September 28, 2011

TO: Steve Haubert, Principal Planner, Park Planning/Open Space

FROM: Timor Rafiq, Rafiq & Associates, Inc.

SUBJECT: Parking Demand for Three Concept Plans for Adventure Playground
Impact on Two Lexicon Street Parking Lots

The following represents a matrix summarizing the forecast parking demand for each of the three concept plans for Adventure Playground. It is based on the assumptions that all staff drive, all children are accompanied by adults, and all are driven, none are dropped off, and the vehicle occupancy ratio is 3 persons/vehicle for attendees, and 1 staff/vehicle.

Concept Plan for Adventure Playground	Supervision Concept	# of staff	Desired Capacities*	Forecast Parking Demand
San Joaquin	Low supervision concept	1	80	**28**
Lomas Ridge	Medium supervision concept	2	100	**36**
Saddleback	High supervision concept	4	170	**61**

Notes: The Concept Plans and desired capacities were provided by EPT Design. The vehicle occupancy rate chosen is conservative, and is lower than that observed at the similar site, Berkeley, which was observed in January, 2011. The vehicle occupancy rate at Berkeley's Adventure Playground varied between 3.1 and 3.57 persons/vehicle. The number of attendees that arrived by alternative modes of transportation varied from 3% to 7%. The calculations in this estimate assume that all will drive.

Impact on Two Parking Lots on Lexicon Street for University Community Park and Community Center

This analysis assumes that all parking for Adventure Playground would use the two Lexicon Street parking lots for University Community Park and Community Center. Based on the parking study prepared in February 2011 by Rafiq & Associates, Inc., on the day of the highest parking demand, there were 43 vehicles parked in these two parking lots. The number of parking spaces provided in these two lots totals 59. There were 16 vacant spaces.

The San Joaquin Concept plan has a forecast parking demand of 28, and the Lomas Ridge concept plan has a forecast parking demand of 36. The third concept plan, Saddleback, has a forecast parking demand of 61 spaces. All of the concept plans have a forecast parking demand that exceeds the number of vacant spaces in these two lots. Measures to provide more parking spaces for Adventure Playground would be necessary.

Scenario #1 Encourage Community Center users to use Beech Tree lot

Both of the Community Center's buildings are situated close to the Beech Tree parking lot. This parking lot had 33 vacant parking spaces on the day of the highest observed parking count. Measures could be taken to encourage those who use the Community Center to park in the Beech Tree parking lot. This would free up many of the parking spaces in the Lexicon Street parking lots, allowing more parking for Adventure Playground.

The previous study prepared by Rafiq & Associates, Inc. did not itemize the observed parking in the three University Community Park and Community Center parking lots by destination: park, playground, open space, garden, sports fields, or community center, consequently, the number of the vehicles using the Lexicon Street parking lots who are taking classes in the Community Center buildings is not documented.

An assumption for Scenario #1 is made that if half of the vehicles that were parked in the two Lexicon Street parking lots (21 of the 43 occupied spaces), moved to the Beech Tree parking lot, the number of vacant spaces in the two Lexicon Street lots would be **37**. In this scenario, the two Lexicon Street parking lots could accommodate the forecast parking demand of the San Joaquin and Lomas Ridge concept plans for Adventure Playground. The parking demand of the Saddleback concept would still exceed the number of vacant parking spaces in the two Lexicon Street parking lots.

Scenario #1 (Relocate half the veh. to Beech lot)	Parking Lots for UCP	# of Occupied spaces	Total # of spaces provided	# of vacant spaces
Observed Data	Lexicon Street--two lots	43	59	16
Observed Data	Beech Tree lot	21	54	33
Scenario #1	Lexicon Street--two lots	22*	59	**37****
Scenario #1	Beech Tree lot	42	54	12

Calculations: 43 occupied spaces in the two Lexicon lots
-21 vehicles moved from Lexicon to Beech Tree (community center users)
*=22 vehicles remaining in Lexicon Street lots**
*59 total spaces in two Lexicon Street parking lots-22 vehicles= **37** **vacant spaces*

Conclusions and Recommendations

Measures to relocate some of the parked vehicles from the two Lexicon Street parking lots to the Beech Tree parking lot can be taken. If half of the vehicles that are currently parked in the two Lexicon Street lots were relocated to the Beech Tree lot, then sufficient parking spaces would be available for the first two Adventure Playground concept plans, San Joaquin and Lomas Ridge. This could be accomplished by:

- Informing those who sign up for classes at the Community Center to park in the Beech Tree parking lot
- Providing a map and directions in the catalog of Community Center classes
- Posting a map to the Beech Tree parking lot at the end of Lexicon Street
- Relocate "reserved for City vehicles" parking spaces to the Beech Tree lot.

Measures to reduce the parking demand of the Saddleback concept for Adventure Playground could be taken by:

- Staff carpooling or use of alternative forms of transportation
- Attendees arriving by bike, walking, or skateboard
- Attendees being dropped off
- Structuring the playground so that parents are not required to stay with their children during play
- Scheduling the community center activities to be non-coincident with Adventure Playground hours
- Parent/drivers attending community center classes while children are at Adventure Playground (removes "double counting")
- Structuring activities at Adventure Playground to be in two or more "shifts" with fewer attendees onsite concurrently, but still accommodating the desired attendance throughout the day.

Should you have further questions or comments on this report, please contact me at (949) 724-7339, or Diane Jakubowski via email at djakubowski@ci.irvine.ca.us.

_____

Timor S. Rafiq
Principal

C: Claire Latane, EPT Design
Diane Jakubowski, P.E., Rafiq & Associates, Inc.