

Transfer of Development Rights 5-Year Review Report

For

Township of Woolwich



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**Township of Woolwich
Gloucester County, New Jersey**

**Transfer of Development Rights
5-Year Review Report**

October 2013



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Gloucester County Engineering Department

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Part 1: Five-Year Transfer of Development Rights Update

Woolwich Township's 2008 Transfer of Development Rights ordinance identified 116 parcels in the Sending Area with 1335.75 credits. Recalculation of the assigned credits in that ordinance notes a minor error in addition—the actual number of credits allocated was 1,343.75. Subsequent to that ordinance, there have been some subdivisions of parcels (with related subdivision of credits) and there has been some refinement to available mapping. As a result, recalculation of Sending Area credits in 2013 results in a total of 1357.50 credits as shown on **Table 1**.

Table 1
Sending Area Parcels--Part 1

Block Lot	Owner	Owner Address	City	Acres	Zoning	Credits
14	28 GAROZZA, CATHERINE MRS	140 MILL ROAD	WOOLWICH TWP, NJ 08085	11.65	R-1	3.00
14	29 GAROZZA, CATHERINE MRS	140 MILL ROAD	WOOLWICH TWP, NJ	5.32	R-1	1.00
14	30 DESANTIS, MARY ANN	156 MILL ROAD	WOOLWICH TWP, NJ 08085	18.00	R-1	2.50
31	3.01 SWEDESBORO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	50.06	R-1	17.50
31	4 SWEDESBORO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	62.00	R-1	17.75
31.01	12 SWEDESBORO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	14.81	R-1	2.50
38	4 DELUCA ENTERPRISES INC	975 EASTON RD STE 200	WARRINGTON, PA	66.38	R-1	Approved for 31 31.00
38	5 SCHMIDT, FRANCES A & DONALD W	600 WOODSTOWN RD	WOOLWICH TWP, NJ	12.46	R-1	3.00
39	1 HAINES, CHARLES & MARGARET P	323 N MAIN ST	WOODSTOWN, NJ	10.18	R-1	4.25
39	2 SORBELLO, THOMAS & MARIE	216 PORCHES MILL ROAD	SWEDESBORO, NJ	13.54	R-1	5.00
39	3 SORBELLO, THOMAS	216 PORCHES MILL ROAD	SWEDESBORO, NJ	12.82	R-1	4.75
39	4 HAINES, CHARLES & MARGARET P	323 N MAIN ST	WOODSTOWN, NJ	15.48	R-1	6.75
39	5 DELUCA ENTERPRISES INC	975 EASTON RD STE 200	WARRINGTON, PA	18.99	R-1	Above 38/4
40	9-11			53.94	R-1	Approved for 23 23.00
40	12 SWEDESBORO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	25.36	R-1	4.50
40	14 SWEDESBORO INC	2387 KINGS HIGHWAY	WOOLWICH TWP, NJ	67.22	R-1	16.25
41	1 ROBERTS, ARTHUR C JR & MARION E	141 HARRISONVILLE RD.	WOOLWICH TWP, NJ	47.73	R-1	16.75
41	8 SORBELLO, THOMAS & MARIE ETALS	216 PORCHES MILL ROAD	SWEDESBORO, NJ	42.65	R-1	9.25
41	10			34.32	R-1	4.75
42	2 SORBELLO, GRACE	885 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	24.03	R-1	9.50
42	2.03 SORBELLO, FRANK M & JENNIE L	1015 OLDMANS CREEK RD.	WOOLWICH TWP, NJ	16.30	R-1	5.75
43	10 ROBERTS, ARTHUR C JR & MARION E	141 HARRISONVILLE RD.	WOOLWICH TWP, NJ	36.78	R-1	8.75
43	3 KING, DAVID & FEUCHT, CAROLINE	107 DAVIDSON ROAD	WOOLWICH TWP, NJ	16.12	R-1	1.00
43	5 ROBERTS, KENNETH A & WHITE, HELEN A	141 HARRISONVILLE ROAD	WOOLWICH TWP., NJ	9.64	R-1	1.00
43	13 DIBELLA, JOSEPH & WRIGHT, ROSEMARY	421 WHIG LANE ROAD	PILES GROVE, NJ	126.79	R-1	Approved for 59 59.00
43	14 DIBELLA, JOSEPH & WRIGHT, ROSEMARY	421 WHIG LANE ROAD	PILES GROVE, NJ	1.00	R-1	Above 43/13

Table 1
Sending Area Parcels--Part 2

Block Lot	Owner	Owner Address	City	Acres	Zoning	Credits	
44	7 CHIUCCARELLO, MICHAEL	610 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	55.12	R-1	Approved for 25	25.00
44	8 DIBELLA, MICHAEL S & JANE B	707 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	62.26	R-1	Approved for 38	38.00
44	8.02 DIBELLA, MICHAEL S & JANE B	707 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	31.89	R-1	Above 44/8	
46	3.01 CALI, ANNA ESTATE OF	201 MONROEVILLE RD.	WOOLWICH TWP. NJ	77.61	R-1	10.50	
46	6 DAVIDSON, ELMA C.	121 DAVIDSON ROAD	WOOLWICH TWP. NJ	30.43	R-1	0.75	
46	8 THOMPkins, JOHN SR & MABEL L TRUSEE	1039 EXCELSIOR DRIVE	ASTON, PA	26.09	R-1	3.00	
46	9 DIBELLA, JOSEPH A	184 DAVIDSON ROAD	WOOLWICH TWP, NJ 08085	17.67	R-1	3.00	
46	9.01 FINOCCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP. NJ	16.33	R-1	3.50	
46	11 FINNOCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP. NJ	14.04	R-1	5.50	
46	11.02 FINNOCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP. NJ	13.91	R-1	5.50	
46	11.03 FINNOCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP. NJ	14.02	R-1	5.50	
46	12 DIBELLA, CARMEN A & JOSEPHINE	525 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	6.00	R-1	1.25	
46	12.01 DIBELLA, CARMEN A & JOSEPHINE	525 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	17.47	R-1	6.75	
47	2 HORNER, WILLIAM C	263 FRANKLINVILLE RD	WOOLWICH TWP. NJ	29.61	R-1	10.50	
47	2.01 HORNER, WILLIAM C	263 FRANKLINVILLE RD	WOOLWICH TWP. NJ	10.89	R-1	4.75	
47	4 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP. NJ	28.71	R-1	8.50	
47	5.02 FINOCCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP. NJ	26.52	R-1	6.75	
47	5.03 FINNOCHIARO, JOSEPH A	503 W 45TH ST APT 3E	NEW YORK, NY	12.67	R-1	5.75	
47	5.04 FINOCCHIARO, MARY LOUISE	343 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	8.82	R-1	4.00	
48	1 AVSEC, TIMOTHY & DIANE	431 FRANKLINVILLE RD.	WOOLWICH TWP, NJ	33.00	R-1	4.25	
48	9.01 SUIT, CURTIS & CHRISTINE	480 MONROEVILLE RD.	WOOLWICH TWP, NJ 08085	12.05	R-1	2.50	
48	10 SUIT, CURTIS D & CHRISTINE O	480 MONROEVILLE RD.	WOOLWICH TWP. NJ	10.03	R-1	2.25	
48	4.01 PETRONGOLO EVEGREEN PLANTATION	7541 WEYMOUTH ROAD	HAMMONTON, NJ	47.01	R-1	19.75	
49	2			60.93	R-1	Approved for 40	40.00
50	2			20.60	R-1	4.75	
50	4 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP. NJ	14.56	R-1	1.00	
55	1 GROPPENBACHER, @ KIRK HORNER	PO BOX 108	HARRISONVILLE, NJ	80.30	R-1	19.75	
55	3 VANDERGRACHT, TRACIE	240 FRANKLINVILLE RD.	WOOLWICH TWP. NJ	18.08	R-1	Approved for 8	8.00
55	4.01 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP. NJ	15.54	R-1	2.75	
55	4.02 HORNER, WILLIAM C	263 FRANKLINVILLE RD.	WOOLWICH TWP. NJ	9.00	R-1	3.75	
55	7 DORSETT, LAWRENCE & ANN	169 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	70.38	R-1	18.25	
56	1 BUTLER, GLADYS G	170 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	106.00	R-1	18.25	
56	3 CARDILLO, RUSSELL ESTATE OF	52 SADDLEBROOK DRIVE	SEWELL, NJ	25.73	R-1	4.75	
1	1			10.00	R-2	2.75	
1	3 MACCARONE, SAMUEL	2200 OLDMANS CREEK RD	WOOLWICH TWP, NJ	124.00	R-2	57.25	
1	4 CATALANO, SALVATORE & ETALS	216 PORCHES MILL ROAD	WOOLWICH TWP. NJ	136.00	R-2	54.75	
1	5			6.68	R-2	3.00	
1	5.01 SORBELLO, THOMAS EXECUTOR & ETALS	216 PORCHES MILL ROAD	SWEDESBORO, NJ	28.02	R-2	15.25	
1	6 VS WOOLWICH, INC.	1200 OAK POINT AVE	BRONX, NY	200.96	R-2	53.75	
1	8 RIZZI, JOSEPH H & FLORENCE	2012 OLDMANS CREEK RD	WOOLWICH TWP, NJ	129.06	R-2	34.25	
1	11 MAUGERI, ANNA R	1991 OLDMANS CREEK RD	WOOLWICH TWP, NJ 08085	10.54	R-2	3.75	
2	10 WMP REALTY CO.	PO BOX 2170	BOOTHWYN, PA	79.00	R-2	36.00	
2	11 WMP REALTY CO.	PO BOX 2170	BOOTHWYN, PA	12.00	R-2	6.00	
2	12 MAUGERI, ANNA R	1991 OLDMANS CREEK RD	WOOLWICH TWP, NJ	96.35	R-2	37.25	
2	13 NICOLosi BROS	2063 OLDMANS CREEK RD.	WOOLWICH TWP, NJ	83.56	R-2	29.25	
2	14 CATALANO, SALVATORE & ETALS	216 PORCHES MILL ROAD	WOOLWICH TWP. NJ	15.86	R-2	6.00	
2	15 CATALANO, SALVATORE & ETALS	216 PORCHES MILL ROAD	WOOLWICH TWP. NJ	68.55	R-2	20.25	
2	16 CJR REALTY CO	P O BOX 2170	BOOTHWYN, PA.	46.20	R-2	19.75	
2	18 MARINO, RUSSELL S & ETALS	1211 ELDERON DRIVE	WILMINGTON, DE	33.27	R-2	7.50	
2	23 DESTEFANO, EDWARD & KATHLINE	1276 TOWNSHIP LINE RD.	WOOLWICH TWP, N J	56.38	R-2	15.25	
11	1 MACCARONE, SAMUEL	341 STONE MTG. HOUSE RD.	WOOLWICH TWP. NJ	35.46	R-2	9.00	
12	6 VIERECK, LARRY E & DAVID W	110 VIERECK ROAD	WOOLWICH TWP, NJ	47.00	R-2	26.50	

Table 1
Sending Area Parcels--Part 3

Block	Lot	Owner	Owner Address	City	Acres	Zoning	Credits	
13	2				53.23	R-2	21.00	
13	2.02	VIERECK, LARRY E & DAVID W	110 VIERECK ROAD	WOOLWICH TWP, NJ	11.96	R-2	6.00	
13	3	RACITE, DOMINIC	119 CENTER SQUARE ROAD	LOGAN TWP, NJ	21.80	R-2	9.50	
13	4	SARBELLO, ROSE M & JOSEPH ETAL	80 PANCOAST ROAD	WOOLWICH TWP, NJ	17.66	R-2	9.00	
13	5	BELFIORE @ C EASTLACK	361 PAULSBORO ROAD	WOOLWICH TWP, NJ	8.97	R-2	4.50	
14	13	STILES, LYNNE H & ETALS	388 GRISCOM DRIVE	SALEM, NJ	79.00	R-2	32.50	
14	5	SANDY HILL FARMS @ C EASTLACK	361 PAULSBORO ROAD	WOOLWICH TWP, NJ	6.28	R-2	3.50	
14	5.01	SANDY HILL FARMS @C EASTLACK	361 PAULSBORO ROAD	WOOLWICH TWP, NJ	33.82	R-2	15.75	
14	5.03	BELFIORE @ C EASTLACK	361 PAULSBORO ROAD	WOOLWICH TWP, NJ	4.41	R-2	2.50	
14	6.02	FARKAS, LADISLAV & MAUREEN	439 PAULSBORO ROAD	WOOLWICH TWP, NJ 08085	15.42	R-2	9.00	
14	9	MUSUMECI, PETER & RENARD	447 PAULSBORO ROAD	WOOLWICH TWP, NJ	7.75	R-2	4.25	
14	12				57.10	R-2	Approved for 31	31.00
17	6	GAROZZA, CATHERINE	140 MILL ROAD	WOOLWICH TWP, NJ	60.25	R-2	21.00	
19	1	PREVITERA, ALFIO & CATHLEEN	191 MILL ROAD	WOOLWICH TWP, NJ	32.00	R-2	3.00	
19	2	GIESCHEN, DANIEL D & ALISON V	382 ASBURY STATION ROAD	WOOLWICH TWP, NJ	8.49	R-2	2.00	
19	4	GAROZZA, CATHERINE MRS	140 MILL ROAD	WOOLWICH TWP, NJ	35.30	R-2	7.00	
20	1	GARDNER, PHILLIP	410 MULICA HILL RD	GLASSBORO, NJ	32.82	R-2	3.25	
20	3	CURIALE, ANTHONY & CHRISTINA	369 ASBURY STATION RD	WOOLWICH TWP, NJ	18.00	R-2	2.00	
20	4	HELM, WM W & EILEEN	15 MILL ROAD	WOOLWICH TWP, NJ	42.80	R-2	15.25	
20	6	HELM, WM W & EILEEN	15 MILL ROAD	WOOLWICH TWP, NJ	25.00	R-2	6.50	
21	1	KING'S VIEW ESTATES LLC	700 LANTERN WAY	SEWELL, NJ	46.20	R-2	23.50	
21	2	KING'S VIEW ESTATES LLC	570 MANTUA BLVD	SEWELL, NJ	13.00	R-2	1.25	
21	3	KING'S VIEW ESTATES LLC	700 LANTERN WAY	SEWELL, NJ	15.30	R-2	7.00	
21	4	KING'S VIEW ESTATES LLC	700 LANTERN WAY	SEWELL, NJ	55.60	R-2	24.25	
21	5	BEIER, ERNEST JR & ELINOR	825 KINGS HIGHWAY	MICKLETON, NJ	13.00	R-2	5.50	
24	2	WMP REALTY, CO.	PO BOX 2170	BOOTHWYN, PA	22.73	R-2	5.75	
24	4.14	MERCER, CHRISTOPHER T & TIFFANY C	22 VICTORIA DRIVE	WOOLWICH TWP, NJ	10.09	R-2	1.25	
28	1	WMP REALTY CO	PO BOX 2170	BOOTHWYN, PA	40.00	R-2	15.25	
54	3	LAUGHLIN JR, JOSEPH D & JOANN	PO BOX 37	SWEDESBORO, NJ 08085	15.66	R-2	4.25	
54	9.01	THOMAS, WILBERT A III & MARGUERITE	110 FRANKLINVILLE RD	WOOLWICH TWP, NJ 08085	11.20	R-2	5.75	
57	7	CAVALLARO, ALFRED L, ETAL	167 COUNTY HOUSE ROAD	MT ROYAL, NJ 08061	16.17	R-2	8.75	
1	2	MAUGERI, ANNA R	1991 OLDMANS CREEK RD	WOOLWICH TWP, NJ	76.40	R-2	29.25	
5	6	WRIGHT, ROSINA	223 HIGH HILL ROAD	WOOLWICH TWP, NJ 08085	64.85	R-3	10.00	
5	6.05	FARE, CHARLES J. SR., & CAROL L	231 HIGH HILL ROAD	WOOLWICH TWP, NJ 08085	11.79	R-3	1.75	
5	6.06	VILLANOVA, KENNETH R JR & SUSAN	233 HIGH HILL ROAD	WOOLWICH TWP, NJ 08085	11.12	R-3	1.75	
25	5	MOXLEY, MILTON R & ELMA L	2061 KINGS HIGHWAY	WOOLWICH TWP, NJ	7.63	5AC	1.00	
26	1	ARROYO, EFRAIN, JR. & NEREIDA	2027 OLDMANS CREEK ROAD	WOOLWICH TWP, NJ 08085	22.30	5AC	2.50	
36	4	SCHMIDT, FRANCES & DONALD	600 WOODSTOWN ROAD	WOOLWICH TWP, NJ	23.51	5AC	1.50	
36	5	HARGRAVE, JAMES D	20 OLIPHANTS MILL ROAD	WOOLWICH TWP, NJ 08085	31.60	5AC	3.25	
36	10	SCHMIDT, FRANCES & DONALD ETALS	600 WOODSTOWN ROAD	WOOLWICH TWP, NJ 08085	10.24	5AC	1.00	
Total					Acres	Credits		
R-1 TOTAL					1836.84			
R-2 TOTAL					2126.30			
R-3 TOTAL					87.76			
5AC TOTAL					95.28			
GRAND TOTAL					4146.18	1102.50	255.00	
						1357.50	Total Credits	

Since 2008, various properties have entered into participation in land preservation programs and restrictions have been placed on other parcels which have retired the development credits associated with those parcels. In total, these activities have retired 307.50 credits as detailed on **Table 2** and Appendices 1, 2, & 3.

Table 2
Retired Sending Area Credits

Block Lot	Owner	Owner Address	City	Acres	Zoning	Credits
39	2 SORBELLO, THOMAS & MARIE	216 PORCHES MILL ROAD	SWEDESBORO, NJ	13.54	R-1	5.00
39	3 SORBELLO, THOMAS	216 PORCHES MILL ROAD	SWEDESBORO, NJ	12.82	R-1	4.75
39	4 HAINES, CHARLES & MARGARET P	323 N MAIN ST	WOODSTOWN, NJ	15.48	R-1	6.75
43	13 DIBELLA, JOSEPH & WRIGHT, ROSEMARY	421 WHIG LANE ROAD	PIESGROVE, NJ	126.79	R-1	Approved for 59 59.00
43	14 DIBELLA, JOSEPH & WRIGHT, ROSEMARY	421 WHIG LANE ROAD	PIESGROVE, NJ	1.00	R-1	Above 43/13
44	7 CHIUCARELLO, MICHAEL	610 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	55.12	R-1	Approved for 25 25.00
44	8 DIBELLA, MICHAEL S & JANE B	707 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	62.26	R-1	Approved for 38 38.00
44	8.02 DIBELLA, MICHAEL S & JANE B	707 RUSSELL MILL ROAD	WOOLWICH TWP, NJ	31.89	R-1	Above 44/8
46	3.01 CALI, ANNA ESTATE OF	201 MONROEVILLE RD.	WOOLWICH TWP, NJ	77.61	R-1	10.50
46	6 DAVIDSON, ELMA C.	121 DAVIDSON ROAD	WOOLWICH TWP, NJ	30.43	R-1	0.75
46	8 THOMPSON, JOHN SR & MABEL L TRUSEE	1039 EXCELSIOR DRIVE	ASTON, PA	26.09	R-1	3.00
46	9 DIBELLA, JOSEPH A	184 DAVIDSON ROAD	WOOLWICH TWP, NJ 08	17.67	R-1	3.00
46	9.01 FINOCCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP, NJ	16.33	R-1	3.50
47	4 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP, NJ	28.71	R-1	8.50
47	5.02 FINOCCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP, NJ	26.52	R-1	6.75
47	5.03 FINOCCHIARO, JOSEPH A	503 W 45TH ST APT 3E	NEW YORK, NY	12.67	R-1	5.75
49	2			60.93	R-1	Approved for 40 40.00
55	1 GROPPENBACHER, @ KIRK HORNER	PO BOX 108	HARRISONVILLE, NJ	80.30	R-1	19.75
55	4.01 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP, NJ	15.54	R-1	2.75
1	4 CATALANO, SALVATORE & ETALS	216 PORCHES MILL ROAD	WOOLWICH TWP, NJ	136.00	R-2	54.75
5	6 WRIGHT, ROSINA	223 HIGH HILL ROAD	WOOLWICH TWP, NJ 08	64.85	R-3	10.00
Total				912.55		145.5 162
						307.50 Total Credits

In addition, the developer of the Auburn Road Receiving Area #2 has retained ownership of 82.75 credits with intent to utilize those credits toward the overall development of that Receiving Area where demand exists for 117 credits. These credits are detailed on **Table 3**.

Table 3
Sending Area Credits Held By Receiving Area #2 Developer

Block	Lot	Owner	Owner Address	City	Acres	Zoning	Credits
28	1	WMP REALTY CO.	PO BOX 2170	BOOTHWYN, PA	41.62	R-2	15.25
2	10	WMP REALTY CO.	PO BOX 2170	BOOTHWYN, PA	79	R-2	36.00
24	2	WMP REALTY CO.	PO BOX 2170	BOOTHWYN, PA	23.62	R-2	5.75
2	11	WMP REALTY CO.	PO BOX 2170	BOOTHWYN, PA	12	R-2	6.00
2	16	CJR REALTY CO	PO BOX 2170	BOOTHWYN, PA.	46.2	R-2	19.75
TOTAL					202.44		82.75

Taken together, during the initial five years of TDR program implementation 390.25 development credits have either been retired or reserved for use by Receiving Area developers. This group of 390.25 credits represents 28.7% of all designated development credits, thereby meeting the statutory test for substantial progress in retiring or utilizing development credits.

Part 2: Sewer Service

Appendix 4 contains a sewer planning update from Director of Community Development, Matthew Blake. Lack of sewer availability within the Regional Center alone has crippled the ability for further utilization of development credits beyond Receiving Area #2. The provision of sewer service to the Regional Center is critical to the implementation of Receiving Area #1.

Part 3: Revisions to Receiving Area #1

Based on the adjustments detailed in Part 1 above, there are 967.25 development credits remaining in the Sending Area, exclusive of those held by the developer of the Auburn Road Receiving Area #2. 34.25 of these credits are required to complete Receiving Area #2.

The remaining 933.00 credits will support substantially less development in the Route 322 Receiving Area #1 than was envisioned in the 2008 TDR plan (Appendix 5). Furthermore, that 2008 plan was in part to be compatible with the Woolwich Adult Settlement Agreement executed in 2003 with addendums in 2004. That agreement allowed, in part, a senior community of up to 1,029 market rate units and an associated golf course; up to 104 affordable age-restricted units within the 1,029 unit community; and funding for 39 units of regional contribution agreements ("RCAs").

The agreement also permitted the construction of 1.2 million to 2.9 million square feet of various non-residential uses.

The settlement agreement is now considered inoperable with respect to the residential component but not the non-residential component. In fact, the Wolfson Group has secured general development plan (GDP) approval for 1,498,288 square feet of commercial/retail and restaurant uses in three phases known as Woolwich Commons, Woolwich Crossings and Main Street at Woolwich. Woolwich Commons received preliminary and final major site plan approval in October 2013. The GDP concept is shown in the Proposed New Receiving Area Concept – G (Appendix 6).

The Woolwich Adult residential component would have occurred to the north of the non-residential component, on both sides of Kings Highway within the Regional Center. This land is now available for residential development within a Receiving Area context, adjacent to the proposed large retail complexes, forming a compact, walkable environment.

In addition, the pace of development of the substantial retail concentration near the Turnpike entrance (the "Wolfson" development) has accelerated to the point that other developers of retail or mixed use commercial space may find it difficult to secure large numbers of tenants for intensively developed mixed use projects elsewhere in the Receiving Area #1.

As documented in the Preliminary Real Estate Market Analysis Update (Appendix 8), there has also been both a significant slowing in the pace of development in Gloucester County and Woolwich Township since 2006, as well as a reduction in the amount of future development forecast by the Delaware Valley Regional Planning Commission for

Woolwich. In particular, the pace of development in Gloucester County and Woolwich in the 2007 to 2013 period has been at 50% the pace of previous years. Previous forecasts anticipated nearly 6,600 housing units in Woolwich by 2013; the current estimates are only 3,515. Similarly, earlier forecasts expected full build-out of Woolwich housing potential by 2030, with nearly 32,000 residents by that point. Current DVRPC forecasts anticipate a population of slightly more than 23,000 by 2040.

Given these factors, planning for the Receiving Area #1 needs to be adjusted to assure that the principles imbedded within the Woolwich Regional Center plan—the promotion of traditional neighborhood development; the creation of a sustainable, diverse, and mixed use community; and the utilization of development patterns that support walkability and de-emphasize local automotive traffic—can still be achieved in the context of diminished demand and reduced availability of development credits.

As a result, it seems reasonable to compact Receiving Area #1 in a manner that allows two (2) other parcels within the original Receiving Area #1 to be added to the Sending Area. In addition, six (6) other parcels outside of the original Receiving Area #1 have been selected for inclusion in the Sending Area (Appendices 1 & 3). These parcels were identified during the course of the 5-year review. This adds 110.25 additional development credits to the supply available to support compact development in the Receiving Areas. Adding these 110.25 credits to the 933.00 (above) results in approximately 1,043.25 credits that need to be transferred into Receiving Area #1. Alternatively, some portion of these credits may be retired through continued farmland and open space preservation efforts of the Township.

Within this context, it became evident to the TDR Work Group to consider major changes to the core mixed-use area along Swedesboro-Paulsboro Road as contained in the 2008 TDR Plan. Through the course of eight (8) TDR Work Group meetings beginning in February 2013 and numerous 322 Corridor Stakeholder meetings, various versions of a new plan for the development of Receiving Area #1 and the Regional Center were developed. This culminated in Proposed New Receiving Area Concept – G (Appendix 6). The proposed new regional center is approximately 1,576 acres or 2.5 square miles and will consist of approximately 2,300 residential units of various types and a large amount of non-residential development.

A Proposed New Receiving Area Parcels Table is enclosed as Appendix 7.

A Preliminary Real Estate Market Analysis Update is enclosed as Appendix 8.

A School Attendance Estimation for Revised Receiving Area #1 is enclosed as Appendix 9.

Appendix 1
Sending Parcel Table

Woolwich Twp. TDR Sending Parcels
(Modified 5-Year Review - revised 10/9/13)

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					SOIL CONSTRAINTS								Notes:
BLOCK	LOT	2011 Tax Map ACRES	2006 ACRES	NET 2006 ACRES*	SLIGHT	MODERATE	SEVERE	YIELD UNITS	TDR Credits	Rounded credits			
14.00	28.00	11.65	13	11.44	5.992	0	5.448	6	3.15	3.00	3B, QFARM		Smaller lot area in 2011 tax map, credits to remain
14.00	29.00	5.32	5.32	4.68	0.46	0	4.22	2	0.35	1.00	3B, QFARM		Per ordinance-1 Credit minimum, 0.25 + 0.75=1
14.00	30.00	18	16.75	14.74	4.685	0	9.33	7	2.60	2.50	3B, QFARM		1.69 acre bldg lot excluded
31.00	3.01	50.06	50.06	44.05	34.69	0	9.36	22	17.61	17.50	Class 3A		
31.00	4.00	62	61.71	54.30	33.05	2.17	19.08	27	17.54	17.75	Class 4A		
31.01	12.00	14.81	14.81	13.03	4.87	0	9.65	7	2.70	2.50	Class 4A		
38.00	4.00	66.37	66.38	58.41	33.739	19.5	5.171	29	Approved w/ BI 39, L5 for 31 Units*		3B, QFARM		
38.00	5.00	12.46	11.45	10.08	5.92	0.00	4.16	5	3.08	3.00	3B, QFARM		1 acre bldg lot excluded
39.00	1.00	10.18	10.08	8.87	8.54	0.00	0.51	4	4.28	4.25	3B, QFARM		
39.00	2.00	13.54	13.54	11.92	10.30	0.00	1.62	6	5.20	5.00	3B, QFARM		Preserved -5 Credits
39.00	3.00	12.82	12.82	11.28	9.46	0.00	1.82	6	4.78	4.75	3B, QFARM		Preserved -4.75 Credits
39.00	4.00	15.48	15.48	13.62	13.62	0.00	0.00	7	6.81	6.75	3B, QFARM		Preserved -6.75 Credits
39.00	5.00	18.99	19	16.72	16.72	0.00	0.00	8	Approved w/ BI 38, L4		3B, QFARM		
40.00	9.00	9.88	10.17	8.95	4.93	0.00	4.02	4	Preliminary Approval for 23 units (Lots 9-11)		3B, QFARM		
40.00	10.00	37.3	37.3	32.82	8.60	0.00	28.22	16			3B, QFARM		
40.00	11.00	6.76	4.65	4.09	1.41	0.00	2.68	2			3B, QFARM		
40.00	12.00	25.36	25.36	22.32	8.65	0.00	13.67	11	4.70	4.50	Class 4A		
40.00	14.00	67.22	69.59	61.24	30.95	0.00	30.29	31	16.32	16.25	Class 4A		includes old lots 14.01 & 14.05, smaller lot area in 2011 tax map, credits to remain
41.00	1.00	47.73	46.73	41.12	33.35	0.00	7.77	21	16.89	16.75	3B, QFARM		
41.00	8.00	42.65	42.65	37.53	17.38	0.00	21.14	19	9.28	9.25	3B, QFARM		
41.00	10.00	34.32	33.33	29.33	8.16	0.00	25.17	15	4.78	4.75	3B, QFARM		bldg lot excluded (1 acre assumed)
42.00	2.00	24.03	34.10	30.01	24.31	4.85	2.01	15	9.37	9.50	3B, QFARM		Recalculated based on subdivided lot and 2011 tax map area.

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					SOIL CONSTRAINTS								Notes:
BLOCK	LOT	2011 Tax Map ACRES	2006 ACRES	NET ACRES*	SLIGHT	MODERATE	SEVERE	YIELD UNITS	TDR Credits	Rounded credits			
42.00	2.03	16.30	15.92	14.01	9.71	4.39	0.22	7	5.85	5.75	3B, QFARM		1 acre bldg lot excluded
43.00	10.00	36.78	37.39	32.90	16.61	0.00	16.29	16	8.76	8.75	3B, QFARM		Smaller lot area in 2011 tax map, credits to remain
43.00	3.00	16.12	15.12	13.31	0.00	0.00	13.31	7	0.37	1.00	3B, QFARM		Per ordinance-1 Credit minimum, 0.25 + 0.75=1
43.00	5.00	9.64	9.64	8.48	1.17	0.00	7.31	4	0.79	1.00	3B, QFARM		Per ordinance-1 Credit minimum, 0.75 + 0.25=1
43.00	13.00		126.79	111.58	13.21	0.00	98.37	56	Prelim Approval together for 59 units		3B, QFARM		Preserved (with Lot 14) - 59 Credits
43.00	14.00	128.00	1.00	0.88	0.27	0.00	0.61	0			3A		
44.00	7.00	56.12	55.12	48.51	38.39	8.69	1.43	24	Approved for 25 units		3B, QFARM		Preserved -25 Credits
44.00	8.00	62.26	62.26	54.79	43.35	3.94	7.50	27			3B, QFARM		Preserved (with Lot 8.02) -38 Credits
44.00	8.02		31.89	28.06	17.21	10.85	0.00	14	Approved together for 38 units		3B, QFARM		
46.00	3.01	76.61	77.61	68.30	11.47	16.33	40.50	34			3B, QFARM		incl. old lot 3, Preserved -10.5 Credits
46.00	6.00	29.82	30.43	26.78	0.00	0.11	26.67	13	0.77	0.75	3B, QFARM		incl. old lot 6.01, Preserved -0.75 Credits
46.00	8.00		26.09	22.96	5.14	0.00	17.82	11	3.07	3.00	Class 2		Preserved -3 Credits
46.00	9.00	18.67	17.67	15.55	5.81	0.00	11.46	8	3.22	3.00	3B, QFARM		Preserved -3 Credits
46.00	9.01	16.33	16.33	14.37	5.19	3.39	7.70	7	3.57	3.50	3B, QFARM		Preserved -3.5 Credits
46.00	11		40.39	35.54	31.42	1.82	2.80	18	16.19	16.00	3B, QFARM		Subdivided (see below)
46.00	11	14.04		0.00				0	5.63	5.50	3B, QFARM		New Lots (recalculated to spread credits across 3 lots)
46.00	11.02	13.91		0.00				0	5.58	5.50	3B, QFARM		
46.00	11.03	14.02		0.00				0	5.62	5.50	3B, QFARM		
46.00	12	6	5.42	4.77	2.74	0.00	2.03	2	1.43	1.25	3B, QFARM		1 acre bldg lot excluded
46.00	12.01	17.47	17.47	15.3736	13.34	0.00	3.51	8	6.77	6.75	3B, QFARM		
47.00	2	29.61	27.61	24.30	18.42	5.88	0.00	12	10.53	10.50	3B, QFARM		*8 year preserved, 1 acre bldg lot excluded
47.00	2.01	10.89	10.89	9.58	9.58	0.00	0.00	5	4.79	4.75	3B, QFARM		*8 year preserved
47.00	4	28.71	28.71	25.26	16.47	1.14	7.65	13	8.70	8.50	3B, QFARM		Preserved - 8.5 Credits
47.00	5.02	26.52	26.52	23.34	3.79	22.11	0.00	12	6.87	6.75	3B, QFARM		Preserved - 6.75 Credits
47.00	5.03	12.67	12.62	11.11	10.69	1.89	0.00	6	5.77	5.75	3B, QFARM		Preserved - 5.75 Credits
47.00	5.04	8.82	8.87	7.81	7.19	2.07	0.00	4	4.06	4.00	3B, QFARM		

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SOIL CONSTRAINTS

BLOCK	LOT	2011 Tax Map ACRES	2006 ACRES	NET ACRES*	SLIGHT	MODERATE	SEVERE	YIELD UNITS	TDR Credits	Rounded credits		Notes:
48.00	1.00	33.00	28.00	24.64	6.22	0	18.42	12	4.26	4.25	3A	includes Lot 2, Recalculated based on 2011 tax map areas.
48.00	9.01	12.05	10.82	9.52	5.08	0	4.45	5	2.66	2.50	3B, QFARM	includes 9.02, 1 acre bldg lot excluded
48.00	10	10.03	10.03	8.83	4.71	0.00	4.12456	4	2.47	2.25	3B, QFARM	
48.00	4.01	47.01	47.45	41.76	35.80	8.66	0.11	21	19.85	19.75	3B, QFARM	includes lot 4.02
49.00	2.00	60.93	60.93	53.62	41.60	0.01	11.999	27	Approved together for 40 units		3B, QFARM	AC Electric acquisition - 40 Credits
50.00	2.00	20.60	20.60	18.13	9.28	0.00	8.852	9			3B, QFARM	*final preservation funding, NOT preserved
50.00	2.00	20.60	20.60	18.13	9.28	0.00	8.852	9	4.88	4.75	3B, QFARM	add +4.75 Credits, calculated
50.00	4	14.56	14.56	12.81	1.02	0.94	10.84952	6	1.02	1.00	3B, QFARM	
55.00	1	80.30	79.30	69.78	30.76	17.62	22.41	35	19.97	19.75	3B, QFARM	Preserved -19.75 Credits
55.00	3	18.8	17.8	15.66	15.66	0.00	0.00	8	Approved for 8 units		3B, QFARM	*final preservation funding, NOT preserved
55.00	4.01	15.52	15.54	13.68	3.27	4.98	5.44	7	2.91	2.75	3B, QFARM	Preserved w/ Block 55, Lot 4 - 2.75 Credits
55.00	4.02	9.00	9.00	7.92	7.92	0	0.00	4	3.96	3.75	3B, QFARM	*8 year preserved
55.00	7.00	70.38	69.38	61.05	35.20	0	25.86	31	18.32	18.25	3B, QFARM	1 acre bldg lot excluded
56.00	1.00	106.00	108.45	95.44	30.01	7.14	59.24	48	18.25	18.25	3B, QFARM	includes old block 49 lot 1; 1 acre bldg lot excluded, Smaller lot area in 2011 tax map, credits to remain
56.00	3	25.73	25.73	22.64	8.90	0.00	13.74	11	4.83	4.75	3B, QFARM	
R-1 TOTAL			1854	1632	846	148	665	816	279.46	252.25		

with approvals 314.25

Woolwich Twp. TDR Sending Parcels
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SOIL CONSTRAINTS

BLOCK	LOT	2011 Tax Map ACRES	2006 ACRES	NET ACRES*	SLIGHT	MODERATE	SEVERE	YIELD UNITS	TDR Credits	Rounded credits		Notes:
1.00	1	10.00	7.27	6.40	4.05	0.00	2.35	4	2.79	2.75		1 acre bldg lot excluded
1.00	3	124.00	123.00	108.24	84.72	0.00	23.53	71	57.35	57.25	3B, QFARM	1 acre bldg lot excluded
1.00	2	77.40	76.40	67.23	42.52	0.00	24.71	44	29.26	29.25	3B, QFARM	1 acre bldg lot excluded
1.00	4	136.00	140.00	123.20	79.97	0.00	43.03	81	54.91	54.75	3B, QFARM	incl. old lot 4.01, Preserved -54.75 Credits
1.00	5	6.68	6.67	5.87	4.64	0.00	1.23	4	3.14	3.00		displayed as lot 5 on map
1.00	5.01	28.02	28.02	24.66	22.72	0.00	6.02	16	15.37	15.25	3B, QFARM	displayed as lot 5 on map
1.00	6	200.96	176.96	155.72	66.10	0.00	89.62	103	53.82	53.75	3B, QFARM	includes old lot 6.01, Recalculated based on 2011 tax map area.
1.00	8	129.06	128.60	113.17	47.46	1.12	64.59	75	34.37	34.25	3B, QFARM	includes old lot 8.01
1.00	11	10.54	10.5	9.24	3.86	4.32	1.51	6	3.93	3.75	3B, QFARM	
2.00	10	79.00	79.00	69.52	50.97	5.39	11.95	46	36.04	36.00	3B, QFARM	Part of GDP with B:2, L:9, 10, & 11; B:24, L:2 & B:28, L:1, 3, & 4
2.00	11	12.00	12.00	10.56	7.76	2.8	0	7	6.01	6.00	3B, QFARM	
2.00	12	96.35	95.2	83.78	38.06	37.49	18.341	55	37.30	37.25	3B, QFARM	Lot 12.03 lot excluded
2.00	13	83.56	82.50	72.60	42.44	0.00	30.56	48	29.43	29.25	3B, QFARM	1 acre bldg lot excluded
2.00	14	15.86	15.86	13.96	8.78	0.00	5.18	9	6.05	6.00	3B, QFARM	
2.00	15	68.15	68.55	60.32	28.69	0.00	31.63	40	20.30	20.25	3B, QFARM	
2.00	16	46.20	46.20	40.66	29.00	0.00	11.65	27	19.76	19.75	3B, QFARM	includes old lot 17
2.00	18	33.27	33.27	29.28	10.45	0.00	18.83	19	7.66	7.50	3B, QFARM	includes old lot 18.02
2.00	23	56.38	55.38	48.73	21.34	0.00	27.87	32	15.26	15.25	3B, QFARM	1 acre bldg lot excluded

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BLOCK	LOT	2011 Tax Map ACRES	2006 ACRES	NET ACRES*	SLIGHT	MODERATE	SEVERE	YIELD UNITS	TDR Credits	Rounded credits		Notes:
11.00	1	35.46	34.46	30.32	0.35	29.24	0.731	20	9.03	9.00	3B, QFARM	
12.00	6	47	47	41.36	39.15	1.89	0.319	27	26.68	26.50	3B, QFARM	
13.00	2	53.23	52.25	45.98	26.53	9.49	17.944	30	21.20	21.00	3B, QFARM	1 acre bldg lot excluded
13.00	2.02	11.96	11.96	10.52	8.86	0.83	0.825	7	6.19	6.00	3B, QFARM	
13.00	3	21.80	20.00	17.60	14.29	0.00	3.31	12	9.65	9.50	3B, QFARM	1 acre bldg lot excluded
13.00	4	17.66	17.66	15.54	13.70	0.00	1.842	10	9.20	9.00	3B, QFARM	
13.00	5	8.97	7.96	7.00	7.00	0.00	0	5	4.67	4.50	3B, QFARM	1 acre bldg lot excluded
14.00	13	79.00	79.00	69.52	47.66	0.00	24.02	46	32.66	32.50	3B, QFARM	
14.00	5	6.28	6.28	5.53	5.53	0.00	0.00	4	3.69	3.50	3B, QFARM	
14.00	5.01	33.82	32.82	28.88	23.31	0	5.57	19	15.75	15.75	3B, QFARM	Lot split between sending and receiving, 1 acre bldg lot excluded
14.00	5.03	4.41	4.29	3.78	3.78	0	0.00	2	2.52	2.50	3B, QFARM	
14.00	6.02	15.42	15.42	13.57	13.52	0	0.06	9	9.01	9.00	3B, QFARM	displayed as old lot 6 on map
14.00	9.00	7.75	7.65	6.73	6.73	0	0.00	4	4.49	4.25	3B, QFARM	
14.00	12.00	57.1	60.17	52.95	39.53	0	13.42	35	Approved for 31 units		3B, QFARM	31 on Twp list of Approvals (+1 added)
17.00	6	60.25	60.25	53.02	30.48	0.00	24.36	35	21.22	21.00	3B, QFARM	
19.00	1	32.00	31.00	27.28	3.44	0.00	23.84	18	3.18	3.00	3B, QFARM	1 acre bldg lot excluded
19.00	2	8.49	7.49	6.59	3.00	0.00	4.50	4	2.17	2.00	3B, QFARM	1 acre bldg lot excluded
19.00	4.00	35.30	34.80	30.62	9.04	0.00	21.58	20	6.93	7.00	3B, QFARM	includes lot 5, Recalculated based on 2011 tax map area (+0.25)

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SOIL CONSTRAINTS

BLOCK	LOT	2011 Tax Map ACRES	2006 ACRES	NET ACRES*	SLIGHT	MODERATE	SEVERE	YIELD UNITS	TDR Credits	Rounded credits		Notes:
20.00	1	32.82	32.82	28.88	3.66	0.00	25.22	19	3.37	3.25	3B, QFARM	
20.00	3	18.00	16.00	14.08	2.49	0.00	11.59	9	2.09	2.00	3B, QFARM	2 acre bldg lot excluded
20.00	4	42.80	42.70	37.58	21.95	0.00	16.63	25	15.25	15.25	3B, QFARM	
20.00	6	25.00	23.00	20.24	9.48	0.00	10.76	13	6.72	6.50	3B, QFARM	2 acre bldg lot excluded
21.00	1	46.20	46.20	40.66	35.11	0.00	5.09	27	23.60	23.50	3B, QFARM	
21.00	2.00	13.00	13.00	11.44	1.53	0.00	9.91	8	1.39	1.25	Class 1	
21.00	3	15.30	15.30	13.46	10.60	0.00	2.861	9	7.17	7.00	3B, QFARM	
21.00	4	55.60	55.60	48.93	35.85	0.00	13.05	32	24.38	24.25	3B, QFARM	
21.00	5	13.00	13.00	11.44	8.35	0	3.09	8	5.68	5.50	3B, QFARM	
24.00	2	22.73	23.62	20.79	5.69	5.79	8.77	14	5.86	5.75	3B, QFARM	Part of GDP with B:2, L:9, 10, & 11; B:24, L:2 & B:28, L:1, 3, & 4
24.00	4.14	10.09	10.09	8.88	1.60	0.09	7.19	6	1.36	1.25	Class 1	
28.00	1.00	40.00	41.62	36.63	14.25	19.01	3.33	24	15.33	15.25	3B, QFARM	Part of GDP with B:2, L:9, 10, & 11; B:24, L:2 & B:28, L:1, 3, & 4
54.00	3.00	15.66	15.66	13.78	5.95	0.00	7.841	9	4.26	4.25	3B, QFARM	
54.00	9.01	11.20	10.20	8.98	7.62	3.00	0	6	5.98	5.75	3B, QFARM	includes old lot 9, 1 acre bldg lot excluded
57.00	7.00	16.17	17.17	15.11	13.13	0.0002	2.024	10	8.83	8.75	3B, QFARM	1 acre bldg lot excluded
R-2 TOTAL			2092	1841	1067	120	682	1215	697.32	692.00		

with approvals 723.00

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SOIL CONSTRAINTS											
BLOCK	LOT	2011 Tax Map ACRES	2006 ACRES	NET ACRES*	SLIGHT	MODERATE	SEVERE	YIELD UNITS	TDR Credits	Rounded credits	Notes:
5.00	6.07		64.85	57.07	12.77	0.00	44.30	38	10.15	10.00	3B, QFARM *used R2 calcs, outside SSA, formerly Lot 6, Preserved - 10 Credits
5.00	6.05	11.79	10.79	9.50	2.12	0.00	7.38	6	1.85	1.75	3B, QFARM *used R2 calcs, outside SSA. Recalculated based on 2011 tax map area (+0.25)
5.00	6.06	11.12	10.12	8.91	1.99	0.00	6.92	5	1.74	1.75	3B, QFARM *used R2 calcs, outside SSA. Recalculated based on 2011 tax map area (+0.25)
R-3 TOTAL			86	75	17	0	59	48	3.59	3.50	

5AC

SOIL CONSTRAINTS											
BLOCK	LOT	2011 Tax Map ACRES	2006 ACRES	NET ACRES*	SLIGHT	MODERATE	SEVERE	YIELD UNITS	TDR Credits	Rounded credits	Notes:
25.00	5.00	7.63	7.63	7.401	1.318	0	6.0831	1.48	0.33	1.00	Class 2 Per ordinance-1 Credit minimum, 0.25 + 0.75=1
26.00	1.00	22.30	22.60	21.92	12.85	0.00	9.16	4	2.67	2.50	3B, QFARM
36.00	4.00	23.51	17.00	16.49	3.60	3.26	9.63	3	1.55	1.50	3B, QFARM Recalculated based on 2011 tax map area (+0.50)
36.00	5.00	31.60	30.60	29.68	15.50	0	14.21	6	3.26	3.25	3B, QFARM 1 acre bldg lot excluded
36.00	10.00	10.24	11.93	11.57	3.83	0	7.57	2	0.85	1.00	3B, QFARM Per ordinance-1 Credit minimum, 0.75 + 0.25=1
5AC TOTAL			90	87	37	3	47	17	8.66	9.25	

Lots Added to Sending Area-2013

SOIL CONSTRAINTS											
BLOCK	LOT	Zoning Multiplier	2013 ACRES	NET ACRES*	Not Limited	Somewhat Limited	Very Limited	YIELD UNITS	TDR Credits	Rounded credits	Notes:
5.00	3.00	R-3	39	34.32	7.216	0	27.104	23	5.81	6.00	3B, QFARM 0.5 acre bldg lot excluded
11.00	2.00	R-2	16.16	14.22	3.55	0	10.67	9	Approved together for 13 units		3B
11.00	24.00	R-2	7.69	6.77	0.04	0	6.73	4			3B
11.00	24.01	R-2	2.11	1.86	0.16	0	1.70	1			3B
13.00	5.01	R-2	27.86	24.52	24.02	0.4	0.00	16	Approved for 14 units		3B, QFARM Current zoning is RC-1, R-2 previous zoning used for calc.
14.00	3.00	R-2	69.50	61.16	52.98	5.456	2.73	40	37.06	37.00	3B, QFARM Current zoning is RC-1, R-2 previous zoning used for calc.
14.00	17.00	R-2	53.00	46.64	39.60	1.848	6.07	31	27.18	27.25	3A Current zoning is RC-1, R-2 previous zoning used for calc. 1 acre bldg lot excluded
22.00	3.00	R-2	32.00	28.16	18.74	0	9.42	19	12.84	13.00	Current zoning is PAC, R-2 previous zoning used for calc.
			247	218	146	8	64	144	109.89	110.25	

Notes: 2013 acres taken from tax records at NJACTB.org. Soil constraints used from NRCS, download 9/19/13, Sewage Disposal ratings.

Woolwich Twp. TDR Sending Parcels
(Modified 5-Year Review - revised 10/9/13)

				SOIL CONSTRAINTS								
		2011 Tax Map ACRES	2006 Acres	NET ACRES*	SLIGHT	MODERATE	SEVERE	YIELD UNITS	TDR Credits	Rounded Total	Total With Approvals	
R-1 TOTAL			1854.2	1631.7	845.7	148.5	664.8	815.86	279.46	252.25	314.25	
R-2 TOTAL			2276.3	2024.1	1205.8	128.2	719.6	1335.9	801.39	796.25	827.25	
R-3 TOTAL			124.8	109.8	24.1	0.0	85.7	71.0	9.40	9.50	9.50	
5AC TOTAL			89.8	87.1	37.1	3.3	46.7	17.4	8.66	9.25	9.25	
GRAND TOTAL			4345.0	3852.7	2112.6	279.9	1516.8	2240.2	1098.92	1067.25	1160.25	
											1160.25	Total
											1343.75	Credits from TDR Ordinance (calculated)***
											(183.50)	Difference
											307.50	Total credits retired since 2008
											120.50	Total credits added 2013
											(117.00)	Credits dedicated to Auburn Road Village GDP
											1043.25	Remaining for Rt. 322

*2006 Acres as per New Jersey Association of County Tax Board

* Net Acres are calculated by multiplying Gross Acres by 0.88 in the R-1, R-2 and R-3 Zones and by .97 in the 5AC Zone.

*Slight, Moderate, and Severe calculations derived using GIS parcel layers from Gloucester County Gloucester County Parcels 2004.

***Credits totaled in TDR Ordinance were incorrectly calculated to 1335.75. If all credits and approvals were correctly added it would have been 1343.75. A difference of 8.

Since Slight, Moderate and Severe Soil Constraint calculations were based upon GIS information from 2004, there were discrepancies in acreage with the 2006 tax information.

These discrepancies were dealt with by creating a ratio of Slight to Moderate to Severe soils for the property and applying this ratio to the actual 2006 acreage.

This was done ONLY when it resulted in an increase in credits for the property owner, not a decrease in credits.

Therefore, some property owners will find that the acreages of slight, moderate and severe soils do not add up to equal the total net acres for their property.

Should this be the case, then the credit value is higher as it stands than it would be had this ratio been applied.

Highlighting Key:

Preserved or removed from sending area

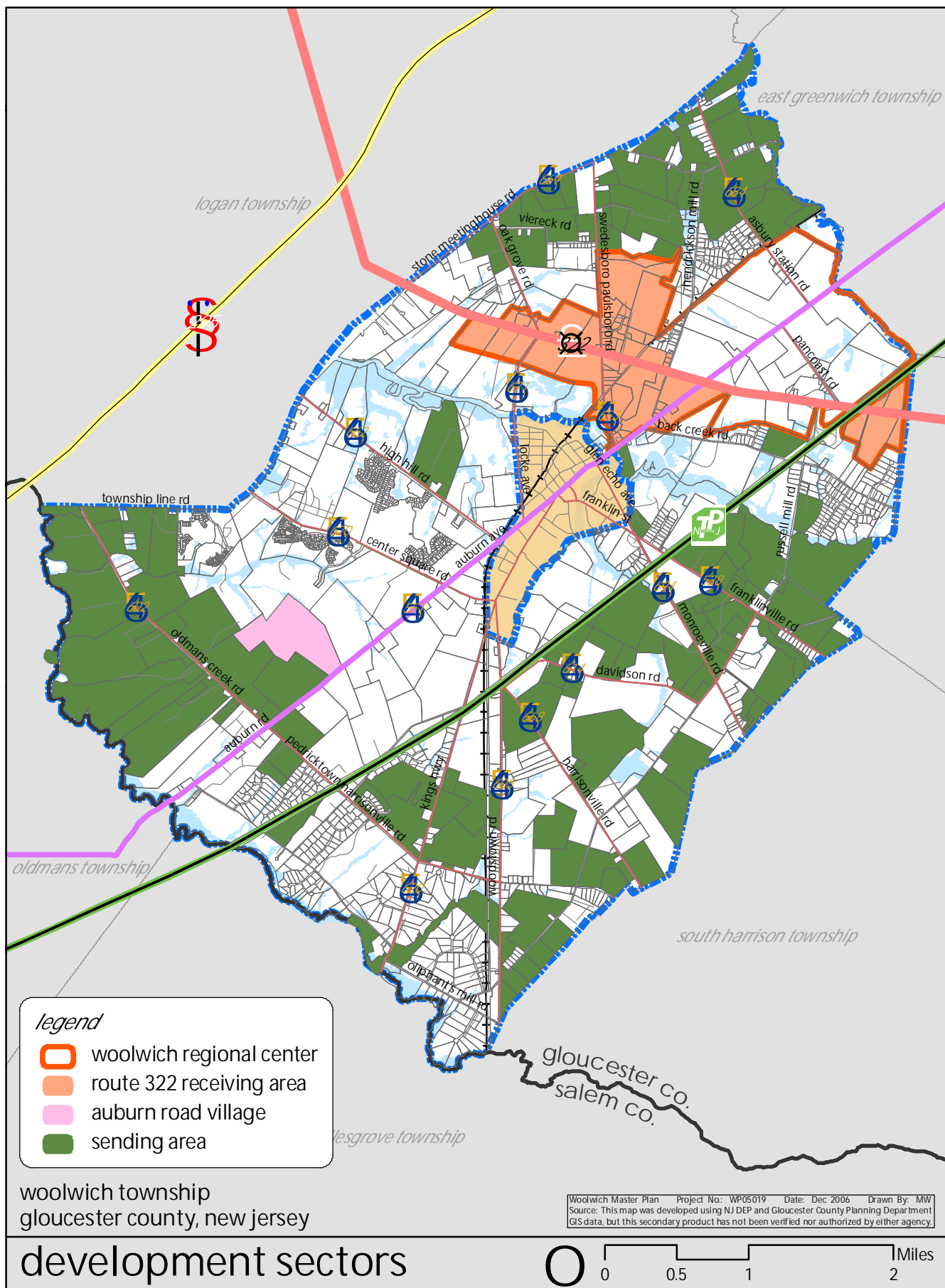
Lots with questions/issues that need to be addressed

Subdivided lots

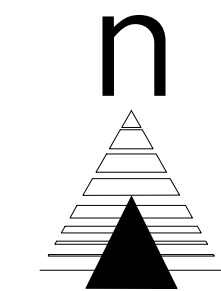
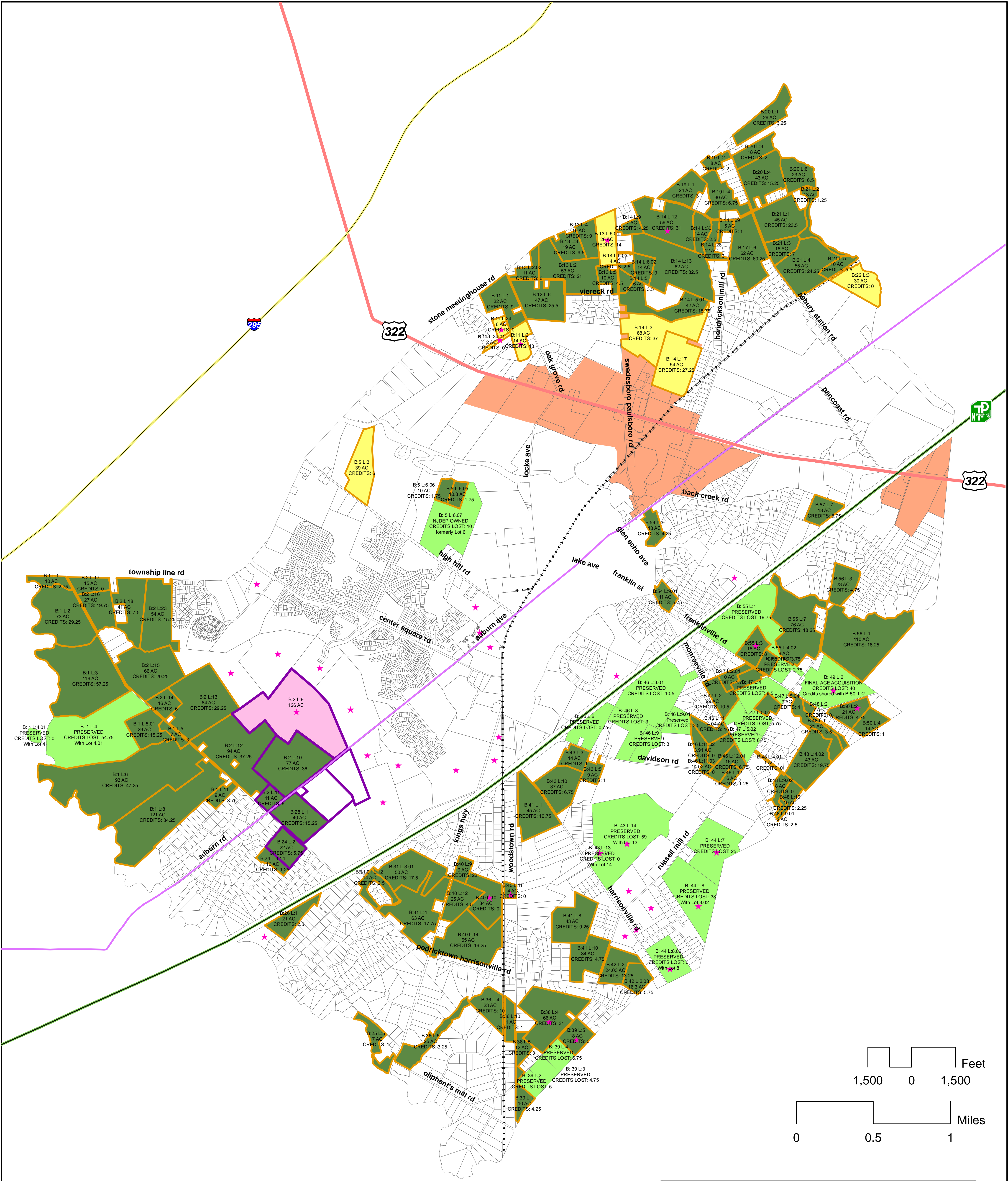
Lots approved with GDP, part of Auburn Road Village

Inconsistent lot areas between 2006 area in table and 2011 tax maps

Appendix 2
2008 Sending & Receiving Area Map



Appendix 3
Revised Sending Area Map



Revised Sending Areas 5-Year TDR Review

woolwich township
gloucester county, new jersey

★

Approvals

Auburn Road GDP

Sending Area Parcels (as revised Sept. 2013)

Parcels Added to Sending Area (2013)

Parcels to be Removed from Sending Area

Auburn Road Village Receiving Area

Parcels-2010

Route 322 Receiving Area (2008)

--Parcel lines from 2010 GIS data made publicly available by the County of Gloucester
--Parcels to be removed based on preserved lots from SADC GIS data, preserved lots from Gloucester County lists, and acquisition of a lot by AC Electric.
--Sending area parcels from 2007 TDR and modified per 5-year review.
--Receiving areas from 2007 TDR.

TDR 5-Year Review
Project No.: WWP13005
Date: October 8, 2013
Drawn By: MSY
Source: This map was developed using NJDEP and Gloucester County Planning Department GIS data, but this secondary product has not been verified nor authorized by either agency.
File Name: M:\GIS PROJECTS\woolwich\TDR 5-Year Review\Sending Area after revs.mxd

Appendix 4
Sewer Planning Update Report

TOWNSHIP OF WOOLWICH
OCTOBER 30TH TDR REVIEW HEARING

MATT BLAKE, DOCD

SEWER PLANNING UPDATE

While TDR was adopted back in 2008, there have been many hurdles to its implementation. Since TDR relies on the private market and growth pressure to work, the recent economic downturn represented a significant set-back. In addition, despite local and state approval of TDR, the Township, like all communities in New Jersey, was recently required to undertake a major overhaul of its Wastewater Management Plan ("WMP"), which was approved in September of 2012. That was not a wasted effort however, since careful planning for public sewers remains the most crucial factor to bringing both TDR and much-needed commercial development and positive ratables to the 322 Corridor. For example, without a WMP in hand, such projects as the recently approved, Woolwich Commons, retail development on Rt. 322, could not move forward. The approved WMP will also facilitate nearly 1.6 Million S.F. of retail development approved under the Wolfson Group's, three-phase General Development Plan. In addition, nearly 7 million S.F. of commercial/retail area exists within the approved Regional Center, with another 700 acres dedicated to various residential uses within the TDR Receiving Area.

With that said, the Township recognizes that the lack of sewer availability within the Regional Center hinders the ability for utilization of development credits, and that wastewater treatment capacity is tantamount to serve and assist the TDR Plan and the ultimate build out of the corridor. To that end, we are pleased to report that the Township has made significant progress since it attained state approval of its WMP in 2012. At present negotiations are currently underway for a public and private agreement between Aqua New Jersey, the Wolfson Group, Woolwich Township and future developers, for both a short and long term solution for sewer service.

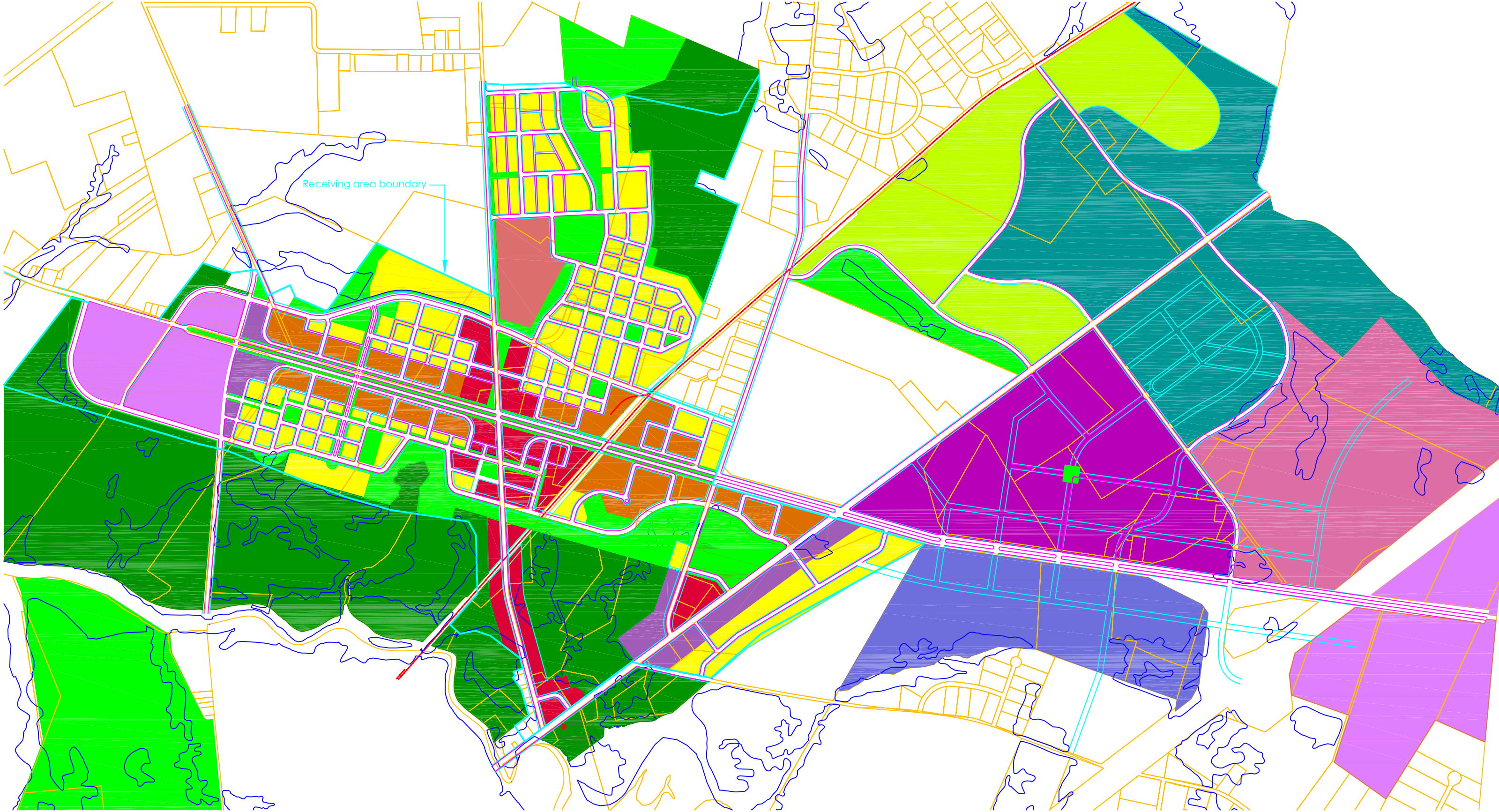
The first priority is to have a sewer conveyance system to the Logan Treatment Plant installed as soon as possible in order to facilitate the Woolwich Commons project. In order to provide future capacity beyond that obtained by the Wolfson Group for use at the Logan Plant, the Township is currently investigating the feasibility for a future wastewater treatment plant to be located in Woolwich Township that would be designed to discharge, fully-treated effluent to groundwater, to a level compliant with the State DEP's Drinking Water Standards. The so-called package plant could be constructed as needed in four phases in 150,000 gdp increments to suit the needs of specific builders over time. It should be noted that the package plant concept is what was proposed in the existing TDR Plan that was adopted in 2008, and strongly encouraged by the DEP.

The project costs, including land acquisition, are proposed to be funded by a sewer credit system established by the Township for builders after the Woolwich Commons project. Planning and installation could be carried out by either Aqua New Jersey or developers, although the Franchise would retain oversight of the project. As far as details on financing, timing, possible location and acreage needed for a future package plant and associated conveyance infrastructure, much of that remains under negotiation and is being evaluated by the Township.

There remain many hurdles that need to be cleared in order to construct a package plant. Some steps can be completed simultaneously with one another. Major milestones we anticipate include:

- Sewer Conveyance from Woolwich Commons to Logan MUA: 11 months (2014)
- Geotechnical Evaluation of the Site Soils: 6 months (April 2014)
- Legal Execution of the Land Option: 3 months (July 2014)
- Preparation and Submission of WMP Amendment: 3 months (July 2014)- Concurrent Step
- WMP Approval Process: 16 months (November 2015)
- Preparation and Submission of NJPDES Permit: 6 months from WMP Submission:
(January 2015)- Concurrent Step
- NJPDES Permit Approval Process: 15 months (April 2016)
- Final Plant and Conveyance Design and TWA Submission: 12 months after NJPDES Submission:
(January 2016) Concurrent Step
- TWA Permit Approval Process: 3 months (April 2016)
- Construction Bidding, Contractor Procurement: 3 months after Final Design: (April 2016
Concurrent Step
- WWTP Plant and Conveyance Construction: 14 months (June 2017)
- Sewer Connections (June 2017)

Appendix 5
2008 Receiving Area Land Use Map



Land Use Concept

- | | | |
|---|---|--|
| flats along 322 | non-residential - retail/office services | woolwich adult - power center |
| residential - all types | parks/open space | woolwich adult - hotel and office |
| mixed-use retail/residential | woolwich adult - senior residential | woolwich adult -golf course |
| mixed-use retail/office | woolwich adult - lifestyle center | |

Appendix 6
Proposed New Receiving Area Concept - G

Appendix 7
Proposed New Receiving Area Parcels Table

Woolwich Township TDR 5-Year Review
Proposed New Receiving Area Parcels

Block	Lot	Location	Owner	Owner Address	Total Acres	Environmentally Constrained Area (acres)	Remainder (acres)	Underlying Zoning (without TDR)	Unit Yield Under Previous (Underlying) Zoning without TDR	Allocation of adjusted acreage (after constraints) to each of our TDR zoning category									
										Flex Area 1	Flex Area 2	Flex Area 3	Flex Area 4	Flex Area 5	Flats	Retail/ Residential	Highway Commercial	Neighborhood Commercial	Interstate Commercial
6	6	US 322			97	36	61	FOC	n/a				18.2				6.4		
7	4	US 322			6.07		6.07	FOC	n/a			6.07							
7	4.01	US 322			23.86		23.86	FOC	n/a			19.06					4.8		
7	4.02	Locke Ave			4.25		4.25	FOC	n/a			4.25							
7	5	US 322			77.6	35.8	41.8	FOC	n/a			36						6.9	
7	5.01	US 322			1.99		1.99	FOC	n/a								1.99		
8	1	Paulsboro Road			2		2	FOC	n/a									2	
8	2	Paulsboro Road			4.01	1.9	2.11	FOC	n/a									2.11	
8	3.01	Paulsboro Road			0.38		0.38	FOC	n/a									0.38	
8	4	Paulsboro Road			0.17		0.17	FOC	n/a									0.17	
8	5	Paulsboro Road			0.38		0.38	FOC	n/a									0.38	
8	6	Paulsboro Road			0.11		0.11	FOC	n/a									0.11	
8	7	Paulsboro Road			0.27		0.27	FOC	n/a									0.27	
8	8	Paulsboro Road			0.15		0.15	FOC	n/a									0.15	
8	9	Paulsboro Road			3.88		3.88	FOC	n/a									3.88	
8	10	Paulsboro Road			0.4		0.4	FOC	n/a									0.4	
9	1	Paulsboro Road			1.03		1.03	FOC	n/a									1.03	
9	2	Paulsboro Road			1		1	FOC	n/a									1	
9	3	Paulsboro Road			1.52		1.52	FOC	n/a									1.52	
9	4	Paulsboro Road			3		3	FOC	n/a									3	
9	5	Paulsboro Road			5.5		5.5	FOC	n/a								5.5		
9	5.01	Paulsboro Road			1		1	FOC	n/a									1	
10	2	Paulsboro Road			2.4	0.64	1.76	FOC	n/a									1.76	
10	3	Paulsboro Road			25.13	11.3	13.83	FOC	n/a									10.3	
10	6	Kings Highway			1.2		1.2	FOC	n/a									1.2	
10	6.01	Kings Highway			3.1	1.6	1.5	FOC	n/a									1.5	
10	7	Paulsboro Road			0.51		0.51	FOC	n/a									0.51	
11	7	US 322			2.09		2.09	FOC	n/a								2.09		
12	1	US 322			1.04		1.04	FOC	n/a							1.04			
12	2	US 322			18		18	FOC	n/a		15.2					2.8			
12	3	US 322			40.3		40.3	FOC	n/a		35.4						4.9		
12	3.01	US 322			1		1	FOC	n/a		1								
12	3.02	US 322			1		1	FOC	n/a		1								
12	4.01	Oak Grove Road			1		1	FOC	n/a								1		
14	1.03	Paulsboro Road			1.31		1.31	FOC	n/a							1.31			
14	1.04	Paulsboro Road			1.67		1.67	FOC	n/a							1.67			
14	1.05	Paulsboro Road			1.85		1.85	FOC	n/a							1.85			
16	5	Kings Highway			19		19	FOC	n/a								11.6		
57	1	Back Creek Road			0.1		0.1	FOC	n/a									0.1	
57	2	Back Creek Road			1.6		1.6	FOC	n/a									1.6	
57	2.01	Kings Highway			1		1	FOC	n/a									1	
57	3	Kings Highway			25.1		25.1	FOC	n/a					14.5			10.6		
57	3.01	Kings Highway			8.09		8.09	FOC	n/a									8.09	
57	3.02	Kings Highway			1.5		1.5	FOC	n/a								1.5		
58	1	US 322			7.9		7.9	FOC	n/a										7.9

Block	Lot	Location	Owner	Owner Address	Total Acres	Environmentally Constrained Area (acres)	Remainder (acres)	Underlying Zoning (without TDR)	Unit Yield Under Previous (Underlying) Zoning without TDR	Allocation of adjusted acreage (after constraints) to each of our TDR zoning category									
										Flex Area 1	Flex Area 2	Flex Area 3	Flex Area 4	Flex Area 5	Flats	Retail/ Residential	Highway Commercial	Neighborhood Commercial	Interstate Commercial
59	5	RT 322			1		1	FOC	n/a										1
59	6	US 322			1		1	FOC	n/a										1
59	6.01	US 322			6.13		6.13	FOC	n/a										6.13
59	6.02	US 322			7		7	FOC	n/a										7
59	7	Back Creek Road			6.27		6.27	FOC	n/a										6.27
59	8	US 322			42.5		42.5	FOC	n/a										42.5
59	10	US 322			10.9		10.9	FOC	n/a										10.9
60	2	Kings Highway			43.24		43.24	FOC	n/a	33.14					10.1				
60	5.01	Pancoast Road			0.56		0.56	FOC	n/a						0.56				
60	5.02	US 322			1.16		1.16	FOC	n/a								0.72		
60	6	US 322			10.66		10.66	FOC	n/a						8.4		2.26		
60	6.01	US 322			1		1	FOC	n/a						0.08		0.92		
60	6.02	US 322			1		1	FOC	n/a								1		
60	7	Pancoast Road			0.61		0.61	FOC	n/a								0.61		
60	7.01	US 322			4.61		4.61	FOC	n/a								4.61		
60	7.02	Pancoast Road			0.84		0.84	FOC	n/a								0.84		
60	7.03	Pancoast Road			0.67		0.67	FOC	n/a								0.67		
60	8	Pancoast Road			0.5		0.5	FOC	n/a						0.5				
322 R.O.W. near interchange					4.9		4.9	n/a	n/a								4.9		
61	1	Pancoast Road			67.22	17.7	49.52	PAC	n/a	49.52									
61	2	Pancoast Road			59	43.6	15.4	PAC	n/a	12.7									
61	3	Pancoast Road			2.11		2.11	PAC	n/a	2.11									
61	4	Pancoast Road			3.9		3.9	PAC	n/a	3.8							0.1		
61	4.01	Pancoast Road			1.6		1.6	PAC	n/a								1.6		
61	5	Pancoast Road			0.05		0.05	PAC	n/a								0.05		
62	1	US 322	NJ Turnpike Authority		5.8		5.8	FOC	n/a										5.8
62	2	US 322			17.4		17.4	FOC	n/a										17.4
62	3	US 322			0.7		0.7	FOC	n/a										0.7
Total					703.79	148.54	555.25	0	0	101.27	52.6	65.38	18.2	14.5	19.64	8.67	68.66	50.36	106.6

Notes:

1. Total Acres taken from tax information available at NJACTB.org. Partial acreage taken from County parcel shapefiles.
2. Environmentally constrained areas are approximated using NJDEP GIS data including stream flow lines and wetland limits. Field studies will be required to determine the actual extent of environmentally constrained areas.

Appendix 8
Preliminary Real Estate Market Analysis Update

URBAN PARTNERS

829 Spruce St., Suite 204
Philadelphia, PA 19107
215 829-1902
Fax: 215 829-1908
e-mail:
jhartling@urbanpartners.us

October 15, 2013

To: Woolwich Township
From: James E. Hartling, Urban Partners
Subject: Preliminary Real Estate Market Analysis Update, Transfer of Development Rights

Purpose of the Market Analysis Update

This preliminary real estate market analysis update has been prepared to document changes in market conditions, land use, and planning objectives that impact the Transfer of Development Rights (TDR) Element of the Master Plan for Woolwich Township, Gloucester County, New Jersey. That TDR Element and related regulations and guidelines were adopted in 2008, in part based on the Real Estate Market Analysis (REMA) prepared for that TDR program in December 2006. This memorandum is not a full REMA update; that full update will be prepared when (and if) the Township undertakes a formal amendment to its TDR Element.

Summary of 2006 Real Estate Market Analysis

The 2006 REMA reported the following facts, assumptions, and conclusions:

1. Woolwich Township was growing rapidly: housing units had grown from 498 in 1990 to 1,026 in 2000 to an estimated 3,030 in 2006. The 2005 estimated population was 7,560.
2. The Township's population and housing units were expected to continue to increase dramatically with a full residential buildout forecasted by 2029 at 31,983 total residents and 9,600 additional housing units beyond the estimated 3,030 in 2006. Of these 9,600 new units, about 3,450 were anticipated to be constructed during the completion of the Weatherby development; about 1,500 would occur in other already approved developments, as part of an affordable senior housing development or in very low density developments elsewhere in the Township; 925 would occur at the Woolwich Adult development--included within the Route 322 Center, but not part of the TDR program; and the remaining 3,725 would be constructed within the two TDR Receiving Areas.
3. The TDR Program established a Sending Area with a total of 1,343.5 transferrable development credits.
4. The TDR Program also established two Receiving Areas: the Route 322 Receiving Area #1 with 681 acres and the 125-acre Auburn Road Receiving Area # 2.

5. It was anticipated that during the 2012 to 2029 period the Route 322 Receiving Area #1 would absorb 3,217 units of housing; 1.1 - 2.1 million SF of retail; and 500,000 - 1.5 million SF of office/flex space. The major components of this development program included:

- 284 acres devoted to residential and mixed-use development for which TDR credits were required and which would result in 2,717 new housing units and 325,000 SF of retail;
- about 200 acres of commercially developed property that through use of TDR credits could increase density and/or contain retail uses. These 200 acres would provide the demand for 130 development credits and result in approximately 2.6 million SF of commercial space (1.3 million SF by-right; 1.3 million SF through use of TDR credits);
- approximately 150 acres expected to be allocated to open space use; and
- about 50 acres of mixed use “core” which could be developed without TDR credits and provide for about 500 units of flats and 200,000 SF of first floor retail.

The anticipated residential development program requiring development credits included a total of 2,717 units (see **Table 1**), including:

- 100 small lot single-family homes;
- 1,000 twins;
- 500 townhomes;
- 317 flats in multi-family buildings; and
- 800 flats in multi-family buildings with retail first floors.

Table 1
Development Program Credit Requirements
Route 322 Receiving Area #1--2006

Development Type	Development Program --Units	Development Program --Retail SF	Receiving Area Land Requirement (Acres)	Required Development Credits	Development Supported By Receiving Area Zoning	Development Credit Shortfall
Single Family Units--9,500 SF Avg. Lot	100		29.1	100	17	83
Twins--5,000 SF Avg. Lot	1,000		153.0	1,000	90	910
Townhomes-1875 SF Average Lot	500		40.5	500	24	476
Multi-Family Flats, Etc.--28 DUs/Gross Acre	317		11.3	317	6	311
Multi-Family Flats, w. Retail--16 DUs/Gross Acre	800	325,000	50.0	800	0	800
Total	2,717	325,000	283.9	2,717	137	2,580

Of the 2,717 residential units outside the mixed use “core,” 137 units could be constructed “by-right” based on underlying zoning in the Receiving Area. The remaining 2,580 units would require transfer of development credits.

6. Similarly, during the same 2012 to 2029 period the Auburn Road Receiving Area # 2 would absorb 502 single-family and townhome units and 60,000 to 70,000 SF of

convenience retail. 240 of these units could be constructed “by-right,” but the remaining 262 units would require transfer of development credits.

7. Based on density bonuses assigned in the TDR Element, demand for credits from the Receiving Areas was estimated at 1,357 credits including: 1,110 credits to support residential development in the Route 322 Receiving Area #1 (see **Table 2**); 117 credits to support the development program in the Auburn Road Receiving Area #2; and 130 credits to support increased commercial FAR on certain parcels in the Route 322 Receiving Area #1.

Table 2
Development Program Credit Utilization
Route 322 Receiving Area #1--2006

Development Type	Development Credit Shortfall	Development Credit Bonus Ratio	Bonus Development Credits	Development Credits Needed From Sending Area
Single Family Units--9,500 SF Avg. Lot	83	0.30	19	64
Twins--5,000 SF Avg. Lot	910	0.80	405	506
Townhomes-1875 SF Average Lot	476	1.80	306	170
Multi-Family Flats, Etc.--28 DUs/Gross Acre	310	2.00	207	104
Multi-Family Flats, w. Retail--16 DUs/Gross Acre	800	2.00	533	267
Total	2,580		1,470	1,110

8. Based on the factors detailed above, the 2006 REMA concluded that there was a “sufficient level of residential and retail demand, coupled with the proposed bonus credits, [to] provide adequate market to support needed sales of the desired [1343.5] credits in the Sending Area.”

Changes in Credit Supply Since 2006

Since 2006, various properties have entered into participation in land preservation programs and restrictions have been placed on other parcels which have retired the development credits associated with those parcels. In total, these activities have retired 307.50 credits as detailed on Table 3.

Table 3
Retired Sending Area Credits

Block Lot	Owner	Owner Address	City	Acres	Zoning	Credits	
39	2 SORBELLO, THOMAS & MARIE	216 PORCHES MILL ROAD	SWEDSBORO, NJ	13.54	R-1	5.00	
39	3 SORBELLO, THOMAS	216 PORCHES MILL ROAD	SWEDSBORO, NJ	12.82	R-1	4.75	
39	4 HAINES, CHARLES & MARGARET P	323 N MAIN ST	WOODSTOWN, NJ	15.48	R-1	6.75	
43	13 DIBELLA, JOSEPH & WRIGHT, ROSEMARY	421 WHIG LANE ROAD	PIESGROVE, NJ	126.79	R-1	Approved for 59	59.00
43	14 DIBELLA, JOSEPH & WRIGHT, ROSEMARY	421 WHIG LANE ROAD	PIESGROVE, NJ	1.00	R-1	Above 43/13	
44	7 CHIUCCARELLO, MICHAEL	610 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	55.12	R-1	Approved for 25	25.00
44	8 DIBELLA, MICHAEL S & JANE B	707 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	62.26	R-1	Approved for 38	38.00
44	8.02 DIBELLA, MICHAEL S & JANE B	707 RUSSELL MILL ROAD	WOOLWICH TWP. NJ	31.89	R-1	Above 44/8	
46	3.01 CALI, ANNA ESTATE OF	201 MONROEVILLE RD.	WOOLWICH TWP. NJ	77.61	R-1	10.50	
46	6 DAVIDSON, ELMA C.	121 DAVIDSON ROAD	WOOLWICH TWP. NJ	30.43	R-1	0.75	
46	8 THOMPSON, JOHN SR & MABEL L TRUSEE	1039 EXCELSIOR DRIVE	ASTON, PA	26.09	R-1	3.00	
46	9 DIBELLA, JOSEPH A	184 DAVIDSON ROAD	WOOLWICH TWP. NJ 08	17.67	R-1	3.00	
46	9.01 FINOCCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP. NJ	16.33	R-1	3.50	
47	4 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP. NJ	28.71	R-1	8.50	
47	5.02 FINOCCHIARO, JOSEPHINE TRUSTEE	290 MONROEVILLE RD.	WOOLWICH TWP. NJ	26.52	R-1	6.75	
47	5.03 FINOCCHIARO, JOSEPH A	503 W 45TH ST APT 3E	NEW YORK, NY	12.67	R-1	5.75	
49	2			60.93	R-1	Approved for 40	40.00
55	1 GROPPENBACHER, @ KIRK HORNER	PO BOX 108	HARRISONVILLE, NJ	80.30	R-1	19.75	
55	4.01 BUTLER, MARTHA	304 FRANKLINVILLE RD.	WOOLWICH TWP. NJ	15.54	R-1	2.75	
1	4 CATALANO, SALVATORE & ETALS	216 PORCHES MILL ROAD	WOOLWICH TWP. NJ	136.00	R-2	54.75	
5	6 WRIGHT, ROSINA	223 HIGH HILL ROAD	WOOLWICH TWP. NJ 08	64.85	R-3	10.00	
Total				912.55		145.5	162

On the other hand, the Township has identified eight other parcels which, given current circumstances, would be appropriately included in the Sending Area. Analysis of these eight parcels indicates that they should be allocated 110.25 credits. With these adjustments, it appears that the remaining Sending Area as of October, 2013, includes 107 parcels with a total of 1,160.25 credits. This group of Sending Area parcels includes five parcels with 82.75 credits owned by the developer of the Auburn Road Receiving Area #2.

Changes in Growth and Development Forecasts Since 2006

Since 2006, there has been a substantial slowdown in the demand for housing based on the deterioration of national and regional economic circumstances. This is most substantially documented by the reduction in building permit approvals. This data was documented in the 2006 REMA for the period 1996 through August, 2006. On **Table 4**, we extend this data base to August, 2013.

Table 4
Building Permit Activity

Year	Woolwich Permits Single-Family	Woolwich Permits Multi-Family	Gloucester County Permits Single-Family	Gloucester County Permits Multi-Family	Woolwich As Percent Of Gloucester County Single-Family	Woolwich As Percent Of Gloucester County Multi-Family
1996	32		1,018	39	3.14%	0.00%
1997	88		1,151	16	7.65%	0.00%
1998	83		1,238	128	6.70%	0.00%
1999	214		1,310	217	16.34%	0.00%
2000	225		1,294	43	17.39%	0.00%
2001	259		1,338	297	19.36%	0.00%
2002	342		1,689	113	20.25%	0.00%
2003	200		1,560	299	12.82%	0.00%
2004	285	229	1,638	412	17.40%	55.58%
2005	387		1,882	193	20.56%	0.00%
2006	102		1,021	120	9.99%	0.00%
2007	86		902	18	9.53%	0.00%
2008	124		771	17	16.08%	0.00%
2009	94	86	642	223	14.64%	38.57%
2010	63		504	212	12.50%	0.00%
2011	77	91	481	111	16.01%	81.98%
2012	54	56	475	59	11.37%	94.92%
2013 (8 mos.)	81	95	417	362	19.42%	26.24%
Total	2,796	557	19,331	2,879	14.46%	19.35%
Average 1996 -2006	202	21	1,376	171	14.64%	12.20%
Average Since 2007	87	49	629	150	13.81%	32.73%

Source: New Jersey Department of Labor; Urban Partners

Since 2006, there has been more than a 50% decline in building permit activity in Gloucester County, especially for single-family homes. This slowdown has been generally parallel in Woolwich Township.

On **Table 5**, we utilize this information and data from the U.S. Census and the Delaware Valley Regional Planning Commission (DVRPC) to compare the 2006 to 2013 growth assumptions in the 2006 REMA with recent trends. This analysis indicates that the economic slowdown of the past seven years has dramatically reduced housing development and population growth in Woolwich. While the underlying assumptions of the TDR Element projected a population of nearly 18,700 by August of 2013 occupying nearly 6,600 housing units, current estimates indicate a population of about 10,500 in 3,500 housing units. We should also add that 2010 census data and analysis of building permit data (Table 4, above) suggest that the previous housing unit estimate for 2005 (3,030 units) likely overstated actual conditions in 2005. 2,475 units was a more reasonable estimate for 2005.

Table 5
Development Trends: 2005-2013

Year	<u>Assumptions In 2006 REMA</u>		<u>DVRPC/Permit Estimates</u>	
	Housing Units	Population	Housing Units	Population
2000	1,026	3,032	1,026	3,032
2005	3,030	7,563	2,475	7,563
2010	4,989	14,018	3,229	10,200
Aug. 2013	6,594	18,694	3,515	10,525

Source: Group Melvin Design; Del. Valley Regional Planning Com.; NJ Dept of Labor; Urban Partners

To reach a total of 6,600 housing units by late summer 2013, the 2006 forecasts assumed that 3,600 new units would be added—about 700 within the Receiving Areas and about 2,900 in Weatherby and other locations outside the Receiving Areas. Instead, actual growth has added about 1,040 units—all in Weatherby and in other locations outside the Receiving Areas.

As noted above, full buildout forecasts underlying the 2006 analysis assumed that 9,600 new housing units would eventually be added in Woolwich after 2006: 3,725 in the two Receiving Areas; 4,950 in Weatherby and other locations; and 925 in the Woolwich Adult LLC development. As of 2013, the development approvals for Woolwich Adult LLC have expired and it is now assumed that this development will not occur. Adjusting for the 1,040 units added in the 2006-13 period and the ending of the Woolwich Adult LLC development, remaining development capacity consistent with the 2008 TDR Plan Element is 7,635 units: 3,725 in the two Receiving Areas and 3,910 in Weatherby and other locations.

The current population forecasts of the Delaware Valley Regional Planning Commission (DVRPC), however, estimate total population for Woolwich in 2040 at 23,098 (see **Table 6**). This forecast will support the production of about 6,130 units of new housing in the 2013-2040 period, even after adjusting for expected declines in average household size due to a larger portion of housing units being located in the more compact Receiving Areas.

We would expect that this growth would be shared between Receiving Areas and other locations: for planning purposes, we now forecast about 3,310 new units in Weatherby and other non-Receiving Area locations in the 2013-2040 period and about 2,820 in the Receiving Areas.

Table 6
Growth Forecasts: 2013 to 2040

Year	Population	Housing Units	New Housing During Period	Weatherby + Other	Route 322 Receiving #1	Auburn Road Receiving #2
Aug. 2013	10,525	3,515				
2015	10,812	3,630	115	115		
2020	12,553	4,780	1,150	755	210	185
2025	16,649	6,787	2,007	1,095	590	317
2030	20,745	8,777	1,990	800	1,195	
2035	22,486	9,457	680	355	325	
2040	23,098	9,647	190	190		
Total			6,132	3,310	2,320	502

Source: Delaware Valley Regional Planning Commission; Urban Partners

Adjustments to Route 322 Receiving Area #1

Given these many changes in underlying conditions, the Township is considering modifications to the Route 322 Receiving Area #1. Key considerations in making these adjustments include:

- Reduction in available development credits (see above);
- Acceleration in the pace of development of the regional retail center (the “Wolfson” development) included within the overall Route 322 Corridor Center (but not within the TDR Receiving Area #1). This development will provide the opportunity for more compact housing development within walking distance of a major commercial attraction.
- The availability of the former Woolwich Adult LLC parcels as possible Receiving Areas.
- Reduced growth expectations for the overall Township.

As noted above, total available development credits, after anticipated adjustments, are 1,160.25 credits. Given the historic commitment of the Township to farmland preservation and open space amenities and representations by the Township that these programs will continue to be aggressively pursued over the next 10 to 20 years, we can reasonably assume that another 200 development credits will be retired through these activities. This leaves approximately 960 credits, of which 117 are required for the Auburn Road Receiving Area #2. As a result, 843 credits are available to support a modified Route 322 Receiving Area #1.

We also note that it is essential that there be sufficient demand for credits to eventually retire all Sending Area credits; that is, with 843 remaining credits in the Sending Area (after deducting Receiving Area #2), the development program in Receiving Area #1 must achieve demand for at least this number of credits. Exact parity is not required: there could be some, but not too much, excess of demand over supply.

The Township has preliminarily considered several approaches to adjusting the Receiving Area #1; the most recent and refined approach is documented on the plan “Proposed Receiving Area Concept G” prepared by Kernan Engineering and dated September 26, 2013. The total Receiving Area includes 73 parcels with a total of 703.8 acres, 148.54 of which are environmentally constrained.

This proposed development program includes a variety of development zones, only some of which will require TDR to facilitate development. The areas for which development credits will be required include Highway Commercial, Interstate Commercial, Retail/Residential mixed-use, Neighborhood Commercial, and various intensities of residential use.

The proposed TDR categories within this modified Receiving Area #1 include:

- All or a portion of 22 parcels totaling 68.66 developable acres are proposed to be zoned **Highway Commercial**. These 22 parcels are clustered at four key intersections of Route 322, all expected to be signalized. With TDR, these parcels can increase FAR from .15 to .30 and can accommodate retail uses. One development credit will be necessary for each 10,000 SF of retail use or increased other commercial use. Three of these parcels with 7

acres currently have modern retail uses through variance. The TDR program is not likely to change these uses. For the remaining 62 acres on 19 parcels, participation in TDR could allow for up to 805,000 SF of additional retail use, though this intensity of development is not likely to occur. For purposes of estimating the impact of development in this zone on transfer of development credits, we assume that total retail development on these 19 parcels will be approximately 225,000 SF and this retail development will facilitate the transfer of 30 development credits.

- All or a portion of 11 parcels at the turnpike exit totaling 106.6 developable acres are proposed to be zoned ***Interstate Commercial***. With TDR, these parcels can increase FAR from .15 to .30 and can accommodate retail uses. One development credit will be necessary for each 10,000 SF of retail use or increased other commercial use. For purposes of estimating the impact of development in this zone on transfer of development credits, we assume that total development requiring TDR on these 11 parcels will be approximately 100,000 SF and will facilitate the transfer of 15 development credits.
- All or portions of five parcels totaling 8.67 developable acres are proposed to be zoned ***Retail/Residential*** mixed use. These parcels are located along Swedesboro-Paulsboro Road just north of Route 322. Development patterns for these parcels require multi-story mixed use buildings with limited first floor retail/commercial. Development credits are not required for the retail/commercial uses, but are required for upper floor residential. The density of residential development anticipated in this zone is 23 dwelling units per acre, providing for about 200 multi-family units with 25,000 SF to 40,000 SF of walkable retail/commercial frontage along Swedesboro-Paulsboro Road.
- All or portions of 25 parcels totaling 50.36 developable acres are proposed to be zoned ***Neighborhood Commercial***. These parcels are located along Swedesboro-Paulsboro Road and King's Highway, south of Route 322 as these two roads run toward Swedesboro. Development patterns for these parcels will allow multi-story mixed use buildings with limited upper floor residential development. Development credits are not required for the retail/commercial uses, but are required for upper floor residential. It is anticipated that a few of these parcels may be attractive for such mixed use development; for planning purposes, we assume that these parcels collectively will result in 50 units of multi-family housing.
- The residential development program requiring transfer of development credits would occur in several locations. Two areas of ***multi-family flats*** would be developed adjacent to the proposed retail "Main Street" northeast of the intersection of Kings Highway and Route 322. The first area is immediately east of the "Main Street;" the second, immediately north of this commercial center. Together, all or portions of five parcels in this area with 19.64 acres would accommodate 540 flats in multi-family buildings at a density of 28 dwelling units per acre.
- The remaining residential development in Receiving Area #1 would occur in five ***Flexible Residential Areas*** ("Flex Areas") zoned to allow flexible development patterns

utilizing a mix of small-lot single family homes, twins, and townhomes:

- Flex Area 1: An area with five parcels and a total of approximately 101.3 developable acres located southeast of Kings Highway and northeast of the ten-acre area of multi-family flats north of the “Main Street” described above.
- Flex Area 2: An area with four parcels and a total of approximately 52.6 developable acres located northwest of the intersection of Route 322 with Swedesboro-Paulsboro Road.
- Flex Area 3: An area with four parcels and a total of approximately 65.38 developable acres located south of Route 322 between Swedesboro-Paulsboro Road and Locke Road.
- Flex Area 4: An area with a single parcel of 18.2 developable acres located southwest of the intersection of Route 322 and Locke Road.
- Flex Area 5: An area with a single parcel of 14.5 developable acres located south of Route 322 along the east side of King’s Highway.

Taken together, these five areas include approximately 252 developable acres of land. Within these Flex Areas, small-lot single family homes can be no more than 15% of units developed; townhomes can be no more than 80% of developed units. Minimum allowed density is 6 dwelling units per gross developable acre; maximum density is 8 dwelling units per gross developable acre. Therefore, the ranges of units provided by Flex Area are:

- Flex Area 1: 608 to 810 units;
- Flex Area 2: 316 to 420 units;
- Flex Area 3: 393 to 523 units;
- Flex Area 4: 110 to 145 units;
- Flex Area 5: 87 to 116 units.

The total development in all five flex areas together will range from 1,514 to 2,014 units.

On **Table 7**, we assess the impact of development in these Receiving Area #1 zones on demand for development credits from the Sending Area.

Table 7
Development Program Credit Requirements
Route 322 Receiving Area #1

Development Type	Development Program --Units	Development Program --Retail/Commercial SF	Developable Land (Acres)	Required Development Credits	Development Supported By Receiving Area Zoning	Development Credit Shortfall	Development Credit Bonus Ratio	Bonus Development Credits	Development Credits Needed From Sending Area
Highway Commercial		225,000	68.66	30	0	30	N/A	0	30
Interstate Commercial		100,000	106.60	15	0	15	N/A	0	15
Retail/Residential Mixed-Use Flats	200	35,000	8.67	200	0	200	2.00	133	67
Neighborhood Commercial	50		50.36	50	0	50	2.00	33	17
Multi-Family Flats--East & North of "Main Street"	540		19.64	540	12	528	2.00	352	176
Flex Areas #1-5	1,514		251.98	1,514	148	1,366	1.53	826	540
Total	2,304	360,000	505.91	2,349	159	2,190		1,345	844

As noted above, we assume that likely retail development in the Highway Commercial zone will create demand for 30 development credits and the TDR-supported incremental development in the Interstate Commercial zone will support demand for another 15 credits. Similarly, the anticipated 200 flats in the Retail/Residential area along Swedesboro-Paulsboro Road will require 67 development credits. The 50 flats in the neighborhood Commercial zone will require 17 credits, while the 540 units of flats adjacent to the “Main Street” development will generate demand for another 176 credits.

If the minimum required development of 1,514 units occurred in the five Flex Areas with 15% small lot single-family homes, 5% twins, and 80% townhomes, this development would require 540 credits from the Sending Area.

Taken together, these components of demand would support transfer of 844 development credits, almost precisely matching the residual supply of 843 credits after adjustment for the Auburn Road Receiving Area #2 and the 200 credits likely to be retired under the continued farmland preservation program.

We should also note that the 2,302 housing units matches closely to the anticipated demand for 2,320 units in Receiving Area #1 based on DVRPC growth forecasts.

Appendix 9
School Attendance Estimation for Revised Receiving Area #1

School Attendance Estimation for Revised Receiving Area #1 October, 2013

The proposed revisions to the development program for Receiving Area #1 will result in approximately 2,300 new housing units including 790 flats, 227 small-lot single family homes, 76 twins, and 1,211 townhomes.

As an independent assessment of population and school enrollment impact, the “Who Lives in New Jersey?” guide to demographic multipliers produced by David Listokin et al of the Center for Urban Policy Research at Rutgers University provides a basis for calculating the resident and school enrollment impacts of specific development projects. These factors are applied to the proposed development program as shown on **Table 1**.

Table 1
Resident Characteristics
Rutgers Center for Urban Policy Research Factors Analysis
Receiving Area #1

	Estimated Residents (1)	Estimated School Age Children (1)	Estimated Public School Enrollment (1) Swedesboro-Woolwich	Estimated Public School Enrollment (1) Kingsway
395 Flats--One-Bedroom	643	24	16	5
395 Flats--Two-Bedroom	772	50	24	11
245 Townhomes--Two-Bedroom	469	24	12	8
966 Townhomes--Three-Bedroom	2,361	273	126	110
76 Twins--Three-Bedroom	185	22	10	9
227 Small-Lot Single-Family--Four-Bedroom	877	261	130	73
Total	5,307	654	318	216

Footnotes:

(1) From Factors In "Who Lives In New Jersey Housing," November, 2006

Based on this analysis, the expected increase in school age population due to this development is 654 children, with 318 of them being expected to attend Swedesboro-Woolwich School District schools and 216 expected to attend Kingsway Regional schools.

The “Who Lives in New Jersey?” guide, however, provides an analytical approach based on statewide factors. For a community with especially attractive schools, such as Woolwich, there may be more significant impacts from incremental housing development. On **Table 2**, we have considered a more localized analysis of demographic impact.

In general, the extent to which children reside in new housing developments is heavily determined by the type of housing units provided. For instance, subdivisions with a large percentage of three-, four-, and five-bedroom homes will likely house a significant number of school-age children. On the other hand, a complex of one-bedroom apartments will house very few children—it is almost always true that no children sleep in the first bedroom in any housing unit. Based on these relationships, the strongest predictor of school-aged children in a new housing development is the number of bedrooms *after the first bedroom*.

The 2007-2011 American Community Survey reports that Woolwich Township had 3,275 housing units with 2,326 school age children (age 5-17). Utilizing ratios for bedroom counts derived from this 2007-11 American Community Survey, we estimate that these 3,275 housing units contained 10,947 bedrooms, or 7,672 bedrooms after the first bedroom. As a result the ratio of school age children to bedrooms beyond the first bedroom was 0.303 (2,326 divided by 7,672). Applying this ratio to the proposed 2,304 new residential units yields the estimates shown on **Table 2**, which indicate that this proposed development will yield about 1,032 children aged 5-17.

Table 2
Resident Characteristics--Localized Bedroom-Count Analysis
Receiving Area #1

	Estimated School Age Children (1)	Estimated Public School Enrollment (2) Swedesboro-Woolwich	Estimated Public School Enrollment (3) Kingsway
395 Flats--One-Bedroom	0	0	0
395 Flats--Two-Bedroom	120	62	45
245 Townhomes--Two-Bedroom	74	39	28
966 Townhomes--Three-Bedroom	586	305	219
76 Twins--Three-Bedroom	46	24	17
227 Small-Lot Single-Family--Four-Bedroom	206	108	77
Total	1,032	538	386

Footnotes:

(1) Estimated .303 School-Age Children per bedroom beyond the first bedroom in Woolwich (American Community Survey 2007-11)

(2) Public-School Enrollment Ratio in Swedesboro-Woolwich of .966 of School-Age Children (5-11)

(3) Public-School Enrollment Ratio in Kingsway Regional of .814 of School-Age Children (12-17)

We have estimated the ratio of public school attendance for the period covered by the data collected from the American Community Survey (2007-11). This ratio appears to be .966 for children ages 5-11 attending Swedesboro-Woolwich Schools and .814 for older children attending Kingsway Regional schools. Applying these ratios to the 1,032 anticipated school-age children results in an anticipated increased attendance of 538 at Swedesboro-Woolwich schools and 386 at Kingsway Regional schools.

Looking at the two analytic techniques together, we conclude that the **likely increase in attendance at Swedesboro-Woolwich School District schools from this 2,304-unit growth in the Receiving Area #1 will be in the range of 318 to 538 pupils; the likely increase in attendance at Kingsway Regional School District schools will be in the range of 216 to 386 pupils.**

For the 2013-14 school year, the local cost per student at Swedesboro-Woolwich schools is \$9,959, while the local cost per student at Kingsway Regional schools is \$8,442. Therefore the incremental local cost for Swedesboro-Woolwich schools is in the range of \$3,167,000 to \$5,358,000 in 2013 prices. The 2013 tax rate is 1.319% based on equalized value. For Kingsway Regional schools, the incremental local cost will be in the range of \$1,823,000 to \$3,259,000 in 2013 prices. The 2013 tax rate is 0.7675% based on equalized value.