HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: April 12, 2022

To: Ms. Jessica Viramontes, ICF

From: Gary Black, Katie Riutta

Subject: Parking Study for 555 W. Middlefield Road in Mountain View, California

Hexagon Transportation Consultants, Inc. has completed a parking study for the proposed residential development at 555 W. Middlefield Road in Mountain View, California. The project site is located on the south side of Middlefield Road, midblock between Moffett Boulevard and SR 85. The project currently has 402 units, with 483 bedrooms. The proposed project would provide 323 new units, with 521 new bedrooms, for a total of 725 units with 1,004 bedrooms.

Based on input from the City Council Public Hearing on February 8, 2022, the applicant proposes changes to the project that would preserve the trees in Block A by reducing the parking garage footprint and reconfigure the Block C parking garage. The proposed changes to the project would provide 926 on-site parking spaces. In Block A, the proposed changes would provide 67 fewer spaces than the project analyzed in the 555 West Middlefield Road Project EIR. The proposed changes (i.e. the reconfiguration of the Block C parking garage) would provide 435 parking spaces in the Block C parking garage, which is similar to the number of spaces anticipated and evaluated in the EIR. Thus, the proposed changes to the Block C parking garage, including the construction of 23 additional spaces, would not exceed what was analyzed in the EIR. Overall, the proposed changes would reduce the parking supply by 44 spaces.

The purpose of this memo is to determine the number of parking spaces that should be provided for the proposed residential project based on peak parking demand ratios by bedroom and by unit. This memo provides an analysis of the peak parking demand observed at other residential developments in the area. These surveyed parking ratios at nearby developments were used to estimate the number of parking spaces necessary to serve the project.

Parking Research

Hexagon conducted peak parking counts at 26 apartment buildings in 10 cities in the South Bay and on the Peninsula to determine the peak parking demand per bedroom and per unit. The number of vehicles parked at each apartment building was counted at midnight on one to three typical days. The apartment buildings that were studied vary in their size. Apartment building size based on number of bedrooms ranged from 196 to 4,305. The number of units ranged from 103 to 2,762. The data are summarized in Appendix A.

Based on the peak parking counts conducted at the surveyed apartment buildings, parking demand ranged from 0.59 to 0.96 spaces per bedroom, with an average parking demand ratio of 0.80 spaces per bedroom. The parking demand ranged from 0.91 to 1.88 spaces per unit, with an average parking demand ratio of 1.23 spaces per unit.

Mountain View Apartments Parking Counts

To augment the previous counts done in 2011-2018, Hexagon conducted new peak parking counts at five apartment complexes in Mountain View on Tuesday March 15, 2022. The apartment building sizes ranged from 164 to 583 units. The data are summarized in Appendix A.

Based on the peak parking counts, the parking demand ranged from 0.60 to 0.90 spaces per bedroom, with an average parking demand ratio of 0.72 spaces per bedroom. The parking demand ranged from 0.87 to 1.14 spaces per unit, with an average parking demand ratio of 1.00 spaces per unit. The new peak parking demand counts were consistent with, and slightly lower than, the previous counts from year 2011-2018 for buildings in the South Bay and on the Peninsula.

Parking Estimate

The proposed project would provide 1,004 bedrooms in 725 units. Based on the parking research conducted by Hexagon, the project would be expected to have a peak parking demand of 804 parking spaces using the demand per bedroom. The project would be expected to have a peak parking demand of 892 parking spaces using the demand per unit. Therefore, the proposed project should provide at least 892 parking spaces to meet the peak parking demand.

Based on the Mountain View apartments parking counts, the project would be expected to have a peak parking demand of 725 parking spaces using the demand per bedroom. The project would be expected to have a peak parking demand of 717 parking spaces using the demand per unit. Therefore, the proposed project should provide at least 725 parking spaces to meet the peak parking demand.

The proposed project would provide 926 on-site parking spaces, which is 28% more spaces than the estimated peak parking demand based on the parking counts for the Mountain View apartment buildings. The additional parking spaces would make it easier for residents to find the vacant spaces. Therefore, the proposed parking supply would be expected to meet the peak parking demand.

Appendix A: Hexagon Apartment Parking Demand Research

		San Jose		Mountain View							Cupertino						San Mateo	Palo Alto
	All Sites Average	River-view	North Park	The Shadows Apartments	Central Park Apartments	Park Place Apartments	North Park Apartments	Avalon Mountain View	Avalon Towers on the Peninsula	Madera Apartments	Markham Apartments	Siena Apartments	Arioso Apartments	Archstone Cupertino	Biltmore Apartments	Verandas	The Metropolitan	Altaire Apartments
Count Date		2/28/2018	3/1/2018	2/14/2012	2/14/2012	2/16/2012	2/16-17/2012	2/23/2012	3/6/2012	6/25-26/2013	10/22/2011	10/22/2011	10/27/2011	2/16/2012	2/16/2012	12/3/2018-12/9/2018	7/27/2011	7/27/2011
1 bedroom units		814	1340	92	68	181	98	117	90	116	259	36	81	145	78		115	5
2 bedroom units		494	1301	64	204	186	90	75	115	87	245	92	120	152	93		91	2
3 bedroom units		0	121	24	82	6	0	56	6		0	0	0	14	8		12	63
4 bedroom units		0	0								0	0	0	0	0		0	33
Total Apartment Units	**13,615**	**1308**	**2762**	**180**	**354**	**373**	**188**	**248**	**211**	**203**	**504**	**128**	**201**	**311**	**179**	**120**	**218**	**103**
Total Bedrooms	20,766	1,802	4,305	292	722	571	278	435	338	290	749	220	321	491	288	240	333	330
Bedrooms to units ratio	1.53	1.38	1.56	1.62	2.04	1.53	1.48	1.75	1.60	1.43	1.49	1.72	1.60	1.58	1.61	2.00	1.53	3.20
Occupied Parking Spaces	**16,681**	**1,570**	**3,265**	**219**	**490**	**339**	**215**	**301**	**247**	**206**	**575**	**182**	**275**	**385**	**276**	**188**	**305**	**194**
Total Parking Spaces	19747	1805	3536	341	696	511	324	426	529	313				529	353	229		
Percent Occupied		87%	92%	64%	70%	66%	66%	71%	47%	66%				73%	78%	82%		
Occupied spaces to units ratio	**1.23**	**1.20**	**1.18**	**1.22**	**1.38**	**0.91**	**1.14**	**1.21**	**1.17**	**1.01**	**1.14**	**1.42**	**1.37**	**1.24**	**1.54**	**1.57**	**1.40**	**1.88**
Parking Supply per Unit	1.58	1.38	1.28	1.89	1.97	1.37	1.72	1.72	2.51	1.54				1.70	1.97	1.91		
Parking Supply per Bedroom	1.05	1.00	0.82	1.17	0.96	0.89	1.17	0.98	1.57	1.08				1.08	1.23	0.95		
Occupied spaces to bedrooms ratio	**0.80**	**0.87**	**0.76**	**0.75**	**0.68**	**0.59**	**0.77**	**0.69**	**0.73**	**0.71**	**0.77**	**0.83**	**0.86**	**0.78**	**0.96**	**0.78**	**0.92**	**0.59**

				Santa Clara										Sunnyvale	
	The Plaza, Foster City	Township, Redwood City	Colonnade, Los Altos	Hearth North		Hearth South		Cobalt		Park Central		Mansion Grove		Spruce Apartments	
				Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Count Date	3/7/2017-3/9/2017			9/12/17-9/14/2017	9/16/17-9/17/17	9/12/17-9/14/2017	9/16/17-9/17/17	9/12/17-9/14/2017	9/16/17-9/17/17	9/12/17-9/14/2017	9/16/17-9/17/17	9/12/17-9/14/2017	9/16/17-9/17/17	10/3/2018	9/29/2018
1 bedroom units	150	71	100	129	129	114	114	118	118	85	85	502	502	550	550
2 bedroom units	138	58	67	160	160	145	145	104	104	88	88	494	494	216	216
3 bedroom units	19	3	0	0	0	0	0	0	0	0	0	4	4	0	0
4 bedroom units				0	0	0	0	0	0	0	0	0	0	0	0
Total Apartment Units	**307**	**132**	**167**	**289**	**289**	**259**	**259**	**222**	**222**	**173**	**173**	**1000**	**1000**	**766**	**766**
Total Bedrooms	483	196	234	449	449	404	404	326	326	261	261	1502	1502	982	982
Bedrooms to units ratio	1.57	1.48	1.40	1.55	1.55	1.56	1.56	1.47	1.47	1.51	1.51	1.50	1.50	1.28	1.28
Occupied Parking Spaces	**442**	**140**	**191**	**353**	**364**	**317**	**314**	**274**	**271**	**212**	**219**	**1,317**	**1285**	**882**	**868**
Total Parking Spaces	693	169	321	474	474	462	462	378	378	345	345	1670	1670	1157	1157
Percent Occupied	64%	83%	60%	74%	77%	69%	68%	72%	72%	61%	63%	79%	77%	76%	75%
Occupied spaces to units ratio	**1.44**	**1.06**	**1.14**	**1.22**	**1.26**	**1.22**	**1.21**	**1.23**	**1.22**	**1.23**	**1.27**	**1.32**	**1.29**	**1.15**	**1.13**
Parking Supply per Unit	2.26	1.28	1.92	1.64	1.64	1.78	1.78	1.70	1.70	1.99	1.99	1.67	1.67	1.51	1.51
Parking Supply per Bedroom	1.43	0.86	1.37	1.06	1.06	1.14	1.14	1.16	1.16	1.32	1.32	1.11	1.11	1.18	1.18
Occupied spaces to bedrooms ratio	**0.92**	**0.71**	**0.82**	**0.79**	**0.81**	**0.78**	**0.78**	**0.84**	**0.83**	**0.81**	**0.84**	**0.88**	**0.86**	**0.90**	**0.88**

Appendix A: Mountain View Apartment Parking Counts on Wednesday March 15, 2022

Building Names	Street Address	Mixed Use	Parking Spaces	Parking Residential	Shared Retail Parking	Occupied Spaces	Parking Count Date	Parking Unbundled	Parking Cost Monthly	Available Parking Per Unit	Available Parking Per Bdrm	Occupied Parking Per Unit	Occupied Parking Per Bdrm	Units	Bedrooms
Park Place	851 Church St	Yes	561	493	68	343	03/15/22	unknown	unknown	1.50	0.98	0.92	0.60	373	571
The Dean	458 San Antonio Rd	Yes	837	668	169	507	03/15/22	1st space included with rent	$100	1.44	1.01	0.87	0.61	583	830
Madrone	111 Rengstorff Ave	No	415	415		284	03/15/22	1st space included with rent	unknown	1.53	1.04	1.04	0.71	272	398
Elan	801 W El Camino Real	Yes	303	248	55	187	03/15/22	1st space included with rent	$75	1.85	1.46	1.14	0.90	164	208
Eaves	555 W Middlefield Rd	No	670	670		385	03/15/22	Bundled		1.67	1.39	0.96	0.80	402	483
											Average Parking Demand Rate	**1.00**	**0.72**		