

WELLS + ASSOCIATES

MEMORANDUM



To: Stephanie Rogers, P.E.
City of Falls Church Department of Public Works

From: William F. Johnson, P.E.

Re: Founders Row (formerly Mason Row)
Trip Generation Analysis

Date: April 3, 2017

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The intent of this memorandum is to provide a trip generation analysis in support of a proposed amendment to the approved Founders Row (previously Mason Row) development plan. Specifically, the Applicant proposes to revise the development to delete the previously approved hotel component and instead develop active adult residential units. The other components of the site, including the retail, theater, office, and multifamily components would remain a part of the development consistent with current approvals. Furthermore, the layout of the site, including building design/orientation and site access would remain largely unchanged from the approved development plan.

Founders Row, as approved by the Falls Church City Council on January 11, 2016, is envisioned as a vibrant mixed-use center consisting of complementary retail, office, hotel, and residential uses. In support of the applications approved by Council, Wells + Associates prepared a Traffic Impact Study (TIS) dated January 22, 2014 as revised through July 24, 2015. The TIS reflected the following development program:

- 145 Room Hotel
- 340 Multifamily Residential Units
- 5,317 Gross Square Feet (GSF) Office Use
- 42,394 GSF Theater
- 63,147 GSF Retail Use

The trip generation analysis from the TIS is provided for reference as Attachment I. Based on the traffic impacts evaluated in the TIS and reflective of the above development program, the Applicant committed to a number of transportation improvements/enhancements which are represented in the Voluntary Concessions (VC's) approved by Council.



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The Applicant now proposes to amend the development plan in order to replace the hotel use with active adult residential uses. The resulting amended development program is provided as follows:

- 72 Active Adult Housing Units
- 322 Multifamily Residential Units
- 5,317 GSF Office Use
- 33,000 GSF Theater
- 62,500 GSF Retail Use

It should be noted that the above program reflects modifications to site intensities for the other (non-hotel) land use components subsequent to the TIS submission. However, those intensities conform to the currently approved development plan.

Table 1 provides a trip generation analysis of the amended program. The analysis was performed using the same methodologies employed in the TIS, including the use of ITE trip generation rates, as well as trip reduction factors scoped and agreed to with City staff upon initiation of the original TIS. When compared to the trip generation analysis associated with the TIS, the amended program generates 82 fewer AM peak hour trips and 127 fewer PM peak hour trips. Therefore, the amended development plan will result in less of a traffic impact than that evaluated in the original TIS associated with the Property.

The Applicant does not propose to amend any of the Voluntary Concessions associated with the transportation improvements/enhancements currently committed. Therefore, for purposes of this amended development plan and in the opinion of Wells + Associates, the results of previously conducted TIS for Founders Row should be considered conservative and no new traffic study is necessary.

Please feel free to contact Will Johnson at 703.365.9262 or at wjohnson@wellsandassociates.com for any questions related to this matter.

Attachment: a/s

Table I
 Founders Row
 Site Trip Generation Analysis ⁽¹⁾

Scenario	Land Use Code	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Trips			
				In	Out	Total	In	Out	Total				
Existing Driveway Counts				106	110	216	42	78	120	1200			
Proposed Uses													
Residential Uses													
Senior Adult Housing-Attached	310	72	dwelling units	5	9	14	10	8	18	248			
Apartment	220	322	dwelling units	<u>32</u>	<u>130</u>	<u>162</u>	<u>127</u>	<u>68</u>	<u>195</u>	<u>2,075</u>			
Residential Subtotal				37	139	176	137	76	213	2323			
Retail/Residential Internal Allowance (5% AM/10% PM)				(2)	(6)	(8)	(10)	(8)	(18)	(348)			
Residential External Trips				35	133	168	127	68	195	1,975			
5% Residential Mode Split				(2)	(7)	(8)	(6)	(3)	(10)	(99)			
			Total Residential Vehicle Trips	33	126	160	121	65	185	1,876			
Office Uses	710	5,317	GSF	7	1	8	(2)	1	7	8	(2)	141	
Theater Uses	444	33,000	GSF	0	0	0		80	45	125		1,045	(3)
Specialty Retail Center	826	62,500	GSF	<u>111</u>	<u>120</u>	<u>231</u>	(4)	<u>75</u>	<u>96</u>	<u>171</u>		<u>2,770</u>	
Retail Subtotal				111	120	231		75	96	171		2,770	
Retail/Residential Internal Allowance (5% AM/10% PM)				(6)	(2)	(8)		(8)	(10)	(18)		(348)	
Retail External Trips				105	118	223		67	86	153		2,422	
Pass-by Trips (25%)				(26)	(30)	(56)		(17)	(21)	(38)		(606)	
			Total Non-Residential Vehicle Trips	86	89	175		131	117	248		3,002	
Total Site Trips				119	215	335		252	182	433		4,878	
Total Site Trips from July 2015 Traffic Study				167	250	417		319	240	560		5,874	

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation, 9th Edition.

(2) It is noted in Trip Generation that "some of the regression curves plotted for this land use may produce illogical trip-end estimates for small office buildings". Thus, for this analysis, the rates have been used for the peak hour office trip generation.

(3) Average Daily Trips based on number of screens.

(4) AM peak hour of adjacent street rate based on (AM peak hour of generator rate X (PM peak hour of adjacent street rate / PM peak hour of generator rate))

Table 6-1
 Mason Row
 Site Trip Generation Analysis ⁽¹⁾

Scenario	Land Use Code	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Trips
				In	Out	Total	In	Out	Total	
Existing Driveway Counts										
Proposed Uses										
Residential/Hotel Uses										
Hotel	310	145	occupied rooms	56	41	97	50	52	102	1,293
Apartment	220	340	dwelling units	34	136	170	133	72	205	2,184
Residential/Hotel Subtotal				90	177	267	183	124	307	3477
Retail/Residential Internal Allowance (5% AM/10% PM)				(5)	(6)	(11)	(10)	(8)	(18)	(420)
Residential/Hotel External Trips				85	171	256	173	116	289	3,057
5% Residential/Hotel Mode Split				(4)	(9)	(13)	(9)	(6)	(14)	(153)
Total Residential/Hotel Vehicle Trips				81	162	243	164	110	275	2,904
Office Uses	710	5,317	GSF	7	1	8	(2)	7	8	(2)
Theater Uses	444	42,394	GSF	0	0	0	103	58	161	1,045
Specialty Retail Center	826	63,147	GSF	112	121	233	(4)	76	173	2,799
Retail Subtotal				112	121	233	76	97	173	2,799
Retail/Residential Internal Allowance (5% AM/10% PM)				(6)	(5)	(11)	(8)	(10)	(18)	(420)
Retail External Trips				106	116	222	68	87	155	2,379
Pass-by Trips (25%)				(27)	(29)	(56)	(17)	(22)	(39)	(595)
Total Non-Residential Vehicle Trips				86	88	174	155	130	285	2,970
Total Site Trips				167	250	417	319	240	560	5,874
Total Net New Trips				61	140	201	277	162	440	4,674

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' 'Trip Generation', 9th Edition.

(2) It is noted in 'Trip Generation' that 'some of the regression curves plotted for this land use may produce illogical trip-end estimates for small office buildings'. Thus, for this analysis, the rates have been used for the peak hour office trip generation.

(3) Average Daily Trips based on number of screens.

(4) AM peak hour of adjacent street rate based on (AM peak hour of generator rate X (PM peak hour of adjacent street rate / PM peak hour of generator rate))