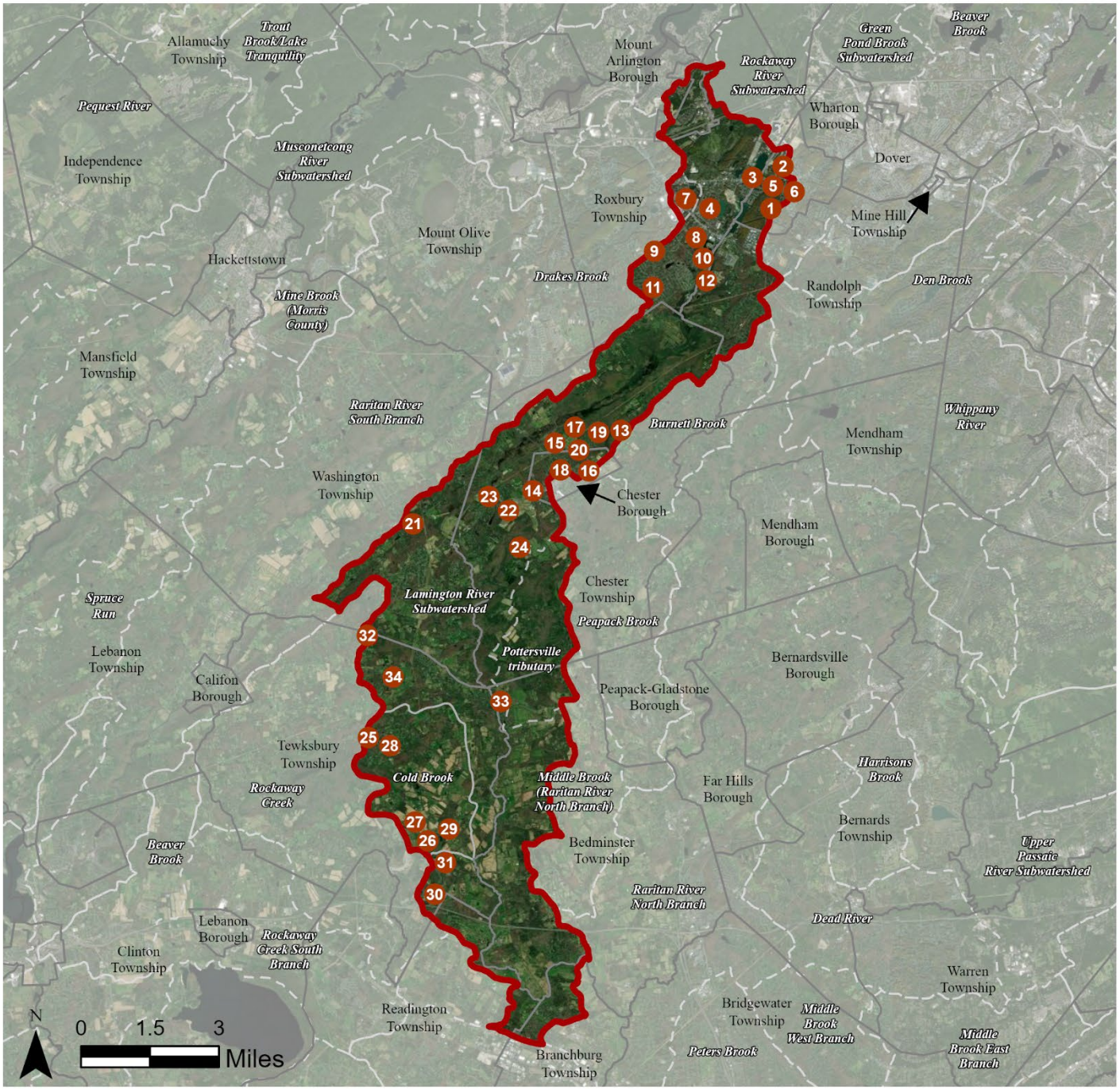
Appendix C

Concept Plans for Potential Green Infrastructure Projects

LAMINGTON RIVER WATERSHED: GREEN INFRASTRUCTURE SITES



Lamington River Watershed

1. Canfield Avenue Elementary School
2. Coco's Chateau
3. Country Lakes Animal Clinic
4. Franklin Elementary School and Lincoln Roosevelt School
5. Hodes Veterinary Group
6. Mine Hill Fire Department
7. Saint Therese Church
8. Eisenhower Middle School and Roxbury High School
9. Hillside Lutheran Brethren Church
10. Horseshoe Lake Recreation Complex
11. Kennedy Elementary School
12. Roxbury Day Care Center
13. Black River Middle School
14. Chester Library
15. Chester Senior Housing
16. Colonial Prospect Lodge #24 Masonic Lodge
17. Grace Bible Chapel
18. St. Lawrence Church
19. Stony Hill Farm Market
20. Suburban Hills School
21. Valley Brook Country Day School
22. Chester Township Municipal Building
23. Church of the Messiah
24. Kay Environmental Education Center
25. Old Turnpike Middle School
26. Oldwick Park
27. Tewksbury Township Library
28. Tewksbury Township Municipal Offices
29. Zion Lutheran Church
30. Oldwick Animal Hospital
31. Oldwick Post Office
32. Fairmount United Methodist Church
33. Pottersville Volunteer Fire Company
34. Tewksbury Elementary School

1. CANFIELD AVENUE ELEMENTARY SCHOOL

Subwatershed: Lamington River

Site Area: 633,014 sq. ft.

Address: 42 Canfield Avenue
Mine Hill, NJ 07803

Block and Lot: Block 1401, Lot 1

A rain garden can be installed near the disconnected downspouts to capture, treat, and infiltrate rooftop 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"
25	155,613	7.5	78.6	714.5	0.121	4.27

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 system	0.347	58	25,480	0.96	3,330	$16,650

GREEN INFRASTRUCTURE RECOMMENDATIONS

Canfield Avenue Elementary School

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

0 25' 50'

2. COCO'S CHATEAU

Subwatershed: Lamington River

Site Area: 35,723 sq. ft.

Address: 247 US-46
Mine Hill, NJ 07803

Block and Lot: Block 805, Lot 1

Pervious pavement can be installed on a parking strip south of the building 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	21,483	1.0	10.8	98.6	0.017	0.59

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	0.103	17	7,570	0.28	1,000	$25,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Coco's Chateau

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

0 25' 50'

3. COUNTRY LAKES ANIMAL CLINIC

Subwatershed: Lamington River

Site Area: 33,664 sq. ft.

Address: 378 US-46
Mine Hill, NJ 07803

Block and Lot: Block 404, Lot 3-4,8

Parking spaces south of the building 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"
82	27,664	1.3	14.0	127.0	0.022	0.76

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	0.169	28	12,420	0.47	1,770	$44,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

Country Lakes Animal Clinic

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

0 25' 50'

4. FRANKLIN ELEMENTARY SCHOOL & LINCOLN ROOSEVELT SCHOOL

Subwatershed: **Lamington River**

Site Area: **1,431,171 sq. ft.**

Address: **8 Meeker Street**
Succasunna, NJ 07876

Block and Lot: **Block 3901, Lot 2**

Rain gardens can be installed at the entrances of both buildings near downspouts to capture, treat, and infiltrate rooftop runoff. Another rain garden can be installed in the turfgrass area near a catch basin to capture water from the parking lot. A section of parking spaces can be converted to porous pavement to capture and infiltrate runoff 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"
29	415,275	20.0	209.7	1,906.7	0.324	11.39

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
Bioretention systems	0.354	59	26,010	0.98	5,405	$27,025
Pervious pavement	0.475	79	34,840	1.31	3,260	$81,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

Franklin Elementary School & Lincoln Roosevelt School

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

0 100' 200'

5. HODES VETERINARY GROUP

Subwatershed: Lamington River

Site Area: 23,156 sq. ft.

Address: 265 US-46
Mine Hill, NJ 07803

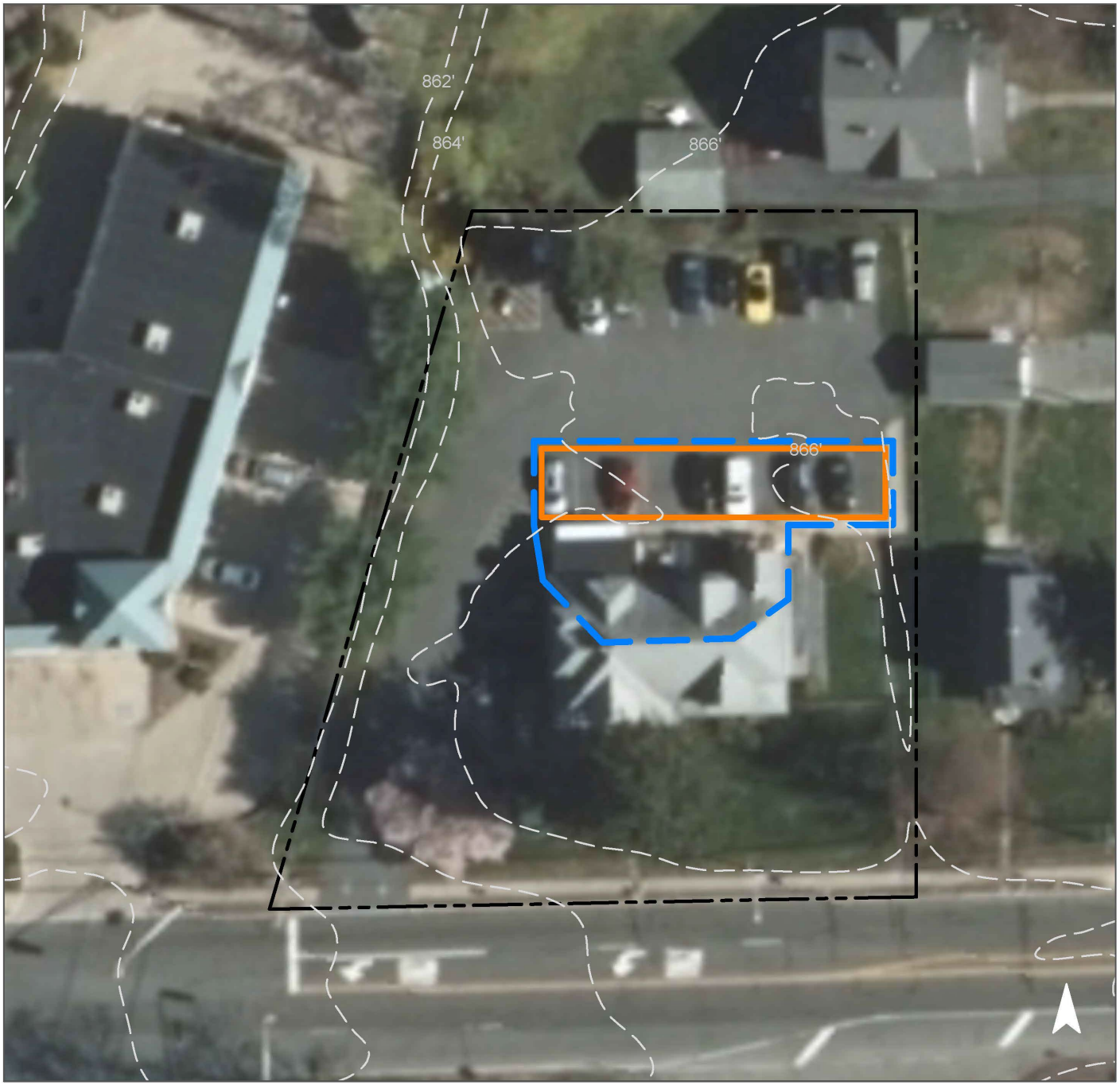
Block and Lot: Block 806, Lot 1

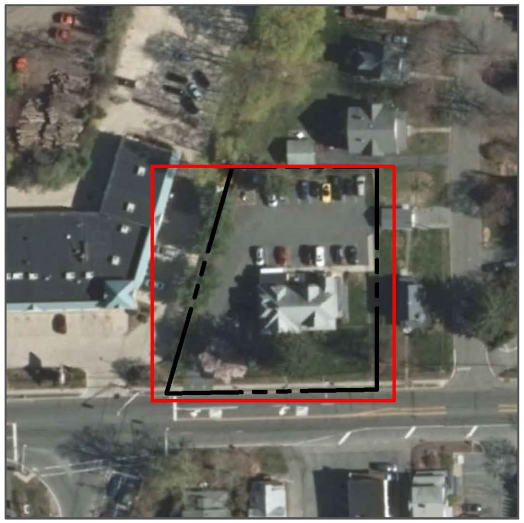
Pervious pavement can be installed on the north side of the building to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

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	13,897	0.7	7.0	63.8	0.011	0.38

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	0.100	17	7,300	0.27	1,620	$40,500

GREEN INFRASTRUCTURE RECOMMENDATIONS





Hodes Veterinary Group

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

0 20' 40'

6. MINE HILL FIRE DEPARTMENT

Subwatershed: Lamington River

Site Area: 410,173 sq. ft.

Address: 230 US-46
Mine Hill, NJ 07803

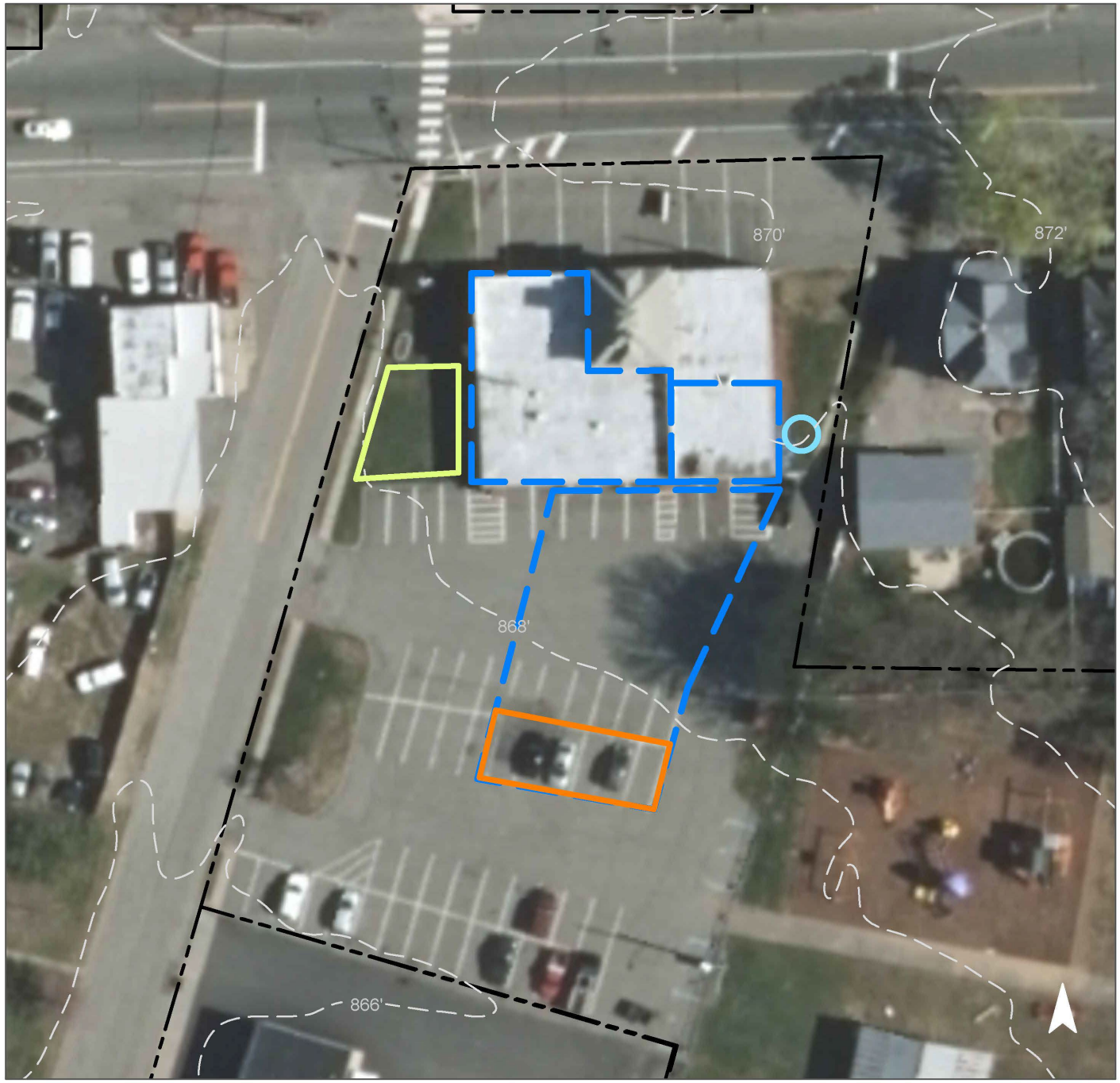
Block and Lot: Block 1304, Lot 17

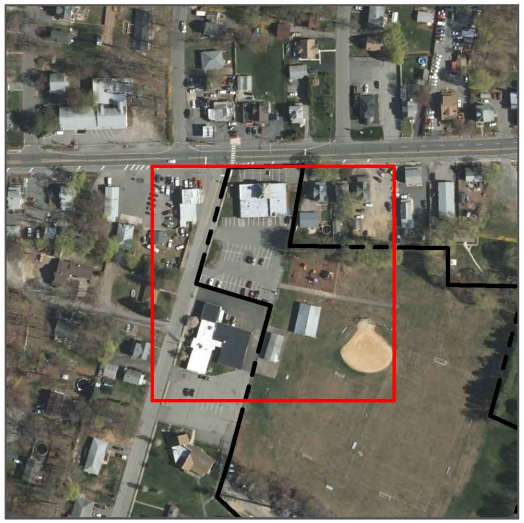
A rain garden can be installed on the west side of the building to capture, treat, and infiltrate rooftop runoff. Pervious pavement can be installed on the south parking strip to store stormwater runoff and allow it to slowly infiltrate into the ground. A cistern can be installed on the east side of the building near a disconnected downspout so the water can be used for watering gardens, washing vehicles, or for other non-potable uses. 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"
13	52,163	2.5	26.3	239.5	0.041	1.43

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	0.094	16	6,880	0.26	900	$4,500
Pervious pavement	0.190	32	13,920	0.52	1,300	$32,500
Rainwater harvesting	0.030	5	900	0.03	900 (gal)	$1,800

GREEN INFRASTRUCTURE RECOMMENDATIONS





Mine Hill Fire Department

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

0 25' 50'

7. SAINT THERESE CHURCH

Subwatershed: **Drakes Brook**

Site Area: **727,688 sq. ft.**

Address: **151 Main Street**
Succasunna, NJ 07876

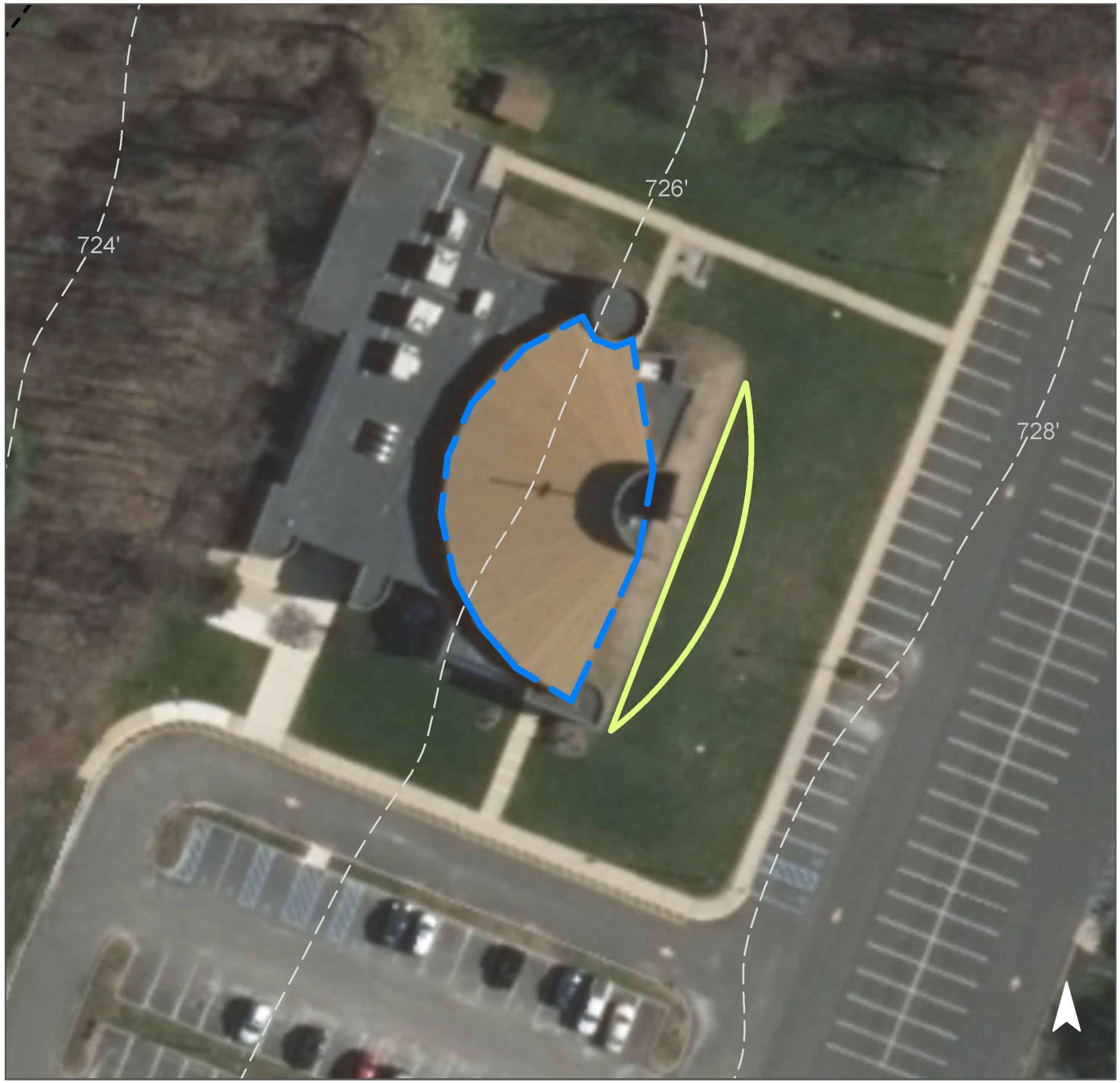
Block and Lot: **Block 5103, Lot 1**

A rain garden can be installed on the east side of the building to capture, treat, and infiltrate rooftop 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"
36	264,110	12.7	133.4	1,212.6	0.206	7.24

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	0.156	26	11,410	0.43	1,450	$7,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Saint Therese Church

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

0 25' 50'

8. EISENHOWER MIDDLE SCHOOL & ROXBURY HIGH SCHOOL

Subwatershed: Lamington River

Site Area: 3,538,538 sq. ft.

Address: 47 Eyland Avenue
Succasunna, NJ 07876

Block and Lot: Block 1801, Lots 2, 3, 4

Three rain gardens can be installed to capture, treat, and infiltrate runoff from rooftops and paved areas. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater runoff from the parking lot areas. A cistern can be installed to capture roof runoff from a maintenance shed. 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"
32	1,137,347	54.8	574.4	5,222.0	0.886	31.19

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	0.627	105	46,020	1.73	6,020	$30,100
Pervious pavement	3.845	644	282,110	10.60	26,350	$658,750
Rainwater harvesting	0.048	8	1,450	0.06	1,450 (gal)	$2,900

GREEN INFRASTRUCTURE RECOMMENDATIONS

Eisenhower Middle School & Roxbury High School

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

0 150' 300'

9. HILLSIDE LUTHERAN BRETHREN CHURCH

Subwatershed: **Lamington River**

Site Area: **253,933 sq. ft.**

Address: **113 South Hillside Avenue**
Succasunna, NJ 07876

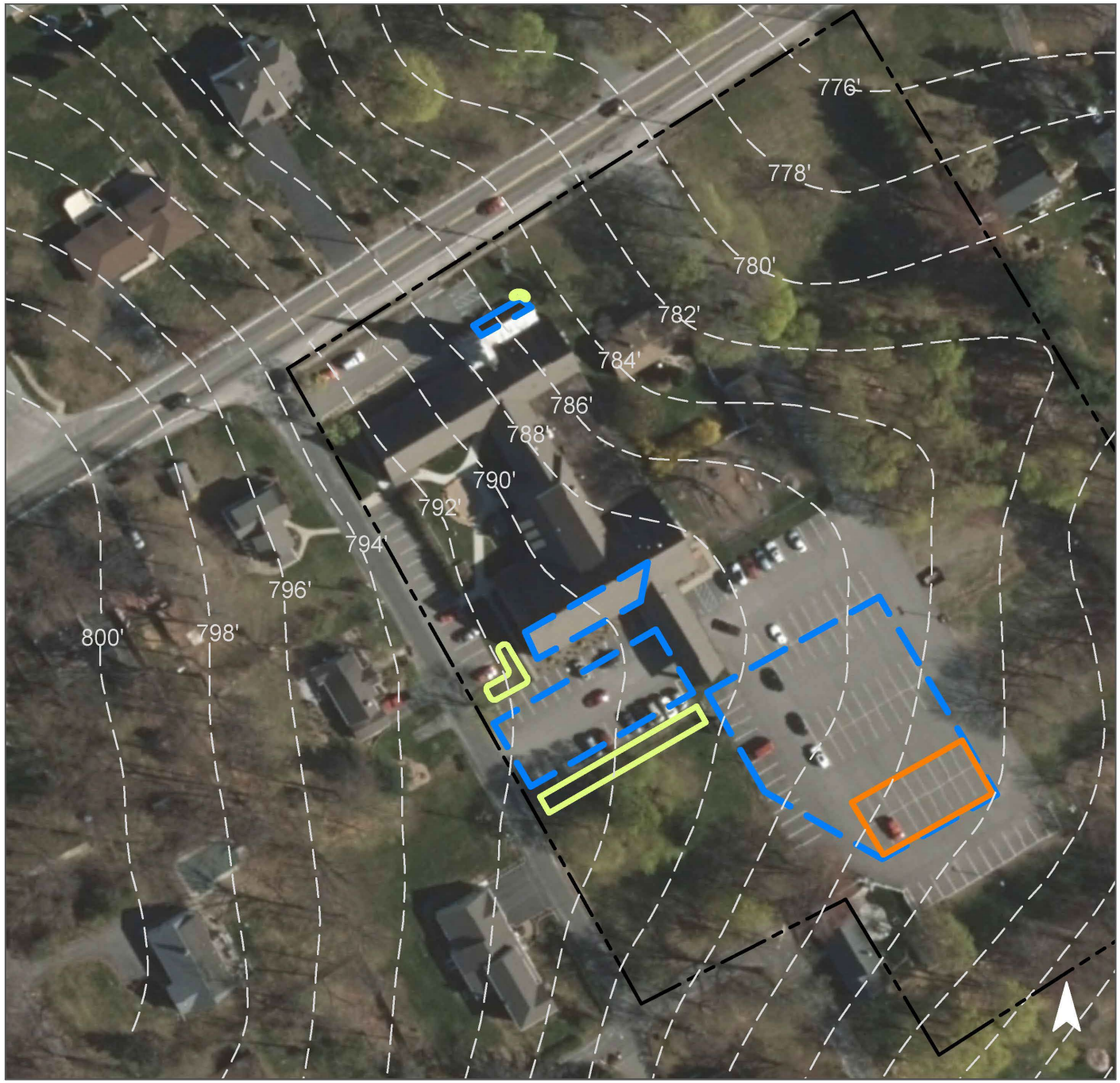
Block and Lot: **Block 3103, Lot 1**

Rain gardens can be installed north and west of the building near downspouts to capture, treat, and infiltrate rooftop runoff. Another rain garden can be installed near the parking lot to capture runoff from the road. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater runoff 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"
46	117,092	5.6	59.1	537.6	0.091	3.21

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 systems	0.202	34	14,830	0.56	1,945	$9,725
Pervious pavement	0.484	81	35,540	1.34	3,320	$83,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hillside Lutheran Brethren Church

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

0 50' 100'

10. HORSESHOE LAKE RECREATION COMPLEX

Subwatershed: **Lamington River**

Site Area: **3,768,003 sq. ft.**

Address: **72 Eyland Avenue**
Succasunna, NJ 07876

Block and Lot: **Block 1802, Lot 7-8**

There are four downspouts along the north side of the building where downspout planter boxes can be installed. A rain garden can be installed at end of the parking lot that will capture stormwater from the parking lot. Another rain garden can be installed on the north side of the building near downspouts. Pervious pavement can be installed to capture and infiltrate runoff from the southern 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"
17	647,900	31.2	327.2	2,974.7	0.505	17.77

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
Bioretention systems	0.106	18	7,780	0.29	581	$2,905
Pervious pavement	0.190	32	13,920	0.52	1,300	$32,500
Planter boxes	n/a	3	n/a	n/a	4 (boxes)	$4,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Horseshoe Lake Recreation Complex

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

0 50' 100'

11. KENNEDY ELEMENTARY SCHOOL

Subwatershed: **Lamington River**

Site Area: **587,551 sq. ft.**

Address: **20 Pleasant Hill Road**
Succasunna, NJ 07876

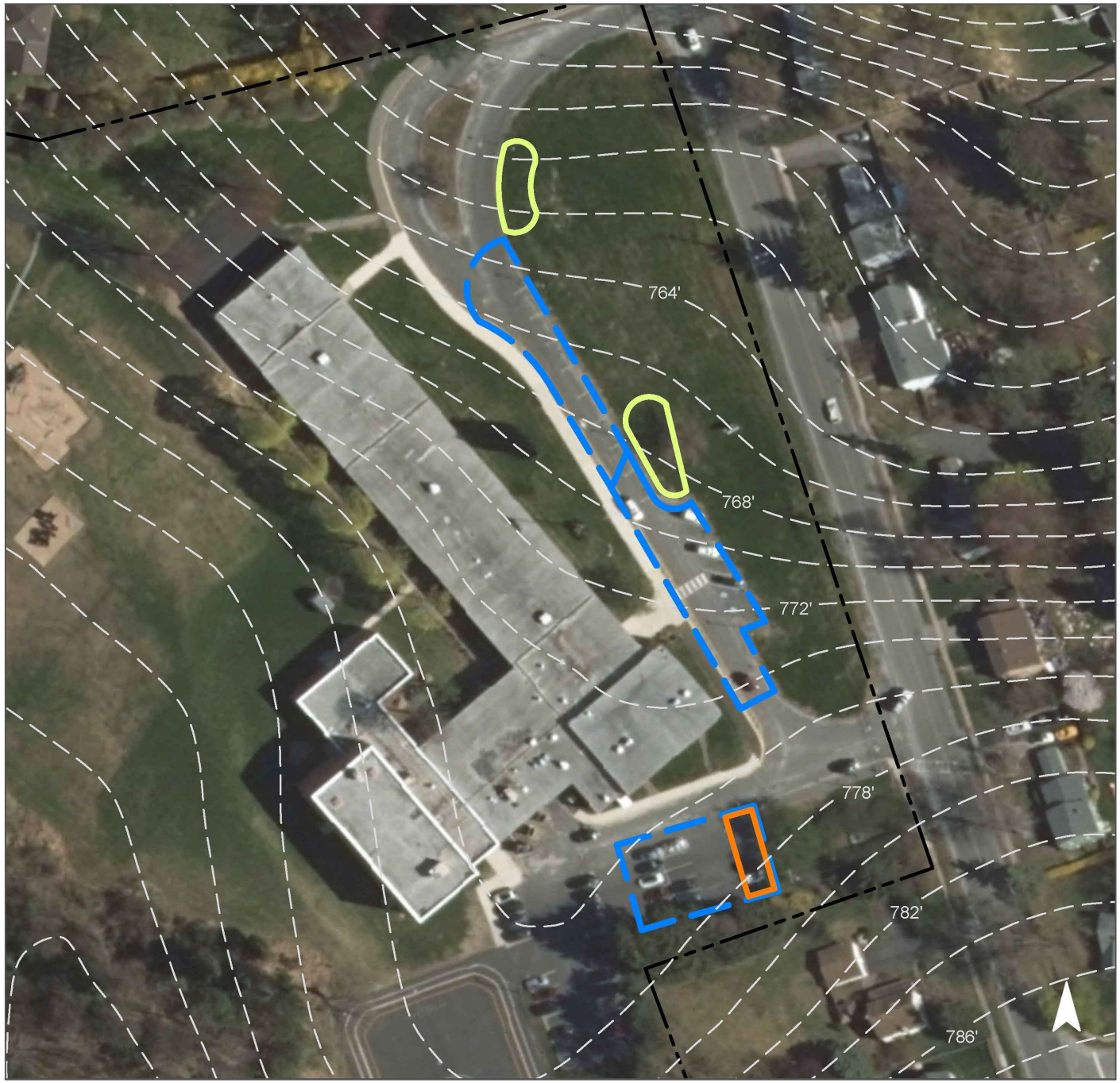
Block and Lot: **Block 1201, Lot 19**

Two rains gardens can be installed in the turfgrass in front of the building to capture, treat, and infiltrate roadway runoff. Another rain garden can be installed south of the building to capture runoff from the basketball court. Pervious pavement can be installed in the parking lot to capture and infiltrate stormwater runoff 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"
26	150,355	7.2	75.9	690.3	0.117	4.12

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	0.271	45	19,920	0.75	2,605	$13,025
Pervious pavement	0.141	24	10,320	0.39	970	$24,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Kennedy Elementary School

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

0 50' 100'

12. ROXBURY DAY CARE CENTER

Subwatershed: Lamington River

HUC14 ID: 02030105050020

Site Area: 3,105,783 sq. ft.

Address: 25 Righter Road, Succasunna, NJ 07876

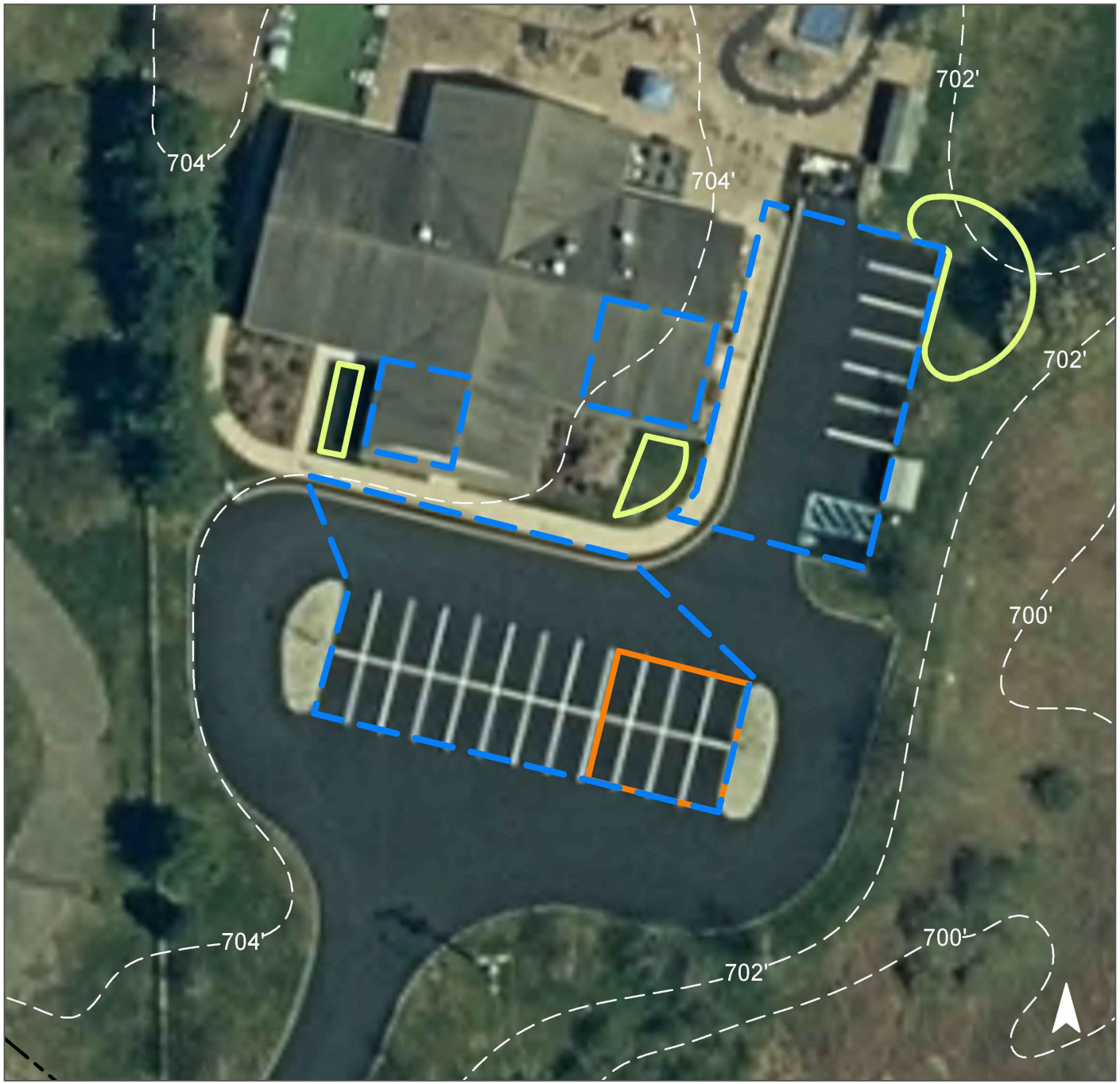
Block and Lot: Block 1802, Lot 8

Parking spaces in the lot to the south of the building can be converted to porous pavement to capture and infiltrate stormwater runoff from the asphalt using trench drains for redirection. Two rain gardens requiring downspout disconnection can be installed in the grass areas near the entrance of the building to capture, treat, and infiltrate stormwater runoff from the roof. A rain garden with a curb cut can be installed in the grass area east of the building to capture, treat, and infiltrate stormwater 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 50"
14	443,013	21.4	223.7	2,034.0	0.345	13.81

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	5,565	0.165	25	11,610	0.44	1,395	$13,950
Pervious pavement	6,230	0.184	27	12,990	0.49	1,220	$30,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Roxbury Day Care Center

- bioretention system
- pervious pavement
- captured drainage area
- property line
- 2020 Aerial: NJOIT, OGIS

0 20' 40'

13. BLACK RIVER MIDDLE SCHOOL

Subwatershed: Lamington River

HUC14 ID 02030105050030

Site Area: 1,716,100 sq. ft.

Address: 133 North Road
Chester, NJ 07930

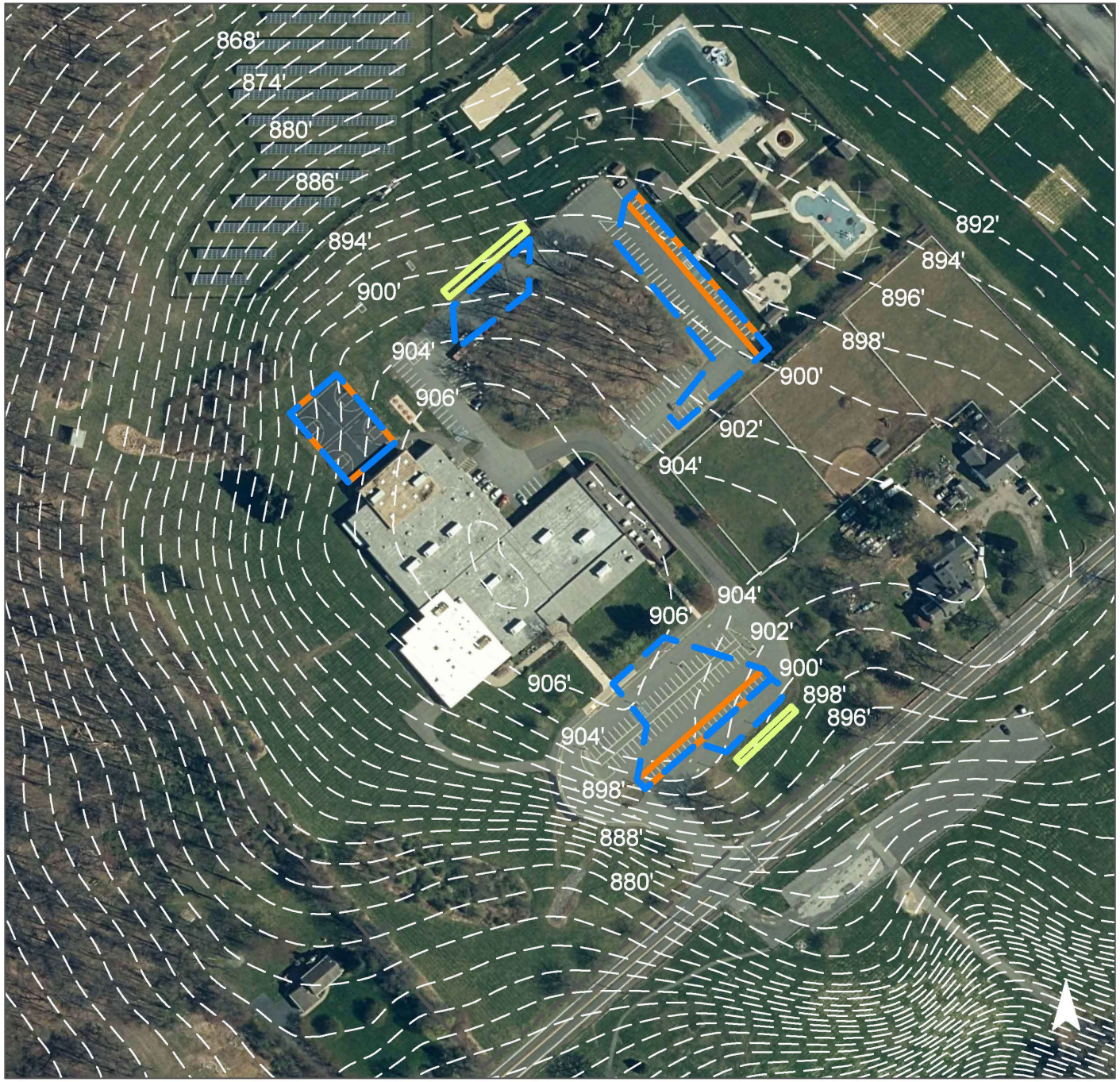
Block and Lot: Block 33, Lot 17.02

Rain gardens can be installed near the northern and southern parking lots to capture, treat, and infiltrate the stormwater runoff from the asphalt. This will require downspout disconnections. Existing parking spaces in the northern and southern lots can be converted into pervious pavement to capture and infiltrate the stormwater runoff from the asphalt. The basketball court to the north of the school can also be converted into pervious pavement. 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 50"
18	301,365	14.5	152.2	1,383.7	0.235	9.39

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	10,080	0.298	44	21,030	0.79	2,520	$25,200
Pervious pavement	47,990	1.421	209	100,100	3.76	17,550	$438,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



Black River Middle School

- bioretention system
- pervious pavement
- captured drainage area
- property line
- 2020 Aerial: NJOIT, OGIS

0 100' 200'

14. CHESTER LIBRARY

Subwatershed: Lamington River

Site Area: 393,550 sq. ft.

Address: 250 West Main Street
Chester, NJ 07930

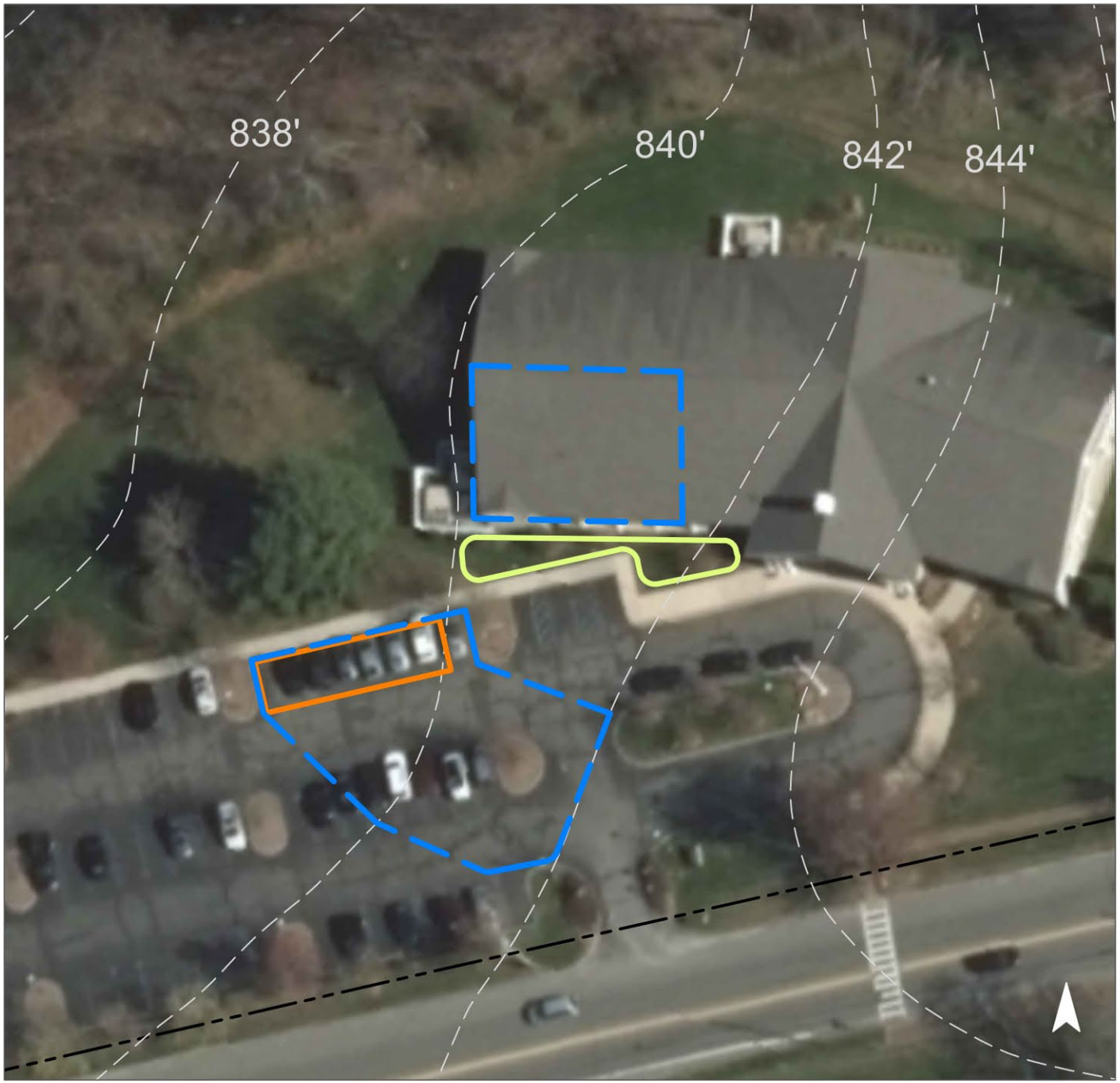
Block and Lot: Block 101, Lot 21

Parking spaces in the parking lot to the west of the building can be converted to porous pavement to capture and infiltrate stormwater runoff from the parking lot, before it enters the nearby storm drain. A rain garden can be installed south of the building to capture, filter, and infiltrate stormwater runoff from the roof if the front downspouts are disconnected. 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"
17	68,470	3.3	34.6	314.4	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	0.089	15	6,310	0.24	860	$4,300
Pervious pavement	0.157	26	11,120	0.42	1,055	$26,375

GREEN INFRASTRUCTURE RECOMMENDATIONS



Chester Library

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

0 25' 50'

15. CHESTER SENIOR HOUSING

Subwatershed: Lamington River

Site Area: 171,540 sq. ft.

Address: 1 Cole Court
Chester Borough, NJ 07930

Block and Lot: Block 110, Lot 4

Two rain gardens can be installed west of the two buildings to accumulate and infiltrate stormwater runoff from the buildings. Additionally, porous pavement can be used to capture stormwater from the parking lot in front of the main building. 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	40,325	1.9	20.4	185.1	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	0.042	7	2,980	0.11	405	$2,025
Pervious pavement	0.178	30	12,640	0.48	1,450	$36,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

Chester Senior Housing

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

0 30' 60'

16. COLONIAL PROSPECT LODGE #24 MASONIC LODGE

Subwatershed: Lamington River

HUC14 ID: 02030105050030

Site Area: 29,963 sq. ft.

Address: 370 Main Street
Chester, NJ 07930

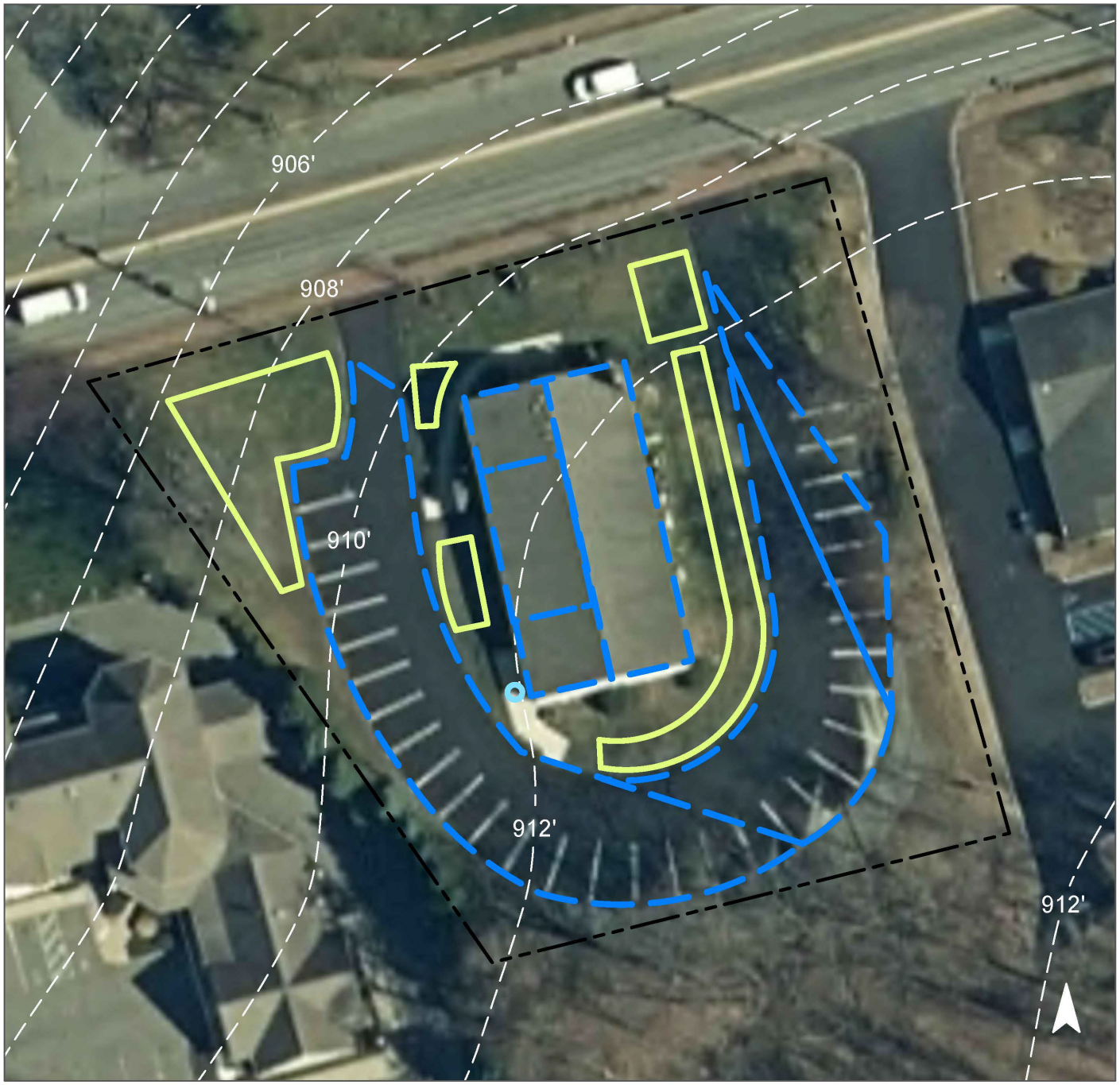
Block and Lot: Block 119, Lot 11

Rain gardens can be installed in multiple grass areas around the property to capture, treat, and infiltrate the stormwater runoff from the driveway and rooftop. This will require downspout disconnections, trench drains, and in some cases downspout redirection beneath the sidewalk. A cistern can be installed to the southwest of the building to divert and detain the stormwater runoff from the rooftop for later non-potable reuse such as watering a garden bed. 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 50"
58	17,428	0.8	8.8	80.0	0.014	0.54

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	12,090	0.358	53	25,220	0.95	3,025	$30,250
Rainwater harvesting	430	0.013	2	350	N/A	350 (gal)	$1,050

GREEN INFRASTRUCTURE RECOMMENDATIONS



Colonial Prospect Lodge
#24 Masonic Lodge

- bioretention system
- rainwater harvesting
- captured drainage area
- property line
- 2020 Aerial: NJOIT, OGIS

0 20' 40'

17. GRACE BIBLE CHAPEL

Subwatershed: Lamington River

HUC14 ID 02030105050030

Site Area: 357,759 sq. ft.

Address: 100 Oakdale Road
Chester, NJ 07930

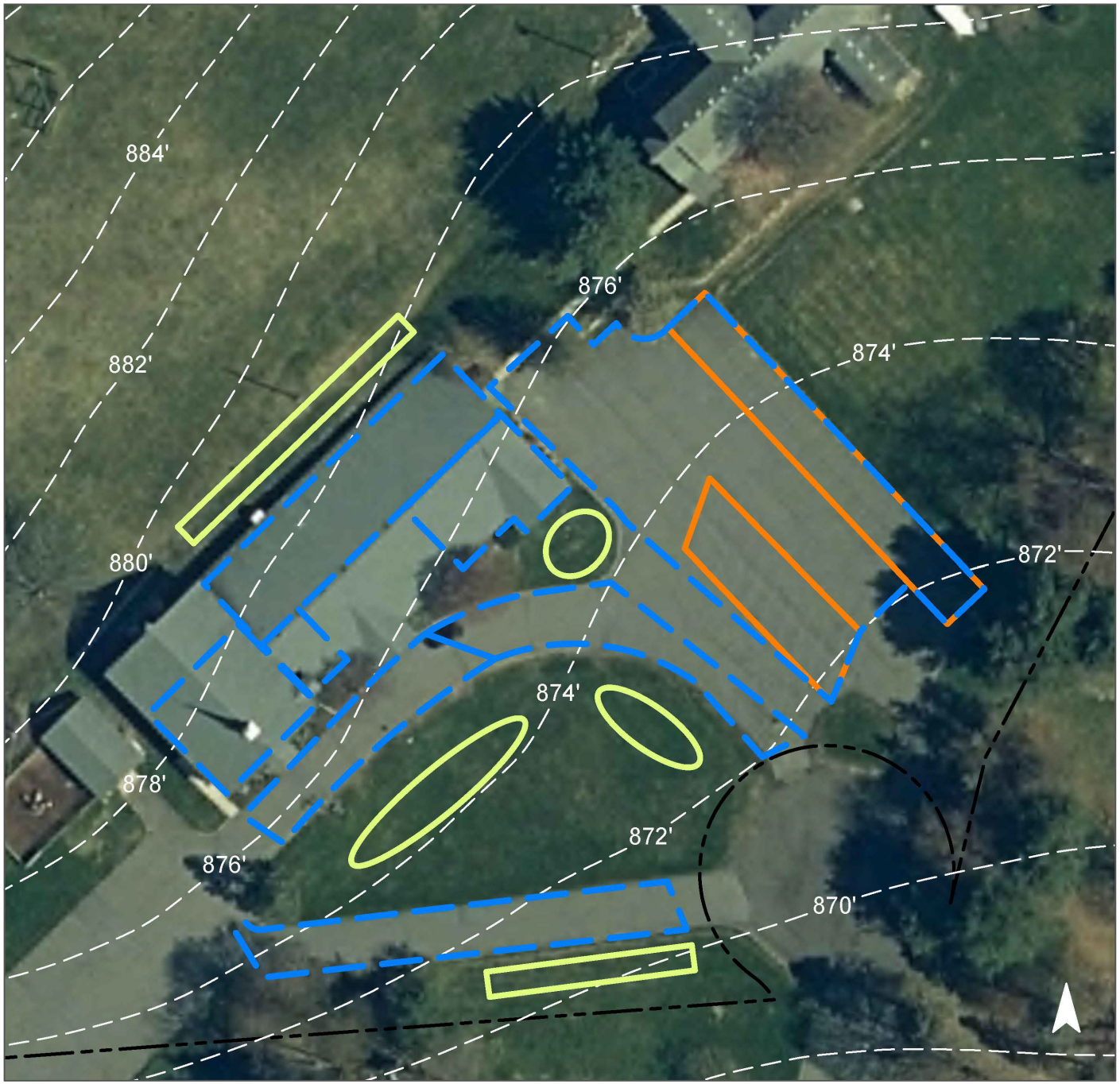
Block and Lot: Block 33.01, Lot 10

Rain gardens can be installed in multiple grass areas around the property to capture, treat, and infiltrate the stormwater runoff from the rooftop and driveways. This may require downspout disconnections, trench drains, and curb cuts. Existing parking spaces to the east of the building can be converted into pervious pavement to capture and infiltrate the stormwater runoff from the asphalt. This may require a trench drain. 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 50"
19	69,577	3.4	35.1	319.5	0.054	2.17

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	16,895	0.500	74	35,240	1.32	4,225	$42,250
Pervious pavement	13,315	0.394	59	27,770	1.04	5,450	$136,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Grace Bible Chapel

- bioretention system
- pervious pavement
- captured drainage area
- property line
- 2020 Aerial: NJOIT, OGIS

0 30' 60'

18. ST. LAWRENCE CHURCH

Subwatershed: Lamington River

Site Area: 534,640 sq. ft.

Address: 375 Main Street
Chester, NJ 07930

Block and Lot: Block 110, Lot 32

A rain garden can be installed west of the building behind the parking lot to capture, treat, and infiltrate stormwater runoff from the roof. 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	116,365	5.6	58.8	534.3	0.091	3.19

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	0.214	36	15,160	0.57	2,050	$10,250

GREEN INFRASTRUCTURE RECOMMENDATIONS

St. Lawrence Church

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

0 25' 50'

19. STONY HILL FARM MARKET

Subwatershed: Lamington River

Site Area: 1,466,765 sq. ft.

Address: 15 North Road
Chester Borough, NJ 07930

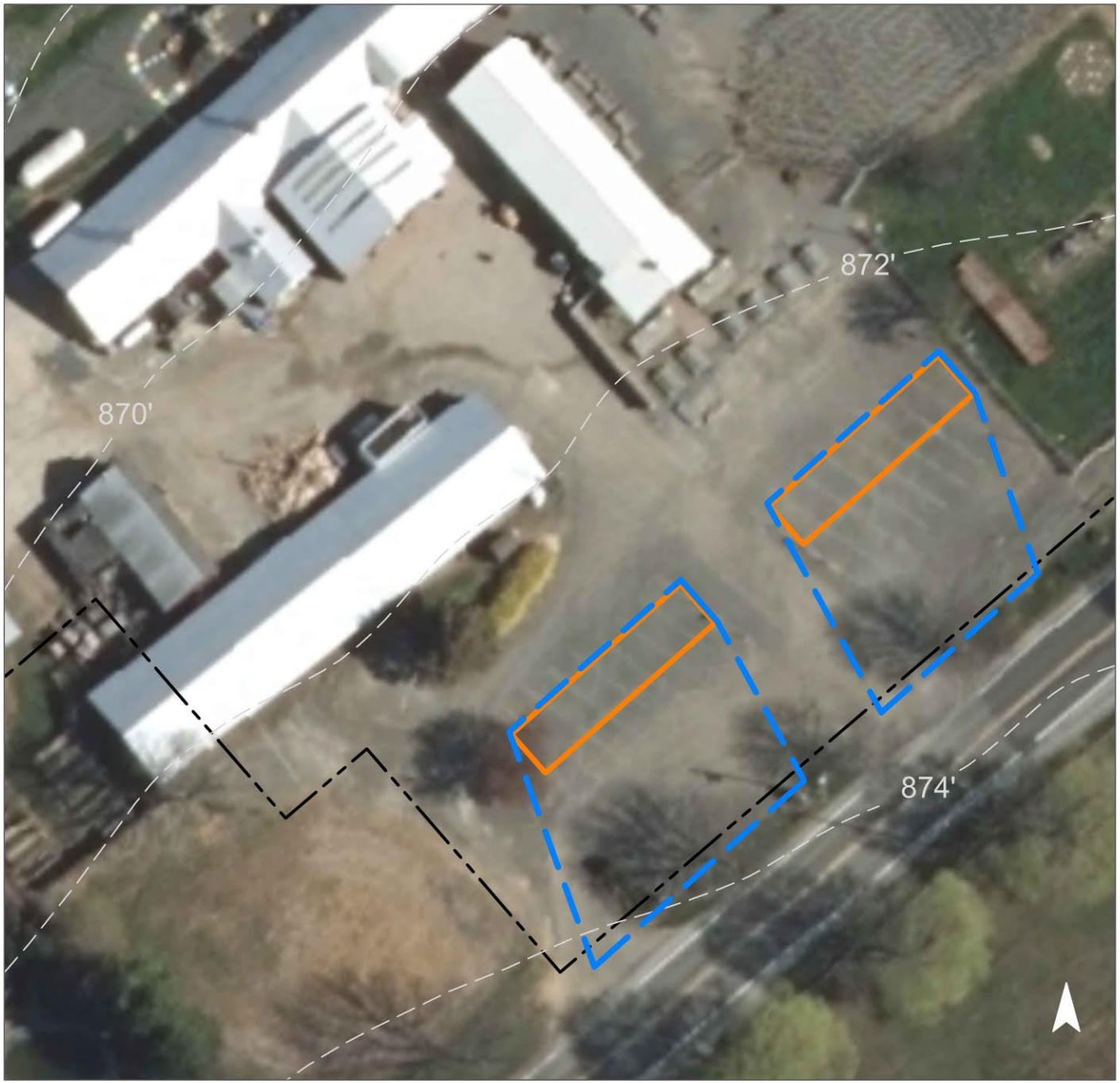
Block and Lot: Block 114, Lot 15

Pervious pavement can be installed in the parking lot to capture the stormwater 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"
3	39,515	1.9	20.0	181.4	0.031	1.08

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	0.316	53	22,460	0.84	2,700	$67,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Stony Hill Farm Market

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

0 25' 50'

20. SUBURBAN HILLS SCHOOL

Subwatershed: Lamington River

Site Area: 53,755 sq. ft.

Address: 41 Oakdale Road
Chester Borough, NJ 07930

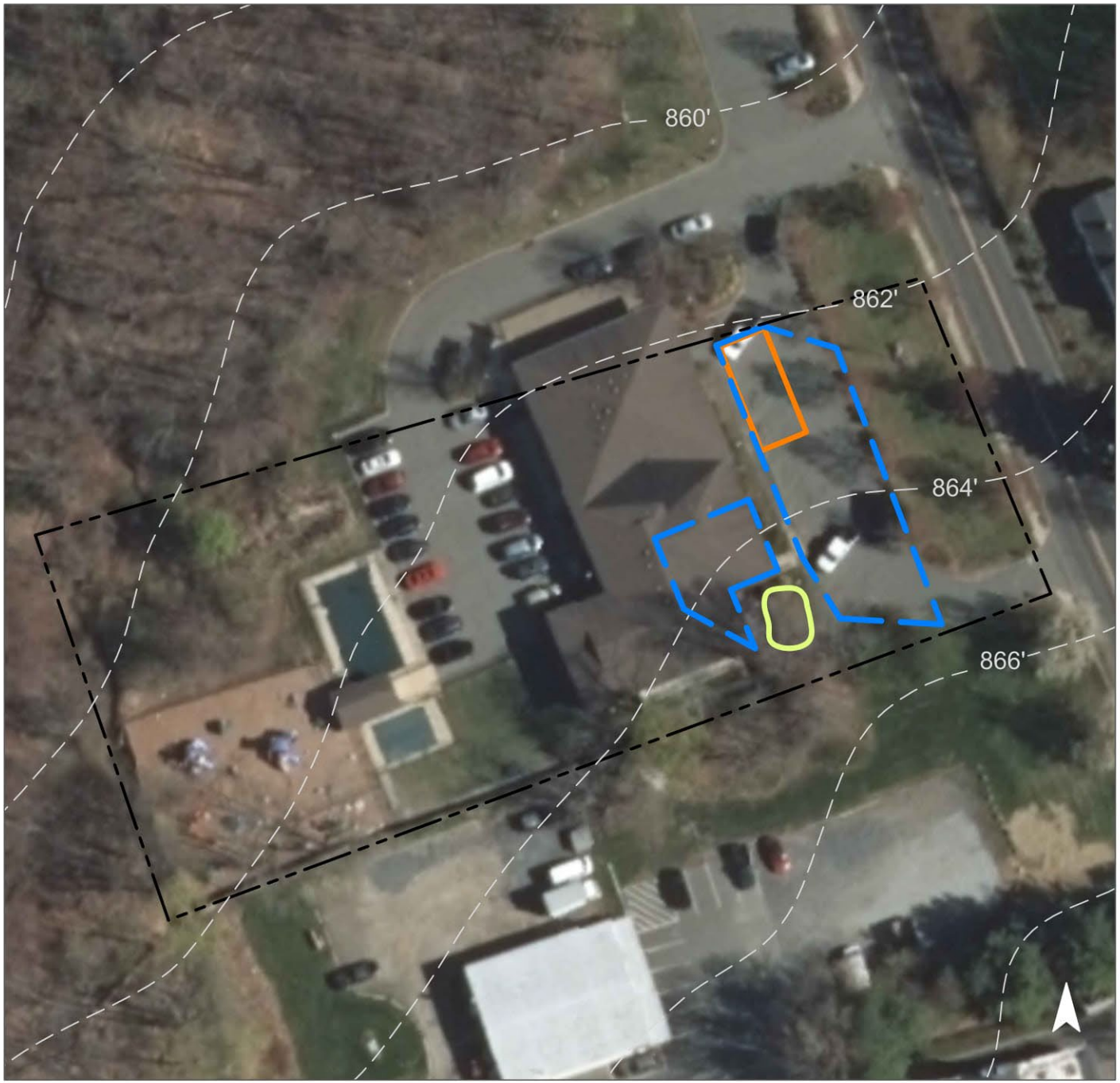
Block and Lot: Block 110, Lot 25

Parking spaces in the parking lot to the northeast of the building can be converted to porous pavement to capture and infiltrate stormwater runoff from the parking lot. A rain garden can be installed in the turfgrass area near the entrance of the building to capture, treat, and infiltrate stormwater runoff from the roof. 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"
64	34,200	1.6	17.3	157.0	0.027	0.94

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 system	0.038	6	2,690	0.10	365	$1,825
Pervious pavement	0.131	22	9,320	0.35	900	$22,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Suburban Hills School

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

0 30' 60'

21. VALLEY BROOK COUNTRY DAY SCHOOL

Subwatershed: **Lamington River**

Site Area: **1,079,999 sq. ft.**

Address: **73 East Valley Brook Rd**
Long Valley, NJ 07853

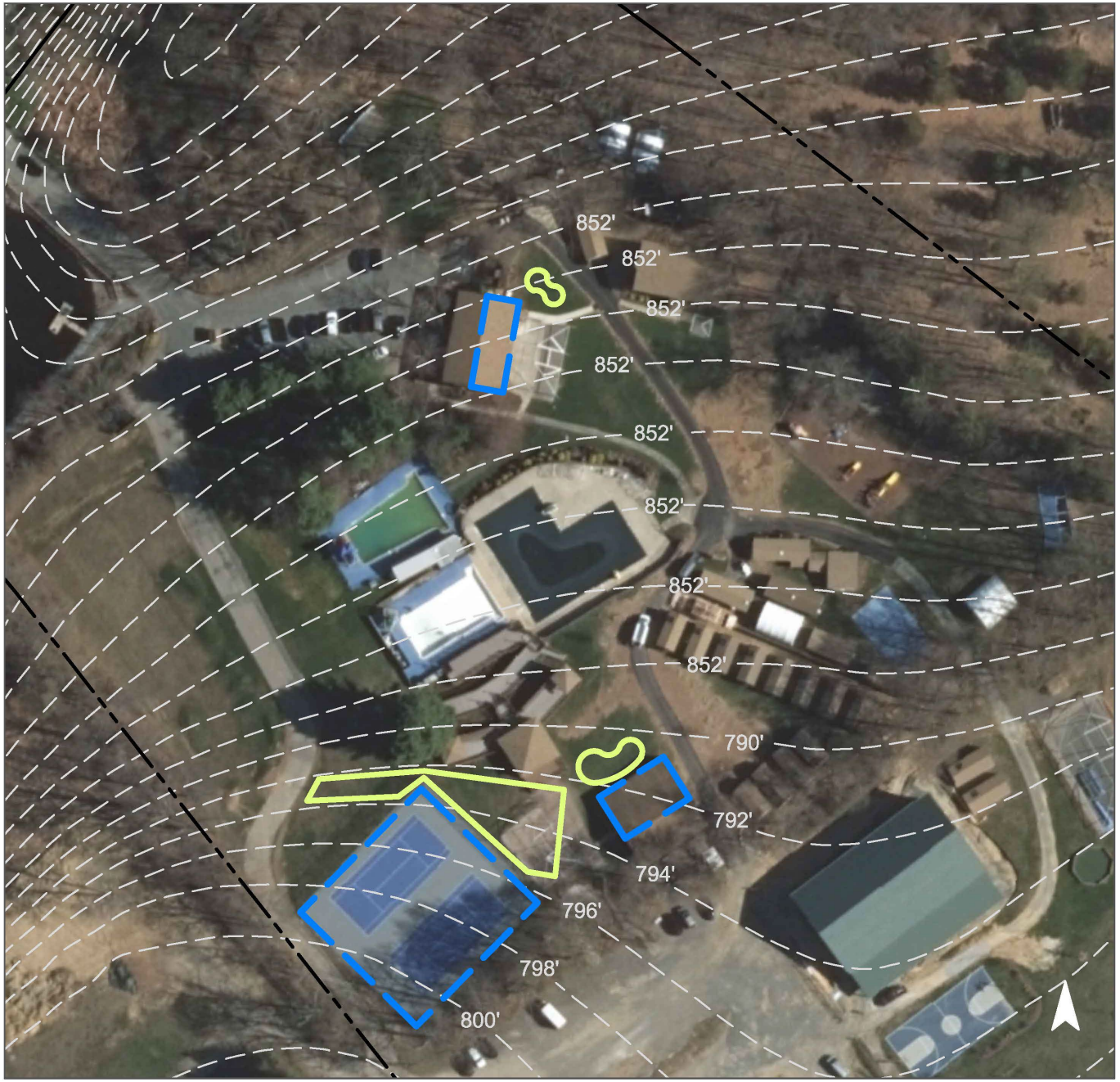
Block and Lot: **Block 37, Lot 25**

Rain gardens can be installed adjacent to buildings and impervious surfaces like the tennis courts to capture stormwater 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"
19	4.76	207,492	10.0	104.8	952.7	0.162

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	0.389	65	30,430	1.07	3,740	$18,700

GREEN INFRASTRUCTURE RECOMMENDATIONS



VALLEY BROOK COUNTRY DAY SCHOOL

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

0 50' 100'

22. CHESTER TOWNSHIP MUNICIPAL BUILDING

Subwatershed: Lamington River

Site Area: 90,055 sq. ft.

Address: 1 Parker Road
Chester, NJ 07930

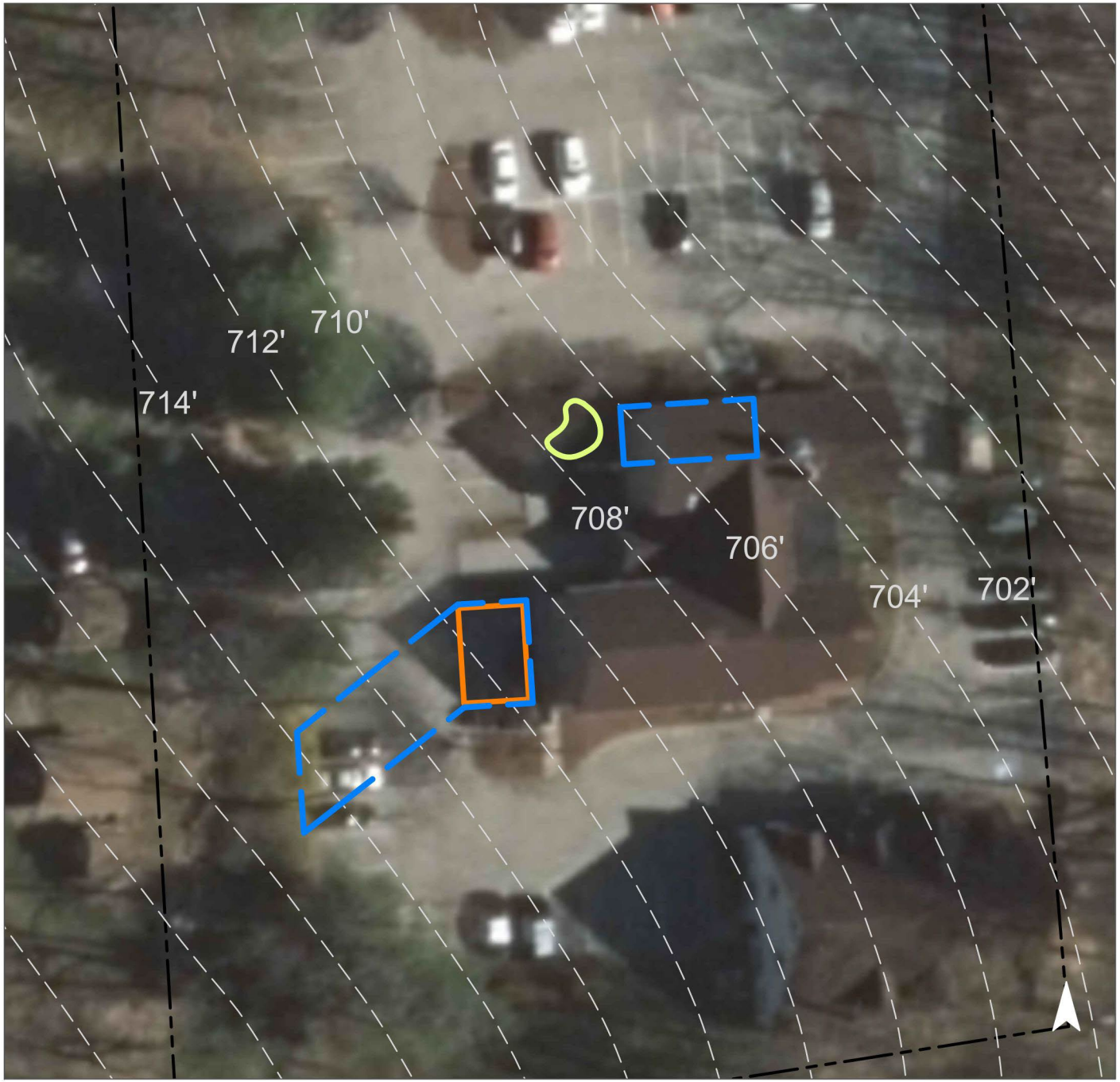
Block and Lot: Block 16, Lot 34

Pervious pavement can be installed in the parking spaces west of the building to capture and infiltrate stormwater. A rain garden can be installed to the northwest of the building to capture, treat, and infiltrate stormwater runoff from the roof. 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	47,320	2.3	23.9	217.3	0.037	1.30

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	0.014	2	1,000	0.04	130	$650
Pervious pavement	0.044	7	3,190	0.12	490	$12,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Chester Township Municipal Building

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

0 20' 40'

23. CHURCH OF THE MESSIAH

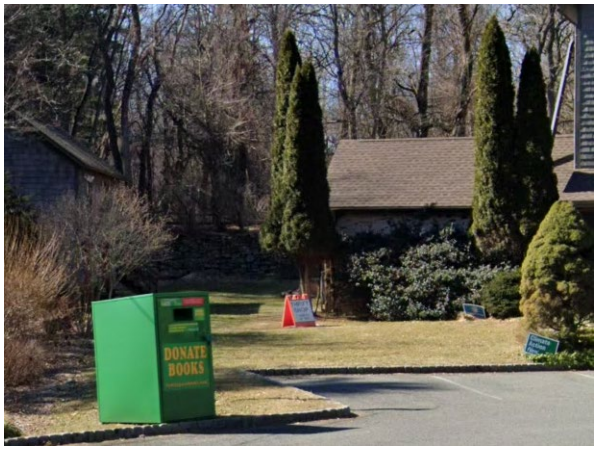
Subwatershed: Lamington River

HUC14 ID 02030105050040

Site Area: 330,558 sq. ft.

Address: 50 County Highway 513
Chester, NJ 07930

Block and Lot: Block 17, Lot 38

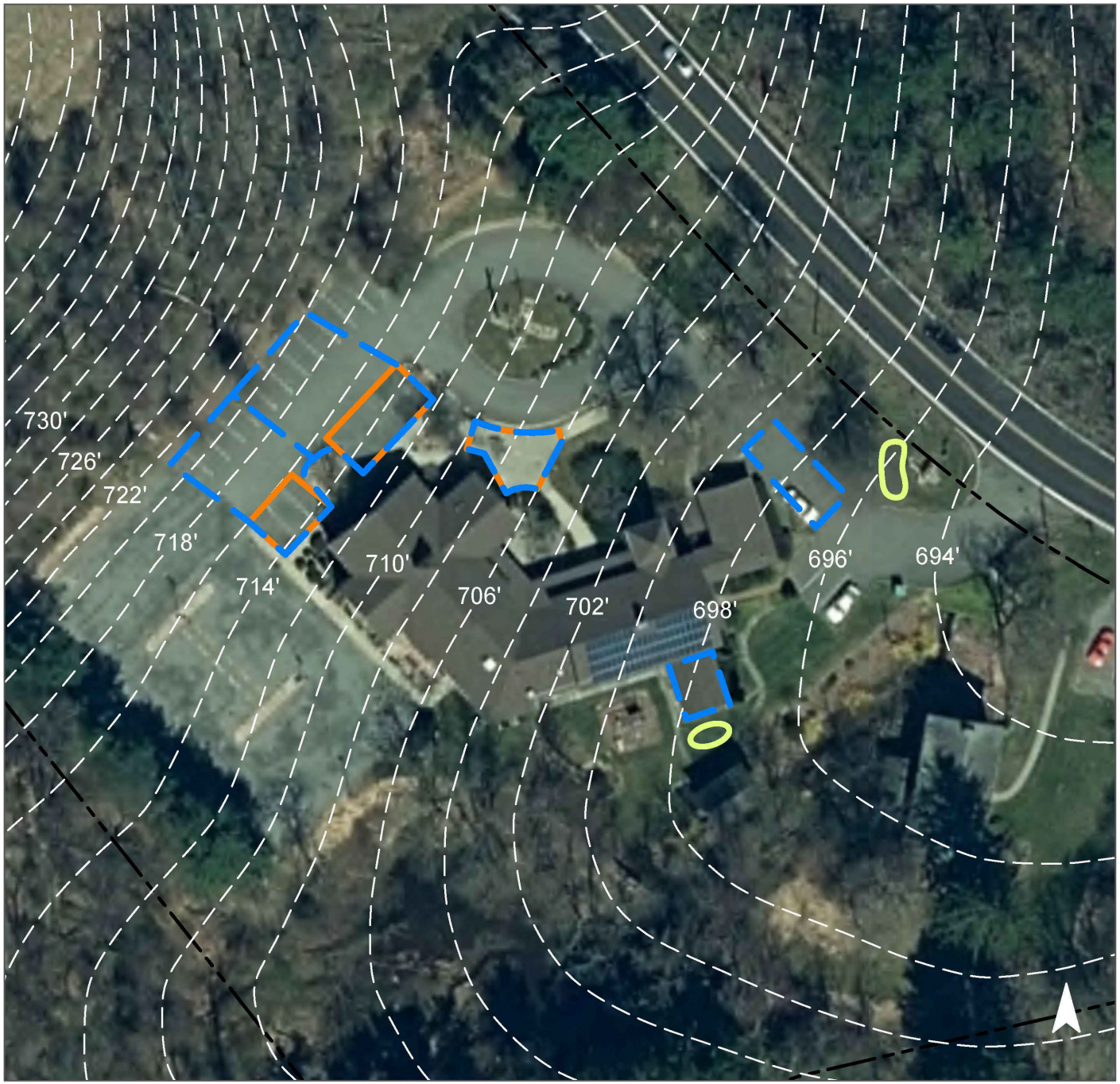


A rain garden can be installed near the south of the building using the disconnected downspouts to capture, treat, and infiltrate the stormwater runoff from the rooftop. Another rain garden can be installed around an existing catch basin near the driveway entrance to capture, treat, and infiltrate the stormwater runoff from the asphalt. A trench drain will be needed to intercept and redirect the driveway runoff. Existing parking spaces to the northwest of the building can be converted into pervious pavement to capture and infiltrate the stormwater runoff from the asphalt. The concrete walkway near the building entrance can be replaced with permeable pavers. 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 50"
16	52,338	2.5	26.4	240.3	0.041	1.63

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	1,095	0.032	6	2,280	0.09	275	$2,750
Pervious pavement	5,190	0.154	23	10,820	0.41	1,910	$47,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



Church of the Messiah

- bioretention system
- pervious pavement
- captured drainage area
- property line
- 2020 Aerial: NJOIT, OGIS

0 30' 60'

24. KAY ENVIRONMENTAL EDUCATION CENTER

Subwatershed: Lamington River

Site Area: 24,177,870 sq. ft.

Address: 200 Pottersville Road
Chester, NJ 07930

Block and Lot: Block 15, Lot 1

Pervious pavement can be installed in the parking spaces to capture the stormwater runoff from the pavement. A rain garden can be installed to capture and infiltrate stormwater runoff from 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"
0.27	65,755	3.2	33.2	301.9	0.051	1.80

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	0.012	2	860	0.03	130	$650
Pervious pavement	0.078	13	5,740	0.22	600	$15,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Kay Environmental Education Center

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

0 25' 50'

25. OLD TURNPIKE MIDDLE SCHOOL

Subwatershed: Cold Brook

Site Area: 997,124 sq. ft.

Address: 171 Old Turnpike Road
Tewksbury, NJ 07830

Block and Lot: Block 27, Lot 68.01

Two rain gardens can be installed adjacent to the entrance of the building and in the turfgrass south of the building to capture, treat, and infiltrate rooftop runoff. A section of parking spaces can be converted to 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"
21	212,600	10.2	107.4	976.1	0.166	5.83

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 systems	0.143	24	18,304	0.81	1,375	$6,875
Pervious pavement	0.449	75	9,073	0.40	3,080	$77,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Old Turnpike Middle School

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

0 50' 100'

26. OLDWICK PARK

Subwatershed: Cold Brook

Site Area: 528,992 sq. ft.

Address: 31 Old Turnpike Road
Whitehouse Station, NJ 07830

Block and Lot: Block 44, Lot 12

A cistern can be installed on the southern side of the building near a downspout to capture stormwater from the roof. The water can then be used for watering gardens, washing vehicles, or for other non-potable uses. Four downspout planter boxes can be constructed along the building to allow roof runoff to be reused. 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"
11	59,764	2.9	30.2	274.4	0.047	1.64

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
Planter boxes	n/a	3	n/a	n/a	4	$4,000
Rainwater harvesting	0.033	6	995	0.12	995 (gal)	$1,990

GREEN INFRASTRUCTURE RECOMMENDATIONS

Oldwick Park

- planter box
- rainwater harvesting
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0 20' 40'

27. TEWKSBURY TOWNSHIP LIBRARY

Subwatershed: Cold Brook

Site Area: 27,235 sq. ft.

Address: 31 Old Turnpike Road
Whitehouse Station, NJ
08889

Block and Lot: Block 44, Lot 11

Two rain gardens can be used to capture, treat, and infiltrate rooftop runoff. A downspout planter box can be constructed along the building to allow roof runoff to be captured and 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"
49	13,271	0.6	6.7	60.9	0.010	0.36

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	0.020	3	1,459	0.06	195	$975
Planter box	n/a	1	n/a	n/a	1 (box)	$1,000

GREEN INFRASTRUCTURE RECOMMENDATIONS

Tewksbury Township Library

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

0 10' 20'

28. TEWKSBURY TOWNSHIP MUNICIPAL BUILDINGS

Subwatershed: Cold Brook

HUC14 ID: 02030105050060

Site Area: 417,784 sq. ft.

Address: 167 County Road 517
Califon, NJ 07830

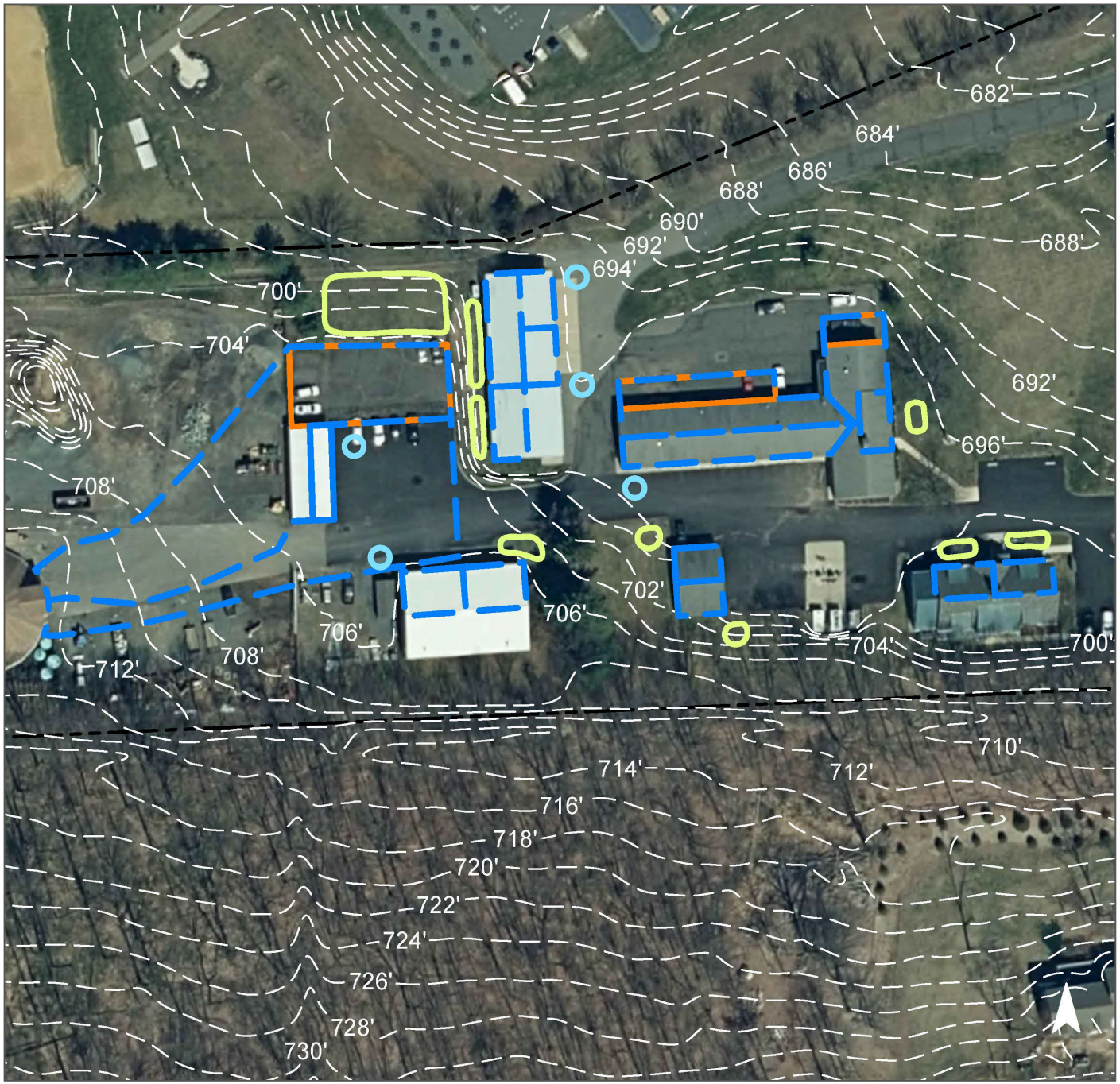
Block and Lot: Block 27, Lot 68.02

Rain gardens can be installed in multiple locations around the property to capture, treat, and infiltrate stormwater runoff from the rooftops. Most of these will require downspout disconnection and redirection. A rain garden can be installed to the northwest of the property to capture, treat, and infiltrate runoff from the asphalt. A trench drain will be needed. Cisterns can be installed near multiple buildings to divert and detain runoff from the rooftops via downspouts for non-potable future use, such as washing vehicles or watering the landscaping vegetation. The police vehicle parking lot and sections of existing parking spots can be converted into pervious pavement to capture and infiltrate stormwater runoff from the asphalt and the rooftops. This will require downspout disconnections. 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 49.4"
48	201,148	9.7	101.6	923.5	0.157	6.19

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	19,455	0.569	86	39,010	1.47	4,865	$48,650
Pervious pavement	24,455	0.715	106	49,030	1.84	7,795	$194,875
Rainwater harvesting	6,390	0.187	29	5,200	0.20	5,200 (gal)	$15,600

GREEN INFRASTRUCTURE RECOMMENDATIONS



Tewksbury Township Municipal Buildings

- bioretention system
- pervious pavement
- rainwater harvesting
- captured drainage area
- property line
- 2017 - 2018 USGS Lidar: NW New Jersey 6 County

0 50' 100'

29. ZION LUTHERAN CHURCH

Subwatershed: Cold Brook

Site Area: 104,636 sq. ft.

Address: 18 Miller Avenue
Oldwick, NJ 08858

Block and Lot: Block 42, Lot 1

Two rain gardens can be installed in the turfgrass areas adjacent to the building to capture, treat, and infiltrate stormwater runoff from the roof. Another rain garden can be installed in a parking lot island to capture, treat, and infiltrate stormwater runoff 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"
44	46,252	2.2	23.4	212.4	0.036	1.27

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	0.103	17	4,421	0.19	995	$4,975

GREEN INFRASTRUCTURE RECOMMENDATIONS

Zion Lutheran Church

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

0 20' 40'

30. OLDWICK ANIMAL HOSPITAL

Subwatershed: Lamington River

Site Area: 44,718 sq. ft.

Address: 130 Oldwick Road
Whitehouse Station, NJ
08889

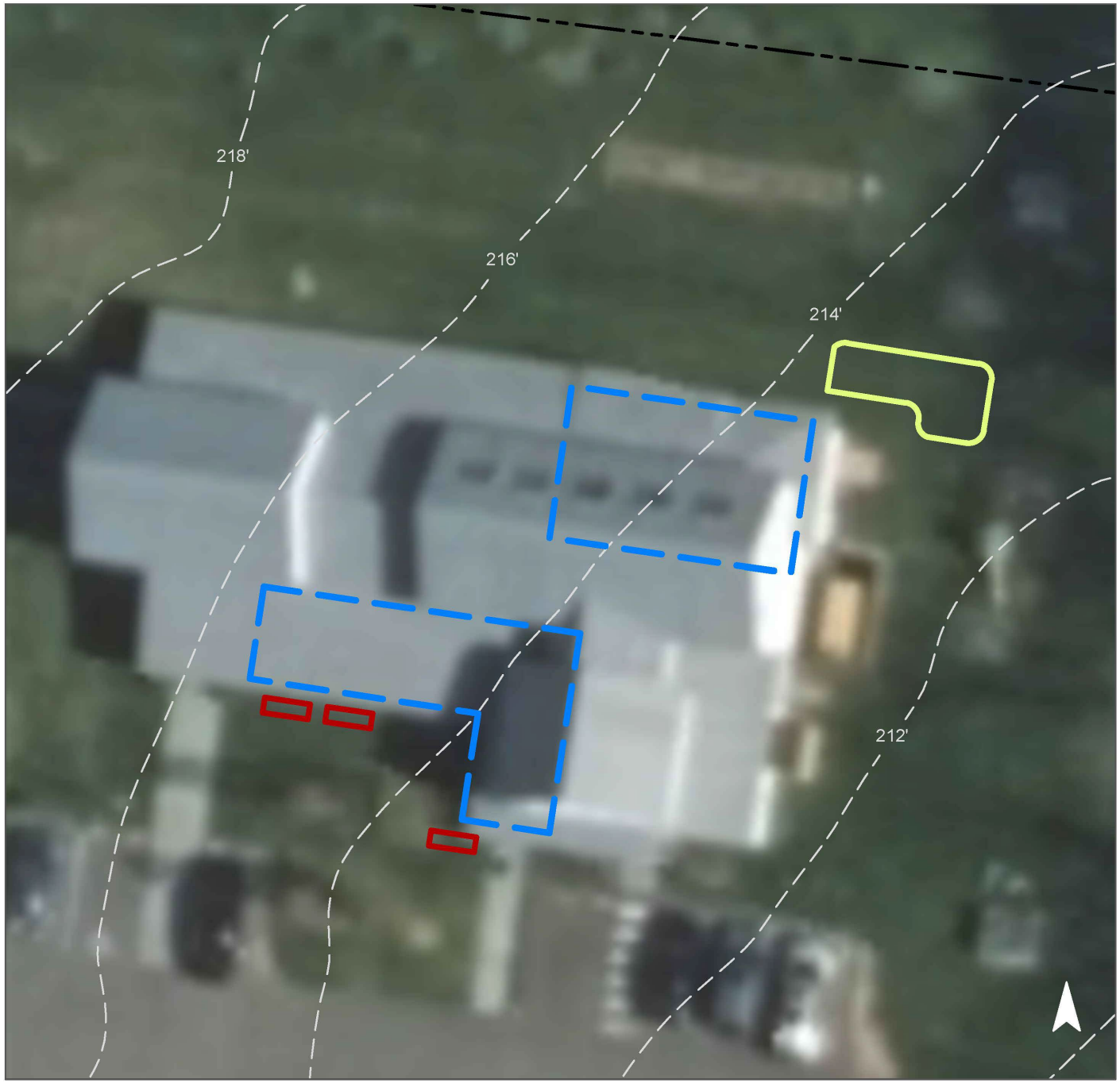
Block and Lot: Block 45, Lot 28

A rain garden can be installed in the turfgrass area to capture, treat, and infiltrate stormwater runoff from the roof. Downspout planter boxes can be constructed along the building to allow roof runoff to be captured and reused. 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"
61	27,479	1.3	13.9	126.2	0.021	0.75

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	741	0.03	165	$825
Planter boxes	n/a	2	n/a	n/a	3 (boxes)	$3,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Oldwick Animal Hospital

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

0 10' 20'

31. OLDWICK POST OFFICE

Subwatershed: Lamington River

Site Area: 21,980 sq. ft.

Address: 174 Lamington Road
Oldwick, NJ 08858

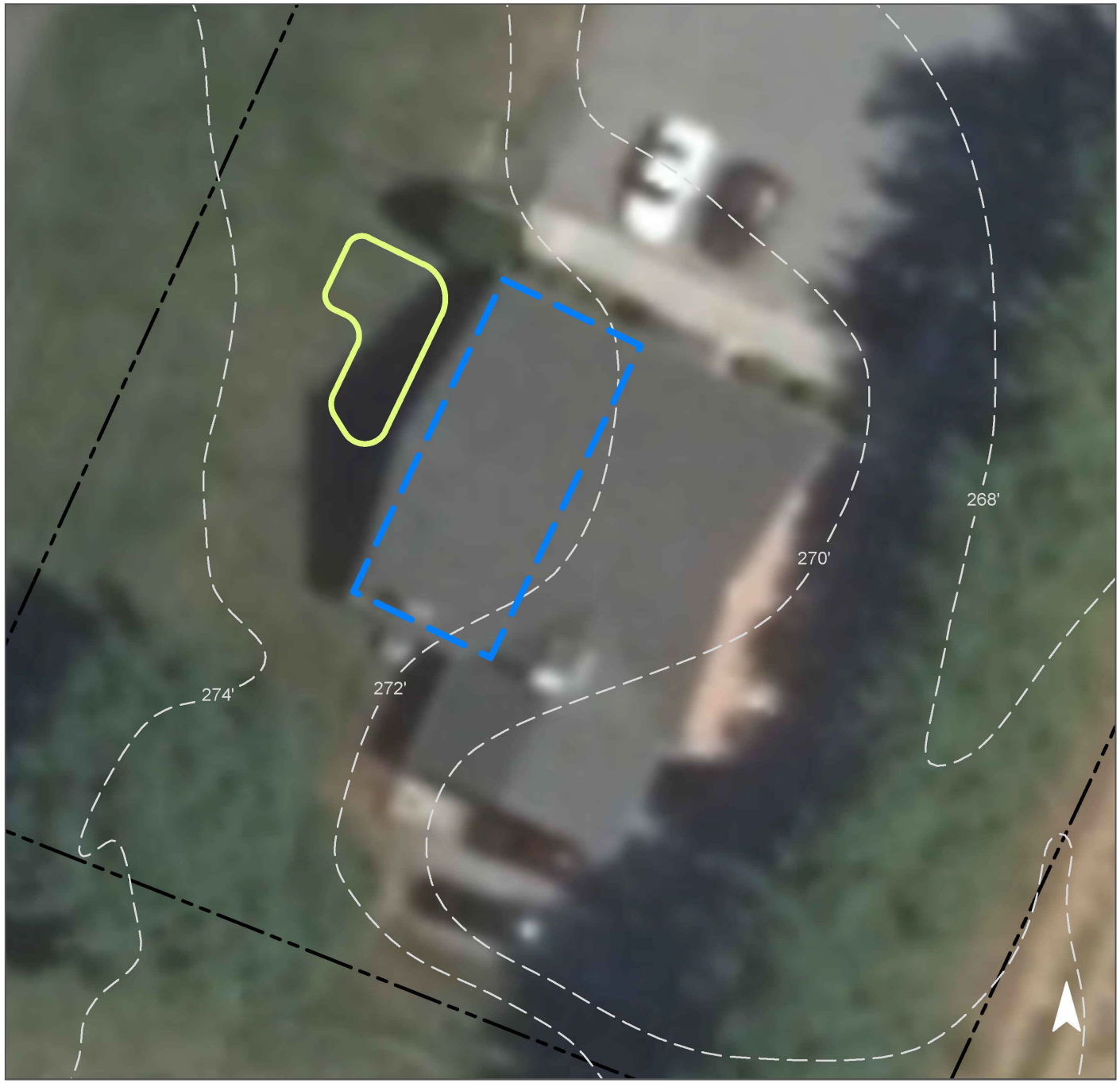
Block and Lot: Block 45, Lot 1.01

A rain garden can be installed on the west side of the building to capture, treat, and infiltrate stormwater 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"
45	9,842	0.5	5.0	45.2	0.008	0.27

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 system	0.024	4	1,825	0.07	225	$1,125

GREEN INFRASTRUCTURE RECOMMENDATIONS



Oldwick Post Office

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

0 10' 20'

32. FAIRMOUNT UNITED METHODIST CHURCH

Subwatershed: Lamington River

Site Area: 56,952 sq. ft.

Address: 253 Old Turnpike Road
Califon, NJ 07830

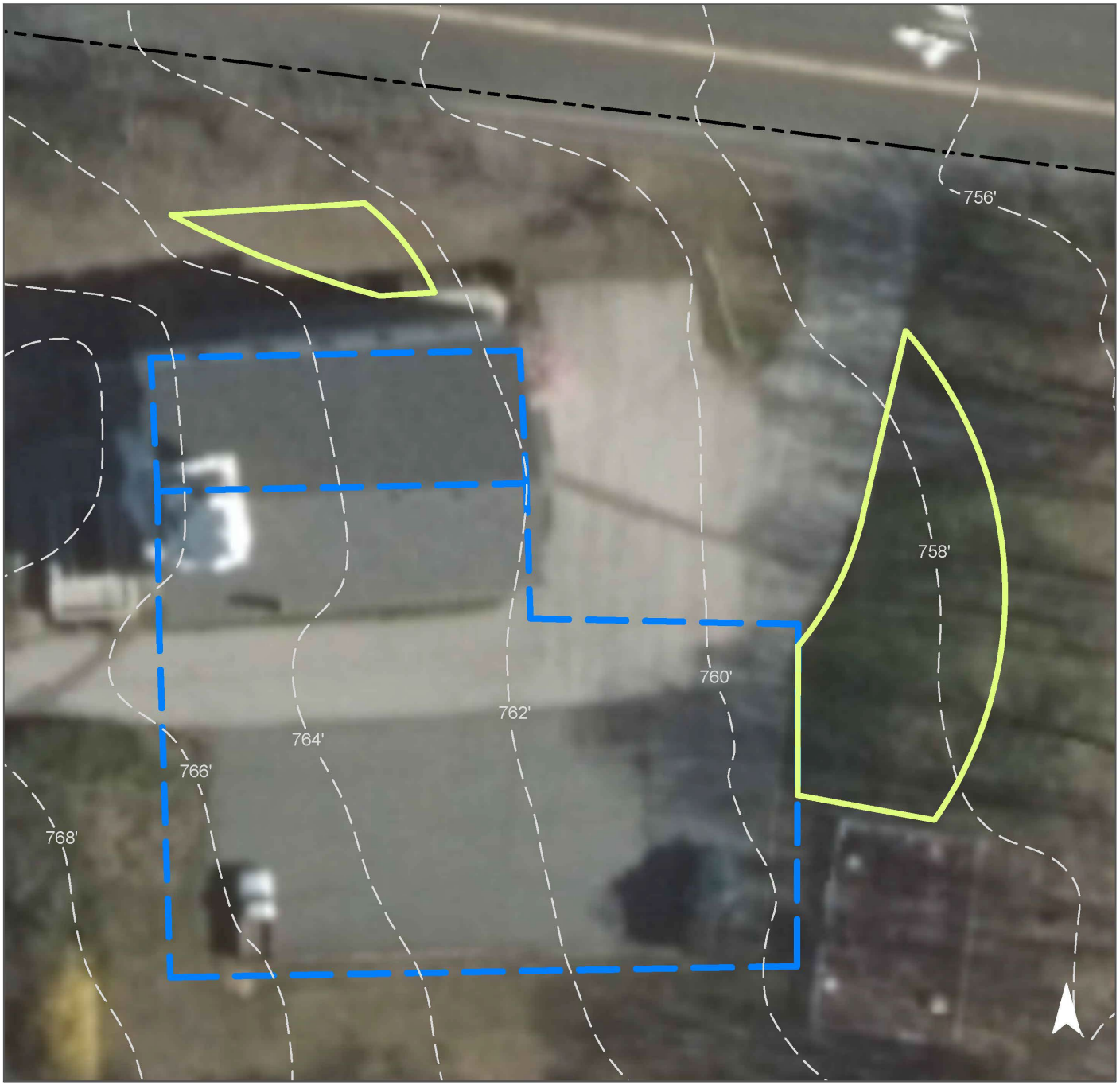
Block and Lot: Block 16, Lot 1,2.012

Rain gardens can be installed on the north side of the building and on the turfgrass area east of the parking lot to capture, treat, and infiltrate stormwater 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"
54	30,764	1.5	15.5	141.2	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	0.322	54	24,385	1.07	3,090	$15,450

GREEN INFRASTRUCTURE RECOMMENDATIONS



Fairmount United Methodist Church

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

0 15' 30'

33. POTTERSVILLE VOLUNTEER FIRE COMPANY

RAP ID: 1

Subwatershed: Lamington River

HUC14 ID: 02030105050130

Site Area: 16,327 sq. ft.

Address: 8 Hacklebarney Road
Pottersville, NJ 07979

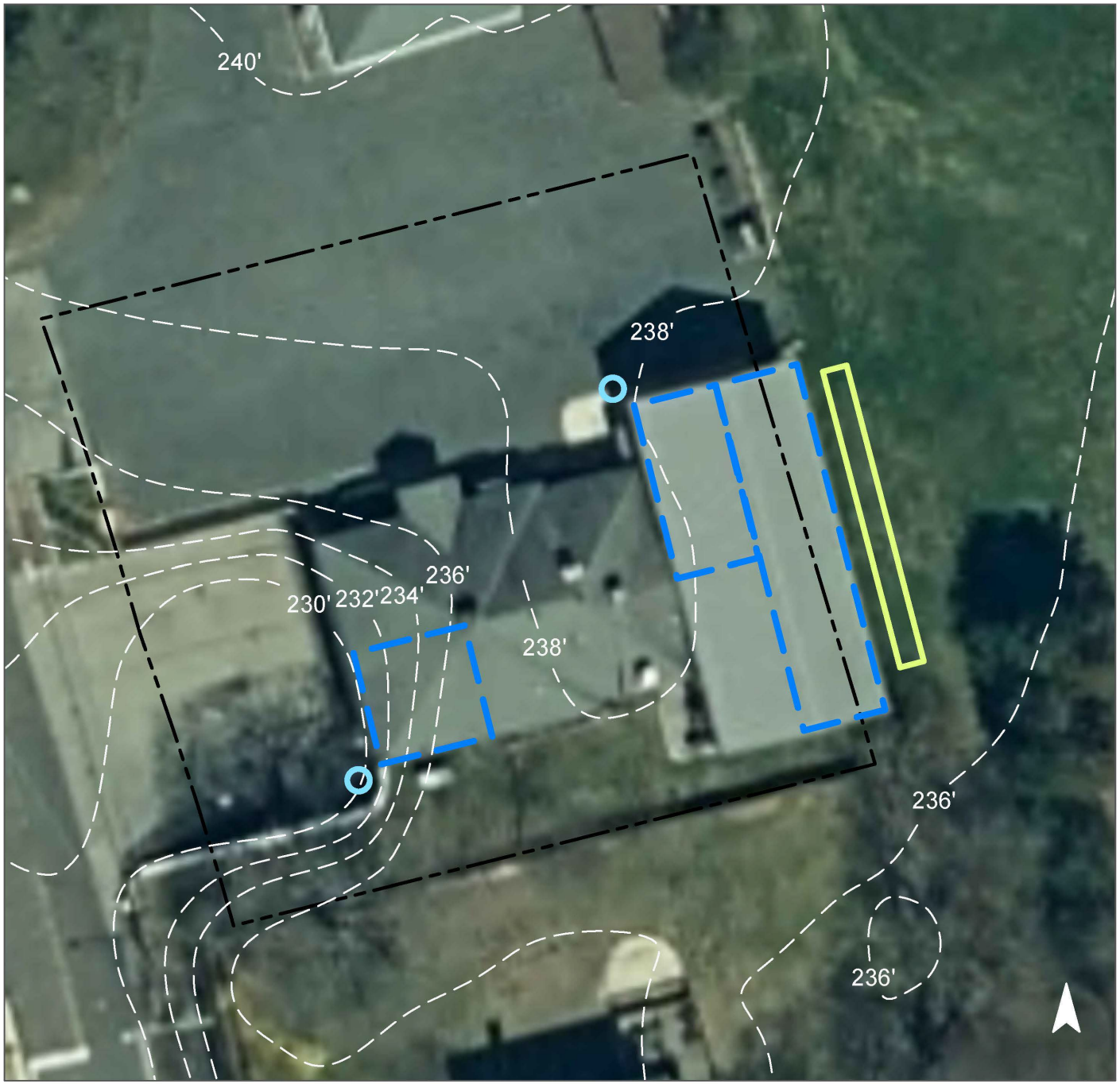
Block and Lot: Block 2, Lot 3

A rain garden can be installed in the grass area to the east of the building to capture, treat, and infiltrate the stormwater runoff from the rooftop. This would require downspout disconnections. Cisterns can be installed to the northeast and southwest of the building to divert and detain the stormwater runoff from the rooftop for later non-potable reuse such as washing vehicles. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure. An underdrain would be required.

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 49"
94	15,311	0.7	7.7	70.3	0.012	0.47

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	1,155	0.034	6	2,240	0.08	290	$2,900
Rainwater harvesting	1,085	0.031	4	850	N/A	850 (gal)	$2,550

GREEN INFRASTRUCTURE RECOMMENDATIONS



Pottersville Volunteer Fire Company

- bioretention system
- rainwater harvesting
- captured drainage area
- property line
- 2020 Aerial: NJOIT, OGIS

0 15' 30'

34. TEWKSBURY ELEMENTARY SCHOOL

Subwatershed: Lamington River

Site Area: 5,952,026 sq. ft.

Address: 109 Fairmount Road East
Whitehouse Station, NJ
08889

Block and Lot: Block 16, Lot 6

A rain garden can be installed in the turfgrass area on the west side of the building and on the turfgrass area in the parking lot to capture, treat, and infiltrate stormwater runoff from the roof. Parking spaces north of the building can be replaced with pervious pavement to capture and infiltrate stormwater runoff 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"
6	333,441	16.1	168.4	1,531.0	0.260	9.15

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	0.133	22	16,164	0.71	1,275	$6,375
Pervious pavement	0.371	62	24,662	1.08	2,540	$63,500

GREEN INFRASTRUCTURE RECOMMENDATIONS

Tewksbury Elementary School

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

0 75' 150'