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LINDA JOY AND KENNETH JAY POLLIN MEMORIAL COMMUNITY TRANSPORTATION IMPACT STUDY WASHINGTON, D C.

Prepared for
Pollin Memorial Community Development
And
District of Columbia Housing Authority

Prepared by
Wells & Associates, LLC

June 16, 2006

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LINDA JOY AND KENNETH JAY POLLIN
MEMORIAL COMMUNITY
TRANSPORTATION IMPACT STUDY
WASHINGTON, D.C.

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Section I
INTRODUCTION

This report presents the results of a traffic impact analysis of the Linda Joy & Kenneth Jay Pollin Memorial Community residential project within Parkside in Ward 7 in the northeast section of Washington, D C , as shown on Figure 1-1

Parkside is located east of Kenilworth Aquatic Gardens, west of Kenilworth Avenue, and south of Mayfair The subject site consists of 459,939 square feet of land area in Square 5040, Parcel 170/27 and a portion of Parcel 170/28, in the northeast section of Washington, D C Lot 804 in Square 5040 is zoned R-5-A and is bounded by Anacosita Avenue, Hayes Street, Barnes Street and Grant Street Parcel 170/27 and 170/28, which are triangular in shape and not now included in a zone district, are collectively bounded by Hayes Street, Anacostia Avenue and Kenilworth Park.

Pollin Memorial Community Development and the District of Columbia Housing Authority propose a Planned Unit Development consisting of 125 residential units and 125 off-street parking spaces The 42 rental apartment units that currently occupy the site would be replaced and the remaining 83 units would be owner occupied townhomes

The subject site is served by a connected network of local streets, including Anacostia Avenue, Barnes Street, Grant Place, and Hayes Street. Parkside is connected to Route 295 (Kenilworth Avenue), a limited access highway The closest interchanges are located to the north at Nannie Helen Burroughs Avenue and to the south at Benning Road

For purposes of this traffic analysis, this development was assumed to be completely built and occupied three years hence, by 2009

Tasks undertaken in this study included the following

1 Review the proposed development plans and other background data

2 A field reconnaissance of existing roadway and intersection geometrics, traffic controls, traffic signal phasing/timings, and speed limits

3 Counts of existing vehicular and pedestrian traffic at four (4) key intersections

4 Analysis of existing levels of service at these intersections

5 Background future traffic volumes were forecasted for project buildout.

6 Background levels of service were calculated at key intersections based on background traffic forecasts, existing traffic controls, and existing intersection geometrics

7 The number of AM and PM peak hour trips that would be generated by the proposed project were estimated based on (1) Institute of Transportation Engineers (ITE) trip generation rates, (2) the proximity of the project to the nearest Metro station, and (3) experience with other comparable projects in Washington, D C

8 Total future traffic volumes were forecasted for 2009

9 Total future levels of service were calculated at key intersections based on total future traffic forecasts, existing traffic controls, and existing intersection geometrics

10 The adequacy of the proposed number of parking spaces were evaluated

Sources of data for this analysis included traffic counts conducted by Wells & Associates, ITE, the Washington Metropolitan Area Transit Authority (WMATA), the District of Columbia Office of Planning, the District Department of Transportation (DDOT), Parkside Mixed-Use Development Traffic Impact Study, Gorove Slade, August 8, 2005, and the development team

The conclusions of this traffic impact study are as follows:

1. ***Turning movements at the four intersections in the study area currently operate at level of service (LOS) "C" or better during both the AM and PM peak hours.***

2. ***The Linda Joy & Kenneth Jay Pollin Memorial Community residential project will add 24 new AM peak hour trips and 28 new PM peak hour trips, to the public street system upon project completion***

3. ***The net additional trips that would be generated by the proposed residential project will not have an adverse impact on traffic conditions in the study area. On average, motorists on Hayes Street at the Kenilworth Avenue access road would realize 4.9 seconds of additional delay.***

4. ***The connected sidewalk system in the immediate site vicinity and the proximity to the Minnesota Avenue Metrorail Station provide a transit opportunity for residents other than the automobile***

5. ***The 125off-street parking spaces would adequately accommodate the Linda Joy & Kenneth Jay Pollin Memorial Community residential project.***

Figure 1–1
Site Location

North

Linda Joy and Kenneth Jay Pollin Memorial Community
Washington, D.C.

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LOCATION PLAN

ILLUSTRATIVE SITE PLAN

§ 2406.11 – PUD Application Requirements

LINDA JOY & KENNETH JAY POLLIN MEMORIAL COMMUNITY

Figure 1–2
Site Plan

North

Section 2
BACKGROUND DATA

Overview

This section presents the general study scope and background data regarding the public road network, existing vehicular and pedestrian traffic counts, public transportation facilities and services, curb parking, and bicycle facilities

Study Scope

This traffic study includes the following intersections

1 Kenilworth Avenue/Foote Street.
2 Anacostia Avenue/Hayes Street
3 Kenilworth Terrace/Hayes Street
4 Kenilworth Avenue/Hayes Street

Also two future intersections along Hayes Street and on intersection along Anacostia Avenue were included

Level of service (LOS) "D" is considered the minimum acceptable level of service in urban areas such as Washington, D C

Public Road Network

Overview. The subject site is served by a connected network of local streets and a freeway Existing intersection lane use and traffic control at key intersections in the site vicinity are shown on Figure 2-1

In the site vicinity, Kenilworth Avenue is classified by DDOT as a freeway Anacostia Avenue, Foote Street, Hayes Street, and Kenilworth Terrace are classified as local streets

Kenilworth Avenue (Route 295) is a north-south, limited access, freeway connecting the Baltimore Washington Parkway in Maryland to Interstate 295 in Washington, D C Access to Kenilworth Avenue, the immediate site vicinity is provided via southbound access road The closest interchanges are located to the north at Nannie Helen Burroughs Avenue and to the south at Benning Road

Anacostia Avenue in the site vicinity is a 30-foot road that connects Hayes Street through Parkside to Benning Road On-street parking is permitted on both sides of Anacostia Avenue Sidewalks are located on either side of Anacostia Avenue in the site vicinity

Foote Street is a two-way, local street that connects Anacostia Avenue to the Kenilworth Avenue access road Sidewalks are located on the both side of Foote Street

Hayes Street is a 62 -foot wide local street that operates one-way westbound between Kenilworth Terrace and Mayfair Terrace Between Kenilworth Avenue and Kenilworth Terrace, Hayes Street operates two-way Sidewalks are located on both sides of Hayes Street

Kenilworth Terrace is a north-south, two-way, local street connecting Jay Street to the north to Foote Street Sidewalks are located on either side of Kenilworth Terrace

Existing Traffic Counts

Vehicular Traffic Counts. Existing AM and PM peak period vehicular traffic counts were conducted on Thursday, March 30, 2006, by Wells & Associates at the following intersections

1 Kenilworth Avenue/Foote Street.
2 Anacostia Avenue/Hayes Street.
3 Kenilworth Terrace/Hayes Street.
4 Kenilworth Avenue/Hayes Street.

The results are included in Appendix A and summarized on Figure 2-2

Figure 2-2 indicates that Anacostia Avenue, through the site, carried 71 trips during the AM peak hour, and 34 trips during the PM peak hour Hayes Street, just north of Kenilworth Terrace carried 287 trips during the AM peak hour, and 245 trips during the PM peak hour

Pedestrian Traffic Counts. Existing AM and PM peak period pedestrian traffic counts also were conducted on Thursday, March 30, 2006, by Wells & Associates at the intersections listed above The results are included in Appendix B and summarized on Figure 2-3

Public Transportation Facilities and Services

The subject site is served by numerous Metrobus lines and the Minnesota Avenue Metro station, as shown on Figure 2-4 The Minnesota Avenue Metro station is located approximately 1,500 feet from the proposed project, across Kenilworth Avenue The Metro station is connected to the residential community by an existing pedestrian bridge at Hayes Street. Another pedestrian bridge is planned to cross Kenilworth Avenue at Grant Street

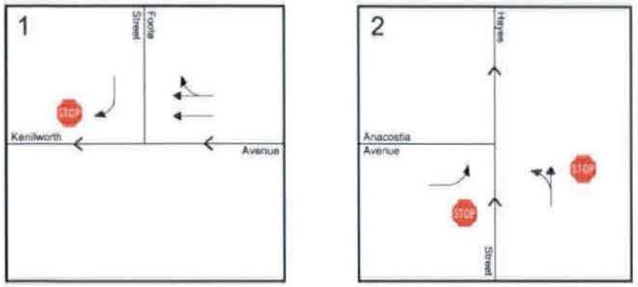
Metrobus Line U6 is routed on Kenilworth Terrace and Hayes Street, adjacent to Parkside Metrobus Lines U2, U4, U5, U6, U8, V7, V8, and X3 serve the Minnesota Avenue Metro station

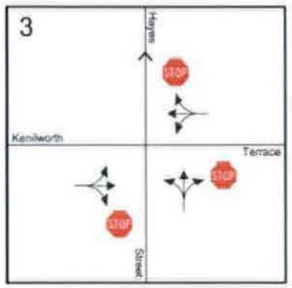
Curb Parking

Parking is permitted on both sides of both sides of Anacostia Avenue and Hayes Street in the through and along the site frontage On-street curb parking is planned to remain along both Anacostia Avenue and Hayes Street with the proposed Linda Joy & Kenneth Jay Pollin Memorial Community residential project. As noted above, each dwelling unit would also have off-street parking

Bicycle Facilities

Currently, there are no bicycle facilities in the immediate site vicinity A multi-use trail is proposed along Foote Street and Kenilworth Terrace





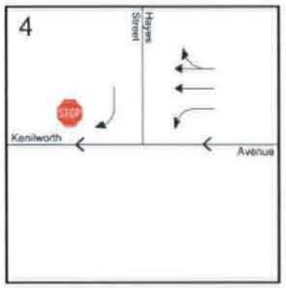


Figure 2–1
Intersection Lane Use and Traffic Control

← Represents One Travel Lane
Signalized Intersection
Stop Sign

North

Linda Joy and Kenneth Jay Pollin Memorial Community
Washington, D.C.

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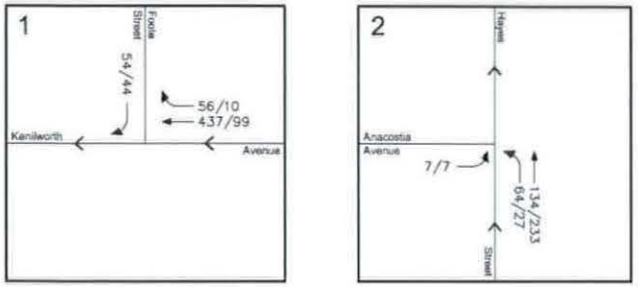

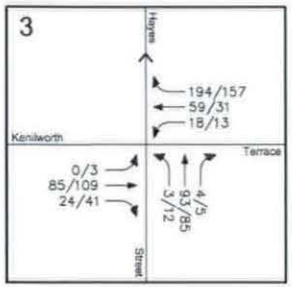

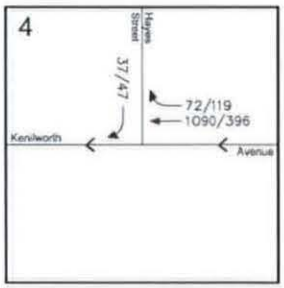

Figure 2–2
Existing Vehicular Traffic Counts

AM PEAK HOUR
PM PEAK HOUR
000/000

North

Linda Joy and Kenneth Jay Pollin Memorial Community
Washington, D.C.

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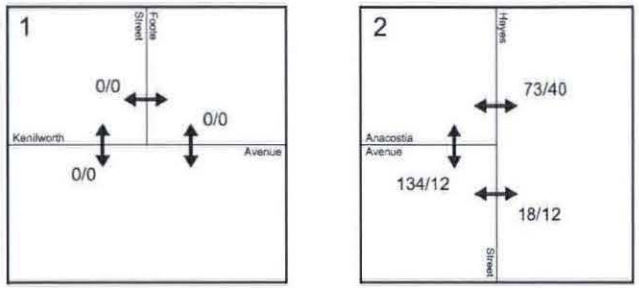

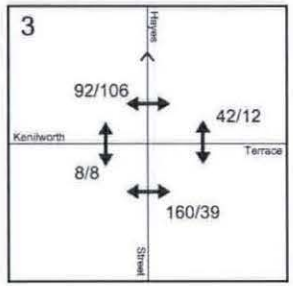

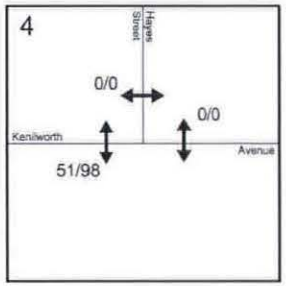

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Figure 2-3
Existing Pedestrian Traffic Counts

xx/xx Existing Pedestrian Volumes

North

Linda Joy and Kenneth Jay Pollin Memorial Community
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Figure 2-4
Existing Metro Bus & Rail Service

North

Linda Joy and Kenneth Jay Pollin Memorial Community
Washington, D.C.

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Section 3
ANALYSIS

Overview

This section presents analyses of existing and future traffic conditions, without and with the proposed Linda Joy & Kenneth Jay Pollin Memorial Community residential project, and evaluations of the parking requirements

Existing Levels of Service

Existing peak hour levels of service were estimated at the four key intersections in the study area based on the existing lane usage and traffic control shown on Figure 2-1, existing vehicular traffic counts shown on Figure 2-2, existing pedestrian traffic counts shown on Figure 2-3, and the Synchro intersection capacity analysis model The results are presented in Appendix C and summarized in Table 3-1

Table 3-1 indicates that the turning movements at the four, unsignalized, study intersections currently operate at level of service (LOS) "C" or better during both the AM and PM peak hours

Background Traffic Growth

A 0 5 percent per year background traffic growth rate was used to account for general regional traffic growth and other projects that may be built within the next three years in the District of Columbia outside of the study area This rate was compounded for three years for project buildout (2009) This growth rate was applied to all movements at each study area intersection

Pipeline Projects

Vehicular trips associated with the Parkside PUD was included in this traffic study Traffic data for the Parkside PUD was obtained from the Parkside Mixed-Use Development Traffic Impact Study, Gorove Slade, August 8, 2005

The Parkside PUD would include 1,865 residential units, 586,520 S F of office, and 37,000 S F of retail As shown in Table 3-2, the Parkside project is anticipated to generate 797 AM peak hour trips (522 in, 275 out) and 871 PM peak hour trips (307 in, 564 out)

The traffic assignments for the Parkside PUD were obtain from the traffic study and are shown on Figure 3-1

Table 3-1
Linda Joy and Kenneth Jay Pollin Memorial Community
Intersection Level of Service (1 2 3)

Intersection	Control	Approach	Existing AM	Existing PM	Background AM	Background PM	Total Future AM	Total Future PM
1 Kenilworth Avenue & Foote Street	Unsignalized	EBR	B [10 4]	A [8.8]	B [11 2]	A [10 0]	B [11 3]	B [10 0]
2. Anacostia Avenue & Hayes Street	Unsignalized	WBTL	A [8 3]	A [8.8]	A [8 3]	A [8 8]	A [8 3]	A [9 0]
		NBL	A [7 6]	A [7.8]	A [7 7]	A [7 8]	A [7 7]	A [7 8]
3 Kenilworth Terrace & Hayes Street	Unsignalized	NBLTR	A [8 1]	A [8.3]	NA	NA	NA	NA
		SBLTR	A [8 8]	A [8.2]	NA	NA	NA	NA
		WBLTR	A [8 6]	A [8.5]	NA	NA	NA	NA
IMPROVEMENT	Unsignalized	EBLTR	NA	NA	A [8 9]	A [8 8]	A [8 9]	A [8 9]
Parkside Mixed Use Development Proposes Hayes Street to be 2 way from Parkside Place to Kenilworth Terrace		WBLTR	NA	NA	A [9 6]	A [9 8]	A [9 7]	B [10 0]
		NBLTR	NA	NA	A [9 1]	A [9 9]	A [9 3]	B [10 0]
		SBLTR	NA	NA	B [11 8]	B [10 2]	B [11 9]	B [10 4]
4 Kenilworth Avenue & Hayes Street	Unsignalized	EBR	C [15 7]	B [11 4]	E [45 0]	C [16 4]	E [49 9]	C [16.8]
5 Anacostia Avenue & Site Access	Unsignalized	EBLR	NA	NA	NA	NA	A [8 7]	A [8 5]
6 Site Access & Hayes Street	Unsignalized	WBLT	NA	NA	NA	NA	A [8 5]	A [0 3]
		NBL	NA	NA	NA	NA	A [7 2]	B [10 1]
7 Site Access & Hayes Street	Unsignalized	NBLT	NA	NA	NA	NA	A [9 2]	A [0 1]

Notes:

[1] Based on 6s Synchro version 6

[2] Numbers in brackets, [ ], represent control delay in seconds per vehicle for unsignalized intersections.

[3] Numbers in parenthesis, ( ), represent control delay in seconds per vehicle for signalized intersections.

Table 3 2
Linda Joy and Kenneth Jay Pollin Memorial Community
Pipeline Project Trip Generation (1)

Background Development	Land Use	Land Use Code	Size	Units	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Parkside Mixed Use Development										
	Residential				68	203	271	184	119	303
	Office				442	61	503	80	392	472
	Retail				12	11	23	43	53	96
	Total Background Development				**522**	**275**	**797**	**307**	**564**	**871**

Notes (1) Trip Generation taken from Parkside Mixed-Use Development, Traffic Impact Study Prepared by Gorove Slade, August 8 2005

Background Traffic Forecasts

Future peak hour traffic forecasts, without the Linda Joy & Kenneth Jay Pollin Memorial Community residential project, were estimated based on existing traffic counts, background traffic growth, and traffic assignments associated with the Parkside PUD, as shown on Figure 3-2

Background Future Levels of Service

Future peak hour levels of service, without the Linda Joy & Kenneth Jay Pollin Memorial Community residential project, were estimated at the four key intersections in the study area for the year of project buildout (2009) based on the intersection lane usage and traffic control shown on Figure 2-1, the background traffic forecasts shown on Figure 3-2, and the Synchro intersection capacity analysis model

The results are presented in Appendix D, and are summarized in Table 3-1 Table 3-1 indicates that the turning movements at the Kenilworth Avenue/Foote Street, Anacostia Avenue/Hayes Street, and Kenilworth Terrace/Hayes Street intersections would operate at LOS "A" or "B" during the AM and PM peak hours

The eastbound right turn movement on Hayes Street at the Kenilworth Avenue access road would operate at LOS "E" during the AM peak hour and LOS "C" during the PM peak hour

Site Trip Generation Analysis

The number of trips that will be generated by the proposed Linda Joy & Kenneth Jay Pollin Memorial Community residential project were estimated based on (1) Institute of Transportation Engineers (ITE) trip generation rates, (2) the proximity of the project to the Minnesota Avenue Metro station, and (3) experience with other comparable projects in Washington, D C

The number of vehicle trips generated by the proposed project were reduced to account for the proximity to the Minnesota Avenue Metro station, based on U S Census 2000 Data and the *Development-Related Ridership Survey II*, Washington Metropolitan Area Transit Authority, December 1989 The proposed project is approximately 1,500 feet from Metro station, with access provided via an existing bridge over Kenilworth Avenue and in the future via a new pedestrian bridge It is assumed that 40 52 percent of the residents will use either Metrorail, Metrobus or another form of transportation other than a single occupancy vehicle

Table 3-3
Linda Joy and Kenneth Jay Pollin Memorial Community
Site-Trip Generation Analysis

Land Use	Size	Units	Land Use Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Existing Conditions									
Apartments	42	D U	220	5	19	24	27	14	41
Existing ITE Person Trips (2)									
Apartments	42	D U	220	6	21	26	30	15	45
Existing ITE Vehicle Trips (3)									
Apartments	42	D U	220	3	10	13	15	7	22
Proposed ITE Vehicle Trips (1)									
Townhomes	83	D U	230	7	37	44	35	17	52
Apartments	42	D U	220	5	19	24	27	14	41
ITE Person Trips (2)									
Townhomes	83	D U	230	8	41	48	39	19	57
Apartments	42	D U	220	6	21	26	30	15	45
ITE Vehicle Trips (3)									
Townhomes	83	D U	230	4	20	24	19	9	28
Apartments	42	D U	220	3	10	13	15	7	22
Proposed Development Subtotal				7	30	37	34	16	50
Difference (Proposed minus Existing)				**4**	**20**	**24**	**19**	**9**	**28**

Notes (1) Based on Trip Generation 7th Edition Institute of Transportation Engineers

(2) Assumptions

	Residential
Non-auto mode split	0%
Average vehicle occupancy (persons per vehicle)	1 10

(3) Assumptions

	Residential
Non-auto mode split	40 52%
Average vehicle occupancy (persons per vehicle)	1 20

Non-auto mode splits were adapted from the U S Census 2000 Data Summary File 3 and the *Development Related Ridership Survey II* Washington Metropolitan Area Transit Authority December 1989

It is estimated that the proposed 125 dwelling units would generate 37 AM peak hour trips, and 50 PM peak hour trips, as shown in Table 3-3 The 42 existing residential apartments generate 13 AM peak hour trips and 22 PM peak hour trips, based on ITE rates The proposed Linda Joy & Kenneth Jay Pollin Memorial Community, thus, would generate 24 net additional trips during the AM peak hour and 28 net additional trips during the PM peak hour, or one (1) vehicle every 2 5 minutes during the AM peak hour and one (1) vehicle every 2 15 minutes during the PM peak hour

Trip Distribution Analysis

The distribution of peak hour trips that would be generated by the proposed Linda Joy & Kenneth Jay Pollin Memorial Community residential project was determined based on existing traffic counts and are consistent with other traffic studies conducted in the area The estimated directions of approach are shown on Figure 3-3

As shown on Figure 3-3, 25 percent of the trips would approach the site from the north on Kenilworth Avenue, 50 percent would approach the site from the south on Kenilworth Avenue and 25 percent would approach the site from the west on Benning Road

Site Traffic Assignments

The site-generated traffic volumes were assigned to the public road network according to the directional distribution described above The resulting site traffic assignments are shown on Figure 3-4

Total Future Traffic Forecasts

These site traffic assignments were added to the future background traffic volumes shown on Figure 3-2 to yield the total future traffic forecasts shown on Figure 3-5

Total Future Levels of Service

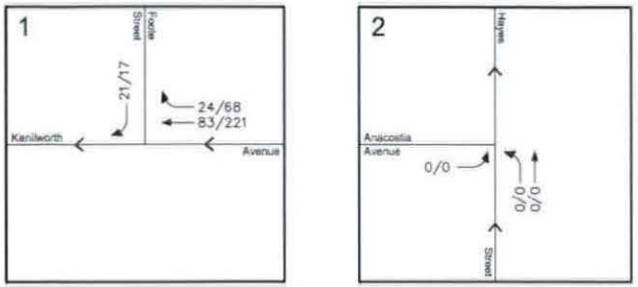
Future peak hour levels of service with Linda Joy & Kenneth Jay Pollin Memorial Community residential project were estimated at the key intersections in the study area based on the lane usage and traffic controls shown on Figure 2-1, the total future traffic forecasts shown on Figure 3-5, and the Synchro intersection capacity analysis model The results are presented in Appendix E and summarized in Table 3-1

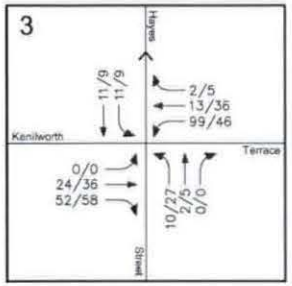
Table 3-1 indicates that the turning movements at the unsignalized, study intersections would continue to operate at levels of service consistent with background levels during both the AM and PM peak hours The eastbound right turn movements from Hayes Street onto the Kenilworth Avenue access road would continue to operate at or near capacity during the AM peak hour The trips associated with the Linda Joy & Kenneth Jay Pollin Memorial Community residential project would add 4 9 seconds of delay per vehicle to the eastbound right turn movement during the AM peak hour and only 0 4 seconds during the PM peak hour Based on the intersection levels of service and the minimal increase in delay, the project will not have an adverse impact on the surrounding road network

Parking Requirements

The parking requirement for residential units, both apartments and one-family dwellings, within the R-5-A zone is one (1) space for each dwelling unit, according to Chapter 21 of the *District of Columbia Municipal Regulations* The proposed Linda Joy & Kenneth Jay Pollin Memorial Community residential project, therefore, would require 125 parking spaces

The proposed residential project would be served by 125 off-street parking spaces, one space for each dwelling unit Further, some of the dwelling units will have tandem off-street parking spaces and on-street parking is proposed to remain along Anacostia Avenue and Hayes Street and is proposed along the dwelling side of the 20-foot streets within the project These on-street spaces will provide an opportunity for guests of the residents to park within the site and not spill onto other neighborhood streets The proposed parking supply more than adequately accommodates the parking requirements for the proposed residential project.





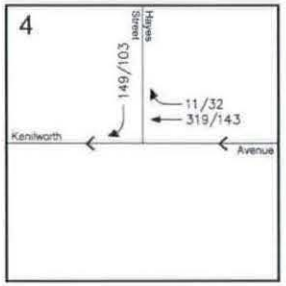


Figure 3–1
Pipeline Project Traffic Forecasts

AM PEAK HOUR
PM PEAK HOUR
000/000

North

Linda Joy and Kenneth Jay Pollin Memorial Community
Washington, D.C.

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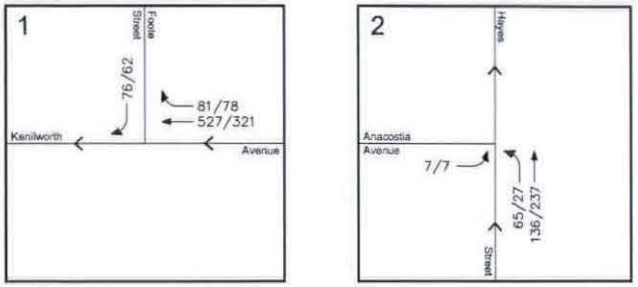

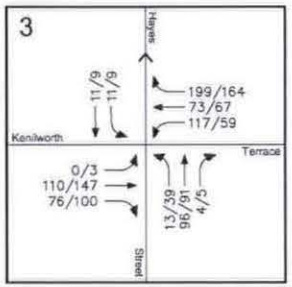

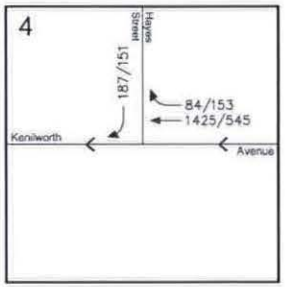

Figure 3–2
Background Future Peak Hour Traffic Forecasts

AM PEAK HOUR
PM PEAK HOUR
000/000

North

Linda Joy and Kenneth Jay Pollin Memorial Community
Washington, D.C.

WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS

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Figure 3–3
Site–Generated Traffic Directional Distribution

Linda Joy and Kenneth Jay Pollin Memorial Community
Washington, D.C.

WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS

O:\Projects\3001-3500\3204 Parkside Housing\Graphics\3204 Directional Distribution.dwg\CA

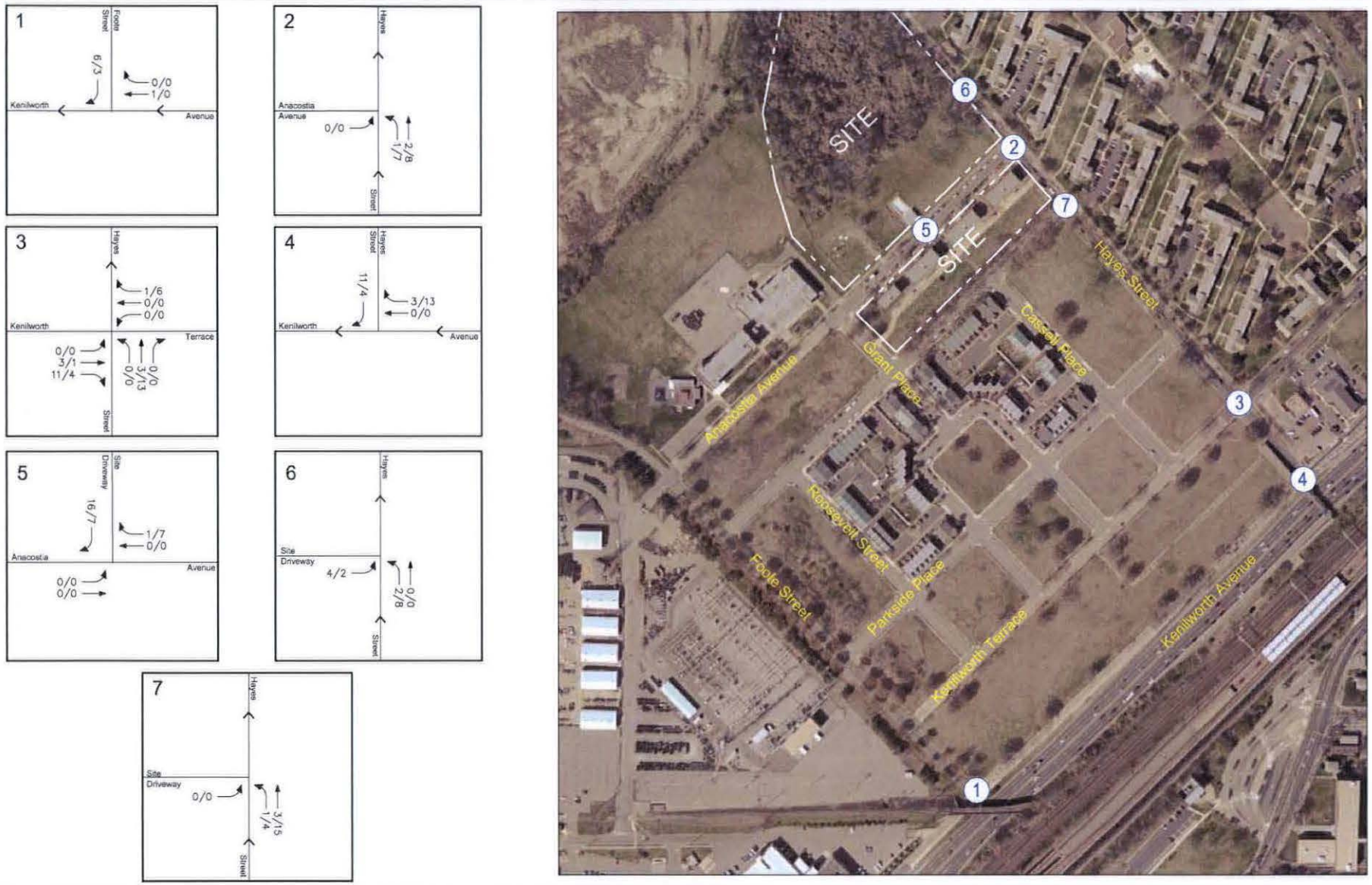


Figure 3–4
Site–Generated Traffic Assignments

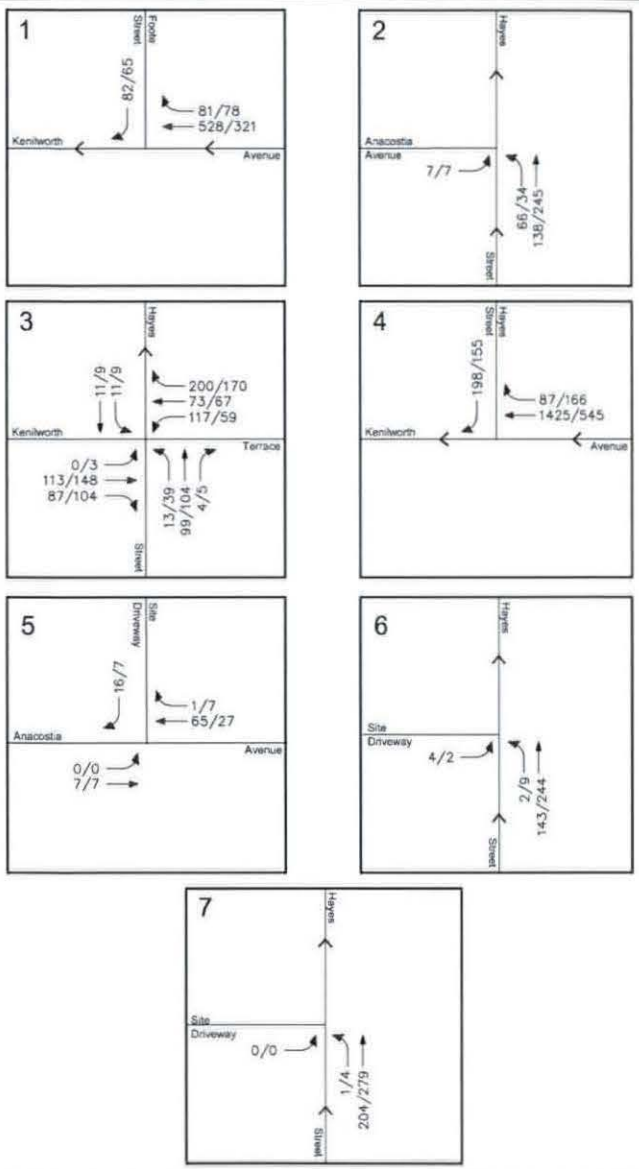
AM PEAK HOUR
PM PEAK HOUR
000/000

North

Linda Joy and Kenneth Jay Pollin Memorial Community
Washington, D.C.

WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS

O:\Projects\3001-3500\3204 Parkside Housing\Graphics\3204 Parkside Housing Graphics.dwg\MRP



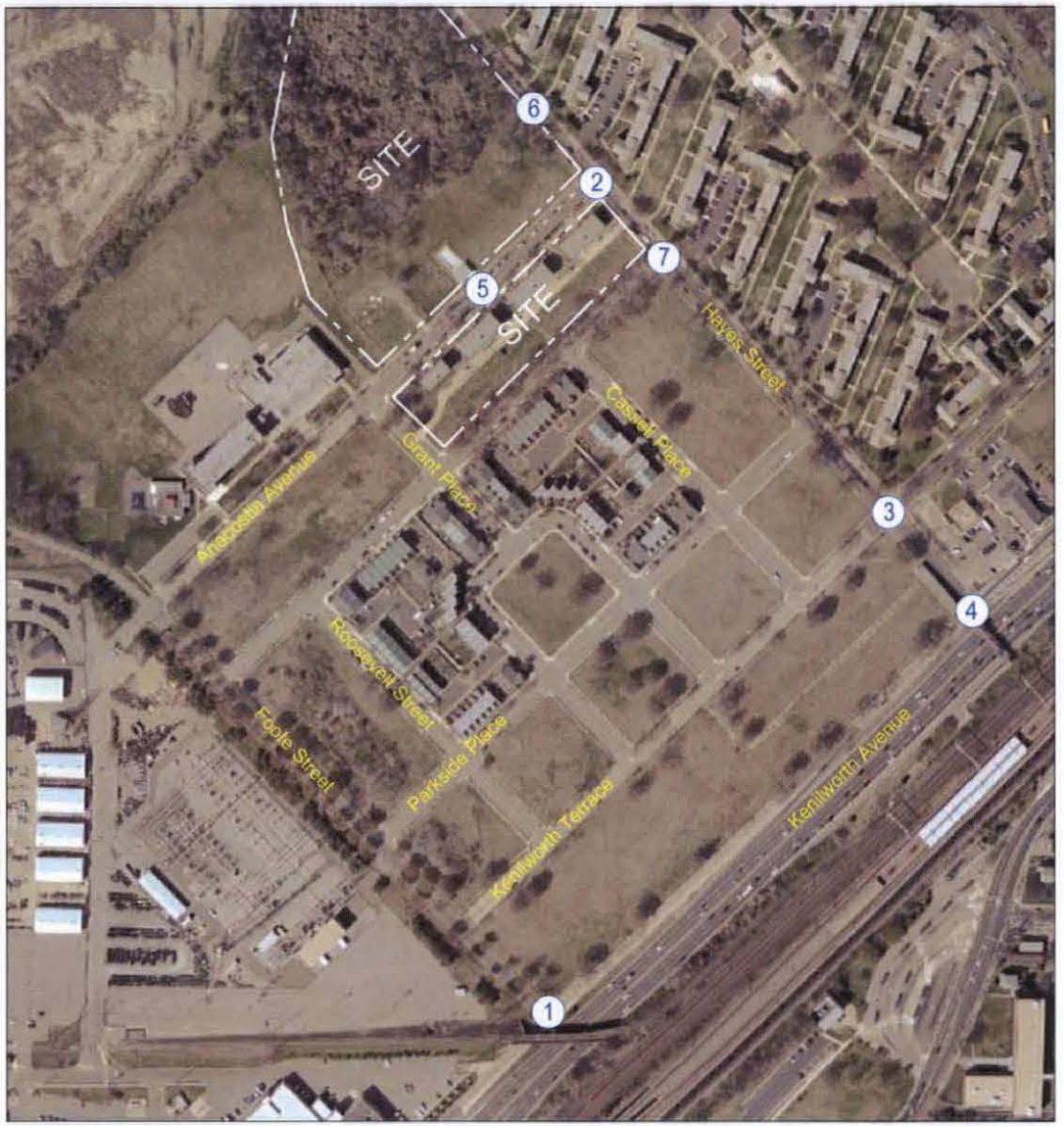


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Figure 3–5
Total Future Peak Hour Traffic Forecasts

AM PEAK HOUR
PM PEAK HOUR
000/000

North

Linda Joy and Kenneth Jay Pollin Memorial Community
Washington, D.C.

WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS

Section 4
CONCLUSIONS

The conclusions of this traffic impact study are as follows

1 Turning movements at the four intersections in the study area currently operate at level of service (LOS) "C" or better during both the AM and PM peak hours

2 The Linda Joy & Kenneth Jay Pollin Memorial Community residential project will add 24 new AM peak hour trips and 28 new PM peak hour trips, to the public street system upon project completion

3 The net additional trips that would be generated by the proposed residential project would have no significant impact on the intersections in the study area On average, motorists on Hayes Street at the Kenilworth Avenue access road would realize 4 9 seconds of additional delay

4 The net additional trips that would be generated by the proposed residential project will not have an adverse impact on traffic conditions in the study area On average, motorists on Hayes Street at the Kenilworth Avenue access road would realize 4 9 seconds of additional delay

5 The 125off-street parking spaces would adequately accommodate the Linda Joy & Kenneth Jay Pollin Memorial Community residential project

Appendix A

Existing Vehicular Traffic Counts

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT	Parkside Housing	DATE	3/30/2006	SOUTHBOUND ROAD	Kenilworth Terrace NE	
W & A JOB NO	3204	DAY	Thursday	NORTHBOUND ROAD	Kenilworth Terrace NE	
INTERSECTION	Hayes St & Kenilworth Terr	WEATHER	Clear	WESTBOUND ROAD	Hayes Street NE	
LOCATION	Washington DC	COUNTED BY	Jerret & Homer	EASTBOUND ROAD	Hayes Street NE	
		INPUTED BY	agan			

Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Kenilworth Terrace NE				Westbound Hayes Street NE				Northbound Kenilworth Terrace NE				Eastbound Hayes Street NE				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
AM																					
7 00 7 15	20	17	2	39	2	14	0	16	0	9	0	9	1	0	0	1	48	17	65		7 00 7 15
7 15-7 30	25	12	0	37	1	5	3	9	2	12	0	14	0	0	0	0	51	9	60		7 15-7 30
7 30 7 45	28	12	2	42	0	22	2	24	6	8	1	15	0	0	0	0	57	24	81		7 30 7 45
7 45 8 00	38	20	5	63	0	19	1	20	2	15	0	17	0	0	0	0	80	20	100		7 45-8 00
8 00-8 15	66	15	6	87	1	35	0	36	9	23	0	32	0	0	0	0	119	36	155		8 00 8 15
8 15-8 30	45	14	5	64	1	18	2	21	4	24	0	28	0	0	0	0	92	21	113		8 15-8 30
8 30 8 45	45	10	2	57	2	21	0	23	9	23	0	32	0	0	0	0	89	23	112		8 30 8 45
8 45-9 00	31	7	3	41	4	7	0	11	7	14	1	22	0	0	0	0	63	11	74		8 45 9 00
9 00 9 15	22	4	2	28	1	13	1	15	10	11	0	21	0	0	0	0	49	15	64		9 00 9 15
9 15 9 30	22	5	6	33	2	12	3	17	3	13	0	16	0	0	0	0	49	17	66		9 15 9 30
9 30 9 45	19	4	4	27	2	6	1	9	3	6	0	9	0	0	0	0	36	9	45		9 30 9 45
9 45 10 00	19	4	0	23	0	12	0	12	2	13	0	15	0	0	1	1	38	13	51		9 45 10 00
3 Hour Totals	380	124	37	541	16	184	13	213	57	171	2	230	1	0	1	2	771	215	986		
1 Hour Totals																					
7 00-8 00	111	61	9	181	3	60	6	69	10	44	1	55	1	0	0	1	236	70	306	0 77	7 00-8 00
7 15-8 15	157	59	13	229	2	81	6	89	19	58	1	78	0	0	0	0	307	89	396	0 64	7 15-8 15
7 30-8 30	177	61	18	256	2	94	5	101	21	70	1	92	0	0	0	0	348	101	449	0 72	7 30-8 30
7 45-8 45	194	59	18	271	4	93	3	100	24	85	0	109	0	0	0	0	380	100	480	0 77	7 45-8 45
8 00-9 00	187	46	16	249	8	81	2	91	29	84	1	114	0	0	0	0	363	91	454	0 73	8 00 9 00
8 15-9 15	143	35	12	190	8	59	3	70	30	72	1	103	0	0	0	0	293	70	363	0 80	8 15 9 15
8 30-9 30	120	26	13	159	9	53	4	66	29	61	1	91	0	0	0	0	250	66	316	0 71	8 30 9 30
8 45-9 45	94	20	15	129	9	38	5	52	23	44	1	68	0	0	0	0	197	52	249	0 84	8 45 9 45
9 00-10 00	82	17	12	111	5	43	5	53	18	43	0	61	0	0	1	1	172	54	226	0 86	9 00-10 00
AM Peak																					**AM Peak**
7 45-8 45	**194**	**59**	**18**	**271**	**4**	**93**	**3**	**100**	**24**	**85**	**0**	**109**	**0**	**0**	**0**	**0**	**380**	**100**	**480**	**0 77**	**7 45-8 45**
PM																					
4 00-4 15	49	10	5	64	0	19	4	23	12	48	0	60	1	0	0	1	124	24	148		4 00-4 15
4 15-4 30	35	3	5	43	0	20	1	21	11	29	1	41	0	0	0	0	84	21	105		4 15-4 30
4 30-4 45	31	8	2	41	4	29	2	35	9	17	1	27	0	0	0	0	68	35	103		4 30-4 45
4 45-5 00	42	10	1	53	1	17	5	23	9	15	1	25	0	0	0	0	78	23	101		4 45-5 00
5 00 5 15	40	8	1	49	1	20	3	24	5	15	0	20	0	0	0	0	69	24	93		5 00-5 15
5 15-5 30	54	2	0	56	5	14	3	22	5	18	1	24	0	0	0	0	80	22	102		5 15-5 30
5 30 5 45	40	10	3	53	2	19	2	23	6	26	1	33	0	0	0	0	86	23	109		5 30 5 45
5 45-6 00	41	3	1	45	3	36	4	43	7	16	2	25	0	0	0	0	70	43	113		5 45-6 00
6 00-6 15	41	7	4	52	1	27	3	31	7	19	3	29	0	0	0	0	81	31	112		6 00-6 15
6 15-6 30	34	4	1	39	3	24	5	32	4	16	0	20	0	0	0	0	59	32	91		6 15-6 30
6 30-6 45	51	5	2	58	4	18	1	23	12	11	1	24	0	0	0	0	82	23	105		6 30-6 45
6 45-7 00	48	4	1	53	2	24	0	26	4	18	0	22	0	0	0	0	75	26	101		6 45-7 00
3 Hour Totals	506	74	26	606	26	267	33	326	91	248	11	350	1	0	0	1	956	327	1,283		
1 Hour Totals																					
4 00 5 00	157	31	13	201	5	85	12	102	41	109	3	153	1	0	0	1	354	103	457	0 77	4 00 5 00
4 15-5 15	148	29	9	186	6	86	11	103	34	76	3	113	0	0	0	0	299	103	402	0 96	4 15 5 15
4 30-5 30	167	28	4	199	11	80	13	104	28	65	3	96	0	0	0	0	295	104	399	0 97	4 30 5 30
4 45-5 45	176	30	5	211	9	70	13	92	25	74	3	102	0	0	0	0	313	92	405	0 93	4 45 5 45
5 00-6 00	175	23	5	203	11	89	12	112	23	75	4	102	0	0	0	0	305	112	417	0 92	5 00-6 00
5 15-6 15	176	22	8	206	11	96	12	119	25	79	7	111	0	0	0	0	317	119	436	0 96	5 15-6 15
5 30 6 30	156	24	9	189	9	106	14	129	24	77	6	107	0	0	0	0	296	129	425	0 94	5 30-6 30
5 45-6 45	167	19	8	194	11	105	13	129	30	62	6	98	0	0	0	0	292	129	421	0 93	5 45-6 45
6 00-7 00	174	20	8	202	10	93	9	112	27	64	4	95	0	0	0	0	297	112	409	0 91	6 00 7 00
PM Peak																					**PM Peak**
4 00 5 00	**157**	**31**	**13**	**201**	**5**	**85**	**12**	**102**	**41**	**109**	**3**	**153**	**1**	**0**	**0**	**1**	**354**	**103**	**457**	**0 77**	**4 00-5 00**

Wells & Associates, LLC

McLean Virginia

Existing Traffic Count

PROJECT	Parkside Housing	DATE	3/30/2006	SOUTHBOUND ROAD	0	
W & A JOB NO	3204	DAY	Thursday	NORTHBOUND ROAD	Anacostia Avenue NE	
INTERSECTION	Anacostia Ave & Hayes St	WEATHER	Clear	WESTBOUND ROAD	Hayes Street NE	
LOCATION	Washington DC	COUNTED BY	Al & Gerri	EASTBOUND ROAD	Hayes Street NE	
		INPUTED BY	agan			

Time Period	Turning Movements																				Total	PHF	Time Period
	Southbound 0				Westbound Hayes Street NE				Northbound Anacostia Avenue NE				Eastbound Hayes Street NE				North & South	East & West					
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total							
AM																							
7 00-7 15	0	0	0	0	0	21	7	28	0	0	1	1	2	0	0	2	1	30	31				7 00-7 15
7 15-7 30	0	0	0	0	0	19	8	27	0	0	0	0	0	0	0	0	0	27	27				7 15-7 30
7 30-7 45	0	0	0	0	0	28	3	31	0	0	0	0	1	0	0	1	0	32	32				7 30-7 45
7 45-8 00	0	0	0	0	0	32	13	45	0	0	0	0	1	0	0	1	0	46	46				7 45-8 00
8 00-8 15	0	0	0	0	0	43	19	62	0	0	5	5	1	0	0	1	5	63	68				8 00-8 15
8 15-8 30	0	0	0	0	0	28	20	48	0	0	1	1	0	0	0	0	1	48	49				8 15-8 30
8 30-8 45	0	0	0	0	0	31	12	43	0	0	1	1	0	0	0	0	1	43	44				8 30-8 45
8 45-9 00	0	0	0	0	0	16	12	28	0	0	2	2	0	0	0	0	2	28	30				8 45-9 00
9 00 9 15	0	0	0	0	0	25	5	30	0	0	0	0	0	0	0	0	0	30	30				9 00 9 15
9 15-9 30	0	0	0	0	0	27	3	30	0	0	0	0	0	0	0	0	0	30	30				9 15 9 30
9 30-9 45	0	0	0	0	0	16	6	22	0	0	0	0	0	0	0	0	0	22	22				9 30 9 45
9 45-10 00	0	0	0	0	0	27	3	30	0	0	0	0	0	0	0	0	0	30	30				9 45 10 00
3 Hour Totals	0	0	0	0	0	313	111	424	0	0	10	10	5	0	0	5	10	428	439				
1 Hour Totals																							
7 00-8 00	0	0	0	0	0	100	31	131	0	0	1	1	4	0	0	4	1	135	136	0 74			7 00-8 00
7 15 8 15	0	0	0	0	0	122	43	165	0	0	5	5	3	0	0	3	5	168	173	0 64			7 15-8 15
7 30 8 30	0	0	0	0	0	131	55	186	0	0	6	6	3	0	0	3	6	189	195	0 72			7 30-8 30
7 45 8 45	0	0	0	0	0	134	64	198	0	0	7	7	2	0	0	2	7	200	207	0 76			7 45-8 45
8 00 9 00	0	0	0	0	0	118	63	181	0	0	9	9	1	0	0	1	9	182	191	0 70			8 00 9 00
8 15 9 15	0	0	0	0	0	100	49	149	0	0	4	4	0	0	0	0	4	149	153	0 78			8 15 9 15
8 30 9 30	0	0	0	0	0	99	32	131	0	0	3	3	0	0	0	0	3	131	134	0 76			8 30 9 30
8 45-9 45	0	0	0	0	0	84	26	110	0	0	2	2	0	0	0	0	2	110	112	0 93			8 45 9 45
9 00 10 00	0	0	0	0	0	95	17	112	0	0	0	0	0	0	0	0	0	112	112	0 93			9 00 10 00
AM Peak																							**AM Peak**
7 45-8 45	0	0	0	0	0	134	64	198	0	0	7	7	2	0	0	2	7	200	207	0 76			**7 45-8 45**
PM																							
4 00-4 15	0	0	0	0	0	50	6	56	0	0	0	0	0	0	0	0	0	56	56				4 00-4 15
4 15-4 30	0	0	0	0	0	29	5	34	0	0	0	0	1	0	0	1	0	35	35				4 15-4 30
4 30-4 45	0	0	0	0	0	42	6	48	0	0	0	0	1	0	0	1	0	49	49				4 30-4 45
4 45-5 00	0	0	0	0	0	56	0	56	0	0	1	1	0	0	0	0	1	56	57				4 45-5 00
5 00-5 15	0	0	0	0	0	49	1	50	0	0	3	3	0	0	0	0	3	50	53				5 00 5 15
5 15-5 30	0	0	0	0	0	53	9	62	0	0	4	4	0	0	0	0	4	62	66				5 15-5 30
5 30-5 45	0	0	0	0	0	43	12	55	0	0	2	2	0	0	0	0	2	55	57				5 30 5 45
5 45-6 00	0	0	0	0	0	59	7	66	0	0	3	3	0	0	0	0	3	66	69				5 45-6 00
6 00-6 15	0	0	0	0	0	58	8	66	0	0	0	0	0	0	0	0	0	66	66				6 00-6 15
6 15-6 30	0	0	0	0	0	57	7	64	0	0	4	4	0	0	0	0	4	64	68				6 15-6 30
6 30-6 45	0	0	0	0	0	55	6	61	0	0	2	2	0	0	0	0	2	61	63				6 30-6 45
6 45-7 00	0	0	0	0	0	63	6	69	0	0	1	1	0	0	0	0	1	69	70				6 45-7 00
3 Hour Totals	0	0	0	0	0	614	73	687	0	0	20	20	2	0	0	2	20	689	709				
1 Hour Totals																							
4 00-5 00	0	0	0	0	0	177	17	194	0	0	1	1	2	0	0	2	1	196	197	0 86			4 00 5 00
4 15-5 15	0	0	0	0	0	176	12	188	0	0	4	4	2	0	0	2	4	190	194	0 85			4 15 5 15
4 30-5 30	0	0	0	0	0	200	16	216	0	0	8	8	1	0	0	1	8	217	225	0 85			4 30 5 30
4 45-5 45	0	0	0	0	0	201	22	223	0	0	10	10	0	0	0	0	10	223	233	0 88			4 45-5 45
5 00-6 00	0	0	0	0	0	204	29	233	0	0	12	12	0	0	0	0	12	233	245	0 89			5 00-6 00
5 15-6 15	0	0	0	0	0	213	36	249	0	0	9	9	0	0	0	0	9	249	258	0 93			5 15-6 15
5 30-6 30	0	0	0	0	0	217	34	251	0	0	9	9	0	0	0	0	9	251	260	0 94			5 30-6 30
5 45-6 45	0	0	0	0	0	229	28	257	0	0	9	9	0	0	0	0	9	257	266	0 96			5 45-6 45
6 00 7 00	0	0	0	0	0	233	27	260	0	0	7	7	0	0	0	0	7	260	267	0 95			6 00 7 00
PM Peak																							**PM Peak**
6 00 7 00	0	0	0	0	0	233	27	260	0	0	7	7	0	0	0	0	7	260	267	0 95			**6 00 7 00**

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT	Parkside Housing	DATE	3/30/2006	SOUTHBOUND ROAD	Kenilworth Avenue NE	
W & A JOB NO	3204	DAY	Thursday	NORTHBOUND ROAD	Kenilworth Avenue NE	
INTERSECTION	Kenilworth Ave & Foote St	WEATHER	Clear	WESTBOUND ROAD	Foote Street NE	
LOCATION	Washington DC	COUNTED BY	Milton & Daryl	EASTBOUND ROAD	Foote Street NE	
		INPUTED BY	again			

Time Period	Turning Movements: Southbound Kenilworth Avenue NE				Westbound Foote Street NE				Northbound Kenilworth Avenue NE				Eastbound Foote Street NE				North & South	East & West	Total	PHF	Time Period
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
AM																					
7 00-7 15	12	85	0	97	0	0	0	0	0	0	0	0	12	0	0	12	97	12	109		7 00 7 15
7 15-7 30	28	122	0	148	0	0	0	0	0	0	0	0	17	0	0	17	148	17	165		7 15-7 30
7 30-7 45	10	116	0	126	0	0	0	0	0	0	0	0	11	0	0	11	126	11	137		7 30 7 45
7 45-8 00	8	114	0	122	0	0	0	0	0	0	0	0	14	0	0	14	122	14	136		7 45-8 00
8 00-8 15	4	72	0	76	0	0	0	0	0	0	0	0	26	0	0	26	76	26	102		8 00-8 15
8 15-8 30	6	76	0	82	0	0	0	0	0	0	0	0	19	0	0	19	82	19	101		8 15-8 30
8 30 8 45	4	73	0	77	0	0	0	0	0	0	0	0	12	0	0	12	77	12	89		8 30-8 45
8 45-9 00	2	78	0	80	0	0	0	0	0	0	0	0	7	0	0	7	80	7	87		8 45-9 00
9 00 9 15	3	35	0	38	0	0	0	0	0	0	0	0	4	0	0	4	38	4	42		9 00-9 15
9 15 9 30	4	68	0	72	0	0	0	0	0	0	0	0	15	0	0	15	72	15	87		9 15 9 30
9 30 9 45	2	40	0	42	0	0	0	0	0	0	0	0	7	0	0	7	42	7	49		9 30 9 45
9 45-10 00	0	24	0	24	0	0	0	0	0	0	0	0	3	0	0	3	24	3	27		9 45 10 00
3 Hour Totals	**81**	**903**	**0**	**984**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**147**	**0**	**0**	**147**	**984**	**147**	**1 131**		
1 Hour Totals																					
7 00 8 00	56	437	0	493	0	0	0	0	0	0	0	0	54	0	0	54	493	54	547	0 83	7 00-8 00
7 15-8 15	48	424	0	472	0	0	0	0	0	0	0	0	68	0	0	68	472	68	540	0 82	7 15-8 15
7 30-8 30	28	378	0	406	0	0	0	0	0	0	0	0	70	0	0	70	406	70	476	0 87	7 30-8 30
7 45-8 45	22	335	0	357	0	0	0	0	0	0	0	0	71	0	0	71	357	71	428	0 79	7 45-8 45
8 00-9 00	16	299	0	315	0	0	0	0	0	0	0	0	64	0	0	64	315	64	379	0 93	8 00 9 00
8 15-9 15	15	262	0	277	0	0	0	0	0	0	0	0	42	0	0	42	277	42	319	0 79	8 15-9 15
8 30-9 30	13	254	0	267	0	0	0	0	0	0	0	0	38	0	0	38	267	38	305	0 86	8 30 9 30
8 45-9 45	11	221	0	232	0	0	0	0	0	0	0	0	33	0	0	33	232	33	265	0 76	8 45 9 45
9 00-10 00	9	167	0	176	0	0	0	0	0	0	0	0	29	0	0	29	176	29	205	0 59	9 00 10 00
AM Peak																					**AM Peak**
7 00-8 00	**56**	**437**	**0**	**493**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**54**	**0**	**0**	**54**	**493**	**54**	**547**	**0 83**	**7 00-8 00**
PM																					
4 00-4 15	3	28	0	31	0	0	0	0	0	0	0	0	27	0	0	27	31	27	58		4 00-4 15
4 15-4 30	2	22	0	24	0	0	0	0	0	0	0	0	9	0	0	9	24	9	33		4 15-4 30
4 30-4 45	2	28	0	30	0	0	0	0	0	0	0	0	6	0	0	6	30	6	36		4 30-4 45
4 45 5 00	3	21	0	24	0	0	0	0	0	0	0	0	2	0	0	2	24	2	26		4 45 5 00
5 00 5 15	4	18	0	22	0	0	0	0	0	0	0	0	6	0	0	6	22	6	28		5 00 5 15
5 15 5 30	1	7	0	8	0	0	0	0	0	0	0	0	2	0	0	2	8	2	10		5 15-5 30
5 30 5 45	0	13	0	13	0	0	0	0	0	0	0	0	6	0	0	6	13	6	19		5 30 5 45
5 45-6 00	1	16	0	17	0	0	0	0	0	0	0	0	1	0	0	1	17	1	18		5 45-6 00
6 00-6 15	3	8	0	11	0	0	0	0	0	0	0	0	3	0	0	3	11	3	14		6 00-6 15
6 15-6 30	4	25	0	29	0	0	0	0	0	0	0	0	6	0	0	6	29	6	35		6 15-6 30
6 30-6 45	1	52	0	53	0	0	0	0	0	0	0	0	3	0	0	3	53	3	56		6 30-6 45
6 45-7 00	1	10	0	11	0	0	0	0	0	0	0	0	4	0	0	4	11	4	15		6 45-7 00
3 Hour Totals	**25**	**248**	**0**	**273**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**75**	**0**	**0**	**75**	**273**	**75**	**348**		
1 Hour Totals																					
4 00-5 00	10	99	0	109	0	0	0	0	0	0	0	0	44	0	0	44	109	44	153	0 66	4 00 5 00
4 15-5 15	11	89	0	100	0	0	0	0	0	0	0	0	23	0	0	23	100	23	123	0 85	4 15-5 15
4 30-5 30	10	74	0	84	0	0	0	0	0	0	0	0	16	0	0	16	84	16	100	0 69	4 30 5 30
4 45-5 45	8	59	0	67	0	0	0	0	0	0	0	0	16	0	0	16	67	16	83	0 74	4 45-5 45
5 00-6 00	6	54	0	60	0	0	0	0	0	0	0	0	15	0	0	15	60	15	75	0 67	5 00-6 00
5 15-6 15	5	44	0	49	0	0	0	0	0	0	0	0	12	0	0	12	49	12	61	0 80	5 15-6 15
5 30 6 30	8	62	0	70	0	0	0	0	0	0	0	0	16	0	0	16	70	16	86	0 61	5 30-6 30
5 45-6 45	9	101	0	110	0	0	0	0	0	0	0	0	13	0	0	13	110	13	123	0 55	5 45-6 45
6 00 7 00	9	95	0	104	0	0	0	0	0	0	0	0	16	0	0	16	104	16	120	0 54	6 00 7 00
PM Peak																					**PM Peak**
4 00 5 00	**10**	**99**	**0**	**109**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**44**	**0**	**0**	**44**	**109**	**44**	**153**	**0 66**	**4 00-5 00**

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

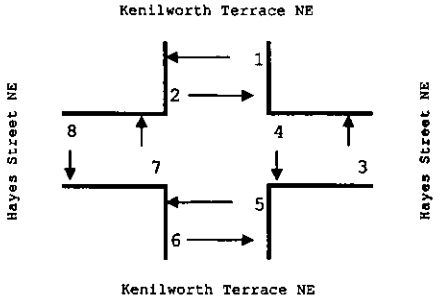
PROJECT	Parkside Housing	DATE	3/30/2006	SOUTHBOUND ROAD	Kenilworth Avenue NE	
W & A JOB NO	3204	DAY	Thursday	NORTHBOUND ROAD	Kenilworth Avenue NE	
INTERSECTION	Kenilworth Ave & Hayes St	WEATHER	Clear	WESTBOUND ROAD	Hayes Street NE	
LOCATION	Washington DC	COUNTED BY	Gina & April	EASTBOUND ROAD	Hayes Street NE	
		INPUTED BY	agan			

Time Period	Turning Movements: Southbound Kenilworth Avenue NE				Westbound Hayes Street NE				Northbound Kenilworth Avenue NE				Eastbound Hayes Street NE				North & South	East & West	Total	PHF	Time Period
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
AM																					
7 00-7 15	11	277	0	288	0	0	0	0	0	0	0	0	4	0	0	4	288	4	292		7 00-7 15
7 15-7 30	12	288	0	300	0	0	0	0	0	0	0	0	10	0	0	10	300	10	310		7 15-7 30
7 30-7 45	24	271	0	295	0	0	0	0	0	0	0	0	11	0	0	11	295	11	306		7 30 7 45
7 45-8 00	25	254	0	279	0	0	0	0	0	0	0	0	12	0	0	12	279	12	291		7 45-8 00
8 00-8 15	25	240	0	265	0	0	0	0	0	0	0	0	17	0	0	17	265	17	282		8 00-8 15
8 15-8 30	29	230	0	259	0	0	0	0	0	0	0	0	14	0	0	14	259	14	273		8 15-8 30
8 30-8 45	12	226	0	238	0	0	0	0	0	0	0	0	19	0	0	19	238	19	257		8 30-8 45
8 45-9 00	15	200	0	215	0	0	0	0	0	0	0	0	17	0	0	17	215	17	232		8 45 9 00
9 00 9 15	12	160	0	172	0	0	0	0	0	0	0	0	11	0	0	11	172	11	183		9 00 9 15
9 15-9 30	13	134	0	147	0	0	0	0	0	0	0	0	14	0	0	14	147	14	161		9 15-9 30
9 30 9 45	10	114	0	124	0	0	0	0	0	0	0	0	8	0	0	8	124	8	132		9 30-9 45
9 45-10 00	13	105	0	118	0	0	0	0	0	0	0	0	8	0	0	8	118	8	126		9 45-10 00
3 Hour Totals	201	2,499	0	2 700	0	0	0	0	0	0	0	0	145	0	0	145	2,700	145	2 845		
1 Hour Totals																					
7 00-8 00	72	1 090	0	1 162	0	0	0	0	0	0	0	0	37	0	0	37	1 162	37	1 199	0 97	7 00-8 00
7 15-8 15	86	1 053	0	1 139	0	0	0	0	0	0	0	0	50	0	0	50	1 139	50	1 189	0 96	7 15-8 15
7 30-8 30	103	995	0	1 098	0	0	0	0	0	0	0	0	54	0	0	54	1 098	54	1 152	0 94	7 30-8 30
7 45-8 45	91	950	0	1 041	0	0	0	0	0	0	0	0	62	0	0	62	1 041	62	1 103	0 95	7 45-8 45
8 00-9 00	81	896	0	977	0	0	0	0	0	0	0	0	67	0	0	67	977	67	1 044	0 93	8 00-9 00
8 15-9 15	68	816	0	884	0	0	0	0	0	0	0	0	61	0	0	61	884	61	945	0 87	8 15-9 15
8 30-9 30	52	720	0	772	0	0	0	0	0	0	0	0	61	0	0	61	772	61	833	0 81	8 30-9 30
8 45-9 45	50	608	0	658	0	0	0	0	0	0	0	0	50	0	0	50	658	50	708	0 76	8 45-9 45
9 00-10 00	48	513	0	561	0	0	0	0	0	0	0	0	41	0	0	41	561	41	602	0 82	9 00 10 00
AM Peak 7 00-8 00	72	1 090	0	1,162	0	0	0	0	0	0	0	0	37	0	0	37	1,162	37	1 199	0 97	**AM Peak 7 00-8 00**
PM																					
4 00-4 15	20	107	0	127	0	0	0	0	0	0	0	0	15	0	0	15	127	15	142		4 00-4 15
4 15-4 30	25	103	0	128	0	0	0	0	0	0	0	0	20	0	0	20	128	20	148		4 15-4 30
4 30-4 45	30	96	0	126	0	0	0	0	0	0	0	0	9	0	0	9	126	9	135		4 30-4 45
4 45 5 00	24	102	0	126	0	0	0	0	0	0	0	0	9	0	0	9	126	9	135		4 45 5 00
5 00 5 15	19	106	0	125	0	0	0	0	0	0	0	0	15	0	0	15	125	15	140		5 00 5 15
5 15 5 30	19	94	0	113	0	0	0	0	0	0	0	0	8	0	0	8	113	8	121		5 15-5 30
5 30 5 45	23	97	0	120	0	0	0	0	0	0	0	0	7	0	0	7	120	7	127		5 30-5 45
5 45-6 00	36	93	0	129	0	0	0	0	0	0	0	0	8	0	0	8	129	8	137		5 45-6 00
6 00-6 15	34	92	0	126	0	0	0	0	0	0	0	0	13	0	0	13	126	13	139		6 00-6 15
6 15-6 30	31	103	0	134	0	0	0	0	0	0	0	0	14	0	0	14	134	14	148		6 15-6 30
6 30-6 45	18	108	0	126	0	0	0	0	0	0	0	0	12	0	0	12	126	12	138		6 30-6 45
6 45-7 00	24	78	0	102	0	0	0	0	0	0	0	0	10	0	0	10	102	10	112		6 45-7 00
3 Hour Totals	303	1 179	0	1 482	0	0	0	0	0	0	0	0	140	0	0	140	1,482	140	1 622		
1 Hour Totals																					
4 00-5 00	99	408	0	507	0	0	0	0	0	0	0	0	53	0	0	53	507	53	560	0 95	4 00 5 00
4 15-5 15	98	407	0	505	0	0	0	0	0	0	0	0	53	0	0	53	505	53	558	0 94	4 15 5 15
4 30 5 30	92	398	0	490	0	0	0	0	0	0	0	0	41	0	0	41	490	41	531	0 95	4 30 5 30
4 45-5 45	85	399	0	484	0	0	0	0	0	0	0	0	39	0	0	39	484	39	523	0 93	4 45 5 45
5 00-6 00	97	390	0	487	0	0	0	0	0	0	0	0	38	0	0	38	487	38	525	0 94	5 00-6 00
5 15-6 15	112	376	0	488	0	0	0	0	0	0	0	0	36	0	0	36	488	36	524	0 94	5 15-6 15
5 30-6 30	124	385	0	509	0	0	0	0	0	0	0	0	42	0	0	42	509	42	551	0 93	5 30-6 30
5 45-6 45	119	396	0	515	0	0	0	0	0	0	0	0	47	0	0	47	515	47	562	0 95	5 45-6 45
6 00 7 00	107	381	0	488	0	0	0	0	0	0	0	0	49	0	0	49	488	49	537	0 91	6 00 7 00
PM Peak 5 45-6 45	119	396	0	515	0	0	0	0	0	0	0	0	47	0	0	47	515	47	562	0 95	**PM Peak 5 45-6 45**

Appendix B

Existing Pedestrian Traffic Counts

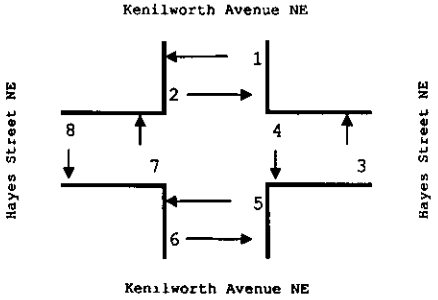
Project Name	[illegible]
Project Number	2[illegible]
Location	Washington DC
Intersection	Hayes St. & Kenilworth Terr
Weather	Clear
Date	3/30/2006
Surveyor	Jane & Home



Hourly Pedestrian Count

		1	2	3	4	5	6	7	8					
	From	SE	NE	SW	SE	SW	NW	NW	NE	Total	1 & 2	3 & 4	5 & 6	7 & 8
Time Period	To	NE	SE	SE	SW	NW	SW	NE	NW					
AM PEAK														
7 00	8 00	16	43	2	19	38	20	1	11	150	59	21	58	12
7 15	8 15	22	51	2	27	107	21	1	14	245	73	29	128	15
7 30	8 30	23	69	2	40	141	19	1	7	302	92	42	160	8
7 45	8 45	16	73	0	41	162	17	1	6	316	89	41	179	7
8 00	9 00	14	63	0	35	161	14	2	5	294	77	35	175	7
8 15	9 15	19	63	0	29	104	15	1	1	232	82	29	119	2
8 30	9 30	20	37	1	14	72	11	1	2	158	57	15	83	3
8 45	9 45	21	27	1	10	42	6	1	3	111	48	11	48	4
9 00	10 00	26	28	1	11	23	5	0	2	96	54	12	28	2
PM PEAK														
4 00	5 00	40	23	3	4	8	34	6	2	120	63	7	42	8
4 15	5 15	42	38	4	2	11	35	5	3	140	80	6	46	8
4 30	5 30	38	39	4	6	13	18	0	2	120	77	10	31	2
4 45	5 45	44	52	6	6	13	27	0	2	150	96	12	40	2
5 00	6 00	52	54	5	7	19	20	6	2	165	106	12	39	8
5 15	6 15	48	39	5	8	16	15	6	1	138	87	13	31	7
5 30	6 30	46	34	7	5	13	10	7	3	125	80	12	23	10
5 45	6 45	53	27	6	6	12	1	7	7	119	80	12	13	14
6 00	7 00	53	32	5	5	5	1	1	11	113	85	10	6	12

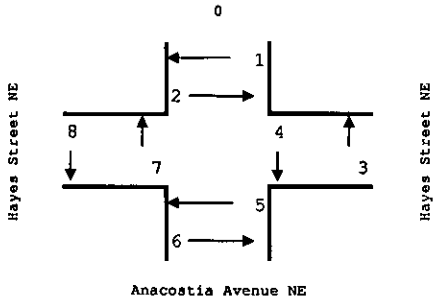
Project Name	Parkside Housing
Project Number	3204
Location	Washington DC
Intersection	Kenilworth Ave & Hayes St
Weather	Clear
Date	7/20/2006
Surveyor	Paul Grill



Hourly Pedestrian Count

		1	2	3	4	5	6	7	8					
	From	SE	NE	SW	SE	SW	NW	NW	NE	Total	1 & 2	3 & 4	5 & 6	7 & 8
Time Period	To	NE	SE	SE	SW	NW	SW	NE	NW					
AM PEAK														
7 00	8 00	0	0	0	0	19	46	16	46	127	0	0	65	62
7 15	8 15	0	0	0	0	22	51	19	51	143	0	0	73	70
7 30	8 30	0	0	0	0	24	51	21	51	147	0	0	75	72
7 45	8 45	0	0	0	0	18	40	18	40	116	0	0	58	58
8 00	9 00	0	0	0	0	13	27	13	27	80	0	0	40	40
8 15	9 15	0	0	0	0	20	19	20	19	78	0	0	39	39
8 30	9 30	0	0	0	0	16	11	16	11	54	0	0	27	27
8 45	9 45	0	0	0	0	14	15	14	15	58	0	0	29	29
9 00	10 00	0	0	0	0	13	12	13	12	50	0	0	25	25
PM PEAK														
4 00	5 00	0	0	0	0	51	9	51	9	120	0	0	60	60
4 15	5 15	0	0	0	0	41	15	41	15	112	0	0	56	56
4 30	5 30	0	0	0	0	56	22	56	21	155	0	0	78	77
4 45	5 45	0	0	0	0	74	19	74	18	185	0	0	93	92
5 00	6 00	0	0	0	0	78	21	78	20	197	0	0	99	98
5 15	6 15	0	0	0	0	75	17	75	16	183	0	0	92	91
5 30	6 30	0	0	0	0	62	12	62	12	148	0	0	74	74
5 45	6 45	0	0	0	0	55	12	55	12	134	0	0	67	67
6 00	7 00	0	0	0	0	61	6	61	6	134	0	0	67	67

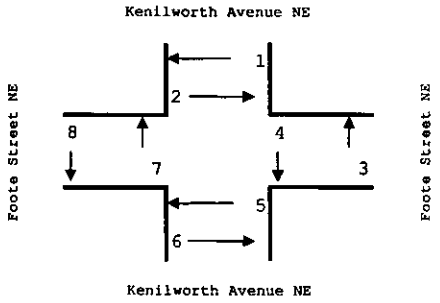
Project Name	Parkside Hous g
Project Number	3404
Location	Washington DC
Intersection	Anacostia Av Ha es St
Weather	Clear
Date	3/30/2006
Surveyor	Al & eri



Hourly Pedestrian Count

		1	2	3	4	5	6	7	8					
Time Period	From / To	SE / NE	NE / SE	SW / SE	SE / SW	SW / NW	NW / SW	NW / NE	NE / NW	Total	1 & 2	3 & 4	5 & 6	7 & 8
AM PEAK														
7 00	8 00	16	28	2	18	2	3	1	32	102	44	20	5	33
7 15	8 15	18	45	6	32	5	6	5	77	194	63	38	11	82
7 30	8 30	20	53	10	32	9	9	13	121	267	73	42	18	134
7 45	8 45	30	53	13	33	11	6	17	140	303	83	46	17	157
8 00	9 00	26	52	14	29	11	6	19	115	272	78	43	17	134
8 15	9 15	32	29	10	11	7	3	18	71	181	61	21	10	89
8 30	9 30	31	18	5	9	2	0	10	30	105	49	14	2	40
8 45	9 45	19	12	2	2	0	0	7	8	50	31	4	0	15
9 00	10 00	18	12	0	2	0	0	4	4	40	30	2	0	8
PM PEAK														
4 00	5 00	34	17	14	12	3	1	8	2	91	51	26	4	10
4 15	5 15	23	18	13	15	2	2	7	2	82	41	28	4	9
4 30	5 30	17	14	15	10	5	4	12	3	80	31	25	9	15
4 45	5 45	15	16	15	11	5	4	14	2	82	31	26	9	16
5 00	6 00	23	17	12	10	5	7	10	2	86	40	22	12	12
5 15	6 15	17	22	15	9	6	7	11	3	90	39	24	13	14
5 30	6 30	15	28	9	9	3	4	11	2	81	43	18	7	13
5 45	6 45	17	27	10	10	6	6	9	2	87	44	20	12	11
6 00	7 00	11	27	12	11	5	4	8	2	80	38	23	9	10

Project Name	Parkside H[illegible]
Project Number	[illegible]14
Location	Washington DC
Intersection	Kenilworth Ave & Foote St
Weather	Clear
Date	3/ 9/2006
Surveyor	Fallon [illegible]



Hourly Pedestrian Count

		1	2	3	4	5	6	7	8					
Time Period	From / To	SE / NE	NE / SE	SW / SE	SE / SW	SW / NW	NW / SW	NW / NE	NE / NW	Total	1 & 2	3 & 4	5 & 6	7 & 8
AM PEAK														
7 00	8 00	0	0	0	0	0	0	0	0	0	0	0	0	0
7 15	8 15	0	0	0	0	0	0	0	0	0	0	0	0	0
7 30	8 30	0	0	0	0	0	0	0	0	0	0	0	0	0
7 45	8 45	0	0	0	0	0	0	0	0	0	0	0	0	0
8 00	9 00	0	0	0	0	0	1	0	0	1	0	0	1	0
8 15	9 15	0	0	0	0	0	2	0	0	2	0	0	2	0
8 30	9 30	0	0	0	0	0	2	0	0	2	0	0	2	0
8 45	9 45	0	0	0	0	0	2	0	0	2	0	0	2	0
9 00	10 00	0	0	0	0	0	1	0	0	1	0	0	1	0
PM PEAK														
4 00	5 00	0	0	0	0	0	0	0	0	0	0	0	0	0
4 15	5 15	0	0	0	0	0	0	0	0	0	0	0	0	0
4 30	5 30	0	0	0	0	0	0	0	0	0	0	0	0	0
4 45	5 45	0	0	0	0	0	0	0	0	0	0	0	0	0
5 00	6 00	0	0	0	0	0	0	0	0	0	0	0	0	0
5 15	6 15	0	0	0	0	0	0	0	0	0	0	0	0	0
5 30	6 30	0	0	0	0	0	0	0	0	0	0	0	0	0
5 45	6 45	0	0	0	0	0	0	0	0	0	0	0	0	0
6 00	7 00	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix C

Existing Levels of Service

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	54	0	0	437	56
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	59	0	0	475	61
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	505	268	536			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	505	268	536			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	92	100			
cM capacity (veh/h)	496	730	1028			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	59	317	219
Volume Left	0	0	0
Volume Right	59	0	61
cSH	730	1700	1700
Volume to Capacity	0.08	0.19	0.13
Queue Length 95th (ft)	7	0	0
Control Delay (s)	10.4	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.4	0.0	
Approach LOS	B		

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	23.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	64	134	7	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	70	146	8	0

Direction, Lane #	WB 1	NB 1
Volume Total (vph)	215	8
Volume Left (vph)	70	8
Volume Right (vph)	0	0
Hadj (s)	0.10	0.23
Departure Headway (s)	4.0	4.6
Degree Utilization, x	0.24	0.01
Capacity (veh/h)	889	740
Control Delay (s)	8.3	7.6
Approach Delay (s)	8.3	7.6
Approach LOS	A	A

Intersection Summary			
Delay	8.3		
HCM Level of Service	A		
Intersection Capacity Utilization	27.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	0	0	0	3	93	4	0	85	24	18	59	194
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	3	101	4	0	92	26	20	64	211

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	109	118	295
Volume Left (vph)	3	0	20
Volume Right (vph)	4	26	211
Hadj (s)	0.02	-0.10	-0.38
Departure Headway (s)	4.8	4.4	3.9
Degree Utilization, x	0.14	0.14	0.32
Capacity (veh/h)	692	788	893
Control Delay (s)	8.6	8.1	8.8
Approach Delay (s)	8.6	8.1	8.8
Approach LOS	A	A	A

Intersection Summary			
Delay		8.6	
HCM Level of Service		A	
Intersection Capacity Utilization		42.5%	ICU Level of Service A
Analysis Period (min)		15	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	0	1090	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	40	0	0	1185	78
Pedestrians	51					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	4					
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1275	683	1314			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1275	683	1314			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	89	100			
cM capacity (veh/h)	152	375	500			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	40	790	473
Volume Left	0	0	0
Volume Right	40	0	78
cSH	375	1700	1700
Volume to Capacity	0.11	0.46	0.28
Queue Length 95th (ft)	9	0	0
Control Delay (s)	15.7	0.0	0.0
Lane LOS	C		
Approach Delay (s)	15.7	0.0	
Approach LOS	C		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	44	0	0	99	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	48	0	0	108	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	113	59	118			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	113	59	118			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	100			
cM capacity (veh/h)	871	994	1467			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	48	72	47
Volume Left	0	0	0
Volume Right	48	0	11
cSH	994	1700	1700
Volume to Capacity	0.05	0.04	0.03
Queue Length 95th (ft)	4	0	0
Control Delay (s)	8.8	0.0	0.0
Lane LOS	A		
Approach Delay (s)	8.8	0.0	
Approach LOS	A		

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	27	233	7	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	29	253	8	0

Direction, Lane #	WB 1	NB 1
Volume Total (vph)	283	8
Volume Left (vph)	29	8
Volume Right (vph)	0	0
Hadj (s)	0.05	0.23
Departure Headway (s)	4.0	4.7
Degree Utilization, x	0.31	0.01
Capacity (veh/h)	899	710
Control Delay (s)	8.8	7.8
Approach Delay (s)	8.8	7.8
Approach LOS	A	A

Intersection Summary			
Delay	8.7		
HCM Level of Service	A		
Intersection Capacity Utilization	23.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	0	0	0	12	85	5	3	109	41	13	31	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	13	92	5	3	118	45	14	34	171

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	111	166	218
Volume Left (vph)	13	3	14
Volume Right (vph)	5	45	171
Hadj (s)	0.03	-0.12	-0.42
Departure Headway (s)	4.7	4.3	3.9
Degree Utilization, x	0.15	0.20	0.24
Capacity (veh/h)	701	809	875
Control Delay (s)	8.5	8.3	8.2
Approach Delay (s)	8.5	8.3	8.2
Approach LOS	A	A	A

Intersection Summary			
Delay	8.3		
HCM Level of Service	A		
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	47	0	0	396	119
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	51	0	0	430	129
Pedestrians	67					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	6					
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	562	347	627			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	562	347	627			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	92	100			
cM capacity (veh/h)	431	613	898			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	51	287	273
Volume Left	0	0	0
Volume Right	51	0	129
cSH	613	1700	1700
Volume to Capacity	0.08	0.17	0.16
Queue Length 95th (ft)	7	0	0
Control Delay (s)	11.4	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.4	0.0	
Approach LOS	B		

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	25.9%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix D

Background Future Levels of Service

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	76	0	0	527	81
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	83	0	0	573	88
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	617	330	661			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	617	330	661			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	88	100			
cM capacity (veh/h)	422	665	923			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	83	382	279
Volume Left	0	0	0
Volume Right	83	0	88
cSH	665	1700	1700
Volume to Capacity	0.12	0.22	0.16
Queue Length 95th (ft)	11	0	0
Control Delay (s)	11.2	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.2	0.0	
Approach LOS	B		

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	65	136	7	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	71	148	8	0

Direction, Lane #	WB 1	NB 1
Volume Total (vph)	218	8
Volume Left (vph)	71	8
Volume Right (vph)	0	0
Hadj (s)	0.10	0.23
Departure Headway (s)	4.0	4.6
Degree Utilization, x	0.24	0.01
Capacity (veh/h)	889	739
Control Delay (s)	8.3	7.7
Approach Delay (s)	8.3	7.7
Approach LOS	A	A

Intersection Summary			
Delay	8.3		
HCM Level of Service	A		
Intersection Capacity Utilization	27.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	11	11	0	13	96	4	0	110	76	117	73	199
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	12	0	14	104	4	0	120	83	127	79	216

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	24	123	202	423
Volume Left (vph)	12	14	0	127
Volume Right (vph)	0	4	83	216
Hadj (s)	0.13	0.04	-0.21	-0.21
Departure Headway (s)	5.7	5.4	4.6	4.3
Degree Utilization, x	0.04	0.18	0.26	0.51
Capacity (veh/h)	549	600	747	801
Control Delay (s)	8.9	9.6	9.1	11.8
Approach Delay (s)	8.9	9.6	9.1	11.8
Approach LOS	A	A	A	B

Intersection Summary			
Delay	10.6		
HCM Level of Service	B		
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	187	0	0	1425	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	203	0	0	1549	91
Pedestrians	51					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	4					
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1646	871	1691			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1646	871	1691			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	28	100			
cM capacity (veh/h)	86	282	358			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	203	1033	608
Volume Left	0	0	0
Volume Right	203	0	91
cSH	282	1700	1700
Volume to Capacity	0.72	0.61	0.36
Queue Length 95th (ft)	128	0	0
Control Delay (s)	45.0	0.0	0.0
Lane LOS	E		
Approach Delay (s)	45.0	0.0	
Approach LOS	E		

Intersection Summary			
Average Delay	5.0		
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	62	0	0	321	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	67	0	0	349	74
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	386	211	423			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	386	211	423			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	92	100			
cM capacity (veh/h)	590	794	1133			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	67	233	190
Volume Left	0	0	0
Volume Right	67	0	74
cSH	794	1700	1700
Volume to Capacity	0.08	0.14	0.11
Queue Length 95th (ft)	7	0	0
Control Delay (s)	10.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	10.0	0.0	
Approach LOS	A		

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	21.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	27	237	7	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	29	258	8	0

Direction, Lane #	WB 1	NB 1
Volume Total (vph)	287	8
Volume Left (vph)	29	8
Volume Right (vph)	0	0
Hadj (s)	0.05	0.23
Departure Headway (s)	4.0	4.8
Degree Utilization, x	0.32	0.01
Capacity (veh/h)	899	708
Control Delay (s)	8.8	7.8
Approach Delay (s)	8.8	7.8
Approach LOS	A	A

Intersection Summary			
Delay	8.8		
HCM Level of Service	A		
Intersection Capacity Utilization	24.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	9	9	0	39	91	5	3	147	100	59	67	164
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	10	0	42	99	5	3	160	109	64	73	178

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	20	147	272	315
Volume Left (vph)	10	42	3	64
Volume Right (vph)	0	5	109	178
Hadj (s)	0.13	0.07	-0.20	-0.26
Departure Headway (s)	5.6	5.3	4.5	4.4
Degree Utilization, x	0.03	0.22	0.34	0.39
Capacity (veh/h)	551	611	760	777
Control Delay (s)	8.8	9.8	9.9	10.2
Approach Delay (s)	8.8	9.8	9.9	10.2
Approach LOS	A	A	A	B

Intersection Summary			
Delay	10.0		
HCM Level of Service	A		
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	151	0	0	545	153
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	164	0	0	592	166
Pedestrians	67			67		
Lane Width (ft)	12.0			0.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	6			0		
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	743	513	826			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	743	513	826			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	66	100			
cM capacity (veh/h)	331	478	756			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	164	395	364
Volume Left	0	0	0
Volume Right	164	0	166
cSH	478	1700	1700
Volume to Capacity	0.34	0.23	0.21
Queue Length 95th (ft)	38	0	0
Control Delay (s)	16.4	0.0	0.0
Lane LOS	C		
Approach Delay (s)	16.4	0.0	
Approach LOS	C		

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		