be installed to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
8	96,109	4.6	48.5	441.3	0.075	2.64

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.068	11	4,970	0.19	650	$3,250
Pervious pavement	0.949	159	69,640	2.62	8,735	$218,375

GREEN INFRASTRUCTURE RECOMMENDATIONS

Sunnybrae League Park

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

SWITLIK PARK

Subwatershed: Crosswicks Creek

Site Area: 807,435 sq. ft.

Address: 5 Fisher Place
Hamilton, NJ 08620

Block and Lot: Block 2614, Lot 130

Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff and roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
15	122,463	5.9	61.8	562.3	0.095	3.36

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.077	13	5,670	0.21	350	$1,750
Pervious pavement	1.433	240	105,150	3.95	12,150	$303,750

GREEN INFRASTRUCTURE RECOMMENDATIONS

Switlik Park

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

THE STONE TERRACE

Subwatershed: Crosswicks Creek

Site Area: 527,979 sq. ft.

Address: 2275 Kuser Road
Hamilton, NJ 08690

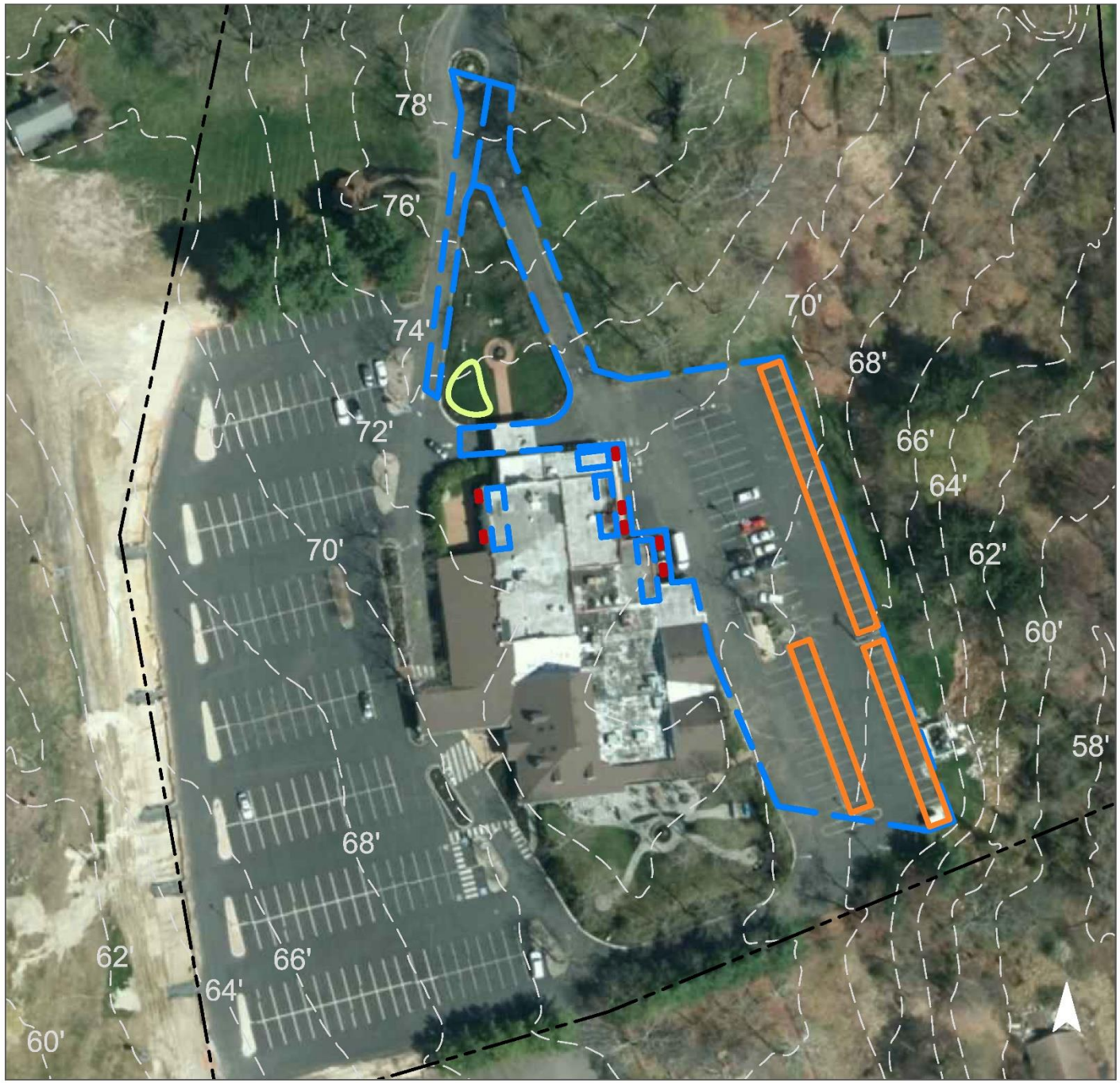
Block and Lot: Block 2575, Lot 161

Planter boxes can be constructed on the perimeter of the facility to allow roof runoff to be reused. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A bioretention system can be installed in the entry island to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
35	186,118	9.0	94.0	854.5	0.145	5.10

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.064	11	4,720	0.18	620	$3,100
Pervious pavement	1.106	185	81,160	3.05	7,885	$197,125
Planter boxes	n/a	6	n/a	n/a	7 (boxes)	$7,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



The Stone Terrace

- bioretention system
- pervious pavement
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

YARDVILLE HEIGHTS ELEMENTARY SCHOOL

Subwatershed: Crosswicks Creek

Site Area: 244,009 sq. ft.

Address: 3880 South Broad Street
Hamilton, NJ 08620

Block and Lot: Block 2606, Lot 15

Two bioretention systems can be installed in front of the school to capture roof runoff. Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Part of the play area can also be repaved with pervious pavement. Planter boxes can be constructed on the perimeter of the school in the playground area to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
43	103,719	5.0	52.4	476.2	0.081	2.84

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.054	9	3,940	0.15	520	$2,600
Pervious pavement	0.635	106	46,590	1.75	5,010	$125,250
Planter boxes	n/a	3	n/a	n/a	4 (boxes)	$4,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Yardville Heights Elementary School

- bioretention system
- pervious pavement
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

YMCA

Subwatershed: Crosswicks Creek

Site Area: 2,304,067 sq. ft.

Address: 185 Sawmill Road
Hamilton, NJ 08620

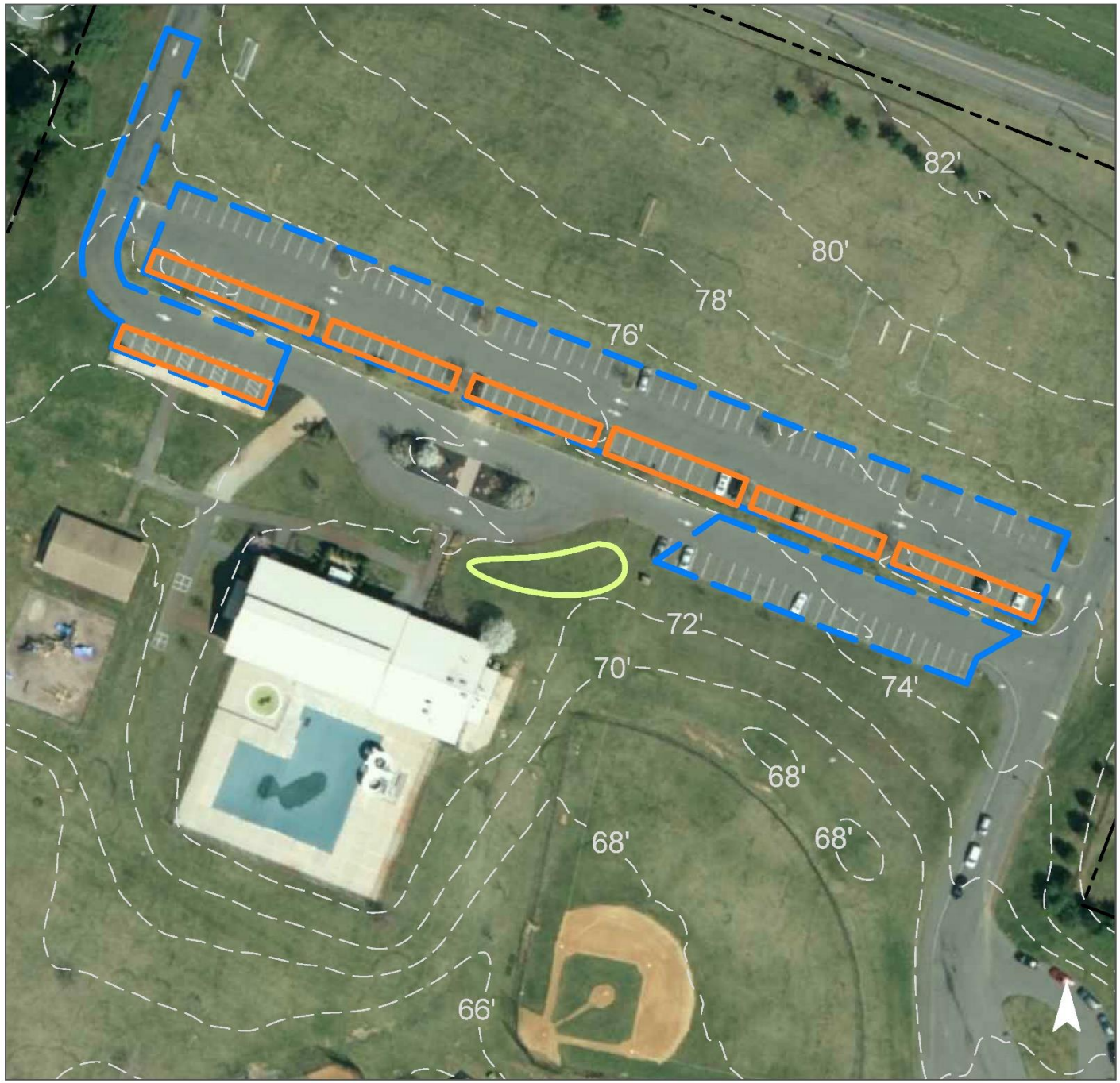
Block and Lot: Block 2730, Lot 14.01

Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A bioretention system can be installed at the front of the building to capture, treat, and infiltrate parking lot runoff via curb cuts. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
10	226,550	10.9	114.4	1,040.2	0.177	6.21

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.236	39	17,300	0.65	3,250	$16,250
Pervious pavement	1.477	247	108,350	4.07	14,205	$355,125

GREEN INFRASTRUCTURE RECOMMENDATIONS



YMCA

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

ST. GEORGE UKRAINIAN ORTHODOX CHURCH

Subwatershed: Doctors Creek

Site Area: 536,154 sq. ft.

Address: 839 Yardville Allentown Road
Hamilton, NJ 08620

Block and Lot: Block 2724, Lot 82

There are several opportunities to install bioretention systems to capture, treat, and infiltrate runoff; three are adjacent to the church buildings, and the other is along the driveway. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
20	109,828	5.3	55.5	504.3	0.086	3.01

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.161	27	11,830	0.44	1,550	$7,750

GREEN INFRASTRUCTURE RECOMMENDATIONS

St. George Ukrainian Orthodox Church

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

YARDVILLE ELEMENTARY SCHOOL

Subwatershed: Doctors Creek

Site Area: 187,256 sq. ft.

Address: 450 Yardville Allentown Road
Hamilton, NJ 08620

Block and Lot: Block 2699, Lot 1

Planter boxes can be constructed around the perimeter of the mobile classrooms and school to allow roof runoff to be reused. A bioretention system can be installed to capture, treat, and infiltrate roof runoff on the front lawn of the school. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
44	81,714	3.9	41.3	375.2	0.064	2.24

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.038	6	2,750	0.10	360	$1,800
Pervious pavement	0.263	44	19,270	0.72	1,800	$45,000
Planter boxes	n/a	6	n/a	n/a	8 (boxes)	$8,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Yardville Elementary School

- bioretention system
- pervious pavement
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

CHRIST PRESBYTERIAN CHURCH

Subwatershed: Miry Run

Site Area: 142,625 sq. ft.

Address: 746 Klockner Road
Hamilton, NJ 08619

Block and Lot: Block 1656, Lot 58

Planter boxes can be constructed around the perimeter of the building to allow roof runoff to be reused. A bioretention system can be installed near the main entrance to capture, treat, and infiltrate runoff from the roof. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
23	32,397	1.6	16.4	148.7	0.025	0.89

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.016	3	1,180	0.04	160	$800
Planter boxes	n/a	3	n/a	n/a	4 (boxes)	$4,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Christ Presbyterian Church

- bioretention system
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

CLOVER SQUARE

Subwatershed: **Miry Run**

Site Area: **887,560 sq. ft.**

Address: **3100 Quakerbridge Road**
Hamilton, NJ 08619

Block and Lot: **Block 1603, Lot 19**

Rows of parking spaces throughout the shopping plaza can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
81	721,004	34.8	364.1	3,310.4	0.562	19.77

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	4.451	745	326,560	12.27	34,649	$866,225

GREEN INFRASTRUCTURE RECOMMENDATIONS

Clover Square

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

ENTERPRISE VOLUNTEER FIRE COMPANY

Subwatershed: Miry Run

Site Area: 49,506 sq. ft.

Address: 569 Klockner Road
Hamilton, NJ 08619

Block and Lot: Block 1648, Lot 12, 16

Rainwater can be harvested by installing a cistern at the building. The water can be used for cleaning vehicles or for conducting car wash fundraisers. A bioretention system can be installed to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
88	43,673	2.1	22.1	200.5	0.034	1.20

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.031	5	2,240	0.08	300	$1,500
Rainwater harvesting	0.031	5	1,000	0.04	1,000 (gal)	$2,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Enterprise Volunteer Fire Company

- bioretention system
- rainwater harvesting
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 20' 40'

FIRST PENTECOSTAL PRAYER OF FAITH CHURCH

Subwatershed: Miry Run

Site Area: 35,411 sq. ft.

Address: 3632 Nottingham Way
Hamilton, NJ 08690

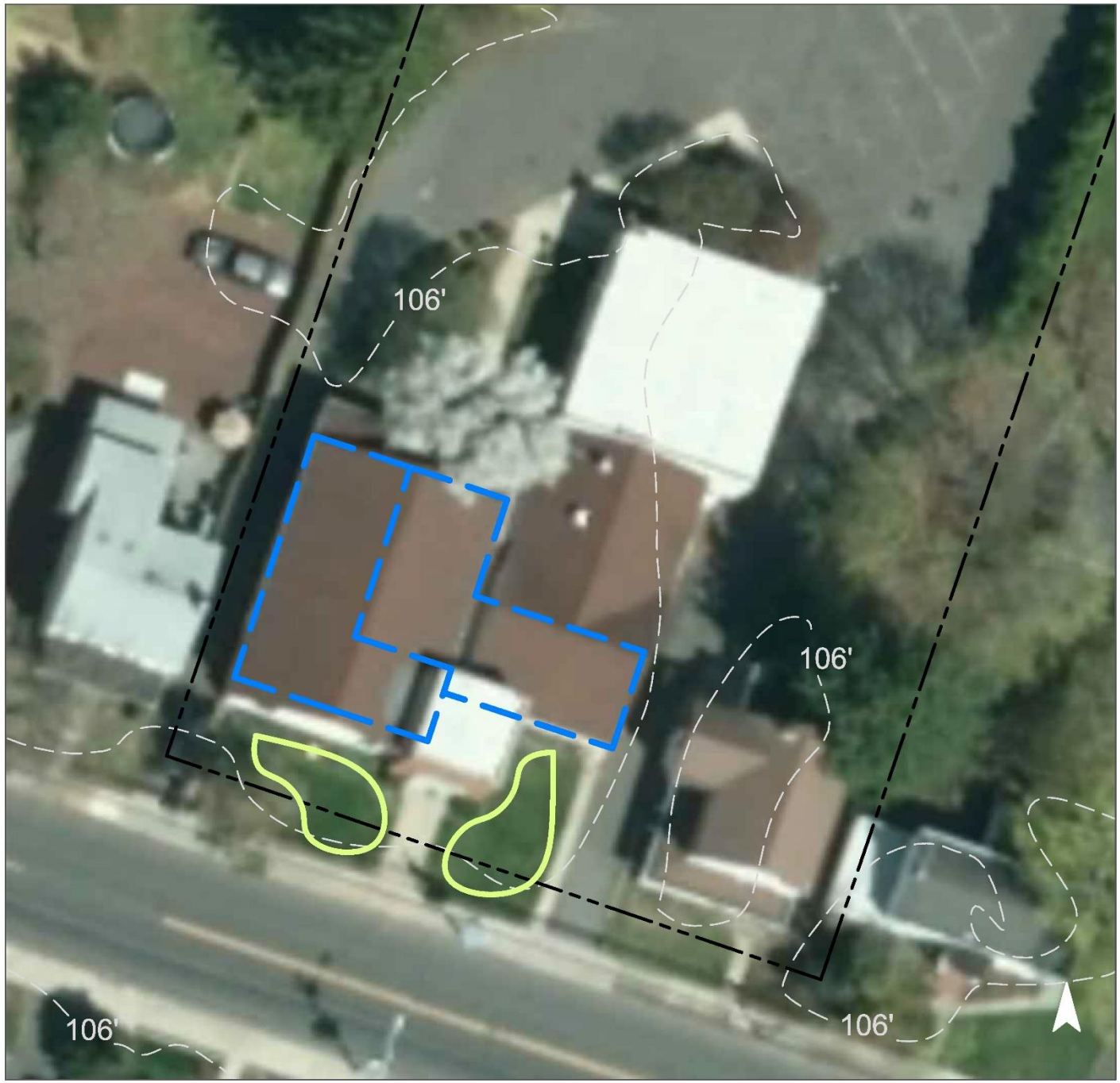
Block and Lot: Block 1836, Lot 34

Mirrored bioretention systems can be installed at the entrance of the church to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
87	30,651	1.5	15.5	140.7	0.024	0.84

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.070	12	5,160	0.19	675	$3,375

GREEN INFRASTRUCTURE RECOMMENDATIONS



First Pentecostal Prayer of Faith Church

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 15' 30'

FIRST PRESBYTERIAN CHURCH / YMCA YOUNG WONDERS

Subwatershed: Miry Run

Site Area: 85,330 sq. ft.

Address: 3550 Nottingham Way
Hamilton, NJ 08690

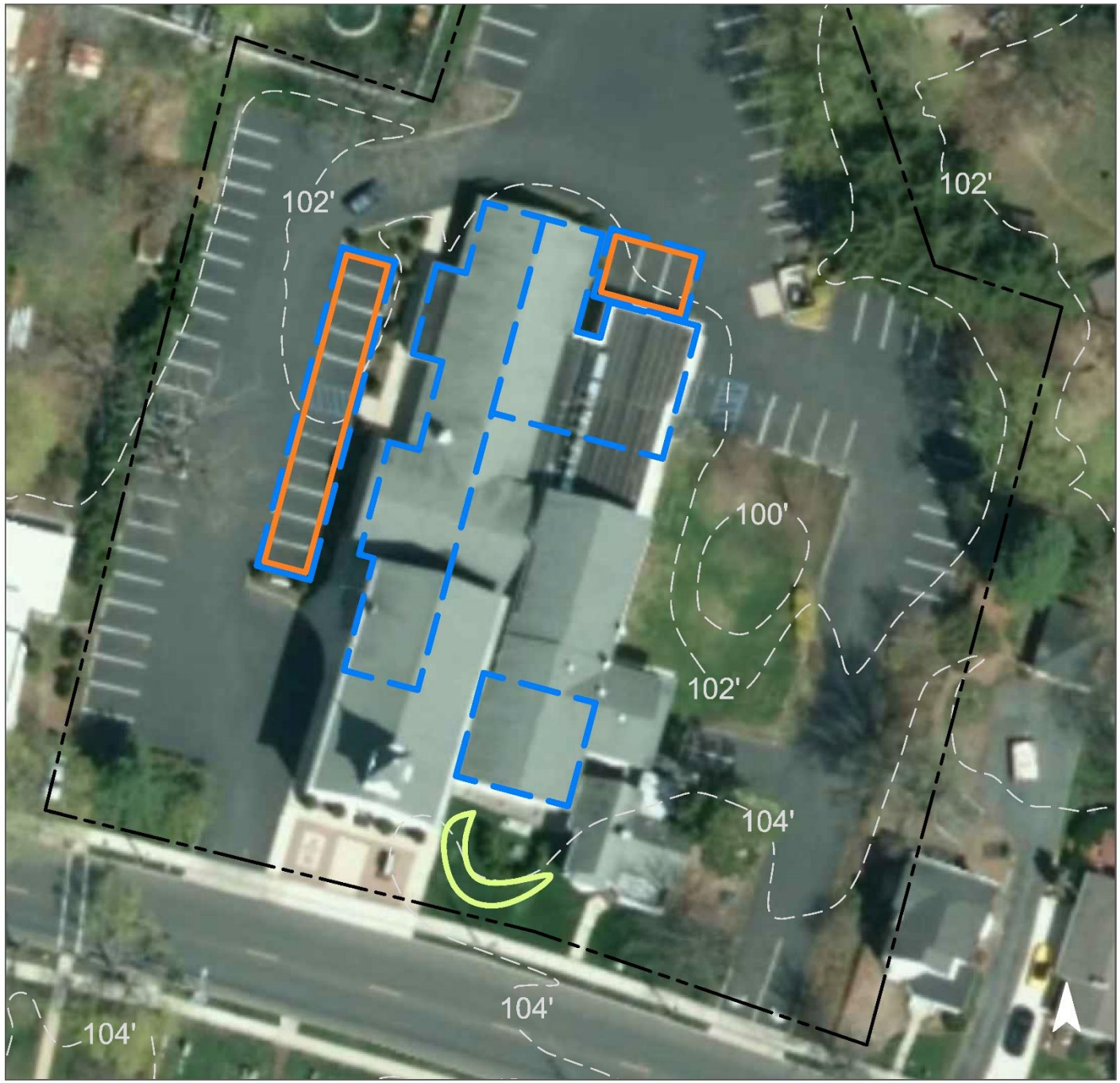
Block and Lot: Block 1830, Lot 20, 50-52

A bioretention system can be installed to capture, treat, and infiltrate roof runoff near the entrance to the church. Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
81	68,988	3.3	34.8	316.7	0.054	1.89

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.035	6	2,540	0.10	335	$1,675
Pervious pavement	0.156	26	11,480	0.43	2,460	$61,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



First Presbyterian Church / YMCA Young Wonders

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

H.D. MORRISON ELEMENTARY SCHOOL (UNIVERSITY HEIGHTS)

Subwatershed: Miry Run

Site Area: 562,187 sq. ft.

Address: 645 Paxson Avenue
Hamilton, NJ 08619

Block and Lot: Block 1561, Lot 13, 24, 25

A bioretention system can be installed to capture, treat, and infiltrate paved surface runoff. A section of the adjacent area could also be depaved. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
22	126,391	6.1	63.8	580.3	0.098	3.47

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.101	17	7,440	0.28	975	$4,875
Pervious pavement	0.567	95	41,580	1.56	4,160	$104,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

H.D. Morrison Elementary School (University Heights)

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

HAMILTON SQUARE BAPTIST CHURCH

Subwatershed: Miry Run

Site Area: 156,832 sq. ft.

Address: 3752 Nottingham Way
Hamilton, NJ 08690

Block and Lot: Block 1839, Lot 87

A bioretention system can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
44	68,505	3.3	34.6	314.5	0.053	1.88

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.063	11	4,650	0.17	610	$3,050
Pervious pavement	0.862	144	63,240	2.38	6,230	$155,750

GREEN INFRASTRUCTURE RECOMMENDATIONS

Hamilton Square Baptist Church

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

HAMILTON TOWNSHIP SCHOOL DISTRICT

Subwatershed: **Miry Run**

Site Area: **56,745 sq. ft.**

Address: **90 Park Avenue**
Hamilton, NJ 08690

Block and Lot: **Block 1836, Lot 6, 8**

A bioretention system can be installed to capture, treat, and infiltrate roof runoff. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
87	49,126	2.4	24.8	225.6	0.038	1.35

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.087	15	6,370	0.24	835	$4,175
Pervious pavement	0.242	41	17,760	0.67	2,270	$56,750

GREEN INFRASTRUCTURE RECOMMENDATIONS

Hamilton Township School District

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 20' 40'

KLOCKNER ELEMENTARY SCHOOL

Subwatershed: Miry Run

Site Area: 102,765 sq. ft.

Address: 830 Klockner Road
Hamilton, NJ 08619

Block and Lot: Block 1659, Lot 2,3

The row of parking spaces furthest east of the school can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed around the perimeter of the school to allow roof runoff to be reused. Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
48	49,185	2.4	24.8	225.8	0.038	1.35

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.025	4	1,830	0.07	240	$1,200
Pervious pavement	0.362	61	26,580	1.00	2,480	$62,000
Planter boxes	n/a	2	n/a	n/a	3 (boxes)	$3,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Klockner Elementary School

- bioretention system
- pervious pavement
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

MERLIN INDUSTRIES INC.

Subwatershed: Miry Run

Site Area: 935,824 sq. ft.

Address: 2904 East State Street
Hamilton, NJ 08619

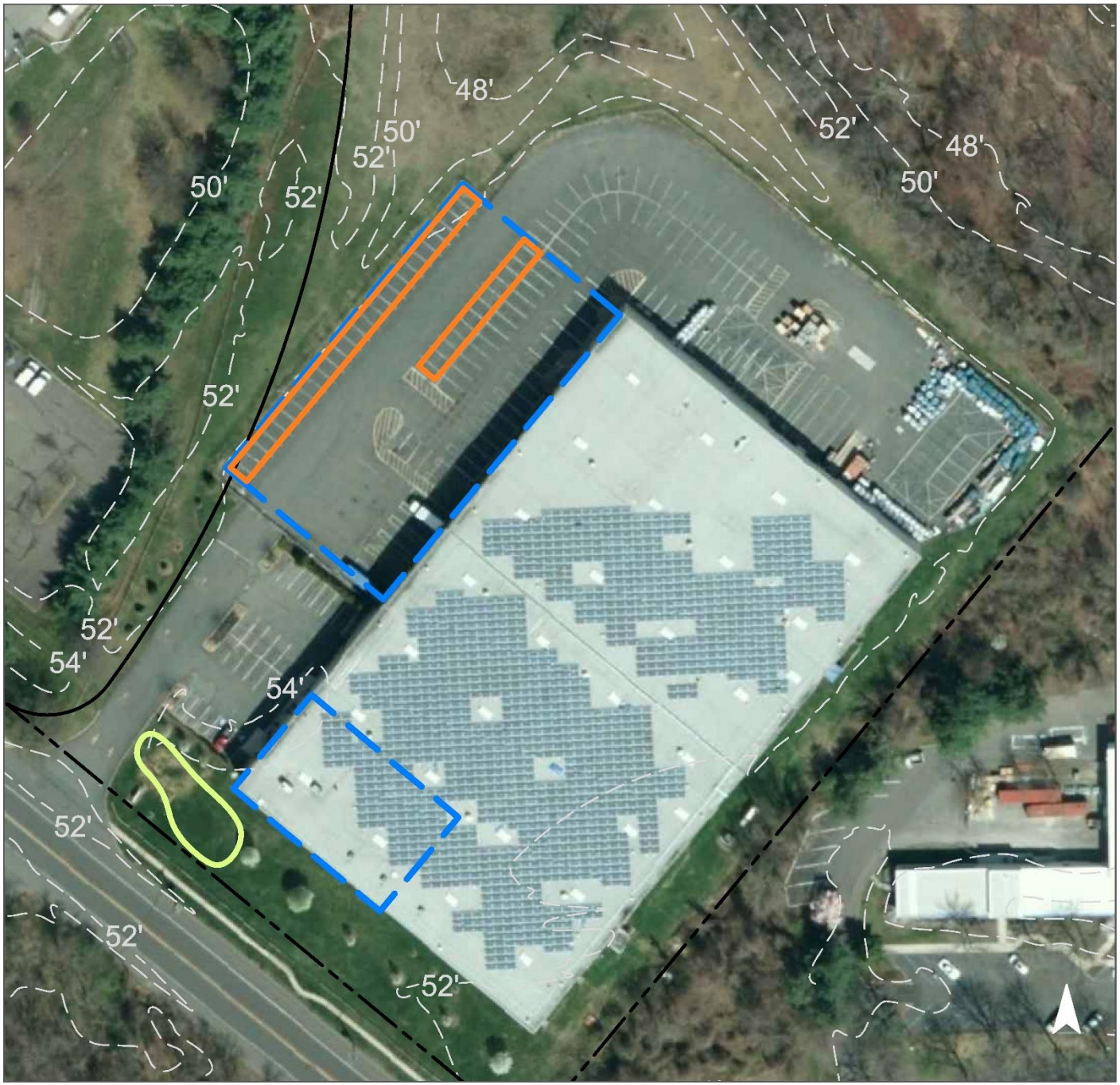
Block and Lot: Block 1602, Lot 7

A bioretention system can be installed in front of the building to capture, treat, and infiltrate roof runoff. Pervious pavement can be installed in parking spaces to capture runoff from the parking lot. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
22	203,182	9.8	102.6	932.9	0.158	5.57

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.087	15	6,370	0.24	835	$4,175
Pervious pavement	0.844	141	61,940	2.33	6,370	$159,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Merlin Industries Inc.

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

MORGAN ELEMENTARY SCHOOL

Subwatershed: **Miry Run**

Site Area: **369,401 sq. ft.**

Address: **38 Stamford Road**
Hamilton, NJ 08619

Block and Lot: **Block 1618, Lot 34,40**

A bioretention system can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
35	129,743	6.3	65.5	595.7	0.101	3.56

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.066	11	4,880	0.18	640	$3,200
Pervious pavement	0.412	69	30,260	1.14	4,320	$108,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Morgan Elementary School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

NOTTINGHAM LITTLE LEAGUE

Subwatershed: Miry Run

Site Area: 615,843 sq. ft.

Address: 120 Mapleshade Avenue
Hamilton, NJ 08690

Block and Lot: Block 1722, Lot 95,96,105

The existing swale behind the gray building at the ball field can be converted into a bioswale. Additionally, a bioretention system can be installed to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
21	127,290	6.1	64.3	584.4	0.099	3.49

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.125	21	9,180	0.34	1,200	$6,000
Bioswale	0.040	10	385	0.01	770	$3,850

GREEN INFRASTRUCTURE RECOMMENDATIONS

Nottingham Little League

- bioretention system
- bioswale
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

NOTTINGHAM VOLUNTEER FIRE COMPANY STATION 17

Subwatershed: Miry Run

Site Area: 153,281 sq. ft.

Address: 200 Mercer Street
Hamilton, NJ 08690

Block and Lot: Block 1839, Lot 24.01

A bioretention system can be installed to capture, treat, and infiltrate runoff from the roof. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Rainwater can be harvested by installing a cistern at the fire company. The water can be used for cleaning emergency vehicles or for conducting car wash fundraisers. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
93	141,848	6.8	71.6	651.3	0.111	3.89

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.025	4	1,860	0.07	250	$1,250
Pervious pavement	0.221	37	16,250	0.61	1,520	$38,000
Rainwater harvesting	0.052	9	2,000	0.08	2,000 (gal)	$4,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Nottingham Volunteer Fire Company Station 17

- bioretention system
- pervious pavement
- rainwater harvesting
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

OUR LADY OF SORROWS SCHOOL

Subwatershed: **Miry Run**

Site Area: **517,440 sq. ft.**

Address: **3800 East State Street**
Hamilton, NJ 08619

Block and Lot: **Block 1666, Lot 80**

A bioretention system can be installed in front of the school to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
42	219,134	10.6	110.7	1,006.1	0.171	6.01

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.029	5	2,160	0.08	290	$1,450
Pervious pavement	1.462	245	107,290	4.03	13,800	$345,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Our Lady of Sorrows School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

SAINT MARK UNITED METHODIST CHURCH

Subwatershed: Miry Run

Site Area: 284,082 sq. ft.

Address: 465 Paxson Avenue
Hamilton, NJ 08690

Block and Lot: Block 1622, Lot 8

Bioretention systems can be installed to capture, treat, and infiltrate parking lot and roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
40	113,873	5.5	57.5	522.8	0.089	3.12

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.608	102	44,640	1.68	5,850	$29,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

Saint Mark United Methodist Church

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

UNIVERSITY PLAZA

Subwatershed: Miry Run

Site Area: 167,756 sq. ft.

Address: 96 Flock Road
Hamilton, NJ 08619

Block and Lot: Block 1551, Lot 16

A bioretention system can be installed along the driveway to capture, treat, and infiltrate stormwater via curb cuts. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
72	120,521	5.8	60.9	553.4	0.094	3.31

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.061	10	4,500	0.17	600	$3,000
Pervious pavement	0.408	68	29,960	1.13	4,140	$103,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

University Plaza

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

VFW HAMILTON TOWNSHIP POST

Subwatershed: **Miry Run**

Site Area: **143,315 sq. ft.**

Address: **77 Christine Avenue**
Hamilton, NJ 08619

Block and Lot: **Block 1660, Lot 25,26**

Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
42	60,776	2.9	30.7	279.0	0.047	1.67

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.145	24	10,610	0.40	1,390	$6,950
Pervious pavement	0.219	37	16,060	0.60	1,500	$37,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

VFW Hamilton Township Post

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

ALEXANDER ELEMENTARY SCHOOL

Subwatershed: **Pond Run**

Site Area: **526,633 sq. ft.**

Address: **20 Robert Frost Drive**
Hamilton, NJ 08690

Block and Lot: **Block 1980, Lot 20**

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Portions of the play areas can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
24	128,186	6.2	64.7	588.6	0.100	3.52

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.098	16	7,220	0.27	950	$4,750
Pervious pavement	0.711	119	52,200	1.96	4,880	$122,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Alexander Elementary School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

BROMLEY PARK

Subwatershed: Pond Run

Site Area: 219,967 sq. ft.

Address: 1651 East State Street
Hamilton, NJ 08609

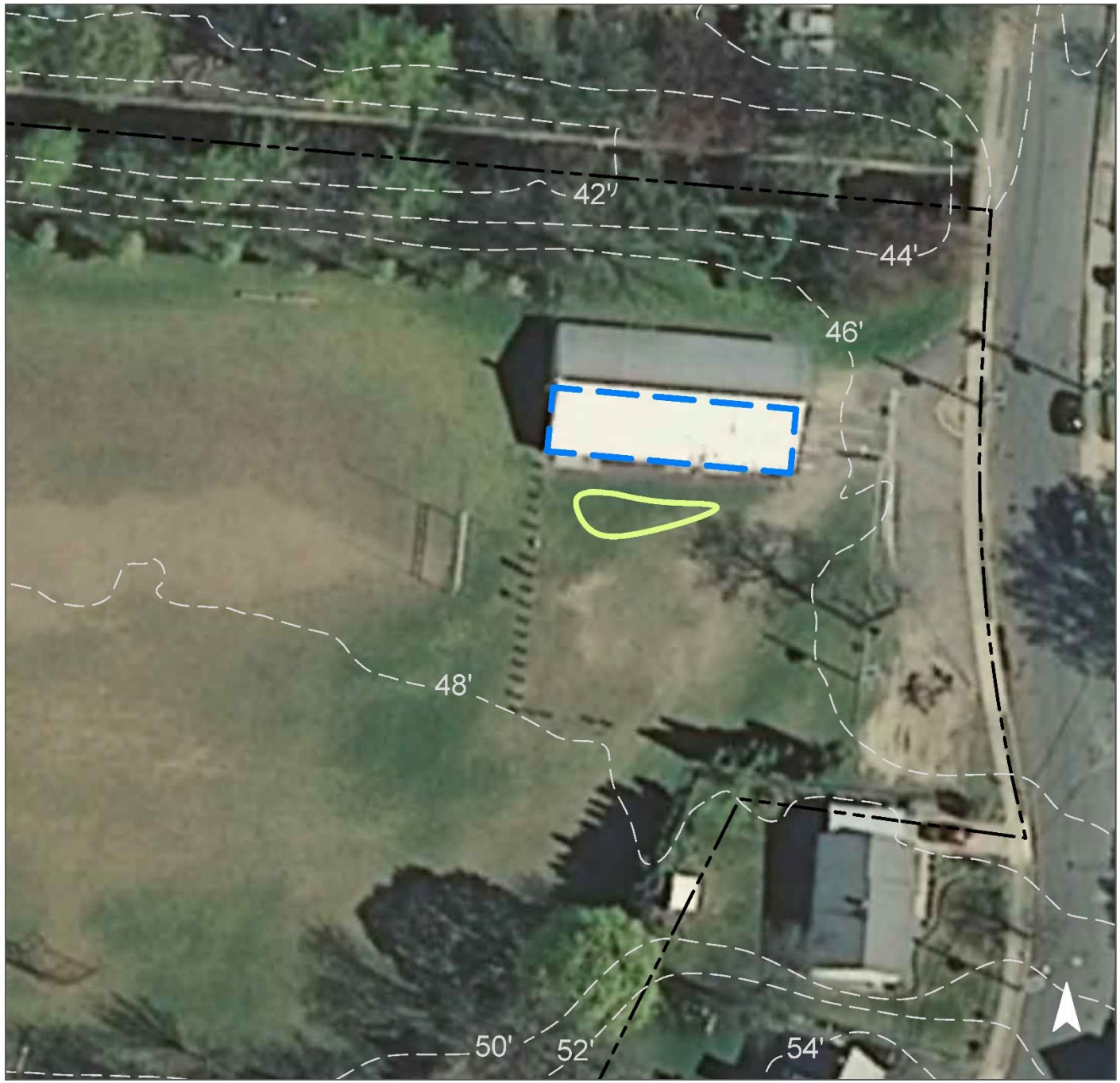
Block and Lot: Block 1733, Lot 7

A bioretention system can be installed to capture, treat, and infiltrate runoff generated by the adjacent maintenance building. A channel of Pond Run is present along the park. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
14	29,780	1.4	15.0	136.7	0.023	0.82

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.044	7	3,210	0.12	420	$2,100

GREEN INFRASTRUCTURE RECOMMENDATIONS



Bromley Park

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

COLONIAL VOLUNTEER FIRE COMPANY

Subwatershed: **Pond Run**

Site Area: **324,471 sq. ft.**

Address: **801 Kuser Road**
Hamilton, NJ 08619

Block and Lot: **Block 2154, Lot 4**

Rainwater can be harvested by installing a cistern at the fire company. The water can be used for cleaning emergency vehicles or for conducting car wash fundraisers. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
49	158,286	7.6	79.9	726.8	0.123	4.34

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.746	125	54,780	2.06	5,500	$137,500
Rainwater harvesting	0.082	14	2,500	0.23	2,500 (gal)	$5,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Colonial Volunteer Fire Company

- pervious pavement
- rainwater harvesting
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

GREENWOOD ELEMENTARY SCHOOL

Subwatershed: **Pond Run**

Site Area: **83,373 sq. ft.**

Address: **2069 Greenwood Avenue**
Hamilton, NJ 08609

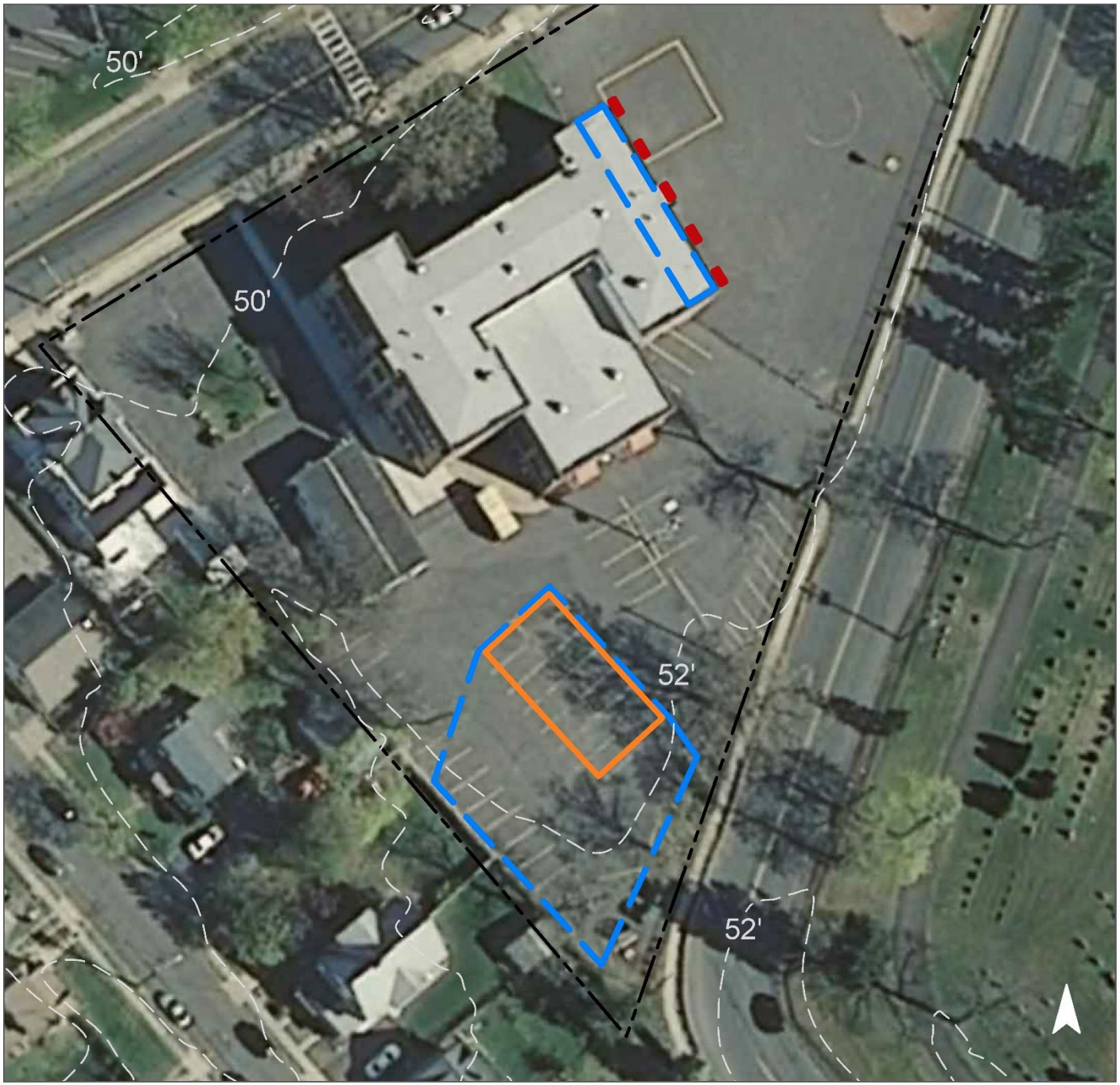
Block and Lot: **Block 1884, Lot 1**

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
89	74,555	3.6	37.7	342.3	0.058	2.04

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.217	36	15,950	0.60	2,660	$66,500
Planter boxes	n/a	4	n/a	n/a	5 (boxes)	$5,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Greenwood Elementary School

- pervious pavement
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

HAMILTON GOLF CENTER

Subwatershed: **Pond Run**

Site Area: **3,076,264 sq. ft.**

Address: **5 Justice Samuel A Alito Jr Way Hamilton, NJ 08619**

Block and Lot: **Block 2163, Lot 5,8**

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff near the entrance to the building. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
6	198,955	9.6	100.5	913.5	0.155	5.46

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.079	13	5,790	0.22	760	$3,800
Pervious pavement	0.197	33	14,450	0.54	1,350	$33,750

GREEN INFRASTRUCTURE RECOMMENDATIONS

Hamilton Golf Center

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

HAMILTON LANES

Subwatershed: Pond Run

Site Area: 240,604 sq. ft.

Address: 1200 Kuser Road
Hamilton, NJ 08619

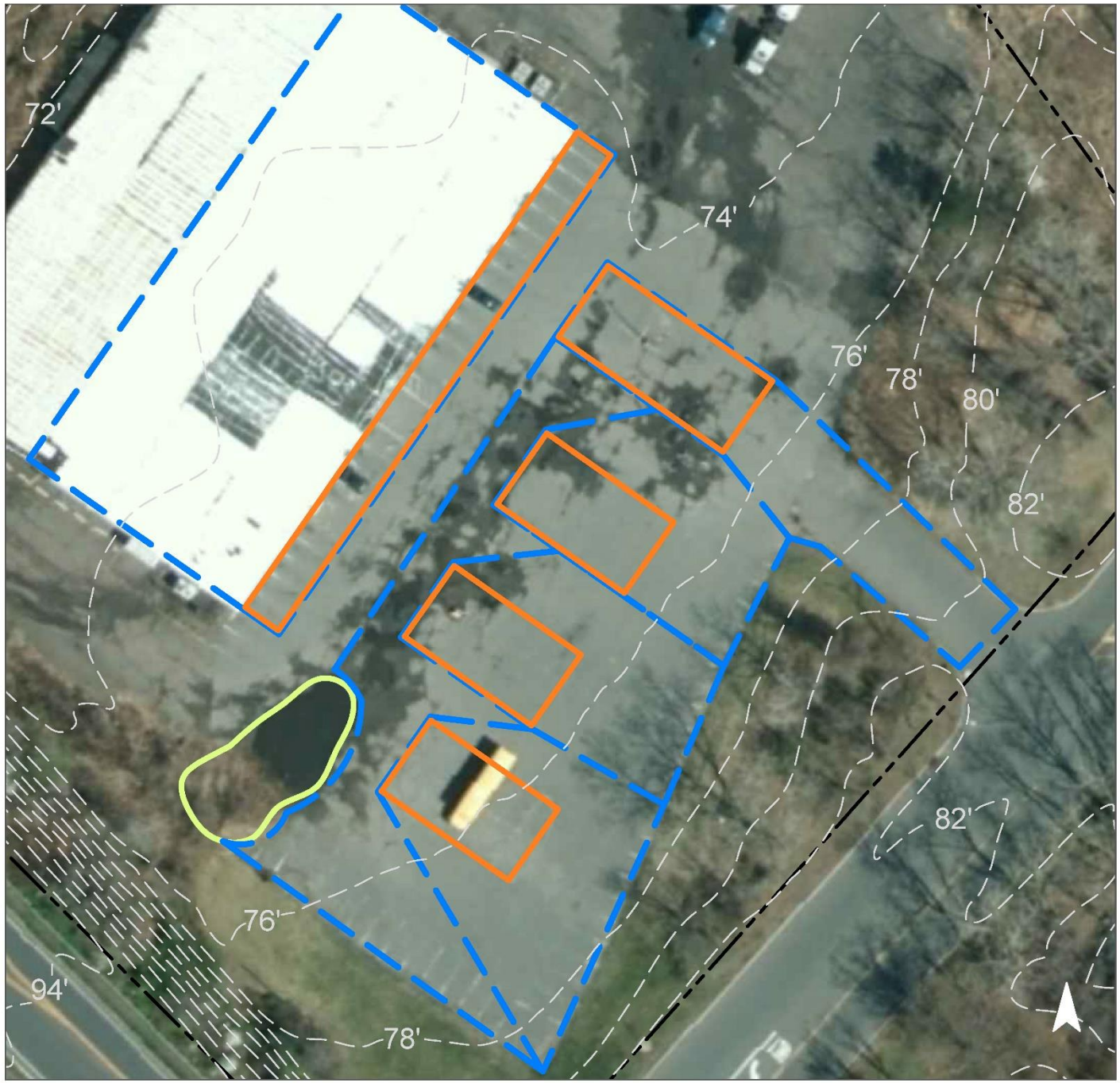
Block and Lot: Block 2163, Lot 9

A section of the parking lot can be depaved, and a bioretention system can be installed to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater from the parking lot and the building's rooftop. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
67	162,114	7.8	81.9	744.3	0.126	4.45

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.242	41	17,780	0.67	2,325	$11,625
Pervious pavement	1.286	215	94,400	3.55	13,380	$334,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Lanes

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

HAMILTON TOWNSHIP MUNICIPAL BUILDING

Subwatershed: Pond Run

Site Area: 436,805 sq. ft.

Address: 2100 Greenwood Avenue
Hamilton, NJ 08609

Block and Lot: Block 1757, Lot 24

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
38	164,366	7.9	83.0	754.7	0.128	4.51

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.059	10	4,300	0.16	250	$1,250
Pervious pavement	0.961	161	70,540	2.65	9,900	$247,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

Hamilton Township Municipal Building

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

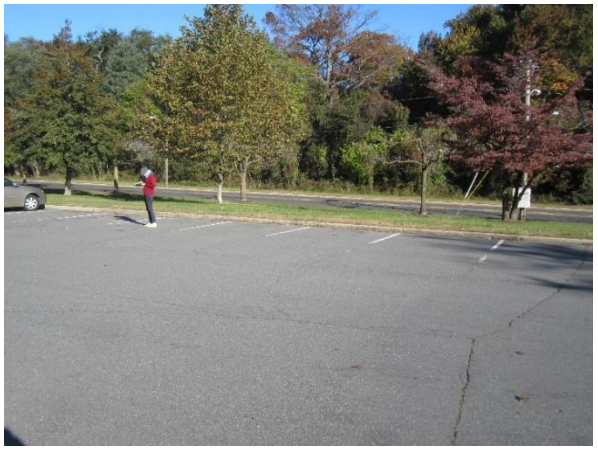
HAMILTON TOWNSHIP LIBRARY

Subwatershed: Pond Run

Site Area: 350,879 sq. ft.

Address: 1 Justice Samuel A Alito Jr Way
Hamilton, NJ 08619

Block and Lot: Block 2163, Lot 6



A bioretention system can be installed to capture, treat, and infiltrate sidewalk runoff via a trench drain. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
34	118,144	5.7	59.7	542.4	0.092	3.24

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.032	5	2,370	0.09	310	$1,550
Pervious pavement	0.466	78	34,220	1.29	4,275	$106,875

GREEN INFRASTRUCTURE RECOMMENDATIONS

Hamilton Township Library

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

HAMILTON TOWNSHIP POLICE DIVISION

Subwatershed: **Pond Run**

Site Area: **419,914 sq. ft.**

Address: **1270 Whitehorse Mercerville Road Hamilton, NJ 08619**

Block and Lot: **Block 2163, Lot 7**

Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
52	218,343	10.5	110.3	1,002.5	0.170	5.99

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.233	39	17,130	0.64	2,240	$11,200
Pervious pavement	0.414	69	30,400	1.14	2,840	$71,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Hamilton Township Police Division

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

KUSER ELEMENTARY SCHOOL

Subwatershed: Pond Run

Site Area: 114,206 sq. ft.

Address: 70 Newkirk Avenue
Hamilton, NJ 08629

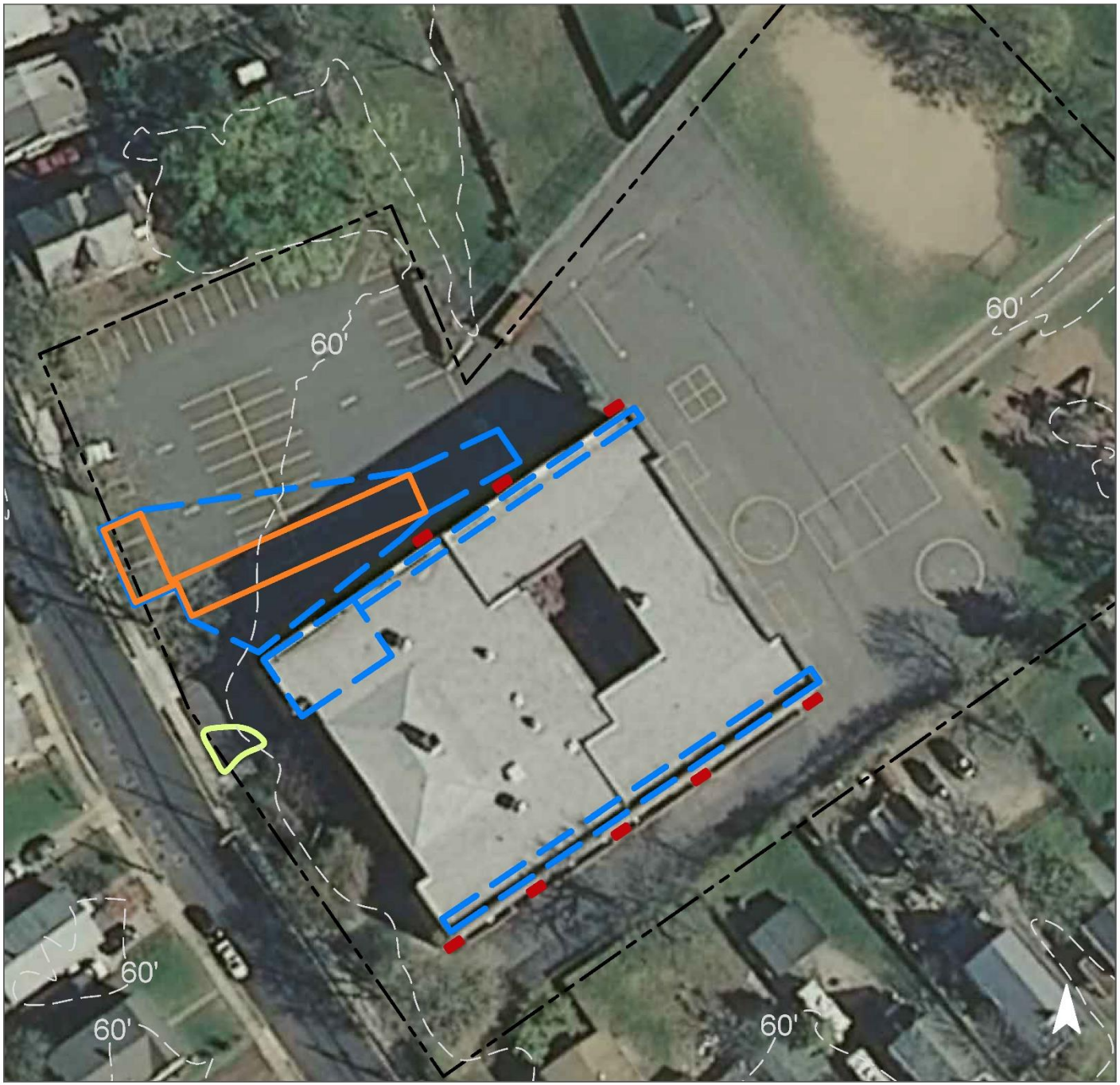
Block and Lot: Block 2023, Lot 31,32,42,43

A bioretention system can be installed at the front of the building to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
67	76,683	3.7	38.7	352.1	0.060	2.10

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.026	4	1,910	0.07	250	$1,250
Pervious pavement	0.150	25	11,040	0.41	2,440	$61,000
Planter boxes	n/a	6	n/a	n/a	8 (boxes)	$8,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Kuser Elementary School

- bioretention system
- pervious pavement
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

LANGTREE ELEMENTARY SCHOOL

Subwatershed: **Pond Run**

Site Area: **679,288 sq. ft.**

Address: **2080 Whatley Road**
Hamilton, NJ 08690

Block and Lot: **Block 1925, Lot 19**

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
13	88,838	4.3	44.9	407.9	0.069	2.44

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.314	53	23,050	0.87	3,020	$15,100
Pervious pavement	0.405	68	29,740	1.12	4,210	$105,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

Langtree Elementary School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

MERCERVILLE ELEMENTARY SCHOOL

Subwatershed: **Pond Run**

Site Area: **197,433 sq. ft.**

Address: **60 Regina Avenue**
Hamilton, NJ 08619

Block and Lot: **Block 1694, Lot 27,28,29,30**

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
58	113,776	5.5	57.5	522.4	0.089	3.12

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.760	127	55,730	2.09	5,290	$132,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

Mercerville Elementary School

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

PACE CHARTER SCHOOL

Subwatershed: **Pond Run**

Site Area: **88,487 sq. ft.**

Address: **1949 Hamilton Avenue**
Hamilton, NJ 08619

Block and Lot: **Block 1917, Lot 4**

Two bioretention systems can be installed in front of the school to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
46	40,404	1.9	20.4	185.5	0.031	1.11

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.122	20	8,930	0.34	1,180	$5,900
Pervious pavement	0.335	56	24,600	0.92	3,240	$81,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Pace Charter School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 20' 40'

REYNOLDS MIDDLE SCHOOL

Subwatershed: **Pond Run**

Site Area: **1,235,105 sq. ft.**

Address: **2145 Yardville Hamilton Square Road Hamilton, NJ 08690**

Block and Lot: **Block 1943, Lot 5**

Bioretention systems can be installed to capture, treat, and infiltrate parking lot and roof runoff. Planter boxes can be constructed along the pavilion to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
23	284,929	13.7	143.9	1,308.2	0.222	7.81

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.192	32	14,070	0.53	1,840	$9,200
Planter boxes	n/a	6	n/a	n/a	8 (boxes)	$8,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Reynolds Middle School

- bioretention system
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 100' 200'

SAYEN ELEMENTARY SCHOOL

Subwatershed: **Pond Run**

Site Area: **538,634 sq. ft.**

Address: **3333 Nottingham Way**
Hamilton, NJ 08690

Block and Lot: **Block 1828, Lot 14**

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Planter boxes can be constructed to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
15	80,043	3.9	40.4	367.5	0.062	2.20

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.220	37	16,160	0.61	2,115	$10,575
Planter boxes	n/a	2	n/a	n/a	3 (boxes)	$3,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Sayen Elementary School

- bioretention system
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

ST. GREGORY THE GREAT CATHOLIC CHURCH

Subwatershed: Pond Run

Site Area: 663,284 sq. ft.

Address: 4620 Nottingham Way
Hamilton, NJ 08690

Block and Lot: Block 1841, Lot 182,183

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Rainwater can be harvested by installing a cistern to provide water for the school's garden. Planter boxes can be constructed to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
51	338,012	16.3	170.7	1,551.9	0.263	9.27

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.204	34	14,990	0.56	1,960	$9,800
Pervious pavement	2.114	354	155,110	5.83	15,070	$376,750
Planter boxes	n/a	5	n/a	n/a	6 (boxes)	$6,000
Rainwater harvesting	0.043	7	1,300	0.12	1,300 (gal)	$2,600

GREEN INFRASTRUCTURE RECOMMENDATIONS

St. Gregory the Great Catholic Church

- bioretention system
- pervious pavement
- planter box
- rainwater harvesting
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

SUBURBAN PLAZA (WALMART)

Subwatershed: **Pond Run**

Site Area: **1,058,104 sq. ft.**

Address: **1700 Nottingham Way**
Hamilton, NJ 08619

Block and Lot: **Block 1589, Lot 167,168**

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
88	925,875	44.6	467.6	4,251.0	0.721	25.39

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.328	55	24,090	0.91	35,100	$877,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

Suburban Plaza (Walmart)

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

TRENTON CATHOLIC ACADEMY

Subwatershed: Pond Run

Site Area: 1,562067 sq. ft.

Address: 175 Leonard Avenue
Hamilton, NJ 08610

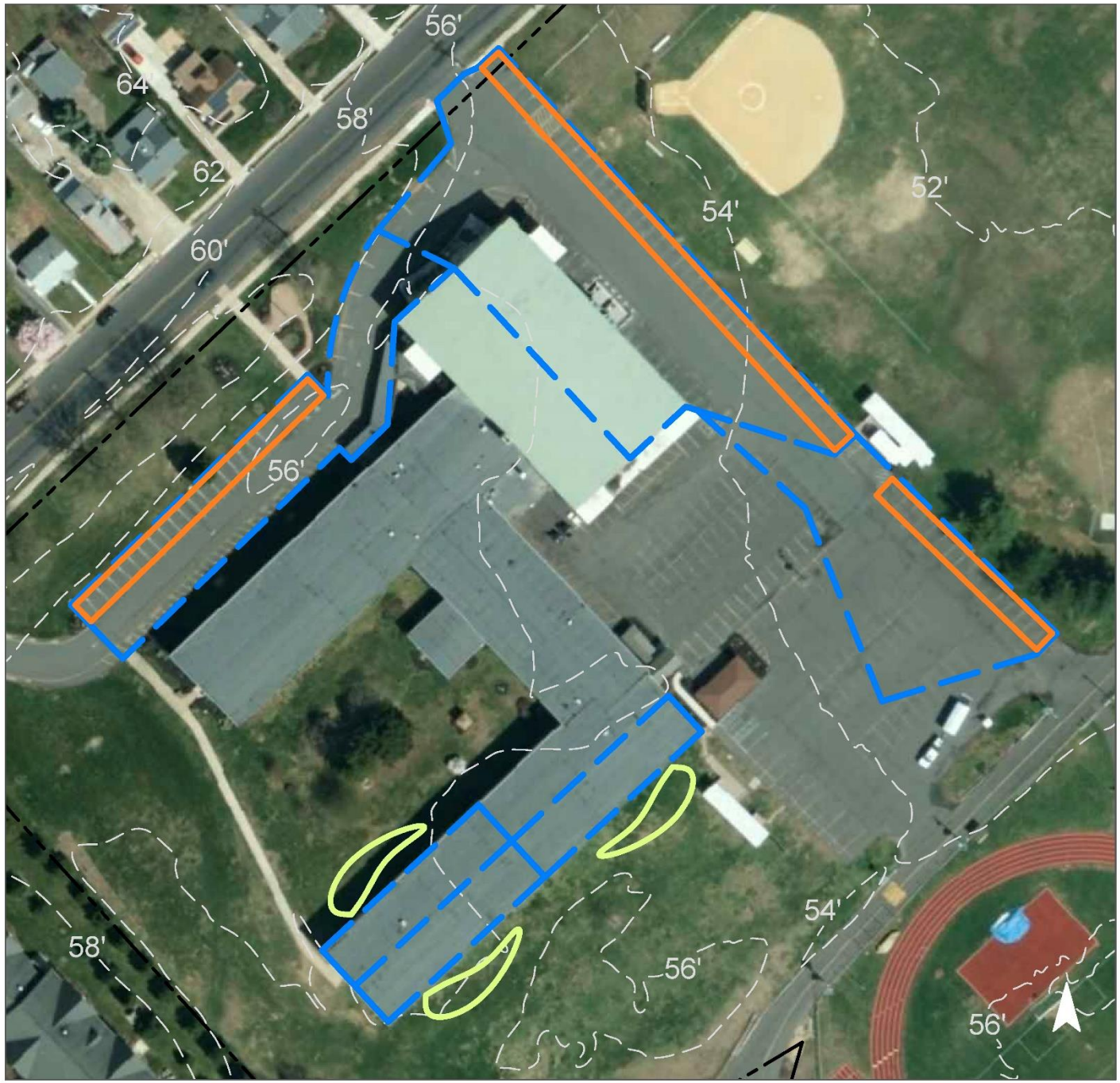
Block and Lot: Block 2154, Lot 1.01,2

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
14	213,685	10.3	107.9	981.1	0.166	5.86

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.350	59	25,690	0.97	3,360	$16,800
Pervious pavement	1.706	286	125,190	4.70	13,515	$337,875

GREEN INFRASTRUCTURE RECOMMENDATIONS



Trenton Catholic Academy

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

WHITEHORSE PLAZA SHOPPING CENTER

Subwatershed: Pond Run

Site Area: 366,404 sq. ft.

Address: 1750 Whitehorse Mercerville Road Hamilton, NJ 08619

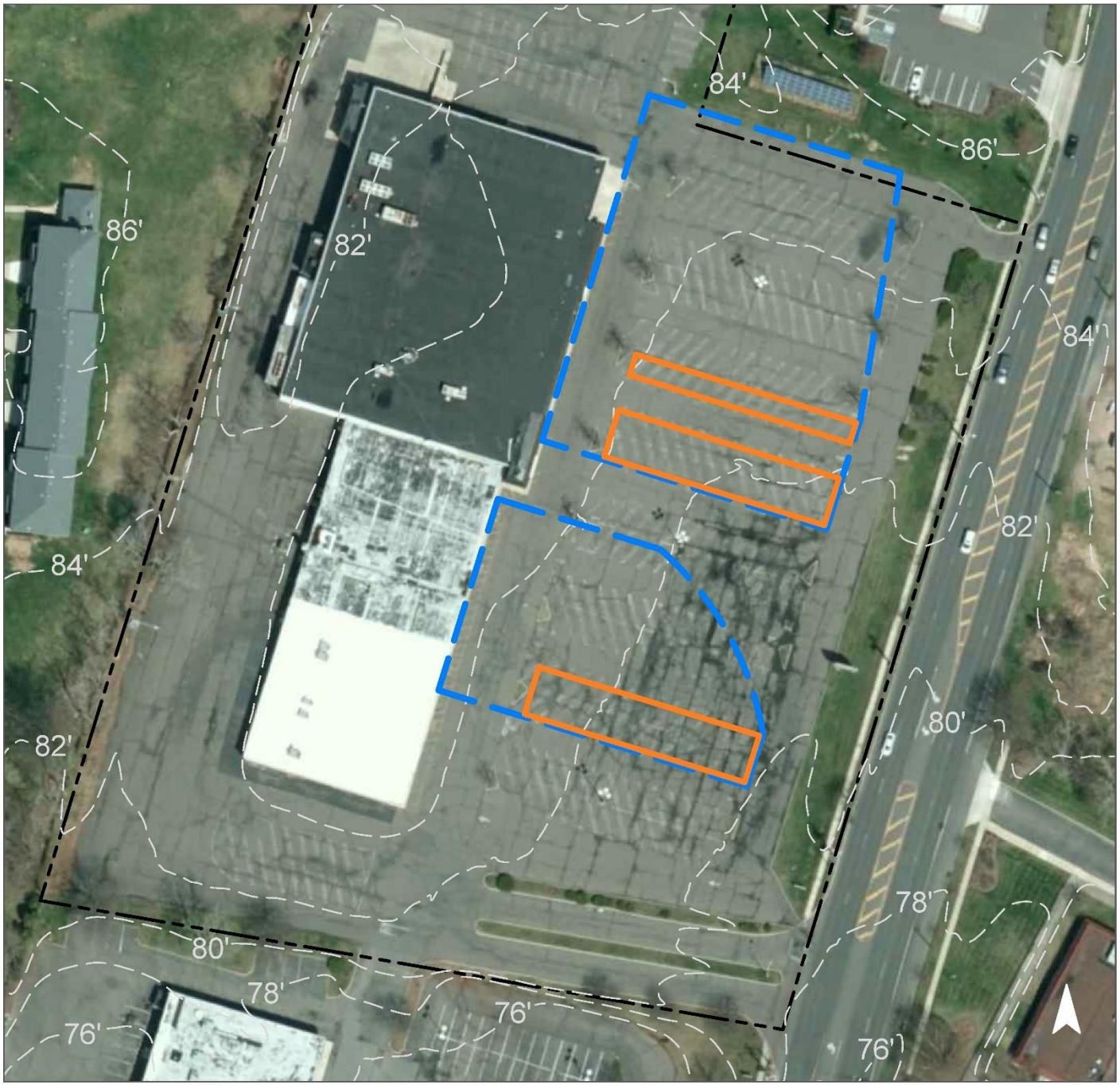
Block and Lot: Block 1922, Lot 7

Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
85	310,784	15.0	157.0	1,426.9	0.242	8.52

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	1.781	298	130,690	4.91	13,950	$348,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



Whitehorse Plaza Shopping Center

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

ALDI

Subwatershed: Shady Brook

Site Area: 174,577 sq. ft.

Address: 2735 South Broad Street
Hamilton, NJ 08610

Block and Lot: Block 2451, Lot 2

A bioretention system can be installed to capture, treat, and infiltrate runoff from the abandoned parking lot in front of the store. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
79	138,254	6.7	69.8	634.8	0.108	3.79

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.104	17	7,640	0.29	1,000	$5,000
Pervious pavement	0.686	115	50,310	1.89	5,235	$130,875

GREEN INFRASTRUCTURE RECOMMENDATIONS

Aldi

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

DUETZVILLE PARK

Subwatershed: Shady Brook

Site Area: 848,988 sq. ft.

Address: 498 Bunting Avenue
Hamilton, NJ 08611

Block and Lot: Block 2187, Lot 3,4

A bioretention system can be installed to capture, treat, and infiltrate roof runoff from the recreation building. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
10	81,162	3.9	41.0	372.6	0.063	2.23

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.039	7	2,880	0.11	376	$1,881
Pervious pavement	0.337	56	24,700	0.93	3,420	$85,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

Duetzville Park

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

GEORGE E. WILSON ELEMENTARY SCHOOL

Subwatershed: **Shady Brook**

Site Area: **931,393 sq. ft.**

Address: **600 East Park Avenue**
Hamilton, NJ 08610

Block and Lot: **Block 2379, Lot 1,31**

Bioretention systems can be installed to capture, treat, and infiltrate runoff from adjacent paved surfaces. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
15	139,279	6.7	70.3	639.5	0.109	3.82

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.098	16	7,210	0.27	950	$4,750

GREEN INFRASTRUCTURE RECOMMENDATIONS

George E. Wilson Elementary School

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

GRICE MIDDLE SCHOOL

Subwatershed: **Shady Brook**

Site Area: **954,219 sq. ft.**

Address: **901 Whitehorse-Hamilton Square Road Hamilton, NJ 08610**

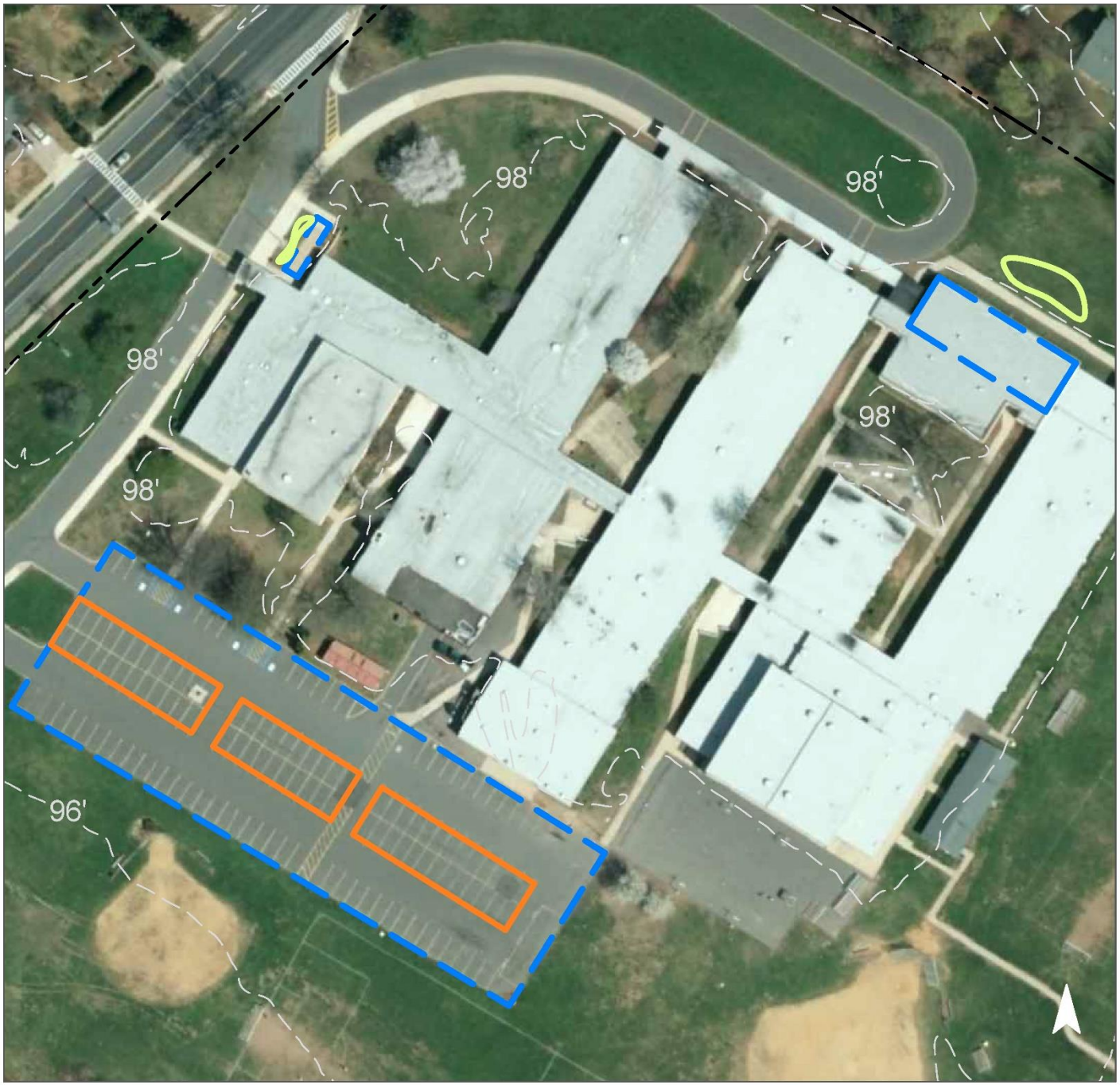
Block and Lot: **Block 2445, Lot 21,51**

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff generated from paved surfaces. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
26	244,895	11.8	123.7	1,124.4	0.191	6.72

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.114	19	8,360	0.31	1,100	$5,500
Pervious pavement	1.203	201	88,270	3.32	11,450	$286,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Grice Middle School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

HAMILTON EDUCATIONAL PROGRAM

Subwatershed: **Shady Brook**

Site Area: **42,765 sq. ft.**

Address: **310 Rowan Avenue**
Hamilton, NJ 08610

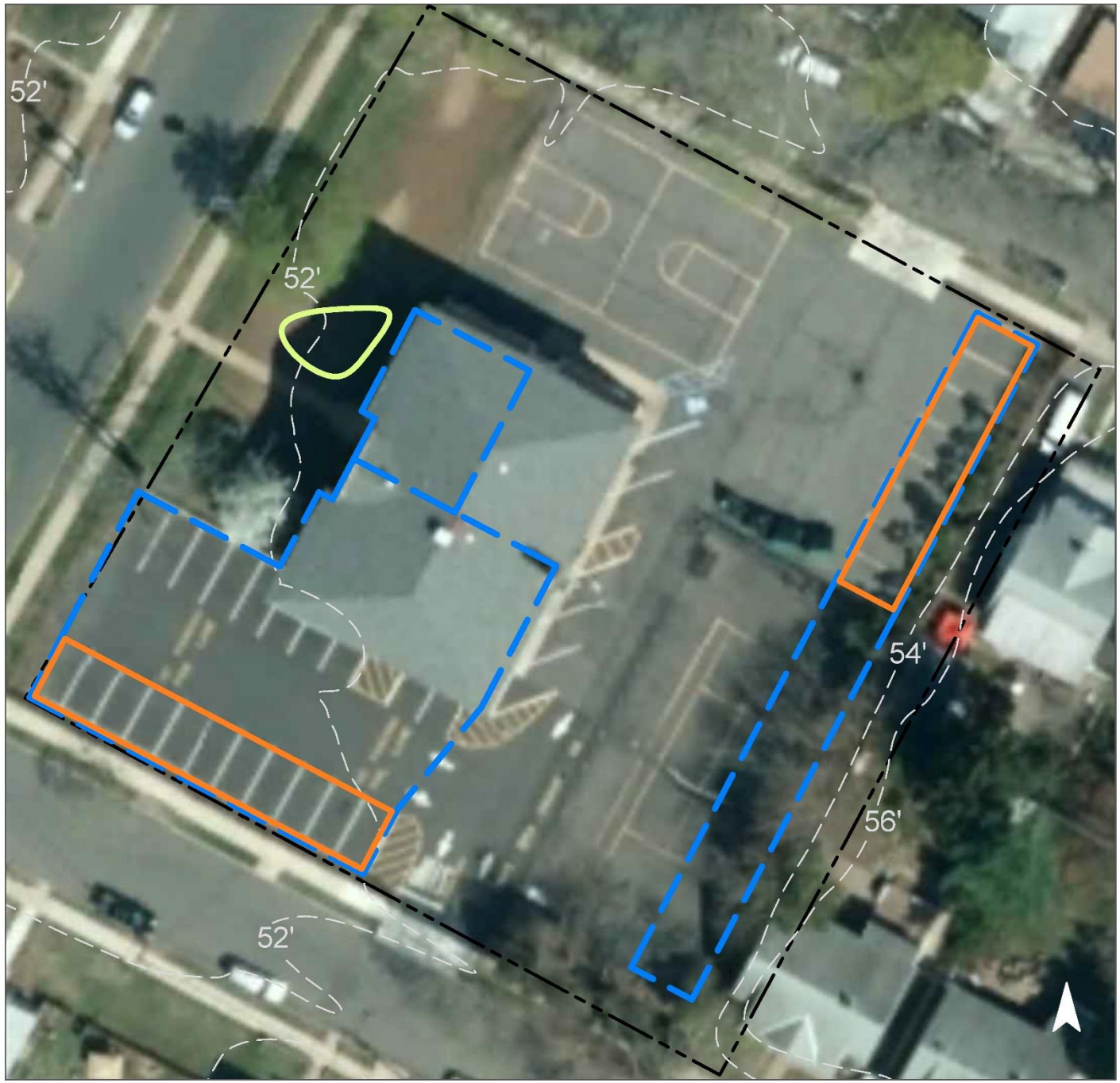
Block and Lot: **Block 2362, Lot 1**

A bioretention system can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
82	35,165	1.7	17.8	161.5	0.027	0.96

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.036	6	2,640	0.10	350	$1,750
Pervious pavement	0.308	52	22,620	0.85	3,320	$83,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Educational Program

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 20' 40'

HAMILTON HIGH SCHOOL WEST

Subwatershed: **Shady Brook**

Site Area: **382,143 sq. ft.**

Address: **2720 South Clinton Avenue**
Hamilton, NJ 08610

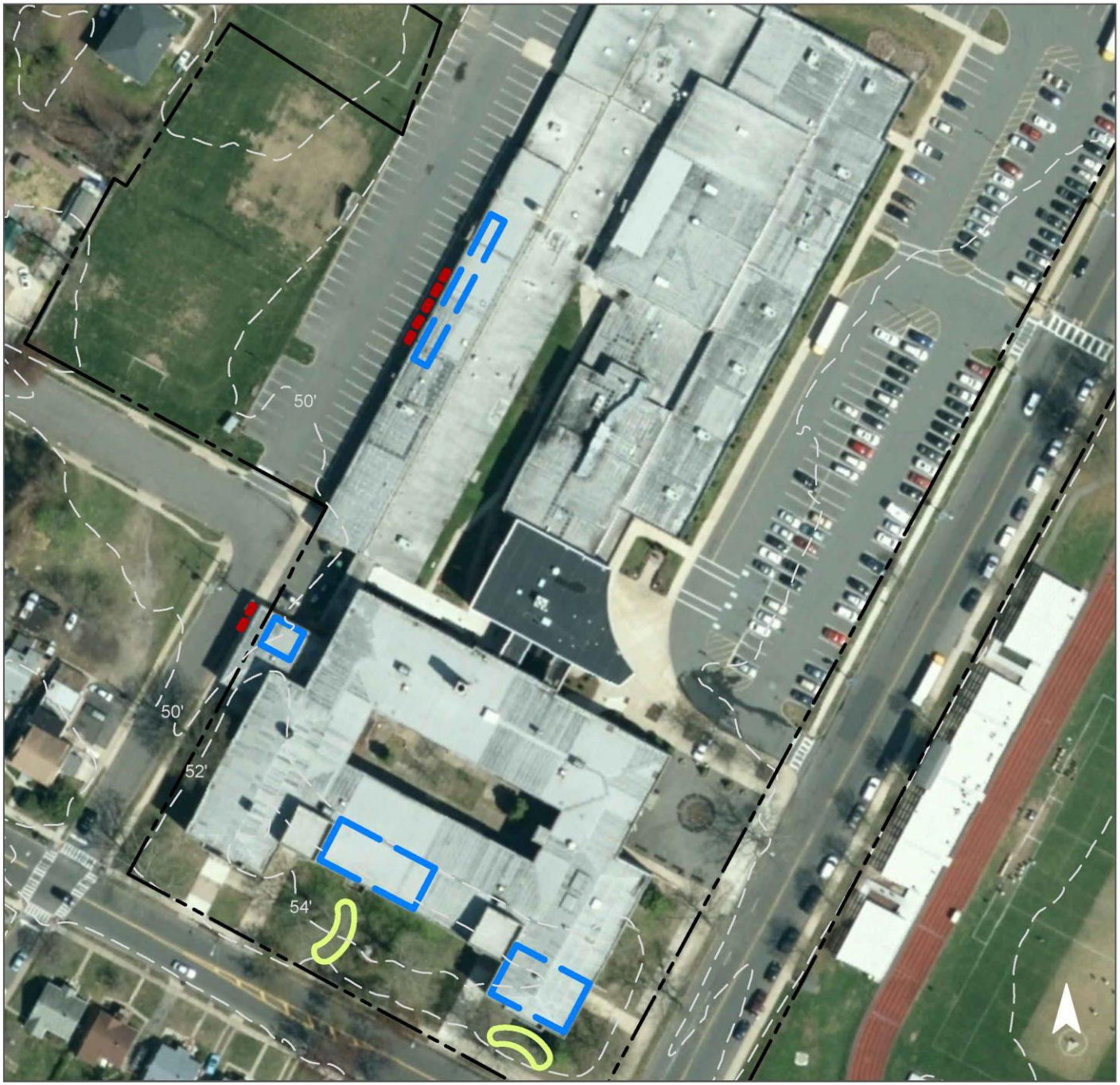
Block and Lot: **Block 2346, Lot 1-3, 17-25**

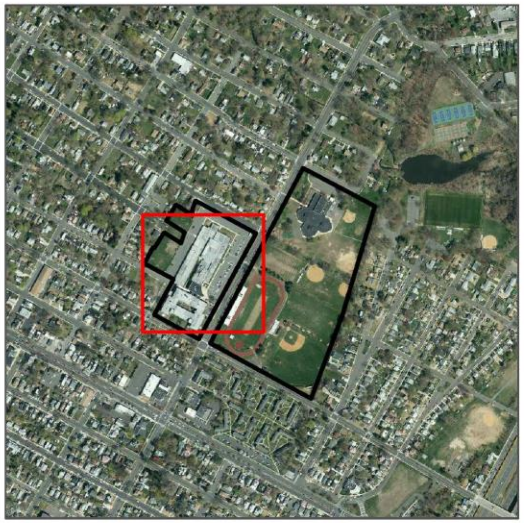
Bioretention systems can be installed to capture, treat, and infiltrate rooftop runoff. Planter boxes can be constructed where disconnected downspouts are discharging stormwater into parking areas. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
78	296,723	14.3	149.9	1,362.4	0.231	8.14

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.104	17	7,640	0.29	1,000	$5,000
Planter boxes	n/a	6	n/a	n/a	7 (boxes)	$7,000

GREEN INFRASTRUCTURE RECOMMENDATIONS





Hamilton High School West

- bioretention system
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

INDEPENDENCE MALL

Subwatershed: **Shady Brook**

Site Area: **1,113,428 sq. ft.**

Address: **2496 South Broad Street**
Hamilton, NJ 08610

Block and Lot: **Block 2389, Lot 3,5**

A bioretention system can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
94	1,050,665	50.7	530.6	4,824.0	0.819	28.82

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.125	21	9,180	0.34	1,200	$6,000
Pervious pavement	1.570	263	115,190	4.33	13,815	$345,375

GREEN INFRASTRUCTURE RECOMMENDATIONS

Independence Mall

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 75' 150'

K MCCOY INC. INSURANCE AGENCY

Subwatershed: Shady Brook

Site Area: 30,764 sq. ft.

Address: 1878 Arena Drive
Hamilton, NJ 08610

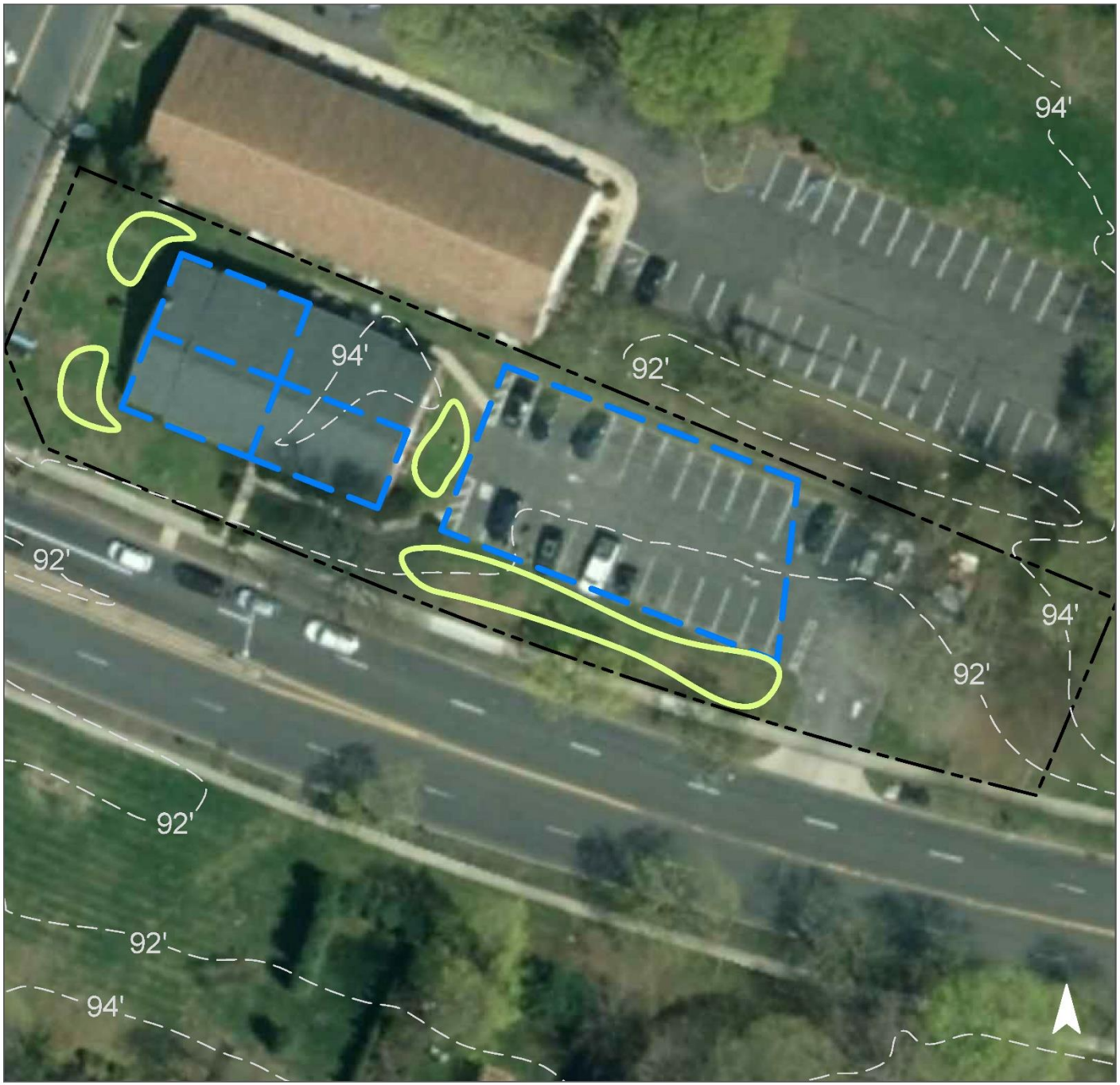
Block and Lot: Block 2531, Lot 1

Bioretention systems can be installed to capture, treat, and infiltrate parking lot and roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
65	19,997	1.0	10.1	91.8	0.016	0.55

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.261	44	19,120	0.72	2,515	$12,575

GREEN INFRASTRUCTURE RECOMMENDATIONS



K McCoy Inc.
Insurance Agency

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

KISTHARDT ELEMENTARY SCHOOL

Subwatershed: Shady Brook

Site Area: 203,419 sq. ft.

Address: 215 Harcourt Drive
Hamilton, NJ 08610

Block and Lot: Block 2411, Lot 13

A bioretention system can be installed to capture, treat, and infiltrate runoff from the roof and paved playground. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
41	84,386	4.1	42.6	387.4	0.066	2.31

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.017	3	1,240	0.05	165	$825
Pervious pavement	0.307	51	22,560	0.85	2,880	$72,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Kisthardt Elementary School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

LALOR ELEMENTARY SCHOOL

Subwatershed: **Shady Brook**

Site Area: **129,800 sq. ft.**

Address: **25 Barnt Deklyn Road**
Hamilton, NJ 08610

Block and Lot: **Block 2212, Lot 1**

Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed around the perimeter of the building to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
42	54,848	2.6	27.7	251.8	0.043	1.50

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.060	10	4,410	0.17	580	$2,900
Pervious pavement	0.106	18	7,740	0.29	975	$24,375
Planter boxes	n/a	3	n/a	n/a	4 (boxes)	$4,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Lalor Elementary School

- bioretention system
- pervious pavement
- planter box
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

LIFE ST. FRANCIS

Subwatershed: **Shady Brook**

Site Area: **25,000 sq. ft.**

Address: **1435 Liberty Street**
Hamilton, NJ 08610

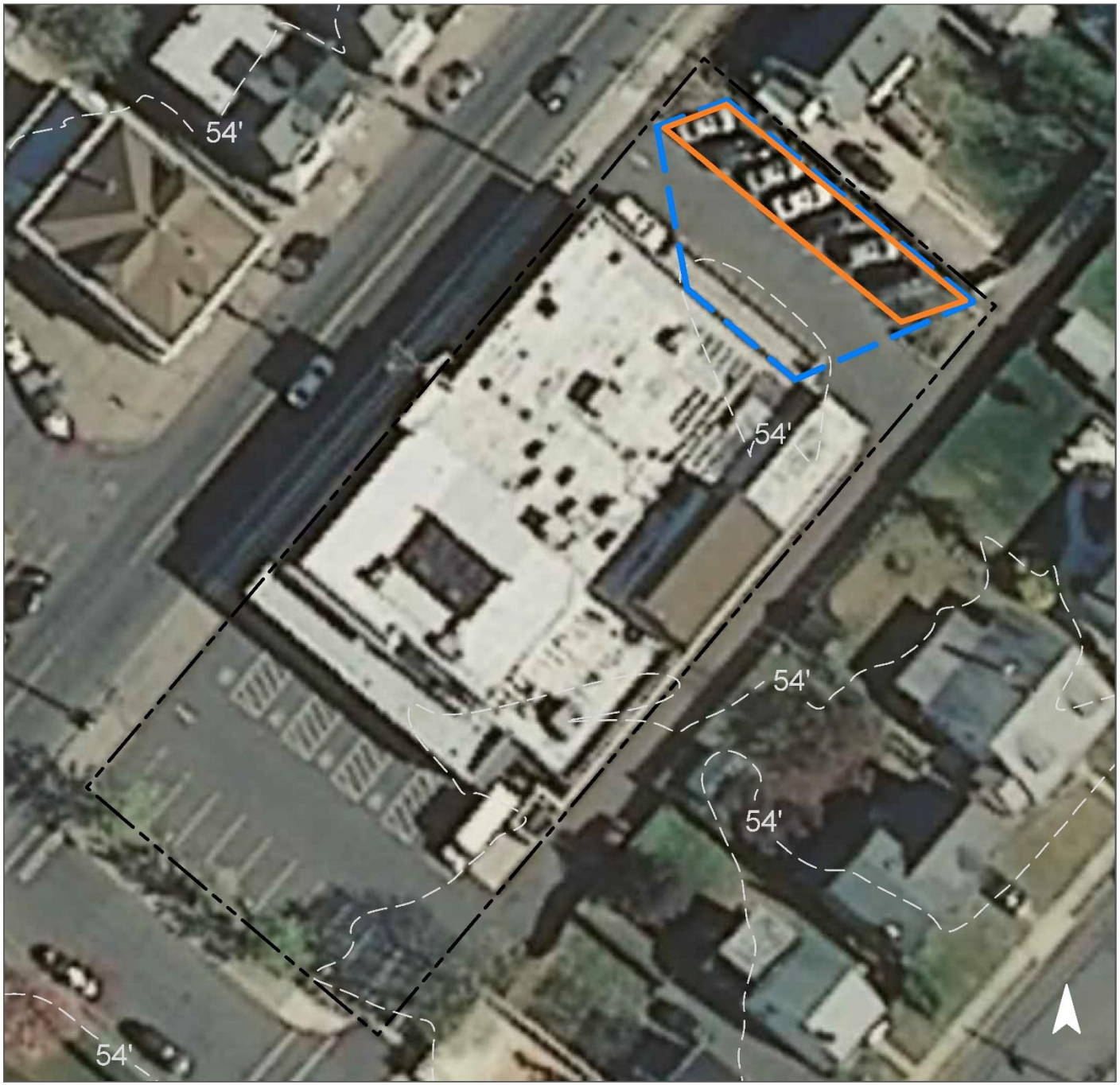
Block and Lot: **Block 2033, Lot 1**

A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
90	22,500	1.1	11.4	103.3	0.018	0.62

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.081	14	5,960	0.22	1,400	$35,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Life St. Francis

- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 20' 40'

MCGALLIARD ELEMENTARY SCHOOL

Subwatershed: **Shady Brook**

Site Area: **437,779 sq. ft.**

Address: **1600 Arena Drive**
Hamilton, NJ 08610

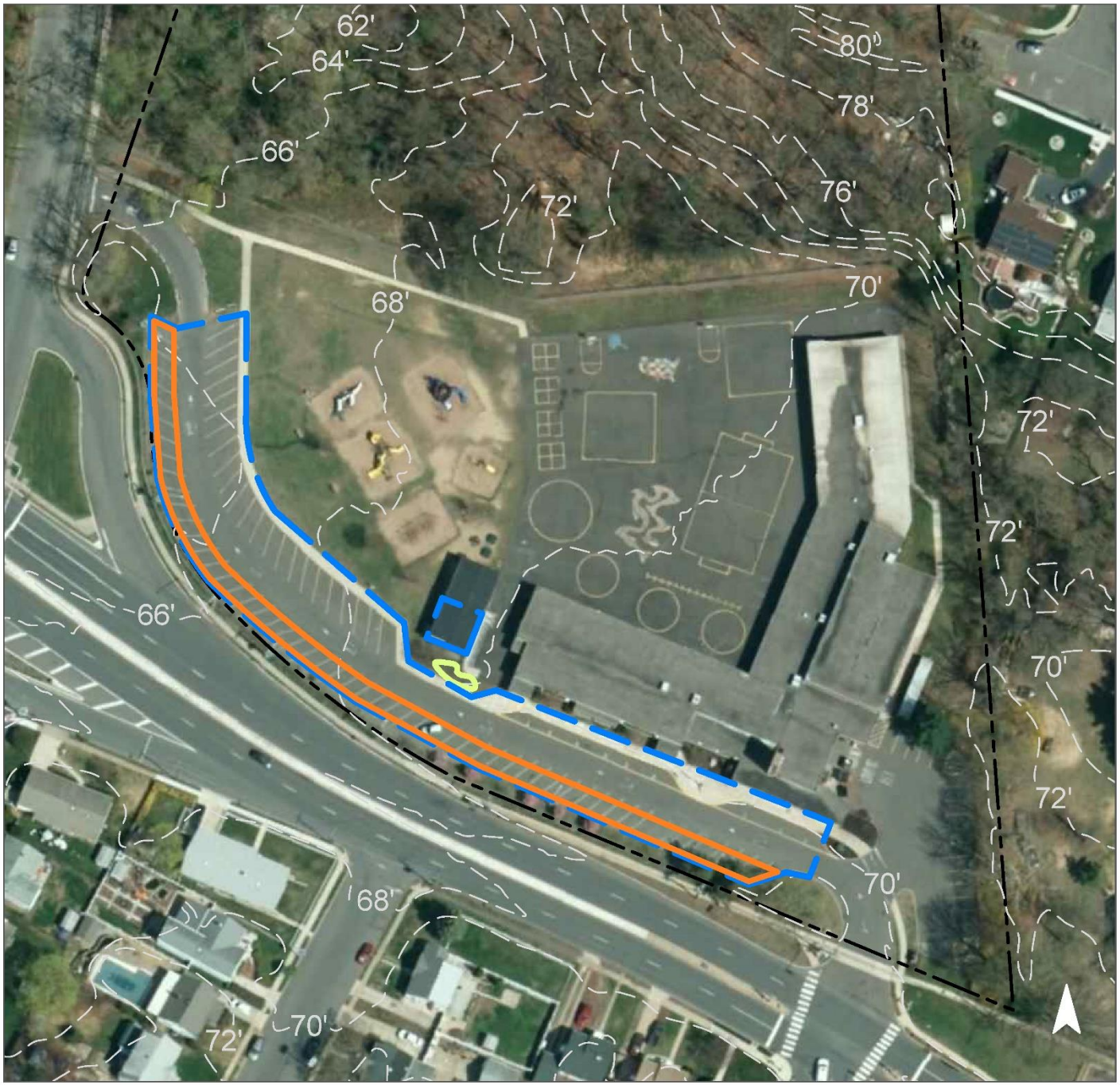
Block and Lot: **Block 2474, Lot 48**

A bioretention system can be installed near the trailer building to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater from the parking lot. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
33	145,044	7.0	73.3	665.9	0.113	3.98

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.020	3	1,500	0.06	200	$1,000
Pervious pavement	0.858	144	62,970	2.37	9,970	$249,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



McGalliard Elementary School

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 50' 100'

RUSLING HOSE FIRE COMPANY

Subwatershed: **Shady Brook**

Site Area: **41,181 sq. ft.**

Address: **13 Rennie Street**
Hamilton, NJ 08610

Block and Lot: **Block 2302, Lot 1**

A bioretention system can be installed near the front of the building to capture, treat, and infiltrate street runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
75	30,885	1.5	15.6	141.8	0.024	0.85

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.152	26	11,180	0.42	1,465	$7,325
Pervious pavement	0.242	40	17,750	0.67	2,285	$57,125

GREEN INFRASTRUCTURE RECOMMENDATIONS

Rusling Hose Fire Company

- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 30' 60'

ST. MARK LUTHERAN CHURCH

Subwatershed: Shady Brook

Site Area: 45,290 sq. ft.

Address: 350 White Horse Avenue
Hamilton, NJ 08610

Block and Lot: Block 2493, Lot 7,8,9,10

Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Additional rainwater can be harvested by installing a second rain barrel or small cistern on the shed near the raised garden beds. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
40	32,042	1.5	16.2	147.1	0.025	0.88

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.075	12	5,480	0.21	720	$3,600
Pervious pavement	0.499	84	36,610	1.38	3,420	$85,500
Rainwater harvesting	0.003	0	100	0.01	100 (gal)	$200

GREEN INFRASTRUCTURE RECOMMENDATIONS

St. Mark Lutheran Church

- bioretention system
- pervious pavement
- rainwater harvesting
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 20' 40'

TRUE SERVANT PRESCHOOL ACADEMY

Subwatershed: Shady Brook

Site Area: 34,069 sq. ft.

Address: 2630 South Broad Street
Hamilton, NJ 08610

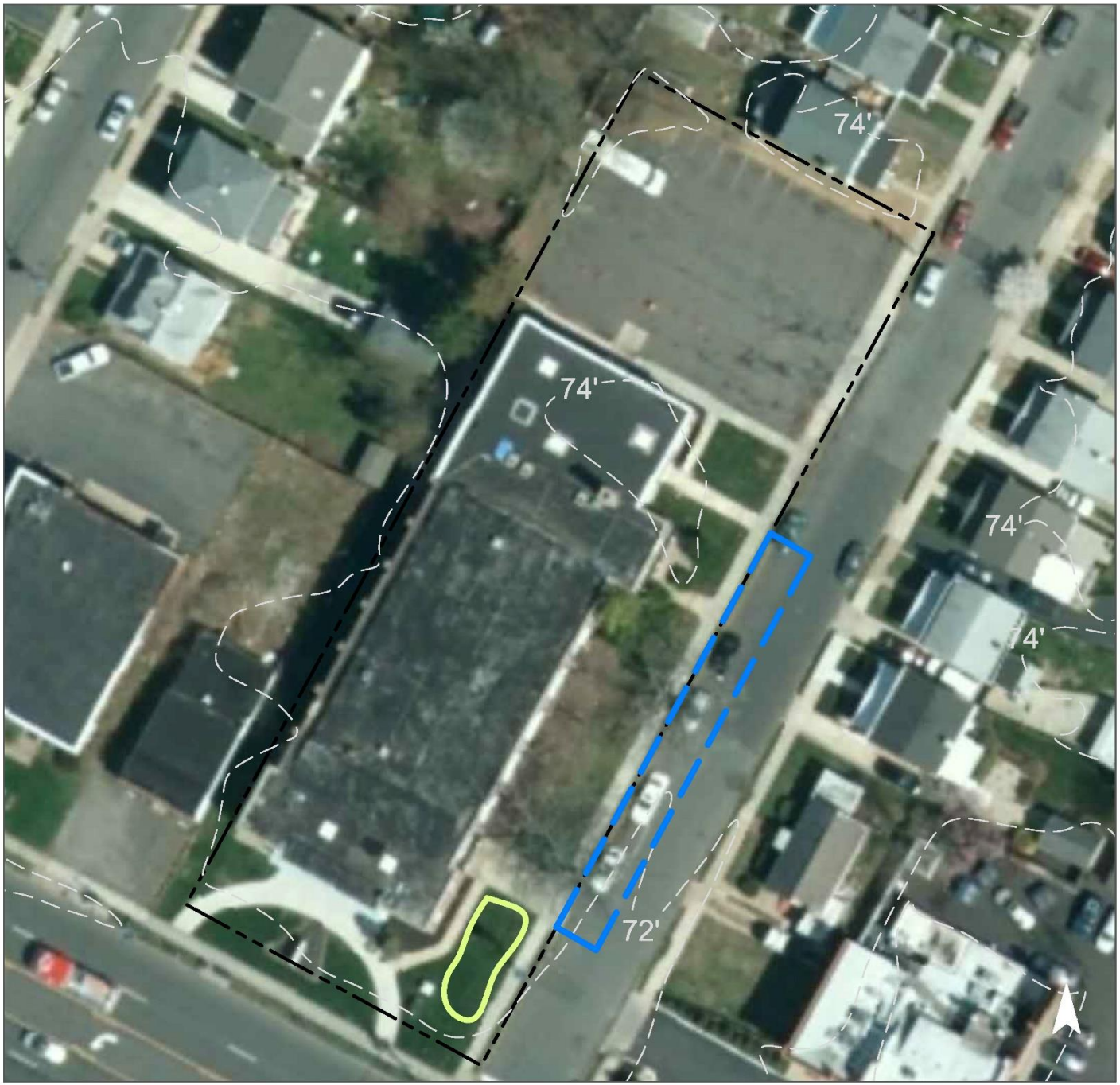
Block and Lot: Block 2423, Lot 2, 24

A bioretention system can be installed near the front of the building by using a trench drain to capture, treat, and infiltrate street runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
89	30,209	1.5	15.3	138.7	0.024	0.83

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.156	26	11,470	0.43	550	$2,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



True Servant Preschool Academy

- bioretention system
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 25' 50'

December 21, 2018

Attachment 2

Summary of Existing Conditions

Summary of Existing Conditions

	Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
									TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
	ASSUNPINK CREEK SUBWATERSHED	**70.51**	**3,071,259**				**1,875,191**	**43.05**	**90.4**	**947.1**	**8,609.7**	**1.461**	**51.43**
1	**BLV Holding Company Inc.**												
	Total Site Info	2.94	128,109	1581	13, 14	60	76,494	1.76	3.7	38.6	351.2	0.060	2.10
2	**Cornell Heights Field**												
	Total Site Info	4.77	207,769	1535	19	24	49,319	1.13	2.4	24.9	226.4	0.038	1.35
3	**Ibis Plaza Office Suites**												
	Total Site Info	8.34	363,367	1521	113, 114	86	313,593	7.20	15.1	158.4	1,439.8	0.244	8.60
4	**Medallion Care**												
	Total Site Info	16.73	728,833	1505	9	45	325,970	7.48	15.7	164.6	1,496.6	0.254	8.94
5	**Siemens Industry & Delaval Turbomachinery**												
	Total Site Info	37.72	1,643,180	1517	1	68	1,109,814	25.48	53.5	560.5	5,095.6	0.865	30.44
	BACK CREEK SUBWATERSHED	**120.52**	**5,249,690**				**1,736,491**	**39.86**	**83.7**	**877.0**	**7,972.9**	**1.353**	**47.63**
6	**AAA Mid Atlantic**												
	Total Site Info	21.23	924,624	2612	5.02	30	276,011	6.34	13.3	139.4	1,267.3	0.215	7.57
7	**Abandon Restaurant**												
	Total Site Info	1.82	79,478	2686	1, 2	82	65,161	1.50	3.1	32.9	299.2	0.051	1.79
8	**Caola Company**												
	Total Site Info	2.18	94,850	2591	14	53	50,019	1.15	2.4	25.3	229.7	0.039	1.37
9	**Crockett Middle School**												
	Total Site Info	40.22	1,751,814	2592	2	14	252,991	5.81	12.2	127.8	1,161.6	0.197	6.94
10	**Custom Calibrations Solutions, LLC**												
	Total Site Info	4.62	201,089	2712	130	40	81,426	1.87	3.9	41.1	373.9	0.063	2.23
11	**Hamilton Medical Arts**												
	Total Site Info	4.20	182,831	2591	7	66	121,379	2.79	5.9	61.3	557.3	0.095	3.33

Summary of Existing Conditions

	Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
									TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
12	**Kleinfelder**												
	Total Site Info	7.11	309,617	2597	13	40	124,614	2.86	6.0	62.9	572.2	0.097	3.42
13	**S. T. Peterson & Co. Inc. Office Space**												
	Total Site Info	7.01	305,378	2597	14	38	116,632	2.68	5.6	58.9	535.5	0.091	3.20
14	**Skylink Technologies**												
	Total Site Info	1.61	69,930	2597.01	5	89	62,020	1.42	3.0	31.3	284.8	0.048	1.70
15	**Verizon**												
	Total Site Info	20.84	907,720	2612	5.07, 5.08	48	431,354	9.90	20.8	217.9	1,980.5	0.336	11.83
16	**York Risk Services**												
	Total Site Info	9.70	422,358	2597.01	1	37	154,883	3.56	7.5	78.2	711.1	0.121	4.25
	CROSSWICKS CREEK SUBWATERSHED	**146.16**	**6,366,857**				**1,243,006**	**28.54**	**59.9**	**627.8**	**5,707.1**	**0.969**	**34.09**
17	**Grow-Ville Community Day School**												
	Total Site Info	0.70	30,612	2661	24, 26	85	26,020	0.60	1.3	13.1	119.5	0.020	0.71
18	**Robinson Elementary School**												
	Total Site Info	9.38	408,677	2548	17, 18, 19	28	113,018	2.59	5.4	57.1	518.9	0.088	3.10
19	**St. Raphael-Holy Angels Parish**												
	Total Site Info	14.03	611,220	2542	30, 32	48	293,454	6.74	14.1	148.2	1,347.4	0.229	8.05
20	**Sunnybrae Elementary School**												
	Total Site Info	6.75	294,171	2606	126	26	75,555	1.73	3.6	38.2	346.9	0.059	2.07
21	**Sunnybrae League Park**												
	Total Site Info	26.14	1,138,686	2606	96, 98	8	96,109	2.21	4.6	48.5	441.3	0.075	2.64
22	**Switlik Park**												
	Total Site Info	18.54	807,435	2614	130	15	122,463	2.81	5.9	61.8	562.3	0.095	3.36

Summary of Existing Conditions

	Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial) TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Runoff Volumes from I.C. Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
23	**The Stone Terrace**												
	Total Site Info	12.12	527,979	2575	161	35	186,118	4.27	9.0	94.0	854.5	0.145	5.10
24	**Yardville Heights Elementary School**												
	Total Site Info	5.60	244,009	2606	15	43	103,719	2.38	5.0	52.4	476.2	0.081	2.84
25	**YMCA**												
	Total Site Info	52.89	2,304,067	2730	14.01	10	226,550	5.20	10.9	114.4	1,040.2	0.177	6.21
	DOCTORS CREEK SUBWATERSHED	**16.61**	**723,410**				**191,542**	**4.40**	**9.2**	**96.7**	**879.4**	**0.149**	**5.25**
26	**St. George Ukrainian Orthodox Church**												
	Total Site Info	12.31	536,154	2724	82	20	109,828	2.52	5.3	55.5	504.3	0.086	3.01
27	**Yardville Elementary School**												
	Total Site Info	4.30	187,256	2699	1	44	81,714	1.88	3.9	41.3	375.2	0.064	2.24
	MIRY RUN SUBWATERSHED	**120.89**	**5,265,901**				**2,306,287**	**52.95**	**111.2**	**1164.8**	**10,589.0**	**1.797**	**63.25**
28	**Christ Presbyterian Church**												
	Total Site Info	3.27	142,625	1656	58	23	32,397	0.74	1.6	16.4	148.7	0.025	0.89
29	**Clover Square**												
	Total Site Info	20.38	887,560	1603	19	81	721,004	16.55	34.8	364.1	3,310.4	0.562	19.77
30	**Enterprise Volunteer Fire Co.**												
	Total Site Info	1.14	49,506	1648	12, 16	88	43,673	1.00	2.1	22.1	200.5	0.034	1.20
31	**First Pentecostal Prayer of Faith Church**												
	Total Site Info	0.81	35,411	1836	34	87	30,651	0.70	1.5	15.5	140.7	0.024	0.84
32	**First Presbyterian Church/YMCA Young Wonders**												
	Total Site Info	1.96	85,330	1830	20, 50, 51, 52	81	68,988	1.58	3.3	34.8	316.7	0.054	1.89
33	**H.D. Morrison Elementary School (University Heights)**												
	Total Site Info	12.91	562,187	1561	13, 24, 25	22	126,391	2.90	6.1	63.8	580.3	0.098	3.47

Summary of Existing Conditions

	Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
									TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
34	**Hamilton Square Baptist Church**												
	Total Site Info	3.60	156,832	1839	87	44	68,505	1.57	3.3	34.6	314.5	0.053	1.88
35	**Hamilton Township School District**												
	Total Site Info	1.30	56,745	1836	6, 8	87	49,126	1.13	2.4	24.8	225.6	0.038	1.35
36	**Klockner Elementary School**												
	Total Site Info	2.36	102,765	1659	2, 3	48	49,185	1.13	2.4	24.8	225.8	0.038	1.35
37	**Merlin Industries Inc.**												
	Total Site Info	21.48	935,824	1602	7	22	203,182	4.66	9.8	102.6	932.9	0.158	5.57
38	**Morgan Elementary School**												
	Total Site Info	8.48	369,401	1618	34, 40	35	129,743	2.98	6.3	65.5	595.7	0.101	3.56
39	**Nottingham Little League**												
	Total Site Info	14.14	615,843	1722	95, 96, 105	21	127,290	2.92	6.1	64.3	584.4	0.099	3.49
40	**Nottingham Volunteer Fire Company Station 17**												
	Total Site Info	3.52	153,281	1839	24.01	93	141,848	3.26	6.8	71.6	651.3	0.111	3.89
41	**Our Lady of Sorrows School**												
	Total Site Info	11.88	517,440	1666	80	42	219,134	5.03	10.6	110.7	1,006.1	0.171	6.01
42	**Saint Mark United Methodist Church**												
	Total Site Info	6.52	284,082	1622	8	40	113,873	2.61	5.5	57.5	522.8	0.089	3.12
43	**University Plaza**												
	Total Site Info	3.85	167,756	1551	16	72	120,521	2.77	5.8	60.9	553.4	0.094	3.31
44	**VFW Hamilton Township Post**												
	Total Site Info	3.29	143,315	1660	25, 26	42	60,776	1.40	2.9	30.7	279.0	0.047	1.67

Summary of Existing Conditions

	Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial) TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Runoff Volumes from I.C. Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
	POND RUN SUBWATERSHED	**279.66**	**12,181,921**				**3,725,758**	**85.53**	**179.6**	**1881.7**	**17,106.3**	**2.903**	**102.19**
45	**Alexander Elementary School**												
	Total Site Info	12.09	526,633	1980	20	24	128,186	2.94	6.2	64.7	588.6	0.100	3.52
46	**Bromley Park**												
	Total Site Info	5.05	219,967	1733	7	14	29,780	0.68	1.4	15.0	136.7	0.023	0.82
47	**Colonial Volunteer Fire Company**												
	Total Site Info	7.45	324,471	2154	4	49	158,286	3.63	7.6	79.9	726.8	0.123	4.34
48	**Greenwood Elementary School**												
	Total Site Info	1.91	83,373	1884	1	89	74,555	1.71	3.6	37.7	342.3	0.058	2.04
49	**Hamilton Golf Center**												
	Total Site Info	70.62	3,076,264	2163	5, 8	6	198,955	4.57	9.6	100.5	913.5	0.155	5.46
50	**Hamilton Lanes**												
	Total Site Info	5.52	240,604	2163	9	67	162,114	3.72	7.8	81.9	744.3	0.126	4.45
51	**Hamilton Township Municipal Building**												
	Total Site Info	10.03	436,805	1757	24	38	164,366	3.77	7.9	83.0	754.7	0.128	4.51
52	**Hamilton Township Library**												
	Total Site Info	8.06	350,879	2163	6	34	118,144	2.71	5.7	59.7	542.4	0.092	3.24
53	**Hamilton Township Police Division**												
	Total Site Info	9.64	419,914	2163	7	52	218,343	5.01	10.5	110.3	1,002.5	0.170	5.99
54	**Kuser Elementary School**												
	Total Site Info	2.62	114,206	2023	31, 32, 42 43	67	76,683	1.76	3.7	38.7	352.1	0.060	2.10
55	**Langtree Elementary School**												
	Total Site Info	15.59	679,288	1925	19	13	88,838	2.04	4.3	44.9	407.9	0.069	2.44
56	**Mercerville Elementary School**												
	Total Site Info	4.53	197,433	1694	27, 28 , 29, 30	58	113,776	2.61	5.5	57.5	522.4	0.089	3.12

Summary of Existing Conditions

	Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
									TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
57	**Pace Charter School**												
	Total Site Info	2.03	88,487	1917	4	46	40,404	0.93	1.9	20.4	185.5	0.031	1.11
58	**Reynolds Middle School**												
	Total Site Info	28.35	1,235,105	1943	5	23	284,929	6.54	13.7	143.9	1,308.2	0.222	7.81
59	**Sayen Elementary School**												
	Total Site Info	12.37	538,634	1828	14	15	80,043	1.84	3.9	40.4	367.5	0.062	2.20
60	**St. Gregory the Great Catholic Church**												
	Total Site Info	15.23	663,284	1841	182, 183	51	338,012	7.76	16.3	170.7	1,551.9	0.263	9.27
61	**Suburban Plaza (Walmart)**												
	Total Site Info	24.29	1,058,104	1589	167, 168	88	925,875	21.26	44.6	467.6	4,251.0	0.721	25.39
62	**Trenton Catholic Academy**												
	Total Site Info	35.86	1,562,067	2154	1.01, 2	14	213,685	4.91	10.3	107.9	981.1	0.166	5.86
63	**Whitehorse Plaza Shopping Center**												
	Total Site Info	8.41	366,404	1922	7	85	310,784	7.13	15.0	157.0	1,426.9	0.242	8.52
	SHADY BROOK SUBWATERSHED	**123.85**	**5,394,812**				**2,406,053**	**55.24**	**116.0**	**1215.2**	**11,047.1**	**1.875**	**65.99**
64	**Aldi**												
	Total Site Info	4.01	174,577	2451	2	79	138,254	3.17	6.7	69.8	634.8	0.108	3.79
65	**Duetzville Park**												
	Total Site Info	19.49	848,988	2187	3, 4	10	81,162	1.86	3.9	41.0	372.6	0.063	2.23
66	**George E. Wilson Elementary School**												
	Total Site Info	21.38	931,393	2379	1, 31	15	139,279	3.20	6.7	70.3	639.5	0.109	3.82
67	**Grice Middle School**												
	Total Site Info	21.91	954,219	2445	21, 51	26	244,895	5.62	11.8	123.7	1,124.4	0.191	6.72

Summary of Existing Conditions

	Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
									TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
68	**Hamilton Educational Program**												
	Total Site Info	0.98	42,765	2362	1	82	35,165	0.81	1.7	17.8	161.5	0.027	0.96
69	**Hamilton High School West**												
	Total Site Info	8.77	382,143	2346	1-3,17-25	78	296,723	6.81	14.3	149.9	1,362.4	0.231	8.14
70	**Independence Mall**												
	Total Site Info	25.56	1,113,428	2389	3, 5	94	1,050,665	24.12	50.7	530.6	4,824.0	0.819	28.82
71	**K McCoy Inc. Insurance Agency**												
	Total Site Info	0.71	30,764	2531	1	65	19,997	0.46	1.0	10.1	91.8	0.016	0.55
72	**Kisthardt Elementary School**												
	Total Site Info	4.67	203,419	2411	13	41	84,386	1.94	4.1	42.6	387.4	0.066	2.31
73	**Lalor Elementary School**												
	Total Site Info	2.98	129,800	2212	1	42	54,848	1.26	2.6	27.7	251.8	0.043	1.50
74	**Life St. Francis**												
	Total Site Info	0.57	25,000	2033	1	90	22,500	0.52	1.1	11.4	103.3	0.018	0.62
75	**McGalliard Elementary School**												
	Total Site Info	10.05	437,779	2474	48	33	145,044	3.33	7.0	73.3	665.9	0.113	3.98
76	**Rusling Hose Fire Company**												
	Total Site Info	0.95	41,181	2302	1	75	30,885	0.71	1.5	15.6	141.8	0.024	0.85
77	**St. Mark Lutheran Church**												
	Total Site Info	1.04	45,290	2493	7, 8, 9, 10	71	32,042	0.74	1.5	16.2	147.1	0.025	0.88
78	**True Servant Preschool Academy**												
	Total Site Info	0.78	34,069	2423	24	89	30,209	0.69	1.5	15.3	138.7	0.024	0.83

December 21, 2018

Attachment 3

Summary of Proposed Green Infrastructure Practices

Summary of Proposed Green Infrastructure Practices

	Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area Area (SF)	Potential Management Area Area (ac)	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost ($/unit)	Unit	Total Cost ($)	I.C. Treated %
	ASSUNPINK CREEK SUBWATERSHED	**135,145**	**3.10**	**3.521**	**589**	**258,380**	**9.71**				**$814,625**	**7.2%**
1	**BLV Holding Company Inc.**											
	Bioretention system	1,600	0.04	0.042	7	3,060	0.11	400	$5	SF	$2,000	2.1%
	Pervious pavement	16,785	0.39	0.437	73	32,090	1.21	5,080	$25	SF	$127,000	21.9%
	Total Site Info	**18,385**	**0.42**	**0.479**	**80**	**35,150**	**1.32**				**$129,000**	**24.0%**
2	**Cornell Heights Field**											
	Bioretention systems	15,200	0.35	0.396	66	29,060	1.09	3,850	$5	SF	$19,250	30.8%
	Total Site Info	**15,200**	**0.35**	**0.396**	**66**	**29,060**	**1.09**				**$19,250**	**30.8%**
3	**Ibis Plaza Office Suites**											
	Pervious pavement	46,065	1.06	1.200	201	88,070	3.31	11,380	$25	SF	$284,500	14.7%
	Total Site Info	**46,065**	**1.06**	**1.200**	**201**	**88,070**	**3.31**				**$284,500**	**14.7%**
4	**Medallion Care**											
	Pervious pavement	27,795	0.64	0.724	121	53,140	2.00	8,250	$25	SF	$206,250	8.5%
	Total Site Info	**27,795**	**0.64**	**0.724**	**121**	**53,140**	**2.00**				**$206,250**	**8.5%**
5	**Siemens Industry & Delaval Turbomachinery**											
	Bioretention system	6,700	0.15	0.175	29	12,810	0.48	1,675	$5	SF	$8,375	0.6%
	Pervious pavement	21,000	0.48	0.547	92	40,150	1.51	6,690	$25	SF	$167,250	1.9%
	Total Site Info	**27,700**	**0.64**	**0.722**	**121**	**52,960**	**1.99**				**$175,625**	**2.5%**
	BACK CREEK SUBWATERSHED	**554,920**	**12.74**	**14.450**	**2,420**	**1,060,300**	**39.84**				**$2,891,250**	**32.0%**
6	**AAA Mid Atlantic**											
	Bioretention system	5,900	0.14	0.154	26	11,280	0.42	1,475	$5	SF	$7,375	2.1%
	Pervious pavement	105,850	2.43	2.758	462	202,370	7.60	26,850	$25	SF	$671,250	38.3%
	Total Site Info	**111,750**	**2.57**	**2.912**	**487**	**213,650**	**8.02**				**$678,625**	**40.5%**
7	**Abandon Restaurant**											
	Pervious pavement	16,450	0.38	0.429	72	31,450	1.18	3,720	$25	SF	$93,000	25.2%
	Total Site Info	**16,450**	**0.38**	**0.429**	**72**	**31,450**	**1.18**				**$93,000**	**25.2%**

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8	**Caola Company**											
	Bioretention system	6,200	0.14	0.162	27	11,860	0.45	1,550	$5	SF	$7,750	12.4%
	Pervious pavement	12,900	0.30	0.336	56	24,660	0.93	3,755	$25	SF	$93,875	25.8%
	Total Site Info	**19,100**	**0.44**	**0.498**	**83**	**36,520**	**1.38**				**$101,625**	**38.2%**
9	**Crockett Middle School**											
	Bioretention systems	20,500	0.47	0.534	89	39,200	1.47	5,130	$5	SF	$25,650	8.1%
	Total Site Info	**20,500**	**0.47**	**0.534**	**89**	**39,200**	**1.47**				**$25,650**	**8.1%**
10	**Custom Calibrations Solutions, LLC**											
	Bioretention system	12,000	0.28	0.313	52	22,940	0.86	3,000	$5	SF	$15,000	14.7%
	Pervious pavement	41,655	0.96	1.085	182	79,640	2.99	8,680	$25	SF	$217,000	51.2%
	Planter box (downspout)	325	0.01	n/a	1	n/a	n/a	3	$1,000	box	$3,000	0.4%
	Total Site Info	**53,980**	**1.24**	**1.398**	**235**	**102,580**	**3.85**				**$235,000**	**66.3%**
11	**Hamilton Medical Arts**											
	Pervious pavement	30,875	0.71	0.804	135	59,020	2.22	6,970	$25	SF	$174,250	25.4%
	Total Site Info	**30,875**	**0.71**	**0.804**	**135**	**59,020**	**2.22**				**$174,250**	**25.4%**
12	**Kleinfelder**											
	Bioretention system	2,500	0.06	0.065	11	4,780	0.18	625	$5	SF	$3,125	2.0%
	Pervious pavement	46,065	1.06	1.200	201	88,070	3.31	11,380	$25	SF	$284,500	37.0%
	Total Site Info	**48,565**	**1.11**	**1.265**	**212**	**92,850**	**3.49**				**$287,625**	**39.0%**
13	**S. T. Peterson & Co. Inc. Office Space**											
	Bioretention system	4,420	0.10	0.115	19	8,450	0.32	1,120	$5	SF	$5,600	3.8%
	Pervious pavement	18,500	0.42	0.482	81	35,370	1.33	4,100	$25	SF	$102,500	15.9%
	Total Site Info	**22,920**	**0.53**	**0.597**	**100**	**43,820**	**1.65**				**$108,100**	**19.7%**
14	**Skylink Technologies**											
	Bioretention system	2,000	0.05	0.052	9	3,820	0.14	500	$5	SF	$2,500	3.2%
	Total Site Info	**2,000**	**0.05**	**0.052**	**9**	**3,820**	**0.14**				**$2,500**	**3.2%**
15	**Verizon**											
	Pervious pavement	190,550	4.37	4.965	831	364,300	13.69	40,880	$25	SF	$1,022,000	44.2%
	Total Site Info	**190,550**	**4.37**	**4.965**	**831**	**364,300**	**13.69**				**$1,022,000**	**44.2%**

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16	**York Risk Services**											
	Bioretention system	7,180	0.16	0.187	31	13,730	0.52	1,825	$5	SF	$9,125	4.6%
	Pervious pavement	31,050	0.71	0.809	135	59,360	2.23	6,150	$25	SF	$153,750	20.0%
	Total Site Info	**38,230**	**0.88**	**0.996**	**167**	**73,090**	**2.75**				**$162,875**	**24.7%**
	CROSSWICKS CREEK SUBWATERSHED	**347,580**	**7.98**	**8.995**	**1,514**	**660,020**	**24.82**				**$1,790,875**	**28.0%**
17	**Grow-Ville Community Day School**											
	Bioretention system	1,220	0.03	0.032	5	2,330	0.09	305	$5	SF	$1,525	4.7%
	Pervious pavement	15,960	0.37	0.416	70	30,510	1.15	2,850	$25	SF	$71,250	61.3%
	Total Site Info	**17,180**	**0.39**	**0.448**	**75**	**32,840**	**1.24**				**$72,775**	**66.0%**
18	**Robinson Elementary School**											
	Bioretention systems	19,875	0.46	0.518	87	38,000	1.43	4,970	$5	SF	$24,850	17.6%
	Pervious pavement	15,660	0.36	0.408	68	29,940	1.13	4,790	$25	SF	$119,750	13.9%
	Total Site Info	**35,535**	**0.82**	**0.926**	**155**	**67,940**	**2.56**				**$144,600**	**31.4%**
19	**St. Raphael-Holy Angels Parish**											
	Bioretention system	4,120	0.09	0.107	18	7,880	0.30	1,035	$5	SF	$5,175	1.4%
	Pervious pavement	30,660	0.70	0.799	134	58,620	2.20	7,700	$25	SF	$192,500	10.4%
	Total Site Info	**34,780**	**0.80**	**0.906**	**152**	**66,500**	**2.50**				**$197,675**	**11.9%**
20	**Sunnybrae Elementary School**											
	Bioretention system	13,520	0.31	0.352	59	25,850	0.97	3,400	$5	SF	$17,000	17.9%
	Pervious pavement	10,150	0.23	0.264	44	19,400	0.73	4,850	$25	SF	$121,250	13.4%
	Total Site Info	**23,670**	**0.54**	**0.617**	**103**	**45,250**	**1.70**				**$138,250**	**31.3%**
21	**Sunnybrae League Park**											
	Bioretention system	2,600	0.06	0.068	11	4,970	0.19	650	$5	SF	$3,250	2.7%
	Pervious pavement	36,425	0.84	0.949	159	69,640	2.62	8,735	$25	SF	$218,375	37.9%
	Total Site Info	**39,025**	**0.90**	**1.017**	**170**	**74,610**	**2.81**				**$221,625**	**40.6%**
22	**Switlik Park**											
	Bioretention system	2,965	0.07	0.077	13	5,670	0.21	350	$5	SF	$1,750	2.4%
	Pervious pavement	55,000	1.26	1.433	240	105,150	3.95	12,150	$25	SF	$303,750	44.9%
	Total Site Info	**57,965**	**1.33**	**1.510**	**253**	**110,820**	**4.16**				**$305,500**	**47.3%**

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23	**The Stone Terrace**											
	Bioretention system	2,470	0.06	0.064	11	4,720	0.18	620	$5	SF	$3,100	1.3%
	Pervious pavement	42,450	0.97	1.106	185	81,160	3.05	7,885	$25	SF	$197,125	22.8%
	Planter box (downspout)	1,500	0.03	n/a	6	n/a	n/a	7	$1,000	box	$7,000	0.8%
	Total Site Info	**46,420**	**1.07**	**1.170**	**201**	**85,880**	**3.23**				**$207,225**	**24.9%**
24	**Yardville Heights Elementary School**											
	Bioretention system	2,060	0.05	0.054	9	3,940	0.15	520	$5	SF	$2,600	2.0%
	Pervious pavement	24,365	0.56	0.635	106	46,590	1.75	5,010	$25	SF	$125,250	23.5%
	Planter box (downspout)	860	0.02	n/a	3	n/a	n/a	4	$1,000	box	$4,000	0.8%
	Total Site Info	**27,285**	**0.63**	**0.689**	**118**	**50,530**	**1.90**				**$131,850**	**26.3%**
25	**YMCA**											
	Bioretention system	9,050	0.21	0.236	39	17,300	0.65	3,250	$5	SF	$16,250	4.0%
	Pervious pavement	56,670	1.30	1.477	247	108,350	4.07	14,205	$25	SF	$355,125	25.0%
	Total Site Info	**65,720**	**1.51**	**1.712**	**287**	**125,650**	**4.72**				**$371,375**	**29.0%**
	DOCTORS CREEK SUBWATERSHED	**19,425**	**0.45**	**0.461**	**84**	**33,850**	**1.26**				**$62,550**	**10.1%**
26	**St. George Ukrainian Orthodox Church**											
	Bioretention systems	6,185	0.14	0.161	27	11,830	0.44	1,550	$5	SF	$7,750	5.6%
	Total Site Info	**6,185**	**0.14**	**0.161**	**27**	**11,830**	**0.44**				**$7,750**	**5.6%**
27	**Yardville Elementary School**											
	Bioretention system	1,440	0.03	0.038	6	2,750	0.10	360	$5	SF	$1,800	1.8%
	Pervious pavement	10,080	0.23	0.263	44	19,270	0.72	1,800	$25	SF	$45,000	12.3%
	Planter box (downspout)	1,720	0.04	n/a	6	n/a	n/a	8	$1,000	box	$8,000	2.1%
	Total Site Info	**13,240**	**0.30**	**0.300**	**57**	**22,020**	**0.82**				**$54,800**	**16.2%**
	MIRY RUN SUBWATERSHED	**459,940**	**10.56**	**11.905**	**2,001**	**867,955**	**32.61**				**$2,190,250**	**19.9%**
28	**Christ Presbyterian Church**											
	Bioretention system	620	0.01	0.016	3	1,180	0.04	160	$5	SF	$800	1.9%
	Planter box (downspout)	860	0.02	n/a	3	n/a	n/a	4	$1,000	box	$4,000	2.7%
	Total Site Info	**1,480**	**0.03**	**0.016**	**6**	**1,180**	**0.04**				**$4,800**	**4.6%**

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29	**Clover Square**											
	Pervious pavement	170,810	3.92	4.451	745	326,560	12.27	34,649	$25	SF	$866,225	23.7%
	Total Site Info	**170,810**	**3.92**	**4.451**	**745**	**326,560**	**12.27**				**$866,225**	**23.7%**
30	**Enterprise Volunteer Fire Co.**											
	Bioretention system	1,175	0.03	0.031	5	2,240	0.08	300	$5	SF	$1,500	2.7%
	Rainwater harvesting	1,175	0.03	0.031	5	1,000	0.04	1,000	$2	gal	$2,000	2.7%
	Total Site Info	**2,350**	**0.05**	**0.061**	**10**	**3,240**	**0.12**				**$3,500**	**5.4%**
31	**First Pentecostal Prayer of Faith Church**											
	Bioretention system	2,700	0.06	0.070	12	5,160	0.19	675	$5	SF	$3,375	8.8%
	Total Site Info	**2,700**	**0.06**	**0.070**	**12**	**5,160**	**0.19**				**$3,375**	**8.8%**
32	**First Presbyterian Church/YMCA Young Wonders**											
	Bioretention system	1,330	0.03	0.035	6	2,540	0.10	335	$5	SF	$1,675	1.9%
	Pervious pavement	6,005	0.14	0.156	26	11,480	0.43	2,460	$25	SF	$61,500	8.7%
	Total Site Info	**7,335**	**0.17**	**0.191**	**32**	**14,020**	**0.53**				**$63,175**	**10.6%**
33	**H.D. Morrison Elementary School (University Heights)**											
	Bioretention system	3,890	0.09	0.101	17	7,440	0.28	975	$5	SF	$4,875	3.1%
	Pervious pavement	21,750	0.50	0.567	95	41,580	1.56	4,160	$25	SF	$104,000	17.2%
	Total Site Info	**25,640**	**0.59**	**0.668**	**112**	**49,020**	**1.84**				**$108,875**	**20.3%**
34	**Hamilton Square Baptist Church**											
	Bioretention system	2,430	0.06	0.063	11	4,650	0.17	610	$5	SF	$3,050	3.5%
	Pervious pavement	33,075	0.76	0.862	144	63,240	2.38	6,230	$25	SF	$155,750	48.3%
	Total Site Info	**35,505**	**0.82**	**0.925**	**155**	**67,890**	**2.55**				**$158,800**	**51.8%**
35	**Hamilton Township School District**											
	Bioretention system	3,330	0.08	0.087	15	6,370	0.24	835	$5	SF	$4,175	6.8%
	Pervious pavement	9,290	0.21	0.242	41	17,760	0.67	2,270	$25	SF	$56,750	18.9%
	Total Site Info	**12,620**	**0.29**	**0.329**	**55**	**24,130**	**0.91**				**$60,925**	**25.7%**
36	**Klockner Elementary School**											
	Bioretention system	960	0.02	0.025	4	1,830	0.07	240	$5	SF	$1,200	2.0%
	Pervious pavement	13,900	0.32	0.362	61	26,580	1.00	2,480	$25	SF	$62,000	28.3%
	Planter box (downspout)	645	0.01	n/a	2	n/a	n/a	3	$1,000	box	$3,000	1.3%
	Total Site Info	**15,505**	**0.36**	**0.387**	**67**	**28,410**	**1.07**				**$66,200**	**31.5%**

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37	**Merlin Industries Inc.**											
	Bioretention system	3,330	0.08	0.087	15	6,370	0.24	835	$5	SF	$4,175	1.6%
	Pervious pavement	32,400	0.74	0.844	141	61,940	2.33	6,370	$25	SF	$159,250	15.9%
	Total Site Info	**35,730**	**0.82**	**0.931**	**156**	**68,310**	**2.57**				**$163,425**	**17.6%**
38	**Morgan Elementary School**											
	Bioretention system	2,550	0.06	0.066	11	4,880	0.18	640	$5	SF	$3,200	2.0%
	Pervious pavement	15,825	0.36	0.412	69	30,260	1.14	4,320	$25	SF	$108,000	12.2%
	Total Site Info	**18,375**	**0.42**	**0.479**	**80**	**35,140**	**1.32**				**$111,200**	**14.2%**
39	**Nottingham Little League**											
	Bioretention system	4,800	0.11	0.125	21	9,180	0.34	1,200	$5	SF	$6,000	3.8%
	Bioswale	3,050	0.07	0.040	10	385	0.01	770	$5	SF	$3,850	2.4%
	Total Site Info	**7,850**	**0.18**	**0.165**	**30**	**9,565**	**0.35**				**$9,850**	**6.2%**
40	**Nottingham Volunteer Fire Company Station 17**											
	Bioretention system	970	0.02	0.025	4	1,860	0.07	250	$5	SF	$1,250	0.7%
	Pervious pavement	8,500	0.20	0.221	37	16,250	0.61	1,520	$25	SF	$38,000	6.0%
	Rainwater harvesting	2,000	0.05	0.052	9	2,000	0.08	2,000	$2	gal	$4,000	1.4%
	Total Site Info	**11,470**	**0.26**	**0.299**	**50**	**20,110**	**0.76**				**$43,250**	**8.1%**
41	**Our Lady of Sorrows School**											
	Bioretention system	1,130	0.03	0.029	5	2,160	0.08	290	$5	SF	$1,450	0.5%
	Pervious pavement	56,120	1.29	1.462	245	107,290	4.03	13,800	$25	SF	$345,000	25.6%
	Total Site Info	**57,250**	**1.31**	**1.492**	**250**	**109,450**	**4.11**				**$346,450**	**26.1%**
42	**Saint Mark United Methodist Church**											
	Bioretention system	23,350	0.54	0.608	102	44,640	1.68	5,850	$5	SF	$29,250	20.5%
	Total Site Info	**23,350**	**0.54**	**0.608**	**102**	**44,640**	**1.68**				**$29,250**	**20.5%**
43	**University Plaza**											
	Bioretention system	2,350	0.05	0.061	10	4,500	0.17	600	$5	SF	$3,000	1.9%
	Pervious pavement	15,670	0.36	0.408	68	29,960	1.13	4,140	$25	SF	$103,500	13.0%
	Total Site Info	**18,020**	**0.41**	**0.470**	**79**	**34,460**	**1.30**				**$106,500**	**15.0%**
44	**VFW Hamilton Township Post**											
	Bioretention system	5,550	0.13	0.145	24	10,610	0.40	1,390	$5	SF	$6,950	9.1%
	Pervious pavement	8,400	0.19	0.219	37	16,060	0.60	1,500	$25	SF	$37,500	13.8%
	Total Site Info	**13,950**	**0.32**	**0.363**	**61**	**26,670**	**1.00**				**$44,450**	**23.0%**

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	POND RUN SUBWATERSHED	**579,005**	**13.29**	**14.922**	**2,521**	**1,089,530**	**41.15**				**$3,582,500**	**15.5%**
45	**Alexander Elementary School**											
	Bioretention system	3,775	0.09	0.098	16	7,220	0.27	950	$5	SF	$4,750	2.9%
	Pervious pavement	27,300	0.63	0.711	119	52,200	1.96	4,880	$25	SF	$122,000	21.3%
	Total Site Info	**31,075**	**0.71**	**0.810**	**136**	**59,420**	**2.23**				**$126,750**	**24.2%**
46	**Bromley Park**											
	Bioretention system	1,680	0.04	0.044	7	3,210	0.12	420	$5	SF	$2,100	5.6%
	Total Site Info	**1,680**	**0.04**	**0.044**	**7**	**3,210**	**0.12**				**$2,100**	**5.6%**
47	**Colonial Volunteer Fire Company**											
	Pervious pavement	28,650	0.66	0.746	125	54,780	2.06	5,500	$25	SF	$137,500	18.1%
	Rainwater harvesting	3,150	0.07	0.082	14	2,500	0.23	2,500	$2	gal	$5,000	2.0%
	Total Site Info	**31,800**	**0.73**	**0.829**	**139**	**57,280**	**2.29**				**$142,500**	**20.1%**
48	**Greenwood Elementary School**											
	Pervious pavement	8,340	0.19	0.217	36	15,950	0.60	2,660	$25	SF	$66,500	11.2%
	Planter box (downspout)	1,000	0.02	n/a	4	n/a	n/a	5	$1,000	box	$5,000	1.3%
	Total Site Info	**9,340**	**0.21**	**0.217**	**40**	**15,950**	**0.60**				**$71,500**	**12.5%**
49	**Hamilton Golf Center**											
	Bioretention system	3,030	0.07	0.079	13	5,790	0.22	760	$5	SF	$3,800	1.5%
	Pervious pavement	7,560	0.17	0.197	33	14,450	0.54	1,350	$25	SF	$33,750	3.8%
	Total Site Info	**10,590**	**0.24**	**0.276**	**46**	**20,240**	**0.76**				**$37,550**	**5.3%**
50	**Hamilton Lanes**											
	Bioretention system	9,300	0.21	0.242	41	17,780	0.67	2,325	$5	SF	$11,625	5.7%
	Pervious pavement	49,375	1.13	1.286	215	94,400	3.55	13,380	$25	SF	$334,500	30.5%
	Total Site Info	**58,675**	**1.35**	**1.529**	**256**	**112,180**	**4.22**				**$346,125**	**36.2%**
51	**Hamilton Township Municipal Building**											
	Bioretention system	2,250	0.05	0.059	10	4,300	0.16	250	$5	SF	$1,250	1.4%
	Pervious pavement	36,900	0.85	0.961	161	70,540	2.65	9,900	$25	SF	$247,500	22.4%
	Total Site Info	**39,150**	**0.90**	**1.020**	**171**	**74,840**	**2.81**				**$248,750**	**23.8%**
52	**Hamilton Township Library**											
	Bioretention system	1,240	0.03	0.032	5	2,370	0.09	310	$5	SF	$1,550	1.0%
	Pervious pavement	17,900	0.41	0.466	78	34,220	1.29	4,275	$25	SF	$106,875	15.2%
	Total Site Info	**19,140**	**0.44**	**0.499**	**83**	**36,590**	**1.38**				**$108,425**	**16.2%**

Summary of Proposed Green Infrastructure Practices

	Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area Area (SF)	Potential Management Area Area (ac)	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost ($/unit)	Unit	Total Cost ($)	I.C. Treated %
53	**Hamilton Township Police Division**											
	Bioretention systems	8,960	0.21	0.233	39	17,130	0.64	2,240	$5	SF	$11,200	4.1%
	Pervious pavement	15,900	0.37	0.414	69	30,400	1.14	2,840	$25	SF	$71,000	7.3%
	Total Site Info	**24,860**	**0.57**	**0.648**	**108**	**47,530**	**1.78**				**$82,200**	**11.4%**
54	**Kuser Elementary School**											
	Bioretention system	1,000	0.02	0.026	4	1,910	0.07	250	$5	SF	$1,250	1.3%
	Pervious pavement	5,775	0.13	0.150	25	11,040	0.41	2,440	$25	SF	$61,000	7.5%
	Planter box (downspout)	1,720	0.04	n/a	6	n/a	n/a	8	$1,000	box	$8,000	2.2%
	Total Site Info	**8,495**	**0.20**	**0.177**	**36**	**12,950**	**0.48**				**$70,250**	**11.1%**
55	**Langtree Elementary School**											
	Bioretention system	12,060	0.28	0.314	53	23,050	0.87	3,020	$5	SF	$15,100	13.6%
	Pervious pavement	15,555	0.36	0.405	68	29,740	1.12	4,210	$25	SF	$105,250	17.5%
	Total Site Info	**27,615**	**0.63**	**0.720**	**120**	**52,790**	**1.99**				**$120,350**	**31.1%**
56	**Mercerville Elementary School**											
	Pervious pavement	29,150	0.67	0.760	127	55,730	2.09	5,290	$25	SF	$132,250	25.6%
	Total Site Info	**29,150**	**0.67**	**0.760**	**127**	**55,730**	**2.09**				**$132,250**	**25.6%**
57	**Pace Charter School**											
	Bioretention system	4,670	0.11	0.122	20	8,930	0.34	1,180	$5	SF	$5,900	11.6%
	Pervious pavement	12,870	0.30	0.335	56	24,600	0.92	3,240	$25	SF	$81,000	31.9%
	Total Site Info	**17,540**	**0.40**	**0.457**	**77**	**33,530**	**1.26**				**$86,900**	**43.4%**
58	**Reynolds Middle School**											
	Bioretention systems	7,360	0.17	0.192	32	14,070	0.53	1,840	$5	SF	$9,200	2.6%
	Planter box (downspout)	1,720	0.04	n/a	6	n/a	n/a	8	$1,000	box	$8,000	0.6%
	Total Site Info	**9,080**	**0.21**	**0.192**	**38**	**14,070**	**0.53**				**$17,200**	**3.2%**
59	**Sayen Elementary School**											
	Bioretention system	8,450	0.19	0.220	37	16,160	0.61	2,115	$5	SF	$10,575	10.6%
	Planter box (downspout)	575	0.01	n/a	2	n/a	n/a	3	$1,000	box	$3,000	0.7%
	Total Site Info	**9,025**	**0.21**	**0.220**	**39**	**16,160**	**0.61**				**$13,575**	**11.3%**
60	**St. Gregory the Great Catholic Church**											
	Bioretention system	7,840	0.18	0.204	34	14,990	0.56	1,960	$5	SF	$9,800	2.3%
	Pervious pavement	81,130	1.86	2.114	354	155,110	5.83	15,070	$25	SF	$376,750	24.0%
	Planter box (downspout)	1,290	0.03	n/a	5	n/a	n/a	6	$1,000	box	$6,000	0.4%
	Rainwater harvesting	1,650	0.04	0.043	7	1,300	0.12	1,300	$2	gal	$2,600	0.5%
	Total Site Info	**91,910**	**2.11**	**2.361**	**400**	**171,400**	**6.51**				**$395,150**	**27.2%**

Summary of Proposed Green Infrastructure Practices

	Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area Area (SF)	Potential Management Area Area (ac)	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost ($/unit)	Unit	Total Cost ($)	I.C. Treated %
61	**Suburban Plaza (Walmart)**											
	Pervious pavement	12,600	0.29	0.328	55	24,090	0.91	35,100	$25	SF	$877,500	1.4%
	Total Site Info	**12,600**	**0.29**	**0.328**	**55**	**24,090**	**0.91**				**$877,500**	**1.4%**
62	**Trenton Catholic Academy**											
	Bioretention system	13,440	0.31	0.350	59	25,690	0.97	3,360	$5	SF	$16,800	6.3%
	Pervious pavement	65,480	1.50	1.706	286	125,190	4.70	13,515	$25	SF	$337,875	30.6%
	Total Site Info	**78,920**	**1.81**	**2.056**	**344**	**150,880**	**5.67**				**$354,675**	**36.9%**
63	**Whitehorse Plaza Shopping Center**											
	Pervious pavement	68,360	1.57	1.781	298	130,690	4.91	13,950	$25	SF	$348,750	22.0%
	Total Site Info	**68,360**	**1.57**	**1.781**	**298**	**130,690**	**4.91**				**$348,750**	**22.0%**
	SHADY BROOK SUBWATERSHED	**292,585**	**6.72**	**7.562**	**1,275**	**554,730**	**20.88**				**$1,526,306**	**12.2%**
64	**Aldi**											
	Bioretention system	4,000	0.09	0.104	17	7,640	0.29	1,000	$5	SF	$5,000	2.9%
	Pervious pavement	26,315	0.60	0.686	115	50,310	1.89	5,235	$25	SF	$130,875	19.0%
	Total Site Info	**30,315**	**0.70**	**0.790**	**132**	**57,950**	**2.18**				**$135,875**	**21.9%**
65	**Duetzville Park**											
	Bioretention system	1,505	0.03	0.039	7	2,880	0.11	376	$5	SF	$1,881	1.9%
	Pervious pavement	12,920	0.30	0.337	56	24,700	0.93	3,420	$25	SF	$85,500	15.9%
	Total Site Info	**14,425**	**0.33**	**0.376**	**63**	**27,580**	**1.04**				**$87,381**	**17.8%**
66	**George E. Wilson Elementary School**											
	Bioretention system	3,770	0.09	0.098	16	7,210	0.27	950	$5	SF	$4,750	2.7%
	Total Site Info	**3,770**	**0.09**	**0.098**	**16**	**7,210**	**0.27**				**$4,750**	**2.7%**
67	**Grice Middle School**											
	Bioretention system	4,375	0.10	0.114	19	8,360	0.31	1,100	$5	SF	$5,500	1.8%
	Pervious pavement	46,170	1.06	1.203	201	88,270	3.32	11,450	$25	SF	$286,250	18.9%
	Total Site Info	**50,545**	**1.16**	**1.317**	**220**	**96,630**	**3.63**				**$291,750**	**20.6%**
68	**Hamilton Educational Program**											
	Bioretention system	1,380	0.03	0.036	6	2,640	0.10	350	$5	SF	$1,750	3.9%
	Pervious pavement	11,830	0.27	0.308	52	22,620	0.85	3,320	$25	SF	$83,000	33.6%
	Total Site Info	**13,210**	**0.30**	**0.344**	**58**	**25,260**	**0.95**				**$84,750**	**37.6%**

Summary of Proposed Green Infrastructure Practices

	Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area Area (SF)	Potential Management Area Area (ac)	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost ($/unit)	Unit	Total Cost ($)	I.C. Treated %
69	**Hamilton High School West**											
	Bioretention systems	4,000	0.09	0.104	17	7,640	0.29	1,000	$5	SF	$5,000	1.3%
	Planter box (downspout)	1,505	0.03	n/a	6	n/a	n/a	7	$1,000	box	$7,000	0.5%
	Total Site Info	**5,505**	**0.13**	**0.104**	**23**	**7,640**	**0.29**				**$12,000**	**1.9%**
70	**Independence Mall**											
	Bioretention system	4,800	0.11	0.125	21	9,180	0.34	1,200	$5	SF	$6,000	0.5%
	Pervious pavement	60,250	1.38	1.570	263	115,190	4.33	13,815	$25	SF	$345,375	5.7%
	Total Site Info	**65,050**	**1.49**	**1.695**	**284**	**124,370**	**4.67**				**$351,375**	**6.2%**
71	**K McCoy Inc. Insurance Agency**											
	Bioretention system	10,000	0.23	0.261	44	19,120	0.72	2,515	$5	SF	$12,575	50.0%
	Total Site Info	**10,000**	**0.23**	**0.261**	**44**	**19,120**	**0.72**				**$12,575**	**50.0%**
72	**Kisthardt Elementary School**											
	Bioretention system	650	0.01	0.017	3	1,240	0.05	165	$5	SF	$825	0.8%
	Pervious pavement	11,800	0.27	0.307	51	22,560	0.85	2,880	$25	SF	$72,000	14.0%
	Total Site Info	**12,450**	**0.29**	**0.324**	**54**	**23,800**	**0.90**				**$72,825**	**14.8%**
73	**Lalor Elementary School**											
	Bioretention system	2,310	0.05	0.060	10	4,410	0.17	580	$5	SF	$2,900	4.2%
	Pervious pavement	4,050	0.09	0.106	18	7,740	0.29	975	$25	SF	$24,375	7.4%
	Planter box (downspout)	860	0.02	n/a	3	n/a	n/a	4	$1,000	box	$4,000	1.6%
	Total Site Info	**7,220**	**0.17**	**0.166**	**31**	**12,150**	**0.46**				**$31,275**	**13.2%**
74	**Life St. Francis**											
	Pervious pavement	3,120	0.07	0.081	14	5,960	0.22	1,400	$25	SF	$35,000	13.9%
	Total Site Info	**3,120**	**0.07**	**0.081**	**14**	**5,960**	**0.22**				**$35,000**	**13.9%**
75	**McGalliard Elementary School**											
	Bioretention system	785	0.02	0.020	3	1,500	0.06	200	$5	SF	$1,000	0.5%
	Pervious pavement	32,940	0.76	0.858	144	62,970	2.37	9,970	$25	SF	$249,250	22.7%
	Total Site Info	**33,725**	**0.77**	**0.879**	**147**	**64,470**	**2.43**				**$250,250**	**23.3%**
76	**Rusling Hose Fire Company**											
	Bioretention system	5,850	0.13	0.152	26	11,180	0.42	1,465	$5	SF	$7,325	18.9%
	Pervious pavement	9,285	0.21	0.242	40	17,750	0.67	2,285	$25	SF	$57,125	30.1%
	Total Site Info	**15,135**	**0.35**	**0.394**	**66**	**28,930**	**1.09**				**$64,450**	**49.0%**

Summary of Proposed Green Infrastructure Practices

	Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential	TSS Removal Potential	Max Volume Reduction Potential	Peak Discharge Reduction Potential	Size of BMP	Unit Cost	Unit	Total Cost	I.C. Treated
		Area (SF)	Area (ac)	(Mgal/yr)	(lbs/yr)	(gal/storm)	(cfs)		($/unit)		($)	%
77	**St. Mark Lutheran Church**											
	Bioretention system	2,865	0.07	0.075	12	5,480	0.21	720	$5	SF	$3,600	8.9%
	Pervious pavement	19,150	0.44	0.499	84	36,610	1.38	3,420	$25	SF	$85,500	59.8%
	Rainwater harvesting	100	0.00	0.003	0	100	0.01	100	$2	gal	$200	0.3%
	Total Site Info	**22,115**	**0.51**	**0.576**	**96**	**42,190**	**1.60**				**$89,300**	**69.0%**
78	**True Servant Preschool Academy**											
	Bioretention system	6,000	0.14	0.156	26	11,470	0.43	550	$5	SF	$2,750	19.9%
	Total Site Info	**6,000**	**0.14**	**0.156**	**26**	**11,470**	**0.43**				**$2,750**	**19.9%**

Attachment 4

Nonstructural Stormwater Management Strategies and How to Demonstrate "Maximum Extent Practicable"

1. Protect areas that provide water quality benefits or areas particularly susceptible to erosion and sediment loss.

   Requirement: Applicant must identify all existing riparian buffers, corridors, wetlands, and highly erodible soils on the plans. Disturbance of these areas must be prevented by installing fencing, identification signage, and/or other protective elements. All proposed measures must be clearly indicated on the plans.

2. Minimize impervious surfaces and break up or disconnect the flow of runoff over impervious surfaces.

   Requirement: Applicant must demonstrate that impervious cover is less than 10% of the site or that any impervious areas exceeding 10% of the site area are disconnected to prevent stormwater runoff from flowing directly into the storm sewer system and/or nearby waterways.

3. Maximize the protection of natural drainage features and vegetation.

   Requirement: Applicant must identify these features and vegetation on the plans and protect these features with fencing or justify disturbance of these areas and provide a plan for restoration of these areas. All proposed measures must be clearly indicated on the plans.

4. Minimize the decrease in the "time of concentration" from pre-construction to post-construction. "Time of concentration" is defined as the time it takes for runoff to travel from the hydraulically most distant point of the drainage area to the point of interest within a watershed.

   Requirement: If #2 is satisfied; this criterion also is satisfied.

5. Minimize land disturbance including clearing and grading.

   Requirement: Applicant is allowed to clear an area up to 150% of the final right of way (ROW) of the roadway. The Applicant is only allowed to clear up to 150% of the width of a final driveway. The Applicant is only allowed to clear up to 50 feet around a structure footprint.

6. Minimize soil compaction.

   Requirement: All limits of disturbance must be fenced off to prevent heavy equipment entering these areas.

7. Provide low-maintenance landscaping that encourages retention and planting of native vegetation and minimizes the use of lawns, fertilizers and pesticides.

   Requirement: A landscape plan signed and sealed by a New Jersey Licensed Landscape Architect must be submitted to the Township that shows all turfgrass areas and all landscaped areas. A minimum of 10% of proposed landscape areas shall use native vegetation species.

8. Provide vegetated open-channel conveyance systems discharging into and through stable vegetated areas.
   Requirement: A minimum of 10% of all stormwater conveyance must be accomplished through the use of open channel vegetated channels.

9. Provide other source controls to prevent or minimize the use or exposure of pollutants at the site to prevent or minimize the release of those pollutants into stormwater runoff. These source controls include, but are not limited to:
   i. Site design features that help to prevent accumulation of trash and debris in drainage systems.
      Requirement: All catch basins must comply with MS4 regulations.

   ii. Site design features that help to prevent discharge of trash and debris from drainage systems.
      Requirement: All catch basins must comply with MS4 regulations.

   iii. Site design features that help to prevent and/or contain spills or other harmful accumulations of pollutants at industrial or commercial developments.
      Requirement: All outdoor chemical storage areas shall be covered and have secondary containment in compliance with Federal, State, and Local regulations.

   iv. When establishing vegetation after land disturbance, applying fertilizer in accordance with the requirements established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules.
      Requirement: Applicant must have an approved soil erosion and sediment control permit and comply with all requirements.