FEHR PEERS

MEMORANDUM

Date: May 4, 2016

To: Catarina Kidd, City of Cupertino

From: Dale Domingo and Franziska Church, Fehr & Peers

Subject: Hamptons Apartment Complex Parking Demand Assessment Memorandum

SJ15-1612

This memorandum presents the results of a parking study prepared for the Hamptons Apartment Complex in the City of Cupertino. The proposed project is a redevelopment of an existing 12.4-acre apartment complex located at the south-east corner of the Wolfe Road/Pruneridge Avenue intersection directly adjacent to the new Apple Campus 2 project. The Hamptons Apartment Complex currently has 342 units and is proposing to redevelop the site and increase the number of dwelling units by 600 to a total 942 units.

The project applicant, The Irvine Company, is proposing to supply parking at a rate of 1.8 spaces per unit, which is less than the 2.0 units required by Cupertino City code. Fehr & Peers conducted a parking analysis as part of the transportation impact analysis (TIA) for the project (March 2016). Based on apartment parking demand rates published in the Institute of Transportation Engineer's (ITE's) *Parking Generation* (4th Edition), the TIA concluded that that a 1.8 parking ratio would be adequate for The Hamptons. However, since this ratio is less than the City's code of 2.0, the City has requested us to conduct parking surveys to determine whether the proposed parking ratio of 1.8 parking spaces per unit is adequate for the Project site. Data was collected at three sites, including the existing Hamptons site and two similar apartment sites within Cupertino. The purpose of this memorandum is to present the findings of parking demand surveys conducted at The Hamptons (Project), Biltmore Apartments, and Arioso Apartments in Cupertino.

PARKING CODE AND PUBLISHED ITE RATES

Section 19.124.040 of the City of Cupertino's Municipal code defines off-street parking requirements for specific plan land uses. Per the City's code, a rate of 2 parking spaces is required per dwelling unit. The Hamptons Apartment Complex proposes a total of 942 dwelling units,

which would equate to a parking supply of 1,884 vehicle parking spaces. However, the Irvine Company proposes to provide 1,696 vehicle parking spaces, which results in a parking rate supply of approximately 1.8 parking spaces per dwelling unit.

Parking rates can be obtained from the Institute of Transportation Engineers' (ITE) *Parking Generation* (4th Edition), a national database of parking studies that summarizes observed parking demand rates for many land uses. The reported range of weekday peak parking demand rates for low/mid-rise apartments is 1.23 vehicles per dwelling unit for suburban locations. Even if these parking demand rates are increased by 10 to15 percent to account for turn-over and to avoid vehicles circulating for parking, the ITE Parking Generation would suggest a parking ratio of 1.35-1.42 spaces per dwelling unit.

In addition, the project applicant, The Irvine Company, has noted that they have several properties in Northern California with a parking ratio of 1.8 spaces per dwelling unit They have found that the 1.8 spaces/unit parking ratio to be sufficient and often times resulting in more parking spaces than required.

PARKING DEMAND ASSESSMENT

This section outlines the data collection efforts and describes the method used to estimate the peak parking demand rates for the residential units at the existing Hampton Apartment complex, as well as the Biltmore and Arioso apartment complexes.

Data Collection

Fehr & Peers conducted parking surveys at the existing Hamptons complex and the Biltmore Apartment Complex located on Blaney Avenue. Additionally, we qualitatively assessed the existing parking demand at the Arioso Apartments, which is located immediately across the Project on the west side of Wolfe near Pruneridge Avenue. The Hamptons and Biltmore sites were visited to determine the parking demand and number of parking spaces provided. **Figure 1** shows the location of the three apartment sites that were analyzed in this study.

We coordinated with the City and property managers to arrange parking counts. The parking counts were conducted on Tuesday, April 26th from 12:00 AM to 2:00 AM to observe the typical peak parking demand, and the numbers of parked vehicles were recorded once per hour. Parking counts were only conducted for the surface parking spaces, and not garages due to the accessibility difficulty. However, both property managers confirmed that the parking garages

were typically 100 percent occupied. The counted parking demand was compared to the supply as determined from the site visits.

There is on-street parking on Blaney Avenue and Rodrigues Avenue, immediately adjacent to the Biltmore Apartments. Vehicles parked on those two streets were assumed to be Biltmore residents and were included in the parking survey. Additionally, while the adjacent retail center north of the new Biltmore buildings provides signs prohibiting overnight parking, we assumed that those overnight parked vehicles were Biltmore residents and included these in the parking survey, as the retail businesses were closed during the late night. This approach would provide a conservative analysis in the parking demand estimate.

In addition to conducting parking surveys for the two sites, we also contacted the property manager at the immediately adjacent complex, Arioso Apartments, to obtain existing parking supply. However, only the surface lots were open to conducting the parking surveys, which is less than 10 percent of the total parking supply. Therefore, we did a qualitative assessment on the parking demand based on the parking information provided by the property manager.

Parking Demand Assessment

All vehicles observed were included in the estimate of parking demand. The survey results are presented in **Table 1**. The property managers of the Hamptons and Biltmore Apartments provided occupied residential units for the week the counts were conducted, which was 96 percent and 95 percent of total units occupied, respectively. The total number of parked vehicles was divided by the number of occupied units to determine peak parking demand rate. In addition, we also provided the parking supply ratios for each complex.

The survey reveals a total peak parking demand ratio of 1.7 and 1.8 parking spaces per dwelling unit for the Hamptons and Biltmore, respectively.

In addition to the two parking surveys, we also coordinated with the Arioso Apartments property manager to determine the existing parking situation. According to the property manager, there are total of 379 assigned underground parking spaces, of which, 270 are currently assigned to existing tenants. Additionally, there are 31 unassigned surface parking spaces that typically are fully occupied during the late nights. Therefore, based on the number of leased out parking spaces and surface spaces, the total parking demand would be 301 spaces (270 + 31 = 301 spaces), which would equate to a parking ratio of 1.6 per dwelling unit.

Table 1
Parking Demand Survey Results

Parking Facility	Apartment Complex Property		
	The Hamptons	Biltmore Apartments	Arioso
Total Units	342	259	201
Occupied Units[2]	328	246	191
Parking Supply			
Total Parking Supply	600	441	410
Parking Supply Ratios[3]	1.75	1.70	2.04
Parking Demand			
Off-Site Parked Vehicles[1]	0	38	0
Surface Parked Vehicles	315	219	31
Garage Parked Vehicles	241	181	270
Total Parking Demand	**556**	**438**	**301**
Parking Demand Ratios[4]	**1.7**	**1.8**	**1.6**
AVERAGE PARKING DEMAND RATIO = 1.69			

Notes:

[1] Off-Street parking includes on-street parking on Blaney Avenue and Rodrigues Avenue, as well as at the adjacent retail center north of the Biltmore complex.

[2] Based on information provided by property management.

[3] Parking Supply Ratios = Parking Supply/Total Units

[4] Parking Demand Ratios = Parking Demand/Occupied Units

Source: Fehr & Peers, May 2016.

CONCLUSIONS

The peak parking demand rate for the three complexes is between 1.6 and 1.8 spaces per unit, with an average parking ratio of 1.69 spaces per dwelling unit. Apartment buildings are typically able to manage their parking effectively, through assigned parking and other parking strategies, such are parking cash out. If we assume a circulation factor of five percent, the corresponding parking supply rate would be approximately 1.78 spaces per unit. This parking ratio would result

in 1,677 required vehicle parking spaces, which is less than what the Project proposes to provide of 1,696 vehicle parking spaces.

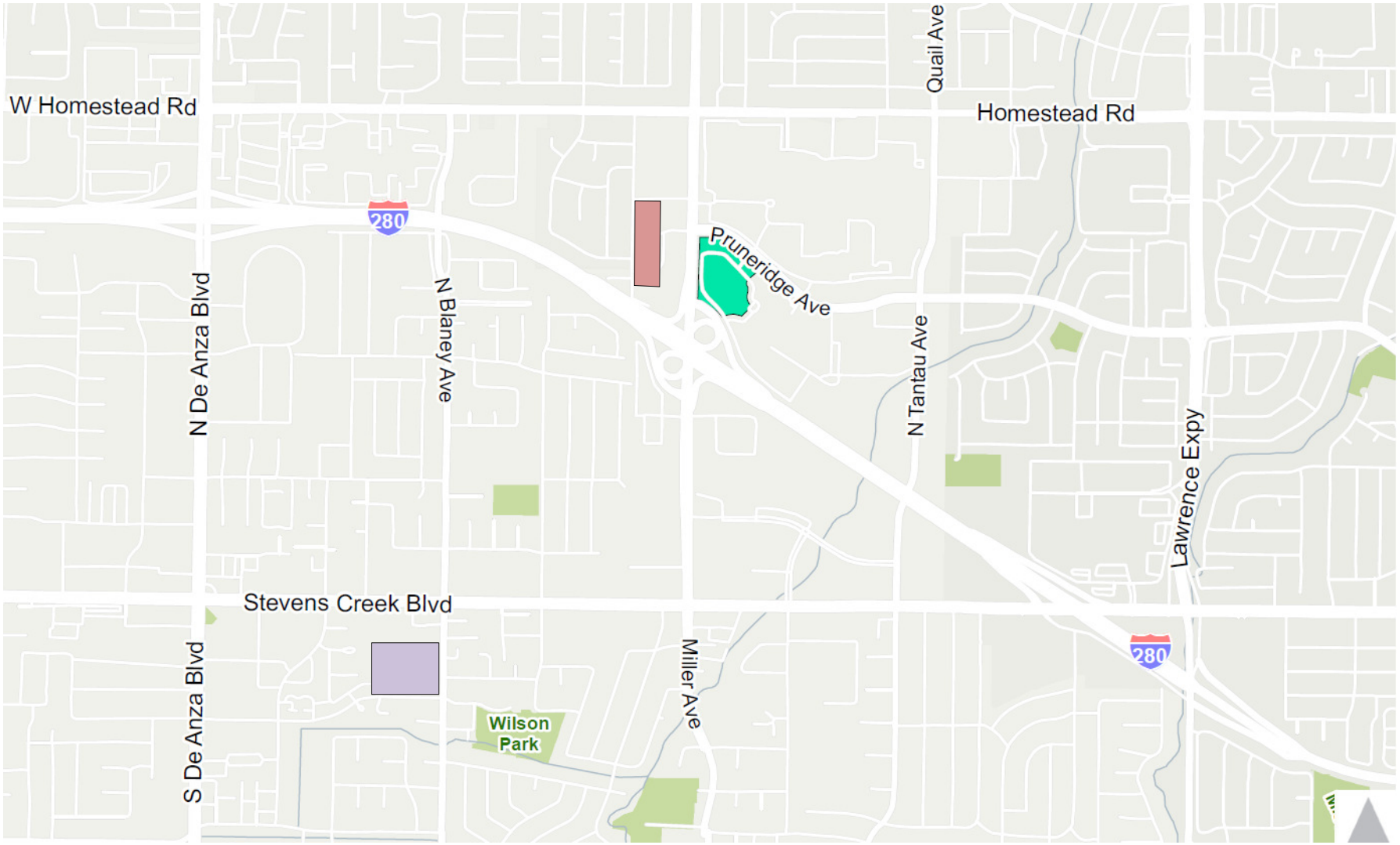

Figure 1
Parking Survey Sites