

APPENDIX C-2
PARKING ASSESSMENT



April 9, 2018

Mr. Will Burns, AICP
David J. Powers & Associates, Inc.
1611 Telegraph Avenue, Ste. 1002
Oakland, CA 94612

Kawana Springs Community Park Parking Assessment

Dear Mr. Burns;

As requested, W-Trans has prepared a parking assessment for the proposed Kawana Springs Community Park to be located in southeast Santa Rosa near Taylor Mountain Regional Park. The purpose of this letter is to address how the project may influence parking conditions on surrounding streets.

Project Description

The proposed project is a city park to be developed on a currently-vacant 19.2-acre site within a residential neighborhood in Santa Rosa. Of the 19.2 acres, approximately 5.5 acres would be used as active park space, with the remainder comprised of passive spaces including oak riparian woodland areas, Colgan Creek, storm water detention areas, and seasonal wetland areas. The western portion of the park would include a small community garden and walking trails, and the main park area to the east of Meda Avenue would include facilities such as picnic areas, a children's play area, a dog park, a bocce ball court, sand volleyball court, pump track, and additional walking paths.

The park would have two off-street parking lots, and users would also be able to utilize existing on-street parking. The community garden in the western part of the site would have seven parking spaces, including one that is handicap accessible. The main parking lot off Kawana Terrace would have 32 parking spaces, including two accessible parking spaces. To deter project visitors as well as visitors to the adjacent Taylor Mountain Regional Park from parking on the northern shoulder of Kawana Terrace along the bank of Kawana Springs Creek, boulders and/or split rail fence would be placed between the proposed Kawana Springs Park dog park and the eastern terminus of street.

Study Area and Periods

The study area consists of Kawana Springs Road, Kawana Terrace, and Meda Avenue, all of which front the proposed park site in the southeast quadrant of the City of Santa Rosa. Parking surveys were collected in the study area within 500 to 800 feet of the active park space as well as along Kawana Terrace and in the Taylor Mountain Regional Park parking lot. Parking occupancy counts were collected for four hours at about 30-minute intervals on Saturday, December 3, 2016 between 12:00 noon and 4:00 p.m. The day the counts were collected, the recorded temperature was a high of 66 degrees Fahrenheit with sunny conditions and a slight breeze. The observation weekend was also the first clear weekend after two weeks of rainy and cool weather, and many people appeared to be taking advantage of the conditions to walk and bike at Taylor Mountain Regional Park.

Within 500 to 800 feet of the proposed project frontage, the streets were divided into five areas including a total of 32 neighborhood street segments and the Taylor Mountain parking lot. Each of these five sub-areas is summarized below.

- West – This parking area includes Meda Avenue south of Kawana Springs Road, Kawana Terrace west of Meda Avenue, and the neighborhood bounded by those streets. The estimated parking supply in this area was roughly 114 on-street parking spaces.

- Kawana Terrace – This area includes the segment of Kawana Terrace between Meda Avenue and the eastern terminus, which is at the entrance to Taylor Mountain Regional Park. This segment of Kawana Terrace currently has approximately 32 informal parking spaces along the roadside shoulder.
- Northwest – This area includes the neighborhood north of Kawana Springs Road and south of Tokay Street and is bound by Citrine Way to the west and Brookwood Avenue to the east. Within this neighborhood, there are approximately 328 on-street parking spaces
- Northeast – This area includes Kawana Springs Road east of Brookwood Avenue, as well as the residential neighborhood bound by Taylor Mountain Place, Havitur Way and Rudesill Lane. There are approximately 125 on-street parking spaces in this area.
- Taylor Mountain Regional Park Lot – The paid parking lot serving Taylor Mountain Regional Park has an approximate capacity of 105 spaces, including spaces along the perimeter fencing and along the ends of the parking bays.

This study area is shown in Figure 1, with the street segments surveyed highlighted in green.



Figure 1 – Parking Survey Study Area

Existing Parking Occupancy

The parking supply for each of the segments was determined using field measurements. On residential streets, one parallel parking space was assumed to require a minimum of 22 feet of curb length. The lengths of curb

sections between streets and driveways, and exclusive of any red zones, was measured and the effective number of parking spaces determined. The total parking supply for the area was determined to be 704 spaces.

Based on the parking surveys, the maximum occupancy in the study area was observed between 2:55 and 3:25 p.m. Of the available 704 spaces in the study area, 207 were occupied during the peak period, translating to a parking occupancy rate of approximately 29 percent. The most heavily-utilized area was the 32 spaces along the shoulder of Kawana Terrace. It is likely that many of these vehicles were associated with drivers visiting Taylor Mountain Regional Park but avoiding the Park's parking fee. The peak surveyed parking occupancy rates are shown for each of the five sub-areas in Figure 2, and copies of the parking surveys are enclosed.



Figure 2 – Existing Surveyed Peak Parking Occupancy

Project Parking Generation

Typically, City parking supply requirements are based on the City's Municipal Code, Chapter 20-36, "Number of Parking Spaces Required." However, for the park land use, the required supply is identified as "determined by the review authority." As such, the following analysis is provided as guidance. It should be noted that since the park is intended to primarily serve nearby neighborhoods, it is expected that many of the park's visitors will choose to either walk or bike to the site instead of drive.

ITE Parking Generation

The Kawana Springs Park project as proposed would provide a total of 39 off-street parking spaces including three accessible spaces; seven would be located at the community garden and the remainder would be at the Kawana Terrace parking lot. The parking demand was estimated using standard rates published by ITE in *Parking Generation*, 4th Edition, 2010, using the published rates for the City Park land use (ITE LU #411). The independent variable used to estimate parking demand is the park acreage. Because much of this park's acreage would be allocated to passive uses that would generate no user activity (creekside riparian areas, detention basins, wetland areas, etc.), only the 5.5-acres of active uses were used to estimate parking demand.

ITE includes only one data point for a park that has similar characteristics to Kawana Springs Park. The surveyed site was 10 acres and included a playground, picnic area, and hiking trail. The peak observed parking demand on a Saturday was 2.3 spaces per acre. Using this representative rate, the proposed Kawana Springs Park would generate a peak Saturday parking demand of approximately 13 spaces, which is considerably less than the proposed supply. The proposed parking supply and the expected demand are shown in Table 1.

Land Use	Units	Supply (spaces)	ITE Parking Generation	
			Rate per Acre	Estimated Parking Demand
City Park	5.5 ac	39	2.3	13

Notes: ac= acre

Finding – The park’s proposed parking supply is expected to accommodate the anticipated parking demand.

City-Permitted Events

As proposed, there are no City-planned events that would result in additional parking demand beyond that identified above. The City would, however, issue permits for use of the picnic areas by groups. As proposed there are two group picnic areas which, based on permitted events at other City parks, would be expected to have an attendance of 20 to 50 people per event. A conservative estimate for these city-issued permits would be two per Saturday and one on Sunday every other weekend, March through October¹.

Within Sonoma and Napa County, 2.5 to 2.6 persons per vehicle are the accepted vehicle occupancy estimates for winery-based event trips. While not a directly-related land use, the same vehicle occupancy could be assumed for an event in a park. It would be reasonable to assume that of the 20 to 50 people per permitted event, most would arrive with another person or their family. As such, on a peak Saturday with a combined 100 people simultaneously using the park’s picnic areas, about 40 parked vehicles would be expected. Even under the conservative assumption that the on-site parking is 100 percent occupied and these 40 event vehicles would be required to park off-site, the adjacent West and Northwest parking areas closest to the picnic areas had a combined parking surplus of 330 parking spaces. If all 40 vehicles were to park in either the West or Northwest area, the expected occupancy would remain low at 35 and 38 percent, respectively.

Finding –The project’s onsite parking lots along with adjacent on-street parking areas would have sufficient capacity to accommodate the parking demand resulting from concurrent use of the park’s picnic areas by two groups.

Parking along Kawana Terrace

Development of the park would include the installation of boulders and split rail fence along the north side of Kawana Terrace, eliminating the existing informal parking spaces along the roadside shoulders. It appears that most of this parking activity is associated with visitors of Taylor Mountain Regional Park who are avoiding the payment of parking fees at the Regional Park parking lot. With the proposed Kawana Springs Park project’s removal of parking along Kawana Terrace, visitors to the regional park would be expected to either pay for parking at the Taylor Mountain lot, or park at the eastern terminus of Kawana Spring Road and walk to the regional park.

¹ Email communication from Jen Santos (City of Santa Rosa Deputy Director-Parks) to Tali Ashurov (David J. Powers & Associates), February 20, 2018

Based on the counts collected, the Taylor Mountain lot, which had a surplus of 63 spaces, and the northeast area's parking, with a surplus of 100 spaces, would accommodate the existing parking demand of 29 vehicles along Kawana Terrace. If all 29 vehicles were parked in either the Taylor Mountain lot or the Northeast area, the respective parking occupancies would be 68 and 43 percent respectively.

Parking-related issues associated with Taylor Mountain Regional Park are not the responsibility of the City of Santa Rosa to manage or address as part of the Kawana Springs Park project. Nevertheless, based on the above evaluation, it is reasonable to conclude that any changes to Taylor Mountain Regional Park's parking activity that may occur because of the project will not adversely affect parking conditions in surrounding neighborhoods. It should also be noted that, once the Farmers Lane extension is complete in the future, access to the Taylor Mountain Regional Park parking lot will be provided via Farmers Lane instead of Kawana Terrace. This change is likely to reduce both traffic and parking activity associated with Taylor Mountain Regional Park in the neighborhoods surrounding Kawana Springs Park.

Finding –The Kawana Springs Park project may shift where some users of Taylor Mountain Regional Park currently park their vehicles, though any such changes are not anticipated to result in adverse parking impacts to surrounding neighborhoods.

Parking Occupancy with Kawana Springs Park

The existing parking supply within the study area is 704 parking spaces. As part of the project, 32 informal parking spaces along Kawana Terrace would be removed, and 39 on-site spaces would be added. The total parking supply for the area would have a net increase of seven spaces.

During the peak period surveyed, there were 207 parked vehicles. Based on the applied ITE parking generation rates, the park would be expected to have a typical peak demand for 13 parking spaces, resulting in a total area-wide parking demand of 220 spaces, or an overall occupancy of about 31 percent. It should be noted that even if the parking utilization were to double because of seasonal variations or an unusual combination of activities occurring simultaneously in the neighborhood and park, the total parking utilization would still be well below the area's parking capacity.

Finding – With development of Kawana Springs Park and its associated improvements, the overall parking occupancy in the surrounding area during the Saturday peak demand period is anticipated to increase from 29 percent to 31 percent. Even with seasonal variations and the potential for multiple neighborhood and park activities to occur at the same time, parking demand would still be well below the available supply.

Conclusions

- The park's proposed parking supply is expected to accommodate the anticipated parking demand.
- The project's onsite parking lots along with adjacent on-street parking areas would have sufficient capacity to accommodate the parking demand resulting from concurrent use of the park's picnic areas by two groups.
- The Kawana Springs Park project may shift some parking activity associated with Taylor Mountain Regional Park by installing parking deterrents along Kawana Terrace, though any such changes are not anticipated to result in adverse parking impacts to surrounding neighborhoods.
- The parking supply for the area would have net increase of seven parking spaces upon completion of the project.

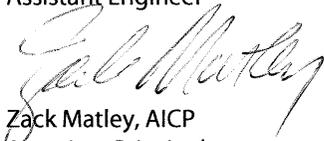
- With development of Kawana Springs Park and its associated improvements, the overall parking occupancy in the surrounding area during the Saturday peak demand period is anticipated to increase from 29 percent to 31 percent.
- Even with seasonal variations and the potential for multiple neighborhood and park activities to occur at the same time, parking demand would still be well below the available supply.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,



Briana Byrne, EIT
Assistant Engineer



Zack Matley, AICP
Associate Principal

ZM/bkb/SRO392.L2

Enclosure: Parking Survey Results

Kawana Springs Park Area Parking Survey Data

Location: Kawana Terrace east
 City: Santa Rosa

Day: Saturday
 Date: 12/3/2016
 Weather: Sunny, 66 degrees

Parking Summary Statistics

	Surveyed Parking Demand			Parking Occupancy		
	On-Street	Taylor Mtn. Lot	Total	On-Street	Taylor Mtn. Lot	Total
12:00 PM	134	39	173	22%	37%	25%
12:25 PM	125	34	159	21%	32%	23%
12:55 PM	129	28	157	22%	27%	22%
1:25 PM	129	31	160	22%	30%	23%
1:55 PM	129	33	162	22%	31%	23%
2:25 PM	141	30	171	24%	29%	24%
2:55 PM	165	42	207	28%	40%	29%
3:25 PM	154	34	188	26%	32%	27%

Areawide Parking Occupancy Summary

	Surveyed Demand	Total Parking Supply	Parking Occupancy
12:00 PM	173	704	25%
12:25 PM	159	704	23%
12:55 PM	157	704	22%
1:25 PM	160	704	23%
1:55 PM	162	704	23%
2:25 PM	171	704	24%
2:55 PM	207	704	29%
3:25 PM	188	704	27%

Time	Segment										
	1	2	3	4	5	6	7	8	9	10	11
12:00 PM	2	7	3	4	1	5	23	17	2	5	0
12:25 PM	2	6	3	4	1	4	20	15	2	6	0
12:55 PM	2	6	4	4	1	4	21	17	2	6	0
1:25 PM	2	7	4	5	2	3	20	18	2	8	0
1:55 PM	2	7	4	6	1	6	19	17	2	7	0
2:25 PM	2	7	4	4	1	8	21	19	3	8	0
2:55 PM	2	6	4	5	1	9	28	21	2	9	0
3:25 PM	2	6	4	4	2	8	29	20	2	8	0

Time	Segment										
	12	13	14	15	16	17	18	19	20	21	22
12:00 PM	2	2	5	0	4	6	2	7	3	6	1
12:25 PM	2	2	5	0	2	4	2	7	3	5	1
12:55 PM	2	2	5	0	3	3	2	7	3	5	1
1:25 PM	2	2	5	0	2	4	2	6	3	5	2
1:55 PM	2	2	5	0	3	2	2	7	2	5	2
2:25 PM	2	2	5	0	3	2	4	8	2	6	2
2:55 PM	3	2	5	1	4	4	4	9	3	8	3
3:25 PM	3	2	4	0	3	2	4	9	3	7	4

Time	Segment										
	23	24	25	26	27	28	29	30	31	32	Lot 1
12:00 PM	7	1	0	3	3	6	0	0	4	3	39
12:25 PM	8	1	0	4	5	5	0	0	4	2	34
12:55 PM	8	1	0	4	5	5	0	0	4	2	28
1:25 PM	7	1	0	3	4	4	0	0	4	2	31
1:55 PM	8	1	0	4	3	4	0	0	4	2	33
2:25 PM	9	1	0	4	2	5	0	0	4	3	30
2:55 PM	6	1	1	4	7	5	0	0	6	2	42
3:25 PM	6	1	0	4	4	5	0	0	5	3	34