



**WELLS + ASSOCIATES**

July 29, 2013

**TO:** Jorgen Punda  
Gables Residential  
8280 Greensboro Drive  
Suite 605  
McLean, VA 22101

**RE:** Gables White Flint  
Shared Parking Demand Analysis - **DRAFT**  
North Bethesda, Maryland

## **INTRODUCTION**

This memorandum summarizes the results of a shared parking study for the Gables White Flint project located in the White Flint Metro Station Policy Area of Montgomery County. The site is located to the south and east of the Old Georgetown Road/Executive Boulevard Intersection. The proposed development will contain approximately 455 residential apartment units, approximately 15,500 SF of retail space and approximately 15,500 SF of restaurant space.

Per the 2010 White Flint Sector Plan, Wall Local Park, including Kennedy-Shriver Aquatic Center (KSAC), will serve as a regional destination and is planned to be redesigned with more active outdoor facilities. The redesign is planned to be accomplished by relocating the existing surface parking spaces and the additional parking spaces for potential future facilities at Wall Park to a shared parking structure on the Gables Property that will allow Wall Park to be redesigned as a significant public amenity as envisioned in the Sector Plan.

Future parking for Gables property and Wall Park expansion (including aquatic and recreational center expansion) is planned to be accommodated via a 994 space parking garage proposed as part of the Gables White Flint development. This study presents results of a shared parking analysis conducted to determine the combined maximum hourly parking demand for both Wall Park expansion and Gables White Flint development.

Tasks undertaken for this study are as follows:

- 1) Estimation of parking requirements of Gables White Flint development using the MNCPPC Commercial/Residential (CR) zone regulations.

- 2) Estimation of maximum hourly parking demand for the proposed development using the hourly distributions established in the Urban Land Institute (ULI) Shared Parking Manual Second Edition.
- 3) Collection of the existing hourly parking occupancy information at KSAC site to determine the hourly parking demand for KSAC.
- 4) Estimation of parking requirements of Wall Park/Recreational Center expansion using the MNCPPC Commercial/Residential (CR) zone regulations.
- 5) Estimation of maximum hourly parking demand for the proposed Wall Park/Recreational center expansion using the hourly distributions established in the Urban Land Institute (ULI) Shared Parking Manual Second Edition.
- 6) Estimation of combined hourly parking demand for KSAC, proposed Wall Park/Recreational center expansion and Gables White Flint development and the resulting maximum highest one hour parking demand.

### **Parking Demand Forecast for the Gables White Flint Development**

Parking requirements of the Gables development were estimated using the associated parking rates developed from County Zoning Code guidelines. Table I shows the parking requirement for the proposed Gables development. Detailed parking calculations and associated parking rates used are shown in Table IA included in Appendix A. As shown in Table I, a total of 594 parking spaces, are required for the proposed development.

The weekday and weekend shared hourly parking demand for the proposed Gables White Flint development was calculated using hourly parking demand rates established in the ULI Shared Parking Manual Second Edition. The parking estimates are based on the assumption that 100% of residential parking spaces will be reserved. The results of the parking analysis are summarized in Table 2 and Table 3 for weekday and weekend conditions, respectively.

### **Parking Occupancy for the KSAC**

A count of the KSAC parking usage was undertaken to determine the existing parking availability and demand of this facility. Parking occupancy counts were conducted by Wells & Associates on the following days:

Wednesday, April 3, 2013	from 7:00 AM to 8:00 PM
Saturday, April 6, 2013	from 9:00 AM to 8:00 PM

Based on the parking information collected, a total of 261 parking spaces were available within the KSAC site. The parking occupancy counts were recorded in ½ hour intervals and are included in Appendix B. Appendix Tables A and B show the weekday and weekend hourly parking occupancy counts, respectively. As shown in Table A, a maximum of 132 parking spaces were observed to be occupied during any one hour of the weekday. During weekend, a maximum of 90 parking spaces are occupied during any one hour as indicated in Table B. As noted in Tables A and B, maximum weekend parking occupancy is less than that of weekday.

### **Parking Demand Forecast for the Wall Park/Recreational Center Expansion**

Parking requirements of the planned Wall Park/Recreational center expansion were estimated using the County Zoning Code, Section 59- E and Section 59-C-15.65. Table 1B showing the CR Zone minimum parking requirement for the proposed development is included in Appendix A. As shown in Table 1B, a total of 252 parking spaces, are required for the proposed Wall Park/Recreational center expansion.

The weekday and weekend shared hourly parking demand for the planned Wall Park expansion development was calculated using hourly parking demand rates established in the ULI Shared Parking Manual Second Edition. The results of the parking analysis are summarized in Table 2 and Table 3 for weekday and weekend conditions, respectively.

### **Combined Hourly Parking Demand for KSAC, Wall Park/Recreational Center Expansion and Gables White Flint Development**

Shared hourly parking demand between KSAC, Wall Park/Recreational Center expansion and Gables White Flint development was estimated by adding hourly parking demand for each of the above referenced developments. The results of the shared parking analysis are summarized in Table 2 and Table 3 for weekday and weekend conditions, respectively.

As shown in Table 2, a maximum of 963 parking spaces are required to serve the visitors to KSAC, Wall Park/Recreational Center and Gables White Flint on a weekday. On a weekend, a maximum of 909 parking spaces are required to serve KSAC, Wall Park/Recreational Center and Gables White Flint developments. This information is shown in Table 3.

Based on the shared parking analysis conducted, a maximum of 963 parking spaces will be adequate to accommodate the parking needs of KSAC, Wall Park/Recreational Center expansion and Gables White Flint together.

If you have any questions or require any additional information please call me at my office at 301-448-1333 (Ext # 1494) or email me at [amrandall@mjwells.com](mailto:amrandall@mjwells.com).

Sincerely,

A handwritten signature in cursive script that reads "Nancy Randall". The signature is written in black ink and is positioned above the printed name.

Nancy Randall, AICP, PTP  
Principal Associate

Table 1  
 Gables - White Flint Parking Estimate<sup>1</sup>

	Amount	Units	Gables Development Parking Estimate
<b><u>Residential Development</u></b>			
<b>Market Rate Units</b>			
Studio Apartment	52	DU	28
1 Bed Apartment	220	DU	220
2 Bed Apartment	128	DU	192
<b>Phase I MPDU'S</b>			
Studio Apartment	8	DU	2
1 Bed Apartment	28	DU	14
2 Bed Apartment	<u>19</u>	DU	<u>14</u>
Sub-total	<b>455</b>		<b>470</b>
<b><u>Phase I Non-Residential Development</u></b>			
Retail	15,500	SF	62
Restaurant	15,500	SF	62
<b>Total No. of Parking Spaces Required (Residential + Retail+ Restaurant)</b>			<b>594</b>

1. Detailed parking demand calculations are included in Appendix A.

Table 2

Gables at White Flint

Forecasted Parking Demand Based on Current Zoning and ULI Methodology (Weekday Conditions) - Residential Reserved with KSAC

Hour of Day	Gables -White Flint Hourly Parking Demand						Existing KSAC/ Wall Park <sup>4</sup>	Wall Park/Recreational Center Expansion			Total Parking Required
	Retail		Restaurant		Residential			Hourly Rates <sup>1</sup> Customers	KSAC/Pool Parking Spaces <sup>5</sup>	Recreation Center Parking Spaces <sup>5</sup>	
	Hourly Rates <sup>1</sup> Customers	Parking Spaces	Hourly Rates <sup>1</sup> Customers	Parking Spaces	Hourly Rates <sup>2</sup>	Parking Spaces					
Development Size		15,500 SF		15,500 SF		455 Units			15,000 SF	35,000 SF	
Parking Spaces required Per Section 59-E & 59-C-15.65 Ordinance for CR Zones		62		62		470					
Non -Captive Rate Adjustment <sup>3</sup>		100%		100%		100%			75	177	
Adjusted Peak Hour Parking Demand		62		62		470			100%	100%	
<b>Starting At</b>									75	177	
6:00 AM	1%	1	0%	-	100%	470	59	70%	53	124	707
7:00 AM	5%	3	0%	-	100%	470	56	40%	30	71	630
8:00 AM	15%	9	0%	-	100%	470	76	40%	30	71	656
9:00 AM	30%	19	0%	-	100%	470	93	70%	53	124	759
10:00 AM	55%	34	15%	9	100%	470	89	70%	53	124	779
11:00 AM	75%	47	40%	25	100%	470	82	80%	60	142	826
12:00 PM	90%	56	75%	47	100%	470	80	60%	45	106	804
1:00 PM	100%	62	75%	47	100%	470	77	70%	53	124	833
2:00 PM	100%	62	65%	40	100%	470	74	70%	53	124	823
3:00 PM	100%	62	40%	25	100%	470	71	70%	53	124	805
4:00 PM	95%	59	50%	31	100%	470	94	80%	60	142	856
5:00 PM	85%	53	75%	47	100%	470	118	90%	68	159	915
6:00 PM	80%	50	95%	59	100%	470	132	100%	75	177	963
7:00 PM	75%	47	100%	62	100%	470	95	90%	68	159	901
8:00 PM	65%	40	100%	62	100%	470	69	80%	60	142	843
9:00 PM	50%	31	100%	62	100%	470	-	70%	53	124	740
10:00 PM	30%	19	95%	59	100%	470	-	35%	26	62	636
11:00 PM	10%	6	75%	47	100%	470	-	10%	8	18	549
12:00 AM	0%	-	25%	16	100%	470		0%	-	-	486
Maximum Hourly Parking Required (Including KSAC & Wall Park/Recreational Center Expansion)	Parking Spaces			963							

- Notes: (1) Hourly distributions from "Shared Parking Second Edition" published by ULI Health Club hourly rates are used for Recreational Center.
- (2) Residential Parking spaces are assumed to be reserved all the day.
- (3) Non Captive rate adjustment reflects percentage of parkers at a land use who are not already counted as being parked at another land use of mixed use development.
- (4) Based on the data collected by Wells + Associates on April 3, 2013 from 7:00 AM to 8:00 PM. Values reported represent highest parking occupancy in an hour.
- (5) Parking Estimates for KSAC/ Pool and Wall Park Recreational Center Expansion Included in Appendix A

Table 3

Gables at White Flint  
 Forecasted Parking Demand Based on Current Zoning and ULI Methodology (Weekend Conditions) - Residential Reserved with KSAC

Hour of Day	Gables -White Flint Hourly Parking Demand						Existing KSAC/ Wall Park <sup>4</sup>	Wall Park/Recreational Center Expansion			Total Parking Required
	Retail		Restaurant		Residential			Hourly Rates <sup>1</sup> Customers	KSAC/Pool Parking Spaces <sup>5</sup>	Recreation Center Parking Spaces <sup>5</sup>	
	Hourly Rates <sup>1</sup> Customers	Parking Spaces	Hourly Rates <sup>1</sup> Customers	Parking Spaces	Hourly Rates <sup>2</sup>	Parking Spaces					
Development Size		15,500 SF		15,500 SF		455 Units			15,000 SF	35,000 SF	
Parking Spaces required Per Section 59-E & 59-C-15.65		62		62		470			75	177	
Non -Captive Rate Adjustment <sup>3</sup>		100%		100%		100%			100%	100%	
Adjusted Peak Hour Parking Demand		62		62		470			75	177	
<b>Starting At</b>											
6:00 AM	1%	1	0%	-	100%	470	-	80%	60	142	673
7:00 AM	5%	3	0%	-	100%	470	-	45%	34	80	587
8:00 AM	10%	6	0%	-	100%	470	57	35%	26	62	621
9:00 AM	35%	22	0%	-	100%	470	76	50%	38	89	695
10:00 AM	60%	37	0%	-	100%	470	64	35%	26	62	659
11:00 AM	70%	43	15%	9	100%	470	67	50%	38	89	716
12:00 PM	85%	53	50%	31	100%	470	55	50%	38	89	736
1:00 PM	95%	59	55%	34	100%	470	61	30%	23	53	700
2:00 PM	100%	62	45%	28	100%	470	80	25%	19	44	703
3:00 PM	100%	62	45%	28	100%	470	83	30%	23	53	719
4:00 PM	95%	59	45%	28	100%	470	74	55%	41	97	769
5:00 PM	90%	56	60%	37	100%	470	94	100%	75	177	909
6:00 PM	80%	50	90%	56	100%	470	90	95%	71	168	905
7:00 PM	75%	47	95%	59	100%	470	84	60%	45	106	811
8:00 PM	65%	40	100%	62	100%	470	43	30%	23	53	691
9:00 PM	50%	31	90%	56	100%	470	-	10%	8	18	583
10:00 PM	35%	22	90%	56	100%	470	-	1%	1	2	551
11:00 PM	15%	9	90%	56	100%	470	-	1%	1	2	538
12:00 AM	0%	-	50%	31	100%	470	-	0%	-	-	501
<b>Maximum Hourly Parking Required (Including KSAC &amp; Wall Park/Recreational Center Expansion)</b>						<b>909</b>					

- Notes: (1) Hourly distributions from "Shared Parking Second Edition" published by ULI. Health Club hourly rates are used for Recreational Center.  
 (2) Residential Parking spaces are assumed to be reserved all the day.  
 (3) Non Captive rate adjustment reflects percentage of parkers at a land use who are not already counted as being parked at another land use of mixed use development.  
 (4) Based on the data collected by Wells + Associates on April 6, 2013 from 7:00 AM to 8:00 PM. Values reported represent highest parking occupancy in an hour.  
 (5) Parking Estimates for KSAC/ Pool and Wall Park Recreational Center Expansion Included in Appendix A

# **Appendix A**

Parking Demand Calculations for Gables White Flint Development and  
Wall Park/Recreational Center Expansion



Table 1A

Gables - White Flint Parking Demand Estimation

	Amount	Units	Parking Ratio <sup>1</sup>	Gables Development Parking Estimate
<b>Residential Development</b>				
<b>Market Rate Units</b>				
Studio Apartment	52	DU	0.53	28
1 Bed Apartment	220	DU	1.00	220
2 Bed Apartment	128	DU	1.50	192
<b>MPDU'S</b>				
Studio Apartment	8	DU	0.27	2
1 Bed Apartment	28	DU	0.50	14
2 Bed Apartment	19	DU	0.75	14
Sub-total	455			470
<b>Phase I Non-Residential Development</b>				
Retail	15,500	SF	4 Spaces /1000 SF	62
Restaurant	15,500	SF	4 Spaces /1000 SF	62
<b>Total No. of Parking Spaces Required (Residential + Retail+ Restaurant)</b>				<b>594</b>

1. Parking Ratios based on rates established in Article 59.E and section 59-C-15.65 for CR Zones

Table 1B  
 Aquatic Center Expansion and Recreational Center Parking Required

	Amount	Units	Parking Ratio <sup>1</sup>	C.R Zone Parking Min. Required <sup>2</sup>
<b>Residential Development</b>				
Aquatic Center Expansion	15,000	SF	12.5 per 1000 SF	75
Recreational Center	35,000	SF	12.5 per 1000 SF	175
Basketball Court	<u>1</u>	<u>Court</u>	<u>3.5 Per Court</u>	<u>2</u>
Total				<b>252</b>

1. Parking Ratios based on rates established in Article 59.E and section 59-C-15.65 for CR Zones  
 2. Utilizes CR Reduction factor for site with 1/4 - 1/2 Mile of Transit Station (see Section 59-C-15.65)

# **Appendix B**

Parking Occupancy for Kennedy Shriver Aquatic Center

Table A

Weekday Parking Occupancy Count  
# 10564

Surveyor: DAMIR  
Hours: 6:30AM - 8:30PM  
Date: 3-Apr  
Weather: Clear

Lots	Lot A	Lot B	Lot C	Lot D	Lot E	Lot F	Lot G	Lot H	Lot I	Lot J	Lot K	Lot L	Lot M	Lot N	Lot O	Total Cars
Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	
AM																
6:30 AM	1	4	1	0	3	7	11	9	5	3	2	1	1	7	4	59
7:00 AM	1	3	1	0	3	5	10	10	7	6	3	1	0	0	3	53
7:30 AM	1	3	1	0	2	3	10	11	7	7	3	1	0	2	5	56
8:00 AM	2	5	1	0	3	6	12	13	8	9	2	0	2	3	7	75
8:30 AM	1	5	2	0	5	9	12	12	8	9	3	0	1	3	6	76
9:00 AM	1	6	2	1	5	10	11	11	10	4	5	1	0	2	5	74
9:30 AM	1	5	2	2	6	11	13	11	11	11	8	4	1	1	6	93
10:00 AM	1	4	2	2	8	8	12	11	10	10	7	4	1	1	8	89
10:30 AM	1	5	2	4	7	8	11	13	8	8	6	3	2	1	8	87
11:00 AM	1	5	2	5	5	8	13	12	8	6	4	2	3	0	8	82
11:30 AM	0	3	2	7	8	9	14	12	7	6	3	1	1	0	5	76
12:00 PM	0	4	2	9	7	12	12	11	8	7	3	1	1	1	2	80
12:30 PM	0	5	2	6	7	9	10	12	6	7	3	1	3	0	1	74
1:00 PM	1	4	2	8	4	8	11	10	8	7	6	3	0	3	2	77
1:30 PM	1	5	2	9	4	9	10	8	8	8	6	2	0	0	4	76
2:00 PM	2	5	2	12	5	8	11	9	6	4	5	1	0	0	4	74
2:30 PM	2	4	2	10	3	6	7	8	6	2	3	1	0	0	3	57
3:00 PM	1	2	1	8	4	9	8	8	6	5	2	1	0	0	2	57
3:30 PM	4	2	1	7	5	10	8	11	9	7	2	2	1	0	2	71
4:00 PM	7	3	1	5	5	9	10	13	9	10	4	2	1	0	3	82
4:30 PM	7	4	1	4	6	9	14	14	11	11	4	5	0	0	4	94
5:00 PM	7	6	1	4	9	10	15	15	13	13	6	5	1	0	2	107
5:30 PM	8	6	0	2	11	16	16	16	12	13	7	7	1	1	2	118
6:00 PM	8	6	3	2	12	16	17	16	14	13	8	8	4	3	2	132
6:30 PM	7	5	3	3	9	14	12	15	14	10	6	7	5	4	2	116
7:00 PM	6	6	2	3	6	11	9	15	12	5	5	5	5	3	2	95
7:30 PM	5	7	2	3	8	9	10	9	6	6	4	4	2	3	3	79
8:00 PM	3	6	1	3	5	8	9	10	6	6	4	3	0	3	2	69
8:30 PM	2	1	0	2	6	9	13	11	4	5	3	3	0	1	3	63
Total Spcs.	7	6	10	45	13	16	17	17	17	15	14	15	26	29	14	261*

\* - Represents Total number of Parking Spaces

Table B

Weekend Parking Occupancy Count  
# 10564

Surveyor: DAMIR  
Hours: 8:30AM - 8:30PM  
Date: 6-Apr  
Weather: Clear

Lots	Lot A	Lot B	Lot C	Lot D	Lot E	Lot F	Lot G	Lot H	Lot I	Lot J	Lot K	Lot L	Lot M	Lot N	Lot O	Total Cars
Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	Cars	
AM																
8:30 AM	0	6	0	0	6	10	8	10	7	6	0	1	0	1	2	57
9:00 AM	0	6	0	0	8	9	11	14	9	9	5	2	0	1	2	76
9:30 AM	0	3	0	2	9	7	12	13	12	8	5	4	2	0	5	82
10:00 AM	0	3	0	3	2	4	9	11	4	5	3	2	1	0	7	54
10:30 AM	0	4	0	5	4	5	8	14	5	7	4	0	1	0	7	64
11:00 AM	0	3	0	4	7	7	9	12	7	7	5	2	1	0	3	67
11:30 AM	0	5	0	5	4	8	9	8	5	7	4	2	1	0	1	59
12:00 PM	0	5	0	3	5	3	9	9	3	6	3	1	0	1	1	49
12:30 PM	0	4	0	1	5	6	11	9	6	6	4	1	0	2	0	55
1:00 PM	0	5	0	1	4	7	12	11	7	8	4	1	0	1	0	61
1:30 PM	0	4	1	3	5	3	13	15	3	5	2	0	0	1	0	55
2:00 PM	0	3	1	3	4	5	12	11	5	3	2	0	0	1	2	52
2:30 PM	0	6	0	3	7	10	15	14	7	7	3	5	0	1	2	80
3:00 PM	0	5	0	4	8	11	15	16	8	7	1	5	0	1	2	83
3:30 PM	1	5	1	4	7	10	16	14	5	7	2	5	0	1	0	77
4:00 PM	1	4	1	3	7	11	12	13	6	4	4	5	0	2	1	74
4:30 PM	3	3	1	3	5	9	11	8	4	2	3	1	0	1	0	54
5:00 PM	4	4	2	1	9	13	14	15	8	7	4	3	0	3	1	88
5:30 PM	4	5	2	1	8	14	16	14	8	9	6	2	1	3	1	94
6:00 PM	4	6	1	1	8	14	15	13	9	10	6	2	1	0	0	90
6:30 PM	4	5	1	1	7	14	13	11	9	8	5	3	0	0	0	81
7:00 PM	5	8	1	1	8	15	14	10	9	7	5	2	0	0	1	84
7:30 PM	4	3	1	1	7	10	8	8	7	6	5	1	1	0	1	63
8:00 PM	3	3	0	1	3	8	6	4	4	5	3	0	1	1	1	43
8:30 PM	3	1	0	1	1	2	4	5	3	4	3	0	0	0	0	27
<b>Total Spcs.</b>	<b>7</b>	<b>6</b>	<b>10</b>	<b>45</b>	<b>13</b>	<b>16</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>15</b>	<b>14</b>	<b>15</b>	<b>26</b>	<b>29</b>	<b>14</b>	<b>261*</b>

\* - Represents Total number of Parking Spaces