

APPENDIX H – PARKING AND ON-SITE CIRCULATION REVIEW LETTER



December 23, 2019

Mr. Matthew Bohan
County of San Diego
Department of Parks and Recreation
5500 Overland Avenue #410
San Diego, CA 92123

LLG Reference: 3-19-3071

Subject: **Otay Lakes Campground Project – Parking and On-Site
Circulation Review**
San Diego, CA

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Dear Mr. Bohan:

This letter has been prepared to provide review and comment of the parking and on-site circulation for the Otay Lakes Campground Project (Project) located on land leased by the Boy Scouts of America (BSOA) from the County of San Diego (County) adjacent to Otay Lakes County Park. A Project area map is included at the end of this letter on **Figure 1**. **Figure 2** shows the conceptual site plan.

Linscott, Law and Greenspan, Engineers (LLG) prepared a Scoping Memo for the Project (submitted on May 14, 2019) that detailed the Project's development components and their respective trip generation. This parking and on-site circulation review letter provides the County with supplemental information regarding those subjects based on the Project's operational characteristics as well as the existing infrastructure provided at the Otay Lakes County Park.

OPERATIONAL COMPONENTS

The following operational components reflect activities that will occur during three (3) mutually exclusive "operational profiles" and are used to evaluate parking demand and on-site circulation:

- Total hourly inbound/outbound trips
 - These are trips that would circulate and queue on-site for drop-off/pick-up;

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- Typical drop-off/ pick-up duration
 - This is the estimated amount of time needed to arrive in the queue, make ready for drop-off/pick-up, complete drop-off/pick-up, and exit the queue;
- Parking demand for staff, chaperones, etc.
 - This is estimated at 10% of total population (users + staff)

LLG calculated the trip generation for each of these three operational profiles based on specific operational characteristics provided by the BSOA and detailed in the May 14, 2019 scoping memo. The trip generation for the Project presented in the scoping memo is attached to this letter as **Table 1**.

The trip generation was based on the total number of users (campers/attendees + staff). To be conservative, staff trips were included in the arrival/departure trips for the various uses, so on-site parking was not specifically addressed in that document. Based on conversations with the development team, a factor of approximately 10% of the total population could reasonably represent staff.

Using these criteria, the three operational profiles can be described as follows:

- **Day Camp** (100 campers/staff)
 - 4 times/year, 1 week each (Mon-Fri)
 - Start: 8:30 AM (44 inbound/44 outbound)
 - Finish: 3:30 PM with after-care to 5:30 PM (33 inbound/33 outbound)
 - Estimated drop-off/pick-up duration: 1 minute
 - 10 Vehicle Parking Demand (estimated at 10% of population)
- **Campsites** (50 campers in 12 sites)
 - Year round, weekends (Fri-Sun)
 - Start: 4:00-6:00 PM (22 inbound/22 outbound)
 - Finish: Noon-2:00 PM (22 inbound/22 outbound)
 - Estimated drop-off/pick-up duration: 2 minutes
 - 27 Vehicle Parking Demand (assumes all 22 inbound vehicle trips park, as do 5 staff at 10% of population)

- **Special Events** (400 attendees/staff)
 - 4-6 times annually, weekends (Sat-Sun)
 - Start: 8:00-10:00 AM (176 inbound/176 outbound)
 - Finish: 4:00-6:00 PM (88 inbound/88 outbound)
 - Estimated drop-off/pick-up duration: 2 minutes
 - 40 Vehicle Parking Demand (estimated at 10% of population)

PARKING

Figure 3 shows an aerial view of the park. A review of the existing Otay Lakes County Park reveals that 62 available parking spaces (regular and van-accessible handicapped), are provided in three (3) parking areas along the north and east sides of the park. The developed park area is approximately 5.5 acres, which would require 22 parking spaces based on the County's published off street parking regulations (4 spaces/acre for "passive" park). This would result in an apparent surplus of 40 parking spaces. However, of these 40 surplus spaces, 22 angled parking spaces provided along the south side of the park are for employees only, and are not accessible to the public as circulation along the south side of the park is prohibited via gates. Thus, the effective public surplus parking available for the Project is calculated at 18 spaces.

Based on the operational components described above, the maximum on-site parking demand would be estimated at 40 spaces for the *Special Events* profile (400 attendees + staff, 4-6 times annually).

The next highest calculated demand is 27 spaces for the *Campsites*, which occur year-round on weekends (Fridays-Sundays).

The *Day Camp* would operate for four weeks of the year, and generate the least parking demand at 10 vehicles (for staff) assuming all campers are dropped off and picked up.

Given the supply of public parking is 62 spaces, a demand of 40 spaces for the *Special Events* profile and the 27 spaces for the *Campsites* profile would likely exceed the calculated reserve capacity the lot would have on a typical weekend. Assuming no additional parking is available within the adjacent BSOA campground area, the additional 22 parking spaces on the south side of the Otay Lakes County Park could be utilized by the Project either as-is, or in an active valet-style format (vehicles tandem parked and/or parked in the parking drive-aisle) for these conditions to minimize parking effects on the balance of the lot.

The 10 spaces required for the *Day Camp* profile would likely be adequately served during the week by the 62 available public spaces and the accompanying 18-space public surplus.

Given the potential variability of the parking demand by event, it is recommended that the Project consider a developing and maintaining Parking Management Plan (PMP). The PMP would provide levels of parking management ranging from “no action” for minor event profiles such as “day camp”, up to actions such as active valet/tandem parking, or possibly off-site parking with a shuttle if necessary for the largest events.

It should also be noted that the park hours are posted as 9:30 AM to 7:00 PM, and parking is charged at a nominal fee of \$3.00/day. Each of the three operational profiles described above would have a start time preceding the park’s opening hours, and/or run for more than a single day, requiring the vehicle owner to leave the BSOA site and return on the second day to pay.

The BSOA and County will need to coordinate on how best to operate the park gates outside of official hours, and if/how the payment kiosks may be modified to accept payment for overnight/multiple-day demand.

ON-SITE CIRCULATION

The operational components described earlier show the following maximum directional (inbound or outbound) peak demand for each operational profile as follows:

- ***Special Events*** – 176 peak directional trips
- ***Day Camp*** – 44 peak directional trips
- ***Overnight Camping*** – 22 peak directional trips

For the *Special Events* and *Day Camp* profiles, the majority of trips are anticipated to be drop-off/pick-up trips which will not park, but will circulate through the park and drop-off/pick-up passengers. *Overnight Camping* users are presumed to park.

The highest hourly demand is for *Special Events*, at 176 peak trips within an hour. This is on average about 3 vehicles/minute. However, hourly distribution is never even, so a peak load can be estimated assuming 50% of the trips (88 vehicles) arrive in 15 minutes, which is 6 vehicles/minute. Assuming each vehicle requires 2 minutes to arrive, organize, pick-up/drop-off and depart, there could be 12 vehicles expected to be circulating in the drop-off/pick-up line during the peak period. A common dimension for linearly queued vehicles is 25-feet/vehicle, which would result in 300 feet of curbside queuing needed for 12 vehicles.

A review of *Figure 3* shows there is tangent queuing area available along the eastern side of the easterly-most north-south drive aisle. This would be best utilized in a counter-clockwise circulation pattern with vehicles circulating from south to north such that passengers disembark or embark from the curbside adjacent to the entry to the BSOA development east of the park. This counter-clockwise orientation would require the use of the southerly east-west drive aisle which is currently closed to public use. *Figure 4* shows a circulation concept for *Special Events*, and the 300 feet of curbside drop-off/ pick-up area that could be used. Coordination between BSOA and the County would be required to gain access to the southern drive aisle.

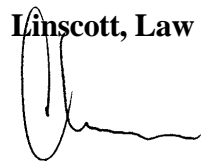
The *Special Events* condition is rare (4 times/year); as such, any disruption to park operations would be limited. A parking management plan would be recommended to determine roles and responsibilities between BSOA and County staff regarding gate openings/closures, and any on-site traffic monitors, signing or other elements that would be desirable to help minimize the effect of the *Special Events*.

The *Day Camp* also operates for a limited period out of the year (4 one-week programs). It generates approximately 25% of the peak directional traffic of the *Special Events*, and would therefore require approximately 25% of the linear curbside queuing for drop-offs and pick-ups (approximately 75 feet). Again, a south-north circulation would be recommended; however given the lower volumes a U-turn movement at the easterly gate intersection may suffice to allow vehicles to circulate without using the southern east-west drive aisle which could remain closed. *Figure 5* shows this circulation concept, as well as the curbside drop-off/ pick-up area that could be used.

Feel free to call me at 858-300-8800 with any questions or comments.

Sincerely,

Linscott, Law & Greenspan, Engineers



Chris Mendiara
Associate Principal

cc: File

Attachments :

Figure 1 : Project Area Map

Figure 2 : Conceptual Site Plan

Figure 3 : Aerial View, Otay Lakes County Park

Figure 4 : Special Events Circulation Concept

Figure 5 : Day Camp Circulation Concept

Table 1 : May 14, 2019 Scoping Memo Trip Generation

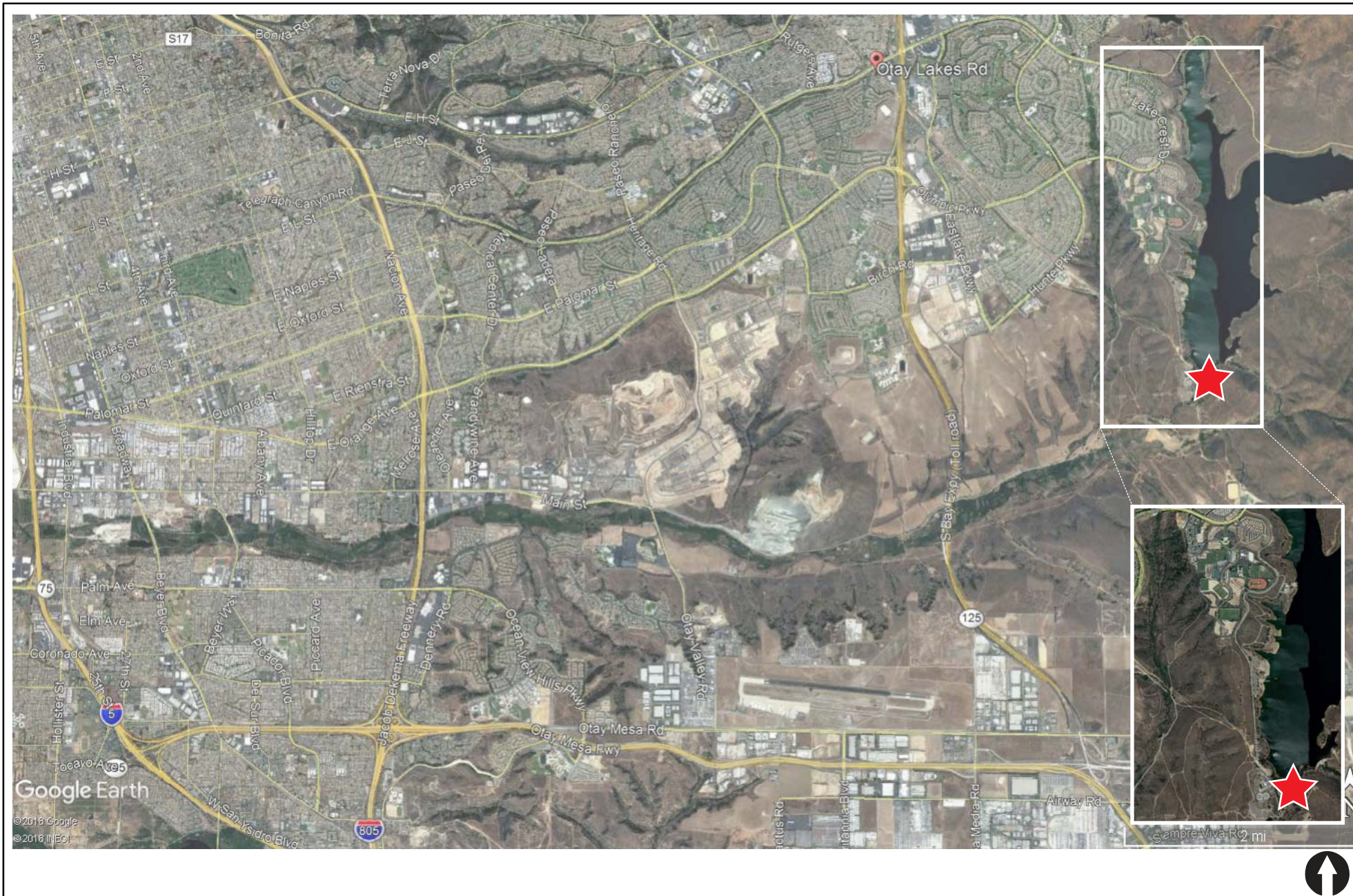
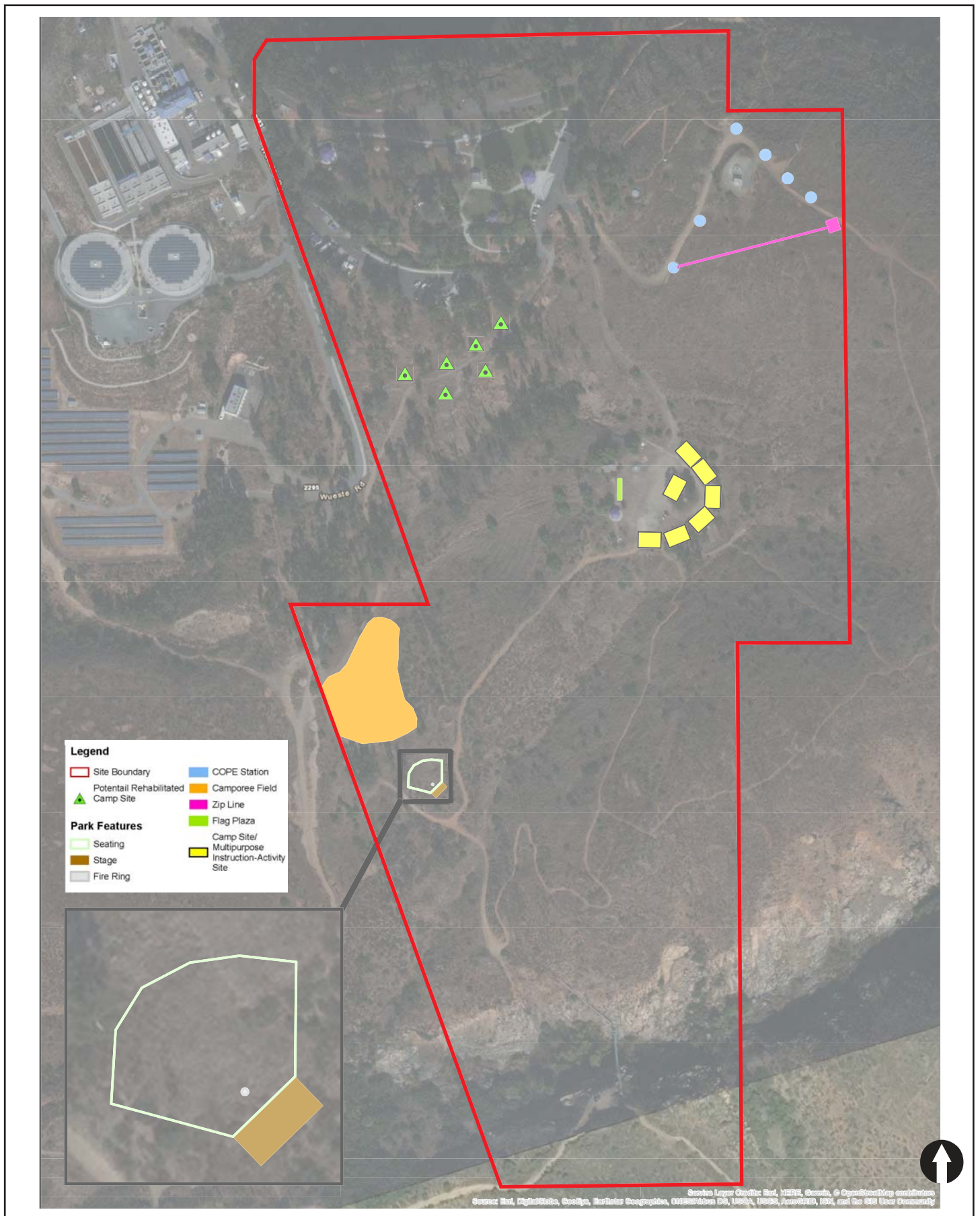


Figure 1

Project Area Map

OTAY LAKES CAMPGROUND





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Figure 3
Aerial View, Otay Lakes County Park



Figure 4
Circulation Concept - Special Events



Figure 5
Circulation Concept - Day Camp

TABLE 1
MAXIMUM CAPACITY PROJECT TRIP GENERATION

Trip Generator	Size	VOR ^a	# of Vehicles ^b	Peak Hour									Maximum Weekday ADT
				Volume			Volume			Volume			
				In	Out	Total	In	Out	Total	In	Out	Total	
Programmed Day Camp ^c				Weekday 8:00-9:00AM ^d			Weekday 3:00-4:00PM ^d			Weekday 5:00-6:00PM ^d			
Attendees	100 ppl	2.28	44	44	44	88	33	33	66	11	11	22	176
Campsites (Programmed Overnight Camping)				Friday 4:00-6:00PM ^e			Sunday 12:00-2:00PM ^e			—			
Attendees	50 ppl	2.28	22	22	0	22	0	22	22	—	—	—	22
Special Events ^f				Saturday 8:00-10:00AM			Saturday 6:00-8:00PM ^e			Sunday 4:00-6:00PM ^e			—
Attendees	400 ppl	2.28	176	176	176	352	88	88	176	88	88	176	—
Maximum Weekday Trip Generation ^g				AM Commute Peak Hour 7:00-9:00AM			PM Commute Peak Hour 4:00-6:00PM			—			—
				44	44	88	11	11	22	—	—	—	176

Footnotes:

- VOR = vehicle occupancy rate. Rate developed from statistical data collected on April 17, 2013 at Humphrey's Concerts by the Bay. VOR of 2.28 may be conservative for the proposed use. Based on information provided by the applicant, patrons of the site will arrive in private vehicle with "multiple people per car".
- Example: # of vehicles = 100 attendees ÷ 2.28 persons per vehicle = 44 vehicles.
- Weekday day camps are anticipated to run for a five-day period, about four (4) times annual. For the purposes of this assessment, two-way drop-off/pick-up trips two times per day were assumed arriving at the total number of daily trips (accounts for one inbound and one outbound trip generated per vehicle twice per day). Programmed day camp activities would be mutually exclusive to programmed overnight weekend camping.
- Based on information provided on the BSA website, day camps typically run from 8:30AM to 3:30PM, with after care provided from 3:30-5:30PM for an additional fee. It was assumed that 25% of the attendees remained on-site in the aftercare program.
- Weekend camping will be open every weekend to programmed groups. It would not, however, overlap with the scheduling of summer camp during a four-week period in the summer months. It is expected that there will be 20-50 people camping during these weekends, including staff and chaperones. Attendees were assumed to arrive on Friday afternoons and leave on Sunday mid-morning.
- For Special Events on-site, based on information provided by the applicant, it was assumed that 400 people will access the Camporee Field, 200 will camp (after 200 leave), 100 of those campers will attend the amphitheater while already on-site (no additional vehicle trips), including employees and chaperones. It is not expected that a cumulative 700 people will be on-site for each activity independently. In addition, all trips were assumed to be drop-off/pick-up trips. It was assumed that all 400 attendees (176 vehicles) arrive on Saturday morning for weekend special events, with all 176 trips making a drop-off round-trip from home to camp and back home. On Saturday evening, 200 of those attendees are anticipated to leave site (88 vehicles) making the pick-up round-trip from home to camp and back home again. On Sunday, the remaining 200 attendees who camped are picked up by a driver making a round-trip from home to camp and back home (88 vehicles). Employee and chaperone vehicles were conservatively assumed in the remaining 88 vehicles.
- Maximum Weekday Trip Generation combines the trips anticipated to be generated on a weekday, and during the 7-9AM and 4-6PM peak commute hours for adjacent street traffic. It should be noted that the maximum weekday trip generation would only occur during a four-week period in the summer months when day camp is programmed to occur.